NEC

Aspire

Software Manual

05.00

Technical Support Web Site:
http://ws1.necii.com (registration is required)

This manual has been developed by NEC Unified Solutions, Inc. It is intended for the use of its customers and service personnel, and should be read in its entirety before attempting to install or program the system. Any comments or suggestions for improving this manual would be appreciated. Forward your remarks to:

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Features

Section 1 - Features

Before Reading This Section

This section provides detailed information on the system's features. If you don't know what the various features are, review the Table of Contents for this section and the manual's Index. After reviewing, turn back to this section for the specifics.

Using This Section

The features in this section are in alphabetical order, like a dictionary. This section subdivides each feature definition into headings as follows:

Description tells what the feature is and describes its benefits. Along with the Description are the *Conditions* and *Default Setting*. Conditions provides the feature's operational limits (if any). Default Setting outlines how the feature works with the default programming. When initially installed, the system uses the default setting. For specific default settings on each program, refer to the chart at the end of this book.

Programming explains the system programming that lets you customize the feature. Some features require programming; other's don't. If you decide to customize a feature, use Section 2 to enter the change into the system.

Related Features presents the feature interaction.

Operation consists of instructions on how to use each feature.

◆ Read These Notes ◆

Simplifying Keyset Operation with One-Touch Keys...
A keyset user can access many features through Service Codes (e.g., Service Code *16 leaves a Message Waiting for a co-worker). To streamline the operation of their phone, a keyset user can store these codes under One-Touch Keys. This provides one-button operation for almost any feature. To find out more, turn to the One-Touch Calling and One-Touch Serial Operation features.

Programmable Keys...
When reading an instruction using programmable keys, you will see a notation similar to (***PGM 15-07 or SC 89nn***). This means that the key requires function code nnn, and you can program this code through Program 15-07 or by dialing Service Code 851 or 852. Refer to the Programmable Function Keys feature for more information.

Using Handsfree...
The manual assumes each extension has Automatic Handsfree. This lets a user just press a line key or CALL key to answer or place a call. For extensions without Automatic Handsfree, the user must:

- Lift the handset or press SPK for Intercom dial tone
- Lift the handset or press SPK, then press a line key for trunk dial tone

Port Assignments: How the System Assigns Ports to the PCBs

Port Calculation for Trunks:
With the 4COIU-LS1, 8 COIU-LS1, 4COIU-LG1, 8COIU-LG1, 4DIOPU-A1, 8DIOPU-A1, 2BRIU, 4BRIU, and 8BRIU PCBs, the system detects the type of PCB (trunk or extension) and assigns the required extension or trunk ports to the slot. The system will use the next available port numbers - it will not reserve any ports.

The T1/PRI PCB assigns the first 24 consecutive trunk ports.

The VoIP PCBs (4VOIPU, 4VOIPDB, 16VOIPU, and 16VOIPDB) are assigned trunks ports appropriate to the PCB. For example, the 4VOIPU uses 4 trunk ports - the 16VOIPU uses 16 trunk ports. If all the ports for the PCB will not be used, they can be undefined in Program 10-03-01, but the ports are still reserved for use by the VoIP PCB.

Port Calculation for Extensions:
With the 8/16/32ESIU or 8SLIU PCBs, the system detects the type of PCB (trunk or extension) and assigns the required number of extension ports for the PCB to the slot. For example, the 8ESIU will have 8 station ports assigned - the 16ESIU will have 16 ports assigned.

Table 1: Abbreviated and Post Dialing Service Codes

Abbreviated Service Codes[1]				
Code	**Starting with an asterisk (*)**		**Starting with a pound sign (#)**	
	For this feature. . .	**When you are. . .**	**For this feature. . .**	**When you are. . .**
*** (+ ext. no.)**	Directed Call Pickup	Picking up a call ringing or waiting at an extension	System Programming Password Protection	Entering the telephone programming mode
#	Group Call Pickup	Picking up a call ringing an extension in your own pickup group	Account Codes	Entering an Account Code from an SLT
0	Message Waiting	Answering a Message Waiting Request	Central Office Calls, Answering	Using Universal Answer to pick up a call ringing over the paging system
1 (+ Zone 0-8)	Paging	Making a Combined Page	Conference	Adding a caller to a Conference from an SLT
2 (+ option)	Call Forwarding	Enabling a Call Forwarding option	Abbreviated Dialing	Dialing a Common Abbreviated dialing number
3 (+ trunk no.)	Forced Trunk Disconnect	Disconnecting a call in progress on a trunk	Flash	Flashing a trunk from an SLT
4	Call Forwarding, Off Premise, Selectable Display Messaging, Voice Response System (VRS)	Setting up Selectable Display Messaging, Off Premise Call Forwarding or Personal Greeting	Abbreviated Dialing	Dialing a Group Abbreviated Dialing number
5	Automatic Call Distribution (ACD)	Logging out of or on to an ACD Group	Last Number Redial	Using Last Number Redial
6 (+ orbit)	Park	Picking up a call parked in a system Park orbit (01-64)	Park	Parking a call in a system Park orbit (01-64)
7	Call Waiting / Camp On	Splitting (switching) between calls on an SLT	Abbreviated Dialing	Using Personal Abbreviated Dialing
8	Voice Mail	Calling your mailbox	Tandem Trunking (Unsupervised Conference)	Setting up an Unsupervised Conference
9	Not Used		Central Office Calls, Placing	Placing an outside call over a specific trunk

[1] Also see Tables 2 and 3.

Table 2: Abbreviated and Post Dialing Service Codes		
Single Digit Post Dialing Codes		
For this feature. . .		**When you are. . .**
1	Handsfree Answerback / Forced intercom Ringing	Changing the signaling mode of your outgoing Intercom call
2	Call Waiting / Camp On / Callback / Trunk Queuing	Camping on to or leaving a Callback at a busy extension or trunk
3-5	Not used	
6	Voice Over	Sending a Voice Over to a busy extension after hearing Busy/Ring tone
7	Off Hook Signaling	Sending off-hook signal tones to a busy extension
8	Voice Mail	Leaving a message in a co-worker's mailbox after calling their busy or unanswered extension
0	Message Waiting	Leaving a Message Waiting at a co-worker's busy or unanswered extension
#	Department Step Calling	Cycling to the next member of a Department Calling Group

Table 3: Service Codes by Number			
Dial this Service Code. . .[1]	**When you are. . .**	**For this feature. . .**	**Also see Function Key. . .**
[1] Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle CALL key first).			
* + Enter Account Code + *	Entering an Account Code	Account Codes	-
**	Picking up a call ringing or waiting at another extension	Directed Call Pickup Voice Response System (VRS)	-
*#	Picking up a call ringing an extension in your own pickup group (except Ring Group calls)	Group Call Pickup	24
*0	Answering a Message Waiting request	Message Waiting	38
*1	Making a Combined Page	Paging	-
*2 + 0	Canceling Call Forwarding	Call Forwarding	16
*2 + 1 + Type (2-4)	Activating Personal Answering Machine Emulation	Voice Mail (Personal Answering Machine Emulation)	16
*2 + 2 + Destination + Type (2-4)	Activating Call Forwarding when Busy/Not Answered	Call Forwarding	16
*2 + 3 + Destination + Type (2-4)	Activating Call Forward Follow Me at the destination extension	Call Forwarding with Follow Me	16
*2 + 4 + Destination + Type (2-4)	Activating Call Forwarding Immediate	Call Forwarding	16
*2 + 6 + Destination + Type (2-4)	Activating Call Forwarding when Unanswered (delayed)	Call Forwarding	16
*2 + 7 + Destination + Type (2-4)	Activating Call Forwarding (Both Ringing)	Call Forwarding	16
*3 (After #9 + 001-200 + busy)	Disconnecting a call in progress on a trunk	Forced Trunk Disconnect	-
*4 + 3 + Message (01-20), or *4 + 3 + Hang up to cancel	Activating and canceling Selectable Display Messaging	Selectable Display Messaging	17
*4 + 6 + Trunk access code + Outside number, or *4 + 6 + Hold + Hang up to cancel	Forwarding your calls to an off-premise telephone number	Call Forwarding Off-Premise	17
*4 + 7 + Record message + # + Condition (2, 4, 6 or 7) + Destination + Type (2 or 3) or *4 + 7 + 3 to cancel	Recording, listening to or erasing a Personal Greeting or Park and Page	Voice Response System (VRS) (Personal Greeting)	17

Table 3: Service Codes by Number			
Dial this Service Code. . .[1]	**When you are. . .**	**For this feature. . .**	**Also see Function Key. . .**
[1] Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle CALL key first).			
*5	Logging out of or in to an ACD group	Automatic Call Distribution (ACD)	*10
*6 + Orbit (01-64)	Picking up a call parked in a system Park orbit (01-64)	Park	*04 + orbit
*7	Splitting (switching) between calls on an SLT	Call Waiting / Camp On	-
*8	Calling your mailbox	Voice Mail	67
#	Step Calling through a Department Group	Department Step Calling	36
# * # *	Entering the system programming mode	System Programming Password Protection	-
# * # 9	Backing up system data	Maintenance	-
Hookflash + ## + Enter Account Code + Hookflash	Entering an Account Code at an SLT	Account Codes	-
#0	Using Universal Answer Code to pick up a call ringing over the paging system	Central Office Calls, Answering	-
Hookflash + #1 + extension + hookflash twice	Activating Conference from a Single Line (500/2500) set	Conference	-
#2 + bin	Dialing a Common Abbreviated Dialing number	Abbreviated Dialing	27
#3	Flashing a trunk from an SLT	Flash	-
#4 + bin	Dialing a group Abbreviated Dialing number	Abbreviated Dialing	28
#5	Using Last Number Redial	Last Number Redial	-
#6 + orbit (01-64)	Parking a call in a system Park orbit (1-8, 01-32 or 01-64)	Park	*04 + orbit (1-64)
#7	Using Personal Abbreviated dialing	Abbreviated Dialing	-
#8	Setting up an Unsupervised Conference	Tandem Trunking (Unsupervised Conference)	-
#9 + 001 -200	Placing a call over a specific trunk	Central Office Calls, Placing	*01 + trunk (001-200)

Table 3: Service Codes by Number			
Dial this Service Code. . .[1]	**When you are. . .**	**For this feature. . .**	**Also see Function Key. . .**
[1] Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle CALL key first).			
0 (Off-hook)	Leaving a Message Waiting at a co-worker's busy or unanswered extension	Message Waiting	38
1 (Off-hook)	Changing the signaling mode of your outgoing Intercom call	Handsfree Answerback/Forced Intercom Ringing	-
2 (Off-hook)	Camping On or leaving a Call-back for a busy extension or trunk	Callback/Camp On/ Trunk Queuing	35
4 (On-hook)	Listening to the General Message	Voice Response System (VRS)	-
6 (On-hook)	Checking an extension's number	Voice Response System (VRS)	-
6 (Off-hook)	Sending a Voice Over to a busy extension after hearing Busy/ Ring Tone.	Voice Over	48
7 (Off-hook)	Sending off-hook signal tones to a busy extension	Off Hook Signaling	33
8 (On-hook)	Listening for the time	Voice Response System (VRS)	-
9	Placing a call using ARS or Trunk Group Routing	Automatic Route Selection Trunk Group Routing	*02
100 + code + 0	Using Dial Block	Toll Restriction, Dial Block	-
101 + code + 0	A supervisor using Dial Block	Toll Restriction, Dial Block	-
102 + Group number (1-8 or 01-64)	Setting Automatic Transfer Setup for each Department Group	Transfer	-
103 + Group number (1-8 or 01-64)	Cancelling Automatic Transfer Setup	Transfer	-
104 + Group number (1-8 or 01-64) + mode + extension	Setting the destination for Automatic Transfer Setup for each Department Group	Transfer	-
105 + Group number (1-8 or 01-64)	Setting Delayed Transfer for each Department Group	Transfer	-
106 + Group number (1-8 or 01-64)	Cancelling Delayed Transfer	Transfer	-

Table 3: Service Codes by Number			
Dial this Service Code. . .[1]	**When you are. . .**	**For this feature. . .**	**Also see Function Key. . .**
[1] Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle CALL key first).			
107 + Group number (1-8 or 01-64)	Setting up DND for each Department Group	Transfer	-
108 + Group number (1-8 or 01-64)	Cancelling DND for each Department Group	Transfer	-
111	SLT Listening to the General Message	Voice Response System (VRS)	-
112 + 3 to erase, 5 to listen or 7 to record	Recording, listening to or erasing the General Message	Voice Response System (VRS)	-
116 + 3 to erase, 5 to listen or 7 to record	Recording, listening to or erasing a VRS Message	Voice Response System (VRS)	-
118	Night Mode Switching for other group	Night Answer	
120	Common Cancelling Service Code	TBD	-
121	Print the SMDR Extension Accumulated printout	Station Message Detail Recording (SMDR)	-
122	Print the SMDR Group Accumulated printout	Station Message Detail Recording (SMDR)	-
123	Print the SMDR Account Code Accumulated printout	Station Message Detail Recording (SMDR)	-
882	Transferring a call to the VRS. This can also be used for routing ANI/DNIS to the VRS.	Transfer	-
126	Leaving a message at an extension, without first calling that extension	Hotel/Motel (Message Waiting)	-
127	Enabling DND at a room telephone	Hotel/Motel (Do Not Disturb)	-
128	Canceling DND at a room telephone	Hotel/Motel (Do Not Disturb)	-
129	Enabling DND for another room telephone	Hotel/Motel (Do Not Disturb)	-
130	Canceling DND at another room telephone	Hotel/Motel (Wake Up Call)	-
131	Setting up a Wake Up call for your own room telephone	Hotel/Motel (Wake Up Call)	-

Table 3: Service Codes by Number			
Dial this Service Code. . .[1]	**When you are. . .**	**For this feature. . .**	**Also see Function Key. . .**
[1] Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle CALL key first).			
132	Canceling a Wake Up Call for your own room telephone	Hotel/Motel (Wake Up Call)	-
133	Setting a Wake Up Call for another guest's room telephone	Hotel/Motel (Wake Up Call)	-
134	Canceling a Wake Up Call for another guest's room telephone	Hotel/Motel (Wake Up Call)	-
135	Enabling Room to Room Call Restriction for a guest's room telephone	Hotel/Motel (Room to Room Call Restriction	-
136	Disabling Room to Room Call Restriction for a guest's room telephone	Hotel/Motel (Room to Room Call Restriction)	-
137	Changing a room's telephone Toll Restriction (When Checked In) level	Hotel/Motel (Toll Restriction When Checked In)	-
138	Setting a room as checked in	Hotel/Motel (Room Status)	-
139	Setting a room as checked out	Hotel/Motel (Room Status)	-
140	Setting a room as available (clean) from the room's telephone	Hotel/Motel (Room Status)	-
141	Setting a room as available (clean) from another telephone	Hotel/Motel (Room Status)	-
142	Requesting a Room Status Printout	Hotel/Motel (Room Status Printouts)	-
145 + trunk # + 1 (block) 145 + trunk # + 0 (enable)	To block/busy out outbound usage on a trunk with Trunk Port Disable.	Central Office Calls, Placing	-
150 + 0 (install) or 1 (remove)	Logging in (0) or logging out (1) for your Department Calling Group	Department Calling	
154	Enabling Conversation Record at an SLT set	Voice Mail	-
155	Logging out of or in to an ACD Group from an SLT	Automatic Call Distribution (ACD)	-
156	Activating Work Time from an SLT	Automatic Call Distribution (ACD)	*17

Table 3: Service Codes by Number			
Dial this Service Code. . .[1]	**When you are. . .**	**For this feature. . .**	**Also see Function Key. . .**
[1] Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle CALL key first).			
157	Canceling Work Time from an SLT	Automatic Call Distribution (ACD	*17
158	Activating Rest Mode from an SLT	Automatic Call Distribution (ACD)	*13
159	Canceling Rest Mode from an SLT	Automatic Call Distribution (ACD)	*13
Hookflash + 160	ACD Recording for SLT	Automatic Call Distribution (ACD)	-
163 + 6-digit code + line + phone number	Overriding Toll Restriction	Toll Restriction	-
166	Changing Toll Restriction for a checked in room	Hotel/Motel (Toll Restriction [Checked in])	-
167	Logging an agent into their ACD Group	Automatic Call Distribution (ACD	-
168	Logging an agent out of their ACD Group	Automatic Call Distribution (ACD	-
169	Supervisor assigning an agent into another ACD Group or changing an agent's status	Automatic Call Distribution (ACD	-
170 + ACD Group	Changing your ACD Group assignment	Automatic Call Distribution (ACD)	-
172 + Line number (001-200)	Answering a call on a specific trunk	Central Office Calls, Answering Hold	
175	Monitoring a room's phone	Hotel/Motel (Room Monitor)	-
177	Changing the COS of another extension. Must be allowed in Program 20-13-28.	Class of Service	-
178 + 0-9	Changing the language of a display phone.	Alphanumeric Display / Maintenance	-
179 + 1 (set) or 0 (cancel)	Changing the ability for a second call with DID/DISA/DIL	Central Office Calls, Answering	-
189	Transferring an Aspire Wireless call when out of range	Aspire Wireless	-
800 + extension # + enter name + HOLD	Programming extension names	Name Storing	55

Table 3: Service Codes by Number			
Dial this Service Code. . .[1]	**When you are. . .**	**For this feature. . .**	**Also see Function Key. . .**
[1] Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle CALL key first).			
801 + zone (1-9 or 01-64) 801 + zone (0 or 00)	Making an Internal Zone Page Making an All Call Internal Page	Paging, Internal	21 + zone 22
802 + Door Box (1-4 or 1-8)	Placing a call to a Door Box	Door Box	-
803 + zone (1-4 or 1-8) 803 + zone (0)	Making an External Zone page Making an External All Call page	External Paging	19 + zone 20
804 + trunk group (1-8 or 1-9 or 001-200)	Placing an outside call over a trunk group	Central Office Calls, Placing	*02 + group
807	Overriding Do Not Disturb or Call Forwarding	Call Forwarding Do Not Disturb	37
808	Stepping through a Department Group	Department Step Calling	36
809	Sending a Call Waiting tone to a busy extension	Call Waiting	33
810	Breaking into another extension's call	Barge In	-
811 + 1 (ICM) or 2 (trk) + tone (1-8)	Listening to the incoming ring choices	Selectable Ring Tones	-
812	Changing the signal type for calling an extension	Intercom	-
815	Saving a number (from SLT) or dialing a saved number	Save Number Dialed	30
818 + 1 818 + 2 818 + 3 818 + 4 818 + 5 818 + 6 818 + 7 818 + 8	Activating Day 1 Mode Activating Night 1 Mode Activating Midnight 1 Mode Activating Rest 1 Mode Activating Day 2 Mode Activating Night 2 Mode Activating Midnight 2 Mode Activating Rest 2 Mode	Night Service	09 + 1 09 + 2 09 + 3 09 + 4 09 + 5 09 + 6 09 + 7 09 + 8
820 + 1 (ICM) or 2 (trk) + tone (1-8)	Changing your extension's incoming ring tones	Selectable Ring Tones	-
821	Enabling Handsfree Answerback for incoming Intercom calls	Handsfree Answerback/Forced Intercom Ringing	-
822	Calling off-premise with a Door Box	Call Forwarding, Off-Premise Door Box	54

Table 3: Service Codes by Number			
Dial this Service Code. . .[1]	**When you are. . .**	**For this feature. . .**	**Also see Function Key. . .**
[1] Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle CALL key first).			
823	Enabling Forced Ringing for incoming Intercom calls	Handsfree Answerback/ Forced Intercom Ringing	-
824	Enabling/disabling Dial Pad Confirmation Tone	Dialing Pad Confirmation Tone	-
825	Turning Background Music on and off	Background Music	04
827 + 1 or 2 + time, or 827 + 1 or 2 + 9999 to cancel	Checking, setting or canceling an alarm	Alarm	-
828 + hour + minutes	Setting the system Time	Time and Date	-
829	Checking or changing ring volume	Volume Control	
830	Remote maintenance	-	-
832	Placing a call on Group Hold	Hold	-
833 + Line number (001-200)	Setting Automatic Trunk Forwarding (following Program 24-04-01 destination).	Call Forwarding, Off-Premise Transfer, Tandem Trunking	
834 + Line number (001-200)	Cancelling Automatic Trunk Forwarding when activated by service code 833.	Call Forwarding, Off-Premise Transfer, Tandem Trunking	
835 + Line number (001-200) + time mode (1-8)	Setting and cancelling Automatic Trunk Forwarding.	Call Forwarding, Off-Premise Transfer, Tandem Trunking	
840	System alarm message delete	-	-
847 + 0 (Cancel) 1 (Trk calls) 2 (Paging, ICM, Call Forward and transfers) 3 (All calls) 4 (Call Forwards)	Activating Do Not Disturb	Do Not Disturb	-
849	Placing a call on Exclusive Hold at a SLT set.	Hold	-
850	Camping On to an extension when calling into the system through the VRS	Voice Response System (VRS)	35

Table 3: Service Codes by Number			
Dial this Service Code. . .[1]	**When you are. . .**	**For this feature. . .**	**Also see Function Key. . .**
[1] Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle CALL key first).			
851 + key + code	Changing the function of a programmable key using 851 service codes	Programmable Function Keys	-
852 + key + code	Changing the function of a programmable key using 852 service codes	One-Touch Serial Operation	-
853 + bin + number + HOLD + Name + HOLD to store	Storing Common Abbreviated Dialing numbers	Abbreviated Dialing	-
854 + bin + number + HOLD + Name + HOLD to store	Storing Group Abbreviated Dialing numbers	Abbreviated Dialing	-
855 + One Touch key + code	Programming a One-Touch Key or Personal Speed Dial	One-Touch Dialing	-
856	Answering a call ringing a phone in your pickup group (except Ring Group calls)	Group Call Pickup	-
857	Parking a call or picking up a parked call at an extension	Park	-
859	Retrieving a call from Exclusive Hold at a SLT set.	Hold	-
860	DID ACD Access Code	Automatic Call Distribution (ACD)	-
862	Picking up a call from Group Hold	Hold	-
863	Joining a Meet Me Conference or Meet Me Page on an Internal Paging Zone (if your extension is in the group called)	Meet Me Conference Meet Me Paging	23 or 32
864 + zone paged (0-9 or 00-64)	Joining a Meet Me Conference or Meet Me Page if your extension is not in the group paged	Meet Me Paging	23 or 32
865 + zone (0-8)	Joining a Meet Me Conference or Meet Me Page on an External Paging Zone	Meet Me Conference Meet Me Paging	23 or 32
866	Using Network Message Lamp Control	Networking	-
868 + pickup group (1-8 or 1-9 or 01-64)	Answering a call ringing a phone in another pickup group (except Ring Group calls)	Group Call Pickup	26 + group

Table 3: Service Codes by Number			
Dial this Service Code. . .[1]	**When you are. . .**	**For this feature. . .**	**Also see Function Key. . .**
[1] Except where indicated, dial Service Code from Intercom dial tone (e.g., press idle CALL key first).			
869	Answering a call ringing a phone in another pickup group if you don't know the group's number (except Ring Group Calls)	Group Call Pickup	25
870	Canceling a Callback request	Callback	-
871 + ext	Canceling Messages Waiting you have left at a specific extension	Message Waiting	-
873	Canceling all Messages Waiting you have left at other extensions	Message Waiting	-
875 + pswd (0000) + place outside call	Temporarily overriding an extension's Toll Restriction	Toll Restriction Override	-
876	Clearing number saved by Last Number Redial	Last Number Redial	-
880 + Relay (0-8)	Using the General Purpose Relay	Paging, External Night Service	51
881 + 00 (no tone), 01 (general) or 02 (holiday)	Changing the Music on Hold Tone	Music on Hold	-
882	Routing ANI/DNIS to the VRS. It can also be used when transferring to VRS.	Transfer Voice Response Service (VRS)	
883	Enabling the data communication auto-answer mode	Data Communications	-
884	Accessing the VRS	Voice Response Service (VRS)	-
885	Clearing the number saved by Save Number Redial	Save Number Redial	-
886	Turning off the E911 alarm.	E911	
890	Using Voice Over after calling a busy extension	Voice Over	48
894	Splitting between two calls on an SLT	Call Waiting	
899	Testing Callback operation for SLT	Callback	-

Table 4: Service Codes by Feature			
For this feature...	**Dial this Service Code...[1]**	**When you are...**	**Also see Function Key...**
[1] Except where indicated, dial Service code form Intercom dial tone (e.g., press idle CALL key first).			
Abbreviated Dialing	853 + bin + number + HOLD + Name + HOLD to store	Storing Common Abbreviated Dialing numbers	-
	854 + bin + number + HOLD + Name + HOLD to store	Storing Group Abbreviated Dialing numbers	-
	#2 + bin	Dialing a Common Abbreviated Dialing number	27
	#4 + bin	Dialing a Group Abbreviated Dialing number	28
	#7 + bin	Using Personal Abbreviated Dialing	-
Account Codes	* + Enter Account code + *	Entering an Account Code	-
	Hookflash + ## + Enter account code + Hookflash	Entering an Account Code at an SLT	-
Alarm	827 + 1 or 2 + time, or 827 + 1 or 2 + 9999 to cancel	Checking, setting or canceling an alarm	-
Alphanumeric Display	178 + 0-9	Selecting the language to be used on display keysets.	-
Aspire Wireless	189	Transferring an Aspire Wireless call when out of range	-
Automatic Call Distribution (ACD)	*5	Logging out of or in to an ACD Group	*10
	155	Logging out of or in to an ACD Group from an SLT	
	156	Activating Work Time from an SLT	*17
	157	Canceling Work Time from an SLT	*17
	158	Activating Rest Mode from an SLT	*13
	159	Canceling Rest Mode from an SLT	*13
	Hookflash + 160	ACD Recording for SLT	-
	167	Allowing ACD Agent to log into a group	
	168	Allowing ACD Agent to log out of a group	
	169	Allowing supervisor to change agent's status	
	170 + ACD Group	Changing your ACD Group assignment	-
	860	DID ACD Access Code	-
Automatic Route Selection or Trunk Group Routing	9	Placing an call using Trunk Group Routing or Automatic Route Selection	*02

Table 4: Service Codes by Feature			
For this feature...	**Dial this Service Code...[1]**	**When you are...**	**Also see Function Key...**
[1] Except where indicated, dial Service code form Intercom dial tone (e.g., press idle CALL key first).			
Background Music	825	Turning Background Music on and off	04
Barge In	810	Barging in on a busy co-worker's extension	34
Call Forwarding	*2 + 0	Canceling Call Forwarding	16
	*2 + 7 + Destination + Type (2-4)	Activating Call Forwarding (Both Ringing)	16
	*2 + 6 + Destination + Type (2-4)	Activating Call Forwarding when Busy	16
	*2 + 2 + Destination + Type (2-4)	Activating Call Forwarding when Busy/ Not Answered	16
	*2 + 6 + Destination + Type (2-4)	Activating Call Forwarding when Unanswered (delayed)	16
	*2 + 7 + Destination + Type (2-4)	Activating Call Forwarding Follow Me	16
	*2 + 4 + Destination + Type (2-4)	Activating Call Forwarding Immediate	16
Call Forwarding Off-Premise	*4 + 6 + Trunk access code + Outside number, or *4 + 6 + Hold + Hang up to cancel	Forwarding your calls to an off-premise telephone number	17
	833 + Line number (001-200)	Setting Automatic Trunk Forwarding (following Program 24-04-01 destination).	-
	834 + Line number (001-200)	Cancelling Automatic Trunk Forwarding when activated by service code 833.	-
	835 + Line number (001-200) + time mode (1-8)	Setting and cancelling Automatic Trunk Forwarding.	-
Call Forwarding, Off-Premise Door Box	822	Calling off-premise with a Door Box	54
Call Forwarding/Do Not Disturb Override	807	Overriding an extension's Call Forward or DND setting.	37
Call Forwarding with Follow Me	*2 + 3 + Destination + Type (2-4)	Activating Call Forward Follow Me at the destination extension	16
Call Waiting / Camp On	*7 or 894	Splitting (switching) between calls on an SLT	-
Callback / Camp On / Trunk Queuing	2	Camping On or leaving a Callback for a busy extension or trunk	35
	870	Canceling a Callback request	-
	899	Testing Callback operation for SLT	-

Table 4: Service Codes by Feature			
For this feature...	**Dial this Service Code...[1]**	**When you are...**	**Also see Function Key...**
[1] Except where indicated, dial Service code form Intercom dial tone (e.g., press idle CALL key first).			
Central Office Calls, Answering / Hold	#0	Using Universal Answer to pick up a call ringing over the paging system	-
	172 + Line number (001-200)	Answering a call on a specific trunk	-
	179 + 1 (set) or 0 (cancel)	Changing the ability for a second call with DID/DISA/DIL	
Central Office Calls, Placing	#9 + 001-200	Placing a call over a specific trunk	*01 + trunk (100-200)
	145 + trunk # + 1 (block) 145 + trunk # + 0 (enable)	To block/busy out outbound usage on a trunk with Trunk Port Disable.	-
	804 + trunk group (1-9 or 001-200)	Placing an outside call over a trunk group	*02 + group
Class of Service	177	Changing the COS of another extension. Must be allowed in Program 20-13-28.	-
Conference	Hookflash + #1 + extension + hookflash twice	Activating Conference from a Single Line (500/2500) set	1016
Data Communications	883	Enabling the data connection auto-answer mode	-
	884	Disconnecting an active data call	-
Department Calling	150 + 0 (install) or 1 (remove)	Logging in (0) or logging out (1) for your Department Calling Group	46
Department Step Calling	#	Step Calling through a Department Group	36
Dial Pad Confirmation Tone	824	Enabling/disabling Dial Pad Confirmation Tone	-
Directed Call Pickup	** + ext.	Picking up a call ringing or waiting at an extension	-
Do Not Disturb	847 + 0 (Cancel) 1 (Trk calls) 2 (Paging, ICM, Call Forwards, and Transfers) 3 (All calls) 4 (Call Forwards)	Activating Do Not Disturb	-
Door Box	802 + Door Box (1-4 or 1-8)	Placing a call to a door Box	-
	822	A Door Box is forwarded off-premise	-
E911	886	Turning off the E911 alarm	-
Flash	#3	Flashing a trunk from an SLT	-

Table 4: Service Codes by Feature			
For this feature...	**Dial this Service Code...[1]**	**When you are...**	**Also see Function Key...**
[1] Except where indicated, dial Service code form Intercom dial tone (e.g., press idle CALL key first).			
Forced Trunk Disconnect	* 3 (after #9 + 1-8 or 001-200 + busy)	Disconnecting a call in progress on a trunk	-
Group Call Pickup	*#	Picking up a call ringing an extension in your own pickup group (except Ring Group calls)	24
	868 + pickup group (1-8 or 1-9 or 01-64)	Answering a call ringing a phone in another pickup group	26 + group
	869	Answering a call ringing a phone in another pickup group if you don't know the group's number (except Ring Group calls)	25
Handsfree Answerback/Forced Intercom Ringing	1 (Off-hook)	Changing the signaling mode of your outgoing Intercom call	-
	821	Enabling Handsfree Answerback for incoming Intercom calls	-
	823	Enabling Forced Ringing for incoming Intercom calls	-
Hold	832	Placing a call on Group Hold	-
	849	Placing a call on Exclusive Hold at a SLT set	-
	859	Retrieving a call from Exclusive Hold at a 2-Button telephone	-
	862	Picking up a call from Group Hold	-
Hotel/Motel (Message Waiting)	126	Leaving a message at an extension, without first calling that extension	-
Hotel/Motel (Do Not Disturb)	127	Enabling DND at a room telephone	-
Hotel/Motel (Do Not Disturb)	128	Canceling DND at a room telephone	-
Hotel/Motel (Do Not Disturb)	129	Enabling DND for another room telephone	-
Hotel/Motel (Do Not disturb)	130	Canceling DND at another room telephone	-
Hotel/Motel	175	Monitoring a room's phone	-
Hotel/Motel (Wake Up Call)	131	Setting a Wake Up Call or your own room telephone	-
Hotel/Motel (Wake Up Call)	132	Canceling a Wake Up Call for your own room telephone	-

Table 4: Service Codes by Feature			
For this feature...	**Dial this Service Code...[1]**	**When you are...**	**Also see Function Key...**
[1] Except where indicated, dial Service code form Intercom dial tone (e.g., press idle CALL key first).			
Hotel/Motel (Wake Up Call)	133	Setting a Wake Up Call for another guest's room telephone	-
Hotel/Motel (Wake Up Call)	134	Canceling a wake Up Call for another guest's room telephone	-
Hotel/Motel (Room to Room Call Restriction)	135	Enabling Room to Room Call Restriction for a guest's room telephone	-
Hotel/Motel (Room to Room Call Restriction)	136	Disabling Room to Room Call Restriction for a guest's room	-
Hotel/Motel (Toll restriction [When Checked In])	137	Changing a room's telephone Toll Restriction (When Checked In) level	-
Hotel/Motel (Room Status)	138	Setting a room as checked in	-
Hotel/Motel (Room Status)	139	Setting room as checked out	-
Hotel/Motel (Room Status)	140	Setting a room as available (clean) from the room's telephone	-
Hotel/Motel (Room Status)	141	Setting a room as available (clean) from another telephone	-
Hotel/Motel (Room Status Printouts)	142	Requesting a Room Status Printout	-
Hotel/Motel (Toll Restriction [When Checked In])	166	Changing a room's telephone Toll Restriction level (when checked in)	-
Intercom	812	Changing the signal type for calling an extension	-
Last Number Redial	#5	Using Last Number Redial	-
	876	Clearing number saved by Last Number Redial	-
Maintenance	# * # 9	Backing up system data	-
	178 + 0-9	Displaying the language the phone is using	-

Table 4: Service Codes by Feature

For this feature...	Dial this Service Code...[1]	When you are...	Also see Function Key...
[1] Except where indicated, dial Service code form Intercom dial tone (e.g., press idle CALL key first).			
Meet Me Conference Meet Me Paging	863	Joining a Meet Me Conference or Meet Me Page on an Internal Paging Zone (if your extension is in the group called)	23 (Meet Me Paging) or 32 (Meet Me Conference)
	864 + zone paged (0-9 or 00-64)	Joining a Meet Me Conference or Meet Me Page if your extension is not in the group paged	-
	865 + zone (0-8)	Joining a Meet Me conference or Meet Me Page on an External Paging Zone.	-
Message Waiting	0 (Off-hook)	Leaving a Message Waiting at a co-worker's busy or unanswered extension	38
	*0	Answering a Message Waiting request	38
	871 + ext	Canceling Messages Waiting you have left at a specific extension	-
	873	Canceling all Messages Waiting you have left at other extensions	-
Music on Hold	881 + 00 (no tone), 01 (general) or 02 (holiday)	Changing the Music on Hold Tone	-
Name Storing	800 + enter name + HOLD	Programming extension names	55
Networking	866	Using Network Message Lamp Control	-
Night Service	118	Night Mode Switching for other group	
	818 + 1 818 + 2 818 + 3 818 + 4 818 + 5 818 + 6 818 + 7 818 + 8	Activating Day 1 Mode Activating Night 1 Mode Activating Midnight 1 Mode Activating Rest 1 Mode Activating Day 2 Mode Activating Night 2 Mode Activating Midnight 2 Mode Activating Rest 2 Mode	09 + 1 09 + 2 09 + 3 09 + 4 09 + 5 09 + 6 09 + 7 09 + 8
Off Hook Signaling	7 (Off-hook) or 809	Sending off-hook signal tones to a busy extension	33
One-Touch Dialing	855 + One-Touch key + code	Programming a One-Touch Key or Personal Speed Dial	-
Paging, Combined	*1 + Zone (1-8) *1 + Zone (0)	Making a combined zone page. Making a combined All Call page.	19 + zone 20
Paging, External	803 + zone (1-8) 803 + zone (0)	Making an external zone page Making an external All Call page	19 + zone 20
Paging, External Night Service	880 + relay number (0-8)	Activating the general purpose relay.	51

Table 4: Service Codes by Feature			
For this feature...	**Dial this Service Code...[1]**	**When you are...**	**Also see Function Key...**
[1] Except where indicated, dial Service code form Intercom dial tone (e.g., press idle CALL key first).			
Paging, Internal	801 + zone (1-8, 1-9 or 01-64) 801 + zone (0 or 00)	Making an Internal Zone Page Making an internal All Call Page	21 + zone or 22
Park	#6 + orbit (01-64)	Parking a call in a system Park orbit (01-64)	*04 + orbit
	*6 + orbit (01-64)	Picking up a call parked in a system Park orbit (01-64)	*04 + orbit
	857	Parking a call or picking up a parked call at an extension	-
Programmable Function Keys	851 + key + code	Changing the function of a programmable key using 851 service codes	-
	852 + key + code	Changing the function of a programmable key using 852 service codes	-
Save Number Dialed	815	Saving a number (from SLT) or dialing a saved number	30
	885	Clearing the number saved by Save Number Redial number	-
Selectable Display Messaging	*4 + 3 + message (01-20), or *4 + 3 + Hang up to cancel	Activating and Canceling Selectable Display Messaging	17
Selectable Ring Tones	811 + 1 (ICM) or 2 (Trk) + tone (1-8)	Listening to the incoming ring choices	-
	820 + 1 (ICM) + 2 (Trk) + tone (1-8)	Changing your extension's incoming ring tones	-
System Programming Password Protection	# * # *	Entering the system programming mode	-
Station Message Detail Recording	121	Print the SMDR Extension Accumulated printout	-
	122	Print the SMDR Group Accumulated printout	-
	123	Print the SMDR Account Code Accumulated printout	-
Tandem Trunking (Unsupervised Conference)	#8	Setting up an Unsupervised Conference	-
Time and Date	828 + hour + minutes	Setting the system Time	-
Toll Restriction, Dial Block	100 + code + 0	Using Dial Block	-
	101 + code + 0	A supervisor using Dial Block	-

Table 4: Service Codes by Feature			
For this feature...	**Dial this Service Code...[1]**	**When you are...**	**Also see Function Key...**
[1] Except where indicated, dial Service code form Intercom dial tone (e.g., press idle CALL key first).			
Toll Restriction Override	875 + pswd (0000) + place outside call	Temporarily overriding an extension's Toll Restriction	-
	163 + digit code + line + telephone number	Overriding Toll Restriction	-
Transfer Call Forwarding, Off-Premise Tandem Trunking	833 + Line number (001-200)	Setting Automatic Trunk Forwarding (following Program 24-04-01 destination).	
	834 + Line number (001-200)	Cancelling Automatic Trunk Forwarding when activated by service code 833.	
	835 + Line number (001-200) + time mode (1-8)	Setting and cancelling Automatic Trunk Forwarding.	
	102 + Group number (1-8 or 01-64)	Setting Automatic Transfer Setup for each Department Group	-
	103 + Group number (1-8 or 01-64)	Cancelling Automatic Transfer Setup	-
	104 + Group number (1-8 or 01-64) + mode + extension	Setting the destination for Automatic Transfer Setup for each Department Group	-
	105 + Group number (1-8 or 01-64)	Setting Delayed Transfer for each Department Group	-
	106 + Group number (1-8 or 01-64)	Cancelling Delayed Transfer	-
	107 + Group number (1-8 or 01-64)	Setting up DND for each Department Group	-
	108 + Group number (1-8 or 01-64)	Cancelling DND for each Department Group	-
	124 + Extension number	Transferring a call into an existing call.	-
	882	Transferring a call to the VRS. This can also be used for routing ANI/DNIS to the VRS.	
Trunk Group Routing or Automatic Route Selection	9	Placing a call using Trunk Group Routing or Automatic Route Selection	*02
Trunk Queuing	2 (Off-hook)	Camping on to or leaving a Callback at a busy trunk	35
Voice Mail	8 (Off-hook)	Leaving a message in a co-worker's mailbox after callback their busy or unanswered extension	-
	*2 + 1 + Type (2-4)	Activating Personal Answering Machine Emulation	-

Table 4: Service Codes by Feature			
For this feature...	**Dial this Service Code...[1]**	**When you are...**	**Also see Function Key...**
[1] Except where indicated, dial Service code form Intercom dial tone (e.g., press idle CALL key first).			
Voice Mail (Cont'd)	*8	Calling your mailbox	67
	154	Enabling Conversation Record at SLT set	-
Voice Over	6 (Off-hook) or 890	Sending a Voice Over to a busy extension after hearing Busy/Ring tone	48
Voice Response System (VRS)	** + ringing ext.	Picking up a call ringing another extension for Directed Call Pickup or VRS Park and Page.	-
	*4 + 7 + Record message + # + Condition (2, 4,6 or 7) + Destination+ Type (2 or 3). or *4 + 7 + 3 to cancel	Recording, listening to or erasing a Personal Greeting or Park and Page	17
	4 (On-hook)	Listening to the General Message	-
	6 (On-hook)	Checking an extension's number	-
	8 (On-hook)	Listening for the time	-
	111	SLT listening to the General Message	-
	112 + 3 to erase, 5 to listen or 7 to record	Recording, listening to or erasing the General Message	-
	116 + 3 to erase, 5 to listen or 7 to record	Recording, listening to or erasing a VRS Message	-
	850	Camping On to an extension when calling into the system through the VRS	-
	882	Transferring a call to the VRS. This can also be used for routing ANI/DNIS to the VRS.	-
	884	Accessing the VRS	-
Volume Control	829	Checking or changing ring volume	-
TBD	120	Common Cancelling Service Code	-

Table 5: Function Key Codes by Features

To program a key, press CALL, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code (e.g., 48 for Voice Over).

For this feature...	Use this key...	When your are...	Key Lamp Status	Also See Srvc Code
Abbreviated Dialing	**Code:** 27 **Operation:** Press key + bin + Line or CALL	Dialing a stored Common Abbreviated Dialing number	None	#2 + bin
	Code: 28 **Operation:** Press key + bin + Line or CALL key	Dialing a stored Group Abbreviated Dialing number	None	# 4 + bin
Account Codes	**Code:** 50 **Operation:** Press key + Dial Account Code	Entering Account Codes	None	*
Automatic Call Distribution (ACD)	**Code:** *10 **Operation:** Press key to log in Press key + 1 to log out or 0 to cancel	Basic Operation Logging in or out of an ACD Group	On red when logged in Off when logged out	*5
	Code: *11 **Operation:** Press key	Turning ACD Call Recording on or off	On red when recording Off when not recording	160
	Code: *12 **Operation:** Press key	Emergency Call Placing or receiving an Emergency Call	On while calling your supervisor or after being answered by your supervisor Flashing fast at the supervisor while ringing	-
	Code: *13 **Operation**: Press key	Rest Mode Enabling/disabling Rest Mode	On red when Rest Mode enabled Off when Rest Mode disabled	-
	Code: *14 **Operation:** Press key + Press 1 (Yes) or 2 (No)	Out of Service Taking an ACD Group out of Service (for Group Supervisors only), or Taking all ACD Groups out of service (for System Supervisors only)	On red when the group is out of service.	-
	Code: *15 **Operation:** Call busy ACD agent + Press key	Terminal Monitor Monitoring an ACD Agent's conversation	On red while monitoring Off when not monitoring	-

Table 5: Function Key Codes by Features

To program a key, press CALL, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code (e.g., 48 for Voice Over).

For this feature...	Use this key...	When your are...	Key Lamp Status	Also See Srvc Code
Automatic Call Distribution (ACD) (cont.)	**Code:** *16 **Operation:** Press key to put agent on hold. Press key again + 1 to hang up agent or 0 to bring agent back into call.	Switching (splitting) between an ACD Agent and their outside caller after answering an emergency call	On red while the agent is on hold	-
	Code: *17 **Operation:** Press key	Working Time Enabling/disabling Work Time	On when Work Time enabled, Flashing while on a call if Auto Work Time enabled Off when Work Time disabled	-
	Code: *18 + ACD Group **Operation:** Press key	ACD Overflow Control Overflowing ACD calls to another group	On when enabled, Slow flash when disabled	-
	Code: *19 **Operation:** Press key while on hook + Vol Up or Vol Down to scroll	Queue Status Check When in an ACD group, check the status of the queue groups	None	-
Background Music	**Code:** 04 **Operation:** Press key	Turning Background Music on or off	None	825
Barge In	**Code:** 34 **Operation:** Call ext + Press key	Barging In on a co-worker's conversation	None	810
Call Coverage	**Code:** *03 + ext. **Operation:** Press key	Placing or answering a call to your co-worker's extension	Slow Flash red when ringing, On red when busy	-
Call Forwarding, Both Ring	**Code:** 14 **Operation:** Press key + Dest. Extension	Call Forwarding Both Ring to extension	Slowly flashes red	*2 + 7
Call Forwarding, Busy	**Code:** 11 **Operation:** Press key + Dest. Extension	Call Forwarding Busy to extension or Voice Mail	Slowly flashes red	*2 + 2
Call Forwarding, Busy/No Answer	**Code:** 13 **Operation:** Press key + Dest. Extension	Call Forwarding Busy/No Answer to extension or Voice Mail	Slowly flashes red	*2 + 2
Call Forwarding, Device	**Code:** 17 **Operation:** Press key + type	Call Forwarding Device to a device or Voice Mail	Slowly flashes red	*4

Table 5: Function Key Codes by Features

To program a key, press CALL, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code (e.g., 48 for Voice Over).

For this feature...	Use this key...	When your are...	Key Lamp Status	Also See Srvc Code
Call Forwarding, External by Door Box	**Code:** 54 **Operation:** Press key + Dest. Number	Externally Call Forwarding Door Box calls	Slowly flashes red	*4
Call Forwarding, Follow Me	**Code:** 15 **Operation:** Press key + Dest. Extension	Call Forwarding Follow Me to extension or Voice Mail	Slowly flashes red	*2 + 3
Call Forwarding, Immediate	**Code:** 10 **Operation:** Press key + Dest. Extension	Call Forwarding Immediate to extension or Voice Mail	Slowly flashes red	*2 + 4
Call Forwarding, No Answer	**Code:** 12 **Operation:** Press key + Dest. Extension	Call Forwarding No Answer to extension or Voice Mail	Slowly flashes red	*2 + 6
Call Forwarding, Off-Premise	**Code:** 17 **Operation:** Press key + device type code + requested data (depends on device selected).	Setting up Call Forwarding Off-Premise, Selectable Display Messaging, VRS Park and Page and VRS Personal Greeting	Slowly flashes red	*4
Call Forwarding, Station	**Code:** 16 **Operation:** Press key + Dest. Extension	Call Forwarding Station to extension or Voice Mail	Slowly flashes red	*2
Call Forwarding / Do Not Disturb Override	**Code:** 37 **Operation:** Call extension + Press key	Overriding an extension's Call Forwarding or Do Not Disturb	None	-
Callback / Camp On/ Trunk Queuing	**Code**: 35 **Operation:** Call busy extension or access busy trunk + Press key	Leaving a Call back request at a busy extension, Camping On to a busy extension, or Queuing for a busy trunk	On red when activated	2
Call Redirect	**Code**: 49 + extension or voice mail **Operation:** Press key	Redirect a ringing call to the predefined destination	On red when activated	-
Central Office Calls	**Code:** *01 + Trunk number (001-200) **Operation:** Press key	Pressing a line key to place or answer a trunk call (where trunks are 001-200)	On green when seized, on red when in use (by other party), Slow Flash green when ringing, Hold flash when on Hold	#9
Conference	**Code:** 07 **Operation:** Set up call + Press key + set up call to add + Press key twice	Setting up a Conference or a Meet Me Conference	On red during setup	#1

Table 5: Function Key Codes by Features

To program a key, press CALL, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code (e.g., 48 for Voice Over).

For this feature...	Use this key...	When your are...	Key Lamp Status	Also See Srvc Code
Conference, Voice Call	**Code:** 32 **Operation:** Set up trunk call + Press key	Setting up a Voice Call Conference	None	-
Data Communications	**Code:** 66 **Operation:** Press key + ext or outside number	Placing a data call	On red when call set up	-
Department Calling	**Code:** 46 **Operation:** Press Key	Logging in or logging out of your Department Calling Group	On when removed, Off when installed	150
Department Step Calling	**Code:** 36 **Operation:** Dial busy ext + Press key	Step Calling through a Department Group for an idle member	None	#
Direct Station Selection / One-Touch Calling	**Code:** 01 **Operation:** Press key + dest. ext. or outside tel. # + HOLD	Calling an extension or outside number using a DSS key	Off = extension idle On = extension busy Flashing = DND	-
Do Not Disturb	**Code**: 03 **Operation:** Press key + code (0-4)	Setting your phone in DND	DND key on red	-
Do Not Disturb/Call Forward Override	**Code:** 37 **Operation:** Press key	Calling an extension which is in DND or Call Forwarded	None	-
General Purpose Relay	**Code:** 51 + relay number **Operation:** Press key	Activating the general purpose relay	On when active	-
Group Call Pickup	**Code:** 24 **Operation:** CALL + Press key	Answering a call ringing another phone in your Pickup Group	None	*#
	Code: 25 **Operation:** CALL + Press key	Answering a call ringing a phone in another Pickup Group - if you don't know the group number	None	869
	Code: 26 + Pickup Group (1-8 or 1-9 or 01-64) **Operation:** CALL + Press key + Pkup Group	Answering a call ringing a phone in a specific Pickup Group	None	868
Handset Cutoff	**Code:** 40 **Operation:** Press key	Cutting off the handset transmission while on a call	On when feature active (no transmission on handset)	-
Headset Operation	**Code:** 05 **Operation:** Press key	Enabling or disabling Headset Operation	On red when activated	834

Table 5: Function Key Codes by Features

To program a key, press CALL, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code (e.g., 48 for Voice Over).

For this feature...	Use this key...	When your are...	Key Lamp Status	Also See Srvc Code
Hold	**Code:** 44 **Operation:** Place or answer call + Press key	Putting a call on System Hold (if your phone's Hold key is reassigned)	None	-
	Code: 45 **Operation:** Place or answer call + Press key	Putting a call on Exclusive Hold	None	-
Hotline	**Code:** 01 + dest. ext **Operation:** Press key	Placing a call to your Hotline partner	Full BLF (red) for covered ext.	-
Loop Keys	**Code:** *05 + 0 (Incoming), 1 (Outgoing) or 2 (Both Ways) + 000 (All trunk groups incoming or ARS outgoing) or Trunk group (001-100). **Operation:** Press Key	Placing or answering a trunk call	Flashing red when ringing On green when in use Flashing green when on hold	-
Meet Me Conference (Also see Conference)	**Code:** 32 **Operation:** Press key	Joining a Meet Me Conference	None	863 or 864
Meet Me Paging	**Code:** 23 **Operation:** Press key	Joining a Meet Me Page	None	863 or 864
Memo Dial	**Code:** 31 **Operation:** Store: While on call, press key + number to store Use: Press Key + Call or line Erase: CALL + Press key	Storing, using or checking a Memo dial number	None	-
Message Waiting	**Code:** 38 **Operation:** Leave message: Call ext + Press key OR Answer message: Press key	Answering/Leaving a Message Waiting	None	*0
Microphone Cutoff	**Code:** 02 **Operation:** Set up call + Press key	Using Microphone Cutoff	On red when activated	-
Multiple Directory Numbers	**Code:** *03 + ext. or dept group **Operation:** Press key	Placing or answering a call to your virtual (phantom) extension	Slow Flash red when ringing, On red when busy	-
Name Storing	**Code:** 55 **Operation:** Press key + ext # + name + HOLD	Entering a name for the extension to be displayed on telephones	None	800

Table 5: Function Key Codes by Features

To program a key, press CALL, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code (e.g., 48 for Voice Over).

For this feature...	Use this key...	When your are...	Key Lamp Status	Also See Srvc Code
Networking	**Code:** *06 + network (01-50) **Operation:** Press key	Accessing a networked trunk	None	-
Night Service	**Code:** 09 + mode (0, 1-4 or 1-8) **Operation:** Press key	Activating the Day/Night Mode	On red when activated	818 + + 0
Off Hook Signaling	**Code:** 33 **Operation:** Call ext. and receive busy + Press key	Signaling a busy extension	None	7
Paging, External	**Code:** 19 + zone (1-8) **Operation:** Press Key	Making an external zone page	On red when activated	803 + zone
	Code: 20 **Operation:** Press key	Making an external All Call page	On red when activated	803 + 0
Paging, Internal	**Code:** 21 + zone (1-8, 1-9 or 01-64) **Operation:** Press key	Broadcasting to an Internal Paging Zone	On red when activated	801 + zone
	Code: 2 **Operation:** Press key	Broadcasting to all Internal Paging zones	On red when activated	801 + 0 or 00
Park	**Code:** *04 + orbit (1-9 or 01-64) **Operation:** Place or answer call + Press key	Placing a call into or retrieving a call from a Park Orbit	Fast flash when orbit is busy (green at originator, red at others)	#6 (Park) *6 (pickup)
Repeat Redial	**Code:** 29 **Operation:** Place call and press key	Activating Repeat Redial while on a call	Fast Flash while system waits to redial	-
Reverse Voice Over	**Code:** 47 + dest. ext. **Operation:** Press and hold key	Initiating Reverse Voice Over	Full BLF red	-
Room Monitor	**Code:** 39 **Operation:** Press key at destination & source + ext	Activating Room Monitor	Dest. Fast Flash red, Source Hold Flash red	-
Save Number Dialed	**Code:** 30 **Operation**: Save: Place call + Press key Redial: Line or CALL + Press key	Saving, redialing or checking a saved number	None	-
Secretary Call (Buzzer)	**Code:** 41 + sec. ext **Operation:** Press key	Calling your secretary (using the buzzer)	On red at source Fast Flash red at destination	-

Table 5: Function Key Codes by Features

To program a key, press CALL, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code (e.g., 48 for Voice Over).

For this feature...	Use this key...	When your are...	Key Lamp Status	Also See Srvc Code
Secretary Call Pickup	**Code:** 42 + boss ext **Operation:** Press key	A secretary picking up a call ringing your boss's extension	On red when activated	-
Selectable Display Messaging	**Code:** 18 **Operation:** Press key + additional data if needed	Setting up Call Forwarding Off-Premise, Selectable Display Messaging, VRS Park and Page and VRS Personal Greeting	Flashes red when activated	*4
Serial Call	**Code:** 43 **Operation:** Trk call + Hold + ext + Press key	Placing a Serial Call to a co-worker	None	-
Station Message Detail Recording	**Code:** 08 **Operation:** Press key	TBD	Flashing when new log created On in call log	-
Step Call	**Code:** 36 **Operation:** Press key	Stepping through a department group	None	#
Transfer	**Code:** 06 **Operation:** Establish call + Hold + Ext + Press key	Transferring a call	None	-
Trunk Group Routing	**Code:** *05 **Operation:** Press key	Accessing a trunk using Trunk Group Routing	On red when active	9
Trunk Groups	**Code:** *02 + Trk group (1-9 or 001-200) **Operation:** Press key	Using a trunk group key to access a Trunk Group	On red when active	804
Trunk Queuing	**Code:** 35 **Operation:** Hear busy tone for Trk + Press key	Camping On or Queuing for a trunk	On red while camped on	2
Voice Response System (VRS) (Park and Page) (Personal Greeting)	**Code:** 17 **Operation:** Press key + device type code + requested data (depends on device selected).	Setting up Call Forwarding Off-Premise, Selectable Display Messaging, VRS Park and Page and VRS Personal Greeting	Flashes red	*4
Voice Mail	**Code:** 68 + code (0-2) **Operation:** Press key	Using Voice Mail Service	Flashes slowly when monitoring	-
	Code: 77 + extension or Message Center number **Operation:** Press key	Calling Voice Mail or leaving a message	Flashes green on your key for your messages or flashes red for the Message Center	*8 or 8
	Code: 78 + 0 **Operation:** Set up call + Press key	Using Voice Mail Record	Slow Flash red when active	-

Table 5: Function Key Codes by Features				
To program a key, press CALL, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code (e.g., 48 for Voice Over).				
For this feature...	**Use this key...**	**When your are...**	**Key Lamp Status**	**Also See Srvc Code**
Voice Over	**Code:** 48 **Operation:** Hear Off-Hook Signaling tone + Press key	Initiating or responding to Voice Over	On red when responding Hold Flash red when listening	6

Table 6: Function Key Codes by Number

To program a key, press CALL, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code (e.g., 48 for Voice Over).

Use this key...	For this feature...	When you are...	Key Lamp Status	Also see Srvc Code
Code: 01 + dest. ext. or outside tel # + HOLD **Operation:** Press key	Direct Station Selection, Hotline, One-Touch Calling	Calling an extension or outside number using a DSS key	Off = extension idle On = extension busy Flashing = DND	-
Code: 02 **Operation:** Set up call + Press key	Microphone Cutoff	Using Microphone Cutoff	On red when activated	-
Code: 03 **Operation:** Press key	Do Not Disturb	Activating DND	On red when activated	-
Code: 04 **Operation:** Press key	Background Music	Turning BGM on or off	On red when activated	825
Code: 05 **Operation:** Press key	Headset Operation	Enabling or disabling Headset Operation	On red when activated	834
Code: 06 **Operation:** Establish call + Hold + Ext + Press key	Transfer	Transferring a call	None	-
Code: 07 **Operation:** Set up call + Press key + set up call to add + Press key twice	Conference	Setting up a conference or a Meet Me Conference	On red during setup	#1
Code: 08 **Operation:** Press key	SMDR	TBD	Flashing when new log created On in call log	-
Code: 09 + mode (0, 1-4 or 1-8) **Operation:** Press key	Night Service	Activating the Day/Night Mode	On red when activated	818 + mode (1-4 or 1-8)
Code: 10 **Operation:** Press key + Dest. Ext.	Call Forwarding, Immediate	Call Forwarding to extension or Voice Mail	Slowly flashes red	*2 + 4
Code: 11 **Operation:** Press key + Dest. Ext.	Call Forwarding, Busy	Call Forwarding to extension or Voice Mail	Slowly flashes red	*2 + 2

Table 6: Function Key Codes by Number

To program a key, press CALL, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code (e.g., 48 for Voice Over).

Use this key...	For this feature...	When you are...	Key Lamp Status	Also see Srvc Code
Code: 12 **Operation:** Press key + Dest. Ext.	Call Forwarding, No Answer	Call Forwarding to extension or Voice Mail	Slowly flashes red	*2 + 6
Code: 13 **Operation:** Press key + Dest. Ext.	Call Forwarding, Busy/No Answer	Call Forwarding to extension or Voice Mail	Slowly flashes red	*2 + 2
Code: 14 **Operation:** Press key + Dest. Ext.	Call Forwarding, Both Ring	Call Forwarding to extension	Slowly flashes red	*2 + 7
Code: 15 **Operation:** Press key + Dest. Ext.	Call Forwarding, Follow Me	Call Forwarding to extension or Voice Mail	Slowly flashes red	*2 + 3
Code: 16 **Operation:** Press key + Dest. Ext.	Call Forwarding, to Station	Call Forwarding to extension or Voice Mail	Slowly flashes red	*2
Code: 17 **Operation:** Press key + device type code + requested data (depends on device selected).	Call Forwarding, to Device Off-Premise Selectable Display Messaging Voice Response System (VRS) (Park and Page) Voice Response System (VRS) (Personal Greeting)	Setting up Call Forwarding Off-Premise, Selectable Display Messaging, VRS Park and Page and VRS Personal Greeting	Flashes red	*4
Code: 19 + zone (1-8) **Operation:** Press key	Paging, External	Broadcasting to an External Paging Zone	On red when activated	803 + zone
Code: 20 **Operation:** Press key	Paging, External	Broadcasting to all External Paging Zones	On red when activated	803 + 0
Code: 21 + zone (1-8, 1-9 or 01-32) **Operation:** Press Key	Paging, Internal	Broadcasting to an Internal Paging Zone	On red when activated	801 + zone
Code: 22 **Operation:** Press key	Paging, Internal	Broadcasting to all Internal Paging Zone	On red when activated	801 + 0 or 00
Code: 23 **Operation:** Press key	Meet Me Paging	Joining a Meet Me Page	None	863, 864, or 865

Table 6: Function Key Codes by Number

To program a key, press CALL, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code (e.g., 48 for Voice Over).

Use this key...	For this feature...	When you are...	Key Lamp Status	Also see Srvc Code
Code: 24 **Operation:** CALL + Press Key	Group Call Pickup	Answering a call ringing another phone in your Pickup Group	None	*#
Code: 25 **Operation:** CALL + Press key	Group Call Pickup	Answering a call ringing a phone in another Pickup Group - if you don't know the group number	None	869
Code: 26 + Pickup Group (1-8 or 1-9 or 01-64) **Operation:** CALL + Press key + Pickup Group	Group Call Pickup	Answering a call ringing a phone in a specific Pickup Group	None	868
Code: 27 **Operation:** Press key + bin + Line or CALL key	Abbreviated Dialing	Dialing a stored Common Abbreviated Dialing number	None	#2 + bin
Code: 28 **Operation:** Press key + bin + Line or CALL key		Dialing a stored Group Abbreviated Dialing number	None	#4 + bin
Code: 29 **Operation:** Place call + Press key	Repeat Redial	Activating repeat redial while on a call	Fast Flash while system waits to redial	-
Code: 30 **Operation:** Save: Place call + Press key Redial: Line or CALL + Press key	Save Number Dialed	Saving, redialing or checking a saved number	None	815
Code: 31 **Operation**: Store: While on call, Press key + number to store Use: Press key + CALL or line Erase: CALL + Press key	Memo Dial	Storing, using or checking a Memo Dial number	None	-
Code: 32 **Operation:** Set up trunk call + Press key OR Press key	Conference, Voice Call OR Meet Me Conference (Also see Conference)	Setting up a Voice Call Conference OR Joining a Meet Me Conference	None	863, 864, or 865

Table 6: Function Key Codes by Number

To program a key, press CALL, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code (e.g., 48 for Voice Over).

Use this key...	For this feature...	When you are...	Key Lamp Status	Also see Srvc Code
Code: 33 **Operation:** Call ext. and receive busy + Press key	Off Hook Signaling	Signaling a busy extension	None	7 or 809
Code: 34 **Operation:** Call ext + Press key	Barge In	Barging In on a co-worker's conversation	None	810
Code: 35 **Operation:** Call busy extension or access busy trunk + Press key	Callback / Camp On / Trunk Queuing	Leaving a Callback request at a busy extension, Camping On to a busy extension, Queuing for a busy trunk	On red when activated	2 or 850
Code: 36 **Operation:** Dial busy ext + Press key	Department Step Calling	Step Calling through a Department Group for an idle member	None	# or 808
Code: 37 **Operation:** Call extension + Press key	Call Forwarding / Do Not Disturb Override	Overriding an extension's Call Forwarding or Do Not Disturb	On red when activated	807
Code: 38 **Operation:** Leave message: Call ext + Press key OR Answer message: Press key	Message Waiting	Answering/Leaving a Message Waiting	None	*0 or 0
Code: 39 **Operation:** Press key at destination and source + ext	Room Monitor	Activating Room Monitor	Fast Flash red at destination, Hold Flash red at source	-
Code: 40 **Operation:** Press key	Handset Cutoff	Cutting off the handset transmission while on a call	On when feature active (no transmission on handset)	-
Code: 41 + sec. ext. **Operation:** Press key	Secretary Call	Calling your secretary (using the buzzer)	On red at source Fast Flash red at destination	-
Code: 42 + boss ext. **Operation:** Press key		A secretary picking up a call ringing your boss's extension.	On red when activated	-
Code: 43 **Operation:** TRK call + Hold + ext + Press key	Serial Call	Placing a Serial Call to a co-worker	None	-

Table 6: Function Key Codes by Number

To program a key, press CALL, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code (e.g., 48 for Voice Over).

Use this key...	For this feature...	When you are...	Key Lamp Status	Also see Srvc Code
Code: 44 **Operation:** Place or answer call + Press key	Hold	Putting a call on System Hold (if hold key is reassigned)	None	-
Code: 45 **Operation:** Place or answer call + Press key		Putting a call on Exclusive Hold	None	-
Code: 46 **Operation:** Press key	Department Calling	Logging in or logging out of your Department Calling Group	On when removed, Off when installed	150
Code: 47 + dest. ext. **Operation:** Press and hold key	Reverse Voice Over	Initiating Reverse Voice Over	Full BLF red	-
Code: 48 **Operation:** Hear Off-Hook Signaling tones + Press key	Voice Over	Initiating or responding to Voice Over	On red when responding Hold Flash red when listening	6 or 890
Code: 49 + ext or voice mail number **Operation:** Press key	Call Redirect	Redirecting an incoming call to an extension or voice mail	On red when activated Flashes when in DND/Call Forward	-
Code: 50 **Operation:** Press key	Account Codes	Entering Account Codes	None	* or ##
Code: 51 + relay number **Operation:** Press key	General Purpose Relay	Activating the general purpose relay	On when active	880
Code: 54 **Operation:** Press key	Call Forward, Off-Premise	Forwarding a Door Box call to an external phone number	On red when activated	822
Code: 55 **Operation:** Do not lift handset + Press key + Enter extension number + Enter name + Press HOLD	Name Storing	Changing the name displayed on your display phone	None	800
Code: 66 **Operation:** Press key + ext or outside number	Data Communications	Setting up a Data Call	On red when call set up	-

Table 6: Function Key Codes by Number

To program a key, press CALL, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code (e.g., 48 for Voice Over).

Use this key...	For this feature...	When you are...	Key Lamp Status	Also see Srvc Code
Code: 68 + 0-2 **Operation:** Press key	Voice Mail	Using Voice Mail Service	Flashes slowly when monitoring	
Code: 77 + extension or Message Center number **Operation:** Press key		Calling Voice Mail or leaving a message	Flashes green on your key for your messages or flashes red for the Message Center	*8 or 8
Code: 78 + Conversation Record **Operation:** Press key		Using Conversation Record	Flashes red when recording	
Code: *01 + Trunk number (001-200) **Operation:** Press key	Central Office Calls	Pressing a line key to place or answer a trunk call (where trunks are 001-200)	On green when seized, on red when in use (by other party), Slow Flash green when ringing, Hold flash when on Hold	#9
Code: *02 + Trk group (1-9 or 001-200) **Operation:** Press key	Trunk Groups	Using a trunk group key to access a Trunk Group	On red when active	804
Code: *03 + ext. or department group **Operation:** Press key	Multiple Directory Numbers/Call Coverage	**Multiple Directory Number:** Placing or answering a call from your virtual (phantom) extension or **Call Coverage:** Placing or answering a call to your co-worker's extension	Slow Flash red when ringing, On red when busy	-
Code: *04 + orbit (01-64) **Operation:** Place or answer call + Press key	Park	Placing a call into or retrieving a call from a Park Orbit	Fast Flash when orbit is busy (green at originator, red at others)	#6 (Park) *6 (pickup)

Table 6: Function Key Codes by Number

To program a key, press CALL, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code (e.g., 48 for Voice Over).

Use this key...	For this feature...	When you are...	Key Lamp Status	Also see Srvc Code
Code: *05 + 0 (Incoming), 1 (Outgoing) or 2 (Both ways) + 000 (All trunk groups incoming or ARS outgoing) or Trunk group (001-100) **Operation:** Press key	Loop Keys, Trunk Group Routing	Placing or answering a trunk call	Flash red when ringing, On green when in use, Flash green when on hold	-
Code: *06 + Network number (1-50) **Operation:** Press key	Networking	Accessing a networked trunk	None	-
Code: *10 **Operation:** Press key to log in Press key + 1 to log out or 0 to cancel	Automatic Call Distribution (ACD)	**Basic Operation** Logging in or out of an ACD Group	On red when logged in Off when logged out	*5
Code: *11 **Operation:** Press key		**Call Recording** Turning ACI Call Recording on or off	On red while recording, Off while not recording	160
Code: *12 **Operation:** Press key		**Emergency Call** Placing or receiving an Emergency Call	On while calling your supervisor or after being answered by your supervisor Flashing fast at the supervisor while ringing	-
Code: *13 **Operation:** Press key		**Rest Mode** Enabling/disabling Rest Mode	On red when Rest Mode enabled Off when Rest Mode disabled	-
Code: *14 **Operation:** Press key + Press 1 (Yes) or 2 (No)		**Out of Service** Taking an ACD Group out of service (for Group Supervisors only), or Taking all ACD Groups out of service (for System Supervisors only)	On red when a group is out of service	-
Code: *15 **Operation:** Call busy ACD agent + Press key		**Terminal Monitor** Monitoring an ACD Agent's conversation	On red while monitoring, Off when not monitoring	-

Table 6: Function Key Codes by Number				
To program a key, press CALL, dial 851 (for 2-digit codes) or 852 (for 3-digit codes), press the key and enter the code (e.g., 48 for Voice Over).				
Use this key...	**For this feature...**	**When you are...**	**Key Lamp Status**	**Also see Srvc Code**
Code: *16 **Operation:** Press key to put agent on hold. Press key again + 1 to hang up agent or 0 to bring agent back into call.	Automatic Call Distribution (ACD) (cont.)	**Supervisor Split** Switching (splitting) between an ACD Agent and their outside caller after answering an emergency call	On while agent is on hold	-
Code: *17 **Operation:** Press Key		**Work Time** Enabling/disabling Work Time	On when Work Time enabled, Flashing (while on a call) if Auto Work time enabled Off when Work Time disabled	-
Code: *18 + ACD Group Number **Operation:** Press key		Enabling ACD overflow	On red when activated Slowly flashes red when disabled	-
Code: *19 **Operation:** Press key while on hook + Vol Up or Vol Down to scroll		Queue Status Check Viewing the ACD Queue Status of each ACD group	None	-

Table 7: System Number Plan/Capacities

System Type:	Aspire S	Aspire M/L	Aspire XL
System			
Analog Caller ID Detector	24	64	64
Classes of Service	15	15	15
Day/Night Mode Numbers	4	8	8
Day/Night Service Patterns	4	32	32
Dial Tone Detector DTMF Receiver	16	64	64
System Ports (trunks and analog/digital extensions)	• ***Software thru 2.21 =*** 8 trunks and 26 extensions • ***Software 2.50+ =*** 8 trunks and 50 extensions	• ***NTCPU with Basic PAL =*** 64 trunks/extensions • ***NTCPU with Feature Upgrade PAL (software 01.00 - 03.10)*** = 64 trunks/extensions • ***NTCPU with Feature Upgrade PAL (software 04.00+) =*** 128 trunks/extensions • ***NTCPU-B*** 200 trunks and 256 extensions	• 200 trunks and 384 extensions
Toll Restriction Classes	15	15	15
Verifiable Account Code Table	2000	2000	2000
Trunk			
Trunk Port Number	1-8	1-200 [1]	1-200
	[1] With the basic NTCPU (P/N 0891002), trunks count toward the total number of allowed hardware ports (64 or 128 ports depending on the PAL EPROM and software installed)		
Trunk Ports (Total) • Analog Trunks • BRI Trunk Ports • T1/PRI Trunk Ports • E&M Analog Trunk Ports • DID Analog Trunk Ports • VoIP Trunk Ports	8 8 4 (8B) N/A N/A 8 8	200 200 96 (192B) 192 60 120 200	200 200 96 (192B) 192 60 120 200
BRIU Logical Ports	T-Bus: 1-8 S-Bus: 1-26	T-Bus: 1-200 S-Bus: 1-256	T-Bus: 1-200 S-Bus: 1-256
COIU: • Physical Ports • Logical Ports	 01-04 0-8	 01-08 0-200	 01-08 0-200

Table 7: System Number Plan/Capacities			
System Type:	**Aspire S**	**Aspire M/L**	**Aspire XL**
DIOPU: • Physical Ports • Logical Ports	 01-02 LD Trunk: 0-8 OPX: 0-8	 01-08 LD Trunk: 0-200 OPX: 0-25	 01-08 LD Trunk: 0-200 OPX: 0-25
PRIU Logical Ports	N/A	T-Bus: 1-200 S-Bus: 1-256	T-Bus: 1-200 S-Bus: 1-256
TLIU: • Physical Ports • Logical Ports	N/A	01-08 0-200	01-08 0-200
VOIPU: • Physical Ports • Logical Ports	 1-8 0-8	 01-32 0-200	 01-32 0-200
DID Translation Tables	20	20	20
DID Translation Table Entries	2000	2000	2000
DISA • Classes of Service • Users	 15 1-15	 15 1-15	 15 1-15
Ring Groups	1-8	1-100	1-100
Tie Line Classes of Service	N/A	15	15
Tie Line Toll Restriction Classes	N/A	15	15
Trunk Access Maps	1-8	1-200	1-200
Trunk Group Numbers	1-8	1-100	1-100
Trunk Routes	1-8	1-100	1-100

Table 7: System Number Plan/Capacities

System Type:	Aspire S	Aspire M/L	Aspire XL
Extension			
Telephone Extension Port Numbers • Keysets • Single Line Phones/Analog Devices • VoIP Extensions • Aspire Wireless	1-50 [3] (1-24) (1-18) (1-16) [2, 4] N/A	1-256 (1-256) [2] (1-256) [2] (1-512) [5] 002-512 (manual select) [5] 257-512 (auto select) [5]	1-384 (1-384) (1-384) (1-512) [5] 002-512 (manual select) [5] 385-512 (auto select) [5]
	[2] Counts toward total number of allowed hardware ports (Aspire S=26 ports with software 2.08-2.21 or 50 ports with software 2.50+, Aspire M 64-Port NTCPU=64, Aspire M/L 64-Port NTCPU w/Feature Upgrade PAL and software 4.00+=128, Aspire M/L w/Enhanced NTCPU=256, Aspire XL=384). [3] The total number of ports available is determined by system software. ***Software prior to 2.50*** has 26 ports (24 digital and analog, 2 analog only - a maximum of 16 IP extensions is included in this 26 ports) ***Software 2.50 and higher*** provides 50 ports (Maximum Wired Terminals: 26 Includes keysets, single line telephones, ISDN terminals (APRs NOT included), Maximum IP Terminals: 16 Includes DtermIP and H.323 terminals, Maximum Special Terminals: Reserved for IntraMail: 8 (fixed extension ports 43-50)). [4] If the APR-B2 mode is assigned in a system which already has 26 extensions, the number of IP phones is reduced. [5] With the basic NTCPU (P/N 0891002), VoIP and Aspire Wireless extensions count toward the total number of allowed hardware ports (64 or 128 ports depending on the PAL EPROM and software installed). With the Enhanced NTCPU (P/N 0891038), if the number of VoIP and Aspire Wireless phones combined exceeds 256, the number of ports available for keysets or analog devices is then reduced by for each additional IP or Aspire Wirelss phone.		
ESIU • Physical Ports • Logical Ports -Tone Ringer (2PGDAD) -Door Box (2PGDAD) -Analog I/F (2PGDAD) -ACI (2PGDAD) -APR for B2 Mode	 1-8 1-4 1-4 1-8 1-8 1-42 (descending order)	 01-16 1-8 1-8 1-96 1-96 193-256 (descending order) ***With software 4.xx or higher:*** 193-512 (descending order)	 01-32 1-8 1-8 1-96 1-96 193-512 (descending order)
SLIU • Physical Ports • Logical Ports	 1-8 1-26	 01-16 1-256	 01-16 1-384
Telephone Extension Number Range	301-499 5000-5312	301-499 5000-5312	301-499 5000-5312
Virtual Extension Ports	24	256	256
Virtual Extension Port Numbers	01-24	001-256	001-256
Virtual Extension Number Range	Undefined	Undefined	Undefined

Table 7: System Number Plan/Capacities			
System Type:	**Aspire S**	**Aspire M/L**	**Aspire XL**
2PGDAD Modules	10	56	56
ADA (Recording Jack) Adapters	24	192	192
Aspire Wireless Bases	N/A	12	12
Aspire Wireless Phones	N/A	120	120
Door Boxes	4	8	8
Door Box Numbers	1-4	1-8	1-8
DSS Consoles Numbers • 24-Button DLS Consoles, Maximum Installed • 110-Button DSS Consoles, Maximum Installed	8 24 4	8 256 32	8 384 32
Handsfree Adapter (HF-R)	24	192	192
Operator Access Number	0	0	0
Operator Extension	1	1	1
Ringdown Assignments	512	512	512
SLT Adapters	8	16	16
Voice Mail Master Numbers	301-499, 5000-5312	301-499, 5000-5312	301-499, 5000-5312
Abbreviated Dialing			
Abbreviated Dialing Groups	8	64	64
Abbreviated Dialing Bins	0-1999	0-1999	0-1999
Abbreviated Dialing Table-Common	1000	1000	1000
ACD			
ACD Groups	N/A	64	64
ACD Agent Extensions	N/A	512	512
ACI			
ACI Groups	4	16	16
ACI Ports	8	96	96
Automated Attendant			
VRS Message Numbers	1-48	1-48	1-48
Conference			
Conference Circuits	32 - maximum (32 Parties Per Conference)	64 - maximum (32 Parties Per Conference)	64 - maximum (32 Parties Per Conference)

Table 7: System Number Plan/Capacities			
System Type:	**Aspire S**	**Aspire M/L**	**Aspire XL**
Data Communication Interfaces			
APR Software Port Numbers	193-256 ***With software 4.xx or higher:*** 193-512	193-256 ***With software 4.xx or higher:*** 193-512	193-512
APA Adapters	24	192	192
APR Adapters	B1 = 24 B2 = 8 prior to 2.50 or 16 with 2.50+	192	192
CTA or CTU Adapters	24	128	128
Module Extension Number Range	301-499, 5000-5312	301-499, 5000-5312	301-499, 5000-5312
Department and Pickup Groups			
Department (Extension) Group Numbers	1-8	1-64	1-64
Department (Extension) Group Number Range	301-499, 5000-5312	301-499, 5000-5312	301-499, 5000-5312
Call Pickup Group Numbers	1-8	1-64	1-64
Hotline			
Internal Hotline	512	512	512
External Hotline	512	512	512
Paging and Park			
Internal Page Group Numbers	0, 1-8	0, 1-9 or 01-64	0, 1-9 or 01-64
External Page Group Numbers	0, 1-8	0, 1-8	0, 1-8
External Speakers • NTCPU • PGDAD Module	8 N/A (1-8)	9 (1) (1-8)	9 (1) (1-8)
Park Group Numbers	1-64	1-64	1-64
Park Orbits	1-64	1-64	1-64
SMDR			
SMDR Ports	1-2	1-8	1-8
VRS			
VRS (on DSP Daughter Board)	1	1	1
VRS Channels	8	16	16
VRS Attendant Messages	3	3	3
VRS Recordable Messages	48	48	48

Table 7: System Number Plan/Capacities			
System Type:	**Aspire S**	**Aspire M/L**	**Aspire XL**
Voice Mail			
Ports for IntraMail	8 (fixed extension ports 43-50)	N/A	N/A
Ports for External Voice Mail	72 [6]	72	72
	[6] Though this is the maximum available in the NVM-Series voice mail, as each voice mail port requires an analog port, the total number is restricted by the Aspire S system to a maximum of 16.		
VoIP			
VoIP Extensions	16 [4]	• ***NTCPU with Basic or Feature Upgrade PAL (software 01.00 - 03.10)*** = 64 • ***NTCPU with Feature Upgrade PAL (software 04.00+)*** = 128 • ***NTCPU-B*** = 512	512
	[4] If the APR-B2 mode is assigned in a system which already has 26 extensions, the number of IP phones is reduced.		
ADA2 (Recording Jack) Adapters	16	192	192
IP Adapters	16	256	256
IP Phones	16	512	512
PSA (Power Failure) Adapters	16	192	192
RAS Unicast Ports	0-65535	0-65535	0-65535
Call Signaling Ports	0-65535	0-65535	0-65535
NGT Signal Receive Ports	0-65535	0-65535	0-65535
DRS Ports	0-65535	0-65535	0-65535
RTP Ports	0-65535	0-65535	0-65535
RTCP Ports	0-65535	0-65535	0-65535
H.245 Ports	0-65535	0-65535	0-65535
DSP Resources	01-32	01-32	01-32
H.323 Alias Addresses	1-6	1-6	1-6

Table 7: System Number Plan/Capacities			
System Type:	**Aspire S**	**Aspire M/L**	**Aspire XL**
Passwords			
User Password for setting Toll Restriction Override and Changing Class of Service using a service code	0000	0000	0000
Programming Passwords			
Level 1 (MF) PCPro/WebPro User Name:	374772 NEC-I	374772 NEC-I	374772 NEC-I
Level 2 (IN) PCPro/WebPro User Name:	12345678 ASPIRE	12345678 ASPIRE	12345678 ASPIRE
Level 3 (SA) PCPro/WebPro User Name:	0000 ADMIN1	0000 ADMIN1	0000 ADMIN1
Level 4 (SB) PCPro/WebPro User Name:	9999 ADMIN2	9999 ADMIN2	9999 ADMIN2
Programming Password Users	8	8	8
Note:			
Extension numbers can be three or four digits long. See Flexible System Numbering.			

Table 8: System Tones			
Tone	**Repetitions**	**Frequency**	**Level**
Internal, Special and External Dial Tone	Continuous	350 Hz + 440 Hz	-16 dB
Internal Recall Dial Tone	3	350 Hz + 440 Hz	-16 dB
Internal Busy Tone 1	Continuous	440 Hz + 480 Hz	-16 dB
DND Busy Tone	Continuous	400 Hz	-13 dB
Internal Reorder Tone	Continuous	480 Hz + 620 Hz	-21 dB
Internal Intercept Tone	Continuous	350 Hz + 440 Hz	-16 dB
Internal Confirmation Tone	3	350 Hz + 440 Hz	-16 dB
Internal Hold Tone	Continuous	MOH	-
External Hold Tone	Continuous	BGM	-
Internal Audible Ring (Ringback) Tone	Continuous	440 Hz + 480 Hz	-16 dB
Override Tone	1	440 Hz	-16 dB
Lock-out Tone	Continuous	800 Hz	-13 dB
Clock Alarm Tone	Continuous	800 Hz	-13 dB
Background Music	Continuous	BGM	-
Door Chime 1	3	650 Hz + 520 Hz	-13 dB
Door Chime 2	3	880 Hz + 700 Hz	-13 dB
Door Chime 3	3	1050 Hz at + 800 Hz	-13 dB
Door Chime 4	3	650 Hz + 520 Hz	-13 dB
Door Chime 5	3	880 Hz + 700 Hz	-13 dB
Door Chime 6	3	1050 Hz at + 800 Hz	-13 dB
Service Set Tone, Service Clear Tone	3	350 Hz + 440 Hz	-16 dB
Talk Back Tone, Paging Tone, Splash Tone 2	2	800 Hz	-13 dB
Speaker Monitor Tone, Door Relay Tone, Door Call Tone, Splash Tone 1	1	800 Hz	-13 dB
Splash Tone 3	3	800 Hz	-13 dB
1 Second Signal Tone	1	800 Hz	-13 dB
Sensor Alarm Tone 1	Continuous	880 Hz	-13 dB
Sensor Alarm Tone 2	Continuous	880 Hz	-13 dB
Sensor Alarm Tone 3	Continuous	880 Hz	-13 dB
Internal Call Waiting Tone	1	400 Hz	-13 dB
Internal Executive Override Tone	1	400 Hz	-13 dB
Conference Tone, Intrusion Tone 2,	1	800 Hz	-13 dB
External Dial Tone	Continuous	350 Hz + 440 Hz	-16 dB
External Audible Ring Tone	Continuous	520 Hz	-13 dB
External Reorder Tone	Continuous	520 Hz	-13 dB

Table 8: System Tones			
Tone	**Repetitions**	**Frequency**	**Level**
External Busy Tone	Continuous	400 Hz	-13 dB
External Special Audible Ring Tone, Voice Mail Message Waiting, Stutter Dial Tone for SLT	Continuous	520 Hz	-13 dB
Trunk Ring Tone Range 1 (Selected in Program 22-03-01 for trunks and 15-02-02 for extensions)	Combination of... High: 1100 Hz + 1400 Hz + 16 Hz Med: 660 Hz + 760 Hz + 16 Hz Low: 520 Hz + 660 Hz + 16 Hz		
Trunk Ring Tone Range 2 (Selected in Program 22-03-01 for trunks and 15-02-02 for extensions)	Combination of... High: 1100 Hz + 1400 Hz + 8 Hz Med: 660 Hz + 760 Hz +8 Hz Low: 520 Hz + 660 Hz + 8 Hz		
Trunk Ring Tone Range 3 (Selected in Program 22-03-01 for trunks and 15-02-02 for extensions)	Combination of... High 2000 Hz + 760 Hz + 16 Hz Med: 1400 Hz + 660 Hz + 16 Hz Low: 1100 Hz + 540 Hz + 16 Hz		
Trunk Ring Tone Range 4 (Selected in Program 22-03-01 for trunks and 15-02-02 for extensions)	Combination of... High: 2000 Hz + 760 Hz + 8 Hz Med: 1400 Hz + 660 Hz + 8 Hz Low: 1100 Hz +540 Hz + 8 Hz		
Extension Ring Tone Range (Selected in Program 15-02-03 for extensions)	Combination of... High 1100 Hz + 1400 Hz +8 Hz Med: 660 Hz + 760 Hz + 8 Hz Low: 520 Hz + 660 Hz + 8 Hz		
Sensor Ring Tone Range	Combination of... High: 760 Hz + 760 Hz Med: 760 Hz + 760 Hz Low: 760 Hz + 760 Hz		

Table 9: Multibutton Telephone Displays		
With this feature...	**You'll see this display...**	**When...**
(Idle telephone)	**Date, Day and Time** **Ext (ext name)**	Your extension is idle and on hook.
	CHECK	You press CHECK to check a function.
	CHECK (ext) (ext name) **PORT nn GP-nn**	You press CHECK and CALL1 to check extension information, where (ext) is the extension number, (ext name) is the extension name, PORT nn is the port number and GP-nn is the Department Group.
Abbreviated Dialing	**SET ABB:COMMON**	You dial Service Code 853 to store a Common Abbreviated Dialing number.
	SET ABB: GROUP	You dial Service Code 854 to store a Group Abbreviated Dialing number.
	ABB (bin) **(digits)**	You are storing Abbreviated Dialing numbers, where (bin) is the bin number and (digits) is the current stored number (if any).
	Time and Date **ABB**	You press CALL and DIAL to dial a Common Abbreviated Dialing number.
	Time and Date **ABB:GROUP**	You press CALL and DIAL to dial a Group Abbreviated Dialing number.
	(trk name) **ABB DIAL (bin #) (digits)**	You place a call using Abbreviated Dialing.
	PREVIEW **ABB:(GROUP)**	You press DIAL to preview an Abbreviated Dialing entry, where GROUP displays based on the DIAL key setting.
	PREVIEW (bin name) **ABB:(bin) (digits)**	You press DIAL and select a bin before outdialing Abbreviated Dialing number, where (bin name) is the programmed name, (bin) is the bin number and (digits) is the stored number.
	CHECK **ABB(GROUP)**	You press CHECK and DIAL to check a stored Abbreviated Dialing bin, GROUP is displayed based on the DIAL key setup.
	CHECK (name) **ABB (xxxx) (digits)**	You press CHECK, DIAL and dial a bin number to check an Abbreviated Dialing entry, where (name) is the bin name, (xxxx) is the bin type/number and (digits) is the stored number.
Account Codes	**(trk name)** **ENTER ACCOUNT CODE**	You place a call and the system has Forced Account Codes enabled.

Table 9: Multibutton Telephone Displays		
With this feature...	**You'll see this display...**	**When...**
Alarm	**SET n ALARM** **DIAL TIME**	You dial 827 to set an alarm, the dial 1 (to set Alarm 1) or 2 (to set Alarm 2).
	Date, Day and Time **EXT ALARM n**	Your extension is idle, after setting Alarm n (1 or 2).
	SET n ALARM **TIME**	You set an alarm time but do not hang up.
	SET n ALARM **CANCEL**	You dial 827, 1 or 2 to select an alarm type then 9999 to cancel.
	SET ALARM **1:ALARM1 2:ALARM2**	You dial 827 to set an alarm.
	ALARM n HH:MM am/pm **(digits)**	You press CHECK, dial 827, then 1 or 2 to check your alarm setting.
Background Music	**Date, Day and Time** **B.G.M. ON**	You dial Service Code 825 to turn Background Music on.
	Date, Day and Time **B.G.M OFF**	You dial Service Code 825 to turn Background Music off.
Barge In	**BREAK IN** **(ext name) (ext name)**	You have Barged-In (speech mode) on a co-worker's Intercom call.
	(Trk name) BREAK IN **(ext name)**	You have Barged-In (speech mode) on a co-worker's outside call.
	MONITOR **(ext name) (ext name)**	You have Barged-In (monitor mode) on a co-worker's Intercom call.
	(Trk name) MONITOR **(ext name)**	You have Barged-In (monitor mode) on a co-worker's outside call.
Call Forwarding	**Date, Day and Time** **FWD B/NA >> (ext name)**	Your extension is idle and you have previously activated Call Forwarding when Busy/Not Answered (Code *22). Name shows destination extension.
	Date, Day and Time **FWD IMME >> (ext name)**	Your extension is idle and you have previously activated Call Forwarding Immediate (Service Code *24). Name shows destination extension.
	Date, Day and Time **FWD RNA >> (ext name)**	Your extension is idle and you have previously activated Call Forwarding when Unanswered (Service Code *26). Name shows destination extension.
	Date, Day and Time **FWD BOTH >> (name)**	Your extension is idle and you have previously activated Call Forwarding with Both Ringing (Service Code *27). Name shows destination extension..
	Date, Day and Time **FWD SCRN >> VOICE MAIL**	Your extension is idle and you have previously activated Call Forwarding with Both Ringing (Service Code *21).

Table 9: Multibutton Telephone Displays		
With this feature...	**You'll see this display...**	**When...**
Call Forwarding (cont.)	**FWD Busy/no answer** **Extension No?**	You lift the handset and dial *22 for Call Forwarding when Busy.
	FWD Immediate **Extension No?**	You lift the handset and dial *24 for Call Forwarding Immediate.
	FWD No answer **Extension No?**	You lift the handset and dial *26 for Call Forwarding when Unanswered.
	FWD Both Ring **Extension No?**	You lift the handset and dial Service Code *27 to enable Call Forwarding with Both Ringing.
	FWD SCRN >> VOICE MAIL **Type?**	You lift the handset and dial Service Code *21 to enable Call Forwarding with Answering Machine Emulation..
	FWD Busy/no answer **Extension No.?**	You dial Service Code *22 to enable Call Forwarding when Busy/No answered.
	FWD No answer **Extension No.?**	You dial Service Code *26 to enable Call Forwarding when Unanswered.
	FWD RNA (ext name) **(type)**	You dial Service Code *26 + extension number + Call Forwarding type to enable Call Forwarding when Unanswered but don't hang up.
	FWD Immediate **Extension No.?**	You dial Service Code *24 to enable Call Forwarding Immediate.
	FWD IMME >> (ext name) **(type)**	You dial Service Code *24 + extension number + Call Forwarding type to enable Call Forwarding Immediate but do not hang up.
	CALL FORWARD CANCEL	You dial Call Forwarding Service Code *20 to cancel Call Forwarding but do not hang up.
Call Forwarding Off-Premise	**Date, Day and Time** **CFW OFF-PREMISE**	You dial Service Code *46, a trunk access code and an outside phone number to enable Call Forwarding Off-Premise.
Call Forwarding with Follow Me	**Follow me** **Extension No.?**	You dial Service Code *23 to dial Call Forward with Follow Me
	FLW ME (ext name) **Type ?**	You dial *23 + extension number to set Call Forward with Follow Me
	Follow me **CANCEL**	You dial *23 to cancel Call Forwarding with Follow Me
	Date, Day and Time **FLW ME >> (ext name)**	An extension is having its calls intercepted by Call Forwarding with Follow Me, where (ext name) is intercepting extension
Call Timer	**(Trk name) MM:SS** **(digits)**	You place an outside call and the Call Timer starts (MM:SS)
Call Waiting/Camp On	**Date, Day and Time** **CAMP-ON (ext name)**	You have dialed 2 to camp-on to a busy extension. Name shows the destination extension.

Table 9: Multibutton Telephone Displays		
With this feature...	**You'll see this display...**	**When...**
Call Waiting/Camp On and Callback	**Date, Day and Time** **CAMP CANCEL**	You have dialed 870 to cancel a Camp-On or Call Waiting request.
Callback	**Date, Day and Time** **CALL-BACK (ext name)**	Extension at which you left a Callback (shown in the name field) is calling you back.
Caller ID	**Date, Day and Time** **NO CALLER INFO**	You try to display the Caller ID data for an incoming call and none is provided by Telco.
	Date, Day and Time **UNAVAILABLE INFO**	You try to display the Caller ID data for an incoming call and the caller has blocked it.
	(list number): (Caller ID name) **date time**	You press List + CID to view Caller ID for previous calls.
	(list number): (Caller ID name) *** date time** **OneT ABBc ABBg**	You press the STORE soft key when viewing the Caller ID information by pressing List + CID.
	Store to (location) **ENTER BIN**	You initiate the storing of Caller ID information for the viewed call in a One Touch, Common Abbreviated Dial or Group Abbreviated Dial bin by pressing the STORE + (location) soft key. (location being OneT, ABBc, or ABBg)
	KEY (nn) (Caller ID name) **(number)**	You store the viewed Caller ID information in an One Touch bin pressing the STORE + entering the bin number where the number will be stored.
	ABB (bin) (Caller ID name) **(number)**	You store the viewed Caller ID information in an Abbreviated Dial bin pressing the STORE + entering the bin number where the number will be stored.
	(Trk name) **(Caller ID name) (Incoming #)**	You display the Caller ID information for a Multiple Message Format incoming call.
	(Trk name) **(Incoming Number)**	You display the Caller ID number for a Single Message Format incoming call.
	Date, Day and Time **Check List**	Display indicates missed calls while you were away from your phone.
Central Office Calls	**(Trk name)** **BUSY**	You have tried to place a call over a busy trunk.
	(Trk name) **RINGING**	All trunk call is ringing your extension.
	(Trk name)	You have seized a trunk for an outside call.
	(Trk name) HH:MM **ANSWERED**	You have answered an incoming trunk call (where nn:nn indicates the Call Timer).
Conference	**CONF** **ICM DIAL**	You press the Conference key to initiate a Conference.
	(name) CONF **(name) (name)**	You have set up a Conference, where (name) is either an extension or trunk name.

Table 9: Multibutton Telephone Displays		
With this feature...	**You'll see this display...**	**When...**
Dial Number Preview	**PREVIEW DIAL** **DIAL (digits)**	You use Dial Number Preview to preview your call before dialing it out.
Dial Pad Confirmation Tone	**Date, Day and Time** **SET KEY TOUCH TN**	You dial Service Code 824 to enable Dial Pad Confirmation Tone.
	Date, Day and Time **CANCEL KEY TOUCH TN**	You dial Service Code 824 to cancel Dial Pad Confirmation Tone.
Direct Station Selection (DSS) Console	**Date, Day and Time** **OFF DUTY**	You press ALT to activate Alternate Answering.
Do Not Disturb	**Date, Day and Time** **DND EXTERNAL**	You press DND and dial 1 to activate DND for incoming trunk calls.
	Date, Day and Time **DND INTERCOM**	You press DND and dial 2 to activate DND for Intercom and transferred trunks.
	Date, Day and Time **DND ALL**	You press DND and dial 3 to activate DND for all calls.
	Date, Day and Time **DND TRANSFER**	You press DND and dial 4 to activate DND for incoming Call Forwards.
	SET DND	You press DND to start DND activation procedure.
	SET DND **CANCEL**	You press DND and dial 0 to cancel Do Not Disturb.
Door Box	**Date, Day and Time** **CALL <<< DOOR-n**	You are receiving chimes from Door Box n.
	Date, Day and Time **TALKING TO DOOR-n**	You dial Service Code 802 and call a Door Box, where n is the Door Box number.
Group Call Pickup	**Date, Day and Time** **CALL P/U (ext name)**	You have intercepted a call using Group Call Pickup.
	(Trk name) (HH:MM:SS) **CALL P/U (ext name)**	You use Group Call Pickup to intercept a call ringing a phone in a pickup group.
Group Listen	**Date, Day and Time** **GROUP LISTEN**	You press the SPK key twice while on a handset call to active Group Listen.

Table 9: Multibutton Telephone Displays		
With this feature...	**You'll see this display...**	**When...**
Hold	**Date, Day and Time** **HOLD (ext name)**	You place an Intercom call on Hold, where (ext name) is the name of extension you placed on Hold.
	Date, Day and Time **GROUP HOLD (ext name)**	You dial Service Code 832 to place an Intercom call on Group Hold, where (ext name) is the name of your Intercom caller.
	(Trk name) **GROUP HOLD**	You dial Service Code 832 to place your trunk call on Group Hold.
	(ext name) **HLD RCALL**	An Intercom call you left on Hold too long recalls your extension, where (ext name) is the call you left on Hold.
	(Trk name) **HOLD RECALL**	A call you have left on Hold too long is recalling your extension.
	(Trk name) **HOLD**	You place a call on Hold.
Intercom	**Date, Day and Time** **TALKING TO (ext name)**	Your extension is busy on an Intercom call.
	Date, Day and Time **DND (ext name)**	You have placed an Intercom call to an extension in DND.
	Date, Day and Time **CALLING (ext name)**	You have placed an Intercom call that has either voice-announced or is ringing (but the user has not lifted the handset).
	Date, Day and Time **CALL FROM (name)**	An Intercom call has voice-announced or is ringing your extension.
	Date, Day and Time **BUSY (ext name)**	You have placed an Intercom call to a busy extension.
Intercom Abandoned Call Display	**(nnn) (ext name)**	You press CHECK and CALL2 to check the Intercom Abandoned Call Display, where (nnn) is the abandoned extension and (ext name) is that extension's name.
Last Number Redial	**(Trk name)** **REDIAL (digits)**	Last Number Redial is outdialing the last number you dialed.
	REDIAL-nn **(digits)**	You press List and Redial soft keys to check the stored Last Number Redial entry, where (digits) is the stored entry.
	REDIAL-nn **(digits)**	You press LND to check your stored Last Number Redial entry.
	Date, Day and Time **CLEAR REDIAL**	You dial Service Code 876 to clear the Last Number Redial entry.
Memo Dial	**MEMO DIAL** **(digits)**	You press the Memo Dial key to check the Memo Dial entry before dialing it out.
	CHECK LINE KEY (nn) **MEMO DIAL**	You press CHECK and the Memo Dial key.

Table 9: Multibutton Telephone Displays		
With this feature...	**You'll see this display...**	**When...**
Message Waiting	**Date, Day and Time** **MSG >>> (ext name)**	You dialed Service Code *0 and left a message at the extension shown in (ext name).
	Date, Day and Time **CANCEL MESSAGE**	You dialed 871 to cancel a message you left at another extension, continue by entering the extension number to be cancelled.
Music on Hold	**SET HOLD TONE** **SET nTONE**	After you dial Service Code 881 you set the MOH tone, where n is the MOH tone number (00-02).
Name Storing	**ENTER NAME** **ICM DIAL**	You dial Service Code 800 to program your name.
One-Touch Calling	**(trk name)** **ONE TOUCHnn (digits)**	You press a One-Touch Key after seizing a trunk to outdial the number stored under the key, where nn is the One-Touch Key number.
	KEY PROG ONE TOUCH	You dial Service Code 855 to program a One-Touch key.
	KEY nn (name) **(digits)**	You program a One-Touch Key by dialing Service Code 855 and pressing the One-Touch Key, where (digits) displays current programming.
	CHECK DSSnn **(digits)**	You press CHECK and a One-Touch Key to check the stored function, where nn is the key number and (digits) is the stored code.
Paging, External	**Date, Day and Time** **PAGE GROUP (nn)**	You make an Combined Page.
	Date, Day and Time **GROUP CALL GROUP (nn)**	You make an External Zone Page, where (nn) is the external zone number.
	Date, Day and Time **GROUP NO.**	You dial 801 to access an Internal Paging Zone.
	Date, Day and Time **ZONE**	You dial 803 to access an External Paging Zone.
Paging, Internal	**Date, Day and Time** **GROUP CALL (name)**	You dial 801 and an internal zone number, where (name) is the Internal Paging Zone name.
	Date, Day and Time **GROUP CALL (ext name)**	Another extension makes an Internal Page to your paging zone, where (ext name) is the name of the extension that initiated the page.
Park	**(trk name) PARK** **HOLD**	You park a call (before you hang up).
	PARK HOLD **PARK No. DIAL**	You dial Service Code #6 to Park a call.
	ANS HOLD **PARK No. DIAL**	You dial Service Code *6 to pick up a parked call.

Table 9: Multibutton Telephone Displays		
With this feature...	**You'll see this display...**	**When...**
Programmable Function Keys	**KEY PROGRAM KEY (nn) (function)**	You press a function key after dialing Service Code 851, where (function) is the currently programmed function, as follows:
	For this key function . . .	You see this display . . .
	01	DSS/ONE TOUCH nn
	02	MIC KEY
	03	DND KEY
	04	BGM
	05	HEADSET
	06	TRANS KEY
	07	CONFERENCE
	08	CALL HISTORY
	09	NIGHT SERVICE n
	10	CALL FORWARD
	11	TRANSFER-BUSY
	12	TRANSFER-NO ANS
	13	TRANSFER-BUSY/NO ANS
	14	CALL FWD-DUAL RING
	15	FOLLOW ME
	16	CALL FORDWARD TO STA.
	17	CALL FORWARD TO DEV.
	18	TEXT MESSAGE nn
	19	PAGE GROUP nn
	20	PAGE EXT ALL
	21	PAGE GROUP ICM nn
	22	PAGE INT ALL
	23	MEET ME PAGE
	24	CALL PICK UP
	25	OTHER GROUP PICK UP
	26	GROUP PICK UP: n
	27	COM/EXCABB nnn
	28	ABB GROUP n

Table 9: Multibutton Telephone Displays		
With this feature...	**You'll see this display...**	**When...**
Programmable Function Keys (cont)	29	REPEAT DIAL
	30	SAVE NUMBER REDIAL
	31	MEMO DIAL
	32	MEET ME CONF
	33	OVERRIDE
	34	BREAK IN
	35	CAMP ON
	36	STEP CALL
	37	DND/FWD OVERRIDE
	38	MESSAGE WAITING
	39	ROOOM MONITOR
	40	TRANSMIT CUT OFF
	41	BUZZER (extension name)
	42	BOSS CALL FORWARD
	43	SERIES CALL
	44	HOLD
	45	EXCLUSIVE HOLD
	46	INT GROUP WITHDRAW
	47	REV.VOICE OVER nnn
	48	VOICE OVER
	49	REDIRECT nnn
	50	ACCOUNT CODE
	51	GP RELAY NO.nn
	52	VRS MESSAGE IRG nnn
	53	WAIT MESSAGE
	54	EXT FWD BY DPN
	55	NAME CHANGE
	56	PRESENCE:A nnn
	57	PRESENCE:B nnn
	58	FWD IMME STG NO.nn
	59	FWD RNA STG NO.nn
	60	FWD DND STG NO.nn

Table 9: Multibutton Telephone Displays		
With this feature...	**You'll see this display...**	**When...**
Programmable Function Keys (cont)	63	SEND NO. NON NOTICE
	64	----------
	66	CTI TELECOM
	67	MAIL BOX nnn
	68	VM PLAY BACK SKIP, VM PLAY BACK SKIP, or AUTO ATTENDANT MONITOR
	69	CONVERSATION RECORD
	70	ANSWERING MACHINE
	71	ANSWERING MESSAGE
	77	VOICE MAIL MSG nnn
	78	CONVERSATION RECORD
	79	AUTO ATT.(PCVM)nnn
	80	TANDEM RINGING
	KEY PROGRAM KEY (nn) (function)	You press a function key after dialing Service Code 852, where (function) is the currently programmed function, as follows:
	For this key function . . .	You see this display . . .
	*01	LINE PORT No.nnn
	*02	LINE GRP ACCESS nn
	*03	ICM nnnn
	*04	PARK HOLD nn
	*05	LOOP KEY n
	*06	LINE ACCESS SYTEM nn
	*10	ACD LOGIN/OUT
	*12	ACD EMERGENCY CALL
	*13	ACD OFF DUTY
	*14	ACD FORCE WORK END
	*15	ACD MONITOR
	*16	ACD WAITING
	*17	ACD WRAP UP
	*18	ACD OVERFLOW nn
	*19	ACD QUEUE CHECK

Table 9: Multibutton Telephone Displays		
With this feature...	**You'll see this display...**	**When...**
Programmable Function Keys (cont)	**KEY PROGRAM**	You dial Service Code 851 or 852 to program your function keys.
	KEY PROGRAM KEY (nn) (function	You press a function key after dialing Service Code 851 or 852, where (function) is the currently programmed function.
	CHECK LINE KEY nn (function)	You press CHECK and a function key while on hook, where (function) is the stored function.
Repeat Redial	**PREVIEW CANCEL REPEAT DAIL**	You cancel Repeat Redial.
	(Trk name) REPEAT DIAL (digits)	Repeat Redial is automatically outdialing.
	(Trk name) REPEAT DIAL	You have activated Repeat Redial but have not hung up.
Reverse Voice Over	**REV VO TO: (ext name)**	You press your reverse Voice Over key to place a private call to your co-worker.
Room Monitor	**ROOM MONITOR ICM DIAL**	You press the Room Monitor key.
	Date, Day and Time MONITOR << (ext name)	You activate Room Monitor at the initiating extension, where (ext name) is the name of the extension being monitored.
	Date, Day and Time MONITORED >>	You activate Room Monitor at the extension to be monitored.
Save Number Dialed	**(Trk name) NUMBER SAVED**	You saved the number you just dialed.
	(Trk name) SAVED (digits)	Save is outdialing your saved number.
	PREVIEW SAVED NUMBER (digits)	While on hook, you pressed your Save Number Dialed key to preview your stored number.
	CHECK LINE KEY nn SAVE NUMBER REDIAL	You press CHECK and the SAVE Number Dialed key while on hook.
Secretary Call Pickup	**Date, Day and Time BOSS FWD << (ext name)**	You have activated Secretary Call Pickup for the indicated extension.
	Date, Day and Time CANCEL FWD (ext name)	You have canceled Secretary Call Pickup for the indicated extension.
	CHECK LINE KEYnn BOSS CALL FORWARD	You press CHECK and the Secretary Call Pickup key while on hook.
Selectable Display Messaging	**TEXT MESSAGE DIAL MESSAGE No.**	You dialed Service Code *43 to choose a Selectable Display Message.

Table 9: Multibutton Telephone Displays		
With this feature...	**You'll see this display...**	**When...**
Selectable Ring Tones	**SET INCOM RING** **1:INT 2:EXT**	You dial Service Code 820 to set Selectable Ring Tones.
	SET INT INCOM RING **INCOM RING1-8:?**	You dial Service Code 820 plus 1 to set Intercom Selectable Ring Tones.
	SET EXT INCOM RING **INCOM RING1-8:?**	You dial Service Code 820 plus 2 to set trunk Selectable Ring Tones.
	SET (type) INCOM RING **INCOM RING (n) SET**	You set the incoming ring type, where (type) is INT or EXT and n is the range (1-8).
	CONFIRM INCOM RING **1:INT 2:EXT**	You dial Service Code 811 to listen to your Selectable Ring Tone Settings.
	CONFIRM INT INCOM **INCOM RING1-8:?**	You dial Service Code 811 plus 1 to listen to the Intercom ring settings.
	CONFRIM EXT INCOM **INCOM RING1-3,MELODY4-8**	You dial Service Code 811 plus 2 to listen to the trunk ring settings.
Serial Call	**(Trk name)** **WAIT TRF (ext name)**	You press the Serial Call key to set up a Serial Call, where (Trk name) is the trunk transferred and (ext name) is destination extension.
Transfer	**(Trk name)** **TRANSFER << (ext name)**	A transferred trunk is ringing your phone, where (Trk name) is the trunk's name and (ext name) is the name of the extension that transferred the call.
	(trk name) **TRF RCALL (ext name)**	A trunk you transferred is recalling your phone, where (trk name) is the recalling trunk and (ext name) is extension from which the call is recalling.
Trunk Queuing	**(trk name)** **CALL BACK**	The trunk you queued for is calling you back.
	Date, Day and Time **CAMP LINE**	You have queued for a busy trunk.
Voice Mail	**CALL FORWARD OPTION** **Condition?(0:Cancel)**	You press your Personal Answering Machine Emulation key.
	Date, Day and Time **FWD SCRN >> VOICE MAIL**	Press your Answer Machine Emulation key + 1 + 2, 3, or 4 to forward calls.
	CALL FORWARD **CANCEL**	Press your Answer Machine Emulation key and dial 0 to cancel forwarding.
	Date, Day and Time **FWD SCRN >> VOICE MAIL**	You enable Answer Machine Emulation modes 1 or 2 and wait several seconds.
Voice Over	**VOICE OVER DENIED**	Your Voice Over to a busy co-worker cannot go through.
	V.O. TO: (ext name)	You have placed a Voice Over to (ext name).
	V.O. FROM (ext name)	You have received a Voice Over from (ext name).

Table 9: Multibutton Telephone Displays		
With this feature...	**You'll see this display...**	**When...**
Voice Response System (VRS)	**VRS MESSAGE CONTROL** **L:5 R:7 E:3 ?**	You press CALL and dial 116 to record, listen to or erase a VRS message.
	PLAY VRS MSG **MESSAGE No.**	You press CALL, dial 116 then 5 to listen to a recorded VRS message.
	RECORD VRS MSG **MESSAGE No.**	You press CALL, dial 116 then 7 to record a VRS message.
	ERASE VRS MSG **MESSAGE No.**	You press CALL, dial 116 then 3 to erase a VRS message.
	GENERAL MESSAGE CONTROL **L:5 R:7 E:3 ?**	You press CALL and dial 112 to record, listen to or erase the General Message.
	PLAY GENERAL MESSAGE	You press CALL, dial 112 then 5 to listen to the General Message.
	RECORD GENERAL MSG	You press CALL, dial 112 then 7 to record the General Message.
	ERASE GENERAL MESSAGE	You press CALL, dial 112 then 3 to erase the General Message.
	CF PERSONAL GREETING **speak greeting & '#'**	You press CALL and dial *47 to record your Personal Greeting (if none is currently recorded).
	PERSONAL GREETING **R:7 L:5 E:3 ?**	You press CALL and dial *47 if you have already recorded a Personal Greeting
	PLAY PERSONAL MSG	You press CALL, dial *47 then 5 to listen to your Personal Greeting.
	RECORD PERSONAL MSG **speak greeting & '#'**	You press CALL, dial *47 then 7 to rerecord your Personal Greeting.
	ERASE PERSONAL MSG	You press CALL, dial *47 then 3 to erase your Personal Greeting.
	Date, Day and Time **VRS-NA (ext name)**	You Enable Personal Greeting to forward calls to (ext name) when your extension is not answered.
	Date, Day and Time **VRS-BY/NA (ext name)**	You enable Personal Greeting to forward calls to (ext name) when your extension is busy or not answer.
	Date, Day and Time **VRS-IMM (ext name)**	You enable Personal Greeting to forward all your calls immediately to (ext name).
	CHECK (ext name) STA nnn **PORT-nnn GP-nn**	You dial 6 while on hook to listen to your extension's name.
	Date, Day and Time **PARK AND PAGE**	You have activated Park and Page at your extension.
	Date, Day and Time **LEAVE NUM npa-nnx-xxxx**	An outside caller dialing through the VRS has left their number on your phone for a recall.

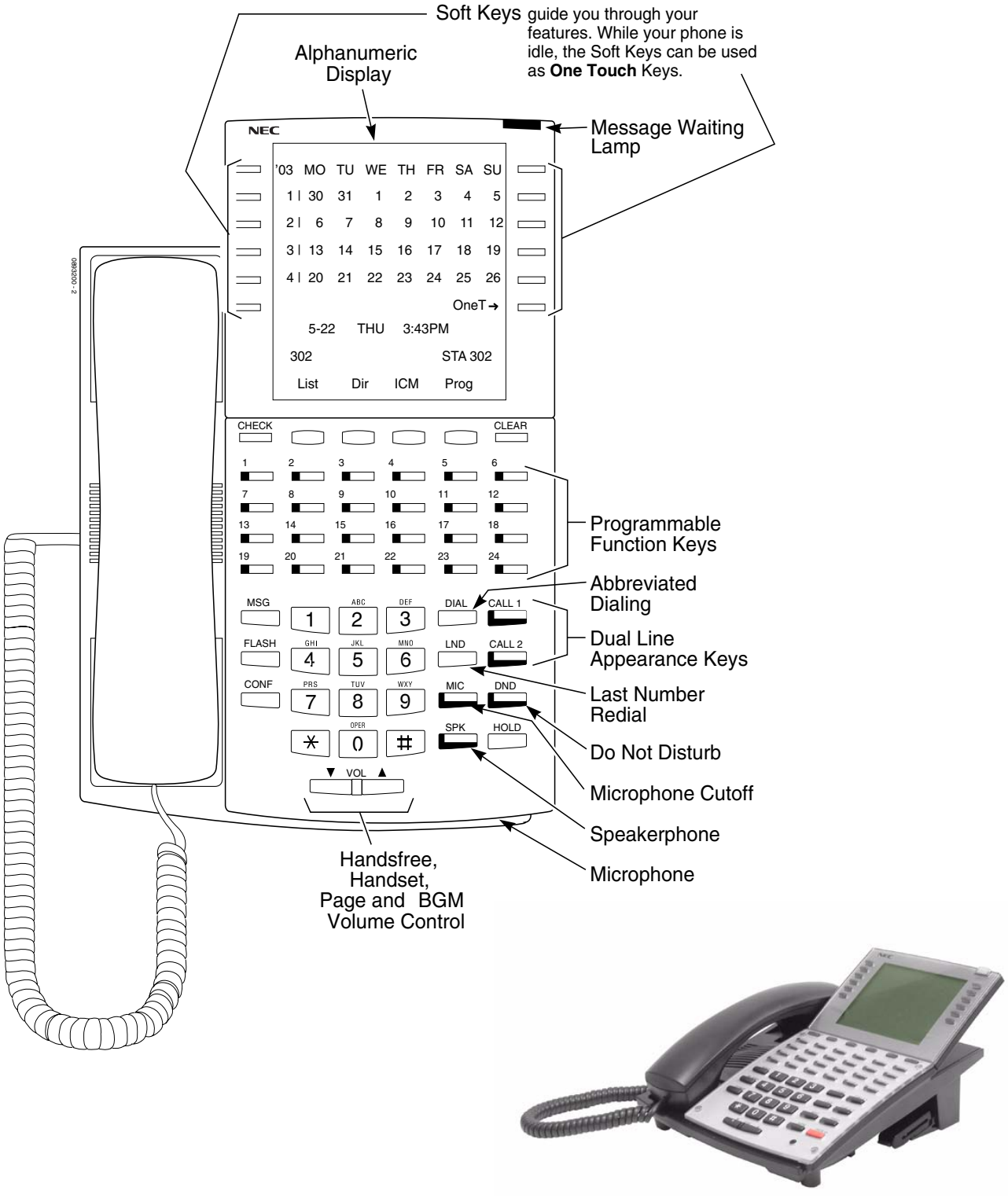


Figure 1: SUPER DISPLAY TELEPHONE

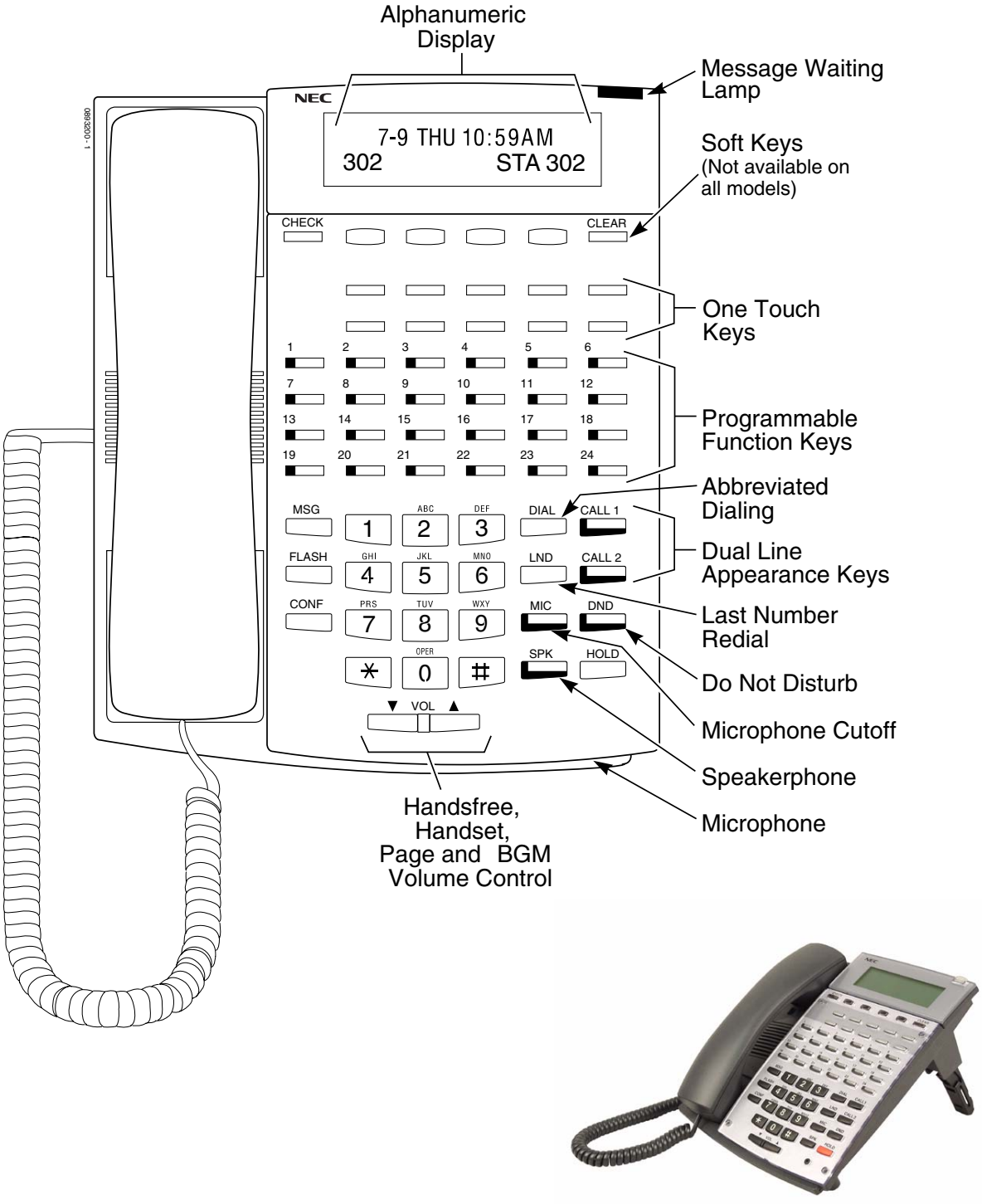


Figure 2: MULTIBUTTON TELEPHONE

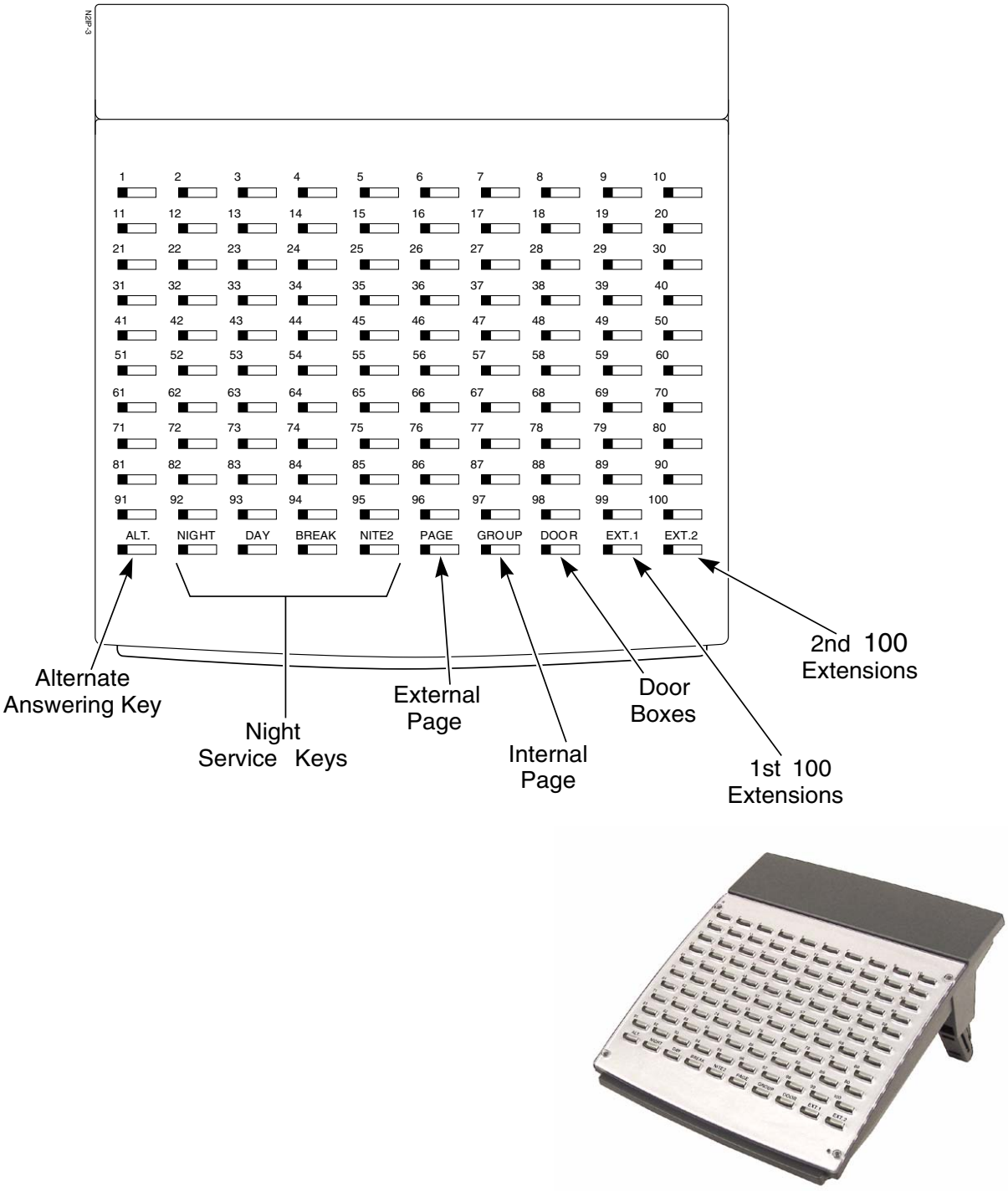


Figure 3: 110-BUTTON DSS CONSOLE

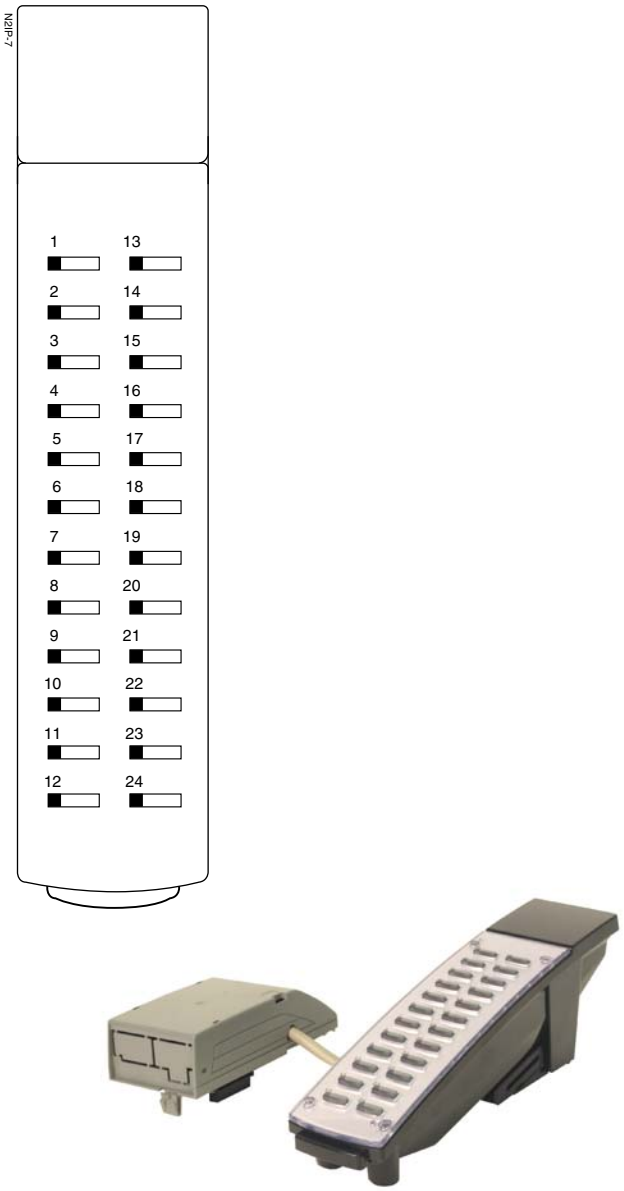


Figure 4: 24-BUTTON DSS CONSOLE

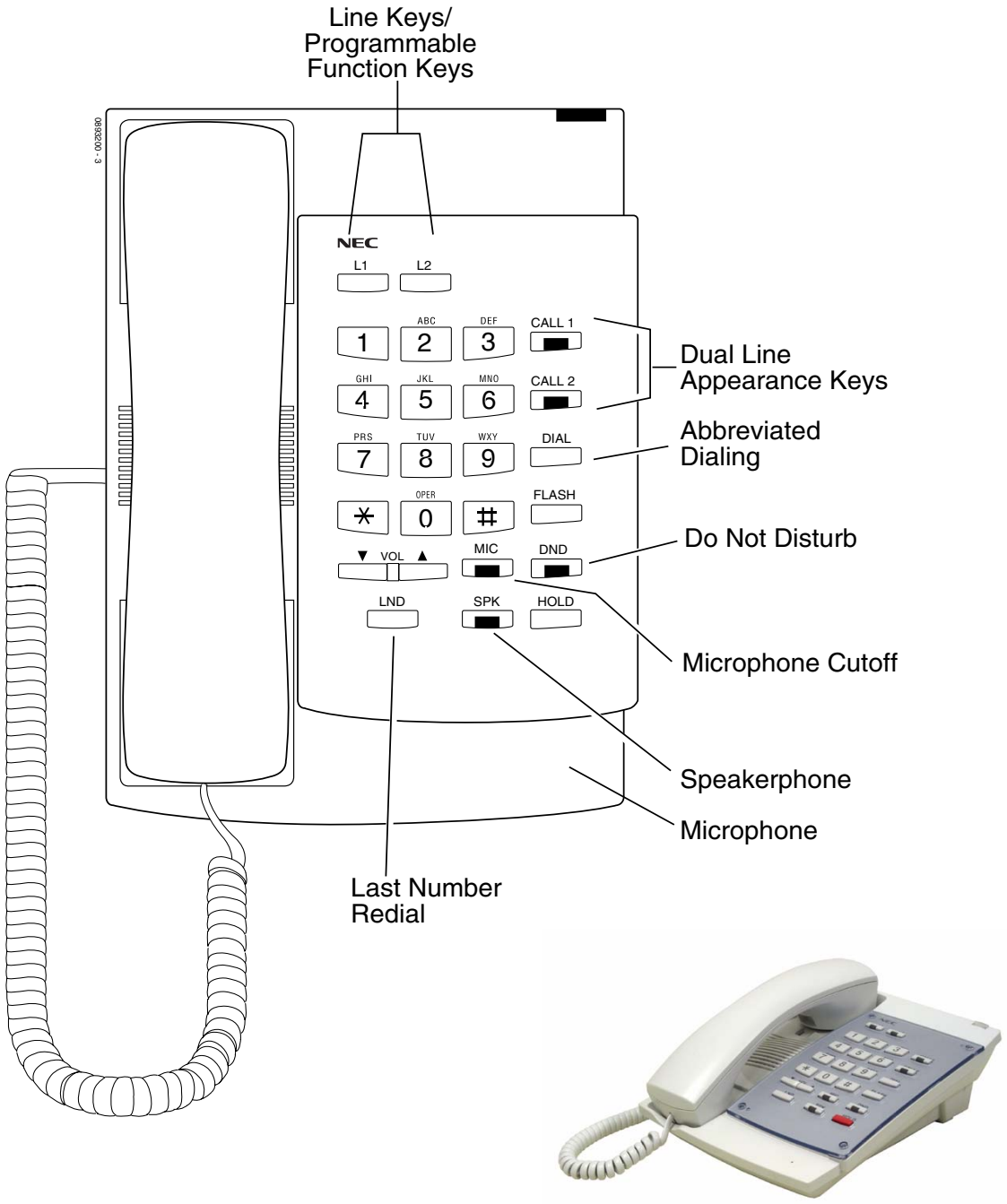
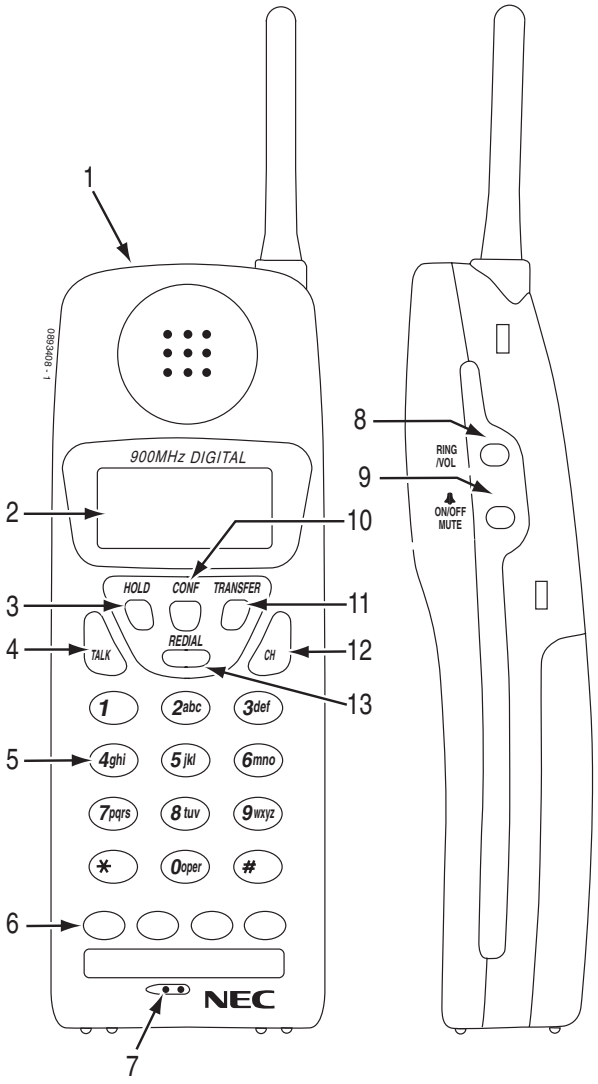
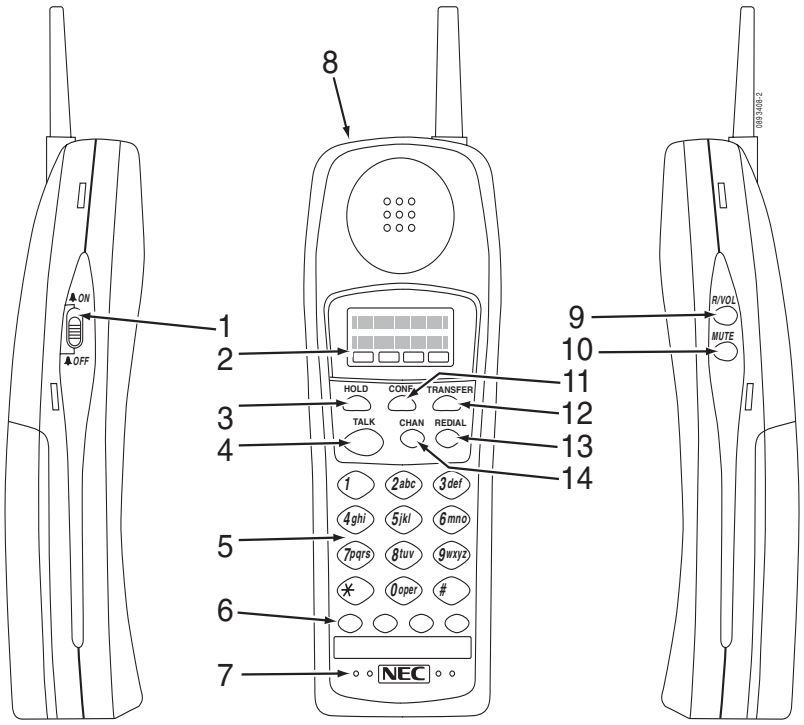


Figure 5: Digital Two-Button Telephone



1. Headset Jack
2. Message Display
3. Hold Key
4. Talk Key
5. Numeric Keypad
6. Function keys (default: line keys 1-4)
7. Microphone
8. Volume (Ring/Vol) Key
9. Mute Key
10. Conference (CONF) Key
11. Transfer/Flash Key (defined in 15-02-05)
12. Last Number Redial (REDIAL) ***OR*** Desk/Cordless Switching Key (requires program change)
13. Channel (CH) Key

Figure 6: Cordless Lite II (Spread Spectrum) Telephone



1. Ringer ON/OFF switch
2. Message Display
3. Hold Key
4. Talk Key
5. Numeric Keypad
6. Function Keys
   (default: line keys 1-4)
7. Microphone
8. Headset Jack
9. Volume (R/VOL) Key
10. Mute Key
11. Conference (CONF) Key
12. Transfer/Flash Key (defined in Pgm 15-02-05)
13. Last Number Dial (REDIAL) ***OR***
    Desk/Cordless Switching Key
    (requires program change)
14. Channel (CHAN) Key

Figure 7: Cordless II Telephone

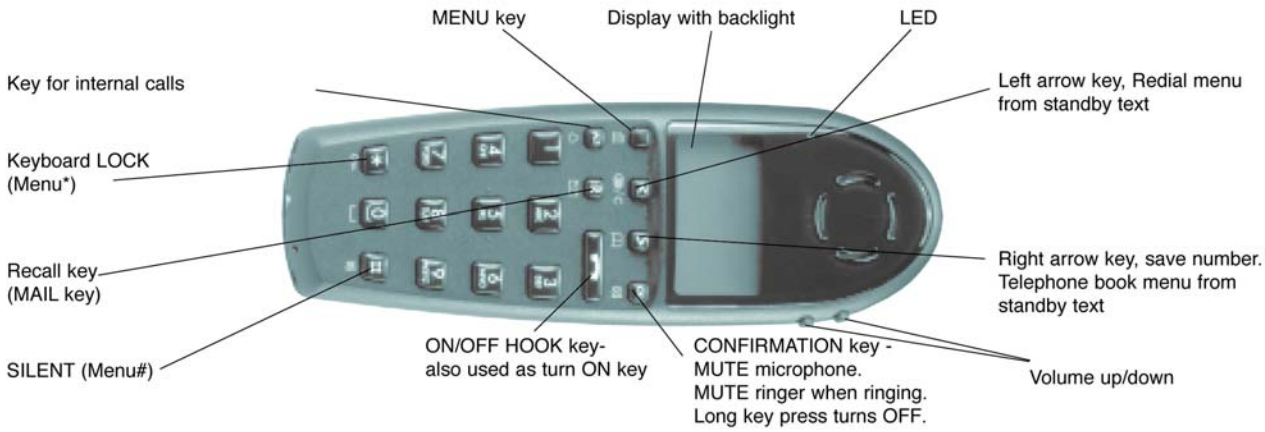


Figure 8: Aspire Wireless Telephone

- For Your Notes -

Aspire S	Aspire M/L/XL
• Available.	• Available.
• 2000 bins available (0000-1999) for Common and Group Abbreviated Dialing. Up to 8 Abbreviated Dialing Groups available.	• 2000 bins available (0000-1999) for Common and Group Abbreviated Dialing. Up to 64 Abbreviated Dialing Groups available.

Description

Abbreviated Dialing gives an extension user quick access to frequently called numbers. This saves time, for example, when calling a client with whom they deal often. Instead of dialing a long telephone number, the extension user just dials the Abbreviated Dialing code.

There are three types of Abbreviated Dialing: Common, Group and Personal. All co-workers can share the Common Abbreviated Dialing numbers. All co-worker's in the same Abbreviated Dialing Group can share the Group Abbreviated Dialing numbers. Personal Abbreviated Dialing numbers are available only at a user's own extension. To set up Personal Abbreviated Dialing, refer to the "One-Touch Calling" feature. The system has 2000 Abbreviated Dialing bins that you can allocate between Common and Group Abbreviated Dialing. (The Group bins are assigned in groups of 10.)

Each Abbreviated Dialing bin can store a number up to 24 digits long.

When placing an Abbreviated Dialing call, the system normally routes the call through Trunk Group Routing or ARS (whichever is enabled). Or, the user can preselect a specific trunk for the call. In addition, the system can optionally force Common Abbreviated Dialing numbers to route over a specific Trunk Group. User pre-selection always overrides the system routing.

Common Bins Limited to 1000 with Dial Key or #2 Service Code

Though there are 2000 Abbreviated Dialing bins available in the system, once programmed, these bins can currently only be dialed using the Directory Dial feature (Press Directory Dialing Soft Key + ABBc Soft Key + Use arrow keys to locate number or enter the Abbreviated Dial bin name + CALL or SPK to place call.)

The DIAL key and service code #2 operations are not available for any 4-digit Abbreviated Dial common bin number.

DSS Console Chaining

DSS Console chaining allows an extension user with a DSS Console to chain to an Abbreviated Dialing number stored under a DSS Console key. The stored number dials out (chains) to the initial call. This can, for example, simplify dialing when calling a company with an Automated Attendant. You can program the bin for the company number under one DSS Console key (e.g., #200) and the client's extension number under the other (e.g., #201). The DSS Console user presses the first key to call the company, waits for the Automated Attendant to answer, then presses the second key to call the client (extension 400). See Programming below for additional details.

The DSS Console user can also chain to an Abbreviated Dialing number dialed manually, from a Programmable Function Key or a One-Touch Key.

Storing a Flash

To enhance compatibility with connected Centrex and PBX lines, an Abbreviated Dialing bin can have a stored Flash command. For example, storing 9 Flash 926 5400 will cause the system to dial 9, flash the line and then dial 926 5400. The Flash can be stored by the user from their telephone or by the system administrator during system programming.

Using a Programmable Function Key

To streamline frequently-called numbers, an Abbreviated Dialing Programmable Function Key can also store an Abbreviated Dialing bin number. When the extension user presses the key, the phone automatically dials out the stored number. This provides true one-touch calling via a phone's function keys.

Conditions

None

Default Setting

Available. There are no Group Abbreviated Dialing bins assigned.

Programming

- **11-10-04 : Service Code Setup (for System Administrator) - Storing Common Abbreviated Dialing Numbers**
  If required, change the service code (853) used to store Common Abbreviated Dialing numbers.
- **11-10-05 : Service Code Setup (for System Administrator) - Storing Group Abbreviated Dialing Numbers**
  If required, change the service code (854) used to store Group Abbreviated Dialing numbers.
- **13-01-01 : Abbreviated Dialing Function Setup - Abbreviated Dialing Auto Outgoing Call Mode**
  Determine if dialing an Abbreviated Dialing number will dial an outside number (seizing a trunk as defined in Program 13-05) or an Intercom number (0=trunk dialing mode, 1=extension dialing mode).
- **13-01-03 : Abbreviated Dialing Function Setup - Common Abbreviated Dialing Bins**
  Designate the bins the system will use for Common Abbreviated Dialing. When using 4-digit bins (1000-2000), remember that these must be dialed using the keyset's Soft Keys.
- **13-02-01 : Group Abbreviated Dialing Bins**
  Designate the bins the system will use for Group Abbreviated Dialing. The system assigns the group numbers in sets of 10 (start bin: xxx0 - end bin: xxx9).
- **13-03-01 : Abbreviated Dialing Groups for Extensions**
  For Group Abbreviated Dialing, assign extensions to Abbreviated Dialing groups.
  ➪ Aspire S Abbreviated Dialing Groups: 1-8
  ➪ Aspire Abbreviated Dialing Groups: 1-64
- **13-04-01 : Abbreviated Dialing Number and Name**
  Enter the Common and Group Abbreviated Dialing numbers and names.
- **13-05-01 : Abbreviated Dialing Trunk Group**
  For each Common Abbreviated Dialing number, enter the routing option. To use ARS or Trunk Group Routing, enter 9. To use a specific Trunk Group, enter the group number.
  ➪ Aspire S Trunk Groups: 1-8
  ➪ Aspire Trunk Groups: 1-100
- **14-02-06 : Analog Trunk Data Setup - Pause Time**
  Enable/disable the systems ability to pause after dialing the first digit.
- **15-02-04 : Abbreviated Dialing DIAL Key Control**
  Assign the extensions' DIAL key for either Common (0) or Group (1) Abbreviated Dialing.

- **15-07-01 : Programming Function Keys**
  Assign a function key for Common Abbreviated Dialing (code 27) or Group Abbreviated Dialing (code 28). You can program the key as either a general Abbreviated Dialing key or you can choose to store a bin number with the function key. This key would then always dial the associated bin number. If storing a bin number along with the code, do not store 0, 00 or 000. To bypass entering a bin number, press HOLD (HOLD is also required if programming the function key using the service code 851).
- **20-06-01 : Class of Service for Extensions**
  Assign a Class of Service (1-15) to an extension.
- **20-07-04 : COS Options (Administrator Level) - Storing Abbreviated Dialing Entries**
  In an extension's COS, allow (1) or prevent (0) the storing of Abbreviated Dialing entries (codes 853 and 854). Preventing this option will also prevent the user's display from showing the telephone number. This can be used when you want to prevent account codes from being displayed.
- **20-08-03 : COS Options (Outgoing Call Service) - Common Abbreviated Dialing**
  In an extension's COS, enable (1) or disable (0) Common Abbreviated Dialing.
- **20-08-04 : COS Options (Outgoing Call Service) - Group Abbreviated Dialing**
  In an extension's Class of Service, enable (1) or disable (0) Group Abbreviated Dialing.
- **30-03-01 : DSS Console Key Assignment**
  Assign an Abbreviated Dialing Service Code (27 or 28) plus a two-digit bin number to a DSS Console key. For DSS Console Chaining, assign a DSS Console key as a DSS/One-Touch Key (01) then add the additional data.
- **80-03-01 : DTMF Tone Receiver Setup**
  80-04-01 : Call Progress Tone Detector Setup
  If required, modify the criteria for dial tone detection and call progress tone detection for outgoing Abbreviated Dialing calls.
- **81-01-16 : ATRU-LS Initial Data Setup - Pause Time**
  If Abbreviated Dialing numbers include a pause, the system uses this timer to determine the length of the pause. This timer is enabled/disabled in 14-02-06.

Related Features

Account Codes
Abbreviated Dialing bins can contain stored Account Codes. Prevent them from being displayed using 20-07-04.

Automatic Route Selection
For systems with Automatic Route Selection, ARS selects the trunk for the call unless the user preselects.

Central Office Calls, Placing
A user can implement Abbreviated Dialing only if their extension has outgoing access to trunks.

Dial Tone Detection
Refer to this feature for the specifics on how the system handles Dial Tone Detection.

One-Touch Calling
An extension can have a One-Touch Key for Abbreviated Dialing operation.

PBX Compatibility
If you enter a PBX trunk access code in an Abbreviated Dialing bin, the system automatically inserts a pause after the bin.

Programmable Function Keys
Function keys simplify Abbreviated Dialing operation.

Single Line Telephones
Single line telephones can only dial Common and Group Abbreviated Dialing numbers.

Toll Restriction

Toll Restriction may prevent a user from using a stored Abbreviated Dialing number.

Trunk Group Routing

Unless a user preselects a trunk, Trunk Group Routing selects the trunk Abbreviated Dialing uses for trunk calls.

Operation

To store an Abbreviated Dialing number (display phones only):

1. Press idle CALL key.
2. Dial 853 (for common) or 854 (for group).
3. Dial common or group storage code (000-999).

   Initially, there are 1000 Common Abbreviated Dialing codes. There are Group Abbreviated Dialing codes only if you define them in programming.

   When using 4-digit bins, the storage codes/bin numbers are 0000-1999.
4. Dial telephone number you want to store (up to 24 digits).

   *Valid entries are 0-9, # and *. To enter a pause, press MIC. To store a Flash, press FLASH.*
5. Press HOLD.
6. Enter the name associated with the Abbreviated Dialing number.

With Software 2.05+: Key for Entering Names	
When entering names in the procedures below, refer to this chart. Names can be up to 12 digits long. For prior software or when using i-Series phones, refer to the charts in the Name Storing feature (page 432).	
Use this keypad digit . . .	**When you want to. . .**
1	Enter characters: 1 @ [¥] ^ _ ` { | } → ← Á À Â Ã Ç É Ê ì ó
2	Enter characters A-C, a-c, 2.
3	Enter characters D-F, d-f, 3.
4	Enter characters G-I, g-i, 4.
5	Enter characters J-L, j-l, 5.
6	Enter characters M-O, m-o, 6.
7	Enter characters P-S, p-s, 7.
8	Enter characters T-V, t-v, 8.
9	Enter characters W-Z, w-z, 9.
0	Enter characters: 0 ! " # $ % & ' ( ) ô o ú ä ö ü α ε θ
*	Enter characters: * + , - . / : ; < = > ? π ∑ σ Ω ∞ ¢ £
#	# = Accepts an entry (only required if two letters on the same key are needed - ex: T**OM**). Pressing # again = Space. (In system programming mode, use the right arrow soft key instead to accept and/or add a space.)
CONF	Clear the character entry one character at a time.
CLEAR	Clear all the entries from the point of the flashing cursor and to the right.

7. Press HOLD
8. Press SPK to hang up.

To dial a Common Abbreviated Dialing number:

Four-digit bin numbers must be dialed using the keyset's Soft Keys.

3-Digit Bin Numbers Only

1. At keyset, press idle CALL key.
   OR
   At single line set, lift handset.
2. Dial #2 (000-999).
   OR
   Press DIAL key.
   OR
   Press Common Abbreviated Dialing key (PGM 15-07 or SC 851: 27).
   To preselect, press a line key in step 1 (instead of CALL) before pressing the DIAL or Abbreviated Dialing key).
3. Dial Common Abbreviated Dialing storage code (000-999).
   The stored number dials out.
   Unless you preselect, Trunk Group Routing selects the trunk for the call. The system may optionally select a specific Trunk Group for the call.
   If you have a DSS Console, you may be able to press a DSS Console key to chain to a stored number.

4-Digit Bin Numbers

1. At keyset, press the DIR Soft Key.
2. Press the ABBc Soft Key.
3. Use the ↑ or ↓ to locate the number you wish to call.
4. Press the DIAL Soft Key.
   The stored number dials out.

To store a Common Abbreviated Dialing number under a Programmable Function Key:

1. At keyset, press idle CALL key.
2. Dial 851.
3. Press the key which is to store the number.
4. Dial 01.
5. Dial #2 + the 3-digit bin number (000-999) to be stored.
   Four-digit bin numbers can not be stored with this function.
6. Press HOLD.
7. Press SPK to hang up.

To dial a Common Abbreviated Dialing number under a Programmable Function Key:

1. At keyset, press idle CALL key.
2. Press the key which has the stored number to be dialed.
   The number seizes an outside line and dials out.

To dial a Group Abbreviated Dialing number:

3-Digit Bin Numbers Only

1. At keyset, press idle CALL key.
   OR
   At single line set, lift handset.
2. Dial #4 (000-999).
   OR
   Press DIAL key.
   OR
   Press Group Abbreviated Dialing key (PGM 15-07 or SC 851: 28).
   To preselect, press a line key in step 1 (instead of CALL) before pressing the DIAL or Abbreviated Dialing key)
3. Dial the Group Abbreviated Dialing code (000-999).
   The stored number dials out.
   Unless you preselect, Trunk Group Routing selects the trunk for the call.
   If you have a DSS Console, you may be able to press a DSS Console key to chain to a stored number.

4-Digit Bin Numbers

1. At keyset, press the DIR Soft Key.
2. Press the ABBg Soft Key.
3. Use the ↑ or ↓ to locate the number you wish to call.
4. Press the DIAL Soft Key.
   The stored number dials out.

To check your stored Abbreviated Dialing numbers (display phone only):

1. Press CHECK.
2. For Common Abbreviated Dialing, press DIAL.
   Dial the Abbreviated Dialing Code (e.g., common code 001).
   *If the entire stored number is too long for your phone's display, press * to see the rest of it.*
   OR
   For Group Abbreviated Dialing, press the Group Abbreviated Dialing key.
   OR
   For Common Abbreviated Dialing key, press the Common Abbreviated Dialing key.
3. Press CLEAR.
   To display additional numbers, repeat from step 1.

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Adjustable Forced Account Code interdigit timer requires software 2.65+.	• Adjustable Forced Account Code interdigit timer requires software 2.65+.

Description

Account Codes are user-dialed codes that help the system administrator categorize and/or restrict trunk calls. The system has three types of Account Codes:

- **Optional Account Codes**
  Optional Account Codes allow a user to enter an Account Code while placing a trunk call or anytime while on a call. This type of Account Code is optional; the system ***does not*** require the user to enter it.
- **Forced Account Codes**
  Forced Account Codes ***require*** an extension user to enter an Account Code every time they place a trunk call. If the user doesn't enter the code, the system prevents the call. As with Optional Account Codes, the extension user can elect to enter an Account Code for an incoming call. However, the system does not require it. ***Forced Account Codes does not block 1-800, 1-888 and emergency assistance (911) calls***.

  Once set up in system programming, you can enable Forced Account Codes on a trunk-by-trunk basis. In addition, Forced Account Codes can apply to all outside calls or just long distance calls. Forced Account Codes for Toll Calls restricts calls according to the following chart:

Number of Digits Dialed	If first digit is not 1	If first digit is 1
1-3	Not allowed	Not allowed
4-7	Allowed - does not require Account Code	Allowed - requires Account Code
More than 7[1]	Allowed - requires Account Code	Allowed - requires Account Code
800 and 888	Allowed - requires Account Code	Allowed - does not require Account Code
011 (International)	Allowed - requires Account Code	N/A
911	Allowed - does not require Account Code	N/A
[1] If you change the local call length in Toll Restriction, this value changes accordingly.		

Timer Modified to Allow for Forced Account Code Interdigit Timer
Programming has been changed which will allow the adjustment of the interdigit timer used for Forced Account Codes. Previously, this was fixed at 3 seconds.

Depending on your software, the system will use the time set in **Program 21-01-04 : System Options for Outgoing Calls - Dial Tone Detection Time** for the interval the system will wait for a user to enter a Forced Account Code. By default, this option is set to 5 (Entries: 0-64800 seconds).

- **Verified Account Codes**
  With Verified Account Codes, the system compares the Account Code the user dials to a list of up to 1000 pre-programmed codes. If the Account Code is in the list, the call goes through. If the code dialed is not in the list, the system prevents the call. Verified Account Codes can be from 3-16 digits long using the characters 0-9 and #. During programming, you can use "wild cards" to streamline entering codes into system memory. For example, the entry 123W lets users dial Verified Account Codes from 1230 through 1239.

Operator Notification
To prevent Account Code abuse, the system can notify the operator each time an Account Code violation occurs. This can happen if the user fails to enter an Account Code (if Forced) or enters a Verified Account Code that is not in the list. The notification is an automatic Intercom call to the attendant and a "*RESTRICT*" message in the operator's display. (If the attendant fails to enter a valid Account Code, the system drops the call.)

Account Codes for Incoming Calls
The system can control the ability of extension users to enter Account Codes for incoming calls. When this option is enabled, a user can dial * while on an incoming call, enter an Account Code, and then dial * to return to their caller. If the option is disabled, any digits the user dials after answering an incoming call outdial on the connected trunk.

Hiding Account Codes
Account Codes can be optionally hidden from a telephone's display. This would prevent, for example, an unauthorized co-worker from obtaining a Verified Account Code by watching the display and making note of the digits that dial out. When hidden, the Account Code digits show as the character "*" on the telephone's display.

Account Code Capacity
Account Codes print along with the other call data on the SMDR record after the call completes. Account Codes can be 1-16 digits in length using 0-9 and #. Verified Account Codes can be from 3-16 digits long.

Redialed Numbers Do Not Contain Account Codes
When using the Last Number Redial, Save or Repeat Dial features, the system will not retain Account Code information. Any number redialed with these features, the user will need to reenter an Account Code.

Note:
If a user enters *12345*203 926 5400*67890*, if the Last Number Redial feature is used, the system dials the number as 203 926 5400*67890*. The *67890* is not treated as an Account Code.

Conditions

(A.) If a user enters a code that exceeds the 16 digit limit, the system ignores the Account Code entry.

(B.) If the system has Account Codes disabled, the digits dialed (e.g., *1234*) appear on the SMDR report as part of the number dialed.

(C.) Do not use an asterisk within a PBX access code when using Account Codes. Otherwise, after the *, the trunk will stop sending digits to the central office.

Default Setting

Account Codes are disabled.

Programming

- **14-01-11 : Basic Trunk Data Setup - Account Code**
  Enable (1) or disable (0) Forced Account Codes for each trunk.
- **15-07-01 : Programming Function Keys**
  Assign a function key as an Account Code key (code 50). Use this key instead of the dial pad to enter the * before and after the Account Code.
- **20-06-01 : Class of Service for Extensions**
  Assign a Class of Service (1-15) to an extension.
- **21-01-04 : System Options for Outgoing Calls - Forced Acount Code Inter-Digit Time**
  Adjust the interval the system will wait for a user to enter a Forced Account Code. By default, this option is set to 3 (Entries: 0-64800 seconds).
- **21-04-01 : Toll Restriction Class**
  Use this option to assign a Toll Restriction Class (1-15) to an extension.
- **35-05-01 : Account Code Setup - Account Code Mode**
  For each Class of Service (1-15) use this option to select the Account Code Mode. The options are:
  - 0 Account Codes disabled. (Any codes you enter dial out as part of your initial call.)
  - 1 Account Codes optional (not required).
  - 2 Account Codes required (forced) but not verifiable.
  - 3 Account Codes required (forced) and verifiable.
- **35-05-02 : Account Code Setup - Forced Account Code Toll Call Setup**
  For each Class of Service (1-15), enter 1 in this option to enable Forced Account Codes for just toll calls. Enter 0 to enable Forced Account Codes for local and toll calls. With this option enabled, local calls will have Optional Account Codes. If a user needs to dial * as part of post-dialing digits, The * must be pressed three times (twice for the expected account code entry and the third as the post-dialing digit).
- **35-05-03 : Account Code Setup - Account Codes for Incoming Calls**
  For each Class of Service (1-15), enter 1 in this option to enable Account Codes for incoming calls. Enter 0 to disable Account Codes for incoming calls. If disabled, any codes you enter dial out on the connected trunk.
- **35-05-04 : Account Code Setup - Hiding Account Codes**
  For each Class of Service (1-15), enter 1 to have the system hide Account Codes on an extension's display as they are entered. Enter 0 to have the Account Codes displayed.
- **35-06-01 : Verified Account Code Table**
  Use this option to enter data into the Verified Account Code Table. You can enter up to 2000 codes from 3-16 digits in length. For a wild card, press the FLASH key.

Related Features

Abbreviated Dialing

Abbreviated Dialing bins can contain stored Account Codes. Prevent them from being displayed using 20-07-04.

Automatic Route Selection

ARS can force a user to enter an Authorization Code prior to using a certain route. The system verifies the ARS Authorization Code dialed against the ARS Authorization Code list (Program 44-03).

One-Touch Calling

To simplify Account Code entry, store the Account Code (e.g., *1234*) in a One-Touch Key. Just press the key instead of dialing the codes.

PBX Compatibility

When using Account Codes, do not use an asterisk within a PBX access code. Otherwise, after the *, the trunk would stop sending digits to the central office.

Station Message Detail Recording

Account Codes appear on the SMDR report (even if they are hidden on the phone's display).

Operation

To enter an Account Code any time while on a trunk call:

The outside caller cannot hear the Account Code digits you enter.

You can use this procedure if your system has Optional Account Codes enabled. You may also be able to use this procedure for incoming calls.

This procedure is not available at SLTs.

1. Dial *.
   OR
   Press your Account Code key (PGM 15-07 or SC 851: code 50).
2. Dial your Account Code (1-16 digits, using 0-9 and #).
   If Account Codes are hidden, each digit you dial will show an "" character on the telephone's display.*
3. Dial *.
   OR
   Press your Account Code key (PGM 15-07 or SC 851: code 50).

To enter an Account Code before dialing the outside number:

If your system has Forced Account Codes, you must use this procedure. If it has Verified Account Codes, you can use this procedure instead of letting the system prompt you for your Account Code. You may also use this procedure if your system has Optional Account Codes.

If your system has Verified Account Codes enabled, be sure to choose a code programmed into your Verified Account Code list.

1. Access trunk for outside call.

   You can access a trunk by pressing a line key or dialing a code (except 9). Refer to **Central Office Calls, Placing** (page 218) *for more information.*

2. Dial *

   OR

   Press your Account Code key (PGM 15-07 or SC 851: code 50)

3. Dial your Account Code (1-16 digits, using 0-9 and #).

   If you make an incorrect entry, your system may automatically alert the operator. If Account Codes are hidden, each digit you dial will show an "" character on the telephone's display.*

4. Dial *.

   OR

   Press your Account Code key (PGM 15-07 or SC 851: code 50)

5. Dial the number you want to call.

   If you hear "stutter dial tone after dialing the number, ARS is requesting that you enter an ARS Authorization Code. Refer to **Automatic Route Selection** (page 138) *for more information.*

To dial an outside number and let your system tell you when an Account Code is required:

1. Access a trunk and dial the number you want to call.

   If you hear "stutter dial tone after dialing the number, ARS is requesting that you enter an ARS Authorization Code. Refer to **Automatic Route Selection** (page 138) *for more information.*

2. Wait for your call to go through.

   OR

   If you hear *"Please enter an Account Code,"* and your display shows ENTER ACCOUNT CODE:

   - Dial *.

     OR

     Press your Account Code key (PGM 15-07 or SC 851: code 50)

   - Dial your Account Code (1-16 digits, using 0-9 and #).

     If Account Codes are hidden, each digit you dial will show an "" character on the telephone's display.*

   - Dial *.

     OR

     Press your Account Code key (PGM 15-07 or SC 851: code 50)

To enter an Account Code for an incoming call:

This procedure is not available at SLTs.

1. Answer incoming call.

   If Account Codes for Incoming Calls is disabled, the following steps will dial digits out onto the connected trunk.

2. Dial *.
3. Enter the Account Code.

   You can enter any code of the proper length. Incoming Account Codes cannot be Forced or Verified.

4. Dial *.

To enter an Account Code while placing a trunk call:

If your system has Forced Account Codes, you must follow this procedure.

1. Access trunk for outside call.

   You can access a trunk by pressing a line key or dialing a code. Refer to Central Office Calls, Placing for more information.

   With Forced Account Codes, you hear, "Please enter an Account Code." Your display shows: ENTER ACCOUNT CODE.

2. Dial *.
3. Dial your Account Code (1-16 digits, using 0-9 and #).
4. Dial *

   *If the system has Forced Account Codes and you don't enter a code, your call cannot go through. You can, however, dial ** to bypass Forced Account Code entry.*

5. Dial number you want to call.

   If you hear "stutter" dial tone after dialing the number, ARS is requesting you to enter an ARS Authorization Code. Refer to the Automatic Route Selection feature for more information on ARS Authorization Codes.

To enter an Account Code at a single line set:

1. Access trunk for outside call.

   You can access a trunk by dialing a code. Refer to Central Office Calls, Placing for more information.

   With Forced Account Codes, you hear, "Please enter an Account Code." Your display shows: ENTER ACCOUNT CODE.

2. Dial *.
3. Enter Account Code (1-16 digits).
4. Dial *.
5. Dial number you want to call.

   If you hear "stutter" dial tone after dialing the number, ARS is requesting you to enter an ARS Authorization Code. Refer to the Automatic Route Selection feature for more information on ARS Authorization Codes.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Alarm lets a keyset extension work like an Alarm clock. An extension user can have Alarm remind them of a meeting or an appointment. There are two types of Alarms:

- Alarm 1 (sounds only once at the preset time)
- Alarm 2 (sounds every day at the preset time)

Conditions

Single line sets will ring and Music on Hold will be heard when the alarm sounds.

Default Setting

Alarm is enabled.

Programming

20-01-06 : System Options - Alarm Duration
Set the duration of the Alarm signal (0-64800 seconds).

Related Features

None

Operation

To set the alarm:

1. At keyset, press idle CALL key.
   OR
   At single line set, lift handset.
2. Dial 827.
3. Dial alarm type (1 or 2).
   Alarm 1 sounds only once. Alarm 2 sounds each day at the preset time.
4. Dial the alarm time (24-hour clock).
   For example, for 1:15 PM dial 1315.
   A confirmation tone will be heard if the alarm has been set. If the alarm was not set, an error tone will be heard instead.
5. At keyset, press SPK to hang up.
   OR
   At single line set, hang up.

To silence an alarm:

1. At keyset, press CLEAR.
   OR
   At single line set, lift handset.
   The single line set user will hear Music on Hold when the handset is lifted.

To check the programmed alarm time:

1. Press CHECK.
2. Dial 827.
3. Dial alarm type (1 or 2).
   The programmed time displays.
4. Press CLEAR.

To cancel an alarm:

1. At keyset, press idle CALL key.
   OR
   At single line set, lift handset.
2. Dial 827.
3. Dial alarm type (1 or 2).
4. Dial 9999.
5. At keyset, press SPK to hang up.
   OR
   At single line set, hang up.

Refer to the Maintenance (page 391) for information on this feature.

Alphanumeric Display

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Additional language options (entries 10-12 in Program 15-02-01) require software 4.93+.	• Additional language options (entries 10-12 in Program 15-02-01) require software 4.93+.

Description

Multibutton display telephones have a 3-line, 24 character per line alphanumeric display that provides various feature status messages. These messages help the display telephone user process calls, identify callers and customize features.

Conditions

The contrast is not adjustable when the telephone has background music enabled.

Default Setting

Enabled for all display telephones.

Programming

- **11-11-13 : Service Code Setup (for Setup/Entry Operation) - Display Language Selection for Keyset**
  If needed, redefine the service code used to select the language for display keysets (default: 178).
- **15-02-01 : Multi-Line Telephone Basic Data Setup - Display Language Selection**
  Select the language to be displayed on a keyset's display (0 = Japanese, 1 = English, 2 = German, 3 = French, 4 = Italian, 5 = Spanish, 6 = Dutch, 7 = Portuguese, 8 = Norwegian, 9 = Danish, 10 = Swedish, 11 = Turkish, 12 = Latin American Spanish).
- **20-06-01 : Class of Service for Extensions**
  Assign a Class of Service (1-15) to an extension.
- **20-11-08 : Class of Service Options (Hold/Transfer Service) - Transfer Display**
  In an extension's Class of Service, enable (1) or disable (0) an extension's incoming Transfer pre-answer display.

Related Features

None

Operation

Display is automatic if enabled in programming.

To Change Displayed Language:

1. At keyset, dial 178.
2. Enter the language number (00-12) which should be displayed.
3. Press SPK to hang up.

Aspire S	Aspire M/L/XL
• Available - 8 ACI software ports (4 PGDAD modules max. when used for ACI ports) and 4 ACI Department Groups.	• Available - 96 ACI software ports (48 PGDAD modules max. when used for ACI ports) and 16 ACI Department Groups.

Description

The Analog Communications Interface (ACI) feature uses a PGDAD module to provide two analog ports (with associated relays) for Music on Hold, External Paging or auxiliary devices such as tape recorders and loud bells. The system allows up to 48 PGDAD modules (when used for ACI ports), for a maximum of 96 analog ports. Each PGDAD module requires an unused port on an ESIU PCB.

- **Music on Hold**
  You can connect up to two customer-provided Music on Hold music sources to a PGDAD module. This lets you add additional music sources if the external source on the NTCPU PCB or the internal source are not adequate. By using PGDAD modules, you could even have a different music source for each trunk.

  When the system switches the ACI analog port to a trunk on Hold, the PGDAD relay associated with the ACI analog port closes. You can use this capability to switch on the music source, if desired.

  Extension users can dial the ACI analog port extension number and listen to the connected music source. The PGDAD relay associated with the port closes when the call goes through.

  For Music on Hold, connect the music source to the PGDAD module. Connect the music source control leads to the CTL (control relay) jack. Refer to the Hardware Manual for additional details.

- **External Paging**
  An ACI analog port can also be an External Page output. When connected to customer-provided External Paging equipment, the ACI port provides External Paging independent of the Aspire NTCPU external paging input (the Aspire S CPU does not provide an external paging input). To use the External Paging, an extension user just dials the ACI analog port extension number and makes the announcement. The system broadcasts the announcement from the ACI analog port and simultaneously closes the associated PGDAD relay. You can use the relay closure to control the External Paging amplifier, if required.

  This external paging zone is not included in external all call paging or combination paging (internal and external).

  For External Paging, connect the Paging amplifier to the PGDAD jack. Connect the amplifier control leads to the CTL (control relay) jack. Refer to the Hardware Manual for additional details.

- **Auxiliary Device Control**
  The PGDAD module can control a customer-provided tape recorder. When an extension user dials the ACI analog port extension number, they can automatically start the recorder and activate the record function. When the user hangs up, the recording stops and the tape recorder turns off. For tape recording, connect the tape recorder AUX input jack to the PGDAD jack. Connect the recorder control leads (if available) to the CTL (control relay) jack. Refer to the Hardware Manual for additional details.

By using Department Calling, you can arrange multiple tape recorders into a pool. When an extension user dials the Department Group pilot number, they reach the first available tape recorder in the pool.

The relays in the PGDAD module can optionally control customer-provided external ringers (loud bells) and buzzers. When an extension user dials the ACI analog port extension number, the associated PGDAD relay closes and activates the ringer. You could use this capability to control an emergency buzzer for a noisy machine shop floor, for example.

- **ACI Call Recording**
  ACI Call Recording allows you to use a recording device connected to a PGDAD module to manually or automatically record calls. The recording device is typically a customer-provided tape recorder. You can set up ACI Call Recording to output to a single ACI port/recording device or to a pool of ACI ports/devices. With a single device, all calls are stored in a centralized location. With a pool of devices, you'll be sure to have a port available for recording - even in peak traffic periods. You can set up automatic recording on a per trunk or manually on a per extension basis.

  When set up for manual recording, the user presses the ACI Conversation Record key (Service Code 851 + 69 + 0) to begin recording the call from that point. When set up for automatic recording, ACI Call Recording starts automatically as soon as the user places or answers their call. The system can be programed to record all ***incoming*** trunk calls which ring an extension. This includes the following trunk types:
  - Central Office calls programmed to ring the extension.
  - Direct Inward Dialing (DID)
  - Direct Inward Line (DIL)
  - Direct Inward System Access (DISA)
  - Tie lines

  The system can also be programmed to record ***outgoing*** trunk calls, however, this is only possible using E&M tie lines, PRI or BRI trunks.

  ACI Call Recording is not available for intercom calls, transferred calls, or calls placed on hold and answered by an extension with Call Recording enabled. To manually record any type of call (transferred, ICM, outgoing CO trunk, etc.), use the Voice Mail Conversation Record key (Service Code 851 + 78).

Physical Ports and Software Ports

Each PGDAD module consists of a physical port for connection to the phone system and two logical ports. For programming purposes, the ports are also called software ports. The physical port connects to a station position on a EISU PCB. During installation, the first PGDAD module you set up is physical port 1; the second PGDAD module is physical port 2, etc. Each PGDAD module has two software ports, which are numbered independently of the physical ports. Normally, the first PGDAD module set up has software ports 1-2; the second PGDAD module has software ports 3-4, etc. There are a total of 96 software ports (48 PGDAD modules x 2 ports each). During programming, you assign ACI extension numbers and Department Group options to PGDAD software ports, not physical ports. During installation, you connect equipment to the jacks on the PGDAD module that correspond to the software port. Refer to the system Hardware Manual for more installation details.

Conditions

The devices connected to the PGDAD module must be compatible with the specifications below. Refer to the system Hardware Manual for additional details.

PGDAD/ACI Interface Specifications	
Relay Contacts	
Maximum Contact Ratings	30 V DC @ 60 mA
	90 V AC @ 10 mA
Minimum Application Load	1 V DC @ 1 mA
Audio/Music Input	
Input Impedance	47 K Ohms @ 1 KHz
Audio/Paging Output	
Output Impedance	600 Ohms @ 1 KHz
Maximum Output	+ 8 dBm

Default Setting

No PGDAD modules programmed.

Programming

- **10-03-01 : PCB Setup - Terminal Type (Circuit 1)**
  10-03-06 : PCB Setup - Terminal Type (Circuit 2)
  The circuit should be assigned a type "9" for ACI or type "7"for an external ringer.
- **10-05-01 : General Purpose Relay Setup**
  Define which relay circuits (5-8) on the 2PGDAD Module are used for General Purpose Relays. Also refer to Program 10-21-01 for the NTCPU relay assignments.
- **10-07-01 : Conversation Record Circuits**
  Assign the number of conversation record circuits.
- **10-21-01 : NTCPU Hardware Setup - External Source Control Switch Selection on NTCPU**
  Specify the function of the relay switch for external tone source control (0=external MOH source, 1=BGM source, 2=external speaker (Aspire only), 3=general purpose relay). If this is set to 2, service code 803+1 pages and the relay closes. The relay opens upon hang up. If this option is set to '3', service code 880+0 toggles the relay open or closed. Also refer to Program 10-05-01 for PGDAD Module relay assignments.
- **11-06-01 : ACI Extension Numbering**
  Assign extension numbers to ACI software ports. Select a number outside of the normal extension number range.
  Aspire S: ACI Ports 1-8
  Aspire: ACI Ports 1-96
- **11-08-01 : ACI Group Pilot Number**
  Assign pilot numbers to ACI groups. When a user dials the pilot number, they reach an available ACI software port within the group.
  Aspire S: ACI Groups 1-4
  Aspire: ACI Groups 1-16
- **11-12-50 : Service Code Setup (For Service Access)**
  Specify the service code to be used for toggling the relay open and closed (Default: 880).

- **14-09-01 : ACI Conversation Recording Destination for Trunks - ACI Recording Destination Extension Number**
  Use this option to assign the ACI Call Recording destination on a per trunk basis. The destination can be an ACI port's extension number (assigned in Program 11-06-01) or an ACI Department Group pilot number (assigned in Program 11-08-01). If destinations are assigned in Programs 14-09 and 15-12, the destination in Program 15-12 will be followed.
- **14-09-02 : ACI Conversation Recording Destination for Trunks - ACI Automatic Recording for Incoming Call**
  Determine whether a trunk should be automatically recorded when an incoming call is received (0=off, 1=on).
- **14-09-04 : ACI Conversation Recording Destination for Trunks - ACI Automatic Recording for Outgoing Call**
  Determine whether a trunk should be automatically recorded when an outgoing call is initiated (0=off, 1=on).
- **15-07-01 : Programmable Function Keys**
  If required, program an ACI Conversation Record Key (code 69 + 0). This key allows an extension user to press the key to manually record a call to the ACI.
- **15-12-01 : Conversation Recording Destination for Extensions - ACI Recording Destination Extension Number**
  Use this option to assign the ACI Call Recording destination on a per extension basis. The destination can be an ACI port's extension number (assigned in Program 11-06) or an ACI Department Group pilot number (assigned in Program 11-08). If destinations are assigned in Programs 14-09 and 15-12, the destination in Program 15-12 will be followed.
- **15-12-02 : Conversation Recording Destination for Extensions - ACI Automatic Recording for Incoming Call**
  Determine whether an extension should be automatically recorded when an incoming call is received (0=off, 1=on).
- **15-12-04 : Conversation Recording Destination for Extensions - ACI Automatic Recording for Outgoing Call**
  Determine whether an extension should be automatically recorded when an outgoing call is received (0=off, 1=on).
- **31-05-01 : Universal Night Answer**
  For trunks which ring an external ringer connected to a 2PGDAD module, set the trunks to ring "1". When programming, the zones on the PGDAD adapter are numbers 1-8. The NTCPU's zone is number 9.
- **33-01-01 : ACI Port Type Setup**
  Set each ACI software port for input (1) or input/output (2). Use input ports for Music on Hold sources. Use output ports for External Paging/ringer control.
  Aspire S: ACI Ports1-8
  Aspire: ACI Ports 1-96
- **33-02-01 : ACI Department Calling Group**
  Assign ACI software ports to ACI Department Groups. This lets ACI callers connect to ACI software ports by dialing the group's pilot number (set in Program 11-08).
  Aspire S: ACI Ports 1-8, ACI Groups 1-4
  Aspire: ACI Ports 1-96, ACI Groups 1-16

Related Features

Automatic Call Distribution (ACD)
ACD agents which are logged on can be recorded.

Background Music
ACI software ports cannot be Background Music music sources.

Door Box
If a 2PGDAD circuit is used for ACI, it can not be used for a Door Box.

Hotline
Music on Hold ACI software ports can be Music on Hold music sources.

One-Touch Calling
An extension can have One-Touch Keys for ACI software ports. The gives the extension user:
- One touch access to external music
- One touch External Paging
- One touch loud ringer control

Paging, External
ACI software ports can provide External Paging with control, independent of the External Paging circuits on the NTCPU PCB. If a 2PGDAD circuit is used for ACI, it can not be used for External Page.

Operation

To call an ACI software port:

1. Press idle CALL key.
2. Dial ACI software port extension number.
   OR
   Dial ACI Department Group extension number.
   OR
   Press One-Touch Key for ACI extension or Department Group.

After you call an ACI software port:

- If the port is set for input (Program 33-01-01=1) and a music source is connected, you hear music.
  OR
- If the port is set for output (Program 33-01-01=2) and External Paging is connected, you can page into the external zone.
  OR
- If the port is set for output (Program 33-01-01=2) and a loud ringer is connected, you activate the loud ringer.

To manually record a call an ACI software port:

1. While on a call, press the ACI Conversation Record Key (PGM 15-07 or SC 851: 69 + 0).
   The key's LED will be lit when recording.
2. To stop recording, press the ACI Conversation Record Key once again.
   The key's LED will be off when recording has stopped.

Aspire S	Aspire M/L/XL
• Not Available.	• Available with software 2.16+ - 120 wireless phones maximum • Program options to adjust transmit and receive level of Aspire Wireless available with 2.63+ software. • Service Codes for registering/unregistering Aspire Wireless phones available with 2.63+ software. • Enhanced Features requires software 4.93+, Aspire Wireless handset version PP4+, and DSIU firmware 1.16+.

Description

The Aspire system provides the ability to use 2.4 GHz Aspire Wireless/DECT (Digital Enhanced Cordless Telecommunication) phones. These phones provide you with the freedom and conveniences of a wireless phone, but in addition, you also have access to features provided by the Aspire system.

The Aspire Wireless (DECT) phone provides additional options as well. Refer to the user guide included with your phone for details on these features.

- 12 Character Alphanumeric Display with Back Light
- LED Indication for Incoming and Unanswered Calls
- Telephone Book with 80 Number Memory Capacity
- Vibration
- Auto Log-In (roaming between different systems)
- 14 Messages Stored
- Stack for 10 Caller ID
- Silent Mode (mute all sounds)
- Redial (last 10 numbers)
- Programming Pause
- Programming of 2 Different Setups (indoor and outdoor)
- Adjustable Volume
- Key Lock
- 9 Different Ring Tones and Adjustable Ring Volume
- Microphone Mute
- Headset Connection
- Automatic Off-Hook (B-Answer)
- R-Key for Transfer and Special Services
- Detects other wireless devices and will temporarily block that frequency range until it
- becomes available (helps to prevent interference between devices)

Out-of-Range

When a Aspire Wireless phone receives an incoming call and the phone is considered out-of-range (Program 20-22-05 timer expires), what the system does with the call and what the caller hears depends on system programming.

- Extension callers will hear a lock-out tone and may see “Out of Range” on their display.
- DISA callers will following the programming set in Program 25-04-01 : VRS/DISA Transfer Ring Group With No Answer/Busy.
- DID and DIL callers hear ringing and can then be transferred to voice mail or to another extension based on the settings in Program 15-15-05 and 15-15-06.
- Tie line callers will hear the lock-out tone.

The Aspire Wireless requires the following hardware:

- 4-Port Interface PCB (P/N 0891090), 8-Port Interface PCB (P/N 0891091), or 12-Port Interface PCB (P/N 0891092)
- Handset with Battery (P/N 780004)
- Base Station (P/N 780136)
- Charging Cradle (P/N 780137)

Optional Equipment:

- Leather Cover w/Clip for Aspire Wireless (DECT) Handset (P/N 780148)
- Repeater (P/N 780138)
- AC Adapter (P/N 780139)
- Battery (NMh) (P/N 780140)
- Handset Belt Clip (P/N 780141)
- Repeater Programming Kit (P/N 780142)
- Service Tool Kit (P/N 780143)
- Deployment Tool (P/N 780144)
- External Antenna w/Cable for Repeater (P/N 780145)

Prior to deleting an Aspire Wireless (DECT) phone from the system using **Program 91-07-01 : DECT Subscription - Delete**, make sure the DSIU PCB is installed in the system. If the DSIU is removed when Program 91-07-01 is run, the system will retain the DECT setting. This will prevent the Aspire Wireless phone(s) from being registered in the system again.

Programs Available for Gain Adjustment

With software 2.63 or higher, you can adjust the gain of the Aspire Wireless handsets using Program 15-15-07 and 15-15-08.

Register/Unregister Handset by Service Code

The Aspire Wireless telephones can be registered or unregistered at a display keyset using a service code. Note the following conditions when using this feature:

- As this feature uses extension numbers and not port number, it is not possible to have the system select an available port as when using Program 91-06-01.
- This feature only supports the wild card subscription method. It is not possible to specify the IPEI number.
- The wait timer for terminal registration is fixed at 600 seconds.
- This feature can only be used from a display keyset. Digital single line telephones and i-Series phones cannot be used.
- This option is not available for Networked systems.

Enhanced Features Added

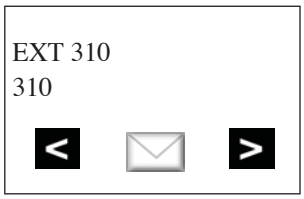
The features for the Aspire Wireless phones have been enhanced. ***Note: In order to enable these enhancements, the Aspire Wireless phones must be updated to software version PP4 and the DSIU PCB must be updated to 1.16 or higher. When both the handset and DSIU are updated to the correct version, Program 90-17-15 will display the version as V01.07.***

- **Calling Party Information with Transfer**
  Previously, when a call is transferred to an Aspire Wireless phone, the Calling Party Number displayed on the LCD was that of the transferring extension - not of the transferred caller. With this release, the Calling Party Number of the transferred caller will now be displayed.

- **Incoming and Outgoing Collision Operation (DSIU firmware changed)**
  When a call collision occurred (an outgoing and incoming call on an Aspire Wireless occurred at the same time), the incoming call would be answered. This is determined by the DSIU PCB firmware. However, previously, the display did not indicate the incoming caller's number.

  With this enhancement, the DSIU PCB firmware has been changed. Now, when a call collision occurs, the phone will not automatically answer the call, but it will suspend the outgoing call operation and indicate the incoming call.

- **Message Waiting Icon Display**
  Previously, the Aspire Wireless phones did not provide an icon display to indicate when a Message Waiting (MW), voice mail message, or general message using the VRS had been left for the Aspire Wireless phone. With this enhancement, when a MW, voice mail message, or general message using the VRS is left, the envelope icon will be shown in the LCD display.



  If the Aspire Wireless is out of range or if the phone is turned off, the message indication will be delayed until the phone returns into range or is powered up.

- **Stand-by Display**
  The Aspire Wireless display has been changed to allow the name and number of the extension to be displayed while in stand-by/idle mode. The stand-by display for the phone is renewed by powering ON/OFF.

  The extension name and number will display even if the Aspire Wireless phone is set with Call Forward.

- **ABB Search**
  An Aspire Wireless user can search the Common and Group Abbreviated Dial numbers for a programmed name by entering one or more characters of the name. Previously, the user needed to know the ABB number to be dialed - it was not possible to search or scroll through the list of numbers programmed in the system.

Related Features

Caller ID

Aspire Wireless phones can provide Caller ID information if it is provided by telco.

Call Forwarding

- If the Transferring When Out of Range feature and a Call Forward option (such as No Answer) are both programmed for the Aspire Wireless (DECT) phone, the call is sent to the destination based on which option's timer expires first.
- If an extension is set with Call Forward Both Ring, with the Aspire Wireless phone being the second extension to ring, if the extensions have Fixed Call Forwarding to voice mail, any transferred calls to the extension will not forward to voice mail. Use the Tandem Ringing feature instead.

Hold

Aspire Wireless phones provide an exclusive Hold feature. A call can be placed on Hold at the phone, but the held call cannot be picked up by any other extension.

Networking

Networked extensions cannot use service codes to register or unregister an Aspire Wireless handset.

Programmable Function Keys

Aspire Wireless phones cannot have any Programmable Function Keys. Due to this, Multiple Directory Numbers, Call Coverage Keys, and Repeat Redial features are not available with this phone.

Ringing Line Preference

Ringing Line Preference is not supported with Aspire Wireless phones.

Voice Mail

Aspire Wireless phones can provide Caller ID information if it is provided by telco.

Refer to the Aspire Wireless Installation Manual (P/N 0893103) for complete details.

Operation

Answering Calls

Answering Outside Calls:

1. Press the **ON-HOOK/OFF-HOOK** key.

   If Caller ID has been enabled in the system, the display shows the calling party's information.

Answering Intercom Calls:

1. Press the **ON-HOOK/OFF-HOOK** key to speak.

Picking up calls not ringing your phone . . .

Answering a call ringing Paging after hours:

1. Press the **ON-HOOK/OFF-HOOK** key.
2. Dial # + 0.

When a call is ringing a co-worker's phone:

1. Press the **ON-HOOK/OFF-HOOK** key.
2. Dial ** + Co-worker's extension.

Placing Calls

Placing an Outside Call:

1. Press the **ON-HOOK/OFF-HOOK** key.
   Listen for dial tone.
   To preview the number first, press the ON-HOOK/OFF-HOOK key after step 2 instead of pressing it first.
2. Dial 9 + Outside number.
   When behind a PBX, you may have to dial another 9 before your number.
   OR
   Dial 804 + Line group number (1-9 or 001-200) + Outside number.
   When behind a PBX, you may have to dial 9 before your number.
   OR
   Dial #9 + Line number (e.g., 005 for line 5) + Outside number.
   When behind a PBX, you may have to dial 9 before your number.

Calling a Co-Worker, Voice Mail and Paging

1. Press the **ON-HOOK/OFF-HOOK** key.
2. Dial co-worker's extension number.
   Your call will ring or voice-announce. If you hear ringing, wait for an answer. If you hear two beeps, begin speaking. Dialing 1 changes mode.
   OR
2. For Paging, dial *1 + 0 for All Call or 1-64 for zones.
   OR
2. To call your mailbox, dial the *8.

Abbreviated Dialing: Common and Group (Speed Dial)

Store Common or Group Abbreviated Dialing numbers:

1. Press the **ON-HOOK/OFF-HOOK** key.
2. Dial 853 (for Common).
   OR
   Dial 854 (for Group).
3. Dial Abbreviated Dialing bin number.
   Ask your Communications Manager for your bin numbers.
4. Dial phone number to store + the **R (HOLD/RECALL)** key.
   *The number can be up to 24 digits, using 0-9, # and *.*

Dial your stored Abbreviated Dial number:

1. Press the **ON-HOOK/OFF-HOOK** key.
2. Dial #2 + Bin (for Common).
   OR
   #4 + Bin (for Group).

Abbreviated Dial Search

1. Press the MENU button.

PROFILE
SET UP
< >

2. Press the right arrow button.

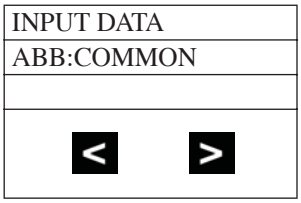
MENU
EXT. SERVICE
< >

3. Press the OK button.

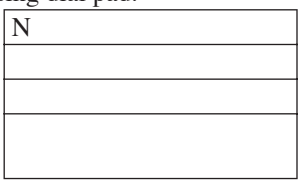
SELECT MENU
ABB:COMMON
>

4. Press the right arrow button to change the search mode from Common Abbreviated Dial (COMMON), Group Abbreviated Dial (GROUP), or Extension name (EXTENSION).

5. Press the OK button.



6. Input the character(s) by pressing dial pad.



While inputting characters, the cursor blinks. While scrolling through the characters, you have approximately 1 second to move to the next character under the same key, otherwise, the phone accepts the displayed character as an entry.

You can use the left and right arrows to move the cursor.

To delete a character, position the cursor over the character and hold the left arrow key down for approximately 1 second. To delete all the characters, hold down the left arrow key for approximately 5 seconds (the cursor position does not matter when deleting all characters).

A search cannot be performed if more than 13 characters are entered.

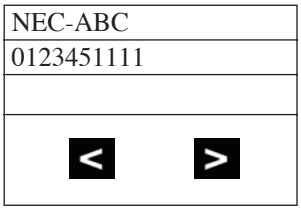
Character Entry in Aspire Wireless

Dial										
1	Æ (0xc6)	0 (0xd8)	Â (0xc5)	@ (0x40)	Ä (0xc4)	ö (0xd6)	ß (0xdf)	ü (0xdc)	1 (0x31)	
2	A (0x41)	B (0x42)	C (0x43)	@ (0x40)	Ä (0xc4)	Á (0xc1)	À (0xc0)	Å (0xc2)	2 (0x32)	
3	D (0x44)	E (0x45)	F (0x46)	3 (0x33)						
4	G (0x47)	H (0x48)	I (0x49)	Ï (0xcf)	Î (0xce)	4 (0x34)				
5	J (0x4a)	K (0x4b)	L (0x4c)	5 (0x35)						
6	M (0x4d)	N (0x4e)	O (0x4f)	ö (0xd6)	ó (0xd3)	ò (0xd2)	6 (0x36)			
7	P (0x50)	Q (0x51)	R (0x52)	S (0x53)	ß (0xdf)	7 (0x37)				
8	T (0x54)	U (0x55)	V (0x56)	ü (0xdc)	ú (0xda)	ù (0xd9)	û (0xdb)	8 (0x38)		
9	W (0x57)	X (0x58)	Y (0x59)	Z (0x5a)	9 (0x39)					
0	space (0x20)	. (0x2e)	, (0x2c)	_ (0x5f)	- (0x2d)	+ (0x2b)	: (0x3a)	? (0x3f)	! (0x21)	0 (0x30)
*	* (0x2a)	# (0x23)	/ (0x2f)	\ (0x5c)	((0x28)	) (0x29)	= (0x3d)	& (0x26)		
#										

Not used

Excepted character at search (same as no input)

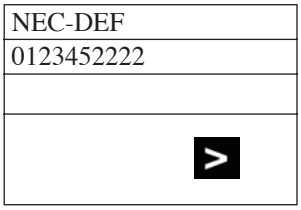
7. Press the OK button to start the search.



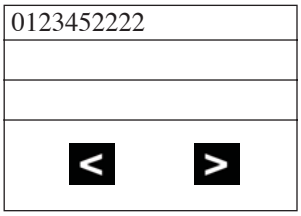
The display shows the ABB/EXT name in the first line (Max. 12 characters). The ABB/EXT number is shown in the second and third line (Max. 20 digits).

8. If there is no match for the search entry, the following display is shown:

9. Press the right arrow button to see the next entry in the search list.



10. To make an outgoing call, press the hook button .



OR, to cancel the search, press the MENU button.

Use the Phone's Telephone Book for Personal Numbers

Store a number in the Telephone Book:

1. While idle, dial the number to be stored.
2. Press the **>** key + the **OK** key.
3. Enter the name associated with the number + the **OK** key.

   Up to 80 numbers with name can be stored in the Telephone Book. A name is required with each number. A "Memory Full" message indicates that a number must be deleted before making another entry.

Dial a number from the Telephone Book:

1. Press the **>** key.
2. Use the **<** or **>** keys to display the number to be called or press the first letter in the name using digits 1-9.
3. Press the **ON-HOOK/OFF-HOOK** key to place the call.

Call Forwarding

Forward your calls to a co-worker:

1. Press the **ON-HOOK/OFF-HOOK** key + *2.
2. Dial Call Forwarding condition:
   2 = Busy or not answered
   4 = Immediate
   6 = Not answered
   7 = Immediate w/simultaneous ringing (not for Voice Mail)
   0 = Cancel
3. Dial destination extension or Voice Mail master number.
4. Dial Call Forwarding Type:
   2 = All calls
   3 = Outside calls only
   4 = Intercom calls only

Call Forwarding, Off-Premise

Forward your calls to an outside telephone number:

1. Press the **ON-HOOK/OFF-HOOK** key + *4.
2. Dial 6 and the trunk access code.

   Trunk access codes are 9 (ARS/Trunk Group Routing), 804 + Line Group (1-9, 01-99 or 001- 100) or #9 + Line number (e.g., 05 or 005 for line 5).
3. Dial the outside number to which your calls should be forwarded.
4. Press the **ON-HOOK/OFF-HOOK** key.

   Stutter dial tone is heard when the On-Hook/Off-Hook key is pressed.

To cancel Call Forwarding Off-Premise

1. Press the **ON-HOOK/OFF-HOOK** key + *4.
2. Dial 6.
3. Press the **ON-HOOK/OFF-HOOK** key.

Camp On / Callback

If you heard a busy signal when calling a co-worker, use Camp On or Callback:

1. Dial 2 to Camp On (wait without hanging up).
   (Intercom calls) If you hear two beeps, you can speak. If you hear busy/ring, dial 6 to send a Voice Over.
   (Outside calls) When you hear new dial tone, place your call again.
   OR
   Dial 2 and hang up to leave a Callback for a free line or extension.
   Wait for the system to call you back.
2. Press the **ON-HOOK/OFF-HOOK** key when the system rings you back.
   (Outside calls) Place your call again.
   (Intercom calls) Speak to co-worker.

To cancel your Callback:

1. Press the **ON-HOOK/OFF-HOOK** key.
2. Dial 870 + Hang up.

Conference

Establishing a Conference Call:

1. Place or answer call + the **R (HOLD/RECALL)** key + #1.
2. Place/answer next call + the **R (HOLD/RECALL)** key + #1.
   You may have up to 32 callers. Your software determines if there is any restriction on the number of outside parties. Repeat this step to add more parties.
3. After adding all parties, press the **R (HOLD/RECALL)** key twice to set up the Conference.

Do Not Disturb

Using Do Not Disturb:

1. Press the **ON-HOOK/OFF-HOOK** key.
2. Dial 847.
3. Dial the DND option code (0-4).
   1 = Blocks outside calls
   2 = Blocks Paging, Intercom calls, Call Forwards and Transferred outside calls.
   3 = Blocks all calls
   4 = Blocks Call Forwards
   0 = Cancels DND

Turning off your handset:

1. Press the **OK** key for 3 seconds.
   The phone will beep and the display will go blank when the phone is off.

Turning your handset on:

1. Press the **ON-HOOK/OFF-HOOK** key.

   When the handset is on, is shown in the lower left corner of the display if the handset has been subscribed to a system.

Hold

Placing a call on Hold:

1. Do not hang up + press the **R (HOLD/RECALL)** key + Do not hang up.

   This puts your call on Exclusive Hold.

   To place the call on Group Hold (so only those in your Department can pick up the call), dial 832 after pressing the R (Hold/Recall) key.

   Intercom calls automatically go on Exclusive Hold when you press the R (Hold/Recall) key.

Retrieving a call from Hold:

1. Press the **R (HOLD/RECALL)** key.

   To retrieve a call from Group Hold, dial 862 instead of pressing the R (Hold/Recall) key.

Last Number Redial

Quickly redial your last outside call:

1. Press the **ON-HOOK/OFF-HOOK** key + #5.

   The system selects an outside line.

Dial a number from the phone's stored Redial and CLIP numbers:

The handset stores up to 10 redial numbers and 10 Caller ID numbers in memory.

1. Press the **Left Arrow** key.
2. Press the **Left Arrow** key to scroll through the numbers.

   Numbers are displayed newest to oldest.

   Use the key to scroll forward if needed.

   To delete a number, press OK twice. To store a number in the Phone Book, press OK + > + OK + Enter name + OK.
3. Press the **ON-HOOK/OFF-HOOK** key to place the call.

Message Waiting (Direct Messaging)

Leave a Message Waiting:

1. Do not hang up + 0.

   Your co-worker's MW flashes fast.

Answer a Message Waiting:

1. Press the **ON-HOOK/OFF-HOOK** key + *0.

   To cancel all your messages (those you left and those left for you), dial 873.

Name Entry:

The dial pad digits are used for writing the name to be placed in the Phone Book. For example, press the digit 2 key once for A, twice for B, three times for C, etc.

The arrow keys can be used to move the cursor left or right. The left arrow key can also be used for deleting a character by holding it down for 1 second.

Pressing a new key or pausing for more than 1 second automatically moves the cursor to the next position.

Key	
1	Æ Ø Å @ Ä Ö ß Ü 1
2	A B C @ Ä Á À Â 2
3	D E F 3
4	G H I Ï Î 4
5	J K L 5
6	M N O Ö Ó Ò 6
7	P Q R S ß 7
8	T U V Ü Ú Ù Û 8
9	W X Y Z 9
0	Space . , _ - + : ? ! 0
*	* # / \ ( ) = &
#	Upper/lower-case

Park

Park a call in orbit:

1. Do not hang up.
   Park a call in a System Orbit
2. Press the **R (HOLD/RECALL)** key + #6 + Park Orbit.
   Park Orbits are 01-64.
   Park a call at your extension using Personal Park
   Dial 857.
3. Page your co-worker to pick up the call.
   *For Paging, dial *1 + 0 for All Call or *1 + 1-64 for zones.*
4. Hang up.

Pickup up a call in Park:

1. Press the **ON-HOOK/OFF-HOOK** key.
2. For a Call Parked in a System Orbit:
   Dial *6 + Park Orbit.
   Park Orbits are 01-64.
   OR
   For a Call Parked in a Personal Park Orbit
   When Parked at your phone:
   Dial 857 + your extension number.
   When Parked at a co-worker's phone:
   ** + Announced extension.

Park and Page

Use Park and Page to be paged for calls while away from your desk

1. Press the **ON-HOOK/OFF-HOOK** key.
2. Press *47 + Record your Personal Greeting.
3. #7 + Record the Page.

   For Personal Greeting only, press # then 2 (Busy/No Answer), 4 (Immediate), or 6 (No Answer) + extension to receive calls + 2 (All) or 3 (CO) and hang up.
4. # + Dial the Page Zone (e.g. 801 + 1).
5. Press 2 (All calls) or 3 (CO calls).

To Cancel:

1. Press the **ON-HOOK/OFF-HOOK** key.
2. Press *47 3.
3. Press the **ON-HOOK/OFF-HOOK** key.

Answer Park and Page:

1. Press the **ON-HOOK/OFF-HOOK** key.
2. Press ** + Announced extension.

Personal Greeting

Use Personal Greeting to record a message for the caller and then forward the call:

1. Press the **ON-HOOK/OFF-HOOK** key.
2. Press *47 + Record your Personal Greeting.
3. Press # + 2 (Busy/No Answer), 4 (Immediate), or 6 (No Answer).
4. Dial the extension to receive calls + 2 (All calls) or 3 (CO calls).
5. Press the **ON-HOOK/OFF-HOOK** key.

Registration

Registering an Aspire Wireless Handset

To cancel the registration process at any point, press the SPK or Headset key, or place the handset on-hook.

1. From a keyset, press SPK key and dial the service code defined in Program 11-10-30.
2. Enter the extension number to be assigned.

   If the DSIU is unavailable or if the extension number is invalid, the system displays an error message and the phone is returned to an idle condition.

   If another keyset is registering a phone, the system indicates "DSIU Busy" and the phone is returned to an idle condition.

   If the extension number entered is already subscribed, the system displays the following message "Already Subscribed".
3. When a valid extension number is entered, the system displays the extension number and the AC number and enters the registration mode.
4. Using the Aspire Wireless phone to be registered, press the Menu key then press the Left Arrow key twice to display the Login option. Press OK.
5. Press the Right Arrow key once to display the Subscription Create option. Press OK.
6. The Aspire Wireless phone will search for the DSIU PCB and display the PCB's ID number once found.

   This may take a few seconds. If the ID number does not appear, check Program 90-27-01 to make sure the PCB is recognized.
7. Press OK.
8. Enter the 4-digit AC number displayed in Step 3 and press OK.
9. Once the phone has been registered, the phone will beep and (((.))) will appear in the lower left-hand corner.

   If the registration was successful, the display will indicate: "Completed".
   If the registration failed, the display will indicate: "Failed".
   If the registration was failed due to timeout, the display will indicate: "No Response".

Unregistering an Aspire Wireless Handset

1. From a keyset, press SPK key and dial the service code defined in Program 11-10-31.
2. Enter the assigned extension number.

   If the DSIU is unavailable or if the extension number is invalid, the system displays an error message and the phone is returned to an idle condition.

   If another keyset is registering a phone, the system indicates "DSIU Busy" and the phone is returned to an idle condition.

   If the extension number entered is already subscribed, the system displays the following message "Already Subscribed".
3. When a valid extension number is entered, the system requests a confirmation that the phone is to be unsubscribed.

   "Delete DECTPP xxxxxxx
   Ready (1: Yes)."
4. Press 1 to confirm or any other key to cancel the operation.

   Once the phone has been unregistered, the phone displays "Completed".

   If the Aspire Wireless phone was active on a call at the time it was unregistered, the call will be dropped.

Save

Save your call for quick dialing later on:

1. While on a call, press the **R (HOLD/RECALL)** key + 815.

Quickly redial your saved number:

1. Press the **ON-HOOK/OFF-HOOK** key + 815.
   When redialing, the system selects an outside line for you. To clear a saved number: Press the ON-HOOK/OFF-HOOK key + 885.

Transfer

Transferring your call to a co-worker:

1. Press the **R (HOLD/RECALL)** key + Dial your co-worker's extension.
   *To transfer the call to a co-worker's mailbox, dial the *8 before their extension.*
2. (Optional) Announce the call when your co-worker answers.
3. Press the **ON-HOOK/OFF-HOOK** key.

Transferring When Out of Range

To Set the Transferring When Out of Range Option:

1. Press the **ON-HOOK/OFF-HOOK** key.
2. Dial the Transfer When Out Of Range Service Code (by default: 189).
3. ***Skip this step if using the pre-defined destination from Program 15-14-01.***
   Enter the telephone number which should be the destination of the forwarded call
   Make sure to include any required trunk access codes (ex: 9 or #9 + trunk number) when transferring to an outside number.
   Entering any new number overwrites the previously defined information entered manually or through system programming (15-14-01).
4. Press the **ON-HOOK/OFF-HOOK** key.

To Clear the Transfer Destination:

1. Press the **ON-HOOK/OFF-HOOK** key.
2. Dial the Transfer When Out Of Range Service Code (by default: 189).
3. Press the **R (HOLD/RECALL)** key.
4. Press the **ON-HOOK/OFF-HOOK** key.

To Cancel the Transferring When Out of Range Option:

1. Press the **ON-HOOK/OFF-HOOK** key.
2. Dial the Transfer When Out Of Range Service Code (by default: 189).
3. Press the **ON-HOOK/OFF-HOOK** key.

Aspire S	Aspire M/L/XL
• N/A	• Aspire XL available with software 4.0E+.

Description

To enhance the Aspire system, which previously only supported 256 digital/analog extensions (not including IP and Wireless), the Aspire XL system is now available. The Aspire XL uses a new power supply cabinet, new power supplies, and 32ESIU PCB to provide the ability to support up to 384 digital/analog extensions (TDM/legacy telephones). ***The total number of phones (legacy + IP/ Aspire Wireless) supported is still 512.***

The Aspire XL uses the same hardware as the existing Aspire M/L system except for the new hardware indicated below.

- **Power Supply Set (IP1WW-XLPSU-A(SET) / New power supply) - Kit P/N 0890069**
  This kit includes the following:
  - IP1WW-PSADU-A1 (AC/DC Unit for the XL Power Supply) - P/N 0892011
    Two AC/DC Power Supplies maximum per Power Supply Cabinet.
    When two AC/DC Power Supplies are installed, two separate AC cords will each require an AC outlet connection from the bottom Power Supply Cabinet. Use the power cords included with the Aspire system cabinet(s) for connecting the power supplies to the AC outlet. The Aspire system cabinet is no longer directly connected to an AC outlet with the AC/DC Power Supplies installed.
  - IP1WW-PSDDU-A1 (DC/DC Unit for the XL Power Supply) - P/N 0892012
    Two DC/DC Converters maximum per system - one in each system cabinet.
    A DC/DC Converter replaces the two power supplies used in the cabinet of the Aspire M/L system (P/N 0891000).
    If an Aspire M/L system is upgraded to an Aspire XL, the existing power supplies will no longer be required as they are replaced by the DC/DC Converter.
  - IP1WW-XLPS Cable for Power (connects the AC/DC Unit and DC/DC Unit) - P/N 0892013
    This cable allows for a power connection from one AC/DC Supply in the bottom cabinet to one DC/DC Converter in the system cabinet.
    Note: The power cord for the system cabinet (located on the back of the cabinet) is no longer required with this cable connection.
  - IP1WW-XLPS Cable for Signal (connects the AC/DC Unit and DC/DC Unit) - P/N 0892010
    This cable allows for a signal connection from one AC/DC Supply in the bottom cabinet to one DC/DC Converter in the system cabinet.

- **Power Supply Cabinet (IP1WW-XLPS CABINET/ For the IP1WW-PSADU-A1) - P/N 0890068**
  IP1WW-XLPSU CABINET can contain maximum two IP1WW-PASDU-A1s.

  The cabinet accommodates up to two AC/DC power supplies. This cabinet is to be installed as the bottom cabinet of a 3-cabinet system (the top two cabinets containing the NTCPU, DC/DC Converters, and PCBs).

Refer to the *Aspire XL Installation Instructions*, P/N 0893113, for details on installing the power supplies and cables.

- **32ESIU (IP1WW-32ESIU-PR2 / 32-Port Digital Station Interface) - P/N 0891058**
  The 32ESIU can be installed with a maximum of twelve PCBs per Aspire XL system (8 maximum per cabinet). Only the first 4 ports on each PCB allow the use of the B2 channel. This means that the APR(B2 mode) adapter or PGDAD module must be installed on one of these first 4 ports.

Aspire XL systems can accommodate 384 TDM station ports maximum for -48V with two power supplies (P/N 0890069) installed. The PCBs which require -48V are: ESIU, DSTU, SLIU, DSIU, BRIU, DIOPU.

If the system has more than 256 ports, and both cabinets have more than 128 -48V ports each, an additional AC/DC and DC/DC Converter is required in the power supply cabinet.

New AC/DC Supply + DC/DC Converter can accommodate 256 ports max. for -48V in one cabinet.

If both new AC/DC +DC/DC Converters are installed, then 384 Ports max. (greater than 128 Ports in each cabinet) are supported by -48V output.

The 32ESIU can be installed in an Aspire M/L system, however, note the following conditions:

- Up to four 32ESIU cards can be supported in one cabinet without the need to change existing power supplies (P/N 0891000).
- The Aspire M/L system can accommodate 128 ports maximum for -48V with two power supplies (P/N 0891000) in one cabinet.
  If 4 32ESIU's are used with two Aspire M/L power supplies, no other PCB which requires -48V (ESIU, DSTU, SLIU, DSIU, BRIU, DIOPU) can be installed in that cabinet.
- Using the 32ESIU PCBs **does not** increase the number of digital/analog ports - the limit remains at 512 (256 analog/digital and 256 IP and Wireless).
- The 32ESIU can be used with any version of the NTCPU/PAL chip.

The Aspire XL system can support mixed hardware configurations. With an Aspire XL AC/DC power supply cabinet and DC/DC Converter, the second cabinet can contain up to two Aspire M/L power supplies (P/N 0891000).

For installation details, refer to the *Aspire 32ESIU PCB Installation Instructions*, P/N 0893112.

Program Changes

The following programs are enhanced for the XL system.

- **10-03-01~07 (ESIU) : PCB Setup - Physical Port Number**
  Previous Entry: 1-16
  New Entry: 1-32
- **10-03-01 (SLIU) : PCB Setup / Logical Port Number**
  Previous Entry: 0-256
  New Entry: 0-384
- **10-03-01 (VMSU) : PCB Setup / Logical Port Number**
  Previous Entry: 0-256
  New Entry: 0-384
- **10-03-02 : (ESIU) : PCB Setup**
  Terminal Type 1 (Keyset/DSLT) Logical Port
  Previous Entry: 0-256
  New Entry: 0-384
  Terminal Type 2 (SLT Adapter) Logical Port
  Previous Entry: 0-256
  New Entry: 0-512
  Terminal Type 3 and 4 - Not used in U.S. = 0-512
- **10-03-02 (DIOPU) : PCB Setup / Logical Port Number**
  Previous Entry: 0-256
  New Entry: 0-384
- **10-03-02 (BRI) : PCB Setup / Logical Port Number**
  Previous Entry: 0-256
  New Entry: 0-384
- **10-03-02 (PRI) : PCB Setup / Logical Port Number**
  Previous Entry: 0-256
  New Entry: 0-384
- **82-07-01 : CODEC Filter Setup for Analog Station Ports/ CODEC Filter Type**
  Previous Entry: 1-256
  New Entry: 1-384
- **91-06-01 : Aspire Wireless Subscription, New**
  When a user selects 0 (auto port assignment) in Program 91-06-01 to assign an Aspire Wireless port, the system previously had assigned an available port from 257. This is now changed to 385.

Conditions

- ***Prior to updating system software, due to capacity differences, a database file must be made in order to revert to any older version of software. The expanded database file from a 4.x software cannot be used in older software once the new ports are recognized and used by the system.***
- APR(B2 mode) Port Assignment: With the XL system, the APR port is assigned from 512 in descending order.
- The Aspire XL system can support mixed hardware configurations. With an Aspire XL AC/DC power supply cabinet and DC/DC Converter, the second cabinet can contain up to two Aspire M/L power supplies (P/N 0891000).

Default Setting

Refer to the individual features.

Programming

Refer to the individual features for programming specifics.

Operation

Refer to the individual features for programming specifics.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Attendant extensions can have up to 32 incoming calls queued before additional callers hear busy tone. This helps minimize call congestion in systems that use the attendant as the overflow destination for unanswered calls. For example, you can program Direct Inward Lines and Voice Mail calls to route to the attendant when their primary destination is busy. With Attendant Call Queuing, these unanswered calls would normally "stack up" for the attendant until they can be processed.

The 32 call queue total includes Intercom, DISA, DID, DIL, tie line and transferred calls. If the attendant doesn't have an appearance for the queued call, it waits in line on a CALL key. If the attendant has more than 32 calls queued, an extension can Transfer a call to the attendant only if they have Busy Transfer enabled.

Attendant Call Queuing is a permanent, non-programmable system feature.

Conditions

None

Default Setting

Enabled.

Programming

- **20-17-01 : Operator's Extension**
  Assign the operator (attendant's) extension.
- **24-02-01 : System Options for Transfer - Busy Transfer**
  Prevent (0) or allow (1) extensions to Transfer calls to an attendant that has more than 32 calls is queue.

Related Features

Call Forwarding / Personal Greeting

Forwarding when unanswered or busy can only occur at the attendant if there are more than 32 calls in queue.

Operation

None

Aspire S	Aspire M/L/XL
• Not Available.	• Available with the Basic NTCPU (P/N 0891002) with the PAL upgrade or the Enhanced NTCPU (P/N 0891038) - 64 ACD Groups and 512 ACD Agents. • ACD Call Coverage keys supported with 1.06+ software. • ACD Queue Status Display supported with 1.11+ software. • ACD Hotline Key Shows Agent Status supported with 1.11+ software. • ACD MIS software can count overflow calls with 2.63+ software. • P command support for AIC log-in requires 4.0E+. • Enhanced Overflow options requires 4.94+. • For more information, refer to the ACD Manual (P/N 0893202).

Description

Automatic Call Distribution (ACD) uniformly distributes calls among member agents of a programmed ACD Group. When a call rings into an ACD Group, the system automatically routes the call to the agent that has been idle the longest. Automatic Call Distribution is much more sophisticated and comprehensive than Department Calling and other group services - it can accurately judge the work load at each agent and distribute calls accordingly. The system allows up to 64 ACD Groups and 512 ACD agents.

You can put any agent in any group. In addition, an agent can be in more than one group. This allows, for example, a Technical Service representation to answer Customer Service calls at lunch time when many of the Customer Service reps are unavailable.

The ACD Master Number is the “extension number” of the whole group. Calls directly ringing or transferred to the ACD Master number enter the group and are routed accordingly. Although the master number can be any valid extension number, you should choose a number that is out of the normal extension range.

Automatic Call Distribution operation is further enhanced by:

- **ACD Call Queuing**
  When all agents in an ACD Group are unavailable, an incoming call will queue and cause the Queue Status Display to occur on the ACD Group Supervisor’s display. The display helps the supervisor keep track of the traffic load within their group. The Queue Status Displays shows:
  - The number of calls queued for an available agent in the group.
  - The trunk that has been waiting the longest, and how long it has been waiting.

For each ACD Group, you can set the following conditions:
- The number of trunks that can wait in queue before the Queue Status Display occurs.
- How often the time in queue portion of the display reoccurs.
- If the supervisor should hear a Queue Alarm whenever the time in queue portion reoccurs. This alarm is a single beep tone that reminds the supervisor to check the condition of the queue.

- **ACD Overflow (With Announcements)**
ACD offers extensive overflow options for each ACD Group. For example, a caller ringing in when all agents are unavailable can hear an initial announcement (called the 1st Announcement). This announcement can be a general greeting like, "Thank you for calling. All of our agents are currently busy helping other customers. Please stay on the line and we will help you shortly." If the caller continues to wait, you can have them hear another announcement (called the 2nd Announcement) such as, "Your business is important to us. Your call will be automatically answered by the first available agent. Please stay on the line." If all the ACD Group's agents still are unavailable, the call can automatically overflow to another ACD Group or the Voice Mail Automated Attendant. If all agents in the overflow ACD Group are busy, Lookback Routing automatically ensures that the waiting call will ring into the first agent in either group that becomes free.

  You can assign an ACD Group with any combination of 1st Announcement, 2nd Announcement and overflow method. You can have, for example, a Technical Service group that plays only the 2nd Announcement to callers and then immediately overflows to Voice Mail. At the same time, you can have a Customer Service group that plays both announcements and does not overflow.

- **Agent Log In and Log Out Services**
An ACD Agent can log in and log out of their ACD Group. While logged in, the agent is available to receive ACD Group calls. When logged out, the agent is excluded from the group's calls. The programmable keys and alphanumeric display on an agent's phone show at a glance when they are logged in or logged out.

- **Agent Identity Code (AIC)**
An Agent Identity Code (AIC) allows ACD agents to log in any extension without setting Program 41-02 (AIC Log In). Using AIC, ACD agents can also log in to multiple ACD groups at the same time (up to 64 ACD Groups). The system will also allow all extensions (up to the system maximum) to log in using the same AIC code. AIC and ACD groups for each work period (mode pattern number) can be set in Program 41-18 as shown in the following example.

Table #	AIC	Operation Group	Mode Pattern Number							
			1	2	3	4	5	6	7	8
1	789	1	1	1	-	-	-	-	-	-
2	789	1	2	1	-	-	-	-	-	-
3	789	1	16	1	-	-	-	-	-	-
4	567	10	10	10	10	10	10	10	10	10
5	678	2	2	2	2	2	2	2	2	2
6	678	2	3	3	3	3	3	3	3	3
7	678	2	5	5	5	5	5	5	5	5

With this example, ACD will work as follows:
Example 1: Log In with AIC 789

- During Mode Pattern 1, ACD agents will belong to ACD groups 1, 2, and 16 at the same time.
- During Mode Pattern 2, ACD agents will belong to only ACD group 1.
- During Mode Pattern 3-8, ACD agents will not belong to any ACD group and the ACD extensions will work as normal extensions.

Example 2: Log In with AIC 567

- During Mode Patterns 1-8, ACD agents will belong to only ACD group 10.

Example 3: Log In with AIC 678

- During Mode Patterns 1-8, ACD agents will belong to ACD groups 2, 3 and 5 at the same time.

With older software, P commands are not supported for AIC log on/ log off. Because of this, it is not possible for the inDepth MIS software to determine which ACD groups each extension was a member of or to which ACD groups calls were presented.

However, with software 4.0E and higher, AIC log on/log off operations are supported. The Aspire P Commands will indicate which ACD Group is being logged onto when an AIC code is entered. Also when an agent logs off, there will be a multiple log of events, one log off event for each previous ACD log on event.

This feature is not yet supported by the inDepth software.

- **Multiple Agent Log In**
  ACD agents can log their extension in using multiple AICs (up to 3). The system will also allow all extensions (up to the system maximum) to log in using the same AIC code. For example, even if ACD agent "A" logs in extension 350 with AIC 789, ACD agent "B" can also log in to extension 351 with AIC 789 at the same time. Using the example setup above, ACD will work as follows:
  Example 1: Log In with AIC 789 and 568
  - During Mode Pattern 1, ACD agents will belong to ACD groups 1, 2, 10 and 16 at the same time.
  - During Mode Pattern 2, ACD agents will belong to ACD groups 1 and 10.
  - During Mode Pattern 3-8, ACD agents will belong to only ACD group 10.

  Example 2: Log In with AIC 789, 568 and 678
  - During Mode Pattern 1, ACD agents will belong to ACD groups 1, 2, 3, 5, 10 and 16 at the same time.
  - During Mode Pattern 2, ACD agents will belong to ACD groups 1, 2, 3, 5 and 10.
  - During Mode Pattern 3-8, ACD agents will belong to only ACD groups 2, 3, 5 and 10.

  In addition to an agent logging in with multiple AIC codes, ACD agents can log in to multiple ACD groups at the same time (up to 64 ACD Groups). AIC and ACD groups for each work period (mode pattern number) can be set in Program 41-18.

  Some conditions with Multiple Agent Log In:
  - ACD agents cannot log in to the system supervisor or group supervisor's extension.
  - In order to log in with AIC, the extension should be set to AIC Log In mode in Program 41-17.
  - If the extension is set to AIC log in mode in Program 41-17, the system will ignore the setting of Program 41-02 for the extension.
  - A supervisor cannot log out an agent logged in by an AIC code.

- **Emergency Call**
  If an ACD Agent needs assistance with a caller, they can place an Emergency Call to their ACD Group Supervisor. Once the supervisor answers the Emergency Call, they automatically monitor both the ACD Agent and the caller. If the agent needs assistance, the supervisor can join in the conversation. Emergency Call can be a big help to inexperienced ACD Agents that need technical advise or assistance with a difficult caller. The supervisor can easily listen to the conversation and then "jump in" if the situation gets out of hand.

- **Enhanced DSS Operation**
  A programmed extension user can use their DSS Console to monitor the status of the ACD Agents within a group. The DSS Console is an essential tool for supervisors. The console key flash rates tell the supervisor at a glance which of the group's agents are:
  - Logged onto the group (i.e., in service)
  - Logged out of the group (i.e., out of service)
  - Busy on a call
  - Placing an Emergency Call to the supervisor
  - Not available or installed

  The ACD Supervisor can also use their console for placing and transferring calls - just like any other extension user.

- **Flexible Time Schedules**
  An ACD Work Schedule lets you divide a day into segments (called Work Periods) for scheduling the activity in your ACD Groups. You can set up four distinct Work Schedules, with up to eight Work Periods in each Work Schedule. Each day of the week has one Work Schedule, but different days can share the same schedule. For example, your Monday through Friday Work Schedule could consist of only two Work Periods. Work Period 1 could be from 8:00 AM to 5:00 PM - when your business is open. Work Period 2 could be from 5:00 PM to 8:00 AM - which covers those times when your business is closed.

- **Headset Operation (With Automatic Answer)**
  An ACD Agent or ACD Group Supervisor can utilize a customer-provided headset in place of the handset. The headset conveniently frees up the user's hands for other work and provides privacy while on the call. In addition, an ACD Agent with a headset can have Automatic Answer. This allows an agent busy on a call to automatically connect to the next waiting call when they hang up.

- **Incoming Call Routing**
  Incoming trunk calls can automatically route to specific ACD Groups. These types of calls ring directly into the ACD Group without being transferred by a co-worker or the Automated Attendant.

- **Rest Mode**
  Rest Mode temporarily logs-out an ACD agent's phone. There are two types of Rest Mode:-
  - **Manual Rest Mode**
    An ACD Agent can enable Manual Rest Mode anytime they want to temporarily log out of the ACD Group. They might want to do this if they go to a meeting or get called away from their work area. While logged out, calls to the ACD Group will not ring the agent's phone.
  - **Automatic Rest Mode**
    When an ACD Group has Automatic Rest Mode, the system will automatically put an agent's phone in Rest Mode if it is not answered. This ensures callers won't have to wait while ACD rings an extension that won't be answered. For keysets, the system enables Automatic Rest Mode for all phones with Rest Mode keys. For SLTs, you must set an option in programming to enable Automatic Rest Mode. If an agent's phone is placed into Rest Mode because a call is not answered, the agent will need to manually cancel Rest Mode in order to log back into the ACD group.

  With a Rest Mode key programmed on an ACD agent's phone, when the agent is in rest mode, the key will be lit. If the Rest Mode key is pressed while an agent is on a call, the key will flash to indicate a pre-Rest Mode status. When the current call is finished, the agent's phone will be in rest mode. The agent can place intercom calls or receive direct incoming calls while in Rest Mode. The ability to receive incoming intercom calls is defined in system programming for each ACD group. Note that an ACD System Supervisor cannot be placed in Rest Mode.

- **Supervisor, ACD Group**
  You can designate an extension in an ACD Group to be the group's supervisor. Once assigned as an ACD Group Supervisor, the user can:
  - Take the entire ACD Group out of service.
  - Check the log out status of each agent after the group taken down.
  - Restore the ACD Group to service.

  During programming, you can choose one of three modes of operation for each ACD Group supervisor:
  - Supervisor's extension cannot receive calls to the ACD Group.
  - Supervisor's extension can only receive ACD Group calls during overflow conditions.
  - Supervisor's extension receives calls just like any other ACD Group agent (mode 2).

  An ACD Group can have only one supervisor. In addition, an extension can be a supervisor for only one ACD Group.

- **Supervisor, ACD System**
  You can designate an extension as an ACD System Supervisor. Once assigned as an ACD System Supervisor, the user can:
  - Take the all the system's ACD Groups out of service simultaneously
  - Check the log out status of each agent after the groups are taken down.
  - Restore all the ACD Groups to service simultaneously.

  The system can have only one ACD System Supervisor.

- **Work Time**
  Work Time temporarily busies-out an ACD agent's phone so they can work at their desk uninterrupted. This gives the agent time to fill out important logs and records as soon as they are finished with their call. There are two types of Work Time:

  - **Manual Work Time**
    An ACD Agent can enable Manual Work Time any time they need to work at their desk undisturbed. You might prefer this Work Time mode if an agent only occasionally has to fill out follow-up paper work after they complete their call. When the agent is through catching up with their work, they manually return themselves to the ACD Group.

  - **Automatic Work Time**
    The system implements Automatic Work Time for the agent as soon as they hang up their current call. This is helpful in applications (such as Tech Service groups) where follow-up paperwork is a requirement for every call. When the agent is done with their work, they manually return themselves to the ACD Group.

  - **ACD Group Call Coverage Keys**
    To help cover calls during peak periods, a keyset can have Call Coverage keys for ACD Groups by assigning the ACD master number to the Call Coverage key. When a call rings into a covered ACD Group, it rings the appropriate ACD Group Call Coverage key, allowing users to pick up incoming ACD calls. The key can ring immediately, after a delay or just flash. The Call Coverage key also facilitates one-button Transfer for an ACD Group. The covering extension does not have to be a member of the ACD Group.

ACD Call Coverage Key LED Pattern	Status
Off	There is no incoming call to the ACD group.
Flashing Red	Incoming call(s) are ringing the ACD group.

  - **Hotline Key Shows Agent Status**
    An extension's Hotline keys provide the "normal" Busy Lamp Field (BLF) for co-workers and a unique BLF for ACD Agents. Similarly to the supervisor's DSS Console BLF, the unique BLF shows when the covered agent is in service, out of service or busy on a call. This enhanced BLF gives a department manager, for example, ACD Group monitoring capabilities without having to become a supervisor with a DSS Console.

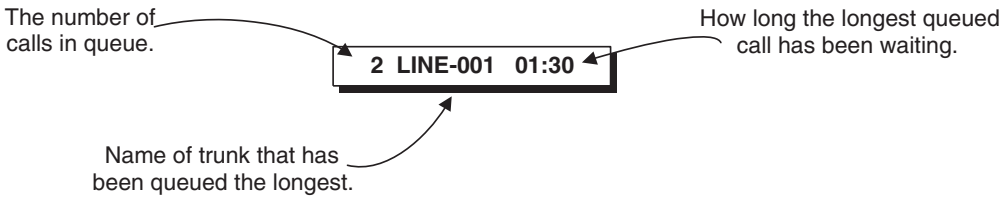
    Hotline gives a keyset user one-button calling and Transfer to another extension (the Hotline partner). Hotline helps co-workers that work closely together. The Hotline partners can call or Transfer calls to each other just by pressing a single key. Enhanced for ACD applications, Hotline provides a unique Busy Lamp Field for ACD agents as well as a BLF for co-workers that are not ACD agents. The charts below show both sets of BLF indications.

BLF For ACD Agents	
When the key is . . .	**The ACD Agent is . . .**
Off	Idle and is not an ACD Agent
On	Busy
Double Wink Off	Making an Emergency Call
Wink Off	Logged off or not installed
Double Wink On	Logged on

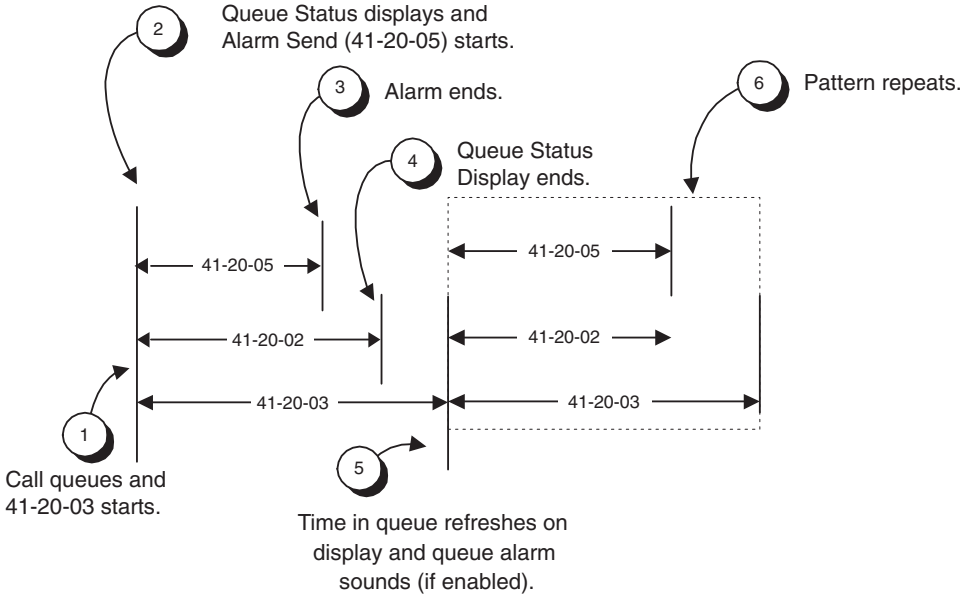
BLF For Co-Workers That Are Not ACD Agents	
When the key is . . .	**Your co-worker is . . .**
Off	Idle
On	Busy or ringing
Fast	Flash In Do Not Disturb — All calls (option 3) or Intercom calls (option 2)

- **Enhanced Supervisor Options**
  An ACD supervisor can individually assign extensions to ACD Groups, and set an agent's status once assigned. This provides the supervisor with tremendous flexibility to reassign agents as work loads vary.

- **Queue Status Display with Scrolling**
  When all agents in an ACD Group are unavailable, an incoming call will queue and cause the Queue Status Display to occur on the ACD Group Supervisor and/or agent's display (based on the Class of Service). The display helps the supervisor keep track of the traffic load within their group. In addition, any display keyset can have a Queue Status Display Check programmable function key. The keyset user can press this key any time while idle, and using the VOL ▲ and VOL ▼, scroll through the Queue Status Displays of all the ACD Groups. The Queue Status Displays shows (see the Queue Status Display illustration below):
  - The number of calls queued for an available agent in the group.
  - The trunk that has been waiting the longest, and how long it has been waiting.



  For each ACD Group, you can set the following conditions:
  - The number of trunks that can wait in queue before the Queue Status Display occurs.
  - How often the time in queue portion of the display reoccurs (see the Queue Status display Timing illustration below).
  - Queue Status Display holding time.
  - Queue Status Alarm enable/disable.
  - Queue Status Alarm sending time.



When Logged Out of ACD Group

When ACD agents are logged out and a call is placed into the ACD queue, the phones of the logged out agents will display the Queue Status and hear the alarm according to the settings defined in system programming. Pressing the Queue Status Display Programmable Function key will return the phone to idle until the timer in Program 41-20-03 expires again.

Notes:

(A.) Do not use both 41-15 and 41-20 to set the ACD queue alarm. Select either one or the other for the system to follow.

Feature	Available in Program 41-15	Available in Program 41-20
Queue Status Display	---	Yes
Queue Status Display Time	---	Yes
Alarm	Yes	Yes
Alarm Send Time	Program 41-15-02 determines the length/interval of the alarm.	Yes
Interval Time of Queue Status Display		Yes
Class of Service	---	Yes
Timing of alarm and display queue status	Alarm triggered after the number of calls in Program 41-15-01 is exceeded.	Alarm triggered after the number of calls in Program 41-20-01 is exceeded. Then follows Program 41-20-03 timing for displaying status.

(B.) If a telephone is not idle, it cannot use the Queue Status Display Programmable Function key.

(C.) The Queue Status Display is not shown and the Queue Alarm is not heard by ACD agents those in Off-Duty mode.

(D.) In order to scroll through the ACD groups queue status, the Queue Status Display Programmable Function key must be used. You cannot scroll when the Queue Status Display appears due to an alarm condition.
(E.) If the Queue Status display and alarm are active and the queued called is answered/ disconnected, the display and alarm will continue until the timers in Program 41-02-02 and 41-20-05 expire.
(F.) When an overflowed call is in queue, the call will be included in its original ACD group's queue and not in the group's queue to which it overflowed.
(G.) The Queue Status is not displayed on a supervisor's phone based on the settings in Programs 41-02-xx. The supervisor must use the Queue Status Display Programmable Function key to view the queue.

- **Overflow Announcements from Voice Mail**
  The NVM-Series Voice Mail system can provide the ACD overflow announcements in systems that do not have a DSP daughter board installed for VRS. When a caller queues for an available agent, designated Voice Mail ACD Announcement Mailboxes provide the overflow messages.

- **Escape from Queue with NVM-Series**
  Escape From Queue uses NVM-Series Call Routing Mailboxes for announcement messages to provide callers with enhanced options while in queue. After listening to this type of announcement, they can either wait in queue or dial a digit for an alternate destination. The destination is typically the operator, a mailbox or an extension.

- **Programmable Wrap-up Timer**
  When an agent finishes their call, the system automatically starts a wrap-up timer and blocks any ACD calls to the agent. This gives them time to complete important logs and records before a new call comes in. When the timer expires, the system returns the agent to the ACD Group to handle new callers.

- **InDepth and inDepth+**
  InDepth and inDepth+ are Windows-based Management Information Systems that work with the system's built-in ACD. These ACD/MIS systems enhance the system with real time statistics and reports on ACD Group traffic patterns and usage. Refer to the *inDepth and inDepth+* feature for more details.

ACD Group as Overflow Destination

The system can transfer an overflow call to a specific ACD Group or to voice mail using Program 41-09. When Program 41-08-02 : ACD Overflow Destination has the ACD Overflow Destination set to '65', the system will overflow the call to the ACD Group programmed in Program 41-09. (The system will not allow you to program an ACD group with that ACD group as the overflow.) If, while the call is ringing, the extension to which the call was transferred becomes available, both the extension and the overflow ACD group will ring.

Option Available for Counting Overflow Calls in ACD MIS Software

An option is available for use with ACD MIS (such as inDepth/inDepth+) software to count overflow calls. When the number of queued ACD overflow calls exceeds the limit and a busy tone is sent to the caller, the system programming will determine if the call is counted in the ACD MIS software.

Enhancement Provides Additional Overflow Destinations

This feature enhancement provides three new entries for ACD Overflow Transfer destinations. With the older software, only the other ACD group or voice mail could be programmed for the ACD Overflow Transfer destination.

The system can now allow either an off-premise number (using a programmed Abbreviated Dial number) or incoming ring group for the ACD Overflow Transfer destination.

Notes:

- When using Off-Premise Overflow transfer and if all trunks are busy, the system will set the ACD Overflow Timer again and wait to retry. When this occurs, the queue information of this call will be set to the oldest queue.
- Once the Overflow call has successfully transferred to the Off-Premise or ring group, the call is removed from the retry queue.
- Once the Overflow call has successfully transferred to the Off-Premise or ring group, the system will notify the ACD-MIS that the call was abandoned by the caller.
- If the user programmed Overflow Transfer to the ring group which is used by the other ACD group, the system will notify ACD-MIS with new call information. Therefore, the ACD-MIS will count the transferred call as new call.

For more on Automatic Call Distribution, refer to the ACD Manual (P/N 0893202).

Conditions

Refer to the ACD Manual (P/N 0893202).

Default Setting

Refer to the ACD Manual (P/N 0893202).

Programming

Refer to the ACD Manual (P/N 0893202) for complete programming details.

- **11-13-01 - 11-13-13 : Service Code Setup (For ACD)**
  If required, customize the service codes which are used with the ACD feature.
  Note that when using service code 169 to change an agent's ACD group, the supervisor must enter a 2-digit number for the group. For example, to change to ACD group 4, the entry would be '169 04'.
- **11-17-01 : ACD Group Pilot Number**
  Assign the ACD Master Number (up to 8 digits) for each ACD Group (1-8). This is the number users dial to transfer calls to the ACD Group. This will also be the number used for a Call Coverage key.
- **15-02-21 : Multi-Line Telephone Basic Data Setup, Virtual Extension Access Mode**
  Determine whether an extension's Virtual Extension/Call Coverage key should be as a DSS key to the extension and for receiving calls (0), answering incoming calls and ability to place outgoing ICM or CO calls (1), or just receiving incoming calls (2).
- **15-07-01 : Programmable Function Keys**
  Assign ACD Programmable Function Keys as required for each agent.
- **15-08-01 : Incoming Virtual Extension Ring Tone Setup**
  Assign a ring tone range to incoming ACD Call Coverage keys. Only pattern "1" can be used for this feature. Patterns 2-4 are not checked.
- **15-09-01 : Virtual Extension Ring Assignment**
  Individually program an extension's Multiple Directory Number function keys to either ring (1) or not ring (0).
- **15-11-01 : Virtual Extension Delayed Ring Assignment**
  Individually program an extension's Multiple Directory Number keys for Delayed Ringing (1) or Immediate Ringing (0). Also see Program 20-04-03 below.
- **20-04-03 : System Options for Virtual Extensions - Call Coverage Delay Interval**
  Multiple Directory Number/Call Coverage keys set for Delayed Ringing (see Program 15-11 above) ring the covering extension after this interval.
- **20-06-01 : Class of Service for Extensions**
  Assign a Class of Service (1-15) to each extension.
- **20-13-06 : Class of Service Options (Supplementary Service) - Automatic Off Hook Signaling**
  Disable (0) the ability for a busy extension to automatically receive off hook signals if the ACD Monitor feature is to be used by an extension.
- **20-13-33 : Class of Service Options (Supplementary Service) - ACD Supervisor's Position Enhancement**
  This option must be enabled in order for the operator to use service codes in Program 11-13-10 through 11-13-13.
- **20-13-39 : Class of Service Options (Supplementary Service), ACD Queue Status Display**
  Enable (1) or disable (0) the ACD Queue Status Display for an extension's Class of Service. Any extension which has this option enabled will also hear the queue alarm.
- **22-01-11 : System Options for Incoming Calls - VRS Waiting Message Interval Time**
  The Delayed Announcement Messages (1st and 2nd) repeat after this interval expires. For each ACD group (01-64), set the timer for the interval between the Delayed Messages (0-64800 seconds).

- **20-13-33 : Class of Service Options (Supplementary Service) - ACD Supervisor's Position Enhancement**
  This option must be enabled in order for the operator to use service codes in Program 11-13-10 through 11-13-13.
- **30-01-01 : DSS Console Operating Mode**
  Set the mode of the system's DSS Consoles. The available options are Regular (Business) Mode (0), Hotel Mode (1), and ACD Monitor Mode (2). Lamping status for ACD agents and non-ACD agents do not both appear on the same console type. For ACD agent's lamping status, a DSS Console must be programmed as an ACD console. For non-ACD agents, the console must be programmed as business console.
- **30-05-04 : DSS Console Lamp Table, ACD Agent Busy**
  30-05-05 : DSS Console Lamp Table, Out of Schedule
  30-05-06 : DSS Console Lamp Table, ACD Agent Log Out
  30-05-07 : DSS Console Lamp Table, ACD Agent Log In
  30-05-08 : DSS Console Lamp Table, ACD Agent Emergency
  The BLF for an ACD Agent's Hotline key follow the lamping defined in these programs.
- **41-01-01 : System Options for ACD - System Supervisory Extension**
  41-01-03 : System Options for ACD - ACD MIS Connection Port
  Define the system options for the ACD feature.
- **41-01-04 : System Options for ACD - P Command Output for Busy Status**
  When the number of queued ACD overflow calls exceeds the limit and a busy tone is sent to the caller, determine if the call is counted in the ACD MIS software (0=Count, 1=Do Not Count).
- **41-01-02 : System Options for ACD - Login ID Code Digit**
  Define the number of digits for the ID code when logging in (0-20, 0=no ID).
- **41-02-01 : ACD Group and Agent Assignments**
  For each ACD extension number, assign an ACD Group (1-64). An ACD Group number is assigned to each Work Period number (1-8). Do not use this program when using the AIC log in mode. Program 41-18-01 is used instead.
- **41-03-01 : Incoming Ring Group Assignments for ACD Group - ACD Group Number**
  For each incoming trunk ring group set up in Program 22-05, designate into which ACD Group (1-64) the trunks should ring for each of the eight Work Periods.
  ➪ Aspire Ring Groups: 1-100
- **41-03-02 : Incoming Ring Group Assignments for ACD Group - Night Announcement Service**
  For each incoming trunk ring group set up in Program 22-05, determine if the Night Announcement Service should be enabled (1) or disabled (0).
  ➪ Aspire Trunk Groups: 1-100
- **41-03-03 : Incoming Ring Group Assignments for ACD Group - Priority Data**
  Determine whether an incoming call to a trunk ring group should follow a priority assignment (0=normal, 1-7 [1=lowest priority, 7=highest priority]).
- **41-04-01 : ACD Group Supervisor - Group Supervisor Extension**
  For each ACD Group (1-64), assign the group's supervisor extension. An ACD Group can have only one supervisor. In addition, an extension can be a supervisor for only one ACD Group.
- **41-04-02 : ACD Group Supervisor - Operating Type**
  For each ACD Group (1-64), assign the operating mode for the supervisor (0 = Supervisor's extension does not receive ACD Group calls, 1 = Supervisor's extension receives ACD Group overflow calls only, 2 = Supervisor's extension receives ACD Group calls just like all other agents).

- **41-05-01 : ACD Agent Work Schedules**
  Set up the Work Schedules for ACD Agents and Groups. For each ACD Work Schedule (1-4), designate the start and stop times for each of the eight Work Periods. Once you set up the schedules in this program, assign them to days of the week in Program 41-07. (This is the same program used by the Trunk Work Schedules.)
- **41-06-01 : Trunk Work Schedules**
  Set up the Work Schedules for trunks. For each Work Schedule (1-4), designate the start and stop times for each of the eight Work Periods. Once you set up the schedules, assign them to days of the week in Program 41-07. (This is the same program used by the ACD Agent Work Schedules.)
- **41-07-01 : ACD Weekly Schedule Setup**
  Assign the four Work Schedules (1-4) to days of the week (1=Sunday, 7=Saturday). The assignments you make in this program apply to both the ACD Agent Work Schedules (Program 41-05) and the Trunk Work Schedules (Program 41-06).
- **41-08-01 : ACD Overflow Options - Overflow Operation Mode**
  For each ACD Group (1-64), assign the overflow mode (0-9). Each ACD Group can have unique overflow options.
- **41-08-02 : ACD Overflow Options - ACD Overflow Destination**
  For each ACD Group (1-64), assign the destination ACD group (1-64) or option (65=overflow table in Program 41-09, 66=Voice Mail Integration (in-skin voice mail), 67=Off Premise (see Program 41-08-05), 68=Incoming Ring Group (see Program 41-08-06).
- **41-08-03 : ACD Overflow Options - Delay Announcement Source Type**
  For each ACD Group (1-64), assign the announcement message types. Delay announcement functions are not available for ACD pilot number call. Each ACD Group can have unique overflow options.
- **41-08-04 : ACD Overflow Options - ACD Overflow Transfer Time**
  For each ACD Group (1-64), assign the overflow transfer time (0-64800 seconds).
- **41-08-05 : ACD Overflow Options - Abbreviated Dial Area When Overflow)**
  This program defines which Abbreviated Dial dial to use when Program 41-08-02 is programmed with an entry of ’67’.
  Entries: 0 – 1999 (Abbreviated dial areas)
- **41-08-06 : ACD Overflow Options - Incoming Ring Group When Overflow**
  This program defines which incoming Ring Group to use when Program 41-08-02 is programmed with an entry of ’68’.
  Entries: 1 – 100 (Incoming Ring Group)
- **41-09-01 : ACD Overflow Table Setting**
  Define the ACD group (01-64) to which a call will be transferred when overflow occurs and its priority (1-7). If, while the call is ringing, the extension to which the call was transferred becomes available, both the extension and the overflow ACD group will ring.
- **41-10-01 : PGDAD Delay Announcement - 1st Delay Announcement PGDAD Port Number**
  For each ACD group (01-64), define the PGDAD port number (0-96) to be used for the first delay announcement. This program is activated when the delay announcement source and options are assigned as PGDAD in Program 41-08.
- **41-10-02 : PGDAD Delay Announcement - 2nd Delay Announcement PGDAD Port Number**
  For each ACD group (01-64), define the PGDAD port number (0-96) to be used for the second delay announcement. This program is activated when the delay announcement source and options are assigned as PGDAD in Program 41-08.
- **41-10-03 : PGDAD Delay Announcement - 1st Delay Announcement Connection Timer**
  For each ACD group (01-64), set the timer the system waits before playing the first delay announcement (0-64800 seconds).

- **41-10-04 : PGDAD Delay Announcement - 2nd Delay Announcement Connection Timer**
  For each ACD group (01-64), set the timer the system waits before playing the second delay announcement (0-64800 seconds).
- **41-10-05 : PGDAD Delay Announcement - 2nd Delay Announcement Sending Duration**
  For each ACD group (01-64), set the timer for the 2nd Delay announcement (0-64800 seconds). Once this timer expires, the call will disconnect. To keep the call in queue, set this timer to "0".
- **41-11-01 : VRS Delay Announcement - Delay Message Start Timer**
  For each ACD group (01-64), determine how long the system waits before playing the delay Message. This program is activated when the delay announcement source and options are assigned as VRS in Program 41-08.
- **41-11-02 : VRS Delay Announcement - 1st Delay Message Number**
  For each ACD group (01-64), assign the VRS message number to be used as the message source for the 1st Delay Announcement Message (0-49). This program is activated when the delay announcement source and options are assigned as VRS in Program 41-08.
- **41-11-03 : VRS Delay Announcement - 1st Delay Message Sending Count**
  For each ACD group (01-64), determine the 1st Delay Message Sending Count (0-255).
- **41-11-04 : VRS Delay Announcement - 2nd Delay Message Number**
  For each ACD group (01-64), assign the VRS message number to be used as the message source for the 2nd Delay Announcement Message (0-49). This program is activated when the delay announcement source and options are assigned as VRS in Program 41-08.
- **41-11-05 : VRS Delay Announcement - 2nd Delay Message Sending Count**
  For each ACD group (01-64), determine the 2nd Delay Message Sending Count (0-255)
- **41-11-06 : VRS Delay Announcement - Tone Kind at Message Interval**
  For each ACD group (01-64), determine what the caller should hear between messages (0=ring back, 1=MOH, 2=BGM).
- **41-11-07 : VRS Delay Announcement - ACD Forced Disconnect Time After 2nd Delay Message**
  For each ACD group (01-64), assign how long the system should wait after the end of the VRS delay message before disconnecting (0-64800).
- **41-12-01 : Night Announcement Setup - Night Announcement Source Type**
  Define the night announce voice resource (0=ACI, 1=VRS [DSPDB]) for each ACD group (01-64). Night announcement availability depends on the setting in Program 41-03-02. The night announcement function is not available for ACD pilot number call.
- **41-12-02 : Night Announcement Setup - Night Announcement ACI Port Number**
  If Program 41-12-01 is set to '0', define the port number for the ACI night announce voice resource for each ACD group (01-64).
- **41-12-03 : Night Announcement Setup - ACD Night Announce Sending Time**
  Define the night announce sending time (0-64800) for each ACD group (01-64).
- **41-13-01 : VRS Night Announcement - VRS Message Number**
  For each ACD Group (01-64), define the VRS message number (0-48) to be used as the night announcement. This program is activated when the night announcement source is assigned as VRS in Program 41-12-01.
- **41-13-02 : VRS Night Announcement - Tone Kind at Message Interval**
  For each ACD Group (01-64), define what the caller will hear between the night announcements (0=ring back tone, 1=MOH, 2=BGM).
- **41-14-01 : ACD Options - Emergency Call Operation Mode**
  Set the Emergency Call Operation Mode (0=Call system supervisory extension when group supervisory extension is busy, 1=No call to system supervisory extension when group supervisory extension is busy) for ACD Groups (01-64). Note that the supervisor must be logged in and have an Emergency Key programmed. By pressing the key once, the supervisor can monitor the call - pressing twice barges in on the call.

- **41-14-02 : ACD Options - Wrap Up Mode**
  Set the Wrap Up Mode option (0=After wrap up mode key is pressed, 1=After call is finished automatically) for ACD Groups (01-64). Use Program 15-07 to assign an ACD Wrap-Up Mode key (*17) to ACD agents.
- **41-14-03 : ACD Options - ACD Priority for Overflow Calls**
  Set the priority for overflow calls (0=own group priority, 1=priority set by Program 41-03-03) for ACD Groups (01-64).
- **41-14-04 : ACD Options - Automatic Answer in Headset Mode**
  Set the Automatic Answer option (0=off, 1=on) for the headset mode for ACD Groups (01-64).
- **41-14-06 : ACD Options - Transfer to ACD Extension With 2nd Delay Announcement**
  For each ACD Group (01-64), determine whether an outside caller should hear a final announcement [ex: the company closed] (1) or whether the caller should be placed back into queue for the ACD group (0).
- **41-14-07 : ACD Options - Automatic Off Duty**
  For each ACD Group (01-64), determine whether or not a keyset automatically changes to off-duty mode (0=not changed, 1=changed automatically). The keyset must have an Off-Duty key assigned (Program 15-07-01 or SC 852: *13).
- **41-14-08 : ACD Options - ACD Off Duty Mode**
  For each ACD Group (01-64), determine whether or not an agent can receive an internal call in off-duty mode (0=can not receive, 1=can receive).
- **41-14-09 : ACD Options - Automatic Wrap Up End Time**
  For each ACD Group (01-64), set how long the system waits before automatically ending wrap up time (0=disabled or 1-64800 seconds).
- **41-14-10 : ACD Options - ACD Answer of Incoming Call/No Answer Skip Time**
  For each ACD Group (01-64), set how long a call into the ACD Group will ring an idle extension before routing to the next agent (0=disabled or 1-64800 seconds). This timer must be greater than Program 20-04-03 : Delay Ring Timer for the ACD Call Coverage Key with delayed ringing to work.
- **41-14-12 : ACD Options - Start Headset Ear Piece Ringing (SLT)**
  For each ACD Group (01-64), set how long the system waits before starting headset ear piece ringing for single line sets (0=disabled or 1-64800 seconds).
- **41-15-01 : ACD Queue Alarm Information - ACD Queue Alarm**
  For each ACD Group (01-64), determine the number of calls required in queue to activate the alarm (0-200). ***Do not use this program*** if the alarm options are defined in Program 41-20-01 through 41-20-05.
- **41-15-02 : ACD Queue Alarm Information - Alarm Interval**
  For each ACD Group (01-64), determine the interval for displaying the alarm information (0-64800 seconds). ***Do not use this program*** if the alarm options are defined in Program 41-20-01 through 41-20-05.
- **41-16-01 : ACD Threshold Overflow - Number of Calls in Queue**
  For each ACD group (01-64), define the maximum number of calls in ACD queue (0=no limit, 1-200) before the call overflows.
- **41-16-02 : ACD Threshold Overflow - Operation Mode for ACD Queue**
  For each ACD group (01-64), determine how the system handles ACD calls when the maximum number of ACD calls in queue has been reached (0=longest waiting call is transferred, 1=last waiting call is transferred, 2=busy signal sent).

- **41-17-01 : ACD Login Mode Setup**
  Define the ACD login mode (0=normal, 1=AIC) for each extension.
  If set to '1':
  - Program 41-02-01 is used.
  - Note that a supervisor can not log in/out an AIC member as they are not normal ACD agents.
  - Service codes for log-in/log-out must be defined in Programs 11-13-08 and 11-13-09.

  If set to '2':
  - Program 41-18-01 is used.
  - Agents log in/out using codes set in Program 11-13-08 and 11-13-09 or using the ACD Log In/Out Programmable Function Key (Program 15-07-01 or SC 852: *10). Agents do not log in or out using Program 11-13-01 code(*5 and *51).
- **41-18-01 : ACD Agent Identity Code Setup - ACD Agent Identity Code**
  For each AIC Table (001-512), define the ACD Agent Identity Code (AIC) (4 digits).
- **41-18-02 : ACD Agent Identity Code Setup - Default ACD Group Number**
  For each AIC Table (001-512), define the default ACD group number (0=no setting, 1-64).
- **41-18-03 : ACD Agent Identity Code Setup - ACD Group Number in Mode 1**
  For each AIC Table (001-512), define the ACD group number (0=no setting, 1-64) in mode 1.
- **41-18-04 : ACD Agent Identity Code Setup - ACD Group Number in Mode 2**
  For each AIC Table (001-512), define the ACD group number (0=no setting, 1-64) in mode 2.
- **41-18-05 : ACD Agent Identity Code Setup - ACD Group Number in Mode 3**
  For each AIC Table (001-512), define the ACD group number (0=no setting, 1-64) in mode 3.
- **41-18-06 : ACD Agent Identity Code Setup - ACD Group Number in Mode 4**
  For each AIC Table (001-512), define the ACD group number (0=no setting, 1-64) in mode 4.
- **41-18-07 : ACD Agent Identity Code Setup - ACD Group Number in Mode 5**
  For each AIC Table (001-512), define the ACD group number (0=no setting, 1-64) in mode 5.
- **41-18-08 : ACD Agent Identity Code Setup - ACD Group Number in Mode 6**
  For each AIC Table (001-512), define the ACD group number (0=no setting, 1-64) in mode 6.
- **41-18-09 : ACD Agent Identity Code Setup - ACD Group Number in Mode 7**
  For each AIC Table (001-512), define the ACD group number (0=no setting, 1-64) in mode 7.
- **41-18-10 : ACD Agent Identity Code Setup - ACD Group Number in Mode 8**
  For each AIC Table (001-512), define the ACD group number (0=no setting, 1-64) in mode 8.
- **41-19-01 : Voice Mail Delay Announcement - Delay Message Start Timer**
  For each ACD group (01-64), determine how long the system waits before playing the Delay Message (0-64800 seconds).
- **41-19-02 : Voice Mail Delay Announcement - Mailbox for 1st Announcement Message**
  For each ACD group (01-64), assign voice mail ACD Announcement Mailbox as the message source for the 1st Announcement Message. This option is only applicable to ACD Overflow Modes 1, 4, 5 and 9 (source 0/type2). Use Program 41-08 to set up the ACD overflow options.
- **41-19-03 : Voice Mail Delay Announcement - 1st Delay Message Sending Count**
  For each ACD group (01-64), determine the 1st Delay Message Sending Count (0-255). This entry must be set to 1 or higher in order for the message to play.
- **41-19-04 : Voice Mail Delay Announcement - Mailbox for 2nd Announcement Message**
  For each ACD group (01-64), assign voice mail ACD Announcement Mailboxes as the message source for the 2nd Announcement Message. This option is only applicable to ACD Overflow Modes 1, 4, 5 and 9 (source 0/type2). Use Program 41-08 to set up the ACD overflow options.
- **41-19-05 : Voice Mail Delay Announcement - 2nd Delay Message Sending Count**
  For each ACD group (01-64), determine the 2nd Delay Message Sending Count (0-255). This entry must be set to 1 or higher in order for the message to play.

- **41-19-06 : Voice Mail Delay Announcement - Tone Kind at Message Interval**
  For each ACD Group (01-64), define the what the caller will hear between the messages (0=ring back tone, 1=MOH, 2=BGM). Currently, calls in the ACD queue will only hear MOH if the music is from the NTCPU. It will not work if the MOH is connected to an ACI. Incoming callers which have not been put into queue, however, can hear the MOH from any source.
- **41-19-07 : Voice Mail Delay Announcement - ACD Forced Disconnect Time After 2nd Announcement**
  For each ACD group (01-64), assign how long the system should wait after the end of the ACD delay message before disconnecting (0-64800).
- **41-19-08 : Voice Mail Delay Announcement - Delayed Message Interval Time**
  For each ACD group (01-64), set the timer for the interval between the Delayed Messages (0-64800 seconds).
- **41-20-01 : ACD Queue Status Display Settings, Number of Calls in Queue**
  Set the number of calls that can accumulate in the ACD queue before the Queue Status Display (and optional queue alarm) occurs (0=no display, 1-200).
- **41-20-02 : ACD Queue Status Display Settings, Queue Status Display Time**
  Set how long a the Queue Status display remains on the telephone's display (0-64800 seconds).
- **41-20-03 : ACD Queue Status Display Settings, Queue Status Display Interval**
  Set the interval that refreshes the Queue Status Alarm time in queue display and causes the optional queue alarm to occur on phones active on a call, logged out, or in wrap-up (0-64800 seconds).
- **41-20-04 : ACD Queue Status Display Settings, ACD Call Waiting Alarm**
  Enable (1) or disable (0) the queue alarm (Default=0).
- **41-20-05 : ACD Queue Status Display Settings, ACD Call Waiting Alarm Send Time**
  Set how long the Call Waiting Alarm should sound (0-64800 seconds).

Related Features

Call Forwarding / Tandem Ringing
These features will not work for ACD extensions while the agent is logged in.

Direct Inward Dialing (DID)
If defined in Program 22-11-03, DID calls in queue will display the trunk name with the Queue Status feature.

Direct Station Select (DSS) Console
Lamping status for ACD agents and non-ACD agents do not both appear on the same console type. For ACD agent's lamping status, a DSS Console must be programmed as an ACD console in Program 30-01-01. For non-ACD agents, the console must be programmed as business console.

Networking
Calls cannot be transferred across a network to an ACD group.

Night Service
When Program 12-07-01 is customized, an agent's display will not indicate the WAIT ACD LOGIN status, however an agent may still log in.

Voice Mail
Conversation Recording is programmed on a system-wide basis - it is not ACD feature specific.

Refer to the ACD Manual (P/N 0893202).

Operation

Transferring Calls to an ACD Group

To Transfer a call to an ACD Group:

1. At keyset or DSL, press HOLD.
   OR
   At SLT, hookflash
   You hear Transfer dial tone.
2. Dial ACD Group Master Number.
   You can press a One-Touch Key for the master instead.
3. Hang up.

Transferring Trunk Calls to the ACD Master (Program 15-02-21 = 0):

Only analog, ISDN, or H.323 trunk calls can be transferred.

1. While on an outside call, press HOLD.
2. Press the ACD Call Coverage key.
   The ACD Call Coverage key must be defined as a DSS key in Program 15-02-21.
   The ACD Call Coverage key must be off (idle) in order to transfer the call.
3. Hang up.
   The call is transferred to the ACD group.

Answering Outside Calls that Ring Your ACD Group

To answer an outside call that rings your ACD Group:

DISA, DID and tie trunks can ring an ACD master number directly. Other trunk types can ring ACD Groups if set up in programming. Trunks can also be transferred to ACD master numbers.

1. Lift handset.
2. If you don't automatically answer the call, press the flashing line key.

Agent Log In and Log Out

To log your extension into the ACD Group:

Keyset

Your display shows: WAIT ACD LOGIN. If Program 12-07-01 has a customized Day/Night mode message defined, the ACD agent's display will not indicate the WAIT ACD LOGIN status (however, the agent may still log in using the following procedure).

1. Press idle CALL key.
2. Dial *5.
   You hear confirmation tone.
   OR
   Press ACD Log On/Off key (PGM 15-07-01 or SC 852: code *10).
   You hear a single beep.
   Your display will show the ACD Group to which you are logged in.
   If your system has ACD Identification Codes enabled, enter it now.

DSL or SLT

1. Lift handset.
2. Dial *5.
   You hear confirmation tone.
   If your system has ACD Identification Codes enabled, enter it now.

To log your extension out of an ACD Group:

Keyset

Your display shows the ACD Group to which you are logged in.

1. Press idle CALL key.
2. Dial *5.
   OR
   Press ACD Log On/Off key (PGM 15-07-01 or SC 852: code *10).
   Your display shows: ACD LOGOUT (1:Yes, 0:No)
3. Dial 1 to log out.
   *You hear confirmation tone (if you dialed *5) or a single beep (if you pressed the ACD Log On/Log Off key.*
   OR
   Dial 0 to cancel the log out and return to the group.

DSL

1. Lift handset.
2. Dial *5.
3. Dial 1 to log out.
   You hear confirmation tone.
   OR
   Dial 0 to cancel the log out and return to the group.

SLT

1. Lift handset.
2. Dial 155.

AIC Agent Log In

To log in:

Keyset

1. Press the ACD Log In/Log Out key (Program 15-07 or SC 852: *10).
   OR
1. Press CALL key and dial the AIC Log In service code (Program 11-13-08).
2. If the agent log in code is used (as with inDepth/inDepth+), enter the agent log in code (the number of digits to be entered is determined by Program 41-01-02). Otherwise, skip to Step 3.
3. Dial the Agent Identity Code (AIC) (up to 4 digits) defined in Program 41-18-01.
   The ACD Log In/Log Out key lights.

To log out (for single or multiple agent log ins):

Keyset

All AIC log ins become invalid.

1. Press the ACD Log In/Log Out key (Program 15-07 or SC 852: *10).
2. Dial 1 to accept.
   OR
1. Press CALL key and dial the AIC Log Out service code (Program 11-13-09).
   The ACD Log In/Log Out key goes out.

DSL/SLT

All AIC log ins become invalid.

1. Lift the handset.
2. Dial the AIC Log Out service code (Program 11-13-09).
   OR
1. To log out of an ACD group without using AIC: Lift the handset.
2. Dial the ACD Log Out service code 155 (Program 11-13-02).

Multiple Agent Log In

To log in:

Keyset

1. Press the ACD Log In/Log Out key (Program 15-07 or SC 852: *10).
2. Dial 0 to cancel the log out option.
3. Dial the Agent Identity Code (AIC) (up to 4 digits).
   The ACD Log In/Log Out key lights.

   OR

1. Press CALL key and dial the AIC Log In service code (Program 11-13-08).
2. Dial the Agent Identity Code (AIC) (up to 4 digits).
   The ACD Log In/Log Out key lights.

DSL

1. Lift the handset and dial the AIC Log In service code (Program 11-13-08).
2. Dial the log in code (up to 20 digits).
   This step is not required if the ID code is disabled in Program 41-01-02.
3. Dial the first Agent Identity Code (AIC) (up to 4 digits).
   You will hear a confirmation tone.
4. Press HOLD.
5. For second agent log: Dial the second Agent Identity Code (AIC) (up to 4 digits).
   You will hear a confirmation tone.
6. For third agent log: Dial the third Agent Identity Code (AIC) (up to 4 digits).
   You will hear a confirmation tone.

SLT

Follow Steps 1-3 to log in with additional AICs (up to 3) at any time.

1. Lift the handset and dial the AIC Log In service code (Program 11-13-08).
2. Dial the log in code (up to 20 digits).
   This step is not required if the ID code is disabled in Program 41-01-02.
3. Dial the first Agent Identity Code (AIC) (up to 4 digits).
   You will hear a confirmation tone.

When immediately logging in with additional AICs.

4. For second agent log: Dial the second Agent Identity Code (AIC) (up to 4 digits).
   You will hear a confirmation tone.
5. For third agent log: Dial the third Agent Identity Code (AIC) (up to 4 digits).
   You will hear a confirmation tone.

Changing ACD Group Assignment

To change your ACD Group Assignment:

1. Log out of your ACD Group (see the instructions above).
2. Press idle CALL key.
3. Dial 170.
4. Dial the number of the ACD Group (1-64) into which you want to log.
   You hear confirmation tone.
5. Log into the new ACD Group (see the instructions above).

Using the Headset with Automatic Answer for ACD Agents:

1. With the keyset in an idle state, press the Check key.
2. Press the Headset key (PGM 15-07 or SC 851: 05) twice.
3. Press the Clear key to return the display to idle.
   The Headset key blinks when Automatic Headset is activated.
   To cancel Automatic Headset, repeat these steps.

Answering Incoming ACD Calls with a Call Coverage Key:

1. Press the flashing ACD Call Coverage key (PGM 15-07 or SC 851: *03 + ACD Master number).
   Ringing calls are answered in the following priority:
   - Ringing call which has heard the ACD Delayed message.
   - Ringing call which has not heard the ACD Delayed message.
   - Calls in queue (follows ACD overflow priority set in Program 41-14-03).

A Supervisor can monitor an ACD call:

1. When an ACD agent is on an outside call, the supervisor presses the Monitor key (PGM 15-07 or SC 852: *15).
   The call is heard by the supervisor, but cannot participate in the call. If participation is required, use the Barge In feature instead.
2. To cancel the call monitoring, press the Monitor key again.

Queue Status Display

When Logged Into ACD Group

1. With an idle keyset, press the Queue Status Display Programmable Function Key (Code: *19).

   The display indicates the number of calls in queue, the trunk name, and the length of time the call has been waiting.

   When the Queue Status Display key is pressed, the queue status of the extension's group is displayed. When the extension is not in an ACD group, the Queue Status of group 1 is displayed instead.

   When an agent logs in using an AIC code, the Queue Status of the default ACD group defined in Program 41-18-02 is displayed.

2. Press the VOL UP and VOL DOWN to scroll through the Queue Status Displays of all the ACD Groups.
3. Press the CLEAR key to return the phone to an idle state.

When Logged Out of ACD Group

When ACD agents are logged out and a call is placed into the ACD queue, the phones of the logged out agents will display the Queue Status and hear the alarm according to the settings defined in system programming.

Pressing the Queue Status Display Programmable Function key will return the phone to idle until the timer in Program 41-20-03 expires again.

Rest Mode/Off-Duty Mode

To set the manual Rest Mode/Off-Duty Mode:

Keyset

1. With the keyset in an idle state, press the ACD Rest Mode key (PGM 15-07 or SC 852: *13).

   The ACD Rest Mode key lights. If the Rest Mode key is pressed while the agent is on an active call, the key will flash until the agent hangs up.

   This operation is not available for the System Supervisor.

Single Line Telephone

1. Lift the handset and dial 158.

   A fast busy is heard.

   To set Pre-Rest Mode (while on a call), press the hookflash and then dial 158. Press the Hookflash again to return to the outside party. Rest Mode will begin once the call is completed.

2. Hang up.

To cancel the manual Rest Mode/Off-Duty Mode:

Keyset

1. Press the ACD Rest Mode key (PGM 15-07 or SC 852: *13).
   The ACD Rest Mode key light goes off.

Single Line Telephone

1. Lift the handset.
   A fast busy is heard.
2. Dial 159.
3. Hang up.

Refer to the ACD Manual (P/N 0893202) for additional operations.

Aspire S	Aspire M/L/XL
• Available.	• Available.
• COS option for outgoing calls following access map is available.	• COS option for outgoing calls following access map is available in software 1.11+.
• COS Matching feature is available with 2.63+ software.	• COS Matching feature is available with 2.63+ software.
• Alternate Carrier Access for ISDN trunks requires software 2.63+	• Alternate Carrier Access for ISDN trunks requires software 2.63+.

Description

Automatic Route Selection (ARS) provides call routing and call restriction based on the digits a user dials. ARS gives the system the most cost-effective use of the connected long distance carriers.

ARS is an on-line call routing program that you can customize (like other system options) from a display telephone. ARS accommodates 250 call routing choices - without a custom-ordered rate structure database. With ARS, you can modify the system's routing choices quickly and easily. This is often necessary in today's telecommunications world where the cost structure and service choices frequently change.

The ARS feature can add or delete digits and route calls according to pre-determined levels. When Aspire systems are networked together by a tie line, the networked systems can be called by a system number and a user's extension number, just an extension number, or by using a trunk access code.

ARS Feature Summary

ARS provides:

- **Call Routing**
  ARS can apply up to 24-digit analysis to every number dialed. For programming, ARS provides separate 8-digit and 24-digit tables. Each table can have up to 250 numbers.
- **Dialing Translation (Special Dialing Instructions)**
  ARS can automatically execute stored dialing instructions (called Dial Treatments) when it chooses a route for a call. The system allows up to 15 Dial Treatments. The Dial Treatments can:
  - Automatically insert or delete a leading 1
  - Insert or delete an area code (NPA)
  - Add digits (such as a dial-up OCC number), pauses and waits to the dialing sequence
- **Time of Day Selection**
  For routing purposes, ARS provides ten different day selections (called Time Schedule Patterns). Each Time Schedule Pattern can provide up to 20 time intervals which are assigned to one of the eight day/night modes. The Time Schedule Patterns are then assigned to a day of the week (Monday-Friday, Saturday, Sunday or Holiday).

Basic ARS Operation

When a user places an outside call, ARS analyzes the digits dialed and assigns one of 64 Selection Numbers to the call. The Selection Number chosen depends on which digits the user dialed. ARS then checks the time of day, the day of week and the extension's ARS Class of Service. Based on these call routing options, ARS selects a trunk group for the call and imposes the Dial Treatment instructions (if any).

Class of Service Option Allows Outgoing Calls to Not Follow Access Map

Using this option allows an extension's Class of Service to be set so that ARS does not follow the trunk access map settings (Program 14-07-01 and 15-06-01). The feature allows an extension user to have CO line keys on their phone which allow incoming access only. The user would only have outgoing access on the CO lines when using ARS to place a call.

Class of Service Matching

With the ARS Class of Service Match Access feature, you can determine whether the system should allow a call based on the COS assigned to the Dial Analysis Table (Program 26-02). This change can be used to create a tenant-like application. It will then use the trunk group defined in the Additional Entry in Program 26-02-03 to place the outgoing call.

When this feature is enabled, the calls will be routed in sequential order, and will forward provided the Class of Service for the trunk groups match.

For this feature a new system option, **Program 26-01-06 : Automatic Route Selection Service, COS Match Access**, is added. In adding this feature, the ARS table is expanded from 200 to 400. First 200 entries will be compatible with the previous software as well as the 2.63 software.

The examples below use the following system programming:

Program 26-02 for Dial Analysis Table for ARS set as:

Table No.	Program 26-02-01 Dial	Program 26-02-02 Service Type	Program 26-02-03 Add Data	Program 26-02-04 ARS COS
1	203@@@@@@@@	1: Route to trunk group	3 (Group 3)	5
2	214@@@@@@@@	1: Route to trunk group	1 (Group 1)	4
197	@@@@@@@@@@@	1: Route to trunk group	2 (Group 2)	4
198	@@@@@@@@@@@	1: Route to trunk group	3 (Group 3)	3
199	@@@@@@@@@@@	1: Route to trunk group	2 (Group 2)	2
200	@@@@@@@@@@@	1: Route to trunk group	1 (Group 1)	1

Program 12-02 for Automatic Night Service Patterns as:

Time Pattern No.	Program 12-02-01 Start Time	Program 12-02-02 End Time	Program 12-02-03 Operation Mode
1	00:00	08:30	2 (Night)
2	08:30	17:00	1 (Day)
3	17:00	00:00	2 (Night)

Program 26-04 for ARS Class of Service as:

	Ext. 301	Ext. 302	Ext. 401	Ext. 402
Mode 1(Day)	1	2	3	3
Mode 2(Night)	1	4	3	5

Program 26-01-03 for ARS Misdialed Number Handling as: 1(Warning Tone)

With Program 26-01-06: ARS COS Match Access disabled (set to '0'):

- If at 9:00 AM, each extension dialed '9+(203)926-5400'
  All Extension would use Trunk Group 3

- If at 9:00 AM, each extension dialed '9+(214)262-2000'
  All Extension would use Trunk Group 1

- If at 6:00 PM, each extension dialed '9+(203)926-5400'
  All Extension would use Trunk Group 3

- If at 6:00 PM, each extension dialed '9+(214)262-2000'
  Extension 301, 302 and 401 would use Trunk Group 1
  Extension 402 would not be able to dial out as the COS is lower

With Program 26-01-06: ARS COS Match Access enabled (set to '1'):

- If at 9:00 AM, each extension dialed '9+(203)926-5400'
  Extension 301 would use Trunk Group 1
  Extension 302 would use Trunk Group 2
  Extension 401, 402 would use Trunk Group 3

- If at 9:00 AM, each extension dialed '9+(214)262-2000'
  Extension 301 would use Trunk Group 1
  Extension 302 would use Trunk Group 2
  Extension 401, 402 would use Trunk Group 3

- If at 6:00 PM, each extension dialed '9+(203)926-5400'
  Extension 301 would use Trunk Group 1
  Extension 302 would use Trunk Group 2
  Extension 401, 402 would use Trunk Group 3

- If at 6:00 PM, each extension dialed '9+(214)262-2000'
  Extension 301, 302 would use Trunk Group 1
  Extension 401 would use Trunk Group 3
  Extension 402 would not be able to dial out as the COS does not match

Alternate Carrier Access Added for ISDN Trunks

An option is available which allows the system to provide a Transit Network Selection information element for ARS calls using ISDN trunks. This information element identifies a requested transit network. This function is valid only for outbound calls by ISDN trunk.

Local calls do not need Network Selection information since they will be handled by the local exchange carrier (ILEC). If this is the case, ARS is able to distinguish between local and long distance calls and add the Transit Network Selection information element when required.

This option would apply to both PRI and BRI ISDN trunks. If the trunk in the used in **Program 26-02 : Dial Analysis Table for ARS/LCR** is not an ISDN trunk, this code in the dial treatment will be ignored.

The examples below use the following system programming:

➧ **Program 26-02 for Dial Analysis Table for ARS/LCR set as:**

Table No.	Program 26-02-01 Dial	Program 26-02-02 Service Type	Program 26-02-03 Add Data	Program 26-02-04 ARS COS	Program 26-02-05 Dial Treatment
1	203@@@@@@@@	1:TRG	1(Group 1)	0	1
2	@@@@@@@@@@@	1:TRG	1(Group 1)	0	0

➧ **Program 26-03-01 for ARS Dial Treatments set as:**
Table No. 1 - Dial Treatment: A1RE

➧ **Program 26-11-01 for Transit Network ID Table set as:**
Table No. 1 - Transit Network ID: 0288

Example: If an extension dialed '9+(203)925-5400', the setup message will contain the Transit Network Selection IE with Network ID 0288.

Example: If an extension dialed '9+(214)262-2000', the setup message will not contain the Transit Network Selection IE.

Conditions

(A.) Do not use ARS behind a Centrex/PBX if Centrex features are used.
(B.) ARS is intended for areas that use the North American Number Plan (NANP).
(C.) Line keys, outgoing loop keys, outgoing trunk group keys, dialing 804+trunk group, dialing #9+trunk number, and abbreviated dial numbers assigned to a certain trunk group can all be used to by-pass ARS.
(D.) With software prior to 2.63, an entry of ’0’ in the ARS Table COS means it will ignore the telephone’s Class of Service. With software 2.63 and higher, an entry of ’0’ in the ARS Table COS will only match the telephone’s COS ‘0’.

Default Setting

ARS is not programmed.

Programming

➧ **11-01-01 : System Numbering**
Set the system’s internal (Intercom) numbering plan. The numbering plan assigns the first and second digits dialed and affects the digits an extension user must dial to access other extensions and features, such as service codes and trunk codes. If the default numbering plan does not meet the site requirements, use this program to tailor the system numbering to the site.

➧ **11-09-01 : Trunk Access Code**
Specify the single digit code used to access ARS (normally 9).

➧ **14-05-01 : Trunk Groups**
Program trunks of the same carrier type into the same trunk group.

➧ **14-07-01 : Trunk Access Map Setup**
Set up the Trunk Access Maps. This sets the access options for trunks.
➪ Aspire S: Trunk Access Maps 1-8
➪ Aspire: Trunk Access Maps 1-200

➧ **15-06-01 : Trunk Access Map for Extensions**
Assign Trunk Access Maps to extensions.
➪ Aspire S: Trunk Access Maps 1-8
➪ Aspire: Trunk Access Maps 1-200

- **20-03-04 : System Options for Single Line Telephones - Dial Sending Start Time for SLT or ARS**
  When ARS or an analog extension user accesses a trunk and dials an outside call, the system waits this interval before outdialing the first digit (0-64800 seconds).
- **20-06-01 : Class of Service for Extensions**
  Assign a Class of Service (1-15) to an extension.
- **20-08-17 : Class of Service Options (Outgoing Call Service), ARS Override of Trunk Access Map**
  Enable (1) or disable (0) an extension's ability to override the trunk access map programming (Program 14-07-01 and 15-06-01) for outgoing calls.
- **26-01-01 : Automatic Route Selection Service - ARS Service**
  Enable (1) or disable (0) ARS.
- **26-01-02 : Automatic Route Selection Service - Network Outgoing Inter-Digit ARS Timer**
  With Networking, this timer (0-64800 msec.) replaces 20-03-04 when determining if all network protocol digits have been received. If ARS is enabled at Site B, this timer can be programmed for 5 (500 msec) at Site A. If ARS is disabled and Site B is using F-Route for outbound dialing, this timer should be programmed for 30 (3 seconds) at Site A.
- **26-01-03 : Automatic Route Selection Service - ARS Misdialed Number Handling**
  If a user dials a number not programmed in ARS, this option determines if the system should route over trunk group 1 (0) or play error tone (1).
- **26-01-06 : Automatic Route Selection Service - ARS COS Match Access**
  With the ARS Class of Service Match Access feature, you can determine whether the system should allow a call based on the COS assigned to the Dial Analysis Table (Program 26-02). This change can be used to create a tenant-like application. It will then use the trunk group defined in the Additional Entry in Program 26-02-03 to place the outgoing call.

  When this feature is enabled (1), the calls will be routed in sequential order, and will forward provided the Class of Service for the trunk groups match (0 = Disabled, 1=Enabled).
- **26-02-01 : Dial Analysis Table for ARS/LCR - Dial**
  Enter the digits (16 digits maximum: 1-9, 0 * #, @; 400 separate entries) for the Dial Analysis Table which will be analyzed by ARS/LCR. This table will be checked after any programmed F-Route operations have completed. The system will then refer to Program 26-02-02 and 26-02-03 to determine the routing for the call. To enter a wild card/don't care digit, press Line Key 1 to enter an @ symbol. ***It is important to remember that the system checks the table numbers in numerical order.*** This means that entries for specific numbers should be entered first (such as your local area codes), then enter the items containing wild card digits. If the system sees an entry of "2@@" then any table entries which follow will be ignored.

  For example, if 268, 269, and 270 are local exchanges, these would be the first three table entries which would route according to the settings made in Program 26-02-02 and 26-02-03 for each of the table entries. If the next entry is "2@@", then the system checks no further in this program and routes all other "2xx" numbers according to the entries made in Program 26-02-02 and 26-02-03 for this table entry.
- **26-02-02 : Dial Analysis Table for ARS - Service Type**
  For each Dial Analysis Table (1-200), select '0' for no ARS, '1' for *Service Type 1 - Route to Trunk Group Number* to have the number route to a trunk group [Refer to Program 26-02-03] or '2' for *Service Type 2 - F-Route Selected* to have the dialed number controlled by the F-Route table. If Service Type 2 is selected and F-Route operation is on, the F-Route table used is determined by Program 44-04. If F-Route operation is off, the routing is determined by Program 44-05.

26-02-03 : Dial Analysis Table for ARS - Additional Data / Service Number

For each Dial Analysis Table (1-200), if Service Type 1 was selected in Program 26-02-02, enter the trunk group number (0-100, 0=no route).

26-02-04 : Dial Analysis Table for ARS - ARS Class of Service

For each Dial Analysis Table (1-200), set the Automatic Route Selection (ARS) Class of Service (0-16).

26-02-05 : Dial Analysis Table for ARS - Dial Treatment

For each Dial Analysis Table (1-200), set the Automatic Route Selection (ARS) Dial Treatment (0-15) to be used.

26-03-01 : ARS Dial Treatments

Assign the Dial Treatments (1-15) for automatic ARS dialing translation. Assign Dial Treatments to Service Numbers (Trunk Groups) in Program 26-02. The ARS Dial Treatment options are:

- **3** - Delete the NPA if dialed as part of the initial call. This requires at least 8 digits in the ARS table (Program 26-02-01).
- **2** - Delete the leading digit if dialed as part of the initial call. This requires at least 8 digits in the ARS table (Program 26-02-01).
- **1** - Add a leading 1 if not dialed as part of the initial call. This requires at least 8 digits in the ARS table (Program 26-02-01).
- **INPA** - Insert the NPA specified by NPA.
- **DNN** - Outdial the NN number of digits or execute the code that follows. For example, D041234 out-dials 124. Valid entries are 0-9, #, *, Wnn (wait nn seconds) and P (pause). Each digits code counts as a digit. So for example, if a P was added for a pause, the entry would look like: D05P1234. This Dial Treatment can only be added from telephone programming.
- **Wnn** - Wait nn seconds.
- **P** - Pause in analog trunk.
- **R** - Redial the initially dialed number, including any modifications
- **E** - End of Dial Treatment. All Dial Treatments must end with the E code.
- **X** - When ARS is enabled, X must be entered in the Dial Treatment in order for the system to output the extension number of the call's originator to the black box for the E911 feature.
- **An** - Alternate Carrier Access (n = 1 ~ 4). The numeric digit instructs the system to insert a Transit Network Selection information element in the SETUP message and also identifies which code in Program 26-11 will be included in the information element.

26-04-01 : ARS Class of Service

Set an extension's ARS Class of Service (0-16). Automatic Route Selection uses ARS Class of Service when determining how to route an extension's calls.

26-11-01 : Transit Network ID Table

Enter up to four Transit Network ID Codes, each being 4 numbers long (Entries: 0-9).

44-01-01 : System Options for ARS/F-Route

Select whether the ARS/F-Route feature should use the time schedule (0=not used, 1=used). If this option is set to '0', the F-Route table selected is determined only by the digits dialed without any relation to the day or time of the call. If this option is set to '1', the system first refers to Program 44-10. If there is a match, the pattern defined in that program is used. If not, the F-Route pattern in Program 44-09 and time setting in 44-08 are used.

44-02-01 : Dial Analysis Table for ARS/F-Route Access - Dial

Set the Dial digits for the Pre-Transaction Table for selecting ARS/F-Route (8 digits max: 1-9, 0 * #, @). To enter a wild card/don't care digit, press Line Key 1 to enter an @ symbol.

44-02-02 : Dial Analysis Table for ARS/F-Route Access - Service Type

Set the Service Type (0-3) for the Pre-Transaction Table for selecting ARS/F-Route (0=No setting, 1=Extension Call, 2=ARS/F-Route Table, 3=Dial Extension Analyze Table).

- **44-02-03 : Dial Analysis Table for ARS/F-Route Access - Additional Data**
  If a Service Type is selected in Program 44-02-02, set the additional data, if required, for the Pre-Transaction Table for selecting ARS/F-Route (24 digits max: 1-9, 0 * #, @). To enter a wild card/don't care digit, press Line Key 1 to enter an @ symbol.
- **44-02-04 : Dial Analysis Table for ARS/F-Route Access - Dial Tone Simulation**
  Determine if the Dial Tone Simulation is on (1) or off (0) for the Pre-Transaction Table for selecting ARS/F-Route. If enabled, this option sends dial tone to the calling party once the routing is determined. This may be required if the central office at the destination does not send dial tone.
- **44-03-01 : Dial Analysis Extension Table - Dial**
  Set the Dial digits (24 digits max: 1-9, 0 * #, @) to be used for the Dial Extension Analysis Table. When Program 44-02-02 is set to type "3", this program sets the dial extension analysis table. These tables are used when the analyzed digits must be more than 8 digits. To enter a wild card/don't care digit, press Line Key 1 to enter an @ symbol.
- **44-03-02 : Dial Analysis Extension Table - Table Number**
  When dialed digits match the setting in Program 44-03-01, select the ARS/R-Route table number (0-500) to be used for the Dial Extension Analysis Table.
- **44-03-03 : Dial Analysis Extension Table - Table Number (251)**
  If the received digits are not identified in tables 1-250, the F-Route selection table number (0-500) defined in table 251 is used.
- **44-03-04 : Dial Analysis Extension Table - Next Table Number**
  If the received digits do not match the digits set in tables 1-250, table number 252 is used refer to the next Extension Table Area (1-4) to be searched.
- **44-04-01 : ARS/F-Route Selection for Time Schedule**
  Assign each ARS/F-Route Selection number (1-500) to an ARS/F-Route table number for each ARS/F-Route time mode. There are 8 time modes for ARS/F-Route Access.
- **44-05-01 : ARS/F-Route Table - Trunk Group Number**
  For each ARS/F-Route table (1-500) assign a priority number (1-4) and enter the trunk number to be used (0 = No setting, 101-150 = Networking, 255 = Extension Call).
- **44-05-02 : ARS/F-Route Table - Delete Digits**
  For each ARS/F-Route table (1-500) assign a priority number (1-4). Enter the number of digits to be deleted (0-255) from the dialed number.
- **44-05-03 : ARS/F-Route Table - Additional Dial Number Table**
  For each ARS/F-Route table (1-500) assign a priority number (1-4). Enter the table number (defined in Program 44-06) for additional digits to be dialed (0-1000).
- **44-05-04 : ARS/F-Route Table - Beep Tone**
  For each ARS/F-Route table (1-500) assign a priority number (1-4). Select whether or not a beep is heard if a lower priority trunk group is used (0=no beep, 1=beep).
- **44-05-05 : ARS/F-Route Table - Gain Table Number for Internal Call**
  For each ARS/F-Route table (1-500) assign a priority number (1-4). Select the gain table number to be used for internal calls (0-500).
- **44-05-06 : ARS/F-Route Table - Gain Table Number for Tandem Connections**
  For each ARS/F-Route table (1-500) assign a priority number (1-4). Select the gain table number to be used for tandem connection (0-500).
- **44-05-07 : ARS/F-Route Table - ARS Class of Service**
  For each ARS/F-Route table (1-500) assign a priority number (1-4). Select the Class of Service to be used for ARS (0-16). An extension's ARS COS is determined in Program 26-04-01.
- **44-05-08 : ARS/F-Route Table - Dial Treatment**
  For each ARS/F-Route table (1-500) assign a priority number (1-4). Select the Dial Treatment to be used (0-15). The Dial Treatments are defined in Program 26-03-01.

- **44-06-01 : Additional Dial Table**
  If an Additional Dial Number Table is entered in Program 44-05-03, define the additional dial table (1-1000) to add digits in front of the dialed ARS/F-Route number (24 digits max: 1-9, 0 * #, Pause). To enter a wild card/don't care digit, press Line Key 1 to enter a P (pause) symbol.
- **44-07-01 : Gain Table for ARS/F-Route Access - Incoming Transmit**
  44-07-02 : Gain Table for ARS/F-Route Access - Incoming Receive
  44-07-03 : Gain Table for ARS/F-Route Access - Outgoing Transmit
  44-07-04 : Gain Table for ARS/F-Route Access - Outgoing Receive
  Set the gain table to be used (1-500). If an extension dials ARS/F-Route number;
  - The Extension Dial Gain Table is activated, which is assigned in Program 44-05.
  - The Extension Dial Gain Table follows "Outgoing transmit" and "Outgoing receive" settings.

  If the incoming call is transferred to another line using ARS/F-Route;
  - The Tandem Gain Table is activated, which is assigned in Program 44-05.
  - The Tandem Gain Table follows the "Incoming transmit" and "Incoming receive" settings for incoming line, and "Outgoing transmit" and "Outgoing receive" settings for the outgoing line.

  For ARS/F-Route calls, the CODEC gains defined in Program 14-01-02 and 14-01-03 are not activated.
- **44-08-01 : Time Schedule for ARS/F-Route**
  Define the daily pattern of the ARS/F-Route feature. ARS/F-Route has 10 time patterns. These patterns are used in Program 44-09 and 44-10. The daily pattern consists of 20 time settings.
- **44-09-01 : Weekly Schedule for ARS/F-Route**
  Define a weekly schedule for using ARS/F-Route (day numbers 1-7 (1=Sun, 7=Sat), pattern numbers 1-10). The pattern number is defined in Program 44-08-01.
- **44-10-01 : Holiday Schedule for ARS/F-Route**
  Define a yearly schedule for ARS/F-Route. This schedule is used for setting special days such as national holidays (pattern numbers 1-10). The pattern number is defined in Program 44-08-01.
- **80-03-01 : DTMF Tone Receiver Setup**
  Use Items 11-32 to set the criteria for dial tone detection for outgoing ARS calls.

Related Features

Abbreviated Dialing

Abbreviated Dialing may bypass ARS routing.

Central Office Calls, Placing

Set up other options for outgoing calls (e.g., unassign line keys, adjust gains, ARS access key, loop keys, etc.).

Dial Tone Detection

Refer to this feature for the specifics on how the system handles Dial Tone Detection.

E911 Compatibility

If there is no PBX access code is entered in the Dial Treatment, the system will still be able to dial 911.

Networking

IP phones can use ARS COS Matching to call local authorities in case of an emergency (refer to NEC Tech Tip NEC0092 or the Networking manual (P/N 0893207).

Toll Restriction

Toll Restriction overrides ARS.

Trunk Group Routing

A system with Automatic Route Selection cannot also have Trunk Group Routing.

Trunk Queuing/Camp On

With ARS installed, Trunk Queuing automatically queues for the least costly route. The system automatically redials the queued call when the extension user lifts the handset.

Operation

To place a call using ARS:

1. At keyset, press idle CALL key.
   OR
   At single line set, lift handset.
   You'll hear normal Intercom dial tone.
2. Dial 9.
   You'll hear a second, "stutter" dial tone.
3. Dial the outside number.
   If you hear another "stutter" dial tone, you must enter your extension's ARS Authorization Code.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Background Music (BGM) sends music from a customer-provided music source to speakers in key-sets. If an extension user activates it, BGM plays whenever the user's extension is idle.

Conditions

(A.) Background Music requires a customer-provided music source connected to the Aspire NTCPU's CN16 connector or the Aspire S CPU's CN23 connector. Refer to the system Hardware Manual.

(B.) The Aspire S Background Music is the same as the CPU's Music on Hold.

Default Setting

Not installed.

Related Features

Music on Hold

The system can broadcast music to callers on Hold.

Single Line Telephones

Background Music is not available on single line telephones.

Programming

- **10-21-01 : NTCPU Hardware Setup - External Source Control Switch Selection**
  Specify the function of the relay switch for external tone source control (0=external MOH source, 1=BGM source, 2=external speaker, 3=general purpose relay).
- **20-06-01 : Class of Service for Extensions**
  Assign a Class of Service (1-15) to an extension.
- **20-13-30 : Class of Service Options (Supplementary Service) - Background Music**
  In an extension's Class of Service, allow (1) or prevent (0) an extension from turning Background Music on and off.
- **31-08-01 : BGM on External Paging**
  Set the Background Music option for each External Page zone (1-9). If enabled, the system will play BGM over the zone when it is idle (0=disable, 1=enable).

Operation

To turn Background Music on or off:

1. Press idle CALL key.
2. Dial 825.
3. Press SPK to hang up.

Barge In

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Barge In permits an extension user to break into another extension user's established call, including Conference calls. This sets up a Conference-type conversation between the intruding extension and the parties on the initial call. With Barge In, an extension user can get a message through to a busy co-worker right away.

There are two Barge In modes: Monitor Mode (Silent Monitor) and Speech Mode. With Monitor Mode, the caller Barging In can listen to another user's conversation but cannot participate. With Speech Mode, the caller Barging In can listen and join another user's conversation.

CAUTION

The use of monitoring, recording, or listening devices to eavesdrop, monitor, retrieve, or record telephone conversation or other sound activities, whether or not contemporaneous with transmission, may be illegal in certain circumstances under federal or state laws. Legal advice should be sought prior to implementing any practice that monitors or records any telephone conversation. Some federal and state laws require some form of notification to all parties to a telephone conversation, such as using a beep tone or other notification methods or requiring the consent of all parties to the telephone conversation, prior to monitoring or recording the telephone conversation. Some of these laws incorporate strict penalties.

Conditions

None

Default Setting

Disabled

Programming

- **11-12-08 : Service Code Setup (for Service Access) - Barge In**
  Determine what the service code should be for an internal party to use the Barge In feature (default=810).
- **11-16-02 : One-Digit Service Code Setup - Barge In**
  Use this option to set up Item 02 for single digit Barge In. For example, you can assign Item 02 to use digit 5 for Barge In. This would allow you to program a function key with an extension number plus the Barge In code (i.e., 305 5). This allows one-touch access to the Barge In feature for extension 305. If you undefine a service code, ***be careful when you change this item that you don't inadvertently disable any essential dialing function (such as Voice Mail or Message Waiting).***
- **15-07-01 : Programming Function Keys**
  Assign a function key for Barge In (code 34).
- **20-06-01 : Class of Service for Extensions**
  Assign a Class of Service (1-15) to an extension.

- **20-13-10 : Class of Service Options (Supplementary Service) - Barge In Mode**
  In an extension's Class of Service, enable the Barge In Speech Mode (0) or Monitor Mode (1) at the initiating extension (i.e., Barge In initiator).
- **20-13-15 : Class of Service Options (Supplementary Service) - Barge In, Initiate**
  In an extension's Class of Service, enable (1) or disable (0) Barge In at the initiating extension (i.e., Barge In initiator).
- **20-13-16 : Class of Service Options (Supplementary Service) - Barge In, Receive**
  In an extension's Class of Service, enable (1) or disable (0) Barge In at the receiving extension (i.e., Barge In receive).
- **20-13-17 : Class of Service Options (Supplementary Service) - Barge In Tone/Display**
  Enable (1) or disable (0) the Barge In Tone. If disabled, this also turns off the Barge In display at the called extension.
- **20-13-32 : Class of Service Options (Supplementary Service) - Multiple Barge In**
  Enable (1) or disable (0) the extension's ability to have multiple user's Barge In to their conversation.
- **20-14-11 : Class of Service Options for DISA/E&M - DISA/Tie Trunk Barge In**
  Use this option to enabled (1) or disable (0) a DISA or tie trunk user from using the Barge In feature with the service code defined in Program 11-12-08.
- **20-18-07 : Service Tone Timer - Intrusion Tone Repeat Time**
  After a user Barges In, the system repeats the Barge In tone after this interval. Normally, you should disable this timer by entering 0. (This timer also affect any other types of call interruption features, such as Voice Mail Conversation Recording, Voice Over, etc.)
- **21-01-03 : System Options for Outgoing Calls - Trunk Interdigit Time (External)**
  Program how long an extension must wait before using the Barge In feature can be used on a call (this timer waits until this timer expires before putting a call in a talk state). This timer also affects Voice Over.

Related Features

Conference
An extension user can Barge In on a Conference.

Hold
With Program 20-13-10 set to "0", a call which has been barged into can be placed on Hold by the originator of the outside call. Both the outside caller and the extension which barged into the call are placed on Hold.

Intercom
An extension user cannot Barge In on an Intercom call if one of the Intercom callers is using Handsfree Answerback. Both Intercom parties must have lifted the handset or pressed SPK.

Off Hook Signaling
If the system has Automatic Off Hook Signaling, an extension user can Barge In on an Intercom call only if the second extension appearance is busy or ringing.

Park
With Program 20-13-10 set to "1", a call which has been barged into can be placed on Park by the originator of the outside call, but only the outside caller is placed in Park. The extension which barged into the call is dropped.

Privacy (Data)
Privacy blocks Barge In attempts.

Programmable Function Keys
Function keys simplify Barge In operation.

Voice Mail
Conversation Record will not work for Barge In calls, but an ADA Adapter can be used with Barge-In.

Operation

To Barge In after calling a busy extension:

The call must be set up for about 10 seconds before you can Barge In. Listen for busy/ring or busy tone.

1. Call busy extension.
2. Press Barge In key (PGM 15-07 or SC 851: 34).

To Barge in without first calling the busy extension:

1. Press idle CALL key.
2. Dial 810.
   OR
   Press Barge In key (PGM 15-07 or SC 851: 34).
3. Dial busy extension.

To Barge In to a Conference call, dial the extension number of a user active on a Conference call. When a new call is added to the conference, an intrusion tone is heard by all parties, depending on system programming, and all display keysets show the joined party. If Barge In is not possible:
- the extension user will hear a warning tone
- the DISA user will be rerouted to the defined ring group
OR
- the tie line user will hear a busy tone.

OR

Not available for DISA or tie line trunks:

1. Dial the extension number of the busy internal party.
2. Dial the single digit service code or the service code 810.

To Barge In to Conference Call:

1. Pick up the handset or press SPK and dial the service code (810=default).

If the telephone doesn't have the proper COS, a warning tone is sent. After the user hangs up, the system will automatically place a Callback to the extension.

2. Dial the extension number or press a DSS key of a telephone within a Conference call.

When a new call is added to the conference, an intrusion tone is heard by all parties in the Conference, depending on system programming, and all display keysets show the joined party. If a Conference is not possible:
- the extension user will hear a warning tone
- the DISA user will be rerouted to the defined ring group
OR
- the tie line user will hear a busy tone.

OR

Not available for DISA or tie line trunks:

1. Dial the extension number of the internal party.
2. Dial the single digit service code or the service code 810.

Please refer to the Multiple Directory Numbers / Call Coverage (page 419) for information on this feature.

Call Duration Timer

Aspire S	Aspire M/L/XL
• Available. • Program 20-09-06 requires software 2.67+.	• Available. • Program 20-09-06 requires software 2.67+.

Description

Call Duration Timer lets a keyset user time their trunk calls on the telephone display. This helps users that must keep track of their time on the phone. For incoming trunk calls, the Call Timer begins as soon as the user answers the call. For outgoing trunk calls, the Call Timer starts about 10 seconds after the user dials the last digit.

Conditions

None

Default Setting

Enabled.

Programming

- **20-13-36 : Class of Service Options (Supplementary Service) - Call Duration Timer**
  In an extension's Class of Service, enable (1) or disable (0) an extension's Call Timer.
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.
- **20-09-06 : Class of Service Options (Incoming Call Service) - Incoming Time Information Display**
  If this option is set to "1", the Incoming Call Time is displayed on the keyset's LCD while the phone is ringing.
- **21-01-03 : System Options for Outgoing Calls - Trunk Interdigit Time (External)**
  The system waits for this timer to expire before starting the Call Timer.

Related Features

Alphanumeric Display

Disabling the trunk name seize display also disables the Call Timer.

Operation

To time your trunk calls:

1. Place trunk call.
   The timer starts automatically.

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Activating Call Forwarding while on a call available with 2.63+ software.	• Activating Call Forwarding while on a call available with 2.63+ software.

Description

Call Forwarding permits an extension user to redirect their calls to another extension. Call Forwarding ensures that the user's calls are covered when they are away from their work area. The types of Call Forwarding are:

- **Call Forwarding when Busy or Not Answered**
  Calls to the extension forward when busy or not answered.
- **Call Forwarding Immediate**
  All calls forward immediately to the destination, and only the destination rings.
- **Call Forwarding with Both Ringing**
  All calls forward immediately to the destination, and both the destination and the forwarded extension ring (not for Voice Mail).
- **Call Forwarding when Unanswered**
  Calls forward only if they are unanswered (Ring No Answer).
- **Call Forwarding Follow Me**
  Refer to **Call Forwarding with Follow Me** (page 169) for more.
- **Personal Answering Machine Emulation**
  Allows the extension to emulate an answering machine. Refer to "Voice Mail" for more.

Call Forwarding will reroute calls ringing an extension, including calls transferred from another extension. The extension user must enable Call Forwarding from their phone. To redirect calls while a user is at another phone, use "Call Forwarding with Follow Me". A periodic VRS announcement may remind users that their calls are forwarded.

Activating Call Forwarding While On a Call

A keyset user can activate or deactivate Call Forwarding while on a call if the phone has a Call Forward Programmable Function Key programmed (15-07-01 or SC: 851 16). Activating Call Forwarding while on a call works only for Call Forward to Station key (Code: 16). Other Call Forward keys (Code: 10-15, 17) do not work while on a call. This option cannot be enabled while the user is hearing a confirmation or warning tone.

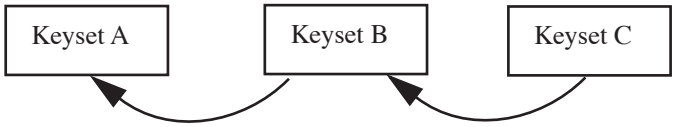
With older software, keyset user could only enable Call Forwarding when the phone was idle or when dial tone was heard.

This option is not available for single line telephones.

When Call Forward Follow Me is set up in a chain, forwarding cannot be canceled by the middle keyset (as shown in the example below) while on a call.

Keyset A sets Follow Me forwarding for Keyset B

Keyset B sets Follow Me forwarding for Keyset C



Conditions

(A.) Normally, the system does not allow the chaining of Call Forwards. For example, extension 316 forwards to 318, and 318 in turn forwards to 320. Calls to 316 route to 318. Calls to 318 route to 320. The system does allow a single chain, however, if the second extension in the chain is forwarded off- premise (*46 + trunk access code + destination telephone number).

(B.) Periodic reminder message requires a DSP daughter board for Voice Response System (VRS).

(C.) Call Forwarding an extension in a Department Group will prevent that extension from receiving Department Pilot Calls.

(D.) If a Programmable Function key is not defined for Call Forwarding (10 - 17), the DND key flashes to indicate that the extension is call forwarded.

(E.) Ring Groups do not follow Call Forward to voice mail.

(F.) Multiple Directory and Call Coverage Key calls do not follow Call Forwarding.

(G.) When upgrading system software to 2.63, any users which previously had Call Forwarding Busy/No Answer defined for the Call Forward to Station key will need to redefine the key's operation. Otherwise, the "no answer" forwarding will not function.

Default Setting

Enabled.

Programming

- **11-11-01 : Service Code Setup (for Service Access) - Call Forward, Immediate**
  11-11-02 : Service Code Setup (for Service Access) - Call Forward, Busy
  11-11-03 : Service Code Setup (for Service Access) - Call Forward, No Answer
  11-11-04 : Service Code Setup (for Service Access) - Call Forward, Busy/No Answer
  11-11-05 : Service Code Setup (for Service Access) - Call Forward, Both Ring
  11-11-06 : Service Code Setup (for Service Access) - Call Forward, Select Option
  11-11-07 : Service Code Setup (for Service Access) - Call Forward, Follow-Me
  Determine what service codes should be used for the different Call Forward options.
- **15-07-01 : Programming Function Keys**
  Assign a function key for Call Forwarding setup code (code 10 - 17).
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.
- **20-11-02 : Class of Service Options (Hold/Transfer Service) - Call Forwarding (When Busy)**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to set Call Forwarding when Busy.
- **20-11-03 : Class of Service Options (Hold/Transfer Service) - Call Forwarding (When Unanswered)**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to set Call Forwarding when Unanswered.
- **20-11-04 : Class of Service Options (Hold/Transfer Service) - Call Forwarding (Both Ringing)**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to set Call Forwarding with Both Ringing.
- **24-02-03 : System Options for Transfer - Delayed Call Forwarding Time**
  Set the Delayed Call Forwarding interval. For an unanswered call, Call Forwarding when Unanswered occurs after this interval.

Related Features

Call Forwarding, Fixed
Fixed Call Forwarding is a permanent type of forwarding that automatically reroutes calls under certain condition - without any user action. User entered Call Forwarding overrides Fixed Call Forwarding.

Call Forwarding, Off-Premise
An extension user can forward their calls to an off-premise location.

Call Forwarding with Follow Me
While away from their desk, a user can redirect their calls to a co-worker's extension.

Call Forwarding/Do Not Disturb Override
Override Call Forwarding or DND at another extension.

Central Office Calls, Answering
When a call is transferred because of Call Forwarding No Answer, Call Forwarding Busy, or DND, the Reason for Transfer option can display to the transferred extension why the call is ringing to their phone.

Department Calling
An extension user can forward their calls to a Department number.

Direct Station Selection (DSS) Console

A DSS key will only indicate a Call Forwarding indication for extensions forwarded with Personal Answering Machine Emulation (*2 + 1) or Immediate Call Forwarding (*2 + 4).

Do Not Disturb

If an extension user activates DND option 4, the system prevents other extensions from forwarding calls to them. If an extension already receiving forwarded calls activates DND option 4, callers to the forwarded extension hear DND tone.

Calls to extensions with DND active do not follow Call Forwarding programming. DIL calls will ring an idle Department Group member, then follow 22-08 programming then 22-05 programming.

Programmable Function Keys

Function keys simplify Call Forwarding operation.

Voice Response System (VRS)

The periodic reminder message requires a Voice Response System (VRS).

Operation

To activate or cancel Call Forwarding:

1. Press idle CALL key (or lift handset) + Dial *2 .
   OR
   Press Call Forwarding key (PGM 15-07 or SC 851: code 16).
2. Dial Call Forwarding condition:
   1 = Personal Answering Machine Emulation (then skip to step 4 - refer also to “Voice Mail”).
   2 = Busy or not answered
   4 = Immediate
   6 = Not answered
   7 = Immediate with simultaneous ringing (not for Voice Mail)
   0 = Cancel
3. Dial destination extension, Voice Mail master number or press Voice Mail key.
4. Dial Call Forwarding type:
   2 = All calls
   3 = Outside calls only
   4 = Intercom calls only

   When you enable Call Forwarding, your Call Forwarding key flashes slowly. If you don’t have a Call Forwarding key, DND flashes slowly.

   Your DND or Call Forwarding (Station) Programmable Function Key flashes when Call Forwarding is activated.

OR

1. Press Call Forwarding key.
   PGM 15-07 or SC 851: code 10 for Forward All Calls Immediately
   PGM 15-07 or SC 851: code 11 for Forward when Busy
   PGM 15-07 or SC 851: code 12 for Forward when Unanswered
   PGM 15-07 or SC 851: code 13 for Forward Busy/No Answer
   PGM 15-07 or SC 851: code 14 for Forward with Both Ringing
   PGM 15-07 or SC 851: code 15 for Follow Me
   PGM 15-07 or SC 851: code 16 for Forward to Station (forward type is selected at the time the option is set by the user)
   PGM 15-07 or SC 851: code 17 for Forward to Device

2. Dial 1 plus extension to enable; dial 0 to disable.
   Once you activate Call Forwarding, only your Call Forwarding destination can place an Intercom call to you.
3. Dial destination extension, Voice Mail master number or press Voice Mail key.
   You'll hear stutter dial tone when placing a new call.
   Your Call Forwarding Programmable Function Key flashes when Call Forwarding is activated.

OR

1. For Selectable Display Messaging, press Call Forwarding to Device key (PGM 15-07 or SC 851: code 17 for Forward to Device).
2. Dial 3 + Message number (01-20).
   Use VOL ▲ or VOL ▼ to scroll through the messages.
3. (Optional for messages 1-8 and 10)
   Dial the digits you want to append to the message.
   You can append messages 1-8 and 10 with digits (e.g., the time when you will be back). You enter the time in 24-hour format, but it displays in 12-hour format.
4. Press SPK to hang up.
   Intercom calls to extensions with Selectable Display Messaging set will receive a DND signal and receive the display message on their telephone's display instead of ringing the extension based on the setting in Program 20-01-02.
   To allow calls to ring through and have the message displayed on the calling extension's display, cancel DND by pressing DND + 0.

To Activate/Cancel Call Forwarding While on a Call:

Prior to being on an active call:

1. Set Call Forwarding using the Call Forwarding key (PGM 15-07 or SC 851: code 16).
   Call Forwarding key + Call Forward condition (1-0) + extension number + Call Forwarding type (2-4).
2. Cancel Call Forwarding using the Call Forwarding key.
   Call Forwarding key + 0.

1. While on the call, press the Call Forwarding key.
   Pressing the key will reactivate the Call Forwarding programming used in Step 1 above.

To Forward No Answer Calls:

1. While idle, press the Call Forward No Answer key (PGM 15-07 or SC 851: 12).
2. Press "1" to set forwarding or "0" to cancel if previously programmed.
3. Dial the extension number to which the unanswered calls should be transferred.

Call Forwarding, Fixed

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Fixed Call Forwarding is a type of forwarding that is *permanently* in force at an extension. Calls to an extension with Fixed Call Forwarding enabled automatically reroute - without any user action. Unlike normal Call Forwarding (which is turned on and off by extension users), Fixed Call Forwarding is set by the administrator in system programming. Fixed Call Forwarding complements Voice Mail, for example. The administrator can program Fixed Call Forwarding to send a user's unanswered calls to their Voice Mail mailbox. Each individual user no longer has to manually set this operation.

In system programming, the administrator can set the Fixed Call Forwarding destination and type for each extension and virtual extension. The forwarding destination can be an on- or off-premise extension or Voice Mail. The Fixed Call Forwarding types are:

- Fixed Call Forwarding with Both Ringing (Program 24-06 Option 1)
- Fixed Call Forwarding when Unanswered (Program 24-06 Option 2)
- Fixed Call Forwarding Immediate (Program 24-06 Option 3)
- Fixed Call Forwarding when Busy or Unanswered (Program 24-06 Option 4)
- Fixed Call Forwarding Off-Premise (Program 24-07)

Fixed Call Forwarding reroutes the following types of incoming calls:

- Ringing intercom calls from co-worker's extensions
- Calls routed from the VRS or Voice Mail
- Direct Inward Lines
- DISA, DID and tie line calls to the forwarded extension
- Transferred calls

Description (Cont'd)

Fixed Call Forwarding Chaining

Fixed Call Forward Chaining allows Fixed Call Forwards to loop from one extension to the next. For example, you could have the chain 301 ☞ 302 ☞ 303 ☞ 304 set up for Fixed Call Forwarding when Busy. If extension 301 is busy, calls to 301 route to 302. If 302 is also busy, the calls route to 303 and so on. Chaining allows you to set up very basic hunting between co-workers.

Keep the following in mind when setting up Fixed Call Forwarding Chaining:

- If Fixed Call Forwarding Chaining forms a complete Call Forwarding loop (i.e., 301 ☞ 302 ☞ 303 ☞ 301), the system rings the last extension in the chain (303). It does not complete the loop.
- If Fixed Call Forwarding Chaining finds an extension with user-implemented Call Forwarding in the middle of a chain, it rings that extension. It does not continue routing to the other extensions in the chain.
- If one of the extensions in a Fixed Call Forwarding chain has its fixed option set for Both Ringing (1), the system rings that extension. It does not continue routing to the other extensions in the chain.
- The receiving extension's display shows:

STA AAA	AAA is the extension that initially placed the call.
TRANSFER<< STA BBB	BBB is the first extension in the Fixed Call Forwarding chain.

Conditions

(A.) Call Forwarding an extension in a Department Group will prevent that extension from receiving Department Pilot Calls.
(B.) Multiple Directory and Call Coverage Key calls follow Call Forwarding of the Multiple directory/Call Coverage key.
(C.) Ring Group calls do not follow Call Forward to voice mail.

Default Setting

Disabled.

Programming

- **24-02-03 : System Options for Transfer - Delayed Call Forwarding Time**
  Set the Delayed Call Forwarding interval. For an unanswered call, Fixed Call Forwarding When Unanswered occurs after this interval.
- **24-06-01 : Fixed Call Forwarding**
  For an extension, assign the Fixed Call Forwarding Type (0-4) and the destination extension. Available types are:
  0 = Fixed Call Forwarding off
  1 = Fixed Call Forwarding with Both Ringing (do not use for Voice Mail ports)
  2 = Fixed Call Forwarding when Unanswered
  3 = Fixed Call Forwarding Immediate
  4 = Fixed Call Forwarding when Busy or Not Answered
- **24-07-01 : Fixed Call Forwarding Off-Premise**
  For each extension, assign the Fixed Call Forwarding Off-Premise telephone number (up to 24 digits). Be sure to include the trunk access code.

Related Features

Alphanumeric Display
When a call is Fixed Call Forwarded, the display at the destination shows from which extension the call was routed.

Call Forwarding
User entered Call Forwarding overrides Fixed Call Forwarding.

Call Forwarding, Off-Premise
An extension user can forward their calls to an outside telephone number.

Do Not Disturb
Calls to extensions with DND active do not follow Call Forwarding programming. DIL calls will ring an idle Department Group member, then follow 22-08 programming then 22-05 programming.

Multiple Directory Numbers
Calls to virtual extension numbers follow the Fixed Call Forwarding assignment of their virtual port.

Operation

None

Aspire S	Aspire M/L/XL
• Available. • DSL sets can be used.	• Available. • DSL sets can be used.

Description

Off-Premise (OPX) Call Forwarding allows an extension user to forward their calls to an off-site location. By enabling OPX Call Forwarding, the user can stay in touch by having the system forward their calls while they are away from the office. The forwarding destination can be any phone number the user enters, such as a car phone, home office, hotel or meeting room. Off-Premise Call Forwarding can route the off-site phone number over a specific trunk or through a trunk group, Automatic Route Selection or Trunk Group Routing.

Off-Premise Call Forwarding reroutes the following types of incoming calls:

- Ringing intercom calls from co-worker's extensions
- Calls routed from the VRS or Voice Mail [1]
- Direct Inward Lines [1]
- DISA, DID and tie line calls to the forwarded extension [1]
- Transferred calls [1]

OPX Call Forwarding does not reroute Call Coverage keys, Multiple Directory Number keys, or Ring Group calls (i.e., trunk ringing according to Ring Group assignments made in Programs 22-04 and 22-05). Ring Group calls may be forwarded off-premise using voice mail's Call Routing, a dial action table can be created to forward calls to an outside number or Abbreviated Dial number (enter #2001PP with 001 being the # to which the call is forwarded) on timeout using UTRF.

Off-Premise Call Forward for Door Boxes

Off-Premise Call Forwarding allows Door Box callers to be transferred automatically to the pre-programmed external party. The destination telephone number is stored in the Common Abbreviated Dial area. This feature may be used in case a co-worker is out of the office. All incoming calls for their extension will be automatically transferred to their external number (example: cell phone). Off-Premise Call Forward for Door Boxes can be transferred to the external party through ***ISDN lines only***.

Trunk-to-Trunk Off-Premise Call Forwarding

Use Trunk-to-Trunk Forwarding to automatically forward an incoming trunk call to an outside location. The forwarding destination can be stored in an Abbreviated Dial bin. This feature can be used for trunks which are defined as normal (0) or DID (3) in Program 22-02 : Incoming Call Trunk Setup.

Conditions

(A.) Call Forwarding Off-Premise requires either loop start trunks with disconnect supervision or ground start trunks.
(B.) The trunk access code and the outside telephone number combined cannot exceed 24 digits.
(C.) Normally, the system does not allow the chaining of Call Forwards. For example, extension 316 forwards to 318, and 318 in turn forwards to 320. Calls to 316 route to 318. Calls to 318 route to 320. The system does allow a single chain, however, if the second extension in the chain is forwarded off-premise (*46 + trunk access code + destination telephone number).

1. Off-Premise Call Forwarding can reroute an incoming trunk call only if the outgoing trunk selected has disconnect supervision enabled (see Programming below).

(D.) Call Forwarding an extension in a Department Group will prevent that extension from receiving Department Pilot Calls.
(E.) If a Programmable Function key is not defined for Call Forwarding (10 - 17), the DND key flashes to indicate that the extension is call forwarded.

Default Setting

Disabled.

Related Features

Call Forwarding, Fixed
Fixed Call Forwarding can automatically forward an extensions calls to an outside number.

Direct Inward Dial (DID)
DID calls to an extension with Off-Premise Call Forwarding set will not recall if there is no answer.

Do Not Disturb
Calls to extensions with DND active do not follow Call Forwarding programming. DIL calls will ring an idle Department Group member, then follow 22-08 programming then 22-05 programming.

Door Box
Door Boxes must be programmed in order for the calls to be transferred off-premise.

Multiple Directory Numbers/Call Coverage Keys
Multiple Directory Numbers/Call Coverage Keys can be forwarded off-premise.

Networking
Call Forwarding Off-Premise does not currently work with Networking.

Ring Groups
Ring Group calls do not follow Off-Premise Call Forwarding programming. However, using the voice mail's Call Routing, a dial action table can be created to forward calls to an outside number or Abbreviated Dial number (enter #2001PP with 001 being the # to which the call is forwarded) on timeout using UTRF.

Toll Restriction
The outside number OPX Call Forwarding dials can only be a number normally allowed by the forwarded extension's Toll Restriction.

Voice Response System (VRS)
In systems with a DSP daughter board for VRS, callers to an extension forwarded off-premise hear, *"Please hold on, your call is being rerouted."*

Programming

- **10-09-01 : DTMF and Dial Tone Circuit Setup**
  Allocate the circuits on the NTCPU PCBs for either DTMF receiving or dial tone detection.
- **11-10-04 : Service Code Setup (for System Administrator) - Storing Common Abbreviated Dialing Numbers**
  Assign the service code to be used for Common Abbreviated Dialing (853 by default).
- **11-10-18 : Service Code Setup (for System Administrator) - Off-Premise Call Forward by Door Box**
  Assign the service code to be used for Off-Premise Calling Forwarding by a Door Box (822 by default).
- **14-01-13 : Basic Trunk Data Setup - Loop Supervision**
  Enable (1) loop supervision for each trunk that should be able to use Call Forwarding Off-Premise.

- **15-07-01 : Programmable Function Keys**
  For one-touch access to the Call Forwarding Device setup code (*4), assign a function key for Call Forwarding (Device).
  For Off-Premise Call Forwarding by a Door Box, assign a function key (54) if required.
- **20-06-01 : Class of Service for Extensions**
  Assign Class of Service (1-15) to an extension.
- **20-11-12 : Class of Service Options (Hold/Transfer Service) - Call Forwarding Off-Premise**
  In an extensions Class of Service, enable (1) or disable (0) setting up Call Forwarding Off-Premise at the extension.
- **24-02-07 : System Options for Transfer - Forced Release for Trunk-to-Trunk Transfer**
  This timer will start when a trunk begins talking with another trunk (for example: trunk-to-trunk transfer, outgoing from trunk, Tandem Trunking) (0-64800).
- **25-07-07 : System Timers for VRS/DISA - DISA/Tandem Trunking Long Conversation Warning Tone Time**
  Determine the length of time a DISA caller or any trunk-to-trunk (such as Tandem Trunking) conversation can talk before the Long Conversation tone is heard (0-64800 seconds).
- **25-07-08 : System Timers for VRS/DISA - DISA/Tandem Trunking Long Conversation Disconnect**
  This timer determines how long the system will wait before disconnecting a DISA or any trunk-to-trunk (such as Tandem Trunking) call after the Long Conversation tone is heard (0-64800 seconds).
- **32-01-03 : Door Box Timers - Off-Premise Call Forward by Door Box Disconnect Timer**
  Define the conversation period for an Off-Premise Call Forward by Door Box call. When this timer expires, the caller will hear busy tone for 3 seconds (fixed timer) and the call will then be disconnected (0-64800).

Trunk-to-Trunk Forwarding - Normal (0) Trunks *(in addition to above programming)*

- **11-10-06 : Service Code Setup (for System Administrator) - Setting the Automatic Trunk Forwarding**
  Customize the service code to be used to set Automatic Trunk Forwarding (default: 833).
- **11-10-07 : Service Code Setup (for System Administrator) - Cancel the Automatic Trunk Forwarding**
  Customize the service code to be used to cancel Automatic Trunk Forwarding (default: 834).
- **11-10-08 : Service Code Setup (for System Administrator) - Automatic Trunk Forwarding Destination**
  Customize the service code to be used to set the destination for the Automatic Trunk Forwarding feature (default: 835).
- **13-04-01 : Abbreviated Dialing Number and Name**
  Enter the Common and Group Abbreviated Dialing numbers and names which are to be used for Trunk-to-Trunk Forwarding.
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.
- **20-07-05 : Class of Service Options (Administrator Level) - Automatic Trunk-to-Trunk Forwarding**
  Enable (1) or disable (0) an extension's ability to use the Trunk-to-Trunk Forwarding service codes.
- **24-04-01 : Automatic Trunk-to-Trunk Transfer Target Setup**
  Assign the Abbreviated Dialing number bin (0-1999) to a trunk and the time mode which should be used as the destination of the Automatic Trunk-to-Trunk Forwarding.
  - Aspire S: Trunks 1-8, Time Mode 1-4
  - Aspire: Trunks 001-200, Time Mode 1-8

Trunk-to-Trunk Forwarding - DID (3) Trunk Forwarding by Department Groups ***(in addition to above programming)***

Refer to Department Calling for additional Department Group programming.

- **11-07-01 : Department Group Pilot Numbers**
  Assign pilot numbers to the Extension (Department) Groups you set up in Program 16-02.
- **11-11-25 : Service Code Setup (for Setup/Entry Operation) - Setting the Automatic Trunk Forwarding for Department Groups**
  Customize the service code to be used to set the Automatic Trunk Forwarding feature for a Department Group (default: 102).
- **11-11-26 : Service Code Setup (for System Administrator) - Cancel the Automatic Trunk Forwarding for Department Groups**
  Customize the service code to be used to cancel the Automatic Trunk Forwarding feature for a Department Group (default: 103).
- **11-11-27 : Service Code Setup (for System Administrator) - Automatic Trunk Forwarding Destination for Department Groups**
  Customize the service code to be used to set the destination for the Automatic Trunk Forwarding feature for a Department Group (default: 104).
- **13-04-01 : Abbreviated Dialing Number and Name**
  Enter the Common and Group Abbreviated Dialing numbers and names which are to be used for Trunk-to-Trunk Forwarding.
- **14-01-04 : Basic Trunk Data Setup - Transmit Gain Level for Conference and Transfer Calls**
  CODEC gain set at 0 dB (14-01-04 = 32) can be used to set the transmit CODEC gain type for multi-line Conference or transferred calls.
- **14-01-05 : Basic Trunk Data Setup - Receive Gain Level for Conference and Transfer Calls**
  CODEC gain set at 0 dB (14-01-04 = 32) can be used to set the transmit CODEC gain type for multi-line Conference or transferred calls.
- **14-06 : Trunk Group Routing**
  Set up an outbound routing table for the trunk groups you assign in Program 14-05. When users dial 9, the system routes their calls in the order (priority) you specify.
- **15-07-01 : Programming Function Keys**
  Assign an Automatic Forwarding at Department Group key (58) or a Delayed Forwarding at Department Group key (59) for an extension user.
- **16-02-01 : Department Group Assignment for Extensions**
  Assign extensions to Department Groups (1-64) and set the priority assignment.
  ➪ Aspire S: Department Groups 1-8
  ➪ Aspire: Department Groups 1-64
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.
- **20-11-17 : Class of Service Options (Hold/Transfer Service) - Department Group Trunk-to-Trunk Forwarding**
  Enable (1) or disable (0) an extension within a Department Group's ability to use the Trunk-to-Trunk Forwarding service codes.
- **24-05-01 : Department Group Transfer Target Setup**
  Assign the Abbreviated Dialing number bin (0-1999) which should be used as the destination of the Department Group's Trunk-to-Trunk Forwarding.

Trunk-to-Trunk Forwarding - DID (3) Trunk Forwarding Using DID Translation Table

(in addition to above programming)

Refer to Direct Inward Dialing (DID) for additional DID programming.

22-11-05 : DID Translation Table Number Conversion - Transfer Destination 1
22-11-06 : DID Translation Table Number Conversion - Transfer Destination 2
For each DID Translation Table entry (1-2000), specify the first and second Transfer Destinations if the callers receives a busy or no answer (action defined in 22-11-04).
(Destination Options: 0 = No setting, Aspire S: 1-8, Aspire: 1-100 = Incoming Group, 102 = In-Skin/External Voice Mail, 103=Centralized Voice Mail, 01-264 = Department Group, 400 = DID, 401 = DISA, 1000-1999 = Abbreviated Number (000-999))

If the Transfer Destinations are busy or receive no answer, those calls are transferred to the final transfer destination (Program 22-10).

Operation

To activate Call Forwarding Off-Premise

1. At keyset, press idle CALL key + Dial *4 .
   OR
   Press Call Forward (Device) key (PGM 15-07 or SC 851: 17)
   OR
   At SLT, lift handset Dial *4 .
2. Dial 6 + trunk access code.

   Trunk access codes are 9 (ARS/Trunk Group Routing), 804 + Line Group (Aspire S: 1-8 or Aspire: 1-9, 01-99 or 001- 100) or #9 + Line number (e.g., 05 or 005 for line 5.
3. Dial the outside number to which your calls should be forwarded.
4. (Keyset only) Press HOLD.
5. Press SPK (or hang up at SLT) to hang up if you dialed *4 in step 1.

   Your DND or Call Forwarding (Device) Programmable Function Key flashes.

To cancel Call Forwarding Off-Premise

1. At keyset, press idle CALL key + Dial *4 .
   OR
   Press Call Forward (Device) key (PGM 15-07 or SC 851: 17)
   OR
   At SLT, lift handset and dial *4 .
2. Dial 6 + HOLD.
3. Press SPK (or hang up at SLT) to hang up if you dialed *4 in step 1.

   Your DND or Call Forwarding (Device) Programmable Function Key stops flashing.

Off-Premise Call Forwarding for Door Boxes:

These operations are performed at the Door Box Ringing Extension only.

To activate Call Forwarding Off-Premise by Door Box

1. At keyset, press idle CALL key + Dial 822.
   OR
   Press Call Forward (Device) key (PGM 15-07 or SC 851: 54)
   OR
   At SLT, lift handset + Dial 822.
2. Dial the Door Box number (1-4 or 1-8).
3. Dial the Abbreviated Dialing number to which the calls should be forwarded.
4. Press SPK (or hang up at SLT) to hang up.
   Your DND or Off-Premise Call Forwarding Programmable Function Key flashes.

To cancel Call Forwarding Off-Premise

1. At keyset, press idle CALL key + Dial 822.
   OR
   Press Call Forward (Device) key (PGM 15-07 or SC 851: 54)
   OR
   At SLT, lift handset and dial 822.
2. Dial 0.
3. Press SPK (or hang up at SLT) to hang up.
   Your DND or Off-Premise Call Forwarding Programmable Function Key stops flashing.

Trunk-to-Trunk Forwarding

Method 1:
Set the Destination and Forward the Line:

1. Lift the handset.
2. Dial 835.
3. Dial trunk port number (1-8 or 001-200) to be defined.
4. Select the time mode (1-4 or 1-8) to be defined.
5. Enter the telephone number which should be the destination of the forwarded trunk.
   The number will be stored in the Abbreviated Dial bin number assigned in Program 24-04-01. This entry will overwrite any existing number defined in the bin.
6. Press HOLD to accept the entry.
7. Repeat from Step 3 to define another time mode entry or press SPK to hang up.

Cancel the Line Forwarding:

1. Lift the handset.
2. Dial 835.
3. Dial trunk port number (1-8 or 001-200) to be defined.
4. Select the time mode (1-4 or 1-8) to be defined.
5. Press the CLEAR key.
6. Press SPK to hang up.

Method 2 (follows the pre-defined destination in Program 24-04-01):
Set Automatic Trunk Forwarding:

The Abbreviated Dial bin must be defined in 13-04-01 in order for the line to forward.

1. Lift the handset.
2. Dial 833.
3. Dial trunk port number to be used (1-8 or 001-200).
4. Press SPK to hang up.

Cancel Automatic Trunk Forwarding:

1. Lift the handset.
2. Dial 834.
3. Dial trunk port number to be used (1-8 or 001-200).
4. Press SPK to hang up.

Department Group Line Forwarding

Method 1:
Set the Destination and Forward the Line:

1. Lift the handset.
2. Dial 104.
3. Dial the Department Group number (1-8 or 01-64) to be defined.
4. Select the time mode (1-4 or 1-8) to be defined.
5. Enter the telephone number which should be the destination of the forwarded trunk.

   The number will be stored in the Abbreviated Dial bin number assigned in Program 24-04-01. This entry will overwrite any existing number defined in the bin.
6. Press HOLD to accept the entry.
7. Repeat from Step 3 to define another time mode entry or press SPK to hang up.

Cancel the Line Forwarding:

1. Lift the handset.
2. Dial 104.
3. Dial the Department Group number (1-8 or 01-64) to be defined.
4. Select the time mode (1-4 or 1-8) to be defined.
5. Press the CLEAR key.
6. Press SPK to hang up.

Method 2 (follows the pre-defined destination in Program 24-05-01):
Set Automatic Trunk Forwarding:

The Abbreviated Dial bin must be defined in 13-04-01 in order for the line to forward.

1. Lift the handset.
2. Dial 102.
3. Dial the Department Group number (1-8 or 01-64) to be defined.
4. Press SPK to hang up.

Cancel Automatic Trunk Forwarding:

1. Lift the handset.
2. Dial 103.
3. Dial the Department Group number (1-8 or 01-64) to be defined.
4. Press SPK to hang up.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

While at a co-worker's desk, a user can have Call Forwarding with Follow Me redirect their calls to the co-worker's extension. This helps an employee who gets detained at a co-worker's desk longer than expected. To prevent losing important calls, the employee can activate Call Forwarding with Follow Me from the co-worker's phone.

Call Forwarding with Follow Me reroutes calls from the destination extension. To reroute calls from the initiating (forwarding) extension, use Call Forwarding.

Conditions

(A.) Call Forwarding an extension in a Department Group will prevent that extension from receiving Department Pilot Calls.
(B.) If a Programmable Function key is not defined for Call Forwarding (10 - 17), the DND key flashes to indicate that the extension is call forwarded.

Default Setting

Enabled.

Programming

- **15-07-01 : Programming Function Keys**
  Assign a function key for one-touch access to the Call Forwarding (Station) setup code (code 10 - 17).
- **20-06-01 : Class of Service for Extensions**
  Assign a Class of Service (1-15) to an extension.
- **20-11-01 : Class of Service Options (Hold/Transfer Service) - Call Forwarding with Follow Me**
  In an extension's Class of Service, allow (1) or prevent (0) the setting of Call Forwarding with Follow Me.

Related Features

Do Not Disturb

Calls to extensions with DND active do not follow Call Forwarding programming. DIL calls will ring an idle Department Group member, then follow 22-08 programming then 22-05 programming.

Programmable Function Keys

Function keys simplify Call Forwarding with Follow Me operation.

Operation

To activate Call Forward Follow Me:

1. At a keyset other than your own, press idle CALL key and dial *2 .
   OR
   Press Call Forward (Station) key (PGM 15-07 or SC 851: 15).
   OR
   At SLT other than your own, lift handset and dial *2 .
2. Dial 3 + Dial your own extension number (i.e., the source).
3. Dial Call Forwarding Type:
   2 = All Calls
   3 = Outside calls only
   4 = Intercom calls only
4. SPK (or hang up at SLT) if you dialed *2 in step 1.
   Your Call Forwarding (Station) Programmable Function Key flashes when Call Forwarding is activated.

To cancel Call Forward Follow Me:

1. At keyset, press idle CALL key and dial *2 .
   OR
   Press Call Forward (Station) key (PGM 15-07 or SC 851: 15).
   OR
   At SLT, lift handset and dial *2 .
2. Dial 0.
3. SPK (or hang up at SLT) if you dialed *2 in step 1.
   Your Call Forwarding (Station) Programmable Function Key goes out.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

An extension user can override Call Forwarding or Do Not Disturb at another extension. This is helpful, for example, to dispatchers and office managers that always need to get through.

Conditions

None

Default Setting

Disabled.

Programming

- **11-12-01 : Service Code Setup (for Service Access) - Call Forwarding / Do Not Disturb Override**
  Customize the Service Code which is to be used for Call Forwarding/DND Override (default: 807). This code is only available if you disable the voice mail Single Digit dialing code in Program 11-16-09.
- **11-16-06 : Single Digit Service Code Setup - DND/Call Forward Override**
  Customize the one-digit Service Code used for DND/Call Forward Override.
- **15-07-01 : Programming Function Keys**
  Assign a function key for Call Forwarding/Do Not Disturb Override (code 37).
- **20-06-01 : Class of Service for Extensions**
  Assign a Class of Service (1-15) to an extension.
- **20-13-04 : Class of Service Options (Supplementary Service) - Call Forwarding/DND Override**
  In an extension's Class of Service, enable (1) or disable (0) the ability to initiate Call Forwarding/DND Override.

Related Features

Programmable Function Keys

Function keys simplify Call Forwarding/DND Override operation.

Operation

To override an extension's Call Forwarding or Do Not Disturb:

1. Call the forwarded or DND extension.
2. Press Override key (PGM 15-07 or SC 851: 37).

Call Pickup Group

Please refer to Group Call Pickup (page 339) for information on this feature.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Call Redirect allows a keyset user to transfer a call to a pre-defined destination (such as an operator, voice mail, or another extension) without answering the call. This can be useful if you are on a call and another rings in to your extension. By pressing the Call Redirect key, the call is transferred, allowing you to continue with your current call.

This feature works with the following types of calls:

- Normal trunk call
- DID
- DISA
- DIL
- E&M
- ICM

The following types of calls *cannot* be redirected with the feature:

- ACD
- Transferred
- Department Group (all ring mode)
- Door Box
- Virtual Extension

Conditions

(A.) After pressing the Call Redirect key, the call will not recall the extension.
(B.) The pre-defined destination has to be an extension number or voice mail pilot number.

Default Setting

Disabled.

Programming

- **15-07-01 : Programmable Function Keys**
  Assign a function key for Call Redirect (code 49 + destination extension number).
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.
- **20-11-16 : Class of Service Options (Hold/Transfer Service) - Call Redirect**
  Enable (1) or disable (0) a keyset user's ability to transfer a call to a pre-defined destination (such as an operator, voice mail, or another extension) without answering the call

Related Features

None

Operation

To redirect a ringing call:

1. With an incoming call ringing your extension, press the Call Redirect key (Program 15-07 or SC 851: 49 + Destination Extension Number) without lifting the handset or pressing the CALL keys.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

With Call Waiting, an extension user may call a busy extension and wait in line (Camp-On) without hanging up. When the user Camps-On, the system signals the busy extension with two beeps indicating the waiting call. The call goes through when the busy extension becomes free. Call Waiting helps busy extension users know when they have additional waiting calls. It also lets callers wait in line for a busy extension without being forgotten.

Conditions

Multiple Directory Number (virtual extension) keys do not support Call Waiting/Camp On Programmable Function keys (code 35).

Default Setting

Enabled.

Programming

- **11-12-04 : Service Code Setup (for Service Access) - Set Camp-On**
  Customize the Service Code which is to be used for setting Camp-On (default: 850).
- **11-12-05 : Service Code Setup (for Service Access) - Cancel Camp-On**
  Customize the Service Code which is to be used for cancelling Camp-On (default: 870).
- **11-12-47 : Service Code Setup (for Service Access) - Call Waiting Answer / Split Answer for SLT**
  If required, use this program to change the code users dial to Split while on a call. This code is normally 894.
- **11-16-05 : Single Digit Service Code Setup - Camp-On**
  Customize the one-digit Service Code used for setting Camp-On (default: 2).
- **15-07-01 : Programming Function Keys**
  Assign a function key for Camp-On (code 35). This key is also the Callback key.
- **20-01-08 : System Options - Trunk Queuing Callback Time**
  Set the Trunk Queuing callback time (default: 15). A Trunk Queuing Callback will ring an extension for this interval.
- **20-01-09 : System Options - Callback/Trunk Queuing Cancel Time**
  The system cancels an extension's Callback or Trunk Queueing request after this interval (default: 64800 seconds).
- **20-03-01 : System Options for Single Line Telephones**
  Set the mode used to answer a camped-on trunk call (0=hookswitch, 1=hookswitch plus service code 894, by default).
- **20-06-01 : Class of Service for Extensions**
  Assign a Class of Service to an extension (1-15).

- **20-13-35 : Class of Service Options (Supplementary Service) - Block Camp-On**
  Use this option to enable (1) or disable (0) an extension's ability to block callers from dialing 2 to Camp On.
- **20-15-09 : Ring Cycle Setup**
  If required, change the ring cycle for Callback and Transferred calls.
- **20-18-06 : Service Tone Timer - Call Waiting Tone Timer**
  Use this option to set the interval between Call Waiting tones. This timer also sets the interval between Off Hook Signaling alerts.

Related Features

Callback
If an extension user Camps-On and then hangs up, the system converts the Camp On to a Callback.

Dual Line Appearance/Off Hook Signaling
If an extension busy on a call has Off Hook Signaling, an incoming Intercom calls rings the idle second line appearance.

Off Hook Signaling
The Off Hook Signaling Enhancements give an extension the ability to block a caller from dialing 804 to Camp On and/or DID callers from automatically camping on.

Programmable Function Keys
Function keys simplify Call Waiting/Camp On operation.

Transfer
An extension user may be able to Transfer a call to a busy extension.

Trunk Queuing/Camp-On
Trunk Queuing lets an extension user Camp-On to a trunk.

Operation

To Camp-On to a busy extension:

1. Call busy extension.
2. Dial 2 or press Camp-On key (PGM 15-07 or SC 851: 35).
3. Do not hang up.

To Camp-On to a trunk, see Trunk Queuing.

To cancel a Camp-On request:

1. Hang up.
2. At keyset, press idle CALL key and dial 870.
   OR
   At keyset, press Camp-On key (PGM 15-07 or SC 851: 35).
   OR
   At single line set, lift handset and dial 870.

To Split (answer a waiting call) at a single line telephone:

Listen for Camp On beep.

1. Hookflash and dial 894.
   To repeatedly split between the two calls.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

When an extension user calls a co-worker that doesn't answer, they can leave a Callback request for a return call. The user does not have to repeatedly call the unanswered extension back, hoping to find it idle.

The system processes Callback requests as follows:

1. Caller at extension A leaves a Callback at extension B.
   Caller can place or answer additional calls in the mean time.
2. When extension B becomes idle, the system rings extension A. This is the Callback ring.
3. Once caller A answers the Callback ring, the system rings (formerly busy) extension B.
   If caller A doesn't answer the Callback ring, the system cancels the Callback.
4. As soon as caller B answers, the system sets up an Intercom call between A and B.

Callback Automatic Answer determines how an extension user answers the Callback ring. When Callback Automatic Answer is enabled, a user answers the Callback ring when they lift the handset. When Callback Automatic Answer is disabled, the user must press the ringing line appearance to answer the Callback ring.

Conditions

(A.) An extension can leave only one Callback request at a time.
(B.) Multiple Directory Number (virtual extension) keys do not support Call Waiting/Camp On Programmable Function keys (code 35).

Default Setting

Enabled.

Programming

- **15-02-11 : Multi-Line Telephone Basic Data Setup - Callback Automatic Answer**
  Enable (1) or disable (0) Callback Automatic Answer.
- **15-07-01 : Programming Function Keys**
  Assign a function key for Callback (code 35). This key is also the Camp-On key.
- **20-01-07 : System Options - Callback Ring Duration Time**
  Set the duration of the Callback ring (0-64800 seconds).
- **20-01-09 : System Options - Callback/Trunk Queuing Cancel Time**
  The system cancels Callback and Trunk Queuing requests after this interval (0-64800 seconds).

Related Features

Call Waiting (Camp-On)

If an extension user initiates a Callback but does not hang up, their extension Camps-On to the busy extension.

Programmable Function Keys

Function Keys simplify Callback operation.

Operation

To place a Callback:

1. Call unavailable (busy or unanswered) extension.
2. Dial 2 or press Callback key (PGM 15-07 or SC 851: 35).
3. Hang up.
4. Lift handset when busy extension calls you back.

   If the unavailable extension was unanswered (not busy), the Callback goes through after your co-worker uses their phone for the first time.

   If you have Callback Automatic Answer, you automatically place a call to the formerly busy extension when you lift the handset. If you don't have Callback Automatic Answer, you must press the ringing line appearance to place the call.

To cancel a Callback:

1. At keyset, press idle CALL key and Dial 870.
   OR
   At keyset, press Camp-On key (PGM 15-07 or SC 851: 35).
   OR
   At single line set, lift handset and dial 870.

To test Callback at your single line phone:

1. Lift the handset.
2. Dial 899.
3. Hang up.
4. When the phone rings, lift the handset.

   You hear synthesized Music on Hold.
5. Hang up.

Aspire S	Aspire M/L/XL
• Available - 32 resources available on the CPU for Caller ID (also used for DTMF receivers and Call Progress Tone Detection). The DSPDB will NOT provide any additional resources.	• Available - 32 resources available on the NTCPU for Caller ID (also used for DTMF receivers and Call Progress Tone Detection). The DSPDB provides an additional 32 resources.
• Caller ID information is not available for Aspire Wireless (Aspire Wireless is not supported on Aspire S).	• Caller ID information available for Aspire Wireless with software 1.05+.
• Option for displaying Caller ID name for SLTs is available.	• Option for displaying Caller ID name for SLTs is available with software 1.11+.
• Adding trunk access code to Caller ID is available.	• Adding trunk access code to Caller ID requires software 2.01+.
• Selecting FSK or DTMF for Caller ID requires software 2.63+.	• Selecting FSK or DTMF for SLT Caller ID requires software 2.63+.
• Caller ID Sender Queuing requires software 4.0E+.	• Caller ID Sender Queuing requires software 4.0E+.
• Selecting Caller ID FSK or DTMF signal from an analog trunk requires software 4.0E+.	• Selecting Caller ID FSK or DTMF signal from an analog trunk requires software 4.0E+.
• Caller ID display changed for i-Series phones is not available.	• Caller ID display changed for i-Series phones requires software 4.0E+.
• Temporary storage of Caller ID numbers increased from 16 to 50 with software 4.93+.	• Temporary storage of Caller ID numbers increased from 16 to 50 with software 4.93+.
• Caller ID Detection Time added with software 4.93+.	• Caller ID Detection Time added with software 4.93+.
• Caller ID number deletion enhanced with 4.93+.	• Caller ID number deletion enhanced with 4.93+.
• Flexible Ringing by Caller ID requires software 4.93+.	• Flexible Ringing by Caller ID requires software 4.93+.

Description

Caller ID allows a display keyset to show an incoming caller's telephone number (called the Directory Number or DN) and optional name. The Caller ID information is available as pre-answer display. With the pre-answer display, the user previews the caller's number before picking up the ringing line. Refer to the table on the following page for the available Caller ID displays.

Second Call Display

While busy on a call, the telephone display can show the identity of an incoming trunk or Intercom call. For incoming trunk calls, the display will show the Caller ID or ANI data or the trunk's name if Caller ID or ANI are not installed. (See the T1 Trunking feature for more on ANI compatibility.) For incoming Intercom calls, the display will show the calling extension's name.

Caller ID supports the telco's Called Number Identification (CNI) and Called Number Delivery (CND) service, when available. These services provide the Caller ID information (i.e., messages) between the first and second ring burst of an incoming call. There are two types of Caller ID message formats currently available: Single Message Format and Multiple Message Format. With Single Message Format, the telco sends only the caller's phone number (DN). The DN is either 7 or 10

digits long. In Multiple Message Format, the telco sends the DN and the caller's name. The DN for this format is also 7 or 10 digits long, and the name provided consists of up to 15 ASCII characters.

Telephone's display can show up to 12 Caller ID digits (for non-ACD calls).

Once installed and programmed, Caller ID is enabled for all types of trunk calls, including:

- Ring Group calls
- Calls transferred from another extension
- Calls transferred from the VRS
- Calls transferred from Voice Mail (unscreened)
- Direct Inward Lines (DILs)

Caller ID temporarily stores 16 or 50 calls (total of abandoned and answered/unanswered), depending on your software version. New calls replace old calls when the buffer fills.

Temporary Memory

An unanswered call will cause the Call History key (PGM 15-07 or SC 851: 08) to flash, indicating a new call has been placed in the temporary memory. If enabled in programming, the telephone's display will show "CHECK LIST".

This Caller ID data from the temporary memory can be saved in either Abbreviated Dial bins or in One-Touch keys making them available for placing future calls.

Caller ID Displays

Abbreviation	Description
Absence code	Absence Reason Code P displays as PRIVATE Absence Reason Code O displays as NO CALLER INFO
CID-num CID-name Trunk name	Caller ID number (Provided by telco) Caller ID name (Provided by telco) Trunk name provided by phone system (Program 14-01-01)
NN:NN:NN HH:MM:SS YY:MM:DD	System's Call Timer display System Time System Date

Conditions	Row	Pre-Answer Display	Post-Answer Display	Display When Reviewing
With Caller ID name and number	1	Trunk name	Trunk name	CID-name
	2	CID-num CID-name	CID-num CID-name	YY:MM:DD HH:MM:SS
With Caller ID number Without Caller ID name With name absence code	1	Trunk name	Trunk name	CID-num
	2	CID-num	CID-num	YY:MM:DD HH:MM:SS
Without Caller ID number With Caller ID name With number absence code	1	Trunk name	Trunk name	CID-name
	2	CID-name	CID-name	YY:MM:DD HH:MM:SS
Without Caller ID number Without Caller ID name With number & name absence codes	1	Trunk name	Trunk name	No Entry
	2	Name Absence Code	Name Absence Code	
Without Caller ID number Without Caller ID name Without number absence code	1	Trunk name	Trunk name	No Entry
	2	Ringing	Ringing	

Description (Cont'd)

Outputting Caller ID Data

The system includes the Caller ID data on the SMDR report. The report provides the incoming call's DN in the DIALED NUMBER field. The CLASS field shows PIN (just like all other incoming calls).

Caller ID Digits to Voice Mail

A Caller ID/ANI trunk can send Remote Log-On Protocol with Caller ID digits to the voice mail. When a trunk '001' receives the Caller ID as '12345', the protocol becomes '***60001*12345*'.

Display Reason for No Caller ID Information

With Caller ID enabled, the system will provide information for analog calls that do not detect the Caller ID information. If the Caller ID information is restricted, the telephone display will show "PRIVATE". If the system is not able to provide Caller ID information because telco information is not detected, then the display will show "NO CALLER INFO".

Calling Party Number Information

When using the Aspire Wireless telephone, the system can provide the Caller ID information for an external call if it is provided by the telco.

Option to Enable Caller ID Name for SLT

System programming provides an option for single line telephones to display Caller ID.

Add Trunk Access Code to Caller ID with Aspire Wireless Phones

Aspire Wireless (DECT) phones on the Aspire can hold incoming call history. This history is created based on the Caller ID information element contained in the call's Setup message which is transmitted from the Aspire. This information allows users to return calls dialing the number stored.

The stored number, however, does not contain the trunk access code. Without this code, the system may not be able to seize an outside line to complete the call.

With this feature, when an Aspire Wireless user receives an incoming trunk call, the trunk access code defined in programming can be added to the Caller ID. This will allow the system to seize an outside line and then dial the stored number.

- This function is only applied to incoming analog trunks. It does not apply to incoming extension calls.
- Caller ID must be available for this feature to work.
- Caller ID Edit Mode (Program 20-19-03) must be enabled.
- The maximum number of Caller ID digit is 20. If the total number of digits (trunk access code (Program 10-02-05) and Caller ID) is over 20, the remaining Caller ID digits are not dialed.
  For example:
  Trunk Access Code (Program 10-02-05): 123456#* (8 digits)
  Incoming Caller ID: 12345678901234567890 (20 digits)
  Aspire Wireless Dials: 123456#*123456789012

Caller ID Sender Queuing Added

The Aspire system can provide Caller ID (calling party number) to a single line telephone which has a display.

With older software, if all Caller ID sender resources were busy in the system, the call would ring the SLT without any Caller ID information displayed. With this enhancement, the system can queue the incoming call to the single line telephone if the system Caller ID sender resources are busy. With this option, Program 20-19-05 is added.

While an incoming call is waiting in queue, if the SLT user lifts their handset, they will hear silence (no dial tone) and can not dial out. When the SLT user goes back on hook, the system immediately sends the queued call to the SLT without Caller ID.

Option Available for FSK or DTMF Type for SLT

An option (Program 15-03-11) is available for the Caller ID which allows you to select either FSK or DTMF as the Caller ID type to be received by a single line telephone.

Option Available for FSK or DTMF Type from Analog Trunk

An option (Program 14-02-16) is available for the Caller ID which allows you to select the type of Caller ID signal from an analog trunk - FSK or DTMF.

Name and Number Limited Display with DSTU PCB

The Caller ID feature has been enhanced to provide better functionality with the i-Series telephones when using a DSTU PCB.

Previously with the i-Series telephones, the Caller ID name was limited to the 10 left most characters and the Caller ID number was limited to 9 digits as both were included on the second line of the display.
Example:

		L	i	n	e		0	0	1									
N	E	C	-	I	n	f	r	o	n		2	0	3	9	2	6	5	4	-

With software 4.0E or higher, the name and number will each appear on a separate line, allowing for a maximum of 20 characters/digits per line.

- When there are more than 20 characters set in Program 20-20 : Message Setup for Non-Caller ID Data, either the first or last character(s) will be missing (based on the entry in Program 20-19-01).
- This feature option is available for i-Series telephones only - Aspire telephones will not follow the setting in Program 20-02-15.
- The display of both Caller ID number and name is shown only while the call is ringing.
- The CO name/DID name is not displayed during ringing if Program 20-02-15 is set to "1" or ’2".
- If Program 20-09-06 : Class of Service Options (Incoming Call Service) : Incoming Time Information Display is set to "1" (call time displayed), the first line will display the time and date.

Flexible Ringing by Caller ID

The Flexible Ringing by Caller ID feature provides several different options for rerouting calls based on the Caller ID received.

- **Reject/Reroute "Private" Caller ID Calls**
  When an analog or ISDN trunk call is received with “Private” Caller ID information, the system can reject the call by playing a VRS message or it can route the call to an alternative extension or incoming ring group programmed in Program 22-18-01.

- **Reject/Reroute Based on Entry in ABB Table**
  When an analog, ISDN or IP trunk call is received with regular Caller ID information, the system can reject the call by playing a VRS message if the Caller ID number matches the ABB group number programmed in Program 22-16-01 and ABB entry in Programs 13-02-01 and 13-04-01.

  The analog, ISDN or IP trunk call can also be routed to an alternative extension or incoming ring group if the Caller ID number matches the common ABB table (Program 13-04).

Refer to **Central Office Calls, Answering** (page 208) for the required programming for this feature.

Conditions

- To have pre-answer Caller ID from the voice mail, the call must be an unscreened transfer.
- Caller ID is provided by the NTCPU. The DSP daughter board, which plugs onto the NTCPU, can provide additional resources for Caller ID if needed.

Default Setting

Disabled.

Programming

- **10-02-05 : Location Setup - Trunk Access Code**
  For Aspire Wireless users, enter the trunk access code digits required to place an outgoing call (8 digits maximum: 0-9, * #). This is the code which will be added to the Caller ID information for incoming trunk calls to allow the call to dial out if allowed in 20-19-03.
  IMPORTANT
  Program 10-02-05 is only supported by telephone programming. PCPro and WebPro cannot edit this option.
- **10-09-01 : DTMF and Dial Tone Circuit Setup**
  Allocate the circuits (1-16 or 1-64) on the NTCPU PCB for either DTMF receiving or dial tone detection (0 = Common use, 1 = Extension only, 2 = Trunk only).
- **14-01-20 : Basic Trunk Data Setup - Block Outgoing Caller ID**
  Allow (1) or prevent (0) the system from automatically blocking outgoing Caller ID information when a user places a call. If allowed (i.e., block enabled), the system automatically inserts the Caller ID block code *67 (defined in Program 14-01-21) before the user dialed digits (this requires Program 14-02-10 to be enabled). If prevented (i.e., block disabled), the system outdials the call just as it was dialed by the user.
- **14-01-21 : Caller ID Block Code**
  Enter the code, up to 8 digits, that should be used as the Caller ID Block Code. This code is automatically inserted before dialed digits if Program 14-01-20 is set to ‘1’.
- **14-01-22 : Basic Trunk Data Setup - Caller ID to Voice Mail**
  Enable (1) or disable (0) the system’s ability to send the Caller ID digits to voice mail.

- **14-02-10 : Analog Trunk Data Setup - Caller ID**
  Enable (1) or disable (0) a trunk's ability to receive Caller ID name/number information. If this option is set to '1', the system will suppress ringing and lamping for trunk calls for the first ring in order to receive the Caller ID information.
- **14-02-16 : Analog Trunk Data Setup - Caller ID Type**
  Select the type of Caller ID signal from an analog trunk - FSK (0) or DTMF (1). By default, this option is set to "0" (FSK).
- **15-02-08 : Multi-Line Telephone Basic Data Setup - Automatic Handsfree**
  Use this option to set whether pressing a key access a One-Touch Key (1) or if it pre-selects the key (0).
- **15-03-09 : Single Line Telephone Basic Data Setup - Caller ID Function-For External Module**
  Enable (1) or disable (0) the Caller ID FSK signal for an external Caller ID module or a 3rd party vendor phone with Caller ID display. If voice mail is used, this setting must be disabled or the system integration codes for disconnect will be incorrect. For Caller ID Sender Queuing, set this option to "1".
- **15-03-10 : Single Line Telephone Basic Data Setup - Caller ID Name**
  Determine if a SLT extension user's phone should display the Caller ID name (0 = Disable, 1 = Enable).
- **15-03-11 : Single Line Telephone Basic Data Setup - Caller ID Type**
  Select the type of Caller ID signal sent from an SLT extension port - FSK (0) or DTMF (1). By default, this option is set to "0" (FSK).
- **15-07-01 : Programmable Function Keys**
  Assign an Outgoing Call Without Caller ID (ISDN) function key (63) or a Caller ID Log History key (08) if needed.
- **20-01-03 : System Options - DSP Sender Resource Selection**
  For the Aspire M/L/XL only, set the DSP Sender Resource Selection to "1" (Caller ID Sender) when using the Caller ID Sender Queuing feature.
- **20-02-08 : System Options for Multi-Line Telephones - LCD Display Holding Time**
  This timer determines how long a user's display will show Caller ID for a second incoming call (0-64800 seconds).
- **20-02-15 : System Options for Multi-Line Telephones - Caller ID Display Mode**
  Determine how the Caller ID should be displayed for all i-Series telephones when an incoming call is received. Once the call is answered, the first line will indicate the trunk number and caller timer (if enabled).
  0 = Displays the line number on line one and the Caller ID name and number on line 2.
  1 = Line 1 displays Caller ID number, Line 2 displays Caller ID name
  2 = Line 1 displays Caller ID name, Line 2 displays Caller ID number
- **20-06-01 : Class of Service for Extensions**
  Assign Class of Service (1-15) to extensions.
- **20-08-15 : Class of Service (Outgoing Call Service) - Block Outgoing Caller ID**
  Allow (1) or prevent (0) a user's Class of Service from automatically blocking outgoing Caller ID information when a call is placed. If allowed (i.e., block enabled), the system automatically inserts the Caller ID block code *67 (defined in Program 14-01-21) before the user dialed digits (this requires Program 14-02-10 to be enabled). If prevented (i.e., block disabled), the system outdials the call just as it was dialed by the user.
- **20-09-02 : Class of Service Options (Incoming Call Service) - Caller ID Display**
  In an extension's Class of Service, enable (1) or disable (0) the extension's ability to display incoming Caller ID name/number information.

- **20-09-03 : Class of Service Options (Incoming Call Service) - Sub Address Identification**
  In an extension's Class of Service, enable (1) or disable (0) the extension's ability to display the Caller Sub-Address.
- **20-09-04 : Class of Service Options (Incoming Call Service) - Notification of Incoming Call List Existence**
  Determine whether or not the CHECK LIST message is displayed to indicate a missed call (0=off, 1=on).
- **20-13-06 : Class of Service Options (Supplementary Service) Automatic Off-Hook Signal**
  In order for a display phone to show Caller ID information for a second incoming call, must be enabled (1).
- **20-19-01 : System Options for Caller ID - Caller ID Display Formatting**
  Determine whether the first 10 digits (0) or last 10 digits (1) should be displayed when Caller ID exceeds 12 digits.
- **20-19-02 : System Options for Caller ID - Caller ID Wait Timer**
  Determine how long an incoming CO call should wait for Caller ID information from telco before the system connects the call.
- **20-19-03 : System Options for Caller ID - Edit Caller ID**
  Enable (1) or disable (0) the system's ability to add the trunk access code to the stored Caller ID information. If Caller ID Edit Mode is disabled (0), no trunk access code will be added to the Caller ID. If this option is enabled (1), the trunk access code entered in Program 10-02-05 will be added to the beginning of the Caller ID.
- **20-19-05 : System ID Options for Caller ID - Caller ID Sender Queuing Timer**
  With the Caller ID Sender Queuing option, determine how long an incoming call will wait in queue for a DSP resource to become available (0-64800 seconds). If a resource becomes available during this time, the call will immediately ring the SLT with Caller ID. If the timer expires before a resource becomes available, then system rings the single line telephone without Caller ID (until the timer expires, the SLT will not ring). If the queuing timer is set to "0", the system does not queue the incoming call.
- **20-20-01 : Message Setup for Non-Caller ID Data - Private Call**
  Enter the text (up to 24 alphanumeric characters) to be displayed for Caller ID when a user receives a call which is classified as a private call.
- **20-20-02 : Message Setup for Non-Caller ID Data - Out of Service Area**
  Enter the text (up to 24 alphanumeric characters) to be displayed for Caller ID when a user receives a call which is classified as a an out-of-service area call.
- **20-20-03 : Message Setup for Non-Caller ID Data - Call Information with Error**
  Enter the text (up to 24 alphanumeric characters) to be displayed for Caller ID when a user receives a call which is classified as a call with a CID error.
- **80-02-01 : DTMF Tone Setup - Duration**
  80-02-02 : DTMF Tone Setup - Pause
  With Program 14-01-20 set to 1 and Program 14-02-10 set to 1, if the Caller ID block code *67 is being sent too quickly for the telco to recognize, lengthen the pause and duration time for the DTMFs.
- **81-01-04 : COIU Initial Data Setup - Ringing Signal Detection Minimum Time**
  If trouble is experienced receiving Caller ID, try reducing the ringing signal detection timer (for example, set it to 6). Note, however, that this may cause false ring detections.
- **81-01-12 : COIU Initial Data Setup - Caller ID Detection Time**
  Select the Caller ID detection time. If an entry other than "0" is made, the actual waiting time is the value x 64ms. For example, if the timer is set to 46, the COIU waits 46 x 64ms = 2944ms). If a problem exists with Caller ID displaying, the recommended entry to try first would be "46". (0 = COIU waits 500ms from end of first ring to beginning of FSK signal for Caller ID, 1 - 255 = The COIU waits for the Caller ID FSK signal from when the first ring pulse was detected.)

Related Features

Abbreviated Dialing / One-Touch Calling
Caller ID information can be stored in Abbreviated Dialing or One-Touch bins.

Aspire Wireless
Caller ID can be displayed for incoming calls, as well as transferred calls.

Automatic Route Selection
ARS can block outgoing Caller ID information on a call-by-call basis. To do this, insert the Caller ID block code (e.g., *67) in the ARS Dial Treatments.

Conference, Voice Call/Privacy Release
Trunks with Privacy Release enabled will display Caller ID until the call is answered. To view it after the call has been picked up, press the line key, though this sets the call to private mode. To keep the call on Privacy Release, press the CHECK + CLEAR key.

Cordless II/Cordless Lite II Telephones
Caller ID can be displayed for incoming calls, as well as transferred calls.

Multiple Directory Numbers / Call Coverage
Call Coverage keys can receive Caller ID.

Park
An extension user can display the Caller ID information for a call in Park if Automatic Hands-free in Program 15-02-08 is set to "0" (pre-select).

Station Message Detail Recording
Caller ID information outputs on the SMDR report.

T1 Trunking (with ANI/DNIS Compatibility)
ANI/DNIS can use the Caller ID tables for routing. Refer to **T1 Trunking (with ANI/DNIS Compatibility)** (page 537) for more.

Voice Mail
The system can send Caller ID digits to the voice mail if allowed in Program 14-02-10.

Operation

DISPLAYING THE INCOMING NUMBER

To display the name/number of an incoming call only lamping your telephone:

Without Automatic Handsfree on Incoming Line/Loop Key Calls (Program 15-02-08=0)

1. Do not lift the handset.
2. Press line/loop key.
   *If the Caller ID data includes the name, you can scroll left and right by pressing * and #.*
3. Lift handset or press SPK to answer the call.
   OR
1. Do not lift the handset.
2. Press FLASH plus the flashing line key.

DISPLAYING CALLER ID FOR A CALL IN PARK

To display Caller ID for a call in Park:

With Program 15-02-08 set to "0" (pre-select) for this feature.

1. *With Program 15-02-08 set to "0" (pre-select) :* With a call in Park, press the PARK key. (PGM 15-07 or SC 852: *04).
   OR
   With Program 15-02-08 set to "1" (one touch): With a call in Park, press FLASH then the PARK key (PGM 15-07 or SC 852: *04).

STORING A NUMBER

To store a Caller ID number in an Abbreviated Dial bin:

1. With a keyset in an idle condition the display shows:

1-01 FRI 09:00AM			
301			STA 301
LIST	DIR	ICM	PROG

2. Press the LIST Soft Key. The display shows:

LIST●MENU			
Redial	CID		

3. Press the CID Soft Key (Caller ID). The display shows:

##:		xxxxxxxxxxxxx	
		mm-dd hh:mm	
↑	↓	Store	DEL

= List Number
xx = Caller ID number
mm-dd hh:mm = incoming date and time
↑ = Preview List
↓ = Next List
Store = Store in List
DEL = Delete from List

4. Press the STORE Soft Key. The display shows:

```
##:          xxxxxxxxxxxx
             mm-dd  hh:mm
OneT   AbbC   ABBg
```

= List Number
xx = Caller ID number
mm-dd hh:mm = incoming date and time
OneT = Store in One-Touch key
ABBc = Store in Common Abbreviated Dial bin
ABBg = Store in Group Abbreviated Dial bin

5. Press the ABBC or ABBG Soft Key. The display shows:

```
Store to ABB:xxxxxx
ENTER BIN
```

6. Dial the Abbreviated Dial bin in which the number is to be stored. If you press HOLD, the next available Abbreviated Dial bin will be used. The display shows:

```
ABB ####:
             xxxxxxxxxxxx
```

If all Abbreviated Dial bins are used, the display shows "TABLE IS FULL".

7. Press HOLD. The display shows:

```
ABB ####
             -
```

8. Enter the name to be associated with the stored number.

With Software 2.05+:
Key for Entering Names

When entering names in the procedures below, refer to this chart. Names can be up to 12 digits long. For prior software or when using i-Series phones, refer to the charts in the Name Storing feature (page 432).

Use this keypad digit . . .	When you want to. . .
1	Enter characters: 1 @ [¥] ^ _ ` { | } → ← Á À Â Ã Ç É Ê ì ó
2	Enter characters A-C, a-c, 2.
3	Enter characters D-F, d-f, 3.
4	Enter characters G-I, g-i, 4.
5	Enter characters J-L, j-l, 5.
6	Enter characters M-O, m-o, 6.
7	Enter characters P-S, p-s, 7.
8	Enter characters T-V, t-v, 8.
9	Enter characters W-Z, w-z, 9.
0	Enter characters: 0 ! " # $ % & ' ( ) ô o ú ä ö ü α ε θ
*	Enter characters: * + , - . / : ; < = > ? π ∑ σ Ω ∞ ¢ £
#	# = Accepts an entry (only required if two letters on the same key are needed - ex: T**OM**). Pressing # again = Space. (In system programming mode, use the right arrow soft key instead to accept and/or add a space.)

With Software 2.05+: Key for Entering Names	
When entering names in the procedures below, refer to this chart. Names can be up to 12 digits long. For prior software or when using i-Series phones, refer to the charts in the Name Storing feature (page 432).	
Use this keypad digit . . .	**When you want to. . .**
CONF	Clear the character entry one character at a time.
CLEAR	Clear all the entries from the point of the flashing cursor and to the right.

9. Press HOLD. The display shows:

```
SET ABB
```

10. Press SPK.

The telephone returns to an idle condition.

To store a Caller ID number in a one-touch key:

1. With a keyset in an idle condition the display shows:

```
     1-01 FRI  09:00AM
301                 STA 301
 LIST   DIR   ICM   PROG
```

2. Press the LIST Soft Key. The display shows:

```
LIST●MENU

Redial  CID
```

3. Press the CID Soft Key (Caller ID). The display shows:

```
##:          xxxxxxxxxxxx
             mm-dd hh:mm
↑     ↓      Store   DEL
```

= List Number
xx = Caller ID number
mm-dd hh:mm = incoming date and time
↑ = Preview List
↓ = Next List
Store = Store in List
DEL = Delete from List

4. Press the STORE Soft Key. The display shows:

```
##:          xxxxxxxxxxxx
             mm-dd hh:mm
OneT  AbbC  ABBg
```

= List Number
xx = Caller ID number
mm-dd hh:mm = incoming date and time
OneT = Store in One-Touch key
ABBc = Store in Common Abbreviated Dial bin
ABBg = Store in Group Abbreviated Dial bin

5. Press the ONET Soft Key. The display shows:

Store to ONE TOUCH ENTER BIN

6. Press the One-Touch key in which the number is to be stored or dial 1-9, 0. If you press HOLD, the next available One-Touch key will be used. The display shows:

KEY ##: xxxxxxxxxxxxx

If all One-Touch keys are used, the display shows "TABLE IS FULL".

7. Press HOLD. The display shows:

KEY ## -

8. Enter the name to be associated with the stored number.

With Software 2.05+:
Key for Entering Names

When entering names in the procedures below, refer to this chart. Names can be up to 12 digits long. For prior software or when using i-Series phones, refer to the charts in the Name Storing feature (page 432).

Use this keypad digit . . .	When you want to. . .
1	Enter characters: 1 @ [¥] ^ _ ` { | } → ← Á À Â Ã Ç É Ê ì ó
2	Enter characters A-C, a-c, 2.
3	Enter characters D-F, d-f, 3.
4	Enter characters G-I, g-i, 4.
5	Enter characters J-L, j-l, 5.
6	Enter characters M-O, m-o, 6.
7	Enter characters P-S, p-s, 7.
8	Enter characters T-V, t-v, 8.
9	Enter characters W-Z, w-z, 9.
0	Enter characters: 0 ! " # $ % & ' ( ) ô o ú ä ö ü α ε θ
*	Enter characters: * + , - . / : ; < = > ? π ∑ σ Ω ∞ ¢ £
#	# = Accepts an entry (only required if two letters on the same key are needed - ex: T**OM**). Pressing # again = Space. (In system programming mode, use the right arrow soft key instead to accept and/or add a space.)
CONF	Clear the character entry one character at a time.
CLEAR	Clear all the entries from the point of the flashing cursor and to the right.

9. Press HOLD. The display shows:

KEY PROG ONE TOUCH

10. Press SPK.

The telephone returns to an idle condition.

Temporary Memory / Call History

An unanswered call will cause the Call History key (PGM 15-07 or SC 851: 08) to flash, indicating a new call has been placed in the temporary memory. If enabled in programming, the telephone's display will show "CHECK LIST".

1. Press the Call History key (PGM 15-07 or SC 851: 08) or press the LIST Soft Key and CID.
   The last addition to the list is displayed.
   With i-Series phones, the Call History key is required - the LIST Soft key is not available.
2. Press the ARROW DOWN Soft Key to scroll through the list of numbers in memory.
3. Press the DEL Soft Key to delete the entry and scroll to the next entry.
4. The Call History key will remain on as long as entries remain in memory.
5. To place a call back to a number in the temporary memory list, with the number to be dialed displayed, press a line, loop or CALL key.
   The outgoing call is placed.
   With i-Series phones, to clear all the numbers in the list, press CHECK + 9. To abort the clear function, press CHECK + 0.

CHECKING YOUR ANSWERED/UNANSWERED CALLER ID CALLS

With software prior to 4.93:
To review the last 16 outside calls your extension received:

1. At a display keyset, press the LIST soft key.
2. Press CID.

   The first row of your display shows the Caller ID number. If there is an "" next to the call record number in the left-hand corner, this indicates that it is a call you missed (unanswered). The second row shows the date and time of the call.*

   Press the up and down soft keys to see the list of calls available in the buffer.

   If the Caller ID includes a name, you can press the CHECK key to view the number of the caller.
3. To call the displayed number, press a line/loop key.
   OR
   To erase the displayed number without returning the call, the DEL soft key.
4. Press SPK to hang up.

With software 4.93+:
To review the last 50 outside calls your extension received:

1. From an idle keyset, press the LIST soft key.
2. Press the CID soft key.
3. ***If deleting just one number,*** scroll to the number.
   If deleting all numbers in the Caller ID list, skip to Step 4.
4. Press the DEL soft key. The display shows:

01:	SMITH JOHN
*	11-14 13:45
One ALL	

5. ***If deleting just one number,*** press the ONE soft key.
   If deleting all numbers in the LND list, press the ALL soft key.
6. When deleting all numbers in the Caller ID list, the display then prompts for a confirmation. Press the YES soft key to delete all the numbers, or press the NO soft key to return to the previous display.
7. Press the CLEAR key to return the phone to an idle state, or it will return to an idle state after approximately 10 seconds.

Aspire S	Aspire M/L/XL
• Available - requires software 4.93+.	• Available - requires software 4.93+.

Description

The Center Telephone Book is a new feature providing each user up to two personal telephone books which can be used to store numbers. The system allows multiple extensions to be assigned the same telephone book - this allows users to share commonly used numbers.

- With the Aspire S, up to 50 numbers/names can be stored; with the Aspire M/L/XL, up to 100 numbers/names can be stored.
- The Telephone Books can be password protected.
- Numbers can be stored using Last Number Dialed and Caller ID

The following key operation can be used with the Telephone Book:

- HOLD button - User can enter the data. (same as the Abbreviated Dial input)
- LND button - User can input the character: @ (same as the Abbreviated Dial input)
- MIC button - User can input the character: P (same as the Abbreviated Dial input)
- FLASH button - User can change the input mode or input the character: R. (same as the Abbreviated Dial input)
- CLEAR button - User can finish the telephone book operation.
- CONF button - User can delete the characters (same as the Abbreviated Dial input) or the user returns back one page.
- VOL UP button - User can change the edit item or page OR the user can start a search.
- VOL DOWN button - User can change the edit item or page OR the user can start a search.
- SOFT KEY button - User can select the function.
- Dial pad - User can input the data or select list.

Conditions

None

Default Settings

Enabled

Programming

15-19-01 : System Telephone Book Setup for Extension - Telephone Book Number 1
Assign the first Telephone Book to each extension. The system allows multiple extensions to be assigned the same telephone book - this allows users to share commonly used numbers.
➪ Aspire S = 0-50
➪ Aspire M/L/XL = 0-100

15-19-02 : System Telephone Book Setup for Extension - Telephone Book Number 2
Assign the second Telephone Book to each extension. The system allows multiple extensions to be assigned the same telephone book - this allows users to share commonly used numbers.
➪ Aspire S = 0-50
➪ Aspire M/L/XL = 0-100

- **15-19-06 : System Telephone Book Setup for Extension - Locking Telephone Book**
  For each extension, determine if the Telephone Book should be locked (1) or unlocked (0) by default. A user can unlock the Telephone Book using the service code defined in Program 11-11-56.
- **15-19-07 : System Telephone Book Setup for Extension - Telephone Book Password**
  For each extension, assign the 4-digit Telephone Book password (0000-9999 (must be 4 digits)).
- **13-07-01 : Telephone Book Number and Name - Dial Data**
  Use this program to store the dialing data for each Telephone Book. Up to 300 entries can be made in each Telephone Book.
  - Aspire S = Telephone Books: 1-50, Memory Number: 0-299
  - Aspire M/L/XL = Telephone Books: 1-100, Memory Number: 0-299
- **13-07-02 : Telephone Book Number and Name - Name**
  Use this program to store a name to a memory number assigned in each Telephone Book. A maximum of 12 characters is allowed (permitted entries: 1-9, 0, *, #, P,R,@). Up to 300 entries can be made in each Telephone Book.
  - Aspire S = Telephone Books: 1-50, Memory Number: 0-299
  - Aspire M/L/XL = Telephone Books: 1-100, Memory Number: 0-299
- **13-07-04 : Telephone Book Number and Name - Group Number**
  Use this program to assign each Telephone Book to a group number (1-20).
- **13-08-01 : Telephone Book System Name**
  Define the name of the system Telephone Book. This entry can be up to 6 characters.
- **13-09-01 : Telephone Book Group Name**
  Use this program to define the name of the system Telephone Book group. This entry can be up to 8 characters.
  - Aspire S = Telephone Books: 1-50, Group Number: 1-20
  - Aspire M/L/XL = Telephone Books: 1-100, Group Number: 1-20
- **13-10-01 : Telephone Book Routing**
  This program defines the dial routing of the system Telephone Book group. When an outside call is placed, the system follows Program 14-06-01.
  - Aspire S = Telephone Books: 1-50, Outgoing Mode: 0 = External Outgoing, 1 = Internal Outgoing
  - Aspire M/L/XL = Telephone Books: 1-100, Outgoing Mode: 0 = External Outgoing, 1 = Internal Outgoing
- **11-11-56 : Service Code Setup (for Setup/Entry Operation) - Telephone Book Lock Service**
  Using the service code defined in this option, users can change the system Telephone Book lock status.

Related Features

Abbreviated Dialing

Each extension user can also store numbers in their Center Telephone Book for quick access to outside numbers.

Operation

New Registration

Registration allows the user to enter new data into the telephone book.

1. From an idle keyset, press the PROG Soft Key. then press the DOWN ARROW Soft Key twice.
   TELBK is displayed on Soft Key 1.
2. Press the TELBK Soft Key. The display indicates the following:

```
1:REGIST      2:SEARCH
3:SETTING     4:DeleteAll
1:        2:      3:      4:
```

3. Press Soft Key 1 for Registration.
   Pressing the CONF key from this screen on will back up the view to the previous screen.
4. *If 2 Telephone Books are defined in Program 15-19-01 and 15-19-02:*
   Press Soft Key 1 or 2 to select the Telephone Book to register new data.

```
[REGIST DATA]

TLBK1   TLBK2
```

   By default, the user will search by name (indicated by the [A] in the upper right-hand corner of the display. Soft Key 1 will step through the different search options (numbers, Kana, alpha). To search by number, press the NUM soft key - the [A] changes to [1].
5. Input the name (up to 12 digits) and press the HOLD button.

```
TLBK1:INPUT NAME   [A]
                   <
NUM   ←        →
```

```
TLBK1:INPUT NAME   [A]
 ABC               <
NUM   ←        →
```

6. Using the dial pad, select the Group number.

```
TLBK1:SELECT GROUP
1:GROUP1      2:GROUP2
3:GROUP3      4:GROUP4
```

7. Enter the number to be stored and press HOLD.

```
TLBK1:INPUT NUMBER
ABC
2035551234
```

8. Enter the bin number where the telephone number is to be stored and press HOLD.
   The next available bin number is automatically displayed.

```
TLBK1:REGIST MEMORY
                          >000
[0- 299]
```

9. The display indicates the bin number as registered with the following display. This display will remain for approximately 3 seconds or you can press the CONF button to continue.

```

MEMORY:000   REGISTERED
REGISTED   DATA  1/300
```

Name Search

A user can search the Center Telephone Book by name.

1. From an idle keyset, press the PROG Soft Key. then press the DOWN ARROW Soft Key twice.

   TELBK is displayed on Soft Key 1.

2. Press the TELBK Soft Key. The display indicates the following:

```
1:REGIST      2:SEARCH
3:SETTING     4:DeleteAll
1:        2:      3:      4:
```

3. Press Soft Key 2 for Search.

   Pressing the CONF key from this screen on will back up the view to the previous screen.

4. *If 2 Telephone Books are defined in Program 15-19-01 and 15-19-02:*
   Press Soft Key 1 or 2 to select the Telephone Book to search.

```
[SEARCH TELBOOK]

TLBK1   TLBK2
```

```
TLBK1:SEARCH NAME   [A]
                <
NUM   MENU    ←       →
```

   By default, the user will search by name (indicated by the [A] in the upper right-hand corner of the display. Soft Key 1 will step through the different search options (numbers, Kana, alpha). To search by number, press the NUM soft key - the [A] changes to [1].

5. Enter the search characters.

```
TLBK1:SEARCH NAME   [A]
ABC             <
NUM   MENU    ←       →
```

6. Press the Volume Up or Volume Down keys to search.

```
1:ABC           2:ABC2
3:ABC3          4:ABC4
92035551234
```

7. To dial the selected name, press the CALL or SPK key. OR,
   To view the detail of the flashing item, press the HOLD key. You can then press the CALL or SPK key to dial the number.

   Pressing the item number on the dial pad selects an item.

   Pressing the CONF key will back up the view to the previous screen.

```
[  0]          TEL1
 92035551234
G:Group  01   CHG     DEL.
```

Group Search

A user can search the Center Telephone Book by group name.

1. From an idle keyset, press the PROG Soft Key. then press the DOWN ARROW Soft Key twice.
   TELBK is displayed on Soft Key 1.
2. Press the TELBK Soft Key. The display indicates the following:

```
1:REGIST        2:SEARCH
3:SETTING       4:DeleteAll
1:          2:          3:          4:
```

3. Press Soft Key 2 for Search.
   Pressing the CONF key from this screen on will back up the view to the previous screen.
4. *If 2 Telephone Books are defined in Program 15-19-01 and 15-19-02:*
   Press Soft Key 1 or 2 to select the Telephone Book to search.

```
[SEARCH TELBOOK]

TLBK1    TLBK2
```

```
TLBK1:SEARCH NAME   [A]
                    <
NUM    MENU     ←          →
```

   By default, the user will search by name (indicated by the [A] in the upper right-hand corner of the display. Soft Key 1 will step through the different search options (numbers, Kana, alpha). To search by number, press the NUM soft key - the [A] changes to [1].
5. Press Soft Key 2 for Menu.

```
[SEARCH MENU]

NAME     GRP     NUM     MEM
```

6. Press Soft Key 2 for Group.

```
TLBK1:SEARCH GROUP
1:Group 01          2:Group 02
3:Group 03          4:Group 04
```

7. Using the dial pad, select the group to search, then press HOLD.

```
1:ABC               2:ABC2
3:ABC3              4:ABC4
92035551234
```

8. Press the Volume Up or Volume Down keys to search.

```
1:ABC               2:ABC2
3:ABC3              4:ABC4
92035551234
```

9. To dial the selected name, press the CALL or SPK key. OR,
   To view the detail of the flashing item, press the HOLD key. You can then press the CALL or SPK key to dial the number.
   Pressing the item number on the dial pad selects an item.
   Pressing the CONF key will back up the view to the previous screen.

```
[  0]              TEL1
 92035551234
G:Group  01    CHG       DEL.
```

Telephone Number Search

A user can search the Center Telephone Book by number.

1. From an idle keyset, press the PROG Soft Key. then press the DOWN ARROW Soft Key twice.
   TELBK is displayed on Soft Key 1.
2. Press the TELBK Soft Key. The display indicates the following:

```
1:REGIST       2:SEARCH
3:SETTING      4:DeleteAll
1:         2:       3:       4:
```

3. Press Soft Key 2 for Search.
   Pressing the CONF key from this screen on will back up the view to the previous screen.
4. *If 2 Telephone Books are defined in Program 15-19-01 and 15-19-02:*
   Press Soft Key 1 or 2 to select the Telephone Book to search.

```
[SEARCH TELBOOK]

TLBK1   TLBK2
```

```
TLBK1:SEARCH NAME   [A]
                    <
NUM   MENU     ←        →
```

5. Press Soft Key 2 for Menu.

```
[SEARCH MENU]

NAME    GRP    NUM    MEM
```

6. Press Soft Key 3 for Number.

```
TLBK1:SEARCH NUMBER

MENU
```

7. Enter the search number(s).
   At least one digit must be entered before the search can be done.

```
TLBK1:SEARCH NUMBER
9203
MENU
```

8. Press the Volume Up or Volume Down keys to search.

```
1:ABC              2:ABC2
3:ABC3             4:ABC4
92035551234
```

9. To dial the selected name, press the CALL or SPK key. OR,
   To view the detail of the flashing item, press the HOLD key. You can then press the CALL or SPK key to dial the number.
   Pressing the item number on the dial pad selects an item.
   Pressing the CONF key will back up the view to the previous screen.

```
[  0]              TEL1
 92035551234
G:Group  01    CHG       DEL.
```

Search Memory

A user can search the Center Telephone Book by memory number.

1. From an idle keyset, press the PROG Soft Key. then press the DOWN ARROW Soft Key twice.
   TELBK is displayed on Soft Key 1.
2. Press the TELBK Soft Key. The display indicates the following:

```
1:REGIST      2:SEARCH
3:SETTING     4:DeleteAll
1:          2:        3:        4:
```

3. Press Soft Key 2 for Search.
   Pressing the CONF key from this screen on will back up the view to the previous screen.
4. *If 2 Telephone Books are defined in Program 15-19-01 and 15-19-02:*
   Press Soft Key 1 or 2 to select the Telephone Book to search.

```
[SEARCH TELBOOK]

TLBK1   TLBK2
```

```
TLBK1:SEARCH NAME   [A]
                    <
NUM   MENU     ←        →
```

5. Press Soft Key 2 for Menu.

```
[SEARCH MENU]

NAME    GRP    NUM    MEM
```

6. Press Soft Key 4 for Memory.

```
TLBK1:SEARCH MEMORY
                              >
MENU                    [0- 299]
```

7. Enter the memory number to be searched.
   At least one digit must be entered before the search can be done.

```
TLBK1:SEARCH MEMORY
                           >  0
MENU                    [0- 299]
```

8. Press the Volume Up or Volume Down keys to search.

```
[  0]            TEL1
 92035551234
G:Group  01   CHG      DEL
```

9. To dial the selected name, press the CALL or SPK key.
   Pressing the CONF key will back up the view to the previous screen.

Delete All Data

A user can delete ***all*** the Center Telephone Book information using the following steps.

1. From an idle keyset, press the PROG Soft Key. then press the DOWN ARROW Soft Key twice.
   TELBK is displayed on Soft Key 1.
2. Press the TELBK Soft Key. The display indicates the following:

1:REGIST 2:SEARCH 3:SETTING 4:DeleteAll 1: 2: 3: 4:

3. Press Soft Key 4 for Delete All.
   Pressing the CONF key from this screen on will back up the view to the previous screen.
4. *If 2 Telephone Books are defined in Program 15-19-01 and 15-19-02:*
   Press Soft Key 1 or 2 to select the Telephone Book to search.

[DELETE DATA] TLBK1 TLBK2

TLBK1:DELETE ALL DATA INPUT PWD:4DIGIT <

5. Enter the 4-digit password assigned in Program 15-09-07 or through the "Setting" menu in the Center Telephone Book Soft Key menu.

TLBK1:DELETE ALL DATA DELETE ALL TELBOOK DATA? Yes No

6. Press Soft Key 3 (Yes) to delete all the entered data, or press Soft Key 4 (No) to back up. Pressing Soft Key 3 will then display the following:

DELETED ALL TELBOOK DATA

[DELETE DATA] TLBK1 TLBK2

7. Press the CONF key to back up the view to the previous screen.

Change the Telephone Book Data

A user can change the Center Telephone Book data.

1. From an idle keyset, press the PROG Soft Key. then press the DOWN ARROW Soft Key twice.
   TELBK is displayed on Soft Key 1.
2. Press the TELBK Soft Key. The display indicates the following:

1:REGIST 2:SEARCH 3:SETTING 4:DeleteAll 1: 2: 3: 4:

3. Press Soft Key 2 for Search.
   Pressing the CONF key from this screen on will back up the view to the previous screen.
4. *If 2 Telephone Books are defined in Program 15-19-01 and 15-19-02:*
   Press Soft Key 1 or 2 to select the Telephone Book to search.

[SEARCH TELBOOK] TLBK1 TLBK2

TLBK1:SEARCH NAME [A] < NUM MENU ← →

5. Press Soft Key 2 for Menu.

[SEARCH MENU] NAME GRP NUM MEM

6. Press the appropriate Soft Key to search by Name, Group, Number, or Memory Number. (Refer to the operations above for details on the specific steps for the option you select.)
7. Locate the entry to be changed and press HOLD to display the details of the entry.

[0] TEL1 92035551234 G:Group 01 CHG DEL

8. Press Soft Key 3 for Change.

TLBK1 :CHANGE DATA N:ABC G:Group 01

9. ***To change the name,*** press HOLD and enter the new name. Press HOLD. You can now change the group or memory number or press CONF to exit.
   To change the memory number, press the Volume Up key, at the ENTER REGIST MEMORY display, press HOLD. Select the new memory number to be used for the number and press HOLD. Press Soft Key 3 to overwrite the current information or press Soft Key 4 to cancel and allow you to select a new memory number. You can now select a new entry to edit or press CONF to exit.
   To change the group and memory number, press the Volume Down key, press HOLD, then using the dial pad, select the group number to be assigned. The display flashes the saved telephone number - press HOLD.You can now change the telephone number, then press HOLD. At the ENTER REGIST MEMORY display, press HOLD. Select the new memory number to be used for the number and press HOLD. Press Soft Key 3 to overwrite the current information or press Soft Key 4 to cancel and allow you to select a new memory number. You can now select a new entry to edit or press CONF to exit.

Delete an Entry in the Telephone Book

A user can delete one entry in the Center Telephone Book.

1. From an idle keyset, press the PROG Soft Key. then press the DOWN ARROW Soft Key twice.
   TELBK is displayed on Soft Key 1.
2. Press the TELBK Soft Key. The display indicates the following:

```
1:REGIST      2:SEARCH
3:SETTING     4:DeleteAll
1:        2:      3:      4:
```

3. Press Soft Key 2 for Search.
   Pressing the CONF key from this screen on will back up the view to the previous screen.
4. *If 2 Telephone Books are defined in Program 15-19-01 and 15-19-02:*
   Press Soft Key 1 or 2 to select the Telephone Book to search.

```
[SEARCH TELBOOK]

TLBK1   TLBK2
```

```
TLBK1:SEARCH NAME   [A]
                <
NUM   MENU    ←       →
```

5. Press Soft Key 2 for Menu.

```
[SEARCH MENU]

NAME    GRP    NUM    MEM
```

6. Press the appropriate Soft Key to search by Name, Group, Number, or Memory Number. (Refer to the operations above for details on the specific steps for the option you select.)
7. Locate the entry to be changed and press HOLD to display the details of the entry.

```
[  0]           TEL1
 92035551234
G:Group  01   CHG      DEL
```

8. Press Soft Key 4 for Delete.

```
TLBK1  :DELETE DATA
DELETE DATA?
                    Yes       No
```

9. Press Soft Key 3 (Yes) to delete the record or press Soft Key 4 (No) to cancel the deletion process. Pressing Yes displays the following:

```
DELETE COMPLETE!
```

10. Press CONF as needed to exit out of the displays or press CLEAR to return the phone to an idle state.

Registering Caller ID to the Center Telephone Book

While reviewing the Caller ID list, a user can add a record into the Center Telephone Book with the following operation. This function can only be performed if the Center Telephone Book is unlocked.

1. From an idle keyset, press Soft Key 1 for List.
2. Press Soft Key 2 for CID.
3. Use the Arrow Up and Arrow Down Soft Keys to display the desired Caller ID record.
4. Press Soft Key 3 for Store.
5. Press Soft Key 3 for TELBK.

```
01:                          ABC1
*                      MM-DD HH:TT
OneT    ABB    TELBK
```

6. *If 2 Telephone Books are defined in Program 15-19-01 and 15-19-02:*
   Press Soft Key 1 or 2 to select the Telephone Book in which the number should be stored.

```
01:                          ABC1
*                      MM-DD HH:TT
TLBK1   TLBK2
```

7. To enter/change the name, press HOLD and enter the new name. Press HOLD.
8. Enter the group number. Press HOLD, then using the dial pad, select the group number to be assigned. The display flashes the saved telephone number - press HOLD.You can now change the telephone number, then press HOLD. At the ENTER REGIST MEMORY display, press HOLD. Select the new memory number to be used for the number and press HOLD. If the memory number selected was already defined, press Soft Key 3 to overwrite the current information or press Soft Key 4 to cancel and allow you to select a new memory number. You can now select a new entry to edit or press CONF to back up the displayed window.

```
TLBK1   :NEW REGIST
N:ABC
G:
```

Registering a LND to the Center Telephone Book

While reviewing the Last Number Dialed (LND) list, a user can add a record into the Center Telephone Book with the following operation. This function can only be performed if the Center Telephone Book is unlocked.

1. From an idle keyset, press Soft Key 1 for List.
2. Press Soft Key 1 for Redial.
3. Use the Arrow Up and Arrow Down Soft Keys to display the desired LND record.
4. Press Soft Key 3 for Store.
5. Press Soft Key 3 for TELBK.

```
REDIAL-01
*                    2035551234
OneT    ABB    TELBK
```

6. *If 2 Telephone Books are defined in Program 15-19-01 and 15-19-02:*
   Press Soft Key 1 or 2 to select the Telephone Book in which the number should be stored.

```
REDIAL-01
*                    2035551234
TLBK1   TLBK2
```

7. To enter/change the name, press HOLD and enter the new name. Press HOLD.
8. Enter the group number. Press HOLD, then using the dial pad, select the group number to be assigned. The display flashes the saved telephone number - press HOLD.You can now change the telephone number, then press HOLD. At the ENTER REGIST MEMORY display, press HOLD. Select the new memory number to be used for the number and press HOLD. If the memory number selected was already defined, press Soft Key 3 to overwrite the current information or press Soft Key 4 to cancel and allow you to select a new memory number. You can now select a new entry to edit or press CONF to back up the displayed window.

```
TLBK1   :NEW REGIST
N:ABC
G:
```

SETTINGS

Changing the Group Name

1. From an idle keyset, press the PROG Soft Key. then press the DOWN ARROW Soft Key twice.

   TELBK is displayed on Soft Key 1.

2. Press the TELBK Soft Key. The display indicates the following:

```
1:REGIST      2:SEARCH
3:SETTING     4:DeleteAll
1:            2:        3:        4:
```

3. Press Soft Key 3 for Setting.

   Pressing the CONF key from this screen on will back up the view to the previous screen.

```
[SETTING]

GrpNameEdit   LOCK    PWD
```

4. *If 2 Telephone Books are defined in Program 15-19-01 and 15-19-02:*
   Press Soft Key 1 or 2 to select the Telephone Book to edit.

```
[SELECT TELBK]

TLBK1    TLBK2
```

5. Press Soft Key 1 for Group Name Edit.
6. Using the dial pad, select the Group number.

```
TLBK1:SELECT GROUP
1:GROUP1      2:GROUP2
3:GROUP3      4:GROUP4
```

7. Enter the new name to be stored and press HOLD.

```
TLBK1:GRP NAME            [A]
Group 01<
NUM  ←        →
```

8. The display indicates "REGISTERED!" then returns to the Select Group display.

```
TLBK1:SELECT GROUP
1:GROUP1      2:GROUP2
3:GROUP3      4:GROUP4
```

9. You can now edit another group name, press CONF to return to the previous menu display, or press CLEAR to exit.

Locking/Unlocking a Telephone Book

Locking a Telephone Book will prevent any changes to it until the book is unlocked.

1. From an idle keyset, press the PROG Soft Key. then press the DOWN ARROW Soft Key twice.
   TELBK is displayed on Soft Key 1.
2. Press the TELBK Soft Key. The display indicates the following:

```
1:REGIST      2:SEARCH
3:SETTING     4:DeleteAll
1:        2:      3:      4:
```

3. Press Soft Key 3 for Setting.
   Pressing the CONF key from this screen on will back up the view to the previous screen.

```
[SETTING]

GrpNameEdit   LOCK   PWD
```

4. Press Soft Key 3 for Lock.
5. Using the dial pad, select the Group number.
   If the Telephone Book is unlocked:

```
[LOCK TELBOOK]
INPUT PWD:4DIGIT
      <
```

   If the Telephone Book is locked:

```
[UNLOCK TELBOOK]
INPUT PWD:4DIGIT
      <
```

6. Enter the password as defined Program 15-19-07 (default: 0000).
   If the Telephone Book is locked:

```
THE TELBOOK IS LOCKED
```

   If the Telephone Book is unlocked:

```
THE TELBOOK IS UNLOCKED
```

7. You can now press CONF to return to the previous menu display or press CLEAR to exit.

Lock/Unlock a Telephone Book Using a Service Code

1. Press the CALL key.
2. Enter the Lock Telephone Book service code (Program 11-11-56).
3. Enter the destination extension number.
4. Enter the extension's password defined in Program 15-19-07.

Edit the Password for Locking/Unlocking a Telephone Book

Locking a Telephone Book will prevent any changes to it until the book is unlocked. This operation changes the password a user would enter to lock/unlock the Telephone Book.

1. From an idle keyset, press the PROG Soft Key. then press the DOWN ARROW Soft Key twice.

   TELBK is displayed on Soft Key 1.

2. Press the TELBK Soft Key. The display indicates the following:

```
1:REGIST      2:SEARCH
3:SETTING     4:DeleteAll
1:        2:      3:      4:
```

3. Press Soft Key 3 for Setting.

   Pressing the CONF key from this screen on will back up the view to the previous screen.

```
[SETTING]

GrpNameEdit   LOCK   PWD
```

4. Press Soft Key 4 for Password.
5. Using the dial pad, enter the current password as defined Program 15-19-07 (default: 0000).

```
[CHANGE PWD]
INPUT PWD:4DIGIT
****  <
```

6. Enter the new 4-digit password.

```
[CHANGE PWD]
INPUT NEW PWD:4DIGIT
****  <
```

7. The display indicates NEW PASSWORD IS SET and then returns to the following display:

```
[SETTING]

GrpNameEdit   LOCK   PWD
```

8. You can now press CONF to return to the previous menu display or press CLEAR to exit.

Aspire S	Aspire M/L/XL
• Available - 8 trunks.	• Available - 200 trunks.
• Additional trunk ring tones available.	• Additional trunk ring tones added with software 1.02+.
• Defining CODEC Filter settings available.	• Defining CODEC Filter settings available with software 1.04+.
• Sidetone Volume Setup available.	• Sidetone Volume Setup added in 1.04+ software.
• Flexible Ringing by Caller ID requires software 4.93+.	• Flexible Ringing by Caller ID requires software 4.93+.

Description

The system provides flexible routing of incoming CO (trunks) calls to meet the exact site requirements. This lets trunk calls ring and be answered at any combination of system extensions. For additional information on making trunk ring, refer to the Ring Group feature.

Delayed Ringing

Extensions in a Ring Group can have delayed ringing for trunks. If the trunk is not answered at its original destination, it rings the DIL No Answer Ring Group (this ring group applies to DIL or non-DIL trunks). This could help a secretary that covers calls for their boss. If the boss doesn't answer the call, it rings the secretary's phone after a programmable interval.

Universal Answer

Universal Answer allows an employee to answer a call by going to any keyset and dialing a unique Universal Answer code. The employee doesn't have to know the trunk number or dial any other codes to pick up the ringing trunk. You'll normally set up Universal Answer along with Universal Night Answer (see "Night Service"). When a Universal Night Answer call rings the External Paging, an employee can answer the call from the first available phone. You might also want to use Universal Answer in a noisy warehouse or machine shop where the volume of normal telephone ringing is not adequate. After hearing the ringing over the Paging, an employee can then easily pick up the call from a shop phone. See "Night Service" for more on Universal Night Answer.

The Automatic Answer of Universal Answer Calls option (Program 20-10-07) determines whether or not the extension has the Auto Answer feature for ringing calls. This option allows a user to simply lift the handset to answer a ringing call; they no longer need to dial the service code.

Display Reason for Transfer

When incoming DID, DISA, DIL or ISDN calls are transferred to another extension or ring group due to a Call Forward or DND setting, the reason for the transfer can be displayed on the phone receiving the transferred call. The extension user can then recognize why they are receiving the call. This feature requires a display telephone in order to view the message.

Additional Trunk Ring Tones

Additional options have been added for the ring tone patters for an incoming call. Previously, in Program 22-03 the system provided ring tone patterns 1-4. With software 1.02 and higher, Melody 1 - Melody 5 are now available as well.

CODEC Filter Data Setup Program Added

When **Program 81-07-01 : CODEC Filter Setup for Analog Trunk Ports** is set to "4 - Specified Data", the system will use the settings in **Program 81-09 : COIU CODEC Filter Data Setup**.

These values should not be changed from their default settings unless directed by NEC'S Technical Service department.

The side tone of the COIU is adjusted using all 16 values, however, special software is required in order to compute these values. The setting is not proportional to the gain level. To change these values, contact NEC's Technical Service department for assistance.

Sidetone Volume Setup

A new option has been added to allow the system programming for the keyset side tone volume. There are two levels, based on whether the connected trunk is a digital trunk or analog trunk.

Flexible Ringing by Caller ID

The Flexible Ringing by Caller ID feature provides several different options for rerouting calls based on the Caller ID received.

- **Reject/Reroute "Private" Caller ID Calls**
  When an analog or ISDN trunk call is received with "Private" Caller ID information, the system can reject the call by playing a VRS message or it can route the call to an alternative extension or incoming ring group programmed in Program 22-18-01.

- **Reject/Reroute Based on Entry in ABB Table**
  When an analog, ISDN or IP trunk call is received with regular Caller ID information, the system can reject the call by playing a VRS message if the Caller ID number matches the ABB group number programmed in Program 22-16-01 and ABB entry in Programs 13-02-01 and 13-04-01.

  The analog, ISDN or IP trunk call can also be routed to an alternative extension or incoming ring group if the Caller ID number matches the common ABB table (Program 13-04).

Programming Examples for Flexible Ringing by Caller ID:

- To refuse the "Private" Caller ID incoming call:
  Program 14-01-27: 1 (reject)
  Program 22-18-01: 0 (no transfer)
  Program 40-10-06: 2 (VRS message 2)
  Then turn on the Private Call Refuse mode using the service code (Program 11-10-32) or Programmable Function Key (code 86).

- To transfer the "Private" Caller ID incoming call to extension 301 as ring pattern 2:
  Program 14-01-27: 1 (reject)
  Program 22-18-01: 1 (extension number)
  Program 22-18-02: 301 (extension 301)
  Program 22-18-03: 2 (ring pattern 2)
  Then turn on the Private Call Refuse mode using the service code (Program 11-10-32) or Programmable Function Key (code 86).

- To transfer the "Private" Caller ID incoming call to incoming ring group 2 as ring pattern 3:
  Program 14-01-27: 1 (reject)
  Program 22-18-01: 2 (incoming ring group)
  Program 22-18-02: 2 (group 2)
  Program 22-18-03: 3 (ring pattern 3)
  Then turn on the Private Call Refuse mode using the service code (Program 11-10-32) or Programmable Function Key (code 86).

- To reject the call with "2039261111" Caller ID incoming call:
  Program 14-01-27: 1 (reject)
  Program 22-16: 64 (ABB group 64)
  Program 13-02; Group 64: 1000 - 1099
  Program 13-04-01; Table 1000: 2039261111
  Then turn on the Caller ID Refuse mode using the service code (Program 11-10-34) or Programmable Function Key (code 87).

- To transfer the call with "2039261111" Caller ID incoming call to extension 301 as ring pattern 1:
  Program 13-04-01: 2039261111
  Program 13-04-03: 1 (extension number)
  Program 13-04-04: 301 (extension 301)
  Program 13-04-05: 1 (tone pattern 1)

- To transfer the call with "2039261111" Caller ID incoming call to incoming ring group 2 as ring pattern 2:
  Program 13-04-01: 2039261111
  Program 13-04-03: 2 (incoming ring group)
  Program 13-04-04: 2 (group 2)
  Program 13-04-05: 2 (tone pattern 2)

Notes:

- Caller ID Matching
  The system compares the Caller ID and programmed ABB dial and allows/denies as indicated below.

Caller ID	ABB Dial	Result
2039261111	2039261111	Matched
2039261111	20392611119	Matched
2039261111	203	Matched
9261111	2039261111	Unmatched
2039261111	9261111	Unmatched

- The ABB dial table is searched from the starting number and the first match result is used.
- The maximum number of VRS message channels that can be used simultaneously is 16 (Aspire M/L/XL) and 8 (Aspire S).
- With ISDN trunks, the unrestricted digital call can not use this feature.
- This feature does not work with incoming trunk calls via Networking (from the other system). In this case, the refuse/routing program must be programmed in the system that has those trunks. Routing to the other system's extension is available.

Conditions

None

Default Setting

Enabled.

Programming

- **10-03-03 : PCB Setup, For SLIU Unit - Transmit CODEC Gain Type**
  10-03-04 : PCB Setup, For SLIU Unit - Receive CODEC Gain Type
  Customize the transmit and receive levels of the CODEC Gain Types for 500/2500 type single line telephones.
- **10-08-01 : Pre-Ringing Setup**
  Enable (1) or disable (0) pre-ringing for outside calls. This setting affects all system trunks.
- **11-10-32 : Service Code Setup (for System Administrator) - Set Private Call Refuse**
  Define the service code to be used to set the "Private" call refusal for the trunks which are programmed in Program 14-01-27 to 1.
- **11-10-33 : Service Code Setup (for System Administrator) - Enter Caller ID Refuse**
  For keysets only, define the service code to be used to add or delete the Caller ID numbers to be refused.
- **11-10-34 : Service Code Setup (for System Administrator) - Set Caller ID Refuse**
  Define the service code to be used to enable/disable the Caller ID call refusal for the trunks which are programmed in Program 14-01-27 to 1.
- **11-11-13 : Service Code Setup (for Setup/Entry Operation) - Display Language Selection for Keyset**
  Select the service code which can be used at an extension to change the displayed language on a keyset's display (default: 178).
- **11-11-37 : Service Code Setup (for Setup/Entry Operation) - Adjusting Ring Volume**
  If required, change the service code used to adjust the ringing volume for CO and ICM calls (829).
- **11-12-30 : Service Code Setup (for Service Access) - Specified Trunk Answer**
  If required, redefine the service code used to answer a specific trunk which is either ringing or on hold (default: 172).
- **13-04-03 : Abbreviated Dialing Number and Name - Transfer Mode/Deesintation Number**
  When using Flexible Ringing by Caller ID, use this program to determine how the incoming call should be handled (0=not defined, 1=rings an internal number, or 2=rings an incoming ring group).
  If this option is set to 1 or 2, then determine the number or ring group to be dialed. With internal dial (1), enter the digits to be dialed (up to 24 including 0-9, *, #, P, R, @). With the ring group (2), enter the ring group to which the call should be sent.
  ➪ Aspire S Ring Groups: 1-8, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
  ➪ Aspire Ring Groups: 1-100, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
- **13-04-05 : Abbreviated Dialing Number and Name - Incoming Ring Pattern**
  Determine the ring pattern to be used (0 = normal pattern, 1-4 = tone pattern 1-4, 5-9 = scale pattern 1-5) for Caller ID Refusal. The definition of the tone pattern is the same as Program 22-03.
- **14-01-02 : Basic Trunk Data Setup - Transmit CODEC Gain Type**
  14-01-03 : Basic Trunk Data Setup - Receive CODEC Gain Type
  Customize the transmit and receive levels of the CODEC Gain Types for each trunk.
- **14-02-02 : Analog Trunk Data Setup - Ring Detect Type**
  For each trunk, enable delayed ringing (0) or immediate ringing (1).

- **14-05-01 : Trunk Groups**
  For Universal Answer, assign trunks to trunk groups then go to Program 14-06 below to set up Trunk Group Routing.
  - Aspire S Trunk Groups: 1-8
  - Aspire Trunk Groups: 1-100
- **14-06-01 : Trunk Group Routing**
  For Universal Answer, set up trunk routes and then go to Program 23-03 below to assign the trunk routes to extensions. An extension user can use Universal Answer to answer a call if the ringing trunk is in its assigned route.
  - Aspire S Trunk Group Routes: 1-8
  - Aspire Trunk Group Routes: 1-100
- **14-07-01 : Trunk Access Map Setup**
  Set up the Trunk Access Maps. This sets the access options for trunks. Ring Group programming overrides Access Map programming.
  - Aspire S: Trunk Access Maps 1-8
  - Aspire: Trunk Access Maps 1-200
- **14-01-27 : Basic Trunk Data Setup - Caller ID Refuse Setup**
  This program defines if the system rejects a trunk call (0=does not reject the call, 1 = rejects the call) and plays a VRS message based on the Caller ID information received. This option is set on a per trunk basis.
  - Aspire S Trunks: 1-8
  - Aspire M/L/XL Trunks: 1-200
- **15-01-05 : Basic Extension Data Setup - Restriction for Outgoing Disable on Incoming Line**
  Enable (1) or disable (0) supervised dial detection for an extension.
- **15-02-01 : Multi-Line Telephone Basic Data Setup**
  Select the language which should be used on a keyset's display (0 = Japanese, 1 = English, 2 = German, 3 = French, 4 = Italian, 5 = Spanish, 6 = Dutch, 7 = Portuguese, 8 = Norwegian, 9 = Danish).
- **15-02-02 : Multi-Line Telephone Basic Data Setup - Trunk Ring Tone**
  Trunks ring extensions according to the Ring Tone Range selected in 22-03 and the settings made with either Service Code 820 or Program 15-02-02. Also see Program 22-03.
- **15-02-22 : Multi-Line Telephone Basic Data Setup, Multiple Incoming From Intercom and Trunk**
  When this option is set to '0' (disabled), incoming calls to an extension will indicate on any Hotline keys for that extension as solid (busy). When this option is set to '1' (enabled), lamping is determined by the setting of Program 22-01-01 Incoming Call Priority. If set to trunk priority (1), the Hotline key will lamp solid when a trunk call rings in. If set to intercom priority (0), the Hotline key will not lamp for incoming trunk calls, but will lamp solid for intercom calls.
- **15-02-10 : Multi-Line Telephone Basic Data Setup - Ringing Line Preference for Trunk Calls**
  Use this option to select between Idle (0) and Ringing Line Preference (1) for trunk calls.
- **15-03-03 : Single Line Telephone Basic Data Setup - Terminal Type**
  Enter 1 for this option to allow a single line port to receive DTMF tones after the initial call setup. Enter 0 to have the port ignore DTMF tones after the initial call setup. For Voice Mail, always enter 1 (e.g., receive DTMF tones).
- **15-06-01 : Trunk Access Map for Extensions**
  Assign Trunk Access Maps to extensions.
  - Aspire S: Trunk Access Maps 1-8
  - Aspire: Trunk Access Maps 1-200

- **15-07-01 : Programming Function Keys**
  To have outside calls ring specific keys, assign trunks to line keys (code *01 + trunk). You can also program function keys as trunk group or loop keys (*02 or *05). For additional loop key data, enter 0 (incoming only), 1 (outgoing only) or 2 (both ways).Use a Call Redirect key (49) to allow a user to transfer a call to another extension or voice mail without answering the call. Also, if needed, define keys for Private Call Refuse (86) or Caller ID Refuse (87) keys. When either of these keys is enabled by the user, "Private" or "Caller ID Number Refusal" will be activated for the trunks set to "1" in Program 14-01-27.
  ➪ Aspire S: Trunks 1-8
  ➪ Aspire: Trunks 1-100
- **15-13-01 : Loop Keys - Outgoing**
  Assign trunk groups for outgoing loop keys (0=ARS, Aspire S Trunk Groups 1-8, or Aspire Trunk Groups 1-100).
- **15-13-02 : Loop Keys - Incoming**
  Assign trunk groups for incoming loop keys (0=all Trunk Groups, Aspire S Trunk Groups 1-8, or Aspire Trunk Groups 1-100).
- **20-02-09 : System Options for Multi-Line Telephones - Disconnect Supervision**
  Enable (1) disconnect supervision for the system.
- **20-06-01 : Class of Service for Extensions**
  For Universal Answer, assign a Class of Service (1-15) to an extension that enables Program 20-10-07.
- **20-07-24 : Class of Service Options - Set/Cancel Private Call Refuse**
  In an extension's Class of Service, enable (1) or disable (0) the extension's ability to use the Private Call Refuse service code or function key.
- **20-07-25 : Class of Service Options - Set/Cancel Caller ID Refuse**
  In an extension's Class of Service, enable (1) or disable (0) the extension's ability to use the Caller ID Refuse service code or function key.
- **20-10-07 : Class of Service Options (Answer Service) - Automatic Answer of Universal Calls**
  In an extension's Class of Service, enable (1) or disable (0) the extension's ability to use Auto-Answer to pick up Universal Answer calls. This allows a user to simply pick up the handset instead of dialing a service code.
- **20-13-13 : Class of Service Options (Supplementary Service) - Continued Dialing**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to use Continued Dialing which allows DTMF signal sending while talking on extension.
- **20-13-23 : Class of Service Options (Supplementary Service) - Display the Reason for Transfer**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to display the Reason for Transfer message.
- **21-01-15 : System Options for Outgoing Calls - Outgoing Disable on Incoming Line**
  Enable (1) or disable (0) the Outgoing Disable on Incoming Line feature.
- **21-01-16 : System Options for Outgoing Calls - Supervise Dial Detection Timer**
  With the Outgoing Disable on Incoming Line feature, if dial tone is not detected after the extension answers an incoming line, the system determines the call is unable to complete and releases the DTMF receiver (0-64800 Seconds).
- **21-01-17 : System Options for Outgoing Calls - Restriction Digit in Outgoing Disable on Incoming Line**
  With the Outgoing Disable on Incoming Line feature, determine the number of digits (0-9) to be dialed before the call should be disconnected.
- **22-01-01 : System Options for Incoming Calls, Incoming Call Priority**
  Use this option to determine if intercom calls or trunk calls have answer priority when both are ringing simultaneously (0=intercom call priority, 1=trunk call priority). Refer to Program 15-02-22 for lamping conditions.

- **22-01-02 : System Options for Incoming Calls - Incoming Call Ring No Answer Alarm**
  Enable (1) or disable (0) the Incoming Call RNA Alarm. If enabled, the ring cadence will change for a call that rings longer than the interval set in 22-01-03.
- **22-01-03 : System Options for Incoming Calls - Ring No Answer Alarm Time**
  Set the Ring No Answer Alarm interval (0-64800 seconds). If a trunk rings a keyset longer than this interval, the system changes the ring cadence.
- **22-01-04 : System Options for Incoming Calls - DIL No Answer Time**
  If an incoming trunk call rings longer than this interval, it reroutes to the Ring Group set in Program 22-08.
- **22-02-01 : Incoming Call Trunk Setup**
  Select the trunk type (0=normal, 1=VRS, 2=DISA, 3=DID, 4=DIL, 5=E&M tie line, 6=delayed DID, 7=ANI/DNIS) for each trunk at each time mode (1-8).
- **22-03-01 : Trunk Ring Tone Range**
  Assign Ring Tone Ranges to trunks. Customize the tones within each Ring Tone Range in 82-01. Trunks ring extensions according to the Ring Tone Range selected in 22-03 and the settings made with either Service Code 820 or Program 15-02-02.
- **22-04-01 : Incoming Extension Ring Group Assignment**
  To have trunks ring extensions, assign extensions to ring groups. For each extension in the Ring Group, indicate in Program 22-06 if trunks should ring (1) or not ring (0).
  ➪ Aspire S Ring Groups: 1-8, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
  ➪ Aspire Ring Groups: 1-100, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
- **22-05-01 : Incoming Trunk Ring Group Assignment**
  To have the trunks ring extensions, assign trunks to a Ring Group. The incoming ring group assignment programmed in 41-03-01 overrides the setting in this program.
- **22-06-01 : Normal Incoming Ring Mode**
  Indicate whether the trunks in the Ring Group assigned in 22-04 should ring (1) or not ring (0).
- **22-07-01 : DIL Assignment**
  Assign the destination extension or Department Call Group pilot number (as assigned in 11-07-01) for each DIL incoming trunk (001-200).
- **22-08-01 : DIL/IRG No Answer Destination**
  If an incoming trunk call rings longer than the DIL No Answer Time (Program 22-01-04), it routes to the destination you specify in this option. Determine if the destination should be a Ring Group, In-Skin/External Voice Mail, or Central Voice Mail.
  ➪ Aspire S Ring Groups: 1-8, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
  ➪ Aspire Ring Groups: 1-100, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
- **22-16-01 : Private Call Refuse Target Area Setup**
  This program defines the ABB group number for Private Call Refuse (0 = No Setting or ABB Group Number)
  ➪ Aspire S: ABB Group Number 1 – 9
  ➪ Aspire: ABB Group Number 1 – 64
- **22-18-01 : Private Call Assignment Setup - Transfer Mode**
  When using Flexible Ringing by Caller ID, use this program to determine whether the call plays the VRS message (0), rings an internal number (1), or rings an incoming ring group (2).
- **22-18-02 : Private Call Assignment Setup - Transfer Mode**
  If Program 22-18-01 is set to 1 or 2, use this program to determine the number or ring group to be dialed. With internal dial (1), enter the digits to be dialed (up to 24 including 0-9, *, #, P, R, @). With the ring group (2), enter the ring group to which the call should be sent.
  ➪ Aspire S Ring Groups: 1-8, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
  ➪ Aspire Ring Groups: 1-100, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail

- **22-18-03 : Private Call Assignment Setup - Incoming Ring Pattern**
  Determine the ring pattern to be used (0 = normal pattern, 1-4 = tone pattern 1-4, 5-9 = scale pattern 1-5) for a "Private" Caller ID call. The definition of the tone pattern is the same as Program 22-03.
- **23-03-01 : Universal Answer/Auto Answer**
  For Universal Answer, assign trunk routes set in Program 14-06 to extensions. An extension user can use Universal Answer to answer a call if the ringing trunk is in its assigned route.
  ➪ Aspire S Trunk Group Routes: 1-8
  ➪ Aspire Trunk Group Routes: 1-100
- **40-10-06 : Voice Announcement Service Option - Set VRS Message for Private Call Refuse**
  Use this option to assign the VRS message number to be played when Private Call Refuse is enabled for a call with "Private" Caller ID information (0 = Does not play message, 1-49 = VRS message number to play).
- **40-10-07 : Voice Announcement Service Option - Set VRS Message for Caller ID Refuse**
  This item assigns the VRS message number to be used as the Caller ID Refuse message when the Caller ID number matches the entry in Program 22-16 (0 = Does not play message, 1-49 = VRS message number to play).
- **81-09-01 : COIU CODEC Filter Data Setup**
  The system will use the settings in this program when **Program 81-07-01 : CODEC Filter Setup for Analog Trunk Ports** is set to "4 - Specified Data". These values should not be changed from their default settings unless directed by NEC's Technical Service department.

  The side tone of the COIU is adjusted using all 16 values, however, special software is required in order to compute these values. The setting is not proportional to the gain level. To change these values, contact NEC's Technical Service department for assistance.
- **82-01-01 : Incoming Ring Tone**
  Customize the ring tones within each Ring Tone Range. Assign Ring Tone Ranges to trunks in 22-03. Trunks ring extensions according to the Ring Tone Range selected in 22-03 and the user settings made with Service Code 820.
- **82-08-01 : Sidetone Volume Setup**
  Use this program to adjust of the keyset side tone volume. There are two levels, based on whether the connected trunk is a digital trunk or analog trunk.
- **82-09-01 : SLIU CODEC Filter Data Setup**
  The system will use the settings in the new **Program 82-09 : SLIU CODEC Filter Data Setup** when **Program 82-07-01 : CODEC Filter Setup for Analog Station Ports** is set to "4 - Specified Data". These values should not be changed from their default settings unless directed by NEC's Technical Service department.

  The side tone of the COIU is adjusted using all 16 values, however, special software is required in order to compute these values. The setting is not proportional to the gain level. To change these values, contact NEC's Technical Service department for assistance.

Related Features

Automatic Call Distribution (ACD)
The incoming ring group assignment programmed in 41-03-01 overrides the setting in Program 22-05-01.

Central Office Calls, Answering Call Forward/DID/DIL/DISA/Do Not Disturb/ISDN
The Reason for Transfer option should be set for each type of trunk which will use the Reason for Transfer message.

Directed Call Pickup/Group Call Pickup
Using these features, ringing calls can be picked up regardless of access map programming.

Direct Inward Line
Direct Inward Lines ring an extension directly, without Ring Group or Access Map programming.

Line Preference
An extension user can answer an outside call just by lifting the handset.

Long Conversation Cutoff/Warning Tone for Long Conversation
Long Conversation Cutoff can disconnect incoming and outgoing CO calls after a set time period. Using the Warning Tone for Long Conversation feature allows users on outgoing calls to hear a warning tone prior to the call disconnecting.

Microphone Cutoff
In order to mute the handset transmitter, set up a Microphone Cutoff Programmable Function Key.

Night Service
Use Universal Answer to pick up Universal Night Answer calls.

Programmable Function Keys
Line keys and loop keys simplify answering outside calls.

Selectable Text Messaging
If the Absent text message has been set by the originating extension, the destination extension will display the assigned text message instead of the Reason for Transfer message.

Operation

To answer an incoming trunk call:

1. Lift handset.
2. At keyset, press flashing line key.

   If you don't have a line or loop key for a trunk call ringing your phone, it rings an idle CALL key.

   If you have Ringing Line Preference, lifting the handset answers the call.

   You can dial after answering the call. This allows you, for example, to respond to computer-generated incoming calls.

   OR

1. If you know the specific line number, dial 172 + Line number (001-200).

To use Universal Answer to answer a call ringing over the Paging system:

1. At keyset, press idle CALL key.

   OR

   At single line set, lift handset.

   Depending on system programming, this may answer the call and you can skip Step 2.
2. Dial #0.

   If you hear error tone, your extension's Class of Service prevents Universal Answer.

To listen to the incoming trunk ring choices (keyset only):

1. Press idle CALL key.
2. Dial 811 + 2.
3. Select the ringing (1-8) and tone range (1-4) you want to check.
4. Go back to step 3 to listen to additional choices or press SPK to hang up.

To change the pitch of your incoming trunk ring (keyset only):

1. Press idle CALL key.
2. Dial 820 + 2.
3. Select the ringing (1-8).
4. Press SPK to hang up.

Aspire S	Aspire M/L/XL
• Available - 8 trunks.	• Available - 200 trunks.
• Additional trunk ring tones added with 1.02+.	• Additional trunk ring tones added with 1.02+.
• Trunk Port Disable feature available.	• Trunk Port Disable feature available with software 1.00+.
• Defining CODEC Filter settings available.	• Defining CODEC Filter settings available with software 1.04+.
• Sidetone Volume Setup available.	• Sidetone Volume Setup added in 1.04+ software.

Description

The system provides flexibility in the way each extension user can place outgoing trunk calls. This lets you customize the call placing options to meet site requirements and each individual's needs. A user can place a call by:

- Pressing Line Keys or "Loop Keys"
- Pressing a Trunk Group (i.e., loop) key
- Pressing a Trunk Group Routing (dial 9) key
- Dialing a code for a specific trunk (#9 + the trunk number)
- Dialing a code for a Trunk Group (804 + group number)
- Dialing a code for Trunk Group Routing or ARS (9)
- Dialing an Alternate Trunk Route Access Code (which you must define)

Trunk Port Disable

The system provides a service code (Default: 145) which can be used by an extension user to block a trunk for outgoing calls. The user which busied out the trunk will still have access to it. All other users will be blocked from seizing it to place an outgoing call. The trunk, however, can still be answered by any users programmed with the trunk access.

Additional Trunk Ring Tones

Additional options have been added for the ring tone patters for an incoming call. Previously, in Program 22-03 the system provided ring tone patterns 1-4. With software 1.02 and higher, Melody 1 - Melody 5 are now available as well.

CODEC Filter Data Setup Program Added

When **Program 81-07-01 : CODEC Filter Setup for Analog Trunk Ports** is set to "4 - Specified Data", the system will use the settings in **Program 81-09 : COIU CODEC Filter Data Setup**.

These values should not be changed from their default settings unless directed by NEC'S Technical Service department.

The side tone of the COIU is adjusted using all 16 values, however, special software is required in order to compute these values. The setting is not proportional to the gain level. To change these values, contact NEC's Technical Service department for assistance.

Sidetone Volume Setup

A new option has been added to allow the system programming for the keyset side tone volume. There are two levels, based on whether the connected trunk is a digital trunk or analog trunk.

Conditions

(A.) The system provides analog trunk CO service via COIU PCBs. COIU PCBs can connect to either loop start or ground start CO lines. Refer to the system hardware manual for additional details.

(B.) Analog Trunk (COIU) PCBs do not require circuit type programming.

Default Setting

Enabled.

Programming

- **10-03-03 : PCB Setup, For SLIU Unit - Transmit CODEC Gain Type**
  10-03-04 : PCB Setup, For SLIU Unit - Receive CODEC Gain Type
  Customize the transmit and receive levels of the CODEC Gain Types for 500/2500 type single line telephones.
- **11-01-01 : System Numbering**
  Set up a Service Code for Alternate Trunk Route Access.
- **11-09-01 : Trunk Access Code**
  If required, change the single-digit Trunk Access Code (normally 9). If you change this code, you must also review the settings in 11-01 for the new code selected.
- **11-09-02 : Trunk Access Code - Alternate Trunk Route Access Code**
  Assign the Service Code set up in 11-01 for Alternate Trunk Route Access.
- **11-10-27 : Service Code Setup (for System Administrator) - Trunk Port Disable**
  Define the service code which should be used by an extension user to block a trunk from being used for outgoing calls (Default: 145).
- **11-11-13 : Service Code Setup (for Setup/Entry Operation) - Display Language Selection for Keyset**
  Select the service code which can be used at an extension to change the displayed language on a keyset's display (default: 178).
- **11-12-01 : Service Code Setup (for Service Access)**
  To simplify placing calls, assign function keys for placing trunk calls: Trunk Group Routing/dial 9 keys (code 804).
- **14-01-01 : Basic Trunk Data Setup - Trunk Name**
  To make identifying calls easier, assign a name to each trunk.
- **14-01-02 : Basic Trunk Data Setup - Transmit CODEC Gain Type**
  14-01-03 : Basic Trunk Data Setup - Receive CODEC Gain Type
  Assign a CODEC Gain Type to each trunk. This sets the amount of gain (amplification) for the selected trunk.
- **14-01-07 : Basic Trunk Data Setup - Outgoing Calls**
  For each trunk, allow (1) or prevent (0) outgoing calls.
- **14-01-10 : Basic Trunk Data Setup - DTMF Tones for Outgoing Calls**
  For each trunk, enable (1) or disable (0) DTMF tones for outgoing trunk calls.
- **14-02-05 : Analog Trunk Data Setup - Dial Tone Detection for Directly Accessed Trunk**
  Use this option enable (1) or disable (0) dial tone detection for directly accessed trunks. If disabled, the system outdials on the trunks without monitoring for dial tone.

- **14-02-11 : Analog Trunk Data Setup - Next Trunk in Rotary if No Dial Tone**
  Use this option to enable (1) or disable (0) the system's ability to skip over a trunk if dial tone is not detected. This option pertains to calls placed using Loop Keys, Speed Dial, ARS, Last Number Redial or Save Number dialed. It does not pertain to line key or Direct Trunk Access calls.
- **14-02-14 : Analog Trunk Data Setup - Loop Start/Ground Start**
  Select loop start (0) or ground start (1) for the trunk.
- **14-05-01 : Trunk Groups**
  Assign trunks to Trunk Groups. You can also assign the outbound priority for trunks within the group. When users dial up the trunk group, they seize the trunks in the order you specify in the outbound priority entry.
  ➪ Aspire S: Trunks 1-8, Trunk Groups 1-8
  ➪ Aspire: Trunks 1-200, Trunk Groups 1-100
- **14-06-01 : Trunk Group Routing**
  Set up an outbound routing table for the trunk groups you assigned in Program 14-05. When users dial 9, the system routes their calls in the order (priority) you specify.
  ➪ Aspire S: Trunk Routing Table 1-8
  ➪ Aspire: Trunk Routing Table 1-100
- **14-07-01 : Trunk Access Map Setup**
  Set up the Trunk Access Maps. This sets the access options for trunks.
  ➪ Aspire S: Trunk Access Maps 1-8
  ➪ Aspire: Trunk Access Maps 1-200
- **15-02-01 : Multi-Line Telephone Basic Data Setup**
  Select the language which should be used on a keyset's display (0 = Japanese, 1 = English, 2 = German, 3 = French, 4 = Italian, 5 = Spanish, 6 = Dutch, 7 = Portuguese, 8 = Norwegian, 9 = Danish).
- **15-02-08 : Multi-Line Telephone Basic Setup - Automatic Handsfree**
  Determine whether or not an extension should have automatic handsfree by pressing a line or one-touch key (1) or if this operation only preselects a line or one-touch key for use (0).
- **15-03-03 : Single Line Telephone Basic Data Setup - Terminal Type**
  Enter 1 for this option to allow a single line port to receive DTMF tones after the initial call setup. Enter 0 to have the port ignore DTMF tones after the initial call setup. For Voice Mail, always enter 1 (e.g., receive DTMF tones).
- **15-06-01 : Trunk Access Map for Extensions**
  Assign Trunk Access Maps to extensions.
  ➪ Aspire S: Trunk Access Maps 1-8
  ➪ Aspire: Trunk Access Maps 1-200
- **15-07-01 : Programming Function Keys**
  To simplify placing calls, assign function keys for placing trunk calls: Line keys (code *01 + trunk), Trunk Group keys (code *02 + group), Loop keys (code *05 + enter 0 (incoming only), 1 (outgoing only) or 2 (both ways)).
  ➪ Aspire S: Trunks 1-8
  ➪ Aspire: Trunks 1-200
- **15-13-01 : Loop Keys - Outgoing**
  Assign trunk groups for outgoing loop keys (0=ARS, Aspire S Trunk Groups 1-8, or Aspire Trunk Groups 1-100).
- **15-13-02 : Loop Keys - Incoming**
  Assign trunk groups for incoming loop keys (0=all Trunk Groups, Aspire S Trunk Groups 1-8, or Aspire Trunk Groups 1-100).
- **20-02-06 : System Options for Multi-Line Telephones - Preselection Time**
  Set the preselection interval (0-64800 seconds). When a keyset user preselects a line key, the system remembers the preselection for this interval.

- **20-02-09 : System Options for Multi-Line Telephones - Disconnect Supervision**
  Enable (1) disconnect supervision for the system.
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to extensions.
- **20-07-12 : Class of Service Options (Administrator Level) - Trunk Port Disable**
  For each Class of Service (1-15), enable (1) or disable (0) an extension's ability to use the Trunk Port Disable feature.
- **20-08-02 : Class of Service Options (Outgoing Call Service) - Trunk Calls**
  In an extension's Class of Service, enable (1) or disable (0) trunk calling.
- **20-13-13 : Class of Service Options (Supplementary Service) - Continued Dialing**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to use Continued Dialing which allows DTMF signal sending while talking on extension.
- **21-01-03 : System Options for Outgoing Calls - Trunk Interdigit Time (External)**
  The system waits for this timer to expire before placing the call in a talk state (Call Timer starts after timer expires, Voice Over and Barge-In are not allowed until after timer expires). If set to "0", Voice Over and Barge In will not work for external calls. This timer affects CO and PRI outdialing. (0-64800 Seconds)
- **21-01-15 : System Options for Outgoing Calls - Outgoing Disable on Incoming Line**
  Enable (1) or disable (0) the Outgoing Disable on Incoming Line feature.
- **21-01-16 : System Options for Outgoing Calls - Supervise Dial Detection Timer**
  With the Outgoing Disable on Incoming Line feature, if dial tone is not detected after the extension answers an incoming line, the system determines the call is unable to complete and releases the DTMF receiver (0-64800 Seconds).
- **21-01-17 : System Options for Outgoing Calls - Restriction Digit in Outgoing Disable on Incoming Line**
  With the Outgoing Disable on Incoming Line feature, determine the number of digits (0-9) to be dialed before the call should be disconnected.
- **21-02-01 : Trunk Group Routing for Extensions**
  Assign Program 14-06 routes to extensions.
  ➪ Aspire S: Trunk Group Routes 1-8
  ➪ Aspire: Trunk Group Routes 1-100
- **21-15-01 : Alternate Trunk Route for Extensions**
  Designate the trunk route accessed when a user dials the Alternate Trunk Route Access Code. Refer to "Trunk Group Routing" to set up outbound routing.
  ➪ Aspire S: Trunk Group Routes 1-8
  ➪ Aspire: Trunk Group Routes 1-100
- **24-02-07 : System Options for Transfer - Forced Release for Trunk-to-Trunk Transfer**
  This timer will start when a trunk begins talking with another trunk (for example: trunk-to-trunk transfer, outgoing from trunk, Tandem Trunking) (0-64800).
- **81-01-01 : Analog Trunk Data Setup**
  Review the Analog Trunk Timers for compatibility with the connected telco.
- **81-09-01 : COIU CODEC Filter Data Setup**
  The system will use the settings in this program when **Program 81-07-01 : CODEC Filter Setup for Analog Trunk Ports** is set to "4 - Specified Data". These values should not be changed from their default settings unless directed by NEC'S Technical Service department.

  The side tone of the COIU is adjusted using all 16 values, however, special software is required in order to compute these values. The setting is not proportional to the gain level. To change these values, contact NEC's Technical Service department for assistance.
- **82-08-01 : Sidetone Volume Setup**
  Use this program to adjust of the keyset side tone volume. There are two levels, based on whether the connected trunk is a digital trunk or analog trunk.

➧ **82-09-01 : SLIU CODEC Filter Data Setup**
The system will use the settings in the new **Program 82-09 : SLIU CODEC Filter Data Setup** when **Program 82-07-01 : CODEC Filter Setup for Analog Station Ports** is set to "4 - Specified Data". These values should not be changed from their default settings unless directed by NEC'S Technical Service department.

The side tone of the COIU is adjusted using all 16 values, however, special software is required in order to compute these values. The setting is not proportional to the gain level. To change these values, contact NEC's Technical Service department for assistance.

Related Features

Alphanumeric Display/Call Timer
If the trunk name seize display is enabled in programming, Call Timer starts automatically after the user places a trunk call. Disabling the trunk name seize display also disables the Call Timer.

Automatic Route Selection
The system can automatically select the correct type of line to use based on the number dialed and the time.

Dial Tone Detection
Refer to this feature for the specifics on how the system handles Dial Tone Detection.

Handsfree
With Automatic Handsfree, an extension user can press a line key to place a trunk call without first lifting the handset or pressing SPK. Users without Automatic Handsfree can preselect a line key before lifting the handset or pressing SPK.

Long Conversation Cutoff/Warning Tone for Long Conversation
Long Conversation Cutoff can disconnect incoming and outgoing CO calls after a set time period. Using the Warning Tone for Long Conversation feature allows users on outgoing calls to hear a warning tone prior to the call disconnecting.

Loop Keys
Loop keys simplify placing Central Office Calls.

Microphone Cutoff
In order to mute the handset transmitter, set up a Microphone Cutoff Programmable Function Key. The MIC key will only mute the handsfree microphone.

Programmable Function Keys
Line keys and loop keys simplify placing outside calls.

Toll Restriction
An extension's Toll Class of Service may prevent them from dialing certain numbers.

Trunk Group Routing
Trunk Group Routing sets outbound call routing options for users that dial the Trunk Group Routing code (9) for trunk calls.

Trunk Groups
Use trunk group programming to set the order in which users access trunks within a specific trunk group.

Operation

To place a call over a trunk group:

1. At keyset, press idle CALL key.
   OR
   At single line set, lift handset.
2. Dial 804.
3. Dial line group number (Aspire S: 1-8, Aspire: 1-9 or 001-100).
4. Dial number.
   OR
1. At keyset, press trunk group key (PGM 15-07 or SC 851: *02 + group).
   Also see the "Loop Keys" feature.
2. Dial number.

To place a call using Trunk Group Routing:

1. At keyset, press idle CALL key.
   OR
   At single line set, lift handset.
2. Dial 9.
   If your system has an Alternate Trunk Route Access code, you may dial that instead.
3. Dial number.
   OR
1. At keyset, press Trunk Group Routing key (PGM 15-07 or SC 852: *05).
   Also see the "Loop Keys" feature.
2. Dial number.

To place a call over a specific trunk:

1. At keyset, press idle CALL key.
   OR
   At single line set, lift handset.
2. Dial #9 .
3. Dial line number (e.g., 005 for line 5).
4. Dial number.
   OR
1. At keyset, press line key (PGM 15-07 or SC 852: 001 to 200).
   Also see the "Loop Keys" feature.
2. Dial number.

To Busy Out a Trunk from Outbound Usage:

1. CALL1 + 145 + trunk number (001-200) + 1.
   The user which busied out the trunk will still have access to it. All other users will be blocked from seizing it to place an outgoing call. The trunk, however, can still be answered by any users programmed with the trunk access.

To Remove a Trunk from a Busied Out State:

1. CALL1 + 145 + trunk number (001-200) + 0.

Aspire S	Aspire M/L/XL
• Available - 15 Classes of Service.	• Available - 15 Classes of Service.
• Aspire Wireless registration by service code option not available (Pgm 20-07-21).	• Aspire Wireless registration by service code option available with 2.63+ software (Pgm 20-07-21).
• Incoming Time Information Display (Pgm 20-09-06) requires software 2.67+.	• Incoming Time Information Display (Pgm 20-09-06) requires software 2.67+.
• Items 24 and 25 require software 4.93+ (Pgm 20-07).	• Items 24 and 25 require software 4.93+ (Pgm 20-07).

Description

Class of Service (COS) sets various features and dialing options (called items) for extensions. The system allows any number of extensions to share the same Class of Service. An extension can have a different Class of Service for each of the Night Service modes. This lets you program a different set of dialing options for daytime operation, nighttime operation and even during lunch breaks. An extension's Class of Service can be changed in system programming or via a Service Code (normally 177).

Conditions

Before assigning a new COS, make sure the new COS matches the old COS or you may enable options which the extension should not have to remove options which it should have.

Default Setting

- The attendant (extension 301) has Class of Service 15 in all Night Service modes. All other extensions have Class of Service 1 in all Night Service modes.
- See the **Charts and Illustrations** (page 5) for the default settings of the individual options.

If changing Class of Service via Service Code:

- The password required to change Class of Service via Service Code 177 is 0000 (Program 90-02-02 = 0000).
- An extension can use Service Code 177 to change another extension's Class of Service (Program 20-13-28 = 1).
- An extension automatically blocks another extension's attempt to change their Class of Service via Service Code 177 (Program 20-13-28 = 0).
- The default Service Code for this option is 177 (Program 11-11-24 = 177).

Programming

➧ **11-11-24 : Service Code Setup (for Setup/Entry Operation) - Change Extension Class of Service**
If required, use this option to change the Service Code a user dials to change an extension's Class of Service.

➧ **20-06-01 : Class of Service for Extensions**
Assign a Class Of Service to extensions (1-15). Any Class of Service assignments you change using Service Code 177 (see below) automatically update this program.

➧ **20-07 through 20-14 : Class of Service Options**
Set the options in a Class of Service.

If changing Class of Service via Service Code:

20-13-28 : Class of Service Options (Supplementary Service) - Allow Station COS to be Changed

Use this option to permit (1) or block (0) another extension from changing this extension's Class of Service via Service Code 177.

Class of Service Options (Administrator Level), Program 20-07

Item No.	Item	Input Data	Default		Related Program
			COS 01-14	COS 15	
01	**Manual Night Service Enabled** Turn off or on an extension's ability to use manual Night Service Switching	0 = Off 1 = On	0 COS 1 Prior to 01.03 = 1	1 Prior to 01.03 = 0	11-10-01
02	**Changing the Music on Hold Tone** Turn off or on an extension's ability to change the Music on Hold tone	0 = Off 1 = On	0 COS 1 Prior to 01.03 = 1	1 Prior to 01.03 = 0	11-10-02
03	**Time Setting** Turn off or on an extension's ability to set the Time via Service Code 828.	0 = Off 1 = On	1	1 Prior to 01.03 = 0	11-10-03
04	**Storing Abbreviated Dialing Entries** Turn off or on an extension's ability to store Common or Group Abbreviated Dialing numbers.	0 = Off 1 = On	1	1 Prior to 01.03 = 0	11-10-04
05	**Set/Cancel Automatic Trunk-to-Trunk Forwarding** Turn off or on an extension's ability to use the Trunk-to-Trunk Forwarding service codes.	0 = Off 1 = On	0 COS 1 Prior to 01.03 = 1	0	11-10-06 11-10-07 11-10-08
06	- Not Used -				
07	- Not Used -				
08	- Not Used -				
09	- Not Used -				
10	**Programmable Function Key Programming (Appearance Level)** Turn off or on an extension's ability to program their Appearance function keys using Service Code 852 (by default).	0 = Off 1 = On	1	1 Prior to 01.03 = 0	20-13-18
11	**Forced Trunk Disconnect (analog trunk only)** Turn off or on an extension's ability to use Forced Trunk Disconnect.	0 = Off 1 = On	0 COS 1 Prior to 01.03 = 1	1 Prior to 01.03 = 0	

Class of Service Options (Administrator Level), Program 20-07					
Item No.	Item	Input Data	Default		Related Program
			COS 01-14	COS 15	
12	**Trunk Port Disable** Turn off or on an extension's ability to busy out a trunk. using Service Code 145. The user which busied out the trunk will still have access to the trunk for placing outgoing calls. All other users will be blocked from seizing the trunk to place an outgoing call. The trunk, however, can still be answered by any users programmed with the trunk access.	0 = Off 1 = On	0 COS 1 Prior to 01.03 = 1	1 Prior to 01.03 = 0	11-10-27
13	**VRS Record** Turn off or on an extension's ability to record, erase and listen to VRS messages.	0 = Off 1 = On	0 COS 1 Prior to 01.03 = 1	1 Prior to 01.03 = 0	
14	**VRS General Message Listen** Turn off or on an extension's ability to dial 4 or Service Code 111 and listen to the General Message	0 = Off 1 = On	0 COS 1 Prior to 01.03 = 1	1 Prior to 01.03 = 0	11-10-21
15	**VRS General Message Record** Turn off or on an extension's ability to dial Service Code 112 and record, listen to or erase the General Message	0 = Off 1 = On	0 COS 1 Prior to 01.03 = 1	1 Prior to 01.03 = 0	11-10-22
16	- Not Used -				
17	- Not Used -				
18	SMDR printout accumulated extension data	0 = Off 1 = On	0 COS 1 Prior to 01.03 = 1	1 Prior to 01.03 = 0	11-10-23
19	SMDR printout accumulated STG data	0 = Off 1 = On	0 COS 1 Prior to 01.03 = 1	1 Prior to 01.03 = 0	11-10-24
20	SMDR printout accumulated account code data	0 = Off 1 = On	0 COS 1 Prior to 01.03 = 1	1 Prior to 01.03 = 0	11-10-25
21	**Aspire Wireless Registration by Service Code** Turn off or on an extension's ability to register or unregister an Aspire Wireless handset using the service codes defined in Program 11-10-30 and 11-10-31.	0 = Off 1 = On	0	0	11-10-30 11-10-31
24	**Set/Cancel Private Call Refuse** Turn on (1) or off (0) an extension's ability to use the Private Call Refuse service code or function key.	0 = Off 1 = On	0	0	

Class of Service Options (Administrator Level), Program 20-07					
Item No.	Item	Input Data	Default		Related Program
			COS 01-14	COS 15	
25	**Set/Cancel Caller ID Refuse** Turn on (1) or off (0) an extension's ability to use the Caller ID Refuse service code or function key.	0 = Off 1 = On	0	0	
26	**DID Mode Switching** Turn on (1) or off (0) an extension's ability to manually change the time pattern for a DID Conversion Table..	0 = Off 1 = On	0	0	11-10-35

Class of Service Options (Outgoing Call Service), Program 20-08					
Item No.	Item	Input Data	Default		Related Program
			COS 01-14	COS 15	
01	**Intercom Calls** Turn off or on Intercom calling for the extension.	0 = Off 1 = On	1	1	
02	**Trunk Calls** Turn off or on outgoing trunk calling for the extension.	0 = Off 1 = On	1	1	
03	Common Abbreviated Dialing	0 = Off 1 = On	1	1	
04	Group Abbreviated Dialing	0 = Off 1 = On	1	1	
05	**Dial Number Preview** Turn off or on an extension's ability to use Dial Number Preview.	0 = Off 1 = On	1	1	
06	**Toll Restriction Override** Turn off or on Toll Restricting Override (Service Code 875).	0 = Off 1 = On	0	0	21-01-07, 21-07
07	**Repeat Redial** Turn off or on an extension's ability to use Repeat Redial.	0 = Off 1 = On	1	1	
08	**Toll Restriction Dial Block** Turn off or on an extension's ability to use Dial Block.	0 = Off 1 = On	0	0	
09	**Hotline/Extension Ringdown** Turn off or on Ringdown Extension for extensions with this COS.	0 = Off 1 = On	0	0	
10	**Switching from Handsfree Answerback to Forced Intercom Ringing** Turn off or on an extension's ability to force Handsfree Answerback or Forced Intercom Ringing for outgoing Intercom calls.	0 = Off 1 = On	1	1	
11	**Protect ICM Call Mode Switching by Caller** When an extension is set to ring mode for ICM calls, enabling this option prevents callers from changing the call to voice announce mode.	0 = Off 1 = On	0	0	
12	**Department Group Step Calling** Turn off or on an extension's ability to use Department Group Step Calling	0 = Off 1 = On	1	1	
13	**ISDN CLIP** Determine if the ISDN calling line identity presentation and screening indicators are to be allowed.	0 = Off 1 = On	0	0	
14	Call Address Information	0 = Off 1 = On	0	0	

Class of Service Options (Outgoing Call Service), Program 20-08					
Item No.	Item	Input Data	Default		Related Program
			COS 01-14	COS 15	
15	**Block Outgoing Caller ID** Turn off or on the system's ability to automatically block outgoing Caller ID information when a user places a call. If this option is on, the system automatically inserts the Caller ID block code *67 (defined in Program 14-01-21) before the user's dialed digits.	0 = Off 1 = On	0	0	14-01-20 14-01-21
16	**Display E911 Dialed Extension Name and Number** Turn off or on an extension's ability to display the name and number of the extension that dialed 911.	0 = Off 1 = On	0	0	
17	**ARS Override of Trunk Access Map** Turn off or on an extension's ability to override the trunk access map programming for outgoing calls.	0 = Off 1 = On	0	0	

Class of Service Options (Outgoing Call Service), Program 20-09					
Item No.	Item	Input data	Default		Related Program
			COS 01-14	COS 15	
01	**Second Call for DID/ DISA/ DIL/ E&M** Turn off or on the extension's ability to receive a second call from a DID, DISA, DIL, or tie line caller. ***Note:*** With this option set to '1', the destination extension must be busy in order for a second DNIS caller to ring through. If the destination extension does not have a line or loop key available for the second call and a previous call is ringing the extension but has not yet been answered, the second caller will hear busy regardless of this program's setting.	0 = Off 1 = On	0	0	
02	**Caller ID Display** Turn off or on the Caller ID display at an extension.	0 = Off 1 = On	0	0	15-02-08
03	**Sub Address Identification** Define whether an extension displays the Caller Sub-Address.	0 = Off 1 = On	0	0	
04	**Notification for Incoming Call List Existence** Determine whether an extension's display will show "Check List" when an incoming call has been missed by a user.	0 = Off 1 = On	0	0	20-09-02
05	**Setting Handsfree Answerback or Forced Intercom Ringing** Turn off or on an extension's ability to enable Handsfree Answerback or Forced Intercom Ringing for their incoming Intercom calls.	0 = Off 1 = On	1	1	11-11-15 11-11-16

Class of Service Options (Outgoing Call Service), Program 20-09					
06	**Incoming Time Information Display** If this option is set to "1", the Incoming Call Time is displayed on the keyset's LCD while the phone is ringing.	0 = Off 1 = On	0	0	

Class of Service Options (Answer Service), Program 20-10				
Item No.	Item	Input Data	Default	
			COS 01-14	COS 15
01	**Group Call Pickup (Within Group)** Turn off or on Group Call Pickup for calls ringing an extension's own Pickup Group as well as ring group calls (Service Code *#).	0 = Off 1 = On	1	1
02	**Group Call Pickup (Another Group)** Turn off or on Group Call Pickup for calls ringing outside a group (Service Code 869).	0 = Off 1 = On	1	1
03	**Group Call Pickup for Specific Group** Turn off or on Group Call Pickup for a specific group using service code 868.	0 = Off 1 = On	1	1
04	**Group Call Pickup** Turn off or on an extension's ability to pick up a call ringing into a Pickup Group (Service Codes *# and 856).	0 = Off 1 = On	1	1
05	**Directed Call Pickup for Own Group** Turn off or on Directed Call Pickup for calls ringing an extension's own Pickup Group (Service Code 856).	0 = Off 1 = On	1	1
06	**Meet Me Conference and Paging** Turn off or on an extension's ability to use Meet Me Conference and Paging.	0 = Off 1 = On	1	1
07	**Automatic Answer of Universal Calls** Turn off or on an extension's ability to use Universal Auto Answer (no service code required).	0 = Off 1 = On	0	0
08	**Auto Off-Hook Answer for Call Coverage Keys** Turn off or on an extension's ability to answer an incoming call on a Call Coverage Key simply by lifting the handset.	0 = Off 1 = On	0	0

Class of Service Options (Answer Service), Program 20-11				
Item No.	Item	Input Data	Default	
			COS 01-14	COS 15
01	**Call Forward Immediate** Turn off or on an extension's ability to initiate Call Forwarding Immediate.	0 = Off 1 = On	1	1
02	**Call Forward When Busy** Turn off or on an extension's ability to use Call Forward When Busy.	0 = Off 1 = On	1	1
03	**Call Forwarding When Unanswered** Turn off or on an extension's ability to use Call Forward When Unanswered.	0 = Off 1 = On	1	1
04	**Call Forwarding (Both Ringing)** Turn off or on an extension's ability to activate Call Forwarding with Both Ringing.	0 = Off 1 = On	1	1
05	**Call Forwarding with Follow Me** Turn off or on an extension's ability to initiate Call Forwarding with Follow Me.	0 = Off 1 = On	1	1
06	**Unscreened Transfer** Turn off or on an extension's ability to use Unscreened Transfer.	0 = Off 1 = On	1	1
07	**Transfer Without Holding** Turn off or on an extension's ability to use Transfer Without Holding.	0 = Off 1 = On	0	0
08	**Transfer Information Display** Turn off or on an extension's incoming Transfer pre-answer display.	0 = Off 1 = On	1	1
09	**Group Hold Initiate** Turn off or on an extension's ability to initiate a Group Hold.	0 = Off 1 = On	1	1
10	**Group Hold Answer** Turn off or on an extension's ability to pick up a call on Group Hold	0 = Off 1 = On	1	1
11	**Automatic On Hook Transfer** Turn off or on an extension's ability to use Automatic On Hook Transfer	0 = Off 1 = On	1	1
12	**Call Forwarding Off-Premise** Turn off or on an extension's ability to set up Call Forwarding Off-Premise for their phone.	0 = Off 1 = On	0	0
13	**Operator Transfer After Hold Callback** Turn off or on an extension's ability to have a call which recalls from hold transfer to the operator.	0 = Off 1 = On	0	0
14	**Trunk to Trunk Transfer Restriction** Turn off or on the Trunk-to-Trunk Transfer Restriction option. If enabled, trunk-to-trunk transfer is not possible.	0 = Off 1 = On	0	0

Class of Service Options (Answer Service), Program 20-11				
Item No.	Item	Input Data	Default	
			COS 01-14	COS 15
15	**VRS Personal Greeting** Turn off or on an extension's ability to dial Service Code *4 7 to record, listen to or erase the Personal Greeting Message.	0 = Off 1 = On	1	1
16	**Call Redirect** Turn off or on a keyset user's ability to transfer a call to a pre-defined destination (such as an operator, voice mail, or another extension) without answering the call.	0 = Off 1 = On	1	1
17	**Set/Cancel Department Group Trunk-to-Trunk Forwarding** Turn off or on an extension user's ability to set Trunk-to-Trunk Forwarding for a Department Group.	0 = Off 1 = On	1	1
18	**No Recall** Allow (0) or deny (1) answered Transferred calls from recalling the originating extension.	0 = Allow 1 = Deny	0	0
19	**Normal/Extended Park** Determine if an extension's Class of Service should allow either a normal or extended Park.	0 = Normal 1 = Extended	0	0
20	**No Callback** Turn off or on an extension's ability to receive Callbacks.	0 = Off 1 = On	0	0
21	**Restriction for Tandem Trunking on Hang Up** Allow (0) or deny (1) an extension users's ability to set up a tandem/conference call automatically when they hang up.	0 = Allow 1 = Deny	0	0

Class of Service Options (Supplementary Service), Program 20-13				
Item No.	Item	Input Data	Default	
			COS 01-14	COS 15
01	**Long Conversation Alarm** Turn off or on the Warning Tone for Long Conversation (not for SLTs)	0 = Off 1 = On	0	0
02	**Long Conversation Cutoff (Incoming)** Turn off or on an extension's ability to use Long Conversation Cutoff for incoming calls.	0 = Off 1 = On	0	0
03	**Long Conversation Cutoff (Outgoing)** Turn off or on an extension's ability to use Long Conversation Cutoff for outgoing calls.	0 = Off 1 = On	0	0
04	**Call Forwarding/DND Override** Turn off or on an extension's ability to use Call Forwarding/DND Override.	0 = Off 1 = On	1	1

Class of Service Options (Supplementary Service), Program 20-13				
Item No.	Item	Input Data	Default	
			COS 01-14	COS 15
05	**Intercom Off Hook Signaling** Turn off or on an extension's ability to receive off hook signals.	0 = Off 1 = On	1	1
06	**Automatic Off Hook Signaling** Allows a busy extension to manually (0) or automatically (1) receive off hook signals.	0= Manually 1= Automati-cally	1	1
07	**Message Waiting** Turn off or on an extension's ability to leave Message Waiting.	0 = Off 1 = On	1	1
08	**Conference** Turn off or on an extension's ability to initiate a conference or Meet Me Conference	0 = Off 1 = On	1	1
09	**Privacy Release** Turn off or on an extension's ability to initiate a Voice Call Conference	0 = Off 1 = On	1	1
10	**Barge In Mode** Enables the extension's Barge In to be speech mode (0) or Monitor mode (1).	0=Speech 1=Monitor	0	0
11	**Room Monitor, Initiating Extension** Turn off or on an extension's ability to initiate Room Monitor	0 = Off 1 = On	0	0
12	**Room Monitor, Extension Being Monitored** Turn off or on an extension's ability to be monitored	0 = Off 1 = On	0	0
13	**Continued Dialing** Turn off or on an extension's ability to use Continued Dialing which allows DTMF signal sending while talking on extension.	0 = Off 1 = On	1	1
14	**Department Calling** Turn off or on an extension's ability to call a Department Group.	0 = Off 1 = On	1	1
15	**Barge In, Initiate** Turn off or on Barge In at the initiating extension.	0 = Off 1 = On	0	0
16	**Barge In, Receive** Turn off or on Barge In at the receiving extension.	0 = Off 1 = On	0	0
17	**Barge In Tone/Display** Use this option to turn off or on the Barge In tone. If on, callers hear an alert tone and their display indicates the Barge In when another extension barges into their conversation. If off, there is no alert tone or display indication.	0 = Off 1 = On	1	1

Class of Service Options (Supplementary Service), Program 20-13				
Item No.	Item	Input Data	Default	
			COS 01-14	COS 15
18	**Programmable Function Key Programming (General Level)** Turn off or on an extension's ability to program their General function keys using Service Code 851 (by default). (Refer to Program 20-07-10 for Service Code 852.)	0 = Off 1 = On	1	1
19	**Selectable Display Messaging** Turn off or on an extension's ability to use Selectable Display Messaging.	0 = Off 1 = On	1	1
20	**Account Code/Toll Restriction Operator Alert** Turn off or on operator alert when an extension improperly enters an Account Code or violates Toll Restriction.	0 = Off 1 = On	0	0
21	**Extension Name** Turn off or on an extension's ability to program its name.	0 = Off 1 = On	1	1
22	**Busy Status Display** Turn off or on the ability to display the detail state of called party.	0 = Off 1 = On	0	0
23	**Display the Reason for Transfer** Select whether an extension should display the reason a call is being transferred to their extension (Call Forward Busy, Call Forward No Answer, DND).	0 = Off 1 = On	0	0
24	**Privacy Release by Pressing Line Key** Turn off or on a user's ability to press a line key to barge into an outside call. The Barge In feature must be enabled if this option is to be used.	0 = Off 1 = On	0	0
25	Transmission is cut when privacy release is used during trunk to trunk transfer.	0 = Off 1 = On	0	0
26	**Group Listen** Turn off or on an extension's ability to use Group Listen.	0 = Off 1 = On	1	1
27	**Busy on Seizing Virtual Extension** If set to '1', you can call a busy extension which is talking on a virtual extension key. Program 20-13-06 (Call Waiting) must be set to off for this option to work.	0 = Off 1 = On	1	1
28	**Allow Class of Service to be Changed** Turn off or on the ability of an extension's COS to be changed via Service Code 177.	0 = Off 1 = On	0	0
29	**Paging Display** Turn off or on an extension's ability to display paging information.	0 = Off 1 = On	1	1
30	**Background Music** In an extension's Class of Service, turn off or on an extension from turning Background Music on and off.	0 = Off 1 = On	1	1

Class of Service Options (Supplementary Service), Program 20-13				
Item No.	Item	Input Data	Default	
			COS 01-14	COS 15
31	Connected Line Identification (COLP)	0 = Off 1 = On	0	0
32	**Deny Multiple Barge Ins** Turn off or on the extension's ability to have multiple user's Barge In to their conversation.	0 = Off 1 = On	0	0
33	**ACD Supervisor's Position Enhancement** This option must be on in order for the operator to use service codes in Program 11-13-10 through 11-13-13.	0 = Off 1 = On	0	0
34	**Block Manual Off Hook Signaling** Turn off or on an extension's ability to block off-hook signals manually sent from a co-worker.	0 = Off 1 = On	0	0
35	**Block Camp On** Turn off or on an extension's ability to block callers from dialing 2 to Camp On.	0 = Off 1 = On	0	0
36	**Call Duration Timer** In an extension's Class of Service, turn off or on an extension's Call Timer. The system waits until the interdigit timer (Program 21-01-01) expires before beginning this timer.	0 = Off 1 = On	0	0
38	**Headset Ringing** In an extension's Class of Service, turn off or on an extension's ability to use the Headset ringing.	0 = Off 1 = On	0	0
39	**ACD Queue Status Display** Turn off or on the ACD Queue Status Display for an extension's Class of Service. Any extension which has this option enabled will also hear the queue alarm.	0 = Off 1 = On	0	0
40	**Do Not Disturb** This option will allow or prevent the user from being able to use the Do Not Disturb feature.	0 = Off 1 = On	1	1

Class of Service Options (DISA/E&M Service), Program 20-14				
Item No.	Item	Input Data	Default	
			COS 01-14	COS 15
01	**First Digit Absorption** For tie lines, enable or disable the ability to absorb (ignore) the first incoming digit. Use this to make the tie trunk compatible with 3- and 4-digit tie line service. This option does not apply to DISA.	0 = Off 1 = On	0	0
02	**Trunk Group Routing/ARS Access** This option enables or disables a DISA or tie trunk caller's ability to dial 9 for Trunk Group Routing or Automatic Route Selection (ARS).	0 = Off 1 = On	0	0
03	**Trunk Group Access** This option enables or disables a DISA or tie trunk caller's ability to access trunk groups for outside calls (Service Code 814).	0 = Off 1 = On	0	0
04	**Common Abbreviated Dialing** This option enables or disables a DISA or tie trunk caller's ability to use the system's Common Abbreviated Dialing.	0 = Off 1 = On	0	0
05	**Operator Calling** This option enables or disables a DISA or tie trunk caller's ability to dial 0 for the telephone system operator.	0 = Off 1 = On	0	0
06	**Internal Paging** This option enables or disables a DISA or tie trunk caller's ability to use the telephone system's Internal Paging.	0 = Off 1 = On	0	0
07	**External Paging** This option enables or disables a DISA or tie trunk caller's ability to use the telephone system's External Paging.	0 = Off 1 = On	0	0
08	**Direct Trunk Access** This option enables or disables a DISA or tie trunk caller's ability to use Direct Trunk Access (Service Code 815).	0 = Off 1 = On	0	0
09	**Forced Trunk Disconnect** <Not for ISDN T-point> This option enables or disables a tie trunk caller's ability to use Forced Trunk Disconnect (Service Code *26). This option is not available to DISA callers.	0 = Off 1 = On	0	0
10	**Call Forward Setting by Remote Via DISA** Enable or disable a DISA callers ability to use the Call Forward service codes (Programs 11-11-01 through 11-11-05).	0 = Off 1 = On	0	0
11	**DISA/Tie Trunk Barge In** This option enables or disables a DISA or tie trunk caller's ability to use the Barge In feature.	0 = Off 1 = On	0	0

Related Features

Refer to specific features for desired Class of Service option.

Night Service

An extension can have a different Class of Service for each Night Service mode: Day 1, Night 1, Midnight 1, Rest 1, Day 2, Night 2, Midnight 2, or Rest 2.

Operation

To change an extension's Class of Service (via Service Code 177):

1. Press idle CALL key.
2. Dial 177.
3. Dial the extension number you want to change.
   You see: MODE1:nn
   Press HOLD to leave the current value unchanged.
   The extension you dial may be set to block your attempt to change their Class of Service.
4. Enter the Day 1 Mode Class of Service for the extension you selected in step 3 and press HOLD.
   You see: MODE2:nn
   Press HOLD to leave the current value unchanged.
5. Enter the Night 1 Mode Class of Service for the extension you selected in step 3 and press HOLD.
   You see: MODE3:nn
   Press HOLD to leave the current value unchanged.
6. Enter the Midnight 1 Mode Class of Service for the extension you selected in step 3 and press HOLD.
   You see: MODE4:nn
   Press HOLD to leave the current value unchanged.
7. Enter the Rest 1 Mode Class of Service for the extension you selected in step 3 and press HOLD.
   You see: MODE5:nn
   Press HOLD to leave the current value unchanged.
8. Enter the Day 2 Mode Class of Service for the extension you selected in step 3 and press HOLD.
   You see: MODE6:nn
   Press HOLD to leave the current value unchanged.
9. Enter the Night 2 Mode Class of Service for the extension you selected in step 3 and press HOLD.
   You see: MODE7:nn
   Press HOLD to leave the current value unchanged.

10. Enter the Midnight 2 Mode Class of Service for the extension you selected in step 3 and press HOLD.

    You see: MODE8:nn

    Press HOLD to leave the current value unchanged.

11. Enter the Rest 2 Mode Class of Service for the extension you selected in step 3 and press HOLD.

    You see: Enter Station#-

12. Go to step 3 and enter another extension number.

    OR

    Press SPK to hang up.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Computer Telephony Integration (CTI) applications automate your office with TAPI compatibility and external PC control. CTI puts your telephone system on the cutting edge of modern office productivity with:

Personal Computer Interface (PCI) / PC Dialing

Use a CTA or CTU Adapter installed in your keyset as a Personal Computer Interface. Installing the TAPI software driver and TAPI compatible software in your personal computer will allow your PC to operate your telephone. The TAPI software driver provides all TAPI Basic Services and a host of TAPI Supplemental Services. See "TAPI Compatibility" for more.

Database Lookup

Provided through Caller ID and TAPI Compatible third-party software (such as ACT!), Database Lookup displays your caller's account information before their call is even answered.

Conditions

None

Default Setting

None

Programming

Refer to the Aspire Hardware Manual for details on connecting the CTA and CTU Adapters.

Related Features

TAPI Compatibility

See this feature for the details on TAPI services provided by the system and the TAPI driver.

Operation

None

Aspire S	Aspire M/L/XL
• NTCPU provides 32 conference circuits, allowing each block to have any number conferences with any number of internal or external parties conferenced as long as the total number of conference channels used does not exceed the limit of 32.	• NTCPU provides 2 blocks of 32 conference circuits, allowing each block to have any number conferences with any number of internal or external parties conferenced as long as the total number of conference channels used does not exceed the block's limit of 32.
• Automatic conference on Hang Up available with software 2.10+.	• Automatic conference on Hang Up available with software 2.10+.
• Transfer Call into Conference is available.	• Transfer Call into Conference requires software 1.11+.
• Changing CONF to a Transfer key is available.	• Changing CONF to a Transfer key requires software 1.12+.
• Conference feature enhancements require software 2.63+.	• Conference feature enhancements require software 2.63+.

Description

Conference lets an extension user add additional inside and outside callers to their conversation. With Conference, a user may set up a multiple-party telephone meeting without leaving the office. The NTCPU provides 2 blocks of 32 Conference circuits, allowing each block to have any number of internal or external parties conferenced up to the block's limit of 32. This means that one extension can Conference up to 31 internal and/or external parties together (the originator would be the 32nd party reaching the maximum of 32). While this Conference call is active, another user can use the second block of Conference circuits to make the same type of call.

Each block of Conference circuits can have multiple Conference calls, providing there are Conference circuits available. It is not restricted to one Conference per block.

Split (From Conference)

Split allows a user to alternate (i.e., switch) between their callers in Conference. This will allow a dispatcher, for example, to control a telephone meeting between themselves, a customer and a service technician. The dispatcher can meet together with all parties, privately set up a service strategy with the technician and then meet again to set the schedule.

Split cycles through the Conference in the same order in which the Conference was initially set up. If a user places an outside call, conferences extension 302 followed by extension 303, Split will cycle from the trunk, to 302 and finally to 303. The Split cycle then repeats.

Barge Into Conference

If a user's extension has Barge In capability enabled, they can also Barge In on an established Conference. This permits, for example, an attendant or supervisor to join a Conference in an emergency. It also allows a co-worker to leave a conference -- and then rejoin the telephone meeting when it is convenient to do so.

Automatic Conference on Hang Up

A Class of Service option is available, depending on your software version, which will allow or deny an extension user from automatically setting up a Conference/Tandem Trunking call upon hanging up the phone.

Transfer Call Into Conference

An extension with Barge In capability can Transfer a call into an existing Conference. This would allow, for example, an attendant to locate co-workers and then Transfer them into an existing telephone meeting. There is no need for the attendant to locate all the parties at the same time and sequentially add them into the Conference.

Change CONF to a Transfer Key

An option is available which allows an extension's CONF key to be programmed for Conference or for Transfer. When set for Transfer, the user places a call on hold, dials the extension to which it should be transferred, the presses the CONF key. The call is then transferred. When set for Conference, with an active call, the user presses the CONF key, places a second call, then presses the CONF key twice. All the calls are then connected.

Conference Feature Enhanced

The Conference feature has been enhanced with the ability to:

- Allow a user in an active Conference call to add another party.
  Older software would not allow a call to be added to an existing Conference unless the call was put on hold or park and the Conference reestablished, then adding all parties into the Conference at once.
- Break up a Conference call by pressing Hold.
  With older software, using line keys, if you set up a 3-party (1 internal user and 2 trunks) Conference, if you placed the Conference on hold and pressed one of the line keys, the conference would restart. You could not undo a Conference once it was set by simply placing Hold.
- Drop a trunk or trunks from the Conference.
  While in a Conference, with older software, you could not drop one of the parties.

Conditions

(A.) Each block assigned in Program 10-07 for Conversation Recording reduces the number of blocks available for ADA Recording, ACD Agent Auto Call Recording, and ACD Supervisor Monitor.
(B.) An ADA module is required for speech recording.
(C.) Multiple Directory Number (virtual extension) keys do not support Conference Programmable Function keys nor can they be used to add a call to a Conference.

Default Setting

Enabled.

Programming

- **10-07-01 : Conversation Record Circuits**
  Determine if there are conference circuits available, that not all have been assigned as conversation record circuits.
- **11-12-08 : Service Code Setup (for Service Access) - Barge In**
  If required, use this program to change the code users dial to Barge In to a Conference call. This code is normally 810.
- **11-12-47 : Service Code Setup (for Service Access) - Call Waiting Answer / Split Answer for SLT**
  If required, use this program to change the code users dial to Split while on a Conference call. This code is normally 894.

- **11-12-58 : Service Code Setup (for Service Access) - Transfer Into Conference**
  If required, change the service code used to transfer a call into a Conference call (default: 124).
- **11-16-02 : Program 11-16 : One-Digit Service Code Setup - Barge In**
  If required, use this program to define the single digit service code users dial to Barge In to a Conference call.
- **14-01-04 : Basic Trunk Data Setup - Transmit Gain Level for Conference and Transfer Calls**
  CODEC gain set at 0 dB (14-01-04 = 32) can be used to set the CODEC gain type for multi-line Conference calls.
- **15-02-24 : Multi-Line Telephone Basic Data Setup, Conference Key Mode**
  This option allows an extension's CONF key to be programmed for Conference or for Transfer. When set for Transfer (1), the user places a call on hold, dials the extension to which it should be transferred, the presses the CONF key. The call is then transferred. When set for Conference (0), with an active call, the user presses the CONF key, places a second call, then presses the CONF key twice. All the calls are then connected.
- **15-07-01 : Programming Function Keys**
  Assign a function key for Conference (code 07).
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.
- **20-11-21 : Class of Service Options (Hold/Transfer Service) - Restriction for Tandem Trunking on Hang Up**
  Allow (0) or deny (1) an extension user's ability to set up a tandem call automatically when they hang up. By default, this option is allowed (0).
- **20-13-08 : Class of Service Options (Supplementary Service) - Conference**
  In an extension's COS, enable (1) or disable (0) the extension's ability to initiate a Conference.
- **20-13-15 : Class of Service Options (Supplementary Service) - Barge In Initiate**
  In an extension's COS, enable (1) or disable (0) the extension's ability to Barge In to a call.
- **20-13-16 : Class of Service Options (Supplementary Service) - Barge In Receive**
  In an extension's COS, enable (1) or disable (0) the extension's ability to receive a Barge In on a call.
- **20-14-11 : Class of Service Options For DISA/E&M - DISA/Tie Trunk Barge In**
  Determine if DISA and tie trunk users should have the ability to dial a service code to Barge In to a Conference call (0=disabled, 1=enabled).

Related Features

Barge In
Users can Barge In on a Conference call if allowed in programming.

Central Office Calls, Placing
Define the outgoing call options for each trunk and user.

Conference, Voice Call
Set up a Conference with a co-worker in your immediate work area.

Direct Inward System Access (DISA) / Tie Lines
DISA and tie line users may use the Barge In feature on a Conference call if they know the service code and are permitted in their DISA/Tie Line Class of Service.

Meet Me Conference
Meet Me Conference lets an extension user set up a Conference via Paging.

Meet Me Paging

Meet Me Paging lets an extension user set up a two-party meeting via Paging.

Multiple Directory Numbers/Call Coverage

Multiple Directory Number (virtual extension) keys do not support Conference Programmable Function keys nor can they be used to add a call to a Conference.

Programmable Function Keys

In order for keyset to have Conference, it must have a Conference function key.

Tandem Trunking

A user can set up an Unsupervised Trunk-to-Trunk Conference and then drop out of the call, allowing the remaining parties to continue the conversation.

Transfer

You can optionally program the CONF (TRF) key for Transfer. In this case, the keyset must have a Conference function key. The system also allows a call to be transferred into a Conference call.

Operation

To establish a Conference:

Keyset

1. Establish Intercom or trunk call.
2. Press CONF or Conference key (PGM 15-07 or SC 851: 07).
3. Dial extension you want to add.
   OR
   Access outside call
   OR
   Retrieve call from Park orbit.

   To get the outside call, you can either press a line key or dial a trunk/trunk group code.

   You can optionally go back to step 2 to add more parties to your Conference.
4. When called party answers, press CONF or Conference key twice.

   If you cannot add additional parties to your Conference, you have exceeded the system's Conference limit.

   With a Super Display keyset, the trunk name (for outgoing calls) or Caller ID (for incoming calls, if available) will be displayed in the one-touch key display area for up to 10 calls.

   If the call being added is busy/unanswered:

   With an outside call and line keys: *Press the line key for a call previously added to the Conference. The unanswered call will drop and the initiator will be back into the Conference call.*

   With an outside call and loop keys: *Press the loop key for a call previously added to the Conference. Press CONF twice to re-establish the Conference call. The unwanted call is dropped.*

   Adding an Intercom call to an outside Conference call: *Press the CNCL soft key on the display keyset then press the ANHD soft key or the CONF key to re-establish the Conference. If using a non-display phone, press the CONF key twice.*

   With only Intercom calls in the Conference: *Press the CONF key to re-establish the Conference. If the voice mail answers, there is no way to drop that extension out. You will need to drop the Conference call.*
5. Repeat steps 2-4 to add more parties.

Single Line Set / 2-Button Telephone

1. Establish Intercom or trunk call.
2. ***Single Line Set***
   Hookflash and dial #1.
   2-Button Telephone
   Press HOLD and dial #1.
3. Dial extension you want to add.
   OR
   Access trunk call.
   OR
   Retrieve call from Park orbit.
4. ***Single Line Set***
   Hookflash and repeat step 3 to add more parties.
   OR
   Hookflash twice to set up the Conference.
   2-Button Telephone
   Press HOLD and repeat step 3 to add more parties.
   OR
   Press HOLD twice to set up the Conference.

   If you cannot add additional parties to your Conference, you have exceeded the system's Conference limit.

To Split (alternate) between the parties in Conference:

Keyset

1. Press CONF (TRF) or Conference key (PGM 15-07 or SC 851: 07).
2. Dial Split service code (894).

   Repeat this procedure to alternate between the remaining parties in the Conference. Press CONF or Conference key twice to set up the Conference again.

Single Line Set

1. Hookflash and dial 894.

   Repeat this procedure to alternate between the remaining parties in the Conference. Hookflash twice to set up the Conference again.

To drop an outside call from the Conference:

1. Press HOLD to place the Conference call on Hold.
2. Hang up.

   The lines involved in the Conference will ring back separately to the phone.
3. Answer and disconnect the unwanted outside call.
4. To re-establish the Conference, answer the remaining call pressing CONF after each call is answered. Press CONF twice when all calls have been answered.

To exit a Conference without affecting the other parties:

Keyset

1. Hang up.

   If you press Hold while on a call with two outside callers, the outside callers hear Music on Hold.

   If Program 20-11-21 is enabled, hanging up with multiple outside calls connected will create a Tandem Trunk call.

Single Line Set

1. Hang up.

   If you are not permitted to use Tandem Trunking, outside callers may hear Music on Hold.

To Barge In to Conference Call:

1. Pick up the handset or press SPK and dial the service code (810=default).

   If the telephone doesn't have the proper COS, a warning tone is sent. After the user hangs up, the system will automatically place a Callback to the extension.
2. Dial the extension number or press a DSS key of a telephone within a Conference call.

   When a new call is added to the conference, an intrusion tone is heard by all parties in the Conference, depending on system programming, and all display keysets show the joined party. If a Conference is not possible:
   - the extension user will hear a warning tone
   - the DISA user will be rerouted to the defined ring group
   OR
   - the tie line user will hear a busy tone.

   OR

Not available for DISA or tie line trunks:

1. Dial the extension number of the internal party.
2. Dial the single digit service code.

   Instead of the single digit service code, the service code 810 can also be dialed at this point.

To Transfer a Call Into a Conference:

1. While on a call, press HOLD.
2. Dial the Transfer to Conference service code (default=124).

   If the telephone doesn't have the proper COS, a warning tone is sent. After the user hangs up, the system will automatically place a Callback to the extension.

   The display shows "Transfer to Conf. ICM Dial".
3. Dial the extension number or press a DSS key of a telephone within a Conference call.

   If an error tone is heard, Barge In is not enabled for the extension and the call will not go through. Retrieve the call by pressing the flashing line or CALL key or hang up and the call will recall the extension.

   When the call is transferred into the Conference, an intrusion tone is heard by all parties in the conference, depending on the entries in Program 20-13-17 and Program 80-01, and all display keysets will show the joined party.

   To cancel the transfer, press the flashing line or CALL key to retrieve the call.
4. Hang up.

Break Up the Conference But Retain the Trunk Calls

1. While on an active Conference call, press HOLD.
2. Select the line or loop key of the caller you wish to talk to.

   Any intercom calls which were involved in the Conference will be disconnected.

Dropping a Party From the Conference

1. While on an active Conference call, press the line/loop key of the party to retain. This action will retain any intercom calls involved in the Conference.

   OR

   With a Super Display Telephone, press the one-touch key of the party to be ***dropped***.

   With a Super Display keyset, the trunk name (for outgoing calls) or Caller ID (for incoming calls, if available) will be displayed in the one-touch key display area for up to 10 calls.

Aspire S	Aspire M/L/XL
• NTCPU provides 32 conference circuits, allowing each block to have any number conferences with any number of internal or external parties conferenced as long as the total number of conference channels used does not exceed the limit of 32.	• NTCPU provides 2 blocks of 32 conference circuits, allowing each block to have any number conferences with any number of internal or external parties conferenced as long as the total number of conference channels used does not exceed the block's limit of 32.

Description

Voice Call Conference lets extension user's in the same work area join in a trunk Conference. To initiate a Voice Call Conference, an extension user just presses the Voice Call Conference key and tells their co-workers to join the call. The system releases the privacy on the trunk, and other users can just press the trunk's line key to join the call.

Voice Call Conference does not use the telephone system features to announce the call. The person initiating the Voice Call Conference just announces it "through the air."

Privacy Mode Toggle Option

The Privacy Mode Toggle option allows an extension user to quickly change an outside call from the non-private mode to the private mode. This would help a workgroup supervisor, for example, that needed to quickly monitor any group member's call. If the supervisor wanted to make a "secure" call, however, they could quickly switch the line's mode and be assured that their call would not be monitored. If the outside call is on a line key, the user just presses the line key to switch modes. If the call is on a loop key, the user presses their Privacy Release function key instead.

For systems using the Privacy Mode Toggle option, trunks initially have the privacy released. If privacy is desired for a trunk, use the toggle option or press the Privacy Release function key to switch modes.

Conditions

(A.) Each block assigned in Program 10-07 for Conversation Recording reduces the number of blocks available for Conference.

(B.) Multiple Directory Number (virtual extension) keys do not support Voice Call Conference Programmable Function keys.

Default Setting

Disabled.

Programming

- **10-07-01 : Conversation Record Circuits**
  Determine if there are conference circuits available, that not all have been assigned as conversation record circuits.
- **14-01-19 : Basic Trunk Data Setup - Privacy Mode Toggle Option**
  Determine if a trunk should be able to be toggled to a private/non-private line (0=disabled, 1=enabled). This option is not required for Voice Call Conference.
- **15-07-01 : Programming Function Keys**
  Assign a function key for the users to set up Voice Call Conference (code 32) and line keys (*01 + trunk number) on the phones of the invited co-workers.
  - Aspire S: Trunks 1-8
  - Aspire: Trunks 1-200
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.
- **20-13-09 : Class of Service Options (Supplementary Service), Privacy Release**
  In an extension's COS, enable (1) or disable (0) an extension's ability to use Privacy Release allowing for a Voice Call Conference. The trunk must be programmed to allow this feature in Program 14-01-19.
- **20-13-17 : Class of Service Options (Supplementary Service), Barge In Tone/Display**
  In an extension's COS, enable (1) or disable (0) the tone the user hears when the Voice Call Conference feature is used. The person on the call will not hear the barge-in tone if disabled (the person intruding will hear a beep when barging in). If enabled, both extension users hear the tone. (Note that this option is also used for Barge In.)
- **31-01-04 : System Options for Internal/External Paging - Privacy Release Time**
  Set the interval users have to join a Voice Call Conference after it is announced. (Note that this interval is also used for Meet Me Conference.)

Related Features

Caller ID

With Caller ID enabled, a call with Privacy Release will show the Caller ID until the call is answered. It can be viewed again by pressing the line key, though this sets the call to Private mode. To keep the call on Privacy Release, press the CHECK + CLEAR key.

Conference

Set up a multiple-party telephone meeting without leaving the office.

Programmable Function Keys

Voice Call Conference requires a Voice Call Conference function key and line keys.

Single Line Telephones

This feature is not available at single line telephones.

Operation

To join a Voice Call Conference (if invited):

1. After Conference request, press indicated line key.
   A "CONF" indication is displayed on both phones.

To exit a Voice Call Conference without affecting the other parties:

1. Press SPK to hang up.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Continued Dialing allows an extension user to dial a call, wait for the called party to answer and then dial additional digits. This helps users that need services like Voice Mail, automatic banking and Other Common Carriers (OCCs).

There are two types of Continued Dialing:

- **Continued Dialing for Intercom Calls**
  Depending on an extension's Class of Service, a keyset user may be able to dial additional digits after their Intercom call connects. In systems with Voice Mail, for example, Continued Dialing lets extension users dial the different options after the Voice Mail answers. Without Continued Dialing, extension users cannot access these Voice Mail options.

- **Continued Dialing for Trunk Calls**
  Continued Dialing gives a user access to outside services like automatic banking, an outside Automated Attendant, bulletin boards and Other Common Carriers (OCCs). After the outside service answers, the user can dial digits for whatever options the services allow. Without Continued Dialing, the system's Toll Restriction will cut off the call after a specific number of dialed digits. See Programming below for additional information.

NOTICE
Continued Dialing may make the system more susceptible to toll fraud.

Conditions

None

Default Setting

Enabled.

Programming

- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.
- **20-13-13 : Class of Service Options (Supplementary Service) - Continued Dialing**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to use Continued Dialing for Intercom calls to 2500 type devices.
- **21-04-01 : Toll Restriction Class**
  Assign a Toll Restriction Class (1-15) to an extension.
- **21-05-04 : Toll Restriction Class - Maximum Number of Digits Table Assignment**
  Assign Program 21-06-03 entries to each Toll Restriction class.

Related Features

Pulse to Tone Conversion

Users can place calls to services over Dial Pulse trunks - and then dial DTMF digits after the service answers.

Toll Restriction

The ability to use Continued Dialing on trunk calls is set by Toll Restriction programming.

Operation

To use Continued Dialing:

1. Place Intercom or trunk call.
2. Continue dialing after call connects.

Toll Restriction and Class of Service programming may limit Continued Dialing.

Aspire S	Aspire M/L/XL
• Available.	• Available with software 1.06+.
• Cordless phones do not display E911 Alarm with software 4.0i or higher.	• Cordless phones do not display E911 Alarm with software 4.0i or higher.
• The ability to press TALK after placing a CO call on Hold without immediately recalling requires software 4.0W+.	• The ability to press TALK after placing a CO call on Hold without immediately recalling requires software 4.0W+.

Description

The Aspire System supports a Cordless Telephone. The DTR-4R-1 Cordless II (P/N 730088) is a 900 MHz spread-spectrum digital cordless telephone that provides mobility, flexibility and convenience for those who spend much of the workday away from their desk. Fully integrated with the telephone system, the DTR-4R-1 Cordless II offers many standard features such as Park, Do Not Disturb, Hotline, Voice Over and Voice Mail. Normally paired with a companion keyset for improved 1-button call coverage capabilities, the DTR-4R-1 Cordless II will also work as a stand-alone telephone.

Complemented by 4 fully programmable function keys (with LEDs), the DTR-4R-1 Cordless II achieves a whole new level of convenience and mobility. An easy-to-read LCD display, volume controls, a rechargeable nickel-cadmium battery pack and a handy belt clip round out the elegant and affordable DTR-4R-1 Cordless II Phone. This phone provides 10 channels.

A second Cordless Phone is also available: the Cordless Lite II (P/N 730087). The Cordless Lite II offers the same features as the Cordless II except that it uses a NiMH battery and has FM modulation (single channel) instead of the spread spectrum modulation. This phone provides 30 channels.

The base unit provides a “Cordless” and “Desk” button which allows the one extension port to switch from the Cordless to an attached Aspire keyset. The phones must be in an idle state when the button is pressed, otherwise any active call will be disconnected.

E911 Alarms

Prior to 4.0i software, if the system was set to display an E911 alarm to telephones (Program 20-08-16), the cordless phones would also indicate the display. There was no way for the users to clear the display of this alarm except by resetting the system. The system has now been changed to exclude the Cordless II and Cordless Lite II phones from displaying the alarm.

Privacy

Cordless telephones are radio devices. Communications between the handset and base of the cordless telephone are accomplished by means of radio waves which are broadcast over the open airways. Because of the inherent physical properties of radio waves, communication can be received by radio receiving devices other than your own telephone unit, consequently, any communications using the cordless telephone may not be private.

Radio Interference

Radio interference may occasionally cause buzzing and humming in your cordless handset or clicking noises in the base unit. This interference is caused by external sources such as TV, fluorescent lighting, or electrical storms. Your unit is not defective. If these noises continue and are too distracting, check around the office to see what appliances may be causing the problem, In addition, it is recommended that the base not be plugged into a circuit that also powers a major appliance because of the potential of interference. For best performance, ensure that the antenna on the base unit is fully extended.

In the unlikely event that other voices or distracting transmissions are heard on the phone, radio signals for another cordless telephone or other source of interference may be the problem. If this type of interference cannot be eliminated, change the telephone to a different channel.

If should also be noted that some cordless telephones operate at frequencies that may cause interference to nearby TVs and VCRs. To minimize or prevent such interference, the base unit should not be placed near or on top of a TV or VCR. If interference is experienced, moving the cordless telephone farther away from the TV or VCR will often reduce or eliminate the interference.

Multiple Cordless Telephones

If you want to use more than one cordless telephone in the same office, they must operate on different channels. Press the channel key to select a channel that provides the clearest communication.

In ideal conditions, multiple spread spectrum type cordless phones (Cordless II) can be utilized in the same environment. However, due to the possible interference problems caused by the bases being placed in close proximity to each other, the following is recommended:

Spread Spectrum Phones (Cordless II P/N 730088)
Where users require greater range on the cordless phones and 3 or less cordless phones are being used at a specific site, we recommend using the spread spectrum cordless phone.

FM Modulation Phones (Cordless Lite II P/N 730087)
Where more than 3 cordless phones are to be used at one specific site, we recommend using the FM modulation cordless phones which have 30-channel capability.

* Note:

1. The range of the phones depends largely on the environmental factors, such as the building structure, the size of the room, RF interference and other electronic equipment installed in the same area. For optimum range and performance, the following is suggested:
2. Place the base units at least 15 feet apart. The performance of the phones become more stable when the distance between the bases is greater.
3. Place the base unit in the center of the coverage area. If the phone will also be used in an outdoor area, like a parking lot, install the base unit in an area close to the window.
4. If a phone experiences interference and noise, press the channel key to select another channel.

Hold on CO Calls No Longer Immediately Recalls

The operation of the Cordless II and Cordless Lite II phones have been enhanced when placing an outside call on hold.

With older software, if an outside caller was placed on hold by a Cordless II/Cordless Lite II user and the user then pressed the TALK button to hang up, the call would immediately recall the user. With software 4.0V+, if the phone has a line key (Program 15-07-01 or SC 851: *01) or a loop key (Program 15-07-01 or SC 851: *02 or *05) programmed, the call will remain on hold and recall only after the hold recall timer has expired (Program 24-01-01). However, without these keys (with software 4.0V only), when placing a call on hold and pressing the TALK button to hang up, the call would immediately ring back.

Software 4.0W further enhances the operation so that a user without a line or loop key programmed can place a caller on hold and press the TALK button. The call will remain on hold and recall only after the hold recall timer has expired (Program 24-01-01).

Intercom calls will still recall immediately if the Cordless II/Cordless Lite II user presses TALK after placing an internal call on hold.

Conditions

(A.) The Cordless phone must be set to ringing mode - not voice announce once it is installed using service code 823.

(B.) Programs **15-02-02 : Multi-Line Telephone Basic Data Setup, Trunk Ring Tone** and **15-02-03 : Multi-Line Telephone Basic Data Setup, Extension Ring Tone** are ignored as the phone follows its programmed setting and not the system setting.

(C.) The Cordless phone can only display alphanumeric characters. Therefore, if any other language other than English is selected in 15-02-01, the display may not function correctly.

(D.) The following Programmable Function Keys (Program 15-07-01) are not available with the Cordless Phones or have special conditions.

Function Number	Feature	Comment
02	Microphone Key (ON/OFF)	
03	DND Key	
04	BGM (ON/OFF)	
05	Headset	
08	Incoming Call Log	
10	Call Forward - Immediate	
11	Call Forward - Busy	
12	Call Forward - No Answer	
13	Call Forward - Busy/No Answer	
14	Call Forward – Both Ring	
15	Follow Me	
16	Call Forward to Station	
17	Call Forward to Device	
30	Saved Number Redial	Cannot check number
31	Memo Dial	Cannot check number
38	Message Waiting	Cannot check number
39	Room Monitoring	
47	Reverse Voice Over	
48	Voice Over	
50	Account Code	Number not displayed
53	Queuing Message Starting	
54	External Call Forward by Door Box	
55	Extension Name Edit	
66	CTI	
80	Tandem Ringing	
*10	ACD Log – In / Log – Out	Only Log-in is valid.
*14	ACD Start / End	

(E.) The following Service Codes are not available with the Cordless Phones or have special conditions.

Item No.	Service Code	Feature	Comment
Program 11-10 : Service Code Setup (for System Administrator)			
04	853	Storing Common Abbreviated Dialing Numbers	
05	854	Storing Group Abbreviated Dialing Numbers	
08	835	Setting the Destination for Automatic Trunk Forwarding	
Program 11-11 : Service Code Setup (for Setup/Entry Operation)			
06	*2	Call Forwarding - Select Option	Except for Answering Machine Emulation (AME)
13	178	Display Language Selection	
15	821	Enable Handsfree Incoming Intercom Calls	Changing this setting affects the desk phone - not the Cordless phone.
18	825	BGM On/Off	
19	824	Key Touch Tone On/Off	Changing this setting affects the desk phone - not the Cordless phone.
20	820	Change Incoming CO and ICM Ring Tones	Changing this setting affects the desk phone - not the Cordless phone.
21	811	Check Incoming Ring Tones	
22	800	Extension Name Programming	
24	177	Change Extension Class of Service	
27	104	Destination of Automatic Transfer Each Department Group	
37	829	Adjusting Ring Volume	
39	855	One Touch Dial Number Entry	Cannot enter name
Program 11-12 : Service Code Setup (for Service Access)			
23	863	Meet Me Answer in Same Paging Group	Cannot be paged, but can join the call
42	#3	Flash on Trunk lines	Used only for SLT phones
44	899	Callback Test for SLT	Used only for SLT phones
45	849	Enabled On Hook When Holding (SLT)	Used only for SLT phones
46	859	Answer On Hook When Holding (SLT)	Used only for SLT phones
47	894	Call Waiting Answer / Split Answer for SLT	Used only for SLT phones
48	##	Account Code	Used only for SLT phones

Item No.	Service Code	Feature	Comment
53	154	Live Recording at SLT	Used only for SLT phones
Program 11-13 : Service Code Setup (for ACD)			
02	155	ACD Log Out (for SLT)	Used only for SLT phones
03	156	Set ACD Temporary Release (for SLT)	Used only for SLT phones
04	157	Cancel ACD Temporary Release (for SLT)	Used only for SLT phones
05	158	Set ACD Off Duty (for SLT)	Used only for SLT phones
06	159	Cancel ACD Off Duty (for SLT)	Used only for SLT phones
07	160	ACD Conversation Recording (for SLT)	Used only for SLT phones
Program 11-14 : Service Code Setup (for Hotel)			
17	175	Hotel Room Monitor	Used only for SLT phones
Program 11-15 : Service Code Setup (for Special Access)			
01	830	Remote Maintenance	Used only for SLT phones
02	860	ACD Access in Dial-In Conversion Table	Used only for SLT phones
05	#*#*	System Programming Mode, Log-On	
07	No Setting	Recording Destination in Dial-In Conversion Table	Used only for SLT phones
08	866	Network Message Lamp Control	Used only for SLT phones
09	No Setting	Transfer to Trunk Ring Group Code	Used only for SLT phones

Default Setting

Disabled

Programming

- **10-03-01 : PCB Setup**
  The system automatically sets the circuit type for each extension (the cordless phone is identified as circuit type 1). If a previously used port is to be used for the Cordless phone, with the station equipment disconnected from the system, undefine the port (00) and allow the system to redefine the circuit type.
- **15-02-05 : Multi-Line Telephone Basic Data Setup - Transfer Key Operation Mode**
  In order for the Cordless Lite/Cordless Lite II phone user to be able to use the flash function (ex: to use the Door Box relay), this option must be set to "2". This changes the Transfer key to a Flash key.
- **15-02-09 : Multi-Line Telephone Basic Data Setup - Ringing Line Preference for Intercom Calls**
  15-02-10 : Multi-Line Telephone Basic Data Setup - Ringing Line Preference for Trunk Calls
  These items should be set to '1' to enable automatic answer for ringing calls.

- **15-02-11 : Multi-Line Telephone Basic Data Setup, Callback Automatic Answer**
  This item should be set to '1' to enable automatic answer for Callbacks.
- **15-07-01 : Programmable Functions Keys**
  Assign a loop key to one of the function keys. The system default setting has the function keys programmed for lines1 - 4 (code *01 + trunk number). By assigning a loop key, all required lines can be accessed (enter code *05 + 0 [Incoming], 1 [Outgoing], or 2 [Both]).
  - Aspire S Trunk: 1-8
  - Aspire Trunk: 1-100
- **15-02-24 : Multi-Line Telephone Basic Data Setup - Conference Key Mode**
  This option allows an extension's CONF key to be programmed for Conference or for Transfer.
- **15-13-01 : Loop Keys - Outgoing**
  Assign trunk groups for outgoing loop keys (0=ARS, Aspire S Trunk Groups 1-8, or Aspire Trunk Groups 1-100).
- **15-13-02 : Loop Keys - Incoming**
  Assign trunk groups for incoming loop keys (0=all Trunk Groups, Aspire S Trunk Groups 1-8, or Aspire Trunk Groups 1-100).
- **22-04-01 : Incoming Extension Ring Group Assignment**
  Assign the cordless phone's extension to a Ring Group.
  - Aspire S Ring Groups: 1-8
  - Aspire Ring Groups: 1-100
- **31-02-01 : Internal Paging Group Assignment**
  Do not place a Cordless extension into a paging group, otherwise it will ring when a Page is made by another user.

Related Features

Background Music

Do not set Background Music for the Cordless phone (Service Code 825). This made cause the phone to ring when it is in an idle state.

Dial Number Preview

If the telephone number is not entered and dialed within 10 seconds, the phone returns to an idle state.

Door Box

For a cordless phone use to use the relay, Program 15-02-05 must be set to "2".

E911 Compatibility

The Cordless phone cannot receive E911 notification.

Intercom

Cordless phones should not have voice announce selected. Intercom calls should only ring the extension. Use Service Code 823 to set an extension to ringing (Program 11-11-16).

Operation

Programming the four function keys on the phone (additional key setup can also be done in the system programming):

1. At the same time, press and hold *# then press TALK.
   'F1=LK01' shows in the display and the F1 LED flashes red.
2. Press MUTE to select the function/line key to program.
   LK01 - LK04 and Off-Hook Ring.
3. Press R/VOL repeatedly to scroll options for each line key.
   LK01 - LK16. Use the Aspire programming to define keys for any feature use.
4. Press TALK to exit programming mode.
   When initially installed, the 4 function keys default to line keys 1-4 respectively and off-hook ringing defaults to ON.

Programming the Redial Key to Activate the Cordless Phone:

This option can only be used on the Cordless II.

1. Make sure the Base Unit is in DESK mode. If the DESK LED is not lit, press DESK button on the Base Unit.
2. Remove the battery.
3. Press and hold *# on the handset at the same time.
4. Install the battery while pressing these keys.
5. After the handset beeps, release the keys.
   The phone is now in the setup mode.
6. Press HOLD to display the current mode.
   The display shows ID 0BD1 DIGITAL (REDIAL).
7. Press F2 + HOLD.
   The display shows DIGITIAL (F8).
8. Press TALK to restore the phone to standby mode.
   Restore the Redial function by entering setup mode, pressing F3 and then HOLD.

Switching the Extension Port from Cordless to Keyset or Vice Versa:

This option can only be used on the Cordless II.
This must be done when the phones are idle otherwise an active call will be disconnected.

1. With the phone in an idle state, press either the CORDLESS or DESK button on the base unit.
   Wait a few seconds for the phone to initialize before attempting to place a call.
   The LED on the Base Unit indicates which phone is currently active.
   If the Cordless phone is active, the time and date are indicated on its display. If the Aspire keyset is active, the display shows "DESK TEL".
   If programmed, the REDIAL key can be used to switch from Desk to Cordless mode only. By default, the REDIAL key performs the redial function.

Changing Channels . . .

Change channels if you're experiencing interference while on a call:

1. Press CHAN while on a call.

   The TALK icon starts blinking and stops when the handset has completed the channel change. Until this process is completed, no other functions are available.

   The Cordless Lite II (P/N 780087) has 30 channels; the Cordless II (P/N 730088) has 10 channels.

ABBREVIATED DIALING

To dial your stored Abbreviated Dialing number:

1. Press TALK + #2 + Bin (for common).
   OR
2. Press TALK + #4 + Bin (for group).

   You may also have function keys for Abbreviated Dialing.

ANSWERING CALLS

Answering a call ringing your phone:

1. Listen for ringing and press TALK, any dial pad key, or press the flashing line key.

   Press line or loop key if not connected to an outside call.

   To mute a conversation, press the MUTE key. The TALK icon blinks. The caller cannot hear you speak. Pressing the MUTE key again deactivates Mute.

   While talking, if the handset cannot receive a signal from the base unit in approximately 35 seconds, it emits an error tone and goes to standby mode.
2. To disconnect, press TALK or place the handset back into the charging unit.

Picking up calls not ringing your phone . . .

If a call is ringing over the Page after hours:

1. Press TALK + #0.

When a call is ringing a co-worker's phone:

1. Press TALK.

   You can press a Group Call Pickup or Call Coverage function key instead of step 2.
2. ** + Co-worker's extension.

CALL FORWARDING

Forward (reroute) your calls to a co-worker:

1. Press TALK + *2.
   *To forward off-premise: *46 + Line access code (e.g., 9) + Number + HOLD.*
   *To cancel: *46 + HOLD + TALK.*
2. Dial Call Forwarding condition:
   1 = Personal Answering Machine Emulation (then skip to step 4)
   2 = Busy or not answered
   3 = Follow Me
   4 = Immediate
   6 = Not answered
   7 = Immediate with both ringing (not for Voice Mail)
   0 = Cancel
3. Dial destination extension, Voice Mail master number or press Voice Mail key.
4. Dial Call Forwarding type:
   2 = All calls
   3 = Outside calls only
   4 = Intercom calls only
   You hear stutter dial tone to remind you that your calls are forwarded.
5. Press TALK.

CAMP-ON AND CALLBACK

When you hear system busy:

1. To Camp-On (wait without hanging up), press 2.
   (Intercom calls) When you hear ringing, wait for the called party to answer.
   If you hear busy/ring instead of busy before camping on, you can optionally dial the Barge In code to send a Voice Over. Check with your Communications Manager for the code.
   (Outside calls) When you hear new dial tone, place your call again.

   OR

1. To leave a Callback for a busy line or extension, press 2 + TALK.
   Wait for the system to call you back.
2. Press TALK.
   (Outside calls) Place your call again.
   (Intercom calls) Speak to co-worker.

To cancel your Callback:

1. Press TALK + 870 + TALK.

CONFERENCE

Use Conference to have a telephone meeting:

1. Place/answer call + CONF.
2. Place/answer next call + CONF.
   Repeat this step to add more parties. You may be able to have up to 32 callers.
3. After adding all parties, press CONF again to begin the Conference.

FLASH

To flash the trunk you are on:

1. Press TRANSFER.

   Program 15-02-05 must be set to "2" for Flash to work.

HOLD

Use Hold instead of leaving the call off-hook:

1. Do not hang up + HOLD.

   This puts your outside call on System Hold. Your co-workers can take the call off Hold. To place the call on Exclusive Hold, press your Exclusive HOLD function key.

   Intercom calls automatically go on Exclusive Hold when you press HOLD.

   Prior to software 4.0W, do not press TALK or the call will automatically recall immediately unless Group Hold is used.

Easily retrieve a call from Hold:

1. Press TALK + flashing line key.

   OR

2. If the call was not on a line key (or was an Intercom call) simply press TALK.

INTERCOM

Dial co-worker using the Intercom:

1. Press TALK + Co-worker's extension number.

   Your call will ring or voice-announce. If you hear ringing, wait for an answer. If you hear a beep, begin speaking. Dialing 1 changes the mode.

   *For your Voice Mailbox, dial * 8.*

   *For Paging, dial *1 + 0 for All Call or *1 + 1-64 for zones.*

   Do not press TALK or the call will automatically recall immediately unless Group Hold is used.

LAST NUMBER REDIAL

Use Last Number Redial to quickly redial your last outside call:

1. Press TALK + a line key + REDIAL. If the Redial key has been reprogrammed, press a a programmed Redial function key instead.

MESSAGE WAITING

Leave a Message Waiting (flashing Message Wait LED) when your co-worker doesn't answer:

1. Do not hang up + 0.
   Your co-worker's Message Wait LED flashes fast. Your Envelope icon displays. With Voice Mail, dial 8 to leave a message in your co-worker's mailbox.

To answer a Message Waiting left for you:

1. Press TALK + *0.
   To cancel Messages Waiting (those you left and those left for you): TALK + 873.

ONE TOUCH CALLING

Quickly dial co-workers and outside calls . . .

One Touch Calling

1. Press TALK + a programmable function key.
   You can define the functions keys for one-touch features such as Hotline, Voice Mail. See Programming Function Keys.

PARK

Park a call in orbit so a co-worker can pick it up:

1. Do not hang up.
2. HOLD + #6 + Park Orbit.
   Park Orbits are 01-64. For Personal Park, dial 857 instead of #6.
3. Page your co-worker to pick up the call.
   *For Paging, dial *1 + 0 for All Call or *1 + 1-64 for zones.*
4. Press TALK.

Or pick up a call a co-worker parked for you:

1. Press TALK + *6 + Park Orbit.
   *For Personal Park, dial 857 (if Parked at your phone) or ** + Extension number.*

PLACING AN OUTSIDE CALL

Press a line key for quick access:

1. Press TALK.
   OR
1. Press a programmed line key.
   "AQUIRING LINK" blinks in the display while trying to connect to the base unit. The TALK icon appears and the line key lights when connected.
   If there is no connection to the base unit, an error tone is heard and "NO SERVICE" is temporarily displayed on the LCD.
2. Listen for dial tone + Outside number.
   You can have function keys for lines or line groups.
   If your system is behind a PBX, you may have to dial 9 before your number.
   To mute a conversation, press the MUTE key. The TALK icon blinks. The caller cannot hear you speak. Pressing the MUTE key again deactivates Mute.
   While talking if the handset cannot receive a signal from the base unit in approximately 35 seconds, it emits an error tone and goes to standby mode.
3. To disconnect, press TALK or place the handset back into the charger.

Dial codes for outside lines:

1. Press TALK + 9 + Outside number.
   OR
1. Press TALK + 804 + Line group (Aspire S: 1-8, Aspire: 1-9 or 001-100) + Outside number.
   OR
1. Press TALK + #9 + Line number (e.g., 005 for line 5) + Outside number.

SAVE

Save your call for quick dialing later on:

1. Press the SAVE programmable function key.

Then redial your saved number:

1. Press TALK + SAVE programmable function key.
   The system selects an outside line.
   OR
2. Press TALK + a line key + SAVE programmable function key.
   The call uses the line you select.

TRANSFER

Transfer the call you're on to a co-worker:

1. Do not hang up + HOLD.
2. Dial your co-worker's extension.

   You can press a One-Touch key instead of dialing your co-worker.

   To transfer the call to Voice Mail, press your Voice Mail key before dialing your co-worker.
3. Press TALK to transfer the call.
   OR
   Press the TRF key to transfer the call.

VOLUME CONTROL

Controlling the volume . . .

Change the ring tone and volume level while in an idle state:

1. Press R/VOL while in an idle state.

   The current tone and volume rings for approximately 2 seconds and the display indicates the level.
2. Continue to press R/VOL until the desired volume level is reached.

   The available levels are: Type A - High and Low, Type B - High and Low, Type C - High and Low, Off - Vibrate.

   If the Vibrate option is selected and the phone is placed in the charger, the phone will ring using Type A Low.

   When the Ringer On/Off slide switch (located on the side of the handset) is turned off, the phone does not ring or vibrate and the OFF icon appears in the display.

Change the ring tone and volume level while on a call:

1. Press R/VOL while on a call.
2. Continue to press R/VOL until the desired volume level is reached.

   The available levels are: Low, Medium, High, Maximum.

Aspire S	Aspire M/L/XL
• Available - 8 Department Groups.	• Available - 64 Department Groups.

Description

With Department Calling, an extension user can call an idle extension within a preprogrammed Department Group by dialing the group's pilot number. The call would ring the first available extension in the group. For example, this would let a caller dial the Sales department just by knowing the Sales department's pilot number. The caller would not have to know any of the Sales department's extension numbers.

There are two types of routing available with Department Calling: Priority Routing and Circular Routing. With Priority Routing, an incoming call routes to the highest priority extensions first. Lower priority extensions ring only if all higher priority extensions are busy. With Circular Routing, each call rings a new extension (with circular routing, a new call will ring the extension which has been idle the longest in the group). The ringing order is based on an extension's priority. In a Department Group with extensions 310 (Priority 1), 311 (Priority 2) and 312 (Priority 3)

- The first call rings 310.
- The second call rings 311.
- The third call rings 312.
- The fourth call rings 310 and the cycle repeats.

Note: When programming, the high priority extensions have low priority numbers. For example, priority 1 has a higher priority than priority 10.

Overflow Routing

Department Calling also provides overflow routing for extensions within the group. If a user directly dials a busy extension within a Department Group, the system can optionally route the call to the first available group member. The system follows Program 22-15-03 and 22-15-05 timers for playing the periodic VRS message.

User Log Out/Log In

An extension user can log out and log in to a Department Calling Group. By logging out, the user removes their extension from the group. Once logged out, Department Calling bypasses their extension. When they log back in, Department Calling routes to their extension normally. All users can dial a code to log in or log out of their Department Calling Group. A keyset can optionally have a function key programmed for one-button log in and log out operation.

Enhanced Hunting

Department Calling is enhanced with expanded hunting capabilities. Hunting sets the conditions under which calls to a Department Group pilot number will cycle through the members of the group. The hunting choices are:

- **Busy**
  A call to the pilot number will hunt past a busy group member to the first available extension.
- **Not answered**
  A call to the pilot number will cycle through the idle members of a Department Calling group. The call will continue to cycle until it is answered or the calling party hangs up. If the Department Group has Priority Routing enabled, and the highest priority member is busy, the call will not route.

- **Busy or not answered**
  A call to the pilot number will cycle through the idle members of a Department Calling group. The call will continue to cycle until it is answered or the calling party hangs up. Calls into groups with Priority Routing and Circular Routing route identically.
- **Simultaneous ringing**
  All idle members of the Department Group ring simultaneously. Calls do not cycle between group members.

If all members of the Department Group are busy, an incoming or transferred call to the group's pilot number will queue for an available member. Each group has a queue that can hold any number of waiting calls. If a display phone is waiting in queue, the user will see: *WAITING (group name)*. If a transferred call in queue is an outside call, and the system has DSP daughter board installed with the VRS, the queued caller will hear, *"Please hold on. All lines are busy. Your call will be answered when a line becomes free."*

The VRS can also transfer calls to Department Groups. Refer to "Voice Response System (VRS)" feature for more information on setting up the VRS.

The system prevents hunting to a Department Group extension if it is:

- Busy on a call
- In Do Not Disturb
- Call Forwarded

Conditions

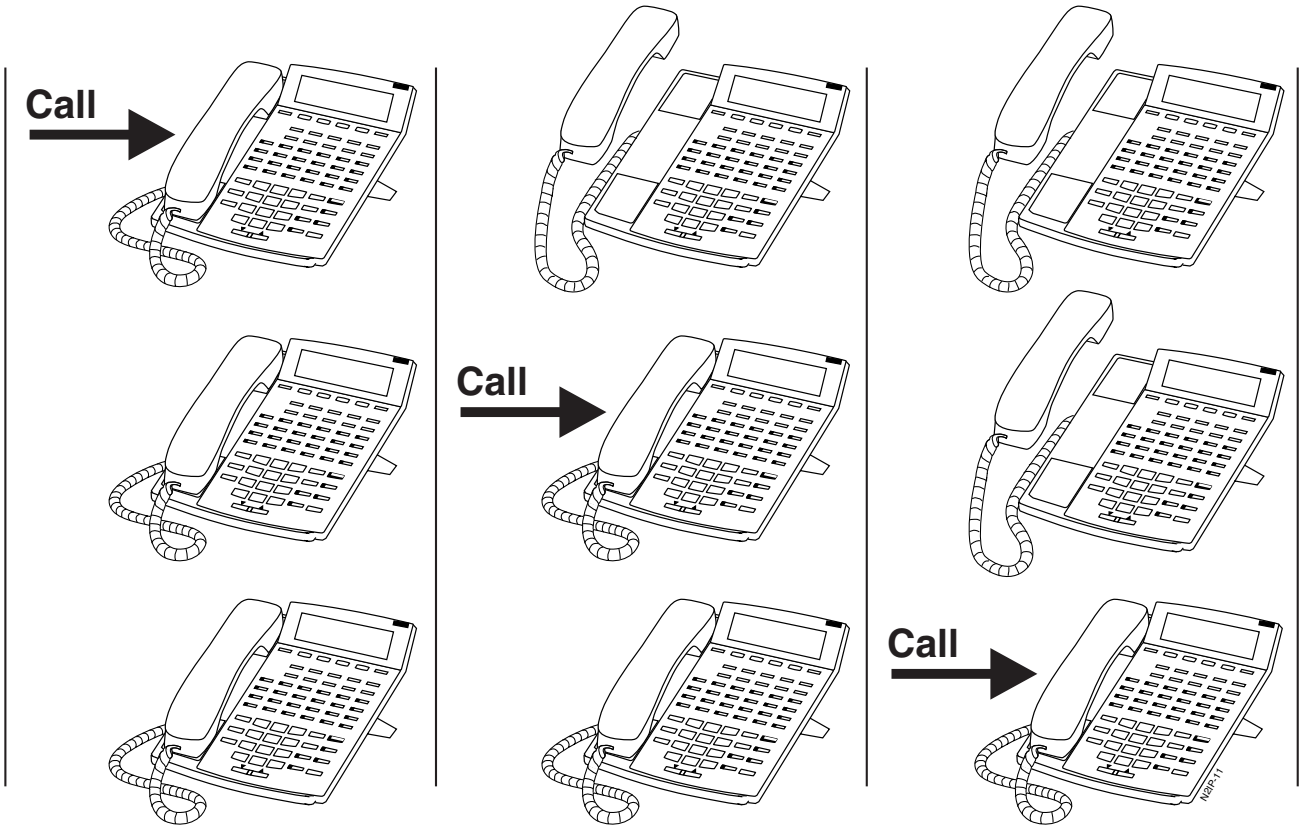
(A.) When a DIL rings to a Department Group, the DIL may follow overflow programming (Programs 22-01-04 and 22-08).
(B.) If an extension has Call Forwarding set, the system will not hunt to the forwarded extension.

Default Setting

Disabled.

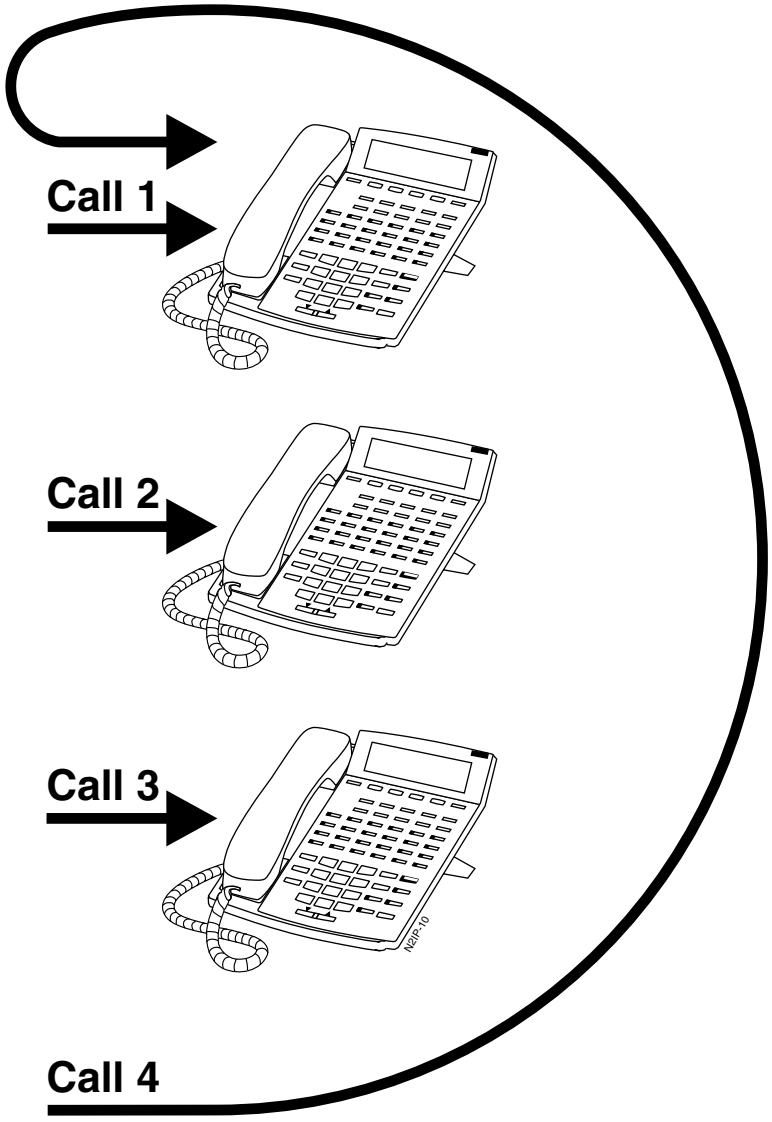
Description (Cont'd)

Priority Routing



Description (Cont'd)

Circular Routing



Programming

- **11-07-01 : Department Group Pilot Numbers**
  Assign pilot numbers to the Extension (Department) Groups you set up in Program 16-02.
- **11-11-25 : Service Code Setup (for Setup/Entry Operation) - Automatic Transfer Setup for Each Department Group**
  Use this option to set the service code (default=102) to activate immediate automatic transfer for ICM and transferred calls to Department Groups.
- **11-11-26 : Service Code Setup (for Setup/Entry Operation) - Automatic Transfer Cancellation for Each Department Group**
  Use this option to set the service code (default=103) to deactivate immediate automatic transfer for ICM and transferred calls to Department Groups.
- **11-11-27 : Service Code Setup (for Setup/Entry Operation) - Destination of Automatic Transfer for Each Department Group**
  Use this option to set the service code (default=104) for setting the destination for immediate automatic transfer for ICM and transferred calls to Department Groups.
- **11-11-28 : Service Code Setup (for Setup/Entry Operation) - Delayed Transfer for Each Department Group**
  Use this option to set the service code (default=105) for setting the delayed transfer destination Department Group.
- **11-11-29 : Service Code Setup (for Setup/Entry Operation) - Delayed Transfer Cancellation for Each Department Group**
  Use this option to set the service code (default=106) for cancelling the delayed transfer destination Department Group.
- **11-12-09 : Service Code Setup (for Service Access) - Changed to STG All Ring**
  Use this option to set the service code for ringing all members of a Department Group.
- **11-16-10 : Single Digit Service Code Setup**
  Assign the Single Digit (post-dialing) Service Code for All Member Ring.
- **15-07-01 : Programming Function Keys**
  Assign a Department Calling key (46) so extension users can install or remove themselves from the Department Calling Group. Additional keys can also be assigned for Department Group features Automatic Transfer (56), immediate calling destination (58), delayed calling destination (59), and DND destination (60).
- **16-01-01 : Department Group Basic Data Setup - Department Name**
  Assign a name to the Extension (Department) Groups you set up in Program 16-02.
- **16-01-02 : Department Group Basic Data Setup - Department Calling Cycle**
  Set the routing cycle for calls into a department (i.e., when a user dials the department pilot number). The system can ring the highest priority extension available (Priority Routing, 0) or cycle in circular order to a new idle extension for each new call (Circular Routing, 1).
- **16-01-03 : Department Group Basic Data Setup - Department Routing When Busy**
  Set how the system routes an Intercom call to a busy Department Group member. The caller can hear busy tone (0) or overflow to the first available Department Group member (1). This option is for Intercom calls to an extension, not a pilot number.
- **16-01-04 : Department Group Basic Data Setup - Hunting Mode**
  Set if an unanswered call should hunt once stopping at the last member tried (0) or continually hunt through the idle members (1).

- **16-01-05 : Department Group Basic Data Setup - Department Group All Ring Mode Operation**
  Set if all members of the group should ring automatically (1) or through the use of the service code defined in Program 11-12-09 (0). Selecting automatic will override the settings of Programs 16-01-03 and 16-01-04.
- **16-01-07 : Department Group Basic Data Setup - Call Recall Restriction for STG**
  Set if a transferred call to the pilot number should recall (0) or camp on (1) to the busy or idle Department Group.
- **16-01-08 : Department Group Basic Data Setup - Queuing for Department Group Calls**
  To have Department Group calls queue when busy, set this entry to "1" (0=no queuing, 1=queuing) for a Department Group.
  This program allows entries of 1-32, however, the system accepts any entry other than "0" as to allow queuing.
- **16-01-09 : Department Group Basic Data Setup - Department Hunting No Answer Time**
  Set how long a call will ring a Department Group extension before hunting occurs.
- **16-01-10 : Department Group Basic Data Setup - Hunt Type**
  Set the type of hunting for each Department Group:
  0- No queuing
  1- Hunting When Busy
  2- Hunting When Not Answered
  3- Hunting When Busy or No Answer
- **16-02-01 : Department Group Assignment for Extensions**
  Assign extensions to Department Groups and set the priority assignment.
  ➪ Aspire S: Department Groups 1-8
  ➪ Aspire: Department Groups 1-64
- **16-03-01 : Secondary Department Group Assignment for Extensions**
  Use this program to assign extensions to multiple Department Groups and set the priority assignment. Each Secondary Department Group can have up to 16 extensions assigned.
  ➪ Aspire S: Department Groups 1-8
  ➪ Aspire: Department Groups 1-64
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.
- **20-11-17 : Class of Service Options (Hold/Transfer Service) - Set/Cancel Department Group Trunk-to-Trunk Forwarding**
  In an extension's Class of Service, allow (1) or prevent (0) an extension from using the immediate automatic transfer of ICM and transferred calls to the Department Groups feature.
- **20-13-14 : Class of Service Options (Supplementary Service) - Department Calling**
  In an extension's Class of Service, allow (1) or prevent (0) extensions from receiving Department Calls when the pilot number is dialed.
- **22-02-01 : Incoming Call Trunk Setup**
  If you want a trunk to be a DIL to a Department Group, assign Service Type 4 for each Night Service Mode. Also see 22-07 below.
- **22-07-01 : DIL Assignment**
  For each trunk assigned Service Type 4 in 22-02 above, assign the DIL destination as the Department Group pilot number (as assigned in Program 11-07-01).
  ➪ Aspire S: Department Groups 1-8
  ➪ Aspire: Department Groups 1-64
- **24-02-05 : System Options for Transfer - Transfer to Busy Department Group Recall Timer**
  After a trunk is unscreen transferred to a busy Department Group, this timer will start. If the call is not answered, it will recall the originator. Determine how long the call should ring before recalling (0-64800 seconds).

- **24-02-08 : System Options for Transfer - Delayed Transfer Timer for All Department Groups**
  Determine how long a call should ring a Department Group before transferring the call (0-64800 seconds).
- **24-05-01 : Department Group Transfer Target Setup**
  Assign the Abbreviated Dialing bin to each Department Group to hold the destination for the immediate automatic transfer of ICM and transferred calls to the Department Group feature.

Related Features

Automatic Call Distribution (ACD)
Set up hunting as required for ACD.

Call Forwarding
Extensions within a Department Group which have Call Forwarding enabled will not be included in the call hunt. The extension to which the user is forwarded will not receive the hunted calls.

Department Step Calling
Easily step call to an idle Department Group member if the member called is busy.

Multiple Directory Numbers / Call Coverage
A virtual extension can be programmed allowing a Call Coverage key to receive multiple calls which can camp on to the extension - no analog port is required.

Transfer
An extension user can Transfer a call to a Department Group master number. If unanswered, the call will recall the transferring extension after the Transfer Recall Time (Program 24-02-04).

Voice Mail
Voice mail uses one Department Group for voice mail.

Voice Response System (VRS)
Refer to the VRS feature for details on using VRS overflow.

Operation

To call a department:

1. At keyset, press idle CALL key.
   OR
   At single line set, lift handset.
2. Dial department's extension number.
   The system routes the call to the first free phone in the department.
3. **Optional**: To manually ring all members of the group, dial the single digit service code assigned for All Member Ring (Program 11-16-10).

To log out of your Department Calling Group:

While you are logged out, Department Calling cannot route calls to your extension.

1. Press idle CALL key.
2. Dial 150 + 1.
   OR
1. Press Department Calling Log In key (PGM 15-07 or SC 851: 46).
   The key lights while you are logged out.

To log back in to your Department Calling Group:

While you log back in, Department Calling will route calls to your extension.

1. Press idle CALL key.
2. Dial 150 + 0.
   OR
1. Press Department Calling Log In key (PGM 15-07 or SC 851: 46).
   The key goes out when you log back in.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

After calling a busy Department Calling Group member, an extension user can have Department Step Calling quickly call another member in the group. The caller does not have to hang up and place another Intercom call if the first extension called is unavailable. Department Step Calling also allows an extension user to cycle through the members of a Department Group.

Conditions

None

Default Setting

Enabled.

Programming

- **11-12-07 : Service Code Setup (for Service Access) - Step Call**
  If required, customize the Step Call service code to be used by an extension user (default: 808).
- **11-16-01 : Single Digit Service Code Setup**
  If required, use this option to change the Department Step Calling Single Digit Service Code.
- **15-07-01 : Programmable Function Keys**
  Assign a function key Department Step Calling (code 36).
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.
- **20-08-12 : Class of Service Options (Outgoing Call Service) - Department Step Calling**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to use Department Step Calling.

Related Features

Department Calling

An extension user can call an idle extension within a preprogrammed Department Group by dialing the group's pilot number. Department Calling also provides overflow routing for extensions within the group - which simulates Step Calling.

Programmable Function Keys

Function keys simplify Department Step Calling operation.

Operation

To make a Step Call:

You step through Department Groups set in Program 16-02.

1. Place call to busy Department Group member.
   OR
   Place call to Department Group pilot number.
2. Dial #.
   OR
   Press Step Call key (PGM 15-07 or SC 851: 36).
3. Repeat step 2 to call other Department Group members.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Dialing Number Preview lets a display keyset user dial and review a number before the system dials it out. Dialing Number Preview helps the user avoid dialing errors.

Conditions

An extension user cannot edit the displayed number.

Default Setting

Enabled.

Programming

➧ **20-06-01 : Class of Service for Extensions**
Assign a Class Of Service (1-15) to an extension.

➧ **20-08-05 : Class of Service Options (Outgoing Call Service) - Dial Number Preview**
In an extension's Class of Service, enable (1) or disable (0) an extension's ability to use Dial Number Preview.

Related Features

Central Office Calls, Placing

In order to place an outgoing call, an extension user must have outgoing access to a line, loop or trunk group key.

Voice Response System (VRS)

If the system has VRS installed, you must first press * in order to preview a number.

Operation

To use Dial Number Preview to place a call (keyset only):

1. Do not lift the handset or press a CALL key.
2. ***To preview any number***, dial the number you wish to call.
   *With VRS installed, you must first press * to preview a number.*
   To preview an Abbreviated Dial number, press DIAL and dial the Abbreviated Dial bin number you want to call.
   The number displays.
3. To dial out the displayed trunk number, press a line/loop/trunk group key.
   If the previewed number as a trunk access code (e.g., 9), you can press CALL instead.
   OR
   To dial out the displayed Intercom number, press a CALL key.
   OR
   To cancel the number without dialing it out, press HOLD.

Dial Pad Confirmation Tone

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

For an extension with Dial Pad Confirmation Tone enabled, the user hears a beep each time they press a key. This is helpful for Intercom calls and Dial Pulse trunk calls, since these calls provide no Call Progress tones.

Conditions

None

Default Setting

Disabled

Programming

➵ **11-11-19 : Service Code Setup (for Setup/Entry Operation) - Key Touch Tone On/Off**
If required, change the service code enabling or disabling the Key Touch Tone (default: 824).

Related Features

Single Line Telephones

Dial Pad Confirmation Tone does not apply to single line telephones.

Operation

To enable/disable Dial Pad Confirmation Tone:

1. Press idle CALL key.
2. Dial 824.

Aspire S	Aspire M/L/XL
• Available	• Available.
• Tone Detection Setup is available.	• Tone Detection Setup is available.
• The Next Trunk in Rotary if No Dial Tone option is available.	• The Next Trunk in Rotary if No Dial Tone option is available.

Description

If a trunk has Dial Tone Detection enabled, the system monitors for dial tone from the telco or PBX when a user places a call on that trunk. If the user accesses the trunk directly (by pressing a line key or dialing #9 and the trunk's number), the system will drop the trunk if dial tone does not occur. If the user access the trunk via a Trunk Group (by dialing a trunk group code or automatically through a feature like Last Number Redial), the system can drop the trunk or optionally skip to the next trunk in the group. Refer to the chart under Programming below for more.

Dial Tone Detection is available for the following features:

- Automatic Route Selection
- Abbreviated Dialing
- Central Office Calls, Placing
- Last Number Redial
- Loop Keys (outbound)
- Save Number Dialed
- T1 Trunking (with ANI/DNIS Compatibility)
- Tie Lines
- Trunk Group Routing
- Trunk Groups

Conditions

None

Default Setting

Disabled for manually dialed calls; enabled for automatically dialed calls.

Programming

Dial Tone Detection Program Interaction			
Method	**14-02-05**	**14-02-11**	**Result if dial tone not present . . .**
Press a line key OR Dial #9 + Trunk number	0	0	Trunk hangs (does not disconnect)
	0	1	Trunk hangs (does not disconnect)
	1	0	Trunk drops
	1	1	Trunk drops
Dial a Trunk Group code OR Automatically through a feature	0	0	Trunk hangs (does not disconnect)
	0	1	Trunk reroutes after time-out
	1	0	Trunk drops
	1	1	Trunk reroutes after time-out

- **10-09-01 : DTMF and Dial Tone Circuit Setup**
  If dial tone detection is enabled, be sure to allocate at least one circuit for dial tone detection (type 0 or 2).
- **14-02-05 : Analog Trunk Data Setup - Dial Tone Detection for Directly Accessed Trunks**
  Enable (1) or disable (0) dial tone detection for manually dialed trunk calls. This option only pertains to calls placed using line keys or Direct Trunk Access.
- **14-02-11 : Analog Trunk Data Setup - Next Trunk in Rotary if No Dial Tone**
  If enabled, the system will skip over a trunk if dial tone is not detected. This option pertains to calls placed using Loop Keys, Abbreviated Dial, ARS, Last Number Redial or Save Number Dialed. It does not pertain to line key or Direct Trunk Access calls.
- **21-01-05 : System Options for Outgoing Calls - Dial Tone Detection Timer**
  If dial tone detection is enabled, the system will wait this interval for the telco to return dial tone. When this interval expires, the system assumes dial tone is not present. To disable this timer (and have the system wait continuously), enter 0.
- **80-03-01 : DTMF Tone Receiver Setup**
  80-04-01 : Call Progress Tone Detector Setup
  Use these programs to set the criteria for dial tone detection and call progress tone detection.

Related Features

See *Description* above.

Operation

Dial Tone Detection is automatic if enabled in programming.

Aspire S	Aspire M/L/XL
• Available with software 2.21+ - 20 DID Translation Tables can be divided between 2000 entries.	• Available - 20 DID Translation Tables can be divided between 2000 entries.
• DID routing can follow ring group programming on transfers for busy/no answer calls.	• DID routing can follow ring group programming on transfers for busy/no answer calls with software 1.11+.
• Call by Time Schedule feature requires 4.93+.	• Call by Time Schedule feature requires 4.93+.

Description

Direct Inward Dialing (DID) lets outside callers directly dial system extensions. DID saves time for callers who know the extension number they wish to reach. To place a DID call, the outside caller dials the local exchange (NNX) and additional digits to ring the telephone system extension. For example, DID number 926-5400 can directly dial extension 400. The caller does not have to rely on attendant or secretary call screening to complete the call.

Note: Direct Inward Dialing requires DID service from telco.

In addition to direct dialing of system extensions, DID provides:

- DID Dialed Number Translation
- Flexible DID Service Compatibility
- DID Intercept
- DID Camp-On

DID Dialed Number Translation

DID allows different tables for DID number translation. This gives you more flexibility when buying DID service from telco. If you can't buy the exact block of numbers you need (e.g., 301-556), use the translation tables to convert the digits received. For example, a translation table could convert digits 501-756 to extension numbers 301-556.

The Aspire system has 2000 DID Translation Table entries that you can allocate among the 20 DID Translation Tables. There is one translation made in each entry. For a simple installation, you can put all 2000 entries in the same table. For more flexibility, you can optionally distribute the 2000 entries among the 20 tables.

In addition to number conversion, each DID Translation Table entry can have a name assigned to it. When the DID call rings the destination extension, the programmed name displays.

Flexible DID Service Compatibility

You can program the system to be compatible with three and four digit DID service. With four digit service, the telco sends four digits to the system for translation. With three digit service, the telco sends three digits to the system for translation. Be sure to program your system for compatibility with the provided telco service. For example, if the telco sends four digits, make sure you set up the translation tables to accept the four digits.

The system is compatible with Dial Pulse (DP) and DTMF DID signaling. DID trunks can be either wink start or immediate start.

DID Camp-On

DID Camp-On sets what happens to DID calls to busy extensions when you have Busy Intercept disabled. With DID Camp-On enabled, a call to a busy extension camps-on for the DID Ring No Answer Time interval. It then diverts to the programmed DID Intercept extension ring group or Voice Mail. Without DID Camp-On, the caller to the busy extension just hears busy tone.

DID Routing Through the VRS

DID calls can optionally route through the VRS. The DID caller hears an initial Automated Attendant Greeting explaining their dialing options. If the caller mis-dials, they can hear a second greeting with additional instructions. For example, the first Automated Attendant Greeting can be, "Thank you for calling. Please dial the extension number you wish to reach or dial 0 for the operator." If the caller inadvertently dials an extension that doesn't exist, they could hear, "The extension you dialed is unavailable. Please dial 0 for assistance or dial # to leave a message so we can call you back."

You assign Automated Attendant greetings (i.e., VRS Messages) to the numbers in each Translation Table. This provides you with extensive flexibility when determining which greetings the system should play for which dialed numbers. You could, for example, set up 926 5401 through 926 5449 to route to extensions 301- 349, and have 926 5450 route to the automated attendant.

The system allows an extension to be defined as a 1-digit number which can be dialed by the outside caller on a DID/DISA trunk using the VRS. The outside caller is able to access to desired extension/department group by dialing only 1 digit after the system answers the call. If the same number is used as the first digit of an extension number as well as the 1-digit access code for DID/DISA, the outside caller will not be able to access the extension.

Example: If '2' is defined as a 1-digit access code to department group 300, outside callers cannot access extensions 200-299 directly.

SMDR Includes Dialed Number

The SMDR report can optionally print the trunk's name (entered in system programming) or the number the incoming caller dialed (i.e., the dialed DID digits). This gives you the option of analyzing the SMDR report based on the number your callers dial. (This option also applies to an ISDN trunk as well.)

DID Intercept

DID Intercept automatically reroutes DID calls under certain conditions. There are three types of DID Intercept:

- **Vacant Number Intercept**
  If a caller dials an extension that does not exist or mis-dials, Vacant Number Intercept can reroute the call to the programmed DID Intercept extension ring group or Voice Mail. Without Vacant Number Intercept, the caller hears error tone after mis-dialing.

- **Busy Intercept**
  Busy Intercept determines DID routing when a DID caller dials a busy extension. If Busy Intercept is enabled, the call immediately routes to the programmed DID Intercept extension ring group or Voice Mail. If Busy Intercept is disabled, the call follows DID Camp-On programming (see below).

- **Ring-No-Answer Intercept**
  Ring-No-Answer Intercept sets the routing options for DID calls that ring unanswered at the destination extension. With Ring-No-Answer Intercept enabled, the unanswered call reroutes to the DID Intercept extension ring group or Voice Mail after the DID Ring-No-Answer Time interval. If Ring-No-Answer Intercept is disabled, the unanswered call rings the destination until the outside caller hangs up.

Delayed DID

Delayed DID allows a user a pre-programmed amount of time to answer a call. If the call is not answered within this time period, the system automatically answers the call. An outside party will hear a voice message, music, or dial tone according to the following conditions:

- If a VRS is installed, the system sends a pre-recorded message from the VRS.
- If a customer-provided audio system (example: tape recorder) is connected, an error message or music can be played for the caller.
- If there is no equipment connected for an announcement, the system sends a unique dial tone to the outside caller.

This feature is not available for the normal incoming call on ISDN trunks.

DID Intercept Destination for Each DID Number

With this feature the system allows you to program a DID Intercept destination for a DID number which receives no answer or busy call. The system can be programmed to use a trunk ring group, the VRS or the voice mail as the programmed destination. Each vacant number intercept for a DID number can have two destinations. The first destination is for an invalid DID number, busy or no answer extension. The second destination is for a no answer trunk ring group.

For busy or no answer intercept calls, a third destination can be defined in Program 22-12. If the first and third destinations are programmed but the second destination is not, the incoming call goes to the third destination after the first destination. If the first and second destinations are not programmed, but the third destination is, the call goes directly to the third destination.

This feature works for DID trunks with a trunk service type 1 in Program 22-02. Other types of trunks may use the DID table, but the DID intercept feature is not yet supported.

With the DID Intercept for each DID number feature, when the primary destination (Program 22-11-05) is set to Voice Mail, the Voice Mail protocol is:

1. Busy Intercept = Forward Busy
2. Ring-No-Answer Intercept = Forward RNA

When the secondary destination (Program 22-11-06) is set to Voice Mail, the Voice Mail protocol is based on the first destination's routing. When the incoming call is forwarded to the first destination by a busy intercept, the Voice Mail protocol will be that it forwards busy calls. When the incoming call is routed to the first destination by a ring-no-answer intercept, the protocol will be that it forwards ring-no-answer. The Voice Mail will transfer the calls to the mailbox number defined in Program 22-11-02.

Note: Any valid DID number must be entered in the DID table (Program 22-11). If a valid DID number is not entered, there will be no ring destination for any incoming calls to that number (the calls will not ring any extension in the system).

Calls Can Follow Ring Group Programming for Transferring Calls

An option has been added to Program 22-11 which allows you to determine if the DID routing should use the programmed ring group entry in Program 22-12-01 when transferring calls from a busy or no answer number.

Call by Time Schedule Feature Added

For every DID number programmed, the DID Call by Time Schedule feature allows each of the 8 different time patterns (defined in Program 22-17) to be assigned a different destination, following the DID conversation table in Program 22-11. This time pattern can also be selected manually, using a service code. The time pattern used for this option is separate from the 8 day/night time modes defined in Program 12-02.

Notes:

- When the time pattern is changed manually, the following conditions apply:
  - Manually selecting the time pattern temporarily overrides the entries in Program 22-17. However, when a time pattern changes with the time schedules in Program 22-17, the pattern applied by the manual change is cancelled.
  - If the time pattern is manually selected and the system is reset, once the system restarts, the manually selected time pattern is still in affect.
- When a time pattern is set as 00:00 from 00:00 and Program 22-11 is defined, the system will always follow the setting in Program 22-11. To prevent the system from using Program 22-11, it must be undefined.
- If the destination defined in Program 22-17 is not found, the system then checks the setting in Program 22-11.
- If an incoming DID call is unanswered/busy, it will follow the entries in Program 22-12 and 22-13 for the trunk group based on the time the no answer/busy indication was received.

Federal Communications Commission DID Requirements

Allowing this equipment to operate in a manner that does not provide proper answer supervision signaling is in violation of Part 68 rules.

This equipment returns answer supervision to the Public Switched Telephone Network when the DID trunk is:

- Answered by the called station
- Answered by the attendant
- Routed to a recorded announcement that can be administered by the CPE user
- Routed to a dial prompt

This equipment returns answer supervision on all DID calls forwarded back to the Public Switched Telephone Network. Permissible exceptions are when:

- A call is unanswered
- A busy tone is received
- A reorder tone is received

When ordering DID service, provide the telco with the following information:

FCC Registration Number:

Aspire S:	KF = US:NIFKF06BASPIRES
	MF = US:NIFMF06BASPIRES
	PF = US:NIFPF06BASPIRES
Aspire:	KF = US:NIFKF07BASPIRE
	MF = US:NIFMF07BASPIRE
	PF = US:NIFPF07BASPIRE
DID Facility Interface Code	02RV2-T
DID Service Order Code	9.0F
DID Answer Supervision Code	A S.2
DID USOC Jack Type	RJ21X

Conditions

(A.) Analog DID requires the installation of a 4DIOPU-A1 PCB (provides four DID ports) or 8DIOPU-A1 PCB (provides eight DID ports). Depending on programming, the system may assign both trunk and extension ports (if OPX is selected in Program 10-03-01) when this PCB is installed.
(B.) DID service must be purchased from your local telephone company.
(C.) DID Intercept for each DID number works for DID trunks with a trunk service type 3 in Program 22-02. Other types of trunks may use the DID table, but the DID intercept feature for each DID number is not yet supported.
(D.) T1 or PRI DID requires a T1/PRI PCB (1PRIU-T1).

Default Setting

Disabled.

Programming

- **10-03-01 : PCB Setup - LD/OPX Assignment**
  Set the function of the DIOPU PCB port for DID (0) or OPX trunk (1).
- **10-09-01 : DTMF and Dial Tone Circuit Setup**
  If the system has DTMF DID trunks, be sure to reserve at least one circuit for analog trunk DTMF reception (type 0 or 2). ***There must be an available receiver for each DTMF DID trunk.***
  - Use the following as a guide when allocating DTMF receivers:
    - In light traffic sites, allocate one DTMF receiver for every 10 devices that use them.
    - In heavy traffic sites, allocate one DTMF receiver for every five devices that use them.
- **11-10-35 : Service Code Setup (For Administrator) - DID Mode Switching**
  Assign the service code to be used by a keyset or SLT user to manually change the time pattern for a DID number.
- **14-05-01 : Trunk Groups**
  Put DID trunks in the same trunk group (other than group 1). If you have several types of DID trunks, put each type in a separate trunk group.
- **15-07-01 : Programmable Function Keys**
  You can assign line or loop keys for DID trunks. Without line keys, DID calls ring line appearance (CALL) keys.
  In addition, assign a key for DID Mode Switching (88 + Program 22-17 table number). This key can be used to manually change the time pattern for a DID number. The following LED indications are used with the key:
  Pattern 1 = LED off, Pattern 2 = LED on, Pattern 3 = slow flash, Pattern 4 = fast flash, Patterns 5-8 = off
  ➪ Aspire S: Trunk 1-8
  ➪ Aspire: Trunk 1-200
- **20-06-01 : Class of Service for Extensions**
  Assign a Class of Service (1-15) to an extension.
- **20-07-26 : Class of Service Options (Administrator Level) - DID Mode Switching**
  For each Class of Service, enable (1) or disable (0) an extension's ability to manually change the time pattern for a DID Conversion Table.
- **20-09-01 : Class of Service Options (Incoming Call Service) - Second Call for DID/ DISA/ DIL/ E&M**
  Enable (1) or disable (0) an extension's ability to receive a second call from a DID, DISA, DIL, or tie line caller.
- **20-13-23 : Class of Service Options (Supplementary Service) - Display the Reason for Transfer**
  Enable (1) or disable (0) an extension's ability to display the reason (Call Forward, Busy, No Answer or DND) a VRS, DID, DISA, or ISDN call is being transferred to their extension.
- **21-01-02 : System Options for Outgoing Calls - Intercom Interdigit Time**
  Set the time-out interval for DID callers that don't dial. After this interval, the DID call routes according to Vacant Number Intercept programming.
- **22-01-06 : System Options for Incoming Calls - DID Ring-No-Answer Time**
  Set the DID Ring-No-Answer (RNA) Intercept interval (0-64800 seconds). In systems with RNA Intercept, the DID call rings the destination extension for this interval and then rings Intercept Ring Group.
- **22-02-01 : Incoming Call Trunk Setup**
  For each Night Service Mode, enter service type 3 when the trunk should be a DID trunk. When the DID Call by Time Schedule feature is to be used, enter the trunk type as "8" (Mode DID).

- **22-04-01 : Incoming Extension Ring Group Assignment**
  Assign extensions to Ring Groups. Calls ring the extensions according to programming in 22-06.
- **22-09-01 : DID Basic Data Setup - Expected Number of Digits**
  For each DID Translation Table (1-20), enter the number of digits the table expects to receive from the CO (8 maximum). For example, for a table used with 3-digit DID service, enter 3.
- **22-09-02 : DID Basic Data Setup - Received Vacant Number Operation**
  Selectively enable (1) or disable (0) Vacant Number Intercept based on each DID Translation Database (Program 22-11-01 and 22-11-02).
- **22-10-01 : DID Translation Table Setup**
  Assign the start and end range of DID Translation Table entries (1-2000) to each DID Translation Table (1-20).
- **22-11-01 : DID Translation Table Number Conversion - Received Number**
  For each DID Translation Table entry (1-2000), specify the digits received by the system (eight max.).
- **22-11-02 : DID Translation Table Number Conversion - Target Number**
  For each DID Translation Table entry (1-2000), specify the extension the system dials after translation (24 digits max.)
- **22-11-03 : DID Translation Table Number Conversion - Dial-In Name**
  For each DID Translation Table entry (1-2000), specify the name that should show on the dialed extension's display when it rings (twelve characters max.)
- **22-11-04 : DID Translation Table Number Conversion - Transfer Operation Mode**
  For each DID Translation Table entry (1-2000), specify the condition required to transfer to the call to the destination defined in 22-11-05 and 22-11-06.
- **22-11-05 : DID Translation Table Number Conversion - Transfer Destination 1**
  22-11-06 : DID Translation Table Number Conversion - Transfer Destination 2
  For each DID Translation Table entry (1-2000), specify the first and second Transfer Destinations if the callers receives a busy or no answer (action defined in 22-11-04).
  (Destination Options: 0 = No setting, 1-8 (Aspire S) or 1-100 (Aspire) = Incoming Group, 102 = In-Skin/External Voice Mail, 103=Centralized Voice Mail, 201-264 = Department Group, 400 = DID, 401 = DISA, 1000-1999 = Abbreviated Number (000-999))
  If the Transfer Destinations are busy or receive no answer, those calls are transferred to the final transfer destination (Program 22-10).
- **22-11-07 : DID Translation Table Number Conversion - Call Waiting**
  For each DID Translation Table entry (1-2000), specify whether Call Waiting should be allowed (0=disable, 1=enable).
- **22-11-08 : DID Translation Table Number Conversion - Maximum Number of Calls**
  For each DID Translation Table entry (1-2000), specify the maximum number of DID calls (0=unlimited, 1-200).
- **22-11-09 : DID Translation Table Number Conversion - MOH Source**
  For each DID Translation Table entry (1-2000), specify the source of music to be used for DID trunks (0=IC/MOH port, 1=BGM port, 2=ACI port).
- **22-11-10 : DID Translation Table Number Conversion - ACI Music Source Port**
  For each DID Translation Table entry (1-2000), if item 2 is selected in 22-11-09, specify the port to be used for the source of music heard on DID trunks.
- **22-11-11 : DID Translation Number Conversion, Ring Group Transfer**
  Enable (1) or disable (0) each conversation tables' ability to follow the Ring Group programming defined in **Program 22-12-01 : DID Intercept Ring Group**. If **Program 22-11-05 : DID Translation Number Conversion, Transfer Destination Number 1** and **Program 22-11-06 : DID Translation Number Conversion, Transfer Destination Number 2** are set, the priority of transferring will be in this order: Program 22-11-05 then Program 22-11-06 then if Program 22-11-11 is enabled, Program 22-12-01.

- **22-12-01 : DID Intercept Ring Group**
  For each DID Translation Table, program the DID Intercept destination. The destination can be a Ring Group, In-Skin/External Voice Mail, or Centralized Voice Mail. This program is used when there is no destination programmed in Program 22-11-05. It is unrelated to Program 22-11-06 and 22-11-07.
  ➪ Aspire S Ring Groups: 1-8, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
  ➪ Aspire Ring Groups: 1-100, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
- **22-13-01 : DID Trunk Group to Translation Table Assignment**
  Assign the DID trunk groups to translation tables. If all the DID trunks use the same type of DID service, you may have only one DID trunk group and one DID Translation Table (with many entries).
  ➪ Aspire S Trunk Groups: 1-8
  ➪ Aspire Trunk Groups: 1-100
- **22-17-01 : DID Conversion Table Area Setup for Time Pattern Mode**
  This program is used to define the times and DID Conversion Table (Program 22-11) for each DID time pattern (1-8) when using the Call by Time Schedule feature. Start from 00:00 and be sure to set up the input so the last entry of the time pattern is set to end at 00:00 (Entries: Start Time = 0000 - 2359, End Time = 0000 - 2359, DID Conversation Table Number: 0 - 2000).
- **25-01-01 : VRS/DISA Line Basic Data Setup - VRS/DISA Dial-In Mode**
  Determine whether the system should use option 0 (Extension number/Service code specify) or option 1 (Use dial conversion table) for calls.
- **25-01-03 : VRS/DISA Line Basic Data Setup - VRS/DISA Transfer Alarm**
  Determine whether the system should use option 0 (Normal) or option 1 (Alarm) for calls.
- **25-02-01 : VRS/DISA VRS Message**
  For each trunk port and each night mode, select the message source (0=No Message, 1=VRS, 2=ACI, 3=SLT), assign the VRS message number to be used as the Automated Attendant Message for each trunk which is assigned as a VRS/DISA (With VRS=01-48 [VRS message number], With ACI=1-4 or 01-16 [ACI group number], With SLT=1-8 or 01-64 [Department Group number]).
  ➪ Aspire S: Trunk Ports 1-8, Night Service Time Mode 1-4
  ➪ Aspire: Trunk Ports 001-200, Night Service Time Mode 1-8
- **25-03-01 : VRS/DISA Transfer Ring Group With Incorrect Dialing**
  For each trunk port, set what happens to a call when the DISA or Automated Attendant caller dials incorrectly or waits too long to dial. The call can either disconnect (0) or Transfer to an alternate destination (a ring group, In-Skin/External, Centralized). When setting the DISA and DID Operating Mode, you make an entry for each Night Service mode .
  ➪ Aspire S Ring Groups: 1-8, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
  ➪ Aspire S: Trunk Ports 1-8, Night Service Time Mode 1-4
  ➪ Aspire Ring Groups: 1-100, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
  ➪ Aspire: Trunk Ports 001-200, Night Service Time Mode 1-8
- **25-04-01 : VRS/DISA Transfer Ring Group With No Answer/Busy**
  For each trunk port (001-200), set the operating mode of each DISA trunk. This sets what happens to the call when the DISA or Automated Attendant caller calls a busy or unanswered extension. The call can either disconnect (0) or Transfer to an alternate destination (a ring group, In-Skin/External, Centralized). When setting the DISA and DID Operating Mode, you make an entry for each Night Service mode.
  ➪ Aspire S Ring Groups: 1-8, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
  ➪ Aspire S: Trunk Ports 1-8, Night Service Time Mode 1-4
  ➪ Aspire Ring Groups: 1-100, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
  ➪ Aspire: Trunk Ports 001-200, Night Service Time Mode 1-8
- **25-05-01 : VRS/DISA Error Message Assignment**
  For each trunk that will be answered by the VRS, enter the VRS message (1-48) the outside caller hears if they dial incorrectly after answer. If you enter 0, the call reroutes according to Program 25-03 and Program 25-04. Make one entry for each Night Service mode.

- **25-06-02 : VRS/DISA One-Digit Code Attendant Setup**
  Set up single digit dialing for Automated Attendant callers. For each VRS Message programmed to answer outside calls, specify
  - The digit the Automated Attendant caller dials (1-12, where 10=0, 11=* and 12=#). (Keep in mind that if you assign destinations to digits 3 and 4, outside callers will not be able to dial system extensions.)
  - The destination reached (four digits maximum) when the caller dials the single digit code.
- **25-07-01 : System Timers for VRS/DISA - VRS Dial Tone Time**
  After answering a VRS/DISA trunk, the system waits this interval for the caller to dial the first digit of the DISA password. If the caller fails to dial within this interval, the system drops the call (0-64800).
- **25-07-02 : System Timers for VRS/DISA - VRS/DISA No Answer Time**
  A VRS/DISA caller can ring an extension for this interval before the system sets the call as a Ring No Answer. After this interval expires, the call follows the programmed Ring No Answer routing (set in Program 25-03 and 25-04) (0-64800).
- **25-07-04 : System Timers for VRS/DISA - Calling Time to Automatic Answering Telephone Set**
  Set the answering waiting time of the automatic answering extension when an incoming DID trunk call is received (0-64800).
- **25-07-05 : System Timers for VRS/DISA - Duration Time for Guidance Message by Automatic Answering Telephone Set**
  Set the announcement time of the automatic answering extension after which in incoming DID trunk caller is disconnected (0-64800).
- **25-07-06 : System Timers for VRS/DISA - Duration Time for Guidance Message by ACI**
  Set the announcement time by the ACI after which an incoming DID trunk caller is disconnected (0-64800).
- **25-07-11 : System Timers for VRS/DISA - VRS/DISA Answer Delay Timer**
  Set up the interval time the system will wait after receiving an incoming VRS/DISA call until the system will automatically answer the call (0-64800).
- **25-07-13 : System Timers for VRS/DISA - VRS/DISA Busy Tone Interval**
  If a DISA caller dials a busy extension (and Program 25-04-01 = 0), the system plays busy tone for this interval before disconnecting (0-64800).
- **25-07-14 : System Timers for VRS/DISA - Delayed DID Answer Timer**
  Assign the delay time from switching from a normal incoming status to DID mode. If this time is set to '0', the call will switch to DID mode immediately (0-64800).
- **30-03-01 : DSS Key Assignment**
  For DSS Consoles, assign a key for DID Mode Switching (88 + Program 22-17 table number). This key can be used to manually change the time pattern for a DID number. The following LED indications are used with the key:
  Pattern 1 = LED off, Pattern 2 = LED on, Pattern 3 = slow flash, Pattern 4 = fast flash, Patterns 5-8 = off
- **34-01-01 : E&M Tie Line Basic Setup - DID/E&M Start Signaling**
  Set the start signaling mode for DID and tie trunks. DID and tie trunks can use either immediate start or wink start signaling (0=2nd dial tone, 1=Wink, 2=Immediate, 3=Delay).
- **34-01-02 : E&M Tie Line Basic Setup - DID/E&M Incoming Signaling Type**
  Enter 0 if DID trunk is Dial Pulse (DP). Enter 1 if DID trunk is DTMF.
- **80-03-01 : DTMF Tone Receiver Setup**
  80-04-01 : Call Progress Tone Detector Setup
  If required, modify the criteria for dial tone detection and call progress tone detection to set the DTMF criteria for DTMF DID calls.

➧ **81-02-01 : DIOPU Initial Data Setup**
Make sure the DID Trunk Timer settings are compatible with your local telco.

Related Features

Central Office Calls, Answering
When a call is transferred because of Call Forwarding No Answer, Call Forwarding Busy, or DND, the Reason for Transfer option can display to the transferred extension why the call is ringing to their phone.

Direct Inward Line (DIL)
DILs also provide a way for outside callers to dial a system extension, virtual extension or Department Group directly.

Direct Inward System Access (DISA)
DISA also allows outside callers to dial system extensions directly.

Off Hook Signaling
The Off Hook Signaling provide DID calls with signaling options. Refer to this feature for the specifics.

Paging, External
DID trunks will not ring external page speakers. Only trunks defined as “normal” in Program 22-02-01 will ring external page speakers.

Programmable Function Keys
To simplify answering DID calls, assign function keys as line keys for the DID trunks.

Station Message Detail Recording
SMDR can print trunk port names or received dialed number for ANI/DNIS or DID trunks. If enabled, DNIS digits can be printed on the SMDR reports instead of the trunk name.

Transfer
Transferred calls on DISA, DID, DIL, ISDN trunks, or from the VRS can display the reason a call is being transferred (Call Forward, Busy, No Answer, or DND).

Operation

DID calls ring extensions like normal trunk calls.

Manually Changing a Time Pattern

1. Press DID Mode Switch key (PGM 15-07 or SC 851: 88) or dial the service code (defined in Program 11-10-35).
2. Enter the DID Conversation Table Number (Aspire S: 1-8, Aspire M/L/XL: 1-100).
3. Enter the time pattern to be assigned (1-8).

Aspire S	Aspire M/L/XL
• Available - 8 trunks and 8 Department Groups. With software prior to 2.50 - 26 extensions and 24 virtual extensions. With 2.50+, 50 extensions and 24 virtual extensions.	• Available. **Aspire M/L:** 200 trunks, 64 Department Groups, 256 extensions, and 256 virtual extensions. **Aspire XL:** 200 trunks, 64 Department Groups, 384 extensions, and 256 virtual extensions.

Description

A Direct Inward Line (DIL) is a trunk that rings an extension, virtual extension or Department Group directly. Since DILs only ring one extension or group (i.e., the DIL destination), employees always know which calls are for them. For example, a company operator can have a Direct Inward Line for International Sales Information. When outside callers dial the DIL's phone number, the call rings the operator on the International Sales line key. The DIL does not ring other extensions.

DIL Delayed Ringing

Extensions in a Ring Group can have delayed ringing for another extension's DIL. If the DIL is not answered at its original destination, it rings the DIL No Answer Ring Group. This could help a Technical Service department, for example, that covers calls for an Inside Sales department. If the Inside Sales calls are not answered, they ring into the Technical Service department.

Conditions

(A.) If unanswered, a DIL without delayed ringing rings an extension until the outside party hangs up.

(B.) If a DIL rings a Department Group and all agents are busy, the system routes the call as follows:

1. The trunk rings the overflow destination assigned in 22-08.
2. If there is no 22-08 assignment, the call rings according to the Ring Group assignments in 22-04 and 22-05.
3. If none of the destinations in steps 1-2 above are available, the call continues to ring until a destination becomes free.

(C.) The DIL follows call forwarding programming, even to voice mail.

Default Setting

Disabled.

Programming

- **14-07-01 : Trunk Access Map Setup**
  Set up the Trunk Access Maps. All extensions should have at least Hold access to the DIL (entry 3).
- **15-06-01 : Trunk Access Map for Extensions**
  Assign Trunk Access Maps to extensions.
  ➪ Aspire S: Trunk Access Maps 1-8
  ➪ Aspire: Trunk Access Maps 1-200
- **15-07-01 : Programmable Function Keys**
  To have the DIL ring a key, program a line key for the DIL trunk.
- **20-06-01 : Class of Service for Extensions**
  Assign a Class of Service (1-15) to an extension.
- **20-09-01 : Class of Service Options (Incoming Call Service) - Second Call for DID/ DISA/ DIL/ E&M**
  Enable (1) or disable (0) an extension's ability to receive a second call from a DID, DISA, DIL, or tie line caller.
- **20-13-23 : Class of Service Options (Supplementary Service) - Display the Reason for Transfer**
  Enable (1) or disable (0) an extension's ability to display the reason (Call Forward, Busy, No Answer or DND) a VRS, DID, DISA, or ISDN call is being transferred to their extension.
- **22-01-04 : System Options for Incoming Calls - DIL No Answer Time**
  Set the DIL No Answer Time (0-64800 seconds). If DIL Delayed Ringing is set in program 22-08, this option sets the DIL Delayed Ring interval.
- **22-02-01 : Incoming Call Trunk Setup**
  Assign each DIL Service Type 4. Make an entry for each Night Service mode.
- **22-04-01 : Incoming Extension Ring Group Assignment**
  Assign the extensions that should receive the overflow to the ring group programmed in 22-08. Set the ringing in Program 22-06 (0=trunks don't ring [just flash line keys], 1=trunks ring).
- **22-07-01 : DIL Assignment**
  Set the destination extension number for each DIL - for each Night Service mode. The destination can be an extension port, virtual extension number, or Department Group pilot number (as assigned in 11-07-01).
- **22-08-01 : DIL/IRG No Answer Destination**
  For each DIL with delayed ringing, enter the DIL No Answer Ring Group. An unanswered DIL rings this group after the DIL No Answer Time. Make an entry for each Night Service mode.
  ➪ Aspire S Ring Groups: 1-8, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
  ➪ Aspire Ring Groups: 1-100, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail

Related Features

Call Forwarding
Call Forwarding reroutes DILs.

Central Office Calls, Answering
When a call is transferred because of Call Forwarding No Answer, Call Forwarding Busy, or DND, the Reason for Transfer option can display to the transferred extension why the call is ringing to their phone.

Central Office Calls, Placing
You can place DILs in trunk groups to make outgoing DIL calls easier.

Department Calling
A DIL can have an Extension (Department) Group as its destination.

Do Not Disturb
If a DIL's destination extension is in DND, an incoming call rings according to Ring Group programming (22-08 then 22-05).

Group Call Pickup
A user can activate Group Call Pickup to intercept a DIL ringing another extension.

Name Storing
Program a name for a DIL. This makes it easier to identify the incoming call.

Off Hook Signaling
If a keyset's first channel is busy, a DIL always signals the idle second channel if available. If the second channel already has a call waiting, DIL waits in line for a channel to become free. The outside caller hears ringback tone while this occurs.

Paging, External
DIL trunks will not ring external page speakers. Only trunks defined as "normal" in Program 22-02-01 will ring external page speakers.

Private Line
To simulate Private Line operation, create a unique Access Map for the DIL that allows full access only for the destination. Give all other extensions only Hold access.

Programmable Function Keys
If an extension has a line key for a DIL, the call will ring the key. If not, the call rings an available line appearance. For other extensions, the DIL indicates as busy.

Ring Groups
A DIL will ring its assigned extension without Ring Group programming. A DIL only rings its assigned extension. It will not ring other extensions in a Ring Group.

Transfer
Transferred calls on DISA, DID, DIL, ISDN trunks, or from the VRS can display the reason a call is being transferred (Call Forward, Busy, No Answer, or DND).

Operation

To answer a call on your Direct Inward Line:

1. Lift handset.
2. At keyset, press flashing line key for DIL.

   If you don't have a line key for the DIL, the DIL rings an idle CALL key.

   If you have Ringing Line Preference, lifting the handset answers the call.

   If you don't answer the call, it may ring other extensions (i.e., the DIL No Answer Ring Group).

To place a call on your Direct Inward Line:

1. Lift handset.
2. At keyset, press line key for DIL
   OR
   Dial #9 and the DIL trunk number (e.g., 005).
   OR
   Dial 804 and the DIL trunk group number (e.g., 05).
   OR
   Dial 9 for Trunk Group Access
3. Dial number.

Aspire S	Aspire M/L/XL
• Available - 15 users, 15 DISA Classes of Service and 8 trunks.	• Available - 15 users, 15 DISA Classes of Service and 200 trunks.
• Trunk Disconnect Continue and Disconnect Codes require software 4.0E+.	• Trunk Disconnect Continue and Disconnect Codes require software 4.0E+.
• Remote Setup with DISA requires software 4.93+.	• Remote Setup with DISA requires software 4.93+.

Description

DISA permits outside callers to directly dial system extensions, trunks and selected features. This could help an employee away from the office that wants to directly dial co-workers or use the company's trunks for long distance calls. To use DISA, the employee:

- Dials the telephone number that rings the DISA trunk
- Waits for the DISA trunk to automatically answer with a unique dial tone
- Dials the 6-digit DISA password (access code)
- Waits for a second unique dial tone
- Accesses a system trunk, uses a selected feature or dials a system extension

DISA calls ring system extensions like other outside calls. If an extension has a line key for the DISA trunk, the call rings that key. If the extension does not have a line key, the call rings an idle CALL key.

You can set DISA operation differently for each Night Service mode. For example, a trunk can be a normal trunk during the day and a DISA trunk at night. You can also set the routing for DISA trunks when the caller dials a busy or unanswered extension, dials incorrectly or forgets to dial.

DISA Class of Service

DISA Class of Service provides features and dialing restrictions for DISA callers. This allows you to control the capabilities of the DISA callers dialing into your system. When a DISA caller first accesses the system, they must enter a DISA password before proceeding. The system associates the password entered with a specific user number, which in turn has a Class of Service. If the Class of Service allows the action (such as making outgoing trunk calls), the call goes through. If the DISA Class of Service doesn't allow the action, the system prevents the call. The DISA Class of Service options are:

- **Trunk Group Routing/ARS Access**
  When a DISA caller dials into the system, they may be able to dial 9 and place outside calls. Any toll charges are incurred by the system. The call follows the system's Trunk Group Access or Automatic Route Selection - whichever is enabled.
- **Trunk Group Access**
  DISA callers may be able to access a specific trunk group for outgoing calls through the system. To access a Trunk Group, the user dials Service Code 804 followed by the Trunk Group number (e.g., 1). This allows the DISA caller to place an outgoing call over the selected group. Trunk Group Access bypasses the system's Trunk Group Routing/ARS/Trunk Access Maps. As with dial 9 access, any toll charges are incurred by the system. Also see Direct Trunk Access below.
- **Common Abbreviated Dialing**
  The system's Common Abbreviated Dialing bins may be available to DISA callers. This could save the DISA caller time when dialing.

- **Operator Calling**
  A DISA caller may be able to dial 0 for the system's operator.
- **Paging**
  Internal and External Paging may be available to DISA callers. This allows co-workers in adjacent facilities, for example, to broadcast announcements to each other.
- **Direct Trunk Access**
  DISA callers may be able to select a specific trunk for outgoing calls through the system. To directly access a trunk, the user dials Service Code #9 followed by the trunk's number (e.g., 001). This allows the DISA caller to place an outgoing call over the selected trunk. Direct Trunk Access bypasses the system's Trunk Group Routing/ARS/Trunk Access Maps. As with dial 9 access, any toll charges are incurred by the system. Also see Trunk Group Access above.
- **Call Forward**
  DISA callers may be able to set Call Forwarding to redirect an extension's calls to another extension. Call Forwarding ensures that the user's calls are covered when they are away from their work area.
- **DISA/Tie Trunk Barge In**
  The DISA/Tie Trunk Barge In option allows a tie line caller to break into another extension's established call. This sets up a three-way conversation between the intruding party and the two parties on the initial call.

DISA Toll Restriction

The digits a DISA caller dials for an outgoing call may be subject to the system's Toll Restriction. For example, Toll Restriction can prevent users from dialing a 1-900 service. When an incoming DISA caller tries to use system trunks to dial 1-900, Toll Restriction will deny the call.

DISA Operating Modes

The DISA Operating Modes determine what happens when a DISA caller forgets to dial, calls a busy or unanswered extension or dials incorrectly. The system can either drop the call or send it to a preset Ring Group (called a the DISA Transfer Destination).

Department Calling with Overflow Message

If a DISA caller dials a busy Department Calling Group, the system can periodically play the voice prompt, *"Please hold on. All lines are busy. Your call will be answered when a line becomes free."* while the caller waits. The interval between the voice prompts is the DISA Overflow Message Time. When an extension in the Department Group becomes available, the call automatically goes through. If the Department Calling Group remains busy past the DISA No Answer Time, the DISA call routes to the overflow destination or disconnects. (What happens to the unanswered call is set by the DISA Operating Mode). The Overflow Message requires a VRS.

Warning Tone for Long DISA Calls

You can set up the system to provide a warning tone to DISA callers that have been on a call too long. The warning tone can be just a reminder (which the caller can ignore) or can be followed by a forced disconnect of the call. When the DISA caller hears the warning tone, they have the option of dialing a code to continue the conversation or disconnect.

Trunk Disconnect Continue/Disconnect Codes Added

The software enhances the forced trunk release option with the Tandem Trunking and DISA features. With older software, with **Program 24-02-07 : System Options for Transfer - Forced Release for Trunk-to-Trunk Transfer** or **Program 25-07-08 : System Timers for VRS/DISA - DISA Long Conversation Disconnect** enabled, users were not provided with an option to continue the call, if required.

With software 4.0E+, users can be provided with the option to use a Continue or Disconnect service code. The Continue service code will extend the conversation a programmed length of time. If the user enters the Disconnect service code, the call will be disconnected immediately.

Example:

The following example indicates how a call will be handled with the system programmed as follows:

- Program 14-01-25: 1
- Program 20-28-01: #
- Program 20-28-02: No setting
- Program 20-28-03: 180
- Program 24-02-07: 600 (Only used with Tandem Trunking)
- Program 24-02-10: 30 (Only used with Tandem Trunking)
- Program 25-07-07: 600 (Only used with DISA)
- Program 25-07-08: 30 (Only used with DISA)

1. An external call connects to an external number (either by transferring with Tandem Trunking or by DISA caller).
2. After 10 minutes (Tandem Trunking = Program 24-02-07 or DISA = Program 25-07-07), a warning tone is heard and the user dials "#" (Program 20-28-01) to extend the conversation.
3. After 3 minutes (Program 20-28-03), the warning tone is heard again. After 30 seconds (Tandem Trunking = Program 24-02-10 or DISA = Program 25-07-08), the call is disconnected.

Remote Feature Setup with DTMF

An option may be available which can be used to remotely set various Aspire functions for the specified extension by dialing the extension number and service code using a DISA line. This option is available for keysets, single line telephones, and IP telephones.

When the outside caller, using an analog or ISDN trunk, places a call to a DISA line and dials the service code for this function, the system will respond with a fixed message prompting the entry of the extension number ("Please dial the extension number."). After the outside caller dials the desired extension number, the system will respond with another fixed message ("Please enter the required Service Code."), then the outside caller dials the required service code to set/cancel the function.

The following features can be set using service codes with this option:

Function Name	Default Service Code	Description
Day / Night Mode Switching for own Night Group (Program 11-10-01)	818	Change the Operation Mode for each Night Group
Setting the Automatic Trunk Transfer for each Trunk (Program 11-10-06)	833	Set the Automatic Trunk Transfer for each Trunk
Canceling the Automatic Trunk Transfer for each Trunk (Program 11-10-07)	834	Cancel the Automatic Trunk Transfer for each Trunk
Setting the destination for Automatic Trunk Transfer (Program 11-10-08)	835	Register the destination telephone number for Automatic Trunk Transfer. With the Remote Feature Setup, after dialing the destination telephone number, *# must be entered (ex: 2035551234 *#).
VRS - Record / Erase Message (Program 11-10-20)	716	Record / Playback / Erase VRS Messages
VRS - General Message Playback (Program 11-10-21)	711	Playback General Message
VRS - Record / Erase General Message (Program 11-10-22)	712	Record / Playback / Erase General Message
Call Forward - Immediate (Program 11-11-01)	848	Set/Cancel Call Forward Immediate *(Service Code + 1 <Set> / 0 <Cancel> + Transferred Destination Extension Number)*
Call Forward - Busy (Program 11-11-02)	843	Set/Cancel Call Forward when Busy *(Service Code + 1 <Set> / 0 <Cancel> + Transferred Destination Extension Number)*
Call Forward - No Answer (Program 11-11-03)	845	Set/Cancel Call Forward when No Answer during pre-assigned period *(Service Code + 1 <Set> / 0 <Cancel> + Transferred Destination Extension Number)*
Call Forward - Busy/No Answer (Program 11-11-04)	844	Set/Cancel Call Forward when No Answer during pre-assigned period *(Service Code + 1 <Set> / 0 <Cancel> + Transferred Destination Extension Number)*
Call Forward - Both Ring (Program 11-11-05)	842	Set/Cancel Call Forward Both Ring *(Service Code + 1 <Set> / 0 <Cancel> + Transferred Destination Extension Number)*
Call Forward - Follow Me (Program 11-11-07)	846	Set/Cancel Call Forward - Follow Me *(Service Code + 1 <Set> / 0 <Cancel> + Appropriate Extension Number)*
DND (Do Not Disturb) (Program 11-11-08)	847	Set/Cancel DND *(Service Code + 0 <Cancel> / 1 <External Call> / 2 <Internal Call> / 3 <All Call> / 4 <CFW Transferred Call>)*

The DISA feature must be enabled for this function.

Notes:

- While the outside caller is setting the function via DISA, no one can use the extension which is being set.
- The outsider caller can not set/cancel a function via DISA when the selected extension is being used except during incoming ringing (including incoming ACD calls). If the extension is busy, the call will be terminated.
- The VRS is required to send the fixed messages heard during the feature setup.

Conditions

(A.) The DISA caller must use a 2500 type (DTMF) telephone. DISA is compatible with calling devices that meet the DTMF signaling requirements of EIA Specification RS-464. DISA trunks must be ground start or supervised loop start.
(B.) The Continue/Disconnect code must be DTMF.
(C.) With an analog trunk, the Continue/Disconnect code may work using DTMF sounds from the opposite side trunk. With an ISDN trunk, Program 14-01-25 must be enabled to detect the Continue/Disconnect code.
(D.) The Continue/Disconnect code is not accepted while dialing a trunk.
(E.) Continue/Disconnect codes will not work if all DTMF receivers are busy.
(F.) When used with the Networking feature, both systems must be programmed the same.

Default Setting

Disabled.

Programming

10-09-01 : DTMF and Dial Tone Circuit Setup
Reserve at least one circuit for DTMF reception (entry 0 or 2).

- Use the following as a guide when allocating DTMF receivers:
  - In light traffic sites, allocate one DTMF receiver for every 10 devices that use them.
  - In heavy traffic sites, allocate one DTMF receiver for every five devices that use them.

11-01-01 : System Numbering
Set up a Service Code for Alternate Trunk Route Access.

11-09-02 : Trunk Access Code - Alternate Trunk Route Access Code
Assign the Service Code set up in 11-01 for Alternate Trunk Route Access.

11-15-13 : Service Code Setup, Administrative (for Special Access) - Function Setting via DISA
Define the service code (up to 8 digits) an outside caller dials when on a DISA line in order to access certain Aspire features.

14-01-02 : Basic Trunk Data Setup - Transmit CODEC Gain Type
14-01-03 : Basic Trunk Data Setup - Receive CODEC Gain Type
Customize the CODEC gains (transmit and receive levels 1-63) for DISA trunks.

14-01-13 : Basic Trunk Setup - Loop Disconnect Supervision
If DISA caller can place outgoing calls through the system (see Program 20-14), enable loop supervision (1) for the DISA trunk. If DISA caller cannot use the system's trunks for outgoing calls, enter 0 to disable loop supervision.

20-01-05 : System Options - DTMF Receiver Active Time
After answering the call, the system attaches a DTMF receiver to the DISA trunk for this interval (0- 64800 seconds).

20-06-01 : Class of Service for Extensions
Assign a Class of Service (1-15) to an extension.

20-09-01 : Class of Service Options (Incoming Call Service) - Second Call for DID/ DISA/ DIL/ E&M
Enable (1) or disable (0) an extension's ability to receive a second call from a DID, DISA, DIL, or tie line caller.

20-13-23 : Class of Service Options (Supplementary Service) - Display the Reason for Transfer
Enable (1) or disable (0) an extension's ability to display the reason (Call Forward, Busy, No Answer or DND) a VRS, DID, DISA, or ISDN call is being transferred to their extension.

20-14-01 - 20-14-11 : Class of Service Options for DISA/E&M
Enable (1) or disable (0) the following options for each DISA Class of Service (1-15).

- First Digit Absorption (Item 1)
- Trunk Group Routing/ARS Access (Item 2)
- Trunk Group Access (Item 3)
- Common Abbreviated Dialing (Item 4)
- Operator Calling (Item 5)
- Internal Paging (Item 6)
- External Paging (Item 7)
- Direct Trunk Access (Item 8)
- Forced Trunk Disconnect (Item 9)
- Call Forward Setting by Remote Via DISA (Item 10)
- DISA/Tie Trunk Barge In (Item 11)

- **21-15-01 : Alternate Trunk Route for Extensions**
  Designate the trunk route accessed when a user dials the Alternate Trunk Route Access Code. Refer to "Trunk Group Routing" to set up outbound routing.
- **22-01-11 : System Options for Incoming Calls - VRS Waiting Message Interval Time**
  Setup the sending duration time of the Auto - Attendant & Queuing. The message is repeatedly sent out within the specified time (0-64800 seconds).
- **22-02-01 : Incoming Call Trunk Setup**
  For DISA operation, set the trunk service type to 2. You can have a different service type for each Night Service mode.
- **22-04-01 : Incoming Extension Ring Group Assignment**
  Assign the extensions that should receive the overflow. Set the ringing in Program 22-06 (0=trunks don't ring [just flash line keys], 1=trunks ring).
- **25-01-01 : VRS/DISA Line Basic Data Setup - VRS/DISA Dial-In Mode**
  Select whether the DISA trunk will use the Extension number/Service code specify (0) or the Dial Conversion Table (1).
- **25-01-02 : VRS/DISA Line Basic Data Setup - DISA User ID**
  Select whether or not the DISA User ID is to be used (0=disable, 1=enable).
- **25-01-03 : VRS/DISA Line Basic Data Setup - VRS/DISA Transfer Alarm**
  Select whether the DISA transfer alarm should be used (0=normal, 1=alarm).
- **25-02-01 : VRS/DISA VRS Message**
  Assign the source and VRS message number to be used as the Automated Attendant Message for each trunk which is assigned as a VRS/DISA (0=No Message, 1=VRS [VRS Message Number 01-48], 2=ACI [ACI Group Number=1-4 or 01-16], 3= SLT [Department Group Number=1-8 or 01-64]).
  ➪ Aspire S Trunks: 1-8
  ➪ Aspire Trunks: 001-200
- **25-03-01 : VRS/DISA Transfer Ring Group With Incorrect Dialing**
  Set the operating mode of each DISA trunk. This sets what happens to the call when the DISA caller dials incorrectly. The call can either disconnect (0), transfer to an alternate ring group destination, or transfer to In-Skin/External Voice Mail, or Centralized Voice Mail.
  ➪ Aspire S Ring Groups: 1-8, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
  ➪ Aspire Ring Groups: 1-100, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
- **25-04-01 : VRS/DISA Transfer Ring Group With No Answer/Busy**
  Set the operating mode of each DISA trunk. This sets what happens to the call when the DISA caller calls a busy or unanswered extension. The call can either disconnect (0), transfer to an alternate ring group destination, In-Skin/External Voice Mail, or Centralized Voice Mail.
  ➪ Aspire S Ring Groups: 1-8, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
  ➪ Aspire Ring Groups: 1-100, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
- **25-05-01 : VRS/DISA Error Message Assignment**
  Assign the VRS message number to be used as the Automated Attendant error message. For each VRS/DISA trunk that the VRS will answer, enter the VRS message (1-48) the outside caller hears if they dial incorrectly. If you enter 0 (i.e., no error message), the call reroutes according to Program 25-03 and 25-04. For each trunk, you make a separate entry for each Night Service mode.

25-06-01 : VRS/DISA One-Digit Code Attendant Setup
Set up single digit dialing through the VRS. This gives VRS callers single key access to extensions, the company operator, Department Calling Groups and Voice Mail. For each VRS message set to answer outside calls (see Program 25-04 and 25-05), you specify:

- The digit the VRS caller dials (0-9, *, #). (Keep in mind that if you assign destinations to digits, outside callers will not be able to dial system extensions.
- The destination reached (eight digits max.) when the caller dials the specified digit.

The destination can be an extension, a Department Calling pilot number or the Voice Mail master number. A one-digit code can be assigned for each Automated Attendant message.

25-07-01 : System Timers for VRS/DISA - DISA Dial Tone Time
After answering the DISA trunk, the system waits this interval (0-64800 seconds) for the caller to dial the first digit of the password. If the caller fails to dial within this interval, the system drops the call.

25-07-02 : System Timers for VRS/DISA - VRS/DISA No Answer Time
A DISA caller can ring an extension for this interval (0-64800 seconds) before the system sets the call as a Ring No Answer. After this interval expires, the call follows the programmed Ring No Answer routing (see Program 25-04 below).

25-07-07 : System Timers for VRS/DISA - DISA/Tandem Trunking Long Conversation Warning Tone Time
Determine the length of time a DISA caller or any trunk-to-trunk (such as Tandem Trunking) conversation can talk before the Long Conversation tone is heard (0-64800 seconds).

25-07-08 : System Timers for VRS/DISA - DISA/Tandem Trunking Long Conversation Disconnect
This timer determines how long the system will wait before disconnecting a a DISA or any trunk-to-trunk (such as Tandem Trunking) call after the Long Conversation tone is heard (0-64800 seconds).

25-07-09 : System Timers for VRS/DISA - DISA Internal Paging Time
This is the maximum length of an Internal Page placed by a DISA caller. If the Page continues longer than this interval (0-64800 seconds), the system terminates the DISA call.

25-07-10 : System Timers for VRS/DISA - DISA External Paging Time
This is the maximum length of an External Page placed by a DISA caller. If the Page continues longer than this interval (0-64800 seconds), the system terminates the DISA call.

25-07-13 : System Timers for VRS/DISA - VRS/DISA Busy Tone Interval
If a DISA caller dials a busy extension (and Program 25-04 = 0), the system plays busy tone for this interval before disconnecting.

25-08-01 : DISA User ID Setup
For each DISA user, set the 6-digit password.

25-09-01 : Class of Service for DISA Users
Assign a DISA Class of Service for each user. ***The DISA Class of Service cannot be 0.*** You cannot use the 20-xx-xx and 42-xx-xx programs to assign Class of Service to DISA trunks (15 users, with one password and DISA Class of Service (1-15) for each user).

25-10-01 : Trunk Group Routing for DISA
Use this program to assign the Trunk Group Route chosen when a user places a DISA call into the system and dials 9. Set Trunk Group Routing in Program 14-06. If the system has ARS, dialing 9 accesses ARS. The route chosen is based on the DISA Class of Service, which is determined by the password the caller dials.
- Aspire S Trunk Group Routes: 1-8
- Aspire Trunk Group Routes: 1-100

- **25-11-01 : DISA Toll Restriction Class**
  If the system uses Toll Restriction, enter a Toll Restriction Class (1-15) for each DISA user (1-15). The system uses the Toll Restriction Class you enter in Program 21-05. The Toll Restriction Class assigned to a DISA call is based on the DISA Class of Service, which is determined by the password the caller dials. You cannot use Program 21-04 to assign Toll Restriction to DISA trunks.
- **25-12-01 : Alternate Trunk Group Routing for DISA**
  Assign the trunk route that DISA Caller's access if they dial the Alternate Trunk Route Access Code. Refer to "Central Office Calls, Placing" for more on setting up Alternate Trunk Route Access.
- **25-13-02 : System Option for DISA - Continue Code for DISA Trunk-to-Trunk**
  With software through 2.68, enter a single digit Continue Code for the DISA call to use to immediately disconnect or continue their outside call. With software 4.0E+, use Program 20-28-01.
- **25-13-03 : System Option for DISA - Disconnect Code for DISA Trunk-to-Trunk**
  With software through 2.68, enter a single digit Disconnect for the DISA call to use to immediately disconnect or continue their outside call. With software 4.0E+, use Program 20-28-02.
- **80-03-01 : DTMF Tone Receiver Setup**
  80-04-01 : Call Progress Tone Detector Setup
  If required, modify the criteria for dial tone detection and call progress tone detection for DTMF tones for inbound DTMF DISA calls.

Trunk Disconnect Continue/Disconnect Codes (Requires software 4.0E+)

- **14-01-25 : Basic Trunk Data Setup - Continue/Disconnect Trunk-to-Trunk Conversation**
  When Program 24-02-10 is set to disconnect a trunk after the defined time, determine whether or not a user should have the ability to use the continue/disconnect code (**Entries:** 0 = Disabled, 1 = Enabled).
- **20-28-01 : System Option Setup - Conversation Continue Code**
  When Program 14-01-25 is enabled, determine the 1-digit code the user should dial (0 - 9, *, #) to extend the conversation length for the time defined in 20-28-03. If the Continue and Disconnect codes are programmed the same (e.g., #), the system will follow the "Continue" operation. Using the Continue code before the warning tone is heard has no action.
- **20-28-02 : System Option Setup - Conversation Disconnect Code**
  When Program 14-01-25 is enabled, determine the 1-digit code the user should dial (0 - 9, *, #) to immediately disconnect their call. Using the Disconnect code before the warning tone is heard will disconnect the call.
- **20-28-03 : System Option Setup - Conversation Extend Time**
  When Program 14-01-25 is enabled, determine the length of time a call will be extended (0 - 64800 seconds) when the user dials the Continue code (defined in 20-28-01).
- **24-02-07 : System Options for Transfer - Forced Release for Trunk-to-Trunk Transfer**
  This timer will start when a trunk begins talking with another trunk (for example: trunk-to-trunk transfer/Tandem Trunking). When this timer expires, a warning tone is heard. If Program 24-02-10 is set, the conversation disconnects after that timer expires. This timer is set again when the external digit timer expires. One of the trunks used must be an analog trunk (or leased line). **Entries:** 0 - 64800 (seconds)
- **24-02-10 : System Options for Transfer - Trunk-to-Trunk Transfer Disconnect Timer**
  Determine how long a conversation will continue (0 - 64800 seconds) once the timer in Program 24-02-07 expires. If this option is set to "0", the conversation will be disconnected immediately. This program has no affect if Program 24-02-07 is set to "0". One of the trunks used must be an analog trunk (or leased line).

- **25-07-07 : System Timers for VRS/DISA - DISA Long Conversation Warning Tone Time**
  Determine the length of time a DISA caller can talk before the Long Conversation tone is heard (0-64800 seconds). If Program 25-07-08 is set to "0", the call is disconnected once the timer expires. This timer is set again when the external digit timer expires.
  Note: If this option is set to "0", the settings in Program 24-02-07 and 24-07-10 are followed - not 25-07-07 and 25-07-08.
- **25-07-08 : System Timers for VRS/DISA - DISA Long Conversation Disconnect Timer**
  This timer determines how long the system will wait (0 - 64800 seconds) before disconnecting a DISA call after the Long Conversation tone is heard. This program has no affect if Program 25-07-07 is set to "0".
- **80-01-35 : Service Tone Setup - 1 Second Signal Tone**
  If required, adjust the warning tone heard by the user when Program 24-02-07 or 25-07-07 expires.

Related Features

Automatic Route Selection

In a system with ARS enabled:
When a DISA caller dials 9 for an outside call (if allowed), the system routes the call via ARS.
In a system with ARS disabled:
When a DISA caller dials 9 for an outside call (if allowed), the system uses the routes programmed for Trunk Group Routing.

Central Office Calls, Answering

When a call is transferred because of Call Forwarding No Answer, Call Forwarding Busy, or DND, the Reason for Transfer option can display to the transferred extension why the call is ringing to their phone.

Direct Inward Dialing (DID) / Direct Inward Line (DIL) / Voice Response System (VRS)

These features also allow outside callers to directly access system extensions.

Long Conversation Cutoff

Long conversation cutoff is controlled separately for DISA and tie lines.

Tandem Trunking (Unsupervised Conferece)

Tandem Trunking also used the Continue/Disconnect codes DISA uses.

Transfer

Transferred calls on DISA, DID, DIL, ISDN trunks, or from the VRS can display the reason a call is being transferred (Call Forward, Busy, No Answer, or DND).

Voice Response System (VRS)

Department Calling with Overflow Message requires a DSP daughter board for VRS.

Operation

To place a DISA call into the system (from any 2500 type telephone):

1. Dial the telephone number that rings the DISA trunk.
2. Wait for the DISA trunk to automatically answer with a unique dial tone.
3. Dial the 6-digit DISA password (access code).
4. Wait for a second unique dial tone.
5. Dial an extension (301-556).
   OR
   Dial 9 for Trunk Group Routing or ARS.
   OR
   Dial Alternate Trunk Route Access Code (if enabled).
   OR
   Dial 804 + a trunk group number (Aspire S: 1-8, Aspire: 1-100) for an outside call.
   OR
   Dial #9 + a trunk number (Aspire S: 1-8, Aspire: 1-200) for an outside call.
   OR
   Dial #2 + Common Abbreviated Dialing bin number.
   OR
   Dial 0 for the operator.
   OR
   Dial 801 + an Internal Paging Zone number (Aspire S: 0, 1-8 or Aspire: 0, 1-9, 00, 01-64).
   OR
   Dial 803 + an External Paging Zone number (1-8 or 0 for All Call).
   OR
   Dial 810 + a busy extension number to barge in to a call.
   OR
   Dial 828 to set the time + two digits for two digits for hour (24 hour clock, 13=1:00 PM) + two digits for minutes.

To forward an extension's calls using a DISA call into the system (from any 2500 type telephone):

1. Dial the telephone number that rings the DISA trunk.
2. Wait for the DISA trunk to automatically answer with a unique dial tone.
3. Dial the 6-digit DISA password (access code).
4. Wait for a second unique dial tone.
5. Dial the Call Forward service code (as defined in Program 11-11-01 through 11-11-05).
6. Dial the number of the extension to be forwarded.
7. Dial "1" to set Call Forwarding or "0" to cancel Call Forwarding.
8. Dial the extension number to which the calls will be forwarded.

To use the Continue code to extend a DISA call:

1. An external call connects to an external number (either by transferring with Tandem Trunking or by DISA caller).
2. After the programmed time (Program 25-07-07), a warning tone is heard and the user dials the Continue code (Program 20-28-01) to extend the conversation.
3. After the programmed time (Program 20-28-03), the warning tone is heard again. After the programmed time (Program 25-07-08), the call is disconnected.

Remote Feature Setup with DTMF

1. An outside caller dials in on an Aspire DISA trunk.
2. The system answers the call.
3. The outside caller dials the Remote Feature Setup service code defined in 11-15-13 (default: 800).

   The caller hears "Please dial the extension number".

   If an incorrect extension number is dialed, the caller hears "That is an invalid entry. Please dial the extension number."
4. Dial the extension number for which a feature is to be activated/deactivated.

   The caller hears "Please enter the required service code".

   If an incorrect service code is dialed, the caller hears "That is an invalid entry. Please enter the required service code."
5. The outside caller can now dial the service code for the feature to be activated/deactivated.

   When the function setting via DISA has succeeded, the caller hears the fixed message "The setting has been activated".

   The LCD indication at the extension changes in accordance with the set function.

Aspire S	Aspire M/L/XL
• Available.	• Available.
• 4 110-Button DSS Consoles maximum (4 per extension).	• 32 110-Button DSS Consoles maximum (4 per extension).
• 24 24-Button DSS Consoles maximum (1 per extension).	• 256 24-Button DSS Consoles maximum (1 per extension).
• DSS Lamping programming is system wide.	• DSS Lamping programming is system wide with 1.02+.
• DSS Lamping affects DSS/Hotline keys for keysets with software 4.0E+.	• DSS Lamping affects DSS/Hotline keys for keysets with software 4.0E+.
• ACD is not available on Aspire S so the ACD agent/non-ACD agent lamping is not applicable.	• ACD agent and non-ACD agent lamping on a DSS Console requires software 4.0E+.

Description

The DSS Consoles (110-Button DSS: P/N 0890051 or 0890052; 24-Button DLS: P/N 0890053 or 0890054) gives a keyset user a Busy Lamp Field (BLF) and one-button access to extensions, trunks and system features. This saves time for users that do a lot of call processing (e.g., operators or dispatchers). The DSS Console simplifies:

- Calling extensions and Door Boxes
- Placing, answering and transferring outside calls
- Making an External or Internal Page
- Switching the Night Service mode
- Activating DSS Console Alternate Answer

The DSS Console also provides DSS Console Alternate Answer. This lets a keyset user with a DSS Console quickly reroute their calls to a co-worker. When the user places their console off-duty (by pressing the ALT. key), their calls route automatically to the programmed co-worker. Transferred and dial “0” calls ring both DSS Consoles and, if the VRS is installed, the main operator hears the message, “Your calls have been forwarded”. Central office calls ring both consoles and no message is heard by the operator.

You can also program the DSS Console keys to store Service Codes codes (up to 29 digits long). This provides the DSS Console user with many of the features available on One-Touch and Programmable Feature Keys. The DSS Console keys can optionally store additional associated digits after the Service Code. For example, storing 8141 under a DSS Console key accesses Trunk Group 1 when the console user presses the key.

The maximum number of 110-Button DSS Consoles allowed per system is 4 (Aspire S) or 32 (Aspire). Up to 24 (Aspire S) or 256 (Aspire) 24-Button DSS Consoles are possible. Each extension can have up to 4 110-Button DSS Consoles and/or only one 24-button DLS console. An extension can, however, have both a 24-button DLS and 110-button DSS console(s) installed. The 110-Button DSS Console requires an available extension port - the 24-Button DLS Console does not.

24-Button DLS (Direct Line Select): DSS/DLS Service Code

Using Programming Function Keys, you can determine whether the keys on a 24-button DLS console (P/N 0890053 or 0890054) are used as DSS (direct station selection) or DLS (direct line selection) keys.

To prevent lamping problems when reassigning DLS Console keys, it is recommended that you clear an extension's programmed key before reassigning it (Program 30-03: Enter key to be cleared + FLASH key [If using PCPro/WebPro, delete the entry and upload the change to the system before proceeding]). Without clearing an extension's key first, your DSS Console may not show the correct lamping, although the DSS function will work correctly.

If you are programming the system from the extension to which the DLS Console is connected, either by phone or using the PC Program, you may need to unplug the DLS and plug it back in to reset the console's lamping.

DSS Lamping Changed to Apply to All Consoles

Software has been changed to apply settings in **Program 30-05 : DSS Console Lamp Table** to all system consoles. Previously, the settings in this program defined for each DSS Console.

DSS Lamping Table Changed to Apply to DSS/Hotline Keys for Keysets

Software has been changed to apply settings in **Program 30-05 : DSS Console Lamp Table** to DSS and Hotline keys on keysets as well as DSS Consoles.

ACD/Non-ACD Agent DSS Lamping Available

With the Aspire M/L/XL system and software 4.0E+, a new option is available in Program 30-05-01 which allows a non-ACD DSS console to lamp indicating the status of both non-ACD agents as well as ACD agents. Previously, the console would only display one type or the other.

Conditions

(A.) Changing flash patterns for DSS Consoles will also change them for Hotline keys.

(B.) When installing a DSS, the system must auto-detect the console in order for the LEDs to function correctly. When connecting the DSS to an extension previously defined with another circuit type, undefine the circuit type (enter 00 in Program 10-03 for the extension number), then connect the DSS Console.

(C.) To program the keys on a 24-Button DLS in Program 15-07, use the extension number to which the DLS is installed and, regardless of the type of keyset connected, ***start programming the DLS keys at key number 25***.

(D.) An attendant does not have to have a DSS Console, but it must be programmed in Program 30-02-01.

(E.) Programmable Function Keys for ACD codes (*10, *12, *13, *14, *15, *16, *17, *18, *19) cannot be programmed on a DSS Console.

(F.) Programmable Function keys for Trunk Group/Loop Key (*02), Virtual Extension (*03), and Loop Key (*05) cannot be programmed on a DSS Console as the system does not allow entry of the additional data required for these keys.

Default Setting

- No DSS Consoles assigned (in Program 30-02).
- All DSS Console key ranges are ports 1-200.
- Once a DSS Console is enabled, the console's keys are DSS keys (Program 30-03).

Programming

- **10-03-01 : PCB Setup**
  The system automatically assigns the terminal type (10) for the port which has a DSS console installed.
- **15-02-08 : Multi-Line Telephone Basic Setup, Automatic Handsfree**
  Set to '1' in order for a DSS Console to have one-touch operation. If set to '0', the user will need to lift the handset before pressing a DSS key in order for the call to complete.
- **15-07-01 : Programmable Function Keys**
  Assign function keys to the DLS consoles. When programming a 24-Button DLS key, use the extension number to which the DLS is installed and, regardless of the type of keyset connected, ***start programming the DLS keys at key number 25 (Key 25=DLS key 1)***. Refer to Program 30-03-01 to assign function keys to DSS consoles.
- **20-02-03 : System Options for Multi-Line Telephones - BLF Control and**
  20-13-06 : Class of Service Options (Supplementary Service) - Automatic Off Hook Signaling
  These programs set the conditions under which a Hotline, Reverse Voice Over or DSS Console key indicates that an extension is busy. With condition 1 in the following chart, the BLF LED is on only when both extension line appearances are busy. In conditions 2-4, the BLF LED is on when one line appearance is busy.

	Program 20-02-03	Program 20-13-06	BLF [1] Status	Busy Status
1	1	0	On	Yes
2	1	1	On	Yes
3	0	0	On	Yes
4	0	1	Off	No

[1] BLF is on for extension receiving a voice announced Intercom call

- **20-06-01 : Class of Service for Extensions**
  Assign Class of Service (1-15) to extensions.
- **20-17-01 : Operator's Extension - Operator's Extension Number**
  Define the extension numbers which are to be used as operators.
- **20-17-02 : Operator's Extension - Operator Console Mode**
  Determine if the operator's keyset will act as a normal keyset (0) or if keys 13-24 will be used for Personal Park of outside calls (1).
- **30-01-01 : DSS Console Operating Mode**
  Set the mode of the system's DSS Consoles. The available options are Regular (Business) Mode (0), Hotel Mode (1), ACD Monitor Mode (2), and Business/ACD Mode (3). Lamping status for ACD agents and non-ACD agents require this option be set to "3" and requires software 4.0E+ - otherwise, ACD agents and non-ACD agents do not both appear on the same console type. For ACD agent's lamping status, a DSS Console must be programmed as an ACD console. For non-ACD agents, the console must be programmed as business console.
  Options 2 and 3 are not available with the Aspire S.
- **30-02-01 : DSS Console Extension Assignment**
  Designate the DSS Console installations (i.e., the extensions that have DSS Consoles connected to them).

- **30-03-01 : DSS Console Key Assignment**
  Customize DSS Console keys to function as DSS keys, Service Code keys, Programmable Function Keys, and One-Touch Calling keys. The key (when defined as a DSS/One-Touch key [code 01] can have any function up to four digits long (e.g., extension number or Service Code). The function information (such as extension number or Service Code) would then be entered as the additional data.
- **30-04-01 : Alternate DSS Console Extension Assignment**
  If the console should have Alternate Answering, use this program to assign the Alternate Answering Destination. That extension must be programmed with a DSS, but it does not actually need a DSS installed.
- **30-05-01 : DSS Console Lamp Table**
  If required, use this program to customize the system's DSS Console flash rates. This table also affects DSS/Hotline key lamping for keysets.

Related Features

Abbreviated Dialing
A user can use the One-Touch Programmable Function Key (code 01) to have DSS Console keys for Personal Speed Dial as well as common and group Abbreviated Dialing.

Automatic Call Distribution (ACD)
Lamping status for ACD agents and non-ACD agents do not both appear on the same console type. For ACD agent's lamping status, a DSS Console must be programmed as an ACD console in Program 30-01-01. For non-ACD agents, the console must be programmed as business console.

Call Forwarding
A DSS key will only indicate a Call Forwarding indication for extensions forwarded with Personal Answering Machine Emulation (*2 + 1) or Immediate Call Forwarding (*2 + 4).

Central Office Calls, Answering and Placing
A DSS Console can have line keys for placing and answering calls.

Door Box
The DSS Console provides one-touch calling and a Busy Lamp Field for Door Boxes. Refer to the Door Box Feature when programming Door Boxes.

Night Service
The DSS Console provides one-touch Night Service switching. Refer to the Night Service feature when programming Night Service options.

One-Touch Calling
Like a One-Touch Key, a user can have DSS Console keys for Direct Station Selection, Trunk Calling, Personal Speed Dial, Abbreviated Dialing, and Service Code access.

Paging, External and Internal
The DSS Console provides one-touch External and Internal Page zone access. Refer the External Paging and Internal Paging features when programming Paging.

Programmable Function Keys
You can program the DSS Console keys with service codes to provide the functions of many of the Programmable Function keys. The stored service code can be up to three digits long, but it can have additional option codes added (e.g. to set Immediate Call Forward for all calls, *2 + 4 + ext # + 2). Trunk Group/Loop Key (*02), Virtual Extension (*03), and Loop Key (*05) codes can not be programmed on a DSS Console as the system does not allow entry of the additional data required.

Operation

Calling an extension from your DSS Console:

1. *(Optional for 110-Button Consoles)* Press EXT.1 or EXT.2 to select the range.
2. Press DSS Console key.

   If the call voice-announces, you can make it ring by dialing 1.
   If you don't have Handsfree, you must lift handset to speak.

Extension Busy Lamp Field	
When the DSS key is...	**The assigned extension is...**
On	Busy on a call
Off	Idle
Flashing Fast	In Do Not Disturb

Placing a trunk call from your 24-Button DLS Console:

1. Press DLS Console key assigned to trunk.
2. Dial outside number.

   If you don't have Handsfree, you must lift the handset to speak.

Trunk Busy Lamp Field	
When the DSS key is...	**The assigned trunk is...**
On	Busy on a call
Off	Idle
Flashing slowly	Ringing

Answering a trunk call from your DSS Console:

1. Press flashing DSS Console key assigned to trunk.

   If you don't have Handsfree, you must lift the handset to speak.

Parking an outside call when using a keyset as an operator's phone (Program 20-17-02 set to "1"):

1. Press the ringing line/loop key.
2. Place the call in Personal Park by pressing an available Park key (13-24).

   To pick up the call, press the flashing Personal Park key.

   With this program set to "1", pressing CHECK and keys 13-24 to verify the keys programming, the display will not indicate any function.

20-17-02 : Operator's Extension - Operator Console Mode
Determine if the operator's keyset will act as a normal keyset (0) or if keys 13-24 will be used for Personal Park of outside calls (1).

Calling a Door Box from your DSS Console:

1. Press DOOR.
2. Press DSS Console key for Door Box you want to call (Aspire S: 1-4, Aspire: 1-8).

   If you don't have Handsfree, you must lift the handset to talk to the Door Box.

Door Box Busy Lamp Field	
When the DSS key is...	**The assigned Door Box is...**
On	Busy or ringing in
Off	Idle

Transferring a call using your DSS Console:

1. Place or answer call.

   If you are on an Intercom call, press HOLD before going to the next step.
2. Press DSS key for extension that will receive transfer.

   You cannot Transfer to an extension that is busy or in Do Not Disturb.
3. (Optional) Announce call.

   If called party doesn't want the call, press flashing line or CALL key to retrieve it.
4. Press SPK to hang up.

Making a External Page using your DSS Console:

1. Press PAGE.
2. Press DSS Console External Page zone key (1-8).

If the zone you want is busy, try again later.
If you don't have Handsfree, lift the handset to make your announcement.

External Page Busy Lamp Field	
When the DSS key is...	**The External Page zone is...**
On	Busy
Off	Idle

Making an Internal Page using your DSS Console:

1. Press GROUP.
2. Press DSS Console Internal Page zone key (Group key 1-64).

If the zone you want is busy, try again later.
If you don't have Handsfree, lift the handset to make your announcement.

Internal Page Busy Lamp Field	
When the DSS key is...	**The Internal Page zone is...**
On	Busy
Off	Idle

Switching the Night Service mode from your DSS Console:

1. Press Night Service key (NIGHT, DAY, BREAK or NITE 2).

Night Service Busy Lamp Field	
When this key is ON...	**The system is in the...**
DAY	Day 1 Mode
NIGHT	Night 1 Mode
BREAK	Break 1 Mode
NIGHT 2	Night 2 Mode

Activating DSS Console Alternate Answer:

1. Press ALT.

You hear a short confirmation tone and "Off Duty" is displayed on the phone.

If you hear a long tone, you cannot enable Alternate Answer. Another user has already enabled your console as their Alternate Answer destination.

Transferred and dial "0" calls ring both DSS Consoles and, if the VRS is installed, the main operator hears the message, "Your calls have been forwarded". Central office calls ring both consoles and no message is heard by the operator.

Alternate Answer Busy Lamp Field	
When the ALT key is...	**Alternate Answer is...**
On	Enabled
Off	Disabled

Using a DSS Console key as a One-Touch or Programmable Function Key:

A user can have DSS Console keys programmed as One-Touch Keys. These keys can be used for Direct Station Selection, Trunk Calling, Personal Speed Dial, Abbreviated Dialing, and Service Code access. The stored service code cannot be longer than three digits.

Service Code 851 can be used to program the 24-Button DLS, but Program 30-03-01 must be used to define the keys on a 110-Button DSS Console.

1. Press DSS Console key for function.

For example, you can forward your calls by pressing DSS Key + 1 + destination. Your DSS key must have been previously programmed for the Call Forward feature.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Directed Call Pickup permits an extension user to intercept a call ringing another extension. This allows a user to conveniently answer a co-worker's call from their own telephone. With Directed Call Pickup, an extension user can pick up:

- Trunk calls (i.e., Ring Group calls)
- Direct Inward Lines
- Transferred trunk calls
- Transferred Intercom calls
- Ringing and voice-announced Intercom calls

Conditions

(A.) An extension can use Directed Call Pickup to intercept calls to which it is denied access in Programs 14-07 and 15-06.

Default Setting

Enabled.

Programming

➧ **11-12-30 : Service Code Setup (for Service Access) - Specified Trunk Answer**
If required, redefine the service code used to answer a specific trunk which is either ringing or on hold (default: 172).

➧ **20-10-05 : Class of Service Options (Answer Service) - Directed Call Pickup for Own Group**
Enable (1) or disable (0) an extension's ability to use Directed Call Pickup for calls ringing their own group.

Related Features

For other features which let you cover a co-worker's calls, refer to:

- Department Calling
- Group Call Pickup
- Hotline
- Multiple Directory Numbers
- Secretary Call Pickup

Hold/Transfer
Calls which were on hold or transferred which recall the extension can be answered using Directed Call Pickup.

Park
Personal Park also uses the Directed Call Pickup code.

Voice Mail
Voice Mail Park and Page also uses the Directed Call Pickup code.

Operation

To use Directed Call Pickup to intercept a call to a co-worker's extension:

1. At keyset, press idle CALL key.
   OR
   At single line set, lift handset.
2. Dial **.
3. Dial number of extension whose call you want to intercept.

   If more than one call is coming in, the system sets the priority for which call it will answer first.

   If you know the specific line number which is ringing, you can dial 172 + Line number (001-200).

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Directory Dialing allows a display or Super Display keyset user to select a co-worker or outside call from a list of names, rather than dialing the phone number. There are four types of Directory Dialing:

- **ABBc** - Company (Common) Abbreviated Dialing
- **ABBg** - Department (Group) Abbreviated Dialing
- **EXT.** - Co-worker's extensions
- **OneT** - Personal Abbreviated Dialing (One-Touch Keys)

Conditions

(A.) Directory Dialing sorts and searches directory names in alphabetical order (based on all of the characters entered of the name) when the system starts up or reboots. In addition, the system will re-sort extension names when:
- You change Program 15-01-01 (Extension Numbers and Names).
- Any user dials 800 and changes their extension's name.

(B.) Directory Dialing follows all the programmed options and conditions for Abbreviated Dialing, Intercom Calling and One-Touch Calling.

Default Setting

Enabled.

Programming

21-01-02 : System Options for Outgoing Calls - Intercom Interdigit Time
If a user waits longer than this interval between Directory Dialing steps, Directory Dialing automatically cancels.

Related Features

i-Series Telephones

Directory Dialing is not available for i-Series phones on the Aspire system.

Soft Keys

Using the Directory Dialing Soft Keys, the FLASH key can toggle the language display from English to Japanese.

Operation

To use Directory Dialing from a display keyset:

1. Do not lift handset or press SPK.
2. Press Directory Dialing Soft Key.
3. Press Soft Key for Directory Dialing type:
   ABBc = Common Abbreviated Dialing.
   ABBg = Group Abbreviated Dialing.
   EXT. = Co-worker's extension numbers.
   OneT = Your One-Touch Keys (1-10).
   Directory Dialing follows any feature restrictions that your system may have enabled. For example, if your extension cannot normally use Common Abbreviated Dialing, Directory Dialing can't access it either.
4. Dial letter/number range for the party you want to call (e.g., dial 2 for A, B, C or 2).
   You can enter several letters to help narrow the search.
   Press # to enter additional letters on the same key (ex: TOM = 8666#6).
5. Press the Down Arrow Soft Key to jump to that section.
6. Press Volume ▲ or ▼ to scroll through the list.
   If you wait too long between your selections, Directory Dialing automatically cancels.
7. Lift handset or press DIAL, CALL1 or SPK to place the selected call.
   If you selected an outside call, the call will route according to your system's Trunk Group Routing/ARS setup.

To cancel Directory Dialing:

1. Press CLEAR.

Please refer to Selectable Display Messaging (page 509) for information on this feature.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Distinctive Ringing, Tones and Flash Patterns provide extension users with audible and visual call status signals. This lets users tell the types of calls by listening to the ringing/tones and watching the keys. It also helps users monitor the progress of their calls. In addition, Distinctive Ringing lets keyset users customize their Intercom and trunk call ringing. This is helpful for users that work together closely. For example, if several co- workers set their keysets to ring at different pitches, the co-workers can always tell which calls are for them. Refer to the following table at the beginning of this section:

Table 1-7 System Tones

You can also customize the tones the system uses for splash tone, confirmation tone, trunk ring tone, Intercom ring tone and Alarm ring tone. Refer to the chart below and the Programming section for more details.

Distinctive Ringing, Tones and Flash Patterns	
Program	**Description**
80-01 : Service Tone Setup	Set the frequency of the system's splash tone. This is the tone the system uses, for example, to alert the user of an incoming voice-announced Intercom call.
82-01 : Incoming Ring Tone	Set the trunk ring tones, which are the tones a user hears when a trunk rings an extension.
82-01 : Intercom and Alarm Ring Tone	Set the Intercom and External Alarm Sensor ring tones.
82-03 : DSS Console LED Pattern Setup and 30-05 : DSS Console Lamp Table	Set the DSS and Hotline key flash rates for busy, idle, DND, ACD Agent status, and hotel options.

Conditions

None

Default Setting

Enabled.

Programming

- **15-02-02 : Multi-Line Telephone Basic Data Setup - Trunk Ring Tone**
  From the range specified in Program 22-03, select the keyset extension's trunk ring tone.
- **15-02-03 : Multi-Line Telephone Basic Data Setup - Extension Ring Tone (Pitch)**
  Select the extension's intercom ring tone.
- **22-03-01 : Trunk Ring Tone Range**
  Set the ring tone range (1-4) for each trunk.
- **80-01-01 : Service Tone Setup**
  Customize the system's basic tones and system service tones.
- **82-01-01 : Incoming Ring Tone**
  Customize the trunk ring tones (i.e., the tones a user hears when a trunk rings an extension). If desired, change the Intercom and External Alarm Sensor ring tones.
- **82-03-01 : DSS Console LED Pattern Setup**
  Customize the DSS and Hotline key flash patterns.

Related Features

Multiple Directory Numbers/Call Coverage

Set up ring tones for Multiple Directory Numbers and Call Coverage keys.

Single Line Telephones

Single line telephone users cannot listen to or change the pitch of their phone's incoming ring.

Operation

To listen to the incoming ring choices (keyset only):

1. Press idle CALL key.
2. Dial 811.
3. Dial 1 to check ringing for Intercom calls.
   OR
   Dial 2 to check ringing for trunk calls.
4. For Intercom calls, select the pitch you want to check (1-8).
   OR
   For trunk calls, select the pitch (1-8) and the tone (1-4) you want to check.
   Refer to Table 1-7 for the four Trunk Ring Tone Ranges and the selections within each range.
5. Go back to step 4 to listen to additional choices or press SPK to hang up.

To change the pitch of your incoming ring (keyset only):

1. Press idle CALL key.
2. Dial 820.
3. Dial 1 to change ringing for Intercom calls.
   OR
   Dial 2 to change ringing for trunk calls.
4. Select the pitch (1-8).
5. Press SPK to hang up.

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Class of Service option for allowing DND requires software 2.63+.	• Class of Service option for allowing DND requires software 2.63+.
• DND activation while on a call is possible with 2.63+ software.	• DND activation while on a call is possible with 2.63+ software.

Description

Do Not Disturb blocks incoming calls and Paging announcements. DND permits an extension user to work by the phone undisturbed by incoming calls and announcements. The user can activate DND while their phone is idle or while on a call. Once activated, incoming trunk calls still flash the line keys. The user may use the phone in the normal manner for placing and processing calls.

There are five Do Not Disturb options available at each extension:

1 = Incoming trunk calls blocked
2 = Paging, incoming Intercom, Call Forwards and transferred trunk calls blocked
3 = All calls blocked
4 = Incoming Call Forwards blocked
0 = Do Not Disturbed canceled

Keyset users be able to activate or deactivate Do Not Disturb while on a call, depending on their software version. With older software, the keyset user could only enable DND when the phone was idle or when dial tone was heard. This option is not available for single line telephones.

Conditions

(A.) If there is no Call Forwarding key (Program 15-07: 10 - 17), the DND key will blink when the extension is forwarded.
(B.) Multiple Directory Number (virtual extension) keys do not support DND Programmable Function keys.

Default Settings

Enabled for all extensions.

Programming

- **11-12-01 : Service Code Setup (for Service Access) - Call Forwarding/DND Override**
  In order to use the DND Override service code if voice mail is installed, the single digit service code (11-16-09) must be deleted or changed as it conflicts with the DND Override code.
- **11-16-06 : Single Digit Service Code Setup - DND/Call Forward Override**
  If a single digit service code is to be used, assign an available code number.
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.
- **20-13-04 : Class of Service Options (Supplementary Service) - Call Forward/DND Override**
  Determine whether or not an extension should be able to override DND (0=denied, 1=allowed).
- **20-13-40 : Class of Service Options (Supplementary Service) - Do Not Disturb**
  This option will allow or prevent the user from being able to use the Do Not Disturb feature (0=disabled, 1=enabled).

Related Features

Call Forwarding

Calls to extensions with DND active do not follow Call Forwarding programming. DIL calls will ring an idle Department Group member, then follow 22-08 programming then 22-05 programming.
If an extension user activates DND option 4, the system prevents other extensions from forwarding calls to them. If an extension already receiving forwarded calls activates DND option 4, callers to the forwarded extension hear DND tone.

Call Forwarding/Do Not Disturb Override

An extension user can override Call Forwarding or Do Not Disturb at another extension.

Central Office Calls, Answering

When a call is transferred because of Call Forwarding No Answer, Call Forwarding Busy, or DND, the Reason for Transfer option can display to the transferred extension why the call is ringing to their phone.

Direct Inward Line (DIL)

DND modes 1-3 will cause calls to follow 22-08 programming then 22-05 programming even if the extension is forwarded.

Distinctive Ringing, Tones and Flash Patterns

Set up DND flash patterns for DSS and Hotline keys.

Operation

To activate or deactivate Do Not Disturb while your extension is idle:

Keyset

1. Do not lift the handset.
2. Press DND key.
   OR
   Press idle CALL key and dial 847.
3. Dial the DND option code.
   0 = Cancel DND
   1 = Incoming trunk calls blocked
   2 = Paging, incoming Intercom, Call Forwards and transferred trunk calls blocked
   3 = All calls blocked
   4 = Call Forwards blocked

Single Line Telephone

1. Lift handset.
2. Dial 847.
3. Dial the DND option code.
   0 = Cancel DND
   1 = Incoming trunk calls blocked
   2 = Paging, incoming Intercom, Call Forwards and transferred trunk calls blocked
   3 = All calls blocked
   4 = Call Forwards blocked

Aspire S	Aspire M/L/XL
• Available - 4 Door Boxes and 6 Chime Tones.	• Available - 8 Door Boxes and 6 Chime Tones.

Description

The Door Box is a self-contained Intercom unit typically used to monitor an entrance door. A visitor at the door can press the Door Box call button (like a door bell). The Door Box then sends chime tones to all extensions programmed to receive chimes. To answer the chime, the called extension user just lifts the handset. This lets the extension user talk to the visitor at the Door Box. The Door Box is convenient to have at a delivery entrance, for example. It is not necessary to have company personnel monitor the delivery entrance; they just answer the Door Box chimes instead. Any number of system extensions can receive Door Box chime tones.

Each Door Box has a pair of normally open relay contacts that can connect to an electric door strike. Use these contacts to remotely control the entrance door. After answering the Door Box chimes, a keyset user can press FLASH to activate the Door Box contacts. This in turn releases the electric strike on the entrance door. The device connected to the Door Box contacts cannot exceed the contact ratings shown in the table below:

Door Box Specifications	
Contact Configuration	Normally Open
Maximum Load	60mA@30 VDC 10mA @90 VDC
Maximum Initial Contact Resistance	50mOhms

The system can have up to eight Door Boxes.

Conditions

(A.) Each channel in the 2PGDAD has a jumper which must be set for Door Box operation. Refer to the system hardware manual for additional details.

(B.) There is no off-hook ringing for Door Boxes. If an extension user is on the phone, the CALL2 key will flash, but no ringing will be heard.

Default Setting

Disabled.

Programming

➧ **10-03-01 : PCB Setup - Channel 1 Terminal Type**
10-03-06 : PCB Setup - Channel 2 Terminal Type
The terminal type should be assigned type “8” for Door Box usage.

➧ **10-05-01 : General Purpose Relay Setup**
Define which Relay circuits (5-8) on a 2PGDAD Adapter are used for General Purpose Relay. Refer to Program 10-21-01 for the NTCPU relay.

- **10-21-01 : NTCPU Hardware Setup - External Source Control Switch Selection on NTCPU**
  Specify the function of the NTCPU's relay switch for external tone source control (0=External MOH source, 1 = BGM source, 2 = External Speaker, 3 = General Purpose Relay). Refer to Program 10-05-01 for PGDAD Module relay assignments
- **32-01-01 : Door Box Timers - Door Box Answer Time**
  Set the interval within which a user must answer the Door Box chimes.
- **32-01-02 : Door Box Timers - Door Lock Cancel Time**
  Set the length of time the Door Box strike stays open when the single line user hook flashes or keyset user presses Flash.
- **32-02-01 : Door Box Ring Assignments**
  Determine which Door Boxes should ring which extensions by entering the extension number. Each Door Box can be programmed to ring up to 32 extensions and an extension can be programmed to ring for multiple Door Boxes.
  ➪ Aspire S: Door Boxes 1-4
  ➪ Aspire: Door Boxes 1-8
- **32-03-01 : Door Box Basic Setup - Chime Pattern**
  Set the chime pattern (0-6) for each Door Box.
- **32-03-02 : Door Box Basic Setup - CODEC Transmit Gain Setup**
  32-03-03 : Door Box Basic Setup - CODEC Receive Gain Setup
  Select the CODEC gain types (1-63) each Door Box.
  ➪ Aspire S: Door Boxes 1-4
  ➪ Aspire: Door Boxes 1-8
- **80-01-01 : Service Tone Setup - Tones 19-24**
  Adjust the Door Box chimes if necessary. After changing this program, a system restart is required for any changes to take affect.

Related Features

Call Forwarding, Off-Premise

Off-Premise Call Forwarding will work for ISDN lines.

Cordless II/Cordless Lite II Telephones

Door Boxes can ring Cordless II and Cordless Lite II phones if allowed in programming.

Paging, External

If a 2PGDAD circuit has a Door Box connected, you cannot use that circuit for External Paging.

Single Line Telephones, Analog 500/2500 Sets

Door Boxes can ring 2500-type single line phones if allowed in programming.

Operation

To call a Door Box:

Keyset

1. Press idle CALL key.
2. Dial 802.
3. Dial Door Box Number (Aspire S: 1-4, Aspire: 1-8).

Single Line Telephone

1. Lift handset.
2. Dial 802.
3. Dial Door Box Number (Aspire S: 1-4, Aspire: 1-8).

To activate the Door Box strike:

Keyset

1. While talking to the Door Box, press the Flash key.

Single Line 500/2500 Telephone

1. While talking to the Door Box, hookflash.

To answer a Door Box chime:

1. Lift handset.

If you are busy on a call, the CALL2 will flash, but there is no off-hook ringing. You can place your active call on hold and answer the Door Box call.

Dual Line Appearance

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Each keyset has two line appearance keys (CALL1 and CALL2) for placing and answering calls. These line appearance keys, assigned to the extension's number, simplify operations for busy users. For example, the user can easily process a new call on one appearance with a call in progress on the other.

Conditions

Normally, both line appearances must be busy to return a busy signal to the caller, however, check any incoming features for specific interactions.

Default Setting

Enabled.

Programming

20-13-06 : Class of Service Options (Supplementary Service) - Automatic Off Hook Signaling
In an extension's Class of Service, enable (1) or disable (0) the extension's ability to automatically send Off Hook Signals while busy on a handset call. Setting this option to "0" will prevent Intercom calls from ringing the CALL2 key - instead the caller will hear a busy signal.

Related Features

Distinctive Ringing, Tones and Flash Patterns
Set up busy and idle extension flash patterns for DSS and Hotline keys.

Off Hook Signaling
Off Hook Signaling rings an extension's second line appearance when the first appearance is busy.

Operation

None

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

IMPORTANT - PLEASE NOTE THE FOLLOWING!
1. ***All local trunks or the trunk connected to external 911 equipment must be put into the E911 route.*** By placing all the local trunks into the E911 route, this assures that any user may make a call to 911.
2. ***When ARS is NOT enabled and the system allows trunk access by dialing '9'***, single line telephones will disregard Program 20-03-03 - System Options for Single Lines Telephones - SLT DTMF Dial to Trunk Lines. This will prevent the system from connecting to a trunk until all the digits are dialed. This can be avoided by using either '8' or '9x' (but not '91') as the trunk access code. Be aware that this change will require additional programming changes.
3. ***When using external E911 equipment***, do not allow analog single line telephones to directly access trunks. When an analog SLT directly accesses a trunk (#9 xxx) and dials 911, the system will not follow the 911 routing. If your system is connected to external E911 equipment, the system will not route the call to that equipment.
4. ***Do not use an asterisk within a PBX access code if the Account Code feature is used.*** With the Account Code feature enabled, if an asterisk is used within the access code, the trunk stops sending digits to the central office after the * is sent.
5. ***Finally, but most important, TEST - TEST - TEST!!*** Due to the nature of the E911 feature, it is imperative that when programming this, or any other feature, to be aware of the consequences. Make sure to test the extensions with the E911 feature to confirm that other features will not prevent the call from being completed. When using external equipment, make sure the dial treatment tables are working properly.

E911 Compatibility ensures that emergency calls always get through. If an emergency occurs, a user simply goes to any phone, lifts the handset and dials 911. The system's built-in E911 compatibility places the emergency call even if the user forgets to dial an access code or press a line key. The E911 capabilities include:

- **Attendant Notification**
  The attendant receives a notification each time a co-worker dials an emergency 911 call. This notification is the co-worker's name and number display optionally accompanied by an audible alarm. Notification occurs regardless of whether the attendant is idle or busy on a call. You can optionally extend this capability to other supervisory extensions as well.

Description (Cont'd)

- **Emergency Routing**
  When an extension user dials 911, the system can automatically find a trunk for the call. The system can choose a route to which the user normally does not have access. If all normal routes are busy, the system can even disconnect an active call and place the emergency call. E911 Compatibility uses the flexibility of the Automatic Route Selection Call Route Options to route 911 emergency calls (even in systems in which ARS is not enabled).
  - **E911 Outgoing Dialing**
    The E911 calls follow the trunk group route programming. It is possible to use the flexibility of the Automatic Route Selection Call Route Options for additional routing options.
  - **Forced Disconnect Follows Timer to Disconnect Call**
    When all lines in the programmed route are busy and the system must drop a call in order to place a 911 call, the system will wait the amount of time set in Program 81-01 before disconnecting the call.

- **Compatibility with Customer Provided E911 Equipment**
  The system can automatically send a 911 call to customer-provided E911 equipment (such as the Proctor 911 ANI-LINK System II). The E911 equipment will dial emergency service and provide the caller's extension number to the emergency personnel. When using this type of equipment, the system must be programmed to send E911 calls to the trunk connected to the E911 box. This is done by assigning the trunk to the E911 trunk group and using ARS to route all 911 calls to that port. The Dial Treatment must then be set to send the extension number and '911' to that port. This is usually accomplished using XRE in the Dial Treatment, but check the requirements of your E911 box.
- **Calling Party Identification**
  With ISDN installed, the system can provide the calling party's telephone number and extension number. No additional customer-provided 911 equipment is required.

Uninstalled Trunks in Trunk Group Prevent Call from Dialing Out

By system default, all trunks in **Program 14-05-01 : Trunk Group** are in group 1. When placing a 911 call, the system will try to access the trunks defined in the group. If the trunks do not exist, the call will not dial out. In order for E911 to function correctly, remove any uninstalled trunks from the trunk group.

The system software will be changed in a future release to ignore trunks which have no voltage present on the PCB.

If **Program 21-01-12 : System Options for Outgoing Calls, Dial 911 Routing Without Trunk Access** is set to "0" (trunk access code required), when using the Dial Number Preview feature and dialing 9+911, if all trunks are busy, the user will hear a busy signal and the call will not dial out.

If option 21-01-12 is set to "1" (trunk access code not required) and using Dial Number Preview, 911 is dialed, the system will disconnect a trunk and dial the call.

Dial Number Preview is when a telephone number is first dialed (previewing the number in the display) then pressing the CALL or line key to place the call.

Conditions

If Program 21-01-10 is programmed with an entry other than “0”, a call will not have a talk path unless the user dials at least the number of digits entered in this option when placing an out going call. This means that an entry of 4 or higher in this program will cause a problem when dialing 911. Since it is only a 3-digit number, the call will not have a talk path, preventing the emergency dispatcher from hearing the caller. It is recommended that this option be kept at its default setting of “0” to prevent any problems with dialing 911.

Default Setting

Disabled.

Programming

- **11-12-56 : Service Code Setup (for Service Access) - E911 Alarm Shut Off**
  Select the Service Code (normally 886) that an extension user can dial to shut off the E911 Alarm Ring.
- **14-05-01 : Trunk Groups**
  Assign the outbound trunks you want to use for E911 service to the same Trunk Group. Remove any uninstalled trunks from the trunk group in order to prevent an unused trunk from being seized to place a 911 call.
  - Aspire S Trunk Groups: 1-8
  - Aspire Trunk Groups: 1-100
- **14-06-01 : Trunk Group Routing**
  Set up an outbound routing table for trunk groups assigned in Program 14-05. This program and Program 21-02 are the minimum required if E911 must seize a line to dial.
  - Aspire S Trunk Group Routes: 1-8
  - Aspire Trunk Group Routes: 1-100
- **20-06-01 : Class of Service for Extensions**
  Assign a Class of Service to an extension (1-15).
- **20-08-16 : Class of Service Options (Outgoing Call Service - Display E911 Dialed Extension Name and Number**
  In an extension’s Class of Service, enable (1) or disable (0) the extension’s ability to display the name and number of the extension that activated E911 service. If disabled (0), the E911 Alarm (set in 21-01-13 below) will never occur.
- **21-01-10 : System Options for Outgoing Calls - Dial Digits for Toll Restriction Path**
  If this is programmed with an entry other than “0”, a call will not have a talk path unless the user dials at least the number of digits entered in this option when placing an out going call. This means that an entry of 4 or higher in this program will cause a problem when dialing 911. Since it is only a 3-digit number, the call will not have a talk path, preventing the emergency dispatcher from hearing the caller. It is recommended that this option be kept at its default setting of “0” to prevent any problems with dialing 911.
- **21-01-12 : System Options for Outgoing Calls - Dial 911 Routing Without Trunk Access**
  If enabled (1), an extension user can dial 911 without first dialing a trunk access code or pressing a line key. If disabled (0), an extension user must dial a trunk access code (e.g., 9) or press a line key before dialing 911. If enabled, dialing 9+911 will still dial out.
- **21-01-13 : System Options for Outgoing Calls - Alarm Ring Timer (E911)**
  Use this option to set the duration of the E911 Alarm Ring Time (0-64800 seconds). If set for 0, the E911 Alarm will not ring.

- **21-02-01 : Trunk Group Routing for Extensions**
  Assign the routes set in Program 14-06 to extensions. This program and Program 14-06 are the minimum required if E911 must seize a line to dial.
  - Aspire S Trunk Groups: 1-8
  - Aspire Trunk Groups: 1-100
- **81-01-14 : COIU Initial Data Setup - Hookflash 1**
  81-01-15 : COIU Initial Data Setup - Hookflash 2
  Program the length of time the system should wait before disconnecting a call in an Emergency Call forced trunk disconnect situation. The item to be programmed depends on the entry in 14-02-04.

Related Features

Automatic Route Selection

Refer to the ARS feature for more information on setting up Selection Numbers, Dial Treatments, Call Route Options and Work Periods.

Central Office Calls, Placing

If trunk access codes are not required in programming (21-01-12) for E911, if a user dials the trunk access code prior to 911, the call will still go through.

Networking / VoIP

Networked IP phones can be programmed to follow ARS COS Matching in order for 911 calls to seize a local line to call the site's local authorities (and not the networked site's).

T1 Trunking (with ANI/DNIS Compatibility)

With PRI trunks, set up the system so the caller's extension number is sent to the 911 center.

Operation

To place an emergency 911 call:

When Dial 911 Routing Without Trunk Access is enabled . . .

1. Go to any phone.
2. Lift handset or press idle CALL key.
3. Dial 911.

When Dial 911 Routing Without Trunk Access is disabled . . .

1. Go to any phone.
2. Lift handset or press idle CALL key.
3. Dial a trunk access code (e.g., 9) or press a line key.
4. Dial 911.

To turn off the E911 Alarm at your telephone:

1. Lift handset or press idle CALL key.
2. Dial 886

   The alarm goes off.

   OR (if you have a display telephone)

1. Press CLEAR once to turn off the alarm.
2. Press CLEAR again to clear the alarm display.

Aspire S	Aspire M/L/XL
• This is a future item and is not currently available.	• This is a future item and is not currently available.

Description

This is a future item and is not currently available.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Flash allows an extension user to access certain CO and PBX features by interrupting trunk loop current. Flash lets an extension user take full advantage of whatever features the connected telco or PBX offers. You must set the Flash parameters for compatibility with the connected telco or PBX.

Conditions

The system does not provide a ground flash.

Default Setting

Enabled.

Programming

- **14-02-03 : Analog Trunk Data Setup - Flashing/Grounding**
  Make sure this item is set for open loop Flash (0).
- **14-02-04 : Analog Trunk Data Setup - Flash for Timed Flash or Disconnect**
  For each trunk, indicate if Flash is for Flash (0) or open loop disconnect (1).
- **15-02-05 : Multi-Line Telephone Basic Data Setup - Transfer Key Operation Mode**
  If the CONF key should access Flash, enter 2. Otherwise, enter 0 or 1.
  In order for the Cordless Lite/Cordless Lite II phone user to be able to use the flash function (ex: to use the Door Box relay), this option must be set to "2". This changes the Transfer key to a Flash key.
- **15-02-24 : Multi-Line Telephone Basic Data Setup - Conference Key Mode**
  This option allows an extension's CONF key to be programmed for Conference or for Transfer.
- **15-03-04 : Single Line Telephone Basic Data Setup - Flashing**
  In a single line (500/2500 type) telephone's Class of Service, enable (1) or disable (0) the ability to hookflash for system feature access.
- **81-01-14 : COIU Initial Data Setup - Hookflash 1**
  Set the Flash duration (16-4080mS) for analog trunk (COIU PCB) circuits.
- **81-01-15 : COIU Initial Data Setup - Hookflash 2**
  Set the open loop disconnect duration (16-4080mS) for analog trunk (COIU PCB) circuits.

Related Features

PBX Compatibility

If the system is behind a PBX, Flash normally gives the extension user access to many PBX features.

Toll Restriction

The system applies Toll Restriction (if applicable) to the number a user dials after flashing a trunk.

Voice Mail

If voice mail ports are to flash outside calls, change the Single Line Flash Service Code (11-12-42). Dialing "#" from voice mail ports lights the Message Waiting lamp.

Operation

To flash the trunk you are on:

Keyset

1. Press FLASH.

Single Line Set

1. Hookflash.
2. Dial #3.

Digital Single Line Set

1. HOLD.
2. Dial #3.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Flexible System Numbering lets you reassign the system's port-to-extension assignments. This allows an employee to retain their extension number if they move to a different office. In addition, factory technicians can make comprehensive changes to your system's number plan. You can have factory technicians:

- Set the number of digits in internal (Intercom) functions. For example, extension numbers can be up to eight digits long.
- Change your system's Service Code numbers
- Assign single digit access to selected Service Codes

Talk to your sales representative to find out if this program is available to you.

You can also use Flexible System Numbering to change the system's Trunk Group Routing code. Although the default code of 9 is suitable for most applications, you can alter the code if needed.

For more information on the systems standard numbering, refer to Tables 1, 2, 3, 4 and 7 at the beginning of this section.

The system provides a completely flexible system numbering plan. Refer to the chart below and the Programming section for more details.

Flexible System Numbering

Program	Description
11-01 : System Numbering	Set the system's internal (Intercom) numbering plan. The numbering plan includes the digits an extension user must dial to access features and other extensions.
11-09-01 : Trunk Access Code	Assign the single-digit trunk access code (normally 9). This is the code users dial to access Automatic Route Selection or Trunk Group Routing.
11-10 : Service Code Setup (for System Administrator) 11-11 : Service Code Setup (for Setup/Entry Operation) 11-12 : Service Code Setup (for Service Access) 11-13 : Service Code Setup (for ACD) 11-14 : Service Code Setup (for Hotel) 11-15 : Service Code Setup, Administrative (for Hotel)	Customize the Service Codes.
11-16 : Single Digit Service Code Setup	Assign the Single Digit Service Codes. these are the post-dialing codes a user can dial after placing an Intercom call to a co-worker.

Conditions

(A.) Programming follows a telephone's extension number, not the port number in most cases. If you relocate a phone, you may need to change additional programming.

(B.) If the extension numbering plan is changed from '3xx' to '2xx', and you would like to consecutively press two DSS keys without toggling the hookswitch, Program 11-16-05 must be removed. If not, pressing the second DSS key will actually camp you on to the first extension.

(C.) Since making changes in Program 11-01 does not automatically make any other changes in any other program, changing the number plan after the system is in operation may cause problems in the following programs:

11-01 Type 2 (Extension Number)				11-01 Type 1 (Service Codes)		
11-02	11-08	15-12	22-11	11-10	11-14	21-11
11-04	11-17	16-01-01	25-06	11-11	11-15	30-03
11-06	15-01-01	15-14	30-03	11-12	15-07	
11-07	15-07	21-11		11-13	15-14	

(D.) Any feature which requires dialing a code or extension number can be affected.

Default Setting

Extensions are numbered consecutively (Program 11-02 and 11-04) from:

- 301 (port 001) to 499 (port 199), 5000 (port 200) to 5312 (port 512)

Refer to Table 7, "System Number Plan/Capacities," on page 42 for the system's default numbering plan.

Programming

- **11-01-01 : System Numbering**
  Customize the system's internal (Intercom) numbering plan.
- **11-02-01 : Extension Numbering**
  Assign extension numbers to extension ports. The telephone's programming identity follows the port number - not the extension number.
- **11-09-01 : Trunk Access Code**
  Assign the single-digit trunk access code (normally 9) for ARS/Trunk Group Routing.
- **11-10-01 : Service Code Setup (for System Administrator)**
  11-11-01 : Service Code Setup (for Setup/Entry Operation)
  11-12-01 : Service Code Setup (for Service Access)
  11-13-01 : Service Code Setup (for ACD)
  11-14-01 : Service Code Setup (for Hotel)
  11-15-01 : Service Code Setup, Administrative (for Hotel)
  Customize the Service Codes.
- **11-16-01 : Single Digit Service Code Setup**
  Assign the Single Digit (post-dialing) Service Codes.

Related Features

None

Operation

Refer to Tables 1-6 at the beginning of this section.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Forced Trunk Disconnect allows an extension user to disconnect (release) another extension's active outside call. The user can then place a call on the released trunk. Forced Trunk Disconnect lets a user access a busy trunk in an emergency, when no other trunks are available. Maintenance technicians can also use Forced Trunk Disconnect to release a trunk on which there is no conversation. This can happen if a trunk does not properly disconnect when the outside party hangs up.

CAUTION
Forced Trunk Disconnect abruptly terminates the active call on the line. Only use this feature in an emergency and when no other lines are available.

Conditions

This feature only works on analog trunk. ISDN trunks do not have the Forced Trunk Disconnect available.

Default Setting

COS1 = Enabled.
COS 2 - 15 = Disabled.

Programming

- **20-06-01 : Class of Service for Extensions**
  Assign a Class of Service (1-15) to an extension.
- **20-07-11 : Class of Service Options (Administrator Level) - Forced Trunk Disconnect**
  In an extension's Class of Service, enable (1) or disable (0) the ability to use Forced Trunk Disconnect.

Related Features

Central Office Calls, Placing

A user can use Forced Trunk Disconnect only for trunks to which it would normally have access.

Operation

To disconnect a busy trunk:

Keyset

1. Press line key for trunk.
   OR
   Dial trunk access code (#9 + trunk number).
   You hear busy tone. Trunk numbers are 001-200.
2. Dial *3 .
   You hear confirmation beeps as the system disconnects the trunk.
   You can now place a call on the free trunk.
3. Press line key for the trunk disconnected in Step 2.
   OR
   Dial the trunk access code (#9 + trunk number) for the trunk disconnected in Step 2.

Single Line Telephone

1. Dial trunk access code (#9 + trunk number).
   You hear busy tone. Trunk numbers are 001-200.
2. Dial *3 .
   You hear confirmation beeps as the system disconnects the line.
3. Hookflash.
   You can now place a call on the free line.
4. Dial the trunk access code (#9 + trunk number) for the trunk disconnected in Step 2.

Aspire S	Aspire M/L/XL
• Available - 8 Call Pickup Groups.	• Available - 64 Call Pickup Groups.

Description

Group Call Pickup allows an extension user to answer a call ringing an extension in a Pickup Group. This permits co-workers in the same work area to easily answer each other's calls. The user can intercept the ringing call by dialing a code or pressing a programmed Group Call Pickup key. If several extensions within the group are ringing at the same time, Group Call Pickup intercepts the call based on the extension's priority within the Pickup Group.

With Group Call Pickup, a user can intercept the following types of calls:

- A call ringing the user's own pickup group
- A call ringing another pickup group when the user knows the group number
- A call ringing another pickup group when the user doesn't know the group number

Conditions

A Call Pickup Group cannot have an associated name.

Default Setting

Enabled.

Programming

- **15-07-01 : Programmable Function Keys**
  Assign Group Call Pickup keys:
  Code 24 for an extension's own Pickup Group and ring group calls (Service Code *#)
  Code 25 for a phone ringing in another Pickup Group (Service Code 869)
  - used when the caller doesn't know the group number
  Code 26 (+ group) for a phone ringing in another specific Pickup Group (Service Code 868)
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service to an extension (1-15).
- **20-10-01 : Class of Service Options (Answer Service) - Group Call Pickup Within Group**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to pick up calls ringing their pickup group (Service Code *#).
- **20-10-02 : Class of Service Options (Answer Service) - Group Call Pickup from Another Group**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to pick up calls ringing telephones that are not in their pickup group (Service Code 869).
- **20-10-03 : Class of Service Options (Answer Service) - Group Call Pickup for Specific Group**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to pick up calls ringing a specific group (Service Code 868).
- **20-10-04 : Class of Service Options (Answer Service) - Group Call Pickup**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to use Group Call Pickup.

- **20-10-05 : Class of Service Options (Answer Service) - Directed Call Pickup for Own Group**
  Enable (1) or disable (0) an extension's ability to use Directed Call Pickup for calls ringing their own group.
- **23-02-01 : Call Pickup Groups**
  Assign extensions to Pickup Groups. Also, use this option to assign an extension's priority within a Pickup Group (Priority Number 1-999).
  - Aspire S: Call Pickup Groups 1-8
  - Aspire: Call Pickup Groups 1-9 or 01-64

Related Features

Central Office Calls, Answering

Users can pickup of calls regardless of their access map programming.

Directed Call Pickup

Directed Call Pickup provides another way of answering a co-worker's call.

Hold / Park

Group Call Pickup can not be used to answer calls recalling from Hold or Park.

Multiple Directory Numbers / Call Coverage

Group Call Pickup keys can not be used to answer calls ringing Multiple Directory Number or Call Coverage keys.

Programmable Function Keys

Function keys simplify Group Call Pickup operation.

Operation

To answer a call ringing another phone in your Pickup Group:

1. At keyset, press idle CALL key.
   OR
   At single line telephone, lift handset.
2. (Keyset only) Press Group Call Pickup key (PGM 15-07 or SC 851: 24).
   OR
   Dial 856 or *#.

   *Service Code *# can pick up any call in the group, plus any Ring Group calls. Service Code 856 cannot pick up Ring Group calls.*

To answer a call ringing a phone in another Pickup Group when you don't know the group number:

1. At keyset, press idle CALL key.
   OR
   At single line telephone, lift handset.
2. (Keyset only) Press Group Call Pickup key (PGM 15-07 or SC 851: 25).
   OR
   Dial 869.

To answer a call ringing a phone in another Pickup Group when you know the group number:

1. At keyset, press idle CALL key.
   OR
   At single line telephone, lift handset.
2. (Keyset only)
   Press Group Call Pickup key (PGM 15-07 or SC 851: 26 + group).
   OR
   Dial 868 and the group number (Aspire S: 1-8, Aspire: 1-9 or 01-64).

Group Listen

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Group Listen permits a keyset user to talk on the handset and have their caller's voice broadcast over the telephone speaker. This lets the keyset user's co-workers listen to the conversation. Group Listen turns off the keyset's Handsfree microphone so the caller does not pick the coworker's voices during a Group Listen.

Conditions

None

Default Setting

Disabled.

Programming

- **20-06-01 : Class of Service for Extensions**
  Assign a Class of Service (1-15) to an extension.
- **20-13-26 : Class of Service Options (Supplementary Service) - Group Listen**
  In an extension's Class of Service, enable (1) or disable (0) the ability to activate Group Listen.

Related Features

Headset Operation

An extension in the headset mode cannot use Group Listen.

Single Line Telephones

Group Listen is not available to single line telephones.

Operation

To initiate Group Listen:

1. Place or answer call using the handset.
2. Press SPK twice (but do not hang up).

   SPK flashes slowly.

   You can talk to the caller through your handset. Your co-workers hear your caller's voice over your phone's speaker.

   When you press SPK once, you turn your Speakerphone on and your handset off. The second press turns on Group Listen. Pressing the SPK key a third time cancels the Group Listen feature.

To Talk Handsfree after initiating Group Listen:

1. Hang up the handset.

To cancel Group Listen (without hanging up your call):

1. Do not hang up.
2. Press flashing SPK.

   You can talk to your caller over your handset. Your co-workers can no longer hear your caller's voice.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Handsfree allows a keyset user to process calls using the speaker and microphone in the telephone (instead of the handset). Handsfree is a convenience for workers who don't have a free hand to pick up the handset. For example, a terminal operator could continue to enter data with both hands while talking on the phone.

The system provides three variations of Handsfree operation:

Handsfree	User can place and answer calls by pressing SPK instead of using the handset.
Automatic Handsfree	User can press a line or line appearance key without first lifting the handset or pressing SPK. An extension can have Automatic Handsfree for just outgoing calls or both outgoing calls and incoming line/loop key calls. Automatic Handsfree can also be used with the Call Coverage or Park features. Normally, extensions without speakerphones should have Automatic Handsfree for outgoing calls only.
Monitor	User can place a call without lifting the handset, but must lift the handset to speak.

Conditions

(A.) DSLs can only use Handsfree Answerback to answer a voice-announced Intercom call. This feature is not available for outside calls.

(B.) Telephones without Full Duplex Speakerphone modules are half-duplex which may cause the speaker to turn off (clip) during conversations.

Default Setting

Enabled.

Programming

- **15-02-08 : Multi-Line Telephone Basic Data Setup - Automatic Handsfree**
  Use this option to set whether pressing a key access a One-Touch Key (1) or if it pre-selects the key (0).
- **15-02-16 : Multi-Line Telephone Basic Data Setup - Handsfree Operation**
  Enable (1) or disable (0) an extensions ability to use the speakerphone on **outside** calls. Users can hear the conversation, but cannot respond handsfree.
- **20-06-01 : Class of Service for Extensions**
  Assign Class of Service (1-15) to extensions.
- **20-02-12 : System Options for Multi-Line Telephones - Forced Intercom Ringing**
  Use this option to enable (1) or disable (0) Forced Intercom Ringing. If enabled, incoming Intercom calls normally ring. If disabled, Intercom calls voice-announce.
- **20-09-05 : Class of Service Options (Incoming Call Service) - Setting Handsfree Answerback or Forced Intercom Ringing**
  Allow (1) or prevent (0) an extension from enabling Handsfree Answerback or Forced Intercom Ringing for their incoming Intercom calls

Related Features

Central Office Calls, Answering / Central Office Calls, Placing
Extensions should be programmed for incoming and outgoing access, ringing, etc.

Handsfree Answerback
Answer Intercom calls without lifting the handset - just speak toward the phone.

Microphone Cutoff
For privacy, mute the phones microphone while on a call.

Single Line Telephones
Handsfree and Monitor are not available to single line telephones.

Prime Line Selection
Prime Line Selection affects how incoming and outgoing calls are handled and thus determines what happens when the user presses the SPK key.

Operation

To talk Handsfree:

1. Press SPK, CALL key or line key.
2. Place call.
3. Speak toward phone when called party answers.

To change a handset call into a Handsfree call:

1. Press SPK.
2. Press SPK to hang up.

To change a Handsfree call into a handset call:

1. Lift handset.

Handsfree Answerback/Forced Intercom Ringing

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Handsfree Answerback permits an extension user to respond to a voice-announced Intercom call by speaking toward the phone, without lifting the handset. Like Handsfree, this is a convenience for workers who don't have a free hand to pick up the handset.

Conditions

Handsfree Answerback does not require a Speakerphone.

Default Setting

Enabled.

Programming

- **11-11-15 : Service Code Setup (for Setup/Entry Operation) - Enable Handsfree Incoming Intercom Calls**
  If required, change the service code used for setting an extension to voice announce for incoming ICM calls (default: 821).
- **11-11-16 : Service Code Setup (for Setup/Entry Operation) - Force Ringing of Incoming Intercom Calls**
  If required, change the service code used for setting an extension to forced rining for incoming ICM calls (default: 823).
- **11-12-06 : Service Code Setup (for Service Access) - Switching of Voice Call and Signal Call**
  If required, change the service code used for toggling an outgoing ICM call between a voice call and signal call (default: 812). Program 11-16-09 (Single Digit Voice Mail code) must be deleted or changed from the default entry of "8" for this service code to work.
- **20-02-12 : System Options for Multi-Line Telephones - Forced Intercom Ringing**
  Enable (1) or disable (0) Forced Intercom Ringing. If disabled (0), Intercom calls voice-announce.
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.
- **20-08-10 : Class of Service Options (Outgoing Call Service) - Switching from Handsfree Answerback to Forced Intercom Ringing**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to toggle between Handsfree Answerback and Forced Intercom Ringing for outgoing Intercom calls (dial 1 or Service Code 812).
- **20-09-05 : Class of Service Options (Incoming Call Service) - Setting Handsfree Answerback/Forced Intercom Ringing**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to set Handsfree Answerback (Service Code 821) and Forced Intercom Ringing (Service Code 823) for incoming Intercom calls.

Related Features

Handsfree and Monitor

A keyset user can process calls using the speaker and microphone in the telephone (instead of the handset).

Microphone Cutoff

With Microphone Cutoff enabled, Handsfree Answerback callers to an extension hear a single beep (instead of two).

Single Line Telephones

Incoming Intercom calls always ring single line telephones.

Operation

To enable Handsfree Answerback for your incoming Intercom calls:

1. Press idle CALL key.
2. Dial 821.
3. Press SPK to hang up.

   This disables Forced Intercom Ringing.

To enable Forced Intercom Ringing for your incoming Intercom calls:

1. Press idle CALL key.
2. Dial 823.
3. Press SPK to hang up.

   This disables Handsfree Answerback.

To change the way your Intercom call signals the extension you are calling:

1. Dial 1.

   If ringing, your call voice-announces. If voice-announced, your call starts to ring the destination. This option is also available at single line telephones.

Aspire S	Aspire M/L/XL
• Available.	• Available.
• SLT Headset Operation available.	• SLT Headset Operation available with 1.02+.

Description

A keyset user can utilize a customer-provided headset in place of the handset. Like using Handsfree, using the headset frees up the user's hands for other work. However, Headset Operation provides privacy not available from Handsfree.

An extension with a headset has two options for when it appears busy to incoming callers. The headset extension can be:

- Busy to incoming callers when only one extension appearance is busy (i.e., Off-Hook Signaling prevented)
  OR
- Busy to incoming callers only when both extension appearances are busy (i.e., Off Hook Signaling allowed)

As the headset plugs into a separate jack on the bottom of the phone, the handset can still be connected to the phone. This provides you with the option to use the handset, headset or the speakerphone for calls.

Examples of compatible headsets are the:

- Polaris Supra Monaural Noise Cancelling, P/N 750036
- Polaris Supra Binaural Noise Cancelling, P/N 750033
- Polaris Encore Binaural Noise Cancelling, P/N 750035

Headset Operation for SLT Headset Operation

The ability for single line telephone users to use the Headset feature has been added. When a single line telephone with a headset receives an incoming call, the system can let the SLT user know of the incoming call by a notification tone in their headset.

Notes:

(A.) This feature is only applicable when the SLT is set in headset mode and the system allows the headset ringing with their class of service.

(B.) If a SLT with headset ringing condition goes on hook, the SLT will ring normally.

(C.) If a SLT is set to automatically seize a trunk, this feature is NOT available for the SLT.

(D.) If a SLT is set for the Ringdown feature, the headset mode is NOT available. But, if the Ringdown call start time is equal to or more than the headset ringing start time, the Headset feature, and not the Ringdown feature, is available.

(E.) Caller ID should be disabled for the SLT when then Headset feature is to be used (Program 15-03-09 and 15-03-10 set to "0"). Otherwise, the phone will only beep twice with an incoming call. In addition, the phone will not receive the Caller ID information when the Headset feature is used.

Conditions

(A.) While using the headset, the Headset function key becomes a release (disconnect) key and no dial tone is heard from the speaker.
(B.) While in the headset mode, the hook switch is not functional.
(C.) The Headset Programmable Function key (05) and Headset service code (188) are not available for i-Series phones.

Default Setting

Disabled.

Programming

- **11-11-43 : Service Code Setup (for Setup/Entry Operation) - Headset Mode Switching**
  Assign the service code for headset mode switching (Default: 188).
- **15-07-01 : Programmable Function Keys**
  Assign a function key for Headset operation (code 05).
- **20-02-05 : System Options for Multi-Line Telephones - Headset Busy Mode**
  Set the conditions under which a headset extension is busy to incoming callers:
  - The Headset extension is busy to incoming callers when **only one** extension appearance is busy (0).
    OR
  - Headset extension is busy to incoming callers only when **both** extension appearances are busy (1).
- **20-02-12 : System Options for Multi-Line Telephones - Forced Intercom Ringing**
  Determine whether intercom calls should ring or voice-announce extensions (0=voice, 1=ring).
- **20-02-14 : System Options for Multi-Line Telephones - Headset Ringing Cancel Timer**
  When a keyset is ringing in the headset mode and this timer expires, the ringing will switch to regular ringing from the keyset ringer (Entries: 0-64800 seconds, Default: 30).
- **20-03-06 : System Options for Single Line Telephone - Headset Start Time (for SLT)**
  Define the headset ringing start time. After this timer expires from the time when a SLT is off hook, the system will set the SLT to headset ringing mode (Default: 5 seconds, Entries: 0-64800).
- **20-13-38 : Class of Service Options (Supplementary Service) - Headset Ringing**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to use the Headset (Default: 0 [disabled]).
- **41-14-04 : ACD Options - Automatic Answer in Headset Mode**
  With ACD, enable (1) or disable (0) a user's ability to automatically answer calls as they ring in while in headset mode.
- **80-01-57 : Service Tone Setup - Headset Ear Piece Ringing Tone**
  Customize the system's basic tone for the headset ringing if required.

Related Features

Caller ID

Caller ID should be disabled for the SLT when then Headset feature is to be used. Otherwise, the phone will only beep twice with an incoming call. In addition, the phone will not receive the Caller ID information when the Headset feature is used.

Handsfree Answerback/Forced Intercom Ringing

An extension with a headset can still receive voice-announced Intercom calls and respond Handsfree.

i-Series Telephones

Headset operation is not available for i-Series telephones on the Aspire system.

Programmable Function Keys

A Headset Function key is required to answer or place a call in headset mode.

Ringdown Extension, Internal/External

If a SLT is set for the Ringdown feature, the headset mode is NOT available. But, if the Ringdown call start time is equal to or more than the headset ringing start time, the Headset feature, and not the Ringdown feature, is available.

Single Line Telephones

Single line telephones can use the Headset feature with software 1.20+.

Operation

To enable the headset:

1. Plug in the headset into the headset jack on the back of the phone.
2. Program a Headset key (PGM 15-07 or SC 851: 05).

   You hear a confirmation beep.

To use the headset:

The Headset key lights when you're on a call. To disconnect, press the Headset key again.

You can still use the handset for calls or respond to voice-announced Intercom calls with the headset plugged in. The headset only activates when the Headset key is pressed.

- Answer a ringing call by pressing the Headset key.
  OR
- Press the Headset key and then a line key to make a trunk call.
  OR
- Press the Headset key to get Intercom dial tone
  OR
- If on a call, press the Headset key to hang up.

Using the Headset with Automatic Answer for ACD Agents:

1. With the keyset in an idle state, press the Check key.
2. Press the Headset key (PGM 15-07 or SC 851: 05) twice.
3. Press the Clear key to return the display to idle.

   The Headset key blinks when Automatic Headset is activated.

   To cancel Automatic Headset, repeat these steps.

ANALOG SINGLE LINE TELEPHONES

To enable the headset mode:

1. Unplug the telephone handset.
2. Plug in the headset.
3. Off hook and dial the Headset service code (Program 11-11-43).
   You will hear a single beep.
4. On hook.

To disable the headset mode:

1. Unplug the headset.
2. Plug in the telephone handset.
3. Off hook and dial the Headset service code (Program 11-11-43).
   You will hear two beeps.
4. On hook.

To be in an Off Hook Idle Condition (Waiting for incoming call):

1. Off hook.
   You hear internal dial tone then silence after Program 20-03-06 timer expires.
   In this "Off Hook Idle Condition" condition, the SLT can receive an incoming call. However, the SLT can NOT dial in this condition. The SLT will be indicated on a DSS console as being idle (LED lights off).

To answer an incoming call when the headset rings:

You hear ringing in the headset.

1. Hookflash (or press the Flash key if available) to answer the call.
   OR
   On hook and off hook to answer the call.

To disconnect a call:

1. While on a conversation, on hook to disconnect the call.

To make an internal / outgoing call with off hook idle condition:

1. Hookflash (or press the Flash key if available).
   OR
   On Hook and Off Hook.
   You hear internal dial tone.
2. Dial the internal call number.
   OR
   Dial trunk access code and destination number.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Hold lets an extension user put a call in a temporary waiting state. The caller on Hold hears silence or Music on Hold, not conversation in the extension user's work area. While the call waits on Hold, the extension user may process calls or use a system feature. Calls left on Hold too long recall the extension that placed them on Hold. There are four types of Hold:

- **System Hold**
  An outside call a user places on Hold flashes the line key (if programmed) at all other keysets. Any keyset user with the flashing line key can pick up the call.
- **Exclusive Hold**
  When a user places a call on Exclusive Hold, only that user can pick up the call from Hold. The trunk appears busy to all other keysets that have a key for the trunk. Exclusive hold is important if a user doesn't want a co-worker picking up their call on Hold.
- **Group Hold**
  If a user places a call on Group Hold, another user in the Department Group can dial a code to pick up the call. This lets members of a department easily pick up each other's calls.
- **Intercom Hold**
  A user can place an Intercom call on Hold. The Intercom call on Hold does not indicate at any other extension.

With Automatic Hold enabled (Program 15-02-07), when the user is on an ***outside call using the handset***, the user can press a flashing line/loop key to answer an incoming call without disconnecting their first call. The first caller is automatically placed on hold. This feature does not work using handsfree or when the user is on an ICM and presses a flashing line/loop key (the ICM call is disconnected).

Hold Recall to Operator

Hold Recall to Operator enhances how the system handles calls that have been left on hold too long. With Hold Recall to Operator:

- A trunk call recalls the extension that placed it on Hold after the Hold/Exclusive Hold Recall time.
- The recalling trunk will ring the extension that placed it on Hold for the Hold/Exclusive Hold Recall Callback Time.
- After the Hold/Exclusive Hold Recall Callback Time, the trunk call will ring the operator.

Hold Recall to Operator applies to trunk calls placed on System Hold, Exclusive Hold and Group Hold. It does not apply to Intercom calls.

Conditions

The called extension must lift the handset or press the SPK key before the call can be placed on hold.

Default Setting

Enabled.

Programming

- **11-12-30 : Service Code Setup (for Service Access) - Specified Trunk Answer**
  If required, redefine the service code used to answer a specific trunk which is either ringing or on hold (default: 172).
- **11-12-33 : Service Code Setup (for Service Access) - Group Hold**
  If required, redefine the service code used to answer a specific trunk which is either ringing or on hold (default: 832).
- **11-12-34 : Service Code Setup (for Service Access) - Answer for Group Hold**
  If required, redefine the service code used to answer a specific trunk which is either ringing or on hold (default: 862).
- **14-01-16 : Basic Trunk Data Setup - Forced Release of Held Call**
  Enable (1) or disable (0) Forced Release of Held Call.
- **14-07-01 : Trunk Access Map Setup**
  Set up the Trunk Access Maps. This sets the access options for trunks on Hold.
  - Aspire S: Trunk Access Maps 1-8
  - Aspire: Trunk Access Maps 1-200
- **15-02-06 : Multi-Line Telephone Basic Data Setup - Hold Key Operating Mode**
  Set the function of the extension's HOLD key: System (0), Exclusive (1), or Park (2) Hold.
- **15-02-07 : Multi-Line Telephone Basic Data Setup - Automatic Hold for CO Line**
  Determine whether an extension will use Automatic Hold for CO calls (0) or if the call should disconnect (1).
- **15-06-01 : Trunk Access Map for Extensions**
  Assign Trunk Access Maps to extensions.
  - Aspire S: Trunk Access Maps 1-8
  - Aspire: Trunk Access Maps 1-200
- **15-07-01 : Programmable Function Keys**
  Assign a function key for Exclusive Hold (code 45). If an extension has its fixed Hold key reassigned (in Program 15-02-06), assign a function key for System Hold (code 44).
- **16-02-01 : Department Group Assignment for Extensions**
  Assign extensions to Department Groups.
  - Aspire S: Department Groups 1-8
  - Aspire: Department Groups 1-64
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.
- **20-11-09 : Class of Service Options (Hold/Transfer Service) - Group Hold Initiate**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to initiate Group Hold (Service Code 832).
- **20-11-10 : Class of Service Options (Hold/Transfer Service) - Group Hold Answer**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to pick up a call placed on Group Hold (Service Code 862).
- **20-11-13 : Class of Service Options (Hold/Transfer Service) - Hold Recall to Operator**
  Enable (1) or disable (0) Hold Recall to Operator. If enabled, a call recalling an extension longer than the Hold/Exclusive Hold Recall Callback Time will recall the operator (normally 300). If disabled, the call will continually recall the extension that placed it on Hold.
- **20-17-01 : Operator's Extension**
  Assign an operator's extension number if Hold Recall to Operator will be used.
- **24-01-01 : System Options for Hold - Hold Recall Time**
  Set the Hold Recall Time (0-64800 seconds). A call on Hold recalls the extension that placed it on Hold after this interval.

- **24-01-02 : System Options for Hold - Hold Recall Callback Time**
  Set the Hold Recall Callback Time (0-64800 seconds). A trunk recalling from Hold rings an extension for this interval.
- **24-01-03 : System Options for Hold - Exclusive Hold Recall Time**
  Set the Exclusive Hold Recall Time (0-64800 seconds). A call on Exclusive Hold recalls the extension that placed it on Hold after this interval.
- **24-01-04 : System Options for Hold - Exclusive Hold Recall Callback Time**
  Set the Hold Recall Time (0-64800 seconds). A trunk recalling from Hold rings an extension for this interval. If still unanswered, the call changes to System Hold.
- **24-01-05 : System Options for Hold - Forced Release of Held Calls Interval**
  Set the Forced Release of Held Calls interval (0-64800 seconds). If enabled in Program 14-01-16, the system disconnects a call if on Hold longer than this interval.

Related Features

Music on Hold
Callers on Hold hear Music on Hold, if programmed.

Programmable Function Keys
An extension can have function keys for System Hold and Exclusive Hold.

Single Line Telephones
Analog single line telephones can only use Exclusive Hold and Group Hold. The 2-button telephones can use System Hold as well.

Operation

System Hold

To place an outside call on System Hold (Keyset and 2-Button Telephone Only):

1. Press HOLD.
   A line/loop/CALL key flashes slowly while on Hold; flashes fast when recalling.

To pick up an outside call on System Hold:

Keyset/2-Button Telephones

1. Press flashing line/loop/CALL key.
   OR
1. If you know the specific line number, dial 172 + Line number (001-200).

Exclusive Hold

To place an outside call on Exclusive Hold:

Keyset/2-Button Telephones

1. Press Exclusive Hold key (PGM 15-07 or SC 851: 45).
   A line/loop/CALL key flashes slowly while on Hold, flashes fast when recalling.

Single Line Telephone

1. Hookflash.
2. Dial 849.

To pick up an outside call on Exclusive Hold:

Keyset/2-Button Telephones

1. Press flashing line/loop/CALL key.

Single Line Set

1. Dial 859.

Group Hold

To place a call on Hold so anyone in your Department Group can pick it up:

Keyset /2-Button Telephones

1. Press HOLD.
2. Dial 832.
3. Press SPK to hang up.

Single Line Telephone

1. Hookflash.
2. Dial 832.
3. Hang up.

To pick up a call on Group Hold:

Keyset /2-Button Telephones

1. Press idle CALL key.
2. Dial 862.

Single Line Telephone

1. Lift handset.
2. Dial 862.

Intercom Hold

To place an Intercom call on Intercom Hold:

1. Press HOLD.
   The CALL key flashes.
2. Press SPK to hang up.

To pick up an Intercom call on Intercom Hold:

1. Press SPK.
2. Press flashing CALL key.

Aspire S	Aspire M/L/XL
• Available - 512 Internal Hotline extensions.	• Available - 512 Internal Hotline extensions.
• DSS Lamping (Program 30-05-01) applied to keysets with 4.0E+ for DSS and Hotline keys.	• DSS Lamping (Program 30-05-01) applied to keysets with 4.0E+ for DSS and Hotline keys.

Description

Hotline gives a keyset user one-button calling and Transfer to another extension (the Hotline partner). Hotline helps co-workers that work closely together. The Hotline partners can call or Transfer calls to each other just by pressing a single key.

In addition, the Hotline key shows the status of the partner's extension

When the key is . . .	The extension is . . .
Off	Idle
On	Busy or ringing
Fast Flash	DND - All calls (option 3) or Intercom calls (option 2)
Double Wink On	ACD Agent logged onto the group
Wink Off	ACD Agent logged off

Conditions

An extension user cannot use Hotline to pick up a call ringing their partner's extension.

Default Setting

Disabled.

Programming

- **15-07-01 : Programmable Function Keys**
  Assign a function key for Hotline (code 01 + partner's extension number).
- **15-02-22 : Multi-Line Telephone Basic Data Setup, Multiple Incoming From Intercom and Trunk**
  When this option is set to '0' (disabled), incoming calls to an extension will indicate on any Hotline keys for that extension as solid (busy). When this option is set to '1' (enabled), lamping is determined by the setting of Program 22-01-01 Incoming Call Priority. If set to trunk priority (1), the Hotline key will lamp solid when a trunk call rings in. If set to intercom priority (0), the Hotline key will not lamp for incoming trunk calls, but will lamp solid for intercom calls.

- **20-02-03 : System Options for Multi-Line Telephones - BLF Control and**
  20-13-06 : Class of Service Options (Supplementary Service) - Automatic Off Hook Signaling
  Programs 20-02-03 and 20-13-06 set the conditions under which a Hotline, Reverse Voice Over or DSS Console key indicates that an extension is busy. With condition 1 in the following chart, the BLF LED is on only when both extension line appearances are busy. In conditions 2-4, the BLF LED is on when one line appearance is busy.

	Program 20-13-06	Program 20-02-03	BLF [1] Status	Busy Status
1	1	0	Off	No
2	1	1	On	Yes
3	0	0	On	Yes
4	0	1	On	Yes

[1] BLF is on for extension receiving a voice announced Intercom call.

- **20-06-01 : Class of Service for Extensions**
  Assign a Class of Service to an extension (1-15).
- **22-01-01 : System Options for Incoming Calls, Incoming Call Priority**
  Use this option to determine if intercom calls or trunk calls have answer priority when both are ringing simultaneously (0=intercom call priority, 1=trunk call priority). Refer to Program 15-02-22 for lamping conditions.
- **30-05-01 : DSS Console Lamp Table**
  If required, use this program to customize the system's DSS Console flash rates. This table also affects DSS/Hotline key lamping for keysets.

Related Features

Automatic Call Distribution (ACD)
The Hotline key blinks to indicate the ACD agent's status.

Distinctive Ringing, Tones and Flash Patterns
Set up flash patterns for DSS and Hotline keys.

Direct Station Selection
Assign Hotline keys to the DSS and DLS consoles.

Do Not Disturb
Hotline does not override Do Not Disturb.

Handsfree Answerback/Forced Intercom Ringing
Hotline always follows the Handsfree Answerback/Forced Intercom Ringing mode set at the called extension. The Hotline caller can override the setting, if desired.

Hotline, External
External Hotline will automatically dial a telephone number or Common Abbreviated Dialing number when the handset is lifted.

Off Hook Signaling
If the partner's extension is busy, Hotline does not automatically activate Off Hook Signaling.

One-Touch Keys
Assign Hotline keys for service codes.

Programmable Function Keys
A Hotline is a uniquely programmed function key.

Operation

To place a call to your Hotline partner:

1. Press Hotline key (PGM 15-07 or SC 851: 01 + partner's extension number + HOLD).
   You can optionally lift handset after this step for privacy.

To transfer your outside call to your Hotline partner:

1. Press Hotline key.
2. Announce call and hang up.
   OR
   Hang up to have the call wait at your Hotline partner unannounced.
   If unanswered, the call recalls like a regular transferred call.

To answer a call from your Hotline partner:

1. If you hear two beeps, speak toward phone.
   OR
1. If your telephone rings, lift handset.

Refer to the Ringdown Extension, Internal/External (page 494) **for information on this feature.**

Aspire S	Aspire M/L/XL
• Not Available.	• Available with software 1.06+.

Description

Each 16DSTU PCB provides the Aspire system the ability to connect up to 16 i-Series telephones with each port supporting 1 B-channel. The system allows up to 15 DSTU PCBs (limited by load factor) to be installed, allowing up to 240 i-Series telephones to be connected. Each phone having a load factor of "3". The following i-Series phones are compatible with the Aspire system:

Model 2 922xx/926xx Series Keysets

32-Button Display Phone, P/N 92293B / 92293W / 92673
32-Button Standard Phone, P/N 92290B / 92290W / 92670
16-Button Display Phone, P/N 92373C / 92373W / 92573 / 92563
16-Button Standard Phone, P/N 92370B / 92370W / 92570 / 92560

Model 3 i-Series Keysets *

34-Button Display Phone, P/N 92783
28-Button Display Phone, P/N 92763
28-Button Standard Phone, P/N 92760
22-Button Display Phone, P/N 92753A / 92750A

** i-Series keysets do not have a gain setting database and will use the phone's initial setting*

In addition, the following hardware is also supported using DSTU ports:

- Remote Extender

The following i-Series hardware is **NOT** supported on the Aspire system:

- 2OPX
- 3ACI
- 900/900i/910i Cordless Phone
- DCI-A/B
- DCI-L
- Digital VANGARD Voice Mail
- DSLT
- DSS Consoles (24-Button or 110-Button)
- VAU
- Analog Module
- Data Module
- Off-Hook Voice Announce Module
- Speakerphone Module
- Super Display Phones

When using i-Series phones on the Aspire system, the following features are **NOT** supported:

- Directory Dial
- Super Display Operation
- Soft Keys
- Headset Key
- Changing Incoming CO and ICM Ring Tones (Program 11-11-20)
- Telephone System Programming (#*#*)
- Program 10-03 : PCB Setup (DSTU PCB has no programmable options)
- Program 90-17-01 : Display Firmware Version
- Program 90-07-01 : Extension Control

In addition to the above, the 92290x, 92670, 92370x, 92570, 92560, and 92760 phones do **NOT** support:

- Check Abandon Calls (CHECK + CALL2)
- Check Port/Name (CHECK + CALL1)
- Name Program (Service Code 800)
- Language Display (Program 15-02-01)
- Time and Display Modes (Program 20-02-07)

Call History/Caller ID Lists Do Not Provide Delete Function

With software 4.93-4.95, the display of the Call History/Caller ID list was enhanced to provide the ability to delete one or all numbers currently displaying in the Caller ID list.

With this change, however, when reviewing the numbers in the list, when the last number in the list was viewed, it would then scroll back to the first number - it did not stop. With this change, the i-Series phones did not have the option to clear the list by pressing CHECK + 9 (CHECK + 0 aborts the deletion).

This has been changed with this release so that the list will now stop at the last number when reviewing using an i-Series phone.

Conditions:

- As the Aspire keysets provide 24-character displays and the i-Series keysets provide 20-character displays, the i-Series phones will not indicate any characters over the 20-character limit.
- Some languages are not supported by the i-Series phones (such as Norwegian and Danish) due to the LCD controller differences between the i-Series and Aspire phones.
- The NSL is not supported with Aspire Mail.
- Using the Caller ID Check List feature requires an Incoming Call Log Programmable Function Key (15-07-01, code 08) in order to view the list.

Default Setting

Enabled

Refer to the DSTU PCB Installation Instructions, P/N 0893106, for details on installing the PCB.

Programming

Programming is the same as the Aspire keysets. Refer to the particular feature for details.

Operation

Operation is the same as the Aspire keysets with the exception to the following operation. Refer to the particular feature for details.

Caller ID

Temporary Memory/Call History

An unanswered call will cause the Call History key (PGM 15-07 or SC 851: 08) to flash, indicating a new call has been placed in the temporary memory. If enabled in programming, the telephone's display will show "CHECK LIST".

1. Press the Call History key (PGM 15-07 or SC 851: 08).
   The last addition to the list is displayed.
2. Press the ARROW DOWN Soft Key to scroll through the list of numbers in memory.
3. The Call History key will remain on as long as entries remain in memory.
4. To place a call back to a number in the temporary memory list, with the number to be dialed displayed, press a line, loop or CALL key.
   The outgoing call is placed.
   To clear all the numbers in the list, press CHECK + 9. To abort the clear function, press CHECK + 0.

To redial your last call on an i-Series phone:

1. Press LINE + LND + #.
   OR
2. Press LND + CALL key or # to redial the displayed number or press the LND key until the desired number is displayed, then press # or CALL key.
   If a line key is not pressed, the system automatically selects a trunk from the same group as the original call.
   OR
3. Press CALL key + #5.
   If a line key is not pressed, the system automatically selects a trunk from the same group as the original call.

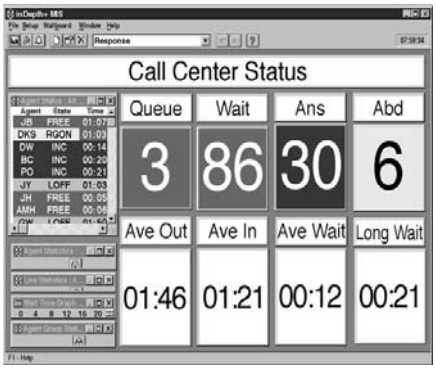
Aspire S	Aspire M/L/XL
• Available, but not for ACD. Requires Aspire software 2.65+ and inDepth software 3.10.500.1 +.	• Available (Optional feature) - Requires inDepth's Aspire software 3.10.500.1 or higher and the Feature Upgrade PAL or Enhanced NTCPU when used with ACD. With the Basic NTCPU and no ACD, software 2.65+ is required.

Description

The inDepth and inDepth+ programs are Windows-based Management Information Systems that work in conjunction with the built in Aspire ACD. These ACD/MIS systems enhance the system ACD with real time statistics and reports on ACD group traffic patterns and usage. The inDepth and inDepth+ applications have an extensive set of user-configurable Real Time Windows and Reporter subsystems.

InDepth+ is the more comprehensive and capable of the ACD/MIS systems and offers:

- **Real Time Status Window**
  This window displays ACD agent status, state and connection state.



- **Real Time Statistics Window**
  The statistics window provides a visual performance summary for lines, agents and ACD Groups.

- **Call Queue and Wait Time Windows**
  These windows show the number of calls in queue, the longest wait time, as well as the number of calls answered and abandoned.

- **Wallboard Template**
  Use the wallboard template display to motivate and inform ACD agents through a dynamic display of real time statistics and messages.

- **Reporter**
  ACD administrators can create fully-configurable reports for display and printing.

Similar in many respects to inDepth+, inDepth is streamlined for more modest ACD applications. InDepth provides a single real time screen template, up to seven reports and can track report data for up to one full month. InDepth includes ACD/MIS features like Report View/Print and Audible/Visual Alarms, but excludes the Sub-Supervisor Positions and the Wallboard Support.

Hardware, Software and System Requirements

- PC 486 DX2-66 or higher with 8MByte RAM
- Windows 98SE, 2000, ME, NT or XP
- SVGA mode (800 x 600)
- 4 Serial ports
- Network card for multiple MIS workstations
- Sound card

For more information, refer to the inDepth/inDepth+ Manual (P/N 0893230) for the specifics.

Conditions

(A.) The inDepth currently has a default setting for the phone system port of "4000". As this is the same port number used for the Aspire IP telephones, this must be changed to avoid any conflicts between the IP and inDepth program. A setting of "28000" is recommended. This change is made in the Phone System Connection window under the inDepth Aspire Setup option. When changing this port number in the inDepth, in order for the inDepth and Aspire system to be able to communicate, it must also be changed in the Aspire Program 10-20-01, External Equipment 2.

(B.) Uniden H.323 phones are not supported with the inDepth/inDepth+ application.

Refer to the inDepth/inDepth+ Manual (P/N 0893230) for additional information.

Default Setting

InDepth/inDepth+ not installed.

Programming

Refer to the inDepth/inDepth+ Manual (P/N 0893230) for the specifics.

Related Features

Refer to the inDepth/inDepth+ Manual (P/N 0893230) for the specifics.

Operation

Refer to the inDepth/inDepth+ Manual (P/N 0893230) for the specifics.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Intercom gives extension users access to other extensions. This provides the system with complete internal calling capability.

Handsfree Answerback/Forced Intercom Ringing

Handsfree Answerback permits an extension user to respond to a voice-announced Intercom call by speaking toward the phone, without lifting the handset. Like Handsfree, this is a convenience for workers who don't have a free hand to pick up the handset. Refer to **Handsfree Answerback/ Forced Intercom Ringing** (page 346) for more.

Busy Status Display

When a display keyset user places an Intercom call to a busy extension, the details of the busy status (who it talking to the extension or which line is in use by the extension) can be displayed. The details of the trunk's busy status (the extension using the line) can be displayed after trying to access the trunk. This feature provides a user information which can determine whether they should use the Barge-In feature for the extension or trunk. This information automatically displays for a keyset once programmed.

Conditions

Preventing ICM calls does not affect dialing other service codes, including 911.

Default Setting

Enabled.

Programming

For Intercom . . .

- **11-11-13 : Service Code Setup (for Setup/Entry Operation) - Display Language Selection for Keyset**
  Select the service code which can be used at an extension to change the displayed language on a keyset's display (default: 178).
- **11-11-37 : Service Code Setup (for Setup/Entry Operation) - Adjusting Ring Volume**
  If required, change the service code used to adjust the ringing volume for CO and ICM calls (829).
- **15-02-01 : Multi-Line Telephone Basic Data Setup - Display Language Selection**
  Select the language which should be used on a keyset's display (0 = Japanese, 1 = English, 2 = German, 3 = French, 4 = Italian, 5 = Spanish, 6 = Dutch, 7 = Portuguese, 8 = Norwegian, 9 = Danish).
- **15-02-09 : Multi-Line Telephone Basic Data Setup - Ringing Line Preference for Intercom Calls**
  Use this option to select between Idle and Ringing Line Preference for Intercom calls. (0 = Idle (off), 1 = Ringing (on)).
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.

- **20-08-01 : Class of Service Options (Outgoing Call Service) - Intercom Calls**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to place Intercom calls.
- **20-08-11 : Class of Service Options (Outgoing Call Service) - Protect ICM Call Mode Switching by Caller**
  When an extension is set to ring mode for ICM calls, enabling this option prevents callers from changing the call to voice announce mode (disable=0, enable=1).
- **20-11-07 : Class of Service Options (Hold/Transfer Service) - Transfer Without Holding**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to Transfer a call without holding. If the Busy Status Display feature is to be used, this option should be set to "0".
- **20-13-22 : Class of Service Options (Supplementary Service) - Busy Status Display**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to use the Busy Status Display feature.
- **20-17-01 : Operator's Extension**
  Assign the operator's extension.
- **20-18-01 : Service Tone Timer - Extension Dial Tone Time**
  Set the Extension Dial Tone Time (0-64800 seconds). After getting Intercom dial tone, a key-set user has this interval to dial the first digit of the Intercom call.
- **21-01-02 : System Options for Outgoing Calls - Intercom Interdigit Time**
  Set the Intercom Interdigit Time (0-64800 seconds). When placing Intercom calls, users must dial each digit within this interval.
- **82-01-01 : Incoming Ring Tone - Intercom Ring Tone**
  Customize the Intercom ring tone.

For Handsfree Answerback/Forced Intercom Ringing . . .

- **20-02-12 : System Options for Multi-Line Telephones - Forced Intercom Ringing**
  Determine if an extension's ICM calls should be set as Forced Intercom Ringing (1). If disabled (0), Intercom calls voice-announce. For all NEC Cordless phones (P/N 730082), this option must be set to "1" as voice announce is not possible.
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.
- **20-08-10 : Class of Service Options (Outgoing Call Service) - Switching from Handsfree Answerback to Forced Intercom Ringing**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to toggle between Handsfree Answerback and Forced Intercom Ringing for outgoing Intercom calls (dial 1 or Service Code 812).
- **20-09-05 : Class of Service Options (Incoming Call Service) - Setting Handsfree Answerback/Forced Intercom Ringing**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to set Handsfree Answerback (Service Code 821) and Forced Intercom Ringing (Service Code 823) for incoming Intercom calls.
- **20-13-06 : Class of Service Options (Supplementary Service) - Automatic Off Hook Signaling**
  In an extension's Class of Service, enable (1) or disable (0) the extension's ability to automatically send Off Hook Signals while busy on a handset call. Setting this option to "0" will prevent Intercom calls from ringing the CALL2 key - instead the caller will hear a busy signal.
- **80-01-01 : Service Tone Setup - Tone 28, Speaker Monitor Tone**
  This tone changes the tone the originator of an ICM call hears. (The tone cannot be changed for what is heard by the user when receiving an ICM call.)

Related Features

Handsfree Answerback/Forced Intercom Ringing
Intercom calls can ring or be voice-announced at the called extension.

Intercom Abandoned Call Display
Intercom Abandoned Call Display remembers the last five Intercom calls to an extension.

Line Preference
Ringing Line Preference can automatically answer ringing Intercom or trunk calls when the user lifts the handset.

Name Storing
An extension can have a name assigned that identifies the extension to callers.

Operation

To place an Intercom call:

1. At keyset, press idle CALL key.
   OR
   At single line telephone, lift handset.
2. Dial extension number (or 0 for your operator).
   Your call may voice-announce or ring the called extension. Dial 1 to change the way your call alerts the called extension.
   If the extension you call is busy or doesn't answer, you can dial another extension without hanging up.

To answer an Intercom call:

1. If you hear two beeps, speak toward phone.
   Your telephone picks up your voice.
   OR
   If your telephone rings, lift handset.

To check your extension's data (Keyset Only):

1. Press CHECK.
2. Press CALL1.
   You display shows your telephone's extension number, port number and extension/ Department Group.
   You can also check any other extension numbers information y pressing CHECK + the extension number.
3. Press CLEAR to return the normal time/date display.

To change how Intercom calls ring your extension:

1. Press the CALL key or lift the handset.
2. Dial 823 to have calls ring your extension
   OR
3. Dial 821 to have calls voice announce to your extension.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Intercom Abandoned Call Display shows a display keyset user a list of Intercom calls placed to them that they did not answer. This is a convenience if a user has to temporarily leave their desk. When they return, they can display the list to find out who called while they were out.

Conditions

Intercom Abandon Call Display remembers the last five Intercom calls to an extension.

Default Setting

Enabled.

Programming

None

Related Features

Intercom

Intercom gives extension users access to other extensions.

Operation

To display the list of Intercom calls you did not answer.

1. Press CHECK.
2. Press CALL2.

   Repeatedly press CALL2 until no more calls display.
3. Press CLEAR to return to the normal Time and Date display.

Aspire S	Aspire M/L/XL
• PRI Not Available.	• PRI Available.
• BRI S-Bus Available. BRI T-Bus Not Yet Available.	• BRI S-Bus Available. BRI T-Bus Not Yet Available.
	• This feature requires the Basic NTCPU (P/N 0891002) with the PAL upgrade or the Enhanced NTCPU (P/N 0891038) unless using software 4.0E or higher.
• CLIP display available with software 1.02+.	• CLIP display available with software 1.02+.
• Calling Party allowed for extension with software 1.04+.	• Calling Party allowed for extension with software 1.04+.
• Option for alert tone for S-Bus terminals calling busy extension available with 2.63+ software.	• Option for alert tone for S-Bus terminals calling busy extension available with 2.63+ software.
• T303 timer operation mode option available with 2.63+ software.	• T303 timer operation mode option available with 2.63+ software.
• Option for PB Back Tone Level available with 2.63+ software.	• Option for PB Back Tone Level available with 2.63+ software.
• Ringback tone for BRI trunks requires software 4.04+.	• 2 B-Channel Transfer for PRI requires software 2.63+.
• Calling Party Number option to define type requires software 4.08+.	• Alternate Carrier Access added to ISDN trunks with ARS requires software 2.64+. Refer to the **Automatic Route Selection** (page 138) for additional information.
	• Ringback tone for BRI trunks requires software 4.04+.
	• Calling Party Number option to define type requires software 4.08+.

Description

!! Important !!

ISDN is an emerging technology on the leading edge of international digital communication's networking. Always check with your NEC's Technical Service Representative before setting up your ISDN application. Working together will ensure maximum compatibility and reliable ISDN performance.

SMDR Includes Dialed Number

The SMDR report can optionally print the trunk's name (entered in system programming) or the number the incoming caller dialed (i.e., the dialed ISDN digits). This gives you the option of analyzing the SMDR report based on the number your callers dial. (This option also applies to a DID trunk as well.)

Display Shows Why Caller ID is Not Available

With Caller ID enabled, the system will provide information for ISDN calls that do not contain the Caller ID information. If the Caller ID information is restricted, the telephone display will show "PRIVATE". If the system is not able to provide Caller ID information because the telco information is not available, then the display will show "OUT OF AREA".

Calling Party Number Notification

The system can provide calling party number notification for outgoing ISDN calls. When a call is made on an ISDN line by an extension, the system will send the identification for the extension placing the call, if it's programmed. If there is no Extension Calling Number assigned, the system will send the calling number for the ISDN trunk. If both the extension and trunk information is programmed, the extension information will be sent as it takes priority.

When the option for calling party subaddress is on, the extension number will be sent as the subaddress information. Both the calling party number and calling party subaddress are sent in a SETUP message as the calling party information element and a calling party subaddress information element. Allow the system to send the subaddress by setting the following programs: 10-03-05=1, 15-01-04=1, 20-08-13=1, 21-13-01=enter number to be sent.

Calling Line Identification Presentation

A Class of Service option has been added which can be used to allow the Calling Party Number IE in the Setup Message.

Calling Party Allowed or Prevented for Extension

The system now allows the Calling Party Number for outgoing ISDN calls based on the extension's set up in **Program 15-01-04 : Basic Extension Data Setup - ISDN Caller ID**. If this option is to be enabled, then it must also be enabled for the BRI or PRI PCB in **10-03-05 : PCB Setup - CLIP Information**.

Alert Tone When S-Bus Terminal Calls Busy Extension

System software provides a program option for S-Bus terminals to determine what a user on an S-Bus terminal will hear when a busy extension is called. The system can be programmed so the user will hear an alert tone or be disconnected.

Release Message with Second T303 Timer

Depending on your software, the system can provide an program option for ISDN trunks can be used to determine whether or not a release message is sent when the second T303 timer expires.

Option Added for PB Back Tone Level

An option is available in system software which can be used to adjust the PB Back Tone level when calling an ISDN line.

Calling Party Number Option Added to Define Type

System software allows the number plan type to be defined in programming. Previously, this was not selectable and, depending on your software, was either set for "Unknown" or "National number in a ISDN numbering plan" to allow the calling party information to be passed to some telcos.

With software 4.08, this option was programmable using Programs 99-01-32 and 99-01-33, allowing the system to be adjusted for this setting. With software 4.93+, these programs have been replaced by 10-03-18 and 10-03-19.

Primary Rate Interface (PRI)

The system is compatible with ISDN Primary Rate Interface (PRI) services. PRI services currently supported include:

- Basic PRI Call Control (BCC)
- Display of incoming caller's name and number when allowed by telco
- Routing in the system based on the number the caller dialed
- ISDN maintenance functions (such as In Service/Out of Service Messaging)
- Speech and 3.1 KHz audio

PRI capability requires the installation of T1/PRI Interface PCBs (0891009). Each PCB (also called a PRI circuit) provides 24 PRI channels (23B + D) [1] with 64K Clear Channel response. The T1/PRI Interface PCB uses a single slot.

When installed, the T1/PRI Interface PCB uses the first block of 24 consecutive trunks. For example, if you have an 8COIU PCB installed for trunks 1-8, the T1/PRI Interface PCB will automatically use trunks 9-32. If you have 8COIU PCBs installed for trunks 1-8 and 17-24, the T1/PRI PCB will use trunks 25-48. The T1/PRI Interface cannot use trunks 9-16 (even if available) since they are not part of a consecutive block of 24 trunks.

Trunk Number Translation for Channel ID Based on Trunk Group Number

The Channel ID of an incoming SETUP message on a PRI line is related to the trunk group number. The system will create the trunk line number as the lowest trunk port number in the range of the same trunk group related to the channel number of the Channel ID information element of an incoming call's SETUP message.

For example, referring to the chart below, the system translates the call as being trunk port 4.

Trunk Number	Trunk Group	Channel Number	
1	1	1	
2	1	2	
3	1	3	
4	2	4	
5	2	5	
6	2	6	<--- Incoming Call
7	2	7	
8	5	8	
9	5	9	
. . . 23	. . . 5	. . . 23	

Notes:

- In addition to T1/PRI Interface PCBs, PRI also requires a CSU/DSU Unit and interconnecting cables to interface with the telco.
- Each T1/PRI Interface PCB is switch selectable between T1 and PRI operation. For more on T1 Trunking, go to "T1 Trunking (with ANI/DNIS Compatibility)".

1. Each T1/PRI Interface PCB provides 23 voice (B) and 1 data (D) channel.

Two B-Channel Transfer for PRI

Depending on your software, the system may have the ability for a keyset or single line telephone to use the optional "Two B-Channel Transfer for PRI" service provided by some National ISDN carriers in the U.S. (comparable to an analog centrex).

This service supports trunk-to-trunk transfer on the telco side. With this option enabled, two trunk calls on the Aspire system can be connected together by the telco, releasing the trunks from the Aspire and connecting the outside parties together.

The Aspire can perform a trunk-to-trunk transfer in the following cases:

- Put a PRI trunk call on hold and call/answer another PRI trunk. Press the Transfer (Program 15-07 or SC 851: 06) or CONF key.
  The status and bearer capability of the two trunks both meet the service requirements.
- Put a PRI trunk call on hold and call/answer another PRI trunk, then go on-hook (Program 20-11-21 must be enabled "0").
  The status and bearer capability of the two trunks both meet the service requirements.

To use the ISDN Two B-Channel Transfer, the system sends a Facility Message to the currently active PRI trunk and then sets the retry timer (Program 24-02-09). The system will resend the Facility timer based on the retry timer. If there is no response after the 3rd resend, the system considers the transfer as failed and stops resending.

When the transfer has succeeded, the telco sends the information to the system in the Facility, Disconnect or Release Message. When the system receives a Facility Message, it sends back Disconnect or Release then releases the trunks. When the system receives a Disconnect or Release, the system simply releases the trunks (the other trunk will also receive a Disconnect or Release).

If the transfer fails, the telco sends the system Facility message with the fail information (some telcos may send an Alerting, Disconnect or Release Message). In this case, the trunks are not transferred and remain in the system.

With this feature, the following conditions apply:

- Only manual transfers (such as pressing the Transfer key or going on-hook) are supported with this feature. Aspire PRI trunks cannot perform a trunk-to-trunk transfer in the following cases:
  A. Pressing the Transfer (Program 15-07 or SC 851: 06) or CONF key while in a Conference call with two trunks (Unsupervised Conference feature).
  B. The incoming trunk call is automatically transferred to another trunk by system programming (such as Call Forward Off-Premise).
- The bearer capability of the two calls must be "Speech, 3.1-kHz Audio, Unrestricted Digital information" or compatible.
- At least one call must have been answered. The other call must:
  - have already received ALERT message if it is an outgoing call
  OR
  - already have been answered if it is an incoming call.
- The regular Tandem Trunking programming must also be set to enable this feature.
- This feature does not support S-Bus.
- When used with Aspire Networking, this feature will work only when the two trunks are in the same system.

Basic Rate Interface (BRI)

Your system also provides compatibility with ISDN Basic Rate (BRI) services, including:

- Basic BRI Call Control (BCC)
- Point-to-Point BRI Terminal Connection (no daisy-chaining)
- Multipoint BRI Terminal Connection (daisy-chaining)
- S-Bus (allows BRI PCB's to be used as either a trunk or station interface)

BRI services require the installation of BRI Interface PCBs (2BRIU P/N 0891050 (Aspire S) or 0891006 (Aspire), 4BRIU P/N 0891007, 8BRIU, P/N 0891008). Each 2BRI Interface PCB has two BRI circuits. The 4BRI Interface PCB has four BRI circuits, while the 8BRI has eight BRI circuits. The BRI Interface PCBs use a single universal slot.

- **2BRI (Aspire S: P/N 0891050, Aspire: P/N 0891006):**
  - Provides 30 BRI circuits and 60 BRI channels.
    Each PCB takes up 8 ports. If any circuits set for T-Bus, the next set of 4 trunk ports are used. If any circuits are set up for S-Bus, the next 4 station ports are used.

- **4BRI PCB (P/N 0891007)**
  - Provides 60 BRI circuits and 120 BRI channels.
    Each PCB takes up 16 ports. If any circuits set for T-Bus, the next set of 8 trunk ports are used. If any circuits are set up for S-Bus, the next 8 station ports are used.

- **8BRI PCB (P/N 0891008)**
  - When used as T-Bus, provides 96 BRI circuits and 192 BRI channels. When used as S-Bus, 120 BRI circuits and 240 S-Bus stations ports are provided.
    Each PCB takes up 32 ports. If any circuits set for T-Bus, the next set of 16 trunk ports are used. If any circuits are set up for S-Bus, the next 16 station ports are used.

Each BRI Has Two TEI's

For each BRI line, two different TEI's will be assigned to two different SPID's.

The two different SPID's for each BRI line, will be related to different trunk logical port numbers. One BRI provides two trunk logical ports when it is connected to a CO line. Each SPID is assigned to a different TEI. This relationship is made in the initialization of the BRI line when it is connected to the CO.

This relationship between SPID and TEI's are created as follows.

LOGICAL-PORT-NUMBER + 0 = SPID-1
LOGICAL-PORT-NUMBER + 1 = SPID-2

When using the SMDR reports for BRI, all incoming BRI calls will be displayed under the CLASS column as "IVIN".

Automatic Data Link Failure Recovery

If a data link error is detected by the BRI PCB, the system will try to recover the data link and send the SPID to the central office. To provide this enhancement, the BRI PCB must be able to indicate to the system when a data link error has occurred.

Note: In addition to BRI Interface PCBs, BRI Services require the installation of NT1 Network Terminators and interconnecting cabling.

BRI and DID Callers with Non-Matching SPID Numbers

This feature allows you to determine whether the system will check the called party number with the SETUP message and the SPID setup. Depending on the system programming, this can allow DID calls to be received on BRI trunks and direct them according to the DID Translation Table (Program 22-11-03).

Ringback Tone to Telco Now Possible with BRI Trunks

An option is available using Program 10-03-17 which can be used to determine whether or not the system sends ringback tone to the telco.

Conditions

Refer to the ISDN-BRI Manual (P/N TBD) and ISDN-PRI Manual (P/N 0893212) for the specifics.

Default Setting

None

Programming

Refer to the ISDN-BRI Manual (P/N TBD) and ISDN-PRI Manual (P/N 0893212) for the specifics.

- **10-03-01 : PCB Setup - ISDN Line Mode**
  Setup and confirm the Basic Configuration data for each PCB. This program selects the ISDN Line Mode: 0=Not set, 1=T-Bus, 2=S-Bus, 3=Network Mode (Leased Line), 4=Network Mode (Interconnected Line), 5=Network Mode (Interconnected Line, Fixed Layer 1=NT), 6=S-Point (Leased Line). The option selected here determines the clock source for a networked system. With option 3, telco sends the clock to the master and slave systems. With option 4, the master system sends the clock to telco which then sends the clock to the slave system (with no telco, the master system sends the clock directly to the slave system). With option 5, the master and slave systems both send the clock to telco.
- **10-03-02 : PCB Setup - Logical Port Number**
  Setup and confirm the Basic Configuration data for each PCB. This program displays the start port number of a PRI line. Thirty logic ports are automatically assigned to a PRI line (T-Bus = 1-200, S-Bus = 1-256).
- **10-03-03 : PCB Setup - CRC Multi-Frame (CRC4)**
  Setup and confirm the Basic Configuration data for each PCB. This program determines whether or not the CRC Multi-Frame (CRC4) is used (0=off, 1=on).
- **10-03-04 : PCB Setup - Layer 3 Timer Type**
  Setup and confirm the Basic Configuration data for each PCB. This program selects the Layer 3 timer type (1-5). Each timer value of Layer 3 is set up for each type in Program 81-06 (T-Bus) and Program 82-06 (S-Bus).
- **10-03-05 : PCB Setup - CLIP Information**
  Based on this setting, the system will include a “Presentation Allowed” (1) or “Presentation Restricted” (0) in the Setup message to allow or deny the Calling Party Number. Program 15-01-04 must also be set to a ‘1’ if this option is enabled.
- **10-03-06 : PCB Setup - Length of Cable**
  Setup and confirm the Basic Configuration data for each PCB. Select the length of cable to be used (0=0-40m, 1=40 81m, 2=81-122m, 3=122-162m, 4=162-200m).
- **10-03-07 : PCB Setup - S-Point DID Digits**
  Setup and confirm the Basic Configuration data for each PCB. This program selects number of DID digits to be received (0-4).

- **10-03-08 : PCB Setup - Dial Sending Mode**
  Setup and confirm the Basic Configuration data for each PCB. Select either enblock or overlap sending (0=Enblock Sending, 1=Overlap Sending).
- **10-03-09 : PCB Setup - Dial Information Element**
  Setup and confirm the Basic Configuration data for each PCB. If Overlap Sending is selected in Program 10-03-08, select either Keypad Facility (0) or Called Party Number (1) for the dial information element.
- **10-03-10 : PCB Setup - Master/Slave System**
  Setup and confirm the Basic Configuration data for each PCB. If the system is networked, set the system as either the slave (0) or master (1) system.
- **10-03-11 : PCB Setup - Networking System Number**
  Setup and confirm the Basic Configuration data for each PCB. If the system is networked, define the system number (0-50).
- **10-03-12 : PCB Setup - Short/Long Haul**
  Setup and confirm the Basic Configuration data for each PCB. Select either short-haul (0) or long-haul (1).
- **10-03-13 : PCB Setup - Loss-of-Signal Detection Limit**
  Setup and confirm the Basic Configuration data for each PCB. Select the loss-of-signal detection limit. In short-haul mode: 0=0.91V, 1=0.74V, 2=0.59V, 3=0.42V, 4=0.32V, 5=0.21V, 6=0.16V. 7=0.10V. In long-haul mode: 0=1.70V, 1=0.84V, 2=0.84V, 3=0.45V, 4=0.45V, 5=0.20V, 6=0.10V, 7=not defined
- **10-03-14 : PCB Setup - Service Protocol for S-Point**
  Setup and confirm the Basic Configuration data for each PCB. Select the service protocol to be used (0=keypad facility, 1=specified protocol for Aspire).
- **10-03-15 : PCB Setup - Call Busy Mode for S-Bus**
  For S-Bus terminals, use this program to determine what a user on an S-Bus terminal will hear when a busy extension is called. If this option is set to "0", the user will hear an alert tone. If this option is set to "1", the user will be disconnected. By default, this option is set to "0".
- **10-03-16 : PCB Setup - ISDN 2 B-Channel Transfer**
  For PRI, enable (1) or disable (0) the 2 B-Channel Transfer function for a PRI PCB.
- **10-03-17 : PCB Setup - Ringback to Telco**
  For BRI trunks, this option can be used to determine whether or not the system sends ringback tone to the telco (0 = Disable, 1 = Enable, *Default Setting: 0*).
- **10-03-18 : IN Options - Type of Number (software 4.93+)**
  Use this option to define the ISDN numbering plan to allow the calling party information to be passed to some telcos. **Note that with software 4.08-4.0W, Program 99-01-32 was used instead.** (0 = Unknown, 1 = International number, 2 = National number, 3 = Network Specific number, 4 = Subscriber number, 5 = Abbreviated number - *Default: 3 (National number))*
- **10-03-19 : IN Options - Numbering Plan Identification (software 4.93+)**
  Use this option to define the ISDN numbering plan to allow the calling party information to be passed to some telcos. **Note that with software 4.08-4.0W, Program 99-01-33 was used instead.** (0 = Unknown, 1 = ISDN numbering plan, 2 = Data numbering plan, 3 = Telex numbering plan, 4 = National standard numbering plan, 5 = Private numbering plan - *Default: 1 (ISDN numbering plan)*)
- **10-31-01 : Networking Keep Alive Setup - Keep Alive Interval**
  If this program is greater than “0”, networked PRI spans using Kentrox DSUs will not resync when removed from serviced then placed back into service.
- **14-01-13 : Basic Trunk Data Setup - Loop Supervision**
  For each trunk that should be able to participate in a tandem call, enter 1. To disable a trunk from Tandem Trunking, enter 0 *(Default Setting: 1*). Required for 2 B-Channel Transfer.

- **15-01-04 : Basic Extension Data Setup - ISDN Caller ID**
  If both Program 15-01-04 and 10-03-05 are enabled (1), the system includes Caller ID in the Setup message as "Presentation Allowed". If these options are disabled (0), it will be "Presentation Restricted".
- **15-02-29 : Multi-Line Telephone Basic Data Setup, ISDN Back Tone**
  This program option can be used to adjust the PB Back Tone level when calling an ISDN line. (Entries: 1-63 [-15.5 to +15.5 db in 0.5 dB steps], *Default Setting: 32*)
- **15-07-01 : Programmable Function Keys**
  Assign a function key for Caller ID Block for ISDN (63) if required.
- **20-06-01 : Class of Service for Extensions**
  Assign a Class of Service (1-15) to an extension.
- **20-08-13 : Class of Service Options (Outgoing Call Service) - ISDN CLIP**
  Determine if the ISDN calling line identity presentation and screening indicators are to be allowed (1) or disabled (0).
- **20-08-14 : Class of Service Options (Outgoing Call Service) - ISDN Call Address Information**
  Determine whether the sub-address should be sent for outoing ISDN calls (0=disabled, 1=enabled).
- **20-09-02 : Class of Service Options (Incoming Call Service) - Caller ID Display**
  In an extension's Class of Service, enable (1) or disable (0) the extension's ability to display incoming Caller ID name/number information.
- **20-09-03 : Class of Service Options (Incoming Call Service) - Sub Address Identification**
  In an extension's Class of Service, enable (1) or disable (0) the extension's ability to display the Caller Sub-Address.
- **20-11-11 : Class of Service Options (Hold/Transfer Service) - Automatic On Hook Transfer**
  In an extension's Class of Service, enable (1) or disable (0) the extension's ability to use Automatic On Hook Transfer. If enabled, user must press HOLD and dial the extension number to Transfer the call. If disabled, a user must have a Transfer Programmable Function Key. Used with 2 B-Channel Transfer.
- **20-11-14 : Class of Service Options (Hold/Transfer Service) - Trunk-to-Trunk Transfer**
  For each Class of Service, allow (0) or deny (1) Trunk-to-Trunk Transfer *(Default Setting: 1*). Required for 2 B-Channel Transfer.
- **20-11-21 : Class of Service Options (Hold/Transfer Service) - Restriction for Tandem Trunking on Hang Up**
  Allow (0) or deny (1) an extension user's ability to set up a tandem call automatically when they hang up. By default, this option is allowed (0). Required for 2 B-Channel Transfer.
- **20-13-23 : Class of Service Options (Supplementary Service) - Display the Reason for Transfer**
  Enable (1) or disable (0) an extension's ability to display the reason (Call Forward, Busy, No Answer or DND) a VRS, DID, DISA, or ISDN call is being transferred to their extension.
- **20-08-13 : Class of Service Options (Outgoing Call Service) - ISDN CLIP**
  Determine if the ISDN calling line identity presentation and screening indicators are to be allowed (0=disabled, 1=enabled).
- **20-25-14 : ISDN Options - Operation Mode When Second T303 Timer Expires**
  This option can be used to determine whether or not a release message is sent when the second T303 timer expires. (Entries: 0=normal/off, 1=send release message, *Default Setting: 0*)

- **21-12-01 : ISDN Calling Party Number Setup for Trunks**
  Assign Calling Party Numbers for each trunk (maximum 16 digits per entry). When a call is made by an extension which does not have an Extension Calling Number assigned (Program 21-13), the system sends the calling number for the ISDN trunk defined in 21-12. If the Calling Party Number is assigned in both Programs 21-12 and 21-13, the system sends the data in Program 21-13.
- **21-13-01 : ISDN Calling Party Number Setup for Extensions**
  Assign each extension a Calling Party Number (maximum 16 digits per entry). The calling number is the subscriber number of the dial-in number. When a call is made by an extension which does not have an Extension Calling Number assigned (Program 21-12), the system sends the calling number for the ISDN trunk defined in Program 21-13. If a Calling Party Number is assigned in both Programs 21-12 and 21-13, the system sends the data in Program 21-13 if allowed in Program 20-08-13.
- **22-02-01 : Incoming Call Trunk Setup**
  Assign the incoming trunk type for each trunk. There is one item for each Night Service Mode.
- **22-11-01 : DID Translation Table Number Conversion**
  Specify for each Translation Table entry (2000):
  - The digits received by the system (eight max.)
  - The extension the system dials after translation (24 digits max.)
  - The name that should show on the dialed extension's display when it rings (twelve characters max.)
  - The Transfer Target-1 and 2
  - If the Transfer Targets are busy or receive no answer, those calls are transferred to the final transfer destination (Program 22-10).
  - Operation mode
- **24-02-09: System Options for Transfer - ISDN Transfer Resend Timer**
  Determine how long the system should resend a Facility Message to the currently active PRI trunk when the 2 B-Channel Transfer feature is used. The system will resend the Facility timer based on this timer. If there is no response after the 3rd resend, the system considers the transfer as failed and stops resending. (Entries: 1-30 seconds, *Default Setting: 10 seconds*)
- **99-01-32 : MF Options - Type of Number (software 4.08-4.0W)**
  Use this option to define the ISDN numbering plan to allow the calling party information to be passed to some telcos. **Note that this program is changed to Program 10-03-18 with software 4.93+.** (1=Unknown, 2=International number, 3=National number, 4=Network Specific number, 5=Subscriber number, 6=Abbreviated number - *Default: National number)*
- **99-01-33 : MF Options - Numbering Plan Identification (software 4.08-4.0W)**
  Use this option to define the ISDN numbering plan to allow the calling party information to be passed to some telcos. **Note that this program is changed to Program 10-03-19 with software 4.93+.** (1=Unknown, 2=International number, 3=National number, 4=Network Specific number, 5=Subscriber number, 6=Abbreviated number - *Default :ISDN numbering plan*)

Related Features

Forced Trunk Disconnect

This feature only works on analog trunk. ISDN trunks do not have the Forced Trunk Disconnect available.

Transfer

Transferred calls on DISA, DID, ISDN trunks, or from the VRS can display the reason a call is being transferred (Call Forward, Busy, No Answer, or DND).

Networking

Trunk-to-Trunk transfer of ISDN PRI calls will work only when the two trunks are in the same system.

Refer to the ISDN-BRI Manual (P/N TBD) and ISDN-PRI Manual (P/N 0893212) for the specifics.

Operation

Refer to the ISDN-BRI Manual (P/N TBD) and ISDN-PRI Manual (P/N 0893212) for the specifics.

Two B-Channel Transfer

1. Establish a PRI trunk call.
2. Press HOLD.
3. Establish or answer a second PRI trunk call.
4. Press the Transfer key (PGM 15-07 or SC 851: 06) to perform the trunk-to-trunk transfer.
5. If the transfer is successful, the B-Channel is released.
   If the transfer failed, the trunks remain active on the Aspire system.

Last Number Redial

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Number deletion operation enhanced with software 4.93+.	• Number deletion operation enhanced with software 4.93+.

Description

Last Number Redial allows an extension user to quickly redial the last number dialed. For example, a user may quickly recall a busy or unanswered number without manually dialing the digits.

Last Number Redial saves in system memory the last 24 digits a user dials. The number can be any combination of digits 0-9, # and *. The system remembers the digits regardless of whether the call was answered, unanswered or busy. The system normally uses the same trunk group as for the initial call. However, the extension user can preselect a specific trunk if desired.

Redial List

The system allows ***display*** telephones to have a Redial List. Up to 10 dialed numbers (both external and internal destinations) are automatically stored in the Redial List. The user can display and select one of the stored numbers and then redial it. If more than 10 destination numbers are dialed, the oldest number is automatically erased to make room for the new number.

i-Series Phones Operation Different from Aspire Phones

When an i-Series telephone is connected to the Aspire system, the Last Number Redial operation is slightly different.

When pressing the LND key, the display indicates "REDIAL [#] / ABB". The user can then press # to redial the number displayed, or enter an Abbreviated Dialing bin number to be dialed. Pressing the # key repeatedly will scroll through the last 10 numbers dialed.

Conditions

Redial List requires the use of a display telephone. Non-display and single line phones can not use this feature.

Default Setting

Enabled.

Programming

- **11-12-12 : Service Code Setup (for Service Access) - Last Number Dial**
  Assign a service code (#5) to use Last Number Dial.
- **11-12-17 : Service Code Setup (for Service Access) - Clear Last Number Dialing Data**
  Assign a service code (876) to clear the Last Number Dial.
- **15-02-13 : Multi-Line Telephone Basic Data Setup - Redial List Mode**
  Select the type of numbers that will be stored in the Redial List - Internal and External numbers (0) or External only (1).

Related Features

Automatic Route Selection
When using Automatic Route Selection, ARS selects the trunk for the call unless the user preselects.

Repeat Redial
The system can periodically redial an unanswered trunk call.

Save
A user can save the number of an outgoing call to be accessed at a later time.

Operation

To redial your last call:

1. Without lifting the handset, press LND.
   The last dialed number is displayed.
2. To redial the last number, press #.
   OR
   Search for the desired number from the Redial List by pressing the LND or VOLUME ▲ or VOLUME ▼ keys.
3. Lift the handset or press SPK to place the call.
   The system automatically selects a trunk from the same group as your original call and dials the last number dialed.
   OR

1. At keyset, press idle line key (optional).
   The system automatically selects a trunk from the same group as your original call.
2. Press LND.
   OR

1. At keyset, press idle CALL key.
   OR
   At single line telephone, lift handset.
2. Dial #5.
   The system automatically selects a trunk from the same group as your original call and dials the last number dialed.

To redial your last call on an i-Series phone:

1. Press LINE + LND + #.
   OR
2. Press LND + CALL key or # to redial the displayed number or press the LND key until the desired number is displayed, then press # or CALL key.
   If a line key is not pressed, the system automatically selects a trunk from the same group as the original call.
   OR
3. Press CALL key + #5.
   If a line key is not pressed, the system automatically selects a trunk from the same group as the original call.

To check the number saved for Last Number Redial:

1. Press LND.

   The stored number displays for six seconds. The stored number dials out if you:
   - *Lift the handset,*
   - *Press an idle line key,*
   - *Press an idle CALL key, or*
   - *Press SPK*

2. Press CLEAR.

To erase all the stored numbers:

1. At keyset, press idle CALL key.
   OR
   At single line telephone, lift handset.
2. Dial 876.

To erase one or all LND numbers:

1. From an idle keyset, press the LIST soft key then press the REDIAL soft key.
   OR
   From an idle keyset, press LND.
2. ***If deleting just one number,*** scroll to the number.
   If deleting all numbers in the LND list, skip to Step 3.
3. Press the DEL soft key. The display shows:

REDIAL-01
2035551234
One All

4. ***If deleting just one number,*** press the ONE soft key.
   If deleting all numbers in the LND list, press the ALL soft key.
5. When deleting all numbers in the LND list, the display then prompts for a confirmation. Press the YES soft key to delete all the numbers, or press the NO soft key to return to the previous display.
6. Press the CLEAR key to return the phone to an idle state, or it will return to an idle state after approximately 10 seconds.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Line Preference determines how a keyset user places and answers calls. There are two types of Line Preference: Incoming Line Preference and Outgoing Line Preference.

Incoming Line Preference

Incoming Line Preference establishes how a keyset user answers calls. When a call rings the keyset, lifting the handset answers either the ringing call (for **Ringing Line Preference**) or seizes an idle line (for **Idle Line Preference**). The idle line can provide either Intercom or trunk dial tone (see Outgoing Line Preference below). Ringing Line Preference helps users whose primary function is to answer calls (such as a receptionist). Idle Line Preference is an aid to users whose primary function is to place calls (such as a telemarketer).

Outgoing Line Preference

Outgoing Line Preference sets how a keyset user places calls. If a keyset has Outgoing Intercom Line Preference, the user hears Intercom dial tone when they lift the handset. If a keyset has Outgoing Trunk Line Preference, the user hears trunk dial tone when they lift the handset. Outgoing Line Preference also determines what happens at extensions with Idle Line Preference. The user hears either trunk ("dial 9") or Intercom dial tone.

Auto-Answer of Non-Ringing Lines

With Auto-Answer of Non-Ringing Lines, an extension user can automatically answer trunk calls that ring other extensions (not their own). This would help a user that has to answer calls for co-workers that are away from their desks. When the user lifts the handset, they automatically answer the ringing calls based on Trunk Group Routing programming. The extension user's own ringing calls, however, always have priority over calls ringing other co-worker's extensions.

Conditions

If a keyset extension has more than one call ringing its line keys, Ringing Line Preference answers the calls on a first-in first-answered basis.

Default Setting

Enabled.

Programming

- **14-05-01 : Trunk Groups**
  For Auto-Answer of Non-Ringing Lines, assign trunks to trunk groups. This is part of Trunk Group Routing programming.
  ➪ Aspire S: Trunks 1-8
  ➪ Aspire: Trunks 1-100
- **14-06-01 : Trunk Group Routing**
  For Auto Answer of Non-Ringing Lines, program the Trunk Group Routing table. Auto Answer uses this table to determine the answer sequence for ringing calls.
  ➪ Aspire S: Trunk Groups 1-8
  ➪ Aspire: Trunk Groups 1-100

- **14-07-01 : Trunk Access Map Setup**
  For Outgoing Line Preference and Auto-Answer of Non-Ringing Lines, set up the Trunk Access Maps.
  - Aspire S: Trunk Access Maps 1-8
  - Aspire: Trunk Access Maps 1-200
- **15-01-02 : Basic Extension Data Setup - Outgoing Trunk Line Preference**
  Enable (1) or disable (0) Outgoing Trunk Line Preference for extensions.
- **15-02-09 : Multi-Line Telephone Basic Data Setup - Ringing Line Preference for Intercom Calls**
  Enable Idle (0) or Ringing (1) Line Preference for Intercom calls. See the table below for interaction.
- **15-02-10 : Multi-Line Telephone Basic Data Setup - Ringing Line Preference for Trunk Calls**
  Enable Idle (0) or Ringing (1) Line Preference for trunk calls. See the table below for interaction.

Program		Ringing Intercom Call	Ringing Trunk Call	Lifting the handset
15-02-09 (Intercom Preference)	15-02-10 (Trunk Preference)			
0	**0**	**X**	**X**	**Seizes idle line appearance.**
0	**0**	**X**	**-**	**Seizes idle line appearance.**
0	**0**	**-**	**X**	**Seizes idle line appearance.**
0	1	X	X	If Program 22-01-01 is 1, answers ringing trunk. If Program 22-01-01 is 0, seizes idle line appearance.
0	1	X	-	If Program 22-01-01 is 1, seizes idle line appearance. If program 22-01-01 is 0, seizes line appearance,
0	1	-	X	Answers ringing trunk.
1	**0**	**X**	**X**	**Seizes idle line appearance.**
1	**0**	**X**	**-**	**Answers ringing line appearance.**
1	**0**	**-**	**X**	**Seizes idle line appearance.**
1	1	X	X	If Program 22-01-01 is 1, answers ringing trunk. Intercom call then rings second line appearance. If Program 22-01-01 is 0, answers Ring line appearance.
1	1	X	-	Answers ringing Intercom call (Line appearance).
1	1	-	X	Answers ringing trunks.

Note: Program 22-01-01 sets Intercom (0) or trunk (1) call priority.

- **15-06-01 : Trunk Access Map for Extensions**
  For Outgoing Line Preference and Auto-Answer of Non-Ringing Lines, assign trunk Access Maps to extensions.
  - Aspire S: Trunk Access Maps1-8
  - Aspire: Trunk Access Maps 1-200

- **20-10-07 : Class of Service Options (Answer Service) - Automatic Answer of Universal Calls**
  Enable (1) or disable (0) an extension's ability to use Universal Auto Answer for non-ringing lines.
- **22-01-01 : System Options for Incoming Calls - Incoming Call Priority**
  Determine if ringing Intercom calls (0) or ringing trunk calls (1) should have answer priority. See the table below for interaction.
- **22-04-01 : Incoming Extension Ring Group Assignment**
  Assign extensions to ring groups. Auto-Answer for Non-Ringing Lines only works for trunks that do not ring an extension.
  ➪ Aspire S Ring Groups: 1-8, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
  ➪ Aspire Ring Groups: 1-100, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
- **22-05-01 : Incoming Trunk Ring Group Assignment**
  Assign trunks to ring groups. Auto-Answer for Non-Ringing Lines only works for trunks that do not ring an extension.
  ➪ Aspire S Ring Groups: 1-8, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
  ➪ Aspire Ring Groups: 1-100, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
- **23-03-01 : Universal Answer/Auto Answer**
  For each extension, select the route that it will use for Auto-Answer for Non-Ringing Lines. The routes correspond to the Trunk Group Routing table set in Program 14-06.
  ➪ Aspire S: Trunk Group Routes 1-8
  ➪ Aspire: Trunk Group Routes 1-100

Related Features

Direct Inward Line

DILs do not affect Incoming Line Preference operation.

Ring Groups

Trunks ring extensions according to Ring Group programming.

Trunk Group Routing

If an extension gets trunk dial tone when the user lifts the handset, the system uses the "dial 9" routing to select the trunk.

Operation

To answer a ringing call if your phone has Ringing Line Preference:

1. Refer to the chart on the previous page.

To place a call if your phone has Outgoing Line Preference:

1. Refer to the chart on the previous page.

Long Conversation Cutoff

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

For incoming and outgoing central office calls, each trunk can be programmed to disconnect after a defined length of time. The timer begins when the trunk is seized and disconnects the call after the timer expires.

When used with the Warning Tone for Long Conversation feature, the system can provide a warning tone on outgoing trunks calls before the call is disconnected. This tone is not available to analog single line telephone users nor is it available for incoming calls.

Conditions

None

Default Setting

Disabled.

Programming

- **14-01-14 : Basic Trunk Data Setup - Long Conversation Cutoff**
  Enable (1) or disable (0) a trunk's ability to disconnect incoming and outgoing central office calls automatically.
- **14-01-15 : Basic Trunk Data Setup - Long Conversation Alarm Before Cut Off**
  Enable (1) or disable (0) the Long Conversation Alarm for each trunk.
- **20-06-01 : Class of Service for Extensions**
  Assign a Class of Service (1-15) to extensions.
- **20-13-02 : Class of Service Options (Supplementary Service) - Long Conversation Cutoff (Incoming)**
  Enable (1) or disable (0) an extension's class of service from using Long Conversation Cutoff for incoming calls.
- **20-13-03 : Class of Service Options (Supplementary Service) - Long Conversation Cutoff (Outgoing)**
  Enable (1) or disable (0) an extension's class of service from using Long Conversation Cutoff for outgoing calls.
- **20-21-03 : System Options for Long Conversation - Long Conversation Cutoff for Incoming Calls**
  Enter the time the system will wait before disconnecting incoming trunks (0-64800 seconds).
- **20-21-04 : System Options for Long Conversation - Long Conversation Cutoff for Outgoing Calls**
  Enter the time the system will wait before disconnecting outgoing trunks (0-64800 seconds).

Related Features

Central Office Calls, Answering/Central Office Calls, Placing

Long Conversation Cutoff can disconnect incoming and outgoing CO calls after a set time period.

Direct Inward System Access (DISA)/Tie Lines

Long conversation cutoff is controlled separately for DISA and tie lines.

Warning Tone for Long Conversation

Using the Warning Tone for Long Conversation feature allows users on outgoing calls to hear a warning tone prior to the call disconnecting.

Operation

Feature is automatic once programmed.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Loop keys are uniquely programmed function keys that simplify placing and answering trunk calls. There are three types of loop keys: Incoming Only, Outgoing Only and Both Ways.

- **Incoming Only Loop Keys**
  Incoming Only loop keys are for answering trunk calls. An extension can have an incoming loop key for a specific trunk group (fixed) or a "catch all" loop key for any trunk group (switched). Fixed loop keys allow an extension user to tell the type of call by the ringing key. Switched loop keys are ideal for an extension with a large number of feature keys. In addition, switched loop keys are a destination for any trunk not on a line key or fixed loop key. Without a switched loop key, calls not appearing on a line key or fixed loop key will ring only the CALL key. Incoming Only loop keys also receive Transferred trunk calls.

- **Outgoing Only Loop Keys**
  Outgoing Only loop keys are for placing trunk calls. An extension can have outgoing loop keys for a specific trunk group or for ARS access. When a user presses the loop key, they get dial tone from the first available trunk in the group (or from ARS if programmed). Outgoing Only loop keys help ensure that an extension will always have a key available for placing calls.

- **Both Ways Loop Keys**
  Both Ways loop keys combine the functions of both Incoming Only and Outgoing Only loop keys. Both Ways loop keys work well for extension users that handle a moderate amount of calls and don't separate keys for incoming and outgoing calls. Both Ways loop keys also receive Transferred trunk calls.

An extension can have many loop keys - of any type. You can program an operator, for example, with four loop keys for incoming calls and four for outgoing calls.

Once a loop key call is set up, the user can handle it like any other trunk call. For example, the user can place the call on Hold, Transfer it to a co-worker or send it to a Park Orbit.

An incoming call will ring the first available loop key, beginning with the lowest numbered key. If keys 1-3 are loop keys, for example, the first incoming call rings key 1. If key 1 is busy, the next call rings key 2. If keys 1 and 2 are busy, the next call rings key 3. If all three keys are busy, additional incoming calls queue for the first available key. The telephone display will show "WAITING - LOOP KEY" if the user presses a loop key when there are additional calls waiting.

Conditions

None

Default Setting

Disabled.

Programming

- **14-05-01 : Trunk Groups**
  Assign trunks to trunk groups. In general, loop keys access trunks within specific trunk groups.
  - Aspire S Trunk Groups: 1-8
  - Aspire Trunk Groups: 1-100
- **14-07-01 : Trunk Access Map Setup**
  Set up the Trunk Access Maps. For example, if an extension's loop key is for incoming and outgoing, make sure the Trunk Access Map allows incoming and outgoing access. Also see Program 15-06 below.
- **15-06-01 : Trunk Access Map for Extensions**
  Assign Trunk Access Maps to extensions. Also see Program 14-07 above.
- **15-07-01 : Programmable Function Keys**
  Program function keys as trunk group/loop keys (*02 or *05). For additional data, enter 0 (incoming only), 1 (outgoing only) or 2 (both ways). Use Programs 15-13-01 or 15-13-02 to define the trunk groups used.
- **15-13-01 : Loop Keys - Outgoing**
  Assign trunk groups for outgoing loop keys (0=ARS, Aspire S Trunk Groups 1-8, or Aspire Trunk Groups 1-100). Selecting "0" for ARS should only be used when ARS is enabled in Program 26-01-01 or it could cause the loop key to lock up.
- **15-13-02 : Loop Keys - Incoming**
  Assign trunk groups for incoming loop keys (0=all Trunk Groups, Aspire S Trunk Groups 1-8, or Aspire Trunk Groups 1-100).
- **20-07-10 : Class of Service Options (Administrator Level), Programmable Function Key Programming (Appearance Level)**
  If an extension should be able to use Programmable Functions Keys to program a loop key, enable this option in the user's Class of Service (1-15).
- **22-04-01 : Incoming Extension Ring Group Assignment**
  Assign extensions to Ring Groups. An incoming loop key will ring only for those trunks programmed to ring. Also see Program 22-05.
  - Aspire S Ring Groups: 1-8, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
  - Aspire Ring Groups: 1-100, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
- **22-05-01 : Incoming Trunk Ring Group Assignment**
  Assign trunks to Ring Groups. An incoming loop key will ring only for those trunks programmed to ring. Also see Program 22-04 above.
  - Aspire S Ring Groups: 1-8, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
  - Aspire Ring Groups: 1-100, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail

Related Features

Automatic Route Selection (ARS) / Central Office Calls, Answering / Central Office Calls, Placing

Program incoming and outgoing access and routing options.

Off Hook Signaling

If enabled, a user hears Call Waiting beeps if additional calls are waiting behind a loop key.

Programmable Function Keys

If you have a line and loop key for the same trunk, the line key has precedence. An incoming call rings the line key, not the loop key. When you press the loop key for an outgoing call, the line key lights.

Trunk Group/Loop Key (*02), Virtual Extension (*03), and Loop Key (*05) codes can not be programmed on a DSS Console as the system does not allow entry of the additional data required.

Ring Groups

Trunks ring telephones according to their Ring Group assignments (Programs 22-04 and 22-05).

Direct Inward Dialing (DID) / Direct Inward Line (DIL) / Direct Inward System Access (DISA) / Tie Lines

Transferred DID, DIL, DISA and tie line calls do not require ring group programming.

Operation

To place a call on a loop key:

1. Press outgoing or both ways loop key.
   You hear dial tone and the key lights green.
2. Dial number.

To answer a call on a loop key:

Listen for ringing a look for a flashing loop key.

1. Press loop key.
   The key lights green and you connect to the call.
   If there are additional calls waiting to be answered, your display shows:
   WAITING - LOOP KEY

To program a loop key:

1. Press the SPK key.
2. Dial 852.
3. Press the key you want to program as a loop key.
4. Dial *05.
5. Dial the loop key type:
   - 0 = Incoming only
   - 1 = Outgoing only
   - 2 = Both ways (incoming and outgoing)
6. Dial the loop key routing option for incoming, outgoing, or incoming and outgoing calls:
   - 000 = Trunk Group Routing or ARS (if installed)
   - 001-200 = Trunk Groups

   If you selected option 2 in step 5 above, enter the incoming Trunk Group followed by the outgoing Trunk Group.
7. Press SPK to hang up.

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Extension Data Swap function requires software 2.65+. Extension Data Swap with service code/Secure Set Relocation requires software 4.0E+.	• Extension Data Swap function requires software 2.65+. Extension Data Swap with service code/Secure Set Relocation requires software 4.0E+.
• Program 23-02-01 added to Extension Data Copy with software 2.67+.	• Program 23-02-01 added to Extension Data Copy with software 2.67+.
• Program 32-02-01 added to Extension Data Copy with software 4.93+.	• Program 32-02-01 added to Extension Data Copy with software 4.93+.

Description

The Aspire system provides several features to help maintain the Aspire database, for backup, and system analysis.

Database Maintenance

In addition to the keyset programming, the Aspire system provides the ability to use a PC to access system programming. The Windows-based PCPro and the HTML-based WebPro allows you to:

- Edit the telephone system programming options from a remote location.

  The PCPro application requires changes to be uploaded to the system before they take affect. The WebPro application applies the changes as soon as the APPLY or OK icon is clicked.

- Access system maintenance functions (like reports and tests) as well as:
  - Slot Control (possible with telephone programming or WebPro access)
    Allows the PCB slots to be deleted or reset
  - Trunk Control (possible with telephone or PCPro programming or WebPro access)
    Allows the trunks to be blocked so no new additional calls can be made on the PCB
  - Extension Control (possible with telephone programming or WebPro access)
    Allows hard or soft reset for each extension
  - System Reset (possible with telephone programming or WebPro access)
    Allows the system to be reset

In addition, PCPro allows you to:

- Save your programming to your PC's hard disk - then upload it via a LAN (Local Area Network), PPP, serial or USB connection.

  PPP is a protocol that allows a computer to use a regular telephone line and a serial interface (modem) to make TCP/IP connections.

- Download the existing programming in the telephone system via a LAN, PPP, serial or USB connection - and save it to your PC's hard disk.
- Set up a default database with the settings you use most often.
- Create a unique database for each phone system you have installed. Since you save the site-specific data to your PC's hard disk, you can easily retrieve a customer's programming if something goes wrong.

Refer to the PCPro/WebPro Installation Manual for additional details (P/N 0893201).

Extension Data Swap Function Added

Depending on your software, the system can provide the ability to swap an extension's programming to another extension number. The following extension-based programs can be swapped:

Refere to Secure Set Relocation feature below for additional options.

Program No.	Program Name
11-02	Extension Numbering
15-01	Extension Basic Data Setup (include Virtual Extension)
15-02	Multi-Line Telephone Basic Data Setup
15-03	Single Line Telephone Basic Data Setup
15-04	PHS Terminal Basic Data Setup
15-06	Trunk Access Map for Extension
15-07	Programmable Function Key
15-08	Incoming Virtual Extension Ring Tone Setup
15-09	Virtual Extension Ring Assignment
15-10	Incoming Virtual Extension Ring Tone Order Setup
15-11	Virtual Extension Delayed Ring Assignment
15-12	Conversation Recording Destination for Extension
20-06	Class of Service for Extension
21-02	Trunk Group Routing for Extensions
21-04	Toll Restriction Class for Extensions
21-07	Toll Restriction Override Password Setup
21-11	Hotline Assignment
23-02	Call Pickup Group
23-03	Ringing Line Preference
23-04	Ringing Line Preference for Virtual Extensions
24-03	Park Group Assignment
31-02	Internal Paging Group Assignment

Keep the following items in mind when using the Extension Data Swap function:

- Any user-defined programming stored in the SRAM will not be swapped (for example, Call Forward set up, Selectable Display Messaging, etc.).
- ***The extensions to be swapped must be idle*** while the swap is performed, or an "Invalid" error message will be received.
- Data for virtual extension's cannot be swapped.
- When a swap is performed, the following actions are executed for the swapped extensions.
  - Camp On Clear (Program 11-12-05)
  - Common Cancel (Program 11-12-37)
  - Last Number Redial Clear (Program 11-12-17)
  - Saved Number Clear (Program 11-12-18)
  - Incoming History data is deleted.

- ***Using Program 92-04-01 will also swap the order in which these extensions are displayed in all extension-related programs***. This means that the system will no longer display all the extension numbers from low to high. For example, if port 2 and 6 were swapped, when viewing the extensions in 15-02-01, the extensions will display in the following order: 301, 306, 303, 304, 305, 302.

Extension Data Swap by Service Code / Secure Set Relocation

The system previously provided the ability to swap an extension's programming to another extension number using **Program 92-04-01 : Extension Data Swap**. Depending on the software version, the extension data can be swapped using a service code as well.

With this option, the user must enter a 4-digit password (fixed at 4 digits) in order to complete the swap.

The following extension-based programs can be swapped:

Program No.	Program Name
11-02	Extension Numbering
12-05	Night Mode Group Assignment for Extensions
13-03	Abbreviated Dialing Group Assignment for Extensions
15-01	Extension Basic Data Setup (include Virtual Extension)
15-02	Multi-Line Telephone Basic Data Setup
15-03	Single Line Telephone Basic Data Setup
15-06	Trunk Access Map for Extension
15-07	Programmable Function Key
15-08	Incoming Virtual Extension Ring Tone Setup
15-09	Virtual Extension Ring Assignment
15-10	Incoming Virtual Extension Ring Tone Order Setup
15-11	Virtual Extension Delayed Ring Assignment
15-12	Conversation Recording Destination for Extension
15-13	Loop Keys
15-14	Programmable One-Touch Keys
16-02	Department Group Assignment for Extensions
20-06	Class of Service for Extension
21-02	Trunk Group Routing for Extensions
21-04	Toll Restriction Class for Extensions
21-07	Toll Restriction Override Password Setup
21-10	Dial Block Restriction Class Per Extensions
21-11	Hotline Assignment
21-13	ISDN Calling Party Number Setup for Extensions
21-15	Individual Trunk Group Routing for Extensions
21-18	IP Trunk Calling Party Number Setup for Extensions
21-19	IP Trunk (SIP) Calling Party Number Setup for Extensions

21-20	SIP Trunk Call Discernment Setup for Extensions
22-04	Incoming Extension Ring Group Assignment
22-06	Normal Incoming Ring Mode
23-02	Call Pickup Group
23-03	Ringing Line Preference
23-04	Ringing Line Preference for Virtual Extensions
24-03	Park Group Assignment
24-06	Fixed Call Forwarding
24-07	Fixed Call Forwarding Off-Premise
26-04	ARS Class of Service
26-07	Not used in U.S.
31-02	Internal Paging Group Assignment
41-02	ACD Group and Agent Assignments
41-17	ACD Login Mode Setup
42-02	Hotel/Motel Telephone Setup
92-05	Password for Extension Data Swap

Secure Set Relocation Conditions

- Any user-defined programming stored in the SRAM will not be swapped (for example, Call Forward set up, Selectable Display Messaging, etc.).
- The extensions to be swapped must be idle while the swap is performed, or an "Invalid" error message will be received.
- Data for virtual extension's cannot be swapped.
- When a swap is performed, the following actions are executed for the swapped extensions.
  - Camp On Clear (Program 11-12-05)
  - Common Cancel (Program 11-12-37)
  - Last Number Redial Clear (Program 11-12-17)
  - Saved Number Clear (Program 11-12-18)
  - Incoming History data is deleted.
- Using this option will also swap the order in which these extensions are displayed in all extension-related programs . This means that the system will no longer display all the extension numbers from low to high. For example, if port 2 and 6 were swapped, when viewing the extensions in 15-02-01, the extensions will display in the following order: 301, 306, 303, 304, 305, 302.

Extension Data Copy Function Enhanced to Provide Port Copy Option

Depending on your software, the system provides the ability to copy an extension's programming to another extension either by extension number or port number, depending on which program you use. With older software, an extension's information could only be copied based on the extension number.

The following extension-based programs can be copied:

Program No.	Program Name	Note
15-01	Extension Basic Data Setup (include Virtual Extension)	Copy all data except extension name (item 01).
15-02	Multi-Line Telephone Basic Data Setup	
15-03	Single Line Telephone Basic Data Setup	
15-04	PHS Terminal Basic Data Setup	Copy Item 11, 12 and 13.
15-06	Trunk Access Map for Extension	
15-07	Programmable Function Key	
15-08	Incoming Virtual Extension Ring Tone Setup	
15-09	Virtual Extension Ring Assignment	
15-10	Incoming Virtual Extension Ring Tone Order Setup	
15-11	Virtual Extension Delayed Ring Assignment	
15-12	Conversation Recording Destination for Extension	
20-06	Class of Service for Extension	
21-02	Trunk Group Routing for Extensions	
21-04	Toll Restriction Class for Extensions	
21-11	Hotline Assignment	
23-02	Call Pickup Group	Requires software 2.67+.
23-03	Ringing Line Preference	
23-04	Ringing Line Preference for Virtual Extensions	
24-03	Park Group Assignment	
31-02	Internal Paging Group Assignment	
32-02	Door Box Ring Assignment	Requires software 4.93+.

Keep the following items in mind when using the Extension Data Copy function:

- Using this program to copy a keyset's Programmable Function Keys will copy all the keys whether they exist on the phone to which the programming is being copied. This may cause confusion when trying to define a key which is already defined but which doesn't exist on the phone (will display as "DUPLICATE DATA"). It is recommend to either clear these non-existent keys or to only copy from an extension which has the same or fewer number of keys than the extension to which the programming is being copied.

Fill and Delete Extension Data Functions Added

The software provides the ability to fill program entries for a range of extensions to the same as a designated source extension. In addition, program data can be deleted for a range of ports.

The Fill and Delete programs can be used only with the following programs:

Program No.	Program Name
11-02	Extension Numbering
11-04	Virtual Extension Numbering
11-06	ACI Extension Numbering
11-07	Department Group Pilot Numbers
11-08	ACI Group Pilot Number
11-17	ACD Group Pilot Number

Fill and Delete Extension Data Conditions

- With the Fill function, if the data is out of range, the display will show "Invalid Data" and allow you to reenter the range.
- If data to be filled is duplicate data, the display will show "Fail to fill" and allow you to reenter the range.
- If the range of ports entered for the Delete function includes all ports, port 001 will not be deleted (to ensure phone programming can still be accessed).

Alarm Reports

The system logs various errors and information about the operation which can be used to determine the cause of a problem (up to 100 individual alarms are stored, then oldest data is deleted to allow for new information to be stored). The system can indicate the errors on a keyset's display, send the information to a printer at a programmed time, send the data via EMail. When an alarm report is printed through PCPro, the system will not delete the report data after printing. If the system is set up to EMail the report and the mail server is down, the report will not be sent.

The alarm reports indicate:

- System start-up/upgrade date and time
- PCB communication error with the date and time and the restoration date and time
- Date and time a PCB was removed from the system
- Date and time an extension was disconnected from the system
- Date and time of any interruption in system power
- Power brown-outs generate a Low Battery log
- Hard disk driver exchange time is logged (Future Item)
- Date and time of any system data change

Sample Report:

<< Alarm Report >> 06/16/2003 14:12 PAGE 001

LVL	NO	STAT	DATE	TIME		ITEM	UNIT	SLT	PRT	PARAMETER
MIN	0002	ERR	06/09/03	11:34	PKG	Installation	VMSU	04	00	
MIN	0002	ERR	06/09/03	11:34	PKG	Installation	VMSU	04	00	

System Information

The system can print a report of the PCBs installed, the port assignments, and the port types. This information is sent to the port defined in Program 90-13. This report includes:

- The version of system software
- PCB names
- Slot condition (working, blocked)
- Port assignment
- Port classification

Sample Report:

<< System Information >> 06/16/2003 13:57

slot	location	type	assign port	condition	note
1	1-1	ESIU	1- 16	Running	*******- -------- Connect:*
2	1-2	COIU	1- 4	Running	
3	1-3	SLIU	17- 24	Running	
4	1-4	VMSU	25- 28	Running	
5	1-5	-none-	-none-		
6	1-6	-none-	-none-		
7	1-7	-none-	-none-		
8	1-8	-none-	-none-		
9	2-1	-none-	-none-		
10	2-2	-none-	-none-		
11	2-3	-none-	-none-		
12	2-4	-none-	-none-		
13	2-5	-none-	-none-		
14	2-6	-none-	-none-		
15	2-7	-none-	-none-		
16	2-8	-none-	-none-		

Reloading Customer Databases

When reloading a customer database, the system must be reset (either using Program 90-08 or power down/power up) before all uploaded programming will take affect.

After uploading the programming, reset the system and wait a few minutes for the system to reset completely before accessing any lines or special system features. Otherwise, some unusual LED indications may be experienced.

Conditions

(A.) Aspire S and Aspire Customer Databases Not Interchangeable

Due to database differences, saved customer databases are **not** interchangeable between the Aspire S and Aspire systems.

The PCPro will prevent the upload of an incorrect database by disabling the Upload button when the system database does not match the system to which you are connected.

However, when using **Program 90-04 : Load Data**, the system will not be able to prevent an incorrect upload. It is important to make sure you only load data saved *from* an Aspire S *to* an Aspire S system and data saved *from* an Aspire *to* an Aspire system.

Default Setting

Enabled.

Programming

System Maintenance

- **11-11-13 : Service Code Setup (for Setup/Entry Operation) - Display Language Selection for Keyset**
  Define the service code to be used to change the language shown on display keysets (default: 178).
- **11-15-01 : Service Code Setup, Administrative (for Special Access) - Remote Maintenance**
  Set the service code used in the dial-up number when using the serial or USB port for PCPro or WebPro (default: 830).
- **11-15-03 : Service Code Setup, Administrative (for Special Access) - Backup Data Save**
  This option will save the user's soft key settings (extension's programmed Call Forwards, DND, etc.). It is recommended to use this feature before upgrading the system software.
- **90-03-01 : Save Data**
  Save the programmed data on the SRAM and Flash ROM to a compact flash memory card.
- **90-04-01 : Load Data**
  Load the saved system data from an inserted compact flash memory card to the SRAM and Flash ROM in the system.

  Note: Aspire S and Aspire Customer Databases Not Interchangeable!
  The system will not be able to prevent an incorrect upload. It is important to make sure you only load data saved *from* an Aspire S *to* an Aspire S system and data saved *from* an Aspire *to* an Aspire system.
- **90-05-01 : Slot Control**
  Reset (Menu 1) or delete/uninstall (Menu 2) circuit boards (slots 1-16) as needed through either telephone programming or WebPro access.
- **90-06-01 : Trunk Control**
  Busy Out (0) lets you block a PCB from placing outgoing calls (just like placing the PCB switch down). Once busied out, none of the ports on the PCB can be used for new calls. Existing calls, however, are not disconnected. Release the Busy Out state by entering "1" for the trunk. This option is available through telephone programming, PCPro or WebPro access.
- **90-07-01 : Extension Control**
  Perform a hardware (1) or software (2) reset on a particular extension as needed through either telephone programming or WebPro access.
- **90-08-01 : System Reset**
  Perform a system reset as needed through either telephone programming or WebPro access.
- **90-09-01 : Automatic System Reset Time**
  Define the time and date the system should automatically reset. This option is available through either telephone programming or WebPro access.
- **92-06-01: Fill Extension Data**
  Enter the 4-digit program number you would like to fill. For example, Program 11-02 would be entered as "1102". Enter the source extension number (the extension which contains the data to be used) and press HOLD. Next, enter the first extension number to be filled and press HOLD. Enter the last extension number to be filled and press HOLD. The data from the source extension for that program will then be entered into the range of extensions defined.
- **92-07-01 : Delete Port Data**
  Enter the 4-digit program number you would like to delete. For example, Program 11-02 would be entered as "1102". Enter the first port number to be deleted and press HOLD. Enter the last port number to be deleted and press HOLD. The data for that program will then be erased for the range of ports defined.

System Alarm Reports

Basic Programming

- **90-10-01 : System Alarm Setup - Alarm Type**
  Assign a status to system alarms (001-100). You can designate an alarm as Major or Minor (0=no notification, 1=major alarms displayed, 2=minor alarms displayed).
- **90-10-02 : System Alarm Setup - Report**
  This program assigns whether or not the alarm is displayed to a key telephone and whether or not the alarm information is reported to the pre-defined destination (0=no report, 1=report).
- **90-11-01 : System Alarm Report - System Alarm Display Telephone**
  Assign the display keyset's extension number that should receive system alarms.
- **90-12-05 : System Alarm Output - Clear All Alarm Reports**
  Entering 1 will clear all alarm reports.
- **90-12-06 : System Alarm Output - Output Mode**
  Select either manual (0) or automatic (1) alarm reports.
- **90-24-01 - 90-24-04 : System Alarm Report Notification Time Setup**
  Set the month (00=disabled, 01-12), day (00-31), hour (00-23), and minute (00-59) that the alarm report should print. Up to 12 time settings can be programmed (01-12). This report will indicate both major and minor alarms.

Printing Reports - in addition to the Basic Programming above

- **90-12-01 : System Alarm Output - Output Port Type**
  Define the output port to be used as the output for system alarm report (0=no setting, 1=NTCPU COM port, 2=NTCPU USB port, 4=CTA/CTU adapter). Set the baud rate for the COM port in Program 10-21-02. The system can have up to 50 reports.
- **90-12-02 : System Alarm Output - Destination Extension Number**
  If the output port (90-12-01) is a CTA or CTU, enter the extension number with the CTA/CTU connection.
- **90-12-03 : System Alarm Output - Output All Alarm Reports**
  Entering 1 will print all the alarm reports.
- **90-12-04 : System Alarm Output - Printout New Alarm Reports**
  Entering 1 will print all new alarm reports.

EMailing Reports - in addition to the Basic Programming above

- **10-12-01 : NTCPU Network Setup - IP Address**
  Select the IP address for the IP connection (default: 172.16.0.10). A static IP address is required by the NTCPU. The system must be reset in order for the change to take effect.
- **10-12-02 : NTCPU Network Setup - Subnet Mask**
  Select the Subnet Mask to be used by the IP server (default: 255.255.0.0).
- **10-12-03 : NTCPU Network Setup - Default Gateway**
  If required, select the default gateway IP address to be used when using a router (default: 0.0.0.0).
- **90-11-02 : System Alarm Report - Report Method**
  When alarm reports are to be EMailed, set this option to "1".
- **90-11-06 : System Alarm Report - SMTP Name**
  Set the SMTP name or IP address (up to 255 characters/numbers) (ex: smtp.yourisp.com). Contact your ISP (internet service provider) for the correct entry if needed.

- **90-11-07 : System Alarm Report - SMTP Host Port Number**
  Set the SMTP host port number (0-65535). Contact your ISP (internet service provider) for the correct entry if needed. Usually, the default entry of 25 can be used.
- **90-11-08 : System Alarm Report - To Address**
  Set this EMail address to which the report should be sent (up to 255 characters).
- **90-11-09 : System Alarm Report - Reply Address**
  Set this EMail address to which any replies should be EMailed (up to 255 characters).
- **90-11-10 : System Alarm Report - From Address**
  Set this EMail address from which the report is being sent (up to 255 characters). ***This option is required for the EMail function to work.***
- **90-11-11 : System Alarm Report - DNS Primary Address**
  Set the DNS primary address (0.0.0.0-255.255.255.255).
- **90-11-12 : System Alarm Report - DNS Secondary Address**
  Set the DNS secondary address (0.0.0.0-255.255.255.255).
- **90-11-13 : System Alarm Report - Customer Name**
  Enter a name which will be used to identify the particular system (up to 255 characters).
- **90-25-01 : System Alarm Report CC Mail Setup**
  Set up to five additional destinations which can receive copies of the report.

System Information Reports

- **90-13-01 : System Information Output - Output Port Type**
  Define the output port to be used as the output for system information report (0=no setting, 1=NTCPU COM port, 2=NTCPU USB port, 4=CTA/CTU adapter). Set the baud rate for the COM port in Program 10-21-02. The system can have up to 50 reports.
- **90-13-02 : System Information Output - Destination Extension Number**
  If the output port type (90-13-01) is a CTA, enter the extension number with the CTA connection.
- **90-13-03 : System Information Output - Output**
  Entering 1 will print the system report to the connected device.

Extension Data Swap/Secure Set Relocation

- **11-15-12 : Service Code Setup, Administrative (for Special Access) - Extension Data Swap**
  Define the service code (up to 8 digits) to be used with the Extension Data Swap feature. By default, there is no entry.
- **92-05-01 : Password for Extension Data Swap**
  This program defines the 4-digit password to be used by each extension when using the Extension Data Swap feature using a service code (Entries: 0 - 9, *, # [Fixed at 4 digits])
- **92-04-01: Extension Data Swap**
  Enter the two extension numbers which should be swapped. After pressing HOLD, the system data for the programs listed in the table above will be swapped. Any user-defined programming stored in the SRAM will not be swapped (for example, Call Forward set up, Selectable Display Messaging, etc.).

Related Features

Traffic Reports

Traffic Reports log system call data providing several reports which can be used to determine adequate system resources (receivers, channels, trunks, etc.).

Operation

To check your extension's data (Keyset Only):

1. Press CHECK.
2. Press CALL1.

   You display shows your telephone's extension number, port number and extension/ Department Group.

   You can also check any other extension numbers information y pressing CHECK + the extension number.
3. Press CLEAR to return the normal time/date display.

To perform an extension swap using Secure Set Relocation:

1. From one of the telephones which is to be swapped, dial the Extension Data Swap service code (defined in Program 11-15-12).

   If the password is not set in Program 92-05, a warning tone is heard.

   If VRS is installed in the system, the message "The number you have dialed is not in service" is heard.
2. Dial the 4 digit password.

   *The password is displayed as * (asterisk).*

   If an incorrect password is entered, a warning tone is heard.
3. Dial the extension number which is to be swapped.

   If an incorrect number is dialed, a warning tone is heard.
4. A confirmation tone is heard if the swap is completed.
   If it is not possible to swap the extension data, a warning tone is heard.

Aspire S	Aspire M/L/XL
• NTCPU provides 32 conference circuits, allowing any number of internal or external parties conferenced up to the limit of 32.	• NTCPU provides 2 blocks of 32 conference circuits, allowing each block to have any number of internal or external parties conferenced up to the block's limit of 32.

Description

With Meet Me Conference, an extension user can set up a Conference with their current call and up to 32 other internal or external parties. Each party joins the Conference by dialing a Meet Me Conference code. Meet Me Conference lets extension users have a telephone meeting -- without leaving the office.

Conditions

(A.) Each block assigned in Program 10-07 for Conversation Recording reduces the number of blocks available for Conference, Recording, ACD Agent Auto Call Recording, and ACD Supervisor Monitor.

Default Setting

Enabled.

Programming

Note: For additional programming for Paging, refer to the Paging External and Paging Internal features.

- **10-07-01 : Conversation Record Circuits**
  The number of circuits assigned as Conversation Record circuits limits the number of available Conference circuits. Make sure there are circuits available for Conference.
- **15-07-01 : Programmable Function Keys**
  Assign function keys for Conference (code 07), External Zone Paging (code 19 + zone), External All Call Paging (code 20), Internal Zone Paging (code 21 + zone) and Meet Me Conference/Paging Pickup (code 23).
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.
- **20-10-06 : Class of Service Options (Answer Service) - Meet Me Conference and Paging**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to initiate a Meet Me Conference or Meet Me Page.
- **31-01-04 : System Options for Internal/External Paging - Privacy Release Time**
  Set the Privacy Release Time (0-64800 seconds). Once the user initiates Meet Me Conference, the system waits this interval for the Paged party to join the conversation.

Related Features

Conference
An extension user can also use other types of Conferences to join callers together.

Meet Me Paging
An extension user can have a telephone meeting with a co-worker on a Page zone.

Programmable Function Keys
Meet Me Conference requires a Conference key. In addition, Internal and External Paging keys simplify Meet Me Conference operation.

Operation

Meet Me External Conference

To make a Meet Me External Conference:

Keyset

1. While on a call, press Conference key (PGM 15-07 or SC 851: 07).
2. Dial 803 and the External Paging Zone code (1-8 or 0 for All Call)
   OR
   Dial *1 and the Combined Paging Zone code 1-8 (for Internal/External Zones 1-8) or 0 (for Internal/External All Call).
   OR
   Press Page key (PGM 15-07 or SC 851: 19 + zone & 20).
3. Announce the zone.
4. When co-worker answers your page, press the Conference key twice.
5. Repeat steps 1-4 for each co-worker you want to add.

Single Line Telephone

1. While on a call, hookflash and dial #1.
2. Dial 803 and the External Paging zone code (1-8 or 0 for All Call).
   OR
   Dial *1 and the Combined Paging Zone code 1-8 (for Internal/External Zones 1-8) or 0 (for Internal/External All Call).
3. Announce the zone.
4. When co-worker answers your page, press the hookflash twice.
5. Repeat steps 1-4 for each co-worker you want to add.

To join a Meet Me External Conference:

1. At keyset, press idle CALL key.
   OR
   At single line telephone, lift handset.
2. Dial 865.
3. Dial the announced External Paging Zone code (0-8).
   You connect to the other parties.

Meet Me Internal Conference:

To make a Meet Me Internal Conference:

Keyset

1. While on a call, press Conference key (PGM 15-07 or SC 851: 07).
2. Dial 801 and the Internal Paging Zone code (0-9 or 00-64).
   OR
   Dial *1 and the Combined Paging Zone code 1-8 (for Internal/External Zones 1-8) or 0 (for Internal/External All Call).
3. Announce the zone.
4. When co-worker answers your page, press the Conference key twice.
5. Repeat steps 1-4 for each co-worker you want to add.

Single Line Telephone

1. While on a call, hookflash and dial #1.
2. Dial 801 and the Internal Paging Zone code (0-9 or 00-64).
   OR
   Dial *1 and the Combined Paging Zone code 1-8 (for Internal/External Zones 1-8) or 0 (for Internal/External All Call).
3. Announce the zone.
4. When co-worker answers your page, press the hookflash twice.
5. Repeat steps 1-4 for each co-worker you want to add.

To join a Meet Me Internal Conference:

1. At keyset, press idle CALL key.
   OR
   At single line telephone, lift handset.
2. Dial 863 (if your extension is in the zone called).
   OR
   Dial 864 and the zone number (if your extension is not in the zone called).
   OR
   Press the Meet Me Conference/Paging Pickup key (PGM 15-07 or SC 851: 23) if your extension is in the zone called.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Meet Me Paging allows an extension user to Page a co-worker and privately meet with them on a Page zone. The Paging zone is busy to other users while the meeting takes place. While the co-workers meet on the zone, no one else can hear the conversation, join in or make an announcement using that zone. Meet Me Paging is a good way to talk to a co-worker when their location is unknown. If the co-worker can hear the Page, they can join in the conversation.

Conditions

(A.) External paging requires a 2PGDAD PCB be installed in the system.

Default Setting

Enabled.

Programming

Note: For additional programming information on Paging, refer to the Paging External and Paging Internal features.

➵ **15-07-01 : Programmable Function Keys**
Assign function keys for External Zone Paging (code 19 + zone), External All Call Paging (code 20), Internal Zone Paging (code 21 + zone) or Meet Me Conference/Paging Pickup (code 23).

➵ **20-06-01: Class of Service for Extensions**
Assign a Class Of Service (1-15) to an extension.

➵ **20-10-06 : Class of Service Options (Answer Service) - Meet Me Conference and Paging**
In an extension's Class of Service, enable (1) or disable (0) an extension's ability to initiate a Meet Me Conference or Meet Me Page.

Related Features

Meet Me Conference
An extension user can set up a Conference with their current call and up to 31 other inside parties.

Meet Me Paging Transfer
With Meet Me Paging Transfer, a user can page a co-worker and have the call automatically transfer when the co-worker answers the page.

Paging, Internal / Paging, External
An extension's access to internal and external page zones affects the Meet Me Paging feature.

Programmable Function Keys
Internal and External Paging keys simplify Meet Me Paging operation.

Operation

Meet Me External Page

To make a Meet Me External Page:

1. At keyset, press idle CALL key.
   OR
   At single line telephone, lift handset.
2. Dial 803 and the External Paging Zone code (1-8 or 0 for All Call).
   OR
   Dial *1 and the Combined Paging Zone code 1-8 (for Internal/External Zones 1-8) or 0 (for Internal/External All Call).
3. Announce the zone.
   OR
1. At keyset, press the External Paging Zone key (PGM 15-07 or SC 851: 19 + zone & 20).
2. Announce the zone.

To join a Meet Me External Page:

1. At keyset, press idle CALL key.
   OR
   At single line telephone, lift handset.
2. Dial 865.
3. Dial the announced External Paging Zone (0-8).
   You connect to the other party.

Meet Me Internal Page

To make a Meet Me Internal Page:

1. At keyset, press idle CALL key.
   OR
   At single line telephone, lift handset.
2. Dial 801 and dial the Internal Paging Zone code (0-9, 00-32 or 00-64).
   OR
   Dial *1 and the Combined Paging Zone code 1-8 (for Internal/External Zones 1-8) or 0 (for Internal/External All Call).
3. Announce the zone.
   OR

1. At keyset, press the External Paging Zone key (PGM 15-07 or SC 851: 19 + zone & 20).
2. Announce the zone.

To join a Meet Me Internal Page:

1. At keyset, press idle CALL key.
   OR
   At single line telephone, lift handset.
2. Dial 863 (if your extension is in the zone called).
   OR
   Dial 864 and the zone number (if your extension is not in the zone called).
   OR
   Press the Meet Me Conference/Paging Pickup key (PGM 15-07 or SC 851: 23) if your extension is in the zone called.

Meet Me Paging Transfer

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

If a user wants to Transfer a call to a co-worker but they don't know where the co-worker is, they can use Meet Me Paging Transfer. With Meet Me Paging Transfer, the user can Page the co-worker and have the call automatically Transfer when the co-worker answers the Page. Since Meet Me Paging Transfer works with both Internal and External Paging, a call can be quickly extended to a co-worker anywhere in the facility.

Conditions

(A.) External paging requires a 2PGDAD module be installed in the system.

Default Setting

Enabled.

Programming

Note: For additional programming information on Paging, refer to the Paging External and Paging Internal features.

- **15-07-01 : Programmable Function Keys**
  Assign function keys for External Zone Paging (code 19 + zone), External All Call Paging (code 20), Internal Zone Paging (code 21 + zone) and Meet Me Conference/Paging Pickup (code 23).
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.
- **20-10-06 : Class of Service Options (Answer Service) - Meet Me Conference and Paging**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to initiate a Meet Me Paging Transfer.

Related Features

Meet Me Conference
An extension user can set up a Conference with their current call and up to 31 other inside parties.

Meet Me Paging
An extension user can Page a co-worker and meet with them on a Page zone.

Paging, External
With External Paging, an extension user can broadcast an announcement over Paging equipment connected to external Paging zones.

Paging, Internal
Internal Paging lets extension users broadcast announcements to other keysets.

Programmable Function Keys
Function keys simplify Meet Me Paging Transfer operation.

Operation

Meet Me External Paging Transfer

To make a Meet Me External Paging Transfer:

1. At keyset, while on a call, press HOLD.
   OR
   At single line telephone, while on a call, hookflash.
2. Press the External Paging Zone key (PGM 15-07 or SC 851: 19 + zone & 20).
   OR
   Dial 803 and the External Paging Zone code (1-8 or 0 for All Call).
   OR
   Dial *1 and the Combined Paging Zone code 1-8 (for Internal/External Zones 1-8) or 0 (for Internal/External All Call).
3. Announce the call.
4. When Paged party answers, hang up to Transfer the call to them.

To join a Meet Me External Paging Transfer:

1. At keyset, press idle CALL key.
   OR
   At single line telephone, lift handset.
2. Dial 865.
3. Dial the announced External Paging Zone (0-8).
   You connect to the Paging party.
4. Stay on the line.
   After the Paging party hangs up, you connect to the transferred call.

Meet Me Internal Paging Transfer

To make a Meet Me Internal Paging Transfer:

1. At keyset, while on a call, press HOLD.
   OR
   At single line telephone, while on a call, hookflash.
2. Press Internal Paging Zone key (PGM 15-07 or SC 851: 20 + zone).
   OR
   Dial 801 and the Internal Paging Zone code (0-9 or 00-64).
   OR
   Dial *1 and the Combined Paging Zone code 1-8 (for Internal/External Zones 1-8) or 0 (for Internal/External All Call).
3. Announce the call.
4. When Paged party answers, hang up to Transfer the call to them.
   The answering party connects to the trunk call when you hang up.

To join a Meet Me Internal Paging Transfer:

1. At keyset, press idle CALL key.
   OR
   At single line telephone, lift handset.
2. Dial 863 (if your extension is in the zone called).
   OR
   Dial 864 and the zone number (if your extension is not in the zone called).
   OR
   Press the Meet Me Conference/Paging Pickup key (PGM 15-07 or SC 851: 23) if your extension is in the zone called.
3. Stay on the line.
   After the Paging party hangs up, you connect to the transferred call.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

While on an outside call, Memo Dial lets a display keyset user store an important number for easy redialing later on. The telephone can be like a notepad. For example, a user could dial Directory Assistance and ask for a client's telephone number. When Directory Assistance plays back the requested number, the caller can use Memo Dial to jot the number down in the telephone's memory. They can quickly call the Memo Dial number after hanging up.

When a user enters a Memo Dial number, the dialed digits do not output over the trunk. Dialing Memo Dial digits does not interfere with a call in progress.

Conditions

When Memo Dial calls out, it outdials the entire stored number. Memo Dial does not automatically strip out trunk or PBX access codes if entered as part of the stored number.

Default Setting

Disabled.

Programming

15-07-01 : Programmable Function Keys
Assign a function key for Memo Dial (code 31).

Related Features

Central Office Calls, Placing
A user's outgoing dialing options affect how a Memo Dial call is placed.

Last Number Redial
Quickly redial the last outside number dialed.

Save Number Dialed
Save the last outside number dialed.

Single Line Telephones
Memo Dial is not available at single line telephones.

Operation

To store a number while you are on a call:

1. While on a call, press Memo Dial key (PGM 15-07 or SC 851: 31).
2. Dial number you want to store.
3. Press Memo Dial key again and continue with conversation.

To call a stored Memo Dial number:

1. Do not lift the handset.
2. Press Memo Dial key (PGM 15-07 or SC 851: 31).
3. Press idle CALL key.

   The stored number dials out only if you store a trunk access code before the number.

   OR

   Press line key.

   The stored number dials out.

To check to see the stored Memo Dial number:

1. Do not lift handset.
2. Press Memo Dial key (PGM 15-07 or SC 851: 31).

   The stored number displays.

To cancel (erase) a stored Memo Dial number:

1. Press idle CALL key.
2. Press Memo Dial key (PGM 15-07 or SC 851: 31).

Aspire S	Aspire M/L/XL
• Available.	• Available.
• The MSG key as Voice Mail key feature is available.	• The MSG key as Voice Mail key feature is available with 1.11+ software.
• LED Color Indication option requires software 2.63+.	• LED Color Indication option requires software 2.63+.
• SLT MW Indication option requires software 2.63+.	• SLT MW Indication option requires software 2.63+.

Description

An extension user can leave a Message Waiting indication at a busy or unanswered extension requesting a return call. The indication is a flashing MW lamp at the called extension and a steadily lit MW lamp on the calling extension. Answering the Message Waiting automatically calls the extension which left the indication. Message Waiting ensures that a user will not have to recall an unanswered extension. It also ensures that a user will not miss calls when their extension is busy or unattended. Additionally, Message Waiting lets extension users:

- View and selectively answer messages left at their extension (display keyset only)
- Cancel all messages left at their extension
- Cancel messages they left at other extensions

An extension user can leave Messages Waiting at any number of extensions. Also, any number of extensions can leave a Message Waiting at the same extension. A periodic VRS announcement may remind users that they have Messages Waiting. Up to 50 Message Waiting indications can be displayed in a system at one time.

MSG Key will Operate as Voice Mail Key

The system enhances a phone's MSG key function when connected to a system which has voice mail installed. When an extension receives a voice mail, the MSG key can be used to check the number of messages in voice mail, as well as call the voice mail to listen to the messages. If there is no Voice Mail Programmable Function Key defined (Program 15-07-01, code 77), the phone's Message Waiting LED will flash to indicate new messages.

This option is not available with a networked voice mail - the voice mail must be local.

Refer to the Voice Mail feature for the feature operation.

LED Color Indication

Depending on your software, the software provides an option allows you to select whether the Message Wait LED located at the top of the keyset will flash green (0) or red (1) when a Message Wait indication is flashing. By default, this option is set to flash red.

Note that if this LED is also used for voice mail indications (no Programmable Function Key programmed for voice mail), if there are both voice mail messages and Message Wait indications, the color set for Message Wait will override the color used for voice mail indications (red).

Single Line Telephone MW Indication Option

An option is available for analog single line telephones which provide a display. When a user leaves a Message Waiting for a SLT which has a display, **Program 15-03-13 : Single Line Telephone Basic Data Setup - MW Signal Type** is used to determine whether the SLT user will see a MW LED indication or if the Caller ID will be used to display the call.

Conditions

(A.) Reminder messages require a DSP daughter board for VRS messages.
(B.) Analog ports from APA or APR adapters do not provide Message Waiting lamping.

Default Setting

Enabled.

Programming

- **11-10-16 : Service Code Setup (for System Administrator) - Leaving Message Waiting**
  11-11-09 : Service Code Setup (for Setup/Entry Operation) - Answer Message Waiting
  11-11-10 : Service Code Setup (for Setup/Entry Operation) - Cancel All Messages Waiting
  11-11-11 : Service Code Setup (for Setup/Entry Operation) - Cancel Message Waiting
  11-12-37 : Service Code Setup (for Service Access) - Common Canceling Service Code
  11-16-07 : Single Digit Service Code Setup - Message Waiting
  If necessary, customize the service codes used for these features.
- **15-02-28 : Multi-Line Telephone Basic Data Setup, Message Wait LED**
  This option allows you to select whether the Message Wait LED located at the top of the key-set will flash green (0) or red (1) when a Message Wait indication is flashing. Note that if this LED is also used for voice mail indications (no Programmable Function Key programmed for voice mail), if there are both voice mail messages and Message Wait indications, the color set for Message Wait will override the color used for voice mail indications (red).
- **15-03-13 : Single Line Telephone Basic Data Setup - MW Signal Type**
  An option is available for analog single line telephones which provide a display. When a user leaves a Message Waiting for a SLT which has a display, this option is used to determine whether the SLT user will see a MW LED indication (0) or if the Caller ID will be used to display the call (1).
- **15-07-01 : Programmable Function Keys**
  Assign a function key for Message Waiting (code 38).
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.
- **20-13-07 : Class of Service Options (Supplementary Service) - Message Waiting**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to leave Messages Waiting.
- **24-02-05 : System Options for Transfer - Message Wait Ring Interval Timer**
  For SLTs without message waiting lamps, this timer determines the amount of time between intermittent ringing. If this timer is set to '0' then the system rings once.
- **80-01-01 : Service Tone Setup - Message Wait Dial Tone**
  If the default tone is not acceptable for the Message Wait Dial Tone, a new tone can be assigned.

Related Features

Handsfree Answerback/Forced Intercom Ringing

When a user responds to a Message Waiting, the system does not cancel the Message Waiting indication if the called party uses Handsfree Answerback. The system cancels the indication only if the called party lifts the handset or presses SPK.

Hotel/Motel

With the Hotel/Motel set up, an employee with a keyset can send a Message Waiting to a room telephone if allowed in system programming.

Programmable Function Key

A Message Waiting key simplifies this feature's operation.

Voice Response System

Reminder messages require a DSP daughter board for Voice Response System (VRS).

Voice Mail

Telephone-to-telephone Message Waiting works when the voice mail is installed.
The MW LED may be used to indicate voice mail messages if there is no extension number assigned to the voice mail key in system programming.

Operation

To leave a Message Waiting:

1. Call busy or unanswered extension.
2. Dial 0 or press Message Waiting key (PGM 15-07 or SC 851: 38)
3. Hang up.

With keyset phones, the MW LED lights.

To answer a Message Waiting:

When you have a message, your MW LED flashes fast for keysets.

1. At a keyset, press idle CALL key and dial *0 .
   OR
   Press Message Waiting key (PGM 15-07 or SC 851: 38).
   OR
   At single line telephones, lift the handset and dial *0 .

If the called extension doesn't answer, dial 0 or press your Message Waiting key to automatically leave them a message.

Normally, your MW LED goes out. If it continues to flash, you have new messages in your "Voice Mail" mailbox or a new "General Message". Go to "To check your messages" below.

To cancel all your Messages Waiting:

This includes messages you have left for other extensions and messages other extension have left for you.

1. At keyset, press idle CALL key.
   OR
   At single line telephone, lift handset.
2. Dial 873.
3. Hang up.

To cancel the Messages Waiting you have left at a specific extension:

1. At keyset, press idle CALL key.
   OR
   At single line telephone, lift handset.
2. Dial 871.
3. Dial number of extension you don't want to have your messages.
4. Hang up.

To check your messages:

1. Press CHECK
2. Dial *0 .

You can have any combination of the message types in the table below on your phone.

If you see. . .	You have. . .
VOICE MESSAGE **n MESSAGE**	New messages in your Voice Mail mailbox
CHECK MESSAGE **VRS GENERAL MESSAGE**	A General message in Voice Mail that has not been heard.
CHECK MESSAGE **(name)**	Message Waiting requests left at your phone by your co-workers.

3. Press VOL ▲ or VOL ▼ to scroll through your display.
4. When you find the message you want to answer, press CALL1. You'll either:
   - Go to your Voice Mail mailbox.
   - Listen to the new General Message.
   - Automatically call the extension that left you a Message Waiting.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Microphone Cutoff lets a keyset user turn off their phone's handsfree or handset microphone at any time. When activated, Microphone Mute prevents the caller from hearing conversations in the user's work area. The user may turn off the microphone while their telephone is idle, busy on a call or ringing. The microphone stays off until the user turns it back on.

Conditions

None

Default Setting

Enabled (using MIC key).

Programming

15-07-01 : Programmable Function Keys
If an extension needs handset microphone cutoff, program a Handset Transmission Cutoff key (code 40). To program a Mic Cutoff key, use code 02 as the entry. The Mic Cutoff key will mute conversation on a handsfree call, while the Handset Transmission Cutoff key will mute the handset transmission on a non-handsfree call.

20-02-11 : System Options for Multi-Line Telephones - Handsfree Microphone Control
Use this option to set the default setting for a keyset's Handsfree microphone. If set to 0, a user can place a call Handsfree without lifting the handset. If set to 1, a user can place a call Handsfree but must lift the handset to talk or press their MIC key.

Related Features

Handsfree Answerback/Forced Intercom Ringing

Microphone Cutoff does not operate if the user calls another extension and the called extension responds without lifting the handset or pressing SPK. With Microphone Cutoff enabled, Handsfree Answerback callers to an extension hear a single beep (instead of two).

Programmable Function Keys

Handset Microphone Cutoff requires a uniquely programmed function key.

Single Line Telephones

Single line telephones cannot use Microphone Cutoff.

Operation

To mute your telephone's handset or Handsfree microphone while on a call:

1. Press MIC.

   This only turns off the Handsfree microphone.

   OR

   Press Microphone Cutoff key (PGM 15-07 or SC 851: 40).

   This turns off both the handset and Handsfree microphone.

To turn your telephone's microphone back on:

1. Press MIC.

   Use MIC only if you pressed it initially to turn off your Handsfree microphone.

   OR

   Press Microphone Cutoff key (PGM 15-07 or SC 851: 40).

   Use the Microphone Cutoff key only if you pressed it initially to turn off your handset or Handsfree microphone.

Aspire S	Aspire M/L/XL
• Available - Virtual ports 1-24.	• Available - Virtual ports 1-256.
• Virtual extensions can use Fixed Call Forward Off-Premise with CO trunks with software 2.63+.	• Virtual extensions can use Fixed Call Forward Off-Premise with CO trunks with software 2.63+.

Description

Multiple Directory Numbers let a keyset have more than one extension number. Calls can route to the keyset's installed number or to the keyset's "virtual extension" Multiple Directory Number key. This helps users identify incoming calls. For example, an extension installed at 304 (Sales) could have a virtual extension for 460 (Service). Calls to 304 ring the extension normally. Calls to 460 ring the Multiple Directory Number key. This lets the user at extension 304 differentiate Sales calls from Service calls.

Call Coverage

A keyset can have Multiple Directory Number keys set up as Call Coverage keys for co-worker's extensions. The Call Coverage key lights when the co-worker's extension is busy and flashes slowly when the co-worker has an incoming call. The Call Coverage key can ring immediately when a call comes into the covered extension, ring after a delay or not ring at all. In addition, the keyset user can press the Call Coverage key to intercept their co-worker's incoming call. The user can also go off hook and press the Call Coverage key to call the covered extension.

If the covered extension is busy and they receive a second call, the covering extension's Call Coverage key will flash. The user just presses the flashing key to pick up the call.

The Call Coverage keys follow the extension's Do Not Disturb and Off-Hook Signaling programming. These keys do not, however, indicate the lamping for extensions in DND. If this is required, a Hotline key can be used instead.

Place and Receive Calls on Call Coverage/Multiple Directory Number Keys

Multiple Directory Number keys/Call Coverage keys can be used three separate ways, depending on how the key is defined in Program 15-02-21.

- a DSS key to the extension and for receiving incoming calls
- answering incoming calls with the ability to place outgoing ICM or CO calls
  OR
- just for receiving incoming calls

A keyset can have Multiple Directory Number/Call Coverage keys for many different extensions and virtual extensions. In addition, co-workers can share the same Multiple Directory Numbers. For example, everyone in the Service Department could have a key for the Sales Department's virtual extension.

Auto Off-Hook Answer and Ringing Line Preference for Call Coverage Keys

An extension's Call Coverage Keys can be programmed to allow the user to simply pick up the handset to answer a ringing call. So as not to interfere with ringing trunk or Intercom calls, the system automatically assigns Call Coverage Key ringing with the lowest answering priority. If multiple Call Coverage Keys are ringing, answering priority is set first by the assigned ring pattern and then by the key position.

Virtual Extension vs. Ring Groups

As the system does not allow voice mail calls to ring Ring Groups, a virtual extension can be created which will allow you to direct more than one call to the extension. The system will allow up to 10 calls to be queued. When you program a Call Coverage Key for that extension to ring, the next call can then be answered.

This could allow a voice mail caller to dial the virtual extension and have all the extensions with the same virtual extension key ring. The system can be programmed as follows:

- Program 11-04, 15-01-01: Assign a virtual extension number and name (example: virtual port 1, extension 5400, Sales, virtual port 2, extension 5401, Customer Service, etc.).
- Program 11-07: Assign a Department Group Pilot number for the virtual extension (example: Department Group Number 2 = 5555).
- Program 15-07: Assign a Call Coverage key (*03) to an extension for the virtual extension number assigned.
- Program 16-02: Department Group Assignment for Virtual Extensions (example: virtual extension 5400 - group 2, virtual extension 5401 - group 2).

The end user can then simply transfer the call to the virtual extension number (example: 5555). The call is in placed in queue and will be answered in turn as soon as the extension is available.

Call Forward Off-Premise From CO Trunk/Voice Mail Transfer Possible

The system allows virtual extensions to use Fixed Call Forward Off-Premise with normal central office trunks. With some older software, this was only possible using DIL or DID trunks. This enhancement allows a call transferred by the voice mail to a virtual extension to be forwarded off-premise.

Conditions

(A.) More than one extension can share the same Multiple Directory Number.
(B.) An extension can have more than one Multiple Directory Number (limited only by the number of available function keys).
(C.) The system follows either the Multiple Directory Number's Class of Service or the keyset's Class of Service, depending on the program number.

Programs Which Follow The Multiple Directory Number COS	
• 20-07-04 : Storing Abbreviated Dial	• 20-10-03 : Group Call Pickup for Specific Group
• 20-08-01 : Intercom Calls	• 20-10-04 : Group Call Pickup
• 20-08-02 : Trunk Calls	• 20-11-06 : Unscreened Transfer
• 20-08-03 : Common Abbreviated Dial	• 20-11-11 : Automatic On-Hook Transfer
• 20-08-04 : Group Abbreviated Dial	• 20-13-01 : Long Conversation Alarm
• 20-08-12 : Department Group Step Calling	• 20-13-04 : Call Forwarding / DND Override
• 20-10-01 : Group Call Pickup (within group)	• 20-13-13 : Continued Dialing
• 20-10-02 : Call Pickup (another group)	

Programs Not Supported by the Multiple Directory Number Key	
• 20-07-03 : Time Setting	• 20-11-09 : Group Hold Initiate
• 20-09-05 : Setting Handsfree Answer-back/Forced Intercom Ringing	• 20-11-10 : Group Hold Answer
• 20-11-02 : Call Forward When Busy	• 20-11-11 : Automatic On-Hook Transfer
• 20-11-03 : Call Forward When Unanswered	• 20-11-12 : Call Forwarding Off-Premise
• 20-11-04 : Call Forward (Both Ringing)	• 20-11-15 : VRS Personal Greeting
• 20-11-05 : Call Forward with Follow Me	• 20-11-16 : Call Redirect
• 20-11-07 : Transfer Without Holding	• 20-11-18 : No Recall
• 20-11-08 : Transfer Information Display	• 20-11-19 : Normal/Extended Park
For all other features, the COS for the keyset with the Multiple Directory Number is followed.	

Service Codes Supported by the Multiple Directory Number Key
Program 11-11
• Item 09 - Answer Message Waiting (*0)
• Item 10 - Cancel All Messages Waiting (873)
• Item 11 - Cancel Message Waiting (871)
• Item 18 - Background Music On/Off (825)
• Item 34 - Temporary Toll Restriction Override (875)
Program 11-12
• Item 01 - DND / Forward Override Call [Bypass Call] (807)
• Item 03 - Call Waiting [Off-Hook Signaling] (809)
• Item 05 - Cancel Camp-On (870)
• Item 06 - Switching Voice/Signal Call (812)
• Item 07 - Step Call (808)
• Item 09 - Change to STG All Ring (no setting)
• Item 10 - Common Abbreviated Dialing (#2)
• Item 11 - Group Abbreviated Dialing (#4)
• Item 12 - Last Number Dialing (#5)
• Item 13 - Saved Number Dialing (815)
• Item 14 - Trunk Group Access (804)
• Item 15 - Specified Trunk Access (#9)
• Item 19 - Internal Group Paging (801)
• Item 20 - External Paging (803)

Service Codes Supported by the Multiple Directory Number Key
• Item 21 - Meet-Me Answer to Specified Internal Page Group (864) • Item 22 - Meet-Me Answer to External Paging (865) • Item 23 - Meet-Me Answer in Same Paging Group (863) • Item 26 - Call Pickup for Specified Group (868) • Item 27 - Call Pickup (*#) • Item 28 - Call Pickup for Another Group (869) • Item 31 - Park Orbit (#6) • Item 36 - Door Box Access (802)
Other service codes are not supported by the Multiple Directory Number key.

Programmable Function Keys Not Supported by the Multiple Directory Number Key
• 03 - DND Key • 07 - Conference Key • 09 - Day/Night Mode Change • 11 - Call Forward Busy • 12 - Call Forward, No Answer • 13 - Call Forward, Busy/No Answer • 14 - Call Forward, Both Ringing • 15 - Call Forward, Follow-Me • 18 - Text Message Setup • 32 - Meet-Me Conference • 35 - Camp-On/Callback • 39 - Room Monitoring • 42 - Secretary Call Pickup (calls to manager)

Default Setting

Disabled.

Programming

- **11-04-01 : Virtual Extension Numbering**
  Assign extension numbers to Multiple Directory Numbers.
  - Aspire S Virtual Extension Ports: 1-24
  - Aspire Virtual Extension Ports: 1-256
- **11-07-01 : Department Group Pilot Numbers**
  In order to queue multiple calls to a busy virtual extension key, assign a pilot number to each Department Group set up in Program 16-02. The pilot number is the number users dial for the Department Group when transferring a call. If the extensions in the group are busy, the call will be placed in queue until an extension is available.
- **14-05-01 : Trunk Groups**
  Assign trunks to trunk groups.
  - Aspire S Trunk Groups: 1-8
  - Aspire Trunk Groups: 1-100
- **14-06-01 : Trunk Group Routing**
  Set up an outbound routing table for trunk groups assigned in Program 14-05.
  - Aspire S Trunk Group Routes: 1-8
  - Aspire Trunk Group Routes: 1-100
- **15-01-01 : Basic Extension Data Setup - Extension Name**
  Assign names to virtual extensions.
- **15-01-02 : Basic Extension Data Setup - Outgoing Trunk Line Preference**
  Set this option to determine if an extension user seizes Prime Line when they lift the handset (0=disable, 1=enable).
- **15-01-05 : Basic Extension Data Setup - Restriction for Outgoing Disable on Incoming Line**
  Enable (1) or disable (0) supervised dial detection for an extension.
- **15-02-21 : Multi-Line Telephone Basic Data Setup, Virtual Extension Access Mode**
  Determine whether an extension's Virtual Extension/Call Coverage Key should be used as a DSS key to the extension and for receiving calls (0), answering incoming calls and ability to place outgoing ICM or CO calls (1), or just receiving incoming calls (2). If the key is to be used for outgoing calls, the extension number of the key must be a real extension or virtual extension number. When the extension number of the key is a real extension number, when the key is pressed, the real extension cannot be used.
- **15-07-01 : Programmable Function Keys**
  Assign function keys for Multiple Directory Numbers (code *03 + extension number).
- **15-08-01 : Incoming Virtual Extension Ring Tone Setup**
  Assign a ring tone (0-4) to each extension port and virtual extension port assigned to a Multiple Directory Number key. If ringing is enabled for the key in Program 15-09, the key rings with the tone set in this program. Each port can have one of four different rings.
- **15-09-01 : Virtual Extension Ring Assignment**
  Individually program an extension's Multiple Directory Number function keys to either ring (1) or not ring (0).
- **15-10-01 : Incoming Virtual Extension Ring Tone Order Setup**
  Set the priority (1-4) for the Multiple Directory Number Ring Tones set in Program 15-08. When Multiple Directory Number calls ring an extension simultaneously, the tone with the highest priority (e.g., 1) rings. The other keys just flash.
- **15-11-01 : Virtual Extension Delayed Ring Assignment**
  Individually program an extension's Multiple Directory Number keys for Delayed Ringing (1) or Immediate Ringing (0). Also see Program 20-04-03 below.

- **16-01-08 : Department Group Basic Data Setup - Queuing for Department Group Calls**
  In order to queue multiple calls to a busy virtual extension key, set this option to an entry of "1" - "0" is used for no queueing.
- **16-01-10 : Department Group Basic Data Setup - Hunt Type**
  In order to queue multiple calls to a busy virtual extension key, set the type of hunting for the Department Group. This entry should be either "1" or "3" in order for the virtual extension to receive calls when busy.
- **16-02-01 : Department Group Assignment for Extensions**
  In order to queue multiple calls to a busy virtual extension key, add the virtual extensions to the Department Group defined in 11-07-01.
- **20-04-01 : System Options for Virtual Extensions - Virtual Extension Key Operation Mode**
  With an entry of "0", after placing a call on hold which is on a virtual extension key, once the call is picked up, the call comes off the virtual extension key and appears on the line or loop key.
  With an entry of "1", after placing a call on hold which is on a virtual extension key, once the call is picked up, the call will remain on the virtual extension key.
- **20-04-03 : System Options for Virtual Extensions - Call Coverage Delay Interval**
  Multiple Directory Number/Call Coverage Keys set for Delayed Ringing (see Program 15-11 above) ring the covering extension after this interval.
- **20-06-01 : Class of Service for Extensions**
  Assign a COS to each virtual extension (1-15). A virtual extension can have a different COS from the real extension number of the phone.
- **20-07-10 : Class of Service Options (Administrator Level) - Programmable Function Key Programming (Appearance Level)**
  Determine whether an extension's Class of Service allows a user to set up a Call Coverage key using service code 852 (Enable=1, Disable=0).
- **20-10-08 : Class of Service Options (Answer Service) - Auto Off-Hook Answer for Call Coverage Keys**
  Determine whether an extension's Call Coverage Key should be automatically answered when the handset is lifted (0=disabled, 1=enabled). With multiple ringing calls, Programs 15-08, 15-10 and 23-04 determine which call is answered first.
- **20-13-27 : Class of Service Options (Supplementary Service) - Busy on Seizing Virtual Extension**
  If set to '1', you can call a busy extension which is talking on a virtual extension key. Program 20-13-06 (Call Waiting) must be set to "0" for this option to work.
- **21-01-15 : System Options for Outgoing Calls - Outgoing Disable on Incoming Line**
  Enable (1) or disable (0) the Outgoing Disable on Incoming Line feature.
- **21-01-16 : System Options for Outgoing Calls - Supervise Dial Detection Timer**
  With the Outgoing Disable on Incoming Line feature, if dial tone is not detected after the extension answers an incoming line, the system determines the call is unable to complete and releases the DTMF receiver (0-64800 Seconds).
- **21-01-17 : System Options for Outgoing Calls - Restriction Digit in Outgoing Disable on Incoming Line**
  With the Outgoing Disable on Incoming Line feature, determine the number of digits (0-9) to be dialed before the call should be disconnected.
- **21-02-01 : Trunk Group Routing for Extensions**
  Assign the routes set in Program 14-06 to extensions.
  ➪ Aspire S: Trunk Group Routing 1-8
  ➪ Aspire: Trunk Group Routing 1-100
- **21-04-01 : Toll Restriction Class**
  For each virtual extension, assign a Toll Restriction Class for reach Night Service mode. A virtual extension can have a different Toll Restriction Class from the real extension number of the phone.

- **21-13-01 : ISDN Calling Party Number Setup for Extensions**
  Assign each extension a Calling Party Number (maximum 16 digits per entry). The calling number is the subscriber number of the dial-in number. When a call is made by an extension which does not have an Extension Calling Number assigned (Program 21-12), the system sends the calling number for the ISDN trunk defined in Program 21-13.
- **23-04-01 : Ringing Line Preference for Virtual Extensions**
  When an extension has a virtual extension assigned to a Programmable Function Key, this program determines the priority (1-4) for a Ring Group for automatically answering the ringing calls when the handset is lifted. If "00" is selected for the Ring Group, when the user lifts the handset, the user will answer a ringing call from any group.
  ⇨ Aspire S: Ring Groups 1-8
  ⇨ Aspire: Ring Groups 1-64

Related Features

Automatic Call Distribution (ACD)
Extensions can have Call Coverage Keys for ACD Groups. Refer to *Multiple Directory Numbers / Call Coverage for ACD Groups* in the ACD Manual (P/N 0893202) for the specifics.

Call Forwarding, Off-Premise
Multiple Directory Numbers/Call Coverage Keys can be forwarded off-premise.

Caller ID
Call Coverage Keys can receive Caller ID.

Central Office Calls, Placing
If, for example, extension 301 dials a trunk access code while using the outgoing virtual extension key, extension 301's trunk access route is used for the call.

Class of Service
Class of Service options apply to Multiple Extension Appearances.

Conference
Multiple Directory Numbers/Call Coverage Keys cannot be used to add parties to a Conference call.

Department Calling
Multiple Extension Appearances can be in Department Calling Groups.

Do Not Disturb / Off-Hook Signaling
A Call Coverage Key follows DND and Off-Hook Signaling programming for an extension.

Group Call Pickup
Multiple Extension Appearances can be in Call Pickup Groups.

ISDN Compatibility
The Calling Party Number for the keyset or virtual port can be programmed.

Line Preference
An extension user can answer an outside call on a Call Coverage Key just by lifting the handset.

Programmable Function Keys
This feature requires uniquely programmed function keys.
Trunk Group/Loop Key (*02), Virtual Extension (*03), and Loop Key (*05) codes can not be programmed on a DSS Console as the system does not allow entry of the additional data required.

Station Message Detail Recording
If a keyset makes an outgoing call using the Multiple Directory Number/virtual extension key, the SMDR indicates the name of the outgoing virtual extension port - not the name of the keyset.

Operation

To answer a call ringing a Multiple Directory Number:

1. Press flashing Multiple Directory Number key (PGM 15-07 or SC 852: *03 + ext.).

To place a call to a Multiple Directory Number (including a Call Coverage key):

1. Press idle CALL key.
2. Dial Multiple Directory Number number or press Multiple Directory Number key.

To place a call from a Multiple Directory Number (including a Call Coverage key):

1. Press the Multiple Directory Number key.
   ICM dial tone is heard.
2. Place an intercom call or dial a trunk access code to seize an outside line and place your call.

To set up a Call Coverage Key:

1. Press idle CALL key or SPK key.
2. Dial 852.
3. Press the programmable key you want to program.
   The previously programmed entry displays.
4. Dial *03.
5. Dial the number of the extension you want to cover.
6. Press HOLD once for Immediate Ring
   To set for Delayed Ring, skip to Step 8.
7. Dial the Mode number(s) in which the key will be used.
   1=Day 1
   2=Night 1
   3=Midnight 1
   4=Rest 1
   5=Day 2
   6=Night 2
   7=Midnight 2
   8=Rest 2
8. Press HOLD to set up Delayed Ring
   OR
   Skip to Step 10.
9. Dial the Mode number(s) in which the key will be used.
   1=Day 1
   2=Night 1
   3=Midnight 1
   4=Rest 1
   5=Day 2
   6=Night 2
   7=Midnight 2
   8=Rest 2
10. Press SPK to hang up.

Aspire S	Aspire M/L/XL
• Available. • Using a system tone for MOH requires software 2.63+.	• Available. • Using a system tone for MOH requires software 2.63+.

Description

Music on Hold (MOH) sends music to calls on Hold and parked calls. The music lets the caller know that his call is waiting, not forgotten. Without Music on Hold, the system provides silence to these types of calls. The Music on Hold source can be internal (synthesized) or from a customer-provided music source (i.e., tape deck, receiver, etc.). The customer-provided source can connect to a PGDAD module analog port or to a connector on the CPRU PCB.

Option Available for Using System Tone

The Music on Hold feature has been enhanced to allow callers to hears a system tone instead of playing the internal or external music.

Note: In accordance with U.S. copyright law, a license may be required from the American Society of Composers, Authors and Publishers (ASCAP) or other similar organizations, if radio, television broadcasts or music other than material not in the public domain are transmitted through the Music on Hold feature of telecommunications systems. NEC America hereby disclaims any liability arising out of the failure to obtain such a license.

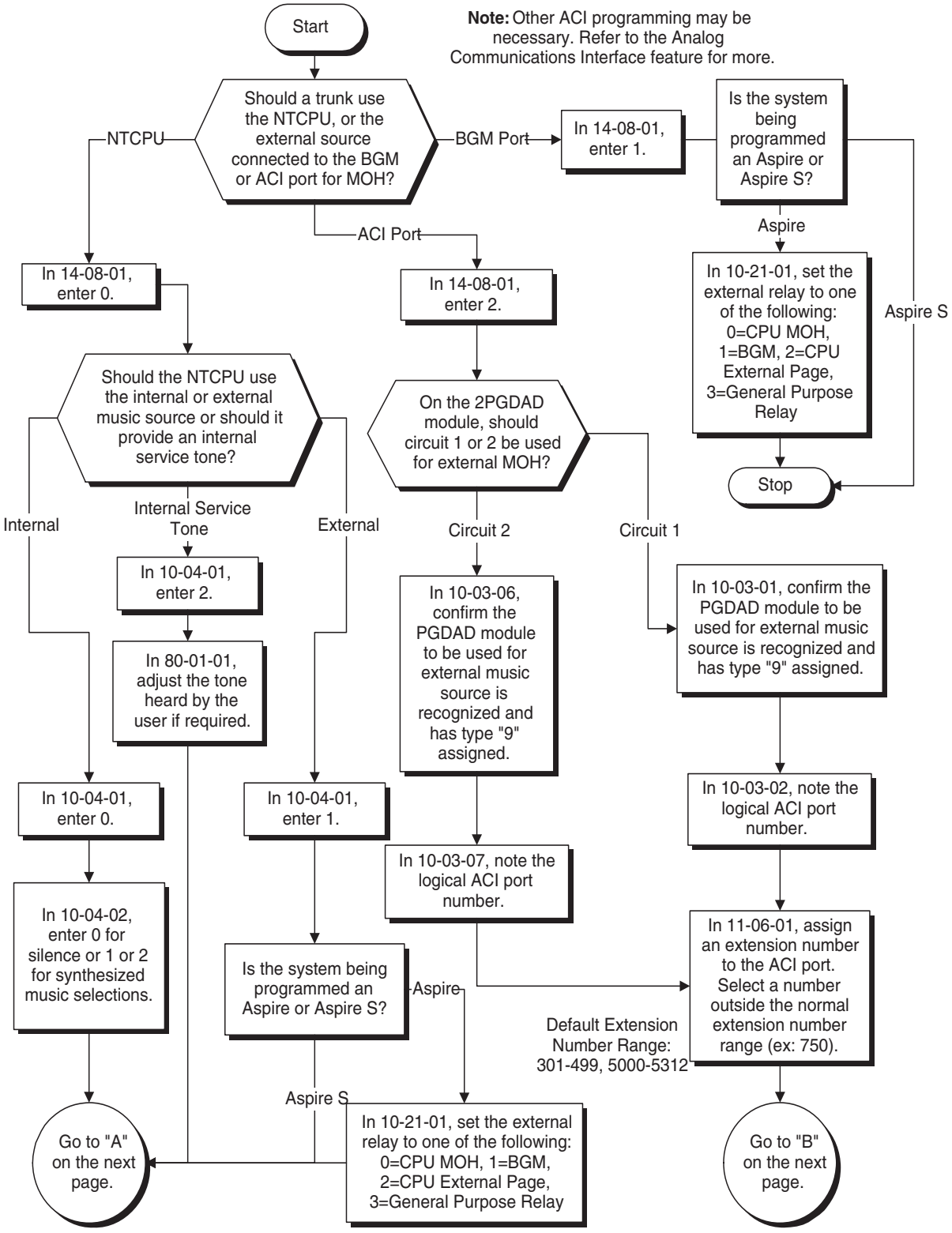
Conditions

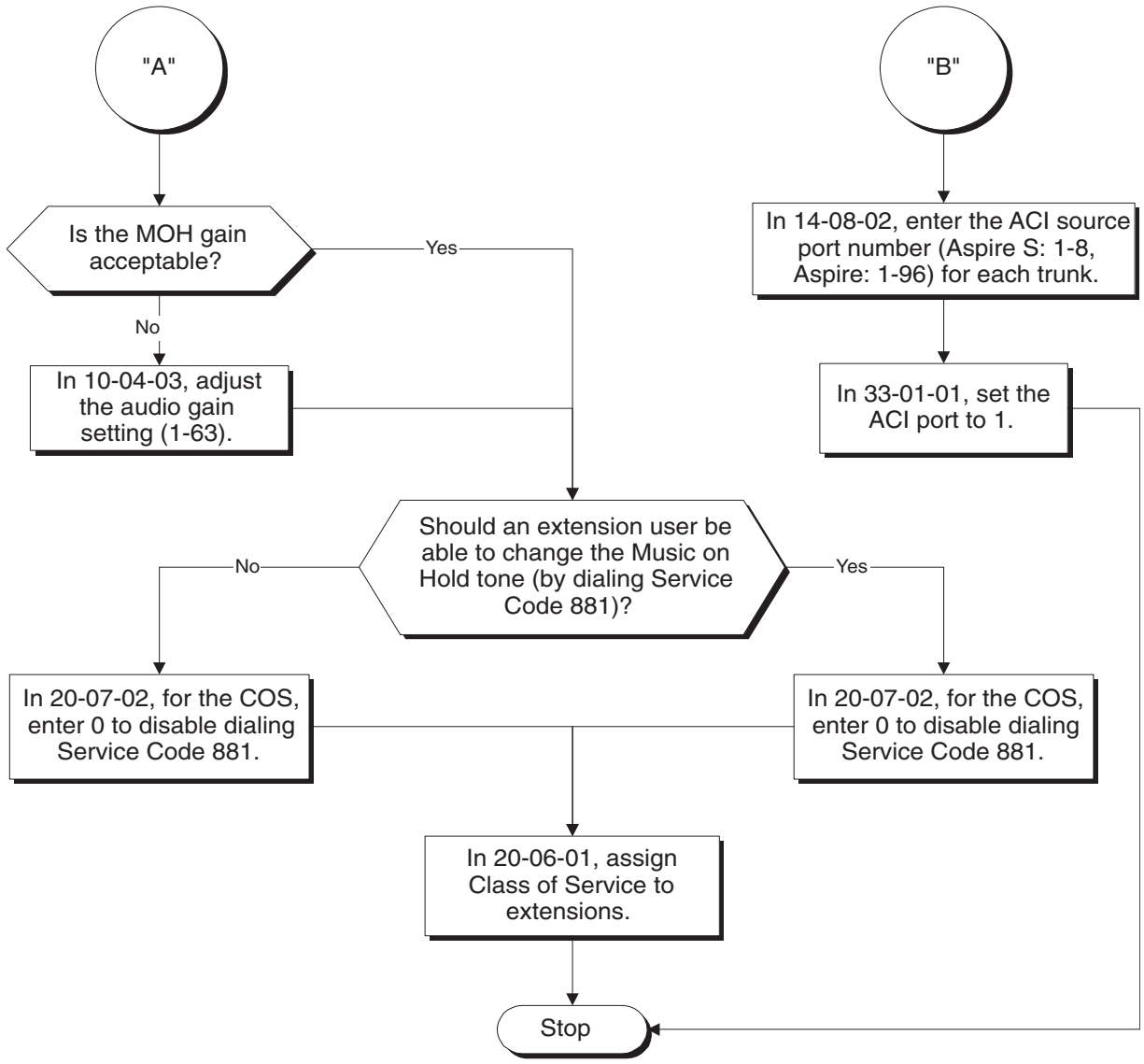
None.

Default Setting

Disabled.

Programming




"A"
"B"
Is the MOH gain acceptable?
Yes
No
In 10-04-03, adjust the audio gain setting (1-63).
In 14-08-02, enter the ACI source port number (Aspire S: 1-8, Aspire: 1-96) for each trunk.
In 33-01-01, set the ACI port to 1.
Should an extension user be able to change the Music on Hold tone (by dialing Service Code 881)?
No
Yes
In 20-07-02, for the COS, enter 0 to disable dialing Service Code 881.
In 20-07-02, for the COS, enter 0 to disable dialing Service Code 881.
In 20-06-01, assign Class of Service to extensions.
Stop

Programming (Cont'd)

- **10-04-01 : Music on Hold Setup - Music on Hold Source Selection**
  Determine whether the system should use internal (0), external (1) music source, or internal service tone (2). If set to '1', Program 14-08-01 must be set to '0' or '1'.
- **10-04-02 : Music on Hold Setup - Music Selection for Internal Source**
  Set the Music on Hold selection. The options are 0 (silence), 1-2 (synthesized music selections).
- **10-04-03 : Music on Hold Setup - Audio Gain Setup**
  Set the Music on Hold audio gain (1-63).
- **10-21-01 : NTCPU Hardware Setup - External Source Control Switch Selection**
  Specify the function of the relay switch for external tone source control (0=external/internal MOH source, 1=BGM source, 2=external speaker, 3=general purpose relay).
- **14-08-01 : Music on Hold Source for Trunks**
  For each trunk, set the Music on Hold source (0=NTCPU, 1=Customer-provided source connected to BGM port, 2=Customer-provided source connected to ACI port).
- **14-08-02 : Music on Hold Source Port Number**
  If the MOH type is "2" in 14-08-01, for each trunk enter the ACI source port number (1 – 96).
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.
- **20-07-02 : Class of Service Options (Administrator Level) - Changing the Music on Hold Tone**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to change the Music on Hold tone (Service Code 881).
- **33-01-01 : ACI Port Type Setup**
  If ACI software port is designated for MOH in 14-08-01, set port's function to 1 (input).
- **80-01-01 : Service Tone Setup, Music On Hold Tone, Service Tone 64**
  If required, change the tone heard by the user when placed on hold when Program 10-04-01 set to "2".

When Using a PGDAD Module:

- **10-03-01 : PCB Setup - Terminal Type**
  If a PGDAD module is used for the external music source, the module will automatically be assigned type '9' if the jumper straps in the module have been set prior to connecting it to the system. If another type has been assigned, disconnect the PGDAD from the system, delete the type setting, and, with the jumper straps positioned correctly in the PGDAD module, reconnect the module to the system. Refer to the Aspire Hardware Manual (P/N 0893100) for the jumper strap settings.
- **11-06-01 : ACI Extension Numbering**
  Each ACI port must be assigned an extension number. Use this program to assign the extension numbers to ACI software ports. Select a number outside of the normal extension number range.
  Aspire S: ACI Ports 1-8
  Aspire: ACI Ports 1-96
- **11-08-01 : ACI Group Pilot Number**
  Assign pilot numbers to ACI groups. When a user dials the pilot number, they reach an available ACI software port within the group.
  Aspire S: ACI Groups 1-4
  Aspire: ACI Groups 1-16

- **33-01-01 : ACI Port Type Setup**
  Set each ACI software ports for input (1) or input/output (2). Use input ports for Music on Hold sources. Use output ports for External Paging/ringer control.
  Aspire S: ACI Ports 1-8
  Aspire: ACI Ports 1-96
- **33-02-01 : ACI Department Calling Group**
  Assign ACI software ports to an ACI Department Group. This lets ACI callers connect to ACI software ports by dialing the group's pilot number (set in Program 11-08).
  Aspire S: ACI Ports 1-4, ACI Groups 1-4
  Aspire: ACI Ports 1-8, ACI Groups 1-16

Note: Refer to the "Analog Communications Interface (ACI)" feature for additional information.

Related Features

Single Line Telephones

Single line telephones cannot change the Music on Hold tone.

Operation

To change the Music on Hold tone:

1. Press idle CALL key.
2. Dial 881.
3. Dial Music on Hold tone code:
   00 No Tone
   01 General
   02 Holiday
4. Press SPK to hang up.

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Additional characters available.	• Additional characters added in software 2.05+.

Description

Extensions and trunks can have names instead of just circuit numbers. These names show on a key-set's display when the user places or answers calls. Extension and trunk names make it easier to identify callers. The user does not have to refer to a directory when processing calls. A name can be up to 12 digits long, consisting of alphanumeric characters, punctuation marks and spaces.

Additional Characters Available

When using the Name Storing feature, the system now provides additional characters which can be used. These characters are available with any option which allows Name Storing - Abbreviated Dialing, One-Touch Keys, Extension Name, Trunk Naming.

Under key 1:

Á À Â Ã Ç É Ê ì ó

Under key 0:

ô Õ ú ä ö ü a e θ

Under key *:

π ∑ σ Ω ∞ ¢ £

With this change, to enter a space or accept an entry, the # key is used. However, this key will only work when performing user programming (such as Name Storing for an extension, service code 800). When in system programming, the right arrow soft key must be used to advance the cursor.

Conditions

None

Default Setting

Enabled.

Programming

- **14-01-01 : Basic Trunk Data Setup - Trunk Name**
  Program names for system trunks.
- **15-01-01 : Basic Extension Data Setup - Extension Name**
  Program name for system extensions (ports 001-499, 5000-5312).
- **15-07-01 : Programmable Function Keys**
  Assign an Extension Name Change key (55) to extensions:
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.
- **20-09-02 : Class of Service Options (Incoming Call Service) - Trunk Name Display, Incoming**
  In an extension's Class of Service, enable (1) or disable (0) the displaying of a trunk's name/number when the trunk is ringing.
- **20-13-21 : Class of Service Options (Supplementary Service) - Extension Name**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to program their name.

Related Features

Directory Dialing

Display telephones use extension names for Directory Dialing.

Single Line Telephones

Single line extensions cannot program names.

Operation

To program an extension's name:

1. Press idle CALL key.
2. Dial 800
   OR
   Press Extension Name Change key (PGM 15-07 or SC 851: 55).
3. Enter the extension number to be named.
4. Enter name (see below).
   Your name can be up to 12 digits maximum.
5. Press HOLD.
6. Press SPK to hang up.

With Software Prior to 2.05:
Key for Entering Names

Use this keypad digit . . .	When you want to. . .
1	Enter characters: 1 @ [¥] ^ _ ‘ { | } ← → Press repeatedly to scroll through the list. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
2	Enter characters A-C, a-c, 2. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
3	Enter characters D-F, d-f, 3. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
4	Enter characters G-I, g-i, 4. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
5	Enter characters J-L, j-l, 5. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
6	Enter characters M-O, m-o, 6. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
7	Enter characters P-S, p-s, 7. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
8	Enter characters T-V, t-v, 8. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
9	Enter characters W-Z, w-z, 9. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
0	Enter characters: 0 ! “ # $ % & ‘ ( ) Press repeatedly to scroll through the list. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
*	Enter characters: * + , - . / : ; < = > ? Press repeatedly to scroll through the list. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
Soft Key Left/Right Arrows	Accepts an entry (only required if two letters on the same key are needed - ex: **TO**M) and moves cursor in the arrows direction.
CONF	Clear the character entry one character at a time.
CLEAR	Clear all the entries from the point of the flashing cursor and to the right.

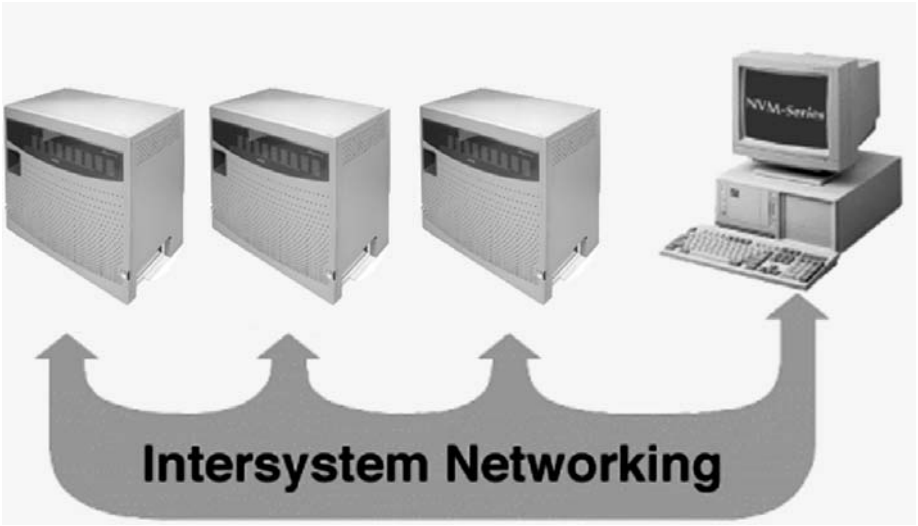
With Software 2.05+: Key for Entering Names	
Use this keypad digit . . .	**When you want to. . .**
1	Enter characters: 1 @ [¥] ^ _ ` { | } → ← Á À Â Ã Ç É Ê ì ó
2	Enter characters A-C, a-c, 2.
3	Enter characters D-F, d-f, 3.
4	Enter characters G-I, g-i, 4.
5	Enter characters J-L, j-l, 5.
6	Enter characters M-O, m-o, 6.
7	Enter characters P-S, p-s, 7.
8	Enter characters T-V, t-v, 8.
9	Enter characters W-Z, w-z, 9.
0	Enter characters: 0 ! " # $ % & ' ( ) ô o ú ä ö ü α ε θ
*	Enter characters: * + , - . / : ; < = > ? π ∑ σ Ω ∞ ¢ £
#	# = Accepts an entry (only required if two letters on the same key are needed - ex: T**OM**). Pressing # again = Space. (In system programming mode, use the right arrow soft key instead to accept and/or add a space.)
CONF	Clear the character entry one character at a time.
CLEAR	Clear all the entries from the point of the flashing cursor and to the right.

When using i-Series telephones on the Aspire system, not all the same characters are available. Refer to the following chart for the i-Series characters:

With Software 2.05+ and i-Series Phones: Key for Entering Names	
Use this keypad digit . . .	**When you want to. . .**
1	Enter characters: 1 @ [¥] ^ _ ` { | } → ← å blank blank blank blank blank blank blank blank
2	Enter characters A-C, a-c, 2.
3	Enter characters D-F, d-f, 3.
4	Enter characters G-I, g-i, 4.
5	Enter characters J-L, j-l, 5.
6	Enter characters M-O, m-o, 6.
7	Enter characters P-S, p-s, 7.
8	Enter characters T-V, t-v, 8.
9	Enter characters W-Z, w-z, 9.
0	Enter characters: 0 ! " # $ % & ' ( ) blank blank blank ä ö ü α ε θ
*	Enter characters: * + , - . / : ; < = > ? π ∑ σ Ω ∞ ¢ £
#	# = Accepts an entry (only required if two letters on the same key are needed - ex: T**OM**). Pressing # again = Space.
CONF	Clear the character entry one character at a time.
CLEAR	Clear all the entries from the point of the flashing cursor and to the right.

Aspire S	Aspire M/L/XL
• Networking with VoIP or BRI available. PRI Networking is not available.	• Two System Networking available with software 1.07+. • Multiple Site Networking available with software 2.08+. • This feature requires the Basic NTCPU (P/N 0891002) with the PAL upgrade or the Enhanced NTCPU (P/N 0891038).
• Keep Alive options added with software 1.11+.	• Keep Alive options added with software 1.11+.
• PRI Channel Limitation is not available.	• PRI Channel Limitation added with software 2.09+.
• Transfer Network trunk to local voice mail using voice mail key requires software 3.05+.	• Transfer Network trunk to local voice mail using voice mail key requires software 3.05+.
• Enhanced Fax Over Networking requires software 4.93+.	• Enhanced Fax Over Networking requires software 4.93+.

Description



Use the built in networking feature to integrate multiple phone systems into a single “virtual” communications system. Interconnected with ISDN PRI or BRI or VoIP, each phone system becomes a node on the network that can communicate with any other phone system node.

- **Centralized Network Attendant**
  Centralized Network Attendant allows multiple networked systems to share a single centralized attendant. This centralized attendant can receive calls from and transfer calls to any destination in any network node. Unanswered calls recall and route as if they were part of a single, much larger system.

- **Flexible Network Routing**
  Use network routes to set up ISDN and VoIP networking between many separate systems - or use mixed (ISDN or VoIP) networking per system for greater network performance. Data tables in the system program define the routing for each network node. These tables are easily customized to meet the requirements of each networking configuration.

  Users may place an intercom call or transfer a call to any extension at any location by simply dialing an extension number. The system analyzes each extension number received and determines how to route the call to its final destination. The feature which handles this route selection is called Flexible Routing (F-Routing). F-Routing also has the ability to select alternate routes to the destination extension if the primary destination is busy. Up to 48 routes are available for networking. Once an extension number is dialed, the system checks the routing, accesses the assigned trunk group and places the call. Each extension is assigned a route or routes that decides which trunk group to access and any modified dialed data if required.

  When an Aspire system is connected via a VoIP connection to an i-Series system in a tie-line type setup, in order to transfer calls from the Aspire system to the i-Series, in addition to the VoIP programs specified in the VoIP feature (page 643), set up the Flexible Routing Tables as follows:

  - **Program 44-05-01 : ARS/F-Route Table** ; Table Number 1 = 9 (Trunk Group for Aspire VoIP Trunk)
  - **Program 10-23-02 : H.323 System Interconnection, IP Address** ; System Number 3 = 172.16.9.10 (IP Address for i-Series System)
  - **Program 10-23-04 : H.323 System Interconnection, Alias Address** ; System Number 3 = 4 (For Dial 4 Calls)

  With this programming, the Aspire system will wait for the Trunk Interdigit Timer to expire before dialing out after an i-Series extension (4xxx) is dialed.

  If the F-Routing is set up with Program 44-05-01; Table Number 1 set to 103 (Networking) and Program 10-27-01; System ID 3 = 172.16.9.10 (IP Address for i-Series), though the i-Series system will be able to transfer calls to the Aspire, the Aspire system will not be able to transfer to the i -Series.

PRI Networking With Two Local Voice Mails, Masters Must Have Different Numbering

When programming a PRI network with each system having their own local voice mail, the master numbers for the voice mails must be defined in different series in Program 11-01. The second digit of the extension number can not be the same. For example, 700 and 701 will not work, however 700 and 710 can be used.

With Two Local Voice Mails, Network ID Must Match in Programming

With a networked system, with each system having their own voice mail, in order for users to properly connect to the correct voice mail when leaving a message, the programming must be set as described below.

PRI Networking

Each node on a networked Aspire system is defined in **Program 10-03-11 : PCB Setup - Networking System Number** for the desired PRI slot. In the local system (Site 1), **Program 11-01-01 : System Numbering** has a digit defined for networking (example: 7x=8 (network)).

The ID entry in Program 10-03-11 must match the ID set in Program 11-01-01. Otherwise, callers could not press "8" to leave a message at a networked user's voice mail. For example:

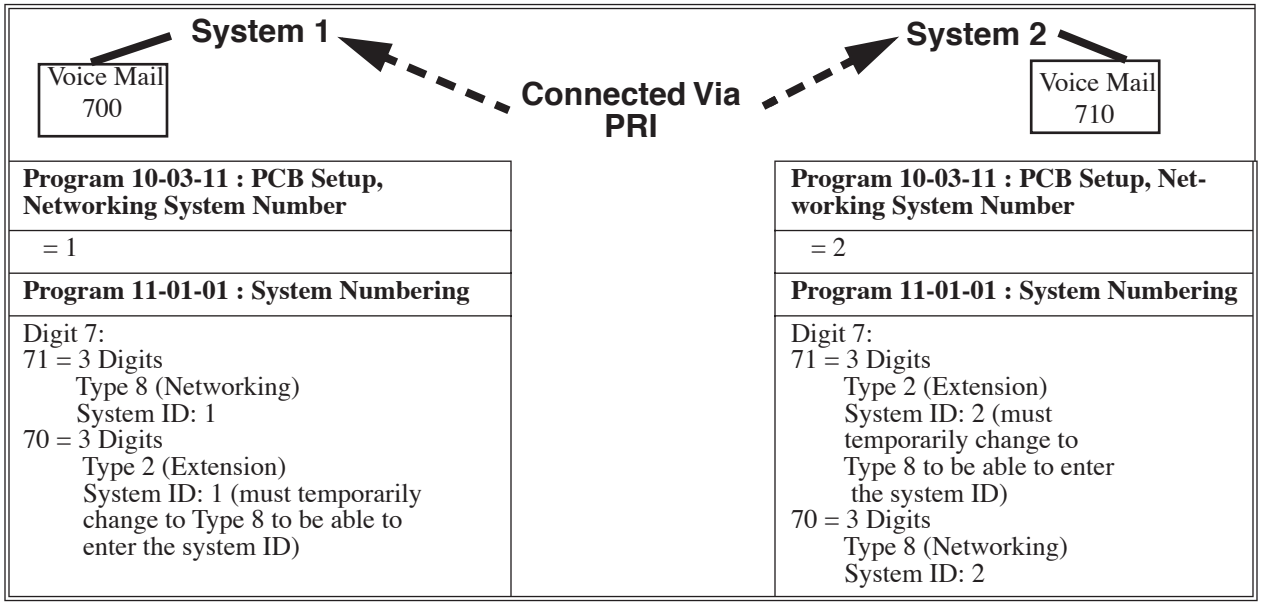
- In Site 1 in **Program 10-03-11 = 1**, **Program 11-01-01 7X=8, ID = 2**.
  When Site 1's extension 301 calls Site 2's extension 401, then presses digit "8", the user would hear a reorder tone.
- In Site 1 in **Program 10-03-11 = 1**, **Program 11-01-01 7X=8, ID = 1**.
  When Site 1's extension 301 calls Site 2's extension 401, then presses digit "8", the user will hear the voice mail message for extension 401.

Note that in order to assign a system ID, the "type" must temporarily be set to "8" (networking). Once the system ID has been assigned, you can change the type to the required entry (2).

Programming

1. Set Program 11-01-01 to "8" (networking) for the local and remote voice mail master numbers and define the ID number.
2. Set the local system ID in Program 10-03-11 to the same entry defined in Program 11-01-01.
3. Change Program 11-01-01 for the local voice mail master number back to "2" (extension number).

Refer to the example below:



Program 10-03-11 : PCB Setup, Networking System Number		Program 10-03-11 : PCB Setup, Networking System Number
= 1		= 2
Program 11-01-01 : System Numbering		**Program 11-01-01 : System Numbering**
Digit 7: 71 = 3 Digits Type 8 (Networking) System ID: 1 70 = 3 Digits Type 2 (Extension) System ID: 1 (must temporarily change to Type 8 to be able to enter the system ID)		Digit 7: 71 = 3 Digits Type 2 (Extension) System ID: 2 (must temporarily change to Type 8 to be able to enter the system ID) 70 = 3 Digits Type 8 (Networking) System ID: 2

IP Networking

Each node on an IP networked Aspire system is defined in **Program 10-27-01 : IP System ID**. For example, Site A has ID 1 and Site B system has ID 2 in Program 10-27-01. ***This must be the same in every node.***

In **Program 11-01-01 : System Numbering**, if Site 1 system (system ID 1) has 700 as the master number, the entry for "70" would be "2".
Site 2 system (system ID 2) has 710 as the master number, the entry for "71" would also be "2".

Note that in order to assign a system ID, the "type" must temporarily be set to "8" (networking). Once the system ID has been assigned, you can change the type to the required entry (2).

The system ID defined in Program 11-01-01 is where the voice mail master number resides. Refer to the example below:

Program 10-23-01 : H.323 System Interconnection
System 1: Interconnect=Yes (1) IP Address: System 1
System 2: Interconnect=Yes (1) IP Address: System 2
Program 11-01-01 : System Numbering
Digit 7: 71 = 3 Digits Type 8 (Networking) System ID: 2 70 = 3 Digits Type 2 (Extension) System ID: 2 (must temporarily change to Type 8 to be able to enter the system ID)

Program 10-23-01 : H.323 System Interconnection
System 1: Interconnect=Yes (1) IP Address: System 1
System 2: Interconnect=Yes (1) IP Address: System 2
Program 11-01-01 : System Numbering
Digit 7: 71 = 3 Digits Type 2 (Extension) System ID: 2 (must temporarily change to Type 8 to be able to enter the system ID) 70 = 3 Digits Type 8 (Networking) System ID: 1

Multiple Site Networking Available

IP Networking allows for a maximum of 50 nodes. With ISDN Networking, the maximum number of nodes depends on the type of trunks used - PRI, BRI or a mixture of both. As the Aspire M/L is limited to 8 PRI PCBs, when PRI trunks are used, the limit would be 8 systems, but each system would require 8 PRI PCBs. ***PRI Networking is not available with the Aspire S.***

The recommended connection for multiple system Networking is to interconnect all the systems using hardware (required with ISDN Networking) and programming. This also allows such features as Park to be used in a network.

With VoIP Networking, the system IDs for each networked system are defined in **Program 10-27 : IP System ID**. An IP address is defined for each node, and using the Numbering Plan (Program 11-01xx), the dialed digits are analyzed, the system ID is determined, and the call is routed to the networked system.

With ISDN Networking, interconnecting the systems is accomplished by defining a master PCB and slave PCB between each system (**Program 10-03-10 : PCB Setup - Master/Slave System**). Each system must have an ISDN PCB for each other system in the network.

The networked systems can be interconnected using a combination of PRI and VoIP trunks. In this type of setup, the IP resources will received priority over the PRI resources. The PRI will be used when the IP resources are busy. The following two graphics indicate correct networking layouts. Each one provides connection between all three systems within the network.

ISDN Networking Clock Source

When using ISDN Networking (PRI or BRI) on the Aspire system, the option selected in **Program 10-03-01 : PCB Setup - ISDN Line Mode** determines the clock source for the networked connection. The following information indicates how, with each option, the clock source is obtained for the networked systems.

Option 3: Network Mode (Leased Line)
Telco sends the clock to the Master System
Telco sends the clock to the Slave System

Option 4: Network Mode (Interconnected Line)
Master System sends the clock to the Telco (or direct connection without telco) which then sends the clock to the Slave System

Option 5: (Interconnected Line, Fixed Layer 1=NT)
Master System sends the clock to the Telco
Slave System sends the clock to the Telco

Keep Alive Programs Added

Two options in Program 10-31 for use with the Networking feature are available to define the interval of Keep Alive and how many times the system resends Keep Alive.

PRI Channel Limitation

The system provides an option which can be used to assign the number of B-channels to be used for each ISDN PCB. This allows for fractional PRIs when used with multiple site networking. If this program is limited to less than "23" on one side of the network, then it also limits both inbound and outbound network calls. This also applies on the other side of the network as well.

Transfer Network Trunk to Local Voice Mail Using Voice Mail Key

With older software, IP or PRI network sites that had their own voice mail could not transfer a call into voice mail using the following steps if the inbound call originated in another site (for example, a call comes in to Site A and it translates to an extension at Site B):

- HOLD + the Voice Mail Programmable Function Key (Program 15-07 or SC 851 + 77) or MSG key (Program 15-02-26=1) + the extension number.

Using software 3.05 or higher, this operation is now possible. Keep the following in mind when using this option:

- ***Note that if you have a local and central voice mail, you can not have the same mailbox number at each node.*** If both sites have the same mailbox, when transferring a call, it will be transferred into the local voice mail and not across the network.
- As this software change allows transferring to a general message by a Single Line Set, the following two operations have different results between Networking Call Transfer and Internal Call Transfer.
  - Hold + Voice Mail Master Dial then hang up.
  - Hold + Service Code (Own Mailbox Access - *8) then hang up.

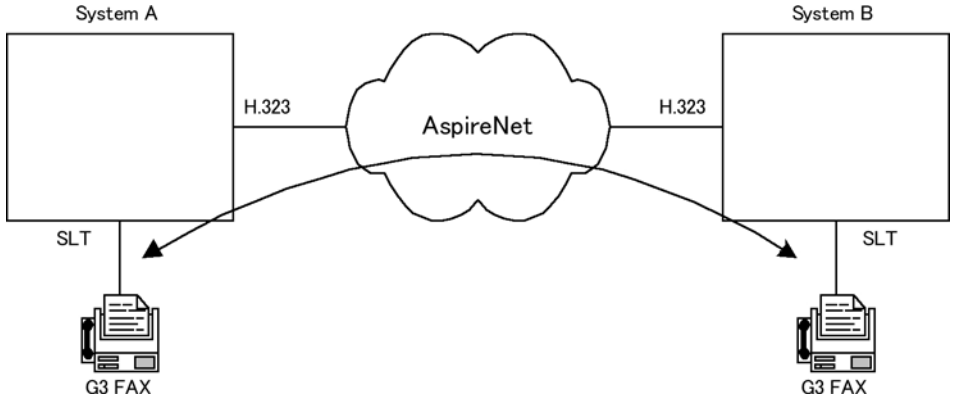
Fax Over Networking

The purpose of Aspire Networking is to be able to connect several systems and have them appear to operate as one system. However, some restrictions still apply. With older software, with Fax Over Networking using H.323 trunks, if a resource was busy, the operation could not be performed efficiently. Although the operation would continue if there were no G.711 compression, there was no resending procedure with RTP and reliability was a problem. The software now enhances this operation to provide better performance.

With IP networking, the modem signal of the fax relay now uses H.245. This enhancement only applies to G3.

Examples:

FAX Relay with SLT Extension (G3)

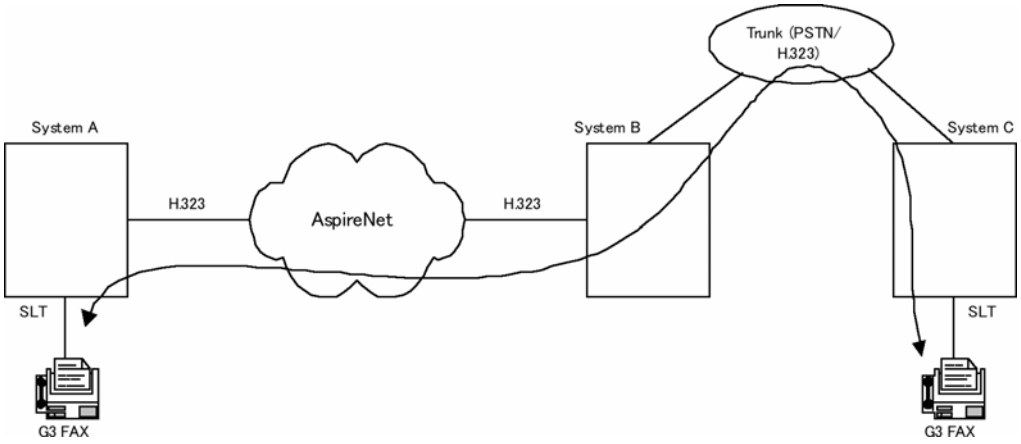


Setup:

- System A
  Program15-03-03 = G3 Fax 1 (special)
  Program 84-12-32 = 2 (Each Port Mode)

- System B
  Program 15-03-03 = G3 Fax 1 (special)
  Program 84-12-32 = 2 (Each Port Mode)

FAX Relay with Trunks



Setup:

- System A
  Program15-03-03 = G3 Fax 1 (special)
  Program 84-12-32 = 2 Each Port Mode
- System B
  Program 84-01-59 = 2 special
  Program 84-12-32 = 2 Each Port Mode
- System C
  Program15-03-03 = G3 Fax 1 (special)
  Program 84-01-59 = 2 Each Port Mode

For additional information on Networking, refer to the Aspire Networking Guide (P/N 0893207).

Conditions

Refer to the Aspire Networking Guide (P/N 0893207).

Default Setting

Disabled.

Programming

Refer to the Aspire Networking Guide (P/N 0893207).

Related Features

Refer to the Aspire Networking Guide (P/N 0893207).

Operation

Refer to the Aspire Networking Guide (P/N 0893207).

Aspire S	Aspire M/L/XL
• Available - 4 Night Service Patterns/Groups and 4 time modes.	• Available - 32 Night Service Patterns/Groups and 8 time modes.
• Toggle night modes with Programmable Function Key requires software 2.63+.	• Toggle night modes with Programmable Function Key requires software 2.63+.

Description

Night Service lets system users activate one of the Night Service modes. Night Service redirects calls to their night mode destination, as determined by Assigned and Universal Night Answer programming. The system allows Night Service to be enabled for each Night Service group, allowing each group to determine when their calls should switch modes. A user typically activates Night Service after normal working hours, when most employees are unavailable to answer calls. The system also provides external contacts to enable Night Service.

There are four (Aspire S) or eight (Aspire M/L/XL) Night Service modes:

- Day 1 / Day 2 Modes - for normal working hours
- Night 1 / Night 2 Modes - after hours (usually evening)
- Midnight 1 / Midnight 2 Modes - late at night to early in the morning
- Rest 1 / Rest 2 Modes - interval usually used for lunch

Assigned Night Answer (ANA)

With Assigned Night Answer, Night Service has calls ring extensions directly. Assigned Night Answer provides an answering point for Night Service calls. For certain applications, this may be more appropriate than Universal Night Answer. For example, you could program trunks to ring the security station telephone during off hours.

Universal Night Answer (UNA)

Universal Night Answer makes incoming calls ring over the External Paging speakers. With UNA, an employee can go to a telephone and press the flashing line key or use “Universal Answer” to pick up the call. Only ring groups calls can be used with Universal Night Answer. For more on setting up Universal Answer, turn to the “Central Office Calls, Answering” feature.

You may also be able to use Transfer to UNA. An extension user can Transfer their call to UNA (i.e., External Paging at night). Once transferred, the call will ring the External Paging speakers like any other UNA call and can be picked up at any extension. You can also set up Transfer to UNA through the VRS. This lets outside callers, answered by the VRS, dial a code to have their call ring External Paging.

Automatic Night Service

The system will allow or deny Automatic Night Service based on the extension’s class of service programming. If allowed, the calls will then route according to the service patterns programmed. The Night Service programming is stored in the RAM memory. This means that if the system is not using the Automatic Night Service, in the case of a power failure while in night mode, when the power is restored, the system will continue to be in night mode.

Programmable Function Key Can Toggle Night Modes

The software allows a Night Service Programmable Function Key (PGM 15-07 or SC 851: 09 + 0) to toggle night modes. You can determine in programming how many modes through which the user will toggle. Note that the additional data for the Programmable Function Key must be set to "0" for the toggle function to work.

Conditions

(A.) The NTCPU PCB has connections for a Night Mode switch. During installation, you connect a mechanical switch to these contacts to provide an additional method of Night Mode switching. Refer to the system hardware manual for additional details.

(B.) If the Night Mode Relay is connected and there is any voltage present (pins 2 and 7 on the NTCPU's CN17 connector), the night mode cannot be toggled using the Night Mode Programmable Function Keys.

(C.) The following programs are affected by Night Mode:

15-06	22-05	25-04	34-02
15-09	22-07	25-05	34-03
15-11	22-08	25-08	34-04
20-06	22-12	25-09	
21-02	22-13	25-10	
21-04	23-03	25-11	
21-12	25-02	25-12	
21-15	25-03	31-05	

(D.) Almost all features are affected by Night Mode except for the following:

- Dial Tone Detection
- External Alarm Sensors
- Flexible System Numbering
- Labelmaker
- Pulse to Tone conversion
- SMDR
- Volume Control

(E.) Multiple Directory Number (virtual extension) keys do not support Day/Night Mode (09) Programmable Function keys.

Default Setting

System is always in the Day Mode.

Programming

- **10-05-01 : General Purpose Relay Setup**
  Define which relay circuits (5-8) on the 2PGDAD adapter are used for General Purpose Relays.
- **10-21-01 : NTCPU Hardware Setup, External Source Control Switch Selection**
  Specify the function of the relay switch for the external tone source control (0=External MOH source, 1=BGM source, 2=External Speaker, 3=General Purpose Relay).
- **11-10-01 : Service Code Setup (for System Administrator) - Day / Night Mode Switching**
  Customize the service code (818) to be used for day/night mode switching.

- **11-12-50 : Service Code Setup (for Service Access) - General Purpose Relay**
  Define the service code to be used for turning the general purpose relay on and off (default=880).
- **12-01-01 : Night Mode Function Setup - Manual Night Service Enable**
  Allow (1) or prevent (0) any extensions from activating Manual Night Service.
- **12-01-02 : Night Mode Function Setup - Automatic Night Service Enabled**
  Enable (1) or disable (0) Automatic Night Service for the system. Make sure to set the Service Patterns in 12-02, 12-03, and 12-04.
- **12-01-03 : Night Mode Function Setup - Night Mode Switch Operating Mode**
  Set the function of the NTCPU Night Service Mode switch (Not Used = 0, Day 1 Mode = 1, Night 1 Mode = 2, Midnight 1 Mode = 3, Rest 1 Mode = 4, Day 2 Mode = 5, Night 2 Mode = 6, Midnight 2 Mode = 7, Rest 2 Mode = 8).
- **12-02-01 : Automatic Night Service Patterns - Start Time**
  For each Night Service Group, enter up to 20 start times for each Time Pattern (1-10). Pattern 1 should begin at 00:00 (midnight).
  ➪ Aspire S: Night Service Groups 1-4
  ➪ Aspire: Night Service Groups 1-32
- **12-02-02 : Automatic Night Service Patterns - End Time**
  For each Night Service Group, enter up to 20 end times (0000-2359) for each Automatic Night Service pattern (1-10).
  ➪ Aspire S: Night Service Groups 1-4
  ➪ Aspire: Night Service Groups 1-32
- **12-02-03 : Automatic Night Service Patterns - Operation Mode**
  For each Night Service Group, define the time mode for up to 20 start/end times for each Automatic Night Service pattern (1-10).
  ➪ Aspire S: Night Service Time Modes 1-4 (Day 1, Night 1, Midnight 1, Rest 1), Night Service Group: 1-4
  ➪ Aspire: Night Service Time Modes 1-8 (Day 1, Night 1, Midnight 1, Rest 1, Day 2, Night 2, Midnight 2, Rest 2), Night Service Group: 1-32
- **12-03-01 : Weekly Night Service Switching**
  Assign one of the five Automatic Night Service patterns programmed in 12-02 to each day of the week.
- **12-04-01 : Holiday Night Service Switching**
  Assign one of the five Automatic Night Service patterns to holidays.
- **12-05-01 : Night Mode Group Assignment for Extensions**
  Assign a Day/Night Mode Group for each extension.
  ➪ Aspire S: Night Service Groups 1-4
  ➪ Aspire: Night Service Groups 1-32
- **12-06-01 : Night Mode Group Assignment for Trunks**
  Assign a Day/Night Mode Group for each trunk port.
  ➪ Aspire S: Night Service Groups 1-4, Trunk Ports: 1-8
  ➪ Aspire: Night Service Groups 1-32, Trunk Ports: 1-200
- **12-07-01 : Text Data for Night Mode**
  Create an original text message which will be displayed on an LCD of keyset telephone in each Night Mode.
- **12-08-01 : Night Mode Service Range**
  For each night mode group, determine how many night modes a user will toggle through when the Night Mode key is pressed (entries: 2-8).
  ➪ Aspire S: 1-4
  ➪ Aspire: 01-32

- **14-07-01 : Trunk Access Map Setup**
  To allow for UNA answering, set up the Trunk Access Maps. For UNA, extension must have incoming access to trunk ringing the External Paging speakers.
  ➪ Aspire S: Trunk Access Maps 1-8
  ➪ Aspire: Trunk Access Maps 1-200
- **15-06-01 : Trunk Access Map for Extensions**
  For UNA answering, assign Trunk Access Maps to extensions. Make one entry for each Night Service mode.
  ➪ Aspire S: Trunk Access Maps 1-8
  ➪ Aspire: Trunk Access Maps 1-200
- **15-07-01 : Programmable Function Keys**
  Assign Night Service function keys (09) to extensions. The additional data for this key must be set to "0" in order for the toggle mode to function. Set the key for the proper mode (Day, Night, Rest, etc.). Assign trunks to function keys (code *01 + 1-8 or 001-200). If required, define a function key for a keyset to use the general purpose relay (51).
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.
- **20-07-01 : Class of Service Options (Administrator Level) - Manual Night Mode Switching**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to manually switch the Night Mode (Service Code 818). This option must be enabled for an extension to be able to display the "Night" indication.
- **22-02-01 : Incoming Call Trunk Setup**
  Assign the incoming trunk type (0-7) for each trunk. There is one item for each Night Service Mode.
  ➪ Aspire S: Night Service Time Mode 1-4
  ➪ Aspire: Night Service Time Mode 1-8
- **22-04-01 : Incoming Extension Ring Group Assignment**
  To have trunks ring extensions during the different Night Service modes (for ANA), assign extensions to Ring Groups. For each extension in the Ring Group, indicate in Program 22-06 if trunk should ring (1) or not ring (0).
  ➪ Aspire S Ring Groups: 1-8, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
  ➪ Aspire Ring Groups: 1-100, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
- **22-05-01 : Incoming Trunk Ring Group Assignment**
  To have trunks ring extensions for ANA, assign trunks to Ring Groups. You make a different entry for each Night Service mode.
  ➪ Aspire S Ring Groups: 1-8, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
  ➪ Aspire Ring Groups: 1-100, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
- **22-08-01 : DIL/IRG No Answer Destination**
  If a Universal Answer call rings longer than the DIL No Answer Time (Program 22-01-04), it routes to the Ring Group specified in this option.
  ➪ Aspire S Ring Groups: 1-8, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
  ➪ Aspire Ring Groups: 1-100, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
- **31-05-01 : Universal Night Answer/Ring Over Page**
  For each Night Service Mode, assign which trunks should ring which External Paging Zones.

Related Features

Central Office Calls, Answering and Placing/Ring Groups

There are separate Access Map and Ring Group programming entries for each Night Service mode (Day 1, Night 1, Midnight 1, Rest 1, Day 2, Night 2, Midnight 2, Rest 2). Also, "Universal Answer" allows an extension user to pick up a UNA call.

Direct Station Selection (DSS) Console

Assign a Night Mode Key as required for DLS Consoles. The DSS Consoles provide Day and Night keys.

Paging, External

With Universal Night Answer, outside calls can ring External Paging Zones.

Programmable Function Keys

Function keys simplify activating Night Service. Note: If the Night Mode Relay is connected and there is any voltage present (pins 2 and 7 on the NTCPU's CN17 connector), the night mode cannot be toggled using the Night Mode Programmable Function Keys.

Operation

To activate Night Service by dialing codes:

1. At keyset, press idle CALL key.
   OR
   At single line telephone, lift handset.
2. Dial 818. To change a different group's mode, dial 118 + the group number (1-4 or 01-32).
3. Dial Night Service code:
   1 Day 1 mode
   2 Night 1 mode
   3 Midnight 1 mode
   4 Rest 1 mode
   5 Day 2 mode
   6 Night 2 mode
   7 Midnight 2 mode
   8 Rest 2 mode
4. Press SPK to hang up.

To activate Night Service by using programmable keys:

1. Press Night Service key (PGM 15-07 or SC 851: 09) + Mode code number (below).
   1 Day 1 mode
   2 Night 1 mode
   3 Midnight 1 mode
   4 Rest 1 mode
   5 Day 2 mode
   6 Night 2 mode
   7 Midnight 2 mode
   8 Rest 2 mode

To transfer a call to the Universal Answer External Page zones:

1. Place the CO call on hold and dial the Transfer to Trunk Ring Group code.
   You will hear a confirmation tone.
2. Hang up.
   The call rings over the External Paging, enabling anyone to answer the call.

Off Hook Signaling

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

When a user calls an extension busy on a call, they can send an off hook signal through the handset and through the telephone's speaker indicating they are trying to get through. The signal is an off hook ringing over the idle (second) line appearance. Off Hook Signaling helps important callers get through, without waiting in line for the called extension to become free. The system provides the following Off Hook Signaling options:

- **Called Extension Block**
  The called extension's Class of Service may block incoming Off Hook Signaling attempts. This is beneficial to users that don't want interruptions while on a call.
- **Automatic Signaling**
  Calling a busy extension automatically initiates Off Hook Signaling. This option is useful to receptionists, operators and others that must quickly process calls. This is set in the called extension's Class of Service.
- **Manual Signaling**
  After reaching a busy extension, manual signaling gives the caller the choice of using Off Hook Signaling or activating other features. Extension's without automatic signaling have manual signaling. The users can dial a service code or press a Programmable Function Key to send Off Hook Signaling to the called phone.
- **Selectable Off Hook Signaling Mode**
  The Off Hook Signal can be muted ringing, no off hook ringing or a beep in the handset - based on the caller's programming.
- **Off Hook Ringing**
  Use this option to enable or disable an extension's Off Hook Signaling for incoming calls. If enabled, Off Hook Signaling occurs normally. If disabled, calls queue behind the extension's busy line appearance and the user gets no Off Hook Signaling indication. The second line appearance stays idle. The caller hears ringback tone while their call waits. This is set in the called extension's Class of Service.
- **DID Call Waiting**
  An extension can optionally have DID calls camp on with Off Hook/Call Wait signaling, without Off Hook/Call Wait signaling or no signaling. This is set in the called extension's Class of Service.
- **Block Manual Off Hook Signals**
  This Class of Service option enables/disables a busy extension's ability to block off hook signals manually sent from a co-worker. If disabled (not blocked), callers can dial 7 at busy or busy/ring to signal the extension. If enabled (blocked), nothing happens when the caller dials 7 to off hook signal.
- **Block Camp On**
  If an extension has Block Camp On enabled, callers to the extension cannot dial 2 to Camp On after hearing busy or busy/ring. If the extension has Block Camp On disabled, callers are not prevented from dialing 2 to Camp on after hearing busy or busy/ring. This is set in the called extension's Class of Service.

Conditions

None

Default Setting

Enabled

Programming

- **11-12-03 : Service Code Setup (for Service Access) - Override (Off Hook Signaling)**
  Assign a service code (809 by default) to be used for Off Hook Signaling Override.
- **11-16-04 : Single Digit Service Code Setup - Intercom Off Hook Signaling**
  Assign a one-digit service code to be used for Off Hook Signaling.
- **15-02-12 : Multi-Line Telephone Basic Data Setup - Off Hook Ringing**
  For each extension, set Off Hook Ringing type: 0 (muted), 1 (none), 3 (beep in speaker), 4 (beep in handset). DID, DNIS and DIL trunks can use any of the 4 options - normal/ring group trunks can only use options “0” or “1”.
- **15-07-01 : Programmable Function Keys**
  Assign a function key for Off Hook Signaling (code 33).
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.
- **20-13-05 : Class of Service Options (Supplementary Service) - Off Hook Signaling Receive**
  In an extension’s Class of Service, enable (1) or disable (0) the extension’s ability to receive Off Hook Signaling.
- **20-13-06 : Class of Service Options (Supplementary Service) - Automatic Off Hook Signaling**
  In an extension’s Class of Service, enable (1) or disable (0) the extension’s ability to automatically send Off Hook Signals while busy on a handset call.
- **20-13-34 : Class of Service Options (Supplementary Service) - Block Manual Off Hook Signaling**
  Turn off (0) or on (1) an extension’s ability to block off-hook signals manually sent from a co-worker.
- **20-18-06 : Service Tone Timer - Call Waiting Tone Timer**
  Use this timer to set the interval between Off Hook Signaling alerts.

Related Features

Call Waiting/Camp On and Callback

An extension user cannot Camp On to a busy extension or leave a Callback if Off Hook Signaling has already gone through. Off Hook Signaling allows an extension to block a caller’s ability to dial 2 to Camp On.

Direct Inward Dialing (DID)

Refer to the DID feature for interaction between Off Hook Signaling and other DID programmed options.

Handsfree and Monitor

You cannot send Off Hook Signals to an extension busy on a Handsfree (Speakerphone) call. The called extension’s idle CALL key flashes fast, with no ringing.

Hotline/Reverse Voice Over

The setting of Program 20-13-06 affects the BLF display for Hotline and Reverse Voice Over. Refer to these features for additional information.

Intercom

You cannot send Off Hook Signals to an extension that is already receiving a voice announcement.

One-Touch Calling

An extension user can store the Off Hook Signaling Service Code (809) under a One-Touch Key to provide quick Off Hook Signaling access.

Programmable Function Keys

Function keys simplify sending Off Hook Signals.

Single Line Telephones

Single line telephones can only send Off Hook Signals.

Operation

To send Off Hook Signals to an extension busy on a call:

Your extension may send Off Hook Signals automatically.

1. Dial 7.

   OR

   Press Off Hook Signaling key (PGM 15-07 or SC 851: 33).

   You hear ringback.

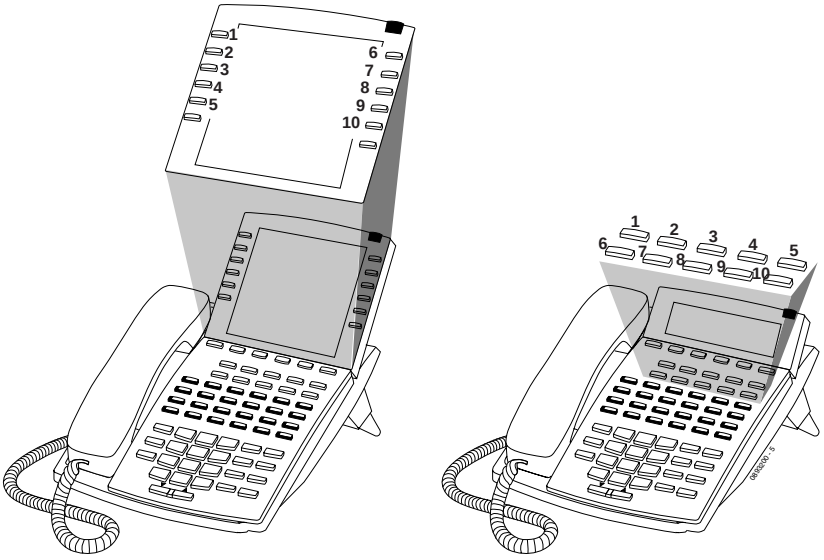
   To have your call voice-announce, dial 1.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

One-Touch Calling gives a keyset user one button access to extensions, trunks and selected system features. This saves users time when accessing co-workers, clients and features they use most often. Instead of dialing a series of codes, the user need only press the One-Touch Key. An extension user can have One-Touch Keys programmed for:

- **Direct Station Selection** - one button access to extensions
- **Personal Speed Dial** - one button access to stored numbers (up to 24 digits long)
- **Abbreviated Dialing** - one button access to stored Abbreviated Dialing numbers
- **Trunk Calling** - one button access to trunks or trunk groups
- **Service Codes** - one button access to specific Service Codes



An extension user can chain dial with One-Touch Keys. For example, a user can store the number for a company's Automated Attendant in key 1 and employee extension numbers in keys 2-5. The user presses key 1 to call the company, then one of keys 2-5 to ring the employee to which they want to speak.

An extension user or system administrator can optionally store a Flash command under a One-Touch Key. This is helpful for One-Touch Keys used as Personal Speed Dial bins. The stored Flash may be helpful to access features of the connected telco, PBX or Centrex.

Conditions

One-Touch Keys do not provide a Busy Lamp Field (BLF).

Default Setting

One-Touch Keys have no assigned functions.

Programming

- **15-07-01 : Programmable Function Keys**
  If required, define a Programmable Function Key for One-Touch Calling of an outside telephone number by defining the key as a One-Touch key (01) + trunk access code + the telephone number.
- **15-14-01 : Programmable One-Touch Keys**
  Set the functions of an extension's One-Touch Keys. An extension user can also program their One-Touch Keys.
- **30-03-01 : DSS Console Key Assignment**
  Customize DSS Console keys to function as DSS keys, Service Code keys, Programmable Function Keys, and One-Touch Calling keys.

Note: When programming a feature within a One-Touch Key, refer to the feature's description for additional programming options.

Related Features

Programmable Function Keys

Function keys can also give an extension user one-touch access to selected system features.

Transfer

When transferring a call, an extension user can press a One-Touch Key instead of dialing the extension number.

Operation

With Software 2.05+: Key for Entering Names	
When entering names in the procedures below, refer to this chart. Names can be up to 12 digits long. For prior software or when using i-Series phones, refer to the charts in the Name Storing feature (page 432).	
Use this keypad digit . . .	**When you want to. . .**
1	Enter characters: 1 @ [¥] ^ _ ` { | } → ← Á À Â Ã Ç É Ê ì ó
2	Enter characters A-C, a-c, 2.
3	Enter characters D-F, d-f, 3.
4	Enter characters G-I, g-i, 4.
5	Enter characters J-L, j-l, 5.
6	Enter characters M-O, m-o, 6.
7	Enter characters P-S, p-s, 7.
8	Enter characters T-V, t-v, 8.
9	Enter characters W-Z, w-z, 9.
0	Enter characters: 0 ! " # $ % & ' ( ) ô o ú ä ö ü α ε θ
*	Enter characters: * + , - . / : ; < = > ? π ∑ σ Ω ∞ ¢ £
#	# = Accepts an entry (only required if two letters on the same key are needed - ex: T**OM**). Pressing # again = Space. (In system programming mode, use the right arrow soft key instead to accept and/or add a space.)
CONF	Clear the character entry one character at a time.
CLEAR	Clear all the entries from the point of the flashing cursor and to the right.

Direct Station Selection

To program a One-Touch Key for Direct Station Selection (extension) calling:

1. Press idle CALL key and dial 855.
2. Press One-Touch Key you want to program.
3. Dial extension number you want assigned to that key.
4. Press HOLD.
5. Enter the name associated with the key you are programming.
6. Press HOLD.
7. Press SPK to hang up.

Personal Speed Dial

To program a One-Touch Key for Personal Speed Dial:

1. Press idle CALL key and dial 855.
2. Press One-Touch Key you want to program.
3. Dial general trunk access code (9).
   OR
   Dial Specific Trunk Service Code (#9) plus the trunk number (e.g., 005).
   OR
   Dial Trunk Group Service Code (804) plus the trunk group number (e.g., 1).
4. Dial number you want to store.
   The total of the digits stored in steps 3 and 4 cannot exceed 24.
   *Valid entries are 0-9, # and *. To enter a pause, press MIC. To store a Flash, press FLASH.*
5. Press HOLD.
6. Enter the name associated with the key you are programming.
7. Press HOLD.
8. Press SPK to hang up.

To program a One-Touch Key for Personal Speed Dial (if your phone doesn't have One-Touch keys):

Use this procedure for 2-button and analog single line (SLT) sets.

1. Lift handset.
2. Dial 855.
3. Dial the Personal Abbreviated Dialing bin (0-9).
   Bins 1-9 correspond to One-Touch keys 1-9; bin 0 corresponds to One-Touch key 10.
4. Dial the number you want to store and press HOLD twice.
   *Valid entries are 0-9, # and *. To enter a pause, press MIC. To store a Flash, press FLASH.*
5. Hang up.

To dial the stored number:

1. Call (or lift handset).
2. Dial #7 + bin number (0-9).

Abbreviated Dialing

To program a One-Touch Key for Abbreviated Dialing:

1. Press idle CALL key and dial 855.
2. Press One-Touch Key you want to program.
3. Dial #2 to store a Common Abbreviated Dialing number.
   OR
   Dial #4 to store a Group Abbreviated Dialing number.
4. Dial Abbreviated Dialing number storage code (e.g., 001).
5. Press HOLD.
6. Enter the name associated with the key you are programming.
7. Press HOLD.
8. Press SPK to hang up.

Central Office Calls, Placing (Trunk Calling)

To program a One-Touch Key for trunk calling:

1. Press idle CALL key and dial 855.
2. Press One-Touch Key you want to program.
3. Dial general trunk access code (9).
   OR
   Dial Specific Trunk Service Code (#9) plus the trunk number (e.g., 005).
   OR
   Dial Trunk Group Service Code (804) plus the trunk group number (e.g., 1).
4. Press HOLD.
5. Enter the name associated with the key you are programming.
6. Press HOLD.
7. Press SPK to hang up.

Service Codes

To assign a Service Code to a One-Touch Key:

This lets you make your own set of one-touch feature keys.

1. Press idle CALL key and dial 855.
2. Press One-Touch Key you want to program.
3. Dial Service Code you want stored.
   For example, if you want a One-Touch Key to automatically clear your Last Number Redial, enter 876.
4. Press HOLD.
5. Enter the name associated with the key you are programming.
6. Press HOLD.
7. Press SPK to hang up.

Using One-Touch Keys

To use a One-Touch Key:

1. Press One-Touch Key.

Clearing a One-Touch Key

To clear a programmed One-Touch Key:

1. Dial 855.
2. Press the One-Touch Key to be cleared.
3. Press CLEAR.

Chaining One-Touch Keys

To chain One-Touch Keys:

1. Press first One-Touch Key.
   Let the stored function dial out.
2. Press another One-Touch Key.
   The stored digits dial out.

Checking One-Touch Keys

To check the function of a One-Touch Key:

1. Press CHECK.
2. Press One-Touch Key.
   The stored function displays.
   *Repeat this step to check additional keys. If you cannot see the entire number stored, dial *.*
3. Press CLEAR.

Programmable Function Keys

When using Programmable Function Keys, note that names cannot be stored with the key as with the One-Touch Key operation above.

To define a Programmable Function Key as a One-Touch Key:

1. Dial 851.
2. Press the key to be defined.
3. Dial 01 (DSS/One-Touch Key Operation).
4. **For Direct Station Selection (Extension):**
   a. Dial extension number you want assigned to that key.
   b. Press HOLD.
   c. Press SPK.

   For Personal Speed Dial:
   a. Dial general trunk access code (9).
   OR
   Dial Specific Trunk Service Code (#9) plus the trunk number (e.g., 005).
   OR
   Dial Trunk Group Service Code (804) plus the trunk group number (e.g., 1).
   b. Dial number you want to store.
   The total of the digits stored in steps 3 and 4 cannot exceed 24.
   *Valid entries are 0-9, # and *. To enter a pause, press MIC. To store a Flash, press FLASH.*
   c. Press HOLD.
   d. Press SPK.

   For Abbreviated Dialing:
   a. Dial #2 to store a Common Abbreviated Dialing number.
   OR
   Dial #4 to store a Group Abbreviated Dialing number.
   b. Dial Abbreviated Dialing number storage code (e.g., 001).
   c. Press HOLD.
   d. Press SPK.

   For Central Office Calls, Placing (Trunk Calling):
   a. Dial general trunk access code (9).
   OR
   Dial Specific Trunk Service Code (#9) plus the trunk number (e.g., 005).
   OR
   Dial Trunk Group Service Code (804) plus the trunk group number (e.g., 1).
   b. Dial the telephone number to be stored.
   c. Press HOLD.
   d. Press SPK.

   For Service Codes:
   a. Dial Service Code you want stored.
   For example, if you want a One-Touch Key to automatically clear your Last Number Redial, enter 876.
   b. Press HOLD.
   c. Press SPK.

Aspire S	Aspire M/L/XL
• Available - up to 8 operators.	• Available - up to 8 operators.

Description

When an extension user dials “0”, calls are routed to a main system operator. The operator can answer and route outside calls or locate employees using the Page feature.

Conditions

None

Default Setting

Extension 301 is an operator.

Programming

- **20-01-01 : System Options - Operator Access Mode**
  Use this program to set up priority of a call when calling an operator telephone (0 = Step, 1 = Circular).
- **20-17-01 : Operator’s Extension - Operator’s Extension Number**
  Designate an extension an operator. When an extension user dials “0” or “9” (defined by Program 11-01 Type 5), calls go to the operator selected in this program.

  If you don’t assign an extension in Program 90-11-01, system alarms appear on the extension assigned in this option.
- **20-17-02 : Operator’s Extension - Operator Console**
  Determine if the console should be a normal keyset (0) or if it should be a special **o**perator console (1).

Related Features

Attendant Call Queuing

Attendant extensions can have up to 32 incoming calls queued before additional callers hear busy tone.

Multiple Directory Numbers/Call Coverage

The operator extension cannot be a virtual extension key.

Operation

Refer to the individual features for operation.

Refer to the Single Line Telephones, Analog 500/2500 Sets (page 515) **for information on this feature.**

Aspire S	Aspire M/L/XL
• Available - 8 External Paging zones.	• Available - 9 External Paging zones.

Description

With External Paging, a user can broadcast announcements over paging equipment connected to external Paging zones. When a user pages on of these external zones, the system broadcasts the announcement over the speakers. Like Internal Paging, External Paging allows a user to locate another employee or make an announcement without calling each extension individually.

The Aspire S system allows up to eight External Paging zones. The Aspire system allows up to nine External Paging zones, with the additional zone (#9) provided on the NTCPU. All other zones (#1-8) requires a port on a 2PGDAD module, with a maximum of two external paging circuits per module. You must have four 2PGDAD modules to get the eight external zones. In addition, each external zone has an associated relay contact. When a user pages to a zone, the corresponding contact activates (closes). This provides for Paging amplifier control. Refer to the system hardware manual for additional details.

Combined Paging

Use Combined Paging when you want to simultaneously Page into an internal and corresponding external zone. For example, you can Page your company's warehouse and outside loading dock at the same time. Combined Paging is available for zones 1-8 and All Call. Refer to **Paging, Internal** (page 463) for more on setting up Combined Paging. In addition, you can program a Function Key as a Combined Paging key. Using the External Page Function Key, when an All Call External Page Function Key is programmed, it will include both the external zones and the assigned internal zone(s). If the internal page zone is busy or there are no extensions in a page group, the announcement will be made on the external zones only.

Remove Paging Information from Display Phones

A Class of Service option is available in system programming to prevent display telephones from showing incoming paging information. This allows the system to save processor time and speed up system operation.

Conditions

(A.) The Aspire provides one external page zone on the NTCPU. For more than one external page zone on the Aspire or when using the Aspire S, External Paging requires 2PGDAD modules and customer-provided Paging equipment.

(B.) With Combined Paging, the system may not allow a page over just the external page zone if the internal zone is busy or if there are no extensions in a page group.

(C.) Talkback paging requires the use of a PGDAD module or a CO trunk port (with the use of external equipment, such as a Valcom page control device). The Aspire NTCPU's external page circuit does not allow talkback.

Default Setting

No External Paging defined.

Programming

- **10-03-01 : PCB Setup - Terminal Type (Circuit 1)**
  10-03-06 : PCB Setup - Terminal Type (Circuit 2)
  When a 2PGDAD module is used for external page, type "6" should be assigned for the 2PGDAD circuit.
- **10-05-01 : General Purpose Relay Setup**
  Define which relay circuits (5-8) on the 2PGDAD Module are used for General Purpose Relays. Also refer to Program 10-21-01 for the NTCPU relay assignments.
- **10-21-01 : NTCPU Hardware Setup - External Source Control Switch Selection**
  Specify the function of the relay switch for external tone source control (0=external MOH source, 1=BGM source, 2=external speaker (Aspire only), 3=general purpose relay). If this option is set to "2", 803+1 will page and close the NTCPU relay. Upon hanging up, the relay opens. If this option is set to "3", 880+0 (Program 11-12-50) toggles the relay on and off.
- **11-12-50 : Service Code Setup (For Service Access)**
  Specify the service code to be used for toggling the relay open and closed (Default: 880).
- **15-07-01 : Programmable Function Keys**
  Assign function keys for External Paging zones (19 + zone) and External All Call Page (20). If required, define a function key for a keyset to use the general purpose relay (50).
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.
- **20-13-29 : Class of Service Options (Supplementary Service) - Paging Display**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to display incoming internal paging information on their display.
- **31-01-02 : System Options for Internal/External Paging - Page Announcement Duration**
  Set the maximum allowable duration for a Paging announcement.
- **31-04-01 : External Paging Zone Group**
  Assign each External Paging Speaker to an External Paging Group (1-8) used for accessing the zone. If zones 1-8 are not connected to PGDAD modules, set these unused zones to External Paging Group "0".
  ➪ Aspire S External Paging Speaker/Zone: 1-8
  ➪ Aspire External Paging Speaker/Zone: 1-9
- **31-05-01 : Universal Night Answer/Ring Over Page**
  Assign Universal Night Answer ringing to each External Paging zone. For each trunk port, you make a separate entry for each External Paging Speaker.
  ➪ Aspire S External Paging Speaker/Zone: 1-8
  ➪ Aspire External Paging Speaker/Zone: 1-9
- **31-06-01 : External Speaker Control - Broadcast Splash Tone Before Paging**
  Use this option to enabled or disable splash tone before Paging over an external zone. If enabled (1=Splash, 2=Chime), the system broadcasts a splash tone before the External Paging announcement.
- **31-06-02 : External Speaker Control - Broadcast Splash Tone After Paging**
  Use this option to enabled or disable splash tone after Paging over an external zone. If enabled (1=Splash, 2=Chime), the system broadcasts a splash tone at the end of an External Paging announcement.
- **31-06-04 : External Speaker Control - CODEC Transmit Gain Setup**
  31-06-05 : External Speaker Control - CODEC Receive Gain Setup
  Select the CODEC gain types (1-32) for each External Page Speaker.
  ➪ Aspire S External Paging Speaker/Zone: 1-8
  ➪ Aspire External Paging Speaker/Zone: 1-9

- **31-07-01 : Combined Paging Assignments**
  Assign an External Paging Group (0-8) to an Internal Paging Zone (0=all call, zones 1-64) for Combined Paging. When an extension user makes a Combined Page, they simultaneously broadcast into both the External and Internal Zone.
- **31-08-01 : BGM on External Paging**
  Assign the Background Music option for each External Paging Speaker. If enabled (1), the system will play Background Music over the zone when it is idle.
  ➪ Aspire S External Paging Speaker/Zone: 1-8
  ➪ Aspire External Paging Speaker/Zone: 1-9

Related Features

Central Office Callings, Placing
A trunk port may be used for a talkback external page with the use of proper external paging equipment (ex: Valcom).

Direct Inward Dial (DID) / Direct Inward Line (DIL) / Transfer
DID and DIL trunks will not ring external page speakers. Only trunks defined as “normal” in Program 22-02-01 will ring external page speakers.

Direct Station Selection
Assign Paging keys for DSS and DLS consoles.

Door Box
If a 2PGDAD circuit has a Door Box connected, you cannot use that circuit for External Paging.

Night Service (Universal Night Answer)
To have outside calls ring External Paging Zones at night, refer to the Night Service feature and Program 31-05.

Paging, Internal
Internal Paging broadcasts announcements to extensions in programmed Internal Paging Zones.

Programmable Function Keys
Function keys simplify External Paging operation.

Operation

To Page into an external zone:

1. Press External Paging key (PGM 15-07 or SC 851: 19 + zone for External Paging zones or 20 for External All Call Paging).
2. Make Announcement.

OR

1. At keyset, press idle CALL key.

OR

At single line telephone, lift handset.

2. Dial 803 and the External Paging Zone code (1-8 or 0 for All Call).

OR

Dial *1 and the Combined Paging Group code 1-8 or 0 (for Internal/External All Call).

Display indicates the Combined Paging as an External Page.

If the Internal Page Zone is busy or if there are no extensions in a page group, the page may be announced as an External Page only.

3. Make Announcement.

Aspire S	Aspire M/L/XL
• Available - 8 Internal Paging Groups (Zones).	• Available - 64 Internal Paging Groups (Zones).

Description

Internal Paging lets extension users broadcast announcements to other keyset users. When a user makes a Zone Paging announcement, the announcement broadcasts to all idle extensions in the zone dialed. With All Call Paging, the announcement broadcasts to all idle extensions programmed to receive All Call Paging. An extension can be a member of only one Internal Paging Zone. Like External Paging, Internal Paging allows a user to locate another employee or make an announcement without calling each extension individually.

Combined Paging

Use Combined Paging when you want to simultaneously Page into an internal and corresponding external zone. For example, you can Page your company's warehouse and outside loading dock at the same time. Combined Paging is available for Paging zones 1-8 and All Call. Optionally, you can change the Combined Paging assignments. For example, you can associate External Paging Zone 1 with Internal Paging Zone 4. You can program a Function Key as a Combined Paging key. When an All Call External Page Function Key is programmed, it will include both the external zones and the assigned internal zone(s). If the internal page zone is busy or there are no extensions in a page group, the announcement will be made on the external zones only.

Remove Paging Information from Display Phones

A Class of Service option is available in system programming to prevent display telephones from showing incoming internal paging information. This allows the system to save processor time and speed up system operation.

Conditions

(A.) Internal Paging does not require a 2PGDAD module.
(B.) You can assign any number of extensions to an Internal or All Call Paging Zone.
(C.) A system must have at least one extension port idle in order to make an Internal Page. If no extension port is idle, the extension performing the Page will hear a busy signal.
(D.) With Combined Paging, the system may not allow a page over just the external page zone if the internal zone is busy or if there are no extensions in a page group.

Default Setting

Enabled.

Programming

- **15-07-01 : Programmable Function Keys**
  Assign function keys for Internal Paging Zones (code 21 + page zone) and Internal All Call Paging (code 22).
  - Aspire S Internal Page Zones: 0, 1-8
  - Aspire Internal Page Zones: 0, 1-9, 00, 01-64
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.

- **20-13-29 : Class of Service Options (Supplementary Service) - Paging Display**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to display incoming internal paging information on their display.
- **31-01-01 : System Options for Internal/External Paging - All Call Paging Zone Name**
  Assign a name to the All Call Internal Paging Zone. The name shows on the display of the telephone making the announcement.
- **31-01-02 : System Options for Internal/External Paging - Page Announcement Duration**
  Set the maximum allowable duration (0-64800 seconds) for a Paging announcement.
- **31-02-01 : Internal Paging Group Assignment - Internal Paging Group Number**
  Assign extensions to Internal Paging Zones. An extension must be assigned to a 2-digit zone in order to access any of the 2-digit zones. Up to 50 extensions maximum can be in a page group.
  - Aspire S Internal Page Zones: 0, 1-8
  - Aspire Internal Page Zones: 0, 1-9, 00, 01-64
- **31-02-02 : Internal Paging Group Assignment - Internal All Call Paging Receiving**
  Allow (1) or prevent (0) All Call Internal Paging for each extension. If allowed, extensions can make and receive All Call Internal Paging announcements. If prevented, extension can only make All Call Internal Paging announcements.
- **31-03-01 : Internal Paging Group Settings - Internal Paging Group Name**
  Program names for the Internal Paging Zones.
- **31-03-02 : Internal Paging Group Settings - Internal Paging Tone**
  For each Internal Paging Zone, have normal (0), muted (1) or no (2) Internal Paging alert tones. If enabled (0 or 1), extensions hear two beeps before Paging announcements. If disabled, the extensions hear the announcement without the beeps.
  - Aspire S Internal Page Zones: 0, 1-8
  - Aspire Internal Page Zones: 0, 1-9, 00, 01-64
- **31-07-01 : Combined Paging Assignments**
  For each External Paging Group (1-8 and 0 for All Call), assign a corresponding Internal Zone for Combined Paging.
  - Aspire S Internal Page Zones: 0, 1-8
  - Aspire Internal Page Zones: 0, 1-9, 00, 01-64

Related Features

Meet Me Paging / Meet Me Paging Transfer

Preventing access to internal page also prevents these features.

Paging, External

An extension user can broadcast an announcement over an External Paging Zone.

Programmable Function Keys

Function keys simplify Internal Paging operation.

Operation

To make an Internal Page announcement:

Keyset

1. Press the zone's Internal Paging key (PGM 15-07 or SC 851: 21 + 0 or 1-8 (Aspire S) *OR* 1-9 or 01-64 for zones (0 or 00 for All Call) (Aspire).
   OR
1. Press idle CALL key.
2. Dial 801 and the Paging Zone number (Aspire S: 0-8 or Aspire: 0-9 or 00-64).
   Dialing 0 or 00 calls All Call Internal Paging.
   OR
   Dial *1 and the Combined Paging Group code 1-8 or 0 (for Internal/External All Call).
   Display indicates the Combined Paging as an External Page.
   If the Internal Page Zone is busy or if there are no extensions in a page group, the page will be announced as an External Page only.
3. Make announcement.
4. Press SPK to hang up.

Single Line Telephone

1. Lift handset.
2. Dial 801 and the Paging Zone number (Aspire S: 0-8 or Aspire: 0-9 or 00-64).
   Dialing 0 or 00 calls All Call Internal Paging.
   Dial *1 and the Combined Paging Group code 1-8 or 0 (for Internal/External All Call).
3. Make announcement.
4. Hang up.

Please refer to Conference, Voice Call/Privacy Release (page 247) for information on this feature.

Aspire S	Aspire M/L/XL
• Available - 64 System Park orbits.	• Available - 64 System Park orbits.
• Personal Park Programmable Function Key and Service Code requires software 2.65+.	• Personal Park Programmable Function Key and Service Code requires software 2.65+.

Description

Park places a call in a waiting state (called a Park Orbit) so that an extension user may pick it up. There are two types of Park: System and Personal. Use System Park when you want to have the call wait in a system orbit. Personal Park allows a user to Park a call at their extension so a co-worker can pick it up. After parking a call in orbit, a user can Page the person receiving the call and hang up. The paged party dials a code or presses a programmed Park key to pick up the call. With Park, it is not necessary to locate a person to handle their calls. A call parked for too long will recall the extension that initially parked it, however the call remains in the park orbit until it's answered. There are 64 Park Orbits (1-64) available for use.

Splitting Between Parked Calls

A keyset user can retrieve two calls from Park Orbit (for which they don't have line appearances) and easily split (alternate) between them. The split operation brings the calls to the user's telephone and frees up the Park Orbits.

Extended Park

An extension's Class of Service determines whether it will use the normal Park Orbit Recall time or the Extended Park Orbit Recall time. The timers are set up in system programming. When an extension with Extended Park Recall Class of Service option parks a call, it recalls after the Extended Park Orbit Recall time. When an extension with the Normal Park Orbit Recall Class of Service option parks a call, it recalls after the normal Park Orbit Recall time, however the call remains in the park orbit until it's answered.

Programmable Function Key and Service Code Available for Personal Park

The Personal Park feature is enhanced with the ability to use a Programmable Function Key or service code (3-digit or 1-digit) to place a call in Personal Park. Older software only provides the option to place a call in Personal Park using a 3-digit service code. With this ability, two new program options have been added to the system in Program 11-16-11 and 15-07-01. This option is available for keysets, single line sets, and Aspire Wireless telephones and can be used for analog or ISDN trunks.

With this feature, the following conditions apply:

- An extension can have only one Personal Park key.
- When the terminal that has a call in Personal Park is unplugged, the Personal Park will be released and the held caller will receive busy tone.

The following table indicates what condition the service codes and Programmable Function key can be used.

Status	Using 3-Digit Service Code	Using 1-Digit Service Code	Using Personal Park Key
Speaking	Not Available	Not Available	Available
ICM Dial Tone or Busy Tone	Available	Not Available	Available
Calling Another Extension	Available	Available (with outside call on hold and when called extension does not answer)	Available
Receiving a Personal Park Recall	Available	Not Available	Available

Conditions

(A.) An extension can park a call in any Park Orbit. However, an extension can only pick up a call Parked by a member of its own Park group (see Program 24-03).
(B.) When a 2-Button telephone user parks a call, they must wait the Interdigit Time (normally 10 seconds) before trying to retrieve it.
(C.) If an extension is not allowed access to trunks in the Access Maps (Programs 14-07 and 15-06), calls in Park and on Hold can be blocked.

Default Setting

Enabled.

Programming

- **11-12-31 : Service Code Setup (for Service Access) - Park**
  Set the service code which should be used for placing a call in Park (default: #6).
- **11-12-32 : Service Code Setup (for Service Access) - Park Answer**
  Set the service code which should be used for answering a call in Park (default: *6).
- **11-12-35 : Service Code Setup (for Service Access) - Personal Park**
  Set the service code to be used for placing a call in a Personal Park (default: 857).
- **11-16-11 : Single Digit Service Code Setup - Personal Park**
  Customize the one-digit service code to be used when placing a call in Personal Park (default: No setting).
- **15-07-01 : Programmable Function Keys**
  Assign a keys as a Park Orbit key (code *04 plus Park orbit number [01-64]) or as a Personal Park key (code *07).
- **20-06-01 : Class of Service for Extensions**
  Assign a Class of Service (1-15) to extensions.
- **20-11-19 : Class of Service Options (Hold/Transfer Service) - Normal/Extended Park**
  Determine whether an extension's Class of Service should allow normal or extended Park (0=normal, 1=extended).
- **24-01-02 : System Options for Hold - Hold Recall Callback Time**
  A call left parked too long recalls the extension that initially parked it for this interval.
- **24-01-06 : System Options for Hold - Park Hold Time**
  Set the Park Hold Time (0-64800 seconds). A call left parked longer than this interval will recall the extension that initially parked it.
- **24-01-07 : System Options for Hold - Extended Park Hold Time**
  Set the Extended Park Hold Time (0-64800 seconds). A call left parked longer than this interval will recall the extension that initially parked it.
- **24-03-01 : Park Group**
  Assign an extension to a Park Group (01-64). An extension can only pick up a call Parked by a member of its own Park Group.

Related Features

Caller ID
A user can display the Caller ID of a call in Park if Caller ID is enabled (1) in Program 20-09-02.

Direct Station Selection
Assign park keys for DSS and DLS consoles.

Hold
A user can place a call in a temporary waiting state without putting it in orbit.

Multiple Directory Numbers/Call Coverage Keys
Calls on virtual extension keys can not be put in Personal Park.

Networking
Networked trunks or extensions can not be put in Personal Park.

Programmable Function Keys
Function keys simplify Park operation.

Operation

To Park a call in a system orbit:

You can Park Intercom or trunk calls.

1. Press Park key (PGM 15-07 or SC 852: *04 + orbit).
   The Park key LED lights.
   If you hear busy tone, the orbit is busy. Try another orbit.
2. Use Paging to announce call.
3. Press SPK to hang up.
   If not picked up, the call will recall to you.

OR

1. At keyset or 2-Button telephone, press HOLD.

OR

At a 500/2500 single line telephone, hookflash.

2. Dial #6 and the Park orbit (1-64).
   If you hear busy tone, the orbit is busy. Try another orbit.
3. Use Paging to announce call.
4. Press SPK to hang up.
   If not picked up, the call will recall to you.
   Note: The parked call recalls after the Park Hold Time (Program 24-01-06). The call rings the extension to which it recalled for the Hold Recall Callback Time (Program 24-01-02). The call then goes on Hold for the Park Hold Time - then recalls again for the Hold Recall Callback Time. The call continues to cycle between Hold and recall until the extension user answers the call or the outside party hangs up.

To pick up a parked call:

1. Lift handset.
2. Press Park key (PGM 15-07 or SC 852: *04 + orbit).

OR

1. At keyset or 2-Button telephone, press idle CALL key.

OR

At single line telephone, lift handset.

2. Dial *6 and the Park orbit (1-64).

To park a call at your extension:

1. Do not hang up.
2. Press the Personal Park key (PGM 15-07 or SC 852: *07).
   OR
   Press HOLD and dial 857.
   OR
   Press HOLD + Press the Personal Park key (PGM 15-07 or SC 852: *07).
   At a 500/2500 SLT, hookflash instead of pressing HOLD.
   A confirmation tone is heard and the call is parked at your extension. If the extension has a Personal Park key, the key will flash.
   The Personal Park single-digit service code (PGM 11-16-11) cannot be used in this operation.
3. Page your co-worker to pick up the call.
4. Press SPK to hang up (or hang up at SLT).
   If not picked up, the call will recall to you.

To Park an outside call at your extension after trying to call a co-worker:

1. While on a call, press HOLD.
2. Dial a co-worker's extension number.
   The co-worker does not answer.
3. Press the Personal Park key (PGM 15-07 or SC 852: *07).
   OR
   Dial the Personal Park single digit code (PGM 11-16-11).
   The Intercom call to the co-worker is dropped. A confirmation tone is heard and the outside call is parked at your extension.
   If the co-worker answers the call, the outside call will ring back once the intercom call is completed. The call can then be placed in Personal park if desired.

To pick up a call parked at your extension:

1. Press the Personal Park key (PGM 15-07 or SC 852: *07).
   OR
   Press idle CALL key and dial 857.
   At an SLT, skip pressing CALL.

   The Personal Park single-digit service code (PGM 11-16-11) cannot be used in this operation.
   If it recalls the extension, pressing the Personal Park key or flashing CALL key will answer the call.
   The Personal Park single-digit service code (PGM 11-16-11) cannot be used in this operation.

To answer a call parked at a co-worker's extension:

1. Press the CALL key, dial ** plus the co-worker's extension number.
   At an SLT, skip pressing CALL.

To split between two parked calls (Keyset Only):

You must have Park Orbit keys for the parked in calls. In addition, your keyset cannot have line keys defined for the parked calls.

1. Press CALL1.
2. Press Park Orbit key (PGM 15-07 or SC 852: *04 + orbit) to retrieve first parked call.
   Call1 lights steadily. This moves the first parked call to your phone.
3. Press HOLD and press SPK.
   CALL1 flashes.
4. Press another Park Orbit key (PGM 15-07 or SC 852: *04 + orbit) to retrieve the second parked call.
   CALL2 lights steadily. This moves the second parked call to your phone.
5. To switch between the two parked calls, press HOLD then the flashing CALL key.
   You can only split between two active calls. To retrieve and split with a new call, you must first hang up one of the initial calls.

To display Caller ID for a call in Park:

With Program 15-02-08 set to "0" (pre-select) for this feature.

1. *With Program 15-02-08 set to "0" (pre-select) :* With a call in Park, press the PARK key. (PGM 15-07 or SC 852: *04).
   OR
   With Program 15-02-08 set to "1" (one touch): With a call in Park, press FLASH then the PARK key (PGM 15-07 or SC 852: *04).

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

You can connect your phone system trunks to Centrex/PBX lines, rather than to telco trunk circuits. This makes the trunk inputs into the system 500/2500 type compatible Centrex/PBX extensions, rather than telco circuits. PBX Compatibility lets the system be a node (i.e., satellite) in a larger private telephone network. To place outside calls when the system is behind a PBX, phone system users must first dial the PBX's trunk access code (usually 9).

The system provides the following PBX Compatibility options:

- **PBX Trunk Access Code Screening**
  The system can monitor the numbers users dial and screen for PBX trunk access codes. The system can screen for up to 4 groups of trunk access codes. The codes can be one or two digits long, consisting of the digits 0-9, # and *. (You use Line Key 1 as a wild card entry.)

- **PBX Trunk Toll Restriction**
  The system can provide the Toll Restriction for the PBX trunk, or restriction can be handled solely by the connected PBX. If the phone system provides the restriction, it restricts the digits dialed after the PBX access code.

- **PBX Call Restriction**
  When the phone system does the Toll Restriction, it can further restrict users from dialing PBX extensions. In this case, the only valid numbers are those dialed after the PBX trunk access code. The only PBX facility phone system users can access are the PBX's outside trunks.

- **Automatic Pause**
  The system automatically pauses when it sees a PBX trunk access code during manual dialing, Abbreviated Dialing, Last Number Redial, Repeat Redial and Save Number Dialed. This gives the connected PBX time to set up its trunk circuits.

Conditions

When using Account Codes, do not use an asterisk within a PBX access code. Otherwise, after the *, the trunk would stop sending digits to the central office.

Default Setting

Disabled.

Programming

- **14-01-08 : Basic Trunk Data Setup - Toll Restriction**
  For each PBX trunk port, enable (0) or disable (1) Toll Restriction.
- **14-02-01 : Analog Trunk Data Setup - Signaling Type (DP/DTMF),**
  14-02-02 : Analog Trunk Data Setup - Ring Detect Type and
  14-01-02 : Basic Trunk Data Setup - Transmit CODEC Gain Type
  Set these options for compatibility with the connected PBX.
- **14-04-01 : Behind PBX Setup - Behind PBX**
  For each PBX trunk port, enter 1. You make a separate entry for each Night Service mode.

- **21-04-01 : Toll Restriction Class**
  Assign a Toll Restriction Class (1-15) to each extension.
- **21-05-12 : Toll Restriction Class - PBX Call Restriction**
  For each Toll Restriction Class, enter 1 to restrict calls on the PBX trunk to outside calls only. Enter 0 to allow users to dial PBX extensions.
- **21-06-08 : Toll Restriction Table Data Setup - PBX Access Code**
  Enter the system PBX access codes. The system can have up to 4 groups of codes. A code can be one or two digits long. Valid entries are 0-9, # and *. Use Line Key 1 as a "don't care" digit. If using Account Codes, do not use the * within the PBX Access Code.
- **81-01-14 : COIU Initial Data Setup - Hookflash 1**
  If the CONF key is set for transfer (in Program15-02-05), use this program to set the duration of the flash that occurs when a user presses the CONF key.

Related Features

Account Codes

When using Account Codes, do not use an asterisk within a PBX access code. Otherwise, after the *, the trunk would stop sending digits to the central office.

Abbreviated Dialing

- The system automatically pauses after it finds a PBX access code in an Abbreviated Dialing bin.
- If Abbreviated Dialing routes a call to a PBX trunk, it does not automatically insert a PBX access code. It outdials the digits just as they are stored.

Central Office Calls, Answering/ Ring Groups

Users answer incoming calls on PBX trunks just like other trunks. All of the relevant access and Ring Group programming applies. Refer to these features for more details.

Central Office Calls, Placing

Except for dialing the PBX access code, users place calls on PBX trunks just like other trunks. All of the relevant access programming applies. Refer to the Central Office Calls Placing feature for more details.

Direct Inward Lines

You can have DILs route from the connected PBX. Users can access these trunks for outgoing PBX calls. All PBX Compatibility restrictions and programming apply.

Direct Inward System Access

You can program incoming DISA trunks to be outgoing PBX trunks. All PBX Compatibility restrictions and programming apply.

Flash

Flash may allow access to certain PBX features - like Transfer. Make sure you program Flash for compatibility with the connected PBX

Pulse to Tone Conversion

The system does not provide automatic Pulse to Tone Conversion after outdialing the PBX trunk access code.

Toll Restriction

PBX trunks can follow normal system Toll Restriction.

Trunk Groups and Trunk Group Routing

- Users can get outbound access to PBX trunks through Trunk Groups and/or Trunk Group Routing. All PBX Compatibility restrictions and programming apply.
- If the system routes a call to a PBX trunk, it does not automatically insert the PBX access code. It outdials the call just as the user dialed it.

Operation

To place a call over a PBX trunk:

1. At keyset, press idle CALL key and dial 804.
   OR
   At single line telephone, lift handset and dial 804.
2. Dial PBX trunk group number (Aspire S: 1-8, Aspire: 1-9 or 001-100).
3. Dial PBX access code and number
   OR

1. (Keyset only) Press PBX trunk group key (PGM 15-07 or SC 852: *02 + group).
2. Dial PBX access code and number.
   OR

1. At keyset, press idle CALL key and dial 9.
   OR
   At single line telephone, lift handset and dial 9.
2. Dial PBX access code and number.
   OR

1. At keyset, press idle CALL key.
   OR
   At single line telephone, Lift handset.
2. Dial #9.
3. Dial PBX trunk number (e.g., 005 for line 5).
4. Dial PBX access code and number.
   OR

1. Press PBX trunk key (PGM 15-07 or SC 851: 1 to 200).
2. Dial PBX access code and number.

Note: In all cases above, Toll Restriction may prevent your call.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Prime Line Selection allows a keyset user to place or answer a call over a specific trunk by just lifting the handset. The user does not have to first press keys or dial codes. This simplifies handling calls on a frequently used trunk.

Prime Line Selection has the following two modes of operation:

- **Outgoing Prime Line Preference**
  Lifting the handset seizes the Prime Line. Outgoing Prime Line Preference would help a telemarketer who always needs a free line to call prospective clients. The telemarketer just lifts the handset and the Prime Line is always available. (Outgoing Prime Line Preference may be affected by Incoming Prime Line Preference -- see Programming below.)

- **Incoming Prime Line Preference**
  When the Prime Line rings the extension, lifting the handset answers the call. Incoming Prime Line Preference could benefit the Service Department dispatcher who must quickly answer customer's service calls and then dispatch repair technicians. The dispatcher would have the assurance than whenever a customer calls in, the dispatcher just lifts the handset get their call. (Incoming Prime Line Preference can optionally seize an idle line appearance -- see Programming below.)

Conditions

The Cordless II and Cordless Lite II telephones do not support Prime Line Preference.

Default Setting

Disabled.

Programming

- **14-05-01 : Trunk Groups**
  Assign Prime Line to a separate trunk group for outgoing Prime Line selection. (Also see 14-06 and 21-02.)
- **14-06-01 : Trunk Group Routing**
  Set up outbound route for trunk group that contains the Prime Line. (Also see 14-05 and 21-02.)
  ➪ Aspire S: Trunk Group Routing 1-8
  ➪ Aspire: Trunk Group Routing 1-100
- **14-07-01 : Trunk Access Map Setup**
  For outgoing Prime Line selection, assign each Prime Line trunk to a different Access Map and deny outbound access to all trunks except the Prime Line trunk.
  ➪ Aspire S: Trunks 1-8
  ➪ Aspire: Trunks 1-200
- **15-01-02 : Basic Extension Data Setup - Outgoing Trunk Line Preference**
  Enter 1 for this option so extension user seizes Prime Line when they lift the handset.
- **15-02-10 : Multi-Line Telephone Basic Data Setup - Ringing Line Preference for Trunk Calls**
  Enter 1 if lifting the handset should answer ringing Prime Line; enter 0 to seize idle line appearance.
- **15-06-01 : Trunk Access Map for Extensions**
  Set assignment so extension(s) can have access to Prime Line. Deny outbound access to extensions that should not have Prime Line.
  ➪ Aspire S: Trunks 1-8
  ➪ Aspire: Trunks 1-200
- **21-02-01 : Trunk Group Routing for Extensions**
  Assign extension(s) to a Prime Line route for outgoing Prime Line access.
  ➪ Aspire S Trunk Groups: 1-8
  ➪ Aspire Trunk Groups: 1-100
- **22-01-01 : System Options for Incoming Calls - Incoming Call Priority**
  Set incoming Prime Line preference. Enter 1 to answer ringing Prime Line; enter 0 to answer ringing Intercom call.
- **22-04-01 : Incoming Extension Ring Group Assignment**
  Assign extension(s) to a ring group that consists of a Prime Line.
  ➪ Aspire S Ring Groups: 1-8
  ➪ Aspire Ring Groups: 1-100
- **22-05-01 : Incoming Trunk Ring Group Assignment**
  Assign a Prime Line to a ring group.
  ➪ Aspire S Ring Groups: 1-8
  ➪ Aspire Ring Groups: 1-100

Related Features

Aspire Wireless / Single Line Telephone, Analog 500/2500 Sets
Though Prime Line Selection can be used for Aspire Wireless and SLTs, with this option programmed, the phones can not access ICM dial tone.

Central Office Calls, Placing
Other programmed options for outgoing calls also affect a Prime Line.

Direct Inward Lines/Direct Inward System Access
DILs and DISA calls also ring extensions directly, even if not allowed in ring group programming.

Line Preference
Prime Line Selection directly interacts with Line Preference.

Voice Mail
If Voice Mail is installed, calls can be directed to the Voice Mail Auto Attendant ring group (102 or 103).

Operation

To place a call on your Prime Line:

1. Lift handset.
   You hear dial tone on your Prime Line.

To answer a call on your Prime Line:

1. Lift handset.
   Depending on your Line Preference programming, you'll either answer the Prime Line or get dial tone on the idle line appearance.

Please refer to Conference, Voice Call/Privacy Release (page 247) for information on this feature.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

A Private Line is a trunk reserved for a keyset for placing and answering calls. A user with a Private Line always knows when important calls are for them. Additionally, the user has their own trunk for placing calls that is not available to others in the system.

- **Incoming only**
  The keyset has a Private Line only for incoming calls. The user cannot place calls on the Private Line.

- **Outgoing only**
  The keyset has a Private Line only for outgoing calls. The Private Line does not ring for incoming calls.

- **Both ways**
  The keyset has a Private Line for both incoming and outgoing calls.

Conditions

None

Default Setting

Disabled.

Programming

- **14-07-01 : Trunk Access Map Setup**
  Assign Private Line to the Private Line Access Map (see Program 15-06 below). Use option 5 for Incoming, option 7 for Both Ways and option 4 for Outgoing. In all other Access Maps, give option 3 to the Private Line.
  ➪ Aspire S: Trunk Access Maps 1-8
  ➪ Aspire: Trunk Access Maps 1-200
- **14-01-09 : Basic Trunk Data Setup - Private Line**
  Determine if a trunk should be used as a normal (0) or private (1) line.
- **15-06-01 : Trunk Access Map for Extensions**
  Assign extension to have Private Line to an unused "Private Line" Access Map.
  ➪ Aspire S: Trunk Access Maps 1-8
  ➪ Aspire: Trunk Access Maps 1-200
- **15-07-01 : Programmable Function Keys**
  Make sure extension has a line key (e.g., 012) for the Private Line.
  ➪ Aspire S: Trunks 1-8
  ➪ Aspire: Trunks 1-200
- **22-02-01 : Incoming Call Trunk Setup**
  Set the Trunk Service Type to 4 if routing unanswered Private Lines to voice mail or 0 if not routing to voice mail.
  ➪ Aspire S Ring Groups: 1-8
  ➪ Aspire Ring Groups: 1-100

- **22-04-01 : Incoming Extension Ring Group Assignment**
  Assign extension to Private Line's ring group. Set the ringing in Program 22-06 - use option 1 for Incoming or Both Ways Private Lines. Use option 0 for Outgoing Private Lines. Do not assign any other extensions to the Private Line ring group.
- **22-05-01 : Incoming Trunk Ring Group Assignment**
  Assign Private Line to an unused "Private Line" ring group (i.e., a ring group just for the Private Line).
  - Aspire S Ring Groups: 1-8
  - Aspire Ring Groups: 1-100
- **22-07-01 : DIL Assignment**
  If routing unanswered Private Lines to voice mail, assign DILs to the extensions.

Related Features

Call Forwarding
Private Lines do not follow Call Forwarding if not DIL.

Central Office Calls, Placing
Other programmed options for outgoing calls also affect a Prime Line.

Do Not Disturb
Calls to extensions with DND active do not follow Call Forwarding programming. DIL calls will ring an idle Department Group member, then follow 22-08 programming then 22-05 programming.

Line Preference
An extension user can have Line Preference options applied to their Private Line.

Prime Line Selection
A Private Line can also be a Prime Line.

Programmable Function Keys
You should always program a line key for each Private Line.

Single Line Telephones
Private Lines are available on single line telephones.

Toll Restriction
Private Lines follow normal Toll Restriction.

Transfer
An extension user can Transfer their Private Line. Since other users have hold access (see Programming), the destination can answer the transferred Private Line and place it on Hold.

Voice Mail
If the Voice Mail is installed, calls can be directed to the Voice Mail Auto Attendant ring group (102 or 103).

Operation

To place a call on your Private Line:

1. Press Private Line key.
2. Dial number.

To answer a call on your Private Line:

1. Press Private Line key or lift the handset.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Each keyset has Programmable Function Keys. Programmable Function Keys simplify placing calls, answering calls and using certain features. You can customize the function of a keyset's programmable keys from your administration telephone, or the extension user can do it themselves. Depending on your telephone style, you can have either 12 or 24 Programmable Function Keys.

Refer to Tables 4 and 5 in the beginning of this section for the Programmable Function Key functions.

Conditions

(A.) When a key is programmed using service code 852, that key cannot be programmed with a function using the 851 code until the key is undefined (000). For example with a Park Key programmed by dialing 852 + *04 must be undefined by dialing 000 before it can be programmed as a Voice Over key by dialing 851 + 48.

(B.) Using Program 92-01 to copy a keyset's Programmable Function Keys will copy all the keys whether they exist on the phone to which the programming is being copied. This may cause confusion when trying to define a key which is already defined but which doesn't exist on the phone (will display as "DUPLICATE DATA"). It is recommend to either clear these non-existent keys or to only copy from an extension which has the same or fewer number of keys than the extension to which the programming is being copied.

(C.) When using Program 15-07-01 to program 24-Button DLS Console keys, use the extension number to which the DLS is installed and, regardless of the type of keyset connected, ***start programming the DLS keys at key number 25***. Service codes 851 and 852 can also be used to program these keys.

Default Setting

The first 12 keys on a telephone are line keys (e.g., key 1 = line 001). The remaining keys are unassigned.

Programming

➧ **15-07-01 : Programmable Function Keys**
Assign the functions of a keyset's Programmable Function Keys. Refer to Tables 4 and 5 at the beginning of this manual. When using Program 15-07-01 to program 24-Button DLS Console keys, use the extension number to which the DLS is installed and, regardless of the type of keyset connected, ***start programming the DLS keys at key number 25***. Service codes 851 and 852 can also be used to program these keys.

➧ **20-06-01 : Class of Service for Extensions**
Assign Class of Service (1-15) to extensions.

➧ **20-07-10 : Class of Service Options (Administrator Level) - Programmable Function Key Programming (Appearance Level)**
In an extension's Class of Service, enable (1) or disable (0) an extension's ability to program their own function keys using service code 852.

Note: When programming a feature as a Programmable Function Key, refer to the feature's description for additional programming options.

Related Features

Abbreviated Dialing/One-Touch Calling

Abbreviated Dialing and One-Touch Calling also offer quick access to calls and features.

Direct Station Selection (DSS) Console

Programming a 110-button console requires separate programming. Refer to this feature for more details.

Operation

To change the function of a General Function programmable key:

1. Press idle CALL key.
2. Dial 851.
3. Press the key you want to program.
4. Enter the 2-digit key function, any additional information needed for the key and press HOLD.
   Available functions are 00-99 (refer to chart) and line keys 001-200.
   To undefine a key, enter 00.

To change the function of an Appearance Function programmable key:

1. Press idle CALL key.
2. Dial 852.
3. Press the key you want to program.
4. Enter the 3-digit key function and any additional information needed for the key.
   *Available functions are *00-*99 (refer to chart) and line keys 001-200.*
   To undefine a key, enter 000.
   *When a key is programmed using service code 852, that key cannot be programmed with a function using the 851 code until the key is undefined (000). For example with a Park Key programmed by dialing 852 + *04 must be undefined by dialing 000 before it can be programmed as a Voice Over key by dialing 851 + 48.*

To check the function of a programmable key:

1. Press CHECK.
2. Press the programmable key.
   The programmed function displays.

Pulse to Tone Conversion

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

An extension can use Pulse to Tone Conversion on trunk calls. Pulse to Tone Conversion lets a user change their extension's dialing mode while placing a call. For systems in a Dial Pulse area, this permits users to access dial-up OCCs (such as MCI) from their DP area. The user can, for example:

- Place a call to an OCC over a DP trunk.
- Depending on programming:
  Manually implement Pulse to Tone Conversion
  OR
  Wait 10 seconds.
- Dial the OCC security code and desired number. The system dials the digits after the conversion as DTMF.

Conditions

Pulse to Tone Conversion is only valid for Dial Pulse trunks (Program14-02-01, options 0 or 1).

Default Setting

Enabled.

Programming

➧ **14-02-07 : Analog Trunk Data Setup - DP to DTMF Conversion Options**
For each trunk, set the type of DP to DTMF Conversion required: automatic (0), automatic and manual (1), or manual (2).

Related Features

Central Office Calls, Placing

Other programmed options for outgoing calls can affect how a call is placed. Check or program these options as needed.

Operation

To convert your phone's dialing to tone after placing your call on a pulse line:

1. Place call over pulse line.
2. Dial # to switch the DP trunk to DTMF dialing.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

If a keyset user places a trunk call that is busy or unanswered, they can have Repeat Redial try it again later on. The user doesn't continually have to try the number again -- hoping it will go through. Repeat Redial automatically retries it until the called party answers (the number of retries is based on system programming).

Conditions

Lifting the handset during a callout cycle will cancel Repeat Redial.

Default Setting

Enabled.

Programming

- **15-07-01 : Programmable Function Keys**
  Assign a function key for Repeat Redial (code 29).
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.
- **20-08-07 : Class of Service Options (Outgoing Call Service) - Repeat Redial**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to use Repeat Redial.
- **21-08-01 : Repeat Dial Setup - Repeat Redial Count**
  Set how many times Repeat Redial will automatically repeat if the call does not go through.
- **21-08-02 : Repeat Dial Setup - Repeat Redial Interval Time**
  Set the interval between Repeat Redial attempts (0-64800 seconds).
- **21-08-03 : Repeat Dial Setup - Repeat Dial Calling Timer**
  Set how long the system waits (0-64800 seconds) for the called party to answer after a Repeat Redial. If the called party doesn't answer within this interval, the system hangs up and tries again (after the Repeat Redial Interval Time). For unanswered calls, the total time between retries is the sum of Items 21-08-02 and 21-08-03.

Related Features

Automatic Route Selection
For systems with Automatic Route Selection, ARS selects the trunk for the Repeat Redial call.

Central Office Calls, Placing
Other programmed options for outgoing calls can affect how a call is placed. Check or program these options as needed.

Last Number Redial/Save Number Dialed
An extension user can quickly redial their last call.

Networking
Repeat Redial will not work across a network.

Single Line Telephones
Single line telephones cannot use Repeat Redial.

Operation

To use Repeat Redial (if the outside party you call is unavailable or busy):

1. Place trunk call.
   Listen for busy tone or ring-no-answer.
2. Press DIAL + LND.
   OR
   Press Repeat Redial Key (PGM 15-07 or SC 851: 29).
   Your Repeat Redial key flashes while you wait for the system to redial.
3. Press SPK to hang up.
   The system periodically redials the call.
4. Lift handset when called party answers.

To cancel Repeat Redial:

1. Press DIAL.
2. Press LND.
   OR
1. Press Repeat Redial Key (PGM 15-07 or SC 851: 29).

See also Last Number Redial.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

While on a handset call, Reverse Voice Over lets a busy keyset user make a private Intercom call to an idle co-worker. The idle co-worker can be at a keyset or 500/2500 set. The busy user just presses and holds down a programmed Reverse Voice Over key to make a private call to a specified co-worker. The initial caller cannot hear the Reverse Voice Over conversation. The private Intercom call continues until the Reverse Voice Over caller releases the key again. The initial call can be an outside call or an Intercom call.

Reverse Voice Over could help a salesman, for example, when placing a call to an important client. The salesman can talk with the client **and** give special instructions to a secretary - without interrupting the initial call.

When the keyset is idle, the Reverse Voice Over key functions the same as a Hotline key. A keyset's Reverse Voice Over key also shows at a glance the status of the associated extension:

When the key is. . .	The associated extension is. . .
Off	Idle
On	Busy or call ringing
Fast Flash	In Do Not Disturb

Note: When the keyset is idle, the Reverse Voice Over provides one button calling to the associated extension (like a Hotline key). An extension user cannot, however, use the Reverse Voice Over key to Transfer calls.

Conditions

(A.) An extension can have Reverse Voice Over keys for more than one extension (limited only by the number of available function keys).

Default Setting

Disabled.

Programming

- **15-07-01 : Programmable Function Keys**
  Assign a function key for Reverse Voice Over (code 47 + dest. ext.).
- **20-02-03 : System Options for Multi-Line Telephones - BLF Control and**
  20-13-06 : Class of Service Options (Supplementary Service) - Automatic Off Hook Signaling
  Programs 20-02-03 and 20-13-06 set the conditions under which a Hotline, Reverse Voice Over or DSS Console key indicates that an extension is busy.

	Program 20-02-03	Program 20-13-06	BLF[1] Status	Busy Status
1	1	0	On	Yes
2	1	1	On	Yes
3	0	0	On	Yes
4	0	1	Off On	No - 1 CALL key busy Yes - Both CALL keys busy

[1] BLF is on for extension receiving a voice announced Intercom call.

- **20-06-01 : Class of Service for Extensions**
  Assign a COS to each extension (1-15).

Related Features

Do Not Disturb
A Reverse Voice Over placed to an extension always rings, regardless of how Handsfree Answerback/Forced Intercom Ringing is set at the destination.

Handsfree Answerback/Forced Intercom Ringing
Reverse Voice Over follows Handsfree Answerback/Forced Intercom Ringing programming.

Hotline
Like Reverse Voice Over, Hotline also provides one-button calling to coworkers.

Intercom
Other programmed options can affect how the Intercom feature works. Program these options as needed.

One-Touch Calling
One-Touch Calling provides one button access to co-workers, but without the Busy Lamp Field provided by Reverse Voice Over.

Programmable Function Keys
Reverse Voice Over requires a uniquely programmed function key.

Single Line Telephones
Reverse Voice Over is not available at single line telephones.

Voice Over
If an extension user places a Reverse Voice Over to a busy destination extension, the system sets up a Voice Over. The Voice Over continues as long as the initiating extension holds down the Reverse Voice Over key.

Operation

WHEN YOU'RE ON A CALL . . .

To place a Reverse Voice Over call:

1. Press and hold your Reverse Voice Over key (PGM 15-07 or SC 851: 47 + dest. ext.).
   Your Reverse Voice Over key lights steadily (green) and you can talk with the programmed Reverse Voice Over destination.

To return to your initial caller:

1. Release the Reverse Voice Over key.
   If the co-worker you call hangs up, you return to the initial call automatically.

WHEN YOUR PHONE IS IDLE . . .

To place a call to your Reverse Voice Over destination:

1. Press your Reverse Voice Over key (PGM 15-07 or SC 851: 47 + dest. ext.).
   You can optionally lift handset after this step for privacy.

Aspire S	Aspire M/L/XL
• Available - 8 Ring Groups.	• Available - 100 Ring Groups.

Description

Ring Groups determine how trunks ring extensions. Generally, trunks ring extension's only if Ring Group programming allows. For example, to make a trunk ring an extension:

- Assign the trunk and the extension to the same Ring Group
- In the extension's Ring Group programming, assign ringing for the trunk.

Any number of extensions and trunks can be in a specific group. The Aspire S system allows Ring Groups=1-8, In-Skin Voice Mail (102), or Centralized Voice Mail (103). The Aspire system allows Ring Groups=1-100, In-Skin Voice Mail (102), or Centralized Voice Mail (103).

If an extension has a line key for the trunk, Ring Group calls ring the line key. If the extension doesn't have a line key, the trunk rings the line appearance key. If an extension has a key for a trunk that is not in its ring group, the trunk follows Access Map programming.

Conditions

DIL trunks disregard ring group programming until DIL overflow.

Default Setting

All trunks are in Ring Group 1, the first 16 extensions ring for trunk calls and all other extensions only flash.

Programming

- **15-07-01 : Programmable Function Keys**
  Assign function keys as line (code *01 + trunk number) or loop keys (code *05 + enter 0 (incoming only), 1 (outgoing only) or 2 (both ways)).
  ➪ Aspire S: Trunks 1-8
  ➪ Aspire: Trunks 1-200
- **15-13-01 : Loop Keys - Outgoing**
  Assign trunk groups for outgoing loop keys (0=ARS, Aspire S Trunk Groups 1-8, or Aspire Trunk Groups 1-100).
- **15-13-02 : Loop Keys - Incoming**
  Assign trunk groups for incoming loop keys (0=all Trunk Groups, Aspire S Trunk Groups 1-8, or Aspire Trunk Groups 1-100).
- **22-02-01 : Incoming Call Trunk Setup**
  Assign the incoming trunk type (0) for each trunk. There is one item for each Night Service Mode. Note: This option must be set to '0' for Ring Groups to work.
  ➪ Aspire S: Night Service Time Mode 1-4
  ➪ Aspire: Night Service Time Mode 1-8
- **22-04-01 : Incoming Extension Ring Group Assignment**
  Assign extensions to ring groups.
  ➪ Aspire S Ring Groups: 1-8, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
  ➪ Aspire Ring Groups: 1-100, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail

- **22-05-01 : Incoming Trunk Ring Group Assignment**
  Assign trunks to ring groups.
  - Aspire S Ring Groups: 1-8, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
  - Aspire Ring Groups: 1-100, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
- **22-08-01 : DIL/IRG No Answer Destination**
  For DIL Delayed Ringing, assign the DIL No Answer Ring Group. An unanswered DIL rings this group after the DIL No Answer Time (Program 22-01-04) expires. DIL Delayed Ringing can also reroute outside calls ringing a Ring Group, In-Skin/External Voice Mail, or Centralized Voice Mail.
  - Aspire S Ring Groups: 1-8, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
  - Aspire Ring Groups: 1-100, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
- **22-12-01 : DID Intercept Ring Group**
  For each DID Translation Table, assign the destination for DID Intercept. The destination can be a Ring Group, In-Skin/External Voice Mail, or Centralized Voice Mail. For each table, make a separate entry for each Night Service mode.
  - Aspire S Ring Groups: 1-8, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
  - Aspire Ring Groups: 1-100, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
- **25-03-01 : VRS/DISA Transfer Ring Group With Incorrect Dialing**
  Set the transfer destination for each DISA and Automated Attendant (OPA) trunk. The destination can be a Ring Group or Voice Mail. Make a separate entry for each Night Service mode.
  - Aspire S Ring Groups: 1-8, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
  - Aspire Ring Groups: 1-100, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail

Note: For incoming calls, Ring Group programming (22-04/22-05) overrides Access Map programming (14-07/15-06).

Use the charts below to program the following example:

For this extension . . .[1]			
301	Trunk 1 rings	Trunk 2 flashes	Trunk 3 flashes
302	Trunk 1 flashes	Trunk 2 rings	Trunk 3 flashes
303	Trunk 1 flashes	Trunk 2 flashes	Trunk 3 rings

[1] Trunks ring the same in the day as at night.

Program 22-04 : Incoming Extension Ring Group Assignment			
Ring Group[1]>	1	2	3
Trunk 1	X	-	-
Trunk 2	-	X	-
Trunk 3	-	-	X
X = Trunk assigned to indicated Ring Group			
[1] Make the same 22-05 entry for all Night Service modes.			

Program 22-05 : Incoming Trunk Ring Group Assignment			
Ring Group >	1	2	3
Ext. 301	1	0[1]	0[1]
Ext. 302	0[1]	1	0[1]
Ext. 303	0[1]	0[1]	1
1 = Extension rings 0 = Extension doesn't ring			
[1] To allow extension user to answer flashing line, be sure to give extension incoming access to the trunk in Programs 14-07 and 15-06.			

Related Features

Automatic Call Distribution
Ring Groups can be used to route trunks to ACD groups.

Automatic Route Selection
When ACD is enabled, Ring Groups are programmed to ring into ACD Groups for each of the eight Work Periods.

Call Forwarding, Off-Premise
Ring Group calls do not follow Off-Premise Call Forwarding programming. However, using the voice mail's Call Routing, a dial action table can be created to forward calls to an outside number or Abbreviated Dial number (enter #2001PP with 001 being the # to which the call is forwarded) on timeout using UTRF.

Direct Inward Dial (DID) / Direct Inward System Access (DISA)
DID, DISA overflow options can be to a Ring Group.

Direct Inward Line (DIL)
DILs ring extensions without being in a Ring Group.

ISDN Compatibility
For ISDN 3.1 KHz audio calls, Ring Groups can be assigned as the destination. These calls include G3 (ISDN) fax calls, modem calls and ISDN calls that are not "end-to-end" ISDN.

Night Service
Ring Group programming can be different for each Night Service mode.

Programmable Function Keys
Function keys simplify answering incoming calls.

Operation

Refer to Central Office Calls, Answering.

Please refer to Selectable Ring Tones (page 512) **for information on this feature.**

Ringdown Extension, Internal/External

Aspire S	Aspire M/L/XL
• Available - 512 Hotline assignments and 50 extensions/virtual extensions with software 2.08-2.21; 66 extensions/virtual extensions with software 2.50 and higher.	• Available - 512 extensions/virtual extensions and 512 Hotline assignments.

Description

With a Ringdown Extension, a user can call another extension, outside number, or Abbreviated Dialing number by just lifting the handset. The call automatically goes through - there is no need for the user to dial digits or press additional keys. Ringdown Extensions are frequently used for lobby phones, where the caller just lifts the handset to get the information desk or off-site Reservation Desk.

After the Ringdown Extension user lifts the handset, ringdown occurs after a programmable interval. Depending on the setting of this interval, the extension user may be able to place other calls before the ringdown goes through.

The system allows each extension in the system to have a Ringdown Extension. All extensions can share the same dialing number, if desired.

Conditions

(A.) Ringdown extension has no effect on an extension's current (active) call.
(B.) The Ringdown Extension user **must** lift the handset for ringdown to work.

Default Setting

Disabled.

Programming

- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.
- **20-08-09 : Class of Service Options (Outgoing Call Service) - Hotline/Extension Ringdown**
  In an extension's Class of Service, enable (1) or disable (0) ringdown. If disabled in Class of Service, the settings in Program 21-11 below have no effect.
- **21-01-09 : System Options for Outgoing Calls - Ringdown Extension Timer**
  After the user lifts the handset, the extension automatically calls the ringdown destination after this interval (0-64800 seconds). A setting of '0' will immediately ring the programmed extension. Any other setting will delay the ringdown the number of seconds programmed.
- **21-11-01 : Extension Ringdown (Hotline) Assignments**
  Program the ringdown (Hotline) source and destination (target) number, up to 24 digits (512 Hotline assignments). Remember to include the trunk access code (usually 9) in front of he number when dialing outside numbers. When programming Common Abbreviated Dialing numbers as the destination, the entry should be "853+bin number".

Related Features

Abbreviated Dialing

Ringdown Extension can use Abbreviated Dialing numbers (and follow their trunk routing) as the destination number.

Call Forwarding

Ringdown Extension follows Call Forwarding. For example, the ringdown destination can forward their calls. When the Ringdown Extension user lifts the handset, ringdown automatically calls the extension to which calls are forwarded.

Call Waiting/Camp On, Callback and Off Hook Signaling

If the Ringdown Extension user hears busy tone when they lift the handset, they can Camp On to the destination, leave a Callback or activate Off Hook Signaling.

Do Not Disturb

The ringdown destination user can activate Do Not Disturb. When the Ringdown Extension user lifts the handset, they hear DND. If enabled, the Ringdown Extension user can override the destination's DND.

Handsfree Answerback/Forced Intercom Ringing

If the destination extension has Handsfree Answerback enabled, the call will voice-announce. If the destination extension has Forced Intercom Ringing enabled, the call will ring.

Multiple Directory Numbers/Call Coverage Keys

A Multiple Directory Number key can be a ringdown destination. This would allow a 'front door' key to be programmed on every extension.

Operation

To place a call if your extension has ringdown programmed:

1. Lift handset.

   If you want to place a trunk call, press a line key before lifting the handset.

   Depending on the setting of your ringdown timer, you may be able to dial an Intercom call before your ringdown goes through.

   If the destination has Handsfree Answerback enabled, your call will voice announce. If the destination has Forced Intercom Ringing enabled, your call will ring.

To bypass ringdown (if enabled for your keyset):

1. Do not lift handset.
2. Press CALL.
3. Place Intercom or trunk call.

To answer a call if you are another extension's ringdown destination:

1. Speak toward phone to answer incoming voice-announcement.
   OR
   Lift handset to answer ringing Intercom call.

Room Monitor

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Room Monitor lets an extension user listen to the sounds in a co-workers area. For example, the receptionist could listen for sounds in the warehouse when it's left unattended. To use Room Monitor, the initiating extension ***and*** the receiving extension must activate it.

When using keysets for monitoring, an extension user can only Monitor one extension at a time. However, many extensions can Monitor the same extension at the same time.

With single line phones, multiple SLTs can be programmed to be monitored by the same SLT. However, only one SLT can monitor another SLT at a time.

Room Monitor for Single Lines

This option enables you to monitor the room status through your single line telephone. Between keysets, the monitored room status is picked up by the phone's microphone and the activity is heard through the speaker of the monitoring keyset. Between single line phones, a user goes off hook on the monitored phone and, from another single line phone, dials a service code and the extension number. The activity of the area where the monitored phone is placed can then be heard at the monitoring phone. This service is available until the handset of the monitored telephone is placed on hook.

CAUTION

The use of monitoring, recording, or listening devices to eavesdrop, monitor, retrieve, or record telephone conversation or other sound activities, whether or not contemporaneous with transmission, may be illegal in certain circumstances under federal or state laws. Legal advice should be sought prior to implementing any practice that monitors or records any telephone conversation. Some federal and state laws require some form of notification to all parties to a telephone conversation, such as using a beep tone or other notification methods or requiring the consent of all parties to the telephone conversation, prior to monitoring or recording the telephone conversation. Some of these laws incorporate strict penalties.

Conditions

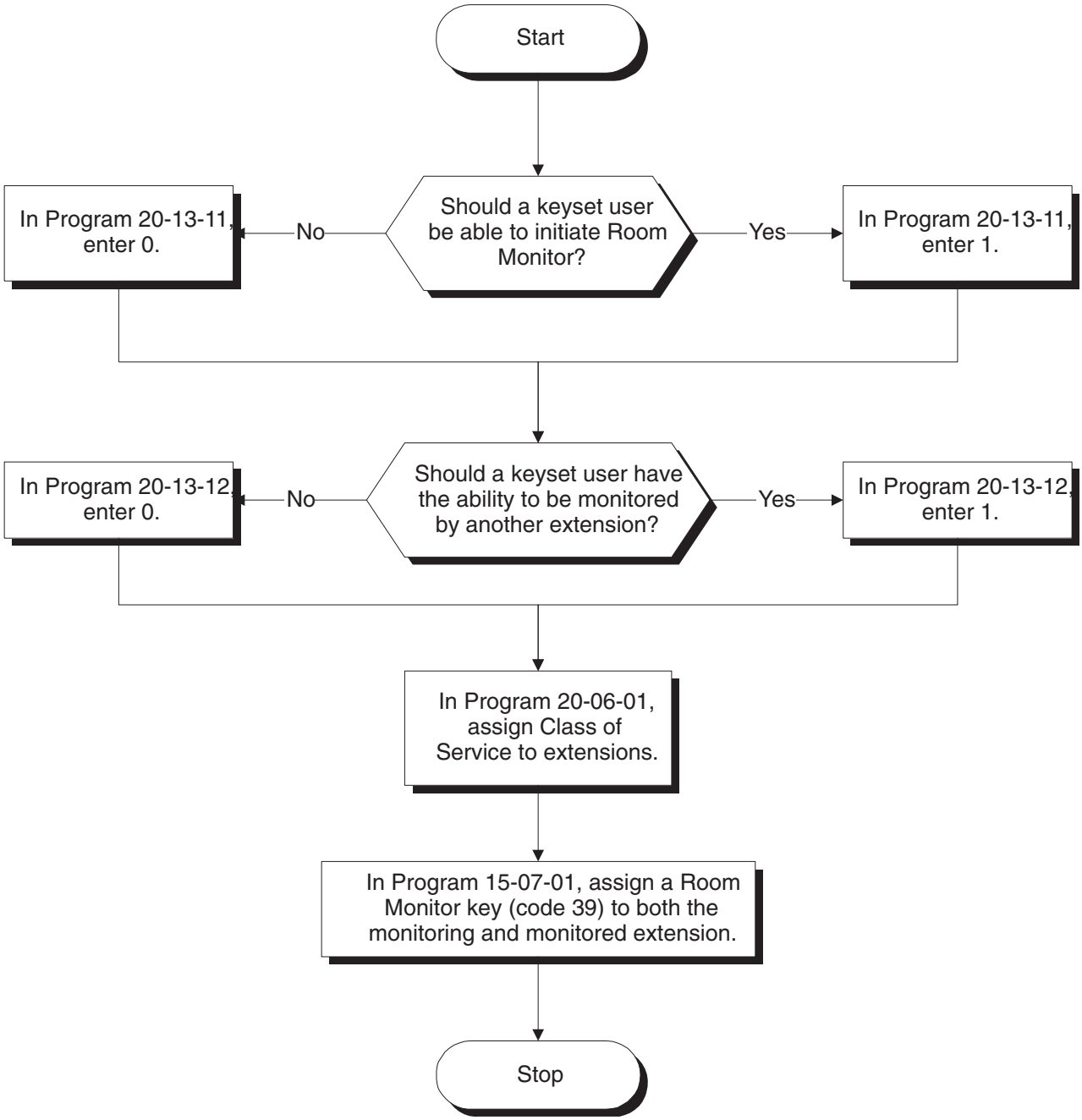
(A.) Room Monitor is for listening only. It does not allow for conversation between the monitoring and monitored extensions.
(B.) An extension user cannot monitor an Attendant.
(C.) The NEC cordless telephone (P/N 730082) does not support Room Monitor.
(D.) A keyset user cannot monitor a single line phone and a single line phone cannot monitor a keyset.
(E.) Multiple Directory Number (virtual extension) keys do not support Room Monitor Programmable Function keys (code 39).

Default Setting

Disabled.

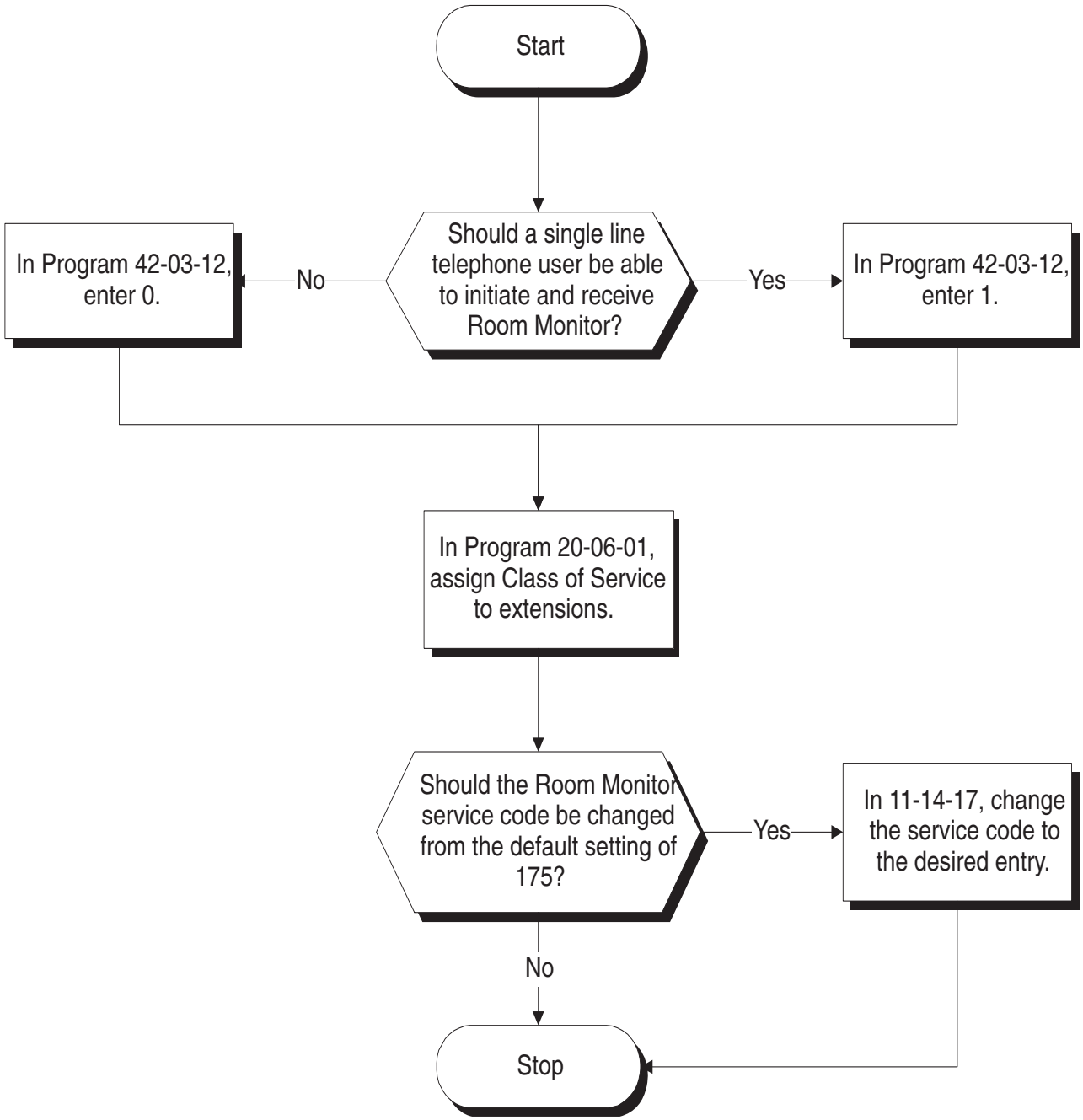
Programming

Keyset Room Monitor



Programming (Cont'd)

Single Line Telephone Room Monitor



Programming (Cont'd)

- **11-14-17 : Service Code Setup (for Hotel) - Hotel Room Monitor**
  Customize the service code (175 by default) to be used for Room Monitor.
- **15-07-01 : Programmable Function Keys**
  Assign a function key as a Room Monitor key (code 39) for both the extension being monitored and the extension initiating Room Monitor.
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.
- **20-13-11 : Class of Service Options (Supplementary Service) - Room Monitor, Initiating Extension**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to initiate Room Monitor.
- **20-13-12 : Class of Service Options (Supplementary Service) - Room Monitor, Extension Being Monitored**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to be monitored.
- **42-03-12 : Class of Service Options (Hotel) - SLT Room Monitor**
  Enable (1) or disable (0) a single line telephone's ability to use Room Monitor.

Related Features

Hotel/Motel

Room Monitor for single line telephones can be used with the Hotel/Motel feature.

Programmable Function Keys

Room Monitor requires uniquely programmed function keys.

Operation

You must activate Room Monitor at the extension initiating the monitor and at the extension you want to monitor. You can only listen to one extension at a time.

Keysets:

To activate Room Monitor (at the initiating extension):

1. Do not lift handset or press SPK.
2. Press Room Monitor key (PGM 15-07 or SC 851: 39).
3. Dial number of extension you want to monitor.
   You can place and answer other calls while Room Monitor is active.

To activate Room Monitor (at the extension to be monitored):

1. Go to the extension you want to monitor.
2. Do not lift handset or press SPK.
3. Press Room Monitor key (PGM 15-07 or SC 851: 39).
4. Dial the number of the extension you are at.
   For example, if you are at extension 306, dial 306.
   You can place and answer other calls while Room Monitor is active.

To cancel Room Monitor (at either extension):

1. Press Room Monitor key at both the initiating extension and the monitored extension.

Single Line Telephones:

To activate Room Monitor (at the extension to be monitored):

1. Go to the extension you want to monitor.
2. Lift handset at the phone to be monitored.
3. Dial 175.
4. Dial 1.
5. Dial number of extension number which will be monitoring the phone.
6. Place the handset on the desk, placing the handset's transmitter towards the room.
   You cannot place or answer other calls while Room Monitor is active.

To activate Room Monitor (at the initiating extension):

1. Lift handset at the phone which will be monitoring another phone.
2. Dial 175.
3. Dial 2.
4. Dial number of extension number which will be monitored.
   You cannot place or answer other calls while Room Monitor is active.

To cancel Room Monitor (at either extension):

1. Hang up the handsets for both the monitored and the monitoring phones.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Save Number Dialed permits an extension user to save their last outside number and easily redial it later on. For example, an extension user can recall a busy or unanswered number without manually dialing the digits. The system retains the saved number until the user stores a new one in its place.

Save Number Dialed saves in system memory a dialed number up to 24 digits. The number can be any combination of digits 0-9, # and *. The system remembers the digits regardless of whether the call was answered, unanswered or busy. The system normally uses the same trunk group as for the initial call. However, the extension user can preselect a specific trunk if desired.

Conditions

None

Default Setting

Enabled.

Programming

- **11-12-13 : Service Code Setup (for Service Access) - Saved Number Dialed**
  Customize the service code (815 by default) to be used for dialing a saved number.
- **15-07-01 : Programmable Function Keys**
  Assign a function key as a Save key (code 30).

Related Features

Automatic Route Selection
For systems with Automatic Route Selection, ARS selects the trunk for the call unless the user preselects.

Central Office Calls, Placing
Other programmed options for outgoing calls can affect how a call is placed. Check or program these options as needed.

Dial Tone Detection
Refer to this feature for the specifics on how the system handles Dial Tone Detection.

Last Number Redial
An extension user can quickly redial the last number placed.

Programmable Function Keys
Function keys simplify Save Number Dialed operation.

Repeat Redial
The system can automatically retry a trunk call that was unanswered or busy.

Operation

To save the outside number you just dialed (up to 24 digits):

Use this feature before hanging up.

Keyset

1. Press Save Number Dialed key (PGM 15-07 or SC 851: 30).

500/2500 Single Line Telephone

1. Hookflash.
2. Dial 815.

To redial a saved number:

Keyset

1. (Optional) Press line key.
   This selects a specific trunk for the call.
2. Press Save Number Dialed key (PGM 15-07 or SC 851: 30).
   The stored number dials out.

   OR

1. Press idle CALL key
2. Dial 815.

   OR

   Press Save Number Dialed key (PGM 15-07 or SC 851: 30).
   Save Number Dialed automatically selects a trunk from the same group as your original call.
   The stored number dials out.

500/2500 Single Line Telephone

1. Hookflash.
2. Dial 815.

To check to see the number you have saved:

1. Press Save Number Dialed key (PGM 15-07 or SC 851: 30).
   The stored number displays for ten seconds.
   The stored number dials out if you:
   - *Lift the handset,*
   - *Press an idle line key,*
   - *Press an idle CALL key, or*
   - *Press SPK*
2. Press CLEAR.

To clear your saved number:

Keyset

1. Press idle CALL key.
2. Dial 885.
3. Press SPK to hang up.

Single Line Telephone

1. Lift handset and dial 885.
2. Hang up.

Secretary Call (Buzzer)

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Secretary Call lets two co-workers alert each other without disturbing their work. To have Secretary Call, both co-workers must have keysets with Secretary Call buzzer keys. When a user presses their buzzer key, the system alerts the called extension by sending a splash tone and flashing the called extension's buzzer key. The called user can respond by placing an Intercom call to the calling party. The called extension's buzzer key continues to flash and the splash tone is heard until either user cancels the Secretary Call. A secretary could use this feature, for example, to get a message through to the boss in an important meeting. After being alerted, the boss could call the secretary when it's most convenient.

An extension can have Secretary Call keys for any number of extensions, limited only by the available number of programmable keys.

Conditions

(A.) Secretary Call is not available to single line telephone users.
(B.) Secretary Call does not set up an Intercom call.
(C.) When assigning Secretary Call, a user enters the associated extension numbers, not port numbers.

Default Setting

Disabled.

Programming

➧ **15-07-01 : Programmable Function Keys**
Assign function keys for Secretary Call buzzer (code 41 + Hold + the destination extension number). Both co-workers must have buzzer keys for each other.

Related Features

Programmable Function Keys
Secretary Call requires a uniquely programmed function key.

Single Line Telephones
Single line telephones cannot use Secretary Call.

Operation

To buzz your secretary or boss:

1. Do not lift handset.
2. Press buzzer key (PGM 15-07 or SC 851: 41 + sec. ext.).
   Your boss or secretary hears ringing.
   Your buzzer key lights steadily.
   Your boss's or secretary's buzzer key flashes fast.
   The phone continues to ring until the Secretary Call key is pressed.

To check to see who left you a Secretary Call:

1. Do not lift handset.
2. Press CHECK.
3. Press flashing Secretary Call key.
4. Press CLEAR.

To answer your Secretary Call indication:

1. Place an Intercom call to the extension that called you.

To cancel a Secretary Call you left at another extension:

1. Press your lit Secretary Call key.

To cancel a Secretary Call left at your extension:

1. Do not lift handset.
2. Press flashing Secretary Call key.

Secretary Call Pickup

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Secretary Call Pickup lets a keyset user easily reroute calls intended for a co-worker to themselves. By pressing a Secretary Call Pickup key, the user can have all calls to a co-worker's phone ring or voice-announce theirs instead. Secretary Call Pickup is a simplified type of Call Forward with Follow Me for employees that work closely together. This feature could be helpful to customer service representatives that must frequently cover each other's clients. When a representative leaves their desk, an associate could press the Secretary Call Pickup key to intercept all their calls.

An extension can have Secretary Call Pickup keys for any number of extensions, limited only by the available number of programmable keys.

Conditions

(A.) Secretary Call Pickup is not available to single line telephone users.
(B.) A Multiple Directory Number (virtual extension) cannot be programmed as the boss's extension.

Default Setting

Disabled.

Programming

➧ **15-07-01 : Programmable Function Keys**
Assign function keys for Secretary Call Pickup (42 + boss ext). Unlike Secretary Call, you do not have to program a corresponding key at the source and destination extensions.

Related Features

Call Forwarding with Follow Me
An extension user can also have Call Forwarding with Follow Me reroute a co-worker's calls to themselves.

Programmable Function Keys
Secretary Call pickup requires a uniquely programmed function key.

Secretary Call (Buzzer)
Co-workers can alert each other without disturbing their work.

Single Line Telephones
A keyset can have a Secretary Call Pickup key for a single line telephone.

Operation

To activate Secretary Call Pickup:

1. Press your Secretary Call Pickup key (PGM 15-07 or SC 851: 42 + boss ext.).
   Your Secretary Call Pickup key lights and the Boss's telephone display shows "BOSS FWD>>".
   Calls intended for covered extension ring your phone instead.

To cancel Secretary Call Pickup:

1. Press your lit Secretary Call Pickup key (PGM 15-07 or SC 851: 42 + boss ext.).

To check a key's Secretary Call Pickup assignment:

1. Press CHECK.
2. Press your Secretary Call Coverage key (PGM 15-07 or SC 851: 42 + boss ext.).
3. Press CLEAR.

Secure Set Relocation

Please refer to Maintenance (page 391) for information on this feature.

Aspire S	Aspire M/L/XL
• Available - all telephones are able to use Selectable Display Messaging at one time.	• Available - all telephones are able to use Selectable Display Messaging at one time.

Description

An extension user can select a preprogrammed Selectable Display Message for their extension. Display keyset callers see the selected message when they call the user's extension. Selectable Display Messaging provides personalized messaging. For example, an extension user could select the message "GONE FOR THE DAY". Any display keyset user calling the extension may hear a DND signal and then see the message. See table below for a list of the standard messages.

An extension user can add digits for date, time or phone number after messages 1-8 and 10 (up to 24 characters). For example, an extension user could select the message "ON VACATION UNTIL" and then enter the date. Callers see the original message followed by the appended date. They would then be able to tell when the user was coming back from vacation. The system allows all phones to use the Selectable Display Messaging feature at the same time.

The default messages are:

No.	Message	Change "#" to...
1	IN MEETING UNTIL ##:##	Time (when meeting done)
2	MEETING ROOM - ########	Room Name or extension
3	COME BACK ##:##	Time (when returning)
4	PLEASE CALL ###########	11 digits (phone number)
5	BUSY CALL AFTER ##:##	Time (when returning)
6	OUT FOR LUNCH BACK ##:##	Time (when returning)
7	BUSINESS TRIP BACK ##/##	Date (when returning)
8	BUSINESS TRIP ##########	10 digits (where reached)
9	GONE FOR THE DAY	
10	ON VACATION UNTIL ##/##	Date (when returning)
11-20	MESSAGE 11-20	

Conditions

None

Default Setting

Enabled.

Programming

- **11-11-14 : Service Code Setup (for Setup/Entry Operation) - Text Message Setting**
  Define the service code to be used when setting a text message.
- **15-07-01 : Programmable Function Keys**
  Assign a function key for Call Forwarding (Device) (code 17) or Text Message (code 18). The Call Forwarding Device key allows the user to select a message each time they activate the feature, while the Text Message key automatically selects the message used when programming the key.
- **15-07-01 : Programmable Function Keys**
  Using the Text Message Setup key (18 + message number), a user can easily set the Selectable Display Messaging feature with the preprogrammed message number.
- **20-01-02 : System Options - Text Message Mode**
  Select whether and intercom caller should hear busy (1) or ring through (0) for extensions which have Selectable Display Messaging set. **Note:** Any extensions previously set with Selectable Display Messaging must cancel the feature and reactivate in order for a change in this option to take affect.
- **20-02-07 : System Options for Multi-Line Telephones - Time and Date Display Mode**
  Set the System Time and Date display mode. The time that displays in Selectable Display Messages follows this setting.
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.
- **20-13-19 : Class of Service Options (Supplementary Service) - Selectable Display Messaging**
  In an extension's Class of Service, enable (1) or disable (0) an extension's ability to use Selectable Display Messaging.
- **20-16-01 : Selectable Display Messages**
  Program the Selectable Display Messages (1-20). Refer to the chart below for character entry.

Use this keypad digit . . .	When you want to. . .
1	Enter characters: 1 @ [¥] ^ _ ‘ { | } > <
2	Enter characters A-C, a-c, 2.
3	Enter characters D-F, a-f, 3.
4	Enter characters G-I, g-i, 4.
5	Enter characters J-L, j-l, 5.
6	Enter characters M-O, m-o, 6.
7	Enter characters P-S, p-s, 7.
8	Enter characters T-V, t-v, 8.
9	Enter characters W-Z, w-z, 9.
0	Enter characters: 0 ! “ # $ % & <space> ( )
*	Enter characters: * + , - . / : ; < = > ?
#	# = Accepts an entry (only required if two letters on the same key are needed - ex: **ST**A)
CONF	Clear the character entry one character at a time.
FLASH	Clear all the entries from the point of the flashing cursor and to the right.

Related Features

Do Not Disturb

The DND key lights steady when Program 20-01-02 is set to "1" (no answer/busy mode) and ICM callers may hear "Please do not disturb" or a DND signal. The message is displayed on their phone. If this option is set to "0" (call mode), the DND is off allowing ICM callers to ring through while the message is displayed on their phone.

Programmable Function Keys

Function keys simplify Selectable Display Messaging operation.

Operation

To select a message:

1. Press idle CALL key + dial *4 .
   OR
   Press Call Forward (Device) key (PGM 15-07 or SC 851: 17).
   OR
   Press idle CALL key + press Text Message key (PGM 15-07 or SC 851: 18) + enter digits to append, if needed + SPK to hang up. Skip the remaining steps.
2. Dial 3 + Message number (01-20).
   Use VOL ▲ or VOL ▼ to scroll through the messages.
3. (Optional for messages 1-8 and 10)
   Dial the digits you want to append to the message.
   You can append messages 1-8 and 10 with digits (e.g., the time when you will be back). You enter the time in 24-hour format, but it displays in 12-hour format.
4. Press SPK to hang up.
   Intercom calls to extensions with Selectable Display Messaging set will receive a DND signal and receive the display message on their telephone's display instead of ringing the extension based on the setting in Program 20-01-02.
   To allow calls to ring through and have the message displayed on the calling extension's display, cancel DND by pressing DND + 0.

To cancel a message:

1. Press idle CALL key + dial *4 .
   OR
   Press Call Forward (Device) key (PGM 15-07 or SC 851: 17).
   OR
   Press idle CALL key + press Text Message key (PGM 15-07 or SC 851: 18) + SPK to hang up.
2. Dial 3.
3. Press SPK to hang up.

Using the Text Message Service Code to select a message:

1. Press idle CALL key + dial the Text Message service code (Program 11-11-14).
2. Dial the Selectable Dsiplay Message number to be used (01-20).
3. Press SPK to hang up.
   To cancel, repeat Step 1 and hang up.

Selectable Ring Tones

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

An extension user can change the way trunks or ICM calls ring their phone. Selectable Ring Tones allows an extension user to set up unique ringing for their calls. This is important in a crowded work area where several phones are close together. Because their phone has a characteristic ring, the user always can tell when it's their phone ringing.

Conditions

None

Default Setting

Enabled

Programming

- **11-11-20 : Service Code Setup (for Setup/Entry Operation) - Change Incoming CO and ICM Ring Tones**
  If required, change the service code used for changing the incoming ring tones heard for CO and ICM calls (Default: 820).
- **15-02-02 : Multi-Line Telephone Basic Data Setup - Trunk Ring Tone**
  Use this option to set the tone (pitch) of the incoming trunk ring for the extension port you are programming (1 = High, 2 = Mid range, 3 = Low, 4 = Ring Tone 1, 5 = Ring Tone 2, 6 = Ring Tone 3, 7 = Ring Tone 4, 8 = Ring Tone 5).
- **15-02-03 : Multi-Line Telephone Basic Data Setup - Extension Ring Tone (Pitch)**
  Use this option to set the tone (pitch) of the incoming extension call ring for the extension port you are programming (1 = High, 2 = Mid range, 3 = Low, 4 = Ring Tone 1, 5 = Ring Tone 2, 6 = Ring Tone 3, 7 = Ring Tone 4, 8 = Ring Tone 5). Also see program 15-08.
- **15-08-01 : Incoming Virtual Extension Ring Tone Setup**
  Assign a ring tone range (0-4) to incoming virtual extensions assigned to a Virtual Extension key (Program 15-07). If you enable ringing for the key in Program 15-09, the key rings with the tone you set in this program. Also see Program 22-03.
- **15-10-01 : Incoming Virtual Extension Ring Tone Order Setup**
  Set the priority (1-4) for the Virtual Extension Ring Tones set in Program 15-08. When Virtual Extension calls ring an extension simultaneously, the tone with the highest order number (e.g., 1) rings. The other keys just flash.
- **22-03-01 : Trunk Ring Tone Range**
  Select the ring tone range for the trunk. The trunk uses a ring tone within the range selected when it rings an extension. There are four ring tones available. Customize the Trunk Ring Tones in Program 82-01.

Related Features

Distinctive Ringing, Tones and Flash Patterns
This feature can be used to change the default ring tones.

i-Series Telephones
Selectable Ring Tones is not available for i-Series phones on the Aspire system.

Single Line Telephones
Single line telephones cannot use Selectable Ring Tones.

Transfer
Transferred calls on DISA, DID, ISDN trunks, or from the VRS can display the reason a call is being transferred (Call Forward, Busy, No Answer, or DND) unless a Selectable Display Message is enabled. If enabled, the message shall be displayed instead of the reason for the call transfer.

Operation

To change your extension's incoming ring tones:

1. Press idle CALL key.
2. Dial 820.
3. Dial 1 to set Intercom ring; 2 to set trunk ring.
4. Dial code for the desired ring pattern (1-8).
5. Press SPK to hang up.

To listen to the incoming ring choices:

1. Press idle CALL key.
2. Dial 811.
3. Dial 1 to listen to Intercom ring; 2 to listen to trunk ring.
   For trunk ring, enter the tone to which you want to listen.
4. **For Intercom Ring:**
   Dial code for the ring pattern you want to hear (1-8).
   OR
   For Trunk Ring:
   Dial code for the ring pattern you want to hear (1-8) and then dial the tone for the ring pattern (1-4).
5. Press SPK to hang up.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Serial Call is a method of transferring a call so it automatically returns to the transferring extension. Serial Calling saves transferring steps between users. For example, a Customer Service Representative (CSR) has a client on the phone who needs technical advice. The CSR wants to send the call to Tech Service, but needs to advise the client of certain costs when Tech Service is done. Rather than transferring the call back and forth, the CSR can use Serial Call to Technical Service and announce, "I have Ted on the phone. I need to talk to him again. Just hang up when you're done and I'll get him back."

Conditions

The transferring extension can remain off-hook to auto-receive the callback or hang up and it will ring back to them.

Default Setting

Disabled.

Programming

➧ **15-07-01 : Programmable Function Keys**
Assign a programmable key as a Serial Call key (code 43).

Related Features

Programmable Function Keys
Serial Call requires a uniquely programmed function key.

Single Line Telephones
Serial Call is not available to single line telephones.

Transfer
An extension user can extend (send) a call to a co-worker.

Operation

To place a Serial Call to a co-worker:

1. Place or answer a call.
2. Press HOLD.
3. Dial co-worker's extension number.
   Co-worker must lift handset to respond to your announcement.
4. Press Serial Call key (PGM 15-07 or SC 851: 43) but do not hang up.
   When your co-worker hangs up the call, the system makes an automatic live transfer back to your extension.

Aspire S	Aspire M/L/XL
• Available - 18 single line telephones maximum.	• Available - 256 single line telephones maximum (may be restricted due to system power requirements).
• Defining CODEC Filter settings available.	• Defining CODEC Filter settings available with software 1.04+.
• DTMF Dial Out Timer requires software 4.0E+.	• DTMF Dial Out Timer requires software 4.0E+.

Description

The system is compatible with 500 type (Dial Pulse) and 2500 type (DTMF) analog single line telephones (SLTs). You can install single line telephones as On-Premise or Off-Premise extensions. Single line telephone users can dial codes to access many of the features available to keyset users. With Single Line Telephones, you can have your system simulate PBX type operation.

When installing single line telephones, you must have:

- A port on an SLIU PCB for each single line telephone installed.
- (If you have 2500 sets) At least one block reserved on the NTCPU for analog extension DTMF reception.

CODEC Filter Data Setup Program Added

When **Program 82-07-01 : CODEC Filter Setup for Analog Station Ports** is set to "4 - Specified Data", the system will use the settings in **Program 82-09 : SLIU CODEC Filter Data Setup**.

These values should not be changed from their default settings unless directed by NEC'S Technical Service department.

The side tone of the SLIU is adjusted using all 16 values, however, special software is required in order to compute these values. The setting is not proportional to the gain level. To change these values, contact NEC's Technical Service department for assistance.

DTMF Dial Out Timer Added

A program is added for DTMF dialing, **Program 20-03-07 : System Options for Single Line Telephones**. When **Program 20-03-03 : System Options for Single Line Telephones - SLT DTMF Dial to Trunk Lines** is set to "0" (receive all digits before sending), the system will following the timers in Program 20-03-04 and 23-03-07.

The timer in **Program 20-03-04 : System Options for Single Line Telephones - Dial Sending Start Time for SLT or ARS** will reset when the user dials another digit.

The timer in **Program 23-03-07 : System Options for Single Line Telephones - Forced Dial Sending Start Time** will not reset when a digit is dialed. The user must finish dialing all the digits before this timer expires (Entries: 0-64800 seconds, Default: 0).

Conditions

(A.) Dial Pulse (500 type) single line telephones cannot access any features that require the user to dial # or *.

Default Setting

- Single Line Telephones function as soon as they are installed and properly programmed.

Programming

- **10-03-01 : PCB Setup**
  Program all on-premise 500/2500 type single line telephones with circuit type '2'. Set the DIOPU trunk to type '1' when trunks should be defined for off-premise extension (OPX) use.
- **10-03-03 : PCB Setup, For SLIU Unit - Transmit CODEC Gain Type**
  10-03-04 : PCB Setup, For SLIU Unit - Receive CODEC Gain Type
  Assign transmit and receive levels for 500/2500 type single line telephones.
- **10-09-01 : DTMF and Dial Tone Circuit Setup**
  If the system has 2500 type (DTMF) single line extensions, allocate at least one circuit for analog extension DTMF reception (entry 0 or 1).
  - Use the following as a guide when allocating DTMF receivers:
    - In light traffic sites, allocate one DTMF receiver for every 10 devices that use them.
    - In heavy traffic sites, allocate one DTMF receiver for every five devices that use them.
- **15-03-01 : Single Line Telephone Basic Data Setup - SLT Signaling Type**
  Enter 0 if single line phone is a 500 type (dial pulse). Enter 1 if single line telephone is a 2500 type (DTMF).
- **15-03-03 : Single Line Telephone Basic Data Setup - Terminal Type**
  Enter 0 for normal 500/2500 type telephones. Enter 1 if a Voice Mail port (refer to "Voice Mail" for more).
- **20-03-02 : System Options for Single Line Telephones - Ignore Received DP Dial on DTMF SLT Port**
  Use this option to define whether the system should receive dial pulse and DTMF signals (0) or ignore dial pulse and only accept DTMF signals (1).
- **20-06-01 : Class of Service for Extensions**
  Assign a unique Class of Service for Dual OPX phones only when using Continued Dialing.
- **20-13-13 : Class of Service Options (Supplementary Service) - Continued Dialing**
  Set option to '0' to prevent dual DTMF tones when using Continued Dialing.
- **20-15-01 : Ring Cycle Setup - Normal Incoming Call on Trunk**
  Define the ringing cycle (1-13) for normal incoming trunk calls (DIL, ring group, etc.).
- **20-15-03 : Ring Cycle Setup - Incoming Internal Calls**
  Define the ringing cycle (1-13) for ICM calls.
- **20-15-05 : Ring Cycle Setup - DID**
  Define the ringing cycle (1-13) for DID calls.
- **80-03-01 : DTMF Tone Receiver Setup**
  80-04-01 : Call Progress Tone Detector Setup
  If required, modify the criteria for dial tone detection and call progress tone detection for the DTMF tones received at a single line telephone.
- **82-04-01 - 82-04-14 : SLIU Initial Data Setup**
  Set various timing parameters for the analog station PCBs. The entries you make in this program affect all SLIU PCBs installed (make time, break time, hookflash, etc.).
- **82-07-01 : CODEC Filter Setup for Analog Station Ports**
  Define the CODEC (QSLAC) Filter (0 = No filter, 1 = 0dB Loss, 2 = 4dB Loss, 3 = 8dB Loss, 4 = Specified Data from Program 82-09) for each analog extension port
  ➪ Aspire S Analog Ports: 1-18
  ➪ Aspire Analog Ports: 1-256

Related Features

Single line telephone users have access to the following features:

Abbreviated Dialing	Department Step Calling	Message Waiting
Account Codes	Directed Call Pickup	Night Service
Alarm	Do Not Disturb	Off Hook Signaling
Automatic Route Selection	Door Box	Paging
Barge In	Flash	PBX Compatibility
Call Forwarding	Forced Trunk Disconnect	Pulse to Tone Conversion
Call Forwarding with Follow Me	Group Call Pickup	Ringdown Extension
Call Forwarding/DND Override	Hold	Save Number Dialed
Call Waiting/Camp On with Split	Intercom	Selectable Display Messages
Callback	Handsfree Answerback/Forced Intercom Ringing	Toll Restriction
Central Office Calls, Answering	Last Number Redial	Transfer
Central Office Calls, Placing	Line Preference	Trunk Queuing and Camp On
Conference	Meet Me Conference	Voice Mail
Department Calling	Meet Me Paging	Voice Over
	Meet Me Paging Transfer	Warning Tone for Long Conversation

Data Communications

APA and APR modules can be used with keysets to provide an analog port.

Refer to the individual features for additional descriptive, programming and operational information.

Operation

Refer to the individual features listed in the Related Features chart above.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Each display telephone provides interactive soft keys for intuitive feature access. It is no longer necessary to remember feature codes to access the telephone's advanced features because the function of the soft keys change as the user processes calls. For example, just press a soft key to Page, Park a call, leave a message or Camp On to a busy co-worker.

Additional options allow you to "fine tune" the keyset's volume levels for handset receive and transmit, speaker volume, ringer and handset volume, and headset volume levels. You can also customize the point at which the built-in speakerphone switches from transmit to receive; a boon for noisy environments. The display telephones also have a contrast control for the LCD display.

Conditions

If a feature is restricted by an extension's Class of Service, though the Soft Key menu will still display the option, the user can not set the feature.

Default Setting

Display shows time/date/extension/Soft Key menu information.

Programming

None

Related Features

Directory Dialing

Using the Directory Dialing Soft Keys, the FLASH key can toggle the language display from English to Japanese.

i-Series Telephones

Soft Keys are not available for i-Series phones on the Aspire system.

Volume Controls

The feature must be active to change the volume (ex: phone must be ringing, page being heard, etc.). Pressing the volume keys when the phone is idle will adjust the display's contrast.

Refer to the individual features for additional descriptive, programming and operational information.

Aspire S	Aspire M/L/XL
• Available.	• Available.
• This feature requires a connection to the system using a CTA or CTU adapter, or through the serial, or LAN port on the Aspire ENTU. (The LAN port only provides information through LAN-capable programs, such as HyperTerminal. Printing of the SMDR information must be done from within that program.)	• This feature requires a connection to the system using a CTA or CTU adapter, or through the serial or USB port on the Aspire NTCPU (requires the USB driver which can be downloaded from the NEC Technical Support web site - ws1.necii.com). • The LAN port on the Aspire NTCPU can be used with 1.02+. (The LAN port only provides information through LAN-capable programs, such as HyperTerminal. Printing of the SMDR information must be done from within that program.)
• SMDR output includes Caller ID with software 4.0E+.	• SMDR output includes Caller ID with software 4.0E+.

Description

Station Message Detail Recording (SMDR) provides a record of the system's trunk calls. Typically, the record outputs to a customer-provided printer, terminal or SMDR data collection device. SMDR allows you to monitor the usage at each extension and trunk. This makes charge-back and traffic management easier.

SMDR provides the following options:

- **Abandoned Call Reporting**
  The SMDR report includes calls that rang into the system but were unanswered (i.e., abandoned). SMDR can include all abandoned calls or only those abandoned calls that rang longer than the specified duration. The Abandoned Call Report helps you keep track of lost business.

- **Blocked Call Reporting**
  When Toll Restriction blocks a call, you can have SMDR print the blocked call information. Or, you can have SMDR exclude these types of calls. With Blocked Call Reporting, you can better customize Toll Restriction for the site's application.

- **Customized Date Format**
  The SMDR header can show the report date in one of three formats: American, European or Japanese. Set the format for your preference.

- **Transferred Call Tracking**
  SMDR shows each extension's share of a transferred call. If an outside call is transferred among four extensions, SMDR shows how long each of the callers stayed on the call.

- **Data Call Tracking**
  Data Call Tracking can log the system's internal data calls. Since SMDR normally logs external (trunk) data calls, Data Call Tracking lets you get a complete picture of data terminal activity.

- **Digit Counting**
  With Digit Counting, SMDR can selectively keep track of toll calls. For example, if the digit count is nine, SMDR won't include toll calls within the home area code. Digit Counting permits SMDR to include only the types of calls you want to monitor.

- **Digit Masking**
  Digit Masking lets you "X" out portions of the number dialed on the SMDR report. A digit mask of seven, for example, masks out all exchange codes (NNXs) and local addresses. Digit Masking makes it easier to keep track of calling patterns, without having to interpret each individual number. You can also use Digit Masking to block out access and security codes.

- **Duration Monitoring**
  SMDR can include calls of any duration, or only those that last longer than the interval you specify. If you want to keep track of all trunk activity, use a short duration. To keep track of only significant usage, use a longer duration.

- **Extension Exclusion**
  You can selectively exclude extensions from the SMDR report. This ensures privacy for high-profile callers. For example, the company attorney negotiating a merger may not want his calls to show up on an in-house report.

- **PBX Call Reporting**
  If you system is behind a PBX, you can have SMDR monitor all traffic into the PBX or just calls placed over PBX trunks. The SMDR record can include all PBX calls (including calls to PBX extensions) or just calls that include the PBX trunk access code.

- **Serial and USB SMDR Communication**
  The system is compatible with both serial and USB SMDR devices. This gives you many SMDR output options. For example, you can output the SMDR report to a high speed printer or send it to disk through a PC's serial or USB port (requires the USB driver which can be downloaded from the NEC Technical Support web site - ws1.necii.com).

- **Trunk Exclusion**
  Use Trunk Exclusion to exclude certain trunks not subject to per-call charges (like WATS lines) from the SMDR report. This makes call accounting easier, since you review only those calls with variable costs.

- **Usage Summaries**
  SMDR can automatically print daily, weekly and monthly call activity summaries. Each summary includes the total number of regular trunk calls and ISDN trunk calls, and the costs for each type. The daily report prints every day at midnight. The weekly report prints every Sunday night at midnight. The monthly report prints at midnight on the last day of the month.

- **Extension Name or Number**
  The SMDR report can include an extension's name or extension number. Choose the method that makes it easier for you to track call usage.

Sample SMDR Report Through Software 3.07

							01/01/03	PAGE 001
CLASS	TIME	DATE	LINE	DURATION	STATION	DIALLED No./CLI	ACCOUNT	
POT	10:44	01/01/03	001	00:00:30	324	12039265400	8841	
POT	10:46	01/01/03	001	00:00:45	324	18874521		0
POT	10:47	01/01/03	001	00:00:29	318	12039265441		0
PIN	10:48	01/01/03	002	00:01:39				NO ANSWER
ALB	10:50	01/01/03	02	00:01:40				
POT	10:55	01/01/03	002	00:00:00	324			0
ALB	10:56	01/01/03	02	00:00:23				
BRD	10:56	01/01/03	002	00:00:00	324			0
ALB	10:56	01/01/03	02	00:00:09				
BRD	10:56	01/01/03	002	00:00:00	324	120366541233		0
ALB	10:56	01/01/03	02	00:00:09				
BRD	10:56	01/01/03	002	00:00:00	324	181477445236		0
ALB	10:56	01/01/03	02	00:00:08				

SMDR Enhanced for Caller ID

Depending on your software version, the SMDR output is enhanced to include up to 16 or 24 characters of the Caller ID name information (depending on the view option selected in Program 35-02-18). You can select to display the Caller ID number or name or the DID number. If you wish to display the Caller Name in the “DIALLED NO./CLI” and “ACCOUNT" area, select "2" in the updated Program 35-02-15 and "1" in Program 35-02-17.

If the Caller ID name is not received, the area for Caller ID Name is left blank.

Sample SMDR Report Through Software 4.0E or Higher

For example, with Program 35-01-09 = 0 (Format for NA) and Program 35-02-17 = 1 (Caller ID Name), if a call is received with the Caller ID Name of “NECinfrontia Corporation” (24 characters), the following SMDR record is displayed:

CLASS	TIME	DATE	LINE	DURATION	STATION	DIALLED No./CLI	ACCOUNT
POT	10:52	12/09	002	00:00:10	2001	2142623801	08754
PIN	10:52	12/09	001	00:00:20	2017	2142623802	NECinfrontia Cor
PIN	10:53	12/09	002			2142623801	NO ANSWER

If Program 35-02-18 = 1 (Caller ID Name Output Method) is set to line feed, the SMDR will display as follows:

CLASS	TIME	DATE	LINE	DURATION	STATION	DIALLED No./CLI	ACCOUNT
POT	10:52	12/09	002	00:00:10	2001	2142623801	08754
PIN	10:52	12/09	001	00:00:20	2017	2142623802	NECinfrontia Cor
NEXT NECinfrontia Corp.							
PIN	10:53	12/09	002			2142623801	NO ANSWER

Definitions	
Call Record Number	SMDR record number (consecutive)
CLASS	Type of call (see Class Definitions below)
TIME	Time call placed or answered. (For Transferred calls, shows time user picked up Transfer.)
DATE	Date the call was made
LINE	Trunk number used for call
DURATION	How long call lasted. (For Transferred calls, shows how long user was on call after answering the Transfer.)
STATION	Extension number of call “owner” (i.e., extension that first placed or answered call) (For Transferred calls, there can be more than one owner - depending on how many extensions shared the call.)
DIALLED No./CLI	For outgoing calls, the number dialed or, for incoming calls, the Caller ID information
COST	For system with ARS, indicates the call cost
OR	
ACCOUNT	Account Code number entered by extension user
Class Definitions	
POT	Outgoing trunk call
POTA	Outgoing trunk call placed using Toll Restriction Override
PIN	Incoming trunk calls
ALB	All lines in group are busy (group number follows TIME field)
BRD	Call blocked due to Toll Restriction
PTRS	Transferred call
IVIN	BRI trunk call

Description (Cont'd)

SMDR Report Format with Program 35-02-14 Set to "0"	
Character Position	**Field Definition**
Header Line 1	
1-60	Spaces
61-70	MM/DD/YYYY
71	Space
72-75	PAGE
76	Space
77-79	Report page number (e.g., 001)
CR & LF	Carriage return and line feed
Header Line 2	
1-5	CLASS
6	Space
7-10	TIME
11-14	Spaces
15-18	LINE
19-22	Spaces
23-30	DURATION
31-32	Spaces
33-39	STATION
40-44	Spaces
45-51	DIALLED
52	Space
53-59	No./CLI
60-63	Spaces
64-70	ACCOUNT
CR & LF	Carriage return and line feed
LF	Line feed
SMDR Record	
1-4	Call type (e.g., POT for outgoing)
5	Space
6-10	Time in 24 hour clock (HH:MM)
11	Space
12-21	LINE
22	Space
23-30	Call Duration (HH:MM:SS)

SMDR Report Format with Program 35-02-14 Set to "0"	
Character Position	**Field Definition**
31	Space
32-41	Station number or name
42	Space
43-62	Number dialed (20 digits maximum)
63	Space
64-79	Account number or NO ANSWER

SMDR Report Format with Program 35-02-14 Set to "1"	
Character Position	**Field Definition**
Header Line 1	
1-60	Spaces
61-70	MM/DD/YYYY
71	Space
72-75	PAGE
76	Space
77-79	Report page number (e.g., 001)
CR & LF	Carriage return and line feed
Header Line 2	
1-5	CLASS
6	Space
7-10	TIME
11	Spaces
12-15	DATE
16-17	Spaces
18-21	LINE
22	Space
23-30	DURATION
31-32	Spaces
33-39	STATION
40-44	Spaces
45-51	DIALLED
52	Space
53-59	No./CLI
60-63	Spaces
64-70	ACCOUNT
CR & LF	Carriage return and line feed

SMDR Report Format with Program 35-02-14 Set to "1"	
Character Position	**Field Definition**
LF	Line feed
SMDR Record	
1-4	Call type (e.g., POT for outgoing)
5	Space
6-10	Time in 24 hour clock (HH:MM)
11	Space
12-16	DATE
17	Space
18-21	LINE
22	Space
23-30	Call Duration (HH:MM:SS)
31	Space
32-41	Station number or name
42	Space
43-62	Number dialed (20 digits maximum)
63	Space
64-79	Account number or NO ANSWER

Summary Reports

```
OUTGOING CALL/COST SUMMARY
FOR DAY OF nn/nn/nn

    TOTAL NO. OF OUTGOING PSTN CALLS:0
    TOTAL NO. OF OUTGOING ISDN CALLS:0
    NO. OF OUTGOING PSTN CALLS COSTED:0 COST:0
    NO. OF OUTGOING ISDN CALLS COSTED:0 COST:0

OUTGOING CALL/COST
SUMMARY FOR WEEK ENDING nn/nn/nn
    TOTAL NO. OF OUTGOING PSTN CALLS:49
    TOTAL NO. OF OUTGOING ISDN CALLS:0
    NO. OF OUTGOING PSTN CALLS COSTED:0 COST:0
    NO. OF OUTGOING ISDN CALLS COSTED:0 COST:0

OUTGOING CALL/COST SUMMARY
FOR MONTH ENDING nn/nn/nn
    TOTAL NO. OF OUTGOING PSTN CALLS:49
    TOTAL NO. OF OUTGOING ISDN CALLS:0
    NO. OF OUTGOING PSTN CALLS COSTED:0 COST:0
    NO. OF OUTGOING ISDN CALLS COSTED:0 COST:0
```

Conditions

(A.) The SMDR report does not include Intercom calls.

(B.) The SMDR call buffer stores 500 calls. The buffer stores calls when the SMDR device is unavailable. When the buffer fills, the oldest record is deleted to allow the new record to be saved.

(C.) When SMDR reports are enabled using the same port as the Traffic Reporting feature (example: 147), the SMDR blocks the Traffic reports. Unplugging the cable and plugging it back in again will allow Traffic reports to print.

(D.) SMDR requires a connection to the NTCPU via a COM port, USB (Aspire only) or LAN connection. A USB connection from the Aspire NTCPU requires the USB driver which can be downloaded from the NEC Technical Support web site - ws1.necii.com.

The system can also use a connection to the system via a CTA/CTU adapter (the CTU adapter also requires a USB driver which is also available on the web site). Once you designate a CTA or CTU for SMDR, you cannot use that extension for placing and answering other data calls. SMDR and the Traffic Reports should not use the same CTA/CTU.

(E.) If no answer is received, "NO ANSWER" is displayed regardless of the system programing for the Caller ID display option.

(F.) The setting in Program 35-02-18 works regardless of the entry in Program 35-02-15 or 35-02-17.

(G.) When Program 35-02-18 is set to "1", the first and second lines are sometimes separated. When the buffer is full, the overflowed data may not be shown.

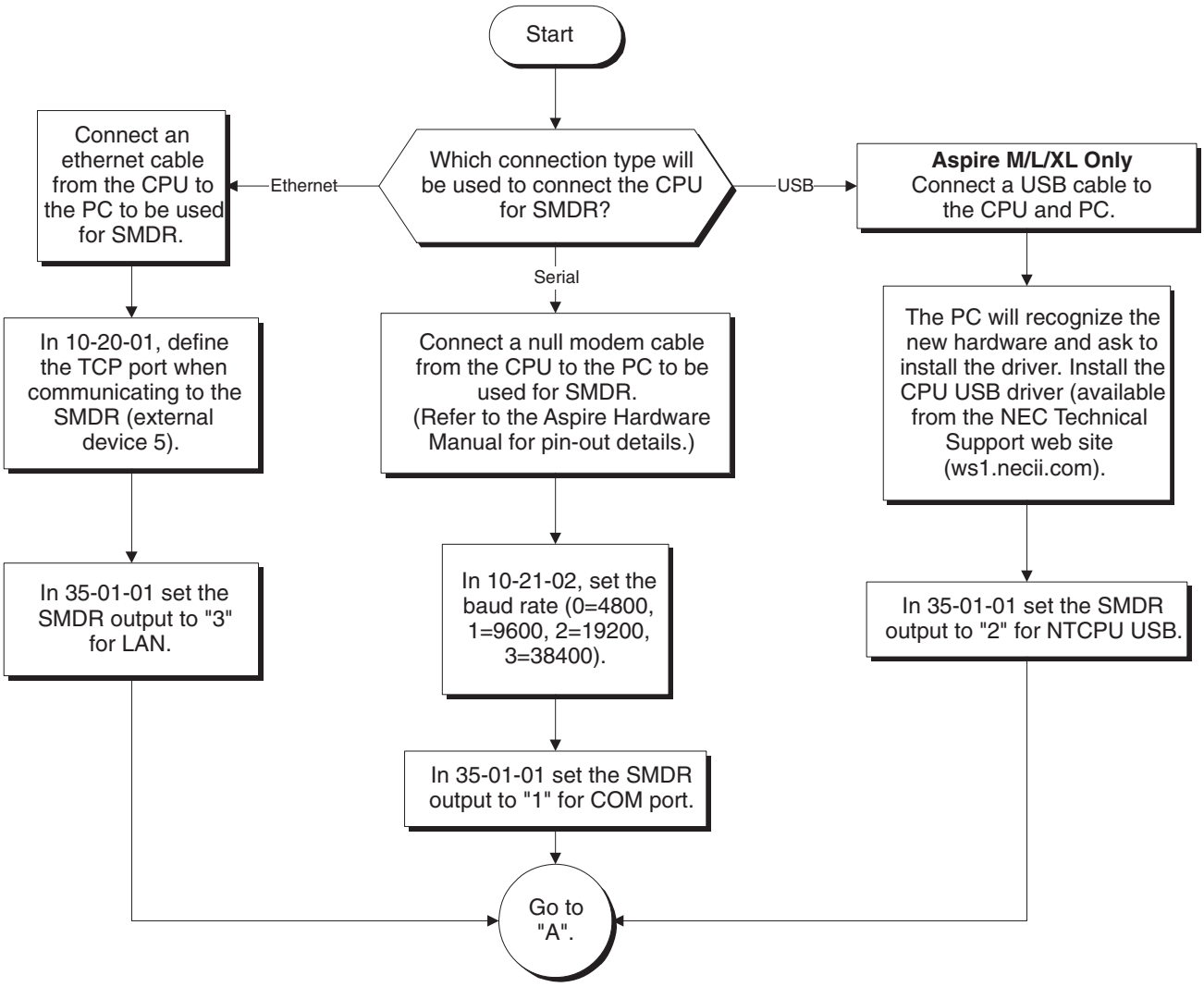
(H.) The special characters used in the Aspire system cannot be output to the SMDR - they are converted to "_".

Default Setting

Disabled.

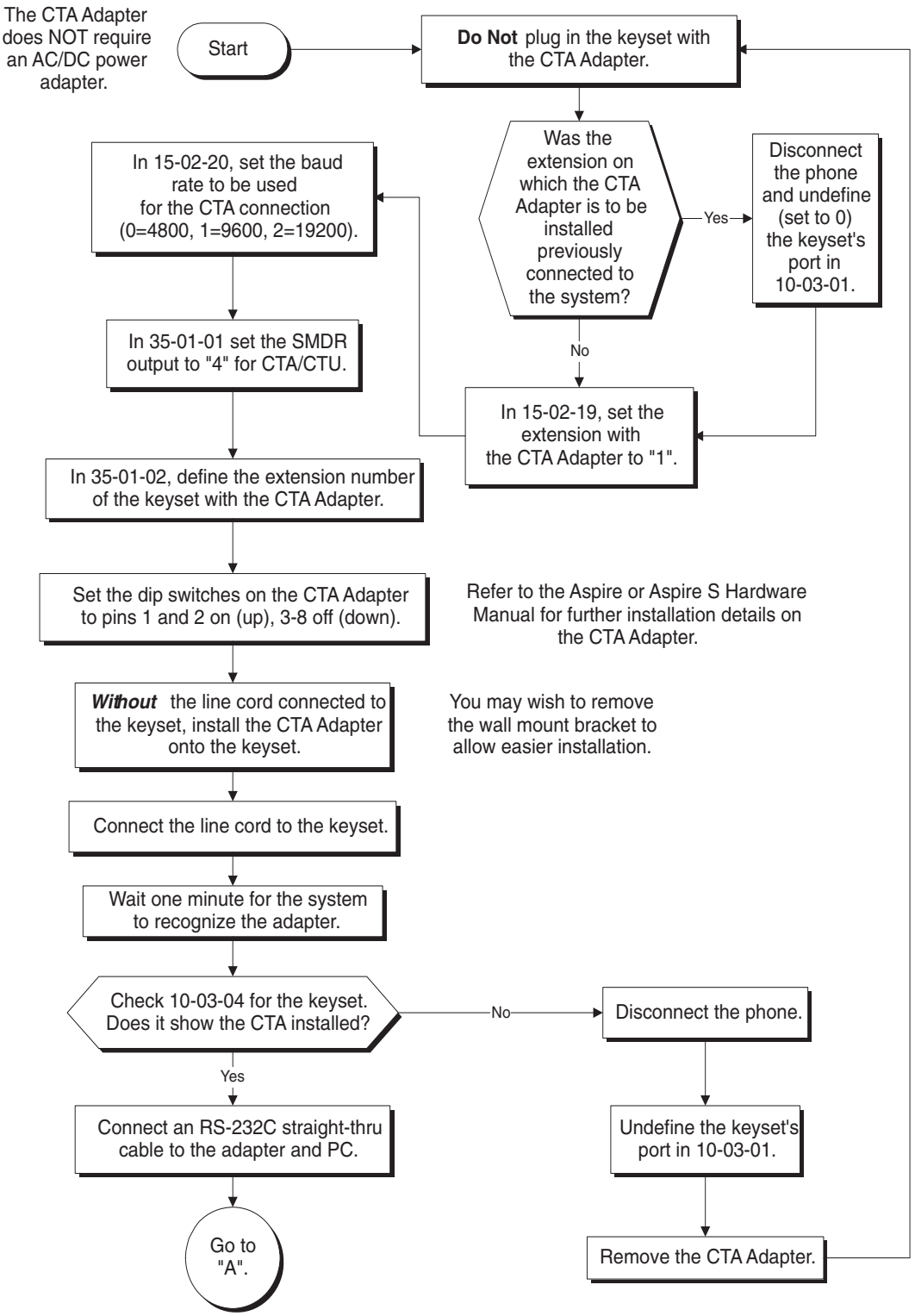
Programming

SMDR With a CPU Connection (Serial / USB / Ethernet)



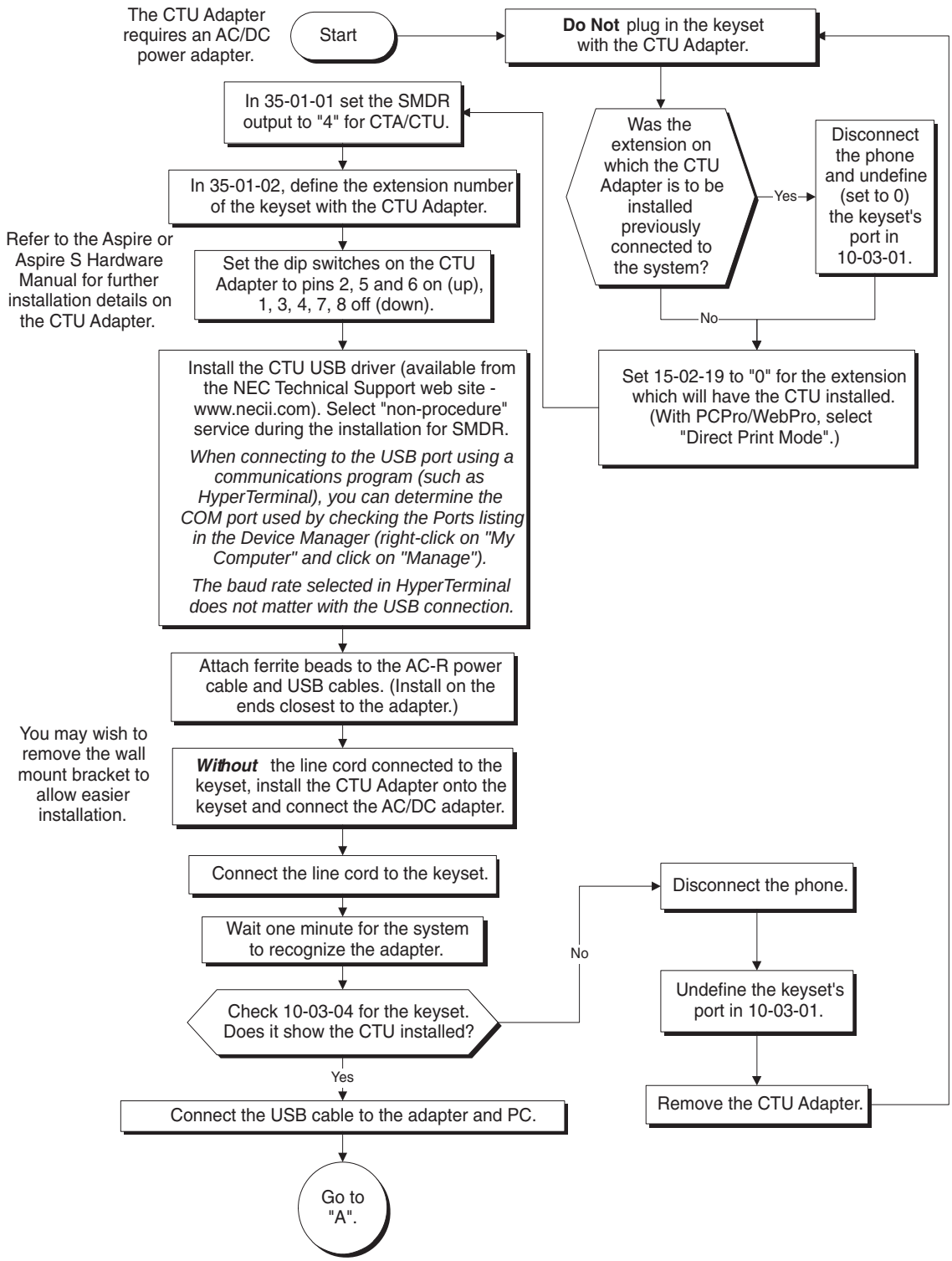
Programming (Cont'd)

SMDR With a CTA Adapter

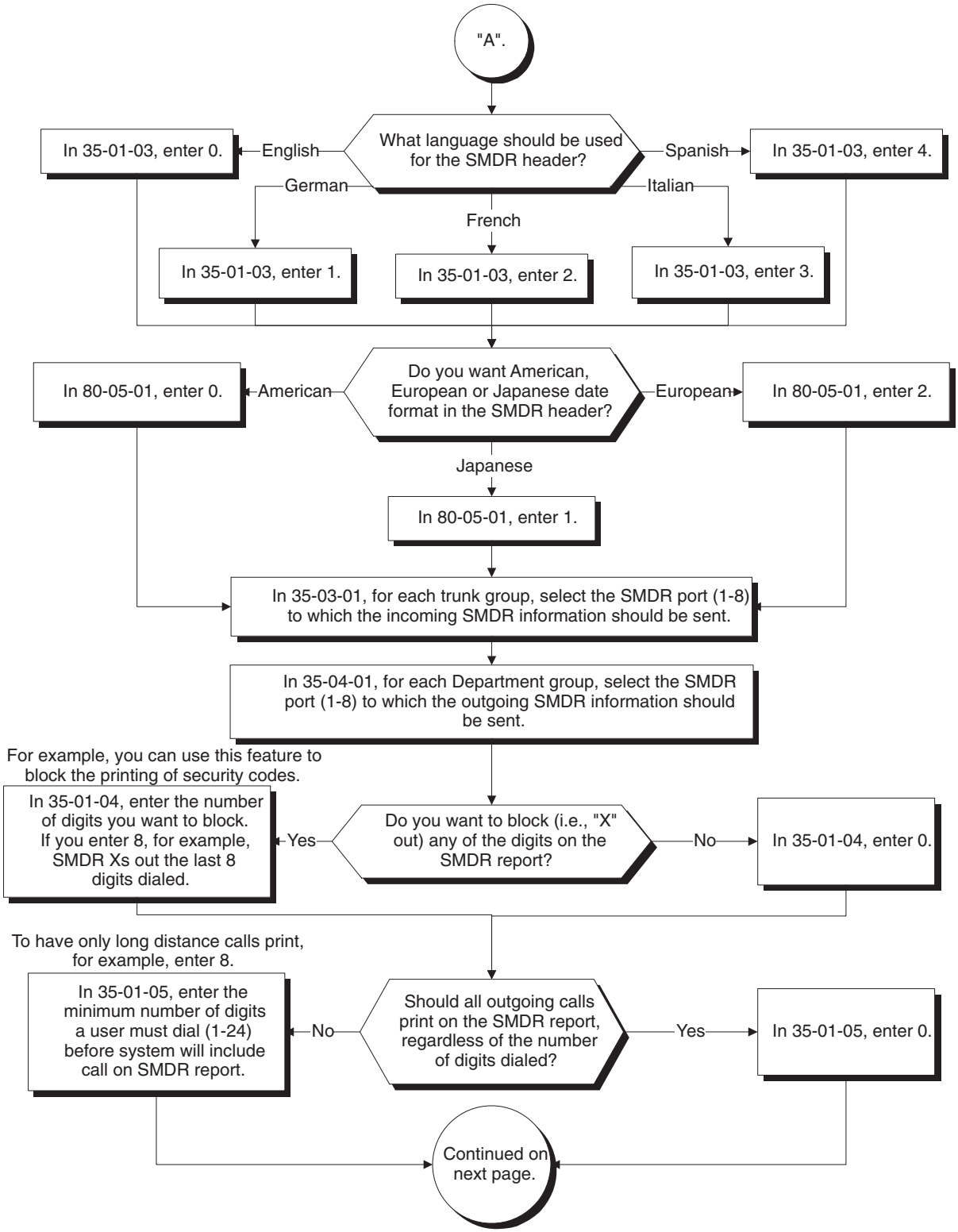


Programming (Cont'd)

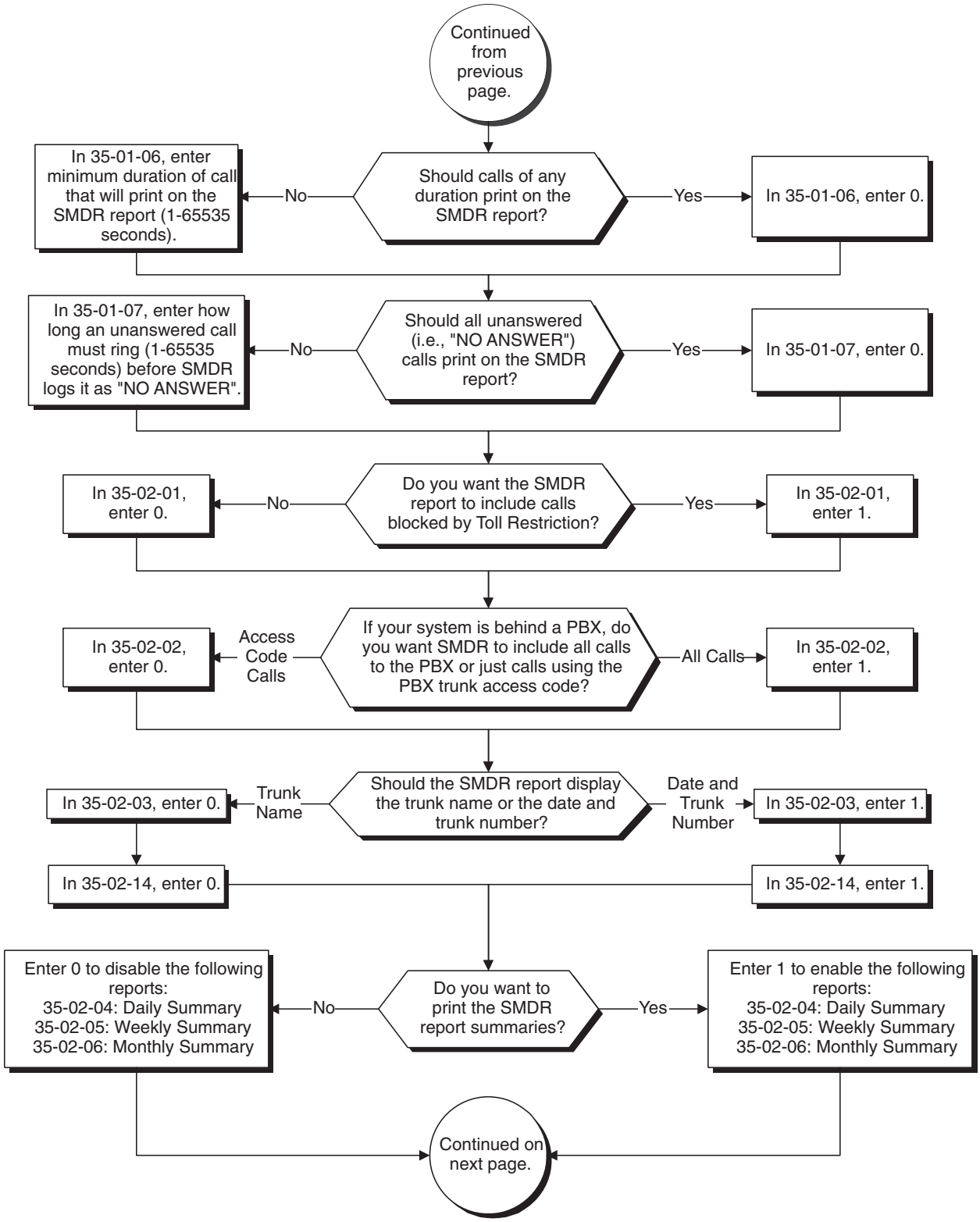
SMDR With a CTU Adapter



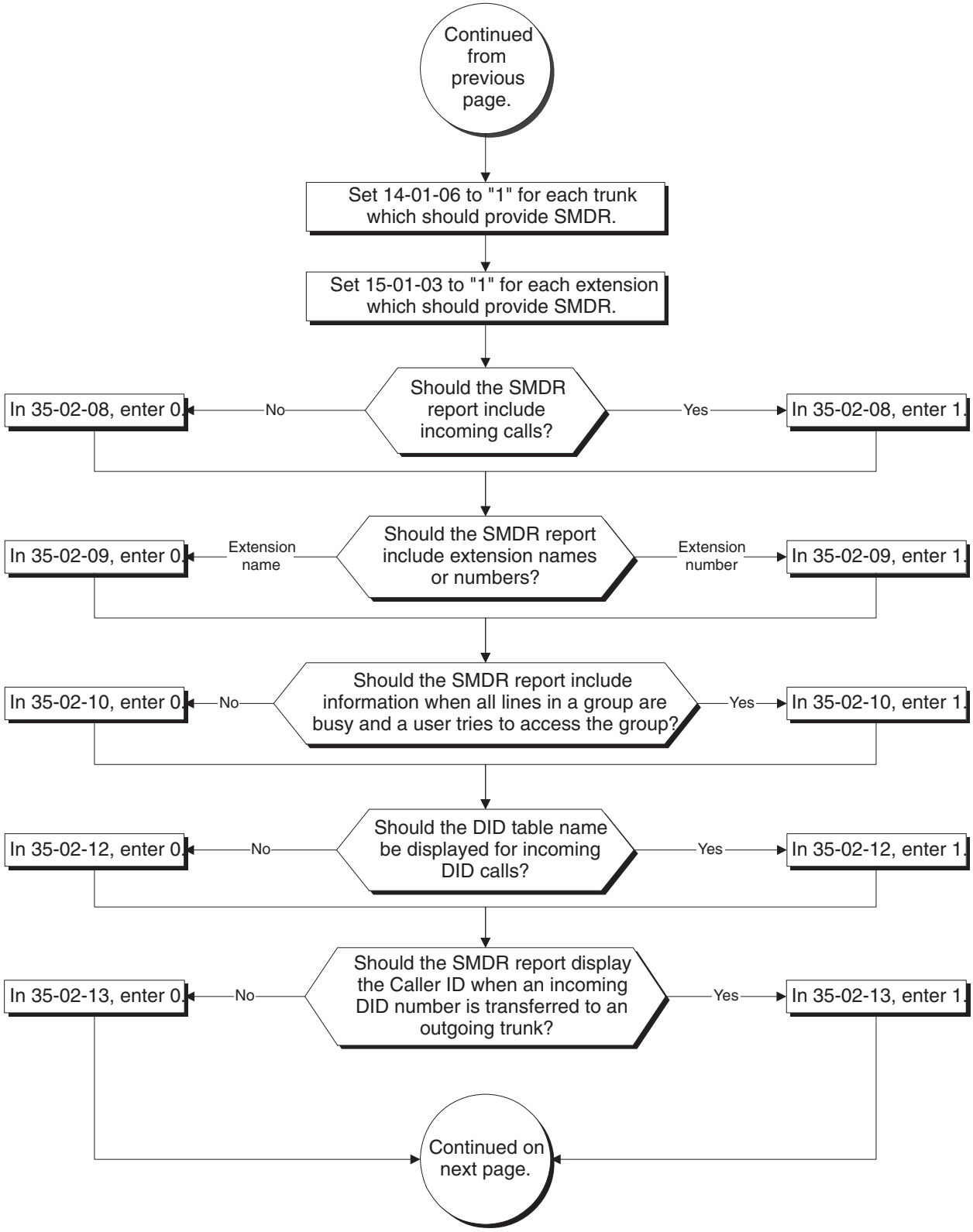
Programming (Cont'd)



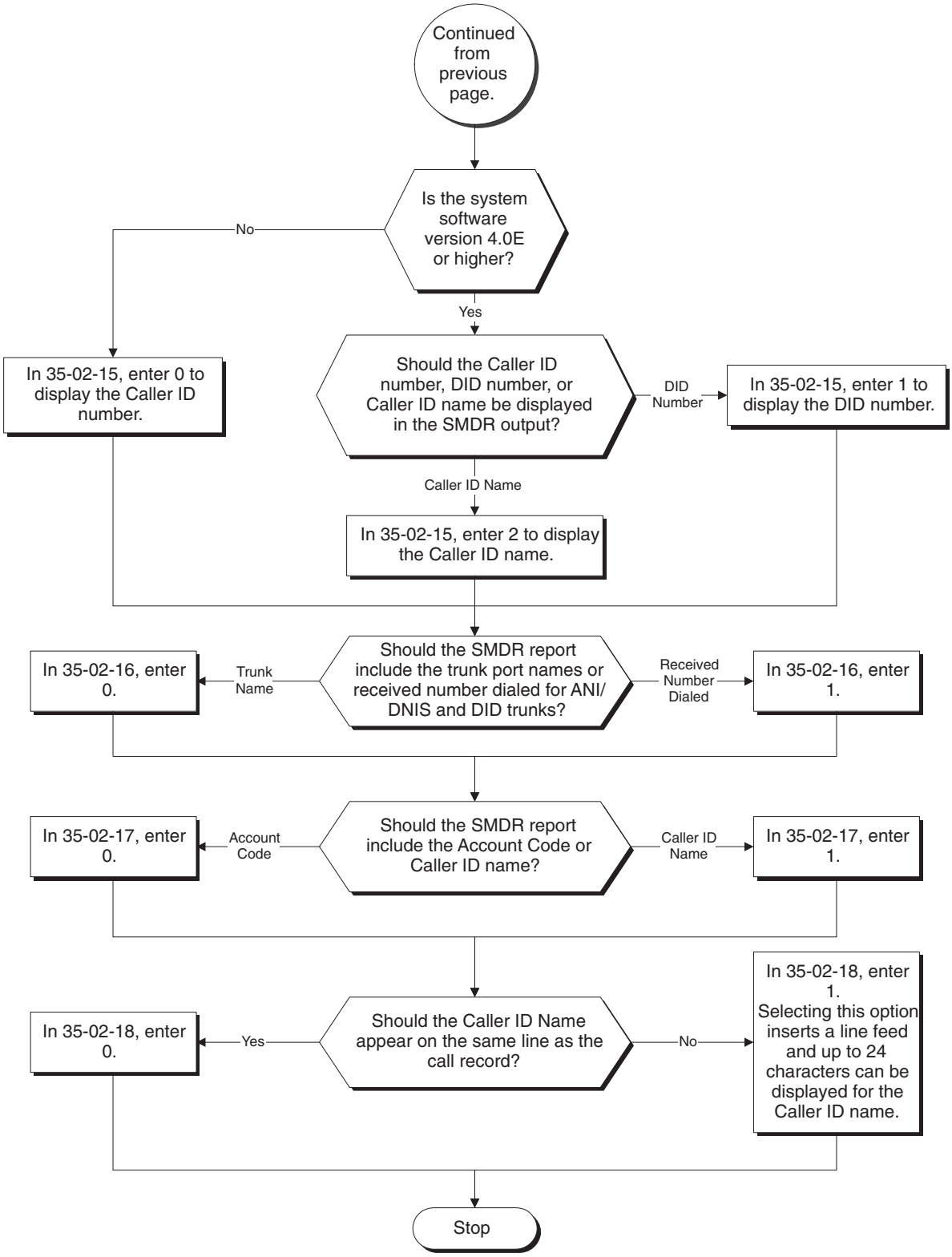
Programming (Cont'd)



Programming (Cont'd)



Programming (Cont'd)



Programming (Cont'd)

- **10-20-01 : LAN Setup for External Equipment**
  Define the TCP port (0-65535) when communicating to the SMDR (type 5).
- **10-21-02 : NTCPU Hardware Setup - Baud Rate for COM Port**
  If the SMDR connection is made using the COM port on the NTCPU, define the baud rate (0=4800, 1=9600, 2=19200, 3=38400).
- **14-01-06 : Basic Trunk Data Setup - SMDR Print Out**
  For each trunk, enter 1 if trunk's calls should appear on SMDR report. Enter 0 if trunk's calls should not appear on SMDR report.
- **15-01-03 : Basic Extension Data Setup - SMDR Printout**
  For each extension, enter 1 if extension's calls should appear on SMDR report. Enter 0 if extension's calls should not appear on SMDR report.
- **15-02-19 : Multi-Line Telephone Basic Data Setup - CTA/CTU Data Communication Mode**
  Select '0' if the dip switch settings are set to PC connection or select '1' if printer/SMDR connection is selected on the CTA/CTU adapter.
- **15-02-20 : Multi-Line Telephone Basic Data Setup - Baud Rate for CTA Port**
  Set the baud rate to be used by the CTA (0=4800, 1=9600, 2=19200).
- **35-01-01 : SMDR Options - Output Port Type**
  Specify the type of connection used for SMDR (0=No setting, 1=COM(NTCPU), 2=USB (NTCPU), 3=LAN (NTCPU), 4=CTA/CTU). The baud rate for the COM port should be set in Program 10-21-02 or 15-02-20.
- **35-01-02 : SMDR Options - Output Destination Number**
  Specify the SMDR printer output port (CTA/CTU extension number).
- **35-01-03 : SMDR Options - Header Language**
  Specify the language in which the SMDR header should be printed (0 = English, 1 = German, 2 = French, 3 = Italian, 4 = Spanish).
- **35-01-04 : SMDR Options - Omit (Mask) Digits**
  Enter the number of digits (1-24) you want SMDR to block (i.e., "X" out). Enter 0 not to block any digits.
- **35-01-05 : SMDR Options - Minimum Number of SMDR Digits**
  Enter the minimum number of digits a user must dial (1-24) before the system includes a call on the SMDR report. Enter 0 to include all outgoing calls, regardless of the number of digits dialed.
- **35-01-06 : SMDR Options - Minimum Call Duration**
  Enter the minimum duration of a call (1-65535) that will print on the SMDR report. Enter 0 to have calls of any duration print.
- **35-01-07 : SMDR Options - Minimum Ringing Time**
  Enter how long an unanswered call must ring (1-65535) before SMDR logs it as "No Answer). Enter 0 to allow all "No Answer" calls to print.
- **35-01-08 : SMDR Options - SMDR Format**
  Do not change:
  This option is added to allow an increased account code field from 8 to 16 when used in the U.K. This allows 16 characters of the Caller ID name to be displayed. For the U.S., this option is set to "0" and should remain at this setting as 16 characters are already provided for the account code field.
- **35-02-01 : SMDR Output Options - Toll Restricted Call**
  Enter 1 if you want the SMDR report to include calls blocked by Toll Restriction. Enter 0 to exclude blocked calls.

- **35-02-02 : SMDR Output Options - PBX Calls**
  If system is behind a PBX, enter 1 to have SMDR include all calls to the PBX. Enter 0 to have SMDR include only calls dialed using PBX trunk access code.
- **35-02-03 : SMDR Output Options - Display Trunk Name or Number**
  Select whether the system should display the trunk name (0) or the number (1) on SMDR reports. ***If this option is set to "0", Program 35-02-14 must be set to "0".***
- **35-02-04 : SMDR Output Options - Daily Summary**
  35-02-05 : Weekly Summary and
  35-02-06 : Monthly Summary
  Enter 1 to enable a summary report. Enter 0 to disable a summary report. The daily report prints every day at midnight. The weekly report prints every Sunday night at midnight. The monthly report prints at midnight on the last day of the month.
- **35-02-08 : SMDR Output Options - Incoming Calls**
  Enter 1 if you want the SMDR report to include incoming calls. Enter 0 if you want the SMDR report to exclude incoming calls.
- **35-02-09 : SMDR Output Options - Print Name or Number**
  Enter 0 if you want the SMDR report to include the extension's name. Enter 1 if you want the SMDR report to include the extension's number.
- **35-02-10 : SMDR Output Options - All Lines Busy (ALB) Output**
  Enter 1 to report information when all lines in a group are busy and an extension user tries to access the group. Enter 0 if this information should not be included.
- **35-02-12 : SMDR Output Options - DID Table Name Output**
  Determine if the DID table name should be displayed for incoming DID calls (0=Not Displayed, 1=Displayed).
- **35-02-13 : SMDR Output Options - CLI Output When DID to Trunk**
  Determine if the Caller ID should be displayed when the incoming DID number is transferred to an outgoing trunk (0=Not Displayed, 1=Displayed).
- **35-02-14 : SMDR Output Options - Date**
  Determine whether the date should be displayed on SMDR reports (0=not displayed, 1=displayed). ***This option must be set to "0" if the trunk name is set to be displayed in Program 35-02-03.***
- **35-02-15 : SMDR Output Options - CLI/DID Number Switching**
  Enter 0 to display the Caller ID number. Currently, option "1" for the DID number is not available.
  With software 4.0E+, determine if the Caller ID number (0), DID number (1) or Caller ID name (2) should be displayed in the SMDR output.
- **35-02-16 : SMDR Output Options - Print Trunk Name or Received Dialed Number**
  Determine how the SMDR should print incoming calls on ANI/DNIS or DID trunks. If set to (1), ANI/DNIS trunks can print DNIS digits. For DID trunks, if the received number is not defined in Program 22-11-01, then no number will be printed. If set to (0) trunk names are printed instead (as assigned in Program 14-01-01).
- **35-02-17 : SMDR Output Options - Print Account Code or Caller ID Name**
  Determine whether the Account Code (0) or Caller ID name (1) should appear in the SMDR record. By default, the Account Code will be displayed.
  Note: Program 35-01-08 must be set to "0" for this entry to be followed.

- **35-02-18 : SMDR Output Options - Caller ID Name Output Method**
  Select whether to display up to 16 characters of the Caller ID Name on the same line as the call record (0) or if a line feed should be added and up to 24 characters of the Caller ID Name will be displayed on the following line (1). If the line feed option is selected, the Caller ID Name will be displayed on the next line as : NEXT "Caller ID Name". The default entry for this option is "0".
  This setting will work regardless of the setting in Program 35-02-15.
  Note: With this option set to "1", if your communications program (such as HyperTerminal) has the line wrap option enabled in the ASCII setup, an additional line break may appear above the Caller ID name line.
- **35-03-01 : SMDR Port Assignment for Trunk Group**
  Assign the SMDR port for each trunk group. For each Trunk Group, select the SMDR port to which the incoming SMDR information should be sent.
  ➪ Aspire S Trunk Groups: 1-8, SMDR Ports 1-2
  ➪ Aspire Trunk Groups: 1-100, SMDR Ports 1-8
- **35-04-01 : SMDR Port Assignment for Department Groups**
  Assign the SMDR port for each Department Group. For each Department Group, select the SMDR port to which the outgoing SMDR information should be sent.
  ➪ Aspire S: Department Groups 1-8, SMDR Ports 1-2
  ➪ Aspire: Department Groups 1-64, SMDR Ports 1-8
- **80-05-01 : Date Format for SMDR and System Reports**
  Set the date format for SMDR (0=American, 1=Japanese or 2=European).

Related Features

PBX Compatibility

To use the PBX Call Reporting option, program system for behind PBX operation.

Networking

Extensions across a network are not included in SMDR.

Traffic Reports

Traffic Management Reports and SMDR should not use the same CTA port.

Operation

Once installed and programmed, SMDR operation is automatic.

Aspire S	Aspire M/L/XL
• Not Available.	• Available • ANI/DNIS Compatibility is available. • This feature requires the Basic NTCPU (P/N 0891002) with the PAL upgrade or the Enhanced NTCPU (P/N 0891038) unless using software 4.0E or higher.

Description

The T1/PRI Interface PCB gives the system T1 trunking capability. This PCB uses a single universal slot and provides up to 24 trunk circuits. In additional to providing digital-quality trunking, the T1/PRI Interface PCB allows you to have maximum trunking capability with fewer PCBs. This in turn makes more universal slots available for other functions.

You can program each T1/PRI PCB for any combination of the following trunks:

- CO loop start
- CO ground start
- Direct Inward Dialing
- Tie lines [1]

The T1/PRI Interface PCB uses the first block of 24 consecutive trunks. For example, if you have an 8COIU PCB installed for trunks 1-8, the T1/PRI Interface PCB will automatically use trunks 9-32. If you have 8COIU PCBs installed for trunks 1-8 and 17-24, the T1/PRI PCB will use trunks 25-48. The T1/PRI Interface cannot use trunks 9-16 (even if available) since they are not part of a consecutive block of 24 trunks. Each T1/PRI PCB requires that 24 consecutive ports be available in the system even if not all the ports will be used otherwise the PCB will not function.

ANI/DNIS Compatibility

The system is compatible with telco's T1 Automatic Number Identification (ANI) and Dialed Number Information Service (DNIS) services. This is only for T1 - not for PRI at this time). A compliment to Caller ID service, ANI/DNIS Compatibility provides:

- **Selectable Receive Format**
  You can set up the system for compatibility with any combination of ANI, DNIS and Dialed Number (Address) data provided by the telco.
- **Flexible Routing**
  Based on the data received, the system can route the incoming ANI/DNIS call to:
  - An extension
  - An ACD or Voice Mail master extension number
  - The VRS and play a VRS message to the caller.
  - A Department Group pilot number
  - A trunk Ring Group
- **Route According to DID Translation Table or Abbreviated Dial Bins**
  Calls can be routed based on either the number of digits defined in Program 22-09-01 (digits 1-8) or by digits entered in Abbreviated Dial bins in Program 13-04-01.
- **ANI/DNIS Data Displayed as Caller ID Data**
- **Data Error and Unanswered Call Handling**
  If a call can't be completed, send it to a predetermined Ring Group or play supervisory tones to the caller.

1. Two-wire (four-lead) type 1 tie lines (FIC TL11M) only.

Conditions

(A.) T1 Trunking requires a T1/PRI Interface PCB and a customer-provided CSU/DSU to interface with the telco. Consult your sales representative and the system Hardware Manual for additional details.
(B.) ANI/DNIS Compatibility requires the use of system DTMF receivers. When all receivers are busy, the incoming ANI/DNIS call waits for a receiver to become available.
(C.) The ANI/DNIS/Address data received from the telco can be up to 10 digits long.
(D.) When connecting to T1 trunks, after changing Program 22-02-01 to match the telco's connected T1 service type, the T1 cable or the T1 PCB must be unplugged and then reconnected in order for the T1 PCB to sync.
(E.) The Aspire S does not have T1 trunking ability.

Default Setting

Disabled.

Programming

- **10-03-01 : PCB Setup**
  Set various T1 trunk options for compatibility with the local telco. For ANI/DNIS, the following settings in Program 10-03 are recommended:
  - Item 02: Frame Type = 0 (D3/D4)
  - Item 03: Zero Suppression = 1 (AMI/ZCS)
  - Item 04: Distance Between PCB and SCU = 0 (0-133')
  - Item 05: Clock Select = 1 (Internal)
- **10-09-01 : DTMF and Dial Tone Circuit Setup**
  For ANI/DNIS, reserve at least one DTMF receiver for DTMF reception (entry 0 or 2).
  - Use the following as a guide when allocating DTMF receivers:
    - In light traffic sites, allocate one DTMF receiver for every 10 devices that use them.
    - In heavy traffic sites, allocate one DTMF receiver for every 5 devices that use them.
- **14-01-02 : Basic Trunk Data Setup - Transmit CODEC Gain Type**
  14-01-03 : Basic Trunk Data Setup - Receive CODEC Gain Type
  Assign a CODEC Gain Type to each trunk. This sets the amount of gain (amplification) for the selected trunk.
- **14-01-07 : Basic Trunk Data Setup, Outgoing Calls**
  For ANI/DNIS, the following additional setting is recommended: Outgoing Calls = 1 (Allowed)
- **14-02-01 : Analog Trunk Data Setup - Additional ANI/DNIS Recommended Settings**
  For ANI/DNIS, the following additional settings in Program 14-02 are recommended:
  - Item 1: Signaling Type (DP/DTMF) = 2 (DTMF)
  - Item 2: Ring Detect Type = 1 (Immediate)
  - Item 3: Flash Type = 0 (Open Loop Flash)
  - Item 4: Flash for Time Flash or Disconnect = 0 (Timed Flash)
  - Item 5: Dial Tone Detection for Manually Dialed Calls = 1 (Outgoing calls allowed)
- **14-02-02 : Analog Trunk Data Setup - Ring Detect Type**
  Set the trunks for Extended Ring Detect or Immediate Ring Detect. For T1 loop/ground start trunks, this option must be set to '1' in order for the trunks to ring and lamp correctly.
- **14-04-01 : Behind PBX Setup: Behind PBX**
  For ANI/DNIS, the following additional setting is recommended: Behind PBX = 0 (Stand alone)

- **14-05-01 : Trunk Groups**
  For ANI/DNIS, place all your ANI/DNIS trunks in Trunk Groups as required.
- **20-06-01 : Class of Service for Extensions**
  Assign a Class of Service (1-15) to an extension.
- **20-09-02 : Class of Service Options (Incoming Call Service) - Caller ID Display**
  Turn off (0) or on (1) the Caller ID display at an extension
- **20-09-01 : Class of Service Options (Incoming Call Service) - Second Call for DID/DISA/DIL/E&M**
  Enable (1) or disable (0) an extension's ability to receive a second call from a DID, DISA, DIL, or tie line caller. With this option set to '1', the destination extension must be busy in order for a second DNIS caller to ring through. If the destination extension does not have a line or loop key available for the second call and a previous call is ringing the extension but has not yet been answered, the second caller will hear busy regardless of this program's setting.
- **20-14-01 : Class of Service Options for DISA/E&M**
  Enable/disable tie line Class of Service options. Assign tie line Classes of Service in 34-02. Up to 15 DISA/E&M Classes of Service can be defined.
- **22-02-01 : Incoming Call Trunk Setup**
  For each ***T1 trunk***, set the Trunk Service Type to match the telco's connected T1 service. For each ***T1 trunk that should support ANI/DNIS service***, enter 7. (ANI/DNIS trunks must be immediate start or wink start T1 trunks with E&M signaling.) After changing Program 22-02-01, in order to allow the T1 PCB to resync, unplug then plug back in either the T1 cable or the PCB itself. For T1 loop/ground start trunks defined as "0", Program 14-02-02 must be set to '1' in order for the trunks to ring and lamp correctly.
- **22-13-01 : DID Trunk Group to Translation Table Assignment**
  Assign DID translation tables to trunk groups.
  ➪ Aspire DID Translation Tables: 1-20, Trunk Groups: 1-100
- **34-01-01 : E&M Tie Line Basic Setup - DID/E&M Start Signaling**
  For each ANI/DNIS trunk, set the start signaling mode to 1 (wink start).
- **34-01-02 : E&M Tie Line Basic Setup - Receive Dial Type for E&M Tie Line**
  For ANI/DNIS, the following additional setting in Program 34-01-02 is recommended:
  - Receive Dial Type for E&M Tie Line = 1 (DTMF)
- **34-01-03 : E&M Tie Line Basic Setup - E&M Dial-In Mode**
  Determine if the incoming tie line call should be directed as an intercom call (0) or if it should follow the DID Translation Table in Program 22-11 (1).
- **34-10-04 : E&M Tie Line Basic Setup - E&M Line Dial Tone**
  Determine whether the tie line should send dial tone to the calling system once the call is set up (1) or not (0).
- **34-02-01 : E&M Tie Line Class of Service**
  Assign a Class of Service (1-15) to a tie line. The Class of Service options are defined in Program 20-14. For each tie line, you make a separate entry for each Night Service mode.
- **34-09-01 : ANI/DNIS Service Options - Receive Format**
  Use this option to specify the format of the ANI/DNIS data received from the telco. Make sure your entry is compatible with the service the telco provides (0 = Address, 1 = *ANI*, 2 = *DNIS*, 3 = *ANI*Address*, 4 = *ANI*DNIS*, 5 = *DNIS*ANI* [* = Delimiter Code]).
- **34-09-02 : ANI/DNIS Service Options - Delimiter Dial**
  This option defines the character telco uses as a delimiter (see entries 1-5 in 34-09-01). Valid entries are 0-9, #, and *.
- **34-09-03 : ANI/DNIS Service Options - Route Setup of Receive Dial**
  This option specifies the source of the data the system uses to route incoming ANI/DNIS calls. If option '2' is selected, refer to Program 34-09-04 (0 = Fixed Route (Item 08), 1 = Routes on Received DNIS or Address Data, 2 = Routes on Received ANI Data).

- **34-09-04 : ANI/DNIS Service Options - Route Table Setup of Target Dial**
  The option sets how the system uses the route data (gathered in Item 3) to route incoming ANI/DNIS calls (0 = ABB Table [Program 13-04], 1 = DID Table [Program 22-11]).

  If option '2' is selected and the call is to be routed using the DID table (1), up to 8 digits can be matched. The number of expected digits set in Program 22-09-01 must match the ANI digits defined in Program 22-11-01. For example, if an ANI/DNIS number received was *2035551234*3001* and Program 22-09-01=4, then the entry in 22-11-01 must be 1234 with the defined target extension.

  If the call is to be routed using the ABB table (0), up to 24 digits can be matched. Define the range of the ABB table to be used in Program 34-09-06. The data is then compared to the entries in Program 13-04-01 and then routed according to Program 13-04-03
- **34-09-05 : ANI/DNIS Service Options - ANI/DNIS Display as Target Dial Name**
  Use this option to set if ANI data should appear on telephone displays as part of Caller ID display (0 = Display Off, 1 = Display On).
- **34-09-06 : ANI/DNIS Service Options - Routing ABB Table Setup**
  Use this option to define which part of the ABB Table set up in Program 13-04 the system will use for ANI/DNIS Caller ID look-ups and ANI/DNIS routing (Start = 0, 100-1900, End = 0, 99-1999). This is required if Items 4 and 5 above are 1 (Caller ID on). When you specify a starting and end address, the system uses the part of the table for look-ups. When you specify a starting address and length, the system uses that part of the table for routing. If the incoming ANI/DNIS number data matches the Number entry in the table, the system routes according to the associated Name data. That data can be an extension, Department Group pilot number, the voice mail master number or a trunk ring group.
- **34-09-07 : ANI/DNIS Service Options - Routing on ANI/DNIS Error**
  This option lets you determine how the system will handle an ANI/DNIS call if a data error is detected in the incoming data string (0 = Play busy tone to caller, 1 = Route the caller to the ring group specified in Program 25-03).
- **34-09-08 : ANI/DNIS Service Options - Routing When Destination Busy or No Answer**
  This option lets you determine how the system will handle an ANI/DNIS call if destination is busy or does not answer (0 = Play busy or ringback tone to caller, 1 = Route the caller to the ring group specified in Program 25-04).
- **34-09-09 : ANI/DNIS Service Options - Calling Number Address Length**
  When Item 1=0 (ANI/DNIS receive format is address), use this option to specify the address length. The choices are from 1 to 8 digits in length.

Related Features

Caller ID
An extension's Class of Service (Program 20-09-02) determines whether ANI information is displayed.

Central Office Calls, Answering and Central Office Calls, Placing
You can use T1 trunks in place of standard analog trunks. The procedures for placing and answering calls are the same for both types of trunks.

Dial Tone Detection
Refer to this feature for the specifics on how the system handles Dial Tone Detection.

Direct Inward Dialing (DID)
The T1/PRI Interface PCB provides DID service. All programming parameters are the same as those used for analog DID trunks (except for the additional T1/PRI Interface PCB settings).

ISDN
The T1/PRI Interface PCB is switch selectable between T1 and PRI operation. Refer to the ISDN PRI Manual, P/N 0893212, for more details on PRI.

Networking
The T1 tie line can be used for Networking. Refer to the Networking Manual, P/N 0893207, for more details.

Station Message Detail Recording
SMDR can print trunk port names or received dialed number for ANI/DNIS or DID trunks. If enabled in programming, DNIS digits can be printed on the SMDR reports instead of the trunk name.

Tie Lines
The T1/PRI Interface PCB provides tie line service. All programming parameters are the same as those used for analog tie lines (except for the additional T1/PRI Interface PCB settings).

Toll Restriction
T1 trunks follow tie line toll restriction programming (34-01-05 and 34-08) unless using software 2.65 or higher. A new operation is available in higher versions wich allow you to select normal toll restriction for T1 trunks.

Operation

Refer to the following features:
Central Office Calls, Answering
Central Office Calls, Placing
Direct Inward Dialing (DID)
Tie Lines

Tandem Ringing

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Tandem Ringing allows an extension user to have two telephones with one phone number. For example, extension 305 (the master phone) sets Tandem Ringing with extension 306. When extension 305 receives an incoming call, both extension 305 and 306 ring. Callers would dial the master extension number (extension 305 in this example). When either the master phone or slave phone is in use, the other phone cannot be used for outgoing calls - incoming calls, however, will ring the available phone.

The keyset must be paired with either an analog single line telephone or Aspire Wireless extension. It cannot be paired with another keyset or IP phone.

Conditions

(A.) The slave phone cannot call the master phone.
(B.) Extensions numbers up to 8 digits can be registered on the Tandem Ringing key. Extension numbers over 9 digits cannot be registered.
(C.) If both phones are busy, no additional calls can be received.
(D.) Tandem Ringing can support up to 256 pairs of Tandem Ringing extensions.
(E.) The extension user which enables Tandem Ringing is the master, while the slave phone is the extension entered by the user while setting up the feature.

Default Setting

Disabled.

Programming

- **15-07-01 : Programmable Function Keys**
  Assign a function key for Tandem Ringing (code 80).
- **30-03-01 : DSS Console Key Assignments**
  Assign a DSS function key for Tandem Ringing (code 80).
- **11-11-41 : Service Code Setup (for Setup/Entry Operation) - Tandem Ringing**
  Define a service code to be used to set up Tandem Ringing (default=no setting).

Related Features

Abbreviated Dial / Multiple Directory Numbers / Voice Mail

Abbreviated Dial, Multiple Directory Numbers/Virtual Extensions and Voice Mail cannot be the target of the Tandem Ringing feature.

Call Forwarding

The slave phone cannot be set as the Call Forward target of the master phone.
A slave phone will ignore the settings for Call Forwarding and follow the master phone's settings instead.

Call Forwarding/Do Not Disturb Override

Call Forwarding/Do Not Disturb Override is not available for Tandem Ringing extensions.

Direct Station Selection (DSS) Console

When Tandem Ringing is active and one of the extensions is busy, a DSS console will indicate both extensions as busy.

Do Not Disturb

A slave phone will ignore the settings for DND and follow the master phone's settings instead.

Intercom

Voice Call is not supported on a keyset with Tandem Ringing.

ISDN / Networking

Tandem Ringing does not support S-Bus or Networking.

Hold

Calls placed on Hold while Tandem Ringing is active will immediately recall if the handset is placed on hook.

Message Waiting

When an extension leaves a Message Waiting for a Tandem Ringing extension, both extensions will indicate the message until one of the extensions return the call.

Ring Groups

A slave phone will ignore the settings for Ring Groups and follow the master phone's settings instead.

Tie Lines

E&M trunks are not supported.

Operation

To set up Tandem Ringing:

1. Press the CALL key on the extension to be considered the master phone.
2. Press the Tandem Ringing key (PGM 15-07 or SC 851: 80).
3. Dial "1" to set the feature.
4. Enter the extension number to be considered the slave phone (the phone that will ring when the master extension rings).

   A confirmation tone will be heard.
5. Press SPK to hang up.

   While the feature is active, if either the master or slave phone has placed a call, the other phone will only be able to answer incoming calls - no calls can be placed until the other extension has hung up. For keysets, this will be indicated by "TANDEM OTHER USED" displayed on the phone - single line telephones will hear a busy signal when the handset is lifted.

To cancel Tandem Ringing:

1. Press the CALL key on the extension to be considered the master phone.
2. Press the Tandem Ringing key (PGM 15-07 or SC 851: 80).
3. Dial "0" to cancel the feature.

Aspire S	Aspire M/L/XL
• NTCPU provides 32 conference circuits, allowing each block to have any number conferences with any number of internal or external parties conferenced as long as the total number of conference channels used does not exceed the limit of 32.	• NTCPU provides 2 blocks of 32 conference circuits, allowing each block to have any number conferences with any number of internal or external parties conferenced as long as the total number of conference channels used does not exceed the block's limit of 32.
• Automatic conference on Hang Up available with software 2.10+.	• Automatic conference on Hang Up available with software 2.10+.
• Trunk Disconnect Continue and Disconnect Codes require software 4.0E+.	• Trunk Disconnect Continue and Disconnect Codes require software 4.0E+.
• Multiple Trunk Conference with 3 or more trunks requires software 4.93+.	• Multiple Trunk Conference with 3 or more trunks requires software 4.93+.

Description

Tandem Trunking allows an extension user to join two outside callers in a trunk-to-trunk Conference. (Depending on your software level, it may be possible to conference 3 or more trunks with Tandem Trunking.) The extension user can then drop out of the call, leaving the trunks in an Unsupervised Conference. The extension user that established the Conference is not part of the conversation. The Conference continues until either outside party hangs up. In addition, the extension user that set up the Conference can end the tandem call at any time.

The number of simultaneous Conference calls is limited by the number of Conference circuits in the system. Due to this fact, the maximum number of Conference calls cannot exceed the limits defined in the above table.

Tandem Trunking could help an office manager, for example, put two outside sales people in touch. The office manager could:

- Answer a call from one salesperson
- Place a call to the second salesperson
- Set up the trunk-to-trunk Conference
- Drop out of the call

The office manager could terminate the Conference at any time.

There are four methods for Tandem Trunking:

- **Method A - Set Up Without Transfer Key**
  An extension user can set up Tandem Trunking (Unsupervised Conference) by dialing a two-digit service code (#8) or a uniquely programmed Transfer key.
- **Method B - Tandem Trunking with Transfer Key**
  This method allows an extension user to easily set up an Unsupervised Conference with a call they have placed on Hold. It uses a uniquely programmed Transfer key to set up a tandem call.
- **Method C - Automatic Tandem Trunking on Hang Up**
  This method allows an extension user to easily set up an Unsupervised Conference without having to place the conference call on Hold. A Class of Service option is available, depending on your software version, which will allow or deny an extension user from automatically setting up a Conference/Tandem Trunking call upon hanging up the phone.

- **Method D - Automatic Tandem Trunking Setup to Abbreviated Dial Number**
  This method allows an extension user to easily set up an Unsupervised Conference with a call they have placed on Hold. A Class of Service option is available, depending on your software version, which will allow or deny an extension user from automatically setting up a Conference/Tandem Trunking call upon hanging up the phone.

Trunk Disconnect Continue/Disconnect Codes Added

The software enhances the forced trunk release option with the Tandem Trunking and DISA features. With older software, with **Program 24-02-07 : System Options for Transfer - Forced Release for Trunk-to-Trunk Transfer** or **Program 25-07-08 : System Timers for VRS/DISA - DISA Long Conversation Disconnect** enabled, users were not provided with an option to continue the call, if required.

With software 4.0E+, users can be provided with the option to use a Continue or Disconnect service code. The Continue service code will extend the conversation a programmed length of time. If the user enters the Disconnect service code, the call will be disconnected immediately.

Example:

The following example indicates how a call will be handled with the system programmed as follows:

- Program 14-01-25: 1
- Program 20-28-01: #
- Program 20-28-02: No setting
- Program 20-28-03: 180
- Program 24-02-07: 600 (Only used with Tandem Trunking)
- Program 24-02-10: 30 (Only used with Tandem Trunking)
- Program 25-07-07: 600 (Only used with DISA)
- Program 25-07-08: 30 (Only used with DISA)

1. An external call connects to an external number (either by transferring with Tandem Trunking or by DISA caller).
2. After 10 minutes (Tandem Trunking = Program 24-02-07 or DISA = Program 25-07-07), a warning tone is heard and the user dials "#" (Program 20-28-01) to extend the conversation.
3. After 3 minutes (Program 20-28-03), the warning tone is heard again. After 30 seconds (Tandem Trunking = Program 24-02-10 or DISA = Program 25-07-08), the call is disconnected.

Multiple Trunk Conference Allows 3 or More Trunks

The Tandem Trunking has been enhanced with the Multiple Trunk Conference feature. Previously, only two outside trunks could be connected for a trunk-to-trunk conference. This enhancement allows multiple trunks to be connected, the extension user can then drop out of the call, leaving the outside calls connected in an unsupervised conference.

This enhancement also allows the user which established the unsupervised conference to reenter the conversation. The user can then let the conversation continue or they can disconnect the trunks.

The number of simultaneous Conference calls is limited by the number of Conference circuits in the system. Due to this fact, the maximum number of Conference calls cannot exceed the limits defined in the above table.

There are two methods for Multiple Trunk Conferencing:

- **Method A - Set Up Without Transfer Key**
  An extension user can set up Multiple Trunk Conference (Unsupervised Conference) by dialing a two-digit service code (#8).
- **Method B - Multiple Trunk Conference with Transfer Key**
  This method allows an extension user to easily set up an Unsupervised Conference using a uniquely programmed Transfer key.

  Note: This operation is different than when only connecting 2 outside callers - the call can be on hold and, after calling the second party, the Transfer key can be pressed. With more than 2 outside calls, the CONF key must be pressed in order to connect the callers.

Notes:

- Multiple Trunk Conference requires either loop start trunks with disconnect supervision or ground start for analog trunks. ISDN does not have this limitation.
- Only trunk keys can be used for re-entering a Multiple Trunk Conference. Trunk Group keys and Loop keys are not supported.
- The maximum number of simultaneous trunk-to-trunk conferences allowed is determined by the Conference feature setup. See Programming below.

Conditions

(A.) Tandem Trunking requires either loop start trunks with disconnect supervision or ground start trunks.
(B.) The maximum number of simultaneous trunk-to-trunk conferences allowed is determined by the Conference feature setup. See *Programming* below.
(C.) The Continue/Disconnect code must be DTMF.
(D.) With an analog trunk, the Continue/Disconnect code may work using DTMF sounds from the opposite side trunk. With an ISDN trunk, Program 14-01-25 must be enabled to detect the Continue/Disconnect code.
(E.) The Continue/Disconnect code is not accepted while dialing a trunk.
(F.) Continue/Disconnect codes will not work if all DTMF receivers are busy.
(G.) When used with the Networking feature, both systems must be programmed the same for the Continue/Disconnect codes.

Default Setting

Disabled.

Programming

Tandem Trunking Method A - Tandem Trunking from Conference

- **10-07-01 : Conversation Record Circuits**
  The number of circuits assigned as Conversation Record circuits limits the number of available Conference circuits. Make sure there are circuits available for Conference.
- **11-12-57 : Service Code Setup (for Service Access) - Tandem Trunking/Unsupervised Conference**
  If the default service code (#8) for Tandem Trunking is not acceptable, change the code as required.
- **14-01-04 : Basic Trunk Data Setup - Transmit Gain Level for Conference and Transfer Calls**
  Select the CODEC gain type used by the trunk when it is part of an Unsupervised Conference.

- **14-01-05 : Basic Trunk Data Setup - Receive Gain Level for Conference and Transfer Calls**
  Select the CODEC gain type used by the trunk when it is part of an Unsupervised Conference.
- **14-01-13 : Basic Trunk Data Setup - Loop Supervision**
  For each trunk that should be able to participate in a tandem call, enter 1.
- **15-07-01 : Programmable Function Keys**
  (Optional) Assign a function key for Transfer (code 06).
- **20-06-01 : Class of Service for Extensions**
  Assign a Class of Service (1-15) to an extension.
- **20-07-11 : Class of Service Options (Administrator Level) - Forced Trunk Disconnect**
  In an extension's Class of Service, enter 1 to enable Forced Trunk Disconnect. This allows the extension to disconnect an Unsupervised Conference in progress.
- **20-11-14 : Class of Service Options (Hold/Transfer Service) - Trunk-to-Trunk Transfer**
  Disable (0) the Trunk-to-Trunk Transfer Restriction option.
- **20-11-21 : Class of Service Options (Hold/Transfer Service) - Restriction for Tandem Trunking on Hang Up**
  Deny (1) an extension user's ability to set up a tandem call automatically when they hang up.
- **20-13-08 : Class of Service Options (Supplementary Service) - Conference**
  In an extension's Class of Service, enable (1) or disable (0) the extension's ability to initiate a Conference.
- **20-13-10 : Class of Service Options (Supplementary Service) - Barge In Mode**
  In an extension's Class of Service, set whether an extension should be able to Barge In to a call and talk (1) or just monitor the call (0).
- **24-02-07 : System Options for Transfer - Forced Release for Trunk-to-Trunk Transfer**
  This timer will start when a trunk begins talking with another trunk (for example: trunk-to-trunk transfer, outgoing from trunk, Tandem Trunking) (0-64800).
- **25-07-07 : System Timers for VRS/DISA -DISA/Tandem Trunking Conversation Warning Tone Time**
  Determine the length of time a DISA caller or a Tandem Trunking conversation can talk before the Long Conversation tone is heard (0-64800 seconds).
- **25-07-08 : System Timers for VRS/DISA - DISA/Tandem Trunking Long Conversation Disconnect**
  This timer determines how long the system will wait before disconnecting a call after the Long Conversation tone is heard (0-64800 seconds).

Tandem Trunking Method B - Tandem Trunking with Transfer Key

- **10-07-01 : Conversation Record Circuits**
  The number of circuits assigned as Conversation Record circuits limits the number of available Conference circuits. Make sure there are circuits available for Conference.
- **14-01-04 : Basic Trunk Data Setup - Transmit Gain Level for Conference and Transfer Calls**
  Select the CODEC gain type used by the trunk when it is part of an Unsupervised Conference.
- **14-01-05 : Basic Trunk Data Setup - Receive Gain Level for Conference and Transfer Calls**
  Select the CODEC gain type used by the trunk when it is part of an Unsupervised Conference.
- **14-01-13 : Basic Trunk Data Setup - Loop Disconnect Supervision**
  For each trunk, enter 1 to enable loop supervision.
- **15-07-01 : Programmable Function Keys**
  Assign a function key for Transfer (code 06).
- **20-06-01 : Class of Service for Extensions**
  Assign a Class of Service (1-15) to an extension.

- **20-07-11 : Class of Service Options (Administrator Level) - Forced Trunk Disconnect**
  In an extension's Class of Service, enter 1 to enable Forced Trunk Disconnect. This allows the extension to disconnect an Unsupervised Conference in progress (initially set up using Method B).
- **20-11-14 : Class of Service Options (Hold/Transfer Service) - Trunk-to-Trunk Transfer**
  Disable (0) the Trunk-to-Trunk Transfer Restriction option.
- **20-11-21 : Class of Service Options (Hold/Transfer Service) - Restriction for Tandem Trunking on Hang Up**
  Deny (1) an extension user's ability to set up a tandem call automatically when they hang up.
- **20-13-10 : Class of Service Options (Supplementary Service) - Barge In Mode**
  In an extension's Class of Service, set whether an extension should be able to Barge In to a call and talk (1) or just monitor the call (0).
- **24-02-07 : System Options for Transfer - Forced Release for Trunk-to-Trunk Transfer**
  This timer will start when a trunk begins talking with another trunk (for example: trunk-to-trunk transfer, outgoing from trunk, Tandem Trunking) (0-64800).
- **25-07-07 : System Timers for VRS/DISA - DISA/Tandem Trunking Long Conversation Warning Tone Time**
  Determine the length of time a DISA caller or any trunk-to-trunk (such as Tandem Trunking) conversation can talk before the Long Conversation tone is heard (0-64800 seconds).
- **25-07-08 : System Timers for VRS/DISA - DISA/Tandem Trunking Long Conversation Disconnect**
  This timer determines how long the system will wait before disconnecting a DISA or any trunk-to-trunk (such as Tandem Trunking) call after the Long Conversation tone is heard (0-64800 seconds).

Tandem Trunking Method C - Tandem Trunking on Hang up

- **10-07-01 : Conversation Record Circuits**
  The number of circuits assigned as Conversation Record circuits limits the number of available Conference circuits. Make sure there are circuits available for Conference.
- **14-01-04 : Basic Trunk Data Setup - Transmit Gain Level for Conference and Transfer Calls**
  Select the CODEC gain type used by the trunk when it is part of an Unsupervised Conference.
- **14-01-05 : Basic Trunk Data Setup - Receive Gain Level for Conference and Transfer Calls**
  Select the CODEC gain type used by the trunk when it is part of an Unsupervised Conference.
- **14-01-13 : Basic Trunk Data Setup - Loop Disconnect Supervision**
  For each trunk, enter 1 to enable loop supervision.
- **20-06-01 : Class of Service for Extensions**
  Assign a Class of Service (1-15) to an extension.
- **20-07-11 : Class of Service Options (Administrator Level) - Forced Trunk Disconnect**
  In an extension's Class of Service, enter 1 to enable Forced Trunk Disconnect. This allows the extension to disconnect an Unsupervised Conference in progress (initially set up using Method B).
- **20-11-14 : Class of Service Options (Hold/Transfer Service) - Trunk-to-Trunk Transfer**
  Disable (0) the Trunk-to-Trunk Transfer Restriction option.
- **20-11-21 : Class of Service Options (Hold/Transfer Service) - Restriction for Tandem Trunking on Hang Up**
  Allow (0) an extension user's ability to set up a tandem call automatically when they hang up.
- **24-02-07 : System Options for Transfer - Forced Release for Trunk-to-Trunk Transfer**
  This timer will start when a trunk begins talking with another trunk (for example: trunk-to-trunk transfer, outgoing from trunk, Tandem Trunking) (0-64800).

- **25-07-07 : System Timers for VRS/DISA -DISA/Tandem Trunking Long Conversation Warning Tone Time**
  Determine the length of time a DISA caller or any trunk-to-trunk (such as Tandem Trunking) conversation can talk before the Long Conversation tone is heard (0-64800 seconds).
- **25-07-08 : System Timers for VRS/DISA - DISA/Tandem Trunking Long Conversation Disconnect**
  This timer determines how long the system will wait before disconnecting a a DISA or any trunk-to-trunk (such as Tandem Trunking) call after the Long Conversation tone is heard (0-64800 seconds).

Tandem Trunking Method D - Tandem Trunking to Abbreviated Dial Number

- **10-07-01 : Conversation Record Circuits**
  The number of circuits assigned as Conversation Record circuits limits the number of available Conference circuits. Make sure there are circuits available for Conference.
- **11-10-06 : Service Code Setup (for System Administrator) - Setting the Automatic Forwarding for Each Trunk Line**
  If the default service code (833) for enabling Automatic Tandem Trunking feature is not acceptable, change the code as required.
- **11-10-07 : Service Code Setup (for System Administrator) - Canceling the Automatic Forwarding for Each Trunk Line**
  If the default service code (834) for canceling Automatic Tandem Trunking feature is not acceptable, change the code as required.
- **11-10-08 : Service Code Setup (for System Administrator) - Setting the Destination for Automatic Trunk Forwarding**
  If the default service code (835) for setting the destination of the Automatic Tandem Trunking feature is not acceptable, change the code as required.
- **13-04-01 : Abbreviated Dialing Number and Name**
  Enter the number and names for the bins used to hold the Automatic Tandem Trunking destination.
- **14-01-04 : Basic Trunk Data Setup - Transmit Gain Level for Conference and Transfer Calls**
  Select the CODEC gain type used by the trunk when it is part of an Unsupervised Conference.
- **14-01-05 : Basic Trunk Data Setup - Receive Gain Level for Conference and Transfer Calls**
  Select the CODEC gain type used by the trunk when it is part of an Unsupervised Conference.
- **14-01-13 : Basic Trunk Data Setup - Loop Disconnect Supervision**
  For each trunk, enter 1 to enable loop supervision.
- **20-06-01 : Class of Service for Extensions**
  Assign a Class of Service (1-15) to an extension.
- **20-07-05 : Class of Service Options (Administrator Level) - Set/Cancel Automatic Trunk-to-Trunk Forwarding**
  Enable (1) or disable (0) an extension's ability to use the Trunk-to-Trunk Forwarding service codes.
- **20-07-11 : Class of Service Options (Administrator Level) - Forced Trunk Disconnect**
  In an extension's Class of Service, enter 1 to enable Forced Trunk Disconnect. This allows the extension to disconnect an Unsupervised Conference in progress.
- **24-02-07 : System Options for Transfer - Forced Release for Trunk-to-Trunk Transfer**
  This timer will start when a trunk begins talking with another trunk (for example: trunk-to-trunk transfer, outgoing from trunk, Tandem Trunking) (0-64800).

- **24-04-01 : Automatic Trunk-to-Trunk Transfer Target Setup**
  Assign the Abbreviated Dialing number (0-1999) to be used as the destination for the trunk-to-trunk transfer.
  - Aspire S: Trunks 1-8
  - Aspire: Trunks 1-200
- **25-07-07 : System Timers for VRS/DISA -DISA/Tandem Trunking Long Conversation Warning Tone Time**
  Determine the length of time a DISA caller or any trunk-to-trunk (such as Tandem Trunking) conversation can talk before the Long Conversation tone is heard (0-64800 seconds).
- **25-07-08 : System Timers for VRS/DISA - DISA/Tandem Trunking Long Conversation Disconnect**
  This timer determines how long the system will wait before disconnecting a a DISA or any trunk-to-trunk (such as Tandem Trunking) call after the Long Conversation tone is heard (0-64800 seconds).

Trunk Disconnect Continue/Disconnect Codes (Requires software 4.0E+)

- **14-01-25 : Basic Trunk Data Setup - Continue/Disconnect Trunk-to-Trunk Conversation**
  When Program 24-02-10 is set to disconnect a trunk after the defined time, determine whether or not a user should have the ability to use the continue/disconnect code (**Entries:** 0 = Disabled, 1 = Enabled).
- **20-28-01 : System Option Setup - Conversation Continue Code**
  When Program 14-01-25 is enabled, determine the 1-digit code the user should dial (0 - 9, *, #) to extend the conversation length for the time defined in 20-28-03. If the Continue and Disconnect codes are programmed the same (e.g., #), the system will follow the "Continue" operation. Using the Continue code before the warning tone is heard has no action.
- **20-28-02 : System Option Setup - Conversation Disconnect Code**
  When Program 14-01-25 is enabled, determine the 1-digit code the user should dial (0 - 9, *, #) to immediately disconnect their call. Using the Disconnect code before the warning tone is heard will disconnect the call.
- **20-28-03 : System Option Setup - Conversation Extend Time**
  When Program 14-01-25 is enabled, determine the length of time a call will be extended (0 - 64800 seconds) when the user dials the Continue code (defined in 20-28-01).
- **24-02-07 : System Options for Transfer - Forced Release for Trunk-to-Trunk Transfer**
  This timer will start when a trunk begins talking with another trunk (for example: trunk-to-trunk transfer/Tandem Trunking). When this timer expires, a warning tone is heard. If Program 24-02-10 is set, the conversation disconnects after that timer expires. This timer is set again when the external digit timer expires. One of the trunks used must be an analog trunk (or leased line). **Entries:** 0 - 64800 (seconds)
- **24-02-10 : System Options for Transfer - Trunk-to-Trunk Transfer Disconnect Timer**
  Determine how long a conversation will continue (0 - 64800 seconds) once the timer in Program 24-02-07 expires. If this option is set to "0", the conversation will be disconnected immediately. This program has no affect if Program 24-02-07 is set to "0". One of the trunks used must be an analog trunk (or leased line).
- **25-07-07 : System Timers for VRS/DISA - DISA Long Conversation Warning Tone Time**
  Determine the length of time a DISA caller can talk before the Long Conversation tone is heard (0-64800 seconds). If Program 25-07-08 is set to "0", the call is disconnected once the timer expires. This timer is set again when the external digit timer expires.
  Note: If this option is set to "0", the settings in Program 24-02-07 and 24-07-10 are followed - not 25-07-07 and 25-07-08.

- **25-07-08 : System Timers for VRS/DISA - DISA Long Conversation Disconnect Timer**
  This timer determines how long the system will wait (0 - 64800 seconds) before disconnecting a DISA call after the Long Conversation tone is heard. This program has no affect if Program 25-07-07 is set to "0".
- **80-01-35 : Service Tone Setup - 1 Second Signal Tone**
  If required, adjust the warning tone heard by the user when Program 24-02-07 or 25-07-07 expires.

Multiple Trunk Conference, Method A - From Conference

- **10-07-01 : Conversation Record Circuits**
  The number of circuits assigned as Conversation Record circuits limits the number of available Conference circuits. Make sure there are circuits available for Conference.
- **11-12-57 : Service Code Setup (for Service Access) - Tandem Trunking/Unsupervised Conference**
  If the default service code (#8) for Tandem Trunking is not acceptable, change the code as required.
- **14-01-04 : Basic Trunk Data Setup - Transmit Gain Level for Conference and Transfer Calls**
  Select the CODEC gain type used by the trunk when it is part of an Unsupervised Conference.
- **14-01-05 : Basic Trunk Data Setup - Receive Gain Level for Conference and Transfer Calls**
  Select the CODEC gain type used by the trunk when it is part of an Unsupervised Conference.
- **14-01-13 : Basic Trunk Data Setup - Loop Supervision**
  For each trunk that should be able to participate in a tandem call, enter 1.
- **14-02-09 : Analog Trunk Data Setup - Busy Tone Detector**
  If this option is enabled (1) for a trunk, if there is no DSP resource available, the Multiple Trunk Conference cannot be completed.
- **15-07-01 : Programmable Function Keys**
  (Optional) Assign a function key for Transfer (code 06).
- **20-06-01 : Class of Service for Extensions**
  Assign a Class of Service (1-15) to an extension.
- **20-07-11 : Class of Service Options (Administrator Level) - Forced Trunk Disconnect**
  In an extension's Class of Service, enter 1 to enable Forced Trunk Disconnect. This allows the extension to disconnect an Unsupervised Conference in progress.
- **20-13-08 : Class of Service Options (Supplementary Service) - Conference**
  In an extension's Class of Service, enable (1) or disable (0) the extension's ability to initiate a Conference.
- **20-13-10 : Class of Service Options (Supplementary Service) - Barge In Mode**
  In an extension's Class of Service, set whether an extension should be able to Barge In to a call and talk (1) or just monitor the call (0).
- **24-02-07 : System Options for Transfer - Forced Release for Trunk-to-Trunk Transfer**
  This timer will start when a trunk begins talking with another trunk (for example: trunk-to-trunk transfer, outgoing from trunk, Tandem Trunking) (0-64800).

Tandem Trunking Method B - Tandem Trunking with Transfer Key

- **10-07-01 : Conversation Record Circuits**
  The number of circuits assigned as Conversation Record circuits limits the number of available Conference circuits. Make sure there are circuits available for Conference.
- **14-01-04 : Basic Trunk Data Setup - Transmit Gain Level for Conference and Transfer Calls**
  Select the CODEC gain type used by the trunk when it is part of an Unsupervised Conference.
- **14-01-05 : Basic Trunk Data Setup - Receive Gain Level for Conference and Transfer Calls**
  Select the CODEC gain type used by the trunk when it is part of an Unsupervised Conference.
- **14-01-13 : Basic Trunk Data Setup - Loop Disconnect Supervision**
  For each trunk, enter 1 to enable loop supervision.
- **14-02-09 : Analog Trunk Data Setup - Busy Tone Detector**
  If this option is enabled (1) for a trunk, if there is no DSP resource available, the Multiple Trunk Conference cannot be completed.
- **15-07-01 : Programmable Function Keys**
  Assign a function key for Transfer (code 06).
- **20-06-01 : Class of Service for Extensions**
  Assign a Class of Service (1-15) to an extension.
- **20-07-11 : Class of Service Options (Administrator Level) - Forced Trunk Disconnect**
  In an extension's Class of Service, enter 1 to enable Forced Trunk Disconnect. This allows the extension to disconnect an Unsupervised Conference in progress (initially set up using Method B).
- **20-11-14 : Class of Service Options (Hold/Transfer Service) - Trunk-to-Trunk Transfer**
  Disable (0) the Trunk-to-Trunk Transfer Restriction option.
- **20-13-10 : Class of Service Options (Supplementary Service) - Barge In Mode**
  In an extension's Class of Service, set whether an extension should be able to Barge In to a call and talk (1) or just monitor the call (0).
- **24-02-07 : System Options for Transfer - Forced Release for Trunk-to-Trunk Transfer**
  This timer will start when a trunk begins talking with another trunk (for example: trunk-to-trunk transfer, outgoing from trunk, Tandem Trunking) (0-64800).

Related Features

Call Forward, Off Premise
A trunk can be set up to automatically tandem trunk/forward to an outside telephone number or Abbreviated Dialing bin.

Central Office Calls, Answering / Central Office Calls, Placing
Other programmed options for incoming and outgoing calls can affect how calls are handled. Check or program these options as needed.

Conference, Voice Call
Set up a Conference with a co-worker in your immediate work area.

Direct Inward System Access (DISA)
DISA calls also use the same Continue/Disconnect codes.

Meet Me Conference
Meet Me Conference lets an extension user set up a Conference via Paging.

Meet Me Paging
Meet Me Paging lets an extension user set up a two-party meeting via Paging.

Operation

Method A - Tandem Trunking from Conference

To set up a Tandem/Multiple Trunk Conference Call:

1. Place or answer first trunk call.
2. Press CONF key.
3. Place or answer second trunk call.
   When adding an answered call, the call must first be answered and placed on hold. A call ringing in cannot be added.
4. With Multiple Trunk Conference, press CONF and place or answer a third trunk call.
   When adding an answered call, the call must first be answered and placed on hold. A call ringing in cannot be added.
5. To set up the tandem call, press CONF key twice.
   This sets up a Conference between you and the outside parties.
6. Press HOLD and dial #8 and hang up.
   OR
   With Tandem Trunking (2 outside calls) Only: Press Transfer key (PGM 15-07 or SC 851: 06).
   This sets up the conference between the outside parties and you drop out.
   The line keys for the trunks blink green as long as the Unsupervised Conference continues.

To end the Tandem Call:

1. Press any of the flashing line keys.
   The line keys light steadily (green). You can listen (i.e., monitor) to the call or rejoin the conversation, based on the setting in Program 20-13-10.
   Only trunk keys can be used for re-entering the call - trunk group keys and loop keys will not work.
2. Press SPK or Hang up.
   If Program 20-13-10 is set to "0", the Conference ends and the line keys go out.
   *If Program 20-13-10 is set to "1", to manually disconnect the Conference, Forced Trunk Disconnect (i.e., Press the line key + *3) must be used by an extension other than the originating extension.*

Method B - Tandem Trunking with Transfer Key

To set up a Tandem Trunking Call with only 2 outside lines:

1. Place or answer first trunk call.
2. Press HOLD to place the first trunk call on Hold.
3. Place or answer second trunk call.
4. Press Transfer key (PGM 15-07 or SC 851: 06).

   This sets up an Unsupervised Conference with both outside parties.

   The line keys for the trunks are lit solid red.

   *To disconnect the Conference, Forced Trunk Disconnect (i.e., Press the line key + *3) must be used by an extension other than the originating extension.*

To set up a Multiple Trunk Conference Call (3 or more outslide lines):

1. Place or answer first trunk call.
2. Press CONF key.
3. Place or answer second trunk call.

   When adding an answered call, the call must first be answered and placed on hold. A call ringing in cannot be added.
4. Press CONF key.
5. Place or answer third trunk call.

   When adding an answered call, the call must first be answered and placed on hold. A call ringing in cannot be added.
6. To set up the conference call, press CONF key twice.

   This sets up a Conference between you and the outside parties.
7. Press Transfer key (PGM 15-07 or SC 851: 06).

   This sets up the Multiple Trunk Conference between the outside parties.

   The line keys for the trunks stutter flash green.

   *To disconnect the Conference, Forced Trunk Disconnect (i.e., Press the line key + *3) must be used by an extension other than the originating extension.*

Single Line Telephone

To set up a Tandem Call:

1. Place or answer first trunk call.
2. Press HOOKFLASH and dial #1.
3. Place or answer second trunk call.
4. To set up the tandem call, press HOOKFLASH and dial #8.
5. Hang up.

   This sets up a Conference between both outside parties.

Method C - Tandem Trunking on Hang up

To set up a Tandem Call (with only 2 outside lines):

1. Place or answer first trunk call.
2. Press HOLD to place the first trunk call on Hold.
3. Place or answer second trunk call.

   The second call cannot be a ringing call . It must first be answered, placed on hold, then answer the other call and press HOLD, then hang up.
4. Hang up.

   This sets up an Unsupervised Conference with both outside parties.

   The line keys for the trunks light solid red.

   *To disconnect the Conference, use Forced Trunk Disconnect (i.e., Press line key + *3).*

Single Line Telephone

To set up a Tandem Call (with only 2 outside lines):

1. Place or answer first trunk call.
2. Press HOOKFLASH.
3. Place or answer second trunk call.
4. To set up the tandem call, hang up.

   This sets up a Conference between both outside parties.

   *To disconnect the Conference, use Forced Trunk Disconnect (i.e., Dial the trunk access code [#9 + trunk number] + *3).*

Method D - Automatic Tandem Trunking Using Abbreviated Dialing

To set Automatic Tandem Trunking:

1. Dial service code 833.
2. Dial the desired trunk number (Aspire S: 1-8, Aspire: 001-200).
3. Hang up.

The line key for the trunk will be solid red as long as the Unsupervised Conference continues.

*To disconnect the Conference, Forced Trunk Disconnect (i.e., Press the line key or #9 plus the trunk number + *3).*

To cancel Automatic Tandem Trunking:

1. Dial service code 834.
2. Dial the desired trunk number (Aspire S: 1-8, Aspire: 001-200).
3. Hang up.

*To disconnect the Conference, Forced Trunk Disconnect (i.e., Press the line key or #9 plus the trunk number + *3).*

To set and change the destination of the Automatic Tandem Trunk call:

1. Dial service code 835.
2. Dial the desired trunk number (Aspire S: 1-8, Aspire: 001-200).
3. Dial the desired time mode (Aspire S: 1-4, Aspire: 1-8).
4. Press HOLD.
5. Hang up.

*To disconnect the Conference, Forced Trunk Disconnect (i.e., Press the line key or #9 plus the trunk number + *3).*

Continue/Disconnect Code

To use the Continue code to extend a Tandem Trunk call:

1. An external call connects to an external number (either by transferring with Tandem Trunking or by DISA caller).
2. After the programmed time (Program 24-02-07), a warning tone is heard and the user dials the Continue code (Program 20-28-01) to extend the conversation.
3. After the programmed time (Program 20-28-03), the warning tone is heard again. After the programmed time (Program 24-02-10), the call is disconnected.

Aspire S	Aspire M/L/XL
• Available.	• Available with software 1.07 or higher.
• Third-party TAPI is available.	• Third-party TAPI requires the Basic NTCPU (P/N 0891002) with the PAL upgrade or the Enhanced NTCPU (P/N 0891038).

Description

The system has Telephony Applications Programming Interface (TAPI) capability. TAPI capability provides:

- Reduced TAPI Feature Set (see the Supported TAPI Commands chart below).
- Caller ID data to the PC for data base lookups and screen pops (see the Caller ID Data chart below).
- Telephone control (off-hook, on-hook and dialing).

The CTA or CTU adapter provides an interface that allows the user personalized control of the telephone system from a desktop or laptop PC when used in conjunction with a TAPI-compliant application. The telephone system and PC are connected by installing an adapter on the telephone keyset, allowing the PC user to access sophisticated communications services via the telephone lines.

In addition to a compatible system software version, you must also have:

- Aspire keyset telephone containing an RS-232-C CTA Adapter (P/N 0890058) / CTU Adapter (P/N 0890059) with TAPI compliant firmware.
- PC Driver for the CTA: PC running Windows 98 Second Edition or higher
- PC Driver for the CTU: PC running Windows 98 Second Edition, Windows 2000, or Windows XP
- A TAPI compatible Windows application

TAPI Commands	
TSPI_LINEANSWER	TSPI_LINENEGOTIATETSPIVERSION
TSPI_LINEBLINDTRANSFER	TSPI_LINEOPEN
TSPI_LINECLOSE	TSPI_LINESETDEFAULTMEDIADETECTION
TSPI_LINECLOSECALL	TSPI_LINEGETADDRESSCAPS
TSPI_LINECOMPLETETRANSFER	TSPI_LINEPARK
TSPI_LINECONDITIONALMEDIADETECTION	TSPI_LINEPICKUP
TSPI_LINECONFIGDIALOG	TSPI_LINEPREPAREADDTOCONFERENCE
TSPI_LINEDIAL	TSPI_LINEREDIRECT
TSPI_LINEDROP	TSPI_LINESELECTEXTVERSION
TSPI_LINEFORWARD	TSPI_LINESETAPPSPECIFIC
TSPI_LINEGETADDRESSID	TSPI_LINESETMEDIAMODE
TSPI_LINEGETADDRESSSTATUS	TSPI_LINESETSTATUSMESSAGES
TSPI_LINEGETCALLADDRESSID	TSPI_LINESETUPCONFERENCE
TSPI_LINEGETCALLINFO	TSPI_LINESETUPTRANSFER
TSPI_LINEGETCALLSTATUS	TSPI_LINESWAPHOLD
TSPI_LINEGETDEVCAPS	TSPI_LINEUNHOLD
TSPI_LINEGETEXTENSIONID	TSPI_LINEUNPARK
TSPI_LINEGETID	TSPI_PROVIDERCONFIG
TSPI_LINEGETLINEDEVSTATUS	TSPI_PROVIDERINIT
TSPI_LINEGETNUMADDRESSIDS	TSPI_PROVIDERINSTALL
TSPI_LINEHOLD	TSPI_PROVIDERREMOVE
TSPI_LINEMAKECALL	TSPI_PROVIDERSHUTDOWN
TSPI_LINENEGOTIATEEXTVERSION	

Caller ID Data		
Call Type	**Signaling**	**Description**
Trunk Call	1st Ring Signal	
	NMBR=XXX XXXXXXX	Caller's number = XXX XXXXXXX
	2nd Ring Signal	
Intercom Call	1st Ring Signal	
	NMBR=XXXX	Caller's number = XXXX
	2nd Ring Signal	

When a CTA keyset answers a call, it provides the following data to the connected device:
If the incoming call data contains the Caller ID number . . .
NMBR=XXX (XXX = Caller ID number data)

If the incoming call data does not contain the Caller ID number . . .
NUMBR=
UNAVAILABLE, OUT OF AREA, or PRIVATE

- To place a call on Hold, the CTA provides the following data to the connected device:
  ATD!

- When the data keyset becomes busy, the CTA provides the following data to the connected device:
  BUSY

Refer to the Aspire CTI Driver Installation Manual, P/N 0893102, for complete installation information.

Conditions

None

Default Setting

Disabled.

Programming

- **15-02-19 : Multi-Line Telephone Basic Data Setup - CTA Data Communications Mode**
  Set the extension to use TAPI to "0" for PC connection.
- **15-02-20 : Multi-Line Telephone Basic Data Setup - Baud Rate for CTA Port**
  Set the baud rate to be used by the CTA adapter (0=4800, 1=9600, 2=19200).

Related Features

Caller ID

An extension's Class of Service setting determines if additional options (Caller ID display, Caller ID for second incoming call, etc.).

Computer Telephony Integration (CTI) Applications and Caller ID

The system provides Database Lookup through Caller ID and TAPI compatible third-party software (such as Interact Commerce Corporations ACT!).

Data Communications

For more information on setting up the CTA Module, turn to this feature.

Headset Operation

In order to use the headset for some TAPI features (such as dialing out from MS Outlook), use the Automatic Answer feature and press the Headset programmable function key (PGM 15-07 or SC 851: 05) to redirect the call to the headset and disable the hookswitch detection.

Operation

TAPI operation is automatic once programmed in the phone system and enabled in the PC's TAPI application, unless a headset is used.

Using the Headset with Automatic Answer:

1. With the keyset in an idle state, press the Check key.
2. Press the Headset key (PGM 15-07 or SC 851: 05) twice.
3. Press the Clear key to return the display to idle.

   The Headset key blinks when Automatic Headset is activated.
   To cancel Automatic Headset, repeat these steps.

To Redirect Calls to the Headset and Disable the Hookswitch (required for some TAPI features):

1. With the keyset in an idle state, press the Check key.
2. Press the Headset key (PGM 15-07 or SC 851: 05) twice.
3. Press the Clear key to return the display to idle.

   The Headset key blinks when Automatic Headset is activated.
   To cancel Automatic Headset, repeat these steps.
4. Press the Headset key (PGM 15-07 or SC 851: 05) to go off hook.

Aspire S	Aspire M/L/XL
• Not Available.	• Available. • This feature requires the Basic NTCPU (P/N 0891002) with the PAL upgrade or the Enhanced NTCPU (P/N 0891038).

Description

Tie lines directly link a local telephone system with one or more remote systems. The link is independent of the telco's switched network. When a local system user seizes a tie line, they hear Intercom dial tone from the remote system. The user may then be able to:

- Dial extensions in the remote system
- Use the remote system's trunks for outgoing calls
- Access Common Abbreviated Dialing bins in the remote system
- Use the remote system's Internal and External Paging

The system provides connection for 2-wire (four lead, tip/ring) or 4-wire (eight lead, tip/ring/tip 1/ring 1) type tie line circuits. Using switches on the PCB, each circuit type can be set as Type I, II, III, IV, or V. Refer to the Aspire M/L/XL Hardware Manual for the PCB switch settings.

Tie Line Class of Service

Tie Line Class of Service provides features and dialing restrictions for incoming tie lines. This allows you to control the capabilities of callers dialing into your system. The tie line Class of Service options are:

- **First Digit Absorption**
  A tie line can ignore (absorb) the first digit received, which helps when setting up a tie line network. For example, your system can have tie lines to two other systems with the same extension numbering plan. Use the first digit to differentiate between the systems. Tie line callers can dial 3200-3456 for the first system's extensions and 4200-4456 for the second system's extensions. The receiving system ignores the first digit and routes calls correctly to the extension dialed (i.e., 4301 is received as 301).

- **Trunk Group Routing/ARS Access**
  When a tie line user calls the remote system, they may be able to dial 9 and place outside calls through the remote system. Any toll charges are incurred by the remote system. The call follows the remote system's Trunk Group Access or Automatic Route Selection - whichever is enabled

- **Trunk Group Access**
  Tie line callers may be able to access trunk groups in the remote system by dialing Programmable Function Key *02 and the trunk group number. This allows the callers to select a specific trunk group for an outgoing call. Trunk Group Access bypasses the remote system's Trunk Group Routing/ARS. As with dial 9 access, any toll charges are incurred by the remote system.

- **Common Abbreviated Dialing**
  The remote system's Common Abbreviated Dialing bins may be available to tie line callers. Use this capability to set up centralized Abbreviated Dialing control - or just save time when dialing.

- **Operator Calling**
  A tie line caller may be able to dial 0 for the remote system's operator.

- **Paging**
  Internal and External Paging may be available to tie line callers. This allows co-workers in adjacent facilities connected by tie lines, for example, to broadcast announcements to each other.

- **Direct Trunk Access**
  This option allows tie line callers to directly access a trunk for an outside call by dialing #9 and the trunk's number. Like Trunk Group Access, this bypasses the remote system's Trunk Group Routing/ARS. Any toll charges are incurred by the remote system.

- **Forced Trunk Disconnect**
  The Forced Trunk Disconnect option allows a tie line caller to disconnect (release) another extension's active outside call. The tie line caller can then place a call on the released trunk. Tie line callers should use Forced Trunk Disconnect only in an emergency, when no other trunks are available.

- **DISA/Tie Trunk Barge In**
  The DISA/Tie Trunk Barge In option allows a tie line caller to break into another extension's established call. This sets up a three-way conversation between the intruding party and the two parties on the initial call.

Tie Line Outgoing Call Restriction

You can selectively deny incoming tie lines access to your system's outgoing trunk groups. Incoming tie line callers could be able to access your outgoing WATS lines, for example, but not your DDD trunks. The system allows you to set up a restriction matrix for each of your incoming tie lines - for each of your outgoing trunk groups.

Tie Line Toll Restriction Class

Incoming tie lines can have a Toll Restriction Class and be subject to the system's toll restriction. For example, Toll Restriction can prevent users from dialing 1-900 calls. When an incoming tie line caller tries to use system trunks to dial a 1-900 service, Toll Restriction will deny the call.

Flexible Tie Line Service Compatibility

You can individually program tie lines for Dial Pulse (DP) or DTMF incoming or outgoing signaling. Outgoing tie lines can be either wink start or immediate start.

Wink Start Mode Does Not Require a DTMF Receiver

E&M trunks in wink start mode do not require a DTMF receiver for dial tone detection. It is detected with the wink. This frees the DTMF receivers for other use.

Conditions

(A.) Tie lines require the installation of a 4TLIU-A1 PCB. Each PCB provides four tie line ports.
(B.) Tie line service must be purchased from your local telephone company.
(C.) The Aspire S does not support tie lines.

Default Setting

Disabled.

Programming

10-09-01 : DTMF and Dial Tone Circuit Setup
If the system has DTMF tie lines, be sure to reserve at least one circuit for analog trunk DTMF reception (type 0 or 2).

- Use the following as a guide when allocating DTMF receivers:
  - In light traffic sites, allocate one DTMF receiver for every 10 devices that use them.
  - In heavy traffic sites, allocate one DTMF receiver for every five devices that use them.

14-01-02 : Basic Trunk Data Setup - Transmit CODEC Gain Type
14-01-03 : Basic Trunk Data Setup - Receive CODEC Gain Type
Customize the transmit and receive levels of the CODEC Gain Types for each trunk as required.

14-01-13 : Basic Trunk Data Setup - Loop Disconnect Supervision
Enable (1) loop supervision for each tie line that should be able to place outgoing calls.

14-02-01 : Analog Trunk Data Setup - Signaling Type (DP/DTMF)
Set the outgoing signaling type for the tie trunk. The options are 0 (DP 10 pps), 1 (DP 20 pps) and 2 (DTMF). To set incoming signaling, refer to Program 34-01-02.

14-05-01 : Trunk Groups
Program tie lines of similar type into the same trunk group. The system uses trunk groups for outgoing access to tie lines (i.e., Service Code 804 + group). Also see Program 34-05.
➪ Aspire Trunk Groups: 1-100

14-06-01 : Trunk Group Routing
When a tie line user dials 9, the system uses the routes defined in this program. Also see Program 34-03. (If the system has ARS, the tie line user accesses ARS when they dial 9.)
➪ Aspire Trunk Group Routes: 1-100

20-01-05 : System Options - DTMF Receiver Active Time
After answering the tie line call, the system attaches a DTMF receiver to the tie line for this interval (0- 64800 seconds).

20-06-01 : Class of Service for Extensions
Assign a Class Of Service (1-15) to extensions.

20-09-01 : Class of Service Options (Incoming Call Service) - Second Call for DID/ DISA/ DIL/ E&M
Enable (1) or disable (0) an extension's ability to receive a second call from a DID, DISA, DIL, or tie line caller.

20-14-01 : Class of Service Options for DISA/E&M
Enable (1) or disable (0) the following options for each tie line Class of Service (1-15):

- First Digit Absorption (Item 1)
- Trunk Group Routing/ARS Access (Item 2)
- Trunk Group Access (Item 3)
- Common Abbreviated Dialing (Item 4)
- Operator Calling (Item 5)
- Internal Paging (Item 6)
- External Paging (Item 7)
- Direct Trunk Access (Item 8)
- Forced Trunk Disconnect (Item 9)
- Call Forward Setting by Remote Via DISA (Item 10)
- DISA/Tie Trunk Barge In (Item 11)

- **21-05-01 : Toll Restriction Class - International Call Restriction Table**
  21-05-02 : Toll Restriction Class - International Call Permit Table
  21-05-04 : Toll Restriction Class - Maximum Number of Digits Table Assignments
  21-05-05 : Toll Restriction Class - Common Permit Code Table
  21-05-06 : Toll Restriction Class - Common Restrict Code Table
  21-05-07 : Toll Restriction Class - Permit Code Table
  21-05-08 : Toll Restriction Class - Restrict Code Table
  21-05-09 : Toll Restriction Class - Restriction for Common Abbreviated Dialing
  21-05-10 : Toll Restriction Class - Restriction for Group Abbreviated Dialing Numbers
  21-05-11 : Toll Restriction Class - Intercom Call Restriction
  21-05-12 : Toll Restriction Class - PBX Call Restriction
  If Program 34-01-05 is set to "1", define the toll restriction settings for tie lines.
- **21-05-13 : Toll Restriction Class - Restriction of Tie Line Calls**
  Enable (1) or disable (0) toll restriction for tie line calls (defined in Program 34-08-01).
- **22-02-01 : Incoming Call Trunk Setup**
  For each Night Service mode, enter service type 5 when the trunk should be a tie trunk.
- **34-01-01 : E&M Tie Line Basic Setup - DID/E&M Start Signaling**
  Enter 0 for 2nd dial tone, 1 for wink, 2 for immediate, or 3 for delay start signaling. To set outgoing signaling, refer to Program 14-02-01.
- **34-01-02 : E&M Tie Line Basic Setup - DID/E&M Start Signaling**
  Set the trunk signaling type to either dial pulse (0) or DTMF (1).
- **34-01-03 : E&M Tie Line Basic Setup - E&M Dial-In Mode**
  Determine if the incoming tie line call should be directed as an intercom call or if it should follow the DID Translation Table in Program 22-11.
- **34-01-04 : E&M Tie Line Basic Setup - E&M Line Dial Tone**
  Enter 1 if the tie line should send dial tone to the calling system once the call is set up. Enter 0 if the tie line should not send dial tone.
- **34-01-05 : E&M Tie Line Basic Setup - System Toll Restriction**
  Enable (1) or disable (0) the ability for tie line calls to follow the system toll restriction entries in Programs 21-05-01 through 21-05-13. If disabled, tie line toll restriction will be determined by 21-05-13.
- **34-02-01 : E&M Tie Line Class of Service**
  Assign the tie line's Class of Service (1-15). Use Program 20-14 to set the tie line Class of Service options. ***You cannot use Programs 20-06 thru 20-17 to assign Class of Service to tie lines.***
- **34-03-01 : Trunk Group Routing for E&M Tie Lines**
  Use this program to assign the trunk group route chosen when a user seizes a tie line and dials 9. Set Trunk Group Routing in program 14-06. If the system has ARS, dialing 9 accesses ARS.
  ➪ Aspire Trunk Group Routes: 1-100
- **34-04-01 : E&M Tie Line Toll Restriction Class**
  If the system uses Toll Restriction, enter a Toll Restriction Class (1-15) for each tie line. The system uses the class you enter in Program 21-05. ***You cannot use Program 21-04 to assign Toll Restriction to tie lines.***
- **34-05-01 : Tie Line Outgoing Call Restriction**
  This program lets you build a restriction matrix for trunk calls placed over a tie line. For each tie line trunk group, enable (0) or disable (1) outgoing access to each CO trunk group.
  ➪ Aspire Trunk Groups: 1-100
- **34-06-01 : Add/Delete Digit for E&M Tie Line - Delete Digit**
  Some tie line networks pass the location number and extension number to the remote side. If the system should ignore these digits, use this program to define the number of digits which should be deleted (0-255, 255 deletes all digits) for a call.

- **34-06-02 : Add/Delete Digit for E&M Tie Line - Additional Dial Digits**
  If a tie line network requires additional digits to reroute the call to a location, enter the digits for the location which should be added to the received digits (up to 4 digits).
- **34-07 : E&M Tie Line Timers**
  Define the system timers as needed for use with the tie line trunks.
- **34-08-01 : Toll Restriction Data for E&M Tie Lines**
  Define the toll restriction data for E&M tie lines if required. This should be defined if toll restriction is enabled in Program 21-05-13.
- **34-09-01 : ANI/DNIS Service Options - Receive Format**
  Use this option to specify the format of the ANI/DNIS data received from the telco. Make sure your entry is compatible with the service the telco provides (0 = Address, 1 = *ANI*, 2 = *DNIS*, 3 = *ANI*Address*, 4 = *ANI*DNIS*, 5 = *DNIS*ANI* [* = Delimiter Code]).
- **34-09-02 : ANI/DNIS Service Options - Delimiter Dial**
  This option defines the character telco uses as a delimiter (see entries 1-5 in Item 1 above). Valid entries are 0-9, #, and *.
- **34-09-03 : ANI/DNIS Service Options - Route Setup of Receive Dial**
  This option specifies the source of the data the system uses to route incoming ANI/DNIS calls. If option '2' is selected, refer to Program 34-09-04 (0 = Fixed Route (Item 08), 1 = Routes on Received DNIS or Address Data, 2 = Routes on Received ANI Data).
- **34-09-04 : ANI/DNIS Service Options - Route Table Setup of Target Dial**
  The option sets how the system uses the route data (gathered in Item 3) to route incoming ANI/DNIS calls (0 = ABB Table [Program 13-03], 1 = DID Table [Program 22-11]).

  If option '2' is selected and the call is to be routed using the DID table (1), up to 8 digits can be matched. The number of expected digits set in Program 22-09-01 must match the ANI digits defined in Program 22-11-01. For example, if an ANI/DNIS number received was *2035551234*3001* and Program 22-09-01=4, then the entry in 22-11-01 must be 1234 with the defined target extension.

  If the call is to be routed using the ABB table (0), up to 24 digits can be matched. Define the range of the ABB table to be used in Program 34-09-06. The data is then compared to the entries in Program 13-04-01 and then routed according to Program 13-04-03.
- **34-09-05 : ANI/DNIS Service Options - ANI/DNIS Display as Target Dial Name**
  Use this option to set if ANI data should appear on telephone displays as part of Caller ID display (0 = Display Off, 1 = Display On).
- **34-09-06 : ANI/DNIS Service Options - Routing ABB Table Setup**
  Use this option to define which part of the ABB Table set up in Program 13-04 the system will use for ANI/DNIS Caller ID look-ups and ANI/DNIS routing (Start = 0, 100-1900, End = 0, 99-1999). This is required if Items 4 and 5 above are 1 (Caller ID on). When you specify a starting and end address, the system uses the part of the table for look-ups. When you specify a starting address and length, the system uses that part of the table for routing. If the incoming ANI/DNIS number data matches the Number entry in the table, the system routes according to the associated Name data. That data can be an extension, Department Group pilot number, the voice mail master number or a trunk ring group.
- **34-09-07 : ANI/DNIS Service Options - Routing on ANI/DNIS Error**
  This option lets you determine how the system will handle an ANI/DNIS call if a data error is detected in the incoming data string (0 = Play busy tone to caller, 1 = Route the caller to the ring group specified in Program 25-03).
- **34-09-08 : ANI/DNIS Service Options - Routing When Destination Busy or No Answer**
  This option lets you determine how the system will handle an ANI/DNIS call if destination is busy or does not answer (0 = Play busy or ringback tone to caller, 1 = Route the caller to the ring group specified in Program 25-04).

- **34-09-09 : ANI/DNIS Service Options - Calling Number Address Length**
  When Item 1=0 (ANI/DNIS receive format is address), use this option to specify the address length. The choices are from 1 to 8 digits in length.
- **80-03-01 : DTMF Tone Receiver Setup**
  80-04-01 : Call Progress Tone Detector Setup
  If required, modify the criteria for dial tone detection and call progress tone detection for tie line calls.
- **81-03-01 : 4TLIU Initial Data Setup**
  Make sure the Tie Line Timer settings are compatible with your local telco.

Related Features

Automatic Route Selection/Trunk Group Routing

In a system with ARS enabled:
When a tie line user dials 9 for an outside call, the system routes the call via ARS.
In a system with ARS disabled:
When a tie line user dials 9 for an outside call, the system uses the routes programmed for Trunk Group Routing.

Central Office Calls, Placing

Depending on programming, you can seize a tie line by:

- Pressing a line key
- Pressing a One-Touch Key
- Dialing a trunk group code
- Dial codes which directly accessing a specific tie line

Dial Tone Detection

Refer to this feature for the specifics on how the system handles Dial Tone Detection.

Long Conversation Cutoff

Long conversation cutoff is controlled separately for DISA and tie lines.

Networking

The Networking feature can use tie lines to connect the different networking nodes.

Toll Restriction

Incoming tie line calls can have a Toll Restriction class and can be subject to the system's toll restriction.

Trunk Groups

To simplify placing calls over your tie lines, you can put the tie lines in a trunk group.

Operation

To place a call over a tie line group:

1. Press idle CALL key and dial 804.
2. Dial tie line group number (Aspire S: 1-8, Aspire: 1-100).
3. Dial number.

OR

1. Press tie line group key (PGM 15-07 or SC 852: *02 + group).
2. Dial number.

To place a tie line call using Trunk Group Routing:

1. Press idle CALL key and dial 9.
2. Dial number.

To place a call over a specific tie line:

1. Press idle CALL key and dial #9.
2. Dial tie line number (e.g., 005 for line 5).
3. Dial number.

OR

1. Press tie line key (PGM 15-07 or SC 852: *01 + 1-200).
2. Dial number.

To Barge In after calling a busy extension:

The call must be set up for about 10 seconds before you can Barge In. Listen for busy/ring or busy tone.

1. Call busy extension using tie line trunk.
2. Press Barge In key (PGM 15-07 or SC 851: 34).

After calling the remote system, you may be able to:

- Dial 9 to place an outside call through the remote system.
- Dial Service Code #9 + a trunk number to place outside calls over a specific trunk.
- Use the remote system's Common Abbreviated Dialing.
- Call the remote system's operator.
- Use the remote system's Internal and/or External Paging.

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Clock Adjustment program available with software 2.62+.	• Clock Adjustment program available with software 2.62+.

Description

The system uses Time and Date for:

- Central Office Calls (Access Maps)
- Class of Service (Class)
- Direct Inward Lines
- Display Telephones
- Fax Machine Compatibility
- Night Service (Automatic)
- Programmable Trunk Parameters
- Ring Groups
- Station Message Detail Recording
- System Reports
- Toll Restriction (Class)
- Trunk Group Routing
- Voice Mail
- Voice Response System

Using the Daylight Savings Setup program, you can determine whether the system should automatically adjust the system time for daylight savings time/standard time changes.

Clock Adjustment

The system can be programmed to automatically adjust the system clock on a nightly basis. This feature allows you to make adjustments should the system cabinet regularly lose or gain time.

Conditions

The system retains the Time and Date after a power failure or system reset.

Default Setting

Enabled.

Programming

- **10-01-01 : Time and Date**
  Set the system Time and Date for the system.
- **10-24-01 : Daylight Savings Setup - Daylight Savings Mode**
  Enable (1) or disable (0) the system's ability to adjust the time for daylight savings/standard time.
- **10-24-02 : Daylight Savings Setup - Time for Daylight Savings**
  Enter the time of day the system should adjust for daylight savings time (0000 - 2359).
- **10-24-03 : Daylight Savings Setup - Start of Month (Summer Time)**
  Enter the month of system should adjust the time for daylight savings time (01 - 12).

- **10-24-04 : Daylight Savings Setup - Start of Week**
  Enter the week of the month the system should adjust the time for daylight savings time (0 = last week of the month or 1-5).
- **10-24-05 : Daylight Savings Setup - Start of Week Day**
  Enter the day of the week the system should adjust the time for daylight savings time (01 = Sunday, 02 = Monday, etc.).
- **10-24-06 : Daylight Savings Setup - End of Month**
  Enter the month of system should adjust the time for standard time (01 - 12).
- **10-24-07 : Daylight Savings Setup - End of Week**
  Enter the week of the month the system should adjust the time for standard time (0 = last week of the month or 1-5).
- **10-24-08 : Daylight Savings Setup - End of Week Day**
  Enter the day of the week the system should adjust the time for daylight savings time (01 = Sunday, 02 = Monday, etc.).
- **20-02-07 : System Options for Multi-Line Telephones - Time and Date Display Mode**
  Select the display mode (type 1-8) for Time and Date (i.e., Time and Date format).
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.
- **20-07-03 : Class of Service Options (Administrator Level) - Time**
  In an extension's Class of Service, enable (1) or disable (0) the extension's ability to set the Time.
- **99-01-16 : System Clock Adjustment**
  The system clock of some Aspire S cabinets may not be accurate. For those cabinets, the system is able to automatically adjust the system clock at every midnight using this program.
  This program is only available through telephone programming.
  No other programs in 99-01-xx should be adjusted. Leave all other entries at their default setting.
  (0 = No adjustment (*default*), 1 - 127 = seconds to be added to clock, 128 - 255 = seconds to be backed up on the clock (-128 to -1 seconds).

Related Features

Class of Service

Changing the time may change the current COS service depending on the COS mode setup.

Night Service

You can program the system to automatically switch day/night modes.

Single Line Telephones

Single line telephones cannot set the Time and Date.

Voice Mail

Changing the system time automatically changes the Aspire Mail, Aspire Mail Plus, and the IntraMail time.

Operation

The date must be set in system programming (10-01).

To set the system Time:

1. Press idle CALL key.
2. Dial 828.
3. Dial two digits for the hour (24 hour clock, 13 = 1:00 PM).
4. Dial two digits for the minutes (00-59).
5. Press SPK to hang up.

Aspire S	Aspire M/L/XL
• Available- 15 Toll Restriction Classes and 26 extensions.	• Available-15 Toll Restriction Classes and 512 extensions.
• Additional programming options available to restrict outgoing calls.	• Additional programming options added to restrict outgoing calls with 1.03+.
• Additional Common Permit Table default entries available.	• Common Permit Table default entries changed with 1.03+.
• Enhanced tie line Toll Restriction requires software 2.65+.	• Enhanced tie line Toll Restriction requires software 2.65+.

Description

Toll Restriction limits the numbers an extension user may dial. By allowing extensions to place only certain types of calls, you can better control long distance costs. The system applies Toll Restriction according to an extension's Toll Restriction Class. The system allows for up to 15 Toll Restriction Classes.

Toll Restriction offers the following capabilities:

- **Common Permit Code Table**
  Use the Common Permit Code Table when you have numbers you want all Toll Restriction Classes to dial. To let all users dial 911, for example, put 911 in the Common Permit Code Table. The Common Permit Code Table overrides the Restrict Code and Common Restrict Code Tables. The system provides 10 tables, with 10 entries in each table. Each code is 4 digits max., using 0-9, #, * and FLASH (as a wild card).

- **Common Restrict Code Table**
  The Common Restrict Code Table lets you globally restrict certain numbers for all Toll Restriction Classes. To prevent all users from dialing directory assistance (411), for example, put 411 in the Common Restrict Code Table. Be sure you don't allow the codes you want to restrict in the Permit Code Table or the Common Permit Code Table. The system provides 10 tables, with 10 entries in each table. Each code is 4 digits max., using 0-9, #, * and FLASH (as a wild card).

- **Restrict Code Table**
  When you want Toll Restriction to allow most calls and restrict only selected calls, use the Restrict Code Table. To block only 1-900 calls, for example, enter 1900 in the Restrict Code Table. (If the same Toll Restriction Class has both Permit and Restrict Code Tables, the system restricts calls that you enter only in the Restrict Code Table. Calls entered in both tables are not restricted.) The system provides 4 tables, with 60 entries (restricted codes) in each table. A restricted code is 12 digits maximum, using 0-9, #, * and FLASH (as a wild card).
- **Permit Code Table**
  The Permit Code Table lets you set up Toll Restriction so that users can dial only selected (permitted) telephone numbers. Use this table when you want to restrict most calls. To allow all users to dial only area code 203, for example, enter 1203 in the Permit Code Table. 1 + 203 + NNX + nnnn are the only numbers users can dial. (If the same Toll Restriction Class has both Permit and Restrict Code Tables, the system restricts calls that you enter only in the Restrict Code Table. Calls entered in both tables are not restricted.) The system provides 4 tables, with 200 entries (permitted codes) in each table. A permitted code is 12 digits maximum, using 0-9, #, * and FLASH (as a wild card).

- **International Call Restriction**
  International Call Restriction lets you limit the international calls an extension user may dial. You can build a restrict table to prevent only certain calls, or you can build a permit table to allow only certain calls. To allow most international calls, use the *International Call Restrict Table*. To prevent most international calls, use the *International Call Allow Table*. The system provides 10 International Call Restrict tables with up to 4 digits in each table entry and 20 International Call Allow tables, with up to 6 digits in each table entry. Valid entries are 0-9, #,* and FLASH (for a wild card).

- **Toll Restriction for Abbreviated Dialing**
  Abbreviated Dialing can bypass or follow Toll Restriction. If you allow many users to program Abbreviated Dialing, consider Toll Restricting the numbers they dial. If only administrators can program Abbreviated Dialing, Toll Restriction may not be necessary. You can separately restrict Group and Common Abbreviated Dialing.

- **Call Digit Counting**
  Use Call Digit Counting to limit the number of digits local callers can dial. You can use this option to prevent users from accessing local dial-up services. For example, set the Maximum Number of Digits in Local Calls to 7 to limit local callers to dialing the exchange code (NNX) and local address (nnnn) only. The system provides 4 tables in which you can make entries for this option. The range is 4-30 digits.

- **Toll Call Digit Counting**
  With Toll Call Digit Counting, you can limit the number of digits long distance callers can dial. This lets you prevent callers from dialing extensively into long distance dial-up services. You can make four entries (4-30 digits).

- **Toll Free Trunks**
  Certain trunks can be completely unrestricted, such as the company president's Private Line. Users can place calls on Toll Free Trunks anytime -- to anywhere, without inadvertently being toll restricted.

- **PBX Call Restriction**
  Toll Restriction programming lets you enable/disable PBX Call Restriction and enter PBX access codes. You only need to do this if your system is behind a PBX and you have trunks programmed for behind PBX operation. Refer to PBX Compatibility feature for the specifics.

Additional Toll Restriction Programming

Prior to 1.03 software, it was possible for users to place a call unrestricted in the following instance:

1. An outside call rings the system, but the caller hangs up before the call is answered.
2. Telco detects the end of the call and returns to an idle status.
3. If a user seizes the trunk within a second or two after this status change, but before the telephone stops ringing, the user is able to place an unrestricted call. This is because the system still recognizes the trunk as an incoming call, but to the telco, this is a new outgoing call.

The system only provides Toll Restriction on outgoing calls.

To prevent this from occurring, the system now provides additional programming options. This option is not available for ISDN, DID, or E&M trunks.

Additional Default Entries For Common Permit Code Table

Additional entries have been added to the default Common Permit Code Table. The default setting is now as follows:

- Table 1: 911
- Table 2: 1800
- Table 3: 1888
- Table 4: 1822 (new)
- Table 5: 1833 (new)
- Table 6: 1844 (new)
- Table 7: 1855 (new)
- Table 8: 1866 (new)
- Table 9: 1877 (new)

Tie Line Toll Restriction Enhanced

With older software, the system only provided the use of Program 34-08 to determine the toll restriction a tie line trunk would follow. This table only allowed 20 entries.

With software 2.65 or higher, a new program is available, **34-01-05 : E&M Tie Line Basic Setup - System Toll Restriction**. If this option is set to '0', the system will follow the setting in **21-05-13 : Toll Restriction Class - Restriction of Tie Line Calls** to determine whether or not the toll restriction setting in Program 34-08 is to be followed. If this option is set to '1', the system will follow the system toll restriction settings defined in Program 21-05-01 through 21-05-13.

Conditions

(A.) If a Toll Restriction Class has the same entries in both a permit and restriction table, the system does not restrict the call.

(B.) Toll Call Digit counting may prevent users from taking advantage of long distance automated services like ACD and automated Technical Service.

(C.) Toll Restriction is applied when accessing ARS.

(D.) If Program 21-01-10 is programmed with an entry other than "0", a call will not have a talk path unless the user dials at least the number of digits entered in this option when placing an out going call. This means that an entry of 4 or higher in this program will cause a problem when dialing 911. Since it is only a 3-digit number, the call will not have a talk path, preventing the emergency dispatcher from hearing the caller. It is recommended that this option be kept at its default setting of "0" to prevent any problems with dialing 911.

Default Setting

Disabled.

Programming

- **14-01-08 : Basic Trunk Data Setup - Toll Restriction**
  For each trunk, enter 1 to enable Toll Restriction; enter 0 to disable Toll Restriction.
- **15-01-05 : Basic Extension Data Setup - Restriction for Outgoing Disable on Incoming Line**
  Enable (1) or disable (0) supervised dial detection for an extension.
- **20-06-01 : Class of Service for Extensions**
  For each extension, assign a Class of Service (1-15).
- **20-08-02 : Class of Service Options (Outgoing Call Service) - Trunk Calls**
  For each Class of Service, decide whether to enable (1) or disable (0) an extension's ability to place an outgoing trunk call.
- **20-13-20 : Class of Service Options (Supplementary Service) - Account Code/Toll Restriction Operator Alert**
  When toll restriction is violated, determine if the operator should be notified. (0=disable, 1=enable)
- **21-01-10 : System Options for Outgoing Calls - Dial Digits for Toll Restriction Path**
  If this option is programmed with an entry other than "0", a call will not have a talk path unless the user dials at least the number of digits entered in this option when placing an outgoing call. This means that an entry of 4 or higher in this program will cause a problem when dialing 911. Since it is only a 3-digit number, the call will not have a talk path, preventing the emergency dispatcher from hearing the caller. It is recommended that this option be kept at its default setting of "0" to prevent any problems with dialing 911.
- **21-01-15 : System Options for Outgoing Calls - Outgoing Disable on Incoming Line**
  Enable (1) or disable (0) the Outgoing Disable on Incoming Line feature.
- **21-01-16 : System Options for Outgoing Calls - Supervise Dial Detection Timer**
  With the Outgoing Disable on Incoming Line feature, if dial tone is not detected after the extension answers an incoming line, the system determines the call is unable to complete and releases the DTMF receiver (0-64800 seconds).
- **21-01-17 : System Options for Outgoing Calls - Restriction Digit in Outgoing Disable on Incoming Line**
  With the Outgoing Disable on Incoming Line feature, determine the number of digits (0-9) to be dialed before the call should be disconnected.
- **21-04-01 : Toll Restriction Class**
  For each extension, assign a Toll Restriction Class for reach Night Service mode.
- **21-05-01 : Toll Restriction Class - International Call Restriction Table**
  For the Toll Restriction Class you select, enable (1) or disable (0) the International Call Restrict Table (Program 21-06-01).
- **21-05-02 : Toll Restriction Class - International Call Permit Table**
  For the Toll Restriction Class you select, enable (1) or disable (0) the International Call Permit Table (Program 21-06-02).
- **21-05-04 : Toll Restriction Class - Maximum Number of Digits Table Assignments**
  For the Toll Restriction Class you select, disable (0) or enable (1) the dialing limit for calls. When enabling, select from entries 1-4 in Program 21-06-03.
- **21-05-05 : Toll Restriction Class - Common Permit Code Table**
  For the Toll Restriction Class you select, enable (1) or disable (0) the Common Permit Code Table (Program 21-06-04).
- **21-05-06 : Toll Restriction Class - Common Restrict Code Table**
  For the Toll Restriction Class you select, enable (1) or disable (0) the Common Restrict Code Table (Program 21-06-05).

- **21-05-07 : Toll Restriction Class - Permit Code Table**
  For the Toll Restriction Class you select, disable (0) or enable (1) the Permit Code Table. When enabling, select from tables 1-4 in Program 21-06-06.
- **21-05-08 : Toll Restriction Class - Restrict Code Table**
  For the Toll Restriction Class you select, disable (0) or enable (1) the Restrict Code Table. When enabling, select from tables 1-4 in Program 21-06-07.
- **21-05-09 : Toll Restriction Class - Restriction for Common Abbreviated Dialing**
  For the Toll Restriction Class you select, enable (1) or disable (0) Toll Restriction for Common Abbreviated Dialing numbers.
- **21-05-10 : Toll Restriction Class - Restriction for Group Abbreviated Dialing Numbers**
  For the Toll Restriction Class you select, enable (1) or disable (0) Toll Restriction for Group Abbreviated Dialing numbers.
- **21-05-11 : Toll Restriction Class - Intercom Call Restriction**
  For the Toll Restriction Class you select, enable (1) or disable (0) Intercom Call Restriction. If enabled, extensions cannot place or receive Intercom calls.
- **21-05-12 : Toll Restriction Class - PBX Call Restriction**
  For the Toll Restriction Class you select, enable (1) or disable (0) PBX Call Restriction. Refer to the PBX Compatibility Feature.
- **21-05-13 : Toll Restriction Class - Restriction of Tie Line Calls**
  Select whether or not the toll restriction set up in 34-08-01 is enabled (1) or disabled (0).
- **21-06-01 : Toll Restriction Table Data Setup - International Call Restrict Table**
  Enter the international dialing codes you want to restrict.
- **21-06-02 : Toll Restriction Table Data Setup - International Call Permit Table**
  Enter the international dialing codes you want to permit.
- **21-06-03 : Toll Restriction Table Data Setup - Maximum Number of Digits Table Assignment**
  Select the maximum number of digits allowed in outgoing calls for each table (4-30).
- **21-06-04 : Toll Restriction Table Data Setup - Common Permit Code Table**
  Program codes into the Common Permit Code Table.
- **21-06-05 : Toll Restriction Table Data Setup - Common Restrict Table**
  Program codes into the Common Restrict Code Table.
- **21-06-06 : Toll Restriction Table Data Setup - Permit Code Table**
  Program codes into the Permit Code Tables.
- **21-06-07 : Toll Restriction Table Data Setup - Restrict Code Table**
  Program codes into the Restrict Code Tables (200 codes per table maximum).
- **21-06-08 : Toll Restriction Table Data Setup - PBX Access Codes**
  The system allows up to 4 tables for PBX access codes. PBX Access Codes can be up to 2 digits, using 0-9, #, * and LINE KEY 1 (don't care). Refer to the PBX Compatibility feature for the specifics.
- **34-01-05 : E&M Tie Line Basic Setup - System Toll Restriction**
  Enable (1) or disable (0) the ability for tie line calls to follow the system toll restriction entries in Programs 21-05-01 through 21-05-13. If disabled, tie line toll restriction will be determined by 21-05-13.
- **34-08-01 : Toll Restriction Data for E&M Tie Lines**
  Define the toll restriction data for E&M tie lines. This data should be defined if Tie Line Toll Restriction is enabled in Program 21-05-13.

Related Features

Central Office Calls, Placing
The system will allow or deny outgoing access to trunks depending on Toll Restriction.

Direct Inward System Access (DISA) / Tie Lines
When using DISA or tie lines, additional programming is required for Toll Restriction (DISA, see Program 25-10; tie lines, see Program 34-04).

PBX Compatibility
The system can provide Toll Restriction for the PBX trunks or the restriction can be handled solely by the connected PBX. If the Aspire provides the restriction, it restricts the digits dialed after the PBX access code.

Toll Restriction, Dial Block
A user can temporarily block their extension's Toll Restriction access, preventing unwanted calls from being placed on their phone while they are away from their desk.

Toll Restriction Override
A user can temporarily override an extension's Toll Restriction.

Operation

To place a trunk call if your system is Toll Restricted:

1. Place call normally.

   If your Toll Restriction Class does not allow the number you dial, your call will be cut off.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Toll Restriction Dial Block lets a user temporarily block an extension's Toll Restriction. This helps a user block his or her phone from being used by another person while they are away from their desk. A user would need to enter a 4-digit personal code to enable/disable this feature.

Dial Block can also be set by the system administrator. If Dial Block has already been set by an extension user, the supervisor can not release it. Additionally, if Dial Block has been set by the supervisor, and extension user can not release it.

Important: This function works by password and Class of Service control (the supervisor is not an assigned extension). If Dial Block is available for all Classes of Service, everyone may become a supervisor if they know the Dial Block password.

Conditions

(A.) If the system is reset by a cold start, the Dial Block feature is cleared.
(B.) This feature is not available for ISDN S-Bus extensions.
(C.) Both Programs 21-09-01 and 21-10 can be set at the same time. The system gives priority to the setting in Program 21-10.

Default Setting

Disabled.

Programming

- **11-10-17 : Service Code Setup (for System Administrator) - Dial Block by Supervisor**
  Assign a service code (101 by default) to be used by the supervisor to set Dial Block for **another** extension.
- **11-11-33 : Service Code Setup (for Setup/Entry Operation) - Dial Block**
  Assign a service code (100 by default) to be used for Dial Block at a user's extension.
- **20-06-01 : Class of Service for Extensions**
  Assign a COS to each extension (1-15).
- **20-08-08 : Class of Service Options (Outgoing Call Service) - Toll Restriction Dial Block**
  Enable (1) or disable (0) an extension's ability to use Dial Block.
- **21-09-01 : Dial Block Setup - Toll Restriction Class With Dial Block**
  Assign a Toll Restriction Class of Service (1-15) when the Dial Block feature is used by the supervisor extension.
- **21-09-02 : Dial Block Setup - Supervisor Password**
  Assign a 4-digit password to be used by the supervisor or extension user to enable or disable Dial Block for extensions.

- **21-10-01 : Dial Block Restriction Class Per Extension**
  Assign the Toll Restriction class (1-15) to be used by an extension when the Dial Block feature is enabled. If this data is "0", Toll Restriction Class follows Program 21-09-01.
- **90-19-01 : Dial Block Release**
  Enter the extension number to be released from the Dial Block restriction. This program can be used when a password is forgotten by the user.

Related Features

Toll Restriction

Dial Block can temporarily block an extension's Toll Restriction setting.

Operation

To set Dial Block at your extension:

1. At keyset, press idle CALL key.
   OR
   At single line telephone, lift handset.
2. Dial 100 .
3. Dial the 4-digit Dial Block code.
4. Dial 1.
   A confirmation tone is heard.
5. Press SPK or replace the handset to hang up.

To release Dial Block:

1. At keyset, press idle CALL key.
   OR
   At single line telephone, lift handset.
2. Dial 100 .
3. Dial the 4-digit Dial Block code.
4. Dial 0.
   A confirmation tone is heard.
5. Press SPK or replace the handset to hang up.

To set Dial Block from another extension:

1. At keyset, press idle CALL key.
   OR
   At single line telephone, lift handset.
2. Dial 101 .
3. Dial the 4-digit Dial Block code.
4. Dial the extension number to be blocked.
5. Dial 1.
   A confirmation tone is heard.
6. Press SPK or replace the handset to hang up.

To release Dial Block from another extension:

1. At keyset, press idle CALL key.
   OR
   At single line telephone, lift handset.
2. Dial 101 .
3. Dial the 4-digit Dial Block code.
4. Dial the extension number to be released from Dial Block.
5. Dial 0.
   A confirmation tone is heard.
6. Press SPK or replace the handset to hang up.

Toll Restriction Override

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Toll Restriction Override lets a user temporarily bypass an extension's Toll Restriction. This helps a user that must place an important call that Toll Restriction normally prevents. For example, you could set up Toll Restriction to block 900 calls and then provide a Toll Restriction Override code to your attendant and executives. When the attendant or executive needs to place a 900 call, they just:

- Press CALL1, dial a service code and enter their override code.
- Press a line key or dial a trunk access code (e.g., 9 or #9 002).
- Place the 900 call without restriction.

You can assign a different Toll Restriction Override code to each extension. Or, extensions can share the same override code.

Toll Restriction Override will override ***all*** Toll Restriction programming. Walking Toll Restriction allows you to assign a Toll Restriction level for each user. When a call is placed using Walking Toll Restriction, the restriction for the call is based on the Toll Restriction level defined in Programs 21-05-xx and 21-06-xx.

Conditions

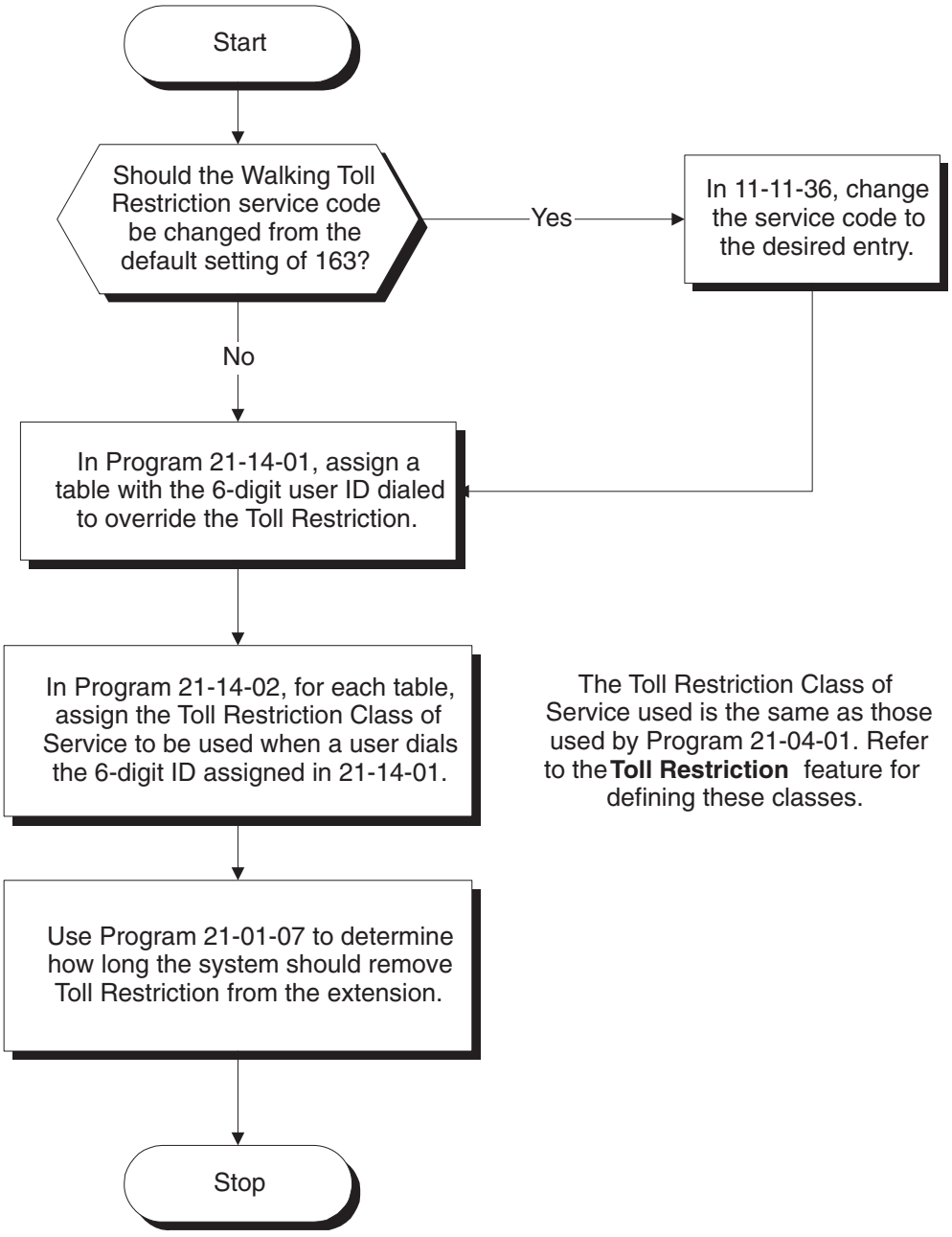
None

Default Setting

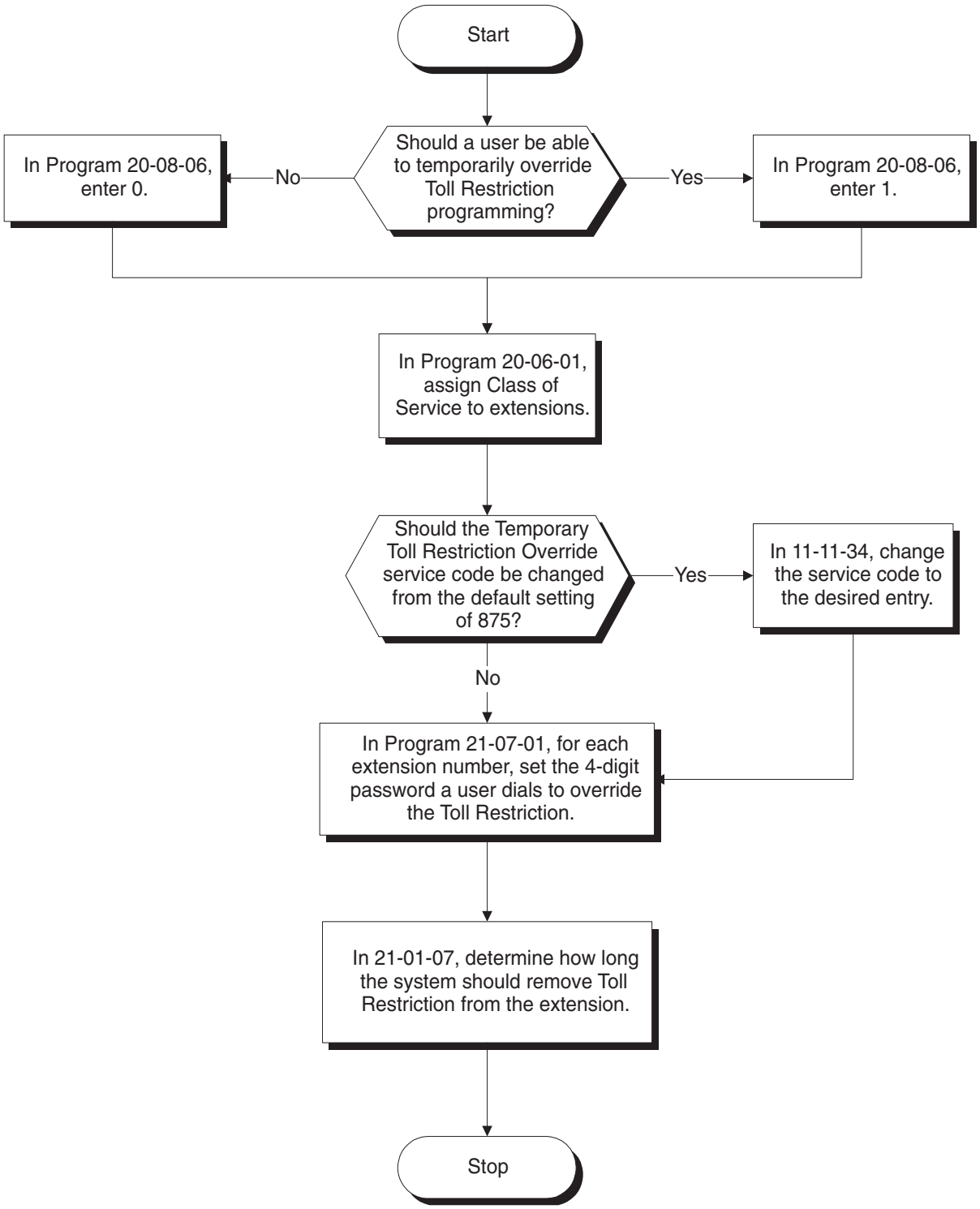
Disabled.

Programming

Walking Toll Restriction



Temporary Toll Restriction Override



Programming (Cont'd)

- **11-11-34 : Service Code Setup (for Setup/Entry Operation) - Temporary Toll Restriction Override**
  If required, change the service code (875) for Temporary Toll Restriction Override.
- **11-11-36 : Service Code Setup (for Setup/Entry Operation) - Walking Toll Restriction**
  If required, change the service code (163) for Toll Restriction Override.
- **20-06-01 : Class of Service for Extensions**
  When using Temporary Toll Restriction Override, assign a COS to each extension (1-15) which will allow the feature.
- **20-08-06 : Class of Service Options (Outgoing Call Service) - Toll Restriction Override**
  In an extension's Class of Service, enable (1) or disable (0) the ability to use Temporary Toll Restriction Override.
- **21-01-07 : System Options for Outgoing Calls - Toll Restriction Override Time**
  Set the Toll Restriction Override Time (0-64800 seconds). After dialing the Toll Restriction Override codes, the system removes Toll Restriction for this interval.
- **21-07-01 : Toll Restriction Override Password Setup**
  Assign Toll Restriction Override codes to extensions. Each code must be 4 digits long, using any combination of 0-9, # and *. Each extension can have a separate code, or many extensions can share the same override code.
- **21-14-01 : Walking Toll Restriction Password Setup - User ID**
  Enter the Walking Toll Restriction Override User ID codes (6 digits) into tables. Up to 500 different override codes can be entered.
- **21-14-02 : Walking Toll Restriction Password Setup - Walking Toll Restriction Class Number**
  Enter the Walking Toll Restriction Class of Service (1-15) to be used for each table number assigned in 21-14-01.
- **35-02-06 through 35-02-11 : SMDR Output Options**
  Assign the output condition for the printer or PC. If the data is set to "1" (output), the symbol of the call will print as "POTW" and the password table number will be printed as "W/@@@" (@@ equals the 3 digit table number) in the Account Code area.

Related Features

Central Office Calls, Placing
Off-premise notification and external extensions require access to outside lines.

Station Message Detail Recording
In the *Class* heading in the SMDR report, POTW indicates that the call was placed using Toll Restriction Override.

Toll Restriction
Toll Restriction Override and Walking Toll Restriction temporarily overrides an extension's Toll Restriction.

Voice Response System (VRS)
If the system has VRS, users hear, "*Your call cannot go through. Please call the operator*" when they dial a number that Toll Restriction prevents.

Operation

To temporarily override a restricted extension's Toll Restriction:

You can override restriction for only one call at a time.

1. At keyset, press idle CALL key.
   OR
   At single line telephone, lift handset.
2. Dial 875.
3. Dial the 4-digit Toll Restriction Override code.
   If you wait too long before going to the next step, you may have to repeat the procedure. After dialing the service code, the display will indicate the override codes as they are being entered. As the last digit is entered, the display is cleared and ICM dial tone is heard.
   You'll hear error tone if you dial your code incorrectly.
4. Press idle line key or dial trunk access code.
5. Dial the number without any restriction.

To use your Walking Toll Restriction level at an extension:

You can override restriction for only one call at a time.

1. At keyset, press idle CALL key.
   OR
   At single line telephone, lift handset.
2. Dial 163 and dial the 6-digit Walking Toll Restriction Class of Service code.
   After dialing the service code, the display will indicate the override codes as they are being entered. As the last digit is entered, the display is cleared and ICM dial tone is heard.
   You'll hear error tone if you dial your code incorrectly.
3. Press idle line key or dial trunk access code.
4. Dial the number.
   The call is allowed or denied based on the user's Toll Restriction Class of Service level.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

The system provides the ability to send data to a PC connected to the Aspire. The telephone call traffic data for each extension is captured for use with the SMDR feature.

Call Traffic

The total of outgoing call frequency, outgoing call duration, call charge, incoming call frequency, answer frequency, incoming call duration, ringing duration for each line and extension, and abandon call frequency for each line is logged. The total of incoming calls, answer frequency, call duration for each line and extension, and abandon call frequency of each line is logged and the data is outputted to the PC. The system totals the hour, day, week, and month for each terminal and trunk number. This information is used by the SMDR feature. The extension which is totalled is determined by system programming. The system outputs this data to the PC for the total period.

Conditions

- The SMDR call buffer stores 500 calls. The buffer stores calls when the SMDR device is unavailable. When the buffer fills, the oldest record is deleted to allow the new record to be saved.
- If connected to the output device, the reports will print hourly. If not connected and the data is not outputted at the end of the hour, the traffic data will be overwritten by new incoming data.
- The traffic data is lost if a power failure occurs.
- The traffic data does not include ICM calls.

Default Setting

Disabled.

Traffic Total Report - Sample Report

<< CALL TRAFFIC INFORMATION >> 09/09/05 15:00 Page:01

Tel/Co	OTG	OTGtime	Charge	ICM	ANS	ICMtime	Ringing	Abandon
302	4	00:01:10	0	0	0	00:00:00	00:00:00	0
303	1	00:00:11	0	0	2	00:03:15	00:00:00	0
306	1	00:10:57	0	0	0	00:00:00	00:00:00	0
346	0	00:14:23	0	0	2	00:01:03	00:00:00	0
LINE 001	2	00:12:57	0	0	0	00:00:00	00:00:00	0
LINE 002	5	00:23:30	0	3	3	00:00:25	00:00:20	0
LINE 003	1	00:17:10	0	1	1	00:00:53	00:00:04	0
LINE 004	4	00:08:11	0	0	0	00:00:00	00:00:33	2

Definitions	
Terminal	Terminal Number/Called Party Number (maximum 24 digits)
OTG	Outgoing Call Frequency/number of outgoing calls (maximum 65535 calls)
Duration	Call Duration for an Outgoing Call
Cost	Call Charge
ICM	Incoming Call Frequency/number of incoming calls (maximum 65535 calls)
Answer	Answer Frequency (maximum 65535 calls)
Duration	Call Duration for an Incoming Call
Ringing	Ringing Duration
Abandon	Number of Abandoned Calls (maximum 65535 calls)

Programming

- **90-20-01 : Traffic Report Data Setup - Call Traffic Output**
  Determine whether or not the Call Traffic Output should be measured (0=no, 1=yes).
- **90-21-01 : Traffic Report Output**
  Define the output port to be used for the traffic reports (0=no setting, 1=NTCPU COM port, 2=NTCPU USB port). The reports will print hourly when connected to the output device.

Related Features

Data Communications

TMS Reports require connection to the serial or USB connector on the NTCPU. Additional programming and a customer-provided printer are also required. Refer to the system *Hardware Manual* for more on setting up and connecting to the Aspire system.

Station Message Detail Recording

SMDR provides additional information about the system's trunk calling patterns. Refer to **Station Message Detail Recording** (page 519) for more.

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Transfer into Conference available.	• Transfer into Conference available with software 1.11+.
• Transfer to trunk ring group requires software 2.63+.	• Transfer to trunk ring group requires software 2.63+.
• Pressing Transfer key (15-07 or SC 851:06) places call on hold requires 4.0E+.	• Pressing Transfer key (15-07 or SC 851:06) places call on hold requires 4.0E+.
• Step Transfer for Auto Trunk-to-Trunk Transfer requires software 4.93+.	• Step Transfer for Auto Trunk-to-Trunk Transfer requires software 4.93+.

Description

Transfer permits an extension user to send (i.e., extend) an active Intercom or outside call to any other extension in the system. With Transfer, any extension user can quickly send a call to the desired co-worker. A call a user transfers automatically recalls if not picked up at the destination extension. This assures that users do not lose or inadvertently abandon their transfers. While a transferred call is ringing an extension the system can optionally play ringback tone or Music on Hold to the caller.

The system allows the following types of transfers:

- **Screened Transfer**
  The transferring user announces the call to the destination before hanging up
- **Unscreened Transfer**
  The transferring party extends the call without an announcement.
- **Extension (Department) Groups Transfer**
  The Transferring party sends the call to a Department instead of an extension.
- **Transfer Without Holding**
  A user presses a busy line key and waits for the call to complete. The system automatically sends them the call when the internal caller hangs up.

Automatic On-Hook Transfer Operation

With Automatic On-Hook Transfer, a Transfer goes through as soon as the transferring user hangs up. For example, extension 304 can answer a trunk, press HOLD, dial 305 and hang up. The system extends the call to extension 305. Without Automatic On-Hook Transfer, the call would stay on Hold at extension 304 when the user hangs up. To extend the call, the user at extension 304 would have to press CONF or a Transfer function key before hanging up.

Each method has advantages. Automatic On-Hook Transfer makes transferring calls easier. However, users have to be more aware of how they handle their calls on Hold. Without Automatic On-Hook Transfer, extending a call becomes a two-step operation - but separate from placing calls on Hold.

Prevent Recall of Transferred Call

The Class of Service program has an option that will allow you to prevent a Transferred call from recalling the originating extension if the call is not answered.

Transfer Call into Conference/Existing Call

This feature allows either a keyset or single line telephone user with Barge In capability the ability to transfer a call into an existing call. This call can be a 2-party call, a Conference call, or a Barge In Conference. The system allows Intercom, analog trunk, ISDN trunk and H.323 trunk calls to be

transferred into a Conference call. This would allow, for example, an attendant to locate co-workers and then transfer them into an existing telephone meeting. There is no need for the attendant to locate all the parties at the same time and sequentially add them into the Conference.
This feature is not supported across a network or with S-Bus ports (this includes transferring an S-Bus call into a conference or transferring a call into a conference which includes an S-Bus port).

Transfer to Trunk Ring Group Available

Depending on your software version, it is possible to transfer a DID or trunk call to the trunk's defined ring group (defined in **Program 22-05-01 : Incoming Trunk Ring Group Assignment**). The trunk will then ring the defined extensions for the ring group.

This also allows the transferred call to ring over the External Paging (**Program 31-05 : Universal Night Answer/Ring Over Page**) so that an employee can answer the call from any available phone.

To enable this feature, the system has a program option, **Program 11-15-09 : Service Code Setup Administrative (for Special Access) - Transfer to Trunk Ring Group Code**. When a call is transferred using this service code, it's transferred to the ring group destination for that incoming trunk. For example, trunk 2 is in Ring Group 4. When the call is transferred using this service code, the trunk will ring all extensions programmed for Ring Group 4 or ring the External Paging Group for Ring Group 4, depending on how the system is programmed.

Program 22-04-01 : Extension Ring Group Assignment and **Program 22-05-01 : Incoming Trunk Ring Group Assignment** must be programmed to allow an extension access to the ring groups. If the call is not answered, it can overflow to the destination defined in **Program 22-08-01 : DIL/IRG No Answer Destination**.

This service code can also be used with the VRS. This provides the caller listening to the VRS message with the ability to transfer their call and have it ring the external page. The code the caller would dial is defined in **Program 25-06-02 : VRS/DISA One-Digit Code Attendant Setup**.

Transfer Key Can Place Call on Hold

Depending on your software version, while on a call, if the Transfer key (Pgm 15-07 or SC 851: 06) is pressed, the call will be placed on hold. With older software, pressing the Transfer key will not place an existing call on hold.

Step Transfer for Automatic Trunk-to-Trunk Transfer Feature Added

The Aspire enhances the Automatic Trunk-to-Trunk Transfer feature. If the destination to which a trunk has been transferred receives no answer (following the timer set in Program 24-02-12), the system can then automatically Step Transfer the call to a new destination. Up to 8 different destination numbers can be defined (Program 14-01-26).

Notes:

- With DID trunks, if the DID Transfer Destination (Program 22-11-04) is allowed, if the Automatic Trunk-to-Trunk Transfer programming is defined, the DID trunks will follow the Step Transfer.
- If the Step Transfer reaches the last defined destination for a call and there is still no answer, the call will continue to ring the last number - it will not restart dialing the first destination.

Conditions

None

Default Setting

Enabled.

Programming

- **11-10-06 : Service Code Setup (for System Administrator) - Setting the Automatic Forwarding for Each Trunk Line**
  If the default service code (833) for enabling the Automatic Tandem Trunking feature is not acceptable, change the code as required.
- **11-12-58 : Service Code Setup (for Service Access) - Transfer into Conference**
  Use this program to assign the code users dial to Transfer a call into a Conference call. This code is normally 124.
- **11-15-09 : Service Code Setup Administrative (for Special Access) - Transfer to Trunk Ring Group Code**
  When a call is transferred using this service code, it's transferred to the ring group destination for that incoming trunk. For example, trunk 2 is in Ring Group 4. When the call is transferred using this service code, the trunk will ring all extensions programmed for Ring Group 4 or ring the External Paging Group for Ring Group 4, depending on how the system is programmed.
- **14-01-26 : Basic Trunk Data Setup - Automatic Trunk to Trunk Transfer Mode**
  For each trunk, enable (1) or disable (0) the Step Transfer function when using the Automatic Trunk-to-Trunk Transfer feature. If this option is disabled, the call will be forwarded to the first specified destination only.
- **15-02-05 : Multi-Line Telephone Basic Data Setup - Transfer Key Operation Mode**
  Use this option to set the operating mode of the extension's CONF key. The keys can be for Call Transfer (0), Serial Calling (1) or Flash (2). When selecting the Flash option, refer also to Program 81-01-14.
- **15-02-24 : Multi-Line Telephone Basic Data Setup, Conference Key Mode**
  This option allows an extension's CONF key to be programmed for Conference or for Transfer. When set for Transfer (1), the user places a call on hold, dials the extension to which it should be transferred, the presses the CONF key. The call is then transferred. When set for Conference (0), with an active call, the user presses the CONF key, places a second call, then presses the CONF key twice. All the calls are then connected.
- **15-07-01 : Programmable Function Keys**
  Extension users may want a function keys programmed for Transfer (code 06).
- **20-02-01 : System Options for Multi-Line Telephones - Retrieve the Line After Transfer**
  Enable (1) or disable (0) an extension's ability to answer a call after it's been transferred, but before it's answered.
- **20-03-01 : System Options for Single Line Telephones - SLT Call Waiting Answer Mode**
  For a busy single line (500/2500 type) telephones, set the mode used to answer a camped-on trunk call:
  - 0 = Press and release hookswitch to pick up waiting call
  - 1 = Press and release hookswitch and dial Service Code 894 to answer waiting call
- **24-02-02 : System Options for Transfer - MOH or Ringback on Transferred Calls**
  Use these options to enable (0) or disable (1) MOH on Transfer. If enabled (0), a transferred caller hears Music on Hold while their call rings the destination extension. If disabled (1), a transferred caller hears ringback while their call rings the destination extension. For this option to work with voice mail, the transferred call must be an unscreened transfer.
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to extensions.
- **20-11-06 : Class of Service Options (Hold/Transfer Service) - Unscreened Transfer**
  In an extension's Class of Service, enable (1) or disable (0) the extension's ability to use Unscreened Transfer.

- **20-11-07 : Class of Service Options (Hold/Transfer Service) - Transfer Without Holding**
  In an extension's Class of Service, enable (1) or disable (0) the extension's ability to use Transfer Without Holding.
- **20-11-08 : Class of Service Options (Hold/Transfer Service) - Transfer Display**
  In an extension's Class of Service, enable (1) or disable (0) the extension's incoming Transfer pre-answer display.
- **20-11-11 : Class of Service Options (Hold/Transfer Service) - Automatic On Hook Transfer**
  In an extension's Class of Service, enable (1) or disable (0) the extension's ability to use Automatic On Hook Transfer. If enabled, user must press HOLD and dial the extension number to Transfer the call. If disabled, a user must have a Transfer Programmable Function Key. To transfer the call, the user would press HOLD, dial the extension number, then press the Transfer Programmable Function key to complete the transfer.
- **20-11-18 : Class of Service Options (Hold/Transfer Service) - Transfer Recall On Receiving COS**
  Allow (0) or deny (1) unanswered Transferred calls to the COS from recalling the originating extension.
  For example, with this option set to '1' for COS 1, calls transferred by any COS to any extension with a COS of 1, will not recall.
- **20-11-20 : Class of Service Options (Hold/Transfer Service) - Transfer Recall On Originating COS**
  Allow (0) or deny (1) unanswered Transferred calls from the COS from recalling the originating extension.
  For example, with this option set to '1' for COS 1, any call transferred by an extension with COS 1, will not recall.
- **20-13-10 : Class of Service Options (Supplementary Service) - Barge In Mode**
  In an extension's Class of Service, enable the Barge In Speech Mode (0) at the initiating extension (i.e., Barge In initiator). This is required in order to transfer a call into a conference.
- **20-13-15 : Class of Service Options (Supplementary Service) - Barge In Initiate**
  In an extension's COS, enable (1) or disable (0) the extension's ability to Barge In to a call.
- **20-13-16 : Class of Service Options (Supplementary Service) - Barge In Receive**
  In an extension's COS, enable (1) or disable (0) the extension's ability to receive a Barge In on a call.
- **20-13-17 : Class of Service Options (Supplementary Service) - Barge In Tone/Display**
  Enable (1) or disable (0) the Barge In Tone. If disabled, this also turns off the Barge In display at the called extension. As this option is for extensions and trunks don't have an option for a Barge In Tone, the tone will be sent to the trunks based on the Class of Service of the transferring extension.
- **20-13-32 : Class of Service Options (Supplementary Service) - Multiple Barge In**
  Enable (1) or disable (0) the extension's ability to have multiple user's Barge In to their conversation.
- **20-14-11 : Class of Service Options For DISA/E&M - DISA/Tie Trunk Barge In**
  Determine if DISA and tie trunk users should have the ability to dial a service code to Barge In to a Conference call (0=disabled, 1=enabled).
- **20-15-09 : Ring Cycle Setup - Callbacck/Transfer Ring**
  Define the ringing cycle for transferred and callbacks (ringing cycle 1-13).
- **20-18-07 : Service Tone Timer - Intrusion Tone Repeat Time**
  After a user Barges In, the system repeats the Barge In tone after this interval. Normally, you should disable this timer by entering 0. (This timer also affect any other types of call interruption features, such as Voice Mail Conversation Recording, Voice Over, etc.)

- **21-01-03 : System Options for Outgoing Calls - Trunk Interdigit Time (External)**
  Program how long an extension must wait before using the Barge In feature can be used on a call (this timer waits until this timer expires before putting a call in a talk state). This timer also affects Voice Over.
- **22-04-01 : Incoming Extension Ring Group Assignment**
  Assign extensions to ring groups.
- **22-05-01 : Incoming Trunk Ring Group Assignment**
  Define a trunk's ring group. When transferring a DID or trunk call to the trunk's defined ring group, the trunk will then ring the defined extensions for the ring group.
- **22-08-01 : DIL/IRG No Answer Destination**
  Assign the DIL No Answer Ring Group (1-103) to which an unanswered call should overflow.
- **24-02-01 : System Options for Transfer - Busy Transfer**
  Prevent (0) or allow (1) extensions to transfer calls to busy extensions. If disabled, calls transferred to busy extensions recall immediately.
- **24-02-03 : System Options for Transfer - Delayed Call Forwarding Time**
  If activated at an extension, Delayed Call Forwarding occurs after this interval (0-64800 seconds). This also sets how long a Transferred call waits at an extension forwarded to Voice Mail before routing to the called extension's mailbox.
- **24-02-04 : System Options for Transfer - Transfer Recall Time**
  Set the Transfer Recall Time (0-64800 seconds). An unanswered transferred call recalls to the extension that initially transferred it after this interval. This interval also sets how long a transferred call camps-on to a busy extension.
- **24-02-05 : System Options for Transfer - Transfer to Busy Department Group Recall Timer**
  After a trunk is unscreen transferred to a busy Department Group, this timer will start. If the call is not answered, it will recall the originator (0-64800 seconds).
- **24-02-11 : System Options for Transfer - No Answer Timer for Step Transfer**
  Define the length of time (0-64800 seconds) the system will wait before Step Transferring a no-answer call to the next destination.
- **24-02-12 : System Options for Transfer - No Answer Timer for Automatic Trunk-to-Trunk Transfer**
  Define the length of time (0-64800 seconds) the system will wait before Automatic Trunk-to-Trunk Transfer occurs for a no-answer call.
- **24-04-01 : Automatic Trunk-to-Trunk Transfer Target Setup**
  Define the Abbreviated Dialing number bin(s) which are to be used as the destination of the Automatic Trunk-to-Trunk Transfer.
- **25-06-02 : VRS/DISA One-Digit Code Attendant Setup**
  Define the digit to be used by a VRS caller which will allow their call to be transferred to the external page.
- **31-05-01 : Universal Night Answer/Ring Over Page**
  For each trunk which should ring the external page, set the External Page zone (1-9) to allow ringing (1).
- **81-01-14 : COIU Initial Data Setup - Flash (Hooking 1)**
  Set the flash duration for analog trunk calls (1-255 in 16ms steps).

Related Features

Barge-In
An existing call can be transferred into a call with Barge-In enabled.

Caller ID
Unscreened Transfers from voice mail will show pre-answer Caller ID information.

Call Forwarding
With Transfer to Busy Extensions enabled (Program 24-02-01=1), Call Forwarding with Both Ringing offers a unique option. A transferred call will wait for either the forwarding or destination extension to become free. The call goes through to whichever extension becomes available first. If neither extension becomes free within the Transfer Recall Time, the call recalls the transferring extension.

Conference
An existing call can be transferred into a Conference call.

Meet Me Paging Transfer
Page a co-worker and have the call automatically Transfer when the co-worker answers the Page.

One-Touch Calling
When transferring, an extension user can press a One-Touch Key instead of dialing the extension number.

Serial Call
Serial Call is a method of transferring a call so it automatically returns to the transferring extension.

Operation

Transferring Trunk Calls

To Transfer a trunk call to a co-worker's extension:

1. At keyset or 2-Button telephone, press HOLD.
   OR
   At 500/2500 single line telephone, hookflash.
   You hear Transfer dial tone.
2. Dial co-worker's extension number.
   If the extension is busy or doesn't answer, you can dial another extension number or press the line key to return to the call. In addition, you may be able to hang up and have the call Camp-On.
   *SLT users can retrieve the call by pressing hookflash. If a call has been transferred and the 500/2500 user has hung up the handset, the call be can retrieved by dialing ** and the extension number to which it had been transferred.*
3. Announce call and press the Transfer key (PGM 15-07 or SC 851: 06) or hang up.
   If you don't have Automatic On Hook Transfer, you must press CONF (Program 15-02-24=1) or your Transfer Programmable Function Key to Transfer the call.
   If your co-worker doesn't want the call, press the flashing line key to return to the call.
   *SLT users can retrieve the call by pressing hookflash. If a call has been transferred and the 500/2500 user has hung up the handset, the call be can retrieved by dialing ** and the extension number to which it had been transferred.*
   If you don't want to screen the call, hang up without making an announcement.

To answer a call transferred to your extension:

1. Lift the handset when a co-worker announces the call.

Transferring Without Holding

To Transfer without holding (keyset only):

1. Lift handset.
2. Press busy line key.
3. When original caller hangs up, you are connected.

Transferring Intercom Calls

To Transfer your Intercom call:

1. At keyset, press HOLD.
   OR
   At single line telephone, hookflash.
2. Dial extension to receive your call.

   If the extension is busy, doesn't answer or does not want the call, you can dial another extension number or press the lit CALL key to return to the call. In addition, you may be able to hang up and have the call Camp-On.

   *SLT users can retrieve the call by pressing hookflash. If a call has been transferred and the 500/2500 user has hung up the handset, the call be can retrieved by dialing ** and the extension number to which it had been transferred.*
3. Announce your call and press the Transfer key (PGM 15-07 or SC 851: 06) or hang up.

   With Automatic On Hook Transfer

   When you hang up, the call is automatically transferred.

   Without Automatic On Hook Transfer

   You must press your Transfer Programmable Function Key to Transfer the call.

   To Transfer the call unscreened, press your Transfer Programmable Function Key and hang up without making an announcement.

Transferring a Call Into a Conference/Existing Call

1. While on a call, press HOLD and dial service code 124.

   The display shows "Transfer to Conf. ICM Dial".
2. Enter the extension number of the co-worker currently on a Conference call to which the call should be transferred.

   To cancel the transfer, press the flashing line or CALL key to retrieve the call.

   If an error tone is heard, Barge In is not enabled for the extension and the call will not go through. Retrieve the call by pressing the flashing line or CALL key or hang up and the call will recall the extension.
3. The transferred call is incorporated into the Conference call.

   The callers hear the Barge In tone if enabled in Program 20-13-17.

   If a call is transferred into a Barge In Conference (an existing 2-party call into which an extension user has used the Barge In feature to join), the Conference becomes a regular 4-party Conference call.
4. Hang up.

Transferring a Call to a Trunk Ring Group

1. While on a call, press HOLD.
2. Dial the Transfer to Ring Group service code defined in 11-15-09.

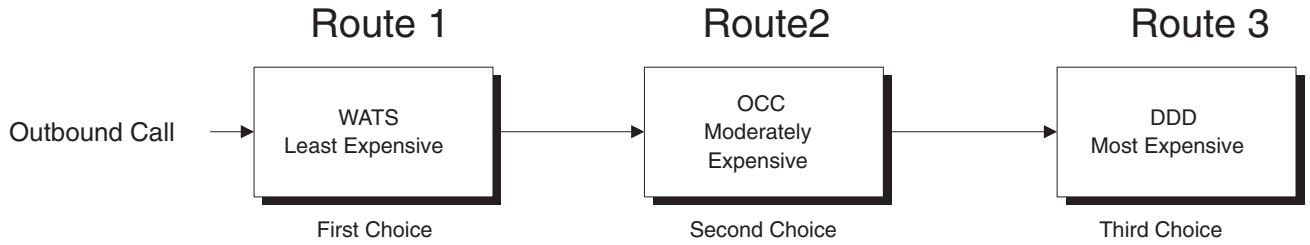
   You will hear a confirmation tone.
3. Hang up.

   The call is transferred to the trunk's ring group defined in Program 22-05-01 and all assigned extensions in the group (Program 22-04-01) ring or it will ring the External Paging, enabling anyone to answer the call.

Aspire S	Aspire M/L/XL
• Available - 8 trunk groups and 8 routes.	• Available - 100 trunk groups and 100 routes.

Description

Trunk Group Routing sets outbound call routing options for users that dial the Trunk Group Routing code (9) for trunk calls. Trunk Group Routing routes calls in the order specified by system programming. If a user dials 9 and all trunks in the first group are busy, the system may route the call to another group. When you're setting up your system, Trunk Group Routing will help you minimize the expense of toll calls. For example, if your system has outbound WATS lines, OCC lines and DDD lines, use Trunk Group Routing to route calls to the WATS lines first.



Conditions

None

Default Setting

Enabled. All trunks are in Group 1.

Programming

- **11-01-01 : System Numbering**
  Set up a Service Code for Alternate Trunk Route Access.
- **11-09-01 : Trunk Access Code**
  If required, change the single-digit Trunk Access Code (normally 9). If you change this code, you must also review the settings in 11-01 for the new code selected.
- **11-09-02 : Trunk Access Code - Alternate Trunk Route Access Code**
  Assign the Service Code set up in 11-01 for Alternate Trunk Route Access.
- **14-05-01 : Trunk Groups**
  Assign trunks to trunk groups.
  ➪ Aspire S Trunk Groups: 1-8
  ➪ Aspire Trunk Groups: 1-100
- **14-06-01 : Trunk Group Routing**
  Set up an outbound routing table for trunk groups assigned in Program 14-05.
  ➪ Aspire S Trunk Group Routes: 1-8
  ➪ Aspire Trunk Group Routes: 1-100
- **14-07-01 : Trunk Access Map Setup**
  Access Map programming may limit Trunk Group Routing options.
  ➪ Aspire S: Trunk Access Maps 1-8
  ➪ Aspire: Trunk Access Maps 1-200

- **15-06-01 : Trunk Access Map for Extensions**
  Access Map programming may limit Trunk Group Routing options.
  - Aspire S: Trunk Access Maps 1-8
  - Aspire: Trunk Access Maps 1-200
- **15-07 : Programming Function Keys**
  Assign a function key for Trunk Group Routing access (code *02 + trunk group #).
  - Aspire S Trunk Groups: 1-8
  - Aspire Trunk Groups: 1-100
- **21-02-01 : Trunk Group Routing for Extensions**
  Assign the routes set in Program 14-06 to extensions.
  - Aspire S Trunk Group Routes: 1-8
  - Aspire Trunk Group Routes: 1-100
- **21-15-01 : Alternate Trunk Route for Extensions**
  Designate the trunk route accessed when a user dials the Alternate Trunk Route Access Code assigned in Program 11-09-02. Trunk Group Routing is set up in Program 14-06.
  - Aspire S Trunk Group Routes: 1-8
  - Aspire Trunk Group Routes: 1-100
- **23-03-01 : Universal Answer/Auto Answer**
  Assign trunk routes set in Program 14-06 to extensions for Universal Answer. If the call ringing the paging system is in an extension's assigned route, the user can dial the Universal Answer code (#0) to pick up the call. This program also allows an extension user to automatically answer trunk calls ringing other extensions, based on Trunk Group Routing programming (defined in Program 14-06).
  - Aspire S Trunk Group Routes: 1-8
  - Aspire Trunk Group Routes: 1-100
- **25-10-01 : Trunk Group Routing for DISA**
  Assign the Trunk Group Route chosen when a user places a DISA call into the system and dials 9. The Trunk Group Routing is defined in Program 14-06. If the system has ARS, dialing 9 accesses ARS. The route chosen is based on the DISA Class of Service, which is determined by the password the caller dials.
  - Aspire S Trunk Group Routes: 1-8
  - Aspire Trunk Group Routes: 1-100
- **25-12-01 : Alternate Trunk Group Routing for DISA**
  Define the trunk route selected when a DISA caller dials the Alternate Trunk Access Code assigned in Program 11-09-02. The route selected is based on the DISA caller's Class of Service, which is in turn determined by the password the caller dial. Program 14-06 is used to set up the Trunk Group Routing.
  - Aspire S Trunk Group Routes: 1-8
  - Aspire Trunk Group Routes: 1-100
- **34-03-01 : Trunk Group Routing for E&M Tie Lines**
  Use this program to assign the Trunk Group Route chosen when a user seizes a tie line and dials 9. Set Trunk Group Routing in Program 14-06. If the system has ARS, dialing 9 accesses ARS.
  - Aspire S Trunk Group Routes: 1-8
  - Aspire Trunk Group Routes: 1-100

Related Features

Automatic Route Selection (ARS)
Dialing 9 activates ARS, overriding trunk group routing.

Central Office Calls, Placing
Instead of using Trunk Group Routing, an extension user can place a trunk call by:

- Pressing a line key
- Dialing a trunk service code
- Pressing a trunk group key (refer to the Trunk Group feature)
- Dialing a trunk group service code (refer to the Trunk Group feature).

Data Communications / Direct Inward System Access (DISA) / Tie Lines
DISA (Program 25-10) and tie lines (Program 34-03) have separate Trunk Group Routing programs.

Dial Tone Detection
Refer to this feature for the specifics on how the system handles Dial Tone Detection.

Programmable Function Keys
Programmable Function Keys simplify placing calls using Trunk Group Routing.

Ringing Line Preference
The system uses Trunk Group Routing programming (Program 14-06) when setting up Ringing Line Preference.

Trunk Groups
Use trunk group programming to set the order in which users access trunks within a specific trunk group.

Operation

To place a call using Trunk Group Routing:

1. At keyset, press idle CALL key.
   OR
   At single line telephone, lift handset.
2. Dial 9.
3. Dial number.
   OR

1. At keyset, press Trunk Group Routing key (PGM 15-07 or SC 852: *05).
   Also see the "Loop Keys" feature.
2. Dial number.

Aspire S	Aspire M/L/XL
• Available - 8 trunk groups.	• Available - 100 trunk groups.

Description

Trunk Groups let you optimize trunk usage for incoming and outgoing calls. With Trunk Groups, users can have loop (rotary) keys for trunk calls. Incoming trunk group calls ring these loop keys. For outgoing calls, the user presses a loop key to access the first available trunk within the group. You set the access order in trunk group programming.

Loop keys give an extension user more available function keys, since the user doesn't need a separate line key for each trunk. The user only needs one loop key for each trunk group. This simplifies placing and answering calls.

Like Trunk Group Routing, Trunk Groups help you minimize the expense of toll calls. For example, if your system has outbound WATS lines, OCC lines and DDD lines, program the trunk group to route to the WATS lines first.

Priority	Type of Trunk
1	WATS
2	OCC
3	DDD

Conditions

None

Default Setting

All trunks are in group 1.

Programming

- **10-09-01 : DTMF and Dial Tone Circuit Setup**
  Allocate the circuits on the NTCPU or DSPDB PCBs for either DTMF receiving or dial tone detection.
- **14-02-11 : Analog Trunk Data Setup - Next Trunk in Rotary if No Dial Tone**
  Use this option to enable/disable the system's ability to skip over a trunk if dial tone is not detected. This pertains to calls using Loop Keys, Speed Dial, ARS, Last Number Redial, or Save number Dialed (0=disabled, 1=enabled). It does not pertain to line keys or Direct Trunk Access calls.
- **14-05-01 : Trunk Groups**
  Assign trunks to trunk groups.
  ➪ Aspire S Trunk Groups: 1-8
  ➪ Aspire Trunk Groups: 1-200
- **14-06-01 : Trunk Group Routing**
  Set up an outbound routing table for the trunk groups you assigned in Program 14-05. When users dial 9, the system routes their calls in the order (priority) you specify.
  ➪ Aspire S Trunk Groups: 1-8, Trunk Group Routes: 1-8
  ➪ Aspire Trunk Groups: 1-200, Trunk Group Routes: 1-100

- **14-07-01 : Trunk Access Map Setup**
  Assign trunks to Access Maps.
  ➪ Aspire S: Trunk Access Maps 1-8
  ➪ Aspire: Trunk Access Maps 1-200
- **15-06-01 : Trunk Access Map for Extensions**
  Assign Access Maps to extensions.
  ➪ Aspire S: Trunk Access Maps 1-8
  ➪ Aspire: Trunk Access Maps 1-200
- **15-07-01 : Programmable Function Keys**
  Assign function keys for trunk group access (code *02 + group) or loop keys (code *05 + 0=incoming, 1=outgoing, 2=both + trunk group. If loop keys are used, assign the loop key to a trunk group in Program 15-13.
  ➪ Aspire S Trunk Groups: 1-8
  ➪ Aspire Trunk Groups: 1-100
- **15-13-01 : Loop Keys - Outgoing**
  Assign trunk groups for outgoing loop keys (0=ARS, Aspire S Trunk Groups 1-8, or Aspire Trunk Groups 1-100).
- **15-13-02 : Loop Keys - Incoming**
  Assign trunk groups for incoming loop keys (0=all Trunk Groups, Aspire S Trunk Groups 1-8, or Aspire Trunk Groups 1-100).
- **20-02-02 : System Options for Multi-Line Telephones - Trunk Loop Access Key Operating Mode**
  Set the operating mode of the extension's trunk group keys (Incoming and Outgoing Access = 0, Outgoing Access =1, Incoming Access = 2).
- **21-01-02 : System Options for Outgoing Calls - Dial Tone Detection Timer**
  If dial tone detection is enabled, the system will wait this interval for the telco to return dial tone. When the interval expires, the system assumes dial tone is not present. To disable this timer (and have the system wait continuously), enter 0.
- **21-02-02 : Trunk Group Routing for Extensions**
  Assign the routes defined in Program 14-06 to extensions.

Related Features

Abbreviated Dialing

Unless a user preselects a trunk, Trunk Group programming selects the trunk Abbreviated Dialing users for trunk calls.

Automatic Route Selection

If a user dials a number that is not programmed in ARS, the system can route the call to a trunk group.

Central Office Calls, Placing

Instead of using Trunk Groups, an extension user can place a trunk call by:

- Pressing a line key
- Dialing a trunk access code
- Dialing a Trunk Group Routing code (9) - refer to the Trunk Group Routing feature

Dial Tone Detection

Refer to this feature for the specifics on how the system handles Dial Tone Detection.

Direct Inward Dialing (DID)

All DID trunks of the same type should be placed in the same trunk group. These trunk groups must then be assigned to a DID Translation Table.

Loop Keys
Program a function key as a Loop Key to allow an extension user to answer incoming trunks within a trunk group.

Programmable Function Keys
Function keys simplify placing and answering trunk group calls.

Ring Groups
Trunks ring extensions according to Ring Group programming.

Tie Lines
To simply placing calls over your tie lines, you can put the tie lines in a trunk group.

Trunk Group Routing
Trunk Group Routing sets outbound call routing options for users that dial the Trunk Group Routing code (9) for trunk calls.

Operation

To place a call over a trunk group:

1. At keyset, press idle CALL key.
   OR
   At single line telephone, lift handset.
2. Dial 804.
3. Dial trunk group number (Aspire S: 1-8, Aspire: 1-9 or 001-100).
4. Dial number.
   OR
1. Press trunk group key (PGM 15-07 or SC 852: *02 + group)
2. Dial number.

To answer an incoming trunk group call:

1. Lift handset.
2. Press flashing trunk group key.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

Trunk Queuing permits an extension user to queue (wait in line) on hook for a busy trunk or trunk group to become free. The system recalls the queued extension as soon as the trunk is available. The user does not have to manually retry the trunk later. Trunk Queuing lets the caller know when the call can go through. If the extension user does not answer the Trunk Queuing ring, the system cancels the queue request.

With Trunk Camp On, an extension user can queue (wait in line) *off hook* for a busy trunk or trunk group to become free. The caller connects to the trunk when the trunk becomes free. As with Trunk Queuing, the user does not have to manually retry the trunk later.

Any number of extensions may simultaneously queue or Camp On for the same trunk or trunk group. When a trunk becomes free, the system connects the extensions in the order that the requests were left.

Conditions

None

Default Setting

Enabled.

Programming

- **15-07-01 : Programmable Function Keys**
  Assign a function key for Trunk Queuing and Trunk Camp On (code 35).
- **20-01-08 : System Options - Trunk Queuing Callback Time**
  Set the Trunk Queuing Callback Time (0-64800 seconds). Trunk Queuing Callback rings an extension for this interval.
- **20-01-09 : System Options - Callback/Trunk Queuing Cancel Time**
  Set the Callback/Trunk Queuing Cancel Time (0-64800 seconds). The system cancels an extension's Callback or Trunk Queuing request after this interval.
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.
- **20-11-07 : Class of Service Options (Hold/Transfer Service) - Transfer Without Holding**
  Disable (0) an extension's ability to use Transfer Without Holding.

Related Features

Automatic Route Selection
With Automatic Route Selection, Trunk Queuing automatically queues for the least costly route.

Call Waiting/Camp On and Callback
A user can Camp On or leave a Callback request for an extension.

Central Office Calls, Placing
Other programmed options for outgoing calls can affect how a call is placed. Check or program these options as needed (ex: access, line/loop keys, etc.).

Programmable Function Keys
Function keys simplify Trunk Queuing operation.

Operation

To queue for a busy trunk:

1. Try to access busy trunk.
2. Dial 2 or press Trunk Queuing/Camp On key (PGM 15-07 or SC 851: 35).
3. Hang up to leave a Trunk Queuing request.
   OR
   Wait off hook to Camp On to the trunk.

To answer when Trunk Queuing calls you back:

1. Lift handset.

To cancel a Trunk Queueing/Camp On request:

1. At keyset, press idle CALL key.
   OR
   At single line telephone, lift handset.
2. Dial 870.
3. At keyset, press SPK to hang up.
   OR
   At single line telephone, hang up.

Please refer to Central Office Calls, Answering (page 208) for information on this feature.

Aspire S	Aspire M/L/XL
• Available - 72 NVM-Series voice mail ports available. External voice mail requires available analog station ports based on the number of voice mail ports connected, so this voice mail maximum is limited to 16 by the Aspire S. - Aspire Mail is not available. - 8 IntraMail ports (fixed ports 43-50) with software 2.50+.	• Available - 72 NVM-Series voice mail ports available. External voice mail requires available analog station ports based on the number of voice mail ports connected. - The Aspire Mail port requirements are based on the installed PCB (the 4VMSU requires 4 ports, 4VMDB requires 4 ports, 16VMSU requires 16 ports (and software 2.26+), 2FMSU requires 2 ports, 4FMSU requires 4 ports, 4FMDB requires 4 ports).
• The MSG key as Voice Mail key available.	• The MSG key as Voice Mail key feature is available with 1.11+ software.
• IntraMail options added with software 2.51+. - Ability to Select Voice Mail Port Selected for Message Notification/MW Lamps - External Transfer Available - Soft Key With Security Code Programming - Internal Message Notification Timer Lengthened	• IntraMail for the Aspire M only requires software 4.93+ and incorporates all prior IntraMail options from the Aspire S. IntraMail for the Aspire L/XL is not available.
• Intramail Directory Dialing and Multiple Greeting features requires software 2.64+.	
• Centralized voice mail with IntraMail available with software 4.94+.	• Centralized voice mail with Aspire Mail and IntraMail available with software 4.94+.

Description

The system is fully compatible with NEC's analog NVM-Series Voice Mail with Automated Attendant Systems. These systems provide telephone users with comprehensive Voice Mail and Automated Attendant features. Voice Mail ends the frustration and cost of missed calls, inaccurate written messages and telephone tag. This frees a company's busy receptionists and secretaries for more productive work.

Automated Attendant automatically answers the system's incoming calls. After listening to a customized message, an outside caller can dial a system extension or use Voice Mail.

Integrated Voice Mail enhances the telephone system with the following features:

- **Call Forwarding to Voice Mail**
  An extension user can forward their calls to Voice Mail. Once forwarded, calls to the extension connect to that extension's mailbox. The caller can leave a message in the mailbox instead of calling back later. Forwarding can occur for all calls immediately, for unanswered calls or only when the extension is busy. When a user transfers a call to an extension forwarded to Voice Mail, the call waits for the Delayed Call Forwarding time before routing to the called extension's mailbox. This gives the transferring party the option of retrieving the call instead of having it go directly to the mailbox.

- **Leaving a Message**
  Voice Mail lets a keyset extension user easily leave a message at an extension that is unanswered, busy or in Do Not Disturb. The caller just presses their Voice Mail key to leave a message in the called extension's mailbox. There is no need to call back later.

- **Transferring to Voice Mail**
  By using Transfer to Voice Mail, a keyset extension user can Transfer a call to the user's own or a co-worker's mailbox. After the Transfer goes through, the caller can leave a message in the mailbox.

- **Conversation Record**
  While on a call, an extension user can have Voice Mail record the conversation. The keyset user just presses the Voice Mail Record key; the ESL user dials a code. Once recorded, the Voice Messaging System stores the conversation as a new message in the user's mailbox. After calling their mailbox, a user can save, edit or delete the recorded conversation.

- **Personal Answering Machine Emulation**
  A keyset user can have their idle extension emulate a personal answering machine. This lets Voice Mail screen their calls, just like their answering machine at home. If activated, the extension's incoming calls route to the user's subscriber mailbox. Once the mailbox answers, the user hears the caller's incoming message. The keyset user can then:
  - Let the call go through to their mailbox
  - Intercept the call before it goes to their mailbox
  - Reject the call before it goes to their mailbox

- **Voice Mail Overflow**
  If Voice Mail automatically answers trunks, Voice Mail Overflow can reroute those trunks to other extensions when all Voice Mail ports do not answer or, with certain software, are busy. During periods of high traffic, this prevents the outside calls from ringing Voice Mail for an inordinate amount of time. There are two types of Voice Mail Overflow: Immediate and Delayed. With immediate overflow, calls immediately reroute to other extensions when all Voice Mail ports do not answer or, with certain software, are busy. With delayed overflow, calls reroute after a preset interval. Without any type of overflow, the outside calls ring Voice Mail until a port becomes available or the outside caller hangs up.

- **Message Center Mailbox**
  A Message Center Mailbox is a mailbox shared by more than one extension. Any keyset that has a Message Center Key for the shared mailbox can:
  - Listen to the messages stored in the shared mailbox.
  - Transfer calls to the shared mailbox.
  - Use many other Voice Mail features previously available only at an extension's individual mailbox.

  A Message Center Mailbox helps co-workers that work together closely - such as members of the same Department Hunt Group or ACD Group. For example, an ACD Group Supervisor can send important messages to the shared Message Center Mailbox, to which any ACD Group member can respond when time allows. Each ACD Agent's Message Center Key flashes when messages are waiting. (The Message Center Mailbox can be a mailbox for an installed, uninstalled or virtual extension.)

- **Voice Mail Caller ID**
  NVM-Series Voice Mail can use ANI/DNIS information to identify the outside caller that left a message in a user's mailbox. When the message recipient presses TI after hearing a message, they hear the time the message was sent and the outside telephone number of the message sender. Refer to **ANI/DNIS Compatibility** (page 537) for more information on setting up this feature.

Voice Mail Queuing

When accessing the voice mail, the system provides a voice mail queue. If all the voice mail ports are busy, any calls trying to get to the voice mail will be placed in queue. As the voice mail ports become available, the calls will be connected to the voice mail in the order in which they were received.

As the Voice Mail Queue follows Department Hunting programming, the queue can hold a maximum of 10 calls. If the queue is full or if the voice mail ports are not assigned to a Department Group, the calls will be handled as though there were no voice mail queuing feature enabled. The calls will either access voice mail if a port is available or they will receive a busy signal.

The Voice Mail Queuing feature does not work with the Conversation Record feature.

Park and Page

When an extension user is away from their phone, the voice mail provides a Park and Page feature which can let them know when they have a call waiting to be answered. To activate Park and Page, the subscriber records the Paging Message. To enable Park and Page, the user records a Paging message. Park and Page will then answer an incoming call and the system broadcasts the prerecorded Paging announcement. When the extension user hears the Page, they can go to any telephone and use Directed Call Pickup to intercept the call. Depending on how the subscriber wants Park and Page to operate, they can turn the Paging Message on or off. Refer to the Aspire Mail System Guide (P/N 17710SWGxx) for details on setting this feature.

MSG Key will Operate as Voice Mail Key

The system enhances a phone's MSG key function when connected to a system which has voice mail installed. When an extension receives a voice mail, the MSG key can be used to check the number of messages in voice mail, as well as call the voice mail to listen to the messages. If there is no Voice Mail Programmable Function Key defined (Program 15-07-01, code 77), the phone's Message Waiting LED will flash to indicate new messages.

This option is not available with a networked voice mail - the voice mail must be local.

In-Skin Voice Mail

The Aspire Mail/Aspire Mail Plus is an in-switch full-featured Voice Mail with Automated Attenddant for the Aspire M/L/XL.

Aspire Mail / Aspire Mail Plus Specifications

	0891032 Aspire Mail (Flash-based)	**0891037** Aspire Mail (Flash-based)	**0891033** Aspire Mail Plus (Hard disk)	**0891056** Aspire Mail Plus (Hard disk)
Ports:	2	4	4	8
Hours:	3	3	1400 (approximate)	1400 (approximate)
Mailboxes:	200	200	1000	1000
Messages (max):	7000	7000	7000	7000

The IntraMail is a plug-in "in-skin" full-featured, DSP-based integrated Voice Mail with Automated Attendant for the Aspire S.

Aspire IntraMail Part Numbers and Capacities	
P/N 0892176	Aspire IntraMail 4 Port/4 Hour Kit Includes: ■ (1) P/N 0891003 DSPDBU (IntraMail PCB) ■ (1) P/N 0892175 4 Port/4 Hour CompactFlash Card with software. ■ (1) 0893820 Aspire IntraMail Literature Kit
P/N 0892180	Aspire IntraMail 4 Port/8 Hour Kit Includes: ■ (1) P/N 0891003 DSPDBU (IntraMail PCB) ■ (1) P/N 0892179 4 Port/8 Hour CompactFlash Card with software. ■ (1) 0893820 Aspire IntraMail Literature Kit
P/N 0892178	Aspire IntraMail 8 Port/8 Hour Kit Includes: ■ (1) P/N 0891003 DSPDBU (IntraMail PCB) ■ (1) P/N 0892177 8 Port/8 Hour CompactFlash Card with software. ■ (1) 0893820 Aspire IntraMail Literature Kit
P/N 0892182	Aspire IntraMail 8 Port/16 Hour Kit Includes: ■ (1) P/N 0891003 DSPDBU (IntraMail PCB) ■ (1) P/N 0892181 8 Port/16 Hour CompactFlash Card with software. ■ (1) 0893820 Aspire IntraMail Literature Kit
Mailboxes:	Station Mailboxes = 128 Routing Mailboxes = 16 Master Mailboxes = 16 (Only 8 of the 16 Master mailboxes are accessible in Aspire S.) Total Mailboxes = 160
Programming Interface:	Aspire S telephone programming or Aspire PCPro software 2.30 or higher.
Remote Programming:	Access Via HTML-based Aspire WebPro or using customer-provided modems with Aspire PCPro.
Voice Storage Media:	Flash Card (on IntraMail PCB)
Languages:	1 (English Mnemonic)

These voice mails can answer incoming calls and route them quickly and efficiently. Integrated Voice Mail features include Conversation Record, Answering Machine Emulation, and Caller ID with Return Call. Interactive Soft Keys guide the display telephone user through the extensive voice mail feature set.

IntraMail for Aspire S

The Aspire S IntraMail port assignments are fixed and should not be changed. The following is the default IntraMail:

- **Program 16-02-01 : Department Group Assignments for Extensions**
  IntraMail ports assigned to Department Group 8.
  343=Order 43
  344=Order 44
  345=Order 45
  346=Order 46
  347=Order 47
  348=Order 48
  349=Order 49
  350=Order 50
- **Program 11-07-01 : Department Group Pilot Numbers**
  Master number is 700.
- **Program 45-01-01 : Voice Mail Integration Options - Voice Mail Department Group Number**
  IntraMail Department Group is Group 8.
- **Program 15-03-01 : Single Line Telephone Basic Data Setup - SLT Signaling Type**
  Set for DP (0).
- **Program 15-03-03 : Single Line Telephone Basic Data Setup - Terminal Type**
  Set to Special (1).
- **Program 22-07-01 : DIL Assignment**
  Trunks terminate to 343.

IntraMail for Aspire M

The Aspire software now provides support for the IntraMail. Previously, this was only available for the Aspire S system. With this change, the 47-xx programs used for IntraMail are now available with the Aspire M. Refer to the IntraMail System Guide (P/N 0893240) for complete details on setting up the IntraMail.

The boot code for the Aspire system must be at the current level of 1.20 for IntraMail to function. Refer to the Boot Code Update Instructions, P/N 0893211 for details on updating. The current version number can be displayed with history enabled (DIMU) after rebooting the system. The version number will show on the first line of the display. Contact NEC's Sales Support in order to obtain an boot update card if needed.

If the IntraMail will not be used, make sure **Program 47-01-17 : IntraMail System Options - Start of IntraMail Port** is set to "0" (this is the default setting). If there is an entry in this program, 8 ports will be reserved for IntraMail usage. This could prevent the system from reaching the full port capacity. This could be important especially when using the 64-port CPU (P/N 0891002).

IntraMail System Requirements

- Aspire M System Software version 4.93 or higher.
- 64-Port NTCPU (P/N 0891002) with basic factory-installed PAL chip or with the Feature Upgrade PAL chip (P/N 0891039)
  IntraMail will not work with the Enhanced NTCPU (P/N 0891038).
- 8 Unassigned Ports in the Aspire System
  Using IntraMail reduces the number of available ports in the system.
- IntraMail Kit

Unlike the Aspire S, the IntraMail ports in the Aspire M must be defined in system programming.

Notes:

- The VRS cannot be used when the IntraMail CompactFlash card is installed.
- An external voice mail and the IntraMail cannot work simultaneously.
- The Aspire Mail (VMSU/FMSU PCBs) and IntraMail cannot work simultaneously.
- The IntraMail will not work automatically as with the Aspire S. Programs must be defined for port usage.
- When the DSPDB is used for IntraMail, the daughter board does **not** provide any additional DSP resources (for DTMF Receivers, Caller ID Receivers, or Call Progress Tone Detection).
- The IntraMail does not work with the Enhanced NTCPU (PAL-B). If switching from an Enhanced NTCPU PAL chip to a Standard or Feature Upgrade for the IntraMail feature, ***the system must be cold started due to the port number differences*** or the IntraMail will not function correctly.
- PVMU stops when IntraMail is used. (The PVMU is not available in the U.S.)

IntraMail: Ability to Select Voice Mail Port Selected for Message Notification/MW Lamps

The Aspire S can select an available voice mail port which can be used the Message Notification or MW Lamp update routines.

IntraMail: External Transfer Available

The software provides the ability for the IntraMail to perform an external transfer. This allows the IntraMail to route an incoming Automated Attendant call out of the Aspire system on a new trunk based on an Abbreviated Dial number stored in a Dial Action Table.

IntraMail: Soft Key With Security Code Programming

The software provides a soft key when programming the security code. This soft key allows a user to select OK/CANCEL following an entry of a new code.

IntraMail: Internal Message Notification Timer Lengthened

When Message Notification places a call out, the system will wait up to 30 seconds for ringback, reorder, or busy tone from the trunk. If detected, notification call out processing begins normally. If not detected, the system abandons the call and decrements the Ring No Answer (RNA) count. In older software versions, the system would wait 15 seconds. This could cause notification callbacks to be inadvertently abandoned.

IntraMail: Directory Dialing

This feature requires the IntraMail Utility 1.2. The utility and the instruction sheet for updating the utility are available for downloading from the NEC Technical Support Site (ws1.necii.com). This site requires user registration (contact NEC Sales Support for details).

Directory Dialing allows an Automated Attendant caller to reach an extension by dialing the first few letters in the extension user's name. With Directory Dialing, the caller does not have to remember the extension number of the person they wish to reach — just their name. Here's how Directory Dialing works:

1. When the Automated Attendant answers, it sends the call to a Directory Dialing Mailbox. (Optionally, the caller may be asked to dial a digit to access Directory Dialing.)
2. The Directory Dialing Mailbox plays the Directory Dialing Message which asks the caller to dial letters for the name of the person they wish to reach.
3. The caller dials the letters for the person's name plus #. They can dial by first name or last name, depending on how the Directory Dialing Message was recorded and the Directory Dialing Mailbox was set up.
4. IntraMail searches the list of programmed extension names for a match of the caller-entered letters.
5. Voice prompts announce the first three matches, and allow the caller to dial a digit (1-3) to reach one of the announced matches. Additionally, the caller can dial 4 to hear additional matches (if any).
6. The caller dials the digit for the extension they wish to reach, and IntraMail sends the call to that extension. The call is sent as a Screened or Unscreened transfer, depending on programming.

For callers to use Directory Dialing, the system must have a name programmed for each extension (up to 15 characters, A-Z, using upper and lower case letters). Each extension should also have a name recorded in their Subscriber Mailbox. In addition, each extension used by Directory Dialing must be installed and must have their Subscriber Mailbox active (Personal or Group).

An outside caller can route to a Master Mailbox or Routing Mailbox programmed as a Directory Dialing Mailbox from:

- The Answer Table's Answer Schedule Override mailbox, Default mailbox, or Routing mailbox.
- A GOTO action in the Dial Action Table of a Call Routing Mailbox.

IntraMail: Multiple Greetings

This feature requires the IntraMail Utility 1.2. The utility and the instruction sheet for updating the utility are available for downloading from the NEC Technical Support Site (ws1.necii.com). This site requires user registration (contact NEC Sales for details).

The mailbox subscriber can record up to three separate greetings and make any one of the three active. When a caller leaves a message in the subscriber's mailbox, they hear the active greeting. This allows the subscriber, for example, to record separate greetings for work hours, after work, and during vacation. Instead of rerecording their greeting when they leave the office, they can just activate the "after work" greeting instead.

If the active greeting has not been recorded, a caller leaving a message in the subscriber mailbox will hear, "*At the tone, you can leave your message for (extension number or name)*."

Multiple Greetings requires IntraMail Voice Prompts version 1.2 or higher.

Centralized Voice Mail Can Use Aspire Mail and IntraMail

With software 4.94 or higher, the Aspire Mail and IntraMail cards can be used with Centralized Voice Mail. Previously, only external voice mails could be used with this feature.

For Centralized Voice Mail, the voice mail software must be version 11.08.05 or higher and all systems connected to the network must be updated to system software 4.94 or higher.

When the Aspire Mail is used for Centralized Voice Mail (CVM), the phones on the networked system can also have their displays updated using the NSL protocol. This allows the users to press the Soft Keys associated with the display to proceed through the voice mail menus. IntraMail does not support this operation and will function like an external voice mail on the networked system.

In order to send NSL protocol over the network, **Program 45-01-10 : Voice Mail Integration Options - NSL Protocol Support** must be enabled in order for the display to use the NSL protocol.

Currently, **Program 45-01-01 : Voice Mail Integration Options - Voice Mail Department Group Number** and **Program 45-01-08 : Voice Mail Integration Options - Networked Voice Mail Department Group Number** must both be programmed with the same group number. Otherwise, the audio path may not connected properly.

Notes:

- When using the Aspire Mail for Centralized Voice Mail with an IP network, DTMF signaling is required. Set **Program 84-06-10 : VOIPU Setup : DTMF Behavior** to "1" (In-Band). An entry of "2" (Out-of-Band) can also be used when the signaling is supported by the VoIP protocol. Set **Program 84-12-31 : H.323 Phone CODEC Information Basic Setup - DTMF Relay Mode** to "1" (RFC2833).
- When the Aspire Mail is used for Centralized Voice Mail, the transfer protocol should be changed due to processing speed differences between the system and the Aspire Mail. In the Aspire Mail programming for the Internal Transfer screen (**Main Menu - Customize Database - System Options**), the Transfer String should be changed from the default entry of "F" to "FS".
- Unscreened transfers from the voice mail over the network with Centralized Voice Mail do not recall to the voice mail if not answered. This applies to internal or external voice mails.

Refer to the Aspire Networking Manual (P/N 0893207) for details on programming the Networking feature.

Refer to the Aspire IntraMail System Guide-P/N 0893240 or the Aspire Mail System Guide-P/N 17710SWG05 for complete details on programming the voice mail.

Conditions

(A.) The periodic reminder message requires a DSP daughter board for Voice Response System (VRS).
(B.) Ring Group calls do not follow extension call forwarding to voice mail.
(C.) NVM-2e does not accept Caller ID information.
(D.) Analog ports on the Aspire S CPU do not support Message Waiting lamping.

Default Setting

Disabled.

Programming

- **10-09-01 : DTMF and Dial Tone Circuit Setup**
  Assign at least one circuit for DTMF reception (type 0 or 1).
  Use the following as a guide when allocating DTMF receivers:
  - In light traffic sites, allocate one DTMF receiver for every 10 devices that use them.
  - In heavy traffic sites, allocate one DTMF receiver for every five devices that use them.
- **11-07-01 : Department Group Pilot Numbers**
  Assign a Department Group pilot number for the Voice Mail (8 digits max). The extensions are assigned to the group in Program 16-02-01.
- **15-02-26 : Multi-Line Telephone Basic Data Setup, MSG Key Operation Mode**
  Determine whether an extension's MSG key should function as a Message key (0) or Voice Mail key (1) (Default=0). If set as a Message key, the user will be able to press the key to call the voice mail only when they have new messages. If set as a Voice Mail key, it will function as a normal Voice Mail key (it will not be active if Centralized Voice Mail is used).
- **15-03-01 : Single Line Telephone Basic Data Setup - SLT Signaling Type**
  For each Aspire Mail extension, this option must be set to "0".
- **15-03-03 : Single Line Telephone Basic Data Setup - Terminal Type**
  Set all SLIU ports used for Voice Mail as type 1.
- **15-03-05 : Single Line Telephone Basic Data Setup - External Reverse**
  This item is not used in the U.S. and should be left at (0) for the voice mail ports.
- **15-03-06 : Single Line Telephone Basic Data Setup - Extension Reverse**
  This item is not used in the U.S. and should be left at (0) for the voice mail ports.
- **15-03-09 : Single Line Telephone Basic Data Setup - Caller ID Function for External Module**
  This option **must** be set to '0' when voice mail is used or the integration code for the disconnect function will be incorrect.
- **15-07-01 : Programmable Function Keys**
  Assign a Voice Mail key to an extension. You must enter the Voice Mail key code (code 77) followed by:
  - Your own extension number if you are setting up your own Voice Mail key.
  - A virtual extension number if you are setting up a Message Center key for a virtual extension.
  - A co-worker's extension number if you are setting up a Message Center key for an installed extension.
  - An uninstalled extension's number if you are setting up a Message Center key for an uninstalled extension.

  (Optional) Assign a Voice Mail Record key to an extension (code 78).
  (Optional) Assign a Personal Answering Machine Emulation key (code 16).
  (Optional) Use a Call Redirect key (49) to allow a user to transfer a call to another extension or voice mail without answering the call.

- **16-01-08 : Department Group Basic Data Setup - Queuing for Department Group Call**
  To have Department Group calls queue when busy, set this entry to "1" for an extension or voice mail group. For no queuing, enter "0".
- **16-02-01 : Department Group Assignment for Extensions**
  Put all the Voice Mail extensions in a unique Department Group (do not use Department Group 1). No other extensions should be in this group. This allows DILs to Voice Mail to ring other Voice Mail extensions when the DIL's assigned port is busy. Only one Voice Mail group is allowed per system. Be sure to set up the Department Group in order. (For example, the first extension should be order 1, the second order 2, etc.)
  With the Aspire M, this entry should contain the IntraMail ports (as defined in 47-01-17). Set the priority number for these ports from 1-8.
- **20-02-09 : System Options for Multi-Line Telephones - Disconnect Supervision**
  Enable (1) disconnect supervision for the system.
- **20-03-01 : System Options for Single Line Telephones - SLT Call Waiting Answer Mode**
  Enter 1 for this option to enable Conversation Record (Service Code 154) at ESL sets.
- **20-06-01 : Class of Service for Extensions**
  Assign a Class of Service (1-15) to the voice mail extensions. It is recommended to use COS 14 for all time modes.
- **20-11-01 : Class of Service Options (Hold/Transfer Service) - Call Forward Immediate**
  20-11-02 : Class of Service Options (Hold/Transfer Service) - Call Forward When Busy
  20-11-03 : Class of Service Options (Hold/Transfer Service) - Call Forwarding When Unanswered
  20-11-04 : Class of Service Options (Hold/Transfer Service) - Call Forwarding (Both Ringing)
  20-11-05 : Class of Service Options (Hold/Transfer Service) - Call Forwarding with Follow Me
  20-11-12 : Class of Service Options (Hold/Transfer Service) - Call Forwarding Off-Premise
  It is recommended that these options be set to off (0) for the voice mail COS.
- **20-13-01 : Class of Service Options (Supplementary Service) - Long Conversation Alarm**
  20-13-05 : Class of Service Options (Supplementary Service) - Intercom Off Hook Signaling
  20-13-06 : Class of Service Options (Supplementary Service) - Automatic Off Hook Signaling
  20-13-07 : Class of Service Options (Supplementary Service) - Message Waiting
  20-13-16 : Class of Service Options (Supplementary Service) - Barge In, Receive
  20-13-28 : Class of Service Options (Supplementary Service) - Allow Class of Service to be Changed
  20-13-35 : Class of Service Options (Supplementary Service) - Block Camp On
  It is recommended that these options be set to off (0) for the voice mail COS.
- **20-13-13 : Class of Service Options (Supplementary Service) - Continued Dialing**
  Enable Continued Dialing (1) for all extensions that will dial Voice Mail features.
- **22-01-04 : System Options for Incoming Calls - DIL No Answer Recall Time**
  If setting up Delayed Voice Mail Overflow, enter a timer value greater than 0. Overflow will occur after this interval (provided the other related programming is correct). If setting up Immediate Voice Mail Overflow, enter 0.
- **24-02-02 : System Options for Transfer - MOH or Ringback on Transferred Calls**
  Use this option to enable (0) or disable (1) MOH on Transfer. If enabled (0), a transferred caller hears Music on Hold while their call rings the destination extension. If disabled (1), a transferred caller hears ringback while their call rings the destination extension. For this option to work with voice mail, the transferred call must be an unscreened transfer.

Assign Trunks As Automated Attendant Trunks - Method 1

- **22-02-01 : Incoming Call Trunk Setup**
  Assign Service Type 4 to each trunk you want to ring into Voice Mail as a Direct Inward Line (DIL).
- **22-07-01 : DIL Assignment**
  Assign the master/pilot number of the voice mail group from Program 11-07-01 as the DIL destination. If all Voice Mail ports are in the same unique Extension (Department) Group (see Program 16-02 above), the DIL will ring another Voice Mail port if its assigned port is busy.

Assign Trunks As Automated Attendant Trunks - Method 2

- **22-02-01 : Incoming Call Trunk Setup**
  Assign Service Type 0 to each trunk you want to ring into Voice Mail as a normal line.
- **22-04-01 : Incoming Extension Ring Group Assignment**
  Assign Ring Group 102 for an In-Skin/External Voice Mail, or 103 for a Central Voice Mail as the destination.

For Either Method:

- **22-04-01 : Incoming Extension Ring Group Assignment**
  To enable Voice Mail Overflow, assign selected extensions to a Ring Group that will ring for unanswered DILs to Voice Mail ports. In Program 22-06, enter 1 to enable overflow ringing.
- **22-08-01 : DIL/IRG No Answer Destination**
  For Voice Mail Overflow, enter the Ring Group that unanswered DILs to Voice Mail will ring after the DIL Call Waiting time (Program 22-01-04).
- **24-02-03 : System Options for Transfer - Delayed Call Forwarding Time**
  Set the interval a transferred call waits at a forwarded extension before routing to the called extension's mailbox.
- **40-03-01 : Message Recording Setup - Voice Mail Recording Time**
  Set the amount of time the voice mail can record a message (1-10 minutes).
- **40-03-02 : Message Recording Setup - Guidance Message**
  Select a guidance message in case recording is not allowed (0=fixed, 1=answer message mailbox).
- **40-03-03 : Message Recording Setup - Response Message**
  Determine if a response message is automatically sent out when busy (0=disable, 1=enable).
- **40-07-01 : Voice Prompt Language Assignment for Voice Mail**
  Specify the language to be used for the voice mail (default=1, English). Although the system allows this option to be changed in programming, the language will only change if the DSPDB has the firmware which provides the newly selected language.
- **45-01-01 : Voice Mail Integration Options, Voice Mail Department Group Number**
  Assign which Extension (Department) Group number is to be assigned as the voice mail group (non-networked system). An entry of '0' means there is no voice mail installed. When using Centralized Voice Mail with Aspire Mail or IntraMail, this program and Program 45-01-08 must both be programmed with the same group number. Otherwise, the audio path may not connected properly.
  ➪ Aspire S: Department Groups 0, 1-8
  ➪ Aspire: Department Groups 0, 1-64
- **45-01-02 : Voice Mail Integration Options, Voice Mail Master Name**
  Enter the Voice Mail master name up to 12 characters.
- **45-01-03 : Voice Mail Integration Options, Voice Mail Screening**
  Enable (1) or disable (0) the system's ability to process the Call Screening commands (1 + extension number) sent from the Voice Mail. You should normally ***enable*** this option to allow for Voice Mail Call Screening. Disable this option if your system has been modified so that extensions begin with the digit 1 (e.g., 101, 102, etc.). Also see the Flexible System Numbering feature.

- **45-01-04 : Voice Mail Integration Options, Park and Page**
  Enable (1) or disable (0) the system's ability to process the Voice Mail's Park and Page (*) commands. You should normally ***enable*** this option.
- **45-01-05 : Voice Mail Integration Options, Message Wait**
  Enable (1) or disable (0) the system's ability to process the Voice Mail's Message Wait (#) commands. You should normally ***enable*** this option. If enabled, be sure that the programmed Message Notification strings don't contain the code #9 for trunk access. When using an external voice mail and centrex transfer, this option should be disabled or the service code #3 in Program 11-12-42 will need to be changed.
- **45-01-06 : Voice Mail Integration Options, Record Alert Tone Interval Time**
  This timer sets the interval (0-64800 seconds) between Voice Mail Conversation Record alerts.
- **45-01-08 : Voice Mail Integration Options, Networked Voice Mail Department Group Number**
  Assign which Extension (Department) Group number is to be assigned as the voice mail group with a networked system. An entry of '0' means there is no voice mail installed. When using Centralized Voice Mail with Aspire Mail or IntraMail, this program and Program 45-01-01 must both be programmed with the same group number. Otherwise, the audio path may not connected properly.
  ➪ Aspire S: Department Groups 0, 1-8
  ➪ Aspire: Department Groups 0, 1-64
- **45-01-10 : Voice Mail Integration Options - NSL Protocol Support**
  This option must be enabled (1) in order for the display to use the NSL protocol. By default, this option is disabled (0).
- **45-02-01 : NSL Option Setup - Send DTMF Tone or 6KD Message**
  Enable (1) the 6KD Message. With 6KD enabled, the system uses NSL messages to communicate with an Intramail voice mail port (rather than DTMF tones). This is required for IntraMail operation.
- **45-02-03 : NSL Option Setup - Send 51A Message**
  Enable (1) the 51A Message. With 51A enabled, when an IntraMail port is placing a call, the system will send NSL messages to Intramail that provide the call status. This typcially occurs during Make Call and Message Notification callouts. This is required for IntraMail operation.
- **47-01-01 : IntraMail System Options - DSPDB Voice Mail Type**
  Define the type of voice mail to be used (0=IntraMail, 1=PVMU). This must be set to "0" for IntraMail to work. *When changing a system from using a VRS to IntraMail, the system must be restarted after making this change.*
- **47-01-17 : IntraMail System Options - Start of IntraMail Port**
  With the Aspire M, set the starting port number to be used for IntraMail (0-57 or 0-121 depending on the PAL chip installed). This must be a port which is currently unassigned to a PCB. ***It is recommended to use the last 8 ports in the system or to start after the last possible physical port to avoid possible numbering issues with future PCB installations.*** The system will assign 8 ports beginning with the port number specified in this option. If a port within the specified range has already been used or the port range is exceeded, the entry will not be accepted. Due to the port assignment for the PCBs, the acceptable entries for this program jump in groups of 4 - starting with 001. For example, acceptable entries would be: 001, 005, 009, 013, 017, 021, etc.
  This program is not available in the Aspire S.
- **47-02-01 : IntraMail Station Mailbox Options -Mailbox Active**
  Enable (1) or disable (0) a mailbox for each extension. An extension is then assigned to this mailbox in Program 47-02-02. Programs 47-02-01 and 47-02-02 are required in order for an extension user to be able to access their voice mail mailbox.

- **47-02-02 : IntraMail Station Mailbox Options -Mailbox Number**
  For each mailbox enabled in Program 47-02-01, assign an extension number. Programs 47-02-01 and 47-02-02 are required in order for an extension user to be able to access their voice mail mailbox.
- **47-01-02- 47-01-15**
  47-02-01 - 47-01-14
  47-03-01 - 47-03-03
  47-04-01 - 47-04-04
  47-05-01 - 47-05-03
  47-06-01 - 47-06-12
  47-07-01 - 47-07-02
  47-08-01 - 47-08-04
  47-09-01 - 47-09-03
  47-10-01 - 47-10-01
  47-11-01 - 47-11-04
  47-12-01 - 47-12-08
  47-13-01
  Refer to the Aspire IntraMail System Guide, P/N 0893240, for complete programming details.
- **80-03-01 : DTMF Tone Receiver Setup**
  80-04-01 : Call Progress Tone Detector Setup
  Use these programs to set the criteria for DTMF dial, ringback and busy tones.
- **84-06-10 : VOIPU Setup - DTMF Behavior**
  With IP Networking, set this option to "1" (RFC2833) in addition to changing Program 84-12-31 in order for DTMF tones to be acknowledged by the voice mail.
- **84-12-31 : H.323 Phone CODEC Information Setup - DTMF Relay Mode**
  With IP Networking, set this option to "2" (out-of-band) in addition to changing Program 84-06-10 in order for DTMF tones to be acknowledged by the voice mail.

Related Features

Barge In
Conversation Record will not work for monitored calls.

Call Forwarding, Fixed
Fixed Call Forwarding can be used to transfer a user's unanswered calls to their voice mail. Call Forwarding does not have to be programmed manually by every user.

Caller ID
Caller ID information will be passed from the Voice Mail to an extension for pre-answer display on an unscreened transfer from Voice Mail.

Central Office Calls, Placing
Off-premise notification and external extensions require access to outside lines.

Data Communications
With APA/APR modules installed, make sure to setup up other required programming.

Direct Inward Line
To have the Voice Mail Automated Attendant answer a trunk, program the trunk as a DIL to a Voice Mail port.

Hold
When the voice mail places a call on hold, it uses Group Hold. Any line appearances for the trunk will show the hold flash rate, however, users will not be able to pick up these calls (a busy signal will be heard).

Message Waiting
Message Waiting functions normally with Voice Mail installed.

One-Touch Calling
An extension can have a One-Touch Key for the Voice Mail Master Number.

Programmable Function Keys
Function keys simplify calling the Voice Mail system.

Time and Date
Updating the system time will also update the voice mail time if either an Aspire Mail or NSL with an external voice mail is used.

Transfer
When using an external voice mail and centrex transfer, option 45-01-05 should be disabled or the service code #3 in Program 11-12-42 will need to be changed.

Voice Response System (VRS)
The periodic reminder message requires a DSP daughter board for VRS.

Operation

CALLING YOUR MAILBOX

To call your mailbox:

With a keyset, our Voice Mail key flashes green and your Message Center keys flash red when they have messages waiting. If you don't have a Voice Mail key, your MW LED flashes instead.

Keyset

1. Press your Voice Mail key (PGM 15-07 or SC 851: 77).
   OR
   Press idle CALL key and dial the Voice Mail Master Number. After Voice Mail Answers, dial your mailbox number.
   Your mailbox number is normally the same as your extension number. You may optionally dial a co-worker's mailbox - or use this procedure to call your mailbox from a co-worker's phone.
   OR
   Press idle CALL key and dial *8.
2. If requested by Voice Mail, enter your security code.
   Ask your Voice Mail system administrator for your security code.
   Normally, your MW LED goes out (if applicable). If it continues to flash, you have unanswered "Message Waiting" requests or a new "General Message". Go to "To check your messages" below.

Single Line Telephone

1. Lift handset and dial *8.
   If you are at a co-worker's phone, you can dial the Voice Mail master number and your mailbox number instead. You can also use this procedure from your own phone to call a co-worker's mailbox.
2. If requested by Voice Mail, enter your security code.

Checking Messages

(If 15-02-26 = 0 (Message Key))

1. Press the MSG key once.

   The user can use the VOL UP and VOL DOWN keys to view the new messages. If there are both voice mail messages and Message Waiting calls, the display indicates the number of new voice mail messages and then each Message Waiting call is shown.

   When there are new messages, the MW LED on the phone will flash red.

2. **To return a displayed Message Waiting,** press the MSG key a second time, press the SPK key or lift the handset.

   To listen to the voice messages, with "Voice Message" displayed, press either the MSG key a second time, press the SPK key or lift the handset.

   The voice mail is called.

   The voice mail is only called if there are new messages. If the display indicates "Check Messages No Messages", then press the CLEAR key to return the phone to an idle condition.

If 15-02-26 = 1 (Voice Mail Key)

1. Press the MSG key once.

   The voice mail is called.

   When there are new messages, the MW LED on the phone will flash red.

   With this option set, the MSG key can be used as a Voice Mail key for any function (calling voice mail or transfer call a to voice mail [HOLD + MSG + Extension Number], etc.).

LEAVING A MESSAGE (Keyset Only)

To leave a message in the mailbox of an unanswered extension: The extension you call can be busy, in DND or unanswered.

1. Press Voice Mail key (PGM 15-07 or SC 851: code 77)

   OR

   Dial 8.

   The Voice Mail system will prompt you to leave a message.

FORWARDING CALLS TO YOUR MAILBOX

To activate or cancel Call Forwarding:

1. Press idle CALL key (or lift handset at SLT) and dial *2 .
   OR
   Press your Call Forward (Station) key (PGM 15-07 or SC 851: code 16).
2. Dial Call Forwarding condition:
   2 = Busy or not answered
   4 = Immediate
   6 = Not answered
   0 = Cancel
3. Dial Voice Mail master number or press Voice Mail key.
4. Dial Call Forwarding type:
   2 = All calls
   3 = Outside calls only
   4 = Intercom calls only
5. Press SPK to hang up (or hang up at SLT) if you dialed *2 in step 1.
   Your DND or Call Forwarding (Station) key flashes when Call Forwarding is activated.

TRANSFERRING CALLS TO A MAILBOX

To Transfer your active call to a mailbox:

Keyset

1. Press HOLD.
2. Press Voice Mail key (PGM 15-07 or SC 851: code 77).
3. Dial number of mailbox to receive Transfer.
   This number can be your mailbox number or a co-worker's mailbox number.
   OR
   Press DSS Console or One Touch key for extension who's mailbox will receive the Transfer.
4. Hang up.
   Voice Mail will prompt your caller to leave a message in the mailbox you selected.
   OR
1. Dial extension number or press a DSS Console key for extension who's mailbox will receive the Transfer.
2. Press Voice Mail key (PGM 15-07 or SC 851: code 77).
3. Hang up.
   Voice Mail will prompt your caller to leave a message in the mailbox you selected.

Single Line Telephone

1. Hookflash.
   Dial Voice Mail master number followed by destination mailbox.
2. Hang up.

RECORDING YOUR CALL

To record your active call in your mailbox:

Keyset

1. Press Voice Mail Record key (PGM 15-07 or SC 851: code 78)

   You hear two beeps and your Record key flashes. The beeps periodically repeat to remind you that you are recording.

   To stop recording, press the Voice Mail Record key again. You can restart and stop recording as required.

   OR

1. Place the call on hold by pressing HOLD.
2. Dial 154.

   The system automatically reconnects you to your call.

   To stop recording, place the call on hold then pick the call back up. You can restart and stop recording as required.

Single Line Telephone

1. Hookflash.
2. Dial 154.

   The system automatically reconnects you to your call.

   To stop recording, hookflash twice. You can restart and stop recording as required.

PERSONAL ANSWERING MACHINE EMULATION (Keyset Only)

To enable or cancel Personal Answering Machine Emulation:

1. Press idle CALL key (or lift handset at SLT) and dial *2 .

   OR

   Press your Call Forward (Station) key (PGM 15-07 or SC 851: code 16).
2. Dial 1 and the Call Forwarding type:

   2 = All calls
   3 = Outside calls only
   4 = Intercom calls only
3. Press SPK to hang up (or hang up at SLT) if you dialed *2 in step 1.

   Your DND or Call Forwarding (Station) key flashes when Call Forwarding is activated.

When Personal Answering Machine Emulation broadcasts your caller's message, you can:

Your telephone must be idle (not on a call).

1. Do nothing.

   The message is automatically being recorded in your mailbox. The broadcast stops when your caller hangs up.

   OR

1. Lift the handset to listen in privacy.

   You do not connect to the call. Use this mode for private listening.

   OR

1. (Optional) Lift the handset.
2. Press the flashing CALL key to intercept the call.

   You connect to the caller. The system records the first part of the message in your mailbox. The line key changes from red to green.

   OR

1. (Optional) Lift the handset.
2. Press a line key or idle CALL key for a new call.

   The message is recorded in your mailbox.

   OR

1. (If you have Automatic Handsfree) Press a line key or idle CALL key for a new call.

   The message is recorded in your mailbox.

   OR

1. Press SPK to cut off the message broadcast and send the call to your mailbox.

   Voice Mail records the entire message in your mailbox.

CHECKING YOUR MESSAGES (Keyset Only)

To check your messages:

1. Press CHECK
2. Dial *0 .

   You can have any combination of the message types in the table below on your phone.

If you see. . .	You have. . .
VOICE MESSAGE n MESSAGES	New messages in your Voice Mail mailbox
CHECK MESSAGE VRS GENERAL MESSAGE	Not listened to the current General Message
CHECK MESSAGE (name)	Message Waiting requests left at your phone by your co-workers

3. Press VOL ▲ or VOL ▼ to scroll through your display.
4. When you find the message you want to answer, press CALL1. You'll either:
   - Go to your Voice Mail mailbox.
   - Listen to the new General Message.
   - Automatically call the extension that left you a Message Waiting.

DIRECTORY DIALING

Recording a Directory Dialing message:

1. Log onto System Administrator's mailbox: **SA** (72) or press **0** to play a Help message.
2. Select Instruction Menus: **I** (4).
3. Enter the Directory Dialing Mailbox number or press # to go back to the System Administrator Options.
4. Select one of the following options:
   L (5) = Listen to the current Directory Dialing Message (if any)
   # = Exit listen mode
   R (7) = Record a new Directory Dialing Message
   * = Pause or restart recording
   E (3) = Erase recording
   # = Exit recording mode
   E (3) = Erase the Directory Dialing Message
   # = Go back to the System Administrator options

Using Directory Dialing

1. After the Automated Attendant answers, wait for the Directory Dialing Message.
   The Automated Attendant may ask you to dial a digit for Directory Dialing.
2. Dial the letters that correspond to the name of the person you wish to reach + **#**.
   - The Directory Dialing Message will tell you how many letters you need to dial, and whether you should enter the person's first name or last name.
   - To exit Directory Dialing without selecting a name, just dial **#**.
3. The Automated Attendant will announce the name matches, and tell you which digit to dial (1-3) to reach each of the announced names.
   - To hear additional name matches (if any), dial 6 instead.
4. Once you make your selection, the Automated Attendant will route your call to the name you select.

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

- Important -
Do not use Voice Over to a user on speakerphone as the conversation may be heard by the outside party.

Voice Over lets a user interrupt a keyset extension user busy on another call. With Voice Over, the busy keyset extension user hears an alert tone followed by the voice of the interrupting party. The keyset extension user can respond to the interrupting party without being heard by the original caller. If desired, the keyset extension user can easily switch between their original caller and the interrupting co-worker. The original caller and the interrupting party can never hear each other's conversation.

Voice Over could help a lawyer, for example, waiting for an urgent call. While on a call with another client, the lawyer's paralegal could announce the urgent call as soon as it comes in. The lawyer could then give the paralegal instructions how to handle the situation - all without the original client hearing the conversation.

Either a keyset or 500/2500 set user can initiate a Voice Over, but only a keyset user can receive a Voice Over.

To enable Voice Over, a keyset should have a function key programmed for Voice Over. In addition to one- touch Voice Over operation, the key shows the Voice Over status as follows:

When the key is . . .	You are . . .
Off	Not using Voice Over
Flashing	Listening to the interrupting party
On	Responding to the interrupting party

Conditions

(A.) While active, Voice Over uses a Conference circuit on a NTCPU. Refer to the Conference feature for Conference circuit programming.
(B.) Voice Over can interrupt a trunk call only if the trunk has been set up for at least six seconds.

Default Setting

Disabled.

Programming

- **10-03-03 : PCB Setup, For SLIU Unit - Transmit CODEC Gain Type**
  10-03-04 : PCB Setup, For SLIU Unit - Receive CODEC Gain Type
  Customize the transmit and receive levels of the CODEC Gain Types for 500/2500 type single line telephones.
- **11-12-41 : Service Code Setup (for System Access) - Voice Over**
  If required, change the service code used for the Voice Over feature (default: 890).
- **15-07-01 : Programmable Function Keys**
  Assign a function key for Voice Over (code 48).
- **20-06-01 : Class of Service for Extensions**
  Assign a Class of Service (1-15) to an extension.
- **20-13-06 : Class of Service Options (Supplementary Service) - Automatic Off Hook Signaling**
  In an extension's Class of Service, enter 1 if you want callers to a busy extension to hear Voice Over (busy/ring) tone. Enter 0 if you want callers to hear busy tone. (The caller must then dial 7 to hear Voice/Over tone.
- **21-01-03 : System Options for Outgoing Calls - Trunk Interdigit Time (External)**
  Program how long an extension must wait before using the Voice Over feature can be used on a call (this timer waits until this timer expires before putting a call in a talk state). This timer also affects Barge In.

Related Features

Conference
An extension user cannot Voice Over to another extension user in a Conference.

Handsfree and Monitor
Do not use Voice Over to a user on speakerphone as the conversation may be heard by the outside party.

Off Hook Signaling
When a user calls an extension busy on a call, they can send an off hook signal indicating they are trying to get through.

Programmable Function Keys
Answering a Voice Over requires a uniquely programmed Voice Over key.

Single Line Telephones
Single line telephones can only initiate Voice Over.

Transfer
If you place a call on Hold and then Voice Over to a busy extension, the call on Hold will not Transfer to the busy party when you end the Voice Over.

Operation

To initiate a Voice Over to a busy extension:

If you hear busy instead, you may be able to dial 7 and hear Voice Over (busy/ring) tone.

1. Press Voice Over key (PGM 15-07 or SC 851: 48)
   OR
   Dial 6.
   OR
   Dial 890.

   You hear an alert tone and the Voice Over key flashes. You can talk to the called party after the alert tone ends.

   In order to use Service Code 890 for Voice Over, Program 11-16-09 (Voice Mail Service Code) must be undefined.

To respond to a Voice Over alert tone to your extension:

You can only respond if you have a Voice Over key.

1. Press and hold flashing Voice Over key.

   The Voice Over key lights steadily (green) and you can talk to the interrupting party. You cannot respond by dialing the Voice Over Service Code (6).

To return to your original call:

1. Release Voice Over key.

   Your Voice Over key flashes when you are talking to your original call.

   To switch between your original call and the interrupting party, just keep pressing the Voice Over key.

Aspire S	Aspire M/L/XL
• Available - 8 Channels.	• Available - 16 Channels. • VRS available with basic NTCPU requires software 2.00+.

Description

The DSP daughter board provides the option for Voice Response System (VRS) which gives the system voice recording and playback capability. The VRS CompactFlash card provides up to 48 system messages (General Message, Automated Attendant greetings, ACD messages, and the 900 Preamble). In addition, the Personal Greeting and Park & Page options can have up to 200 messages (note that the Park & Page feature uses 2 messages). This enhances the system with:

- **General Message** - provides a prerecorded message to which any user can listen
- **Personal Greeting** - lets an extension user record a message and forward their calls. Callers to the extension hear the recorded message and are then redirected.
- **Park and Page** - parks a call at an extension and automatically pages the user to pick it up
- **Automated Attendant (Operator Assistance)** - answers incoming calls, plays a greeting to the caller and then lets the caller directly dial a system extension
- **ACD Messages** - provides announcement and overflow messages for ACD groups
- **Transfer to the VRS -** any extension user can Transfer their outside call to the VRS
- **Voice Prompting Messages** - plays call and feature status messages to users
- **900 Preamble** - alerts callers using 900 lines of the cost and features of the "pay-per-call" service
- **Time, Date and Station Number Check** - lets a keyset extension user quickly hear a recording for the time, date, or the extension's number.

VRS Messages

The VRS allows you to record up to 48 VRS messages. You allocate these messages for Automated Attendant greetings, the General Message, ACD messages and the 900 Preamble message. The total storage time for all VAU messages is approximately 45 minutes. The maximum duration for any type of message is 2 minutes - this is not programmable. VRS messages are battery backed up.

Any on-premise extension caller can listen, record and erase VRS Messages (unless restricted in programming). DISA and DID callers can listen and record VRS messages (unless restricted in programming).

General Message

A General Message is a prerecorded message available to all callers. A General Message typically contains important company information that all employees should hear. To hear the General Message, an employee can go to any keyset and press 4 (for General Message). You can restrict the ability to record the General Message in an extension's Class of Service. This allows you to give recording capability to the System Administrator or Communications Manager, for example, but not any employee. The MW LED at each telephone flashes when a new General Message is recorded. Once the extension user listens to the message, the MW LED goes out.

Personal Greeting

Personal Greeting allows an extension user to record a message and forward their calls. Callers to the extension hear the recorded message and are then forwarded to the new destination. The Personal Greeting and Park & Page options can have up to 200 messages total (note that the Park & Page feature uses 2 messages). With Personal Greeting, an extension user can add a personal touch to their Call Forwards. For example, a user can record:
"Hi. This is John Smith. I'll be out of the office today. In my absence, Mary Jones can answer all your questions. Please hold on for Mary."

After they record their Personal Greeting, the extension user chooses the condition that will activate Personal Greeting. Personal Greeting will activate for:

- Calls to the extension when it is busy or not answered
- All calls immediately
- Calls to the extension that are unanswered

The extension user then selects the destination for their calls. The choices are:

- A co-worker's extension
- Personal Greeting only (without forwarding)
- The extension user's own subscriber mailbox (if Voice Mail (DSP) is installed)
- Off-Premise via Common Abbreviated Dialing

In addition, the user can have Personal Greeting activate automatically for all calls, just CO (trunk) calls or just Intercom calls. When the user implements Personal Greeting for all calls, the system plays the greeting and reroutes:

- Calls transferred from the Automated Attendant (OPA)
- DISA calls ringing the extension
- DID calls ringing the extension
- Direct Inward Lines (DILs) ringing the extension
- Intercom calls

With Personal Greeting for only CO (trunk) calls, the system reroutes all of the calls listed above except Intercom calls.

Unique Personal Greeting Conditions
If a call comes into the extension when there are no VRS ports available to play the Personal Greeting, the system forwards the call without playing the recorded message to the caller.
If an extension has Personal Greeting (RNA) enabled, Intercom calls that voice announce are not subject to Personal Greeting rerouting.
Personal Greeting does not reroute normal Ring Group calls. Calls transferred from a co-worker or Voice Mail route to the forwarding destination without listening to the Personal Greeting.

Park and Page

When an extension user is away from their phone, Park and Page can let them know when they have a call waiting to be answered. The Personal Greeting and Park & Page options can have up to 200 messages total (note that the Park & Page feature uses 2 messages). To enable Park and Page, the user records a Personal Greeting along with an additional Paging announcement. Park and Page will then answer an incoming call and play the Personal Greeting to the caller. The caller then listens to Music on Hold (if available) while the system broadcasts the prerecorded Paging announcement. When the extension user hears the Page, they can go to any telephone and use Directed Call Pickup to intercept the call.

For example, John Smith could record a Personal Greeting that says:
"Hello, this is John Smith. I am away from my phone right now but please hold on while I am automatically paged."

The prerecorded Paging announcement could say:
"John Smith, you have a call waiting on your line."

The incoming caller hears the first message and listens to Music on Hold while the system broadcasts the second message. John Smith could then walk to any phone and pick up his call. If John doesn't pick up the call, the Page periodically repeats.

Park and Page follows the rules for Personal Greeting for All Calls, immediately rerouted. This means that Park and Page will activate for ringing Intercom calls, DID calls and DISA calls. It will also activate for calls transferred from the Automated Attendant. Additionally, calls from the Automated Attendant follow Automatic Overflow routing if not picked up. Park and Page will activate for transferred outside calls but not play the Personal Greeting to the caller. If a call comes in when the specified Page zone is busy, the system broadcasts the announcement when the zone becomes free.

Automated Attendant (Operator Assistance)

Automated Attendant automatically answers outside calls, plays a prerecorded greeting and then lets the outside callers directly dial system extensions, Department Calling Groups and Voice Mail. Automated Attendant provides immediate answering and routing of outside calls without the need for an operator or dispatcher. Automated Attendant provides:

- **Single Digit Dialing**
  Single Digit Dialing allows Automated Attendant callers to dial extensions, Department Calling Groups, and Voice Mail by pressing a single digit. For example, your Automated Attendant can greet calls with, *"Thank you for calling. To place an order, dial 1. To check on an existing order, dial 2. To speak with an operator, dial 0."* You can set up single digit dialing for each VRS Message programmed to answer outside calls via the Automated Attendant. This allows you to set up day/night/holiday greetings or unique greetings for each incoming trunk. (Keep in mind that, with a default system, if you assign destinations to digits 3, 4 and 5, outside callers will not be able to dial system extensions.)

- **Simultaneous Call Answering**
  With VRS installed, the Automated Attendant can answer up to 16 calls simultaneously.

- **Flexible Routing**
  The outside caller can directly dial any system extension, Department Calling Group or Voice Mail. If the caller dials a busy extension, Automated Attendant allows them to dial another extension or wait for the busy extension to become free.

- **Automatic Overflow**
  Automatic Overflow can automatically redirect a call if it can't go through. This can happen if all VRS ports are busy, if the called extension doesn't answer, or if the caller misdials or waits too long to dial. (This would occur if the caller is using a dial pulse telephone.) When the call overflows, it rings a designated Ring Group or the Voice Mail system.

- **Programmable Automated Attendant Greetings**
  You can record a different greeting for each trunk answered by the Automated Attendant. The greetings can be different in the day, at night or on holidays or weekends. You can also have a special greeting if the caller misdials. You record the greetings just the way you want. For example, "*Dial the three-digit extension number you wish to reach, dial 500 for Sales or dial 600 for Customer Service*." When assigning and recording Automated Attendant greetings, you can choose among the 48 VRS messages.

VRS Waiting Message

Using VRS Waiting Message, the system can automatically answer an incoming trunk call first (either a normal trunk or one designated for a department group) to let the outside caller hear a recorded message when the call is not answered in a programmed period of time. With this feature, the call keeps ringing at the same destination until it is answered or until other programming, takes affect.

This feature can use up to two messages for an incoming call and the duration between the messages is programmable. These messages will be repeated and, between these messages, either ring back tone or Music on Hold can be played.

This feature has two different modes:

- **Permanent Mode**
  This mode sets the feature using system programming and is available for the following types of calls.

  A. Normal Incoming Call
  When the call is not answered or a user presses the VRS Waiting Message function key, this feature will be initiated. The waiting message will be played until other no-answer program (transfer to another incoming ring group, disconnect, etc.) takes affect.

  B. Designated Call for the Department Group
  When a department group receives a call from a DID, DIL, DISA or E&M trunk and all terminals in the group are busy, the call will be put in a queue and VRS Waiting Message will be also be initiated. The waiting message will be played until other no-answer program (transfer to another incoming ring group, disconnect, etc.) takes affect or a terminal becomes available to receive the department call.

- **Manual Mode**
  This mode can be programmed by pressing the "VRS Waiting Message" function key from a KST to set this feature for each incoming ring group. This mode can be used for normal incoming calls only.

The following programs would be used to define the VRS Waiting Message feature and the trunk overflow:

- 11-10-20: Service Code Setup (for System Administrator), VRS - Record/Erase Message
- 15-07: Programmable Function Keys
  Incoming Call Queuing Setup (Function Number 52)
  Queuing Message Starting (Function Number 53)
- 16-01-08: Department Group Basic Data Setup, Queuing for Extension Group Call
- 20-07-13: Class of Service Options (Administrator Level), VRS Record
- 20-15-11: Ring Cycle Setup, VRS Waiting Message Incoming Call
- 22-01-04: System Options for Incoming Calls, DIL No Answer Recall Time
- 22-01-08: System Options for Incoming Calls, DID Pilot Call No Answer Timer
- 22-01-10: System Options for Incoming Calls, VRS Waiting Message Operation
- 22-01-11: System Options for Incoming Calls, VRS Waiting Message Interval Time
- 22-08-01: DIL/IRG No Answer Destination
- 22-14-xx: VRS Delayed Message for IRG
- 22-15-xx: VRS Waiting Message for Department Group
- 25-07-02: System Timers for VRS/DISA, VRS/DISA No Answer Time
- 25-07-03: System Timers for VRS/DISA, Disconnect after VRS/DISA re-transfer to IRG

Transfer to the VRS

Any extension user can Transfer their outside call to the VRS. This lets their caller take advantage of the Automated Attendant's extensive routing capabilities. To Transfer the call, the user simply places the call on Hold, dials the unique VRS service code (set up in system programming) and hangs up.

Voice Prompting Messages

The VRS feature provides the system with Voice Prompting Messages. These Voice Prompting Messages tell the extension user the status or progress of their call. For example, if a user calls extension 300 when it is busy, they hear, "*Station 300 is busy. For Callback, dial 2.*"

The following table shows the available Voice Prompting Messages.

Voice Prompting Messages		
Message No.	**Message**	**This message will play when . . .**
1-00	This is station	A user dials 6 for the extension number.
1-01	Station	A user dials 6 for the extension number.
1-02	Is busy, for callback dial	A user is calling a busy extension.
1-03	All lines are busy, for call-back dial	A user dials 9 or 804 (+ trunk group) and all trunks are busy.
1-04	Please do not disturb	A user calls an extension that has enabled Do Not Disturb.
1-05	Please hold on, all lines are busy, your call will be answered when a line becomes free.	ACD message - refer to the ACD Manual (P/N 0893202).
1-06	Please hold on, your call is being rerouted	Call Forwarding Off-Premise is rerouting your call.
1-07	The lowest cost line is busy, please wait for the next one.	ARS tries to reroute the user's call and the least costly route is busy.
1-08	The number you have dialed is not in service.	User dials a Service Code that Class of Service prevents.
1-09	You have a message.	An extension user has a Message Waiting to which they have not responded.
1-10	You have a message.	An extension user has a Message Waiting to which they have not responded.
1-11	Your calls have been for-warded.	An extension user has forwarded their calls.
1-12	Vacant number	An extension user has dialed an extension that does not exist.
1-13	Is unavailable	An outside caller dials an extension through the Automated Attendant and the extension is busy.
1-14	Please dial a new station	
1-15	Or dial	
1-16	To wait	
1-17	To leave your number	
1-18	Dial # to call you back at	
1-19	Enter your area code and telephone number	An outside caller dials an extension through the Automated Attendant and the extension is busy.
1-20	Please enter your password	
1-21	Please enter an account code	A user tries to place a trunk call and Forced Account Codes are enabled.

Voice Prompting Messages		
Message No.	**Message**	**This message will play when . . .**
1-22	Please start recording	A user has dialed the code to record a VRS message or Personal Greeting.
1-23	Recording finished	A user is recording a VRS message or Personal Greeting and they have exceeded the maximum allowed recording length.
1-24	Audio file is full	There is no more space available in the VRS for storing messages.
1-25	To listen dial	A user is trying to record a VRS message or Personal Greeting and the recording already exists.
1-26	To erase dial	
1-27	To re-record dial	
1-28	To save dial	
1-29	To leave a message	
1-30	Just a moment	
1-31	Hello	
1-32	Thank you	
1-33	Good-bye	
2-00	Oh	A user dials 6 for the extension number or 8 for the time, or as part of a spoken code (e.g., 804).
2-01	Dial	
2-02	Star	
2-03	Pound	
2-04	Zero	
2-05	One	A user dials 6 for the extension number, 8 for the time and date or as part of a spoken code (e.g., 114).
2-06	Two	
2-07	Three	
2-08	Four	
2-09	Five	
2-10	Six	
2-11	Seven	
2-12	Eight	
2-13	Nine	
2-14	Ten	A user dials 8 for the time and date.
2-15	Eleven	
2-16	Twelve	
2-17	Thirteen	A user dials 3 for the date.
2-18	Fourteen	
2-19	Fifteen	
2-20	Sixteen	
2-21	Seventeen	
2-22	Eighteen	
2-23	Nineteen	
2-24	Twenty	
2-25	Thirty	
2-26	Forty	

Voice Prompting Messages		
Message No.	**Message**	**This message will play when . . .**
2-27	Fifty	
2-28	Sixty	
2-29	Seventy	
2-30	Eighty	
2-31	Ninety	
2-32	Hundred	
2-33	Thousand	
2-43	Message	
2-44	Messages	
2-64	January	
2-65	February	
2-66	March	
2-67	April	
2-68	May	
2-69	June	
2-70	July	
2-71	August	
2-72	September	
2-73	October	
2-74	November	
2-75	December	
2-76	Sunday	A user dials 8 for the date.
2-77	Monday	
2-78	Tuesday	
2-79	Wednesday	
2-80	Thursday	
2-81	Friday	
2-82	Saturday	
2-83	The date is	A user dials 8 for the date.
3-04	The time is	A user dials 8 for the time.
3-05	AM	
3-06	PM	

900 Preamble

If the system has trunks that are part of a 900 (caller paid) service, the VRS can automatically play a prerecorded message when a user answers the call. This prerecorded message should describe the 900 service features and cost. The 900 Preamble ensures that the caller is always aware that they have accessed a 900 “pay- per-call” service. A system user cannot converse with the caller until the preamble message ends. If the caller hangs up before the message completes, they are not charged for the call. If the caller waits for the message to end, they can talk to a system user and call charging begins. The system will answer as many 900 calls as there are available VRS ports. If a 900 calls comes in when all VRS ports are busy, the call will not appear on an extension until a VRS port is available.

You can also use the 900 Preamble message to set up an *Auto-Answer with Greeting* application. When a receptionist answers a call, the VRS can play a preamble message such as, "Welcome to ABC Company. How can I help you?" When the caller replies, the receptionist answers, "One moment please," and quickly extends the call to the desired party. This ensures that all incoming calls are answered quickly, courteously and consistently.

Time, Date and Station Number Check

If the system has a DSP daughter board installed for VRS, any keyset user can find out the time, date or the extension's number while their phone is idle (on hook). The time and date check saves the user time since they don't have to look for a clock or calendar. Hearing the extension number conveniently identifies non-display keysets. To find out their extension number, the user presses 6 (for **N**umber). To listen to the time and date, the user presses 8 (for **T**ime).

Available with 64-Port Basic NTCPU

Prior to 2.00 software, the VRS feature required the NTCPU to be either:

- The Feature Upgrade PAL chip (P/N 0891039) with the 64-Port Basic NTCPU (P/N 0891002) OR
- The Enhanced NTCPU (P/N 0891038)

With software 2.00 or higher, and an update of the system's boot code, the VRS feature is available with the 64-port Basic NTCPU (no Feature Upgrade PAL chip required).

Note that the VRS feature requires a DSPDB be attached to the NTCPU with the optional VRS flash card installed. Although the DSPDB is recognized for this feature, it ***will not*** provide any additional tone resources (DTMF receivers, Caller ID receivers, or call progress tone detection).

Refer to the Boot Code Update Instructions, P/N 0893211, for details on installing the updated boot code.

Conditions

(A.) Park and Page announcements will only repeat once.
(B.) VAU Record time is fixed at 2 minutes and it cannot be change.

Default Setting

Disabled.

Programming

- **11-10-20 : Service Code Setup (for System Administrator) - VRS Record/Erase Message**
  Define the service code to use to record or erase a VRS message (default: 116).
- **11-10-21 : Service Code Setup (for System Administrator) - VRS General Message Playback**
  Define the service code to use to playback the general message (default: 111).
- **11-10-22 : Service Code Setup (for System Administrator) - VRS Record/Erase General Message**
  Define the service code to use to record or erase a general message on the VRS (default: 112).
- **11-12-54 : Service Code Setup (for Service Access) - VRS Routing**
  Define the service code to use when setting up ANI/DNIS Routing to the VRS Automated Attendant. Using the Transfer feature, this also allows a call to be transferred to the VRS (default: 882).

- **15-07-01 : Programmable Function Keys**
  For one-button access to the Call Forwarding (device) setup code (*4), assign a Call Forwarding (Device) key (code 17). For the VRS Waiting Message feature, assign the VRS Incoming Call Queuing Setup key (code 52 + ring group #) to manually enable the feature.
- **16-01-08: Department Group Basic Data Setup - Queuing for Extension Group Call**
  For VRS Waiting Message, setting this to "1" allows calls to a busy Department Group to queue for the next available extension.
- **20-06-01 : Class of Service for Extensions**
  Assign a Class of Service (1-15) to extensions.
- **20-07-13 : Class of Service Options (Administrator Level) - VRS Record**
  In an extension's Class of Service, enable (1) or disable (0) the extension's ability to record, erase and listen to VRS messages.
- **20-07-14 : Class of Service Options (Administrator Level) - VRS General Message Listen**
  In an extension's Class of Service, enable (1) or disable (0) the extension's ability to dial 4 or Service Code 111 and listen to their General Message.
- **20-07-15 : Class of Service Options (Administrator Level) - VRS General Message Record**
  In an extension's Class of Service, enable (1) or disable (0) the extension's ability to dial Service Code 112 and record, listen to and erase the General Message.
- **20-11-15 : Class of Service Options (Hold/Transfer Service) - VRS Personal Greeting**
  In an extension's Class of Service, enable (1) or disable (0) the extension's ability to dial Service Code *4 7 to record, listen to or erase a Personal Greeting. This option also affects Park and Page.
- **20-13-23 : Class of Service Options (Supplementary Service) - Display the Reason for Transfer**
  Enable (1) or disable (0) an extension's ability to display the reason (Call Forward, Busy, No Answer or DND) a VRS, DID, DISA, or ISDN call is being transferred to their extension.
- **20-15-11: Ring Cycle Setup, VRS Waiting Message Incoming Call**
  Set the ring cycle callers hear when the VRS Waiting Message feature is used.
- **21-01-02 : System Options for Outgoing Calls - Intercom Interdigit Time**
  Automated Attendant callers must dial digits within this interval. If the caller doesn't, they hear busy tone and must hang up and dial again.
- **22-01-10: System Options for Incoming Calls, VRS Waiting Message Operation**
  Determine whether the VRS Waiting Message is automatically (0) or manually (1) set.
- **22-01-11: System Options for Incoming Calls, VRS Waiting Message Interval Time**
  For VRS Waiting Message, determine the number of seconds between the VRS messages (0-64800).
- **22-02-01 : Incoming Call Trunk Setup**
  For each Night Service mode, enter 1 if trunk should be automatically answered by VRS Automated Attendant.
- **22-04-01 : Incoming Extension Ring Group Assignment**
  Assign extensions to the Ring Group programmed in 25-03 and 25-04 that should receive the rerouted calls.
- **22-14-01 : VRS Delayed Message for IRG, 1st Waiting Message Start Time**
  For each Ring Group, set how long the system waits before playing the first message (0-64800 seconds). This timer is also used for VRS Waiting Message.
- **22-14-02 : VRS Delayed Message for IRG, 1st Waiting Message Number**
  For each Ring Group, select the message number to be played as the first message (0-49). This program is also used for VRS Waiting Message.
- **22-14-03 : VRS Delayed Message for IRG, 1st Waiting Message Sending Count**
  For each Ring Group, set the number of times the first message will be played (0-255). This program is also used for VRS Waiting Message.

- **22-14-04 : VRS Delayed Message for IRG, 2nd Waiting Message Number**
  For each Ring Group, select the message number to be played as the second message (0-49). This program is also used for VRS Waiting Message.
- **22-14-05 : VRS Delayed Message for IRG, 2nd Waiting Message Sending Count**
  For each Ring Group, set the number of times the first message will be played (0-255). This program is also used for VRS Waiting Message.
- **22-14-06 : VRS Delayed Message for IRG, Tone Kind at Message Interval**
  For each Ring Group, determine what the caller will hear between messages (0=ring back tone, 1=MOH, 2=BGM). This program is also used for VRS Waiting Message.
- **22-14-07 : VRS Delayed Message for IRG, Disconnect Time**
  For each Ring Group, set how long the system will wait after playing the VRS message before disconnecting the call. To prevent the call from disconnecting, set this option to "0". This program is also used for VRS Waiting Message.
- **22-15-01 : VRS Waiting Message for Department Group, 1st Waiting Message Start Time**
  For each Department Group, set how long the system waits before playing the first message (0-64800 seconds). This program is also used for VRS Waiting Message.
- **22-15-02 : VRS Waiting Message for Department Group, 1st Waiting Message Number**
  For each Department Group, select the message number to be played as the first message (0-49). This program is also used for VRS Waiting Message.
- **22-15-03 : VRS Waiting Message for Department Group, 1st Waiting Message Sending Count**
  For each Department Group, set the number of times the first message will be played (0-255). This program is also used for VRS Waiting Message.
- **22-15-04 : VRS Waiting Message for Department Group, 2nd Waiting Message Number**
  For each Department Group, select the message number to be played as the second message (0-49). This program is also used for VRS Waiting Message.
- **22-15-05 : VRS Waiting Message for Department Group, 2nd Waiting Message Sending Count**
  For each Department Group, set the number of times the first message will be played (0-255). This program is also used for VRS Waiting Message.
- **22-15-06 : VRS Waiting Message for Department Group, Tone Kind at Message Interval**
  For each Department Group, determine what the caller will hear between messages (0=ring back tone, 1=MOH, 2=BGM). This program is also used for VRS Waiting Message.
- **22-15-07 : VRS Waiting Message for Department Group, Disconnect Time**
  For each Department Group, set how long the system will wait after playing the VRS message before disconnecting the call (0-64800 seconds). To prevent the call from disconnecting, set this option to "0". This program is also used for VRS Waiting Message.
- **24-02-03 : System Options for Transfer - Delayed Call Forwarding Time**
  Set how long a telephone with Personal Greeting options 2 or 6 enabled will ring before the call reroutes to the programmed destination.
- **25-02-01 : VRS/DISA VRS Message**
  For each Night Service mode, enter 1 at the "Talkie" prompt if trunk should be automatically answered by VRS and the message number the caller should hear (1-48).
- **25-03-01 : VRS/DISA Transfer Ring Group With Incorrect Dialing**
  Set the destination that Automated Attendant (OPA) calls ring if the OPA caller dials an incorrect extension number. This also sets the options for DISA calls. The system allows Ring Groups, In-Skin/External Voice Mail, Centralized Voice Mail or Disconnect=0.
  ➪ Aspire S Ring Groups: 1-8, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
  ➪ Aspire Ring Groups: 1-100, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail

- **25-04-01 : VRS/DISA Transfer Ring Group With No Answer/Busy**
  Set the destination that Automated Attendant (OPA) calls ring if the OPA caller dials an extension that doesn't answer or is busy. This also sets the options for DISA calls. The system allows Ring Groups, In-Skin/External Voice Mail, Centralized Voice Mail or Disconnect=0.
  ➪ Aspire S Ring Groups: 1-8, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
  ➪ Aspire Ring Groups: 1-100, 102=In-Skin/External Voice Mail, 103=Centralized Voice Mail
- **25-05-01 : VRS/DISA Error Message Assignment**
  For each trunk that will be answered by the VRS, enter the VRS message (1-48) the outside caller hears if they dial incorrectly after answer. If you enter 0, the call reroutes according to Program 25-03 and Program 25-04. Make one entry for each Night Service mode.
- **25-06-01 : VRS/DISA One-Digit Code Attendant Setup - Next Attendant Message Number**
  Set up single digit dialing for Automated Attendant callers. For each VRS Message programmed to answer outside calls (see Program 25-02-01), specify the digit the Automated Attendant caller dials (1-12, where 10=0, 11=* and 12=#). (Keep in mind that if you assign destinations to digits 3 and 4, outside callers will not be able to dial system extensions.)
- **25-06-02 : VRS/DISA One-Digit Code Attendant Setup - Destination Number**
  Set up single digit dialing for Automated Attendant callers. For each VRS Message programmed to answer outside calls (see Program 25-02-01), specify the destination reached (four digits maximum) when the caller dials the single digit code.
- **25-07-02 : System Timers for VRS/DISA - VRS/DISA No Answer Time**
  If an Automated Attendant caller dials an extension that doesn't answer, the call will wait this interval before rerouting to the Ring Group specified in Program 25-03 and 25-04. This setting also affects unanswered DISA calls.
- **25-07-03: System Timers for VRS/DISA - Disconnect after VRS/DISA Re-Transfer to IRG**
  Set the timer for disconnecting a call after it is re-transferred to a ring group by VRS/DISA.
- **25-13-01 : System Option for DISA - VRS Password**
  Enter the password DISA callers must dial before the system will allow them to record, listen to or erase VRS messages.
- **31-02-01 : Internal Paging Group Assignment - Internal Paging Group Number**
  When using Park and Page, assign extensions to Internal Paging Zones. An extension must be assigned to a 2-digit zone in order to access any of the 2-digit zones.
  ➪ Aspire S Internal Page Zones: 0, 1-8
  ➪ Aspire Internal Page Zones: 0, 1-9, 00, 01-64
- **31-04-01 : External Paging Zone Group**
  When using Park and Page, assign each External Paging Zone to an External Paging Group (1-8) used for accessing the zone.
  ➪ Aspire S External Paging Zone: 1-8
  ➪ Aspire External Paging Zone: 1-9
- **31-07-01 : Combined Paging Assignments**
  When using Park and Page, for each External Paging Zone, assign a corresponding Internal Zone for Combined Paging.
  ➪ Aspire S External Paging Zone: 1-8, 0 for All Call
  ➪ Aspire External Paging Zone: 1-9, 0 for All Call
- **40-07-01 : Voice Prompt Language Assignment for VRS**
  Select the language to be used for the VRS (default=1, English). Although the system allows this option to be changed in programming, the language will only change if the DSPDB has the firmware which provides the newly selected language.
- **40-08-01 : Voice Prompt Language Assignment for Mailboxes**
  Select the language to be used for the mailboxes (default=1, English). Although the system allows this option to be changed in programming, the language will only change if the DSPDB has the firmware which provides the newly selected language.

- **40-10-01 : Voice Announcement Service Option - VAU Fixed Message**
  Enable (1) or disable (0) the system's ability to play the fixed VRS messages (such as "You have a message.").
- **40-10-02 : Voice Announcement Service Option - General Message Number**
  Enter the number of the VRS message you want to use for the General Message (01-48). The message you select should not be used as a VRS message.
- **40-10-03 : Voice Announcement Service Option - VRS No Answer Destination**
  When all VRS ports are busy, incoming DILs and DISA calls wait for the VRS No-Answer Time (Program 40-10-04) and then ring the VRS No Answer Destination Ring Group.
- **40-10-04 : Voice Announcement Service Option - VRS No-Answer Time**
  If an extension has Personal Greeting enabled and all VRS ports are busy, a DIL or DISA call to the extension will wait this interval for a VRS port to become free. If a VRS port is still not available, the call will ring the VRS No Answer Destination set in Program 40-10-03.
- **40-10-05 : Voice Announcement Service Option - Park and Page Repeat Timer**
  If a Park and Page is not picked up within this interval, the Paging announcement repeats.
- **40-11-01 : Pre-Amble Message Assignment**
  For each trunk that should have the 900 Preamble option, enter the number of the VRS message (1-48) that is your recorded preamble message. Enter 0 for no preamble.

Related Features

Transfer

Transferred calls on DISA, DID, DIL, ISDN trunks, or from the VRS can display the reason a call is being transferred (Call Forward, Busy, No Answer, or DND).

Voice Mail

Park and Page and Personal Greeting can also be programmed in the VRS.

Operation

VRS MESSAGES

To record a VRS message:

1. Press idle CALL key.
   OR
   At a single line telephone, lift handset.
2. Dial 116.
3. Dial 7 (**R**ecord).
4. Dial the VRS message number you want to record (01-48).
5. When you hear, "Please start recording" followed by a beep, record your message.
   Normally, your message cannot exceed 16 seconds. If you hear, "Recording finished," you have exceeded the allowed message length.
6. Press # to end recording
   OR
   Hang up to save the message.

To listen to a previously recorded VRS message:

1. Press idle CALL key.
   OR
   At a single line telephone, lift handset.
2. Dial 116.
3. Dial 5 (**L**isten).
4. Dial the VRS message number to which you want to listen (01-48).
   You'll hear the previously recorded message. If you hear a beep instead, there is no previous message recorded.
5. Press # to hear the message again.
   OR
   To hear another message, press 5 and then enter the message number (01-48).
   OR
   Hang up.

To erase a previously recorded VRS message:

1. Press idle CALL key.
   OR
   At a single line telephone, lift handset.
2. Dial 116.
3. Dial 3 (**E**rase).
4. Dial the number of the VRS message you want to erase (01-48).
5. Press HOLD (keyset only) to cancel the procedure without erasing (and return to step 3).
   OR
   Hang up to erase the message.

To record, listen to or erase a VRS message if you call in using DISA:

1. Place call to the system.
2. After the system answers, dial the DISA password (normally 000000).
3. Dial 116 and the VRS password.
4. Dial the function you want.
   7 = **R**ecord
   5 = **L**isten
   3 = **E**rase
5. Dial the message number (01-48), record the message and press # to end recording.
   If you dialed 7 to record, you can dial # to listen to the message you just recorded.
   If you dialed 5 to listen, you can dial 5 and the message number to hear it again or if you want to Record, listen to or erase another message, go back to step 4.

GENERAL MESSAGE

To listen to the General Message:

Keyset Only

Your MW LED flashes when there is a new General Message. A voice message periodically reminds you.

1. Do not lift the handset or press CALL.
2. Dial 4 (**G**eneral).

   OR

1. At lift the handset and dial 111.

   You will hear the General Message.

   Normally, your MW LED goes out. If it continues to flash, you have unanswered "Message Waiting" requests or new messages in your "Voice Mail" mailbox.

To record, listen to or erase the General Message:

1. Press idle CALL key.

   OR

   At single line telephone, lift handset.
2. Dial 112.
3. Dial the function you want.

   7 = **R**ecord
   5 = **L**isten
   3 = **E**rase

   If you dialed 7 to record, press # to end the recording.

   If you dialed 5 to listen, you can dial 5 to listen to the message again.

   To Record the General Message again, go back to step 1.

   If you dialed 3 to erase the General Message, you must go to step 4 (hang up). To cancel without erasing on a keyset, press HOLD instead and go back to step 1.
4. Hang up when you are done.

PERSONAL GREETING

To enable a Personal Greeting:

1. Press idle CALL key (or lift handset at SLT) and dial *4.
   OR
   Press Call Forwarding (Device) key (PGM 15-07 or SC 851: 54).
2. Dial 7 + When you hear, "*Please start recording*," record your Personal Greeting.
   If you already have Personal Greeting or Park and Page set up, you can dial:
   7 to re-record
   5 to listen (then # to listen again)
   3 to erase (then optionally HOLD to cancel the erase)
3. Dial # + Personal Greeting condition:
   2 = Busy or not answered
   4 = Immediate
   6 = Not answered
4. Dial the destination to receive your calls. The destination can be:
   - A co-worker's extension
   - Your Voice Mailbox (by dialing the Voice Mail master number)
   - Off-premise via Common Abbreviated Dialing (by entering #2 + bin)
   - Greeting without forwarding so caller hears busy (by entering your extension number)
   You cannot forward to a Department Group pilot number.
5. Dial Personal Greeting type:
   2 = All calls
   3 = Outside calls only
6. Press SPK to hang up (or hang up at SLT).
   Your DND or Call Forwarding (Device) Programmable Function Key flashes when Call Forwarding is activated.

To cancel your Personal Greeting:

1. Press idle CALL key (or lift handset at SLT).
2. Dial *4 7 + 3.
3. Press SPK to hang up (or hang up at SLT).

PARK AND PAGE

To have the system Page you when you have a call:

1. Press idle CALL key (or lift handset at SLT) and dial *4.
   OR
   Press Call Forwarding (Device) key (PGM15-07 or SC 851: 17).
2. Dial 7 + When you hear, "Please start recording," record you Personal Greeting.
   If you already have Park and Page or Personal Greeting set up, you can dial:
   7 to re-record
   5 to listen (then # again to listen again)
   3 to erase (the optionally HOLD to cancel the erase)
3. Dial #7.
4. When you hear, "Please start recording," record your Page.
5. Dial # + Dial the Page Zone that should broadcast your announcement.
   *For example, for Internal Zone 1 dial 801 + 1. Or, for Combined Paging Zone 1 dial *1 + 1.*
6. Dial Park and Page type:
   2 = All calls
   3 = Outside calls only
7. Press SPK to hang up (or hang up at SLT).
   Your DND or Call Forwarding (Device) Programmable Function Key flashes when Call Forwarding is activated.

To pick up your Park and Page:

1. Press idle CALL key (or lift handset at SLT).
2. Dial ** + your extension number.

To cancel your Park and Page:

1. Press idle CALL key (or lift handset at SLT).
2. Dial *4 73.
3. Press SPK to hang up (or hang up at SLT).

TIME, DATE AND STATION NUMBER CHECK

To check the extension number of any keyset:

1. Do not lift the handset or press idle CALL key.
2. Dial 6 for extension **N**umber.

To check the system time and date from any keyset extension:

1. Do not lift the handset or press idle CALL key.
2. Dial 8 for **T**ime and date.

900 PREAMBLE

To answer a 900 Preamble call:

1. Answer the ringing call.
   The line key turns solid red as the system plays the preamble to the caller.
2. When you hear two beeps and the line key turns green, converse with the caller.

Aspire S	Aspire M/L/XL
• Available - 16 IP extensions max.	• Available with software 2.00 or higher. 64 IP extensions maximum with Basic CPU or with Feature Upgrade PAL chip - 512 IP extensions maximum with enhanced CPU.
• Gain Setup for VOIPU available.	• Gain Setup for VOIPU available with software 1.11+.
• Enhanced Echo Adjustment available with software 1.18+.	• Enhanced Echo Adjustment available with software 1.18+.
• Calling Party Number available with software 2.09+.	• Calling Party Number available with software 2.09+.
• Out-of-band DTMF signaling requires software 2.63+.	• Out-of-band DTMF signaling requires software 2.63+.
• SIP requires software 2.63+.	• SIP requires software 2.63+.
• VoIP Port Assignment improved with 4.93+.	• VoIP Port Assignment improved with 4.93+.
• RTP Forwarding available with 4.93+.	• RTP Forwarding available with 4.93+.

Description

VoIP (voice over Internet protocol or voice over IP) allows the delivery of voice information using the Internet protocol (sending data over the Internet using an IP address). This means that voice information, in a digital form, can be sent in packets over the Internet rather than using the traditional public switch telephone network (CO lines). A major advantage of VoIP and Internet telephony is that it avoids the tolls charged by ordinary telephone service.

Using VoIP equipment at a gateway (a network point that acts as an entrance to another network), the packetized voice transmissions from users within the company are received and routed to other parts of the company's intranet (local area or wide area network) or they can be sent over the Internet using CO lines to another gateway.[1]

The Aspire VoIP supports H.323, H.325, and H.245 trunks and compressions of G.711, G.723.1, and G.729.

Note: The Aspire IP phones are not IEEE 802.3af compliant unless an ILPA adapter is used for PoE. The ILPA, however, cannot be used on the Uniden H.323 telephones. Refer to the ILPA Adapter Instructions, P/N 0893109 for details.

Program Available for Gain Setup of VOIPU PCB

The system software provides an option to adjust the gain setting for the VOIPU PCB.

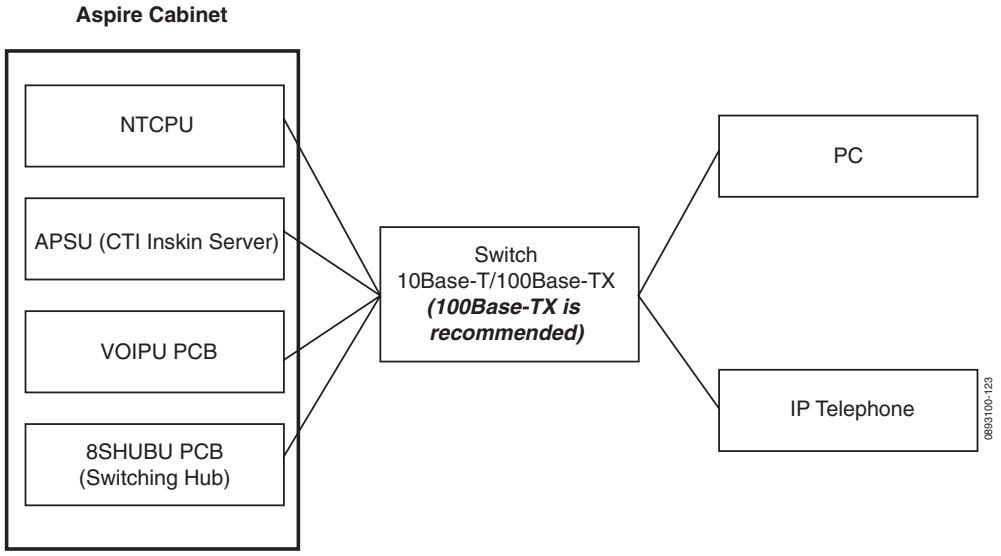
Calling Party Number Setup for Trunks and Extensions

The system provides two programs which allow the programmed entry of the Calling Party Number. These entries determine the information displayed when VoIP trunks and extensions are used.

1. The voice quality of VoIP is dependent on variables such as available bandwidth, network latency and Quality of Service (QoS) initiatives, all of which are controlled by the network and internet service providers. Because these variables are not in NEC's control, it cannot guarantee the performance of the user's IP-based remote voice solution. Therefore, NEC recommends connecting VoIP equipment through a local area network using a Private IP address.

Using LANs

Using a LAN setup (local area network) with the Aspire system complies with the ethernet standard (10Base-T/100Base-TX).



To connect a telephone to a LAN connection, the system allows the use of an Aspire digital IP 34-button keyset (referred to as Aspire IPhone), an Aspire digital keyset with an IP Adapter installed or an H.323 IP digital telephone. For details on installing the IP Adapter, refer to the Aspire Hardware Manual (P/N 0893100).

If connecting a LAN to a WAN (wide area network), follow the instructions included with the ADSL modem or gateway device.

IP Address

Equipment/devices used in the Aspire LAN setup must have an IP address assignment. An IP address assigns a unique address for each device. There are two types of IP addresses: Private and Global. A Private IP address is not accessible through the internet - a Global IP address can be accessed through the internet.

With a Private IP address, with equipment that does not access the internet directly, addresses can be assigned to the equipment within Class A, B or C by assigning a number within the class's range of numbers.

Class	Allowed IP Address	Recommended Environment
A	10.0.0.0 ---10.22.255.255	Large Scale Network
B	172.16.0.0 --- 172.31.255.255	Mid Scale Network
C	192.168.0.0 --- 192.168.255.255	Small Scale Network

With a Global IP Address, connected equipment can be accessed through the internet, so each address must be unique. To avoid a conflict, the addresses are controlled by ARIN (American Registry for Internet Numbers). To obtain a Global IP Address, contact ARIN or apply with your local ISP (internet service provider).

The first one to three groups of numbers (depending on the subnet mask) identify the network on which your computer is located. The remaining group(s) of numbers identify your computer on that network.

Subnet Mask

As the IP Address includes information to identify both the network and the final destination, the Subnet Mask is used to set apart the network and destination information.

The default subnet masks are:

Class	Default Subnet Mask
A	255.0.0.0
B	255.255.0.0
C	255.255.255.0

In the above table, you'll see that the Subnet Mask is made up of four groups of numbers. When a group contains the number '255', this is telling the router to ignore or mask that group of numbers in the IP address as it is defining the network location of the final destination. So, for example, if the IP Address were: 172.16.0.10 and the Subnet Mask used was Class B (255.255.0.0), the first two groups of numbers (172.16) would be ignored once they reached the proper network location. The next two groups (0.10) would be the final destination within the LAN to which the connection is to be made.

DHCP

DHCP (Dynamic Host Configuration Protocol) is a protocol which assigns a dynamic IP Address. Network control may be easier with DHCP as there is no need to assign and program individual IP Addresses for the LAN equipment. To use a dynamic IP Address, a DHCP server must be provided. The Aspire system provides the ability to use DHCP.

When equipment which is connected to the LAN (the DHCP client) is requesting an IP Address, it searches the DHCP server. When the request for an address is recognized, the DHCP server assigns an IP Address, Subnet definition, and the IP Address of the router, etc., based upon the system programming.

Note that the NTCPU must always have a static IP address. This address is set in ***Program 10-12-01 : NTCPU Network Setup - IP Address*** (default: 172.16.0.10).

Gatekeeper

Whenever an H.323 terminal activates, a check is made of the network to see if there are any gatekeepers available. When a gatekeeper is present, it provides users with:

- Address Translation
  Users typically do not know the IP addresses of other terminals. When a user makes a call, the gatekeeper translates an alias address (name or number) to the destination address.
- Admissions Control
  Users will not all be able to access the network at the same time because of limited shared resources. Gatekeepers may restrict network access based on call authorization, bandwidth usage, or some other criteria. It is important to note that Admissions Control is a way to preserve the integrity of the calls (provide QoS guarantees) that are already up and operating when a user requests access.
- Bandwidth Control
  Besides network access control, the gatekeeper offers network managers the ability to restrict or assign bandwidth to different applications along certain protocol conventions. This is another place network managers can enforce QoS guarantees and other enterprise-wide usage policies.

With the Aspire system, a separate external gatekeeper is not required unless connecting to an outside H.323 endpoint/gateway which requires an outer gatekeeper or if over 50 outer addresses must be registered. Otherwise, the Aspire provides tables within the system programming for address resolution.

Routers

When purchasing a router for use with the Aspire IP feature, the minimum requirements would be that it provide VPN and QoS. Current VoIP protocols for the Aspire, NGT and H.323 telephones can not communicate over NAT. Therefore, when communications is required over NAT, the router must support VPN. Note that a router which supports 'VPN Pass Through' requires a VPN server.

The priority control feature is required to prevent RTP packet loss. If a WAN is used for VoIP only and the bandwidth is wide enough for the VoIP channel, then the QoS feature might not be required.

The following are available routers which provide VPN and QoS:

- NEC IX1000 / 2000 Series
- Yamaha RT105, RTX1000 / 2000
- Cisco 800 Series
- Furukawa FITELnet - F40
- Fujitsu SiR-170, SiR-150

The following routers provide VPN but no priority control (QoS):

- Linksys BEFSX41, DEFVP41
- OMRON MR104DV, MR104FH
- Allied Telesis AR410

VoIP Bandwidth Calculation

A digital telephone system converts an analog voice signal into a stream of bits expressed in K bits per second (where K is used to mean one thousand). For standard PCM digital encoding, this stream of bits is 64 K bits per second. This is 64 K bps in each direction (transmit and receive).

To improve transmission efficiency, this bit stream is compressed using a standard compression algorithm such as G.729. The result is still a bit stream, but with fewer bits per second. For example, G.729 will reduce the 64 K bits per second to a bit stream of 8 K bits per second.

This bit stream is then divided into chunks (called Voice Samples or Voice Frames) that can be placed in packets for transmission over a data network.

This reduced bit stream is examined repeatedly in fixed time intervals. This examination time is called the Voice Frame Interval. This is the time used to collect the bits for one Voice Frame. The Voice Frame Interval is expressed in milliseconds (ms). A millisecond is one thousandth of a second.

To help determine the bandwidth requirements for the system, the NEC Technical Support web site (http://ws1.necii.com) provides a bandwidth calculator. This web site requires registration with the NEC Sales Support. Contact them by phone (1-800-365-1928) or EMail (ubsdsupport@necinfrontia.com) in order to register. It is important to remember that the bandwidth calculator is based on a single voice channel. It takes two voice channels (send and receive) for each telephone conversation.

Refer to **Bandwidth Setting for Aspire** (page 692) for additional information.

IP Hardware

PCBs:

- **NTCPU** - Signals the gateway with VoIP communication
- **4VOIPU** - VoIP PCB provides a 4-channel voice packet gateway unit and works as a media gateway for VoIP communication. This PCB is required for either VoIP trunks or when using VoIP keysets which talk to non-IP keysets. VoIP keyset-to-VoIP keyset can talk without a media gateway and without using any DSP resources using the Peer-to-Peer feature (page 694). The 4VOIPU PCB requires 4 trunk ports.
- **4VOIPDB** - VoIP daughter board provides an additional 4 channels when attached to either the 4VOIPU or 16VOIPU PCB. The 4VOIPDB requires 4 trunk ports.
- **16VOIPU** - VoIP PCB provides a 16-channel voice packet gateway unit and works as a media gateway for VoIP communication. This PCB is required for either VoIP trunks or when using VoIP keysets which talk to non-IP keysets. VoIP keyset-to-VoIP keyset can talk without a media gateway and without using any DSP resources using the Peer-to-Peer feature (page 694). The 16VOIPU PCB requires 16 trunk ports.
- **16VOIPDB** - VoIP daughter board provides an additional 16 channels when attached to the 16VOIPU PCB. The 16VOIPDB requires 16 trunk ports.
- **8SHUBU** - Provides an 8-port switching hub for use with the Aspire system. This PCB can also be used to provide PoE for Aspire IP equipment.

When installing a VoIP PCB, the system allocates the maximum number of trunk ports for the PCB being installed. For instance, the 4VOIPU PCB requires 4 ports, while the 16VOIPU PCB requires 16 ports. If the PCB is not going to be used for trunks, the logical trunk ports can be set to '0' in **Program 10-03-01 : PCB Setup**, but the physical trunk ports are still assigned to the PCB and cannot be used for any other PCB. If the trunk ports will not be used and the trunk port usage is a concern, plug the VOIPU PCBs into the system last. The system will allow extension ports to be assigned even if there are no trunk ports available. A maximum of 512 IP extensions or 200 IP trunks are possible with the Aspire. The VoIP PCBs can be plugged into any universal slot.

Terminals:

- **IPhone** - Aspire 34-button multi-line IP phone
- **IP Adapter** - IP adapter connects an Aspire keyset to the VoIP network
  The phone with the adapter installed is also referred to as the Dterm IP phone.
- **ITR-2D-1** - H.323 IP phone
  H.323 phones do not support the ability to send digits after a call has been placed and before it is answered. This means that features which use single digit service codes, such as Voice Over and Barge-In, are not available with this type of phone. These phones do not provide P-codes, and therefore, cannot be used with the inDepth application.

Power must be supplied to the IPhone or the Aspire keyset with IP adapter using either a local or central power supply. The ITR-2D1 phone requires local power. If there is a power outage, the VoIP phones will not work unless the phones are plugged into a UPS (uninterruptible power supply).

When the first IP phone is plugged in, the system automatically assigns the next three consecutive station ports available as IP ports. The next three IP phones installed will use this group of ports. When the fifth IP phone is connected, the next 3 consecutive station ports available will be assigned as IP ports.

Switches/Hubs for PoE

Using a central power supply or the 8SHUBU PCB with the PoE jumpers set, power over category 5 network cables can be provided. This eliminates the need of installing separate power adapters for each IP phone and it allows for centralized power backup. ***Note: The Aspire IP phones are not IEEE 802.3af compliant unless an ILPA adapter is used for PoE. The ILPA, however, cannot be used on the Uniden H.323 telephones. Refer to the ILPA Adapter Instructions, P/N 0893109 for details.***

! CAUTION !

Only Aspire IP phones and Aspire IP Adapters and H.323 phones must be connected to the 8SHUBU. The provided DC voltage provided through the spare pairs (4/5, 7/8) may damage any other equipment.

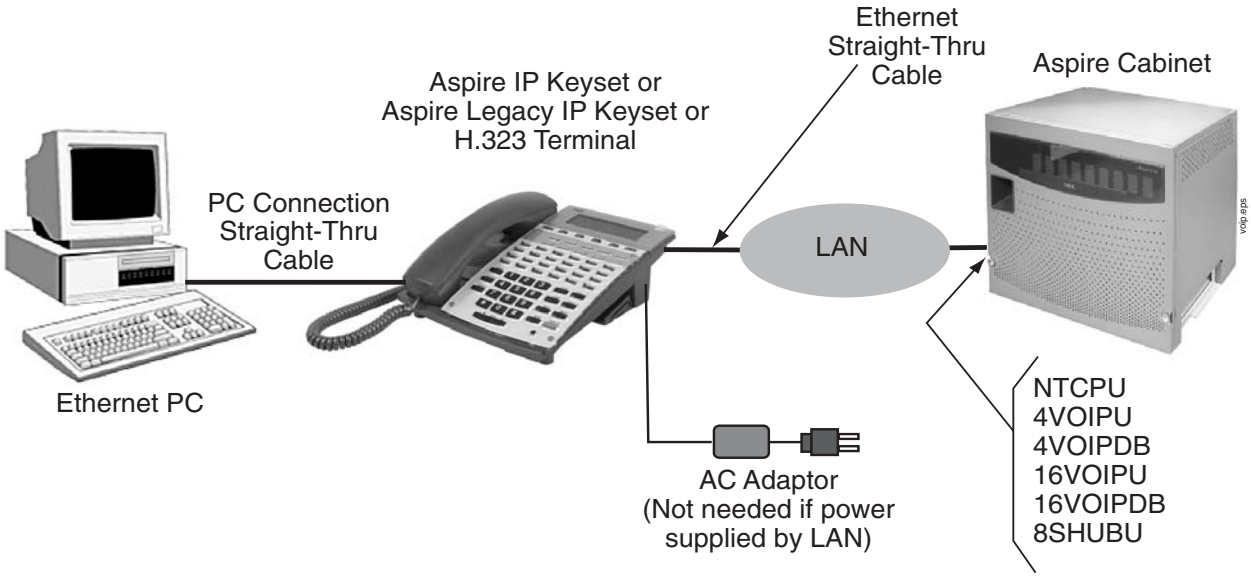
If PoE (power over ethernet) is to be used to eliminate the separate power adapters, due to the power requirements, a separate power source is suggested. It is recommended that you use one of the central power supplies below:

- 8SHUBU PCB - Provides 8-port switching hub and the ability to provide PoE for Aspire equipment.
  - 802.1p/1q Support
- 24-port power supply PoE-managed switch (NEC BlueFire 200/24)
  - PoE (Power Over Ethernet) to Aspire IP/H.323 Phones
  - Spare Pair (4/5, 7/8) / Signal Pair (1/2, 3/6) Selection

    For systems which require layer 2 switching capability and PoE, the NEC BlueFire 200/24 switch is recommended. This unit provides layer 2 switch capability in addition to being able to supply ethernet power to 24 NEC IP terminals.
- Cisco Data Switch - CDP Supported

Other manufacturer central power supplies may be usable, but the above items have been tested for compatibility with the Aspire equipment.

Note: Each IP phone consumes one port. When automatically selected, the port number ranges from 257-512. The port number can be manually assigned using the port range 001-512.



Aspire VoIP Specifications

Category	Feature	Note
IP Address	DHCP Server	NTCPU
	DHCP Client	VOIPU PCB or IP Phone
QoS	802.1p/1q	
	L3 QoS (ToS)	Diffserv/IP Precedence
Maintenance	HTTP Server	NTCPU
Server	H.323 Gatekeeper	For H.323 Phone Registration and Routing
VLAN	Tag and port-based VLAN	
VoCoder	G.711 μ-law/A-law	
	G.729a	
	G.723.1	
	Fax Relay	
Jitter Buffer Size	Set by system programming	
RTP Length	Set by system programming	
Echo Canceller Tail Size	Set by system programming	
Level Adjustment	Set by system programming	
Protocol	H.323	
	NGT (Next Generation Telephone)	
IP Phone	H.323 Phone	H.323 Phone
	NGT Phone	Maximum 512 Phones
IP Trunk	H.323 Trunk	Maximum 200 Trunks

Programming

In addition to the required VoIP programming described under the **Programming - VoIP** (page 651) heading, the following features and options have additional programming which may be required. Refer to the section that applies to the applications required for your location.

- **Programming - VoIP** (page 651)
- **Programming - Static IP Address** (page 651)
- **Programming - Using the Aspire DHCP** (page 656)
- **Programming - Using an External DHCP** (page 658)
- **Programming - H.323 Phone, Setting H.323 Options** (page 661)
- **LAN Connections** (page 665)
- **911 Calls with Networked IP Phones** (page 667)
- **Address Conversion Table** (page 668)
- **Calling Party Number Setup for Trunks and Extensions** (page 668)
- **CODEC Selection** (page 668)
- **Deleting IP Phone Registration** (page 669)
- **Echo Adjustment** (page 669)
- **Enhanced Echo Adjustment** (page 679)
- **Fax Relay** (page 682)
- **Firmware Download for Aspire Keyset with IP Adapter** (page 682)
- **H.323 Gatekeeper Connection** (page 683)
- **H.323 Terminals** (page 684)
- **In-Band/Out-of-Band Signaling** (page 684)
- **IP Extensions** (page 685)
- **IP Trunks** (page 692)
- **Music on Hold for IP Terminals** (page 693)
- **Networking Over IP** (page 693)
- **Peer-to-Peer Connection** (page 694)
- **RTP Forwarding Available** (page 695)
- **Tandem Connection** (page 695)
- **VLAN/QoS** (page 696)
- **VOIPU DSP Resource Assignment** (page 698)

Programming - VoIP

These programs are always required with the VoIP feature. Refer to the following feature options for additional programming.

- **10-12-01 : NTCPU Network Setup - IP Address**
  Select the IP address for the IP connection (default: 172.16.0.10). A static IP address is required by the NTCPU. The system must be reset in order for the change to take effect.
- **10-12-02 : NTCPU Network Setup - Subnet Mask**
  Select the Subnet Mask to be used by the IP server (default: 255.255.0.0).
- **10-12-03 : NTCPU Network Setup - Default Gateway**
  If required, select the default gateway IP address to be used when using a router (default: 0.0.0.0).

Programming - Static IP Address

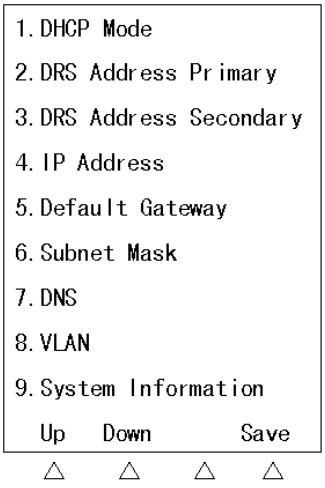
In addition to the system programming for the NTCPU or VOIPU PCB, the IP phone also has options which must be programmed from the phone itself. Be sure to set both the system and phone options.

- **10-13-01 : In-DHCP Server Setup - DHCP Server Mode**
  Disable (0) the system's ability to use the built-in DHCP server.
- **84-04-01 : VOIPU PCB DHCP Server Mode Setup**
  Disable (0) the use of DHCP for the VOIPU PCB.
- **84-05-01 : VOIPU IP Address Setup - IP Address**
  For each VOIPU PCB, enter the IP address for the VOIPU PCB (default: slot 1=172.16.0.20, slot 2 = 172.16.0.21, etc.). The IP address should be increased according to the number of VOIPU PCBs. This entry becomes invalid if Program 84-04 is set to "1" (DHCP enabled).
- **84-06-01 : VOIPU Setup - RTP Port Number**
  For each VOIPU PCB, enter the RTP port number (default 10020).

Programming - Aspire IP Keyset or Aspire Keyset with IP Adapter, Static IP Address

Setting the IP Address on an Aspire IPhone or Aspire Keyset with IP Adapter Using a Static IP Address

1. On the Aspire IP keyset, enter the phone's program mode by pressing HOLD CONF * #.
   This enters the IP User Menu program mode to select the settings for the individual phone.
   *To enter the phone's program mode, the display must show the time, error, or "Connecting" message prior to pressing HOLD CONF * #.*



2. Press 1 to enter the DHCP mode. If not flashing, press "1" to disable the DHCP mode. Press the Soft Key “OK”.
   The flashing item is the current selection.
3. Press 2 to enter the Primary DRS (Device Registration Server). Enter the IP address used in Program 10-12-01 (default: 172.16.0.10). The * key is used to move to the next set of 3 digits (example: 172*16*0*10). Press the Soft Key “OK”.
   The Soft Key “BK” backs up a character to correct an entry.
4. Press 4 to enter the IP address for the phone. The IP address must be unique to each phone but the range is dependent upon system programming (example: IP Keyset 1 = 172.16.0.11, IP Keyset 2 = 172.16.0.12, etc.). The * key is used to move to the next set of 3 digits (example: 172*16*0*10). Press the Soft Key “OK”.
   For on-site LANs, the IP address must be unique to each phone but the range is dependent upon system programming (example: IP Phone 1 = 172.16.0.11, IP Phone 2 = 172.16.0.12, etc.). When phones are off-site (remote LAN) , these settings are dependant on the remote LAN settings - not the phone system settings.
   The Soft Key “BK” backs up a character to correct an entry.
5. Press 5 to enter the Default Gateway address.
   For on-site LANs this is the entry in Program 10-12-03. When phones are off-site (remote LAN) , these settings are dependant on the remote LAN settings - not the phone system settings.
6. Press 6 to enter the Subnet Mask.
   For on-site LANs this is the entry in Program 10-12-02. When phones are off-site (remote LAN) , these settings are dependant on the remote LAN settings - not the phone system settings.
7. Press the Soft Key “SAVE” to save the entries and return the phone to an idle condition.
   Pressing CANCEL instead will ignore the changes made and return the keyset to an idle condition.

In this program entry mode, items "3. DTS Address Secondary" and "7. DNS" can be set as required by the customer but are not required for the feature to function. Item "8. VLAN" is discussed below. Item "9. System Information" displays the entries and does not allow any changes.

Programming - H.323 Phone, Static IP Address

Setting the IP Address on the ITR-2D-1 IP Phone Using a Static IP Address

1. Press the menu key.
   The Setup Menu screen will be displayed with Call Logs as the first entry.
2. Go to the Configuration sub menu using the ▲ key.
3. Press the **Select** key. The Configuration Menu screen will be displayed showing the first entry of Configuration Menu, which is Phone Configuration. Using the ▲ key go to the "Network Menu" which is the second entry under the Configuration Menu.
4. Press the **Select** key. The display prompts you to enter the password. Enter the password and press the **Select** key. The default administrator's password is 654321.
   If a wrong password is entered, the display indicates "Incorrect Password" and Step 4 can be repeated.
5. If a correct password is entered, the current DHCP setting (Enabled or Disabled) will be displayed on the LCD as the first setting of the Network Configuration. There are 6 network related settings available under Network Configuration.
6. Press the **Select** key (▲ and ▼ keys can be used to move within the screen or to go to any one of the 6 network related settings).
7. This screen allows you to either enable or disable the DHCP. Use ▲ and ▼ keys to select disabled then press the **Select** key.
   To cancel instead, press the Cancel/Del key repeatedly until returning to standby mode or press the Menu key once to go to the standby mode.
8. The phone needs be restarted for the new settings to take effect. Press **Select** key to restart the phone, press **Del/Cancel** to return to the previous menu or **Menu** to return to standby mode without restarting the phone. If the Line 1, Line 2 or SPK/HS key is pressed or the handset is picked up, the phone will go off and the restart will be cancelled. If the phone restart is cancelled, the changed network setting will not be used until the phone is restarted. If the **Select** key is pressed, "Initializing…\" will be displayed while the phone is resetting.
   If there is an error in saving, "Cannot Save" will be displayed for 1 second.
9. Repeat Steps 1-6.
10. Use the ▲ and ▼ keys to move to "IP Address."
11. Press the **Select** key to see the current terminal IP address. A screen will be displayed prompting user to change the value.
    Press the Cancel/Del key to go the previous screen.
    *This menu is used to read or change the current value of the terminal IP address if DHCP assignment is disabled. The format of the IP address is: xxx.xxx.xxx.xxx (use the * key to enter the decimal between the numbers). Allowed entries for each set of three numbers are 0-255.*
12. Press the **Select** key to change the IP address. Enter the correct IP address and press the **Select** key.
    For on-site LANs, the IP address must be unique to each phone but the range is dependent upon system programming (example: IP Phone 1 = 172.16.0.11, IP Phone 2 = 172.16.0.12, etc.). When phones are off-site (remote LAN) , these settings are dependant on the remote LAN settings - not the phone system settings.
    If the entered IP address is not valid, "Invalid Input" will be displayed for 1 second before returning to the "IP Address" screen.
    Press the **Cancel/Del** *key to return to the previous screen without making any changes.*

13. The phone needs be restarted for the new settings to take effect. Press **Select** key to restart the phone, press **Del/Cancel** to return to the previous menu or **Menu** to return to standby mode without restarting the phone.

    If there is an error in saving, "Cannot Save" will be displayed for 1 second.

14. Repeat Steps 1-6.
15. Use the ▲ and ▼ keys to move to Subnet Mask.
16. Press the **Select** key to read the value. The next screen displayed prompts you to change the value if needed.

    If DHCP is enabled, subnet mask will be read only and user cannot change the subnet mask address.

17. Press the **Select** key to change the Subnet Mask. Enter the correct Subnet Mask and press the **Select** key.

    For on-site LANs this is the entry in Program 10-12-02. When phones are off-site (remote LAN) , these settings are dependant on the remote LAN settings - not the phone system settings.

    *The format of the Subnet Mask is: xxx.xxx.xxx.xxx (use the * key to enter the decimal between the numbers). Allowed entries for each set of three numbers are 0-255.*

    If the entered subnet mask is not valid, "Invalid Input" will be displayed for 1 second.

    Press the **Cancel/Del** *key to return to the previous screen without making any changes.*

18. The phone needs be restarted for the new settings to take effect. Press **Select** key to restart the phone, press **Del/Cancel** to return to the previous menu or **Menu** to return to standby mode without restarting the phone.

    If there is an error in saving, "Cannot Save" will be displayed for 1 second.

19. Repeat Steps 1-6.
20. Use the ▲ and ▼ keys to move to Default Gateway.
21. Press the **Select** key to read the value. The next screen displayed prompts you to change the value if needed.

    If DHCP is enabled, default gateway will be read only and user cannot change the address.

22. Press the **Select** key to change the Default Gateway. Enter the correct Default Gateway and press the **Select** key.

    For on-site LANs this is the entry in Program 10-12-03. When phones are off-site (remote LAN) , these settings are dependant on the remote LAN settings - not the phone system settings.

    *The format of the Default Gateway is: xxx.xxx.xxx.xxx (use the * key to enter the decimal between the numbers). Allowed entries for each set of three numbers are 0-255.*

    If the entered subnet mask is not valid, "Invalid Input" will be displayed for 1 second.

    Press the **Cancel/Del** *key to return to the previous screen without making any changes.*

23. The phone needs be restarted for the new settings to take effect. Press **Select** key to restart the phone, press **Del/Cancel** to return to the previous menu or **Menu** to return to standby mode without restarting the phone.

    If there is an error in saving, "Cannot Save" will be displayed for 1 second.

24. Repeat Steps 1-6.
25. Use the ▲ and ▼ keys to move to VLAN Enable/Disable. Press the **Select** key.

26. Use the ▲ and ▼ keys to change the selection and press the **Select** key.
    Press the **Cancel/Del** *key to return to the previous screen without making any changes.*
27. The phone needs be restarted for the new settings to take effect. Press **Select** key to restart the phone, press **Del/Cancel** to return to the previous menu or **Menu** to return to standby mode without restarting the phone.
    If there is an error in saving, "Cannot Save" will be displayed for 1 second.
28. Repeat Steps 1-6.
29. Use the ▲ and ▼ keys to move to VLAN ID.
30. Press the **Select** key to read the value. The next screen displayed prompts you to change the value if needed.
31. Press the **Select** key to change the VLAN ID. Enter the correct VLAN ID and press the **Select** key.
    The valid range of entries is 0-65535.
    Press the **Cancel/Del** *key to delete a digit of the existing VLAN ID. If no ID number is displayed when the* **Cancel/Del** *key is pressed, it will return to the previous screen.*
32. The phone needs be restarted for the new settings to take effect. Press **Select** key to restart the phone, press **Del/Cancel** to return to the previous menu or **Menu** to return to standby mode without restarting the phone.
    If there is an error in saving, "Cannot Save" will be displayed for 1 second.

Programming - Using the Aspire DHCP

- **10-13-01 : In-DHCP Server Setup - DHCP Server Mode**
  Enable (1) the system's ability to use the built-in DHCP server. The system must be reset in order for the change to take effect.
- **10-13-02 : In-DHCP Server Setup - Lease Time**
  Enter the lease time of the IP address to a client (default: 0 days, 0 hours, 30 minutes). The system must be reset in order for the change to take effect.
- **10-13-04 : In-DHCP Server Setup - Number of Networks**
  Select the number of networks in use on the system (default: 0, entries: 0=Single Network, 1=Divide Same Network). The system must be reset in order for the change to take effect.
- **10-14-01 : Managed Network Setup - Scope 1**
  Set the range of IP addresses available to be used by the DHCP server for Scope 1 (default: Minimum = 172.16.0.100, Maximum = 172.16.5.254, Scopes 1-10).
- **10-15-01 : Client Information Setup**
  Set the IP and MAC addresses for each client (up to 10) when the DHCP server needs to assign a fixed IP address to clients.
- **10-16-01 : Option Information Setup - Router**
  Set the router address for the DHCP server to the client.
- **10-16-02 : Option Information Setup - DNS Server**
  If required, set the DNS server address for the DHCP server to the client.
- **10-16-03 : Option Information Setup - TFTP Server**
  Set the TFTP server address for the DHCP server to the client.
- **10-16-04 : Option Information Setup - DRS**
  Set the NTCPU's IP address for the DHCP server to the client.
- **84-04-01 : VOIPU PCB DHCP Server Mode Setup**
  Enable (1) the use of DHCP for the VOIPU PCB.
- **84-05-01 : VOIPU IP Address Setup - IP Address**
  For each VOIPU PCB, enter the IP address for the VOIPU PCB (default: slot 1=172.16.0.20, slot 2 = 172.16.0.21, etc.). The IP address should be increased according to the number of VOIPU PCBs. This entry becomes invalid if Program 84-04 is set to "1" (DHCP enabled).

Programming, Aspire IP Keyset or Aspire Keyset with IP Adapter - DHCP

Setting the IP Address on an Aspire IP or Aspire Keyset with IP Adapter Using a DHCP Server

1. On the Aspire IP keyset, enter the phone's program mode by pressing HOLD CONF * #.
   This enters the IP User Menu program mode to select the settings for the individual phone.
2. Press 1 to enter the DHCP mode. If not flashing, press "2" to enable the DHCP mode. Press the Soft Key "OK".
   The flashing item is the current selection.
3. The entries for items 2, 4, 5, and 6 are automatically set by the DCHP server.
4. Press the Soft Key "SAVE" to save the entries and return the phone to an idle condition.

In this program entry mode, items "3. DTS Address Secondary" and "7. DNS" can be set as required by the customer but are not required for the feature to function. Item "8. VLAN" is discussed below. Item "9. System Information" displays the entries and does not allow any changes.

Note 1. If a user's LAN is already operating with a DHCP server, disable the Aspire's DHCP server. Either DHCP server can be used, but not both.

Note 2. When a user's DHCP server is operating, make sure to define Program 10-16.

Programming - H.323 Phone, Enabling DHCP

Setting the IP Address on the ITR-2D-1 IP Phone Using a DHCP Server

1. Press the menu key.
   The Setup Menu screen will be displayed with Call Logs as the first entry.
2. Go to the Configuration sub menu using the ▲ key.
3. Press the **Select** key. The Configuration Menu screen will be displayed showing the first entry of Configuration Menu, which is Phone Configuration. Using the ▲ key go to the "Network Menu" which is the second entry under the Configuration Menu.
4. Press the **Select** key. The display prompts you to enter the password. Enter the password and press the **Select** key. The default administrator's password is 654321.
   If a wrong password is entered, the display indicates "Incorrect Password" and Step 4 can be repeated.
5. If a correct password is entered, the current DHCP setting (Enabled or Disabled) will be displayed on the LCD as the first setting of the Network Configuration. There are 6 network related settings available under Network Configuration.
6. Press the **Select** key (▲ and ▼ keys can be used to move within the screen or to go to any one of the 6 network related settings).
7. This screen allows you to either enable or disable the DHCP. Use ▲ and ▼ keys to select Enabled then press the **Select** key.
   To cancel instead, press the Cancel/Del key repeatedly until returning to standby mode or press the Menu key once to go to the standby mode.
8. The phone needs be restarted for the new settings to take effect. Press **Select** key to restart the phone, press **Del/Cancel** to return to the previous menu or **Menu** to return to standby mode without restarting the phone. If the Line 1, Line 2 or SPK/HS key is pressed or the handset is picked up, the phone will go off and the restart will be cancelled. If the phone restart is cancelled, the changed network setting will not be used until the phone is restarted. If the **Select** key is pressed, "Initializing…\" will be displayed while the phone is resetting.
   If there is an error in saving, "Cannot Save" will be displayed for 1 second.

9. Repeat Steps 1-6.
10. Use the ▲ and ▼ keys to move to "IP Address."
11. Press the **Select** key to see the current terminal IP address.
    With DHCP enabled, the IP address, subnet mask, default gateway will be read only and user cannot change the address.
12. Use the ▲ and ▼ keys to move to VLAN Enable/Disable. Press the **Select** key.
13. Use the ▲ and ▼ keys to change the selection and press the **Select** key.
    Press the **Cancel/Del** *key to return to the previous screen without making any changes.*
14. The phone needs be restarted for the new settings to take effect. Press **Select** key to restart the phone, press **Del/Cancel** to return to the previous menu or **Menu** to return to standby mode without restarting the phone.
    If there is an error in saving, "Cannot Save" will be displayed for 1 second.
15. Repeat Steps 1-6.
16. Use the ▲ and ▼ keys to move to VLAN ID.
17. Press the **Select** key to read the value. The next screen displayed prompts you to change the value if needed.
18. Press the **Select** key to change the VLAN ID. Enter the correct VLAN ID and press the **Select** key.
    The valid range of entries is 0-65535.
    Press the **Cancel/Del** *key to delete a digit of the existing VLAN ID. If no ID number is displayed when the* **Cancel/Del** *key is pressed, it will return to the previous screen.*
19. The phone needs be restarted for the new settings to take effect. Press **Select** key to restart the phone, press **Del/Cancel** to return to the previous menu or **Menu** to return to standby mode without restarting the phone. If the Line 1, Line 2 or SPK/HS key is pressed or the handset is picked up, the phone will go off and the restart will be cancelled. If the phone restart is cancelled, the changed network setting will not be used until the phone is restarted. If the **Select** key is pressed, "Initializing…\" will be displayed while the phone is resetting.
    If DHCP is enabled and after restarting the phone, if the phone cannot find the DHCP server or it fails to retrieve the network information, the phone will go to the standby mode.
    If there is an error in saving, "Cannot Save" will be displayed for 1 second.

Programming - Using an External DHCP

Note 1. If a user's LAN is already operating with a DHCP server, disable the Aspire's DHCP server. Either DHCP server can be used, but not both.

Note 2. When an external DHCP server is operating, make sure to define Program 10-16.

- **10-13-01 : In-DHCP Server Setup - DHCP Server Mode**
  Enable (1) the system's ability to use the built-in DHCP server. The system must be reset in order for the change to take effect.
- **10-16-01 : Option Information Setup - Router**
  Set the router address for the DHCP server to the client.
- **10-16-02 : Option Information Setup - DNS Server**
  If required, set the DNS server address for the DHCP server to the client.
- **10-16-03 : Option Information Setup - TFTP Server**
  Set the TFTP server address for the DHCP server to the client.

- **10-16-04 : Option Information Setup - DRS**
  Set the NTCPU's IP address for the DHCP server to the client.
- **84-04-01 : VOIPU PCB DHCP Server Mode Setup**
  Enable (1) the use of DHCP for the VOIPU PCB.
- **84-05-01 : VOIPU IP Address Setup - IP Address**
  For each VOIPU PCB, enter the IP address for the VOIPU PCB (default: slot 1=172.16.0.20, slot 2 = 172.16.0.21, etc.). The IP address should be increased according to the number of VOIPU PCBs. This entry becomes invalid if Program 84-04 is set to 1 (DHCP enabled).

Programming, Aspire IP Keyset or Aspire Keyset with IP Adapter - DHCP

Setting the IP Address on an Aspire IP or Aspire Keyset with IP Adapter Using a DHCP Server

1. On the Aspire IP keyset, enter the phone's program mode by pressing HOLD CONF * #.
   This enters the IP User Menu program mode to select the settings for the individual phone.
2. Press 1 to enter the DHCP mode. If not flashing, press "2" to enable the DHCP mode. Press the Soft Key "OK".
   The flashing item is the current selection.
3. The entries for items 2, 4, 5, and 6 are automatically set by the DCHP server.
4. Press the Soft Key "SAVE" to save the entries and return the phone to an idle condition.

In this program entry mode, items "3. DTS Address Secondary" and "7. DNS" can be set as required by the customer but are not required for the feature to function. Item "8. VLAN" is discussed below. Item "9. System Information" displays the entries and does not allow any changes.

Programming - H.323 Phone, Enabling DHCP

Setting the IP Address on the ITR-2D-1 IP Phone Using a DHCP Server

1. Press the menu key.
   The Setup Menu screen will be displayed with Call Logs as the first entry.
2. Go to the Configuration sub menu using the ▲ key.
3. Press the **Select** key. The Configuration Menu screen will be displayed showing the first entry of Configuration Menu, which is Phone Configuration. Using the ▲ key go to the "Network Menu" which is the second entry under the Configuration Menu.
4. Press the **Select** key. The display prompts you to enter the password. Enter the password and press the **Select** key. The default administrator's password is 654321.
   If a wrong password is entered, the display indicates "Incorrect Password" and Step 4 can be repeated.
5. If a correct password is entered, the current DHCP setting (Enabled or Disabled) will be displayed on the LCD as the first setting of the Network Configuration. There are 6 network related settings available under Network Configuration.
6. Press the **Select** key (▲ and ▼ keys can be used to move within the screen or to go to any one of the 6 network related settings).
7. This screen allows you to either enable or disable the DHCP. Use ▲ and ▼ keys to select Enabled then press the **Select** key.
   To cancel instead, press the Cancel/Del key repeatedly until returning to standby mode or press the Menu key once to go to the standby mode.

8. The phone needs be restarted for the new settings to take effect. Press **Select** key to restart the phone, press **Del/Cancel** to return to the previous menu or **Menu** to return to standby mode without restarting the phone. If the Line 1, Line 2 or SPK/HS key is pressed or the handset is picked up, the phone will go off and the restart will be cancelled. If the phone restart is cancelled, the changed network setting will not be used until the phone is restarted. If the **Select** key is pressed, "Initializing…\" will be displayed while the phone is resetting.

   If there is an error in saving, "Cannot Save" will be displayed for 1 second.
9. Repeat Steps 1-6.
10. Use the ▲ and ▼ keys to move to "IP Address."
11. Press the **Select** key to see the current terminal IP address.

    With DHCP enabled, the IP address, subnet mask, default gateway will be read only and user cannot change the address.
12. Use the ▲ and ▼ keys to move to VLAN Enable/Disable. Press the **Select** key.
13. Use the ▲ and ▼ keys to change the selection and press the **Select** key.

    Press the **Cancel/Del** *key to return to the previous screen without making any changes.*
14. The phone needs be restarted for the new settings to take effect. Press **Select** key to restart the phone, press **Del/Cancel** to return to the previous menu or **Menu** to return to standby mode without restarting the phone.

    If there is an error in saving, "Cannot Save" will be displayed for 1 second.
15. Repeat Steps 1-6.
16. Use the ▲ and ▼ keys to move to VLAN ID.
17. Press the **Select** key to read the value. The next screen displayed prompts you to change the value if needed.
18. Press the **Select** key to change the VLAN ID. Enter the correct VLAN ID and press the **Select** key.

    The valid range of entries is 0-65535.

    Press the **Cancel/Del** *key to delete a digit of the existing VLAN ID. If no ID number is displayed when the* **Cancel/Del** *key is pressed, it will return to the previous screen.*
19. The phone needs be restarted for the new settings to take effect. Press **Select** key to restart the phone, press **Del/Cancel** to return to the previous menu or **Menu** to return to standby mode without restarting the phone. If the Line 1, Line 2 or SPK/HS key is pressed or the handset is picked up, the phone will go off and the restart will be cancelled. If the phone restart is cancelled, the changed network setting will not be used until the phone is restarted. If the **Select** key is pressed, "Initializing…\" will be displayed while the phone is resetting.

    If DHCP is enabled and after restarting the phone, if the phone cannot find the DHCP server or it fails to retrieve the network information, the phone will go to the standby mode.

    If there is an error in saving, "Cannot Save" will be displayed for 1 second.

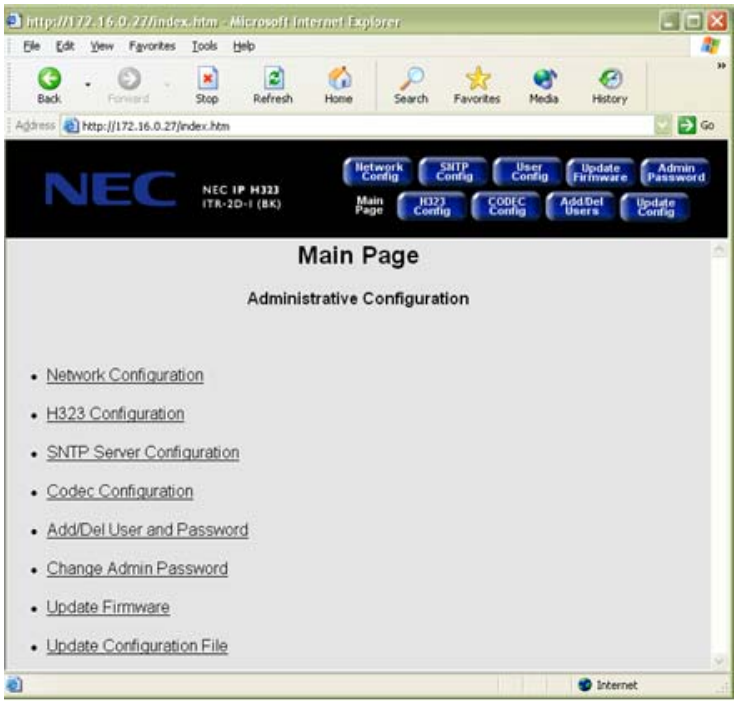
Programming - H.323 Phone, Setting H.323 Options

To complete the H.323 phone programming, after connecting the phone to the LAN, you must connect to the phone using an internet browser (such as Internet Explorer or Netscape Navigator).

1. From a PC which is connected to the same LAN as the VoIP phone, open the internet browser.
   TCP/IP must be set up on the PC in order for the connection to work correctly. In the Network Settings, under the properties of the Local Area Network setting, set the IP and subnet mask address of the TCP/IP settings.
2. Enter the IP address for the phone to be programmed (assigned in the H.323 phone setup).
3. A screen appears requesting a user name and password. By default, the user name for the Administrator's level is "admin" and the password is "654321". Enter the information and click OK.
   To enter the User level, the default user name is "user" and the password is "123456". The User level allows changes to:

Phone Settings	The Phone Settings page allows users to read and modify general call-related settings such as Call Duration Timer, Call Waiting, and Ringer Tone Selection.
Function Keys	The Function Keys page allows users to read and modify the function key configurations (Speed Dial, Call Forward, Voice Mail, Do Not Disturb).
Phone Book	The Phone Book can be viewed and edited using the web browser. However, if the Phone Book is opened by the user on the phone itself, it cannot be edited through the browser.
Password Change	The Password Change page allows modification of the User password. If the browser's Refresh button is clicked before Submit, the old password will be kept.

4. The following screen appears:

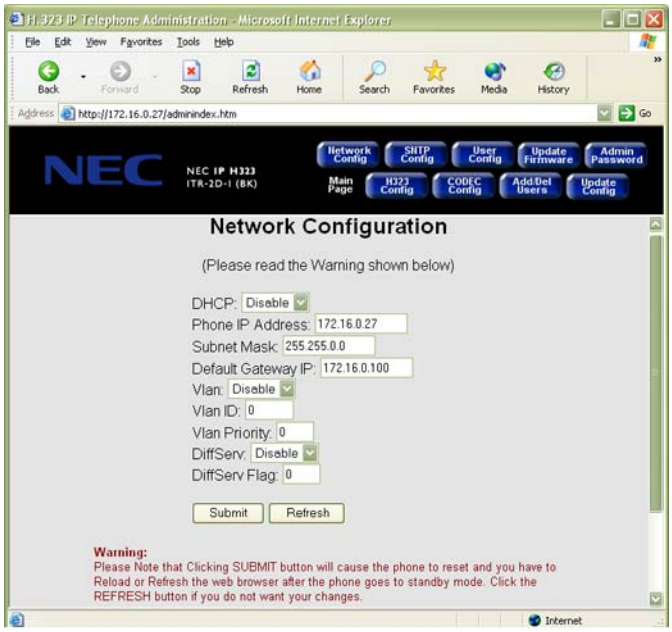


The H.323 Configuration screen requires changes be made in order for the phone to function and display correctly. The Network Configuration also requires changes but these changes can be made either through this menu or through the phone programming described previously. The following options are available through the Administrator's Level programming.

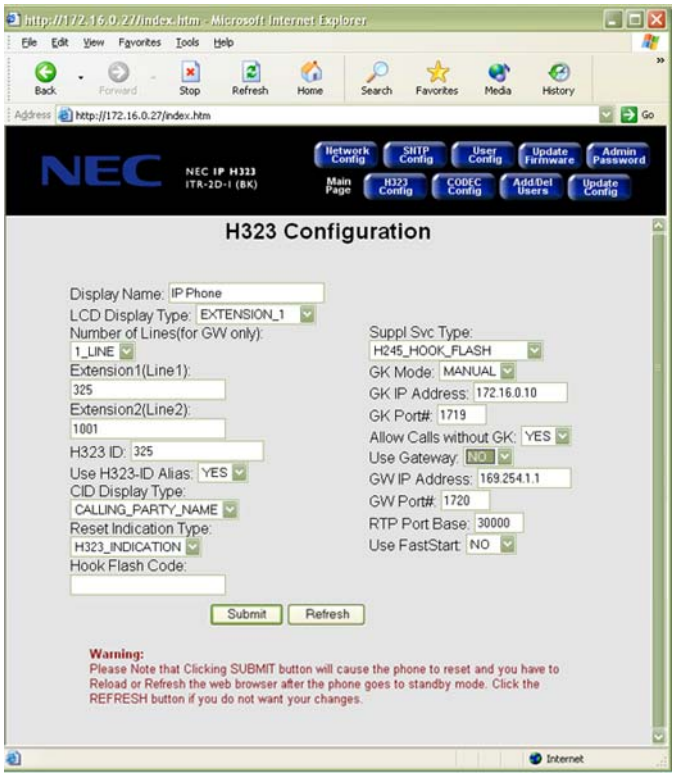
Network Configuration	DHCP Phone IP Address Subnet Mask Default Gateway IP Address VLAN	VLAN ID VLAN Priority Diffserv DiffServ Flag
H.323 Configuration	Display Name LCD Display Type Number of Lines Extension 1 Extension 2 User Name Use H.323 ID Alias CID Display Type Reset Indication Type Hook Flash Code	Supplementary Service Type GK Mode Gatekeeper IP Address Gatekeeper Port Number Allow Calls Without Gatekeeper Use Gateway H.323 Gateway IP Address H.323 Gateway Port Number RTP Port Base Use Fast Start
SNTP Server	SNTP Day Light Savings	Time Zone Offset SNTP Server IP Address
Codec Configuration	Codec Name Acoustic Echo Canceller Packet Size	Nominal Jitter Depth VAD
Add/Del User and Password	Enter a 6-10 digit password	

Update Firmware	Enter the TFTP Server Address, User ID (Optional), Password (Optional) and the File Name and then click "Update" to start the firmware update.	
Update Configuration	Enter the TFTP Server Address, User ID (Optional), Password (Optional) and the File Name and then click "Update" to start the firmware update.	
User Configuration	The User Configuration allows changes to the options available when signing in at the User Level.	
	Phone Settings:	The Phone Settings page allows users to read and modify general call-related settings such as Call Duration Timer, Call Waiting, and Ringer Tone Selection.
	Function Keys:	The Function Keys page allows users to read and modify the function key configurations (Speed Dial, Call Forward, Voice Mail, Do Not Disturb).
	Phone Book:	The Phone Book can be viewed and edited using the web browser. However, if the Phone Book is opened by the user on the phone itself, it cannot be edited through the browser.
	Password Change:	The Password Change page allows modification of the User password. If the browser's Refresh button is clicked before Submit, the old password will be kept.

5. Optionally, if the IP and subnet mask addresses were set up in the phone's programming using the previous programming procedure, you can use the Network Configuration window to define the network settings for the phone. ***If these settings were made previously, skip to Step 6.*** If any changes are made to this window, you must click SUBMIT in order for the changes to be sent to the phone (this will cause the phone to reset).



6. Click on the H.323 Configuration link or button.



7. Make the following changes:
   - LCD Display Type = Extension_1
   - Number of Lines = 1
   - Extension Name = Enter the extension number to be used for the phone
   - H.323 ID = Enter the extension number to be used for the phone
   - CID Display Type = Select the Caller ID display mode to be used
   - Suppl. Svc. Type = Select H245_Hook_Flash in order to use the Hold and Transfer features
   - GK Mode = Manual
   - GK IP Address = Enter the NTCPU IP address assigned in Program 10-12-01 *(by default 172.16.0.10)*
   - Allow Calls Without GK = Yes
   - Use Gateway = No
   - Use Fast Start = No

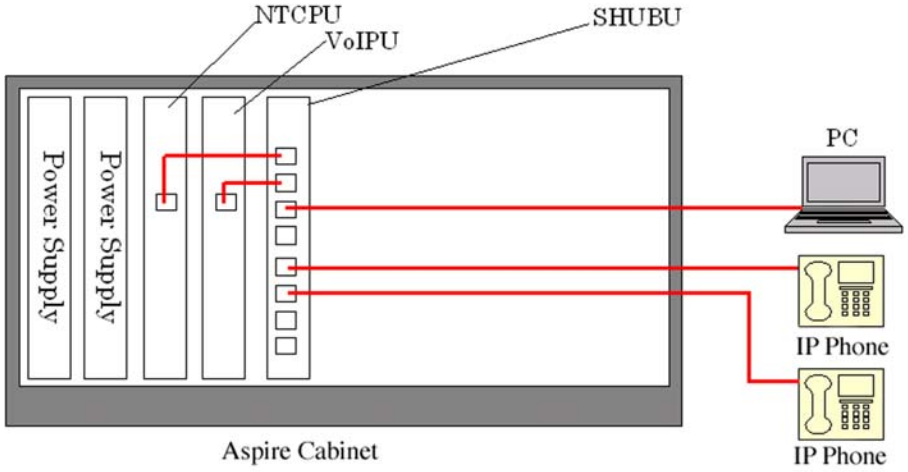
     Fast Start should only be used when both terminals (gateways) are using Fast Start mode. The CODEC is then decided by the Fast Start negotiation flow. The Fast Start elements (CODEC type, VIF size, silent suppression) are compared, and based on the priority set for each system, an option is chosen for each item. In order for a voice path to be established, the CODEC, VIF size and silent suppression have to be the same value between the two gateways.
8. Click the SUBMIT button to enter the changes.

   The phone will reset with the new settings. Click RELOAD or REFRESH after the phone goes to standby mode. If there are incorrect values entered in any of the fields, the update will not be performed and the screen will be displayed again allowing for changes.
9. Close the internet browser.

LAN Connections

Hardware:

- 8SHUBU PCB - Provides 8-port switching hub and the ability to provide PoE for Aspire equipment.
  - 802.1p/1q Support
- 24-Port Power Supply PoE-managed switch (NEC BlueFire 200/24)
  - PoE (Power over Ethernet) to Aspire IP/H.323 Phone
  - Spare Pair (4/5, 7/8) / Signal Pair (1/2, 3/6) Selection
- 12-Port Power Supply Patch Panel (NEC SN1604 PWRMS)
  - PoE (Power over Ethernet) to Aspire IP/H.323 Phone
  - Add this patch to an existing switching hub
  - Spare Pair (4/5, 7/8) / Signal Pair (1/2, 3/6) Selection



Port Assignment Improved

Prior to 4.93 software, if the system was cold started with the VOIPU PCB(s) pulled from the system cabinet, but they were still connected to the LAN, the PCBs would still be assigned port numbers. This could provide unexpected extension numbering as the VOIPU PCB assigns ports as soon as the card syncs, which is usually before the other PCBs. Using software 4.93 or higher, this process is improved.

LAN Connection Programming

- **10-12-05 : NTCPU Network Setup - NIC**
  Select the ethernet interface for the NTCPU (0=Auto, 1=100M/Full, 2=100M/Half, 3=10M/Full, 4=10M/Half).
- **84-05-02 : VOIPU IP Address Setup Network Setup - NIC**
  Select the ethernet interface for the VOIPU PCB (0=Auto, 1=100M/Full, 2=100M/Half, 3=10M/Full, 4=10M/Half).
- **85-01-01 : SHUBU LAN Setup - Link Speed/Duplex**
  85-01-02 : SHUBU LAN Setup - Link Speed
  85-01-03 : SHUBU LAN Setup - Half Duplex/Full Duplex
  85-01-04 : SHUBU LAN Setup - MDIX/MDI
  85-01-05 : SHUBU LAN Setup - Back Pressure
  85-01-06 : SHUBU LAN Setup - 802.3x
  Define the LAN setup for each slot in which an 8SHUBU PCB is installed.

Note 1. Connect only NEC IP phones into the LAN network. Unsupported equipment may be damaged if connected to the Aspire system.

Note 2. Use a 100Base/Full Duplex switch. In order to avoid network problems and to retain voice quality, do not use a Repeater Hub/10Base.

911 Calls with Networked IP Phones

When using IP telephones at a remote site (Site B) which are registered to the main system (Site A), you can use the ARS Class of Service Matching feature added in software 2.63 to route 911 calls to the local authorities at the remote location. Without this programming, since the phones are registered to the main site, when 911 calls are placed by IP phones, the local authorities at the main site (Site A) would be called.

Programming at the Main System

- **10-27-01 : IP System ID**
  For each network node, assign an ID and corresponding IP address of the networked IP system.
- **26-01-01 : Automatic Route Selection Service - ARS Service**
  Enter "1" to enable ARS.
- **26-01-06 : Automatic Route Selection Service - COS Match Access**
  Enter "1" to enable COS Matching.
- **26-04-01 : ARS Class of Service**
  Assign the IP extension's ARS Class of Service (0-16).
- **26-02-01 : Dial Analysis Table for ARS /LCR - Dial**
  Define the Dial Analysis Table. Enter "911" in a table.
- **26-02-02 : Dial Analysis Table for ARS /LCR - Service Type**
  For the 911 Dial Analysis Table, enter the "1" to route the call to a trunk group.
  Note: With PCPro/WebPro, the option is displayed as "Incoming Ring Group".
- **26-02-03 : Dial Analysis Table for ARS /LCR - Additional Data**
  Enter the network ID number which corresponds to the entry in Program 10-27 preceded by "1". (For example: ID 01 is entered as "101", 02 is entered as "102", etc.)
- **26-02-04 : Dial Analysis Table for ARS /LCR - ARS Class of Service**
  Assign the ARS COS to the 911 Dial Analysis Table.

Each remote site needs to have a different ARS Class of Service. If, for example, there were 50 IP sets on one remote site, each would use the same ARS Class of Service.

It is important to remember that there must be a trunk available to make a call across the network from the main system. Then, by default, the system will access the first available trunk in trunk group 1 at the remote side to place the 911 call.

Address Conversion Table

Aspire provides an IP Conversion Table with which the system can recognize the IP address of another system without the use of an outside Gatekeeper.

Programming

- **10-23-01 : H.323 System Interconnection - System Interconnection**
  For each system (50 max), specify whether the system interconnection is used (0=no, 1=yes).
- **10-23-02 : H.323 System Interconnection - IP Address**
  If Program 10-23-01 is set to "1", for each system (50 max), specify the destination IP address. The address should not be duplicated within the system.
- **10-23-03 : H.323 System Interconnection - Call Control Port**
  If Program 10-23-01 is set to "1", for each system (50 max), specify the Call Control Port (1-65535).
- **10-23-04 : H.323 System Interconnection Alias Address**
  If Program 10-23-01 is set to "1", for each system (50 max), specify the destination E.164 number as the Alias Address (12 digits max).

Calling Party Number Setup for Trunks and Extensions

The system has two programs which allow for the Calling Party Number to be displayed when the VoIP feature is used:

Programming

- **21-17-01 : IP Trunk Calling Party Number Setup for Trunk**
  Enter the Calling Party Number to be displayed for each IP trunk used (Entry: 16 digits maximum).
- **21-18-01 : IP Trunk Calling Party Number Setup for Extension**
  Enter the Calling Party Number to be displayed for each IP extension used (Entry: 16 digits maximum).

CODEC Selection

- For H.323 Trunk - Assign CODEC type in Program 84-01-33
  For H.323 Terminal or VoIP Networking - Assign CODEC type in Program 84-12-28
  For Aspire Keyset with IP Adapter or IPhone - Assign CODEC type in Program 84-11-28
- G.711, G.729, G.723.1
- VIF Size
  Trunk:
  G.711 -> 20ms, 30ms
  G.729 -> 20ms-80ms
  G.723 -> 30ms, 60ms
  When using G.711 or G.729 with the VIF set at 20ms, the maximum number of simultaneous calls is 15 when using a 16-channel VOIPU PCB (no daughter board installed). VIF 20ms is not supported with the daughter board.

  Terminal:
  G.711 -> 30ms
  G.729 -> 30ms-80ms (H.323)
  G.729 -> 30ms-40ms (Aspire keyset with IP adapter) or IPhone
  G.723 -> 30ms, 60ms

- Supports Silence Suppression
- Aspire provides 5 types of CODEC for the Aspire Keyset with IP Adapter (defined in Program 84-11, selected in Program 15-05-15).

Since the packet size of G711 is larger than the other compressions (G729, G723), there are some limitations to reach the maximum number of channels. With the default settings, the following limitations must be kept in mind.

32VOIPU (16VOIPU + 16VOIPDB)	
G711 - 20ms	Not supported.
G711 - 30ms	The system uses G711 (30ms) for the first 12 channels of calls. The CODEC then changes to G729 for the last 20 channels.
20VOIPU (16VOIPU + 4VOIPDB or 4VOIPU + 16VOIPDB)	
G711 - 20ms	The system uses G711 (20ms) for the first 13 channels of calls then changes the CODEC type to G729 for the last 7 channels.
G711 - 30ms	There are no limitations.
16VOIPU (16VOIPU)	
G711 - 20ms	The system uses G711 (20ms) for the first 15 channels of calls then changes the CODEC type to G729 for the last channel.
G711 - 30ms	There are no limitations.

Refer to **Simultaneous Calls** (page 685) for more information on CODEC settings.

Deleting IP Phone Registration

➧ **90-23-01 : Deleting Registration of IP Telephones**
When removing an IP telephone from the system, the registration can be deleted using this program. Enter the extension number to be deleted, press 1 and then HOLD.

Echo Adjustment

For Enhanced Echo Adjustment, refer to **Enhanced Echo Adjustment** (page 679).
Where echo (reflection of voice) is generated depends on how the network is configured. Typically, however, echo is generated at the trunk PCB (COIU) or at the telephone's microphone/speaker. The transmit/receive data is separated at the analog trunk interface. Echo from the transmit data to the receive data can be generated, and when the impedance is not set correctly, increased echo will occur. This can also occur at an ISDN/analog trunk interface. In general, the nearer the transmit, the more echo occurs as the signal level is greater.

The type of echo can also occur with non-IP phones, but the time difference between the transmit and receive is so small, the user is hardly aware of it. As the IP terminals require voice packetization, there is a longer delay. This delay causes the echo.

To reduce the echo:

- Suppress the echo from the Aspire system.
- Suppress the echo from outside the Aspire system.
- Remove the unsuppressed echo using the echo canceller in the VOIPU.
- Reduce the telephone's volume.

  On some calls, the echo and side tones can be increased if the telephone volume is set to a midrange level or higher. Simply press the Volume Down button on the phone to reduce the level.

A typical example of this adjustment process is as follows:

1. CODEC Packet Size/Jitter Buffer Configuration
   The Voice Packet CODEC, packet size, jitter buffer size should be configured to minimize the voice delay. This data is set in Program 84-xx-xx.
   - Set the Audio Capability Priority.
   - Set the packet size.
   - Set jitter buffer type and adjust the size.
2. Gain Level
   A transmit gain level with is set too high for a trunk may cause considerable echo depending on the level of the voice path route. Adjust the echo controlling this data.
   - Change the Trunk Voice Transmit Level in the system to adjust the voice transmit level of the Aspire.
   - Change the Trunk Voice Receive Level in the system to adjust the voice receive level of the Aspire.
3. CODEC Filter
   When connecting an analog trunk, adjust the CODEC filter depending on the damping of the trunk side. If this is not properly adjusted, you may hear considerable echo depending on the condition of the line.
   - Set the Echo Canceller Mode (Program 84-17-01) to disabled (0) and check the condition of the echo level by making an outgoing call.
   - Set the CODEC Filter Setup for the analog trunk port (Program 81-07) to the configuration which results in the least amount of echo.
4. Echo Canceller Adjustment
   The echo canceller should be adjusted after reducing the echo using the previous steps.
   - Set the Echo Canceller Mode to enabled (1) [Program 84-01-24 = H.323 trunk, 84-11-20 = Aspire IP phone, 84-12-20 = H.323 extension], the Echo Canceller NLP Mode to disabled (0) [Program 84-01-26 = H.323 trunk, 84-11-22 = Aspire IP phone, 84-12-22 = H.323 extension], and check the condition of the echo level by making an outgoing call.
   - Adjust the VOIPU Limiter Control Gain Setup (Program 84-16) and choose the configuration which results in the least amount of echo.
   - The Echo Canceller NLP Mode should be set to the data which receives the best voice quality.

CODEC Packet Size/Jitter Buffer Configuration				
Program	**Item**	**Input Data**	**Default**	**How to Adjust**
84-01-33 (H.323 Trunk) 84-11-28 (Aspire IP Phone) 84-12-28 (H.323 Extension)	Audio Capability Priority	0: G.711 1: G.723.1 2: G.729	0 (G.711)	This data should not be changed. Voice Quality is the best with G.711 and lessens with G.729 and then again with G.723.1. If you need to select another bandwidth, it is recommended that G.729 be selected.
84-01-02 (H.323 Trunk) 84-11-01 (Aspire IP Phone) 84-12-01 (H.323 Extension)	G.711 Audio Frame	2, 3 (20msec, 30msec)	3 (30msec)	It is strongly recommended to use option 2 (20ms) for H.323 trunks/stations. • This data will usually come into affect when Audio Capability=0 (G.711) is selected. • Aspire IP phones can only be set to use 30ms.
84-01-05 (H.323 Trunk) 84-11-07 (Aspire IP Phone) 84-12-07 (H.323 Extension)	G.729 Audio Frame	2 - 8 (20msec - 80msec)	3 (30msec)	It is strongly recommended to use option 2 (20ms) for H.323 trunks/stations. • This data will usually come into affect when Audio Capability = 2 (G.729) is selected. • Aspire IP phones and IP adapters only suport entries of 1-4 (10-40ms).
84-01-05 (H.323 Trunk) 84-11-12 (Aspire IP Phone) 84-12-12 (H.323 Extension)	G.723.1 Audio Frame	1 - 2 (30 msec, 60 msec)	1 (30 msec)	This data will not need to be changed usually. • This data will usually come into affect when Audio Capability = 1 (G.723) is selected.
84-01-15 (H.323 Trunk) 84-11-17 (Aspire IP Phone) 84-12-17 (H.323 Extension)	Jitter Buffer Mode	1: static 2: adaptive during silence 3: adaptive immediately	3 (adaptive immediately)	This data should not be changed.
84-01-16 (H.323 Trunk) 84-11-04 (Aspire IP Phone) 84-12-04 (H.323 Extension)	G.711 Jitter Buffer (min)	0 - 145 (msec)	30	Set the same time as selected in G.711 Audio Frame.
84-01-17 (H.323 Trunk) 84-11-05 (Aspire IP Phone) 84-12-05 (H.323 Extension)	G.711 Jitter Buffer (type)	0 - 145 (msec)	60	Set this option at two times the time selected in G.711 Audio Frame.
84-01-18 (H.323 Trunk) 84-11-06 (Aspire IP Phone) 84-12-06 (H.323 Extension)	G.711 Jitter Buffer (max)	0 - 145 (msec)	120	Set this option at four times the time selected in G.711 Audio Frame.

CODEC Packet Size/Jitter Buffer Configuration				
Program	**Item**	**Input Data**	**Default**	**How to Adjust**
84-01-07 (H.323 Trunk) 84-11-09 (Aspire IP Phone) 84-12-09 (H.323 Extension)	G.729 Jitter Buffer (min)	0 - 145 (msec)	30	Set the same time as selected in G.729 Audio Frame.
84-01-08 (H.323 Trunk) 84-11-10 (Aspire IP Phone) 84-12-10 (H.323 Extension)	G.729 Jitter Buffer (type)	0 - 145 (msec)	60	Set this option at two times the time selected in G.729 Audio Frame.
84-01-09 (H.323 Trunk) 84-11-11 (Aspire IP Phone) 84-12-11 (H.323 Extension)	G.729 Jitter Buffer (max)	0 - 145 (msec)	120	Set this option at four times the time selected in G.711 Audio Frame.
84-01-19 (H.323 Trunk) 84-11-14 (Aspire IP Phone) 84-12-14 (H.323 Extension)	G.723 Jitter Buffer (min)	0 - 145 (msec)	30	Set the same time as selected in G.723 Audio Frame.
84-01-20 (H.323 Trunk) 84-11-15 (Aspire IP Phone) 84-12-15 (H.323 Extension)	G.723 Jitter Buffer (type)	0 - 145 (msec)	60	Set this option at two times the time selected in G.723 Audio Frame.
84-01-21 (H.323 Trunk) 84-11-16 (Aspire IP Phone) 84-12-16 (H.323 Extension)	G.723 Jitter Buffer (max)	0 - 145 (msec)	120	Set this option at four times the time selected in G.723 Audio Frame.

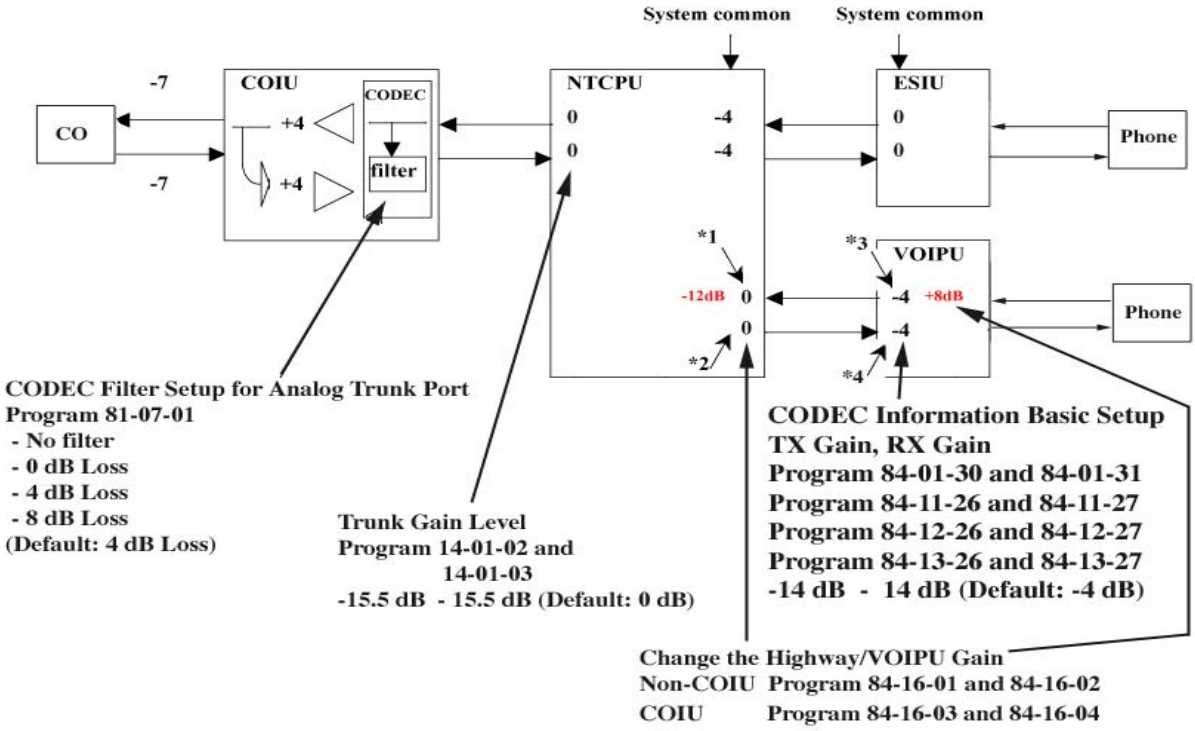
Gain Level - Transmit/Receive				
Program	**Item**	**Input Data**	**Default**	**How to Adjust**
14-01-02	Transmit Gain Level	1 - 63 (-15.5dB - +15.5dB)	32 (0dB)	High level of transmit gain may generate a large echo depending on the environment or location of the party called. Adjust to the appropriate level. Lower limits should be around 18 (-7db).
14-01-03	Receive Gain Level	1 - 63 (-15.5dB - +15.5dB)	32 (0dB)	
14-01-04	Transmit Gain level for conference and Transfer Calls	1 - 63 (-15.5dB - +15.5dB)	22 (-5dB)	High level of transmit gain may generate a large echo depending on the environment or location of the party called. Adjust to the appropriate level. Lower limits should be around 18 (-7db).
14-01-05	Receive Gain level for conference and Transfer Calls	1 - 63 (-15.5dB - +15.5dB)	22 (-5dB)	

Gain Level - Transmit/Receive				
Program	**Item**	**Input Data**	**Default**	**How to Adjust**
84-01-30 (H.323 Trunk) 84-11-26 (Aspire IP Phone) 84-12-26 (H.323 Extension)	Transmit Gain Level of VOIPU	0 - 28 (-14dB - +14dB)	10 (-4dB)	• Aspire IP phone TX gain becomes congruent with the Aspire IP phone when this data is set to 10 (-4db). • Before V3, 84-01-30 will be applied to the H.323 extension and Aspire IP phone as well.
84-01-31 (H.323 Trunk) 84-11-27 (Aspire IP Phone) 84-12-27 (H.323 Extension)	Receive Gain Level of VOIPU.	0 - 28 (-14dB - +14dB)	10 (-4dB)	• Aspire IP phone RX gain become congruent with Dterm when this data is set to 10 (-4db). • Before V3, 84-01-30 will be applied to H.323 extension and Aspire IP phone as well.

Internal Gain Control

Control the VOIPU PCB's internal echo canceller input by setting the VOIPU RX gain higher and the Highway Gain lower. (In the figure below set *1 to +12dB and *2 to –12dB.)

Not all the sidetone can be removed from the COIU by the VOIPU PCB. The remaining sidetone may appear as echo when heard at the IP phone. Optimizing **Program 81-07-01 : CODEC Filter Setup for Analog Trunk Ports** and suppressing sidetone as much as possible may still result in some echo being heard. This becomes more apparent when the volume of the voice level on the IP phone is louder. This may be resolved by setting the VOIPU RX Gain higher, the Highway gain lower and by limiting the volume on the phone (in the figure below, set the *3 and *4 options to +12dB [*3] and –12dB [*4]).



Internal Gain Control				
Program	**Item**	**Input Data**	**Default**	**How to Adjust**
84-16-01	**VOIPU RX Limiter Control Gain** This option controls the limiter gain for IP to PCM direction. This option adds gain to the voice input from the LAN and removes it from the voice output to highway.	0 - 30 (-15dB - +15dB)	25 (10dB)	This setting is applied to the call using the VOIPU and a unit other than the COIU. You may notice a small echo remaining when using ISDN trunks. If this is the case, change this data to a smaller value. Example: 15 (0db) * This option is available with software 1.11 or higher.
84-16-02	**VOIPU TX Limiter Control Gain** This option controls the limiter gain for PCM to IP direction. This option adds the gain to the voice input from highway and removes it from the voice output to the LAN.	0 - 30 (-15dB - +15dB)	15 (0dB)	This setting is applied to the call using the VOIPU and a unit other than the COIU. You may notice a small echo remaining when using ISDN trunks. If this is the case, change this data to larger value. Example 0 (-15db) * This option is available with software 1.11 or higher.
84-16-03	**VOIPU RX Limiter Control Gain (COIU)** This option controls the limiter gain for a COIU call in the IP to PCM direction.	0 - 30 (-15dB - +15dB)	15 (0dB)	This setting is applied to the call using the VOIPU and a COIU. Set this to a larger value when the echo from the COIU is too much. * This option is available with software 1.11 or higher.
84-16-04	**VOIPU TX Limiter Control Gain (COIU)** This option controls the limiter gain for a COIU call in the PCM to IP direction.	0 - 30 (-15dB - +15dB)	15 (0dB)	This setting is applied to the call using the VOIPU and COIU. * This option is available with software 1.11 or higher.

CODEC Filter Configuration				
Program	**Item**	**Input Data**	**Default**	**How to Adjust**
81-07-01	CODEC Filter Setup for Analog Trunk Port	0: No Filter 1: 0dB Loss 2: 4dB Loss 3: 8dB Loss 4. Specified Data	2	Setting this data depends on the loss of the analog line. This will reduce the echo from the analog hybrid circuit caused by the mismatch of the impedance. • When the signal loss is low (ex. behind PBX connection), set to 1. • When the signal loss is high (large distance from the central office), set to 3. • When the echo from the analog line is too much, setting 4 (specified data) may help improve the condition. • Input data 1-4 is equivalent to Types 1-4 in the Analog Port CODEC Filter Setup table below.
82-07-01	CODEC Filter Setup for Analog Station Port	0: No Filter 1: 0dB Loss 2: 4dB Loss 3: 8dB Loss 4: Specified Data	1	Setting this data depends on the loss of the analog line. This will reduce the echo from the analog hybrid circuit caused by the mismatch of the impedance. • When the signal loss is low (ex. behind PBX connection), set to 1. • When the signal loss is high (large distance from the central office), set to 3. • When the echo from the analog line is too much, setting 4 (specified data) may help improve the condition. • Input data 1-4 is equivalent to Types 1-4 in the Analog Port CODEC Filter Setup table below.

Analog Port CODEC Filter Setup									
		Type 1		Type 2		Type 3			
Filter	Data	0dB Loss		ø0.5 4dB Loss		ø0.5 8dB Loss		APEX3600 LC	
		HEX	DEC	HEX	DEC	HEX	DEC	HEX	DEC
B1	D01	AA	170	5A	90	23	35	AA	170
	D02	73	115	CB	203	DE	222	DB	219
	D03	A3	163	2B	43	AA	170	3B	59
	D04	6D	109	2A	42	A3	163	37	55
	D05	33	51	1C	28	22	34	22	34
	D06	A5	165	21	33	A0	160	61	97
	D07	2A	42	22	34	FE	254	B4	180
	D08	D4	212	22	34	1B	27	2C	44
	D09	BD	189	A3	163	B2	178	C4	196
	D10	2B	43	49	73	23	35	98	152
	D11	DB	219	F3	243	4B	75	D3	211
	D12	AD	173	2E	46	A6	166	2E	46
	D13	E2	226	2A	42	52	82	4A	74
	D14	E0	224	D0	208	E0	224	D0	208
B2	D01	22	34	22	34	57	87	2A	42
	D02	C0	192	C0	192	C0	192	B0	176

				Type 4					
Filter	Data	ø0.4 4dB Loss		ø0.4 8dB Loss		ø0.65 4dB Loss		ø0.65 8dB Loss	
		HEX	DEC	HEX	DEC	HEX	DEC	HEX	DEC
B1	D01	24	36	AB	171	22	34	5A	90
	D02	CA	202	DD	221	C2	194	C3	195
	D03	AB	171	4C	76	2A	42	2A	42
	D04	3A	58	2C	44	6A	106	AB	171
	D05	1A	26	13	19	32	50	52	82
	D06	B1	177	A0	160	31	49	21	33
	D07	A2	162	BA	186	7A	122	B3	179
	D08	3C	60	1A	26	1A	26	1C	28
	D09	9F	159	33	51	B3	179	22	34
	D10	3A	58	E2	226	A8	168	A2	162
	D11	C2	194	6B	107	7B	123	35	53
	D12	2D	45	BE	190	AD	173	C4	196
	D13	A5	165	AA	170	25	37	B9	185
	D14	D0	208	D0	208	D0	208	F0	240
B2	D01	FA	250	A2	162	AA	170	A3	163
	D02	C0	192	C0	192	C0	192	D0	208

Echo Canceler Configuration				
Program	**Item**	**Input Data**	**Default**	**How to Adjust**
84-01-24 (H.323 Trunk) 84-11-20 (Aspire IP Phone) 84-12-20 (H.323 Extension)	Echo Canceller Mode	0: Disable 1: Enable	1	• Echo canceler mode • Prior to Version 3, Program 84-01-24 is applied to IP phones (system common data).
84-01-25 (H.323 Trunk) 84-11-21 (Aspire IP Phone) 84-12-21 (H.323 Extension)	Echo Canceller Tail Size	1: 8 ms 2: 16 ms 3: 32mS	3	• Only valid when 84-01-24 is enabled. • Prior to Version 3, Program 84-01-25 is applied to IP phones (system common data).
84-01-26 (H.323 Trunk) 84-11-22 (Aspire IP Phone) 84-12-22 (H.323 Extension)	Echo Canceller NLP Mode	0: Disable 1: Enable	1	• NLP (Non-linear processing) will remove the remaining noise after suppressing echo using the echo canceler. • Prior to Version 3, Program 84-01-26 is applied to IP phones (system common data).
84-01-27 (H.323 Trunk) 84-11-23 (Aspire IP Phone) 84-12-23 (H.323 Extension)	Echo Canceller NLP Noise	40-70 (-40 dBm - -70dBm)	70	• When the NLP is enabled, and silence/non-silence boundary seems incorrect, adjust this data (ex. 50). • This is only valid when Program 84-01-26 is enabled. • Prior to Version 3, Program 84-01-27 is applied to IP phones (system common data).
84-01-28 (H.323 Trunk) 84-11-24 (Aspire IP Phone) 84-12-24 (H.323 Extension)	Echo Canceller Cng Cfg	0: Adaptive 1: Fixed	0	• This is only valid when Program 84-01-26 is enabled. • Prior to Version 3, Program 84-01-28 is applied to IP phones (system common data).
84-01-29 (H.323 Trunk) 84-11-25 (Aspire IP Phone) 84-12-25 (H.323 Extension)	Echo Canceller 4w Detect	0: Disable 1: Enable	0	• Prior to Version 3, Program 84-01-29 is applied to IP phones (system common data).

Enhanced Echo Adjustment

With software 1.18 or higher and VOIPU firmware 3.2 or later, the Echo Canceller option has been enhanced. This enhancement supports the following features:

- Supports long echo tail size (max. 128 msec)
- Adds adjustment parameters for echo cancellation

System Data Changes

With enhanced echo canceller, additional programs have been added and the settings of others have changed. With enhanced echo canceller, following system data is changed:

- Added settings for long echo tail size (Program 84-06-12/13/14)
- Changed settings:
  84-01-24/26/27/28/29 settings are moved to 84-01-60 (H.323 Trunks)
  84-11-20/21/22/23/24/25 settings are moved to 84-11-29 (DtermIP)
  84-12-20/21/22/23/24/25 settings are moved to 84-12-29 (H.323 Phones)

For each of the IP devices above, select an echo canceller type (84-01-60, 84-11-29, 84-12-29). The options are:

- 0: Automatic — If the call is analog (e.g. COIU or TLIU 2-wire) then this selects the echo canceller profile configured in Program 84-17 Type 4 ("Analog Path Setting"). Any other call selects the echo canceller profile configured in Program 84-17 Type 5 ("Digital Path Setting"). Note that the TLIU 4-wire is treated as digital.
- 1: Type 1 — This selects the echo canceller profile configured in Program 84-17 Type 1.
- 2: Type 2 — This selects the echo canceller profile configured in Program 84-17 Type 2.
- 3: Type 3 — This selects the echo canceller profile configured in Program 84-17 Type 3.

Note 1. PC programming software does not support the above changes. Please use WebPro or keyset programming for these settings.

Note 2. For software prior to 1.18 or with VOIPU firmware prior to 3.2, please refer to "**Echo Adjustment** (page 669) for the echo adjustment procedure.

Echo Canceller Feature of the VOIPU

Echo canceler of VOIPU support following features:

- Supports 8/16/32/64/128ms echo tail size
- NLP (Nonlinear processing)

Echo Tail Size

Longer echo tail size increases the echo cancellation ability to echo delay.

If you use above 32msec echo tail size, set Program 84-06-12 (long tail echo mode) to ON, then select the codec type and echo tail size using Program 84-06-13/14.

The following limitations apply when you use long echo tail size (32msec or more) with the enhanced Echo Canceller :

- Decreased VOIPU channels
  If you choose a long echo tail size the number of available VOIPU channels is reduced to 3/4. If you do not choose a long echo tail size, the number of available VOIPU channels is not changed.
  Example: Default VOIPU channels : 16ch -> Long echo tail size select : 12ch

- G.729/G.723.1 codec usage limitation
  If you choose a long echo tail size, you should choose either G.729 or G.723.1.
  * It is recommended to select G.729 for better voice quality.

NLP

If an echo problem is not resolved with the long echo tail size, NLP can be used to remove echo by replacing low level voice to low level white noise (NLP noise).

By default, the adjustment of the NLP noise (white noise) level is automatically determined by Program 84-17-04 (set to adaptive). If needed, the level between background noise and NLP noise can be adjusted setting Program 84-17-04 to "fixed" and then adjust the NLP noise level using Program 84-17-05.

When sound continues from the remote side, as with Music on hold, the NLP can decrease voice quality. In such cases, decrease the NLP Aggressiveness Control value in Program 84-17-06/07. Please note if this is decreased, the echo level will be larger.

Programming

- **84-17-01 : VOIPU Echo Canceller Control Setup - Echo Canceller Mode**
  Enable (1) or disable (0) Echo Canceller mode.
- **84-17-02 : VOIPU Echo Canceller Control Setup - Echo Canceller Tail Size**
  Select the Echo Canceller Tail Size (1 = 8ms, 2 = 16ms). If 84-06-12 (Long Tail Echo Mode) = on, this value is ignored – 84-06-14 is used instead. Only effective if 84-17-01 = enable.
- **84-17-03 : VOIPU Echo Canceller Control Setup - Echo Canceller NLP Mode**
  Enable (1) or disable (0) Echo Canceller NLP mode.
- **84-17-04 : VOIPU Echo Canceller Control Setup - Echo Canceller CNG CFG**
  Only effective if 84-17-03 = enabled. Select either Adaptive (0) or Fixed (1) for the NLP noise adjustment. If set to Fixed, determine the level in Program 84-17-05.
- **84-17-05 : VOIPU Echo Canceller Control Setup - Echo Canceller NLP Noise**
  Adjust the NLP noise level (entries: 40 [-40dBm] - 70 [70dBm]). Only effective if 84-17-04 = fixed.
- **84-17-06 : VOIPU Echo Canceller Control Setup - NLP Aggressiveness Control**
  Determines if value in 84-17-07 is + or -. Only effective if 84-17-03 = enabled (0 = +, 1 = -).
- **84-17-07 : VOIPU Echo Canceller Control Setup - NLP Aggressiveness Control Value**
  Setting of NLP strength. This entry is positive or negative based on the entry in 84-17-06. a larger value provides a stronger NLP effect - a smaller value provides a weaker NLP effect. (Entries: 0 - 32767)
- **84-17-08 : VOIPU Echo Canceller Control Setup - NLP Comfort Noise Configuration**
  Only effective if 84-17-03 = enabled. (Entries: 0 - 32767)
- **84-17-09 : VOIPU Echo Canceller Control Setup - Echo Canceller 4W Detect**
  (0=Disabled, 1=Enabled)
- **84-11-26 : Dterm IP CODEC Information Basic Setup - RX Gain**
  Adjust the receive gain as needed (0-28 [-14~+14]).

- **84-11-27 : Dterm IP CODEC Information Basic Setup - TX Gain**
  Adjust the transmit gain as needed (0-28 [-14~+14]).
- **84-06-12 : VOIPU Setup - Long Tail Echo Mode**
  Turn off (0) or on (1) the Long Tail Echo Mode for each VOIPU slot.
- **84-16-01 : VOIPU Limiter Control Gain Setup - RX Limiter Control Gain**
  This option controls the limiter gain for IP to PCM direction. This option adds gain to the voice input from the LAN and removes it from the voice output to highway (0-30 [-15 ~ +15]).
- **84-16-02 : VOIPU Limiter Control Gain Setup - TX Limiter Control Gain**
  This option controls the limiter gain for PCM to IP direction. This option adds the gain to the voice input from highway and removes it from the voice output to the LAN (0-30 [-15 ~ +15]).
- **14-01-02 : Basic Trunk Data Setup - Transmit CODEC Gain Type**
  Use this option to select the CODEC gain for the trunk (1~63 in .5dB intervals [1= -15.5dB]). The option sets the amount of gain (signal amplification) for the trunk you are programming.
- **14-01-03 : Basic Trunk Data Setup - Receive CODEC Gain Type**
  Use this option to select the CODEC gain for the trunk (1~63 in .5dB intervals [1= -15.5dB]). The option sets the amount of gain (signal amplification) for the trunk you are programming.
- **81-07-01 : CODEC Filter Setup for Analog Trunk Ports**
  Define the CODEC (QSLAC) Filter for each analog trunk port (0 = No Filter, 1 = 0dB Loss, 2 = 4dB Loss, 3 = 8dB Loss, 4 = Specified Data - This option uses the entries defined in Program 81-09.).

Note: Set the trunk TX/RX level to lower than 0dB to reduce hybrid echo level.

Fax Relay

Required Items

16VOIPU PCB
G3 Fax equipment (G4 Fax is not supported)

Basic Programming

All VOIPU programming required for the feature as well as the following:

- **15-03-03 : Single Line Telephone Basic Data Setup**
  Set the terminal type to "1" (Special Terminal) for the extension which has the fax connected.
- **84-01-59 : CODEC Information Basic Setup - Fax Relay Function**
  Enable (1) or disable (0) the Fax Relay function for the system.
  When the voice CODEC to be used in a session is selected as G.711, fax signals may be sent even when this option is disabled. This occurs as G.711 sends fax signals in voice packets. Frequent packet loss on the network may cause the session to disconnect since the connection is not established as a Fax Relay (T.38). To avoid this, set Program 84-01-33 to a CODEC other than G.711 and the fax connection will then be established as T.38 (Fax Relay).
- **84-01-36 through 84-01-58 : CODEC Information Basic Setup**
  These programs are also available for the Fax Relay feature, but it is recommended that they remain at the system default.

The following fax machines require changes as noted below:

- NEFAX-490:
  Set the VOIPU ECM to off (Program 84-01-55 = 0) for transmission on the VOIPU. The NEFAX-490 must also have the ECM turned off and the auto-answer alerting time should be increased.
- NEFAX-500:
  The NEFAX-500 must have the ECM set to off.

Firmware Download for Aspire Keyset with IP Adapter

There are two types of downloads: Local (Aspire Keyset with IP Adapter) and Center (System). When you select Center download, you need to set the hardware version and firmware version. If the hardware version is the same and the firmware version is different, then the download will start. A TFTP server or FTP server is required.

Programming

- **84-07-01 : Firmware Download Setup - Server Mode**
  Select the server mode (0=TFTP, 1=FTP).
- **84-07-02 : Firmware Download Setup - File Server**
  Enter the IP address for the file server.
- **84-07-03 : Firmware Download Setup - Log-In Name**
  Enter the log-in name to be used, up to 20 characters.
- **84-07-04 : Firmware Download Setup - Password**
  Enter the password to be used, up to 20 characters.
- **84-08-01 : Firmware Name Setup - Firmware Directory**
  Enter the firmware directory to be used, up to 64 characters maximum.

84-08-02 : Firmware Name Setup - Firmware File Name
Enter the firmware file name to be used, up to 30 characters.

90-22-01 : NGT Terminal Version Information - Hardware Version
For each terminal type (1=Dterm IP/Aspire keyset with IP adapter, 2=Smart Phone, 3=Bandle IP Phone, 4=ITR-32D-1D, IP1WW IP Adapter, 6=ITR-LC-1, 7=IP1NA-24TIXH, 8=IP1WW-24TIXH), define the hardware version of the NGT terminal.

90-22-02 : NGT Terminal Version Information - Firmware Version
For each terminal type (1=Dterm IP/Aspire keyset with IP adapter, 2=Smart Phone, 3=Bandle IP Phone, 4=ITR-32D-1D, IP1WW IP Adapter, 6=ITR-LC-1, 7=IP1NA-24TIXH, 8=IP1WW-24TIXH), define the firmware version of the NGT terminal.

H.323 Gatekeeper Connection

With the Aspire system, a separate external gatekeeper is not required unless connecting to an outside H.323 endpoint/gateway which requires an outer gatekeeper or if over 50 outer addresses must be registered. Otherwise, the Aspire provides tables within the system programming for address resolution. Each VoIP PCB installed is considered a node when counting the number of addresses. The following gatekeepers have been tested for use with the Aspire System:

- NEC GK1000
- NEC CX6800-GK
- Radvision H.323 Gatekeeper
- Melco VG-GK1000

10-17-01 : H.323 Gatekeeper Setup - Gatekeeper Mode
Set the Gatekeeper mode to be used (0=No Gatekeeper, 1=Automatic Gatekeeper, 2=Manual Gatekeeper). If Automatic Gatekeeper is selected, the system searches for the gatekeeper. If Manual Gatekeeper is selected, the IP address defined in 10-17-02 is used to locate the gatekeeper.

10-17-02 : H.323 Gatekeeper Setup - Gatekeeper IP Address
If 10-17-01 is set to "2", enter the IP address of the Gatekeeper. This should match the entry made in 10-12-01 (default: 172.16.0.10).

10-17-04 : H.323 Gatekeeper Setup - Preferred Gatekeeper
If 10-17-01 is set to "1", enter the Gatekeeper's ID. When registering with an external Gatekeeper using Gatekeeper search, two or more GRQ's may be assigned. In this case, if this ID is set up, it will register with a Gatekeeper using the ID set up in this program (124 characters max).

10-18-01 : H.323 Alias Address Setup - Alias Address
Enter the Alias Address of the Aspire system registered into the external Gatekeeper. At this time as restricted by Program 10-18-02, only the telephone number can be registered as an alias address (12 digits max).

10-18-02 : H.323 Alias Address Setup - Type of Alias Address
Define the type of Alias Address registered to the external Gatekeeper. At this point, only E.164 can be entered (0=E.164).

H.323 Terminals

Hold and Transfer features are available when using the ITR-2D-1 H.323 terminal. The firmware in this terminal should be version 2.08 or higher.

In order to use an H.323 phone as an Aspire extension, the H.323 phone needs to be registered with the Aspire Gatekeeper. An extension number or alias should be assigned to the phone. If both are assigned, the extension number is given priority.

H.323 phones do not support the ability to send digits after a call has been placed and before it is answered. This means that features which use single digit service codes, such as Voice Over and Barge-In, are not available with this type of phone. In addition, these phones doe not provide P-codes, and therefore, cannot be used with the inDepth application.

Programming

- **15-05-01 : IP Phone Terminal Basic Data Setup - Terminal Type**
  When using an IP/H.323 terminal, the terminal type is defined in this program. The type is set automatically and this program cannot be changed manually (0=Aspire NGT [new generation telephones], 1=H.323, 2=SIP, 3=MEGACO).
- **15-05-03 : IP Phone Terminal Basic Data Setup - Default URL Address**
  Define the default URL address for a Smart phone.
- **15-05-04 : IP Phone Terminal Basic Data Setup - H.323 Fixed Port Assignment**
  Set the alias of an H.323 terminal (up to 48 characters in length). Each alias address must be unique in the system.

In-Band/Out-of-Band Signaling

In-band signaling is the way to send DTMF tone just as audio (in band of the RTP packet). There is no other message sent to the far end for the DTMF digits. Therefore, if this is used with G.729 protocol, the DTMF tone will not be received properly. At the level G.729 compresses the audio, it affects the actual DTMF tone and it can not be interpreted by the far end. This is by the design of VoIP and there is no way to correct it.

Out-of-band signaling sends a special message to the far end for the DTMF digits (out of band of the RTP packet). The actual DTMF audio will be muted. There are two signaling types - RFC2833 and H.245. Both signaling types should work on every protocol (G.729, G.711, etc.).

Aspire software version 2.63 and higher supports out-of-band signaling, allowing DTMF digits to be sent when using G.729 protocol. However, in-band signaling on G.729 will never work on any phone system unless the defined compression rate is changed.

To enable the out-of-band signal function, you must have software 2.63 or higher, change Program 84-12-31 : H.323 Phone CODEC Information Setup - DTMF Relay Mode to RFC2833 (an entry of "1"), and change 84-06-10 : VOIPU Setup - DTMF Behavior for the card slot of the VoIP card to out of band (an entry of "2").

IP Extensions

- When the first IP phone is plugged in, the system automatically assigns four consecutive station ports available as IP ports (the system takes the next group of consecutive ports available). The next three IP phones installed will use this group of ports. When the fifth IP phone is connected, the next 4 consecutive station ports available will be assigned as IP ports.
- After connecting an IP phone, there could be a delay of up to one minute until the system checks for an IP connection.
- If there is no idle DSP resource or CODEC resource available, the terminal cannot be registered.
- If the same IP address already exists in the LAN, the last one assigned to the phone is considered valid.
- If a MAC address is registered, but an intercom number is not (Program 11-02), then the DRS rejects a registration and the IP phone display reads “Illegal Len”.
- If the same MAC address already exists, the lower port is assigned.
- Aspire keysets with an IP adapter/Dterm phones and Aspire IP keysets do not support silent suppression.

Assign Port/Extension Number

The extension port of an IP terminal is assigned by default starting with port 01. Use Program 84-03-09 to redefine this starting port number. The extension number for the port is set in Program 11-02.

Programming

➧ **11-02-01 : Extension Numbering**
If the default extension number is not acceptable for an IP terminal, change the extension number associated with the port number (port 1-512).

➧ **84-03-09 : NGT Information Basic Setup**
Set the starting port number to be used for IP terminals (default: 1, entries 1-512).

Simultaneous Calls

Each VoIP PCB provides resources which can be used for IP calls. The 4VOIPU provides 4 resources, the 4VOIPDB provides 4, the 16VOIPU provides 16, and the 16VOIPDB provides 16 resources. An IP phone uses 1 channel resource. At the time of an extension call (IP phone to IP phone), it is possible to create 16 telephone calls if a 16VOIPU and 16VOIPDB are used and are **not** set peer-to-peer. If peer-to-peer is on, a call between Aspire IP phones (Aspire keyset with IP adapter or Aspire IPhone) will not use a resource from the VOIP PCB.

Refer to **CODEC Selection** (page 668) for additional information on CODEC settings.

Because of the performance that would be experienced with the maximum number of calls, it is necessary to restrict the number of maximum number of simultaneous calls with a combination of the type and the number of CODEC frames. The table below indicates the performance level which can be achieved with the various settings.

Use the charts on the following pages to view how the different types of settings restrict the number of simultaneous calls within that range.

Group	CODEC / Frame (VIF) Number *	Comments
Group 1	G.711 / 30ms	• No compression • Best voice performance • Most restricted in the quantity of calls • With a 32VOIPU, 12 channels are possible with this setting. The remaining 20 channels must use one of the Group 3 settings shown below.
Group 2	G.723 / 30ms	• Mid-range compression • Good voice performance • Some restrictions for the quantity of calls • The maximum number of resources for a 16 or 32 VOIPU PCB is 16 using these settings. With a 32VOIPU PCB, only 16 IP telephone conversations are possible - the system can not currently support 32 conversations. (Program 84-11-07 indicates that VIF rates higher than 50ms are possible, however, this will only possible with a new release of the media gateway card (which is not yet available).) • As the default compression recommendation for remote applications is to use G.729a, the current 16-channel VoIP media gateway daughter board provides no additional channels. It is recommended to use multiple 16-channel media gateway PCBs rather than 16-channel daughter boards when more than 16 channels of G.729a compression is required.
	G.729 / 30ms	
	G.729 / 40ms	
	G.729 / 50ms	

* VIF 20ms is supported only when there is no VOIPDB (daughter board) used.
VIF 20ms is applied by the H.323 trunk only.
VIF 20ms is supported for G.711 and G.729. It is not, however, supported with the 32VOIPU PCB.
With G.711 or G.729 at VIF 20ms, the maximum number of simultaneous calls is 15 with a 16VOIPU.

The following chart shows the maximum number of simultaneous calls based on the different group settings and the type of VOIPU PCB being used. So, for example, with a 16VOIPU, 7 calls can use the G.711/G.729 with 20ms VIF, which would then restrict the remaining 9 channels to use one of the Group 2 settings (which have a higher compression and lower voice quality than the Group 1 settings).

16VOIPU PCB

	CODEC	VIF	Number of Simultaneous Calls																		
Group 1	G.711/G.729	20ms	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	14	14	14	14	15 max
Group 2	G.711	30ms	16	15	14	13	12	11	10	9	8	7	6	5	4	3	0	0	0	1	1	0
	G.729/G.723	30ms															0	1	2	0	1	
	G.729	40ms																				
	G.729	50ms																				
	G.729	60ms															2	1	0	1	0	1
	G.729	70ms																				
	G.729	80ms																				

32VOIPU PCB

	CODEC	VIF	Number of Simultaneous Calls													
Group 1	G.711	30ms	0	0	1	2	3	4	5	6	7	8	9	10	11	12 max
Group 2	G.729/G.723	30ms	0	16 max	14	13	12	10	9	8	6	5	4	2	1	0
	G.729	40ms														
	G.729	50ms														
Group 3	G.729/G.723	60ms	32	16	17	17	17	18	18	18	19	19	19	20	20	20
	G.729	70ms														
	G.729	80ms														

20VOIPU PCB (16VOIPU with 4VOIPDB)																							
	CODEC	VIF	Number of Simultaneous Calls																				
Group 1	G.711/G729	20ms	0	1	2	3	4	5					6					7					
Group 2	G.711	30ms	20	19	18	17	15	14	13	12	---	0	12	11	10	---	0	10	9	8	7	6	5
Group 3	G.729/G.723	30ms					0	0	1	3	---	15	0	2	4	---	14	0	2	3	4	6	7
	G.729	40ms																					
	G.729	50ms																					
Group 4	G.729/G.723	60ms					1	1	1	0	0	0	2	1	0	0	0	3	2	2	2	1	1
	G.729	70ms																					
	G.729	80ms																					

Group 1	G.711/G729	20ms	7 (cont.)			8								9									
Group 2	G.711	30ms	4	---	0	8	7	6	5	4	3	2	---	0	7	6	5	4	3	2	1	0	
Group 3	G.729/G.723	30ms	9	---	13	0	2	4	5	7	8	10	---	12	0	2	3	4	5	7	8	10	
	G.729	40ms																					
	G.729	50ms																					
Group 4	G.729/G.723	60ms	0	0	0	4	3	2	2	1	1	0	0	0	4	3	3	3	3	2	2	1	
	G.729	70ms																					
	G.729	80ms																					

Group 1	G.711/G729	20ms	10						11					12			13
Group 2	G.711	30ms	5	4	3	2	1	0	3	3	2	1	0	2	1	0	0
Group 3	G.729/G.723	30ms	0	2	3	5	6	7	0	1	2	4	5	0	1	3	0
	G.729	40ms															
	G.729	50ms															
Group 4	G.729/G.723	60ms	5	4	4	3	3	3	6	5	5	4	4	6	6	5	7
	G.729	70ms															
	G.729	80ms															

VoIP Phones

When connecting an VoIP phone, the MAC address (ID) is automatically registered in Program 15-05-02. If the registration in Program 15-05-02 is made manually, prior to connecting the phone, when the phone is connected, it will use the extension number assigned. The MAC address is printed on the barcode label on the bottom of the phone or adapter. It is a 12-digit alphanumeric number, ranging from 0-9 and A-F.

Aspire keysets with an IP adapter do not use Program 80-01 : Service Tone Setup entries. The tones, instead, are provided by the IP adapter. When a Door Box chime rings an Aspire keyset with IP adapter, the system activates the chimes using a ring command. Because of this, if the volume is adjusted while the door chime is sounding, the ringing volume of the Aspire keyset with IP adapter will be adjusted.

In addition, Music on Hold is also provided by the IP adapter. The settings in Program 10-04 : Music on Hold Setup are ignored except to determine whether or not music should be provided. If 10-04-02 is set to "0", no music on hold will be heard. If 10-04-02 is set to "1" or "2", music will be provided by the IP adapter, but there is only one music selection.

Programming

➧ **15-05-02 : IP Phone Terminal Basic Data Setup - NGT Fixed Port Assignment**
If a specific extension number is to be assigned to an Aspire keyset with an IP adapter, the MAC Address of the IP adapter must be set for the extension. For the extension number which has the IP adapter connected, enter the MAC Address of the IP adapter. This MAC Address is printed on the IP adapter label (default: 00-00-00-00-00-00). If this is not set, the system will automatically assign the next available extension number.

Use line keys 1-6 to enter letters A-F (key 1=A, key 2=B, etc.)

Use caution when entering in the MAC Address as the system will allow duplicate entries to be made. If there are two duplicate entries, the lowest matching extension will be assigned to the MAC Address.

Aspire IP and Aspire Keyset with IP Adapter

There are two program levels available for individual phone programming - the User Menu and the Maintenance Menu. Each program mode is accessed differently.

Accessing the User Menu

1. On the Aspire IPhone or an Aspire keyset with an IP Adapter, enter the phone's program mode by pressing HOLD CONF * #. The following shows the menu items available in the phone's programming.

This enters the IP User Menu program mode to select the settings for the individual phone.

	Default
1. DHCP Mode	Enabled
Disable	
Enable	
2. DRS Address Primary	0.0.0.0
3. DRS Address Secondary	0.0.0.0
4. IP Address	0.0.0.0
5. Default Gateway	0.0.0.0
6. Subnet Mask	0.0.0.0

7. DNS	
DNS Address	0.0.0.0
DNS Domain Name	
DRS Name	NECDRS1
8. VLAN	Disable
VLAN Mode	
VLAN ID	
VLAN Priority	
9. System Information (for viewing only)	
DRS Address (Primary)	0.0.0.0
DRS Address (Secondary)	0.0.0.0
DRS Mate Port	3456
DRS Self Port	3455
IP Address	0.0.0.0
Default Gateway	0.0.0.0
Subnet Mask	0.0.0.0
Download Address	0.0.0.0
Area ID	Automatic
Language	Automatic
DHCP Mode	Enable
DtermIP Modem	Normal
VLAN Mode	Disable
VLAN ID	7
VLAN Priority	5
DNS Address	0.0.0.0
DRS Name	NECDRS1
DNS Access Domain	
PROTIMS Self Port	3458
RTP Self Port	3462
Voice Control Self Port	4000
H245 Self Port	Any Port
ToS DRS	0xC0
ToS PROTIMS	0xC0
ToS RTP	0xA0
ToS Voice Control	0xC0
MAC Address	00 60 b9 c1 23 5d
Firmware Version	(P2PK) 00.21
Hardware Version	02.10

2. Press the Soft Key “SAVE” to save the entries and return the phone to an idle condition.

Accessing the Maintenance Menu

1. On the Aspire keyset with an IP adapter, enter the phone's program mode by pressing HOLD CONF * #. This enters into the IP User Menu. Press HOLD # 0 to then enter the Maintenance Menu. The following shows the menu items available in the phone's programming.

   This enters the IP Maintenance Menu program mode to select the settings for the individual phone.

	Default
0. Next Page (P1 >>P2) [1]	
0. Next Page (P2 >> P1)	
1. Ping	
1. Echo Request	
2. Destination Address	
3. Requests Count	
4. Reply Timer	
2. Music Select	
1. DtermIP Mode	Normal
2. Download Address	0.0.0.0
3. AreaID (select Area ID entry then press #)	Automatic
0. Automatic	
1. Japan	
2. America	
3. Others	
4. Port	
1. DRS Mate Port	3456
2. DRS Self Port	3455
3. PROTIMS Self Port	3458
4. RTP Self Port	3462
5. Voice Ctrl Self Port	4000
6. H245 Self Port	32826
5. Download	
1. Program	
2. Config	
3. Input File Name	
4. Boot & Program	
5. Music [1]	
6. Soft Reset	
7. Factory Value	
8. Type of Service	
1. DRS	ToS (hex) 0xC0
2. PROTIMS	ToS (hex) 0xC0
3. RTP	ToS (hex) 0xC0
4. Voice Control	ToS (hex) 0xC0

[1] IP Adapter firmware version 0.10 is not supported.

2. Press the Soft Key "EXIT" to save the entries and return to the IP User Program menu.

IP Trunks

When installing a VoIP PCB, the system automatically assigns trunk ports to match the card's port capacity. For example, a 4VOIPU would take 4 trunk ports, the 4VOIPU with a 4VOIPDB would take 8 trunk ports. Extension ports are not reserved until an IP phone is connected to the system. When the first IP phone is plugged in, the system takes the next four consecutive extension ports available and automatically assigns them as IP ports. The next three IP phones installed will use this group of ports. When the fifth IP phone is connected, the next 4 consecutive extension ports available will be assigned as IP ports.

If the number of trunk ports reserved by the system is a concern (as it could be with the Aspire S system), install the trunk cards first, then install the VOIPU PCB. This will allow the trunks to be assigned to the COIU, DIOPU, etc. first. If there are not enough trunk ports available for the VoIP PCB, the system will still recognize the card and allow it to be used for IP phones.

Once a VoIP PCB has been installed in the system and trunks have been reserved for the PCB, the only way to release the trunks for use by other PCBs is to remove the VoIP PCB and delete the slot (using Program 90-05). However, if there are IP trunks which are not used or if it is not necessary to use all the ports as IP trunks, use Program 10-03-01 to cancel the trunk setting for the slot in which the VOIPU PCB is installed.

Programming

10-03-01 : PCB Setup - Trunk Logical Port Number
For the slot assigned as a VOIPU slot, undefine (0) the assigned VoIP trunks, if they are not needed. The unassigned port(s) will not be available for any other use as it is still reserved for the VOIPU PCB.

Bandwidth Setting for Aspire

Setting the bandwidth limitation in the Aspire system restricts the amount of bandwidth the Aspire uses for a call.

Packet Len. (msec)	Required Voice Bandwidth (Kbps) Per Call (TX+RX RTP)					
	G711 No VLAN	G711 VLAN	G729 No VLAN	G729 VLAN	G723 No VLAN	G723 VLAN
10	-	-	-	-	-	-
20	160	161.6	48	49.6	-	-
30	149.4	150.4	37.4	38.4	32	33
40	-	-	32	32.8	-	-
50	-	-	28.8	29.6	-	-
60	-	-	26.8	27.2	21.4	21.8
70	-	-	25.2	25.6	-	-
80	-	-	24	24.4	-	-

To help determine the bandwidth requirements for the system, the NEC Technical Support web site (http://ws1.necii.com) provides a bandwidth calculator. This web site requires registration with the NEC Sales Support. Contact them by phone (1-800-365-1928) or EMail (ubsdsupport@necinfrontia.com) in order to register. It is important to remember that the bandwidth calculator is based on a single voice channel. It takes two voice channels (send and receive) for each telephone conversation.

Programming

- **84-01-34 : CODEC Information Basic Setup - Bandwidth Control**
  Enable (1) or disable (0) voice bandwidth control on H.323 trunks.
- **84-01-35 : CODEC Information Basic Setup - Maximum Bandwidth**
  Set the maximum total bandwidth limitation for voice packets (0-65535 kbps). Calls are restricted which are above the maximum bandwidth. Only RTP packets are considered.

Music on Hold for IP Terminals

The Aspire IP Adapter (P/N 0890060) and Aspire IPhone (P/N 0890065) allow a user to download a music file of their own to be used for their Music on Hold. Each IP Adapter or IPhone user must download a file to their own terminal as the music file is only played on the terminal which has the file stored. A maximum of 32 seconds is allowed for the music file. The firmware for the IP Adapter and IPhone should be:

- IP Adapter Firmware 01.00 or higher
- IPhone Firmware 01.03 or higher

Refer to the NEC Technical Support web site (ws1.necii.com) for instructions on setting up Music on Hold (P/N AN2900-05-001).

Networking Over IP

The Aspire system allows Networking connection between several different Aspire systems. Aspire supports Networking using ISDN or VoIP (H.323). Out-of-band DTMF digits can be supported using software 2.63+.

Resource Release with Networked Calls

When a trunk from site A rings an extension in site B, site B answers and transfers the call back to an extension in site A, the following occurs:

- On the initial call, there is 1 media gateway channel used on each site.
- When site B puts the call on hold and transfers it to site A, another media gateway channel is used in site B.
- When site A answers the call, ALL media gateway channels are released.

Programming

- **10-12-01 : NTCPU Network Setup - IP Address**
  Select the IP address of the master system (for example: 172.16.0.10). Set the IP address for the slave system (for example: 172.16.0.11). The system must be reset in order for the change to take effect.
- **10-12-02 : NTCPU Network Setup - Subnet Mask**
  Select the Subnet Mask to be used by the IP server (default: 255.255.0.0) for both the master and slave systems.
- **10-27-01 : IP System ID**
  For each of the networked IP systems, define the IP addresses. (Using the examples shown in Program 10-12-01 above, in the master system enter 172.16.0.11 - in the slave system enter 172.16.0.10.)
- **84-05-01 : VOIPU IP Address Setup - IP Address**
  For each VOIPU PCB, enter the IP address for the VOIPU PCB (for example: master system set to 172.16.0.20 and the slave set to 172.16.0.21).

- **84-06-10 : VOIPU Setup - DTMF Behavior**
  Determine the operation of the DTMF relay for the VOIPU PCB. For out-of-band DTMF, set this option to "2" - out-of-band DTMF relay, do not pass tones as voice.
- **84-05-01 : VOIPU IP Address Setup - IP Address**
  For each VOIPU PCB, enter the IP address for the VOIPU PCB (for example: master system set to 172.16.0.20 and the slave set to 172.16.0.21).
- **84-12-31 : H.323 Phone CODEC Information Setup - DTMF Relay Mode**
  Define the DTMF Payload (Networking). For out-of-band DTMF, set this option to "1" - RFC2833. (Entries: 0=Disable, 1=RFC2833, 2=VOIPU)

Example:

Program	Master System	Slave System
10-12	IP Address: 172.16.0.10 Sub Address: 255.255.0.0	IP Address: 172.16.0.11 Sub Address: 255.255.0.0
84-05	IP Address: 172.16.0.20 Sub Address: 255.255.0.0	IP Address: 172.16.0.21 Sub Address: 255.255.0.0
10-27-01	System ID 1 IP Address: 172.16.0.11 Port: 1730	System ID 1 IP Address: 172.16.0.10 Port: 1730
11-01	Dial 3x Digit 3 Type 2 (Intercom)	Dial 3x Digit 3 Type 8 (Networking) System ID 1
	Dial 4x Digit 3 Type 8 (Networking) System ID 1	Dial 4x Digit 3 Type 2 (Intercom)
11-02-01		

Peer-to-Peer Connection

An Aspire keyset with an IP adapter and Aspire IP keyset can send and receive RTP packets to/from another IP keyset without using DSP resources on a VOIPU PCB. This operation only allows Intercom calls between the phones. If a non-IP Aspire keyset, H.323, SIP phone or outside CO line is required, a DSP resource is needed and a VOIPU PCB must be installed - peer-to-peer will not work. If, while on a peer-to-peer call, a Conference call is formed, the peer-to-peer connection is released and a new non peer-to-peer connection is created using the VOIPU PCB. If the third party drops out of the conversation, the call reverts to a peer-to-peer call (silence may be heard while this conversion is made by the system).

- With Barge-In, a short silence may be heard if the following occurs:
  - A peer-to-peer call receives a Barge-In without a Barge-In tone.
  - A peer-to-peer call receives a Barge-In with Monitor mode.
  - When the established Barge-In is disconnected.

Programming

- **10-26-01 : IP System Operation Setup**
  Enable (1) or disable (0) peer-to-peer operation.

RTP Forwarding Available

With software 4.93+ the delay of the RTP packet is improved. Previously, the VOIPU PCB decoded the RTP packet to voice. The voice returned to the VOIPU PCB through the backplane of the Aspire. The VOIPU PCB would then encode the voice to the RTP packet to send it back out.

With RTP Forwarding now the VOIPU PCB does not decode the RTP packet, but instead just transfers it. This decreases the delay necessary previously when the RTP packets were decoded.

This feature is supported with the following VOIPU PCB firmware:

- VOIPU-A1 - firmware 4.5 or later
- VOIPU-S1 - firmware 4.5 or later
- VOIPU-B2 - firmware 4.3 or later

RTP Forwarding will take affect when:

- Program 10-26-02 is enabled.
- IP call via VOIPU P CB.
- DSP channels on the same VOIPU PCB are used.
- The codec and payload size used RTP packet 1 and RTP packet 2 are the same.
- VAD mode is disabled.

Conditions

- RTP Forwarding does not work with RFC2833 DTMF relay.
- If a digit key on an IP phone is pressed, the RTP Forwarding is temporarily disabled. After a 5 second delay (Program 21-01-03 : Trunk Interdigit Timer), RTP Forwarding is automatically enabled.
- If RTP Forwarding is enabled and RTP packets are not sent from the other phone, an error tone is heard.
- If IP phones use G.723 codec, RTP Forwarding does not work between the IP phone and another terminal/trunk.

Programming

➧ **10-26-02 : IP System Operation Setup - RTP Forwarding**
Enable (1) or disable (0) RTP Forwarding for the system. If this option is disabled, the DSP is used from the VOIPU which low load channel. If this option is enabled, the DSP is used from the same VOIPU channel.

Tandem Connection

To call from one Aspire system to another, set the following programs.

Programming

➧ **15-05-12 : IP Phone Terminal Basic Data Setup - System Type**
Define whether or not the Aspire system is interconnected (0=no system, 1=Second Aspire system).

➧ **15-05-13 : IP Phone Terminal Basic Data Setup - IP Address for Other System**
Define the IP address for the connected system.

➧ **15-05-14 : IP Phone Terminal Basic Data Setup - Call Control Port for Other System**
The Call Control Port for the other system is defined in this program. This item is fixed at 1720 and it cannot be changed.

VLAN/QoS

The Aspire system supports:

- IEEE802.1q (VLAN Tagging)
- IEEE802.1p (Priority)

With the VLAN tagging mode, the Aspire can handle packets with or without a VLAN tag. If the VLAN ID of a packet is different from the registered one, that packet will be dropped.

With the use of a switch which supports VLAN tagging, Layer 2 priority control is enabled. When available, the 8SHUBU PCB can be used to provide this option.

Using a switch which supports 802.1p allows:

- priority control
- reduction of unnecessary packets (ex: broadcast packets) and provides circuitry by restricting a broadcast domain

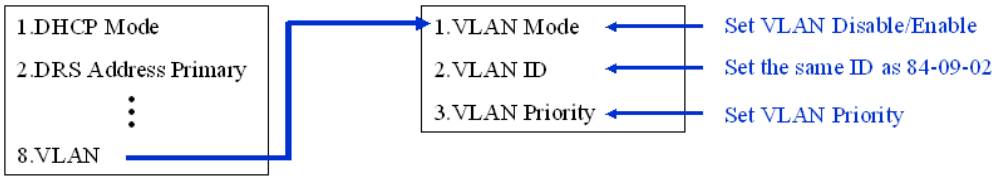
Layer 2

Programming - System, VLAN/QoS - Layer 2

- **84-09-01 : VLAN Setup - VLAN Mode**
  Enable the VLAN mode for the system (0=disable, 1=enable). The system must be reset in order for the change to take effect. If the VLAN mode is enabled, the Aspire sends all packets with a VLAN tag - if disabled, no VLAN tag is sent in the packets.
- **84-09-02 : VLAN Setup - VLAN ID**
  Enter the ID to be used for the VLAN (1-4094). The system must be reset in order for the change to take effect.
- **84-09-03 : VLAN Setup - Priority**
  Enter the priority of the VLAN (0-7). The system must be reset in order for the change to take effect.

Programming - Aspire Keyset with IP Adapter, VLAN/QoS - Layer 2

1. On the Aspire keyset connected as an IP telephone, enter the phone's program mode by pressing HOLD CONF * #.
   This enters the IP program mode to select the settings for the individual phone. The flashing item is the current selection.



2. Press the Soft Key "SAVE" to save the entries and return the phone to an idle condition.

Layer 3 (ToS)

The router-supported ToS controls routing priority of packets by following the ToS field. It is possible to give priority to the voice packet using the ToS field.

- There are two types of ToS formats: DiffServ and IP Precedence. Before programming your router, make sure to check which type is supported by your router.
- Aspire can set the ToS value for each protocol, DTS, NGT, H.323 and Voice Control (H.245 for NGT). This setting allows flexible prioritization.

Protocol Type	Remarks
Default	Not needed
DRS (Device Registration Server)	Protocol when an IP telephone or IP adapter is registered
PROTIMS	Protocol to control the Aspire keyset with IP adapter
Voice Control	H.245 protocol for the Aspire keyset with IP adapter
H.323	H.245 protocol for H.323 IP phones
RTP / RTCP	Protocol for voice packet

Programming - VLAN/QoS - Layer 3

84-03-07 : NGT Information Basic Setup - Type of Service Mode
For the terminal type (1=Dterm IP/Aspire keyset with IP adapter, 2=Smart Phone, 3=Bandle IP Phone), set the service mode to be used (1=disable, 2=IP Precedence, 3=Diffserv).

84-03-08 : NGT Information Basic Setup - Type of Service
For the terminal type (1=Dterm IP/Aspire keyset with IP adapter, 2=Smart Phone, 3=Bandle IP Phone), set the type of service to be used (0x00 to 0xff). This data will be sent to the NGT terminal when it is registered. If Program 84-03-07 is "2", then enter "A0". If Program 84-03-07 is "3", then enter 74.

Use line keys 1-6 to enter letters A-F (key 1=A, key 2=B, etc.)

84-10-01 : ToS Setup - ToS Mode
For the Protocol type (1=default, 2=DRS, 3=Protims, 4=Voice Control, 5=H.323, 6=RTP/RTCP), select the ToS mode (0=disable, 1=IP Precedence, 2=Diffserv).

84-10-02 : ToS Setup - Precedence
For the Protocol type (1=default, 2=DRS, 3=Protims, 4=Voice Control, 5=H.323, 6=RTP/RTCP), if Program 84-10-01 is set to "1", select the precedence (0=low, 7=high).

84-10-03 : ToS Setup - Low Delay
For the Protocol type (1=default, 2=DRS, 3=Protims, 4=Voice Control, 5=H.323, 6=RTP/RTCP), if Program 84-10-01 is set to "1", select the delay (0=normal delay, 1=low delay).

84-10-04 : ToS Setup - Throughput
For the Protocol type (1=default, 2=DRS, 3=Protims, 4=Voice Control, 5=H.323, 6=RTP/RTCP), if Program 84-10-01 is set to "1", select the throughput (0=normal throughput, 1=high throughput).

84-10-05 : ToS Setup - Reliability
For the Protocol type (1=default, 2=DRS, 3=Protims, 4=Voice Control, 5=H.323, 6=RTP/RTCP), if Program 84-10-01 is set to "1", select the reliability (0=normal reliability, 1=high reliability).

84-10-06 : ToS Setup - Low Cost
For the Protocol type (1=default, 2=DRS, 3=Protims, 4=Voice Control, 5=H.323, 6=RTP/RTCP), if Program 84-10-01 is set to "1", select the low cost mode (0=normal cost, 1=low cost).

84-10-07 : ToS Setup - Priority
For the Protocol type (1=default, 2=DRS, 3=Protims, 4=Voice Control, 5=H.323, 6=RTP/RTCP), if Program 84-10-01 is set to "2", select the Diffserv priority (0-63).

VOIPU DSP Resource Assignment

10-19-01 : VOIPU DSP Resource Selection

Specify the operating mode of the DSP voice resource on the VOIPU PCB (DSP Resource: 01-32, 0=IP extensions and trunks, 1=IP extension only, 2=IP trunk only). If a user wants to keep DSP voice channels only for trunks or extensions, then set this program to IP Extension Only (1) or IP Trunk Only (2). Each VoIP call, unless it is a peer-to-peer call, requires a DSP resource be available. One DSP resource can handle 4 VoIP channels. This program setting has no affect on the terminal/trunk port assignment or usage.

- One DSP resource can handle 4 VOIP channels.
- This program setting has no affect on the terminal/trunk port assignments or usage.

Conditions

Changes to the following programs require the system be reset before the changes can take effect.

- Program 10-12
- Program 10-13
- Program 84-10

Changes to the following programs require that a programmer log out of the system programming (phone programming, WebPro) before the changes can take effect.

- Program 84-01 Items: 39-41, 49-58
- Program 84-06
- Program 84-09

When changes are made to the following programs and there is an active call on the VOIPU PCB, the system will not update until the VOIPU PCB is idle.

- Program 10-10
- Program 10-18
- Program 84-01-01
- Program 84-02-33
- Program 84-04
- Program 84-05

Default Setting

Disabled.

Related Features

Networking

Aspire systems can be connected together through a LAN using VoIP. Networked IP phones can be programmed to follow ARS COS Matching in order for 911 calls to seize a local line to call the site's local authorities (and not the networked site's).

Paging, External / Paging, Internal

As the IP phones require a VOIPU resource when receiving a page, the number of IP phones allowed to receive a page should be minimized to prevent a lack of resources.

Operation

Refer to the individual features for operation.

Aspire S	Aspire M/L/XL
• Available. • Handset volume reset option requires software 2.63+.	• Available. • Handset volume reset option requires software 2.63+.

Description

Each keyset user can control the volume of incoming ringing, splash tone, Paging, Background Music, Handsfree and your handset. Keysets consolidate all adjustments into the volume buttons. Pressing the VOLUME ▲ or VOLUME ▼ will adjust the volume level for whichever feature is active (outside call, ICM, ICM ringing, paging, etc.). Pressing these keys when the phone is idle will adjust the contrast level of the telephone's display. The users should set the volumes for their most comfortable levels.

Handset Volume Reset Option Available

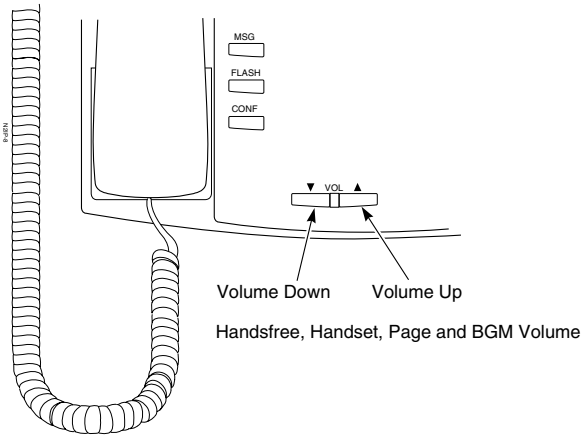
Depending on your software, an option is available which allows the system to either reset the handset volume back to the default setting after hanging up the handset or it can retain the user's setting.

Conditions

The contrast is not adjustable when the phone has background music enabled or if it is a super display telephone.

Default Setting

Enabled.



Handsfree, Handset, Page and BGM Volume

Programming

- **11-11-37 : Service Code Setup (for Setup/Entry Operation) - Adjusting Ring Volume**
  If required, change the service code used to adjust a keyset's ring volume (829).
- **15-02-27 : Multi-Line Telephone Basic Data Setup, Retain Handset Volume**
  This option determines whether a keyset's handset volume will change back to the system default (0) or whether it will be retained at the user's setting (1) after hanging up the handset.

Related Features

None

Operation

To adjust the volume of incoming ringing and splash tone:

1. If the phone is idle, press the CALL key and dial 829. If the phone is ringing, skip to Step 2.
2. Press VOLUME ▲ or VOLUME ▼.

To adjust the volume of ringing incoming Paging announcements, Handsfree, the handset or Background Music:

1. Press VOLUME ▲ or VOLUME ▼.

   The feature must be active to change the volume. Pressing the volume keys when the phone is idle will adjust the display's contrast.

Warning Tone For Long Conversation

Aspire S	Aspire M/L/XL
• Available.	• Available.

Description

The system can broadcast warning tones to a trunk caller warning them that they have been on the call too long. The tones are just a reminder -- the user may be able to disregard the tones and continue talking if they choose. The outside caller does not hear the warning tones. In addition, warning tones do not occur for Intercom calls and most incoming trunk calls. DISA trunks can also have warning tones. Warning tones are not available to analog single line telephone (SLT) users.

There are two types of warning tones: Alarm Tone 1 and Alarm Tone 2. Alarm Tone 1 is the first set of tones that occur after the user initially places a trunk call. Alarm Tone 2 broadcasts periodically after Alarm Tone 1 as a continued reminder. Each alarm tone consists of three short beeps.

If programmed, DISA calls will be disconnected unless the "continue" code is entered by the user. With the Long Conversation Cutoff feature, incoming or outgoing central office calls can also be disconnected.

Warning Tone for DISA Callers

For DISA callers, with this feature enabled, the warning tone timer begins when an incoming DISA call places an outgoing call and either the inter-digit timer expires or the outgoing call is answered.

With this feature enabled, the warning tone timer begins when an incoming DISA call places an outgoing call and either the inter-digit timer expires or the outgoing call is answered.

If an outside call is transferred to forwarded off-premise using an outside trunk, the warning tone timer begins immediately. This will occur only if either trunk involved in the call is programmed for this feature (Program 14-01-17). When transferring a trunk call off-premise, Program 14-01-13 must be enabled (set to '1').

Conditions

None

Default Setting

Disabled.

Programming

- **14-01-17 : Basic Trunk Data Setup - Trunk to Trunk Warning Tone for Long Conversation Alarm**
  Determine whether DISA callers should hear the Warning Tone for Long Conversations (0=disabled, 1=enabled).
- **20-06-01 : Class of Service for Extensions**
  Assign a Class Of Service (1-15) to an extension.
- **20-13-01 : Class of Service Options (Supplementary Service) - Long Conversation Alarm**
  In an extension's Class of Service, enable (1) or disable (0) Warning Tone for Long Conversation.
- **20-21-01 : System Options for Long Conversation - Long Conversation Alarm 1**
  After a user places a trunk call, the system sends the first warning tone to their extension after this interval (0-64800 seconds).
- **20-21-02 : System Options for Long Conversation - Long Conversation Alarm 2**
  After hearing the first warning tone, the system sends additional warning tones after this interval (0- 64800 seconds). The warning tones continue, spaced by this interval, until the user hangs up.
- **21-01-01 : System Options for Outgoing Calls - Trunk Interdigit Time (External)**
  Determine the length of time the system should wait before starting the Warning Tone Timer.
- **25-07-07 : System Timers for VRS/DISA - DISA Conversation Warning Tone Time**
  Determine the length of time the system should wait before the Warning Tone is heard by DISA callers (0-64800 seconds). If an outside call is transferred or forwarded off-premise using an outside trunk, this timer starts immediately. This will occur if either trunk involved in the call is programmed for the Warning Tone (Program 14-01-17).
- **25-07-08 : System Timers for VRS/DISA - DISA Long Conversation Disconnect**
  Determine how long after the Warning Tone is heard the system will wait before disconnecting DISA calls - unless the Continue code is entered (Program 25-13-02).
- **25-13-02 : System Option for DISA - Continue Code for DISA Trunk-to-Trunk**
  With software through 2.68, enter a single digit Continue Code for the DISA call to use to immediately disconnect or continue their outside call (0-9, * or # are accepted entries). With software 4.0E+, use Program 20-28-01.
- **25-13-03 : System Option for DISA - Disconnect Code for DISA Trunk-to-Trunk**
  With software through 2.68, enter a single digit Disconnect for the DISA call to use to immediately disconnect or continue their outside call (0-9, * or # are accepted entries). With software 4.0E+, use Program 20-28-02.

Related Features

Central Office Calls, Answering
Warning Tone for Long Conversation does not occur for incoming trunk calls.

Central Office Calls, Placing / Toll Restriction
Warning Tone for Long Conversation occurs for all outgoing trunk calls, regardless of how they are placed or other outgoing restrictions.

Direct Inward System Access (DISA)
Warning Tone for Long Conversation can be enabled for DISA calls.

Intercom
Warning Tone for Long Conversation does not occur for Intercom calls.

Long Conversation Cutoff
Warning Tone for Long Conversation can be used with the Long Conversation Cutoff feature for outgoing calls.

Single Line Telephones
Warning tones are not available to single line telephone (SLT) users.

Operation

Warning Tone for Long Conversation is automatic if programmed.

Warning Tone for Long Conversation for DISA Callers:

1. A DISA caller dials into the system and places a call.
2. Once the Warning Tone is heard,
   To continue the call, the DISA caller presses the programmed Continue Code.
   OR
   To disconnect the call, the DISA caller presses the programmed Disconnect Code.

Programming

Section 2 - Programming

Before Reading This Section

This section provides you with detailed information about the system programs. By changing a program, you change the way the feature associated with that program works. In this section, you find out about each program, the features that the program affects and how to enter the program data into system memory.

Do not start customizing your system without first reading Section 1, Features.

When you want to customize a feature, find it in Section 1 and learn about it. (If you have trouble finding the feature, try cross-referencing it in the Index at the back of this book.) Section 1 will tell you what programs you have to change to get the operation you want. Then, look the program up in this section if you have any questions about how to enter the data.

How to Use This Section

This section lists each program in numerical order. For example, Program 10-01 is at the beginning of the section and Program 92-01 is at the end. The information on each program is subdivided into the following headings:

Description describes what the program options control. The Default Settings for each program are also included. When you first install the system, it uses the Default Setting for all programs. Along with the Description are the *Conditions* which describe any limits or special considerations that may apply to the program.

The reverse type (white on black) just beneath the Description heading is the program's access level. You can only use the program if your access level meets or exceeds the level the program requires. Refer to **How to Enter the Programming Mode** (page 708) for a list of the system's access levels and passwords.

Feature Cross Reference provides you with a table of all the features affected by the program. You'll want to keep the referenced features in mind when you change a program. Customizing a feature may have an effect on another feature that you didn't intend.

Telephone Programming Instructions shows you how to enter the program's data into system memory. For example:

1. Enter the programming mode.
2. 15-07-01

tells you to enter the programming mode, dial 150701 from the telephone dial pad. After you do, you'll see the message "15-07-01 TEL301" on the first line of the telephone display. This indicates the program number (15-07), item number (01), and that the options are being set for extension 301. The second row of the display "KY01 = *01" indicates that Key 01 is being programmed with the entry of *01. The third row allows you to move the cursor to the left or right, depending on which arrow is pressed. To learn how to enter the programming mode, see **How to Enter the Programming Mode** below.

How to Enter the Programming Mode

To enter the programming mode:

1. Go to any working display telephone.
   In a newly installed system, use extension 301 (port 1).
2. Do not lift the handset.
3. Press CALL1.
4. # * # *
   Password
5. Dial the system password + HOLD.
   Refer to the following table for the default system passwords. To change the passwords, use Program 90-02.

Password	User Name	Level	Programs at this Level
374772	NEC-I	1 (MF)	All programs
12345678	ASPIRE	2 (IN)	All programs in this section not listed below for SA and SB
0000	ADMIN1	3 (SA)	10-01, 10-02, 10-12, 10-13, 10-14, 10-15, 10-16, 10-17, 10-18, 10-22, 12-02, 12-03, 12-04, 15-01, 15-07, 15-09, 15-10, 15-11, 20-16, 21-07, 21-14, 22-04, 22-11, 25-08, 30-03, 32-02, 40-02, 41-02, 41-03, 41-04, 41-05, 41-06, 41-07, 41-08, 41-09, 41-10, 41-11, 41-12, 41-13, 41-14, 41-15, 41-16, 41-17, 41-18, 90-03, 90-04, 90-06, 90-07, 90-18, 90-19
9999	ADMIN2	4 (SB)	13-04, 13-05, 13-06

Note: When changes are made to the following programs, the Aspire system must be restarted.

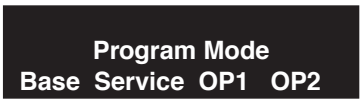
10-12-01	10-14	80-01	84-03-01	84-05-02	84-06-07
10-12-02	10-15	80-02-01	84-03-02	84-06-01	84-06-08
10-12-03	10-16-01	80-02-02	84-03-06	84-06-02	84-06-09
10-12-04	10-16-02	80-02-03	84-03-07	84-06-03	84-06-10
10-13-01	10-16-03	80-02-04	84-03-08	84-06-04	84-06-11
10-13-02	10-16-04	80-03	84-04	84-06-05	84-09
10-13-03	20-01-03	80-04	84-05-01	84-06-06	84-10

How to Exit the Programming Mode

To exit the programming mode:

When you are done programming, you must be out of a program's options to exit (pressing the MSG key will exit the program's option).

1. Press MSG key to exit the program's options, if needed.



2. Press SPK. You see, "Saving System Data" if changes to were to the system's programming.
3. The display shows "Complete Data Save" when completed and will exit the phone to an idle mode.

To save a customer's database, a blank PC-ATA card or CompactFlash with PCMCIA Adapter is required. Insert the card into the NTCPU and, using Program 90-03, save the software to the PC-ATA/CompactFlash card. (Program 90-04 is used to reload the customer data if necessary.) Note that a PC-ATA/CompactFlash card can only hold one customer database. Each database to be saved will require its own separate card.

Using Keys to Move Around in the Programs

Once you enter the programming mode, use the keys in the following chart to enter data, edit data and move around in the menus.

Keys for Entering Data	
Use this key...	**When you want to . . .**
0-9 and *	Enter data into a program.
HOLD	Complete the programming step you just made (like pressing Enter on a PC keyboard). When a program entry displays, press HOLD to bypass the entry without changing it.
CONF	Delete the entry to the left (like pressing Backspace on a PC keyboard).
MSG	Exit one step at a time from the program window currently being viewed. For example, if you're programming item 5 in 15-03, pressing MSG will allow you to enter a new option in program 15-03. Pressing MSG again will allow you to select a new program in the 15- series. Pressing MSG a third time will allow you to enter a new program beginning with '1'. Pressing MSG one last time will bring you to the beginning program display, allowing you to enter any program number.
FLASH	Switch extension, line, etc. being programmed by pressing FLASH. The cursor moves up to the top row of the display. Pressing FLASH again moves the cursor back to the middle row.
LINE KEYS	Use pre-programmed settings to help with the program entry. These settings vary between programs from LINE 1 = 0 (off) and LINE 2 = 1 (on) to preset values for timers where LINE 1 = 5, LINE 2 = 10, LINE 3 = 15, etc. For programs with this option, the line key which currently matches the programmed setting will light steady. The display may also indicate Soft Keys which will allow you to select the values as well (-1 and +1 will step through these pre-programmed settings.)
LINE KEY 1	Program a pause into an Abbreviated Dialing bin.
LINE KEY 2	Program a recall/flash into an Abbreviated Dialing bin.
LINE KEY 3	Program a @ into an Abbreviated Dialing bin.
VOL ▲	Scroll backward through a list of entry numbers (e.g., from extension 301 to 302, 303, etc.) or through entries in a table (e.g., Common Permit Table). *If you enter data and then press this key, the system accepts the data before scrolling forward.*
VOL ▼	Scroll forward through a list of entry numbers (e.g., from extension 301 to 302, 303, etc.) or through entries in a table (e.g., Common Permit Table). *If you enter data and then press this key, the system accepts the data before scrolling backward*

Programming Names and Text Messages

Several programs (e.g., Program 20-16: Selectable Display Messages) require you to enter text. Use the following chart when entering and editing text. When using the keypad digits, press the key once for the first character, twice for the second character, etc. For example, to enter a C, press key "2" three times. Press the key six times display the lower case letter. The name can be up to 12 digits long.

With Software Prior to 2.05:

Key for Entering Names	
Use this keypad digit . . .	**When you want to. . .**
1	Enter characters: 1 @ [¥] ^ _ ‘ { | } ← → Press repeatedly to scroll through the list. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
2	Enter characters A-C, a-c, 2. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
3	Enter characters D-F, d-f, 3. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
4	Enter characters G-I, g-i, 4. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
5	Enter characters J-L, j-l, 5. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
6	Enter characters M-O, m-o, 6. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
7	Enter characters P-S, p-s, 7. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
8	Enter characters T-V, t-v, 8. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
9	Enter characters W-Z, w-z, 9. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
0	Enter characters: 0 ! “ # $ % & ‘ ( ) Press repeatedly to scroll through the list. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
*	Enter characters: * + , - . / : ; < = > ? Press repeatedly to scroll through the list. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
Soft Key Left/Right Arrows	Accepts an entry (only required if two letters on the same key are needed - ex: **TO**M) and moves cursor in the arrows direction.
CONF	Clear the character entry one character at a time.
CLEAR	Clear all the entries from the point of the flashing cursor and to the right.

With Software 2.05+:

Use this keypad digit . . .	When you want to. . .
1	Enter characters: 1 @ [¥] ^ _ ` { | } → ← Á À Â Ã Ç É Ê ì ó
2	Enter characters A-C, a-c, 2.
3	Enter characters D-F, d-f, 3.
4	Enter characters G-I, g-i, 4.
5	Enter characters J-L, j-l, 5.
6	Enter characters M-O, m-o, 6.
7	Enter characters P-S, p-s, 7.
8	Enter characters T-V, t-v, 8.
9	Enter characters W-Z, w-z, 9.
0	Enter characters: 0 ! " # $ % & ' ( ) ô o ú ä ö ü α ε θ
*	Enter characters: * + , - . / : ; < = > ? π ∑ σ Ω ∞ ¢ £
#	# = Accepts an entry (only required if two letters on the same key are needed - ex: T**OM**). Pressing # again = Space. (In system programming mode, use the right arrow soft key instead to accept and/or add a space.)
CONF	Clear the character entry one character at a time.
CLEAR	Clear all the entries from the point of the flashing cursor and to the right.

When using i-Series telephones on the Aspire system, not all the same characters are available. Refer to the following chart for the i-Series characters:

Use this keypad digit . . .	When you want to. . .
1	Enter characters: 1 @ [¥] ^ _ ` { | } → ← å blank blank blank blank blank blank blank blank
2	Enter characters A-C, a-c, 2.
3	Enter characters D-F, d-f, 3.
4	Enter characters G-I, g-i, 4.
5	Enter characters J-L, j-l, 5.
6	Enter characters M-O, m-o, 6.
7	Enter characters P-S, p-s, 7.
8	Enter characters T-V, t-v, 8.
9	Enter characters W-Z, w-z, 9.
0	Enter characters: 0 ! " # $ % & ' ( ) blank blank blank ä ö ü α ε θ
*	Enter characters: * + , - . / : ; < = > ? π ∑ σ Ω ∞ ¢ £
#	# = Accepts an entry (only required if two letters on the same key are needed - ex: T**OM**). Pressing # again = Space.
CONF	Clear the character entry one character at a time.
CLEAR	Clear all the entries from the point of the flashing cursor and to the right.

Using Soft Keys For Programming

Each Aspire display telephone provides interactive soft keys for intuitive feature access. The options for these keys will automatically change depending on where you are in the system programming. Simply press the Soft Key located below the option you wish and the display will change accordingly.

Pressing the VOLUME ▲ or VOLUME ▼ will scroll between the menus.

What the Soft Key Display Prompts Mean

When using a display phone in programming mode, you will see various Soft Key options displayed. These keys will allow you to easily select, scan, or move through the programs.

Soft key Display Prompts	
If you press this Soft Key . . .	**The system will. . .**
back	Go back one step in the program display. You can press VOLUME ▲ or VOLUME ▼ to scroll forwards or backwards through a list of Programs.
↑	Scroll down through the available programs.
↓	Scroll up through the available programs.
select	Select the currently displayed program.
←	Move the cursor to the left.
→	Move the cursor to the right.
–1	Move back through the available program options.
+1	Move forward through the available program options.

System Number Plan/Capacities - Aspire Comparisons

System Number Plan/Capacities			
System Type:	**Aspire S**	**Aspire M/L**	**Aspire XL**
System			
Analog Caller ID Detector	24	64	64
Classes of Service	15	15	15
Day/Night Mode Numbers	4	8	8
Day/Night Service Patterns	4	32	32
Dial Tone Detector DTMF Receiver	16	64	64
System Ports (trunks and analog/digital extensions)	• ***Software thru 2.21 =*** 8 trunks and 26 extensions • ***Software 2.50+ =*** 8 trunks and 50 extensions	• ***NTCPU with Basic PAL =*** 64 trunks/extensions • ***NTCPU with Feature Upgrade PAL (software 01.00 - 03.10)*** = 64 trunks/extensions • ***NTCPU with Feature Upgrade PAL (software 04.00+) =*** 128 trunks/extensions • ***NTCPU-B*** 200 trunks and 256 extensions	• 200 trunks and 384 extensions
Toll Restriction Classes	15	15	15
Verifiable Account Code Table	2000	2000	2000
Trunk			
Trunk Port Number	1-8	1-200 [1]	1-200
	[1] With the basic NTCPU (P/N 0891002), trunks count toward the total number of allowed hardware ports (64 or 128 ports depending on the PAL EPROM and software installed)		
Trunk Ports (Total) • Analog Trunks • BRI Trunk Ports • T1/PRI Trunk Ports • E&M Analog Trunk Ports • DID Analog Trunk Ports • VoIP Trunk Ports	8 8 4 (8B) N/A N/A 8 8	200 200 96 (192B) 192 60 120 200	200 200 96 (192B) 192 60 120 200
BRIU Logical Ports	T-Bus: 1-8 S-Bus: 1-26	T-Bus: 1-200 S-Bus: 1-256	T-Bus: 1-200 S-Bus: 1-256
COIU: • Physical Ports • Logical Ports	 01-04 0-8	 01-08 0-200	 01-08 0-200

System Number Plan/Capacities			
System Type:	**Aspire S**	**Aspire M/L**	**Aspire XL**
DIOPU: • Physical Ports • Logical Ports	 01-02 LD Trunk: 0-8 OPX: 0-8	 01-08 LD Trunk: 0-200 OPX: 0-25	 01-08 LD Trunk: 0-200 OPX: 0-25
PRIU Logical Ports	N/A	T-Bus: 1-200 S-Bus: 1-256	T-Bus: 1-200 S-Bus: 1-256
TLIU: • Physical Ports • Logical Ports	 N/A	 01-08 0-200	 01-08 0-200
VOIPU: • Physical Ports • Logical Ports	 1-8 0-8	 01-32 0-200	 01-32 0-200
DID Translation Tables	20	20	20
DID Translation Table Entries	2000	2000	2000
DISA • Classes of Service • Users	 15 1-15	 15 1-15	 15 1-15
Ring Groups	1-8	1-100	1-100
Tie Line Classes of Service	N/A	15	15
Tie Line Toll Restriction Classes	N/A	15	15
Trunk Access Maps	1-8	1-200	1-200
Trunk Group Numbers	1-8	1-100	1-100
Trunk Routes	1-8	1-100	1-100

System Number Plan/Capacities			
System Type:	**Aspire S**	**Aspire M/L**	**Aspire XL**
Extension			
Telephone Extension Port Numbers • Keysets • Single Line Phones/Analog Devices • VoIP Extensions • Aspire Wireless	1-50 [3] (1-24) (1-18) (1-16) [2, 4] N/A	1-256 (1-256) [2] (1-256) [2] (1-512) [5] 002-512 (manual select) [5] 257-512 (auto select) [5]	1-384 (1-384) (1-384) (1-512) [5] 002-512 (manual select) [5] 385-512 (auto select) [5]
	[2] Counts toward total number of allowed hardware ports (Aspire S=26 ports with software 2.08-2.21 or 50 ports with software 2.50+, Aspire M 64-Port NTCPU=64, Aspire M/L 64-Port NTCPU w/Feature Upgrade PAL and software 4.00+=128, Aspire M/L w/Enhanced NTCPU=256, Aspire XL=384). [3] The total number of ports available is determined by system software. ***Software prior to 2.50*** has 26 ports (24 digital and analog, 2 analog only - a maximum of 16 IP extensions is included in this 26 ports) ***Software 2.50 and higher*** provides 50 ports (Maximum Wired Terminals: 26 Includes keysets, single line telephones, ISDN terminals (APRs NOT included), Maximum IP Terminals: 16 Includes DtermIP and H.323 terminals, Maximum Special Terminals: Reserved for IntraMail: 8 (fixed extension ports 43-50)). [4] If the APR-B2 mode is assigned in a system which already has 26 extensions, the number of IP phones is reduced. [5] With the basic NTCPU (P/N 0891002), VoIP and Aspire Wireless extensions count toward the total number of allowed hardware ports (64 or 128 ports depending on the PAL EPROM and software installed). With the Enhanced NTCPU (P/N 0891038), if the number of VoIP and Aspire Wireless phones combined exceeds 256, the number of ports available for keysets or analog devices is then reduced by for each additional IP or Aspire Wireless phone.		
ESIU • Physical Ports • Logical Ports -Tone Ringer (2PGDAD) -Door Box (2PGDAD) -Analog I/F (2PGDAD) -ACI (2PGDAD) -APR for B2 Mode	1-8 1-4 1-4 1-8 1-8 1-42 (descending order)	01-16 1-8 1-8 1-96 1-96 193-256 (descending order) ***With software 4.xx or higher:*** 193-512 (descending order)	01-32 1-8 1-8 1-96 1-96 193-512 (descending order)
SLIU • Physical Ports • Logical Ports	 1-8 1-26	 01-16 1-256	 01-16 1-384
Telephone Extension Number Range	301-499 5000-5312	301-499 5000-5312	301-499 5000-5312
Virtual Extension Ports	24	256	256
Virtual Extension Port Numbers	01-24	001-256	001-256
Virtual Extension Number Range	Undefined	Undefined	Undefined

System Number Plan/Capacities			
System Type:	**Aspire S**	**Aspire M/L**	**Aspire XL**
2PGDAD Modules	10	56	56
ADA (Recording Jack) Adapters	24	192	192
Aspire Wireless Bases	N/A	12	12
Aspire Wireless Phones	N/A	120	120
Door Boxes	4	8	8
Door Box Numbers	1-4	1-8	1-8
DSS Consoles Numbers • 24-Button DLS Consoles, Maximum Installed • 110-Button DSS Consoles, Maximum Installed	8 24 4	8 256 32	8 384 32
Handsfree Adapter (HF-R)	24	192	192
Operator Access Number	0	0	0
Operator Extension	1	1	1
Ringdown Assignments	512	512	512
SLT Adapters	8	16	16
Voice Mail Master Numbers	301-499, 5000-5312	301-499, 5000-5312	301-499, 5000-5312
Abbreviated Dialing			
Abbreviated Dialing Groups	8	64	64
Abbreviated Dialing Bins	0-1999	0-1999	0-1999
Abbreviated Dialing Table-Common	1000	1000	1000
ACD			
ACD Groups	N/A	64	64
ACD Agent Extensions	N/A	512	512
ACI			
ACI Groups	4	16	16
ACI Ports	8	96	96
Automated Attendant			
VRS Message Numbers	1-48	1-48	1-48
Conference			
Conference Circuits	32 - maximum (32 Parties Per Conference)	64 - maximum (32 Parties Per Conference)	64 - maximum (32 Parties Per Conference)

System Number Plan/Capacities			
System Type:	**Aspire S**	**Aspire M/L**	**Aspire XL**
Data Communication Interfaces			
APR Software Port Numbers	193-256 ***With software 4.xx or higher:*** 193-512	193-256 ***With software 4.xx or higher:*** 193-512	193-512
APA Adapters	24	192	192
APR Adapters	B1 = 24 B2 = 8 prior to 2.50 or 16 with 2.50+	192	192
CTA or CTU Adapters	24	128	128
Module Extension Number Range	301-499, 5000-5312	301-499, 5000-5312	301-499, 5000-5312
Department and Pickup Groups			
Department (Extension) Group Numbers	1-8	1-64	1-64
Department (Extension) Group Number Range	301-499, 5000-5312	301-499, 5000-5312	301-499, 5000-5312
Call Pickup Group Numbers	1-8	1-64	1-64
Hotline			
Internal Hotline	512	512	512
External Hotline	512	512	512
Paging and Park			
Internal Page Group Numbers	0, 1-8	0, 1-9 or 01-64	0, 1-9 or 01-64
External Page Group Numbers	0, 1-8	0, 1-8	0, 1-8
External Speakers • NTCPU • PGDAD Module	8 N/A (1-8)	9 (1) (1-8)	9 (1) (1-8)
Park Group Numbers	1-64	1-64	1-64
Park Orbits	1-64	1-64	1-64
SMDR			
SMDR Ports	1-2	1-8	1-8
VRS			
VRS (on DSP Daughter Board)	1	1	1
VRS Channels	8	16	16
VRS Attendant Messages	3	3	3
VRS Recordable Messages	48	48	48

System Number Plan/Capacities			
System Type:	**Aspire S**	**Aspire M/L**	**Aspire XL**
Voice Mail			
Ports for IntraMail	8 (fixed extension ports 43-50)	N/A	N/A
Ports for External Voice Mail	72 [6]	72	72
	[6] Though this is the maximum available in the NVM-Series voice mail, as each voice mail port requires an analog port, the total number is restricted by the Aspire S system to a maximum of 16.		
VoIP			
VoIP Extensions	16 [4]	• ***NTCPU with Basic or Feature Upgrade PAL (software 01.00 - 03.10)*** = 64 • ***NTCPU with Feature Upgrade PAL (software 04.00+)*** = 128 • ***NTCPU-B*** = 512	512
	[4] If the APR-B2 mode is assigned in a system which already has 26 extensions, the number of IP phones is reduced.		
ADA2 (Recording Jack) Adapters	16	192	192
IP Adapters	16	256	256
IP Phones	16	512	512
PSA (Power Failure) Adapters	16	192	192
RAS Unicast Ports	0-65535	0-65535	0-65535
Call Signaling Ports	0-65535	0-65535	0-65535
NGT Signal Receive Ports	0-65535	0-65535	0-65535
DRS Ports	0-65535	0-65535	0-65535
RTP Ports	0-65535	0-65535	0-65535
RTCP Ports	0-65535	0-65535	0-65535
H.245 Ports	0-65535	0-65535	0-65535
DSP Resources	01-32	01-32	01-32
H.323 Alias Addresses	1-6	1-6	1-6

System Number Plan/Capacities			
System Type:	**Aspire S**	**Aspire M/L**	**Aspire XL**
Passwords			
User Password for setting Toll Restriction Override and Changing Class of Service using a service code	0000	0000	0000
Programming Passwords			
Level 1 (MF) PCPro/WebPro User Name:	374772 NEC-I	374772 NEC-I	374772 NEC-I
Level 2 (IN) PCPro/WebPro User Name:	12345678 ASPIRE	12345678 ASPIRE	12345678 ASPIRE
Level 3 (SA) PCPro/WebPro User Name:	0000 ADMIN1	0000 ADMIN1	0000 ADMIN1
Level 4 (SB) PCPro/WebPro User Name:	9999 ADMIN2	9999 ADMIN2	9999 ADMIN2
Programming Password Users	8	8	8
Note:			
Extension numbers can be three or four digits long. See Flexible System Numbering.			

Level:	Aspire S	Aspire M/L/XL
SA	• Available.	• Available.

Description

Use **Program 10-01 : Time and Date** to change the system Time and Date through system programming. Extension users can also dial Service Code 828 to change the Time if allowed by an extension's Class of Service.

Input Data

Item No.	Item	Input data	Default	Description
01	Year	00-99	No setting	Enter two digits for year (00-99).
02	Month	01-12	No setting	Enter two digits (01-12) for the month.
03	Day	01-31	No setting	Enter two digits (01-31) for the day.
04	Week	1-7 (Sun-Sat)	No setting	Enter digit for the day of the week (1=Sunday, 7=Saturday).
05	Hour	00-23	No setting	Enter two digits for the hour (00-23).
06	Minute	00-59	No setting	Enter two digits for the minute (00-59).
07	Second	00-59	No setting	Enter two digits for the second (00-59).

Conditions

None

Feature Cross Reference

- Time and Date

Program 10 : System Configuration Setup
10-01 : Time and Date

Telephone Programming Instructions

To enter data for Program 10-01 (Time and Date):

1. Enter the programming mode.
2. 10 01

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
SA	• Available.	• Available.

Description

Use **Program 10-02 : Location Setup** to define the location of the installed system.

Input Data

Item No.	Item	Input data	Default	Description
01	Country Code	Dial (up to 4 digits)	1	Enter the country code.
02	International Access Code	Dial (up to 4 digits)	-	Enter the international access code.
03	Other Area Access Code	Dial (up to 2 digits)	9	Enter the other area access code
04	Area Code	Dial (up to 6 digits)	-	Enter the local area code.
05	Trunk Access Code	Dial (up to 8 digits): 0-9, *, #	-	Enter the trunk access code digits required to place an outgoing call. This is the code which will be added to the Caller ID information for incoming trunk calls to allow the call to dial out if allowed in 20-19-03. **IMPORTANT** Program 10-02-05 is only support by telephone programming. PCPro and WebPro cannot edit this option.

Conditions

None

Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 10-02 (Location Setup):

1. Enter the programming mode.
2. 10 02

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:
IN

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Option 15 for S-Bus terminal alert tone requires software 2.63+.	• Option 15 for S-Bus terminal alert tone requires software 2.63+.
• Option 16 for PRI is not available.	• Option 16 for PRI available with software 2.63+.
• Option 5 for T1 is not available.	• Default changed for Option 5 for T1 with software 2.65+.
• Expanded entries for ESIU, SLIU, VMSU, DIOPU, BRI and PRI PCBs is not available.	• Expanded entries for Aspire XL and the ESIU, SLIU, VMSU, DIOPU, BRI and PRI PCBs requires software 4.0E+.
• Option 17 for BRI available with software 4.04+.	• Option 17 for BRI available with software 4.04+.
• Options 18 and 19 for ISDN Numbering Plan selection requires software 4.93+.	• Options 18 and 19 for ISDN Numbering Plan selection requires software 4.93+.

Description

Use **Program 10-03 : PCB Setup** to setup and confirm the Basic Configuration data for each PCB. When changing a defined terminal type, first set the type to '0' and then plug the new device in to have the system automatically define it or you may have to reseat the PCB.

Note: The items highlighted in gray are read only and cannot be changed.

Note: The item numbers indicated below are different when using PCPro/WebPro due to the window layout of the applications. Refer to the program within the PCPro/WebPro application to determine the correct item number.

Input Data

For ESIU Unit

Physical Port Number	**Through Software 3.07:** 01-16 **From Software 4.0E+:** 01-32

B-Channel 1

Item No.	Item	Input Data	Default
01	Terminal Type	0 = Not set 1 = Keyset/DSLT 2 = SLT Adapter 3 = -- Not used -- 4 = -- Not used -- 5 = -- Not used -- 6 = PGD (Paging) 7 = PGD (Tone Ringer) 8 = PGD (Doorbox) 9 = PGD (ACI) 10 = DSS Console 11 = -- Not used --	0
02	Logical Port Number	0 = Not set 1 = Keyset 2 = SLT Adapter 3 = Not used 4 = Not used 5 = 2DCI Adapter 1 - 32 6 = PGD (Paging) 7 = PGD (for Tone Ringer) 1-4 or 1-8 8 = PGD (for Door Box) 1-4 or 1-8 9 = PGD (for Analog I/F) 1-8 or 1-96 10 = DSS 11 = Not used	0
03	Additional Data	***This option is reserved for future use.*** 3 = Not used 4 = Not used 01-16 (port number) A port number is automatically set as the order which the terminal started.	0
04	Optional Installed Unit 1	0 = none 1 = APR Module 2 = APA Module 3 = ADA Module 4 = CTA Module 5 = CTU Module	0

05	Optional Installed Unit 2	0- none 1 = APR Module 2 = APA Module 3 = ADA Module 4 = CTA Module 5 = CTU Module	0

B-Channel 2

Item No.	Item	Input Data	Default
06	Terminal Type	0 = Not set 1 = -- Not used -- 2 = -- Not used -- 3 = -- Not used -- 4 = -- Not used -- 5 = -- Not used -- 6 = PGD (Paging) 7 = PGD (Tone Ringer) 8 = PGD (Door Box) 9 = PGD (ACI) 10 = -- Not used -- 11 = -- Not used -- 12 = APR	0
07	Logical Port Number	0 = Not set 6 = PGD (Paging) 7 = PGD (for Tone Ringer) 1-4 or 1-8 8 = PGD (for Door Box) 1-4 or 1-8 9 = PGD (for ACI) 1-8 or 1-96 12:APR (for B2 mode) 19-50 or 193-512	0

For SLIU Unit

Physical Port Number	01-16

Item No.	Item	Input Data	Default
01	Logical Port Number	**Through Software 3.07:** 0-256 **From Software 4.0E+:** 0-384	0
02	Not used		
03	Transmit Gain Level (S-Level)	1-63 (-15.5 +15.5dB)	32 (0dB)
04	Receive Gain Level (R-Level)	1-63 (-15.5 +15.5dB)	32 (0dB)

For COIU Unit

Physical Port Number	01-08

Item No.	Item	Input Data	Default
01	Logical Port Number	0-200	0

For DIOPU Unit

Physical Port Number	01-08

Item No.	Item	Input Data	Default
01	LD/OPX assignment	0 = LD Trunk 1 = OPX Trunk	0
02	Logical Port Number	0 = For LD Trunk 0-200 1 = For OPX **Through Software 3.07:** 0-256 **From Software 4.0E+:** 0-384	0

For TLIU Unit

Physical Port Number	01-08

Item No.	Item	Input Data	Default
01	Logical Port Number	0-200	0
02	2/4Wire	0 = 2Wire 1 = 4Wire	1

For BRIU Unit

ISDN Line Number	01-08

Item No.	Item	Input Data	Default
01	ISDN Line Mode	0 = Not set 1 = T-Bus 2 = S-Bus *Options 3-5 determines the clock source for the networked connection.* 3 = Network Mode (Leased Line) *Telco sends the clock to the Master System* *Telco sends the clock to the Slave System* 4 = Network Mode (Interconnected Line) *Master System sends the clock to the Telco (or direct connection without telco) which then sends the clock to the Slave System* 5 = Network Mode (Interconnected Line, Fixed layer 1=NT) *Master System sends the clock to the Telco* *Slave System sends the clock to the Telco* 6 = S-Point (Leased Line)	1
02	Logical Port Number (see Note 1)	0 = Net set 1 = For T-Bus (1-200) 2 = For S-Bus (**Through Software 3.07:** 0-256 **From Software 4.0E+:** 0-384)	0
03	Connection Type	0 = Point-to-Multipoint (not available for Networking) 1 = Point-to-Point	0
04	Layer 3 Timer Type (see Note 2)	1-5	1
05	**CLIP Information Announcement** Based on this setting, the system will include a “Presentation Allowed” (1) or “Presentation Restricted” (0) in the Setup message to allow or deny the Calling Party Number. Program 15-01-04 must also be set to a ‘1’ if this option is enabled.	0 = Disable 1 = Enable	1
06	Connection Bus Mode (S-point only)	0 = Extended Passive Bus 1 = Short Passive Bus	0
07	S-point DID digits	0-4	0
08	Dial sending Mode	0 = Enblock sending 1 = Overlap sending	1
09	Dial Information Element (Only for Overlap Sending Mode)	0 = Keypad Facility 1 = Called Party Number	0
10	Master/Slave System (NW mode only)	0 = Slave System 1 = Master System	0

11	Networking System Number (NW mode only)	0-50	0
12	**- Not Currently Used -**		**0**
13	**- Not Currently Used -**		**0**
14	Service Protocol for S-Point	0 = Keypad Facility 1 = Specified Protocol for Aspire System	0
15	**Alert Tone When S-Bus Terminal Calls Busy Extension** This option determines for S-Bus terminals what a user on an S-Bus terminal will hear when a busy extension is called. If this option is set to "0", the user will hear an alert tone. If this option is set to "1", the user will be disconnected.	0 = Alert Tone 1 = Disconnected	0
17	**Ringback Tone to Telco Now Possible with BRI Trunks** This option can be used to determine whether or not the system sends ringback tone to the telco.	0 = Disable 1 = Enable	0
18	**Type of Number** Use this option to define the ISDN numbering plan to allow the calling party information to be passed to some telcos. **Note that with software 4.08-4.0W, Program 99-01-32 was used instead.**	0 = Unknown 1 = International number 2 = National number 3 = Network Specific number 4 = Subscriber number 5 = Abbreviated number	3
19	**Numbering Plan Identification** passed to some telcos. **Note that with software 4.08-4.0W, Program 99-01-33 was used instead.**	0 = Unknown 1 = ISDN numbering plan 2 = Data numbering plan 3 = Telex numbering plan 4 = National standard numbering plan 5 = Private numbering plan	1

Note 1. The start port number of a BRI line is displayed. Two logic ports are automatically assigned to a BRI line.

Note 2. Each timer value of Layer3 are set up for every type of Program 81-06 (T-Bus) and Program 82-06 (S-Bus).

For PRIU Unit

Item No.	Item	Input Data	Default
01	ISDN Line Mode	0 = Not set 1 = T-Bus 2 = S-Bus 3 = Network Mode (Leased Line) 4 = Network Mode (Interconnected Line) 5 = Network Mode (Interconnected Line, Fixed Layer 1=NT) 6 = S-Point (Leased Line)	1
02	Logical Port Number (see Note 1)	1 = for T-Bus 1-200 2 = for S-Bus **Through Software 3.07:** 1-256 **From Software 4.0E+:** 1-384	0
03	CRC Multi-frame(CRC4) (Only E1[30B+D] Mode)	0 = off 1 = on	0
04	Layer 3 Timer Type (see Note 2)	1-5	1
05	**CLIP Information** Based on this setting, the system will include a “Presentation Allowed” (1) or “Presentation Restricted” (0) in the Setup message to allow or deny the Calling Party Number. Program 15-01-04 must also be set to a ‘1’ if this option is enabled.	0 = Disable 1 = Enable	1
06	Length of cable	0 = 0 40m 1 = 40 81m 2 = 81 122m 3 = 122 162m 4 = 162 200m	0
07	S-Point DID Digits	0-4	0
08	Dial Sending Mode	0 = Enblock Sending 1 = Overlap Sending	0
09	Dial Information Element (Only for Overlap Sending Mode)	0 = Keypad Facility 1 = Called Party Number	0
10	Master/Slave System (Network Mode only)	0 = Slave System 1 = Master System	0
11	Networking System Number (Network Mode only)	0-50	0
12	Short / Long-haul	0 = short-haul 1 = long-haul	0

Item No.	Item	Input Data	Default
13	Loss-Of-Signal detection limit	In short-haul mode 0 = 0.91V 1 = 0.74V 2 = 0.59V 3 = 0.42V 4 = 0.32V 5 = 0.21V 6 = 0.16V 7 = 0.10V In long-haul mode 0 = 1.70V 1 = 0.84V 2 = 0.84V 3 = 0.45V 4 = 0.45V 5 = 0.20V 6 = 0.10V 7 = not defined	0
14	Service Protocol for S-Point	0 = Keypad Facility 1 = Specified Protocol for Aspire System	0
15	**Alert Tone When S-Bus Terminal Calls Busy Extension** This option determines for S-Bus terminals what a user on an S-Bus terminal will hear when a busy extension is called. If this option is set to "0", the user will hear an alert tone. If this option is set to "1", the user will be disconnected.	0 = Alert Tone 1 = Disconnected	0
16	**ISDN 2 B-Channel Transfer** Enable or disable the 2 B-Channel Transfer function for a PRI PCB.	0 = Off/Disable 1 = On/Enable	0
18	**Type of Number** Use this option to define the ISDN numbering plan to allow the calling party information to be passed to some telcos. **Note that with software 4.08-4.0W, Program 99-01-32 was used instead.**	0 = Unknown 1 = International number 2 = National number 3 = Network Specific number 4 = Subscriber number 5 = Abbreviated number	3
19	**Numbering Plan Identification** passed to some telcos. **Note that with software 4.08-4.0W, Program 99-01-33 was used instead.**	0 = Unknown 1 = ISDN numbering plan 2 = Data numbering plan 3 = Telex numbering plan 4 = National standard numbering plan 5 = Private numbering plan	1

Note 1. The start port number of a PRI line is displayed. Thirty logic ports are automatically assigned to a PRI line.

Note 2. Each timer value of Layer3 is set up for each type in Program 81-06 (T-Bus) and Program 82-06 (S-Bus).

For T1 Unit

Physical Port Number	01-32

Item No.	Item	Input Data	Default
01	Logical Port Number	0-200	0
02	Frame Type Setup	0 = D4 (12 Multi Frame) 1 = ESF (24 Multi Frame)	0
03	Zero Code Suppression Setup ZCS_B8ZS	0 = B8ZS 1 = AMI/ZCS	0
04	DTI<->CSU Distance Setup	0= 0 feet – 133 feet 1= 133 feet – 266 feet 2= 266 feet – 399 feet 3= 399 feet – 533 feet 4= 533 feet – 655 feet	0
05	T1 Clock Source Master/Slave	0 = Internal 1 = External	1 Prior to 2.65 = 0

For VMSU Unit

Item No.	Item	Input Data	Default
01	Logical Port Number	**Through Software 3.07:** 0-256 **From Software 4.0E+:** 0-384	0

For VOIPU Unit

Physical Port Number	01-32

Item No.	Item	Input Data	Default
01	Trunk Logical Port Number	0-200	0
02	**H.323 or SIP Trunk** Determine the IP trunk type setup. ***Contact Your NEC Sales Representative for information on the SIP feature availability.***	0 = H.323 1 = SIP	0

Conditions

(A.) When changing a defined terminal type, first set the type to '0' and then plug the new device in to have the system automatically define it or redefine the type manually.

(B.) The system must have a PCB installed in order to view/change the options for that type of PCB.

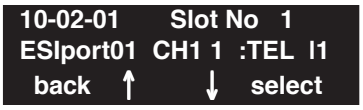
Feature Cross Reference

None

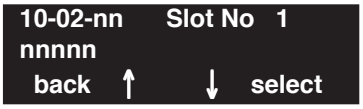
Telephone Programming Instructions

To enter data for Program 10-03 (PCB Setup):

1. Enter the programming mode.
2. 10 03



3. Enter the number of the item you want to program.



4. Select a slot number to be programmed by pressing the VOLUME ▲ or VOLUME ▼ keys. Or, press FLASH once to select the slot number or press FLASH twice to select a port number. Enter the slot or port number.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:
IN

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Internal service tone in item 1 available with software 2.63+.	• Internal service tone in item 1 available with software 2.63+.

Description

Use **Program 10-04 : Music on Hold Setup** to set the Music on Hold selection. For MOH, the system can provide silence to callers on Hold or one of eleven synthesized selections.

Input Data

Item No.	Item	Input Data	Default
01	**Music on Hold Source Selection** The Music on Hold source can be internal (synthesized), from a customer-provided music source, or a service tone provided by the system. The customer-provided source can connect to a 2PGDAD or the connector on the NTCPU. Trunk MOH and Extension MOH music source use the same Music on Hold source.	0=Internal source 1=External source 2=Internal service tone	0
02	**Music Selection for Internal Source** Select the music which will be heard by users on hold.	0 = Silence (no sound) 1 = Selection 1 2 = Selection 2	1
03	**Audio Gain Setup** Adjust the audio gain used by the internal MOH if required. External MOH is adjusted at the MOH source.	1-63 (-15.5 +15.5dB)	32 (0dB)

Conditions

None

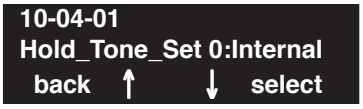
Feature Cross Reference

- Music on Hold

Telephone Programming Instructions

To enter data for Program 10-04 (Music on Hold Setup):

1. Enter the programming mode.
2. 10 04



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 10-05 : General Purpose Relay Setup** to define which Relay circuits (5-8) on 2PGDAD Adapter are used for General Purpose Relay.

Refer to Program 10-21-01 for the NTCPU relay.

Input Data

- INDEX-1 -

General Purpose Relay No.	1-8

Item No.	Item	Input Data	Default
01	Slot No Physical Port of ESIU Sensor circuit No	Slot No: 0-16 ESIU Port: 0-16 Relay No: 0, 5-8	0 - 0 - 0

Conditions

None

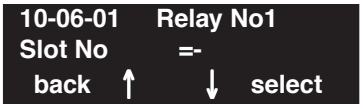
Feature Cross Reference

- Music on Hold

Telephone Programming Instructions

To enter data for Program 10-05 (General Purpose Relay Setup):

1. Enter the programming mode.
2. 10 05



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 10-06 : ISDN BRI Setup** to define the TEI selection and DID mode for DID callers when the BRI feature is used.

Enter the SPID (Service Profile ID) assigned to each of the system's BRI ISDN lines. Each BRI PCB has a maximum of two lines and each line can have a maximum of two SPIDs. To use both channels of a BRI ISDN line, two directory numbers must be ordered from telco. A SPID is assigned for each directory number.

Input Data

- INDEX-1 -

Slot Number	01-16

- INDEX-2 -

ISDN Line Number	01-08

Item No.	Item	Input Data	Default
01	**TEI Selection** Set the method the system will use when assigning Terminal Endpoint Identifier (TEI) values to BRI ports.	0 = Select by SPID number 1 = Select by Channel ID number	0
02	DID Mode	0 = Route by Called Party Number 1 = Route by Redirecting Number	0
03	SPID 1	Dial (up to 20 digits)	No Setting
04	SPID 2	Dial (up to 20 digits)	No setting

Conditions

None

Program 10 : System Configuration Setup
10-06 : ISDN BRI Setup

Feature Cross Reference

- ISDN Compatibility

Telephone Programming Instructions

To enter data for Program 10-06 (ISDN BRI Setup):

1. Enter the programming mode.
2. 10 06

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available - 32 channels maximum (32 on the NTCPU).	• Available - 64 channels maximum (32 on the NTCPU, 32 on the DSPDB).

Description

Use **Program 10-07 : Conversation Record Circuits** to select the number of Conference circuits to be used for Conversation Recording.

Note: Even if this program is set to '0', the telephone conversation recording function can be used. In this case, 64 (32 x 2) circuits will be shared by conference and conversation recording. The number of the conference circuits occupied by a conversation recording is two.

Input Data

Item No.	Number of Conversation Recording	Default
01	0-16 0:not set, 2 to 32 conference circuits	0

Conditions

None

Feature Cross Reference

- Automatic Call Distribution (ACD)
- Conference

Telephone Programming Instructions

To enter data for Program 10-07 (Conversation Record Circuits):

1. Enter the programming mode.
2. 10 07

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 10-08 : Pre-Ringing Setup** to enable or disable pre-ringing for trunk calls. This sets how a trunk initially rings a telephone. With pre-ringing, a burst of ringing occurs as soon as the trunk's LED flashes. The call then continues ringing with the normal ring cadence cycle. Without pre-ringing, the call starts ringing only when the normal ring cadence cycle occurs. This may cause a ring delay, depending on when call detection occurs in reference to the ring cycle.

Input Data

Item No.	Description	Input Data	Default
01	Pre-Ringing Setup	0 = disable 1 = enable	***Prior to 2.13 Software:*** 1 ***With 2.13+ Software:*** 0

Conditions

None

Feature Cross Reference

- Central Office Calls, Answering

Program 10 : System Configuration Setup
10-08 : Pre-Ringing Setup

Telephone Programming Instructions

To enter data for Program 10-08 (Pre-Ringing Setup):

1. Enter the programming mode.
2. 10 08

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 10-09 : DTMF and Dial Tone Circuit Setup** to allocate the circuits on the NTCPU PCBs for either DTMF receiving or dial tone detection. The NTCPU PCB has 16 circuits initially. On the Aspire, with additional DSPDBs installed, the system can provide a total of 64 circuits (32 + 32). These are used as follows:

- Extension — DTMF receiver for SLT
- Trunk — DTMF receiver for analog trunks, dial tone & busy tone detection for analog trunks

Input Data

Circuit/Resource Number	01-64

Item No.	Input Data	Default Setting
01	0 = Common use 1 = Extension only 2 = Trunk only	Circuit/Resource 01-08: 1 (Extension only) Circuit/Resource 09-32: 2 (Trunk only) Circuit/Resource 33-64: 0 (Common use)

Conditions

None

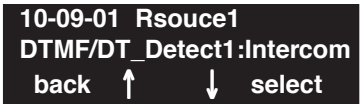
Feature Cross Reference

- Caller ID
- Central Office Calls, Placing
- Direct Inward Dialing (DID)
- Direct Inward System Access (DISA)
- Tie Lines

Telephone Programming Instructions

To enter data for Program 10-09 (DTMF and Dial Tone Circuit Setup):

1. Enter the programming mode.
2. 10 09



3. Enter the number of the item you want to program.

4. Select a circuit/resource number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
SA	• Available.	• Available.

Description

Use **Program 10-12 : NTCPU Network Setup** to setup the IP Address, Subnet-Mask, and Default Gateway addresses.

Input Data

Item No.	Item	Input Data	Default	Conditions
01	IP Address	1.0.0.1 ~ 126.255.255.254 128.1.0.1 -191.254.255.254 192.0.1.1 ~ 223.255.254.254	172.16.0.10	
02	Subnet Mask	128.0.0.0 192.0.0.0 224.0.0.0 240.0.0.0 248.0.0.0 252.0.0.0 254.0.0.0 255.0.0.0 255.128.0.0 255.192.0.0 255.224.0.0 255.248.0.0 255.252.0.0 255.254.0.0 255.255.0.0 255.255.128.0 255.255.192.0 255.255.224.0 255.255.248.0 255.255.252.0 255.255.254.0 255.255.255.0 255.255.255.128 255.255.255.192 255.255.255.224 255.255.255.240 255.255.255.248 255.255.255.252 255.255.255.254 255.255.255.255	255.255.0.0	The setting of Sub-net-Mask is mistaken when all Host Address are 0. If the network section is: 0, 127 128.0 191.255 192.0.0 223.255.255 The setting of Sub-net-Mask is mistaken.
03	Default Gateway	1.0.0.1 ~ 126.255.255.254 128.1.0.1 ~ 191.254.255.254 192.0.1.1 ~ 223.255.254.254	0.0.0.0	IP Address for Router
04	Time Zone	-12 thru +12 Hours	+9 Hours	Enter the difference for standard time.
05	NIC	0 = Auto Detect 1 = 100Mbps, Full Duplex 2 = 100Mbps, Half Duplex 3 = 10Mbps, Full Duplex 4 = 10Mbps, Half Duplex	0	NIC Auto Negotiate

06	**NAPT Router Setup** Enable or disable the NAPT Router Setup. ***This item is not used in the U.S.***	0=Disable, 1=Enable	0	
07	**NAPT Router IP Address** Set the NAPT Router IP Address. ***This item is not used in the U.S.***	0.0.0.1 - 126.255.255.254 128.0.0.1 - 191.255.255.254 192.0.0.1 - 223.225.225.254	0.0.0.0	
08	ICMP Redirect	0=Enable, 1=Disable	0	

Conditions

The system must be reset in order for these changes to take affect.

Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 10-12 (NTCPU Network Setup):

1. Enter the programming mode.
2. 10 12

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 10 : System Configuration Setup
10-13 : In-DHCP Server Setup

Level:	Aspire S	Aspire M/L/XL
SA	• Available.	• Available.

Description

Use **Program 10-13 : In-DHCP Server Setup** to setup the DHCP Server built into the NTCPU.

Input Data

Item No.	Item	Input Data	Default	Description
01	DHCP Server Mode	0:Disabled 1:Enabled	0	Enable or disable the use of the built-in DHCP Server.
02	Lease time	Days 0-255	0 day	Lease Time of the IP address to a client.
		Hour 0-23	0 hour	
		Minutes 1-59	30 minutes	
03	Not used			
04	Number of networks	0:Single 1:Divide same network	0	The number of networks to manage. With a single network, select **Single**. When dividing and managing the same network as multiple networks, select **Divide**.

Conditions

The system must be reset in order for these changes to take affect.

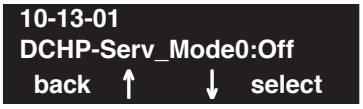
Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 10-13 (In-DHCP Server Setup):

1. Enter the programming mode.
2. 10 13



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 10 : System Configuration Setup
10-14 : Managed Network Setup

Level:	Aspire S	Aspire M/L/XL
SA	• Available.	• Available.

Description

Use **Program 10-14 : Managed Network Setup** to set up the range of the IP address which the DHCP Server leases to a client.

Input Data

Scope Number	1-10

Item No.	Description	Input Data	Default	Related Program
01	The range of the IP address to lease. When "Maximum" has not been entered, the maximum value equals the minimum value. When **Single** is selected in 10-13-04, only one scope range can be entered. When **Divide Same Network** is selected in 10-13-04, a maximum of ten scope ranges can be entered.	Minimum: 1.0.0.1 ~ 126.255.255.254 128.1.0.1 ~ 191.254.255.254 192.0.1.1 ~ 223.255.254.254	Scope 1: 172.16.0.100 Scope 2-10: 0.0.0.0	10-13-04
		Maximum: 1.0.0.1 ~ 126.255.255.254 128.1.0.1 ~ 191.254.255.254 192.0.1.1 ~ 223.255.254.254	Scope 1: 172.16.5.254 Scope 2-10: 0.0.0.0	

Conditions

None

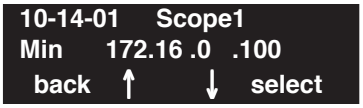
Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 10-14 (Managed Network Setup):

1. Enter the programming mode.
2. 10 14



3. Enter the number of the item you want to program.

4. Select the scope number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 10 : System Configuration Setup
10-15 : Client Information Setup

Level:	Aspire S	Aspire M/L/XL
SA	• Available.	• Available.

Description

Use **Program 10-15 : Client Information Setup** to set up the client information when the DHCP server needs to assign a fixed IP address to clients.

Input Data

Client Number	1-10

Item No.	Description	Input Data	Default
01	The IP address should be assigned out of the scope range set up in Program 10-14.	MAC: 00-00-00-00-00-00 FF-FF-FF-FF-FF-FF	00-00-00-00-00-00
		IP address 1.0.0.1 ~ 126.255.255.254 128.1.0.1 ~ 191.254.255.254 192.0.1.1 ~ 223.255.254.254	0.0.0.0

Conditions

None

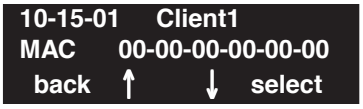
Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 10-15 (Client Information Setup):

1. Enter the programming mode.
2. 10 15



3. Enter the number of the item you want to program.

4. Select the client number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 10 : System Configuration Setup
10-16 : Option Information Setup

Level:	Aspire S	Aspire M/L/XL
SA	• Available.	• Available.

Description

Use **Program 10-16 : Option Information Setup** to set up the option given from the DHCP server to each client.

Input Data

Item No.	Item	Input Data	Default
01	Router	Code number 0-255	3 (Fixed)
		IP address 1.0.0.1 ~ 126.255.255.254 128.1.0.1 ~ 191.254.255.254 192.0.1.1 ~ 223.255.254.254	0.0.0.0
02	DNS Server	Code number 0-255	6 (Fixed)
		IP address 1.0.0.1 ~ 126.255.255.254 128.1.0.1 ~ 191.254.255.254 192.0.1.1 ~ 223.255.254.254	0.0.0.0
03	TFTP Server	Code number 0-255	66 (Fixed)
		IP address 1.0.0.1 ~ 126.255.255.254 128.1.0.1 ~ 191.254.255.254 192.0.1.1 ~ 223.255.254.254	0.0.0.0
04	DRS	Code number 0-255	161 (Fixed)
		IP address 1.0.0.1 ~ 126.255.255.254 128.1.0.1 ~ 191.254.255.254 192.0.1.1 ~ 223.255.254.254	172.16.0.10
05	Media Gateway Card (MGC)	Code number 0-255	129 (Fixed)
		IP address 1.0.0.1 ~ 126.255.255.254 128.1.0.1 ~ 191.254.255.254 192.0.1.1 ~ 223.255.254.254	172.16.0.10

Conditions

None

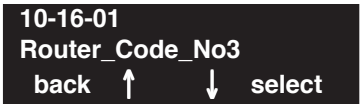
Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 10-16 (Option Information Setup):

1. Enter the programming mode.
2. 10 16



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 10 : System Configuration Setup
10-17 : H.323 Gatekeeper Setup

Level:	Aspire S	Aspire M/L/XL
SA	• Available.	• Available.

Description

Use **Program 10-17 : H.323 Gatekeeper Setup** to define the H.323 Gatekeeper.

Input Data

Item No.	Item	Input Data	Default	Description	Related Program
01	Gatekeeper mode	0:No GK 1:Automatic 2:Manual	0	An external gatekeeper uses proprietary set up. **1 = No GK:** A gatekeeper is not used **2 = Automatic:** A gatekeeper is searched and assigned **3 = Manual:** A gatekeeper's IP address is used (assigned in 10-17-02).	10-17-02 10-17-04
02	Gatekeeper IP address	IP address 1.0.0.1 ~ 126.255.255.254 128.1.0.1 -191.254.255.254 192.0.1.1 ~ 223.255.254.254	0.0.0.0	Unicast IP address of the External GK.	This item is effective only when Program 10-17-01 is set to **Manual (2)**.
03	Not used				
04	Preferred Gatekeeper	Character line (Max 124)	No Setting	When registering with an external gatekeeper using gatekeeper search, two or more GRQ(s) may be assigned. In this case, if this ID is set up, it will register with a gatekeeper with this ID.	This item is effective only when Program 10-17-01 is set to **Automatic (1)**.

Conditions

None

Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 10-17 (H.323 Gatekeeper Setup):

1. Enter the programming mode.
2. 10 17

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 10 : System Configuration Setup
10-18 : H.323 Alias Address Setup

Level:	Aspire S	Aspire M/L/XL
SA	• Available.	• Available.

Description

Use **Program 10-18 : H.323 Alias Address Setup** to set up the Alias Address registered into the External Gatekeeper.

Input Data

The number of alias	1 - 6

Item No.	Item	Input Data	Default	Description
01	Alias Address	Maximum 12 digits	No setup	Define the Alias Address of the Aspire system registered into the External Gatekeeper. At this time, it is only the telephone number which can be registered as an Alias Address. In the future, other types of addresses will be available.
02	Type of Alias Address	0 = E164	0	Define the type of Alias Address registered into the external gatekeeper. Currently the only type is E.164. However, in the future, other types will also be available.

Conditions

None

Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 10-18 (H.323 Alias Address Setup):

1. Enter the programming mode.
2. 10 18

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 10 : System Configuration Setup
10-19 : VOIPU DSP Resource Selection

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 10-19 : VOIPU DSP Resource Selection** to specify the operating mode of the DSP resource on the VOIPU PCB. This program setting has no affect on the terminal/trunk port assignments or usage.

Input Data

SLOT Number	01-16

Item No.	DSP Resource Number	Input Data	Default
01	01-32	0 = common use - for both IP extensions and trunks 1 = IP extension only 2 = IP trunk only 3 = NTW (network)/Telco	0

Conditions

One DSP resource can handle four IP channels.

Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 10-19 (VOIPU DSP Resource Selection):

1. Enter the programming mode.
2. 10 19

3. Enter the number of the item you want to program.

4. Select the slot number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 10 : System Configuration Setup
10-20 : LAN Setup for External Equipment

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 10-20 : LAN Setup for External Equipment** to define the TCP port/address/etc. for communicating to external equipment.

Input Data

Type of external equipment	1 = CTI Server 2 = ACD MIS 3 = - Reserve - 4 = Network Listener 5 = SMDR 6 = DIM Access

Item No.	Item	Input Data	Default
01	**TCP Port** When using External Device 6 for DIM access, the port ***cannot*** be set to 5963.	0-65535	External Device 1 and 2 = 0 External Device 3 = 0 External Device 4 = 30,000 External Device 5 = 0 External Device 6 = 0
02	Not used		
03	Keep Alive Time	1-255 (Seconds)	30

Conditions

None

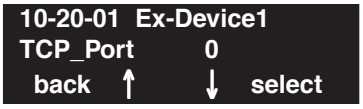
Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 10-20 (LAN Setup for External Equipment):

1. Enter the programming mode.
2. 10 20



3. Enter the number of the item you want to program.

4. Select the device number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 10 : System Configuration Setup
10-21 : NTCPU Hardware Setup

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 10-21 : NTCPU Hardware Setup** to set up various hardware, such as the baud rate of COM port and the switch for control on NTCPU.

Input Data

Item No.	Item	Input Data	Default
01	**External Source Control Switch Selection on NTCPU** Specify the function of the relay switch for external tone source control. Refer to Program 10-05-01 for PGDAD Module relay assignments.	0 = External MOH source 1 = BGM source 2 = External Speaker 3 = General Purpose Relay	0
02	**Baud rate for COM Port** Define the baud rate of the COM port within the NTCPU.	0 = 4800 1 = 9600 2 = 19200 3 = 38400	2
03	UPS	0 = Disable 1 = Enable	0

Conditions

None

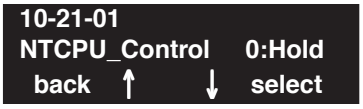
Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 10-02 (Location Setup):

1. Enter the programming mode.
2. 10 02



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 10 : System Configuration Setup
10-22 : Setting the Wake On LAN for APSU

Level:	Aspire S	Aspire M/L/XL
SA	• Available.	• Available.

Description

Use **Program 10-22 : Setting the Wake On LAN for APSU** to set up the data required to start the APSU unit (server) from a key telephone.

Input Data

SLOT Number	01-16

Item No.	Item	Input Data	Default	Description	Related Program
01	Server MAC Address	00-00-00-00-00-00 FF-FF-FF-FF-FF-FF	00-00-00-00-00-00	Set up MAC address for the APSU unit (server).	11-15-06
02	Broadcast address	0.0.0.0 255.255.255.255	0.0.0.0	Set up the Broadcast address for the APSU unit (server).	

Conditions

None

Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 10-22 (Setting the Wake On LAN for APSU):

1. Enter the programming mode.
2. 10 22

3. Enter the number of the item you want to program.

4. Select the slot number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 10 : System Configuration Setup
10-23 : H.323 System Interconnection

Level:
SA

Aspire S	Aspire M/L/XL
• Available. • Expanded system number entry requires software 2.63+.	• Available. • System number entries expanded from 50 to 1000 with software 2.63+.

Description

Use **Program 10-23 : H.323 System Interconnection** to define the IP address of another system, call control port number and alias address for Aspire system inter-connection. This program is activated when Program 10-17-01 and 10-18 are registered. Depending on your system software, the system allows for up to 50 or 1000 systems to be registered.

Input Data

Index 1

System Number	0001-1000

Item No.	Item	Input Data	Default	Related Program
01	System Interconnection	0 = No 1 = Yes	0	
02	IP address	1.0.0.1_126.255.255.254 128.1.0.1 _191.254.255.254 192.0.1.1 _223.255.254.254	0.0.0.0	Activated when 10-23-01=1
03	Call Control Port	1-65535	1720	Activated when 10-23-01=1
04	**Alias Address** If Program 10-28-04 is used, its entry must be numeric as 10-23-04 does not permit text entry - only numeric entries.	Max 12 addresses	No Setting	Activated when 10-23-01=1 10-28-04

Conditions

None

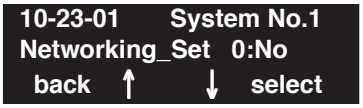
Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 10-23 (H.323 System Interconnection):

1. Enter the programming mode.
2. 10 23



3. Enter the number of the item you want to program.

4. Select the slot number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 10 : System Configuration Setup

10-24 : Daylight Savings Setup

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 10-24 : Daylight Savings Setup** to set the options for daylight savings. As the telephone system is used globally, these settings define when the system should automatically adjust for daylight savings as it applies to the region in which the system is installed.

Input Data

Item No.	Item	Input Data	Default	Related Program
01	**Daylight Savings Mode** Enable (1) or disable (0) the system's ability to adjust the time for daylight savings/standard time.	0 = Disable 1 = Enable	1	
02	**Time for Daylight Savings** Enter the time of day the system should adjust for daylight savings time.	0000-2359	0200	
03	**Start of Month (Summer Time)** Enter the month of system should adjust the time for daylight savings time (01 - 12).	1-12	4	
04	**Start of Week** Enter the week of the month the system should adjust the time for daylight savings time (0 = last week of the month or 1-5).	0 = Last Week of Month 1-5	1	
05	**Start of Week Day** Enter the day of the week the system should adjust the time for daylight savings time (01 = Sunday, 02 = Monday, etc).	1-7 (Sun=1, Mon=2, etc.)	1	
06	**End of Month** Enter the month of system should adjust the time for standard time (01 - 12).	1-12	10	
07	**End of Week** Enter the week of the month the system should adjust the time for standard time (0 = last week of the month or 1-5).	0 = Last Week of Month 1-5	0	
08	**End of Week Day** Enter the day of the week the system should adjust the time for daylight savings time (01 = Sunday, 02 = Monday, etc).	1-7 (Sun=1, Mon=2, etc.)	1	

Conditions

None

Feature Cross Reference

Time and Date

Telephone Programming Instructions

To enter data for Program 10-24 (Daylight Savings Setup):

1. Enter the programming mode.
2. 10 24

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 10 : System Configuration Setup
10-25 : H.323 Gateway Prefix Setup

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 10-25 : H.323 Gateway Prefix Setup** to set the gateway prefix registered to the outside gatekeeper.

Input Data

Item No.	Item	Input Data	Default	Related Program
01	Gateway Prefix	0=Disabled, 1=Enabled	0	
02	Gateway Prefix		No Setting	10-24-01

Conditions

None

Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 10-25 (H.323 Gateway Prefix Setup):

1. Enter the programming mode.
2. 10 25

3. Enter the number of the item you want to program.

4. Select a circuit/resource number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available. • Item 2 requires software 4.93+.	• Available. • Item 2 requires software 4.93+.

Description

Use **Program 10-26 : IP System Operation Setup** to set the operation mode of the IP system.

Input Data

Item No.	Item	Input Data	Default	Related Program
01	**IP Peer-to-Peer** This options allows a IP telephone to call another IP telephone user without using DSP resources on the VOIPU PCB.	0 = Disabled 1 = Enabled	1	
02	**RTP Forwarding** Enable or disable RTP Forwarding for the system. If this option is disabled, the DSP is used from the VOIPU which low load channel. If this option is enabled, the DSP is used from the same VOIPU channel.	0 = Disabled 1 = Enabled	0	

Conditions

None

Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 10-26 (IP System Operation Setup):

1. Enter the programming mode.
2. 10 26

3. Enter the number of the item you want to program.

4. Select a circuit/resource number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 10-27 : IP System ID** to set the IP address of the networked IP systems.

Input Data

System ID	01-50

Item No.	Item	Input Data	Default	Related Program
01	**IP Address** System ID is related with the System ID in the Numbering Plan (Program 11-01-03). When the digits are analyzed and the system ID is determined from the system data set in the Numbering Plan, the Networking call will be sent to the IP Address set in this program. The IP Address should be the IP Address of the peer NTCPU (Program 10-12-01).	1.0.0.1_126.255.255.254 128.1.0.1 _191.254.255.254 192.0.1.1 _223.255.254.254	0.0.0.0	11-01-01 10-12-01
02	**Call Procedure Port** The Port Number should be set with the same value as the H.225 setup port in Program 84-02-33.	1-65535	1730	84-02-33

Conditions

None

Feature Cross Reference

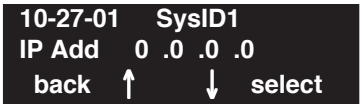
None

Program 10 : System Configuration Setup
10-27 : IP System ID

Telephone Programming Instructions

To enter data for Program 10-27 (IP System ID):

1. Enter the programming mode.
2. 10 27



3. Enter the number of the item you want to program.

4. Select a circuit/resource number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:
IN

Aspire S	Aspire M/L/XL
• Available with software 2.63+.	• Available with software 2.63+.
• Item 6 requires software 2.65+.	• Item 6 requires software 2.65+.

Description

Use **Program 10-28 : SIP Trunk Basic Setup** to set the basic options used for SIP trunks.

Contact Your NEC Sales Representative for information on the SIP feature availability.

Input Data

Item No.	Item	Input Data	Default	Related Program
01	**Domain Name** Define the Domain name.	64 characters maximum	None	
02	**Host Name** Define the Host name.	48 characters maximum	None	
03	**Transport Protocol** Define the Transport type.	0=UDP, 1=TCP	0	
04	**User ID** Define the User ID. Note: If Program 10-23-04 for system interconnection, this entry must be numeric as 10-23-04 does not allow text entry - only numeric.	32 characters maximum	No Entry	
05	**Domain Assignment** Define the Domain Assignment.	0=IP Address, 1=Domain name	0	
06	**IP Trunk Port Binding** If this entry is set to 0 (Disable), an incoming call uses the lowest port. If the entry is set to 1 (Enable), the incoming call uses the port assigned in 10-36.	0 = Disable 1 = Enable	0	10-36-01

Conditions

None

Feature Cross Reference

VoIP

Telephone Programming Instructions

To enter data for Program 10-28 (SIP Trunk Basic Setup):

1. Enter the programming mode.
2. 10 28

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 2.63+.	• Available with software 2.63+.

Description

Use **Program 10-29 : SIP Proxy Setup** to set the proxy options for SIP trunks.

Contact Your NEC Sales Representative for information on the SIP feature availability.

Input Data

Item No.	Item	Input Data	Default	Related Program
01	**Outbound Proxy** Define the SIP Proxy setup, Default Proxy (Outbound).	0=off, 1=on	0	
02	**SIP Proxy Setup - Default Proxy** Define the Default Proxy (inbound).	0=off, 1=on	0	
03	**Default Proxy IP Address** Enter the default Proxy IP Address.	0.0.0.1-126.255.255.254 128.0.0.1 - 191.255.255.254 192.0.0.1 - 223.225.255.254	0.0.0.0	
04	**Default Proxy Trans. Port** Define the Proxy Trans. port.	0-65535	5060	
05	**Registrar Mode** Define the Registrar Mode.	0=none, 1=manual	0	
06	**Registrar IP Address** Define the Registrar IP Address	0.0.0.1-126.255.255.254 128.0.0.1 - 191.255.255.254 192.0.0.1 - 223.225.255.254	0.0.0.0	
07	**Registrar Trans Port** Define the Registrar Trans. port.	0-65535	5060	
08	**DNS Mode** Define the DNS Mode.	0=off, 1=on	0	
09	**DNS IP Address** Define the DNS IP Address.	0.0.0.1-126.255.255.254 128.0.0.1 - 191.255.255.254 192.0.0.1 - 223.225.255.254	0.0.0.0	
10	**DNS Trans. Port** Define the DNS Trans. port.	0-65535	53	
11	**Registrar Domain Name** Define the Registrar Domain Name.	128 characters maximum	No Entry	

Item No.	Item	Input Data	Default	Related Program
12	**Proxy Domain Name** Define the Proxy Domain Name.	64 characters maximum	No Entry	
13	**Proxy Host Name** Define the Proxy Host name.	48 characters maximum	No Entry	
14	**SIP Carrier Choice** Define the SIP Carrier Choice.	0=Default, 1=Carrier A, 2=Carrier B, 3=Carrier C, 4=Carrier D, 5=Carrier E, 6=Carrier F, 7=Carrier G	0	
15	**Registration Expiry Time** Define the Registration Expiry time.	120-65535 seconds	3600 seconds	

Conditions

None

Feature Cross Reference

VoIP

Telephone Programming Instructions

To enter data for Program 10-29 (SIP Proxy Setup):

1. Enter the programming mode.
2. 10 29

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 2.63+.	• Available with software 2.63+.

Description

Use **Program 10-30 : SIP Authentication Information** to set the authentication options for SIP trunks.

Contact Your NEC Sales Representative for information on the SIP feature availability.

Input Data

Item No.	Item	Input Data	Default	Related Program
02	**User ID** Define the User ID.	48 characters max	None	
03	**Password** When the Aspire registers its own ID with the carrier SIP server or makes an outgoing call via the carrier SIP server, the SIP server requests the authentication. This data is used as "Register ID 0".	24 characters max	None	
04	**Authorization Trial** Define the Authorization trial.	1-9	1 time	

Conditions

None

Feature Cross Reference

VoIP

Telephone Programming Instructions

To enter data for Program 10-30 (SIP Authentication Information):

1. Enter the programming mode.
2. 10 30

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 2.63+.	• Available with software 2.63+.

Description

Use **Program 10-33 : SIP Registrar/Proxy Setup** to set the registrar/proxy options for SIP extensions.

Contact Your NEC Sales Representative for information on the SIP feature availability.

Input Data

Item No.	Item	Input Data	Default	Related Program
01	**Registration Expire Time** Set the Registration Expire Time.	60-300 seconds	120 seconds	
02	**Authentication Mode** Enable or disable the Authentication Mode.	0=Disable, 1=Enable	0	
03	**Registrar/Proxy Domain** Set the Registrar/Proxy Domain name.	64 characters maximum	None	
04	**Registrar/Proxy Host Name** Set the Registrar/Proxy Host name.	48 characters maximum	None	

Conditions

None

Feature Cross Reference

VoIP

Telephone Programming Instructions

To enter data for Program 10-33 (SIP Registrar/Proxy Setup):

1. Enter the programming mode.
2. 10 33

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available with software 1.11+.

Description

Use **Program 10-31 : Networking Keep Alive Setup** to set the interval and retry count of the Aspire Networking keep alive message. The keep alive is used for ISDN and IP networking.

The keep alive message is automatically responded to by the destination Aspire, if the response is not received the retry count will start. If a response is not received within the number of retries the networking link will be taken out of service. When the link is taken out of service:

- Any calls that are in progress will be released.
- Park Hold orbits will be released.
- No further Park Hold information will be sent until the link is active.

The link will automatically become active when the next keep alive response is received.

Input Data

Item No.	Item	Input Data	Default	Related Program
01	**Keep Alive Interval** This program is used to set the interval of Keep Alive. The system does not send Keep alive when this item is set to "0". If this entry is greater than “0”, networked PRI spans which are using Kentrox DSUs will not re-sync when removed from service then returned to service.	0-65535 seconds	0	
02	**Keep Alive Retry Timer** Set how many times the system resends Keep Alive.	1-255	5	

Conditions

The keep alive message must be sent and a response not received for the retry count, for the link to be taken out of service and the calls in progress and Park Hold orbits to be released.

For example: If an ISDN AspireNet link is disconnected at Layer 1 then the keep alive message can not be sent, therefore the keep alive operation will not occur.

Feature Cross Reference

Networking

Telephone Programming Instructions

To enter data for Program 10-31 (Networking Keep Alive Setup):

1. Enter the programming mode.
2. 10 31

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Not Available.	• Available with software 2.09+.

Description

Use **Program 10-32 : PRI Networking Channel Limitation** to assign the number of B-channels to be used for each ISDN PCB. This allows for fractional PRIs when used with multiple site networking. If this program is limited to less than "23" on one side of the network, then it also limits both inbound and outbound network calls. For example, when you select 10 channels then only channels 1 to 10 will be available. If a call is attempted on channels 11 to 30 the caller will receive busy tone. This also applies on the other side of the network as well.

The setting is for each slot within the Aspire system; ensure that you select the correct slot before making any changes.

This program will not affect a PRI card set as Trunk or Station mode.

Input Data

Slot Number	1 - 16

Item No.	Item	Input Data	Default	Related Program
01	**Maximum Channels**	1 - 23	Slots 1-16 = 23	

Conditions

None

Feature Cross Reference

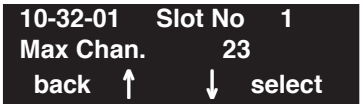
Networking

Program 10 : System Configuration Setup
10-32 : PRI Networking Channel Limitation

Telephone Programming Instructions

To enter data for Program 10-32 (PRI Networking Channel Limitation):

1. Enter the programming mode.
2. 10 32



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 2.65+.	• Available with software 2.65+.

Description

Use **Program 10-36 : SIP Trunk Registration Information Setup** to set the SIP trunk registration information. The Aspire can keep 32 Registrations. Data in programs 10-28-04, 10-30-02 and 10-30-03 are recognized as ID 0. This system data is for register ID 1 - ID 31.

Contact Your NEC Sales Representative for information on the SIP feature availability.

Input Data

Register ID	1 - 31

Item No.	Item	Input Data	Default	Related Program
01	**Registration** Enable or disable the SIP trunk registration.	0 = Disable 1 = Enable	0	
02	**User ID** Define the user ID.	32 characters max	None	
03	**Authentication User ID** Define the authentication user ID.	48 characters max	None	
04	**Authentication Password** Define the authentication password.	24 characters max	None	

Conditions

None

Feature Cross Reference

VoIP

Telephone Programming Instructions

To enter data for Program 10-36 (SIP Trunk Registration Information Setup):

1. Enter the programming mode.
2. 10 36

3. Enter the number of the item you want to program.

4. Select a register ID number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 2.65+.	• Available with software 2.65+.

Description

Use **Program 10-37 : UPnP Setup** to set the UPnP options for SIP trunks.

Contact Your NEC Sales Representative for information on the SIP feature availability.

Input Data

Item No.	Item	Input Data	Default	Related Program
01	**UPnP Mode** Use this option to determine whether UPnP task starts. If UPnP task starts, it obtains a NAPT router WAN IP Address by using NAT traversal and saves it in 10-12-07 automatically.	0 = Disable 1 = Enable	0	10-12-07
02	**UPnP Interval** UPnP task will try to obtain the WAN IP Address of NAPT router at the interval defined in this option.	0-3600	60	

Conditions

None

Feature Cross Reference

VoIP

Telephone Programming Instructions

To enter data for Program 10-37 (UPnP Setup):

1. Enter the programming mode.
2. 10 37

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 11-01 : System Numbering** to set the system's internal (Intercom) numbering plan. The numbering plan assigns the first and second digits dialed and affects the digits an extension user must dial to access other extensions and features, such as service codes and trunk codes. If the default numbering plan does not meet the site requirements, use this program to tailor the system numbering to the site.

CAUTION

Improperly programming this option can adversely affect system operation. Make sure you thoroughly understand the default numbering plan before proceeding. If you must change the standard numbering, use the chart for **System Numbering** (page 797) to keep careful and accurate records of your changes.

Before changing your numbering plan, use the PC Program or Web PC Program to make a backup copy of your system's data.

Changing the numbering plan consists of three steps:

1. Enter the digits you want to change.
2. Specify the length of the code you select to change.
3. Assign a function to the code selected.

Step 1: Enter the digit(s) you want to change

You can make either single or two digit entries. In the Dialed Number column in the **System Numbering** (page 797) table, the nX rows (e.g., 1X) are for single digit codes. The remaining rows (e.g., 11, 12, etc.) are for two digit codes.

- Entering a single digit affects all the Dialed Number entries beginning with that digit. For example, entering 6 affects all number plan entries beginning with 6. The entries you make in step 2 and step 3 below affect the entire range of numbers beginning with 6. (For example, if you enter 3 in step 2 the entries affected would be 600-699. If you enter 4 in step 2 below, the entries affected would be 6000-6999.)
- Entering two digits lets you define codes based on the first two digits a user dials. For example, entering 60 allows you to define the function of all codes beginning with 60. In the default program, only * and # use two-digit codes. All the other codes are single digit. If you enter a two digit code between 0 and 9, be sure to make separate entries for all the other two digit codes within the range as well. This is because in the default program all the two digit codes between 0 and 9 are undefined.

Step 2: Specify the length of the code you want to change

After you specify a single or two digit code, you must tell the system how many digits comprise the code. This is the ***Number of Digits Required*** column in the **System Numbering** (page 797) table. In the default program, all codes from 100-999 are three digits long. Codes beginning with 0 are one digit long. Codes beginning with * are 3 digits long and codes beginning with # are 4 digits long.

Step 3: Assign a function to the code selected

After entering a code and specifying its length, you must assign its function. This is the Dial Type column in the **System Numbering** (page 797) table. The choices are:

Dial Types	Dial Type Description	Related Program
0	- Not Used -	
1	Service Code	11-10 : Service Code Setup (for System Administrator) 11-11 : Service Code Setup (for Registration) 11-12 : Service Code Setup (for Service Access) 11-13 : Service Code Setup (for ACD) 11-14 : Service Code Setup (for HOTEL) 11-15 : Service Code Setup (Special access)
2	Extension Number	11-02 : Extension Numbers 11-04 : Virtual Extension Numbers 11-06 : 2PGDAD (ACI) Extension Numbers 11-07 : Department Calling Group Numbers 11-08 : 2PGDAD (ACI) Group Pilot Numbers
3	Trunk Access Code	11-09 : Trunk Access Code
4	Special Trunk Access	11-09 : Trunk Access Code
5	Operator Access	20-17 : Operator's Extension
6	ARS/F-Route Access	44-xx
8	Networking	10-03 : PCB Setup 10-12 : NTCPU Network Setup 10-20 : LAN Setup for External Equipment 10-27 : IP System IP

- Changing the ***Dial Type*** for a range of codes can have a dramatic affect on how your system operates. Assume, for example, the site is a hotel that has room numbers from 100-399. In order to make extension numbers correspond to room numbers, you should:
  - In Program 11-02, reassign extension numbers on each floor from 100 to 399. (Other applications might also require you to change entries in Program 11-10 through 11-16.)

Default

See the following tables.

System Numbering					
Dial Types: 1=Service Code, 2=Extension Number, 3=Trunk Access, 4=Special Trunk Access, 5=Operator Access, 6=Flexible Routing, 8=Networking, 0=Not Used					
Dialed Number	**Number of Digits Required Default**	**New**	**Dial Type Default**	**New**	**Network System ID [if type 8] - 0-50**
1X	3		1		
11	0		0		
12	0		0		
13	0		0		
14	0		0		
15	0		0		
16	0		0		
17	0		0		
18	0		0		
19	0		0		
10	0		0		
1*	0		0		
1#	0		0		
2X	3		2		
21	0		0		
22	0		0		
23	0		0		
24	0		0		
25	0		0		
26	0		0		
27	0		0		
28	0		0		
29	0		0		
20	0		0		
2*	0		0		
2#	0		0		

System Numbering					
Dial Types: 1=Service Code, 2=Extension Number, 3=Trunk Access, 4=Special Trunk Access, 5=Operator Access, 6=Flexible Routing, 8=Networking, 0=Not Used					
Dialed Number	Number of Digits Required Default	New	Dial Type Default	New	Network System ID [if type 8] - 0-50
3X	3		2		
31	0		0		
32	0		0		
33	0		0		
34	0		0		
35	0		0		
36	0		0		
37	0		0		
38	0		0		
39	0		0		
30	0		0		
3*	0		0		
3#	0		0		
4X	3		2		
41	0		0		
42	0		0		
43	0		0		
44	0		0		
45	0		0		
46	0		0		
47	0		0		
48	0		0		
49	0		0		
40	0		0		
4*	0		0		
4#	0		0		

System Numbering					
Dial Types: 1=Service Code, 2=Extension Number, 3=Trunk Access, 4=Special Trunk Access, 5=Operator Access, 6=Flexible Routing, 8=Networking, 0=Not Used					
Dialed Number	**Number of Digits Required**		**Dial Type**		**Network System ID [if type 8] - 0-50**
	Default	**New**	**Default**	**New**	
5X	3		2		
51	0		0		
52	0		0		
53	0		0		
54	0		0		
55	0		0		
56	0		0		
57	0		0		
58	0		0		
59	0		0		
50	0		0		
5*	0		0		
5#	0		0		
6X	3		2		
61	0		0		
62	0		0		
63	0		0		
64	0		0		
65	0		0		
66	0		0		
67	0		0		
68	0		0		
69	0		0		
60	0		0		
6*	0		0		
6#	0		0		

System Numbering					
Dial Types: 1=Service Code, 2=Extension Number, 3=Trunk Access, 4=Special Trunk Access, 5=Operator Access, 6=Flexible Routing, 8=Networking, 0=Not Used					
Dialed Number	**Number of Digits Required**		**Dial Type**		**Network System ID [if type 8] - 0-50**
	Default	**New**	**Default**	**New**	
7X	3		2		
71	0		0		
72	0		0		
73	0		0		
74	0		0		
75	0		0		
76	0		0		
77	0		0		
78	0		0		
79	0		0		
70	0		0		
7*	0		0		
7#	0		0		
8X	3		1		
81	0		0		
82	0		0		
83	0		0		
84	0		0		
85	0		0		
86	0		0		
87	0		0		
88	0		0		
89	0		0		
80	0		0		
8*	0		0		
8#	0		0		

System Numbering					
Dial Types: 1=Service Code, 2=Extension Number, 3=Trunk Access, 4=Special Trunk Access, 5=Operator Access, 6=Flexible Routing, 8=Networking, 0=Not Used					
Dialed Number	**Number of Digits Required**		**Dial Type**		**Network System ID [if type 8] - 0-50**
	Default	**New**	**Default**	**New**	
9X	1		3		
91	0		0		
92	0		0		
93	0		0		
94	0		0		
95	0		0		
96	0		0		
97	0		0		
98	0		0		
99	0		0		
90	0		0		
9*	0		0		
9#	0		0		
0X	1		5		
01	0		0		
02	0		0		
03	0		0		
04	0		0		
05	0		0		
06	0		0		
07	0		0		
08	0		0		
09	0		0		
00	0		0		
0*	0		0		
0#	0		0		

System Numbering					
Dial Types: 1=Service Code, 2=Extension Number, 3=Trunk Access, 4=Special Trunk Access, 5=Operator Access, 6=Flexible Routing, 8=Networking, 0=Not Used					
Dialed Number	**Number of Digits Required**		**Dial Type**		**Network System ID [if type 8] - 0-50**
	Default	**New**	**Default**	**New**	
*X	2		1		
*1	0		0		
*2	0		0		
*3	0		0		
*4	0		0		
*5	0		0		
*6	0		0		
*7	0		0		
*8	0		0		
*9	0		0		
*0	0		0		
**	0		0		
*#	0		0		
#X	0		0		
#1	2		1		
#2	2		1		
#3	2		1		
#4	2		1		
#5	2		1		
#6	2		1		
#7	2		1		
#8	2		1		
#9	2		1		
#0	2		1		
#*	4		1		
##	2		1		

Conditions

None

Feature Cross Reference

- Flexible System Numbering

Telephone Programming Instructions

To enter data for Program 11-01 (System Numbering):

1. Enter the programming mode.
2. 11 01

3. Enter the number of the item you want to program.

4. Select the dial number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 11 : System Numbering
11-02 : Extension Numbering

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 11-02 : Extension Numbering** to set the extension number. The extension number can be up to eight digits long. The first/second digit(s) of the number should be assigned in Program 11-01. This lets an employee move to a new location (port) and retain the same extension number.

Input Data

Extension Port Number	001-512

Item No.	Extension Number	Description
01	Dial (Up to 8 digits)	• Set up extension numbers for Key Telephones, Single Line Telephones (Including 1SLIA, APR), and IP Telephones. • Extension number assignments cannot be duplicated,

Default

Extension Port Number	Extension Number
1	301
2	302
3	303
:	:
199	499
200	5000
:	:
512	5312

Conditions

None

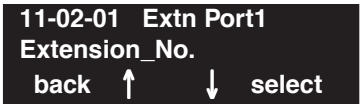
Feature Cross Reference

- Department Calling
- Flexible System Numbering
- Intercom

Telephone Programming Instructions

To enter data for Program 11-02 (Extension Numbering):

1. Enter the programming mode.
2. 11 02



3. Enter the number of the item you want to program.

4. Select the extension port number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 11 : System Numbering
11-04 : Virtual Extension Numbering

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 11-04 : Virtual Extension Numbering** to define the virtual extension numbers. The extension number can be up to eight digits long. The first/second digit(s) of the number should be assigned in Program 11-01.

Input Data

Virtual Extension Port Numbers	Aspire S: 01-24 Aspire: 001-256

Item No.	Virtual Extension Number	Description
01	Dial (Up to 8 digits)	Set up Virtual Extension Numbers. The extension number cannot be duplicated in Programs 11-02, 11-06, 11-07 and 11-08.

Default

Virtual Extension Numbers : No setting

Conditions

None

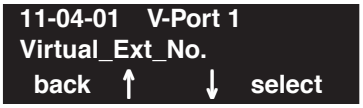
Feature Cross Reference

- Flexible System Numbering
- Multiple Directory Numbers / Call Coverage

Telephone Programming Instructions

To enter data for Program 11-04 (Virtual Extension Numbering):

1. Enter the programming mode.
2. 11 04



3. Enter the number of the item you want to program.

4. Select the virtual port number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 11 : System Numbering
11-06 : ACI Extension Numbering

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 11-06 : ACI Extension Numbering** to define the virtual extension number to be used for the ACI. The extension number can be up to eight digits long. The first/second digit(s) of the number should be assigned in Program 11-01.

Input Data

ACI Port Number	Aspire S: 1-8 Aspire: 01-96

Item No.	ACI Extension Number	Description	Related Program
01	Dial (Up to 8 digits)	The extension number cannot be duplicated in Programs 11-02, 11-04, 11-07 and 11-08.	• 10-03 : Basic Configuration for Each PCBs

Default

ACI Port Numbers have no extension number set.

Conditions

None

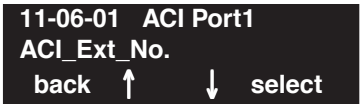
Feature Cross Reference

- Analog Communications Interface (ACI)
- Flexible System Numbering

Telephone Programming Instructions

To enter data for Program 11-06 (ACI Extension Numbering):

1. Enter the programming mode.
2. 11 06



3. Enter the number of the item you want to program.

4. Select the ACI port number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 11 : System Numbering
11-07 : Department Group Pilot Numbers

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 11-07 : Department Group Pilot Numbers** to assign pilot numbers to each Department Group set up in Program 16-02. The pilot number is the number users dial for Department Calling and Department Step Calling. The pilot number can be up to eight digits long. The first/second digit(s) of the number should be assigned in Program 11-01 as type 2.

Input Data

Department (Extension) Group Number	Aspire S: 1-8 Aspire: 01-64

Item No.	Department (Extension) Group Pilot Number	Description	Related Program
01	Dial (Up to 8 digits)	Use this program to assign department group pilot numbers. The number set up by Program 11-02 (Extension Numbering) cannot be used. The extension number cannot be duplicated in Programs 11-02, 11-04, 11-06 and 11-08.	• 16-01 : Department (Extension) Group Basic Data Setup • 16-02 : Department Group Assignment for Extensions • 16-03 : Secondary Department Group

Default

Group Numbers 1-8 or 01-64: No setting

Conditions

None

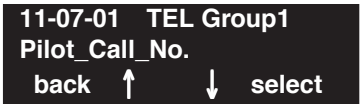
Feature Cross Reference

- Department Calling
- Department Step Calling

Telephone Programming Instructions

To enter data for Program 11-07 (Department Group Pilot Numbers):

1. Enter the programming mode.
2. 11 07



3. Enter the number of the item you want to program.

4. Select the telephone group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 11 : System Numbering
11-08 : ACI Group Pilot Number

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 11-08 : ACI Group Pilot Number** to assign the pilot number to the ACI Groups set in Program 33-02. The pilot number can be up to four digits long. The first/second digit(s) of the number should be assigned in Program 11-01 as type 2.

Input Data

ACI Group Number	Aspire S: 1-4 Aspire: 01-16

Item No.	ACI Group Pilot Number	Description	Related Program
01	Dial (Up to 8 digits)	The extension number cannot be duplicated in Programs 11-02, 11-04, 11-06 and 11-07.	33-07

Default

Group Numbers have no pilot numbers defined.

Conditions

None

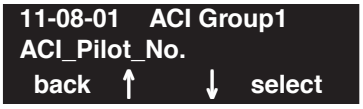
Feature Cross Reference

- Analog Communications Interface (ACI)

Telephone Programming Instructions

To enter data for Program 11-08 (ACI Group Pilot Number):

1. Enter the programming mode.
2. 11 08



3. Enter the number of the item you want to program.

4. Select the ACI group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 11 : System Numbering
11-09 : Trunk Access Code

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 11-09 : Trunk Access Code** to assign the trunk access code (normally 9). The trunk access code can be set from 1 to 8 digits which is defined to type 3 and 4 in Program 11-01. This is the code extension users dial to access Automatic Route Selection. The Individual Trunk Access Code is used when Trunk Group Routing is desired for an outgoing line.

Caution

The digit 9 is defined in Program 11-01 as Dial Type 3 with the Number of Digits Required set to 1. If you change the trunk access code in Program 11-09, you must make the corresponding changes in Program 11-01.

Input Data

Item No.	Item	Input Data	Default	Description	Related Program
01	Trunk Access Code	Dial (Up to 4 digits)	9	Use this program to assign the trunk access code (normally 9). This is the code extension users dial to access Automatic Route Selection.	• 11-01 : System Numbering • 14-01 : Trunk Basic Data Setup • 14-05 : Trunk Group • 14-06 : Trunk Group Routing
02	Alternate Trunk Route Access Code	Dial (Up to 4 digits)	No setting	Use this program to define additional trunk access codes. When a user dials the Alternate Trunk Route Access Code, the system routes their call to the Alternate Trunk Route.	• 11-01 : System Numbering • 14-01 : Trunk Basic Data Setup • 14-05 : Trunk Group • 14-06 : Trunk Group Routing • 21-02 : Trunk Group Routing for Extensions • 21-15 : Alternate Trunk Group Routing for Extensions

Conditions

None

Feature Cross Reference

- Automatic Route Selection
- Central Office Calls, Placing
- Trunk Group Routing

Telephone Programming Instructions

To enter data for Program 11-09 (Trunk Access Code):

1. Enter the programming mode.
2. 11 09

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 11 : System Numbering

11-10 : Service Code Setup (for System Administrator)

Level:
IN

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Aspire Wireless service code items 30 and 31 are not available.	• Aspire Wireless service code items 30 and 31 are available with software 2.63+.
• Service Codes 32-34 available with software 4.93+.	• Service Codes 32-34 available with software 4.93+.

Description

Use **Program 11-10 : Service Code Setup (for System Administrator)** to customize the Service Codes for the System Administrator. You can customize additional Service Codes in Programs 11-11 through 11-16. The following chart shows:

- The number of each code (01-27)
- The function of the Service Code.
- What type of telephones can use the Service Code
- The code's default entry. For example, dialing *3 (item 26) allows users to force a trunk line to disconnect.
- Programs that may be affected with the changing the code.

If you change a Service Code, be sure to record your entry in the "New" column.

Input Data

Item No.	Item	Terminals	Default	New	Related Program
01	Day / Night Mode Switching	KTS, SLT	818		12-xx 20-07-01
02	Changing the Music on Hold Tone	KTS	881		10-04
03	Setting the System Time	KTS	828		
04	Storing Common Abbreviated Dialing Numbers	KTS	853		
05	Storing Group Abbreviated Dialing Numbers	KTS	854		
06	Setting the Automatic Forwarding for Each Trunk Line	KTS	833		24-04-01
07	Canceling the Automatic Forwarding for Each Trunk Line	KTS	834		24-04-01
08	Setting the Destination for Automatic Trunk Forwarding	KTS	835		24-04-01
09	Not Used		No Setting		
10	Not Used	-	-	-	-
11	Entry of Credit for Toll Restriction - Not Used		No Setting		

Item No.	Item	Terminals	Default	New	Related Program
12	Night Mode Switching for Other Group	KTS	118		12-xx 20-07-01
13	Not Used	-	-	-	-
14	Not Used	-	-	-	-
15	Not Used	-	-	-	-
16	Leaving Message Waiting	KTS	126		11-11-09
17	Dial Block by Supervisor	KTS	101		90-19
18	Off-Premise Call Forward by Door Box	KTS	822		13-05
19	Not Used	-	-		-
20	VRS - Record/Erase Message	KTS	116		20-07-13
21	VRS - General Message Playback	KTS	111		20-07-14
22	VRS - Record or Erase General Message	KTS	112		20-07-15
23	SMDR - Extension Accumulated Printout Code	KTS	121		20-07-18
24	SMDR - Group Accumulated Printout Code	KTS	122		20-07-19
25	Account Code Accumulated Printout Code	KTS	123		20-07-20
26	Forced Trunk Disconnect	KTS, SLT	*3		20-07-11
27	Trunk Port Disable for Outgoing Calls	KTS	145		20-07-12
28	Not Used	-	-		-
29	Not Used	-	-		-
30	**Register Aspire Wireless Handset** Define the service code to be used to register an Aspire Wireless handset.	KTS	-		20-07-21
31	**Unregister Aspire Wireless Handset** Define the service code to be used to unregister an Aspire Wireless handset.	KTS	-		20-07-21
32	**Set Private Call Refuse** Define the service code to be used to set the “Private” call refusal for the trunks which are programmed in Program 14-01-27 to 1.	KTS, SLT	No Setting		14-01-27
33	**Enter Caller ID Refuse** For keysets only, define the service code to be used to add or delete the Caller ID numbers to be refused.	KTS, SLT	No Setting		14-01-27

Item No.	Item	Terminals	Default	New	Related Program
34	**Set Caller ID Refuse** Define the service code to be used to enable/disable the Caller ID call refusal for the trunks which are programmed in Program 14-01-27 to 1.		No Setting		14-01-27
35	**DID Mode Switching** Assign the service code to be used to manually change the time pattern for a DID number.	KST, SLT	No Setting		

Conditions

None

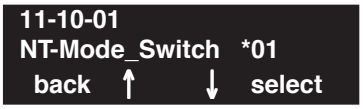
Feature Cross Reference

Refer to chart above.

Telephone Programming Instructions

To enter data for Program 11-10 (Service Code Setup (for System Administrator)):

1. Enter the programming mode.
2. 11 10



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available. • Item 43 available.	• Available. • Item 43 available with software 1.20+.

Description

Use **Program 11-11 : Service Code Setup (for Setup/Entry Operation)** to customize the Service Codes which are used for registration and setup. You can customize additional Service Codes in Programs 11-10, and 11-12 through 11-16. The following chart shows:

- The number of each code (01-38)
- The function of the Service Code.
- What type of telephones can use the Service Code
- The code's default entry. For example, dialing 825 (item 18) allows users to turn on or turn off Background Music.
- Programs that may be affected with the changing the code.

If you change a Service Code, be sure to record your entry in the "New" column.

Input Data

Item No.	Item	Terminals	Default	New	Related Program
01	Call Forward - Immediate	KTS, SLT	No Setting		
02	Call Forward - Busy	KTS, SLT	No Setting		
03	Call Forward - No Answer	KTS, SLT	No Setting		
04	Call Forward - Busy/No Answer	KTS, SLT	No Setting		
05	Call Forward - Both Ring	KTS, SLT	No Setting		
06	Call Forwarding - Select Option	KTS, SLT	*2		
07	Call Forwarding - Follow-Me	KTS, SLT	No Setting		
08	Do Not Disturb	KTS, SLT	847		
09	Answer Message Waiting	KTS, SLT	*0		11-10-16
10	Cancel All Messages Waiting	KTS, SLT	873		
11	Cancel Message Waiting	KTS, SLT	871		
12	Alarm Clock	KTS, SLT	827		20-01-06
13	Display Language Selection for Keyset	KTS	178		15-02
14	Text Message Setting	KTS	No Setting		
15	Enable Handsfree Incoming Intercom Calls	KTS	821		20-09-05 20-02-12

Item No.	Item	Terminals	Default	New	Related Program
16	Force Ringing of Incoming Intercom Calls	KTS	823		20-09-05 20-02-12
17	Programmable Function Key Programming (Dialing 851 Service Code)	KTS	851		15-07 11-11-38
18	BGM On/Off	KTS	825		
19	Key Touch Tone On/Off	KTS	824		
20	Change Incoming CO and ICM Ring Tones	KTS	820		15-02
21	Check Incoming Ring Tones	KTS	811		
22	Extension Name Programming	KTS	800		15-01
23	Second Call for DID/DISA/DIL	KTS	179		
24	**Change Extension Class of Service** Allows an extension user to change the COS of another extension. Must be allowed in Program 20-13-28.	KTS	177		20-13-28
25	Automatic Transfer Setup for Each Department Group	KTS, SLT	102		20-11-17 24-05
26	Automatic Transfer Cancellation for Each Department Group	KTS, SLT	103		
27	Destination of Automatic Transfer Each Department Group	KTS	104		20-11-17 24-05
28	Delayed Transfer for Every Department Group	KTS, SLT	105		20-11-17 24-05 24-02-08
29	Delayed Transfer Cancellation for Each Department Group	KTS, SLT	106		20-11-17
30	DND Setup for Each Department Group	KTS, SLT	107		
31	DND Cancellation for Each Department Group	KTS, SLT	108		
32	Not Used	-	-	-	-
33	Dial Block	KTS, SLT	100		
34	Temporary Toll Restriction Override	KTS, SLT	875		21-07
35	Pilot Group Withdrawing	KTS, SLT	150		
36	Toll Restriction Override	KTS, SLT	163		21-14
37	Adjusting Ring Volume	KTS	829		
38	Programmable Function Key Programming (Dialing 852 Service Code)	KTS	852		15-07 11-11-17

Item No.	Item	Terminals	Default	New	Related Program
39	One Touch Dial Number Entry	KTS	855		
40	Off-Premise Call Forwarding	KTS, SLT	*4		
41	Tandem Ringing	KTS, SLT	No Setting		15-07 30-03
42	**Aspire Wireless Transferring When Out of Range** Customize the service code to be used when setting a Aspire Wireless phone to transfer calls when out of range.	Aspire Wireless	189		
43	**Headset Mode Switching** This option determines how long after the hookswitch is released the SLT will hear dial tone before the phone goes into headset mode.	SLT	188		
44	Automated Attendant (DSPDB) - Not Used in U.S. -	-	-	-	-
56	**Telephone Book Lock Service** Using the service code defined in this option, users can change the system Telephone Book lock status.	KTS	No Setting		

Conditions

None

Feature Cross Reference

Refer to chart above.

Telephone Programming Instructions

To enter data for Program 11-11 (Service Code Setup (for Setup/Entry Operation)):

1. Enter the programming mode.
2. 11 11

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available. • Item 58 available.	• Available. • Item 58 available with software 1.11+.

Description

Use **Program 11-12 : Service Code Setup (for Service Access)** to customize the Service Codes which are used for service access. You can customize additional Service Codes in Programs 11-10, 11-11, and 11-13 through 11-16. The following chart shows:

- The number of each code (01-48)
- The function of the Service Code.
- What type of telephones can use the Service Code
- The code's default entry. For example, dialing 805 (code 05) will cancel a previously set Camp-On.
- Programs that may be affected with the changing the code.

If you change a Service Code, be sure to record your entry in the "New" column.

For "8xx" service codes used after dialing an extension (post-dialing), Program 11-16-09 (Single Digit Voice Mail code) must be deleted or changed from the default entry of "8" for the service codes to work.

Input Data

Item No.	Item	Terminals	Default	New	Related Program
01	**Call Forwarding / Do Not Disturb Override** Activating Call Forwarding/Do Not Disturb Override. This code is only available if you disable the voice mail Single Digit dialing code in Program 11-16-09.	KTS, SLT	807		11-16-09
02	Conference	KTS, SLT	#1		
03	Override (Off-Hook Signaling)	KTS, SLT	809		
04	Set Camp-On	KTS, SLT	850		
05	Cancel Camp-On	KTS, SLT	870		
06	**Switching of Voice Call and Signal Call** Used to toggle an ICM call between Handsfree Answerback and Forced Intercom Ringing for outgoing Intercom calls.	KTS, SLT	812		
07	Step Call	KTS, SLT	808		
08	Barge-In	KTS, SLT	810		
09	Change to STG All Ring	KTS, SLT	No Setting		16-02
10	Common/Extension Abbreviated Dialing	KTS, SLT	#2		

Program 11 : System Numbering

11-12 : Service Code Setup (for Service Access)

Item No.	Item	Terminals	Default	New	Related Program
11	Group Abbreviated Dialing	KTS, SLT	#4		
12	Last Number Dial	KTS, SLT	#5		
13	Saved Number Dial	KTS, SLT	815		
14	Trunk Group Access	KTS, SLT	804		
15	Specified Trunk Access	KTS, SLT	#9		
16	Trunk Access Via Networking	KTS	No Setting		
17	Clear Last Number Dialing Data	KTS, SLT	876		
18	Clear Saved Number Dialing Data	KTS, SLT	885		
19	Internal Group Paging	KTS, SLT	801		31-01-01
20	External Paging	KTS, SLT	803		
21	Meet Me Answer to Specified Internal Paging Group	KTS, SLT	864		
22	Meet Me Answer to External Paging	KTS, SLT	865		
23	Meet Me Answer in Same Paging Group	KTS, SLT	863		
24	Combined Paging	KTS, SLT	*1		31-07
25	Direct Call Pickup - Own Group	KTS, SLT	856		
26	Call Pickup for Specified Group	KTS, SLT	868		
27	Call Pickup	KTS, SLT	*#		
28	Call Pickup for Another Group	KTS, SLT	869		
29	Direct Extension Call Pickup	KTS, SLT	**		
30	Specified Trunk Answer	KTS, SLT	172		
31	Park	KTS, SLT	#6		24-03
32	Answer for Park	KTS, SLT	*6		24-03
33	Group Hold	KTS, SLT	832		
34	Answer for Group Hold	KTS, SLT	862		
35	Personal (Extension) Park	KTS, SLT	857		
36	Door Box Access	KTS, SLT	802		
37	Common Canceling Service Code	KTS, SLT	120		
38	Not Used	-	883	-	-
39	VRS Access - Not Used in U.S. -	KTS, SLT	884		

Item No.	Item	Terminals	Default	New	Related Program
40	Personal Abbreviated Dialing	KTS, SLT	#7		
41	Voice Over	KTS	890		11-16-08
42	Flash on Trunk lines	SLT	#3		
43	Universal Answer	SLT	#0		14-05 14-06
44	Callback Test for SLT	SLT	899		
45	Enabled On Hook When Holding (SLT)	SLT	849		15-03-07
46	Answer On Hook When Holding (SLT)	SLT	859		15-03-08
47	**Call Waiting Answer / Split Answer** Splitting (switching) between calls	KST/SLT	894		11-12-03
48	Account Code	SLT	##		
49	Not Used	-	-	-	-
50	General Purpose Relay	KST	880		
51	Call Own Mailbox		*8		
52	Live Monitoring (VRS)		No Setting		
53	Live Recording at SLT	SLT	154		
54	**VRS Routing for ANI/DNIS** Use when setting up ANI/DNIS Routing to the VRS Automated Attendant. Using the Transfer feature, this also allows a call to be transferred to the VRS.		882		
56	**E911 Alarm Shut Off** Enter the Service Code that an extension user can dial to shut off the E911 Alarm Ring.		886	-	20-08-16 21-01-13
57	**Unsupervised Conference/Tandem Trunking**	KST/SLT	#8		
58	**Transfer Into Conference** Assign the Service Code users dial to Transfer a call into a Conference call.	KST/SLT	124		20-13-10 20-13-15 20-13-16

Conditions

For “8xx” service codes used after dialing an extension (post-dialing), Program 11-16-09 (Single Digit Voice Mail code) must be deleted or changed from the default entry of “8” for the service codes to work.

Feature Cross Reference

Refer to chart above.

Telephone Programming Instructions

To enter data for Program 11-12 (Service Code Setup (for Service Access)):

1. Enter the programming mode.
2. 11 12

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Not Available.	• Available.

Description

Use **Program 11-13 : Service Code Setup (for ACD)** to customize the Service Codes which are used with the Automatic Call Distribution (ACD) feature. You can customize additional Service Codes in Programs 11-10 through 11-12 and 11-14 through 11-16. The following chart shows:

- The number of each code (01-09)
- The function of the Service Code.
- What type of telephones can use the Service Code
- The code's default entry.

If you change a Service Code, be sure to record your entry in the "New" column.

Input Data

Item No.	Item	Terminals	Default	New
01	ACD Log In / Log Out (for KTS)	KTS, SLT	*5	
02	ACD Log Out (for SLT)	SLT	155	
03	Set ACD Wrap-Up Time (for SLT)	SLT	156	
04	Cancel ACD Wrap-Up Time (for SLT)	SLT	157	
05	Set ACD Off Duty (for SLT)	SLT	158	
06	Cancel ACD Off Duty (for SLT)	SLT	159	
07	ACD Conversation Recording (for SLT)	SLT	160	
08	**ACD AIC Login** Allows an AIC Agent to log into a group.	KTS	No setting	
09	**ACD AIC Logout** Allows an AIC Agent to log out of a group.	KTS	No setting	
10	**ACD Agent Login by Supervisor** Allows an ACD Supervisor to log into a group.	KTS	167	
11	**ACD Agent Logout by Supervisor** Allows an ACD Supervisor to log out of a group.	KTS	168	
12	**Change Agent ACD Group by Supervisor** When using service code 169 to change an agent's ACD group, the supervisor must enter a 2-digit number for the group. For example, to change to ACD group 4, the entry would be '169 04'.	KTS	169	

13	**ACD Agent Changing Own ACD Group** Using this service code, an ACD Agent can reassign themselves to another ACD Group.	KTS	170	

Conditions

None

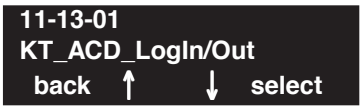
Feature Cross Reference

- Automatic Call Distribution (ACD)

Telephone Programming Instructions

To enter data for Program 11-13 (Service Code Setup (for ACD)):

1. Enter the programming mode.
2. 11 13



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 11-14 : Service Code Setup (for Hotel)** to customize the Service Codes which are used with the Hotel/Motel feature. You can customize additional Service Codes in Programs 11-10 through 11-13, 11-15 and 11-16. The Service Codes can only be used at telephones registered as hotel terminals in Program 42-02. The following chart shows:

- The number of each code (01-17)
- The function of the Service Code.
- What type of telephones can use the Service Code
- The code's default entry.

If you change a Service Code, be sure to record your entry in the "New" column.

Input Data

Item No.	Item	Terminals	Default
01	Set DND for Own Extension	KTS, SLT	127
02	Cancel DND for Own Extension	KTS, SLT	128
03	Set DND for Other Extension	KTS, SLT	129
04	Cancel DND for Other Extension	KTS, SLT	130
05	Set Wake Up Call for Own Extension	KTS, SLT	131
06	Cancel Wake Up Call for Own Extension	KTS, SLT	132
07	Set Wake Up Call for Other Extension	KTS, SLT	133
08	Cancel Wake Up Call for Other Extension	KTS, SLT	134
09	Set Room to Room Call Restriction	KTS, SLT	135
10	Cancel Room to Room Call Restriction (Hotel)	KTS, SLT	136
11	Change Toll Restriction Class for Other Extension	KTS, SLT	137
12	Check-In	KTS, SLT	138
13	Check-Out	KTS, SLT	139
14	Room Status Change for Own Extension	KTS, SLT	140

Item No.	Item	Terminals	Default
15	Room Status Change for Other Extension	KTS, SLT	141
16	Room Status Output	KTS, SLT	142
17	Hotel Room Monitor	KTS, SLT	175
18	Hotel PMS Toll Restriction Set	KTS	166

Conditions

None

Feature Cross Reference

- Hotel/Motel

Telephone Programming Instructions

To enter data for Program 11-14 (Service Code Setup (for Hotel)):

1. Enter the programming mode.
2. 11 14

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:
IN

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Item 9 requires software 2.63+.	• Item 9 requires software 2.63+.
• Item 12 requires software 4.0E+.	• Item 12 requires software 4.0E+.
• Item 13 requires software 4.93+.	• Item 13 requires software 4.93+.

Description

Use **Program 11-15 : Service Code Setup, Administrative (for Special Access)** to customize the special access Service Codes which are used by the administrator in the Hotel/Motel feature. You can customize additional Service Codes in Programs 11-10 through 11-14 and 11-16. The following chart shows:

- The number of each code (01-07)
- The function of the Service Code.
- What type of telephones can use the Service Code
- The code's default entry.
- Programs that may be affected with the changing the code.

If you change a Service Code, be sure to record your entry in the "New" column.

Input Data

Item No.	Item	Terminals	Default	New	Related Program
01	**Remote Maintenance** Set the service code used in the dial-up number when using the serial or USB port for PCPro or WebPro		830		
02	ACD Access in Dial-In Conversion Table		860		22-04 22-11
03	**Backup Data Save** This option will save the user's soft key settings (extension's programmed Call Forwards, DND, etc.). It is recommended to use this feature before upgrading the system software.	KTS	#*#9		
04	Not Used				
05	System Programming Mode, Log-On	KTS	#*#*		11-01
06	Wake on LAN to APSU Unit	KTS	No Setting		10-22
07	Recording Destination in Dial-In Conversion Table		No Setting		
08	Network Message Lamp Control		866		

09	**Transfer to Trunk Ring Group Code** Allows a call to be transferred to a trunk ring group or External Paging zones.	KTS, SLT	No Setting		22-05-01 25-06-02 31-05-01
12	**Extension Data Swap** Define the service code (up to 8 digits) to be used with the Extension Data Swap feature.	KTS, SLT	No Setting		92-04-01
13	**Function Setting via DISA** Define the service code an outside caller dials when on a DISA line in order to access certain Aspire features.	KTS, SLT	8 Digits Max.	No Setting	

Conditions

None

Feature Cross Reference

- Hotel/Motel
- Maintenance

Telephone Programming Instructions

To enter data for Program 11-15 (Service Code Setup, Administrative (for Hotel)):

1. Enter the programming mode.
2. 11 15

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available. • Item 11 requires software 2.64+.	• Available. • Item 11 requires software 2.64+.

Description

Use **Program 11-16 : Single Digit Service Code Setup** to customize the one-digit Service Codes used when a busy or ring back signal is heard. You can customize additional Service Codes in Programs 11-10 through 11-15. The following chart shows:

- The number of each code (01-10)
- The function of the Service Code.
- What type of telephones can use the Service Code
- The code's default entry. For example, dialing 1 (code 03) when calling an extension will switch the call from either a voice or signal call (depending on how it's currently defined).
- Programs that may be affected by changing these codes.

If you change a Service Code, be sure to record your entry in the "New" column.

Input Data

Item No.	Item	Default	New	Related Program
01	Step Call	#		
02	Barge In	No Setting		
03	Switching of Voice/Signal Call	1		
04	Intercom Off Hook Signaling	7		
05	Camp-On	2		
06	DND/Call Forward Override	No Setting		
07	Message Waiting	0		
08	Voice Over	6		
09	Access to Voice Mail	8		
10	STG All Ring Mode	No Setting		16-01-05
11	Personal Park	No Setting		

Conditions

None

Feature Cross Reference

Refer to chart above.

Telephone Programming Instructions

To enter data for Program 11-16 (Single Digit Service Code Setup):

1. Enter the programming mode.
2. 11 16

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Not Available.	• Available.

Description

Use **Program 11-17 : ACD Group Pilot Number** to assign the ACD Master Number for each ACD Group. This is the number users dial to transfer calls to the ACD Group. Normally, you should use unassigned extension numbers (e.g., 600) for the master number. If you want to use an extension number which, by default, has a port number assigned (for example: in the 301-499, 5000-5312), first remove the default assignment. For example, to use extension number 325 as an ACD Master Number, first give extension port 025 a different extension assignment.

Input Data

ACD Group Number	01-64

Item No.	ACD Group Pilot Number
01	Dial (Up to 8 digits)

Default

No ACD Group Pilot Numbers assigned to any ACD Group (1-64).

Conditions

None

Feature Cross Reference

- Automatic Call Distribution (ACD)
- Multiple Directory Numbers/Call Coverage Keys

Program 11 : System Numbering
11-17 : ACD Group Pilot Number

Telephone Programming Instructions

To enter data for Program 11-17 (ACD Group Pilot Number):

1. Enter the programming mode.
2. 11 17

3. Enter the number of the item you want to program.

4. Select the ACD group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 12-01 : Night Mode Function Setup** to set up the Night Mode options. Refer to the following chart for a description of each option, its range and default setting.

Input Data

Item No.	Item	Input Data	Default	Description	Related Program
01	Manual Night Service Enable	0-off 1-on	1	Allows/prevents users from activating Night Service by dialing a service code.	11-10-01
02	Automatic Night Service	0-off 1-on	0	According to a preset schedule, enable or disable Automatic Night Service for the system.	12-02 12-03 12-04
03	Night Mode Switch Operating Mode (Sensor switch on NTCPU only)	0-disable 1-8 (operation mode)	0	Use this option to set the operation mode of the NTCPU Night Service mode switch sensors (external Night Mode Selector Switch). The Night Service mode affects trunk inbound and outbound routing. Note: Function keys 1-8 can be used to select the input data 0-Mode 7, but to select Mode 8, the digit '8' on the dial pad must be pressed instead.	

Note: Even if the operation mode is changed manually, the operation mode changes according to the schedule set up.

Conditions

None

Feature Cross Reference

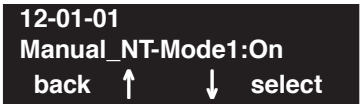
- Night Service

Program 12 : Night Mode Setup
12-01 : Night Mode Function Setup

Telephone Programming Instructions

To enter data for Program 12-01 (Night Mode Function Setup):

1. Enter the programming mode.
2. 12 01



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
SA	• Available.	• Available.

Description

Use **Program 12-02 : Automatic Night Service Patterns** to define the daily pattern of the auto night switch setting. Each Night Mode Group has 10 patterns. These patterns are used in Programs 12-03 and 12-04. The daily pattern consists of 20 timer settings.

Input Data

Night Mode Service Group Number	Aspire S: 1-4 Aspire: 01-32

Time Pattern Number	01-10

Set Time Number	01-20

Item	Description	Input Data
01	Start Time	0000-2359
02	End Time	0000-2359
03	Operation Mode	Aspire S: 1-4 Aspire: 1-8

Example:

Time Pattern 1

0:00	9:00	12:00	13:00	17:00	18:00	22:00	0:00
Mode 3 (midnight)	Mode 1 (day)	Mode 4 (rest)	Mode 1 (day)	Mode 4 (rest)	Mode 2 (night)	Mode 3 (midnight)	

To make the above schedule, it is necessary to set the data as follows:

Time setting 01:	00:00 to 09:00	Mode 3 (midnight)
Time setting 02:	09:00 to 12:00	Mode 1 (day)
Time setting 03:	12:00 to 13:00	Mode 4 (rest)
Time setting 04:	13:00 to 17:00	Mode 1 (day)
Time setting 05:	17:00 to 18:00	Mode 4 (rest)
Time setting 06:	18:00 to 22:00	Mode 2 (night)
Time setting 07:	22:00 to 00:00	Mode 3 (midnight)

Time Pattern 2

0:00	0:00
Mode 2 (night)	

Time setting 01: 00:00 to 00:00 Mode 2 (night)

Default

All groups, all patterns : 00:00 to 00:00 = Mode 1

Time Pattern 1

Set Time Number	Start Time	End Time	Mode
01	0000	0800	2
02	0800	1700	1
03	1700	0000	2
04	0000	0000	1
:	:	:	:
20	0000	0000	1

Time Pattern 2

Set Time Number	Start Time	End Time	Mode
01	0000	0000	2
02	0000	0000	1
:	:	:	:
20	0000	0000	1

Time Pattern 3

Set Time Number	Start Time	End Time	Mode
01	0000	0000	1
:	:	:	:
20	0000	0000	1

Conditions

None

Feature Cross Reference

- Night Service

Telephone Programming Instructions

To enter data for Program 12-02 (Automatic Night Service Patterns):

1. Enter the programming mode.
2. 12 02

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 12 : Night Mode Setup
12-03 : Weekly Night Service Switching

Level:	Aspire S	Aspire M/L/XL
SA	• Available.	• Available.

Description

Use **Program 12-03 : Weekly Night Service Switching** to define a weekly schedule of night-switch settings.

Input Data

Night Mode Service Group Number	Aspire S: 1-4 Aspire: 01-32

Item No.	Day of the Week	Time Schedule Pattern Number
01	01=Sunday	0-10
	02=Monday	
	03=Tuesday	
	04=Wednesday	
	05=Thursday	
	06=Friday	
	07=Saturday	

Default

Day of the Week	Time Schedule Pattern Number
01=Sunday	2
02=Monday	1
03=Tuesday	1
04=Wednesday	1
05=Thursday	1
06=Friday	1
07=Saturday	2

Conditions

None

Feature Cross Reference

- Night Service

Telephone Programming Instructions

To enter data for Program 12-03 (Weekly Night Serv ice Switching):

1. Enter the programming mode.
2. Enter the number of the item you want to program.

3. Enter data for the item you selected + HOLD.
4. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 12 : Night Mode Setup
12-04 : Holiday Night Service Switching

Level:	Aspire S	Aspire M/L/XL
SA	• Available.	• Available.

Description

Use **Program 12-04 : Holiday Night Service Switching** to define a yearly schedule of holiday night-switch settings. This schedule is used for setting of special days which the company is expected to be closed, such as national holiday.

Input Data

Night Mode Service Group Number	Aspire S: 1-4 Aspire: 01-32

Item No.	Days and Months	Time Pattern Number
01	0101 ~ 1231 (ex: 0101 = Jan. 1, 1231 = Dec. 31)	0-10 (0 = no setting)

Default

No setting

Conditions

None

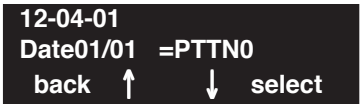
Feature Cross Reference

- Night Service

Telephone Programming Instructions

To enter data for Program 12-04 (Holiday Night Service Switching):

1. Enter the programming mode.
2. 12 04



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 12 : Night Mode Setup

12-05 : Night Mode Group Assignment for Extensions

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 12-05 : Night Mode Group Assignment for Extensions** to a assign Day/Night Mode Group for each extension.

Input Data

Extension Number	Max. 8 Digits

Item No.	Night Mode Service Group Number	Default
01	Aspire S: 1-4 Aspire: 01-32	1

Conditions

None

Feature Cross Reference

- Night Service

Telephone Programming Instructions

To enter data for Program 12-05 (Night Mode Group Assignment for Extensions):

1. Enter the programming mode.
2. 12 05

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 12 : Night Mode Setup

12-06 : Night Mode Group Assignment for Trunks

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 12-06 : Night Mode Group Assignment for Trunks** to assign a Day/Night Mode Group for each trunk port.

Input Data

Trunk Port Number	Aspire S: 1-8 Aspire: 001-200

Item No.	Night Mode Service Group Number	Default
01	Aspire S: 1-4 Aspire: 01-32	1

Conditions

None

Feature Cross Reference

- Night Service

Telephone Programming Instructions

To enter data for Program 12-06 (Night Mode Group Assignment for Trunks):

1. Enter the programming mode.
2. 12 06

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 12 : Night Mode Setup
12-07 : Text Data for Night Mode

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 12-07 : Text Data for Night Mode** to make an original text message which is displayed on an LCD of keyset telephone in each Night Mode.

Input Data

Night Mode Service Group Number	Aspire S: 1-4 Aspire: 01-32

Day/Night Mode	Aspire S: 1-4 Aspire: 1-8

Item No.	Text Message
01	Maximum 12 characters (alphabetic or numeric)

Default

Mode 1 = No setting
Mode 2 = <Night>
Mode 3 = <Mid-night>
Mode 4 = <Rest>
Mode 5 = <Day2>
Mode 6 = <Night2>
Mode 7 = <Midnight2>
Mode 8 = <Rest2>

Conditions

None

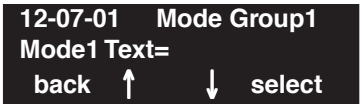
Feature Cross Reference

- Night Service

Telephone Programming Instructions

To enter data for Program 12-07 (Text Data for Night Mode):

1. Enter the programming mode.
2. 12 07



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 12 : Night Mode Setup
12-08 : Night Mode Service Range

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 2.63+.	• Available with software 2.63+.

Description

Use **Program 12-08 : Night Mode Service Range** to set the number of modes a user will toggle through when using the Night Mode Programmable Function Key to toggle night modes.

The Aspire S provides 4 day/night modes - the Aspire provides 8.

Input Data

Night Mode Service Group Number	Aspire S: 1-4 Aspire: 01-32

Item No.	Item	Input Data	Default	Related Program
01	**Night Mode Service Range** For each night mode group, determine how many night modes a user will toggle through when the Night Mode key is pressed.	2-8	2	15-07-01

Default

Users will toggle through 2 Night Modes.

Conditions

The Programmable Function key (PGM 15-07-01 or SC 851: 09) must have the additional data defined as “0” for the toggle function to work.

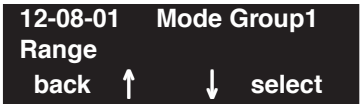
Feature Cross Reference

- Night Service

Telephone Programming Instructions

To enter data for Program 12-08 (Night Mode Service Range):

1. Enter the programming mode.
2. 12 08



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

- For Your Notes -

Level:	Aspire S	Aspire M/L/XL
SA	• Available.	• Available.

Description

Use **Program 13-01 : Abbreviated Dialing Function Setup** to define the Abbreviated Dialing functions.

Input Data

Item No.	Item	Input Data	Default	Related Program
01	Abbreviated Dialing Auto Outgoing Call Mode	0 = Trunk outgoing mode 1 = Extension outgoing mode	0	13-05
02	Not Used			
03	Number of Common Abbreviated Dialing Bins	0-2000 0 = No Common Abbreviated Dialing 100 bins per 1 unit	1000	13-04

Conditions

None

Feature Cross Reference

- Abbreviated Dialing

Program 13 : Abbreviated Dialing
13-01 : Abbreviated Dialing Function Setup

Telephone Programming Instructions

To enter data for Program 13-01 (Abbreviated Dialing Function Setup):

1. Enter the programming mode.
2. 13 01

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 13-02 : Group Abbreviated Dialing Bins** to define the range of bin numbers to be used by each Abbreviated Dialing group (refer to Program 13-03).

Input Data

Item No.	Abbreviated Dialing Group Number	Start Address of Abbreviated Dialing Bin	End Address of Abbreviated Dialing Bin
01	Aspire S: 1-8 Aspire: 01-64	0-1990	0, 9 - 1999

Default

No setting

Conditions

None

Feature Cross Reference

- Abbreviated Dialing

Program 13 : Abbreviated Dialing
13-02 : Group Abbreviated Dialing Bins

Telephone Programming Instructions

To enter data for Program 13-02 (Group Abbreviated Dialing Bins):

1. Enter the programming mode.
2. 13 02

3. Enter the number of the item you want to program.

4. Select the Abbreviated Dialing group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available - 8 Abbreviated Dialing Groups.	• Available - 64 Abbreviated Dialing Groups.

Description

Use **Program 13-03 : Abbreviated Dialing Group Assignment for Extensions** to assign Abbreviated Dialing Group for each extension.

Input Data

Extension Number	Up to 8 digits

Item No.	Group Number	Default Value
01	Aspire S: 1-8 Aspire: 01-64	1

Conditions

None

Feature Cross Reference

- Abbreviated Dialing

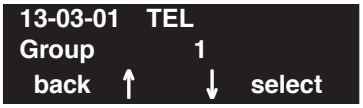
Program 13 : Abbreviated Dialing

13-03 : Abbreviated Dialing Group Assignment for Extensions

Telephone Programming Instructions

To enter data for Program 13-03 (Abbreviated Dialing Group Assignment for Extensions):

1. Enter the programming mode.
2. 13 03



3. Enter the number of the item you want to program.

4. Select the extension number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:
SB

Aspire S	Aspire M/L/XL
• Available. • Item 5 requires software 4.93+.	• Available. • Item 5 requires software 4.93+.

Description

Use **Program 13-04 : Abbreviated Dialing Number and Name** to store Abbreviated Dialing data into the Abbreviated Dialing areas. This program is also used to define the names assigned to the Abbreviated Dialing numbers.

Input Data

Abbreviated Dialing Bin Number	0-1999

Item No.	Item	Input Data	Default	Related Program
01	Abbreviated Dialing Data	1-9, 0, *, #, **P**ause (Press line key 1), **R**ecall/Flash (Press line key 2), **@** for Additional Digit for ISDN Functionality (Press line key 3) (max. 24 digits)	No Setting	
02	Name	Max. 12 Characters	No Setting	
03	Transfer Mode	0 = Not defined 1 = Internal dial 2 = Incoming Ring Group (IRG)	0	
	Destination Number	**If the Transfer mode is;** 1 (Internal Dial Mode) = 1-9, 0, *, #, P, R, @ (Max 24 Characters) **If the Transfer mode is;** 2:IRG 0-100 (IRG Number)	No Setting	
05	**Incoming Ring Pattern** The definition of the tone pattern is the same as Program 22-03.	Incoming Ring Pattern (0-9) 0 = normal pattern 1-4 = tone pattern(1-4) 5-9 = scale pattern(1-5)	0	14-01-27 22-03

Conditions

None

Program 13 : Abbreviated Dialing

13-04 : Abbreviated Dialing Number and Name

Feature Cross Reference

- Abbreviated Dialing

Telephone Programming Instructions

To enter data for Program 13-04 (Abbreviated Dialing Number and Name):

1. Enter the programming mode.
2. 13 04

3. Enter the number of the item you want to program.

4. Select the Abbreviated Dialing group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
SB	• Available.	• Available.

Description

Use **Program 13-05 : Abbreviated Dialing Trunk Group** to define the trunk group to be seized for each Abbreviated Dialing number (refer to Program 13-05).

If this program has an entry of '0' (no setting), then seizing a line follows the trunk access group routing of the caller's extension (refer to Program 14-06). This setting is only available in External Abbreviated Dialing Mode (Program 13-01-01).

Input Data

Abbreviated Dialing Bin Number	0-1999

Item No.	Trunk Group Number
01	0-100

Default

No Setting

Conditions

None

Feature Cross Reference

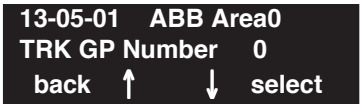
- Abbreviated Dialing

Program 13 : Abbreviated Dialing
13-05 : Abbreviated Dialing Trunk Group

Telephone Programming Instructions

To enter data for Program 13-05 (Abbreviated Dialing Trunk Group):

1. Enter the programming mode.
2. 13 05



3. Enter the number of the item you want to program.

4. Select the Abbreviated Dialing Area number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 4.93+.	• Available with software 4.93+.

Description

Use **Program 13-07 : Telephone Book Numer and Name** to define the Telephone Books.

Input Data

Telephone Books	Aspire S: 1-50 Aspire: 1-100

Memory Number	0-299

Item No.	Item	Entries	Default
01	**Dial Data** Use this program to store the dialing data for each Telephone Book. Up to 300 entries can be made in each Telephone Book.	Aspire S: Telephone Books: 1-50, Memory Number: 0-299 Aspire M/L/XL: Telephone Books: 1-100, Memory Number: 0-299	No Setting
02	**Name** Use this program to store a name to a memory number assigned in each Telephone Book. A maximum of 12 characters is allowed (permitted entries: 1-9, 0, *, #, P,R,@). Up to 300 entries can be made in each Telephone Book.	Aspire S: Telephone Books: 1-50, Memory Number: 0-299 Aspire M/L/XL: Telephone Books: 1-100, Memory Number: 0-299	No Setting
03	**Group Number** Use this program to assign each Telephone Book to a group number.	1-20	1

Conditions

None

Feature Cross Reference

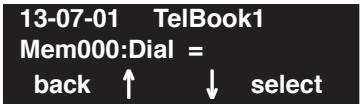
- Center Telephone Book

Program 13 : Abbreviated Dialing
13-07 : Telephone Book Number and Name

Telephone Programming Instructions

To enter data for Program 13-07 (Telephone Book Number and Name):

1. Enter the programming mode.
2. 13 07



3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 4.93+.	• Available with software 4.93+.

Description

Use **Program 13-08 : Telephone Book System Name** to define the nameTelephone Books.

Input Data

Telephone Books	Aspire S: 1-50 Aspire: 1-100

Item No.	Item	Entries	Default
01	**Name** Define the name of the system Telephone Book.	6 characters	No Entry

Conditions

None

Feature Cross Reference

- Center Telephone Book

Telephone Programming Instructions

To enter data for Program 13-08 (Telephone Book Name):

1. Enter the programming mode.
2. 13 08

3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 4.93+.	• Available with software 4.93+.

Description

Use **Program 13-09 : Telephone Book Group Name** to define the name for the Telephone book Group.

Input Data

Telephone Books	Aspire S: 1-50 Aspire: 1-100

Group Number	1-20

Item No.	Item	Entries	Default
01	**Group Name** Use this program to define the name of the system Telephone Book group.	8 characters	01 = Group 01 02 = Group 02 : 20 = Group 20

Conditions

None

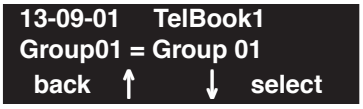
Feature Cross Reference

- Center Telephone Book

Telephone Programming Instructions

To enter data for Program 13-09 (Telephone Book Group Name):

1. Enter the programming mode.
2. 13 09



3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 4.93+.	• Available with software 4.93+.

Description

Use **Program 13-10 : Telephone Book Routing** to define the routing for the Telephone book Group.

Input Data

Telephone Books	Aspire S: 1-50 Aspire: 1-100

Item No.	Item	Entries	Default
01	**Routing** This program defines the dial routing of the system Telephone Book group. When an outside call is placed, the system follows Program 14-06-01.	Aspire S: Telephone Books: 1-50, Outgoing Mode: 0 = External Outgoing, 1 = Internal Outgoing Aspire M/L/XL: Telephone Books: 1-100, Outgoing Mode: 0 = External Outgoing, 1 = Internal Outgoing	0

Conditions

None

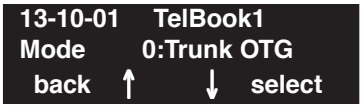
Feature Cross Reference

- Center Telephone Book

Telephone Programming Instructions

To enter data for Program 13-10 (Telephone Book Routing):

1. Enter the programming mode.
2. 13 10



3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:
IN

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Item 24 available with software 2.63+.	• Item 24 available with software 2.63+.
• Item 25 available with software 4.0E+.	• Item 25 available with software 4.0E+.
• Item 26 available with software 4.93+.	• Item 26 available with software 4.93+.
• Item 27 available with software 4.93+.	• Item 27 available with software 4.93+.

Description

Use **Program 14-01 : Basic Trunk Data Setup** to set the basic options for each trunk port. Refer to the chart below for a description of each option, its range and default setting.

Input Data

Trunk Port Number	Aspire S: 1-8 Aspire: 001-200

Item No.	Item	Input Data	Default	Related Program
01	**Trunk Name** Set the names for trunks. The trunk name displays at display keysets for incoming and outgoing calls.	Up to 12 characters	1 = Line 001 I Line 200 = Line 200	
02	**Transmit CODEC Gain Type** Use this option to select the CODEC gain for the trunk. The option sets the amount of gain (signal amplification) for the trunk you are programming.	1~63 (-15.5 ~ +15.5dB in .5dB intervals)	32 (0dB)	
03	**Receive CODEC Gain Type** Use this option to select the CODEC gain for the trunk. The option sets the amount of gain (signal amplification) for the trunk you are programming.	1~63 (-15.5 ~ +15.5dB in .5dB intervals)	32 (0dB)	
04	**Transmit Gain Level for Conference and Transfer Calls** Use this option to select the CODEC gain type used by the trunk when it is part of an Unsupervised Conference.	1~63 (-15.5 ~ +15.5dB in .5dB intervals)	22 (-5dB)	
05	**Receive Gain Level for Conference and Transfer Calls** Use this option to select the CODEC gain type used by the trunk when it is part of an Unsupervised Conference.	1~63 (-15.5 ~ +15.5dB in .5dB intervals)	22 (-5dB)	

Program 14 : Trunk, Basic Setup

14-01 : Basic Trunk Data Setup

Item No.	Item	Input Data	Default	Related Program
06	**SMDR Print Out** Use this option to have the system include/exclude the trunk you are programming from the SMDR printout. See Program 35-01 and 35-02 for SMDR printout options.	0 = No print out 1 = Prints out	0	
07	**Outgoing Calls** Use this option to allow/prevent outgoing calls on the trunk you are programming.	0 = prevented 1 = allowed	1	
08	**Toll Restriction** Use this option to enable/disable Toll Restriction for the trunk. If enabled, the trunk follows Toll Restriction programming (ex: Programs 21-05, 21-06). If disabled, the trunk is a toll free line.	0 = Restriction disable 1 = Restriction enable	1	21-04 21-05 21-06
09	**Private Line** Use this option to enable/disable a trunk's ability to be used as a Private Line.	0 = Private line disable 1 = Private line enable	0	
10	**DTMF Tones for Outgoing Calls** Use this option to enable (1) or disable (0) DTMF tones for outgoing trunk calls.	0 = disable 1 = enable	0	
11	**Account Code Required** Use this option to enable (1) or disable (0) Forced Account Codes.	0 = disable 1 = enable	1	
12	**- Not Used -**		1	
13	**Loop Disconnect Supervision** Use this option to enable (1) or disable (0) loop supervision for the trunk. This option is required for Call Forwarding Off-Premise and Tandem Trunking (including 2 B-Channel Transfer with PRI) only.	0 = disable 1 = enable	1	
14	**Long Conversation Cutoff** Use this option to enable or disable the Long Conversation Cutoff feature for each trunk.	0 = disable 1 = enable	0	20-21-03 20-21-04
15	**Long Conversation Alarm Before Cut Off** Use this option to enable or disable the Long Conversation Alarm for each trunk.	0 = disable 1 = enable	0	20-21-01 20-21-02

Item No.	Item	Input Data	Default	Related Program
16	**Forced Release of Held Call** Use this option to enable/disable forced release for calls on Hold. If enabled, the system disconnects a call if it is on Hold longer than a programmed interval (Program 24-01-05). If disabled, forced disconnection does not occur. Program 24-01-01 also affects this option.	0 = disable 1 = enable	0	24-01-05
17	**Trunk to Trunk Warning Tone for Long Conversation Alarm** Use this option to enable or disable the Warning Tone for Long Conversation feature for DISA callers.	0 = disable 1 = enable	0	
18	Warning Beep Tone Signaling	0 = disable 1 = enable	0	
19	**Privacy Mode Toggle Option** Use this option to enable or disable a trunk's ability to be switched from private to non-private mode by pressing the line key or Privacy Release function key.	0 = disable 1 = enable	0	
20	**Block Outgoing Caller ID** Allow (1) or prevent (0) the system from automatically blocking outgoing Caller ID information when a user places a call. If allowed (i.e. block, enabled), the system automatically inserts the Caller ID block code *67 (defined in 14-01-21) before the user dialed digits.	0 = Allow 1 = Block	0	
21	**Caller ID Block Code** Enter the code, up to 8 digits, that should be used as the Caller ID Block Code. This code is automatically inserted before dialed digits if Program 14-01-20 is set to '1'.	Dial (up to 8 digits)	*67	
22	**Caller ID to Voice Mail** Enable or disable the system's ability to send the Caller ID digits (Remote Log-On Protocol) to voice mail.	0 = disable 1 = enable	0	
23	**LCR - *Not Used in U.S.***		0	
24	**Trunk-to-Trunk Outgoing Caller ID Through Mode** Enable or disable the Trunk-to-Trunk Outgoing Caller ID Through Mode. This option allows Caller ID from the original outside caller to be displayed when a trunk is forwarded off premise. This option can only be used with PRI and SIP trunks.	0 = disable 1 = enable	0	

Item No.	Item	Input Data	Default	Related Program
25	**Continue/Disconnect Trunk-to-Trunk Conversation** When Program 24-02-10 is set to disconnect a trunk after the defined time, determine whether or not a user should have the ability to use the continue/disconnect code.	0 = disable 1 = enable	0	24-02-10
26	**Automatic Trunk to Trunk Transfer Mode** For each trunk, enable (1) or disable (0) the Step Transfer function when using the Automatic Trunk-to-Trunk Transfer feature. If this option is disabled, the call will be forwarded to the first specified destination only.	0 = disable 1 = enable	0	24-04-01
27	**Caller ID Refuse Setup** This program defines if the system rejects a trunk call and plays a VRS message based on the Caller ID information received. This option is set on a per trunk basis.	0 = Does not reject the call 1 = Rejects the call	0	

Default

Trunk Port Number	Name
001	LINE 001
002	LINE 002
:	:
200	LINE 200

Conditions

None

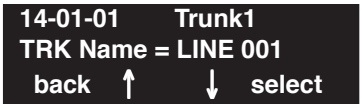
Feature Cross Reference

Refer to features in above chart.

Telephone Programming Instructions

To enter data for Program 14-01 (Basic Trunk Data Setup):

1. Enter the programming mode.
2. 14 01



3. Enter the number of the item you want to program.

4. Select the trunk number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 14 : Trunk, Basic Setup

14-02 : Analog Trunk Data Setup

Level:
IN

Aspire S	Aspire M/L/XL
• Available. • Item 16 requires software 4.0E+.	• Available. • Item 16 requires software 4.0E+.

Description

Use **Program 14-02 : Analog Trunk Data Setup** to set the basic options for each analog trunk port. Refer to the chart below for a description of each option, its range and default setting.

Input Data

Trunk Port Number	Aspire S: 1-8 Aspire: 001-200

Item No.	Item	Input Data	Default	Related Program
01	**Signaling Type (DP/DTMF)** This option sets the signaling type for the trunk.	0 = Dial Pulse (10 PPS) 1 = Dial Pulse (20 PPS) 2 = DTMF	2	
02	**Ring Detect Type** This option sets Extended Ring Detect or Immediate Ring Detect for the trunk. For T1 loop/ground start trunks, this option must be set to '1' in order for the trunks to ring and lamp correctly.	0 = Normal/delayed 1 = Immediate ringing	0	
03	**Flash Types** This option to select the flash type (open loop flash or ground). Always set this option for open loop flash.	0 = Open Loop Flash 1 = Ground	0	
04	**Flash For Timed Flash or Disconnect** This option lets you use Flash for Timed Flash (Program 81-01-14) or Disconnect (Program 81-01-15). (A user implements Flash by pressing the FLASH key while on a trunk call.)	0 = Timed flash/Hooking 1 = Disconnect	0	81-01-14 81-01-15
05	**Dial Tone Detection for Directly Accessed Trunks** Use this option to enable/disable dial tone detection for directly accessed trunks. If disabled, the system outdials on the trunks without monitoring for dial tone.	0 = Dial Tone Detection not used 1 = Dial Tone Detection used	0	21-01-04
06	Pause at 1st digit after line seize in manual dial mode	0 = No Pause 1 = Pause	1	21-01-06

Item No.	Item	Input Data	Default	Related Program
07	**DP to DTMF Conversion Options** Determine how a user can convert a Dial Pulse (DP) call to a DTMF call. For each trunk, set the type of DP to DTMF conversion required. There are three conversion options: Automatic (0), Automatic and Manual (1), or Manual (2). **Automatic:** DP to DTMF conversion occurs automatically if the extension user waits more than 10 seconds before dialing the next digit. **Automatic and Manual:** DP to DTMF conversion occurs automatically if the extension user waits more than 10 seconds before dialing the next digit. In addition, the user can dial # to switch a DP trunk to DTMF dialing. **Manual:** User can dial # to switch a DP trunk to DTMF dialing	0 = Automatic 1 = Automatic and Manual 2 = Manual	2	21-01-03
08	Answering condition	0 = Polarity reversing 1 = Polarity reversing or timer	1	21-01-03
09	**Busy Tone Detection** If this option is enabled (1) for a trunk, if there is no DSP resource available, the Multiple Trunk Conference cannot be completed.	0 = disable 1 = enable	0	
10	**Caller ID** Enable or disable a trunk's ability to receive Caller ID information.	0 = disable 1 = enable	0	
11	**Next Trunk in Rotary if No Dial Tone** Use this option to enable/disable the system's ability to skip over a trunk if dial tone is not detected. This option pertains to calls placed using Loop Keys, Speed Dial, ARS, Last Number Redial or Save Number dialed. It does not pertain to line key or Direct Trunk Access calls.	0 = disable 1 = enable	0	
12	**Detect Network Disconnect Signal** **- Not Used in U.S. -**	0 = disable 1 = enable	1	
13	**Trunk-to-Trunk Limitation** **- Not Used in U.S. -**	0 = disable 1 = enable	0	
14	**Loop Start/Ground Start**	0 = Loop Start 1 = Ground Start	0	
16	**Caller ID Type** Select the type of Caller ID signal from an analog trunk - FSK or DTMF.	0 = FSK 1 = DTMF	0	15-03-11

Conditions

None

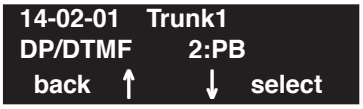
Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 14-02 (Analog Trunk Data Setup):

1. Enter the programming mode.
2. 14 02



3. Enter the number of the item you want to program.

4. Select the trunk number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 14-04 : Behind PBX Setup** to indicate if the trunk is installed behind a PBX. There is one item for each of the Night Service Modes:

Input Data

Trunk Port Number	Aspire S: 1-8 Aspire: 1-200

Item No.	Day/Night Mode	Type of Connection	Default	Related Program
01	Aspire S: 1-4 Aspire: 1-8	0 = Stand alone 1 = Behind PBX	0	22-02

Conditions

None

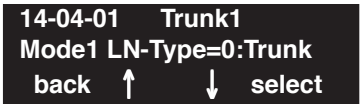
Feature Cross Reference

- Central Office Calls, Placing

Telephone Programming Instructions

To enter data for Program 14-04 (Behind PBX Setup):

1. Enter the programming mode.
2. 14 04



3. Enter the number of the item you want to program.

4. Select the trunk number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 14-05 : Trunk Groups** to assign trunks to Trunk Groups. You can also assign the outbound priority for trunks within the group. When users dial up the trunk group, they seize the trunks in the order you specify in the outbound priority entry.

Input Data

Trunk Port Number	Aspire S: 1-8 Aspire: 001-200

Item No.	Trunk Group Number	Order Number
01	Aspire S: 0-8 Aspire: 0-100	1-200

Default

Trunk Port	Group	Priority
1	1	1
:	:	:
200	1	200

Conditions

None

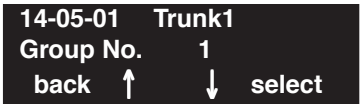
Feature Cross Reference

- Trunk Groups

Telephone Programming Instructions

To enter data for Program 14-05 (Trunk Group):

1. Enter the programming mode.
2. 14 05



3. Enter the number of the item you want to program.

4. Select the trunk number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available - 8 Trunk Group Numbers.	• Available - 100 Trunk Group Numbers.

Description

Use **Program 14-06 : Trunk Group Routing** to set up an outbound routing table for the trunk groups you assigned in Program 14-05. When users dial 9, the system routes their calls in the order (priority) you specify. For example, if a user dials 9 and all calls in the first group are busy, the system may route the call to another group. Trunk Access Map programming (Programs 14-07) may limit this option. The system contains 8 (Aspire S) or 100 (Aspire) routing tables for trunk access. Each table has four priority orders for trunk access.

Example for setting:

With less than 4 trunk groups,

Route number 1 : Order 1 – Trunk group 1
: Order 2 – Trunk group 2

For the above setting, if all the lines in trunk group 1 are busy, the system searches for an idle line in trunk group 2.

With more than 4 trunk groups,

Route number 1 : Order 1 – Trunk group 1
: Order 2 – Trunk group 2
: Order 3 – Trunk group 3
: Order 4 – 1002 (Jump to Route number 2)

Route number 2 : Order 1 – Trunk group 4
: Order 2 – Trunk group 5

For the above setting, if all the lines in the trunk group 1, 2 and 3 are busy, the system searches for an idle line in trunk group 4 and 5.

Input Data

Route Table Number	Aspire S: 1-8 Aspire: 001-100

Item No.	Priority Order Number	Input Data	Related Program
01	1-4	0 = not specify 1-8 or 001-100 : (Trunk Group Number) 101-150 : (100 + Network System Number) 1001-1100 : (1000 + Route Table Number)	14-01-07 14-05 15-01-02 21-02

Default

Route 1, Order Number 1 = 1 (Trunk Group 1), Order Numbers 2, 3, 4 = 0 (not specified)
All Other Routes (2-100) and Order Numbers (1-4) = 0 (not specified)

Conditions

None

Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 14-06 (Trunk Group Routing):

1. Enter the programming mode.
2. 14 06

3. Enter the number of the item you want to program.

4. Select the Trunk Group Routing Table number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 14-07 : Trunk Access Map Setup** to set up the Trunk Access Maps. This sets an extension's access options for trunks. For example, an extension can only place outgoing calls on trunks to which it has outgoing access. There are 200 Access Maps with all 200 trunk ports programmed in Map 1 with full access.

An extension can use one of the maps you set up in this program. Use Program 15-06 to assign Trunk Access Maps to extensions. Each trunk can have one of eight access options for each Access Map.

Input Data

Access Map Number	Aspire S: 1-8 Aspire: 001-200

Item No.	Trunk Port Number	Input Data
01	Aspire S: 1-8 Aspire: 001-200	0 = No access 1 = Outgoing access only 2 = Incoming access only 3 = Access only when trunk on Hold 4 = Outgoing access and access when trunk on Hold 5 = Incoming access and access when trunk on Hold 6 = Incoming and Outgoing access 7 = Incoming access, outgoing access and access when trunk on Hold

Default

- ***Aspire S:***
  Access Map 1 = Trunk Ports 1-8 assigned with option '7' access (incoming and outgoing access and access when trunk is on Hold).
  Aspire:
  Access Map 1 = Trunk Ports 1-200 assigned with option '7' access (incoming and outgoing access and access when trunk is on Hold).
- ***Aspire S:***
  Access Maps 2-8 - Trunk Ports 1-8 assigned with option '0' access (no access).
  Aspire:
  Access Maps 2-200 - Trunk Ports 1-200 assigned with option '0' access (no access).

Conditions

None

Feature Cross Reference

- Central Office Calls, Answering
- Central Office Calls, Placing

Telephone Programming Instructions

To enter data for Program 14-07 (Trunk Access Map Setup):

1. Enter the programming mode.
2. 14 07

   14-07-01 Access Map1
   TRK_ 001=7:OTG/INC/Hold
   back ↑ ↓ select

3. Enter the number of the item you want to program.

   14-07-nn Access Mapnnn
   nnnnn
   ← →

4. Select the Access Map number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 14-08 : Music on Hold Source for Trunks** to define a trunk's Music on Hold source as either the ACI or COI port.

Note: If ACI is selected as the source in Item 1, the port number for the source must be selected in Item 2.

Input Data

Trunk Port Number	001-200

Item No.	Item	Input Data	Default
01	**MOH Type** Select a trunk's Music on Hold source.	0 = Internal synthesized/external MOH 1 = A customer-provided source connected to BGM port 2 = A customer-provided source connected to ACI port	0
02	Source Port Number	If the MOH Type is "2", the source port number is 0 – 96.	0

Conditions

None

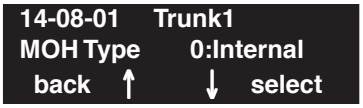
Feature Cross Reference

- Music on Hold

Telephone Programming Instructions

To enter data for Program 14-08 (Music on Hold Source for Trunks):

1. Enter the programming mode.
2. 14 08



3. Enter the number of the item you want to program.

4. Select the trunk number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 14-09 : ACI Conversation Recording Destination for Trunks** to set the ACI Conversation Recording destination for each trunk.

Note: If both Programs 14-09 and 15-12 define a destination, the destination in Program 15-12 will be followed.

Input Data

Trunk Port Number	001-200

Item No.	Item	Input Data	Default
01	**ACI Recording Destination Extension Number** Enter the ACI's extension number to which the trunk calls should be recorded.	Max. 8 digits	No setting
02	**ACI Automatic Recording for Incoming Calls** Determine if a trunk's incoming calls should be automatically recorded to the ACI.	0 = off 1 = on	0
03	**Recording Contents Storing Method (DSPDB)** **- Not Used in U.S. -**	0 = specifies by dialing 1 = own mailbox	0
04	**ACI Automatic Recording for Outgoing Call** Determine if a trunk's outgoing calls should be automatically recorded to the ACI.	0 = off 1 = on	0

Conditions

None

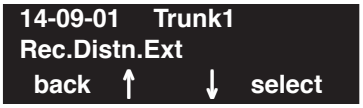
Feature Cross Reference

- Analog Communications Interface (ACI)

Telephone Programming Instructions

To enter data for Program 14-09 (ACI Conversation Recording Destination for Trunks):

1. Enter the programming mode.
2. 14 09



3. Enter the number of the item you want to program.

4. Select the trunk number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Not Available in USA.	• Not Available in USA.

Description

This program is not used in U.S. software.

Program 14 : Trunk, Basic Setup
14-11 : ID Setup for IP Trunk

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 2.63+.	• Available with software 2.63+.

Description

Use **Program 14-11 : ID Setup for IP Trunk** to set the IP trunk ID.

Contact Your NEC Sales Representative for information on the SIP feature availability.

Input Data

Trunk Port Number	001-200

Item No.	Item	Input Data	Default	Related Program
01	**IP Setup for IP Trunk** Set the ID for each IP trunk. This data is referred to for incoming and outgoing IP trunkss. Incoming calls arrive to the trunk port of the same ID as the ID notified from the partner system.	0 = not notified, 1-65535	0	

Conditions

None

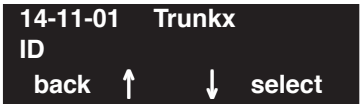
Feature Cross Reference

VoIP

Telephone Programming Instructions

To enter data for Program 14-11 (ID Setup for IP Trunk):

1. Enter the programming mode.
2. 14 11



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 14 : Trunk, Basic Setup
14-12 : SIP Register ID Setup for IP Trunk

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 2.65+.	• Available with software 2.65+.

Description

Use **Program 14-12 : SIP Register ID Setup for IP Trunk** to set the Register ID options for SIP trunks.

Contact Your NEC Sales Representative for information on the SIP feature availability.

Input Data

Item No.	Item	Input Data	Default	Related Program
01	**Register ID** This program sets the SIP Register ID for each trunk. If both 14-12 and 15-16 are assigned, then the system uses the data in Program 15-16. Register ID 0 is associated with Program 10-28 and 10-29 data. Other registered IDs (1-31) are associated with Program 10-36 data.	0-31	0	10-28 10-29 10-36 14-12 15-16
02	**Pilot Register ID** This program sets the SIP Pilot Register ID for each trunk. If both 14-12 and 15-16 are assigned, then the system uses the data in Program 15-16.	0-31	0	14-12 15-16

Conditions

None

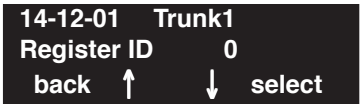
Feature Cross Reference

VoIP

Telephone Programming Instructions

To enter data for Program 14-12 (SIP Register ID Setup for IP Trunk):

1. Enter the programming mode.
2. 14 12



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

- For Your Notes -

Level:	Aspire S	Aspire M/L/XL
SA	• Available.	• Available.

Description

Use **Program 15-01 : Basic Extension Data Setup** to define the basic settings for each extension.

Note: The item numbers indicated below are different when using PCPro/WebPro. Refer to the program within the PCPro/WebPro application to determine the correct item number.

Input Data

Extension Number	Max. 8 digits

Item No.	Item	Input Data	Default	Related Program
01	**Extension Name** Set the extension/virtual extension name. When entering names for use the IntraMail's Directory Dialing, ***do not use non-alpha characters.*** To separate a first name from a last name, enter a space as a delimiter. By default, there are no extension names entered. You can enter names in any of the following formats: • First • Last • First (space) Last • Last (space) First	Up to 12 Characters (A-Z, upper and lower case letters available)	301 = STA 301 302 = STA 302 | 499 = STA 499 5000 = STA 5000 | 5312 = STA 5312	
02	**Outgoing Trunk Line Preference** Use this option to set the extension's outgoing Trunk Line Preference. If enabled, the extension user get trunk dial tone when they lift the handset. The user hears trunk dial tone only if allowed by Trunk Access Map programming (Programs 14-07 and 15-06). Refer to the Line Preference feature for more details.	0 = Off 1 = On	0	14-06 21-02
03	**SMDR Printout** Use this option to include or exclude the extension you are programming in the SMDR report.	0 = Do not print on SMDR report 1 = Include on SMDR report	1	

04	**ISDN Caller ID** If both Program 15-01-04 and 10-03-05 are enabled, the system includes Caller ID in the Setup message as "Presentation Allowed". If these options are disabled, it will be "Presentation Restricted".	0 = Disable 1 = Enable	1	10-03-05
05	**Restriction for Outgoing Disable on Incoming Line** Enable or disable supervised dial detection for an extension.	0 = Disable 1 = Enable	0	21-01-15

Conditions

None

Feature Cross Reference

Refer to chart above.

Telephone Programming Instructions

To enter data for Program 15-01 (Basic Extension Data Setup):

1. Enter the programming mode.
2. 15 01

   ```
   15-01-01    TEL
   Ext.Name  = EXT
    back   ↑     ↓   select
   ```

3. Enter the number of the item you want to program.

   ```
   15-01-nn    TELnnn
   nnnnn
     ←            →
   ```

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:
IN

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Item 24 available.	• Item 24 available with software 1.11+.
• Item 26 available.	• Item 26 available with software 1.11+.
• Item 27 available with software 2.63+.	• Item 27 available with software 2.63+.
• Item 28 available with software 2.63+.	• Item 28 available with software 2.63+.
• Item 29 available with software 2.63+.	• Item 29 available with software 2.63+.
• Item 1 enhanced with options 10-12 with software 4.93+.	• Item 1 enhanced with options 10-12 with software 4.93+.

Description

Use **Program 15-02 : Multi-Line Telephone Basic Data Setup** to set up various keyset options.

Input Data

Extension Number	Max. 8 digits

Item No.	Item	Input Data	Default	Related Program
01	Display Language Selection *(To select options 8-10, press CALL2, then press line keys 1-3. Key 1 is option 8, Key 2 is option 9, and Key 3 is option 10.)* After entering a 2-digit code (for example: 12), if you wish to reenter a single digit code (for example: 1), you must press the Left Arrow Soft Key in order to move the cursor back one position. To program entries 8-12 using the line keys, press CALL2 then press line keys 1-5 (Key 1 is option 8, Key 2 is option 9, etc.).	0 = Japanese 1 = English 2 = German 3 = French 4 = Italian 5 = Spanish 6 = Dutch 7 = Portuguese 8 = Norwegian 9 = Danish 10 = Swedish 11 = Turkish 12 = Latin American Spanish	1	11-11-13

Item No.	Item	Input Data	Default	Related Program
02	**Trunk Ring Tone** Use this option to set the tone (pitch) of the incoming trunk ring for the extension port you are programming.	1 = High 2 = Mid range 3 = Low 4 = Ring Tone 1 5 = Ring Tone 2 6 = Ring Tone 3 7 = Ring Tone 4 8 = Ring Tone 5	2	22-03 82.01
03	**Extension Ring Tone (Pitch)** Use this option to set the tone (pitch) of the incoming extension call ring for the extension port you are programming. Also see program 15-08.	1 = High 2 = Mid range 3 = Low 4 = Ring Tone 1 5 = Ring Tone 2 6 = Ring Tone 3 7 = Ring Tone 4 8 = Ring Tone 5	8	15-08 15-10 82-01
04	**Abbreviated Dialing DIAL Key Control** Use this option to control the function of the extension's DIAL key when used with Abbreviated Dialing. The DIAL key can access either the Common or Group Abbreviated Dialing numbers.	0 = Common and individual Abbreviated Dialing 1 = Group Abbreviated Dialing	0	
05	**Transfer Key Operation Mode** Use this option to set the operating mode of the extension's CONF key. The keys can be for Call Transfer, Serial Calling or Flash. When selecting the Flash option (selection 2), refer also to Program 81-01-14.	0 = Transfer 1 = Series call 2 = Flash	0	
06	**Hold Key Operating Mode** Use this option to set the function of the keyset Hold key. The Hold key can activate normal Hold, Exclusive Hold or Park.	0 = Normal Hold 1 = Exclusive Hold 2 = Park	0	
07	**Automatic Hold for CO Lines** Determine whether an extension will use Automatic Hold for CO calls or if the call should disconnect.	0 = Enable (Hold) 1 = Disable (Disconnect)	1	
08	**Automatic Handsfree** Use this option to set whether pressing a key access a One-Touch Key or if it pre-selects the key.	0 = Pre-select 1 = One-touch (Automatic Handsfree)	1	20-09-02

Item No.	Item	Input Data	Default	Related Program
09	**Ringing Line Preference for Intercom Calls** Use this option to select between Idle and Ringing Line Preference for Intercom calls.	0 = Idle (off) 1 = Ringing (on)	1	
10	**Ringing Line Preference for Trunk Calls** Use this option to select between Idle and Ringing Line Preference for trunk calls.	0 = Idle (off) 1 = Ringing (on)	1	
11	**Callback Automatic Answer** Use this option to enable or disable automatic answer for Callbacks. If enabled, extension automatically answers Callback ring when user lifts the handset. If disabled, use must press line appearance key to answer Callback.	0 = off 1 = on	1	
12	**Off Hook Ringing** Use this option to set the keyset's off hook signaling. Off hook signaling occurs when a keyset user receives a second call while busy on a handset call. DID, DNIS and DIL trunks can use any of the 4 options - normal/ring group trunks can only use options "0" or "1". To enable/disable Off Hook Signaling for an extension's Class of Service, use Program 20-13-06.	0 = Muted Off Hook Ringing 1 = No Off Hook Ringing 2 = Not Used 3 = Beep in Speaker 4 = Beep in Handset	0	
13	**Redial List Mode** Select whether the Redial List feature should store internal and external numbers (0), or only external numbers (1).	0 = Extension/Trunk Mode 1 = Trunk Mode	1	
14	- Not Used -		-	
15	Storage of Caller-ID for answered call	0 = Disable 1 = Enable	1	
16	**Handsfree Operation** Enable or disable an extensions ability to use the speakerphone on **outside** calls. Users can hear the conversation, but cannot respond handsfree.	0 = Disable 1 = Enable	1	
17	- Not Used -		-	
18	Power-saving mode	0 = Normal mode 1 = Power-saving mode	1	

Item No.	Item	Input Data	Default	Related Program
19	**CTA/CTU Data Communication Mode** Select '0' if the dip switch settings on the CTA/CTU Adapter are set to PC connection (1=on, 2-8=off) or select '1' if the dip switches are set to printer connection (1-2=on, 3-8=off).	0 = CTI mode 1 = non-procedural/SMDR mode	0	15-02-20
20	**Baud rate for CTA Port** Select the baud rate to be used by the CTA Adapter.	0 = 4800 1 = 9600 2 = 19200	2	15-02-19
21	**Virtual Extension Access Mode (when idle Virtual Extension key pressed)** Determine whether an extension's Virtual Extension/Call Coverage Key should be as a DSS key to the extension and for receiving calls (0), for placing and receiving calls (1),or just receiving incoming calls (2).	0 = DSS (Inbound/Outbound) 1 = Outgoing 2 = Ignore Key (Inbound)	2	
22	**Multiple Incoming From Intercom and Trunk** If enabled, this affects how a Hotline key lamps, based on the setting in Program 22-01-01. If set to 1 for trunk priority, the Hotline key will lamp solid when a trunk call rings in. If set to 0 for intercom priority, the Hotline key will not lamp for incoming trunk calls, but will lamp solid for intercom calls. If this option is disabled, Hotline keys will lamp solid for any incoming calls regardless of the setting in Program 22-01-01.	0 = Disable 1 = Enable	1	22-01-01

Item No.	Item	Input Data	Default	Related Program
24	**Conference Key Mode** This option allows an extension's CONF key to be programmed for Conference or for Transfer. When set for Transfer (1), the user places a call on hold, dials the extension to which it should be transferred, the presses the CONF key. The call is then transferred. When set for Conference (0), with an active call, the user presses the CONF key, places a second call, then presses the CONF key twice. All the calls are then connected. In order for Cordless II and Cordless Lite II users to use a Flash key, this option must be set to "1" for those extensions.	0 = Conference 1 = Transfer	0	15-02-05
26	**MSG Key Operation Mode** Determine whether an extension's MSG key should function as a Message key or Voice Mail key. If set as a Message key, the user will be able to press the key to call the voice mail only when they have new messages.	0 = Message Key 1 = Voice Mail Key	0	
27	**Volume of Handset** This option determines whether a keyset's handset volume will change back to the system default (0) or whether it will be retained at the user's setting (1) after hanging up the handset.	0 = Revert to Default Volume 1 = Retain User's Setting	1	
28	**Message Waiting LED Color** This option allows you to select whether the Message Wait LED located at the top of the keyset will flash green (0) or red (1) when a Message Wait indication is flashing. By default, this option is set to "1" (red). Note that if this LED is also used for voice mail indications (no Programmable Function Key programmed for voice mail), if there are both voice mail messages and Message Wait indications, the color set for Message Wait will override the color used for voice mail indications (red).	0 = Flashes Green 1 = Flashes Red	1	
29	**ISDN Back Tone** This program option can be used to adjust the PB Back Tone level when calling an ISDN line.	1-63 (-15.5 to +15.5 db in 0.5 dB steps)	32	

Incoming Signal Frequency Pattern	Type	Frequency 1	Frequency 2	Modulation
External Incoming Signal Frequency (Pattern 1)	High Middle Low	1100 660 520	1400 760 660	16Hz Modulation 16Hz Modulation 16Hz Modulation
External Incoming Signal Frequency (Pattern 2)	High Middle Low	1100 660 520	1400 760 660	8Hz Modulation 8Hz Modulation 8Hz Modulation
External Incoming Signal Frequency (Pattern 3)	High Middle Low	2000 1400 1100	760 660 540	16Hz Modulation 16Hz Modulation 16Hz Modulation
External Incoming Signal Frequency (Pattern 4)	High Middle Low	2000 1400 1100	760 660 540	8Hz Modulation 8Hz Modulation 8Hz Modulation
Internal Incoming Signal Frequency	High Middle Low	1100 660 520	1400 760 660	8Hz Modulation 8Hz Modulation 8Hz Modulation

Conditions

None

Feature Cross Reference

Refer to above chart.

Telephone Programming Instructions

To enter data for Program 15-02 (Multi-Line Telephone Basic Data Setup):

1. Enter the programming mode.
2. 15 02

3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level: IN

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Item 10 available.	• Item 10 available with software 1.11+.
• Item 11 available with software 2.63+.	• Item 11 available with software 2.63+.
• Item 13 available with software 2.63+.	• Item 13 available with software 2.63+.
• Item 14 and 15 added with software 4.0E+, however, they are not used in the U.S.	• Item 14 and 15 added with software 4.0E+, however, they are not used in the U.S.

Description

Use **Program 15-03 : Single Line Telephone Basic Data Setup** to set up various single line telephone options.

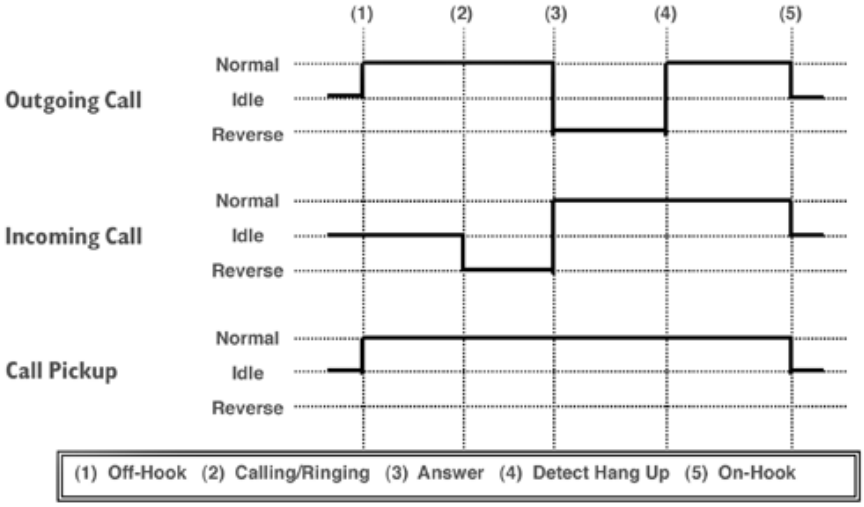
Input Data

Extension Number	Max. 8 digits

Item No.	Item	Input Data	Default	Related Program
01	**SLT Signaling Type** Use this option to tell the system the type of dialing the connected telephone uses. For each Aspire Mail extension, this option must be set to “0”. In order for the Aspire Wireless phones to function correctly, this must be set to ’0’ (dial pulse). If this option is set for DTMF, after an outside call is placed, the system will not dial any additional digits. This program change is automatically performed when the Aspire Wireless phone is registered when using system software 1.13+. When upgrading software from prior versions, the previous default of ’1’ will be saved from the prior database so this option must be changed manually.	0 = DP 1 = DTMF	1	
02	**Loop current** **- Not Used in U.S. -**	0 = 20mA 1 = 35mA	0	

03	**Terminal Type** Enter 1 for this option to allow a single line port to receive DTMF tones after the initial call setup. Enter 0 to have the port ignore DTMF tones after the initial call setup. For Voice Mail, always enter 1 (e.g., receive DTMF tones).	0 = Normal 1 = Special	0	
04	**Flashing** Enables/disables Flash for single line (500/2500 type) telephones.	0 = Disable 1 = Enable	1	
05	**External Reverse** ***Not Used in U.S. - Do Not Change Default Entry*** as DTMF issues may arise with voice mail.	0 = Disable 1 = Enable	0	
06	**Extension Reverse** ***Not Used in U.S. - Do Not Change Default Entry*** as DTMF issues may arise with voice mail.	0 = Disable 1 = Enable	0	
07	Enabled on hook when holding (SLT)	0 = Disable 1 = Enable	1	
08	Answer on hook when holding (SLT)	0 = Disable 1 = Enable	1	11-12-46
09	**Caller ID Function - For External Module** Enable (1) or disable (0) the Caller ID FSK signal for an external Caller ID module or a 3rd party vendor phone with Caller ID display. With the Caller ID Sender Queueing feature, set this option to "1" for the extension. *Important:* If voice mail is used, this setting must be disabled or the system integration codes for disconnect will be incorrect. Note: With some earlier software, if a 2500 set (no Caller ID) is installed, this must be set to "0" or else incoming callers will not have a talkpath.	0 = Disable 1 = Enable	0	
10	**Caller ID Name** Determine if an extension user's phone should display the Caller ID name.	0 = Disable 1 = Enable	1	14-02-10 20-09-02
11	**Caller ID Type** This option allows you to select either FSK or DTMF as the Caller ID type to be received by a single line telephone.	0 = FSK 1 = DTMF	0	14-02-16
12	**- Not Available -**			
13	**MW Signal Type** For analog single line telephones which provide a display, when a user leaves a Message Waiting for a SLT which has a display, this option is used to determine whether the SLT user will see a MW LED indication or if the Caller ID will be used to display the call.	0 = Lamp Indication 1 = Caller ID Indication	0	

14	**Forwarded Caller ID Display Mode** ***Not Used in U.S. - Do Not Change Default Entry***	-	0	
15	**Disconnect Without Dial After Hooking Hold** ***Not Used in U.S. - Do Not Change Default Entry***	-	0	



Conditions

None

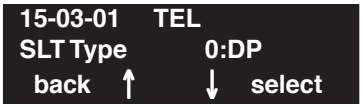
Feature Cross Reference

- Single Line Telephone, Analog
- Single Line Telephone, Digital

Telephone Programming Instructions

To enter data for Program 15-03 (Single Line Telephone Basic Data Setup):

1. Enter the programming mode.
2. 15 03



3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:
IN

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Item 15: Entries are 1-5.	• Item 15: Entries changed from 0-4 to 1-5 with software 1.04+.
• Item 4 renamed from "H.323 Fixed Port Assignment" to "Nickname" and Item 5 renamed from "H.323 Call Procedure Port" to "Call Control Port" with 2.63+ software.	• Item 4 renamed from "H.323 Fixed Port Assignment" to "Nickname" and Item 5 renamed from "H.323 Call Procedure Port" to "Call Control Port" with 2.63+ software.
• Items 16, 17, and 18 available with software 2.63+.	• Items 16, 17, and 18 available with software 2.63+.

Description

Use **Program 15-05 : IP Phone Terminal Basic Data Setup** to set up the basic settings for an IP Phone.

Input Data

Extension Number	Max. 8 digits

Item No.	Item	Input Data	Default	Description	Related Program
01	Terminal Type	0 = NGT 1 = H.323 2 = SIP 3 = MEGACO	0	Viewing Only - No changes permitted	
02	NGT fixed port assignment	MAC address 00-00-00-00-00-00 to FF-FF-FF-FF-FF-FF	00-00-00-00-00-00	For any IP telephone, the MAC Address as indicated on the phone/adapter's label to assign a specific extension number. *Use caution when entering in the MAC Address as the system will allow duplicate entries to be made. If there are two duplicate entries, the lowest matching extension will be assigned to the MAC Address.*	15-05-01
03	Default URL address	URL address	No setting	The default URL address for Smart Phone	15-05-01
04	**Nickname** Define the nickname for the IP extension.	Up to 48 Character Length	No setting	The alias address of the H.323/SIP terminal is set up. Each alias address must be unique in the system.	15-05-01

Program 15 : Extension, Basic Setup

15-05 : IP Phone Terminal Basic Data Setup

Item No.	Item	Input Data	Default	Description	Related Program
05-11	For viewing only - These items should not be changed.				
05	**H.323 Terminal Type**	**1=Standard H.323 Terminal 2=Net Meeting**	**0**		
06	**NGT Terminal Type**	**1=IP70 2=IP80 3=Smart Phone**	**0**		
07	**Using IP Address**	**0.0.0.0 ~ 255.255.255.255**	**0.0.0.0**		
08	**H.323 RAS Port**	**0-65535**	**0**		
09	**Call Control Port**	**0-65535**	**0**		
10	**NGT Voice Path Port**	**0-65535**	**0**		
11	**NGT Call Procedure Port**		**0**		
12	System Type	0=No other system 1=Aspire	0	For system interconnection	
13	Destination System's IP Address	1.0.0.1 ~ 126.255.255.254 128.1.0.1 ~ 191.255.255.254 192.0.1.1 ~ 223.255.255.254	0.0.0.0	Set the IP address of the networked system.	
14	Destination System's Call Control Port	1-65535	1720	Set the call control port of the networked system.	
15	CODEC Type	***Software Prior to 1.4:*** 0-Type 1 1-Type 2 2-Type 3 3-Type 4 4-Type 5 ***Software 1.04+:*** 1-Type 1 2-Type 2 3-Type 3 4-Type 4 5-Type 5	0		
16	Authentication Password	Maximum 24 characters	None	Define the Authentication Password.	

Item No.	Item	Input Data	Default	Description	Related Program
17	Calling Party Display Information	0=nickname, 1=display, 2=user part, 3=extension	Nickname	Set the Calling Party Display Information.	
18	IP Duplication Allowed in Group	0=not used, 1-10=Groups 1-10	0	Some SIP equipment allows multiple Register messages to be sent from the same IP address to different extension numbers. This program allows the system to avoid an IP address conflict. The SIP TA can connect two SLTs to allow those phones to work as SIP extensions. These extension numbers need to be programmed in the same group in 15-05-18 to use the same IP address. No other extension numbers should be in this same group. Without this program entry, the second Register message from an "already registered" IP address will be ignored.	

Conditions

None

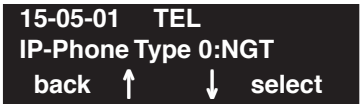
Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 15-05 (IP Phone Terminal Basic Data Setup):

1. Enter the programming mode.
2. 15 05



3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 15-06 : Trunk Access Map for Extensions** to define the trunk access map for each extension. An extension can only place outgoing calls on trunks to which it has outgoing access. Use Program 14-07 to define the available access maps.

Input Data

Extension Number	Max. 8 digits

Day/Night Mode	Aspire S: 1-4 Aspire: 1-8

Item No.	Trunk Access Map No.	Default	Related Program
01	Aspire S: 1-8 Aspire: 1-200	1	14-07

Conditions

None

Feature Cross Reference

- Central Office Calls, Answering
- Central Office Calls, Placing

Telephone Programming Instructions

To enter data for Program 15-06 (Trunk Access Map for Extensions):

1. Enter the programming mode.
2. 15 06

3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:

SA

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Code *07 for Personal Park requires software 2.64+.	• Code *07 for Personal Park requires software 2.64+.
• Codes 86-88 requires software 4.93+.	• Codes 86-88 requires software 4.93+.

Description

Use **Program 15-07 : Programmable Function Keys** to set the functions of an extension's Programmable Function Key.

For certain functions, you can append data to the key's basic function. For example, the function 26 appended by data 1 makes a Group Call Pickup key for Pickup Group 1. You can also program Function Keys using Service Codes.

In order to clear any previously programmed key, press the CLEAR key to erase any displayed code.

Input Data

Extension Number	Max. 8 digits

Item No.	Line Key Number	Function Number	Additional Data
01	1-48	0-99 (General Function Level) (Service Code 851 by default) * 00-* 99 (Appearance Function Level) (Service Code 852 by default)	Refer to the function number list.

Default

Programmable keys 1-12 are line keys (key 1 = line 1, key 2 = line 2, etc.). All other programmable keys are undefined.

Program 15 : Extension, Basic Setup

15-07 : Programmable Function Keys

Function Number List

[1] General Function Level (00 – 99) (Service Code 851)

Function Number	Function	Additional Data	LED Indication
00	Not Defined		
01	DSS / One-Touch	Extension number or any numbers (Up to 24 digits)	**Red On:** extension busy **Off:** extension idle **Rapid Blink (Red):** DND or Call Forward
02	Microphone Key (ON/OFF)		**Red On:** Mic Off **Off:** Mic On
03	DND Key		**Red On:** DND
04	BGM (ON/OFF)		**Red On:** BGM On **Off:** BGM Off
05	Headset		**Red On:** Headset in use
06	Transfer Key		None
07	Conference Key		**Red On:** Conference call setup occurring
08	Call History / Incoming Call Log		**Rapid Blink (Red):** New call log **Red On:** Call log **Off:** No call log
09	Day/Night Mode Switch	Mode number: • 0=toggles night mode [Program 12-08-01], • 1–8=modes night 1-8	**Red On:** Mode active
10	Call Forward - Immediate		**Slow Blink (Red):** Forwarded
11	Call Forward - Busy		**Slow Blink (Red):** Forwarded
12	Call Forward - No Answer		**Slow Blink (Red):** Forwarded
13	Call Forward - Busy/No Answer		**Slow Blink (Red):** Forwarded
14	Call Forward – Both Ring		**Slow Blink (Red):** Forwarded
15	Follow Me		**Rapid Blink (Red):** Forwarded
16	Call Forward to Station		**Slow Blink (Red):** Forwarded **Rapid Blink (Red):** Forwarded with Follow Me
17	Call Forward to Device		**Slow Blink (Red):** Forwarded
18	Text Message Setup	Message Numbers (01-20)	**Red On:** Feature activated by Function Key

Function Number	Function	Additional Data	LED Indication
19	External Group Paging	External Paging Number (1-8)	**Red On:** Page Active
20	External All Call Paging		**Red On:** Page Active
21	Internal Group Paging	Internal Paging Number (01-64)	**Red On:** Page Active
22	Internal All Call Paging		None
23	Meet-Me Answer to Internal Paging		None
24	Call Pickup		None
25	Call Pickup for Another Group		None
26	Call Pickup for Specified Group	Call Pickup Group Number	None
27	Abbreviated Dial – Common/Private	Abbreviated dial number (Common / Private)	None
28	Abbreviated Dial - Group	Abbreviated dial number (Group)	None
29	Repeat Redial		**Red On:** Waiting to redial
30	Saved Number Redial		None
31	Memo Dial		None
32	Meet – Me Conference		None
33	Override (Off-Hook Signaling)		None
34	Break - In		None
35	Camp On		**Red On:** While camp-on activated
36	Step Call		None
37	DND / FWD Override Call		None
38	Message Waiting		None
39	Room Monitoring		**Rapid Blink (Red):** While being monitored **Slow Blink (Red):** While monitoring
40	Handset Transmission Cutoff		**Red On:** Transmission cut-off
41	Buzzer	Extension Number	**Red On:** Transmission side **Rapid Blink (Red):** Receiver side
42	Boss – Secretary Call	Extension Number	**Red On:** Boss – Secretary mode
43	Series Call		None

Function Number	Function	Additional Data	LED Indication
44	Common Hold		None
45	Exclusive		None
46	Department Group Log Out		**Red On:** Logged Out
47	Reverse Voice Over	Extension Number	**Red On:** extension busy **Off:** extension idle **Rapid Blink (Red):** DND or Call Forward **Green:** Reverse Voice Over to extension in progress
48	Voice Over		**Slow Blink (Red):** Voice Over active
49	Call Redirect	Extension Number or Voice Mail Number	None
50	Account Code		**Red On:** While account code being entered
51	General Purpose Relay	Relay No (0, 1-8)	**Red On:** Relay On
52	Incoming Call Queuing Setup	Incoming Group Number	**Red On:** Under setting
53	Queuing Message Starting		**Red On:** Active
54	External Call Forward by Door Box		**Red On:** Active
55	Extension Name Edit		None
56	Department Incoming Call - Automatic Transfer		**Blink (Red):** Active
57	Department Incoming Call - Delayed		**Blink (Red):** Active
58	Department Incoming Call - Immediate	Department Group Number (1-8 or 01-64)	**Blink (Red):** Active
59	Department Incoming Call - Delay	Department Group Number (1-8 or 01-64)	**Blink (Red):** Active
60	Department Incoming Call - DND	Department Group Number (1-8 or 01-64)	**Blink (Red):** Active
61	ID Entry - Not Used -		
63	Outgoing Call Without Caller ID (ISDN)		**Red On:** Active
64	Key Pad Facility		**Red On:** Active
65	Not Used		

Function Number	Function	Additional Data	LED Indication
66	CTI		**Red On:** CTI active
67	Mail Box	Extension Number or Department Group Number	**Rapid Blink (Green):** New message received **Red On:** Listening to messages.
68	Voice Mail Service	0 = Skip 1 = Back Skip 2 = Monitor	2-In case of monitor mode **Slow Blink (Red):** Monitor setting - Automatic **Red On:** Monitor setting - Manual
69	Conversation Record - ACI	0 = ACI as Record Destination 1 = Not Used in U.S. 2 = Not Used in U.S. 3 = Not Used in U.S.	**Red On:** Recording call.
70	Automated Attendant for Extension	Extension Number or Department Group Number	None
71	Message Change for Voice Attendant	Extension Number or Department Group Number	None
72	- Not Used -		
73	- Not Used -		
74	- Not Used -		
75	- Not Used -		
76	- Not Used -		
77	Voice Mail (In-Skin)	Extension Number or Pilot Number	**Red On:** Access to Voice Mail **Rapid Blink (Green):** New Message
78	Conversation Recording - Voice Mail		**Rapid Blink (Red):** Recording
79	Automated Attendant (In-Skin)	Extension Number or Pilot Number	**Red On:** Set Up for All Calls **Fast Blink (Red):** Set Up for No Answer Calls **Stutter Blink (Red):** Set Up for Busy Calls **Slow Blink (Red):** Set Up for Busy/No Answer Calls
80	Tandem Ringing	1=Set or 0=Cancel Extension Number to Tandem Ring	**Red On:** Active
86	**Set Private Call Refuse** This key enables/disables the "Private" call refusal for the trunks set to "1" in Program 14-01-27.		**Slow Blink (Red):** Active

Function Number	Function	Additional Data	LED Indication
87	**Set Caller ID Refuse** This key enables/disables the Caller ID number refusal for the trunks set to "1" in Program 14-01-27.		**Slow Blink (Red):** Active
88	**DID Mode Switching** Assign a key for DID Mode Switching. This key can be used to manually change the time pattern for a DID number.	Program 22-17 Table Number	Pattern 1 = LED off Pattern 2 = LED on Pattern 3 = slow flash Pattern 4 = fast flash Patterns 5-8 = off

[2] Appearance Function Level (*00 - *99) (Service Code 852)

Function Number	Function	Additional Data	LED Indication
*00	Not Used		
*01	Trunk Key	Trunk Number (1-8 or 001-200)	**Red On:** Trunk busy by another user **Green On:** Trunk busy by extension
*02	Trunk Group/Loop Key	Trunk Group Number (1-8 or 001-100)	**Red On:** Trunk busy by another user **Green On:** Trunk busy by extension
*03	Virtual Extension Key	Extension Number or Department Group Number	**Red On:** Trunk busy by another user **Slow Blink (Red):** Incoming call
*04	Park Key	Park Number (01 – 64)	**Slow Blink (Red):** Call placed in Park by another user **Fast Blink (Green):** Extension placed call in Park
*05	Loop Keys *Use Programs 15-13-01 or 15-13-02 to assign the loop key to a trunk group.*	• 0=Incoming + Trunk Group Number (1-8 or 001-100) • 1=Outgoing + Trunk Group Number (1 -8 or 001-100) • 2=Both + Trunk Group Number (1-8 or 001-100)	**Green On:** Extension on an active call
*06	Trunk Access Via Networking	Network System Number (01-50)	
*07	Personal Park		**Slow Blink (Green):** Parked call recalling extension user **Fast Blink (Green):** Extension placed call in Personal Park
*10	ACD Log – In / Log – Out		**Red On:** Under log-on **Off:** Under log-off
*11	-Not Used -		
*12	ACD Emergency Call		**Red On:** Under monitor, Override, Standby **Fast Blink (Red):** Supervisor phone receiving Emergency Call
*13	ACD Off Duty Mode		**Red On:** Under off duty **Slow Blink (Red):** Under reservation
*14	ACD Start / End		**Red On:** ACD operation end
*15	ACD Monitor Mode - Terminal		**Red On:** Under monitor
*16	ACD Standby Mode		**Red On:** Standby
*17	ACD Wrap-Up Mode		**Red On:** Under work time **Slow Blink (Red):** Under reservation

*18	ACD Overflow Control	ACD Group Number	**Red On:** Enable **Slow Blink (Red):** Disable
*19	ACD Queue Status Display Check		

Conditions

When a key is programmed using service code 852, that key cannot be programmed with a function using the 851 code until the key is undefined (000). For example with a Park Key programmed by dialing 852 + *04 must be undefined by dialing 852 + 000 before it can be programmed as a Voice Over key by dialing 851 + 48.

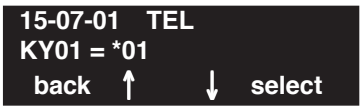
Feature Cross Reference

Refer to chart above.

Telephone Programming Instructions

To enter data for Program 15-07 (Programmable Function Keys):

1. Enter the programming mode.
2. 15 07



3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available - 24 virtual extension ports.	• Available - 256 virtual extension ports.

Description

Use **Program 15-08 : Incoming Virtual Extension Ring Tone Setup** to assign a ring tone range (0-4) to incoming virtual extensions assigned to a Virtual Extension key (Program 15-07). If you enable ringing for the key in Program 15-09, the key rings with the tone you set in this program. Also see Program 22-03. The chart below shows the available tones.

Input Data

Extension Number	Max. 8 digits

Item No.	Incoming Ring Pattern	Default	Description
01	0 = Tone pattern 1 1 = Tone pattern 2 2 = Tone pattern 3 3 = Tone pattern 4 4 = Incoming extension ring tone	0: Tone pattern 1	When an extension or a virtual extension is assigned to the function key on the key telephone, select the ring tone when receiving a call on that key. For ACD Call Coverage Keys, only tone pattern 1 (entry 0) can be used. The remaining patterns are not checked with this feature.

Incoming Signal Frequency Pattern	Type	Frequency 1	Frequency 2	Modulation
Pattern 1	High Middle Low	1100 660 520	1400 760 660	16Hz 16Hz 16Hz
Pattern 2	High Middle Low	1100 660 520	1400 760 660	8Hz 8Hz 8Hz
Pattern 3	High Middle Low	1100 660 520	1100 660 520	Envelope Envelope Envelope
Pattern 4	High Middle Low	1100 660 520	1100 660 520	No modulation No modulation No modulation
Internal Incoming Signal Frequency	High Middle Low	1100 660 520	1400 760 660	8Hz 8Hz 8Hz

Conditions

None

Feature Cross Reference

- Multiple Directory Number / Call Coverage

Telephone Programming Instructions

To enter data for Program 15-08 (Incoming Virtual Extension Ring Tone Setup):

1. Enter the programming mode.
2. 15 08

3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
SA	• Available - 24 virtual extension ports.	• Available - 256 virtual extension ports.

Description

Use **Program 15-09 : Virtual Extension Ring Assignment** to assign the ringing options for an extension's Virtual Extension Key or Virtual Department Group Answer Key which is defined in Program 15-07. You make an assignment for each Night Service Mode.

Assign extension numbers and names to virtual extension ports in Program 15-01. Program Virtual Extension keys in Program 15-07 (code *03).

Input Data

Extension Number	Up to 8 digits

Key Number	01-48

Item No.	Day/Night Mode	Ringing	Default
01	Aspire S: 1-4 Aspire: 1-8	0 = No ringing 1 = Ring	0

Conditions

Program the Multiple Directory Number function keys NOT to ring before removing the key from a keyset's programming.

Feature Cross Reference

- Multiple Directory Number / Call Coverage

Telephone Programming Instructions

To enter data for Program 15-09 (Virtual Extension Ring Assignment):

1. Enter the programming mode.
2. 15 09

3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
SA	• Available - 24 virtual extension ports.	• Available - 256 virtual extension ports.

Description

Use **Program 15-10 : Incoming Virtual Extension Ring Tone Order Setup** to set the priority (1-4) for the Virtual Extension Ring Tones set in Program 15-08. When Virtual Extension calls ring an extension simultaneously, the tone with the highest order number (e.g., 1) rings. The other keys just flash.

Input Data

Extension Number	Up to 8 digits

Item No.	Order	Data	Description	Related Program
01	1-4	0 = Tone pattern 1 1 = Tone pattern 2 2 = Tone pattern 3 3 = Tone pattern 4 4 = Incoming extension ring tone	In the case of that two or more virtual extensions are set on a function key on the keyset, and the tone pattern by which the sound of each extension differs, the priority of ring sound is set up.	15-08

Default

By default, Virtual Extension ring tones have the following order.

Order	Ring Tone (Set in Program 15-08)
1	0
2	1
3	2
4	3

Conditions

None

Feature Cross Reference

- Multiple Directory Number / Call Coverage

Telephone Programming Instructions

To enter data for Program 15-10 (Incoming Virtual Extension Ring Tone Order Setup):

1. Enter the programming mode.
2. 15 10

3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
SA	• Available - 24 virtual extension ports.	• Available - 256 virtual extension ports.

Description

Use **Program 15-11 : Virtual Extension Delayed Ring Assignment** to assign the delayed ringing options for an extension's Virtual Extension or Virtual Department Group Answer keys (defined in Program 15-09). You make an assignment for each Night Service Mode.

Assign extension numbers (Program 11-04) and names (Program 15-01) to virtual extension ports. Program Multiple Directory Number (virtual extension) keys in Program 15-07 (code *03).

Input Data

Extension Number	Max. 8 digits

Key Number	01-48

Item No.	Day/Night Mode	Ringing	Default	Related Program
01	Aspire S: 1-4 Aspire: 1-8	0 = Immediate Ring 1 = Delayed Ring	0	20-04-03

Conditions

Program the Multiple Directory Number keys NOT to ring before removing the key from a keyset's programming.

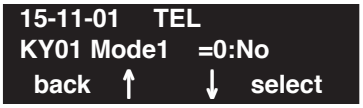
Feature Cross Reference

- Multiple Directory Number / Call Coverage

Telephone Programming Instructions

To enter data for Program 15-11 (Virtual Extension Delayed Ring Assignment):

1. Enter the programming mode.
2. 15 11



3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 15-12 : Conversation Recording Destination for Extensions** to set the ACI Conversation Recording destination for each extension.

Note: If both Programs 14-09 and 15-12 define a destination, the destination in Program 15-12 will be followed.

Input Data

Extension Number	Max. 8 digits

Item Number	Item	Input Data	Default
01	**ACI Recording Destination Extension Number** Enter the ACI's extension number to which the trunk calls should be recorded.	Max. 8 digits	No setting
02	**ACI Automatic Recording for Incoming Calls** Determine if an extension's incoming calls should be automatically recorded to the ACI.	0 = Disable 1 = Enable	0
03	**Recording Contents Storing Method (DSPDB)** **- Not Used in U.S. -**	0 = Specified 1 = Own box	0
04	**ACI Automatic Recording for Outgoing Call** Determine if an extension's outgoing calls should be automatically recorded to the ACI.	0 = Disable 1 = Enable	0

Conditions

None

Feature Cross Reference

- Analog Communications Interface (ACI)

Telephone Programming Instructions

To enter data for Program 15-12 (Conversation Recording Destination for Extensions):

1. Enter the programming mode.
2. 15 12

3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 15-13 : Loop Keys** to assign the Loop Key data for each keyset telephone. Loop Keys can be incoming, outgoing or both ways. Outgoing Loop Keys use the entry in item 1. Incoming Loop Keys use the entry in item 2. Both Way Loop Keys follow the entries in both item 1 and 2.

Input Data

Extension Number	Max. 8 digits

Key Number	01-48

Item Number	Item	Input Data
01	Outgoing Option	0-8 or 0-100 (0 = Assigns the Loop Key for ARS, 1-8 or 1-100 = Assigns the Loop Key to the trunk group specified)
02	Incoming Option	0-8 or 0-100 (0 = Assigns the Loop Key to all trunk groups, 1-8 or 1-100 = Assigns the Loop key to the trunk group specified)

Default

Programmable Function Key No. - 01-32
Outgoing Option - 0 (Assigns the Loop Key for ARS)
Incoming Options - 0 (Assigns the Loop Key to all trunk groups)

Conditions

None

Feature Cross Reference

- Loop Key

Telephone Programming Instructions

To enter data for Program 15-13 (Loop Keys):

1. Enter the programming mode.
2. 15 13

3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 15-14 : Programmable One-Touch Keys** to define the One-Touch key data for each keyset telephone.

For each Aspire Wireless phone to use the Transfer When Out of Range feature, enter the destination number (up to 24 digits) and name (up to 12 characters) into One-Touch bin 10. Make sure to add any required trunk access codes for outside numbers. If this bin information is changed either through 15-14-01 or through user programming, the destination for the transferred calls is also changed.

Input Data

Extension Number	Max. 8 digits

Key Number	01-10

Item No.	Dial Data	Name
01	1-0, *, #, Pause [press Line Key 1], Hookflash [press Line Key 2], @ (Code for Answer-Wait) [press Line Key 3] Up to 24 digits	Up to 12 Digits

Default

No entries for any extension.

Conditions

None

Feature Cross Reference

- One-Touch Keys

Telephone Programming Instructions

To enter data for Program 15-14 (Programmable One-Touch Keys):

1. Enter the programming mode.
2. 15 14

3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Not Available.	• Available. • Gain adjustment programs available with 2.63+ software.

Description

Use **Program 15-15 : Aspire Wireless Terminal Basic Data Setup** to define the options for the Aspire Wireless phones.

Input Data

Extension Number	Max. 8 digits

Item No.	Item	Input Data	Default	Related Program
01	**DECT Terminal Basic Data Setup - IPEI** **The IPEI (International Portable Equipment Identity) is a unique number embedded into each Aspire Wireless (DECT) phone. The IPEI number is the 13-digit serial number which is located on the label in the phone's battery compartment. Use this program to display the IPEI number assigned to a Aspire Wireless phone during the phone subscription. This program is read only.**	**This program is read only.**	-	
02	**DECT Terminal Basic Data Setup - Authentication Code** **This program displays the 4-digit AC (Authentication Code) assigned to the Aspire Wireless (DECT) phone during the phone subscription. This program is read only.**	**This program is read only.**	-	

Program 15 : Extension, Basic Setup

15-15 :Aspire Wireless Terminal Basic Data Setup

Item No.	Item	Input Data	Default	Related Program
03	**DECT Terminal Basic Data Setup - Terminal Capability** **This program displays the capability of the Aspire Wireless (DECT) phone displaying the options below. This program is read only.** • **Display Capabilities** • **ISDN Support** • **Tone Capabilities** • **Data Services Profile E Class 2** • **Echo Parameters** • **Data Services Profile A/B Class 2** • **Portable Part Ambient Noise Rejection (N-REJ)** • **Multi-Bearers Support for Data Services Profile** • **Adaptive Volume Control Provision (A-Vol)** • **Data Services Profile C Class 2** • **Slot Type Capability** • **Data Services Profile D Class 2** • **Number of Stored Display Characters** • **Data Services Profile F Class 2** • **Number of Lines in Display** • **DECT/GSM Interworking - GSM Bearer Service** • **Number of Characters Per Line** • **DECT/GSM Interworking - GSM SMS Service** • **Scrolling Behavior Field** • **DECT/GSM Interworking - GSM Facsimile Service** • **GAP/PAP Support** • **Control Codes** • **DECT/GSM Interworking Profile Supported** • **ISO8859-1 Support**	**This program is read only.**	**-**	
04	**DECT Terminal Basic Data Setup - Model Identifier** This program shows the model identifier that the Aspire Wireless (DECT) terminal uses. The model identifier contains the following items: Manufacturer Identification Code (MANIC) and Model Identification Code (MODIC). This program is read only.	This program is read only.	-	
05	**DECT Terminal Basic Data Setup - Voice Mail Answering When Out of Range** This program enables (1) or disables (0) the ability for calls to be transferred to voice mail if the Aspire Wireless (DECT) phone is out of range. If Program 15-15-05 and 15-15-06 are both enabled, Program 15-15-05 takes priority. If both programs are disabled, the caller hears a lock-out tone and they may see “Out of Range” on their display.	0 = Disabled 1 = Enabled	0	15-15-05 15-15-06
06	**DECT Terminal Basic Data Setup - Call Transferring When Out of Range** This program enables (1) or disables (0) the ability for calls to be transferred to another extension if the Aspire Wireless (DECT) phone is out of range. If Program 15-15-05 and 15-15-06 are both enabled, Program 15-15-05 takes priority. If both programs are disabled, the caller hears a lock-out tone and the may see “Out of Range” on their display.	0 = Disabled 1 = Enabled	0	15-15-05 15-15-06

Item No.	Item	Input Data	Default	Related Program
07	**Transmit Level** This option will adjust the gain for transmitting when using an Aspire Wireless handset.	01-63	32	
08	**Receive Level** This option will adjust the gain for receiving when using an Aspire Wireless handset.	01-63	32	

Conditions

None

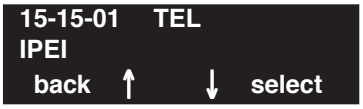
Feature Cross Reference

- Aspire Wireless

Telephone Programming Instructions

To enter data for Program 15-15 (Aspire Wireless Terminal Basic Data Setup):

1. Enter the programming mode.
2. 15 15



3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 15 : Extension, Basic Setup
15-16 : SIP Register ID Setup for Extension

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 15-16 : SIP Register ID Setup for Extension** to set the SIP Register ID to an extension port. If both 14-12 and 15-16 are assigned, then the system uses the data in Program 15-16. Register ID 0 is associated with Program 10-28 and 10-29 data. Other registered IDs (1-31) are associated with Program 10-36 data.

Contact Your NEC Sales Representative for information on the SIP feature availability.

Input Data

Extension Number	Max. 8 digits

Item No.	Item	Entries	Default	Related Program
01	**SIP Register ID Setup for Extension** Set the SIP Register ID to an extension port.	0-31	0	10-28 10-29 10-36 14-12

Conditions

None

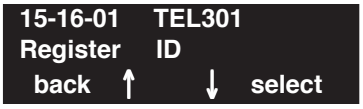
Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 15-16 (SIP Register ID Setup for Extension):

1. Enter the programming mode.
2. 15 16



3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 15 : Extension, Basic Setup

15-19 : System Telephone Book Setup for Extension

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 4.93+.	• Available with software 4.93+.

Description

Use **Program 15-19 : System Telephone Book Setup for Extension** to assign the Telephone Books to each extension and the options for them.

Input Data

Extension Number	Max. 8 digits

Item No.	Item	Entries	Default	Related Program
01	**Telephone Book Number 1** Assign the first Telephone Book to each extension. The system allows multiple extensions to be assigned the same telephone book - this allows users to share commonly used numbers.	Aspire S = 0-50 Aspire M/L/XL = 0-100	Aspire S: Telephone Books 1-50 assigned to Extensions 301-350 Aspire M/L/XL: Telephone Books 1-100 assigned to Extensions 301-400	
02	**Telephone Book Number 2** Assign the second Telephone Book to each extension. The system allows multiple extensions to be assigned the same telephone book - this allows users to share commonly used numbers.	Aspire S = 0-50 Aspire M/L/XL = 0-100	No Telephone Books assigned	
06	**Locking Telephone Book** For each extension, determine if the Telephone Book should be locked by default. A user can unlock the Telephone Book using the service code defined in Program 11-11-56.	0 = Unlocked 1 = Locked	01	11-11-56
07	**Telephone Book Password** For each extension, assign the 4-digit Telephone Book password.	0000-9999 (must be 4 digits)	0000	

Conditions

None

Feature Cross Reference

- Center Telephone Book

Telephone Programming Instructions

To enter data for Program 15-19 (System Telephone Book Setup for Extension):

1. Enter the programming mode.
2. 15 19

3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

- For Your Notes -

Level:	Aspire S	Aspire M/L/XL
IN	• Available - 8 Department Groups.	• Available - 64 Department Groups.

Description

Use **Program 16-01 : Department Group Basic Data Setup** to set the function mode for each department group.

Input Data

Department Group Number	Aspire S: 1-8 Aspire: 01-64

Item No.	Item	Input Data	Default	Related Program
01	Department Name	Max. 12 characters	No setting	11-07
02	**Department Calling Cycle** Use this option to set the call routing for Department Calling. Routing can be either circular (cycles to all phones in group) or priority (cycles to highest priority extensions first).	0 = Priority Routing 1 = Circular Routing	0	16-02
03	**Department Routing When Busy** Use this option to set how the system routes an Intercom call to a busy Department Group member. Intercom callers to the extension can either hear busy or route to the first available department number. This only occurs for calls to the extension directly, not the department number assigned in Program 11-07.	0 = Normal (Intercom caller to busy department member hears busy) 1 = Circular (Intercom callers to busy department member routes to idle member)	0	16-02
04	**Hunting Mode** Use this option to set the action taken when a call reaches the last extension in the Department Group (0=hunting stopped, 1 =hunting repeats with circular routing through the Department Group.	0 = Last extension is called and hunting is stopped. 1 = Circular	0	
05	**Department Group All Ring Mode Operation** Determine whether calls ringing a Department Group should ring all extensions in the group simultaneously automatically or manually when using the service code defined in Program 11-12-09.	0 = Manual 1 = Automatic	0	11-16-10

Program 16 : Department Group Setup

16-01 : Department Group Basic Data Setup

Item No.	Item	Input Data	Default	Related Program
06	**STG Withdraw Mode** - Not Used -	0 = Disable (Camp On) 1 = Enable (Overflow Mode)	0	
07	**Call Recall Restriction for STG** Determine whether a or not an unanswered call transferred to a Department Group should recall the extension from which it was transferred.	0 = Disable (Recall) 1 = Enable (No Recall)	0	
08	**Queuing for Department Group Call** To have Department Group calls queue when busy, set this entry to "1" for an extension or voice mail group.	0 = No Queuing 1 = Queuing (This program allows entries of 1-32, however, the system accepts any entry other than "0" as to allow queuing.)	0	
09	**Department Hunting No Answer Time** Set how long a call will ring a Department group extension before hunting occurs.	0-64800 seconds	15	
10	**Hunt Type** Set the type of hunting for each Extension (Department) Group:	0 = No queuing 1 = Hunting When Busy 2 = Hunting When Not Answered 3 = Hunting When Busy or No Answer	0	

Conditions

None

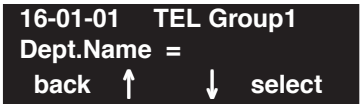
Feature Cross Reference

- Department Calling

Telephone Programming Instructions

To enter data for Program 16-01 (Department Group Basic Data Setup):

1. Enter the programming mode.
2. 16 01



3. Enter the number of the item you want to program.

4. Select the Department Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 16 : Department Group Setup

16-02 : Department Group Assignment for Extensions

Level:	Aspire S	Aspire M/L/XL
IN	• Available - 8 Department Groups.	• Available - 64 Department Groups.

Description

Use **Program 16-02 : Department Group Assignment for Extensions** to assign each extension to a Department Group and to assign the extenion's priority in the group. When a call comes into the group, it may ring the extensions in order of their priority. The system uses these groups for Department Calling. Assign pilot numbers to Department Groups in Program 11-07. This lets system users place calls to the departments.

For voice mail, assign the voice mail ports to the same group. With IntraMail, these ports are defined in Program 47-01-17.

Input Data

Extension Number	Max. 8 digits

Item No.	Group Number	Priority	Default	Description	Related Program
01	Aspire S: 1-8 Aspire: 1-64	1-999	1 – xxx (See Note Below)	Set up the Department Group called by the pilot number and the extension priority when a group is called. Call Pickup Groups are set up in 23-02.	11-07 16-01

Note: The initial value of a priority becomes the ports numerical order assigned in Program 11-02 and 11-04. (Extension ports are 1-50 [Aspire S] or 1 to 256 [Aspire]. Virtual extension ports are 1-24 [Aspire S] or 1-256 [Aspire].)

Conditions

None

Feature Cross Reference

- Department Calling

Telephone Programming Instructions

To enter data for Program 16-02 (Department Group Assignment for Extensions):

1. Enter the programming mode.
2. 16 02

3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 16 : Department Group Setup

16-03 : Secondary Department Group

Level:	Aspire S	Aspire M/L/XL
IN	• Available - 8 Department Groups.	• Available - 64 Department Groups.

Description

Use **Program 16-03 : Secondary Department Group** to set a second Department Group for extensions. Each secondary Department Group can have up to 16 extensions assigned.

Input Data

Secondary Department (Extension) Group Number	Aspire S: 1-8 Aspire: 01-64

Item No.	Extension Entry	Extension Number	Priority Order	Description
01	01-16 (16 extensions numbers can be assigned per Secondary Department Group)	Max. 8 digits	0-999	This program is set up when placing extensions into two or more groups.

Default

All Department Groups : No setting

Conditions

Department Group All Ring (Program 16-01-05) will not include any extensions assigned in this program. It will only include those extensions which have the Department Group as their primary group (assigned in Program 16-02-01).

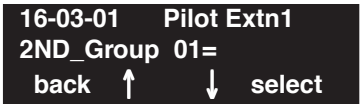
Feature Cross Reference

- Department Calling

Telephone Programming Instructions

To enter data for Program 16-03 (Secondary Department Group):

1. Enter the programming mode.
2. 16 03



3. Enter the number of the item you want to program.

4. Select the Pilot extension number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

- For Your Notes -

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 20-01 : System Options** to set various system options.

Input Data

Item No.	Item	Input Data	Default	Related Program
01	**Operator Access Mode** Use this program to set up priority of a call when calling an operator telephone.		0	20-17
02	**Selectable Text Message Mode** Use this program to select the mode when calling the telephone which has enabled a Selectable Text Message. **Note:** Any extensions previously set with Selectable Display Messaging must cancel the feature and reactivate in order for a change in this option to take affect.	0 = Call mode 1 = No Answer/ Busy mode	1	11-11-14 15-07-08
03	**DSP Sender Resource Selection** Wth the Caller ID Sender Queuing feature, set the DSP Sender Resource Selection to "1" (Caller ID Sender).	0 = Conference 1 = Caller ID 2 = MFC	0	
04	**Network BLF Indication** Used to determine how often the system updates the DSS key BLF indications. For Networking, the entry should be “30” in all systems.	0-64800 in 100 ms increments	0	30-05
05	**DTMF Receive Active Time** For OPXs, analog telephones and certain analog trunks (like DISA), the system attaches a DTMF receiver to the port for this interval. The system releases the receiver after the interval expires.	0-64800 seconds	10	25-07-01
06	**Alarm Duration** This interval sets the duration of the alarm signal.	0-64800 seconds	30	
07	**Callback Ring Duration Time** Callback rings an extension for this interval.	0-64800 seconds	15	11-12-05 15-07-35
08	**Trunk Queuing Callback Time** Trunk Queuing callback rings an extension for this interval.	0-64800 seconds	15	11-12-05 15-07-35
09	**Callback/Trunk Queuing Cancel Time** The system cancels an extension’s Callback or Trunk Queueing request after this interval.	0-64800 seconds	64800	11-12-05 15-07-35
10	**Trunk Guard Timer** - Not Used -	0-64800 seconds	1	

Conditions

None

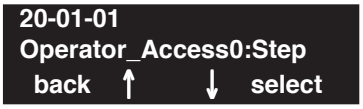
Feature Cross Reference

Refer to above chart.

Telephone Programming Instructions

To enter data for Program 20-01 (System Options):

1. Enter the programming mode.
2. 20 01



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available. • Item 15 not available.	• Available. • Item 15 requires software 4.0E+.

Description

Use **Program 20-02 : System Options for Multi-Line Telephones** to set various system options for Multi-Line Telephones.

Input Data

Item No.	Item	Input Data	Default
01	Trunk Loop Key Operation Mode	0 = Indicate Using Loop Trunk 1 = Not indicated *Mode* / *0 = Keep Lamp* / *1 = Extinction* *Incoming:* *300 IPM Red blink* *Talking:* *Green Lighting (on Talking TEL)* / *Extinction (LED off)* *Holding:* *60 IPM Green blink (on holding TEL)* / *Extinction (LED off)*	0
02	**Trunk Loop Access Key Operating Mode** Use this option to set the operating mode of the extension's trunk group keys. The keys can be for incoming access, outgoing access or both.	0 = Outgoing / Incoming 1 = Outgoing 2 = Incoming	0
03	**BLF Control** Set the conditions under which a Hotline, Reverse Voice Over or DSS Console key indicates that an extension is busy. Refer to the Reverse Voice Over feature for more information.	0 = Idle / Busy (ON/OFF) 1 = Busy / Idle (ON/OFF)	1
04	**Retrieve the Line After Transfer** Enable (1) or disable (0) an extension's ability to answer a call after it's been transferred, but before it's answered.	0 = Not Holding 1 = Holding	1
05	**Headset Busy Mode** Set the conditions under which a headset extension is busy to incoming callers.	0=Headset busy with one CALL key busy 1=Headset busy with both CALL keys busy	0

Item No.	Item	Input Data	Default
06	**Preselection Time** When a keyset user preselects a line key, the system remembers the preselection for this interval.	0-64800 seconds	5
07	**Time and Date Display Mode** Set how the Time and Date appear on display telephones. There are eight display modes.	1-8 Type 1: (12 hour) 10 MAR TUE 3:15PM Type 2: (12 hour) 3:15PM MAR 10 TUE Type 3: (12 hour) 3-10 TUE 3:15 PM Type 4: (12 hour) 3:15PM TUE 10 MAR Type 5: (24 hour) 10 MAR TUE 15:15 Type 6: (24 hour) 15:15 MAR 10 TUE Type 7: (24 hour) 3-10 TUE 15:15 Type 8: (24 hour) 15:15 TUE 10 MAR	3
08	**LCD Display Holding Time** This timer determines how long a user's display will show Caller ID for a second incoming call.	0-64800 seconds	5
09	**Disconnect Supervision** Use this option to enable or disable disconnect supervision for the system trunks.	0 = Disable 1 = Enable	1
10	Time Before Shifting to Power-Saving Mode	0 = Power-Saving Mode Off 1 = 1 minutes 2 = 2 minutes 3 = 4 minutes 4 = 8 minutes 5 = 16 minutes 6 = 32 minutes 7 = 64 minutes	0
11	**Handsfree Microphone Control** Use this option to set the default setting for a keyset's Handsfree microphone on system start up. If set to 0, a user can place a call Handsfree without lifting the handset. If set to 1, a user can initially place a call Handsfree but must lift the handset to talk or press their MIC key. ***Changes to this option will take affect when the system is reset.***	0 = Off 1 = On	1
12	**Forced Intercom Ringing** Use this option to enable or disable Forced Intercom Ringing. If enabled, incoming Intercom calls normally ring. If disabled, Intercom calls voice-announce.	0 = Disable (Voice) 1 = Enable (Ring)	0
13	- Not Used -		

Item No.	Item	Input Data	Default
14	**Headset Ringing Cancel Timer** When a keyset is ringing in the headset mode and this timer expires, the ringing will switch to regular ringing from the keyset ringer.	0-64800 seconds	30
15	**Caller ID Display Mode** Determine how the Caller ID should be displayed for all i-Series telephones when an incoming call is received. Once the call is answered, the first line will indicate the trunk number and caller timer (if enabled).	0 = Displays the line number on line one and the Caller ID name and number on line 2. 1 = Line 1 displays Caller ID number, Line 2 displays Caller ID name 2 = Line 1 displays Caller ID name, Line 2 displays Caller ID number	0

Conditions

None

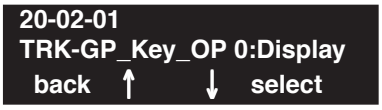
Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 20-02 (System Options for Multi-Line Telephones):

1. Enter the programming mode.
2. 20 02



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 20 : System Option Setup

20-03 : System Options for Single Line Telephones

Level:
IN

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Item 06 available.	• Item 06 available with software 1.20+.
• Item 07 rquires software 4.0E+.	• Item 07 rquires software 4.0E+.

Description

Use **Program 20-03 : System Options for Single Line Telephones** to set up various options for Single Line Telephones.

Input Data

Item No.	Item	Input Data	Default	Related Program
01	**SLT Call Waiting Answer Mode** For a busy single line (500/2500 type) telephone, set the mode used to answer a camped-on trunk call. For ESL sets, enabling this option (1) allows the user to dial Service Code 154 for Voice Mail Conversation Record.	0 = Hook Flash 1 = Hook Flash + Service code (894)	0	11-12-47
02	**Ignore Received DP Dial on DTMF SLT Port** Use this option to define whether the system should receive dial pulse and DTMF signals (0) or ignore dial pulse and only accept DTMF signals (1).	0 = Do Not Ignore 1 = Ignore	0	15-03-01
03	**SLT DTMF Dial to Trunk Lines** • **Type 0 :** The system keeps the digits dialed by the SLT on a trunk in a buffer. After all the digits have been received, the system sends all the digits to the trunk. If the time space between digits is longer than the timer in Item 4, the system considers all digits received. • **Type 1 :** The system passes the received digits from the SLT to the trunk immediately. If the SLT has a Last Number Dial key without a pause, this key may not be able to use the Last Number Dial key with the Type 1 setting. When using a 3rd-party external paging device, set this option to “1”. In addition, set Program 20-03-04 to “1”. These programs must be set in order for Aspire Wireless users to be able to break dial tone on an analog trunk that is used for paging.	0 = Receive all dialed data, before sending. 1 = Direct through out	0	20-03-04

Item No.	Item	Input Data	Default	Related Program
04	**Dial Sending Start Time for SLT or ARS** When ARS or an analog extension user accesses a trunk and dials an outside call, the system waits this interval before outdialing the first digit. The timer will restart when a user dials another digit. When using a 3rd-party external paging device, set this option to “1”. In addition, set Program 20-03-03 to “1”.	0-64800 seconds	3	20-03-03 20-03-07
05	SLT Operation Mode	0 = Normal Mode 1 = Extended Mode1 2 = Extended Mode2	0	
06	**Headset Ringing Start Time** Define the headset ringing start time. After this timer expires from the time when a SLT is off hook, the system will set the SLT to headset ringing mode.	0-64800 seconds	5	20-13-38
07	**Forced Dial Sending Start Time** This option is used for SLT DTMF dialing. When **Program 20-03-03 (SLT DTMF Dial to Trunk Lines)** is set to "0" (receive all digits before sending), the system will following the timers in Program 20-03-04 and 23-03-07. The timer in **Program 20-03-04 : System Options for Single Line Telephones - Dial Sending Start Time for SLT or ARS** will reset when the user dials another digit. This timer will not reset when a digit is dialed. The user must finish dialing all the digits before this timer expires.	0-64800 seconds	0	20-03-03 20-03-04

Conditions

None

Feature Cross Reference

- Single Line Telephones, Analog
- Single Line Telephones, Digital

Telephone Programming Instructions

To enter data for Program 20-03 (System Options for Single Line Telephones):

1. Enter the programming mode.
2. 20 03

   ```
   20-03-01
   Call_Wait_Ans 0:Hooking
     ←              →
   ```

3. Enter the number of the item you want to program.

   ```
   20-03-nn
   nnnnn
     ←              →
   ```

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available - 24 virtual extension ports.	• Available - 256 virtual extension ports.

Description

Use **Program 20-04 : System Options for Virtual Extensions** to set up various system options for Virtual Extensions.

Input Data

Item No.	Item	Input Data	Default
01	**Virtual Extension Key Operation Mode** With an entry of "0", after placing a call on hold which is on a virtual extension key, once the call is picked up, the call comes off the virtual extension key and appears on the line or loop key. With an entry of "1", after placing a call on hold which is on a virtual extension key, once the call is picked up, the call will remain on the virtual extension key.	0 = Release Virtual Extension Key 1 = Hold Virtual Extension Key	0
02	- Not Available -		-
03	**Call Coverage Delay Interval** Multiple Directory Number/Call Coverage Keys set for Delayed Ringing (see Program 15-11) ring the covering extension after this interval.	0-64800 (Sec.)	10

Conditions

None

Feature Cross Reference

- Multiple Directory Number / Call Coverage

Telephone Programming Instructions

To enter data for Program 20-04 (System Options for Virtual Extensions):

1. Enter the programming mode.
2. 20 04

   ```
   20-04-01
   V-Ext.Answer   1:Keep
     ←              →
   ```

3. Enter the number of the item you want to program.

   ```
   20-04-nn
   nnnnn
     ←              →
   ```

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

This program is not used.

Program 20 : System Option Setup
20-06 : Class of Service for Extensions

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 20-06 : Class of Service for Extensions** to assign a Class of Service to an extension. There are15 Classes of Service that can be assigned. To specify the options in each Class of Service, refer to Programs 20-07 through 20-13. You make eight entries for Program 20-06, one for each Night Service Mode.

Input Data

Extension Number	Max. 8 digits

Item No.	Day/Night Mode	Class of Service for Extensions
01	Aspire S: 1-4 Aspire: 1-8	1-15

Default

- Extension number 301 is set as Class 15.
- All other extension numbers are set as Class 1.

Conditions

None

Feature Cross Reference

- Class of Service

Telephone Programming Instructions

To enter data for Program 20-06 (Class of Service for Extensions):

1. Enter the programming mode.
2. 20 06

3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 20 : System Option Setup

20-07 : Class of Service Options (Administrator Level)

Level:
IN

Aspire S	Aspire M/L/XL
• Available.	• Available.
• All Aspire S releases use the adjusted Class of Service levels.	• With software version 01.03, the Class of Service for levels 1 and 15 were adjusted.
• Aspire Wireless registration by service code option not available.	• Aspire Wireless registration by service code option available with 2.63+ software.
• Items 24 and 25 require software 4.93+.	• Items 24 and 25 require software 4.93+.

Description

Use **Program 20-07 : Class of Service Options (Administrator Level)** to define the administrator service availability for each extension's Class of Service.

Input Data

Class of Service Number	01-15

Item No.	Item	Input Data	Default		Related Program
			COS 1-14	COS 15	
01	**Manual Night Service Enabled** Turn off or on an extension's ability to use manual Night Service Switching	0 = Off 1 = On	0 COS 1 Prior to 01.03 = 1	1 Prior to 01.03 = 0	11-10-01
02	**Changing the Music on Hold Tone** Turn off or on an extension's ability to change the Music on Hold tone	0 = Off 1 = On	0 COS 1 Prior to 01.03 = 1	1 Prior to 01.03 = 0	11-10-02
03	**Time Setting** Turn off or on an extension's ability to set the Time via Service Code 828.	0 = Off 1 = On	1	1 Prior to 01.03 = 0	11-10-03
04	**Storing Abbreviated Dialing Entries** Turn off or on an extension's ability to store Common or Group Abbreviated Dialing numbers.	0 = Off 1 = On	1	1 Prior to 01.03 = 0	11-10-04
05	**Set/Cancel Automatic Trunk-to-Trunk Forwarding** Turn off or on an extension's ability to use the Trunk-to-Trunk Forwarding service codes.	0 = Off 1 = On	0 COS 1 Prior to 01.03 = 1	0	11-10-06 11-10-07 11-10-08
06	- Not Used -				
07	- Not Used -				
08	- Not Used -				

Item No.	Item	Input Data	Default		Related Program
			COS 1-14	COS 15	
09	- Not Used -				
10	**Programmable Function Key Programming (Appearance Level)** Turn off or on an extension's ability to program their Appearance function keys using Service Code 852 (by default).	0 = Off 1 = On	1	1 Prior to 01.03 = 0	20-13-18
11	**Forced Trunk Disconnect (analog trunk only)** Turn off or on an extension's ability to use Forced Trunk Disconnect.	0 = Off 1 = On	0 COS 1 Prior to 01.03 = 1	1 Prior to 01.03 = 0	
12	**Trunk Port Disable** Turn off or on an extension's ability to busy out a trunk. using Service Code 145. The user which busied out the trunk will still have access to the trunk for placing outgoing calls. All other users will be blocked from seizing the trunk to place an outgoing call. The trunk, however, can still be answered by any users programmed with the trunk access.	0 = Off 1 = On	0 COS 1 Prior to 01.03 = 1	1 Prior to 01.03 = 0	11-10-27
13	**VRS Record** Turn off or on an extension's ability to record, erase and listen to VRS messages.	0 = Off 1 = On	0 COS 1 Prior to 01.03 = 1	1 Prior to 01.03 = 0	
14	**VRS General Message Listen** Turn off or on an extension's ability to dial 4 or Service Code 111 and listen to the General Message	0 = Off 1 = On	0 COS 1 Prior to 01.03 = 1	1 Prior to 01.03 = 0	11-10-21
15	**VRS General Message Record** Turn off or on an extension's ability to dial Service Code 112 and record, listen to or erase the General Message	0 = Off 1 = On	0 COS 1 Prior to 01.03 = 1	1 Prior to 01.03 = 0	11-10-22
16	- Not Used -				
17	- Not Used -				
18	SMDR printout accumulated extension data	0 = Off 1 = On	0 COS 1 Prior to 01.03 = 1	1 Prior to 01.03 = 0	11-10-23
19	SMDR printout accumulated STG data	0 = Off 1 = On	0 COS 1 Prior to 01.03 = 1	1 Prior to 01.03 = 0	11-10-24
20	SMDR printout accumulated account code data	0 = Off 1 = On	0 COS 1 Prior to 01.03 = 1	1 Prior to 01.03 = 0	11-10-25

Item No.	Item	Input Data	Default		Related Program
			COS 1-14	COS 15	
21	**Aspire Wireless Registration by Service Code** Turn off or on an extension's ability to register or unregister an Aspire Wireless handset using the service codes defined in Program 11-10-30 and 11-10-31.	0 = Off 1 = On	0	0	11-10-30 11-10-31
24	**Set/Cancel Private Call Refuse** Turn on (1) or off (0) an extension's ability to use the Private Call Refuse service code or function key.	0 = Off 1 = On	0	0	
25	**Set/Cancel Caller ID Refuse** Turn on (1) or off (0) an extension's ability to use the Caller ID Refuse service code or function key.	0 = Off 1 = On	0	0	
26	**DID Mode Switching** Turn on (1) or off (0) an extension's ability to manually change the time pattern for a DID Conversion Table..	0 = Off 1 = On	0	0	11-10-35

Conditions

None

Feature Cross Reference

- Class of Service

Telephone Programming Instructions

To enter data for Program 20-07 (Class of Service Options (Administrator Level)):

1. Enter the programming mode.
2. 20 07

3. Enter the number of the item you want to program.

4. Select the Class of Service number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available. • Item 17 available.	• Available. • Item 17 available with software 1.11+.

Description

Use **Program 20-08 : Class of Service Options (Outgoing Call Service)** to define the outgoing call feature availability for each extension's Class of Service.

Input Data

Class of Service Number	01-15

Item No.	Item	Input Data	Default		Related Program
			COS 01-14	COS 15	
01	**Intercom Calls** Turn off or on Intercom calling for the extension.	0 = Off 1 = On	1	1	
02	**Trunk Calls** Turn off or on outgoing trunk calling for the extension.	0 = Off 1 = On	1	1	
03	Common Abbreviated Dialing	0 = Off 1 = On	1	1	
04	Group Abbreviated Dialing	0 = Off 1 = On	1	1	
05	**Dial Number Preview** Turn off or on an extension's ability to use Dial Number Preview.	0 = Off 1 = On	1	1	
06	**Toll Restriction Override** Turn off or on Toll Restricting Override (Service Code 875).	0 = Off 1 = On	0	0	21-01-07, 21-07
07	**Repeat Redial** Turn off or on an extension's ability to use Repeat Redial.	0 = Off 1 = On	1	1	
08	**Toll Restriction Dial Block** Turn off or on an extension's ability to use Dial Block.	0 = Off 1 = On	0	0	
09	**Hotline/Extension Ringdown** Turn off or on Ringdown Extension for extensions with this COS.	0 = Off 1 = On	0	0	

Item No.	Item	Input Data	Default		Related Program
			COS 01-14	COS 15	
10	**Switching from Handsfree Answerback to Forced Intercom Ringing** Turn off or on an extension's ability to force Handsfree Answerback or Forced Intercom Ringing for outgoing Intercom calls.	0 = Off 1 = On	1	1	
11	**Protect ICM Call Mode Switching by Caller** When an extension is set to ring mode for ICM calls, enabling this option prevents callers from changing the call to voice announce mode.	0 = Off 1 = On	0	0	
12	**Department Group Step Calling** Turn off or on an extension's ability to use Department Group Step Calling	0 = Off 1 = On	1	1	
13	**ISDN CLIP** Determine if the ISDN calling line identity presentation and screening indicators are to be allowed.	0 = Off 1 = On	0	0	
14	**ISDN Call Address Information** Determine if the sub-address should be sent for outoing ISDN calls.	0 = Off 1 = On	0	0	21-13-01
15	**Block Outgoing Caller ID** Turn off or on the system's ability to automatically block outgoing Caller ID information when a user places a call. If this option is on, the system automatically inserts the Caller ID block code *67 (defined in Program 14-01-21) before the user's dialed digits.	0 = Off 1 = On	0	0	14-01-20 14-01-21
16	**Display E911 Dialed Extension Name and Number** Turn off or on an extension's ability to display the name and number of the extension that dialed 911.	0 = Off 1 = On	0	0	
17	**ARS Override of Trunk Access Map** Turn off or on an extension's ability to override the trunk access map programming for outgoing calls.	0 = Off 1 = On	0	0	

Conditions

None

Feature Cross Reference

- Class of Service

Telephone Programming Instructions

To enter data for Program 20-08 (Class of Service Options (Outgoing Call Service)):

1. Enter the programming mode.
2. 20 08

   ```
   20-08-01   FCTN Cls1
   Intercom_Call          1:On
     ←                    →
   ```

3. Enter the number of the item you want to program.

   ```
   20-08-nn   FCTN Clsnn
   nnnnn
     ←                    →
   ```

4. Select the Class of Service number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 20 : System Option Setup

20-09 : Class of Service Options (Incoming Call Service)

Level:	Aspire S	Aspire M/L/XL
IN	• Available. • Item 6 requires software 2.67+.	• Available. • Item 6 requires software 2.67+.

Description

Use **Program 20-09 : Class of Service Options (Incoming Call Service)** to define the incoming call feature availability for each extension's Class of Service.

Input Data

Class of Service Number	01-15

Item No.	Item	Input data	Default		Related Program
			COS 01-14	COS 15	
01	**Second Call for DID/ DISA/ DIL/ E&M** Turn off or on the extension's ability to receive a second call from a DID, DISA, DIL, or tie line caller. ***Note:*** With this option set to '1', the destination extension must be busy in order for a second DNIS caller to ring through. If the destination extension does not have a line or loop key available for the second call and a previous call is ringing the extension but has not yet been answered, the second caller will hear busy regardless of this program's setting.	0 = Off 1 = On	0	0	
02	**Caller ID Display** Turn off or on the Caller ID display at an extension.	0 = Off 1 = On	0	0	15-02-08
03	**Sub Address Identification** Define whether an extension displays the Caller Sub-Address.	0 = Off 1 = On	0	0	
04	**Notification for Incoming Call List Existence** Determine whether an extension's display will show "Check List" when an incoming call has been missed by a user.	0 = Off 1 = On	0	0	20-09-02
05	**Setting Handsfree Answerback or Forced Intercom Ringing** Turn off or on an extension's ability to enable Handsfree Answerback or Forced Intercom Ringing for their incoming Intercom calls.	0 = Off 1 = On	1	1	11-11-15, 11-11-16
06	**Incoming Time Information Display** If this option is set to "1", the Incoming Call Time is displayed on the keyset's LCD while the phone is ringing.	0 = Off 1 = On	0	0	

Conditions

None

Feature Cross Reference

- Class of Service

Telephone Programming Instructions

To enter data for Program 20-09 (Class of Service Options (Incoming Call Service)):

1. Enter the programming mode.
2. 20 09

   ```
   20-09-01   FCTN Cls1
   2nd_Call_DDI-Ovrride0:Of
    back   ↑      ↓   select
   ```

3. Enter the number of the item you want to program.

   ```
   20-09-nn   FCTN Clsnn
   nnnnn
    ←              →
   ```

4. Select the Class of Service number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 20 : System Option Setup

20-10 : Class of Service Options (Answer Service)

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 20-10 : Class of Service Options (Answer Service)** to define the answer feature availability for each extension's Class of Service.

Input Data

Class of Service Number	01-15

Item No.	Item	Input Data	Default	
			COS 01-14	COS 15
01	**Group Call Pickup (Within Group)** Turn off or on Group Call Pickup for calls ringing an extension's own Pickup Group as well as ring group calls (Service Code *#).	0 = Off 1 = On	1	1
02	**Group Call Pickup (Another Group)** Turn off or on Group Call Pickup for calls ringing outside a group (Service Code 869).	0 = Off 1 = On	1	1
03	**Group Call Pickup for Specific Group** Turn off or on Group Call Pickup for a specific group using service code 868.	0 = Off 1 = On	1	1
04	**Group Call Pickup** Turn off or on an extension's ability to pick up a call ringing into a Pickup Group (Service Codes *# and 856).	0 = Off 1 = On	1	1
05	**Directed Call Pickup for Own Group** Turn off or on Directed Call Pickup for calls ringing an extension's own Pickup Group (Service Code 856).	0 = Off 1 = On	1	1
06	**Meet Me Conference and Paging** Turn off or on an extension's ability to use Meet Me Conference and Paging.	0 = Off 1 = On	1	1
07	**Automatic Answer of Universal Calls** Turn off or on an extension's ability to use Universal Auto Answer (no service code required).	0 = Off 1 = On	0	0
08	**Auto Off-Hook Answer for Call Coverage Keys** Turn off or on an extension's ability to answer an incoming call on a Call Coverage Key simply by lifting the handset.	0 = Off 1 = On	0	0

Conditions

None

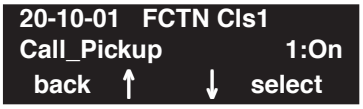
Feature Cross Reference

- Class of Service

Telephone Programming Instructions

To enter data for Program 20-10 (Class of Service Options (Answer Service)):

1. Enter the programming mode.
2. 20 10



3. Enter the number of the item you want to program.

4. Select the Class of Service number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 20 : System Option Setup

20-11 : Class of Service Options (Hold/Transfer Service)

Level:	Aspire S	Aspire M/L/XL
IN	• Available. • Item 21 available with software 2.10+.	• Available. • Item 21 available with software 2.10+.

Description

Use **Program 20-11 : Class of Service Options (Hold/Transfer Service)** to define the Hold and Transfer feature availability for each extension's Class of Service.

Input Data

Class of Service Number	01-15

Item No.	Item	Input Data	Default	
			COS 01-14	COS 15
01	**Call Forward Immediate** Turn off or on an extension's ability to initiate Call Forwarding Immediate.	0 = Off 1 = On	1	1
02	**Call Forward When Busy** Turn off or on an extension's ability to use Call Forward When Busy.	0 = Off 1 = On	1	1
03	**Call Forwarding When Unanswered** Turn off or on an extension's ability to use Call Forward When Unanswered.	0 = Off 1 = On	1	1
04	**Call Forwarding (Both Ringing)** Turn off or on an extension's ability to activate Call Forwarding with Both Ringing.	0 = Off 1 = On	1	1
05	**Call Forwarding with Follow Me** Turn off or on an extension's ability to initiate Call Forwarding with Follow Me.	0 = Off 1 = On	1	1
06	**Unscreened Transfer** Turn off or on an extension's ability to use Unscreened Transfer.	0 = Off 1 = On	1	1
07	**Transfer Without Holding** Turn off or on an extension's ability to use Transfer Without Holding.	0 = Off 1 = On	0	0
08	**Transfer Information Display** Turn off or on an extension's incoming Transfer pre-answer display.	0 = Off 1 = On	1	1
09	**Group Hold Initiate** Turn off or on an extension's ability to initiate a Group Hold.	0 = Off 1 = On	1	1

Item No.	Item	Input Data	Default	
			COS 01-14	COS 15
10	**Group Hold Answer** Turn off or on an extension's ability to pick up a call on Group Hold.	0 = Off 1 = On	1	1
11	**Automatic On Hook Transfer** Turn off or on an extension's ability to use Automatic On Hook Transfer.	0 = Off 1 = On	1	1
12	**Call Forwarding Off-Premise** Turn off or on an extension's ability to set up Call Forwarding Off-Premise for their phone.	0 = Off 1 = On	0	0
13	**Operator Transfer After Hold Callback** Turn off or on an extension's ability to have a call which recalls from hold transfer to the operator.	0 = Off 1 = On	0	0
14	**Trunk to Trunk Transfer Restriction** Turn off or on the Trunk-to-Trunk Transfer Restriction option. If enabled, trunk-to-trunk transfer is not possible.	0 = Off 1 = On	0	0
15	**VRS Personal Greeting** Turn off or on an extension's ability to dial Service Code *4 7 to record, listen to or erase the Personal Greeting Message.	0 = Off 1 = On	1	1
16	**Call Redirect** Turn off or on a keyset user's ability to transfer a call to a pre-defined destination (such as an operator, voice mail, or another extension) without answering the call.	0 = Off 1 = On	1	1
17	**Set/Cancel Department Group Trunk-to-Trunk Forwarding** Turn off or on an extension user's ability to set Trunk-to-Trunk Forwarding for a Department Group.	0 = Off 1 = On	1	1
18	**Transfer Recall On Receiving COS** Allow (0) or deny (1) unanswered Transferred calls to the COS from recalling the originating extension. *For example, with this option set to '1' for COS 1, calls transferred by any COS to any extension with a COS of 1, will not recall.*	0 = Allow 1 = Deny	0	0
19	**Normal/Extended Park** Determine if an extension's Class of Service should allow either a normal or extended Park.	0 = Normal 1 = Extended	0	0
20	**Transfer Recall On Originating COS** Allow (0) or deny (1) unanswered Transferred calls from the COS from recalling the originating extension. *For example, with this option set to '1' for COS 1, any call transferred by an extension with COS 1, will not recall.*	0 = Off 1 = On	0	0
21	**Restriction for Tandem Trunking on Hang Up** Allow (0) or deny (1) an extension user's ability to set up a tandem/conference call automatically when they hang up.	0 = Allow 1 = Deny	0	0

Conditions

None

Feature Cross Reference

- Class of Service

Telephone Programming Instructions

To enter data for Program 20-11 (Class of Service Options (Hold/Transfer Service)):

1. Enter the programming mode.
2. 20 11

   ```
   20-11-01   FCTN Cls1
   Call_Forward          1:On
    back   ↑     ↓   select
   ```

3. Enter the number of the item you want to program.

   ```
   20-11-nn   FCTN Clsnn
   nnnnn
     ←              →
   ```

4. Select the Class of Service number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Not Available.	• Not Available.

Description

This program is not used.

Program 20 : System Option Setup

20-13 : Class of Service Options (Supplementary Service)

Level:
IN

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Item 38 available.	• Item 38 available with software 1.20+.
• Item 40 available with software 2.63+.	• Item 40 available with software 2.63+.

Description

Use **Program 20-13 : Class of Service Options (Supplementary Service)** to define the supplementary feature availability for each extension's Class of Service.

Input Data

Class of Service Number	01-15

Item No.	Item	Input Data	Default	
			COS 01-14	COS 15
01	**Long Conversation Alarm** Turn off or on the Warning Tone for Long Conversation (not for SLTs)	0 = Off 1 = On	0	0
02	**Long Conversation Cutoff (Incoming)** Turn off or on an extension's ability to use Long Conversation Cutoff for incoming calls.	0 = Off 1 = On	0	0
03	**Long Conversation Cutoff (Outgoing)** Turn off or on an extension's ability to use Long Conversation Cutoff for outgoing calls.	0 = Off 1 = On	0	0
04	**Call Forwarding/DND Override** Turn off or on an extension's ability to use Call Forwarding/DND Override.	0 = Off 1 = On	1	1
05	**Intercom Off Hook Signaling** Turn off or on an extension's ability to receive off hook signals.	0 = Off 1 = On	1	1
06	**Automatic Off Hook Signaling** Allows a busy extension to manually (0) or automatically (1) receive off hook signals.	0= Manually 1= Automatically	1	1
07	**Message Waiting** Turn off or on an extension's ability to leave Message Waiting.	0 = Off 1 = On	1	1
08	**Conference** Turn off or on an extension's ability to initiate a conference or Meet Me Conference	0 = Off 1 = On	1	1
09	**Privacy Release** Turn off or on an extension's ability to initiate a Voice Call Conference	0 = Off 1 = On	1	1

Item No.	Item	Input Data	Default	
			COS 01-14	COS 15
10	**Barge In Mode** Enables the extension's Barge In to be speech mode (0) or Monitor mode (1).	0=Speech 1=Monitor	0	0
11	**Room Monitor, Initiating Extension** Turn off or on an extension's ability to initiate Room Monitor	0 = Off 1 = On	0	0
12	**Room Monitor, Extension Being Monitored** Turn off or on an extension's ability to be monitored	0 = Off 1 = On	0	0
13	**Continued Dialing** Turn off or on an extension's ability to use Continued Dialing which allows DTMF signal sending while talking on extension.	0 = Off 1 = On	1	1
14	**Department Calling** Turn off or on an extension's ability to receive a Department Group call when the pilot number is dialed..	0 = Off 1 = On	1	1
15	**Barge In, Initiate** Turn off or on Barge In at the initiating extension.	0 = Off 1 = On	0	0
16	**Barge In, Receive** Turn off or on Barge In at the receiving extension.	0 = Off 1 = On	0	0
17	**Barge In Tone/Display** Use this option to turn off or on the Barge In tone. If on, callers hear an alert tone and their display indicates the Barge In when another extension barges into their conversation. If off, there is no alert tone or display indication.	0 = Off 1 = On	1	1
18	**Programmable Function Key Programming (General Level)** Turn off or on an extension's ability to program their General function keys using Service Code 851 (by default). (Refer to Program 20-07-10 for Service Code 852.)	0 = Off 1 = On	1	1
19	**Selectable Display Messaging** Turn off or on an extension's ability to use Selectable Display Messaging	0 = Off 1 = On	1	1
20	**Account Code/Toll Restriction Operator Alert** Turn off or on operator alert when an extension improperly enters an Account Code or violates Toll Restriction.	0 = Off 1 = On	0	0
21	**Extension Name** Turn off or on an extension's ability to program its name.	0 = Off 1 = On	1	1
22	**Busy Status Display** Turn off or on the ability to display the detail state of called party.	0 = Off 1 = On	0	0
23	**Display the Reason for Transfer** Select whether an extension should display the reason a call is being transferred to their extension (Call Forward Busy, Call Forward No Answer, DND).	0 = Off 1 = On	0	0

Item No.	Item	Input Data	Default	
			COS 01-14	COS 15
24	**Privacy Release by Pressing Line Key** Turn off or on a user's ability to press a line key to barge into an outside call. The Barge In feature must be enabled if this option is to be used.	0 = Off 1 = On	0	0
25	Transmission is cut when privacy release is used during trunk to trunk transfer.	0 = Off 1 = On	0	0
26	**Group Listen** Turn off or on an extension's ability to use Group Listen.	0 = Off 1 = On	1	1
27	**Busy on Seizing Virtual Extension** If set to '1', you can call a busy extension which is talking on a virtual extension key. Program 20-13-06 (Call Waiting) must be set to off for this option to work.	0 = Off 1 = On	1	1
28	**Allow Class of Service to be Changed** Turn off or on the ability of an extension's COS to be changed via Service Code 177.	0 = Off 1 = On	0	0
29	**Paging Display** Turn off or on an extension's ability to display paging information.	0 = Off 1 = On	1	1
30	**Background Music** In an extension's Class of Service, turn off or on an extension from turning Background Music on and off.	0 = Off 1 = On	1	1
31	Connected Line Identification (COLP)	0 = Off 1 = On	0	0
32	**Deny Multiple Barge Ins** Turn off or on the extension's ability to have multiple user's Barge In to their conversation.	0 = Off 1 = On	0	0
33	**ACD Supervisor's Position Enhancement** This option must be on in order for the operator to use service codes in Program 11-13-10 through 11-13-13.	0 = Off 1 = On	0	0
34	**Block Manual Off Hook Signaling** Turn off or on an extension's ability to block off-hook signals manually sent from a co-worker.	0 = Off 1 = On	0	0
35	**Block Camp On** Turn off or on an extension's ability to block callers from dialing 2 to Camp On.	0 = Off 1 = On	0	0
36	**Call Duration Timer** In an extension's Class of Service, turn off or on an extension's Call Timer. The system waits until the interdigit timer (Program 21-01-01) expires before beginning this timer.	0 = Off 1 = On	0	0
38	**Headset Ringing** In an extension's Class of Service, turn off or on an extension's ability to use the Headset ringing.	0 = Off 1 = On	0	0

Item No.	Item	Input Data	Default	
			COS 01-14	COS 15
39	**ACD Queue Status Display** Turn off or on the ACD Queue Status Display for an extension's Class of Service. Any extension which has this option enabled will also hear the queue alarm.	0 = Off 1 = On	0	0
40	**Do Not Disturb** This option will allow or prevent the user from being able to use the Do Not Disturb feature.	0 = Off 1 = On	1	1

Conditions

None

Feature Cross Reference

- Class of Service

Telephone Programming Instructions

To enter data for Program 20-13 (Class of Service Options (Supplementary Service)):

1. Enter the programming mode.
2. 20 13

   ```
   20-13-01   FCTN Cls1
   Long_Conv.Alarm      1:On
    back   ↑      ↓   select
   ```

3. Enter the number of the item you want to program.

   ```
   20-13-nn   FCTN Clsnn
   nnnnn
     ←              →
   ```

4. Select the Class of Service number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 20 : System Option Setup

20-14 : Class of Service Options for DISA/E&M

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 20-14 : Class of Service Options for DISA/E&M** to enable/disable DISA and tie line Class of Service options. You assign a DISA Class of Service to DISA users in Program 25-09. Assign tie line Classes of Service in 34-02. Up to 15 DISA/E&M Classes of Service can be defined.

Note: Analog trunk-to-analog trunk and ISDN trunk-to-ISDN trunk calls are supported by this program. However, analog trunk-to-ISDN trunk and ISDN trunk-to-analog trunk calls are NOT supported by this program.

Input Data

Class of Service Number	01-15

Item No.	Item	Input Data	Default	
			COS 01-14	COS 15
01	**First Digit Absorption** For tie lines, enable or disable the ability to absorb (ignore) the first incoming digit. Use this to make the tie trunk compatible with 3- and 4-digit tie line service. This option does not apply to DISA.	0 = Off 1 = On	0	0
02	**Trunk Group Routing/ARS Access** This option enables or disables a DISA or tie trunk caller's ability to dial 9 for Trunk Group Routing or Automatic Route Selection (ARS).	0 = Off 1 = On	0	0
03	**Trunk Group Access** This option enables or disables a DISA or tie trunk caller's ability to access trunk groups for outside calls (Service Code 814).	0 = Off 1 = On	0	0
04	**Common Abbreviated Dialing** This option enables or disables a DISA or tie trunk caller's ability to use the system's Common Abbreviated Dialing.	0 = Off 1 = On	0	0
05	**Operator Calling** This option enables or disables a DISA or tie trunk caller's ability to dial 0 for the telephone system operator.	0 = Off 1 = On	0	0
06	**Internal Paging** This option enables or disables a DISA or tie trunk caller's ability to use the telephone system's Internal Paging.	0 = Off 1 = On	0	0
07	**External Paging** This option enables or disables a DISA or tie trunk caller's ability to use the telephone system's External Paging.	0 = Off 1 = On	0	0
08	**Direct Trunk Access** This option enables or disables a DISA or tie trunk caller's ability to use Direct Trunk Access (Service Code 815).	0 = Off 1 = On	0	0

Item No.	Item	Input Data	Default	
			COS 01-14	COS 15
09	**Forced Trunk Disconnect** <Not for ISDN T-point> This option enables or disables a tie trunk caller's ability to use Forced Trunk Disconnect (Service Code *26). This option is not available to DISA callers.	0 = Off 1 = On	0	0
10	**Call Forward Setting by Remote Via DISA** Enable or disable a DISA callers ability to use the Call Forward service codes (Programs 11-11-01 through 11-11-05).	0 = Off 1 = On	0	0
11	**DISA/Tie Trunk Barge In** This option enables or disables a DISA or tie trunk caller's ability to use the Barge In feature.	0 = Off 1 = On	0	0

Conditions

None

Feature Cross Reference

- Class of Service
- Direct Inward System Access (DISA)
- Tie Lines

Telephone Programming Instructions

To enter data for Program 20-14 (Class of Service Options for DISA/E&M):

1. Enter the programming mode.
2. 20 14

   ```
   20-14-01   FCTN Cls1
   Del._1digit_Dial        O:Of
    back   ↑      ↓   select
   ```

3. Enter the number of the item you want to program.

   ```
   20-14-nn   FCTN Clsnn
   nnnnn
     ←              →
   ```

4. Select the Class of Service number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 20 : System Option Setup
20-15 : Ring Cycle Setup

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 20-15 : Ring Cycle Setup** to define the ringing cycles for each ring type.

Input Data

Item No.	Incoming Signal Type	Ringing Cycle	Default
01	Normal Incoming Call on Trunk	1-13	3
02	PBX, CES Incoming Call		8
03	Incoming Internal Call		12
04	DID/DISA/VRS		8
05	DID		8
06	Dial-In in the E&M Tie Line		12
07	Door Box Ringing for SLT		8
08	Virtual Extension Ring		8
09	Callback/Transfer Ring		11
10	Alarm for SLT		5
11	VRS Waiting Message Incoming Call		6

Number	Ringing Cycle
1	On
2	On:2.0 / Off:4.0
3	On:1.0 / Off:2.0
4	On:0.5 / Off:0.5
5	On:0.25 / Off:0.25
6	On:0.5 / Off:0.5 / On:0.5 / Off:1.5
7	On:0.25 / Off:0.25 / On:0.25 / Off:5.25
8	On:0.375 / Off:0.25 / On:0.375 / Off:2.0
9	On:0.25 / Off:0.125 / On:0.25 / Off:0.125 / On:0.25 / Off:2.0
10	On:1.0 / Off:4.0

Number	Ringing Cycle
11	On:0.25 / Off:0.25 / On:0.25 / Off:4.25
12	On:1.0 / Off:3.0
13	On:0.25 / Off:0.25 / On:0.25 / Off:2.25

Conditions

None

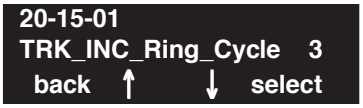
Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 20-15 (Ring Cycle Setup):

1. Enter the programming mode.
2. 20 15



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 20 : System Option Setup
20-16 : Selectable Display Messages

Level:	Aspire S	Aspire M/L/XL
SA	• Available.	• Available.

Description

Use **Program 20-16 : Selectable Display Messages** to enter the Selectable Display Messages. There are 20 alphanumeric messages, up to 24 characters long. Use the following chart when programming messages.

With Software Prior to 2.05:	
Use this keypad digit . . .	**When you want to. . .**
1	Enter characters: 1 @ [¥] ^ _ ‘ { | } ← → Press repeatedly to scroll through the list. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
2	Enter characters A-C, a-c, 2. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
3	Enter characters D-F, d-f, 3. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
4	Enter characters G-I, g-i, 4. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
5	Enter characters J-L, j-l, 5. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
6	Enter characters M-O, m-o, 6. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
7	Enter characters P-S, p-s, 7. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
8	Enter characters T-V, t-v, 8. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
9	Enter characters W-Z, w-z, 9. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
0	Enter characters: 0 ! “ # $ % & ‘ ( ) Press repeatedly to scroll through the list. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
*	Enter characters: * + , - . / : ; < = > ? Press repeatedly to scroll through the list. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
Soft Key Left/Right Arrows	Accepts an entry (only required if two letters on the same key are needed - ex: **TO**M) and moves cursor in the arrows direction.
CONF	Clear the character entry one character at a time.
CLEAR	Clear all the entries from the point of the flashing cursor and to the right.

With Software 2.05+:	
Use this keypad digit . . .	**When you want to. . .**
1	Enter characters: 1 @ [¥] ^ _ ` { | } → ← Á À Â Ã Ç É Ê ì ó
2	Enter characters A-C, a-c, 2.
3	Enter characters D-F, d-f, 3.
4	Enter characters G-I, g-i, 4.
5	Enter characters J-L, j-l, 5.
6	Enter characters M-O, m-o, 6.
7	Enter characters P-S, p-s, 7.
8	Enter characters T-V, t-v, 8.
9	Enter characters W-Z, w-z, 9.
0	Enter characters: 0 ! “ # $ % & ’ ( ) ô o ú ä ö ü α ε θ
*	Enter characters: * + , - . / : ; < = > ? π ∑ σ Ω ∞ ¢ £
#	# = Accepts an entry (only required if two letters on the same key are needed - ex: T**OM**). Pressing # again = Space. (In system programming mode, use the right arrow soft key instead to accept and/or add a space.)
CONF	Clear the character entry one character at a time.
CLEAR	Clear all the entries from the point of the flashing cursor and to the right.

When using i-Series telephones on the Aspire system, not all the same characters are available. Refer to the following chart for the i-Series characters:

With Software 2.05+ and i-Series Phones:	
Use this keypad digit . . .	**When you want to. . .**
1	Enter characters: 1 @ [¥] ^ _ ` { | } → ← å blank blank blank blank blank blank blank blank
2	Enter characters A-C, a-c, 2.
3	Enter characters D-F, d-f, 3.
4	Enter characters G-I, g-i, 4.
5	Enter characters J-L, j-l, 5.
6	Enter characters M-O, m-o, 6.
7	Enter characters P-S, p-s, 7.
8	Enter characters T-V, t-v, 8.
9	Enter characters W-Z, w-z, 9.
0	Enter characters: 0 ! “ # $ % & ’ ( ) blank blank blank ä ö ü α ε θ
*	Enter characters: * + , - . / : ; < = > ? π ∑ σ Ω ∞ ¢ £
#	# = Accepts an entry (only required if two letters on the same key are needed - ex: T**OM**). Pressing # again = Space.
CONF	Clear the character entry one character at a time.
CLEAR	Clear all the entries from the point of the flashing cursor and to the right.

Input Data

Selectable Display Message Number	01-20

Item No.	Text data
01	24 characters

Default

Number	Message
1	IN MEETING UNTIL ##:##
2	MEETING ROOM - ########
3	COME BACK ##:##
4	PLEASE CALL ###########
5	BUSY CALL AFTER ##:##
6	OUT FOR LUNCH BACK ##:##
7	BUSINESS TRIP BACK ##/##
8	BUSINESS TRIP ##########
9	GONE FOR THE DAY
10	ON VACATION UNTIL ##/##
11	MESSAGE 11
12	MESSAGE 12
13	MESSAGE 13
14	MESSAGE 14
15	MESSAGE 15
16	MESSAGE 16
17	MESSAGE 17
18	MESSAGE 18
19	MESSAGE 19
20	MESSAGE 20

Conditions

Time value "## : ##" must be followed by two spaces.

Feature Cross Reference

- Selectable Display Messages

Telephone Programming Instructions

To enter data for Program 20-16 (Selectable Display Messages):

1. Enter the programming mode.
2. 20 16

   ```
   20-16-01  Text Message1
   IN MEETING UNTIL ##:##
    back   ↑     ↓   select
   ```

3. Enter the number of the item you want to program.

   ```
   20-16-nn  Text Messagenn
   nnnnn
     ←            →
   ```

4. Select the text message number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 20 : System Option Setup
20-17 : Operator's Extension

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use Program **20-17 : Operator's Extension** to designate an operator. When an extension user dials "0" or "9" (defined by Program 11-01 Type 5), calls go to the operator selected in this program.

If you don't assign an extension in Program 90-11-01, system alarms appear on the extension assigned in this option.

Input Data

Operator Number	1-8

Item No.	Item	Input Data	Default	Related Program
01	**Operator's Extension Number** Define the extension numbers which are to be used as operators.	Up to 8 digits	301	11-01 20-01-01
02	**Operator Console Mode** Determine if the operator's keyset will act as a normal keyset (0) or if keys 13-24 will be used for Personal Park of outside calls (1). With this option, an operator may not need a DSS Console.	0 = Normal keyset 1 = Special Operator Console	0	

Conditions

None

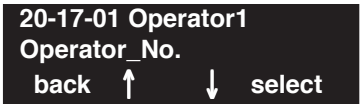
Feature Cross Reference

- Intercom

Telephone Programming Instructions

To enter data for Program 20-17 (Operator's Extension):

1. Enter the programming mode.
2. 20 17



3. Enter the number of the item you want to program.

4. Select the operator number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 20 : System Option Setup

20-18 : Service Tone Timers

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 20-18 : Service Tone Timer** to set the values for the system service tone timers. Refer to the following chart for a description of each option, its range and default setting.

Input Data

Item No.	Item	Input Data	Default	Description	Related Program
01	Extension Dial Tone Time	0-64800 seconds	120	After getting Intercom dial tone, a keyset user has this interval to dial the first digit of the Intercom call.	
02	Busy tone timer	0-64800 seconds	15		
03	Congestion tone	0-64800 seconds	10	A Busy Tone when system resources run short. (such as DTMF receiver resources)	
04	Call Waiting Tone Timer	0-64800 seconds	10	This option sets the interval between Call Waiting tones. This timer also sets the interval between Off Hook Signaling alerts.	
05	Keyset Confirmation Tone	0-64800 seconds	10		
06	Interval of call waiting tone	0-64800 seconds	10		
07	Intrusion Tone Repeat Time	0-64800 seconds	0	After a call is interrupted (such as Barge In, Voice Mail Conversation Recording, Voice Over, etc), the system repeats the Intrusion Tone after this interval. Normally, you should enter 0 to disable this interval.	
08	Conference Tone Interval	0-64800 seconds	0		
09	Warning Beep Tone Signaling Interval	0-64800 seconds	60		14-01-18

Conditions

None

Feature Cross Reference

- Distinctive Ringing, Tones, and Flash Patterns

Telephone Programming Instructions

To enter data for Program 20-18 (Service Tone Timers):

1. Enter the programming mode.
2. 20 18

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 20 : System Option Setup
20-19 : System Options for Caller ID

Level:
IN

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Item 5 requires software 4.0E+.	• Item 5 requires software 4.0E+.

Description

Use **Program 20-19 : System Options for Caller ID** to define the system options for the Caller ID feature.

Input Data

Item No.	Item	Input Data	Default
01	**Caller ID Displaying Format if Displaying Digits are more than 12 digits.** When Caller ID has more than 12 digits, determine which digits should be shown - the first 10 (0) or the last 10 (1).	0 = First 10 digits 1 = Last 10 digits	0
02	**Caller ID Wait Timer** When an incoming CO call is received, the system starts the timer. It will wait the programmed time for Caller ID information from telco before connecting the CO call.	0-30 seconds	5
03	**Caller ID Edit Mode** If Caller ID Edit Mode is disabled (0), no trunk access code will be added to the Caller ID. If this option is enabled (1), the trunk access code entered in Program 10-02-05 will be added to the beginning of the Caller ID.	0 = off 1 = on	0
04	**Wait Facility IE Timer** This timer is used with ISDN trunks to determine how long the system will wait for the Caller ID name from the telco.	0-64800 seconds	10
05	**Caller ID Sender Queuing Timer** With the Caller ID Sender Queuing feature, determine how long an incoming call will wait in queue for a DSP resource to become available. If a resource becomes available during this time, the call will immediately ring the SLT with Caller ID. If the timer expires before a resource becomes available, then system rings the single line telephone without Caller ID (until the timer expires, the SLT will not ring). If the queuing timer is set to "0", the system does not queue the incoming call.	0-64800 seconds	0

Conditions

None

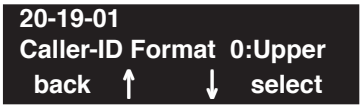
Feature Cross Reference

- Caller ID

Telephone Programming Instructions

To enter data for Program 20-19 (System Options for Caller ID):

1. Enter the programming mode.
2. 20 19



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 20 : System Option Setup

20-20 : Message Setup for Non-Caller ID Data

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 20-20 : Message Setup for Non-Caller ID Data** to define the messages which will be displayed when no Caller ID information is received.

Input Data

Item No.	Item	Input Data	Default
01	Private Call	24 Alphanumeric Characters	PRIVATE
02	Call from Out of Service Area	24 Alphanumeric Characters	OUT OF AREA
03	Call Information with Error	24 Alphanumeric Characters	NO CALL INFO

Conditions

None

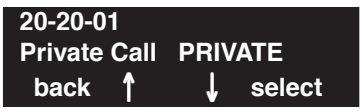
Feature Cross Reference

- Caller ID

Telephone Programming Instructions

To enter data for Program 20-20 (Message Setup for Non-Caller ID Data):

1. Enter the programming mode.
2. 20 20



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 20-21 : System Options for Long Conversation** to define the system options for the Long Conversation feature.

Input Data

Item No.	Item	Input Data	Default	Related Program
01	**Long Conversation Alarm 1** The warning tone for long toll calls sounds after this interval.	0-64800 seconds	170	14-01-15
02	**Long Conversation Alarm 2** After the initial long toll call warning tone, additional warning tones sound after this interval.	0-64800 seconds	180	14-01-15
03	**Long Conversation Cutoff for Incoming Call** This timer determines how long the system will wait before disconnecting an incoming call.	0-64800 seconds	0	14-01-14
04	**Long Conversation Cutoff for Outgoing Call** This timer determines how long the system will wait before disconnecting an outgoing call.	0-64800 seconds	0	14-01-14

Conditions

None

Feature Cross Reference

- Long Conversation Cutoff

Telephone Programming Instructions

To enter data for Program 20-21 (System Options for Long Conversation):

1. Enter the programming mode.
2. 20 21

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Not Available.	• Available.

Description

Use **Program 20-22 : System Options for Aspire Wireless Service** to define the time the system waits before determining the Aspire Wireless (DECT) phone is out of range. For incoming calls, the timer begins when the call is received. If the time defined here expires before the Aspire Wireless phone starts to ring, the system determines the phone is out of range and provides the out-of-range services (indicates out-of range, transfers the call to voice mail or to another extension).

Input Data

Item No.	Input Data	Default	Related Program
05	0-64800 seconds	8	

Conditions

None

Feature Cross Reference

- Aspire Wireless

Telephone Programming Instructions

To enter data for Program 20-22 (System Options for Aspire Wireless Service):

1. Enter the programming mode.
2. 20 22

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 20-23 : System Options for CTI** to define the system options for the CTI feature.

Input Data

Item No.	Item	Input Data	Default
01	Delayed ring timer for CTI	0-64800 seconds	30
02	ALERT replay time (CTI)	0-64800 seconds	8
03	**Trunk Virtual Bridge - TSP Driver** Enable or disable the system's ability to send trunk or virtual extension information to the TSP driver.	0 = Disable 1 = Enable	0
04	The timer which waits for an off-hook for SLT	0-64800 seconds	30

Conditions

None

Feature Cross Reference

- Computer Telephony Integration (CTI) Applications

Telephone Programming Instructions

To enter data for Program 20-23 (System Options for CTI Service):

1. Enter the programming mode.
2. 20 23

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available. • Option 14 available with 2.63+ software	• Available. • Option 14 available with 2.63+ software.

Description

Use **Program 20-25 : ISDN Options** to define the ISDN system options.

Input Data

Item No.	Item	Input Data	Default
01	Send the Release Message After Subscriber Hangs Up	0 = Service Off 1 = Service On	1
02	Progress Indicate Information Element Detect	0 = Service Off 1 = Service On	1
03	Bearer Capability Select from SLT Outgoing	0 = 3.1KHz Audio 1 = Speech	0
04	**Send DT Until User Dials the First Digit (Overlap Sending Mode)** With Overlap Sending Mode, if the network side stops dial tone when CLI is included in the SETUP message, the system sends dial tone until the user dials the first digit instead of the network.	0 = Service Off 1 = Service On	0
05	T305 Timer Start After Sending Disconnect Message	0 = Service Off 1 = Service On	0
06	Call Proceeding Send Mode	0 = Service Off 1 = Service On	0
07	Local Busy Tone Mode Set When Disconnect Message Received	0 = Local Busy Tone Off 1 = Busy Tone from NT (network side)	0
08	Use of Low Layer Compatibility (LLC)	0 = Disable 1 = Enable	1
09	Use of High Layer Compatibility (HLC) Sending	0 = Disable 1 = Enable	1
10	S-Point Terminal Seizes Analog Trunk	0 = Disable 1 = Enable	0
11	Automatic Changing System Clock When Date/Time Information Element Received	0 = Disable 1 = Enable	0

12	Incoming Calls Forwarded Out Automatically Return Connect Message When Outgoing Call Receives Alerting Message	0 = Disable 1 = Enable	0
13	Busy Tone Mode	0 = Disable 1 = Enable	0
14	**Operation Mode When Second T303 Timer Expires** This option can be used to determine whether or not a release message is sent when the second T303 timer expires.	0 = Normal 1 = Send Release Message	0

Conditions

None

Feature Cross Reference

- ISDN Compatibility

Telephone Programming Instructions

To enter data for Program 20-25 (ISDN Options):

1. Enter the programming mode.
2. 20 25

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 4.0E+.	• Available with software 4.0E+.

Description

Use **Program 20-28 : System Option for Trunk to Trunk Conversations** to define the Iconversation continue/disconnection options.

Input Data

Item No.	Item	Input Data	Default
01	**Conversation Continue Code** When Program 14-01-25 is enabled, determine the 1-digit code the user should dial to extend the conversation length for the time defined in 20-28-03. If the Continue and Disconnect codes are programmed the same (e.g., #), the system will follow the "Continue" operation. Using the Continue code before the warning tone is heard has no action.	0 - 9, *, #	No Setting
02	**Conversation Disconnect Code** When Program 14-01-25 is enabled, determine the 1-digit code the user should dial to immediately disconnect their call. Using the Disconnect code before the warning tone is heard will disconnect the call.	0 - 9, *, #	No Setting
03	**Conversation Extend Time** When Program 14-01-25 is enabled, determine the length of time a call will be extended when the user dials the Continue code (defined in 20-28-01).	0 - 64800 (seconds)	No Setting

Conditions

None

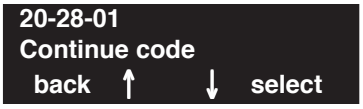
Feature Cross Reference

- Direct Inward System Access (DISA)
- Tandem Trunking (Unsupervised Conference)

Telephone Programming Instructions

To enter data for Program 20-28 (System Option for Trunk to Trunk Conversations):

1. Enter the programming mode.
2. 20 28



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 21-01 : System Options for Outgoing Calls** to set the system options for Outgoing Call Service.

Input Data

Item No.	Item	Input Data	Default	Related Program
01	Seizure Trunk Line Mode	0 = Priority route 1 = Circular route	0	14-05 14-06
02	**Intercom Interdigit Time** When placing Intercom calls, extension users must dial each digit within this interval.	0-64800 Seconds	10	
03	**Trunk Interdigit Time (External)** The system waits for this timer to expire before placing the call in a talk state (Call Timer starts after timer expires, Voice Over and Barge-In are not allowed until after timer expires). If set to “0”, Voice Over and Barge In will not work for external calls. This timer affects CO and PRI outdialing.	0 = Disabled 1-64800 Seconds	5	14-02-08
04	**Dial Tone Detection Time** If dial tone detection is enabled, the system will wait this interval for the Telco to return dial tone. When the interval expires, the system assumes dial tone is not present. To disable this timer (and have the system wait continuously), enter 0.	0-64800 Seconds	5	14-02-05 35-05-01
05	**Disconnect Time** The system waits for this timer to expire before disconnecting a call when dial tone is not detected.	0-64800 Seconds	3	
06	Dial pause at first digit	0-64800 Seconds	1	
07	**Toll Restriction Override Time** After dialing the Toll Restriction Override codes, the system removes Toll Restriction from the extension for this interval.	0-64800 Seconds	10	20-08-06 21-07
08	Preset dial display hold time	0-64800 Seconds	10	

Program 21 : Outgoing Call Setup
21-01 : System Options for Outgoing Calls

Item No.	Item	Input Data	Default	Related Program
09	**Ringdown Extension Timer** A Ringdown extension automatically calls its programmed destination after this interval.	0-64800 Seconds	5	20-08-09 21-11
10	**Dial Digits for Toll Restriction Path** If this option is programmed with an entry other than "0", a call will not have a talk path unless the user dials at least the number of digits entered in this option when placing an outgoing call. This means that an entry of 4 or higher in this program will cause a problem when dialing 911. Since it is only a 3-digit number, the call will not have a talk path, preventing the emergency dispatcher from hearing the caller. It is recommended that this option be kept at its default setting of "0" to prevent any problems with dialing 911.	0-24	0	
11	Inter-Digit Time for Toll Restriction Path Control	0-60	0	
12	**Dial 911 Routing Without Trunk Access** If enabled (1), an extension user can dial 911 without first dialing a trunk access code or pressing a line key. If disabled (0), an extension user must dial a trunk access code (e.g., 9) or press a line key before dialing 911.	0 = Trunk Access Code Required 1 = Trunk Access Code Not Required	1	
13	**Alarm Ring Timer (E911)** Use this option to set the duration of the E911 Alarm Ring Time. If set for 0, the E911 Alarm will not ring.	0, 1-64800 Seconds (0 = Off)	0	11-12-56 20-08-16
14	**Forced Account Code Inter-digit Timer** The system waits this interval for a user to enter a Forced Account code.	0-64800 Seconds	3	
15	**Outgoing Disable on Incoming Line** Enable or disable the Outgoing Disable on Incoming Line feature.	0 = Disable 1 = Enable	0	
16	**Supervise Dial Detection Timer** With the Outgoing Disable on Incoming Line feature, if dial tone is not detected after the extension answers an incoming line, the system determines the call is unable to complete and releases the DTMF receiver.	0-64800 Seconds	20	

Item No.	Item	Input Data	Default	Related Program
17	**Restriction Digit in Outgoing Disable on Incoming Line** With the Outgoing Disable on Incoming Line feature, determine the number of digits to be dialed before the call should be disconnected.	Digits 0-9	4	

Conditions

None

Feature Cross Reference

- Central Office Calls, Placing

Telephone Programming Instructions

To enter data for Program 21-01 (System Options for Outgoing Service):

1. Enter the programming mode.
2. 21 01

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 21 : Outgoing Call Setup

21-02 : Trunk Group Routing for Extensions

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 21-02 : Trunk Group Routing for Extensions** to assign Program 14-06 routes to extensions.

Input Data

Extension Number	Max. 8 digits

Item No.	Day/Night Mode	Route Table Number	Default	Related Program
01	Aspire S: 1-4 Aspire: 1-8	0-100 (0-No setting)	1	14-06 14-01-07

Conditions

None

Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 21-02 (Trunk Group Routing for Extensions):

1. Enter the programming mode.
2. 21 02

```
21-02-01    TEL
Mode1    =T.G.R.  1
 back    ↑    ↓   select
```

3. Enter the number of the item you want to program.

```
21-02-nn    TELnnn
nnnnn
  ←              →
```

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 21 : Outgoing Call Setup
21-03 : Trunk Group Routing for Trunks

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 21-03 : Trunk Group Routing for Trunks** to set the Trunk Route Table for Automatic External Call Forward. The Route Table is set in Program 14-06.

Input Data

Trunk Port Number	Aspire S: 1-8 Aspire: 001-200

Item No.	Day/Night Mode	Route Table Number	Default	Related Program
01	Aspire S: 1-4 Aspire: 1-8	Aspire S: 0-8 Aspire: 0-100 (0 = No setting)	1	14-06 14-07-01

Conditions

None

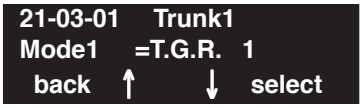
Feature Cross Reference

- Trunk Group Routing

Telephone Programming Instructions

To enter data for Program 21-03 (Trunk Group Routing for Trunks):

1. Enter the programming mode.
2. 21 03



3. Enter the number of the item you want to program.

4. Select the trunk number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 21 : Outgoing Call Setup
21-04 : Toll Restriction Class for Extensions

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 21-04 : Toll Restriction Class** to assign a Toll Restriction class to an extension. The details of Toll Restriction are defined in Program 21-05 and 21-06.

Input Data

Extension Number	Max. 8 digits

Item No.	Day/Night Mode	Restriction Class	Default	Related Program
01	1-9 9: (power failure mode)	1-15	2	14-01-08 21-05

Conditions

None

Feature Cross Reference

- Toll Restriction

Telephone Programming Instructions

To enter data for Program 21-04 (Toll Restriction Class for Extensions):

1. Enter the programming mode.
2. 21 04

```
21-04-01    TEL
Mode1    =T/R_Class 2
 back   ↑      ↓   select
```

3. Enter the number of the item you want to program.

```
21-04-nn    TELnnn
nnnnn
  ←             →
```

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 21 : Outgoing Call Setup

21-05 : Toll Restriction Class

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 21-05 : Toll Restriction Class** to set the system's Toll Restriction classes (1-15).

Input Data

Toll Restriction Class Number	1-15

Item No.	Item	Input Data	Description	Related Program
01	International call restriction table	0 = Unassigned 1 = Assigned	This option assigns/unassigns the International Call Restrict Table for the Toll Restriction Class you are programming. Enter International Call Restrict Table data in Program 21-06-01.	21-06-01
02	International call permit code table	0 = Unassigned 1 = Assigned	This option assigns/unassigns the International Call Permit Table for the Toll Restriction Class you are programming. Enter International Call Permit Table data in Program 21-06-02.	21-06-02
03	Not Used			
04	Maximum Number of Digits Table Assignment	1-4 = Table 0 = Disable	Select the table (defined in 21-06-03) to be used to determine the maximum number of digits allowed for outgoing calls.	21-06-03
05	Common permit code table	0 = Unassigned 1 = Assigned	It chooses whether the table set up by 21-06-04 is referred to, or not referred to.	21-06-04
06	Common restriction table	0 = Unassigned 1 = Assigned	It chooses whether the table set up by 21-06-05 is referred to, or not referred to.	21-06-05
07	Permit code table	1-4 = Table 0 = Disable	Set the tables 1-4 when referring to the table set up by 21-06-06.	21-06-06
08	Restriction table	1-4 = Table 0 = Disable	Set the tables 1-4 when referring to the table set up by 21-06-07.	21-06-07
09	Restriction for common abbreviated dials	0 = Does not restrict 1 = Following restriction check	Use this option to enable/disable Toll Restriction for Common Abbreviated Dialing numbers. If enabled, Common Abbreviated Dialing numbers have the same restrictions as manually dialed numbers.	
10	Restriction for group abbreviated dials	0 = Does not restrict 1 = Following restriction check	Use this option to enable/disable Toll Restriction for Group Abbreviated Dialing numbers. If enabled, Group Abbreviated Dialing numbers have the same restrictions as manually dialed numbers.	

Item No.	Item	Input Data	Description	Related Program
11	Intercom Call Restriction	0 = Disable 1 = Enable	This option determines whether an ICM incoming call is restricted.	
12	PBX Call Restriction	0 = Disable 1 = Enable	Use this option to set how the system Toll Restricts calls over PBX trunks. If you enable PBX Toll Restriction, the system begins Toll Restriction after the PBX access code. The user cannot dial a PBX extension. If you disable PBX Toll Restriction, the system only restricts calls that contain the PBX access code. The system does not restrict calls to PBX extensions. Refer to the PBX compatibility feature. Make sure Program 21-05-04 (Maximum Number of Digits Table Assignment) allows for PBX Toll Call Dialing (normally 12 digits).	
13	Restriction of Tie Line Calls	0 = Disable 1 = Enable	It chooses whether the toll restriction of the dial set up by 34-08 is enabled or disabled.	34-08
14	Restrict Trunk Transfer for Incomplete Dial	---	***- Not Used in U.S. -***	
15	Restrict Common Hold for Incomplete Dial	---	***- Not Used in U.S. -***	

Default

	Item No														
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Class No. 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Class No. 2	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
Class No. 3	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0
Class No. 4	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0
Class No. 5	1	1	1	0	1	1	0	0	1	0	0	0	0	0	0
Class No. 6	1	1	1	0	1	1	0	0	1	1	0	0	0	0	0
Class No. 7	1	1	1	0	1	1	0	0	1	1	1	0	0	0	0
Class No. 8	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0
:	:	:	:	:	:	:	:	:	:	:	:	:	:	0	0
Class No. 15	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0

Conditions

None

Program 21 : Outgoing Call Setup
21-05 : Toll Restriction Class

Feature Cross Reference

- Toll Restriction

Telephone Programming Instructions

To enter data for Program 21-05 (Toll Restriction Class):

1. Enter the programming mode.
2. 21 05

3. Enter the number of the item you want to program.

4. Select the Deny Table number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:
IN

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Item 04: Predefined entries in tables 4-9 available in the Common Permit Code Table.	• Item 04: Predefined entries in tables 4-9 added to the Common Permit Code Table with software 1.03+.

Description

Use **Program 21-06 : Toll Restriction Table Data Setup** to set the system's Toll Restriction data. Dial 1-9, 0, *, # can be entered in each table.

Input Data

Item No.	Item	Table	Input Data	Default
01	**International Call Restriction Table** This option lets you program the Restrict Table for international calls. The system has 10 International Call Restrict Tables. Each entry can be up to four digits long.	1-10	Dial (Up to 4 digits)	Table 1-10 = No Setting
02	**International Call Permit Code Table** This option lets you program the Permit Table for international calls. The system has 20 International Call Permit Table. Each entry can be up to six digits long, using.	1-20	Dial (Up to 6 digits)	No Setting
03	**Maximum Number Digits Table Assignment** This option selects the maximum number of digits allowed in outgoing calls for each table.	1-4	4-30	Tables 1 - 4 = 30
04	**Common Permit Code Table** This option lets you program the Common Permit Code Table. This table contains up to 10 codes you commonly allow users to dial.	1-10	Dial (Up to 4 digits)	Table 1 = 911 Table 2 = 1800 Table 3 = 1888 Table 4 = 1822 Table 5 = 1833 Table 6 = 1844 Table 7 = 1855 Table 8 = 1866 Table 9 = 1877 Table 10 = No Setting
05	**Common Restriction Table** This option lets you program the Common Restrict Code Table. This table contains up to 10 codes you commonly prevent users from dialing.	1-10	Dial (Up to 12 digits)	Table 1 = 900 Table 2 = 1900 Table 3 = 976 Tables 4 = 10 = No Setting

Program 21 : Outgoing Call Setup
21-06 : Toll Restriction Table Data Setup

Item No.	Item	Table	Input Data	Default
06	**Permit Code Table** This option lets you program the Permit Code Tables. If the system has Toll Restriction enabled, users can dial numbers only if permitted by these tables and the Common Permit Table (21-06-04). There are four Permit Code Tables, with up to 200 entries in each table. The system permits calls exactly as you enter the code.	1-4 (table) 1-60 (Entry)	Dial (Up to 12 digits)	Table 1 - 4 = No Setting
07	**Restriction Table** This option lets you program the Restrict Code Tables. If the system has Toll Restriction enabled, users cannot dial numbers listed in these tables. There are four Restrict Code Tables, with up to 200 entries in each table. The system restricts calls exactly as you enter the code.	1-4 (table) 1-60 (Entry)	Dial (Up to 12 digits)	Table 1 - 4 = No Setting
08	**PBX Access Code** Use this option to enter the PBX Access Code. When the system is behind a PBX, this is the code users dial to access a PBX trunk. Toll Restriction begins after the PBX access code. For PBX trunks (Program 14-04) the system only Toll Restricts calls that contain the access code. Always program this option when the system is behind a PBX, even if you don't want to use Toll Restriction. PBX Access Codes can be up to 2 digits, using 0-9, #, * and LINE KEY 1 (don't care). When using Account Codes, do not use an asterisk within a PBX access code. Otherwise, after the *, the trunk would stop sending digits to the central office. Entries 1-4 correspond to the 4 PBX Access Codes. Each code can have up to 2 digits.	1-4	Dial (Up to 2 digits)	Table 1 - 4 = No Setting
09	**Specific Dial Outgoing Code** ***This option is not currently used*** This option can be used to exempt digits from toll restriction. The digits entered in this option will bypass the toll restriction programming. The digits to be exempt can be positioned before or after the entry in Program 21-06-10.	1-20	Dial (Up to 8 digits)	No Setting
10	**Outgoing Call Code Setup** ***This option is not currently used*** This option can be used to exempt digits from toll restriction. The digits entered in this option will bypass the toll restriction programming. This is similar to Program 21-06-09, however, these digits must be first. For example, if a system restricts international dialing (011), it could be possible to allow the system to dial 1010XXX + 011 or *67 + 011. In order to dial *67 + 1010XXX + 011, *67 would be entered in Program 21-06-10 and 1010XXX would be entered in Program 21-06-09.	1-20	Dial (Up to 4 digits)	No Setting

Conditions

None

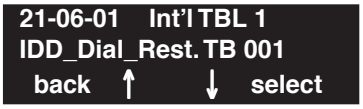
Feature Cross Reference

- Toll Restriction

Telephone Programming Instructions

To enter data for Program 21-06 (Toll Restriction Table Data Setup):

1. Enter the programming mode.
2. 21 06



3. Enter the number of the item you want to program.

4. Select the International Table number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 21 : Outgoing Call Setup

21-07 : Toll Restriction Override Password Setup

Level:	Aspire S	Aspire M/L/XL
SA	• Available.	• Available.

Description

Use **Program 21-07 : Toll Restriction Override Password Setup** to assign Toll Restriction Override codes to extensions. Each code must be four digits long, using any combination of 0-9, # and *. Each extension can have a separate code, or many extensions can share the same override code.

Input Data

Extension Number	Max. 8 digits

Item No.	Password	Default	Related Program
01	4 digits fixed	No setting	11-11-34 21-01-07 20-08-06

Conditions

None

Feature Cross Reference

- Toll Restriction Override

Telephone Programming Instructions

To enter data for Program 21-07 (Toll Restriction Override Password Setup):

1. Enter the programming mode.
2. 21 07

3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 21 : Outgoing Call Setup
21-08 : Repeat Dial Setup

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 21-08 : Repeat Dial Setup** to define the automatic Repeat Dial data.

Input Data

Item No.	Item	Input Data	Default	Related Program
01	**Repeat Redial Count** Set how many times a Repeat Redial will automatically repeat if the call does not go through.	0-255	3	
02	**Repeat Redial Interval Time** This timer sets the interval between Repeat Redial attempts.	0-64800	60	
03	**Repeat Dial Calling Timer** After dialing the trunk call, Repeat Redial maintains the call after this interval. After this interval, the system terminates the call, waits the Repeat Redial Time (Timer 02) and tries again.	0-64800	30	
04	**Time for Send Busy Tone for ISDN Trunk** Set the timer (sec) to send out Busy Tone with an ISDN line, when called party is in busy.	0-64800	0	

Conditions

None

Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 21-08 (Repeat Dial Setup):

1. Enter the programming mode.
2. 21 08

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 21 : Outgoing Call Setup
21-09 : Dial Block Setup

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 21-09 : Dial Block Setup** to define the Dial Blocking Toll Restriction Class and Dial Block Password to be used by the Supervisor extension.

Input Data

Item No.	Item	Input Data	Default
01	**Toll Restriction Class With Dial Block** Assign a Toll Restriction Class of Service when the Dial Block feature is used.	1-15	15
02	**Supervisor Password** Assign a 4-digit password to be used by the supervisor to enable or disable Dial Block for other extensions.	0-9, *, # (4-digit fixed)	No setting

Conditions

This function works by password and Class of Service control (the supervisor is not an assigned extension). If Dial Block is available for all Classes of Service, everyone may become a supervisor if they know the Dial Block password.

Feature Cross Reference

- Toll Restriction

Telephone Programming Instructions

To enter data for Program 21-09 (Dial Block Setup):

1. Enter the programming mode.
2. 21 09

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 21 : Outgoing Call Setup
21-10 : Dial Block Restriction Class Per Extensions

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 21-10 : Dial Block Restriction Class Per Extensions** to define the Toll Restriction Class to each extension when the extension is set for Dial Block Restriction. If this data is "0", Toll Restriction Class follows Program 21-09-01.

Input Data

Extension Number	Max. 8 digit

Item No.	Toll Restriction Class	Default
01	0,1-15 (0:No Setting)	0 (No Setting)

Conditions

None

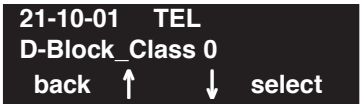
Feature Cross Reference

- Toll Restriction

Telephone Programming Instructions

To enter data for Program 21-10 (Dial Block Restriction Class Per Extensions):

1. Enter the programming mode.
2. 21 10



3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 21 : Outgoing Call Setup
21-11 : Extension Ringdown (Hotline) Assignment

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 21-11 : Extension Ringdown (Hotline) Assignment** to define the Hotline destination number for each extension number.

Input Data

Extension Number	Max. 8 digits

Item No.	Hotline Destination Number	Default	Related Program
01	0, *, #, Pause, Hook Flash, @ (Code to wait for a response) (Max. 24 digits)	No setting	20-08-09 21-01-09

Conditions

None

Feature Cross Reference

- Ringdown Extension

Telephone Programming Instructions

To enter data for Program 21-11 (Extension Ringdown (Hotline) Assignment):

1. Enter the programming mode.
2. 21 11

3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 21 : Outgoing Call Setup
21-12 : ISDN Calling Party Number Setup for Trunks

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 21-12 : ISDN Calling Party Number Setup for Trunks** to assign Calling Party Numbers for each trunk (maximum 16 digits per entry). When a call is made by an extension which does not have an Extension Calling Number assigned (Program 21-13), the system sends the calling number for the ISDN trunk defined in 21-12.

Note: If the Calling Party Number is assigned in both Programs 21-12 and 21-13, the system sends the data in Program 21-13.

Input Data

Trunk Port Number	001-200

Item No.	Calling Party Number Data	Default
01	1-0, *, # (Max. 16 digits)	No setting

Conditions

None

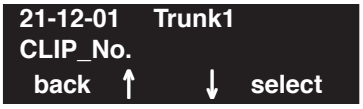
Feature Cross Reference

- ISDN Compatibility

Telephone Programming Instructions

To enter data for Program 21-12 (ISDN Calling Party Number Setup for Trunks):

1. Enter the programming mode.
2. 21 12



3. Enter the number of the item you want to program.

4. Select the trunk number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 21 : Outgoing Call Setup
21-13 : ISDN Calling Party Number Setup for Extensions

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 21-13 : ISDN Calling Party Number Setup for Extensions** to assign each extension a Calling Party Number (maximum 16 digits per entry). The calling number is the subscriber number of the dial-in number. When a call is made by an extension which does not have an Extension Calling Number assigned (Program 21-12), the system sends the calling number for the ISDN trunk defined in Program 21-13.

Note: If a Calling Party Number is assigned in both Programs 21-12 and 21-13, the system sends the data in Program 21-13.

Input Data

Extension Number	Max. 8 digits

Item No.	Calling Party Number Data	Default
01	1-0, *, # (Max. 16 digits)	No setting

Conditions

None

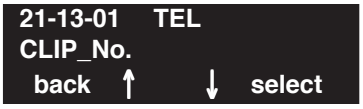
Feature Cross Reference

- ISDN Compatibility

Telephone Programming Instructions

To enter data for Program 21-13 (ISDN Calling Party Number Setup for Extensions):

1. Enter the programming mode.
2. 21 13



3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 21 : Outgoing Call Setup
21-14 : Walking Toll Restriction Password Setup

Level:	Aspire S	Aspire M/L/XL
SA	• Available.	• Available.

Description

Use **Program 21-14 : Walking Toll Restriction Password Setup** to assign the password and Toll Restriction Class for Walking Toll Restriction. Each code is six digits long, using any combination of 0-9, # and *.

Input Data

ID Table Number	1-500

Item No.	Item	Input Data	Default
01	User ID	Dial (6 digits)	No setting
02	Walking Toll Restriction Class Number	1-15	1

Conditions

None

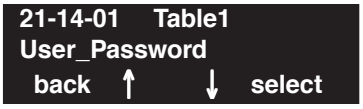
Feature Cross Reference

- Toll Restriction

Telephone Programming Instructions

To enter data for Program 21-14 (Walking Toll Restriction Password Setup):

1. Enter the programming mode.
2. 21 14



3. Enter the number of the item you want to program.

4. Select the ID Table number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 21 : Outgoing Call Setup

21-15 : Individual Trunk Group Routing for Extensions

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 21-15 : Individual Trunk Group Route for Extensions** to designate the alternate trunk access route accessed when a user dials the Alternate Trunk Route Access Code. Refer to Program 11-09-02 : Alternate Trunk Access Code when setting up alternate trunk codes. Turn to Program 14-06 : Trunk Group Routing to set up the trunk routes. When entering data for this option, enter the route number or 0 to prevent routing.

Input Data

Extension Number	Max. 8 digits

Item No.	Day/Night Mode	Route Table Number	Default
01	Aspire S: 1-4 Aspire: 1-8	Aspire S: 0-8 Aspire: 0-100 (0 = no setting)	0

Conditions

None

Feature Cross Reference

- Central Office Calls, Placing

Telephone Programming Instructions

To enter data for Program 21-15 (Individual Trunk Group Routing for Extensions):

1. Enter the programming mode.
2. 21 15

3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 21 : Outgoing Call Setup
21-16 : Trunk Group Routing for Networks

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 21-16 : Trunk Group Routing for Networks** to assign Program 14-06 routes for a networked system. This is required to seize the trunk in a networked system (Extension in System A tries to make an external call using a trunk in System B).

Input Data

System ID	01-50

Item No.	Day/Night Mode	Route Table Number	Default	Related Program
01	Aspire S: 1-4 Aspire: 1-8	Aspire S: 0-8 Aspire: 0-100 (0=No setting)	1	14-06

Conditions

None

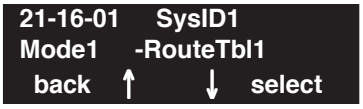
Feature Cross Reference

- Networking

Telephone Programming Instructions

To enter data for Program 21-16 (Trunk Group Routing for Networks):

1. Enter the programming mode.
2. 21 16



3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 21 : Outgoing Call Setup

21-17 : IP (H.323/SIP) Trunk Calling Party Number Setup for Trunks

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 2.09+.	• Available with software 2.09+.

Description

Use **Program 21-17 : IP (H.323/SIP) Trunk Calling Party Number Setup for Trunks** to allow for the Calling Party Number to be displayed for IP trunks when the VoIP feature is used:

Input Data

Trunks	Aspire S: 1-8 Aspire: 001-200

Item	Description	Input Data	Default	Related Program
01	**Party Number** Enter the Calling Party Number to be displayed for each IP trunk used. The assigned number is sent to the central office when the caller places an outgoing call. If the calling Party Number is assigned by both 21-17 and 21-18/21-19, then the system uses the entry in 21-18/21-19.	16 digits maximum (1-9, *, #)	No Entry	21-18 21-19

Conditions

None

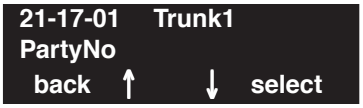
Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 21-17 (IP (H.323/SIP) Trunk Calling Party Number Setup for Trunks):

1. Enter the programming mode.
2. 21 17



3. Enter the number of the item you want to program.

4. Select the trunk number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 21 : Outgoing Call Setup

21-18 : IP (H.323) Trunk Calling Party Number Setup for Extensions

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 2.09+.	• Available with software 2.09+.

Description

Use **Program 21-18 : IP Trunk Calling Party Number Setup for Extensions** to allow for the Calling Party Number to be displayed for IP extensions when the VoIP feature is used:

Input Data

Extensions	301 - 5312

Item	Description	Input Data	Default	Related Program
01	**Party Number** Enter the Calling Party Number to be displayed for each IP extension used. If the calling Party Number is assigned by both 21-17 and 21-18/ 21-19, then the system uses the entry in 21-18/ 21-19.	16 digits maximum	No Entry	21-17 21-19

Conditions

None

Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 21-18 : IP (H.323) Trunk Calling Party Number Setup for Extensions):

1. Enter the programming mode.
2. 21 18

3. Enter the number of the item you want to program.

4. Select the extension number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 21 : Outgoing Call Setup

21-19 : IP (SIP) Trunk Calling Party Number Setup for Extensions

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 2.09+.	• Available with software 2.09+.

Description

Use **Program 21-19 : IP (SIP) Trunk Calling Party Number Setup for Extensions** to allow for the Calling Party Number to be displayed for IP extensions when the VoIP feature is used:

Input Data

Extensions	301 - 5312

Item	Description	Input Data	Default	Related Program
01	**Party Number** Enter the Calling Party Number to be displayed for each IP extension used. The assigned number is sent to the central office when the caller places an outgoing call. If the Calling Party Number is assigned by both Program 21-17 and 21-18/21-19, then the system uses the data in Program 21-18/21-19.	16 digits maximum	No Entry	21-17 21-18

Conditions

None

Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 21-19 : IP (SIP) Trunk Calling Party Number Setup for Extensions):

1. Enter the programming mode.
2. 21 19

3. Enter the number of the item you want to program.

4. Select the extension number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 21 : Outgoing Call Setup

21-20 : SIP Trunk Call Discernment Setup for Extension

Level:	Aspire S	Aspire M/L/XL
IN	• Not Available.	• Not Available.

Description

This item is not currently used in the U.S.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 22-01 : System Options for Incoming Calls** to define the system options for incoming calls.

Input Data

Item No.	Item	Input Data	Default	Description	Related Program
01	Incoming Call Priority	0 = Intercom Call Priority 1 = Trunk Call Priority	1	Use this option to determine if Intercom calls or trunk calls have answer priority when both are ringing simultaneously.	15-02-22
02	Incoming Call Ring No Answer Alarm	0 = Disable 1 = Enable	0	If enabled, an incoming call that rings longer than the Ring No Answer Alarm interval (22-01-03), will change to a unique ring cadence to indicate that the call has been ringing too long. If disabled, this will not occur.	22-01-03 22-01-04
03	Ring No Answer Alarm Time	0-64800 (Sec.)	60	If a trunk rings a key telephone longer than this interval, the system changes the ring cadence. This indicates to the user that the call has been ringing too long.	22-01-02
04	DIL No Answer Recall Time	0-64800 (Sec.)	0	A DIL that rings its programmed destination longer than this interval diverts to the DIL No Answer Ring Group (set in Program 22-08).	
05	- Not Used				
06	DID Ring-No-Answer Time	0-64800 (Sec.)	20	In systems with DID Ring-No-Answer Intercept, this interval sets the Ring-No-Answer time. This interval is how long a DID call rings the destination extension before rerouting to the intercept ring group.	22-12
07	DID Incoming Ring Group no answer timer	0-64800 (Sec.)	20		
08	DID Pilot Call No answer timer	0-64800 (Sec.)	60		
09	DID to Trunk to Trunk no answer timer	0-64800 (Sec.)	20		

Program 22 : Incoming Call Setup
22-01 : System Options for Incoming Calls

Item No.	Item	Input Data	Default	Description	Related Program
10	VRS Waiting Message Operation	0=Enable always 1=Change by manual operation	0	This program sets up the operation mode for Auto Attendant and Queuing Message.	22-14 22-15 22-08 22-04 22-01-04 20-15-11 15-07
11	VRS Waiting Message Interval Time	0-64800 (Sec.)	20	Setup the sending duration time of the Auto - Attendant & Queuing. The message is repeatedly sent out within the specified time.	22-14-06 22-15-06 41-11-06

Conditions

None

Feature Cross Reference

- Central Office Calls, Answering

Telephone Programming Instructions

To enter data for Program 22-01 (System Options for Incoming Call Service):

1. Enter the programming mode.
2. 22 01

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:
IN

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Type 8 for DID Call by Time Schedule requires software 4.93+.	• Type 8 for DID Call by Time Schedule requires software 4.93+.

Description

Use **Program 22-02 : Incoming Call Trunk Setup** to assign the incoming trunk type for each trunk. There is one item for each Night Service Mode.

Input Data

Trunk Port Number	Aspire S: 1-8 Aspire: 001-200

Item No.	Day/Night Mode	Incoming Type	Default	Description	Related Program
01	Aspire S: 1-4 Aspire: 1-8	0 = Normal 1 = VRS (Second dial tone if no VRS installed) 2 = DISA 3 = DID 4 = DIL 5 = E&M Tie line 6 = Delayed DID 7 = ANI/DNIS 8 = DID Call by Time Schedule	0	Use this option to set the feature type for the trunk you are programming.	14-04

Conditions

(A.) When connecting to T1 trunks, after changing Program 22-02-01 to match the telco's connected T1 service type, the T1 cable or the T1 PCB must be unplugged and then reconnected in order for the T1 PCB to sync.

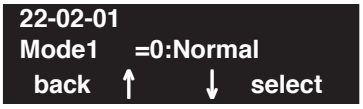
Feature Cross Reference

- Central Office Calls, Answering

Telephone Programming Instructions

To enter data for Program 22-02 (Incoming Service Type Setup):

1. Enter the programming mode.
2. 22 02



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available. • Melody 1-5 available.	• Available. • Melody 1-5 added with software 0.27+.

Description

Use **Program 22-03 : Trunk Ring Tone Range** to select the ring tone range for the trunk. The trunk uses a ring tone within the range selected when it rings an extension. There are four ring tones available. Customize the Trunk Ring Tones in Program 82-01.

Input Data

Trunk Port Number	Aspire S: 1-8 Aspire: 001-200

Item No.	Ring Tone Pattern	Default	Description	Related Program
01	0-8 (Ring Tone Pattern 1-4) (Melody 1 - Melody 5)	0	Use this program to select the ring tone range for the trunk. The trunk uses a ring tone within the range selected when it rings an extension. There are four ring tones available.	15-02 82-01

Incoming Signal Frequency Pattern	Type	Frequency 1	Frequency 2	Modulation
Pattern 1	High Middle Low	1100 660 520	1400 760 660	16Hz Modulation 16Hz Modulation 16Hz Modulation
Pattern 2	High Middle Low	1100 660 520	1400 760 660	8Hz Modulation 8Hz Modulation 8Hz Modulation
Pattern 3	High Middle Low	2000 1400 1100	760 660 540	16Hz Modulation 16Hz Modulation 16Hz Modulation
Pattern 4	High Middle Low	2000 1400 1100	760 660 540	8Hz Modulation 8Hz Modulation 8Hz Modulation

Conditions

None

Program 22 : Incoming Call Setup
22-03 : Trunk Ring Tone Range

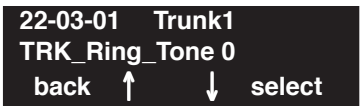
Feature Cross Reference

- Selectable Ring Tones

Telephone Programming Instructions

To enter data for Program 22-03 (Trunk Ring Tone Range):

1. Enter the programming mode.
2. 22 03



3. Enter the number of the item you want to program.

4. Select the trunk number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
SA	• Available - 8 Ring Groups.	• Available - 100 Ring Groups.

Description

Use **Program 22-04 : Incoming Extension Ring Group Assignment** to assign extensions to Ring Groups. Calls ring extensions according to Ring Group programming. Use Program 22-05 to assign trunks to Ring Groups and use Program 22-06 to set the ringing for the phones. IRG can have up to 32 extension numbers assigned.

Input Data

Incoming Ring Group Number	Aspire S: 1-8 Aspire: 1-100

Item No.	Extension Number	Description	Related Program
01	Max. 8 digits	Use this program to assign extensions (up to 32) to Ring Groups. Calls ring extensions according to Ring Group programming.	22-02 22-05 22-06

Default

Extension 301 rings for incoming Ring Group 1 calls. All other extensions do not ring for incoming Ring Group 1 calls.

Conditions

None

Feature Cross Reference

- Ring Groups

Program 22 : Incoming Call Setup

22-04 : Incoming Extension Ring Group Assignment

Telephone Programming Instructions

To enter data for Program 22-04 (Incoming Extension Ring Group Assignment):

1. Enter the programming mode.
2. 22 04

3. Enter the number of the item you want to program.

4. Select the Incoming Ring Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available - 8 Ring Groups.	• Available - 100 Ring Groups.

Description

Use **Program 22-05 : Incoming Trunk Ring Group Assignment** to assign trunks to incoming Ring Groups.

Input Data

Trunk Port Number	Aspire S: 1-8 Aspire: 001-200

Item No.	Day/Night Mode	Incoming Group Number	Default	Description	Related Program
01	Aspire S: 1-4 Aspire: 1-8	• 0 (No setting) • 1-8 or 001-100 (Incoming Group) • 102 (In-Skin/ External Voice Mail) • 103 (Centralized Voice Mail)	1	Use this program to assign Normal Ring Trunks (22-02) to Incoming Ring Groups (22-04).	22-04 22-06

Conditions

None

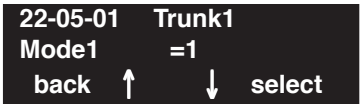
Feature Cross Reference

- Ring Groups

Telephone Programming Instructions

To enter data for Program 22-05 (Incoming Trunk Ring Group Assignment):

1. Enter the programming mode.
2. 22 05



3. Enter the number of the item you want to program.

4. Select the trunk number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 22-06 : Normal Incoming Ring Mode** to define whether or not an extension should ring for the Normal Incoming Ring Mode.

Input Data

Extension Number	Max. 8 digits

Item No.	Day/Night Mode	Incoming Group Number	Default	Related Program
01	Aspire S: 1-4 Aspire: 1-8	0 = No Ring 1 = Ring	1	22-04 22-05

Conditions

None

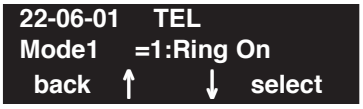
Feature Cross Reference

- Central Office Calls, Answering

Telephone Programming Instructions

To enter data for Program 22-06 (Normal Incoming Ring Mode):

1. Enter the programming mode.
2. 22 06



3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 22-07 : DIL Assignment** to assign the destination extension or Department Calling Group pilot # (as assigned in Program 11-07) for each DIL Incoming trunk. A DIL rings an extension directly, without any other Access Map or Ring Group programming. If an extension has a line key, the DIL rings the line key. If the extension does not have a line key, the DIL rings loop keys (if programmed) or one of the CALL keys (CALL keys will always ring). Use Program 22-02 to designate a trunk as a DIL). You can make eight DIL assignments, one for each Night Service mode:

If trunks should be answered by the voice mail, enter the master/pilot number of the voice mail group defined in Program 11-07-01.

Input Data

Trunk Port Number	Aspire S: 1-8 Aspire: 001-200

Item No.	Day/Night Mode	Number of Transferring Destination	Default
01	Aspire S: 1-4 Aspire: 1-8	Extension number (Max. 8 digits) Pilot number	No setting

Conditions

Program 22-02 must be set to ‘4’ for the trunk.

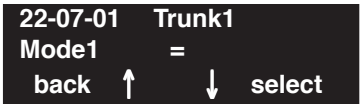
Feature Cross Reference

- Direct Inward Line (DIL)

Telephone Programming Instructions

To enter data for Program 22-07 (DIL Assignment):

1. Enter the programming mode.
2. 22 07



3. Enter the number of the item you want to program.

4. Select the trunk number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

For DIL Delayed Ringing, use **Program 22-08 : DIL/IRG No Answer Destination** to assign the DIL No Answer Ring Group. An unanswered DIL rings this group after the DIL No Answer Time expires (Program 22-01-04). DIL Delayed Ringing can also reroute outside calls ringing a Ring Group.

You make eight assignments, one for each Night Service mode.

Input Data

Trunk Port Number	Aspire S: 1-8 Aspire: 001-200

Item No.	Day/Night Mode	Incoming Group Number	Default
01	Aspire S: 1-4 Aspire: 1-8	0 (No setting) 1-8 or 001-100 (Incoming Group) 102 (In-Skin/External Voice Mail) 103 (Centralized Voice Mail)	1

Conditions

None

Feature Cross Reference

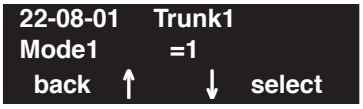
- Direct Inward Line (DIL)
- Ring Group

Program 22 : Incoming Call Setup
22-08 : DIL/IRG No Answer Destination

Telephone Programming Instructions

To enter data for Program 22-08 (DIL/IRG No Answer Destination):

1. Enter the programming mode.
2. 22 08



3. Enter the number of the item you want to program.

4. Select the trunk number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 22-09 : DID Basic Data Setup** to define the basic setting of Dial-In incoming calls for each trunk group.

Input Data

Trunk Group Number	Aspire S: 1-8 Aspire: 001-100

Item No.	Item	Input Data	Default
01	**Expected Number of Digits** Enter the number of digits the table expects to receive from the telco. Use this program to make the system compatible with three- and four-digit DID service.	1-8	4
02	**Received Vacant Number Operation** Use this option to enable or disable Vacant Number Intercept.	0 = Disconnect 1 = Transfer (Program 22-12)	0
03	Sub-addressing Mode	0 = Extension number specify 1 = DID Conversion Table	0
04	DID Receiving Mode for ISDN	0 = Enbloc receiving 1 = Overlap receiving	0
05	Local Code Digits (Only Overlap Receiving Mode)	0-15 (0 = No Local code)	0
06	Local Code (Only Overlap Receiving Mode)	Dial (Max. 16 digits)	No setting
07	Pilot Code (Only Overlap Receiving Mode)	Dial (1 digit : 0-9)	No setting
08	T302 Time-out Operation (Only Overlap Receiving Mode)	0 = Disconnect 1 = Transfer (Program 22-12)	0

Conditions

None

Feature Cross Reference

- Direct Inward Dialing (DID)

Telephone Programming Instructions

To enter data for Program 22-09 (DID Basic Data Setup):

1. Enter the programming mode.
2. 22 09

3. Enter the number of the item you want to program.

4. Select the Trunk Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 22-10 : DID Translation Table Setup** to specify the size of the DID Translation Tables. There are 2000 Translation Table entries that you can allocate among 20 Translation Tables.

Conditions

None

Input Data

Conversion Table Area Number	01-20

Item No.	Item	Input data
01	1st Area Setup (Start Address)	0-2000 (0 = No setting)
	1st Area Setup (End Address)	
	2nd Area Setup (Start Address)	
	2nd Area Setup (End Address)	

Default

Conversion Table Area	1st		2nd	
	Start Table	End Table	Start Table	End Table
1	1	100	0	0
2	101	200	0	0
3	201	300	0	0
4	301	400	0	0
:	:	:	:	:
20	0	0	0	0

Conditions

None

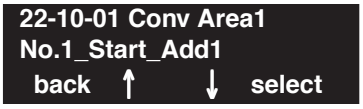
Feature Cross Reference

- Direct Inward Dialing (DID)

Telephone Programming Instructions

To enter data for Program 22-10 (DID Translation Table Setup):

1. Enter the programming mode.
2. 22 10

3. Enter the number of the item you want to program.

4. Select the Conversion Table Area number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
SA	• Available. • Option 11 available.	• Available. • Option 11 available with software 1.11+.

Description

Use **Program 22-11 : DID Translation Table Number Conversion** to specify for each Translation Table entry (2000):

- The digits received by the system (eight max.)
- The extension the system dials after translation (24 digits max.)
- The name that should show on the dialed extension's display when it rings (twelve characters max.)
- The Transfer Target-1 and 2

  If the Transfer Targets are busy or receive no answer, those calls are transferred to the final transfer destination (Program 22-10).
- Operation mode

Use the following chart when entering and editing text for names. Press the key once for the first character, twice for the second character, etc. For example, to enter a C, press "2" three times.

With Software 2.05+:
Key for Entering Names

When entering names in the procedures below, refer to this chart. Names can be up to 12 digits long. For prior software or when using i-Series phones, refer to the charts in the Name Storing feature (page 432).

Use this keypad digit . . .	When you want to. . .
1	Enter characters: 1 @ [¥] ^ _ ` { | } → ← Á À Â Ã Ç É Ê ì ó
2	Enter characters A-C, a-c, 2.
3	Enter characters D-F, d-f, 3.
4	Enter characters G-I, g-i, 4.
5	Enter characters J-L, j-l, 5.
6	Enter characters M-O, m-o, 6.
7	Enter characters P-S, p-s, 7.
8	Enter characters T-V, t-v, 8.
9	Enter characters W-Z, w-z, 9.
0	Enter characters: 0 ! " # $ % & ' ( ) ô o ú ä ö ü α ε θ
*	Enter characters: * + , - . / : ; < = > ? π ∑ σ Ω ∞ ¢ £
#	# = Accepts an entry (only required if two letters on the same key are needed - ex: T**OM**). Pressing # again = Space. (In system programming mode, use the right arrow soft key instead to accept and/or add a space.)
CONF	Clear the character entry one character at a time.
CLEAR	Clear all the entries from the point of the flashing cursor and to the right.

Note: The item numbers indicated below are different when using PCPro/WebPro. Refer to the program within the PCPro/WebPro application to determine the correct item number.

Program 22 : Incoming Call Setup

22-11 : DID Translation Number Conversion

Input Data

Conversion Table Number	1-2000

Item No.	Item	Input Data	Default
01	Received Number	Max. 8 digits	No setting
02	Target Number	Max. 24 digits	No setting
03	DID Name	Max. 12 characters	No setting
04	Transfer Operation Mode	0 = No transfer 1 = Busy 2 = No answer 3 = Busy / No answer	0
05	Transfer Destination Number -1	0 = No setting 1-8 or 1-100 = Incoming Group 101 = DSPDB Voice Mail 102 = In-Skin/External Voice Mail 103 = Centralized Voice Mail 201-264 = Department Group (1-8 or 01-64) 400 = DID 401 = DISA 1000-1999 = Abbreviated Number (000-999)	0
06	Transfer Destination Number -2 Input Data Details: • **400** = Allows the outside party to dial a different DID number in the translation table (for example, ring no answer to a dialed number, the caller then hears a dial tone, allowing them to enter another DID #). • **401** = Provides the caller with DISA dialing options (requires the use of the DISA password).		0
07	Call Waiting	0 = Disable 1 = Enabled	0
08	Maximum Number of DID Calls	0-200 (0 = no limit)	0
09	Music on Hold Source	0 = IC/MOH Port 1 = BGM Port 2 = ACI Port	0
10	ACI Music Source Port	When a sound source type is 2 in above : (0-96)	0
11	**Ring Group Transfer** Enable (1) or disable (0) each conversation tables' ability to follow the Ring Group programming defined in **Program 22-12-01 : DID Intercept Ring Group**. If **Program 22-11-05 : DID Translation Number Conversion, Transfer Destination Number 1** and **Program 22-11-06 : DID Translation Number Conversion, Transfer Destination Number 2** are set, the priority of transferring will be in this order: Program 22-11-05 then Program 22-11-06 then if Program 2-11-11 is enabled, Program 22-12-01.	0 = Disable 1 = Enabled	1

Conditions

None

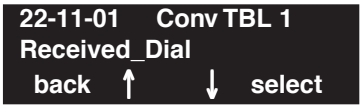
Feature Cross Reference

- Direct Inward Dialing (DID)

Telephone Programming Instructions

To enter data for Program 22-11 (DID Translation Number Conversion):

1. Enter the programming mode.
2. 22 11



3. Enter the number of the item you want to program.

4. Select the Conversation Table number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 22 : Incoming Call Setup
22-12 : DID Intercept Ring Group

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

For each DID Translation Table, use **Program 22-12 : DID Intercept Ring Group** to define the first destination group for DID calls.

Depending on the entry in Program 22-09-02 and 22-11-04, the incoming calls will route to the first destination group by the following:

- Vacant number intercept (vacant number means that there is no phone connected, no station card installed, or the extension number is not defined in Program 11-02)
- Busy intercept
- Ring-no-answer intercept

If the destination is '0', the calls will be forwarded to the trunk ring group defined in Program 22-11 based on the table assigned to the DID trunk.

Note: If Program 22-11-05 and 22-11-06 are set, the priority of transferring will be in this order: Program 22-11-05 ☞ Program 22-11-06 ☞ Program 22-12.

For busy and no-answer calls, if the first and third destinations are programmed but the second destination is not, the incoming call goes to the third destination after the first destination. If the first and second destinations are not defined, but the third destination is, the call goes directly to the third destination (as defined in Program 22-12).

Input Data

Conversion Table Area Number	01-20

Item No.	Day/Night Mode	Incoming Group Number	Default
01	Aspire S: 1-4 Aspire: 1-8	0 (No Setting) 1-8 or 1-100 (Incoming Group) 101 (DSPDB Voice Mail) 102 (In-Skin/External Voice Mail) 103 (Centralized Voice Mail)	1

Conditions

None

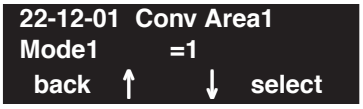
Feature Cross Reference

- Direct Inward Dialing (DID)

Telephone Programming Instructions

To enter data for Program 22-12 (DID Intercept Ring Group):

1. Enter the programming mode.
2. 22 12



3. Enter the number of the item you want to program.

4. Select the Conversion Table Area number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 22 : Incoming Call Setup

22-13 : DID Trunk Group to Translation Table Assignment

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 22-13 : DID Trunk Group to Translation Table Assignment** to assign the DID Trunk Groups to DID Translation Tables. DID trunks should be in their own group. If you have more than one type of DID trunk, put each type in a separate Trunk Group. For each Trunk Group, you make a Translation Table entry for each Night Service mode.

Input Data

Trunk Group Number	Aspie: 1-8 Aspire: 1-100

Item No.	Day/Night Mode	Conversion Table Area Number	Default
01	Aspire S: 1-4 Aspire: 1-8	0-20 (0 = No setting)	1

Conditions

None

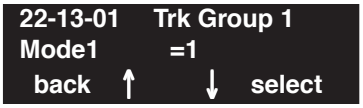
Feature Cross Reference

- Direct Inward Dialing (DID)

Telephone Programming Instructions

To enter data for Program 22-13 (DID Trunk Group to Translation Table Assignment):

1. Enter the programming mode.
2. 22 13



3. Enter the number of the item you want to program.

4. Select the Trunk Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 22 : Incoming Call Setup
22-14 : VRS Delayed Message for IRG

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 22-14 : VRS Delayed Message for IRG** to define for each incoming ring group the timers, VRS message number and tone kind for VRS Waiting Message.

Input Data

Incoming Ring Group Number	Aspire: 1-8 Aspire: 1-100

Item No.	Item	Input Data	Default
01	1st Waiting Message Start Timing	0-64800 Seconds	0
02	1st Waiting Message Number	0-49 (0 = No message, 49 = Fixed message)	0
03	1st Waiting Message Sending Count	0-255	0
04	2nd Waiting Message Number	0-49 (0 = No message, 49 = Fixed message)	0
05	2nd Waiting Message Sending Count	0-255	0
06	Tone Kind at Message Interval	0 = Ring Back Tone 1 = MOH Tone 2 = BGM Source	0
07	Disconnect Time After the End of VRS Waiting Message	0 = No Disconnect 1-64800 Seconds	60

Conditions

None

Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 22-14 (VRS Delayed Message for IRG):

1. Enter the programming mode.
2. 22 14

   ```
   22-14-01    INC Group1
   MSG1_Str.Time 0    Sec.
    back   ↑     ↓   select
   ```

3. Enter the number of the item you want to program.

   ```
   22-14-nn    INC Groupnnn
   nnnnn
     ←              →
   ```

4. Select the Incoming Ring Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 22 : Incoming Call Setup

22-15 : VRS Waiting Message for Department Group

Level:	Aspire S	Aspire M/L/XL
IN	• Available - 8 Department Groups.	• Available - 64 Department Groups.

Description

Use **Program 22-15 : VRS Waiting Message for Department Group** to define for each Department (Extension) Group the timers, VRS message number and tone kind for VRS Waiting Message.

Input Data

Extension (Department) Group Number	Aspire S: 1-8 Aspire: 01-64

Item No.	Item	Input Data	Default
01	1st Waiting Message Start Timing	0-64800 Seconds	0
02	1st Waiting Message Number	0-49 (0 = No message, 49 = Fixed message)	0
03	1st Waiting Message Sending Count	0-255	0
04	2nd Waiting Message Number	0-49 (0 = No message, 49 = Fixed message)	0
05	2nd Waiting Message Sending Count	0-255	0
06	Tone Kind at Message Interval	0 = Ring Back Tone 1 = MOH Tone 2 = BGM Source	0
07	Disconnect Time After the End of VRS Waiting Message	0 = No Disconnect 1-64800 Seconds	60

Conditions

None

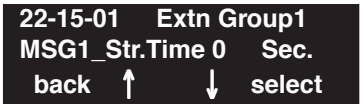
Feature Cross Reference

- Department Group

Telephone Programming Instructions

To enter data for Program 22-15 (VRS Waiting Message for Department Group):

1. Enter the programming mode.
2. 22 15



3. Enter the number of the item you want to program.

4. Select the Department Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 22 : Incoming Call Setup

22-17 : DID Conversion Table Area Setup for Time Pattern Mode

Level:	Aspire S	Aspire M/L/XL
SA	• Available with software 4.93+.	• Available with software 4.93+.

Description

Use **Program 22-17 : DID Conversion Table Area Setup for Time Pattern Mode** to define the times and DID Conversion Table (Program 22-11) for each DID time pattern (1-8).

Input Data

Item No.	Item	Input Data	Default	Related Program
01	This program is used to define the times and DID Conversion Table (Program 22-11) for each DID time pattern (1-8). Start from 00:00 and be sure to set up the input so the last entry of the time pattern is set to end at 00:00.	Start Time = 0000 - 2359 End Time = 0000 - 2359 DID Conversation Table Number: 0 - 2000	Start Time: 0000 End Time: 0000 DID Conversation Table Number: 0	22-11

Conditions

None

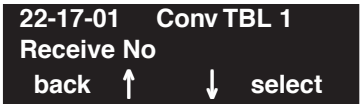
Feature Cross Reference

- Direct Inward Dial (DID)

Telephone Programming Instructions

To enter data for Program 22-17 (DID Conversion Table Area Setup for Time Pattern Mode):

1. Enter the programming mode.
2. 22 17



3. Enter the number of the item you want to program.

4. Select the Conversion Table number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 22 : Incoming Call Setup
22-18 : Private Call Assignment

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 4.93+.	• Available with software 4.93+.

Description

Use **Program 22-18 : Private Call Assignment** to defines assignments and incoming ring patterns for a Private Call.

Input Data

Item No.	Item	Input Data	Default	Related Program
01	**Transfer Mode** If this program is set to 0, the VRS message is played.	0 = Not defined 1 = Internal dial 2 = Incoming Ring Group (IRG)	0	14-01-27 15-02-02 40-10-06
02	**Destination Number** If option 01 is set to "1" or "2", define the destination in this option.	If Transfer Mode is set to: **1: Internal Dial** Dial Data (up to 24 digits) 0-9, *, #, P,R,@ **2: Incoming Ring Group** Aspire S: 0-8 Aspire M/L/XL: 0-100)	No Setting	
03	**Incoming Ring Pattern** The definition of the tone pattern is the same as Program 22-03.	Incoming Ring Pattern (0-9) 0 = normal pattern 1-4 = tone pattern(1-4) 5-9 = scale pattern(1-5)	0	14-01-27 22-03

Conditions

None

Feature Cross Reference

- Caller ID
- Central Office Calls, Answering

Telephone Programming Instructions

To enter data for Program 22-18 (Private Call Assignment):

1. Enter the programming mode.
2. 22 18

3. Enter the number of the item you want to program.

4. Select the Department Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 22 : Incoming Call Setup

22-16 : Private Call Refuse Target Area Setup

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 4.93+.	• Available with software 4.93+.

Description

Use **Program 22-16 : Private Call Refuse Target Area Setup** to define the ABB group number for Private Call Refuse.

Input Data

Item No.	Item	Input Data	Default	Related Program
01	**Abbreviated Dial Group Number** Define the ABB group number for Private Call Refuse.	0 = No Setting or ABB Group Number Aspire S: 1 – 8 Aspire: 1 – 64	0	14-01-27 13-04-03 40-10-06

Conditions

None

Feature Cross Reference

- Caller ID
- Central Office Calls, Answering

Telephone Programming Instructions

To enter data for Program 22-18 (Private Call Assignment):

1. Enter the programming mode.
2. 22 18

3. Enter the number of the item you want to program.

4. Select the Department Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

- For Your Notes -

Level:	Aspire S	Aspire M/L/XL
IN	• Not Available.	• Not Available.

Description

Not currently available.

Program 23 : Answer Features Setup
23-02 : Call Pickup Groups

Level:	Aspire S	Aspire M/L/XL
IN	• Available - 8 Call Pickup Groups.	• Available - 64 Call Pickup Groups.

Description

Use **Program 23-02 : Call Pickup Groups** to assign extensions to Call Pickup Groups. This program also lets you assign an extension's Call Pickup Group priority. If two extensions in a group are ringing at the same time, Group Call Pickup intercepts the highest priority extension first.

Input Data

Extension Number	Max. 8 digits

Item No.	Group Number	Priority	Default	Description	Related Program
01	Aspire S: 1-8 Aspire: 1-64	1-999	1 – xxx	Use this program to assign extensions to Call Pickup Groups other than the Department Group set up by a Program 16-02.	11-12-26 11-12-27 11-12-28 15-07-24 15-07-25 15-07-26

Conditions

None

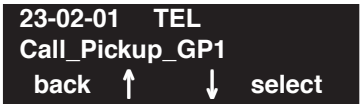
Feature Cross Reference

- Group Call Pickup

Telephone Programming Instructions

To enter data for Program 23-02 (Call Pickup Groups):

1. Enter the programming mode.
2. 23 02



3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 23 : Answer Features Setup
23-03 : Universal Answer/Auto Answer

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 23-03 : Universal Answer/Auto Answer** to assign trunk routes (set in Program 14-06) to extensions for Universal Answer. If the call ringing the paging system is in an extension's assigned route, the user can dial the Universal Answer code (843) to pick up the call.

You can also use this program to let an extension user automatically answer trunk calls that ring other extensions (not their own). When the user lifts the handset, they automatically answer the ringing calls based on Trunk Group Routing programming (defined in Program 14-06). The extension user's own ringing calls, however, always have priority over calls ringing other co-worker's extensions. Refer to the Line Preference feature for more information.

You make one entry for each Night Service mode.

Input Data

Extension Number	Max. 8 digits

Item No.	Day/Night Mode	Route Table Number	Default	Description	Related Program
01	Aspire S: 1-4 Aspire: 1-8	Aspire S: 0-8 Aspire: 0-100	0	Use this program to let an extension user automatically answer trunk calls that ring other extensions. When the user lifts the handset, they automatically answer the ringing calls based on Trunk Group Routing programming (defined in Program 14-06).	14-06

Conditions

None

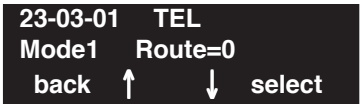
Feature Cross Reference

- Line Preference
- Night Service

Telephone Programming Instructions

To enter data for Program 23-03 (Universal Answer/Auto Answer):

1. Enter the programming mode.
2. 23 03



3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 23 : Answer Features Setup

23-04 : Ringing Line Preference for Virtual Extensions

Level:	Aspire S	Aspire M/L/XL
IN	• Available - 24 virtual extension ports.	• Available - 256 virtual extension ports.

Description

Use **Program 23-04 : Ringing Line Preference for Virtual Extensions** to set the off-hook automatic response priority for calls ringing virtual extension keys on a telephone.

Input Data

Extension Number	Max. 8 digits

Item No.	Priority	Extension (Department) Group Number	Default	Description	Related Program
01	1-4	0-8 or 00-64 (0 or 00= Don't care)	00	When an extension has a virtual extension assigned to a Programmable Function Key, this program determines the priority for automatically answering the ringing calls when the handset is lifted. If "0" or "00" is selected, when the user lifts the handset, the user will answer a ringing call from any group.	16-02 20-10-08

Conditions

None

Feature Cross Reference

- Multiple Directory Numbers / Call Coverage

Telephone Programming Instructions

To enter data for Program 23-04 (Ringing Line Preference for Virtual Extensions):

1. Enter the programming mode.
2. 23 04

3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

- For Your Notes -

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 24-01 : System Options for Hold** to define the system options for the Hold feature.

Input Data

Item No.	Item	Input Data	Default	Related Program
01	**Hold Recall Time** A call on Hold recalls the extension that placed it on Hold after this interval. This timer works with the Hold Recall Callback Timer (Item 2).	0-64800 (Sec.)	90	
02	**Hold Recall Callback Time** A trunk recalling from Hold or Park rings an extension for this interval. This timer works with timer 01 (Hold Recall Time) or timer 06 and 07 (Park Recall Time). After this interval, the system invokes the Hold recall time again. Cycling between timer 01 and 02 and 06 and 07 continues until a user answers the call.	0-64800 (Sec.)	30	
03	**Exclusive Hold Recall Time** A call left on Exclusive Hold recalls the extension that placed it on Hold after this interval.	0-64800 (Sec.)	90	
04	**Exclusive Hold Recall Callback Time** An Exclusive Hold Recall rings an extension for this interval. If not picked up, the call goes back on System Hold.	0-64800 (Sec.)	30	
05	**Forced Release of Held Call** Depending on the setting of Program 14-01-16, the system disconnects calls on Hold longer than this interval.	0-64800 (Sec.)	1800	14-01-16
06	**Park Hold Time - Normal** A call left parked longer than this interval recalls the extension that initially parked it.	0-64800 (Sec.)	90	20-11-19
07	**Park Hold Time - Extended** A call left parked longer than this interval recalls the extension that initially parked it.	0-64800 (Sec.)	300	20-11-19

Conditions

None

Program 24 : Hold/Transfer Setup

24-01 : System Options for Hold

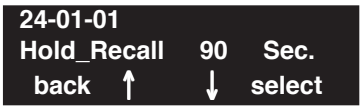
Feature Cross Reference

- Hold
- Park

Telephone Programming Instructions

To enter data for Program 24-01 (System Options for Hold):

1. Enter the programming mode.
2. 24 01



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:
IN

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Option 7 enhanced with software 4.0E+.	• Option 7 enhanced with software 4.0E+.
• Option 10 available with software 4.0E+.	• Option 10 available with software 4.0E+.
• Options 11 and 12 available with software 4.93+.	• Options 11 and 12 available with software 4.93+.

Description

Use **Program 24-02 : System Options for Transfer** to define the system options for Transfer feature.

Input Data

Item No.	Item	Input Data	Default	Related Program
01	**Busy Transfer** Use this option to prevent or allow extensions to Transfer calls to busy extensions.	0 = Disable 1 = Enable	0	
02	**MOH or Ringback on Transferred Calls** Use this option to enable or disable MOH on Transfer. If enabled (0), a transferred caller hears MOH while their call rings the destination extension. If disabled (1), a transferred caller hears ringback while their call rings the destination extension.	0 = Hold Tone 1 = Ring Back Tone	0	20-03-02
03	**Delayed Call Forwarding Time** If activated at an extension, Delayed Call Forwarding occurs after this interval. This also sets how long a Transferred call waits at an extension forwarded to Voice Mail before routing to the called extension's mailbox.	0-64800 (Seconds)	10	
04	**Transfer Recall Time** An unanswered transferred call recalls to the extension that initially transferred it after this interval.	0-64800 (Seconds)	30	
05	**Transfer to Busy Department Group Reccall Timer** After a trunk is unscreen transferred to a busy Department Group, this timer will start. If the call is not answered, it will recall the originator.	0-64800 (Seconds)	25	

07	**Forced Release for Trunk-to-Trunk Transfer** This timer will start when a trunk begins talking with another trunk (for example: trunk-to-trunk transfer, outgoing from trunk, Tandem Trunking). With software 4.0E+, when this timer expires, a warning tone is heard. If Program 24-02-10 is set, the conversation disconnects after that timer expires. This timer is set again when the external digit timer expires. One of the trunks used must be an analog trunk (or leased line)	0-64800 (Seconds)	1800	24-02-10
08	Delayed transfer timer for all Department Groups	0-64800 (Seconds)	10	11-11-28 11-11-29 15-07-01, Key 59
09	**ISDN Transfer Resend Timer** Determine how long the system should resend a Facility Message to the currently active PRI trunk when the 2 B-Channel Transfer feature is used. The system will resend the Facility timer based on this timer. If there is no response after the 3rd resend, the system considers the transfer as failed and stops resending.	1-30 seconds	10	
10	**Trunk-to-Trunk Transfer Disconnect Timer** Determine how long a conversation will continue once the timer in Program 24-02-07 expires. If this option is set to "0", the conversation will be disconnected immediately. This program has no affect if Program 24-02-07 is set to "0". One of the trunks used must be an analog trunk (or leased line).	0 - 64800 seconds	No Setting	
11	**No Answer Timer for Step Transfer** Define the length of time the system will wait before Step Transferring a no-answer call to the next destination.	0 - 64800 seconds	10	14-01-26 24-04-01
12	**No Answer Timer for Automatic Trunk-to-Trunk Transfer** Define the length of time the system will wait before Automatic Trunk-to-Trunk Transfer occurs for a no-answer call.	0 - 64800 seconds	0	14-01-26 24-04-01

Conditions

None

Feature Cross Reference

- Transfer

Telephone Programming Instructions

To enter data for Program 24-02 (System Options for Transfer):

1. Enter the programming mode.
2. 24 02

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 24 : Hold/Transfer Setup
24-03 : Park Group

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 24-03 : Park Group** to assign an extension to a Park Group. The system allows a total of 64 Park Groups. An extension can only pick up a call parked in orbit by an extension in its own group.

Input Data

Extension Number	Max. 8 digits

Item No.	Park Group Number	Default	Description	Related Program
01	1-64	1	Assign an extension to a Park Group. The system allows a total of 64 Park Groups.	15-07-01

Conditions

None

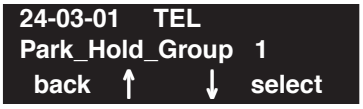
Feature Cross Reference

- Park

Telephone Programming Instructions

To enter data for Program 24-03 (Park Group):

1. Enter the programming mode.
2. 24 03



3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 24 : Hold/Transfer Setup

24-04 : Automatic Trunk-to-Trunk Transfer Target Setup

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 24-04 : Automatic Trunk-to-Trunk Transfer Target Setup** to assign the Abbreviated Dialing number bin which should be used as the destination of the Automatic Trunk-to-Trunk Transfer.

Input Data

Trunk Port Number	001-200

Item No.	Day/ Night Mode	Abbreviated Dial Area Number	Default	Description	Related Program
01	Aspire S: 1-4 Aspire: 1-8	0-1999	1999	The destination telephone number of the Trunk-to-Trunk Transfer uses the number registered into the Abbreviated Dial. Use this program to setup the Abbreviated Dial area.	11-10-08 13-04 24-05

Conditions

None

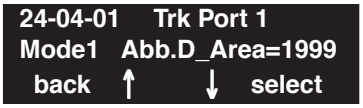
Feature Cross Reference

- Call Forwarding, Off-Premise

Telephone Programming Instructions

To enter data for Program 24-04 (Automatic Trunk-to-Trunk Transfer Target Setup):

1. Enter the programming mode.
2. 24 04



3. Enter the number of the item you want to program.

4. Select the Trunk Port number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 24 : Hold/Transfer Setup

24-05 : Department Group Transfer Target Setup

Level:	Aspire S	Aspire M/L/XL
IN	• Available - 8 Department Groups.	• Available - 64 Department Groups.

Description

Use **Program 24-05 : Department Group Transfer Target Setup** to assign the Abbreviated Dialing bin which is used as the destination of the extension for the Department Group.

Input Data

Department Group Number	Aspire S: 1-8 Aspire: 01-64

Item No.	Day/Night Mode	Abbreviated Dial Area Number	Default	Description	Related Program
01	Aspire S: 1-4 Aspire: 1-8	0-1999	1999	The Abbreviated Dialing area is used to program the destination number of the transferred telephone number when a Department Group's call is transferred using the Trunk-to-Trunk Forwarding feature.	11-11-27 13-04 24-04

Conditions

None

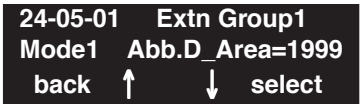
Feature Cross Reference

- Transfer

Telephone Programming Instructions

To enter data for Program 24-05 (Department Group Transfer Target Setup):

1. Enter the programming mode.
2. 24 05



3. Enter the number of the item you want to program.

4. Select the Extension (Department) Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 24 : Hold/Transfer Setup
24-06 : Fixed Call Forwarding

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

For each extension/virtual extension port, use **Program 24-06 : Fixed Call Forwarding** to assign the Fixed Call Forwarding Type (0-4) and the destination extension/virtual extension. *For extension ports,* the Fixed Call Forwarding destination can be an on- or off-premise extension or a Voice Mail extension. *For virtual extensions,* the Fixed Call Forwarding destination can be an on-premise extension or Voice Mail extension.

Input Data

Extension Number	Max. 8 digits

Item No.	Description	Input Data	Transferred Telephone Number	Default
01	Set the type of substitute call receipt and specify the extension number transferred on originated telephone.	0 = No setting (Fixed Call Forwarding disabled) 1 = Fixed Call Forwarding with both extensions ringing 2 = Fixed Call Forwarding when unanswered 3 = Fixed Call Forwarding immediate 4 = Fixed Call Forwarding when busy or unanswered	Max. 8 digits	0

Conditions

Do not use Fixed Call Forwarding Type 1 (Both Ringing) with Voice Mail ports.

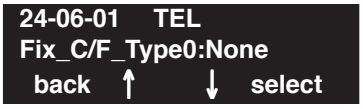
Feature Cross Reference

- Call Forwarding, Fixed

Telephone Programming Instructions

To enter data for Program 24-06 (Fixed Call Forwarding):

1. Enter the programming mode.
2. 24 06



3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 24 : Hold/Transfer Setup

24-07 : Fixed Call Forwarding Off-Premise

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 24-07 : Fixed Call Forwarding Off Premise** to assign the Fixed Call Forwarding Off-Premise telephone number for each extension. The off-premise destination can be up to 24 digits long, using 0-9, *, # and P (pause). Be sure to include the trunk access code (e.g., 9) in the number.

Input Data

Extension Number	Max. 8 digits

Item No.	Off-Premise Destination Number	Default
01	1-9, 0, *, #, **P**ause (Press line key 1), **R**ecall/Flash (Press line key 2), @ (Press line key 3) (max. 24 digits)	No setting

Conditions

None

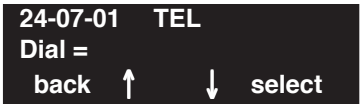
Feature Cross Reference

- Call Forwarding, Off-Premise

Telephone Programming Instructions

To enter data for Program 24-07 (Fixed Call Forwarding Off-Premise):

1. Enter the programming mode.
2. 24 07



3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

- For Your Notes -

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 25-01 : VRS/DISA Line Basic Data Setup** to define the basic setting of each VRS/DISA line.

Input Data

Trunk Port Number	Aspire S: 1-8 Aspire: 001-200

Item No.	Item	Input Data	Default	Related Program
01	VRS/DISA Dial-In Mode	0 = Extension number/Service code specify 1 = Use dial conversion table	0	22-11
02	DISA User ID	0 = off 1 = on	0	25-08
03	VRS/DISA Transfer Alarm	0 = Normal 1 = Alarm	0	

Conditions

None

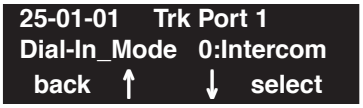
Feature Cross Reference

- Direct Inward System Access (DISA)

Telephone Programming Instructions

To enter data for Program 25-01 (VRS/DISA Line Basic Data Setup):

1. Enter the programming mode.
2. 25 01



3. Enter the number of the item you want to program.

4. Select the Trunk Port number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 25-02 : VRS/DISA VRS Message** to assign the VRS message number to be used as the Automated Attendant Message for each trunk which is assigned as a VRS/DISA.

Input Data

Trunk Port Number	Aspire S: 1-8 Aspire: 001-200

Item No.	Day/Night Mode	Message From	Additional Data	Default
01	Aspire S: 1-4 Aspire: 1-8	0 = No Message 1 = VRS 2 = ACI 3 = SLT	In case of 1: 01-48 (VRS message number) In case of 2: Aspire S: 1-4, Aspire: 01-16 (ACI group number) In case of 3: 1-8 or 01-64 (Department Group number)	0

Conditions

None

Feature Cross Reference

- Direct Inward System Access (DISA)

Telephone Programming Instructions

To enter data for Program 25-02 (VRS/DISA VRS Message):

1. Enter the programming mode.
2. 25 02

3. Enter the number of the item you want to program.

4. Select the Trunk Port number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 25-03 : VRS/DISA Transfer Ring Group With Incorrect Dialing** to set what happens to a call when the DISA or Automated Attendant caller dials incorrectly or waits too long to dial. The call can either disconnect (0) or Transfer to an alternate destination (a ring group or voice mail). When setting the DISA and DID Operating Mode, you make an entry for each Night Service mode.

Input Data

Trunk Port Number	Aspire S: 1-8 Aspire: 001-200

Item No.	Day/Night Mode	Incoming Group Number	Default	Related Program
01	Aspire S: 1-4 Aspire: 1-8	0 (Disconnect) 1-8 or 1-100 (Incoming Group) 102 (In-Skin/External Voice Mail) 103 (Centralized Voice Mail)	0	22-04

Conditions

None

Feature Cross Reference

- Direct Inward System Access (DISA)

Telephone Programming Instructions

To enter data for Program 25-03 (VRS/DISA Transfer Ring Group With Incorrect Dialing):

1. Enter the programming mode.
2. 25 03

3. Enter the number of the item you want to program.

4. Select the Trunk Port number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 25-04 : VRS/DISA Transfer Ring Group With No Answer/Busy** to set the operating mode of each DISA trunk. This sets what happens to the call when the DISA or Automated Attendant caller calls a busy or unanswered extension. The call can either disconnect (0) or Transfer to an alternate destination (a ring group or voice mail). When setting the DISA and DID Operating Mode, you make an entry for each Night Service mode.

Input Data

Trunk Port Number	Aspire S: 1-8 Aspire: 001-200

Item No.	Day/Night Mode	Incoming Group Number	Default	Related Program
01	Aspire S: 1-4 Aspire: 1-8	0 (Disconnect) 1-8 or 1-100 (Incoming Ring Group) 102 (In-Skin/External Voice Mail) 103 (Centralized Voice Mail)	0	22-04

Conditions

None

Feature Cross Reference

- Direct Inward System Access (DISA)

Telephone Programming Instructions

To enter data for Program 25-04 (VRS/DISA Transfer Ring Group With No Answer/Busy):

1. Enter the programming mode.
2. 25 04

   ```
   25-04-01    Trk Port 1
   Mode1 Target_IRG=0
    back   ↑      ↓   select
   ```

3. Enter the number of the item you want to program.

   ```
   25-04-nn    Trk Portnnn
   nnnnn
     ←              →
   ```

4. Select the Trunk Port number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 25-05 : VRS/DISA Error Message Assignment** to assign the VRS message number to be used as the Automated Attendant error message. For each VRS/DISA trunk that the VRS will answer, enter the VRS message (1-48) the outside caller hears if they dial incorrectly. If you enter 0 (i.e., no error message), the call reroutes according to Program 25-03 and 25-04.

For each trunk, you make a separate entry for each Night Service mode.

Input Data

Trunk Port Number	Aspire S: 1-8 Aspire: 001-200

Item No.	Day/Night Mode	VRS Message Number	Default
01	Aspire S: 1-4 Aspire: 1-8	0-48 (0 = no setting)	0

Conditions

None

Feature Cross Reference

- Direct Inward System Access (DISA)

Telephone Programming Instructions

To enter data for Program 25-05 (VRS/DISA Error Message Assignment):

1. Enter the programming mode.
2. 25 05

3. Enter the number of the item you want to program.

4. Select the Trunk Port number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 25-06 : VRS/DISA One-Digit Code Attendant Setup** to set up single digit dialing through the VRS. This gives VRS callers single key access to extensions, the company operator, Department Calling Groups and Voice Mail. For each VRS message set to answer outside calls (see Program 25-04 and 25-05), you specify:

- The digit the VRS caller dials (0-9, *, #). (Keep in mind that if you assign destinations to digits, outside callers will not be able to dial system extensions.
- The destination reached (eight digits max.) when the caller dials the specified digit.

The destination can be an extension, a Department Calling pilot number or the Voice Mail master number. A one-digit code can be assigned for each Automated Attendant message.

Example:
Message Number=01, Destination=2, Next Message Number=0, Dial=399
In this example, when "2" is dialed by an outside caller, the system transfers the call to "399". This means that ext 200-299 cannot receive calls from VRS/DISA users during/after VRS Message 01.

Input Data

Attendant message number	01-48

Received dial	1-9,0,*,#

Item No.	Item	Input Data	Default
01	Next Attendant Message Number	0-48 (0 = no setting)	0
02	Destination Number	Up to 8 digits	No setting

Conditions

Outside caller may not be able to dial individual extensions or lines if the same first digit is defined here.

Feature Cross Reference

- Direct Inward System Access (DISA)
- Voice Response System (VRS)

Telephone Programming Instructions

To enter data for Program 25-06 (VRS/DISA One-Digit Code Attendant Setup):

1. Enter the programming mode.
2. 25 06

3. Enter the number of the item you want to program.

4. Select the Guidance/Attendant Message number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available. • Options 07 and 08 enhanced with software 4.0E+.	• Available. • Options 07 and 08 enhanced with software 4.0E+.

Description

Use **Program 25-07 : System Timers for VRS/DISA** to set the value for the system timers which affect DID and DISA. Refer to the following chart for a description of each option, its range and default setting.

Input Data

Item No.	Item	Input Data	Default	Related Program
01	**DISA Dial Tone Time** After answering a DISA trunk, the system waits this interval for the caller to dial the first digit of the DISA password. If the caller fails to dial within this interval, the system drops the call.	0-64800 seconds	10	25-04
02	**VRS/DISA No Answer Time** A VRS/DISA caller can ring an extension for this interval before the system sets the call as a Ring No Answer. After this interval expires, the call follows the programmed Ring No Answer routing (set in Program 25-03 and 25-04).	0-64800 seconds	30	25-04
03	Disconnect after VRS/DISA re-transfer to IRG	0-64800 seconds	60	
04	**Calling Time to Automatic Answering Telephone Set** Set the answering waiting time of the automatic answering extension when an incoming DID trunk call is received.	0-64800 seconds	10	
05	**Duration Time for Guidance Message by Automatic Answering Telephone Set** Set the announcement time of the automatic answering extension after which in incoming DID trunk caller is disconnected.	0-64800 seconds	10	
06	**Duration Time for Guidance Message by ACI** Set the announcement time by the ACI after which an incoming DID trunk caller is disconnected.	0-64800 seconds	10	
07	**Long Conversation Warning Tone Time** Determine the length of time a DISA caller or any trunk-to-trunk (such as Tandem Trunking) conversation can talk before the Long Conversation tone is heard. With software 4.0E+, if Program 25-07-08 is set to "0", the call is disconnected once the timer expires. This timer is set again when the external digit timer expires. Note: If this option is set to "0", the settings in Program 24-02-07 and 24-07-10 are followed - not 25-07-07 and 25-07-08.	0-64800 seconds	180	24-02-07 24-07-10 25-07-08

Item No.	Item	Input Data	Default	Related Program
08	**Long Conversation Disconnect** This timer determines how long the system will wait before disconnecting a DISA caller or any trunk-to-trunk (such as Tandem Trunking) conversation call after the Long Conversation tone is heard. This program has no affect if Program 25-07-07 is set to "0".	0-64800 seconds	10	25-07-07
09	**DISA Internal Paging Time** This is the maximum length of an Internal Page placed by a DISA caller. If the Page continues longer than this interval, the system terminates the DISA call.	0-64800 seconds	30	
10	**DISA External Paging Time** This is the maximum length of an External Page placed by a DISA caller. If the Page continues longer than this interval, the system terminates the DISA call.	0-64800 seconds	30	
11	**VRS/DISA Answer Delay Timer** Set up the interval time the system will wait after receiving an incoming VRS/DISA call until the system will automatically answer the call.	0-64800 seconds	0	
13	**VRS/DISA Busy Tone Interval** If a DISA caller dials a busy extension (and Program 25-04 = 0), the system plays busy tone for this interval before disconnecting.	0-64800 seconds	5	
14	**Delayed DID Answer Timer** Assign the delay time from switching from a normal incoming status to DID mode. If this time is set to ‘0’, the call will switch to DID mode immediately.	0-64800 seconds	10	

Conditions

None

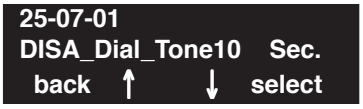
Feature Cross Reference

- Direct Inward System Access (DISA)

Telephone Programming Instructions

To enter data for Program 25-07 (System Timers for VRS/DISA):

1. Enter the programming mode.
2. 25 07



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 25 : VRS/DISA Setup
25-08 : DISA User ID Setup

Level:	Aspire S	Aspire M/L/XL
SA	• Available.	• Available.

Description

Use **Program 25-08 : DISA User ID Setup** to set the 6-digit DISA password for each user. There are 15 users each with one 6-digit password.

Input Data

DISA User Number	1-15

Item No.	Password	Default
01	Dial (Six digits fixed)	No setting

Conditions

None

Feature Cross Reference

- Direct Inward System Access (DISA)

Telephone Programming Instructions

To enter data for Program 25-08 (DISA User ID Setup):

1. Enter the programming mode.
2. 25 08

   25-08-01 DISA User1
   DISA_User_ID
   back ↑ ↓ select
3. Enter the number of the item you want to program.

   25-08-nn DISA Usernn
   nnnnn
   ← →
4. Select the DISA User number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 25-09 : Class of Service for DISA Users** to set the DISA Class of Service for each user. When a DISA caller enters a password (defined in Program 25-08), the system identifies the user and associates the appropriate DISA Class of Service with the call. Assign the DISA Class of Service options in Program 20-14. When programming DISA Class of Service, you make one entry for each Night Service mode.

Input Data

DISA User Number	1-15

Item No.	Day/Night Mode	Function Class	Default
01	Aspire S: 1-4 Aspire: 1-8	1-15	1

Conditions

(A.) The DISA Class of Service cannot be 0.
(B.) You cannot use Program 20-06 to assign Class of Service to DISA trunks.

Feature Cross Reference

- Direct Inward System Access (DISA)

Telephone Programming Instructions

To enter data for Program 25-09 (Class of Service for DISA Users):

1. Enter the programming mode.
2. 25 09

3. Enter the number of the item you want to program.

4. Select the DISA User number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 25-10 : Trunk Group Routing for DISA** to assign the Trunk Group route chosen when a user places a DISA call into the system and dials 9. Set Trunk Group Routing in Program 14-06. Enable or disable the DISA caller's ability to dial 9 in Program 20-14-02. You assign a route to each DISA Class of Service (1-15). The system assigns a DISA Class of Service to a call based on the password the DISA caller dials.

When programming, you make a separate entry for each Night Service Mode.

Input Data

DISA User Number	1-15

Item No.	Day/Night Mode	Route Table Number	Default
01	Aspire S: 1-4 Aspire: 1-8	Aspire S: 0-8 Aspire: 0-100 (0 = no setting)	1

Conditions

None

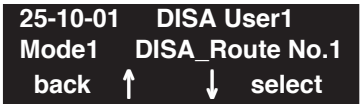
Feature Cross Reference

- Direct Inward System Access (DISA)

Telephone Programming Instructions

To enter data for Program 25-10 (Trunk Group Routing for DISA):

1. Enter the programming mode.
2. 25 10



3. Enter the number of the item you want to program.

4. Select the DISA User number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

For systems that use Toll Restriction, use **Program 25-11 : DISA Toll Restriction Class** to assign a Toll Restriction Class (1-15) to each DISA user (1-15). The system uses the Toll Restriction Class you enter in Program 21-05 and 21-06. The Toll Restriction Class assigned to a DISA call is based on the DISA Class of Service and user, which is determined by the password the caller dials.

When programming, you make a separate entry for each Night Service mode.

Input Data

DISA User Number	1-15

Item No.	Day/Night Mode	Toll Restriction Class	Default
01	Aspire S: 1-4 Aspire: 1-8	1-15	2

Conditions

You cannot use Program 21-05 to assign Toll Restriction to DISA trunks.

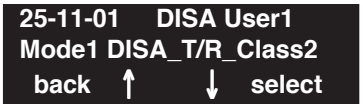
Feature Cross Reference

- Direct Inward System Access (DISA)
- Toll Restriction

Telephone Programming Instructions

To enter data for Program 25-11 (DISA Toll Restriction Class):

1. Enter the programming mode.
2. 25 11



3. Enter the number of the item you want to program.

4. Select the DISA User number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 25-12 : Alternate Trunk Group Routing for DISA** to define the trunk route selected when a DISA caller dials the Alternate Trunk Access Code. The route selected is based on the DISA caller's Class of Service, which is in turn determined by the password the caller dials. When programming, you make a separate entry for each Night Service Mode.

Use Program 11-09-02 to set the Alternate Trunk Access Code. Use Program 14-06 to set trunk routes.

Input Data

DISA User Number	1-15

Item No.	Day/Night Mode	Route Table Number	Default
01	Aspire S: 1-4 Aspire: 1-8	Aspire S: 0-8 Aspire: 0-100 (0 = no setting)	1

Conditions

You cannot use Program 21-15 to assign alternate trunk routing to DISA trunks.

Feature Cross Reference

- Direct Inward System Access (DISA)
- Trunk Group Routing

Telephone Programming Instructions

To enter data for Program 25-12 (Individual Trunk Group Routing for DISA):

1. Enter the programming mode.
2. 25 12

3. Enter the number of the item you want to program.

4. Select the DISA User number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 25-13 : System Option for DISA** to enter the password DISA callers must dial before the system will allow them to record, listen to and or erase the VRS messages. This program also is used to define additional DISA call options.

Input Data

Item No.	Item	Input Data	Default
01	**VRS Password** Enter the password DISA callers must dial before the system will allow them to record, listen to and or erase the VAU messages.	1-9, 0, *, # 6 digits fixed	No setting
02	**Continue Code for DISA Trunk to Trunk** With software through 2.68, program the Continue code. This code is used with the Warning Tone for Long Conversation for DISA callers. This allows the user to press the programmed code to continue the conversation the call. If the Continue code is entered, this resets the timer in Program 25-07-07. With software 4.0E+, use Program 20-28-01.	1-9, 0, *, # 1 digit	
03	**Disconnect Code for DISA Trunk to Trunk** With software through 2.68, program the Disconnect code. This code is used with the Warning Tone for Long Conversation for DISA callers. This allows the user to press the programmed code to disconnect the call. If the Disconnect code is entered, the call is disconnected immediately. With software 4.0E+, use Program 20-28-02.	1-9, 0, *, # 1 digit	

Conditions

None

Feature Cross Reference

- Direct Inward System Access (DISA)
- Voice Response System (VRS)

Telephone Programming Instructions

To enter data for Program 25-13 (System Option for DISA):

1. Enter the programming mode.
2. 25 13

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available. • Option 6 available with 2.63+ software.	• Available. • Option 6 available with 2.63+ software.

Description

Use **Program 26-01 : Automatic Route Selection Service** to define the system options for Automatic Route Selection (ARS).

Input Data

Item No.	Item	Input Data	Default
01	**ARS Service** Enable or disable ARS.	0 = Disable 1 = Enable	0
02	**Network Outgoing Inter-Digit ARS Timer** With Networking, this timer replaces 20-03-04 when determining if all network protocol digits have been received. If ARS is enabled at Site B, this timer can be programmed for 5 (500 msec) at Site A. If ARS is disabled and Site B is using F-Route for outbound dialing, this timer should be programmed for 30 (3 seconds) at Site A.	0-64800 (msec.)	30
03	**ARS Misdialed Number Handling** If a user dials a number not programmed in ARS, this option determines if the system should route over trunk group 1 or play error tone.	0 = Route to Trunk Group 1 1 = Play Warning Tone to Dialer	1
04	**LCR Mode -** ***Not Used in the U.S.***	-	0
06	**ARS COS Match Access** With the ARS Class of Service Match Access feature, you can determine whether the system should allow a call based on the COS assigned to the Dial Analysis Table (Program 26-02). This change can be used to create a tenant-like application. It will then use the trunk group defined in the Additional Entry in Program 26-02-03 to place the outgoing call. When this feature is enabled, the calls will be routed in sequential order, and will forward provided the Class of Service for the trunk groups match.	0 = Disabled (COS not compared) 1 = Enabled (COS Match Access)	0

Conditions

None

Feature Cross Reference

- Automatic Route Selection

Telephone Programming Instructions

To enter data for Program 26-01 (Automatic Route Selection Service):

1. Enter the programming mode.
2. 26 01

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:
IN

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Dial Analysis Tables increased from 200 to 400 with software 2.63+.	• Dial Analysis Tables increased from 200 to 400 with software 2.63+.

Description

Use **Program 26-02 : Dial Analysis Table for ARS/LCR** to set pre-transaction tables for selecting Automatic Route Selection (ARS).

- Service Type 1 (Route to Trunk Group Number) - The number routes to a trunk group.
- Service Type 2 (F-Route Selected) - The number is controlled by the F-Route table.

Input Data

Dial Analysis Table Number	1-400

Item No.	Item	Input Data	Default
01	Dial	Dial Digits (16 digits maximum) 1-9, 0, *, #, or @ for wild character (Press line key 1)	No Setting
02	Service Type	0 = No ARS 1 = Route to Trunk Group 2 = Select F-Route Access	0
03	Additional Data / Service Number	In Service Type 1: Select Trunk Group Number (0-100, 0=no route) In Service Type 2: F-Route Time Schedule Not Used = 0-500 (F-Route Table Number). Refer to Program 44-05. F-Route Time Schedule Used = 0-500 (F-Route Selection Number). Refer to Program 44-04.	0
04	ARS Class of Service	0-16	10
05	Dial Treatment	0-15	0

Item No.	Item	Input Data	Default
06	**LCR Carrier Table** Select the Carrier Table to be used for dial edit. Table 1 is a special table - this table will be automatically used for all numbers that begin with "0" and which do not correspond with the entry in Program 26-02-01.	0-25	0

Conditions

None

Feature Cross Reference

- Automatic Route Selection

Telephone Programming Instructions

To enter data for Program 26-02 (Dial Analysis Table for ARS/LCR):

1. Enter the programming mode.
2. 26 02

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available. • "An" Dial Treatment available with 2.64+ software.	• Available. • "An" Dial Treatment available with 2.64+ software.

Description

Use **Program 26-03 : ARS Dial Treatments** to assign the 15 Dial Treatments for automatic ARS dialing translation. Assign Dial Treatments to Service Numbers (Trunk Groups) in Program 26-02. The ARS Dial Treatment options are:

- **3** - Delete the NPA if dialed as part of the initial call.
  Requires at least 8 digits in the ARS table (Program 26-02-01).
- **2** - Delete the leading "1" if dialed as part of the initial call.
  Requires at least 8 digits in the ARS table (Program 26-02-01).
- **1** - Add a leading 1 if not dialed as part of the initial call.
  Requires at least 8 digits in the ARS table (Program 26-02-01).
- **INPA** - Insert the NPA specified by NPA.
- **DNN** - Outdial the NN number of digits or execute the code that follows. For example, D041234 out-dials 1234. Valid entries are 0-9, #, *, Wnn (wait nn seconds) and P (pause). Each digits code counts as a digit. So for example, if a P was added for a pause, the entry would look like: D05P1234. This Dial Treatment can only be added from telephone programming.
- **Wnn** - Wait nn seconds.
- **P** - Pause in analog trunk.
- **R** - Redial the initially dialed number, including any modifications
- **E** - End of Dial Treatment. All Dial Treatments must end with the E code.
- **X** - When ARS is enabled, X must be entered in the Dial Treatment in order for the system to output the extension number of the call's originator to the black box for the E911 feature.
- **An** - For Alternate Carrier Access (n = 1 ~ 4). The numeric digit instructs the system to insert a Transit Network Selection information element in the SETUP message and also identifies which code in Program 26-11 will be included in the information element. This function is valid only for outbound calls by ISDN trunks.

Input Data

Dial Treatment Table Number	1-15

Item No.	Input Data	Default
01	24 characters maximum	No Setting

Conditions

None

Program 26 : ARS Service
26-03 : ARS Dial Treatments

Feature Cross Reference

- Automatic Route Selection

Telephone Programming Instructions

To enter data for Program 26-03 (ARS Dial Treatments):

1. Enter the programming mode.
2. 26 03

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 26-04 : ARS Class of Service** to set an extension's ARS Class of Service. Automatic Route Selection uses ARS Class of Service when determining how to route an extension's calls.

Input Data

Extension Number	Up to 8 digits

Item No.	Day/Night Mode	Class	Default
01	Aspire S: 1-4 Aspire: 1-8	0-16	0

Conditions

None

Feature Cross Reference

- Automatic Route Selection

Telephone Programming Instructions

To enter data for Program 26-04 (ARS Class of Service):

1. Enter the programming mode.
2. 26 04

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 26 : ARS Service

26-05 : LCR Carrier Table

Level:	Aspire S	Aspire M/L/XL
IN	• Not Available.	• Not Available.

Description

This item is not currently used in the U.S.

Level:	Aspire S	Aspire M/L/XL
IN	• Not Available.	• Not Available.

Description

This item is not currently used in the U.S.

Program 26 : ARS Service

26-07 : LCR Cost Center Code Table

Level:	Aspire S	Aspire M/L/XL
IN	• Not Available.	• Not Available.

Description

This item is not currently used in the U.S.

Level:	Aspire S	Aspire M/L/XL
IN	• Not Available.	• Not Available.

Description

This item is not currently used in the U.S.

Program 26 : ARS Service

26-09 : LCR Manual Override Exemption Table

Level:	Aspire S	Aspire M/L/XL
IN	• Not Available.	• Not Available.

Description

This item is not currently used in the U.S.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 26-11 : Transit Network ID Table** to enter up to four Transit Network ID Codes, each being 4 numbers long.

Input Data

Transit Network ID Codes	1-4

Item No.	Item	Input Data	Default	Related Program
01	**Carrier ID** Enter the Transit Network Selection information element to be added to an ARS call using an ISDN trunk. This information element identifies a requested transit network.	0-9 Maximum of 4 Digits	-	26-02-01 26-03-01

Conditions

None

Feature Cross Reference

- Automatic Route Selection
- ISDN Compatibility

Telephone Programming Instructions

To enter data for Program 26-11 (Transit Network ID Table):

1. Enter the programming mode.
2. 26 11

3. Enter the number of the item you want to program.

4. Select the table number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:
IN

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Business/ACD mode (3) not available.	• Business/ACD mode (3) requires software 4.0E+.

Description

Use **Program 30-01 : DSS Console Operating Mode** to set the mode of the system's DSS Consoles. The entry you make in this option applies to all the system's DSS Consoles. The available options are:

- Regular (Business) Mode (0)
  This option indicates the status of normal keysets (not ACD agents).
- Hotel Mode (1)
- ACD Monitor Mode (2)
  This option indicates the status of ACD agents (non-ACD agents are not included.
- Business/ACD Monitor Mode (3)
  This option allows a non-ACD DSS console to lamp indicating the status of both non-ACD agents as well as ACD agents.

Input Data

DSS Console Number	Aspire S: 1-4 Aspire: 01-32

Item No.	DSS Operation Mode	Default
01	0 = Business mode 1 = Hotel mode 2 = ACD monitor mode (Aspire M/L/XL only) 3 = Business/ACD mode (Aspire M/L/XL only)	0

Conditions

None

Feature Cross Reference

- Direct Station Selection (DSS) Console
- Hotel/Motel

Program 30 : DSS/DLS Console Setup

30-01 : DSS Console Operating Mode

Telephone Programming Instructions

To enter data for Program 30-01 (DSS Console Operating Mode):

1. Enter the programming mode.
2. 30 01

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 30-02 : DSS Console Extension Assignment** to identify which extensions have DSS Consoles connected.

- ***Aspire S:***
  You can have up to 4 different extensions with DSS Consoles. A single extension can have up to 4 110-Button DSS Consoles.
  Aspire:
  You can have up to 32 different extensions with DSS Consoles. A single extension can have up to 4 110-Button DSS Consoles (32 is the maximum allowed per system).
- Each extension in the system can have one 24-Button DLS Console (Aspire S: 24 maximum, Aspire: 256 maximum). An extension can have a 24-Button DLS Console in addition to 110-Button DSS Consoles.

When programming, each extension/DSS Console(s) combination is called a Console Number. There are 32 Console Numbers (1-32). You assign Console Numbers to extensions. When entering data, you normally make the assignment for Console Number 1 first.

Input Data

110-Button DSS Console Number	Aspire S: 1-4 Aspire: 01-32

Item No.	Description	Default
01	The extension number for Key Telephone connected with the DSS console (Up to 8 digits)	No setting

Conditions

24-button DSS consoles cannot be daisy-chained.

Feature Cross Reference

- Direct Station Selection (DSS) Console

Telephone Programming Instructions

To enter data for Program 30-02 (DSS Console Extension Assignment):

1. Enter the programming mode.
2. 30 02

3. Enter the number of the item you want to program.

4. Select the DSS number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
SA	• Available. • Item 88 requires software 4.93+.	• Available. • Item 88 requires software 4.93+.

Description

Use **Program 30-03 : DSS Console Key Assignments** to customize the key assignments for 110-Button DSS Consoles. The DSS Console keys can be programmed using any of the function codes listed below. In addition, the key (when defined as a DSS/One-Touch key [code 01] can have any function up to four digits long (e.g., extension number or Service Code). The function information (such as extension number or Service Code) would then be entered as the additional data.

To prevent lamping problems when reassigning DSS Console keys, it is recommended that you clear an extension's programmed key before reassigning it (Enter key to be cleared + 00 or *00 [If using Web or PC Programming, delete the key assignments and upload the change to the system before proceeding]). Without clearing an extension's key first, your DSS Console may not show the correct lamping, although the DSS function will work correctly.

If you are programming the system from the extension to which the DSS Console is connected, either by phone or using the Web or PC Program, you may need to unplug the DSS and plug it back in to reset the console's lamping.

Input Data

Index 1

DSS Console Number	Aspire S: 1-4 Aspire: 01-32

Index 2

Item No.	Key Number	Function Number	Additional Data
01	001-200	0-99 (General functional level) * 00-* 99 (Appearance functional level)	Refer to functional number list

Program 30 : DSS/DLS Console Setup

30-03 : DSS Console Key Assignment

Function Number List

[1] General functional level (00 – 99)

Function Number	Function	Additional Data	LED Indication
00	Not Used		
01	DSS / One-Touch	Extension number or any numbers (Up to 24 digits)	**Red On:** extension busy **Off:** extension idle **Rapid Blink (Red):** DND or Call Forward
02	Microphone Key (ON/OFF)		**Red On:** Mic On **Off:** Mic Off
03	DND Key		**Red On:** DND
04	BGM (ON/OFF)		**Red On:** BGM On **Off:** BGM Off
05	Headset		**Red On:** Under headset operation
06	Transfer Key		None
07	Conference Key		**Red On:** Under conference operation
08	Incoming Call Log		**Rapid Blink (Red):** New call log **Red On:** Call log **Off:** No call log
09	Operation Mode Switch	Mode number (1 – 8)	**Red On:** On mode
10	Call Forward - Immediate		**Slow Blink (Red):** Forwarding state **Rapid Blink (Red):** Forwarded state
11	Call Forward - Busy		**Slow Blink (Red):** Forwarding state **Rapid Blink (Red):** Forwarded state
12	Call Forward - No Answer		**Slow Blink (Red):** Forwarding state **Rapid Blink (Red):** Forwarded state
13	Call Forward - Busy/No Answer		**Slow Blink (Red):** Forwarding state **Rapid Blink (Red):** Forwarded state
14	Call Forward – Both Ring		**Slow Blink (Red):** Forwarding state **Rapid Blink (Red):** Forwarded state
15	Follow Me		**Rapid Blink (Red):** Setting state **Slow Blink (Red):** Set-ed state
16	Call Forward to Station		**Slow Blink (Red):** Forwarding state **Rapid Blink (Red):** Forwarded state
17	Call Forward to Device		**Slow Blink (Red):** Forwarding state **Rapid Blink (Red):** Forwarded state

Function Number	Function	Additional Data	LED Indication
18	Text Message Setup	Message Numbers (01-20)	**Red On:** Feature active by Function Key
19	External Group Paging	External Paging Number (1-8)	**Red On:** Active
20	External All Call Paging		**Red On:** Active
21	Internal Group Paging	Internal Paging Number (01-64)	**Red On:** Active
22	Internal All Call Paging		None
23	Meet-Me Answer to Internal Paging		None
24	Call Pickup		None
25	Call Pickup for Another Group		None
26	Call Pickup for Specified Group	Call Pickup Group Number	None
27	Abbreviated Dial – Common/Private	Abbreviated dial number (Common / Private)	None
28	Abbreviated Dial - Group	Abbreviated dial number (Group)	None
29	Repeat Redial		**Rapid Blink (Red):** Under a repeat dial
30	Saved Number Redial		None
31	Memo Dial		None
32	Meet – Me Conference		None
33	Override (Off-Hook Signaling)		None
34	Break - In		None
35	Camp On		**Red On:** Under camp-on or reservation
36	Step Call		None
37	DND / FWD Override Call		None
38	Message Waiting		None
39	Room Monitoring		**Rapid Blink (Red):** Under monitored **Slow Blink (Red):** Under monitoring
40	Handset Transmission Cutoff		**Red On:** Transmission cut-off
41	Buzzer	Extension Number	**Red On:** Transmission side **Rapid Blink (Red):** Receiver side

Program 30 : DSS/DLS Console Setup

30-03 : DSS Console Key Assignment

Function Number	Function	Additional Data	LED Indication
42	Boss – Secretary Call	Extension Number	**Red On:** Boss – Secretary mode
43	Series Call		None
44	Common Hold		None
45	Exclusive		None
46	Department Group Log Out		**Red On:** Logged Out
47	Reverse Voice Over	Extension Number	**Red On:** extension busy **Off:** extension idle **Rapid Blink (Red):** DND or Call Forward
48	Voice Over		Calling party - Slow Blink (Red): Under a call, Under a response Called party - Slow Blink (Red): Under a call, Under a response
49	Call Redirect	Extension Number or Voice Mail Number	None
50	Account Code		None
51	General Purpose Relay	Relay No (0, 1-8)	**Red On:** Relay On
52	Incoming Call Queuing Setup	Incoming Group Number	**Red On:** Under setting
53	Queuing Message Starting		**Red On:** Active
54	External Call Forward by Door Box		**Red On:** Active
55	Extension Name Edit		None
56	Department Incoming Call - Automatic Transfer		
57	Department Incoming Call - Delayed		
58	Department Incoming Call - Immediate	Department Group Number (1-8 or 01 – 64)	
59	Department Incoming Call - Delay	Department Group Number (1-8 or 01 – 64)	
60	Department Incoming Call - DND	Department Group Number (1-8 or 01 – 64)	
61	ID Entry - Not Used -		
63	Outgoing Call Without Caller ID (ISDN)		**Red On:** Active

Function Number	Function	Additional Data	LED Indication
64	Key Pad Facility		**Red On:** Active
65	Not Used		
66	CTI		**Red On:** CTI active
67	Mail Box	Extension Number or Department Group Number	**Rapid Blink (Green):** New message received **Red On:** Listening to messages.
68	Voice Mail Service	0 = Skip 1 = Back Skip 2 = Monitor	2-In case of monitor mode **Slow Blink (Red):** Monitor setting - Automatic **Red On:** Monitor setting - Manual
69	- Not Used -		
70	Automated Attendant for Extension	Extension Number or Department Group Number	None
71	Message Change for Voice Attendant	Extension Number or Department Group Number	None
72	Keypad Facility Key		
73	Keypad Hold Key		
74	Keypad Retrieve Key		
75	Keypad Conference Key		
76	Toll Restriction in Credit		
77	Voice Mail (In-Skin)	Extension Number or Pilot Number	**Red On:** Access to Voice Mail **Rapid Blink (Green):** New Message
78	Conversation Recording	0=Conversation recording 1=Delete, Re-recording 2=Delete	**Rapid Blink (Red):** Recording
79	Automated Attendant (In-Skin)	Extension Number or Pilot Number	**Red On:** Set Up for All Calls **Slow Blink (Red):** Set Up for Busy/No Answer Calls
80	Tandem Ringing	1=Set or 0=Cancel Extension Number to Tandem Ring	**Red On:** Active
88	**DID Mode Switching** Assign a key for DID Mode Switching. This key can be used to manually change the time pattern for a DID number.	Program 22-17 Table Number	Pattern 1 = LED off Pattern 2 = LED on Pattern 3 = slow flash Pattern 4 = fast flash Patterns 5-8 = off

[2] Appearance Function Level (*00 - *99) (Service Code 852)

Function Number	Function	Additional Data	LED Indication
*00	Not Used		
*01	Trunk Key	Trunk Number (1-8 or 001-200)	
*02	Trunk Group/Loop Key	Trunk Group Number (1-8 or 001-100)	
*03	Virtual Extension Key	Extension Number or Department Group Number	
*04	Park Key	Park Number (01 – 64)	
*05	Loop Keys	• 0=Incoming + Trunk Group Number (1-8 or 001-100) • 1=Outgoing + Trunk Group Number (1-8 or 001-100) • 2=Both + Trunk Group Number (1-8 or 001-100)	
*06	Trunk Access Via Networking	Network System Number (01-50)	
*10	ACD Log – In / Log – Out		**Red On:** Under log-on **Off:** Under log-off
*11	-Not Used -		
*12	ACD Emergency Call		Emergency call **Red On:** Under monitor, Override, Standby
*13	ACD Off Duty Mode		**Red On:** Under off duty **Slow Blink (Red):** Under reservation
*14	ACD Start / End		**Red On:** ACD operation end
*15	ACD Monitor Mode		**Red On:** Under monitor
*16	ACD Standby Mode		**Red On:** Standby
*17	ACD Wrap-Up Mode		**Red On:** Under work time **Slow Blink (Red):** Under reservation
*18	ACD Overflow Control	ACD Group Number	**Red On:** Enable **Slow Blink (Red):** Disable

Default

The DSS keys 01-60 of all DSS consoles = DSS/One touch key 100-159.

Conditions

None

Feature Cross Reference

- Direct Station Selection (DSS) Console

Telephone Programming Instructions

To enter data for Program 30-03 (DSS Console Key Assignment):

1. Enter the programming mode.
2. 30 03

3. Enter the number of the item you want to program.

4. Select the DSS number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 30 : DSS/DLS Console Setup

30-04 : Alternate DSS Console Extension Assignment

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 30-04 : Alternate DSS Console Extension Assignment** to identify the alternate DSS console extension use when in off-duty mode (by pressing ALT key on the DSS console).

Input Data

DSS Console Number	Aspire S: 1-4 Aspire: 01-32

Item No.	Alternate DSS Number	Default
01	Aspire S: 0-4 Aspire: 0-32 (0 = Not Specified)	0

Conditions

24-button DSS consoles cannot be daisy-chained.

Feature Cross Reference

- Direct Station Selection (DSS) Console

Telephone Programming Instructions

To enter data for Program 30-04 (Alternate DSS Console Extension Assignment):

1. Enter the programming mode.
2. 30 04

3. Enter the number of the item you want to program.

4. Select the DSS number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 30 : DSS/DLS Console Setup

30-05 : DSS Console Lamp Table

Level:
IN

Aspire S	Aspire M/L/XL
• Available except for items 4-8.	• Available.
• With software 4.0E+, this program also affects keyset lamping for DSS/Hotline keys.	• With software 4.0E+, this program also affects keyset lamping for DSS/Hotline keys.

Description

Use **Program 30-05 : DSS Console Lamp Table** to define the LED patterns for functions on the DSS consoles. Depending on your software version, it will also affect the lamping for DSS/Hotline keys on keysets.

Input Data

Item No.	Item	Lamp Pattern Data	Default
01	Idle Extension	0-7	0 (Off)
02	Busy Extension	0-7	7 (On)
03	DND Extension	0-7	3 (RW)
04	ACD Agent Busy	0-7	7 (On)
05	Out of Schedule (ACD DSS)	0-7	0 (Off)
06	ACD Agent Log Out (ACD DSS)	0-7	5 (IL)
07	ACD Agent Log In (ACD DSS)	0-7	4 (IR)
08	ACD Agent Emergency (ACD DSS)	0-7	6 (IW)
09	Hotel Status Code 1 (Hotel DSS)	0-7	7 (On)
10	Hotel Status Code 2 (Hotel DSS)	0-7	1 (FL)
11	Hotel Status Code 3 (Hotel DSS)	0-7	2 (WK)
12	Hotel Status Code 4 (Hotel DSS)	0-7	3 (RW)
13	Hotel Status Code 5 (Hotel DSS)	0-7	5 (IL)
14	Hotel Status Code 6 (Hotel DSS)	0-7	3 (RW)
15	Hotel Status Code 7 (Hotel DSS)	0-7	6 (IW)
16	Hotel Status Code 8 (Hotel DSS)	0-7	4 (IR)
17	Hotel Status Code 9 (Hotel DSS)	0-7	3 (RW)
18	Hotel Status Code 0 (Hotel DSS)	0-7	0 (Off)
19	Hotel Status Code * (Hotel DSS)	0-7	4 (IR)
20	Hotel Status Code # (Hotel DSS)	0-7	5 (IL)

LED Pattern 0 : [OFF]

LED Pattern 1 : [FL: On(500ms)/Off(500ms)]

LED Pattern 2 : [WK: On(250ms)/Off(250ms)]

LED Pattern 3 : [RW: On(125ms)/Off(125ms)]

LED Pattern 4 : [IR: On(125ms)/Off(125ms)/On(125ms)/Off(625ms)]

LED Pattern 5 : [IL: On(875ms)/Off(125ms)]

LED Pattern 6 : [IW: On(625ms)/Off(125ms)/On(125ms)/Off(125ms)]

LED Pattern 7 : [ON]

Conditions

24-button DSS consoles cannot be daisy-chained.

Program 30 : DSS/DLS Console Setup

30-05 : DSS Console Lamp Table

Feature Cross Reference

- Direct Station Selection (DSS) Console

Telephone Programming Instructions

To enter data for Program 30-02 (DSS Console Extension Assignment):

1. Enter the programming mode.
2. 30 02

3. Enter the number of the item you want to program.

4. Select the DSS number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 31-01 : System Options for Internal/External Paging** to define the system options for Internal/External Paging.

The system shows the names you program on the telephone displays. Use the following chart when entering and editing text. When using the keypad digits, press the key once for the first character, twice for the second character, etc. For example, to enter a C, press key "2" three times. Press the key six times display the lower case letter.

With Software 2.05+:
Key for Entering Names

When entering names in the procedures below, refer to this chart. Names can be up to 12 digits long. For prior software or when using i-Series phones, refer to the charts in the Name Storing feature (page 432).

Use this keypad digit . . .	When you want to. . .
1	Enter characters: 1 @ [¥] ^ _ ` { | } → ← Á À Â Ã Ç É Ê ì ó
2	Enter characters A-C, a-c, 2.
3	Enter characters D-F, d-f, 3.
4	Enter characters G-I, g-i, 4.
5	Enter characters J-L, j-l, 5.
6	Enter characters M-O, m-o, 6.
7	Enter characters P-S, p-s, 7.
8	Enter characters T-V, t-v, 8.
9	Enter characters W-Z, w-z, 9.
0	Enter characters: 0 ! " # $ % & ' ( ) ô o ú ä ö ü α ε θ
*	Enter characters: * + , - . / : ; < = > ? π ∑ σ Ω ∞ ¢ £
#	# = Accepts an entry (only required if two letters on the same key are needed - ex: T**OM**). Pressing # again = Space. (In system programming mode, use the right arrow soft key instead to accept and/or add a space.)
CONF	Clear the character entry one character at a time.
CLEAR	Clear all the entries from the point of the flashing cursor and to the right.

Program 31 : Paging Setup

31-01 : System Options for Internal/External Paging

Input Data

Item No.	Item	Input Data	Default	Description	Related Program
01	All Call Paging Zone Name	Up to 12 Characters	Group all	Assign a name to each All Call Internal Paging zone. The name shows on the display of the telephone making the announcement.	11-12-19 31-02-02
02	Page Announcement Duration	0-64800 (Sec.)	1200	This timer sets the maximum length of Page announcements.	
04	Privacy Release Time	0-64800 (Sec.)	90	Once the user initiates a Meet Me Conference or Voice Call Conference, the system waits this interval for the Paged party to join the call.	

Conditions

None

Feature Cross Reference

- Paging, External
- Paging, Internal

Telephone Programming Instructions

To enter data for Program 31-01 (System Options for Internal/External Paging):

1. Enter the programming mode.
2. 31 01

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:
IN

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Default changed for item 1 with software 2.66+.	• Default changed for item 1 with software 2.66+.

Description

Use **Program 31-02 : Internal Paging Group Assignment** to assign extensions to Internal Paging Groups (i.e., Page Zones). The setting in this program also determines if the Internal Page Group can receive Internal All Call Paging. The system can have up to 64 paging groups. An extension can be in only one Internal Paging Group.

Input Data

Extension Number	Max. 8 digits

Item No.	Item	Input Data	Default
01	**Internal Paging Group Number** Assign extensions to Internal Paging Groups (i.e., Page Zones). The system allows up to 64 Internal Paging Groups. An extension can be in only one Internal Paging Group.	0-64 (0 = no setting)	***Aspire S:*** Extension 301-308 = Group 1 All Remaining Extensions = 0 ***Aspire:*** Extension 301-316 = Group 1 All Remaining Extensions = 0 ***Prior to 2.66 for Aspire S/Aspire:*** All Extensions = 0
02	**Internal All Call Paging Receiving** Allow or prevent All Call Internal Paging for each extension. If allowed, extension can place and receive All Call Internal Paging announcements. If prevented, extensions can only make (not receive) All Call Internal Paging announcements. If Combined Paging zones should be restricted as well, change the internal page zone group in Program 31-07-01 to "0".	0 = off 1 = on	0

Conditions

None

Program 31 : Paging Setup

31-02 : Internal Paging Group Assignment

Feature Cross Reference

- Paging, Internal

Telephone Programming Instructions

To enter data for Program 31-02 (Internal Paging Group Assignment):

1. Enter the programming mode.
2. 31 02

3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 31-03 : Internal Paging Group Settings** to assign names to Internal Paging Groups (i.e., Page Zones) and to define the splash tone for Internal Paging.

The system shows the names you program on the telephone displays. Use the following chart when entering and editing text. When using the keypad digits, press the key once for the first character, twice for the second character, etc. For example, to enter a C, press key "2" three times. Press the key six times display the lower case letter.

With Software 2.05+:
Key for Entering Names

When entering names in the procedures below, refer to this chart. Names can be up to 12 digits long. For prior software or when using i-Series phones, refer to the charts in the Name Storing feature (page 432).

Use this keypad digit . . .	When you want to. . .
1	Enter characters: 1 @ [¥] ^ _ ` { | } → ← Á À Â Ã Ç É Ê ì ó
2	Enter characters A-C, a-c, 2.
3	Enter characters D-F, d-f, 3.
4	Enter characters G-I, g-i, 4.
5	Enter characters J-L, j-l, 5.
6	Enter characters M-O, m-o, 6.
7	Enter characters P-S, p-s, 7.
8	Enter characters T-V, t-v, 8.
9	Enter characters W-Z, w-z, 9.
0	Enter characters: 0 ! " # $ % & ' ( ) ô o ú ä ö ü α ε θ
*	Enter characters: * + , - . / : ; < = > ? π ∑ σ Ω ∞ ¢ £
#	# = Accepts an entry (only required if two letters on the same key are needed - ex: T**OM**). Pressing # again = Space. (In system programming mode, use the right arrow soft key instead to accept and/or add a space.)
CONF	Clear the character entry one character at a time.
CLEAR	Clear all the entries from the point of the flashing cursor and to the right.

Input data

Internal Paging Group Number	01-64

Item No.	Item	Input Data	Default	Description
01	Internal Paging Group Name	Up to 12 Characters		Assign names to Internal Paging Groups (i.e., Page Zones). The system shows the names you program on the telephone displays.
02	Internal Paging Splash Tone	0 = Ordinary volume 1 = Mute 2 = No tone	0	Allow an extension to have normal (0), muted (1) or no (2) Internal Paging alert beeps before a Paging announcement.

Default

Item 01 : Internal Paging Group Name

Extension Paging Group	Name
01	Group 1
02	Group 2
:	:
64	Group 64

Conditions

None

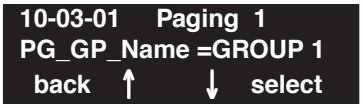
Feature Cross Reference

- Paging, Internal

Telephone Programming Instructions

To enter data for Program 31-03 (Internal Paging Group Settings):

1. Enter the programming mode.
2. 10 03



3. Enter the number of the item you want to program.

4. Select the Internal Paging Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 31 : Paging Setup
31-04 : External Paging Zone Group

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 31-04 : External Paging Zone Group** to assign each External Paging zone to an External Paging group. Users call the External Paging group when broadcasting announcements to the external zone. When programming, the zones on the PGDAD adapter are numbers 1-8. On the Aspire system, the NTCPU's zone is number 9.

To simplify programming and troubleshooting, always make the External Paging Zone Group the same number as the External Paging zone (i.e., 1 = 1, 2 = 2, etc.).

Input Data

External Speaker Number	Aspire S: 1-8 Aspire: 1-9

Item No.	Paging Group Number	Default
01	0-8 (0 = no setting)	Speaker 1 (PGDAD) = 1 (Group 1) Speaker 2 (PGDAD) = 2 (Group 2) Speaker 3 (PGDAD) = 3 (Group 3) Speaker 4 (PGDAD) = 4 (Group 4) Speaker 5 (PGDAD) = 5 (Group 5) Speaker 6 (PGDAD) = 6 (Group 6) Speaker 7 (PGDAD) = 7 (Group 7) Speaker 8 (PGDAD) = 8 (Group 8) Speaker 9 (NTCPU) = 1 (Group 1)

Conditions

None

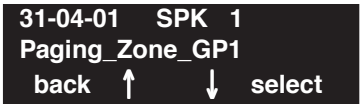
Feature Cross Reference

- Paging, External

Telephone Programming Instructions

To enter data for Program 31-04 (External Paging Zone Group):

1. Enter the programming mode.
2. 31 04



3. Enter the number of the item you want to program.

4. Select the External Speaker number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 31 : Paging Setup

31-05 : Universal Night Answer/Ring Over Page

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 31-05 : Universal Night Answer** to assign Universal Night Answer ringing to each External Paging zone. For each trunk port, you make a separate entry for each External Paging zone. When programming, the zones on the PGDAD adapter are numbers 1-8. The NTCPU's zone is number 9. For UNA ringing, you make a separate entry for each Night Service mode.

This program is also used for an external ringer connected to a 2PGDAD module.

Input Data

Trunk Port Number	Aspire S: 1-8 Aspire: 1-200

External Speaker Number	Aspire S: 1-8 Aspire: 1-9

Item No.	Day/Night Mode	Input Data	Default
01	Aspire S: 1-4 Aspire: 1-8	0 = No Ringing 1 = Ringing	0

Conditions

None

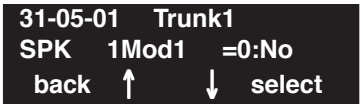
Feature Cross Reference

- Night Service
- Paging, External
- Transfer

Telephone Programming Instructions

To enter data for Program 31-05 (Universal Night Answer):

1. Enter the programming mode.
2. 31 05



3. Enter the number of the item you want to program.

4. Select the trunk number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 31 : Paging Setup
31-06 : External Speaker Control

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 31-06 : External Speaker Control** to define the settings for the external speaker using an amplifier.

Input Data

External Speaker Number	Aspire S: 1-8 Aspire: 1-9

Item No.	Item	Input Data	Default
01	**Broadcast Splash Tone Before Paging** Use this option to enabled or disable splash tone before Paging over an external zone. If enabled, the system broadcasts a splash tone before the External Paging announcement.	0 = No tone 1 = Splash tone 2 = Chime tone	2
02	**Broadcast Splash Tone After Paging** Use this option to enabled or disable splash tone after Paging over an external zone. If enabled, the system broadcasts a splash tone at the end of an External Paging announcement.	0 = No tone 1 = Splash tone 2 = Chime tone	2
03	**Speech Path** Determine if the external speaker will be used for talkback (As this option is not available with the NTCPU external page zone, speaker 9 should be left at "1".	0 = Both way 1 = One way (PGD -> SPK)	1
04	**CODEC Transmit Gain Setup**	1-63 (-15.5 ~ +15.5dB)	32
05	**CODEC Transmit Gain Setup**	1-63 (-15.5 ~ +15.5dB)	32

Conditions

None

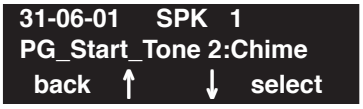
Feature Cross Reference

- Paging, External

Telephone Programming Instructions

To enter data for Program 31-06 (External Speaker Control):

1. Enter the programming mode.
2. 31 06



3. Enter the number of the item you want to program.

4. Select the External Speaker number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 31 : Paging Setup
31-07 : Combined Paging Assignments

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 31-07 : Combined Paging Assignments** to assign an External Paging Group (0-8) to an Internal Paging Zone (0-64) for Combined Paging. When an extension user makes a Combined Page, they simultaneously broadcast into both the External and Internal Zone.

Use Program 31-04-01 to assign an External Paging Zone (Aspire S: 1-8 or Aspire: 1-9) to an External Page Group (1-8).

Input Data

External Paging Group Number	0-8 (0 = All external paging)

Item No.	Internal Paging Group Number	Default
01	0-64 (0 = All Call [internal and external zones])	1

Conditions

None

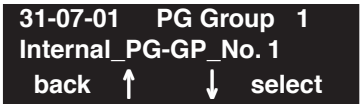
Feature Cross Reference

- Paging, External
- Paging, Internal

Telephone Programming Instructions

To enter data for Program 31-07 (Combined Paging Assignments):

1. Enter the programming mode.
2. 31 07



3. Enter the number of the item you want to program.

4. Select the Page Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 31 : Paging Setup
31-08 : BGM on External Paging

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 31-08 : BGM on External Paging** to set the Background Music option for each External Paging zone. If enabled, the system will play Background Music over the zone when it is idle.

When programming, the zones on the PGDAD adapter are numbers 1-8. For the Aspire system, the NTCPU's zone is number 9.

Input Data

External Speaker Number	Aspire S: 1-8 Aspire: 1-9

Item No.	Description	Input Data	Default
01	Use this option to allow or prevent the External Paging zone you select from broadcasting Background Music when it is idle.	0 = Disable 1 = Enable	0

Conditions

None

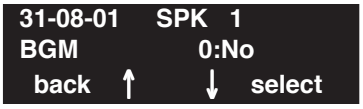
Feature Cross Reference

- Background Music
- Paging, External

Telephone Programming Instructions

To enter data for Program 31-08 (BGM on External Paging):

1. Enter the programming mode.
2. 31 08



3. Enter the number of the item you want to program.

4. Select the External Speaker number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

- For Your Notes -

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 32-01 : Door Box Timers** to assign the timers used for the Door Box.

Input Data

Item No.	Item	Input Data	Default
01	**Door Box Answer Time** A keyset user must answer Door Box chimes within this interval.	0-64800	30
02	**Door Lock Cancel Time** When a single line (2500 type) telephone user hook flashes or a keyset user presses the FLASH key while talking to a Door Box, the strike stays open for this interval.	0-64800	10
03	**Off-Premise Call Forward by Door Box Disconnect Timer** Define the conversation period for an Off-Premise Call Forward by Door Box call. When this timer expires, the caller will hear busy tone for 3 seconds (fixed timer) and the call will then be disconnected.	0-64800	60

Conditions

None

Feature Cross Reference

- Door Box

Program 32 : Door Box and Sensor Setup

32-01 : Door Box Timers

Telephone Programming Instructions

To enter data for Program 32-01 (Door Box Timers):

1. Enter the programming mode.
2. 32 01

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
SA	• Available.	• Available.

Description

Use **Program 32-02 : Door Box Ring Assignments** to assign the extension which will ring when a caller presses the associated Door Box's call button.

Input Data

Door Box Number	Aspire S: 1-4 Aspire: 1-8

Day/Night Mode	Aspire S: 1-4 Aspire: 1-8

Item No.	Door Box Ring Group Number	Extension Number	Default
01	01-32	Max. 8 digits	No setting

Conditions

None

Feature Cross Reference

- Door Box

Program 32 : Door Box and Sensor Setup

32-02 : Door Box Ring Assignment

Telephone Programming Instructions

To enter data for Program 32-02 (Door Box Ring Assignment):

1. Enter the programming mode.
2. 32 02

3. Enter the number of the item you want to program.

4. Select the Door Box number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 32-03 : Door Box Basic Setup** to select the chime pattern and gain level for each Door Box. There are six distinctive chime patterns. The chime tones are defined in Program 80-01.

Input Data

Door Box Number	Aspire S: 1-4 Aspire: 1-8

Item No.	Item	Input Data	Default
01	**Chime Pattern**	0 = No ringing tone 1 = Door Box ring 1 2 = Door Box ring 2 3 = Door Box ring 3 4 = Door Box ring 4 5 = Door Box ring 5 6 = Door Box ring 6	Door Box 1 = 1 Door Box 2 = 2 Door Box 3 = 3 Door Box 4 = 4 Door Box 5 = 5 Door Box 6 = 6 Door Box 7 = 1 Door Box 8 = 1
02	**CODEC Transmit Gain Setup** (PGD to Door Box)	1-63 (-15.5 ~= +15.5dB)	32
03	**CODEC Receive Gain Setup** (Door Box to PGD)	1-63 (-15.5 ~ +15.5dB)	32

Conditions

None

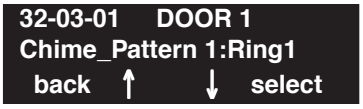
Feature Cross Reference

- Door Box

Telephone Programming Instructions

To enter data for Program 32-03 (Door Box Basic Setup):

1. Enter the programming mode.
2. 32 03



3. Enter the number of the item you want to program.

4. Select the Door Box number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 33-01 : ACI Port Type Setup** to set the function of each software port on an Analog Communications Interface. Each ACI software port can have only one function (input, output or none).

Input Data

ACI Port Number	Aspire S: 1-8 Aspire: 01-96

Item No.	ACI Type	Default
01	0 = No Setting 1 = Input 2 = Input/Output	2

Conditions

None

Feature Cross Reference

- Analog Communications Interface (ACI)

Telephone Programming Instructions

To enter data for Program 33-01 (ACI Port Type Setup):

1. Enter the programming mode.
2. 33 01

33-01-01 ACI Port1
ACI_Type 2:In/Out
back ↑ ↓ select

3. Enter the number of the item you want to program.

33-01-nn ACI Portnn
nnnnn
← →

4. Select the ACI port number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available - 8 ACI Ports and 4 ACI Department Groups.	• Available - 8 ACI Ports and 16 ACI Department Groups.

Description

Use **Program 33-02 : ACI Department Calling Group** to assign ACI ports to Department Groups. An ACI port can only be in one group.

Also use this program to set the ACI port's priority. When a call comes into the ACI Department Group, it connects to the ACI port in order of their priority. A higher priority port (e.g., 1) receives calls before a lower priority port (e.g., 6).

Input Data

ACI Port Number	Aspire S: 1-8 Aspire: 01-96

Item No.	Group Number	Priority
01	Aspire S: 1-4 Aspire: 01-16	Aspire S: 1-8 Aspire: 1-96

Default

ACI Port	Group	Order
01	1	1
02	1	1
:	:	:
96	1	96

Conditions

None

Feature Cross Reference

- Analog Communications Interface (ACI)

Telephone Programming Instructions

To enter data for Program 33-02 (ACI Department Calling Group):

1. Enter the programming mode.
2. 33 02

   ```
   33-02-01    ACI Port1
   ACI_Group       1
    back   ↑       ↓   select
   ```

3. Enter the number of the item you want to program.

   ```
   33-02-nn    ACI Portnn
   nnnnn
     ←              →
   ```

4. Select the ACI port number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 34-01 : E&M Tie Line Basic Setup** to defines the basic settings for each E&M tie line.

Input Data

Trunk Port Number	Aspire S: 1-8 Aspire: 001-200

Item No.	Item	Input Data	Default	Related Program
01	**DID/E&M Start Signaling** Set the start signaling mode for DID and tie trunks. DID and tie trunks can use either immediate start or wink start signaling.	0 = 2nd dial tone 1 = Wink 2 = Immediate 3 = Delay	1	22-02
02	**DID/E&M Incoming Signaling Type** For DID and tie trunks, use this option to set the trunk's signaling type (Dial Pulse or DTMF)	0 = Dial Pulse 1 = PB (DTMF)	0	10-09
03	**E&M Dial-In Mode** Determine if the incoming tie line call should be directed as an intercom call or if it should follow the DID Translation Table in Program 22-11.	0 = Specify Extension number 1 = Use conversion table	0	22-11
04	**E&M Line Dial Tone** Enter 1 if the tie line should send dial tone to the calling system once the call is set up. Enter 0 if the tie line should not send dial tone.	0 = Disable 1 = Enable	1	
05	**System Toll Restriction** Enable (1) or disable (0) the ability for tie line calls to follow the system toll restriction entries in Programs 21-05-01 through 21-05-13. If disabled, tie line toll restriction will be determined by 21-05-13.	0 = Disable 1 = Enable	0	21-05-13 34-08-01

Conditions

None

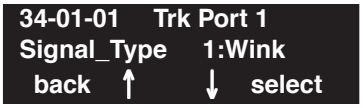
Feature Cross Reference

- Tie Lines

Telephone Programming Instructions

To enter data for Program 34-01 (E&M Tie Line Basic Setup):

1. Enter the programming mode.
2. 34 01



3. Enter the number of the item you want to program.

4. Select the trunk port number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Tie Lines not available.	• Available.

Description

Use **Program 34-02 : E&M Tie Line Class of Service** to assign a Class of Service to a tie line (there are 15 tie line Classes of Service). The Class of Service options are defined in Program 20-14. For each tie line, you make a separate entry for each Night Service mode.

Input Data

Trunk Port Number	1-200

Item No.	Day/Night Mode	Class	Default	Related Program
01	1-8	1-15	1	20-14

Conditions

You cannot use Program 20-06 to assign Class of Service to tie lines.

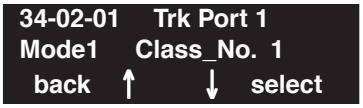
Feature Cross Reference

- Tie Lines

Telephone Programming Instructions

To enter data for Program 34-02 (E&M Tie Line Class of Service):

1. Enter the programming mode.
2. 34 02



3. Enter the number of the item you want to program.

4. Select the trunk port number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 34-03 : Trunk Group Routing for E&M Tie Lines** to assign the trunk group route 1-8 or 1-100) chosen when a user seizes a tie line and dials 9. (Set Trunk Group Routing in Program 14-07.) If the system has Automatic Route Selection, dialing 9 accesses ARS. You make a separate entry for each tie line - for each Night Service Mode.

Input Data

Trunk Port Number	Aspire S: 1-8 Aspire: 001-200

Item No.	Day/Night Mode	Route Table Number	Default
01	Aspire S: 1-4 Aspire: 1-8	Aspire S: 0-8 Aspire: 0-100 (0 = setting)	1

Conditions

None

Feature Cross Reference

- Tie Lines

Telephone Programming Instructions

To enter data for Program 34-03 (Trunk Group Routing for E&M Tie Lines):

1. Enter the programming mode.
2. 34 03

3. Enter the number of the item you want to program.

4. Select the trunk port number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Tie Lines not available..	• Available.

Description

Use **Program 34-04 : E&M Tie Line Toll Restriction Class** to enter a Toll Restriction Class for each tie line. There are 15 Toll Restriction Classes which are defined in Programs 21-05 and 21-06. For each tie line, you make a separate Toll Restriction Class entry for each Night Service mode.

Input Data

Trunk Port Number	001-200

Item No.	Day/Night Mode	Toll Restriction Class	Default	Related Program
01	1-8	1-15	2	21-05 14-01-08

Conditions

You cannot use Program 20-06 to assign Toll Restriction to tie lines.

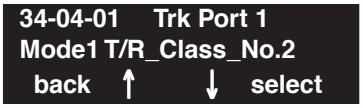
Feature Cross Reference

- Tie Lines

Telephone Programming Instructions

To enter data for Program 34-04 (E&M Tie Line Toll Restriction Class):

1. Enter the programming mode.
2. 34 04



3. Enter the number of the item you want to program.

4. Select the trunk port number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 34-05 : Tie Line Outgoing Call Restriction** to build a restriction matrix for outgoing trunk calls placed from an inbound trunk (e.g., dialed from a tie line). For each inbound trunk group, enable or disable access to each CO trunk group.

With the default entry with software prior to 2.02, tandem trunking would not be allowed when a call which originated in a trunk group tried to connect to another trunk in the same group. The Aspire would allow a user to tandem trunk on inbound group 1, for example, to any trunk group other than 1. This would prevent a user from using Off-Premise Call Forward on a T1 E&M trunk. With software 2.02+, users will now be able to tandem trunk to any trunk group by default.

Input Data

Incoming Trunk Group Number	Aspire S: 1-8 Aspire: 001-100

Outgoing Trunk Group Number	Input Data
Aspire S: 1-8 Aspire: 1-100	0 = Enable 1 = Disable

Default

Outgoing Trunk Groups	Incoming Trunk Groups								
	1	2	3	4	- - - - -	97	98	99	100
1	***Prior to 2.02:*** 1 ***2.02+:*** 0	0	0	0		0	0	0	0
2	0	***Prior to 2.02:*** 1 ***2.02+:*** 0	0	0		0	0	0	0
3	0	0	***Prior to 2.02:*** 1 ***2.02+:*** 0	0		0	0	0	0
4	0	0	0	***Prior to 2.02:*** 1 ***2.02+:*** 0		0	0	0	0

⋮									
97	0	0	0	0		***Prior to 2.02:*** 1 ***2.02+:*** 0	0	0	0
98	0	0	0	0		0	***Prior to 2.02:*** 1 ***2.02+:*** 0	0	0
99	0	0	0	0		0	0	***Prior to 2.02:*** 1 ***2.02+:*** 0	0
100	0	0	0	0		0	0	0	***Prior to 2.02:*** 1 ***2.02+:*** 0

Conditions

None

Feature Cross Reference

- Tie Lines

Telephone Programming Instructions

To enter data for Program 34-05 (Tie Line Outgoing Call Restriction):

1. Enter the programming mode.
2. 34 05

3. Enter the number of the item you want to program.

4. Select the Incoming Trunk Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 34 : Tie Line Setup

34-06 : Add / Delete Digit for E&M Tie Line

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 34-06 : Add / Delete Digit for E&M Tie Line** to set digits that the system should add or delete for tie lines.

- **Delete Digit**
  Some tie line networks pass the location number and extension number to the remote side. This program allows the system to ignore such numbers for a call.

  If individual extensions do not want to receive an incoming call, you could delete all of the digits including the extension number.

- **Add Digit**
  If a tie line network requires additional digits to reroute the call to a location, the digits for the location can be added to the received digits.

Input Data

Incoming Trunk Group Number	Aspire S: 1-8 Aspire: 001-100

Item No.	Item	Input Data	Default
01	Delete Digit	0-255 (255 = delete all digits)	0
02	Additional Dial Digits	Up to 4 digits	No setting

Conditions

None

Feature Cross Reference

- Tie Lines

Telephone Programming Instructions

To enter data for Program 34-06 (Add / Delete Digit for E&M Tie Line):

1. Enter the programming mode.
2. 34 06

3. Enter the number of the item you want to program.

4. Select the Incoming Trunk Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 34 : Tie Line Setup

34-07 : E&M Tie Line Timer

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 34-07 : E&M Tie Line Timer** to define the system service tone timers.

Input Data

Item No.	Item	Input Data	Default
01	ODT/SRT Mark method	0-64800	3
02	ODT/SRT Wink start method	0-64800	0
03	1st digit Pause (LDT)	0-64800	3
04	Leased Line Guard (LDT)	0-64800	0
05	Trunk answer detect timer for E&M / E1	0-64800	30

Conditions

None

Feature Cross Reference

- Tie Lines

Telephone Programming Instructions

To enter data for Program 34-07 (E&M Tie Line Timer):

1. Enter the programming mode.
2. 34 07

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 34 : Tie Line Setup

34-08 : Toll Restriction Data for E&M Tie Lines

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 34-08 : Toll Restriction Data for E&M Tie Lines** to define the toll restriction data for E&M tie lines. This data should be defined if Tie Line Toll Restriction is enabled in Program 21-05-13.

Input Data

Class of Service	01-15

Item No.	Table No.	Dial Data	Default	Related Program
01	01-20	Up to 10 digits	No setting	21-05-13 34-01-05

Conditions

None

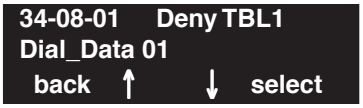
Feature Cross Reference

- Tie Lines

Telephone Programming Instructions

To enter data for Program 34-08 (Toll Restriction Data for E&M Tie Lines):

1. Enter the programming mode.
2. 34 08



3. Enter the number of the item you want to program.

4. Select the Deny Table number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 34 : Tie Line Setup
34-09 : ANI/DNIS Service Options

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 34-09 : ANI/DNIS Service Options** to define the ANI//DNIS service option setup for E&M Class of Service.

Input Data

Class of Service	01-15

Item No.	Name	Input Data	Default		Related Program
			COS 01-14	COS 15	
01	**Receive Format** Use this option to specify the format of the ANI/DNIS data received from the telco. Make sure your entry is compatible with the service the telco provides. (The character * indicates a delimiter.)	0 = Address 1 = *ANI* 2 = *DNIS* 3 = *ANI*Address* 4 = *ANI*DNIS* 5 = *DNIS*ANI* (* = Delimiter Code)	0	0	34-09-02
02	**Delimiter Dial Code** This option defines the character telco uses as a delimiter (see entries 1-5 in Item 1 above). Valid entries are 0-9, #, and *.	1-9, 0, *, #	*	*	34-09-01
03	**Route Setup of Receive Dial** This option specifies the source of the data the system uses to route incoming ANI/DNIS calls. If option '2' is selected, refer to Program 34-09-04.	0 = Fixed Route (Item 08) 1 = Routes on Received DNIS or Address Data 2 = Routes on Received ANI Data	0	0	22-09-01 22-11-01 34-09-04 34-09-08

Item No.	Name	Input Data	Default		Related Program
			COS 01-14	COS 15	
04	**Route Table Setup of Target Dial** The option sets how the system uses the route data (gathered in Item 3) to route incoming ANI/DNIS calls). If option '2' is selected and the call is to be routed using the DID table (1), up to 8 digits can be matched. The number of expected digits set in Program 22-09-01 must match the ANI digits defined in Program 22-11-01. For example, if an ANI/DNIS number received was *2035551234*3001* and Program 22-09-01=4, then the entry in 22-11-01 must be 1234 with the defined target extension. If the call is to be routed using the ABB table (0), up to 24 digits can be matched. Define the range of the ABB table to be used in Program 34-09-06. The data is then compared to the entries in Program 13-04-01 and then routed according to Program 13-04-03.	0 = ABB Table (Program 13-03) 1 = DID Table (Program 22-11)	0	0	13-04-01 13-04-03 22-09-01 22-11 34-09-05 34-09-06
05	**ANI/DNIS Display as Target Dial Name** Use this option to set if ANI data should appear on telephone displays as part of Caller ID display.	0 = Display Off 1 = Display On	1	0	13-04 20-09-02 22-11-03 23-09-04
06	**Routing ABB Table Setup** Use this option to define which part of the ABB Table set up in Program 13-04 the system will use for ANI/DNIS Caller ID look-ups and ANI/DNIS routing. This is required if Items 4 and 5 above are 1 (Caller ID on). When you specify a starting and end address, the system uses the part of the table for look-ups. When you specify a starting address and length, the system uses that part of the table for routing. If the incoming ANI/DNIS number data matches the Number entry in the table, the system routes according to the associated Name data. That data can be an extension, Department Group pilot number, the voice mail master number or a trunk ring group.	Start = 0, 100-1900 End = 0, 99-1999	Start = 1000 End = 1199	Start = 0 End = 0	13-04
07	**Routing on ANI/DNIS Error** This option lets you determine how the system will handle an ANI/DNIS call if a data error is detected in the incoming data string.	0 = Play busy tone to caller 1 = Route the caller to the ring group specified in Program 25-03	1	0	25-03

Program 34 : Tie Line Setup
34-09 : ANI/DNIS Service Options

Item No.	Name	Input Data	Default		Related Program
			COS 01-14	COS 15	
08	**Routing When Destination Busy or No Answer** This option lets you determine how the system will handle an ANI/DNIS call if destination is busy or does not answer.	0 = Play busy or ring-back tone to caller 1 = Route the caller to the ring group specified in Program 25-04	0	0	25-04
09	**Calling Number Address Length** When Item 1=0 (ANI/DNIS receive format is address), use this option to specify the address length. The choices are from 1 to 8 digits in length.	1-8	7	7	34-09-01

Conditions

None

Feature Cross Reference

- T1 Trunking (with ANI/DNIS Compatibility)
- Tie Lines

Telephone Programming Instructions

To enter data for Program 34-09 (ANI/DNIS Service Options):

1. Enter the programming mode.
2. 34 09

   ```
   34-09-01    FCTN Cls1
   Format  0:Address
    back   ↑     ↓   select
   ```

3. Enter the number of the item you want to program.

   ```
   34-09-nn    FCTN Cls1
   nnnnn
     ←            →
   ```

4. Select the Class of Service number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:
IN

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Item 01: LAN option available.	• Item 01: LAN option added with software 1.02+.
• Item 8 requires software 4.0E+.	• Item 8 requires software 4.0E+.

Description

Use **Program 35-01 : SMDR Options** to set the SMDR (Station Message Detail Recording) options for each of the 8 SMDR ports. Refer to the following chart for a description of each option, its range and default setting.

Input Data

SMDR Port Number	Aspire S: 1-2 Aspire: 1-8

Item No.	Item	Input Data	Default
01	**Output Port Type** This option specifies the type of connection used for SMDR. The baud rate for the COM port should be set in Program 10-21-02 or 15-02-19.	0 = No setting 1 = COM(NTCPU) 2 = USB (NTCPU) 3 = LAN 4 = CTA/CTU	0
02	**Output Destination Number** This option specifies the SMDR printer output extension (CTA/CTU extension number).	Up to 8 digit	No setting
03	**Header Language** Specify the language in which the SMDR header should be printed.	0 = English 1 = German 2 = French 3 = Italian 4 = Spanish	0
04	**Omit Digits** The number of digits entered in this option do not print on the SMDR report. For example, if the entry is 10, the first 10 digits a user dials do not appear on the SMDR report.	0-24 (0 = Not applied)	0
05	**Min. Digits** Outgoing calls must be at least this number of digits for inclusion in the SMDR report.	0-24 (0 = Not applied)	0
06	**Min. Call Duration** The duration of a call must be at least this interval to be included on the SMDR report.	0-65535 seconds (0 = All)	0

Item No.	Item	Input Data	Default
07	**Min. Ring Time** A call must ring for at least this interval to be included on the SMDR report.	0-65535 seconds (0 = All)	0
08	**SMDR Format** ***Do not change:*** This option is added to allow an increased account code field from 8 to 16 when used in the U.K. This allows 16 characters of the Caller ID name to be displayed. For the U.S., this option is set to "0" and should remain at this setting as 16 characters are already provided for the account code field.	0: FORMAT 1 (Format for NA) 1: FORMAT 2 (Format for UK)	0

Conditions

None

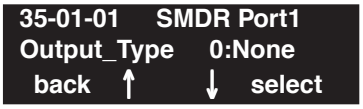
Feature Cross Reference

- Station Message Detail Recording

Telephone Programming Instructions

To enter data for Program 35-01 (SMDR Options):

1. Enter the programming mode.
2. 35 01



3. Enter the number of the item you want to program.

4. Select the SMDR port number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:
IN

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Option 15 enhanced with software 4.0E+.	• Option 15 enhanced with software 4.0E+.
• Options 17 and 18 require software 4.0E+.	• Options 17 and 18 require software 4.0E+.

Description

Use **Program 35-02 : SMDR Output Options** to set the SMDR (Station Message Detail Recording) output options for each of the 8 SMDR ports. Refer to the following chart for a description of each option, its range and default setting.

Input Data

SMDR Port Number	Aspire S: 1-2 Aspire: 1-8

Item No.	Item	Input Data	Default
01	**Toll Restricted Call** SMDR can include or exclude calls blocked by Toll Restriction.	0=Not Displayed 1=Displayed	1
02	**PBX Calls** When the system is behind a PBX, SMDR can include all calls or just calls dialed using the PBX trunk access code.	0=Not Displayed 1=Displayed	1
03	**Trunk Number or Name** Select whether the system should display the trunk name (0) or the number (1) on SMDR reports. ***If this option is set to "0", Program 35-02-14 must be set to "0".***	0=Name 1=Number	1
04	**Summary (Daily)** Set this option to (1) to have the SMDR report provide a daily summary (at midnight every night).	0=Not Displayed 1=Displayed	1
05	**Summary (Weekly)** Set this option to (1) to have the SMDR report provide a weekly summary (every Saturday at midnight).	0=Not Displayed 1=Displayed	1
06	**Summary (Monthly)** Set this option to (1) to have the SMDR report provide a monthly summary (at midnight on the last day of the month).	0=Not Displayed 1=Displayed	1

Item No.	Item	Input Data	Default
07	**Toll Charge Cost** Set this option to (1) have the SMDR report include toll charges.	0=Not Displayed 1=Displayed	1
08	**Incoming Call** Enable this option (1) to have the SMDR report include incoming calls. If you disable this option (0), incoming calls will not print.	0=Not Displayed 1=Displayed	1
09	**Extension Number or Name** Set this option (1) to have the SMDR report include extension numbers. Set this option (0) to have the SMDR report include extension names.	0=Name 1=Number	1
10	**All Lines Busy (ALB) Output** Determine if the All Lines Busy (ALB) indication should be displayed.	0=Not Displayed 1=Displayed	0
11	**Walking Toll Restriction Table Number** - Not Used -	0=Not Displayed 1=Displayed	1
12	**DID Table Name Output** Determine if the DID table name should be displayed.	0=Not Displayed 1=Displayed	0
13	**CLI Output When DID to Trunk** Determine if the CLI output should be displayed for DID.	0=Not Displayed 1=Displayed	
14	**Date** Determine whether the date should be displayed on SMDR reports. ***This option must be set to "0" if the trunk name is set to be displayed in Program 35-02-03.***	0=Not Displayed 1=Displayed	0
15	**CLI / DID Number** Determine if the CLI/DID Number should be displayed. *Caller ID Name (2) requires software 4.0E+.*	0=Caller ID Number 1=DID Calling Number 2=Caller ID Name	0
16	**Trunk Name or Received Dialed Number** Determine how the SMDR should print incoming calls on ANI/DNIS or DID trunks. If set to (1), ANI/DNIS trunks can print DNIS digits. If set to (0) trunk names are printed instead.	0=Trunk port name 1=Received dialed number	0
17	**Print Account Code or Caller ID Name** Determine whether the Account Code or Caller ID name should appear in the SMDR record. **Note:** Program 35-01-08 must be set to "0" for this entry to be followed.	0=Acount Code 1=Caller ID Name	0

Item No.	Item	Input Data	Default
18	**Caller ID Name Output Method** Select whether to display up to 16 characters of the Caller ID Name on the same line as the call record or if a line feed should be added and up to 24 characters of the Caller ID Name will be displayed on the following line. If the line feed option is selected, the Caller ID Name will be displayed on the next line as : NEXT "Caller ID Name". This setting will work regardless of the setting in Program 35-02-15. **Note:** With this option set to "1", if your communications program (such as HyperTerminal) has the line wrap option enabled in the ASCII setup, an additional line break may appear above the Caller ID name line.	0=Same Line 1=Line Feed Prior to Caller ID	0

Conditions

None

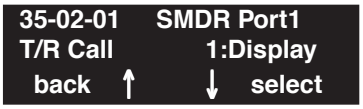
Feature Cross Reference

- Station Message Detail Recording

Telephone Programming Instructions

To enter data for Program 35-02 (SMDR Output Options):

1. Enter the programming mode.
2. 35 02



3. Enter the number of the item you want to program.

4. Select the SMDR port number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 35 : SMDR and Account Code Setup

35-03 : SMDR Port Assignment for Trunk Group

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 35-03 : SMDR Port Assignment for Trunk Group** to assign the SMDR port for each trunk group. For each Trunk Group, select the SMDR port to which the incoming SMDR information should be sent.

Input Data

Trunk Group Number	Aspire S: 1-8 Aspire: 1-100

Item No.	SMDR Port No.	Default
01	Aspire S: 1-2 Aspire: 1-8	1

Conditions

None

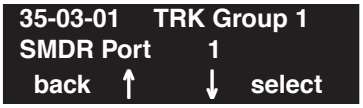
Feature Cross Reference

- Station Message Detail Recording
- Trunk Group Routing

Telephone Programming Instructions

To enter data for Program 35-03 (SMDR Port Assignment for Trunk Group):

1. Enter the programming mode.
2. 35 03



3. Enter the number of the item you want to program.

4. Select the Trunk Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 35 : SMDR and Account Code Setup

35-04 : SMDR Port Assignment for Department Groups

Level:	Aspire S	Aspire M/L/XL
IN	• Available - 8 Department Groups.	• Available - 64 Department Groups.

Description

Use **Program 35-04 : SMDR Port Assignment for Department Groups** to assign the SMDR port for each Department Group. For each Department Group, select the SMDR port to which the outgoing SMDR information should be sent.

Input Data

Department Group Number	Aspire S: 1-8 Aspire: 01-64

Item No.	SMDR Port No.	Default
01	Aspire S: 1-2 Aspire: 1-8	1

Conditions

None

Feature Cross Reference

- Station Message Detail Recording

Telephone Programming Instructions

To enter data for Program 35-04 (SMDR Port Assignment for Department Groups):

1. Enter the programming mode.
2. 35 04

3. Enter the number of the item you want to program.

4. Select the Extension (Department) Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 35 : SMDR and Account Code Setup

35-05 : Account Code Setup

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 35-01 : Account Code Setup** to set various Account Code options for an extension's Class of Service. Assign a Class of Service to extensions in Program 20-06.

Input Data

Class of Service Number	01-15

Item No.	Item	Input Data	Default
01	**Account Code Mode** Use this option to select the Account Code Mode (0-3).	0 = Account Codes disabled 1 = Account Codes optional 2 = Account Codes required but not verified 3 = Account Codes required and verified	0
02	**Forced Account Code Toll Call Setup** Use this option enable Account Codes for all calls or just toll calls (for mode 2 or 3 in Item 01 above).	0 = Account Codes for toll and local calls 1 = Account Codes just for toll calls	0
03	**Account Codes for Incoming Calls** Use this option to allow users to enter Account Codes for incoming calls. If disabled, any codes entered dial out on the connected trunk.	0 = Account Codes for incoming calls disabled 1 = Account Codes for incoming calls enabled	0
04	**Hiding Account Codes** Use this option to either hide or show the Account codes on a telephone's display.	0 = Account Codes displayed 1 = Account Codes hidden	0

Conditions

None

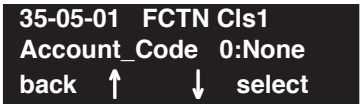
Feature Cross Reference

- Account Codes

Telephone Programming Instructions

To enter data for Program 35-05 (Account Code Setup):

1. Enter the programming mode.
2. 35 05



3. Enter the number of the item you want to program.

4. Select the Class of Service number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 35 : SMDR and Account Code Setup

35-06 : Verified Account Code Table

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 35-06 : Verified Account Code Table** to enter Account Codes into the Verified Account Code list. You can enter up to 2000 codes from 3-16 digits long, using the characters 0-9 or #. Use the FLASH key to enter a wild card. For example, the entry FLASH234 means the user can enter 0234-9234.

Input Data

Verified Account Code Bin Number	1-2000

Item No.	Verified Account Code	Default
01	1-9, 0, #, @ (@ = Wild card) (Up to 16 digits)	No setting

Conditions

None

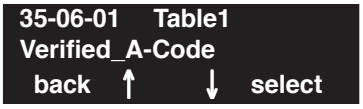
Feature Cross Reference

- Account Codes

Telephone Programming Instructions

To enter data for Program 35-06 (Verified Account Code Table):

1. Enter the programming mode.
2. 35 06



3. Enter the number of the item you want to program.

4. Select the Verified Account Code Table number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

- For Your Notes -

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 40-01 : Voice Mail Basic Setup** to define the basic operation of Voice Mail (DSPDB).

Input Data

Item No.	Item	Input Data	Default	Description
01	Exclusive Channel for Voice Mail	0-16	0	Specify the number of channels of DSPDB which voice mail occupies.
02	Time Stamp	0 = Disable 1 = Enable	1	
03	Conversation Recording Mode for After Transfer	0 = Not Continued 1 = Continue	1	Use this program to set up whether after Hold Transfer continues recording, when recording conversation.
04	Automated Attendant (Voice Mail) for No Existing Extension	0 = Disable 1 = Enable	1	
05	Maintenance Time	0000 - 2359 (0000 = no setting)	0000	Specify time to maintain for DSPDB record media.
06	Automatically Erase Message	0-180	0	
07	Escape from DSPDB Voice Mail While Recording	-	0	**- Not Used in U.S. -**

Conditions

None

Feature Cross Reference

- Voice Mail

Telephone Programming Instructions

To enter data for Program 40-01 (Voice Mail Basic Setup):

1. Enter the programming mode.
2. 40 01

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
SA	• Available.	• Available.

Description

Use **Program 40-02 : Mailbox Setup** to define the mailbox of the Voice Mail (DSPDB).

There are a maximum of 300 mailboxes in the DSPDB. Use this program to set the box number and password linked to the extension number (or pilot number) for each mailbox.

Input Data

DSPDB Message Box Number	01-300

Item No.	Item	Input Data	Default	Description
01	Mailbox Number	Dial (Up to 8 digits)	No setting	A mailbox number should use the same number of an extension.
02	Mailbox Password	Dial (4 digits)	No setting	If not required, leave this option empty.

Conditions

None

Feature Cross Reference

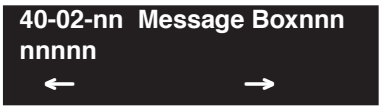
- Voice Mail

Telephone Programming Instructions

To enter data for Program 40-02 (Mailbox Setup):

1. Enter the programming mode.
2. 40 02

3. Enter the number of the item you want to program.



4. Select the Message Box number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 40-03 : Message Recording Setup** to define the auto-answering operation of the Voice Mail (DSPDB).

Input Data

Item No.	Item	Input Data	Default
01	Voice Mail Recording Time	1 to 10 minutes	1
02	A guidance message in case recording is not allowed.	0 = Fixed Guidance Message 1 = Answer Message of Mailbox	0
03	A response message is automatically sent out when busy.	0 = Disable 1 = Enable	0

Conditions

None

Feature Cross Reference

- Voice Mail

Telephone Programming Instructions

To enter data for Program 40-03 (Message Recording Setup):

1. Enter the programming mode.
2. 40 03

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 40-04 : Live Recording Setup** to define the conversation recording operation of the Voice Mail (DSPDB).

Input Data

Item No.	Item	Input Data	Default	Description
01	The operation mode when destination is not defined	0 = Temporary Mailbox 1 = Callback operation	1	
02	Temporary Mailbox Number	0 - 300	0	Set up the temporary mailbox number.
03	Live Recording Display	0 = Enable 1 = Disable	0	Enables or disables the system's ability to display the recording feature active
04	Recall Destination When Destination Not Found	0 = Starting Extension of Conversation Record 1 = Last Extension of Converation Record	0	**- Not Used in U.S. -**

Conditions

None

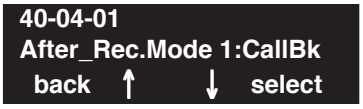
Feature Cross Reference

- Voice Mail

Telephone Programming Instructions

To enter data for Program 40-04 (Live Recording Setup):

1. Enter the programming mode.
2. 40 04



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 40-05 : Call Information Setup** to define the incoming notice of the Voice Mail (DSPDB).

Input Data

Item No.	Item	Input Data	Default
01	Maximum number of outgoing call simultaneously	0 - 16	1
02	Trunk Route Number	0 - 100	1
03	ISDN Calling Party Number	1-0, *, # (max. 6 digits)	No setting
04	Call interval for intercom call	1 - 30 minutes	10
05	Call interval for external call	1 - 30 minutes	10
06	Maximum number of intercom call	1 - 100	3
07	Maximum number of external call	1 - 100	3

Conditions

None

Feature Cross Reference

- Voice Mail

Telephone Programming Instructions

To enter data for Program 40-05 (Call Information Setup):

1. Enter the programming mode.
2. 40 05

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 40-06 : Voice Mail Automated Attendant Data Setup** to define the outside lines to use the automated attendant recording operation of the Voice Mail (DSPDB).

Input Data

Trunk Port Number	Aspire S: 1-8 Aspire: 1-200

Day/Night Mode	Aspire S: 1-4 Aspire: 1-8

Item No.	Item	Input Data	Default
01	Operation Mode	0 = Automated Attendant 1 = Not Used	0
02	Guidance Message Number	0 – 48	0
03	Message Box Number For Leaving a Message	0 – 300	0

Conditions

None

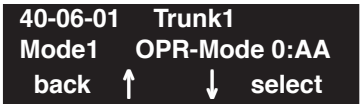
Feature Cross Reference

- Voice Mail

Telephone Programming Instructions

To enter data for Program 40-06 (Voice Mail Automated Attendant Data Setup):

1. Enter the programming mode.
2. 40 06



3. Enter the number of the item you want to program.

4. Select the trunk number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available. • Entries changed with software 4.0E+.	• Available. • Entries changed with software 4.0E+.

Description

Use **Program 40-07 : Voice Prompt Language Assignment for VRS** to specify the language to be used for the VRS prompts.

Input Data

Item No.	Item	Input Data	Default
01	**Voice Prompt Language Assignment for VRS** Although the system allows this option to be changed in programming, the language will only change if the DSPDB has the firmware which provides the newly selected language.	**Software 3.07:** 0 = Japanese 1 = English 2 = German 3 = Portuguese 4 = Netherlands 5 = British 6 = Chinese 7 = Not Used 8 = Not Used **Software 4.0E and Higher:** 0 = Japanese 1 = English 2 = German 3 = Norwegian 4 = Dutch 5 = French 6 = Italian 7 = Spanish 8 = Chinese 9 = Flexible	1

Conditions

None

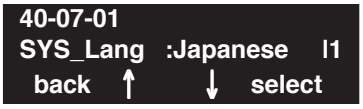
Feature Cross Reference

- Voice Mail

Telephone Programming Instructions

To enter data for Program 40-07 (Voice Prompt Language Assignment for System):

1. Enter the programming mode.
2. 40 07



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available. • Entries changed with software 4.0E+.	• Available. • Entries changed with software 4.0E+.

Description

Use **Program 40-08 : Voice Prompt Language Assignment for Mailboxes** to select the language to be used for the mailboxes.

Input Data

Item No.	Item	Input Data	Default
01	**Voice Prompt Language Assignment for Mailboxes** Although the system allows this option to be changed in programming, the language will only change if the DSPDB has the firmware which provides the newly selected language.	**Software 3.07:** 0 = Japanese 1 = English 2 = German 3 = Portuguese 4 = Netherlands 5 = British 6 = Chinese 7 = Not Used 8 = Not Used **Software 4.0E and Higher:** 0 = Japanese 1 = English 2 = German 3 = Norwegian 4 = Dutch 5 = French 6 = Italian 7 = Spanish 8 = Chinese 9 = Flexible	1

Conditions

None

Feature Cross Reference

- Voice Mail

Telephone Programming Instructions

To enter data for Program 40-08 (Voice Prompt Language Assignment for Mailboxes):

1. Enter the programming mode.
2. 40 08

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 40-09 : Voice Mail Multiple Address Group Setup** to define the broadcast group of a Voice Mail (DSPDB) mailbox.

Input Data

Multiple Address Group Number	1-10

Item No.	Destination Box Number	Box Number	Default
01	1-100	Dial (Up to 8 digits)	No setting

Conditions

None

Feature Cross Reference

- Voice Mail

Telephone Programming Instructions

To enter data for Program 40-09 (Voice Mail Multiple Address Group Setup):

1. Enter the programming mode.
2. 40 09

   40-09-01 GP-Page GP 1
   Destin001 BoxNo.
   back ↑ ↓ select
3. Enter the number of the item you want to program.

   40-09-nn GP-Page GP nn
   nnnnn
   ← →
4. Select the group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 40 : Voice Mail Setup

40-10 : Voice Announcement Service Option

Level:
IN

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Items 6 and 7 available with software 4.93+.	• Items 6 and 7 available with software 4.93+.

Description

In **Program 40-10 : Voice Announcement Serv ice Option** define the system options for the Voice Announcement feature.

Input Data

Item No.	Item	Input Data	Default
01	**VRS Fixed Message** Enable (1) or disable (0) the system's ability to play the fixed VRS messages (such as "You have a message.").	0 = Not Used 1 = Used	1
02	**General Message Number** This item assigns the VAU message number to be used as the General Message.	0-48 (0=No General Message Service)	0
03	**VRS No Answer Destination** This item assigns the transferred Ring Group when the VRS is unanswered after Call Forwarding with Personal Greeting Message.	0-100 (Incoming Ring Group Number)	0 (No Setting)
04	**VRS No Answer Time** If an extension has Personal Greeting enabled and all VRS ports are busy, a DIL or DISA call to the extension will wait this interval for a VRS port to become free.	0-64800	0
05	**Park and Page Repeat Timer** If a Park and Page is not picked up within this interval, the Paging announcement repeats.	0-64800	0
06	**Set VRS Message for Private Call Refuse** Use this option to assign the VRS message number to be played when Private Call Refuse is enabled for a call with "Private" Caller ID information.	0 = Does not play message 1-49 = VRS message number to play)	0
07	**Set VRS Message for Caller ID Refuse** This item assigns the VRS message number to be used as the Caller ID Refuse message when the Caller ID number matches the entry in Program 22-16.	0 = Does not play message 1-49 = VRS message number to play)	0

Conditions

None

Feature Cross Reference

- Voice Response System (VRS)

Telephone Programming Instructions

To enter data for Program 40-10 (Voice Announcement Service Option):

1. Enter the programming mode.
2. 40 10

   ```
   40-10-01
   VAU Fixed Msg 1:Use
    back  ↑    ↓  select
   ```

3. Enter the number of the item you want to program.

   ```
   40-10-nn
   nnnnn
     ←          →
   ```

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 40 : Voice Mail Setup
40-11 : Pre-Amble Message Assignment

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

In **Program 40-11 : Pre-Amble Message Assignment** to assign the VAU message number to be used as the Pre-amble Message for each trunk. When the extension user answers the incoming call, the assigned VAU message will be sent to the outside caller.

Input Data

Trunk Port Number	Aspire S: 1-8 Aspire: 001-200

Item No.	Day/Night Mode	VAU Message Number	Default
01	Aspire S: 1-4 Aspire: 1-8	0-48 (0=No Service)	0

Conditions

None

Feature Cross Reference

- Voice Response System (VRS)

Telephone Programming Instructions

To enter data for Program 40-11 (Pre-Amble Message Assignment):

1. Enter the programming mode.
2. 40 11

   ```
   40-11-01      Trunk1
   Mode1 Preamble MSG  0
    back   ↑      ↓   select
   ```

3. Enter the number of the item you want to program.

   ```
   40-11-nn
   nnnnn
     ←             →
   ```

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:
IN

Aspire S	Aspire M/L/XL
• Not Available.	• Available. • P Command Output for Busy Status available with 2.63+ software.

Description

In **Program 41-01 : System Options for ACD** define the system options for the ACD feature.

Input Data

Item No.	Item	Input Data	Default
01	System Supervisory Extension	Up to 8 digits	No setting
02	**Login ID Code Digit** Define the digit of Login ID	0-20 (0 = No Login ID)	0
03	ACD MIS Connection Ports	0 = No setting 1 = -- Reserve -- 2 = -- Reserve -- 3 = LAN (NTCPU)	0
04	**P Command Output for Busy Status** When the number of queued ACD overflow calls exceeds the limit and a busy tone is sent to the caller, determine if the call is counted in the ACD MIS software.	0=Count 1=Do Not Count	0

Conditions

None

Feature Cross Reference

- Automatic Call Distribution (ACD)

Telephone Programming Instructions

To enter data for Program 41-01 (System Options for ACD):

1. Enter the programming mode.
2. 41 10

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level: SA	Aspire S	Aspire M/L/XL
	• Not Available.	• Available.

Description

In **Program 41-02 : ACD Group and Agent Assignments**, for each ACD extension number, assign an ACD Group (1-64). An ACD Group number is assigned to each Work Period number (1-8).

The assigned extension will work as an ACD agent extension in the following cases;

- The trunk belonging to an ACD group receives an incoming call while an ACD agent is logged in.
- An extension calls or transfers a call to an ACD group using the ACD group pilot number.
- An incoming call is received with a DID/DISA number which is assigned as an ACD pilot number.

Input Data

Extension Number	Up to 8 digits

Item No.	ACD Work Period Mode Number	ACD Group No	Default
01	1-8	0-64	0

Conditions

None

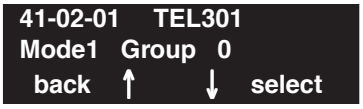
Feature Cross Reference

- Automatic Call Distribution (ACD)

Telephone Programming Instructions

To enter data for Program 41-02 (ACD Group and Agent Assignments):

1. Enter the programming mode.
2. 41 02



3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
SA	• Not Available.	• Available.

Description

In **Program 41-03 : Incoming Ring Group Assignments for ACD Group**, for each incoming trunk group set up in Program 22-05, designate into which ACD Group (1-64) the trunks should ring for each of the eight Work Periods. Also use this program to assign an Incoming Trunk Ring Group as priority or normal. Use Program 41-05 and 41-06 to set up the Work Schedules and Work Periods for trunks. Use Program 41-07 to assign the Work Schedules to the days of the week.

Input Data

Incoming Ring Group Number	1-100

ACD Work Period Mode Number	1-8

Item No.	Item	Input Data	Default
01	ACD Group Number	0-64	0
02	Night Announcement Service	0 = No 1 = Yes	0
03	**Priority** Determine whether an incoming call to a trunk ring group should follow a priority assignment (0=normal, 1-7 [1=lowest priority, 7=highest priority]).	0, 1-7 (0 = No priority) (7 = Highest priority)	0

Conditions

None

Feature Cross Reference

- Automatic Call Distribution (ACD)
- Ring Groups

Program 41 : ACD Setup

41-03 : Incoming Ring Group Assignment for ACD Group

Telephone Programming Instructions

To enter data for Program 41-03 (Incoming Ring Group Assignment for ACD Group):

1. Enter the programming mode.
2. 41 03

3. Enter the number of the item you want to program.

4. Select the Incoming Ring Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level: SA	Aspire S	Aspire M/L/XL
	• Not Available.	• Available.

Description

For each ACD Group (1-64), use **Program 41-04 : ACD Group Supervisor** to assign the group's supervisor extension and operating mode. Operating modes are:

- 0 = Supervisor's extension does not receive ACD Group calls.
- 1 = Supervisor's extension receives ACD Group overflow calls only.
- 2 = Supervisor's extension receives ACD Group calls just like all other agents.

An ACD Group can have only one supervisor. In addition, an extension can be a supervisor for only one ACD Group.

Input Data

ACD Group No	01-64

Item No.	Item	Input Data	Default
01	Group Supervisor Extension	Extension Number (Up to 8 digits)	No setting
02	Operation Type	0 = Not receive any ACD incoming calls 1 = Receive ACD incoming calls in case of overflow 2 = Receive ACD incoming calls all the time	0

Conditions

If you assign an extension as a ACD Group Supervisor in this program, you cannot program the same extension as a System Supervisor in Program 41-01-01.

Feature Cross Reference

- Automatic Call Distribution (ACD)

Telephone Programming Instructions

To enter data for Program 41-04 (ACD Group Supervisor):

1. Enter the programming mode.
2. 41 04

3. Enter the number of the item you want to program.

4. Select the ACD Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
SA	• Not Available.	• Available.

Description

Use **Program 41-05 : ACD Agent Work Schedules** to set up the Work Schedules for ACD Agents and Groups. For each ACD Work Schedule (1-4), designate the start and stop times for each of the eight Work Periods. Once you set up the schedules in this program, assign them to days of the week in Program 41-07. (This is the same program used by the Trunk Work Schedules.)

ACD extensions can log in only during their work period. ACD extensions will receive the following types of calls when they are logged in;

- ACD Call on a Trunk
  If the incoming ring group is assigned in the operating time (Program 41-03 and 41-06).
- ACD Pilot Number Call
  Any time if ACD extensions are available.

Input Data

ACD Work Schedule Time Pattern	1-4

Item No.	Work Period Mode Number	Start Time	End Time	Default
01	1-8	0000-2359	0000-2359	(Start) 0000 (End) 0000

Conditions

None

Feature Cross Reference

- Automatic Call Distribution (ACD)

Telephone Programming Instructions

To enter data for Program 41-05 (ACD Agent Work Schedules):

1. Enter the programming mode.
2. 41 05

3. Enter the number of the item you want to program.

4. Select the Time Pattern number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
SA	• Not Available.	• Available.

Description

Use **Program 41-06 : Trunk Work Schedules** to set up the Work Schedules for trunks. For each Work Schedule (1-4), designate the start and stop times for each of the eight Work Periods. Once you set up the schedules, assign them to days of the week in Program 41-07. (This is the same program used by the ACD Agent Work Schedules.)

Input Data

ACD Work Schedule Time Pattern Number	1-4

Item No.	Work Period Mode Number	Start Time	End Time	Default
01	1-8	0000-2359	0000-2359	(Start) 0000 (End) 0000

Conditions

None

Feature Cross Reference

- Automatic Call Distribution (ACD)

Telephone Programming Instructions

To enter data for Program 41-06 (Trunk Work Schedules):

1. Enter the programming mode.
2. 41 06

3. Enter the number of the item you want to program.

4. Select the Time Pattern number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level: SA	Aspire S	Aspire M/L/XL
	• Not Available.	• Available.

Description

Use **Program 41-07 : ACD Weekly Schedule Setup** to assign the four Work Schedules (1-4) to days of the week. The assignments you make in this program apply to both the ACD Agent Work Schedules (Program 41-05) and the Trunk Work Schedules (Program 41-06).

Input Data

Item No.	Day Number	Time Pattern	Default
01	1 = Sunday	0-4 (0 = No ACD)	0
	2 = Monday		
	3 = Tuesday		
	4 = Wednesday		
	5 = Thursday		
	6 = Friday		
	7 = Saturday		

Conditions

None

Feature Cross Reference

- Automatic Call Distribution (ACD)

Telephone Programming Instructions

To enter data for Program 41-07 (ACD Weekly Schedule Setup):

1. Enter the programming mode.
2. 41 07

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:
SA

Aspire S	Aspire M/L/XL
• Not Available.	• Available. • Enhanced Overflow options 05 and 06 requires 4.94+.

Description

For each ACD Group (1-64), use **Program 41-08 : ACD Overflow Options** to assign the overflow mode (0-9), destination and announcement message types. Delay announcement functions are not available for ACD pilot number call. Each ACD Group can have unique overflow options. The table below outlines the entry options.

Input Data

ACD Group No	01-64

Item No.	Item	Input Data	Default
01	Overflow Operation Mode	0 = No overflow 1 = Overflow with No Announcement 2 = No Overflow with First Announcement Only 3 = No Overflow with First & Second Announcements 4 = Overflow with First Announcement Only 5 = Overflow with First & Second Announcement 6 = -- Not used -- 7 = -- Not used -- 8 = No Overflow with Second Announcement Only 9 = Overflow with Second Announcement Only	0
02	**ACD Overflow Destination** Specify the destination option to which ACD Overflow calls should be transferred	0 = No Setting 1-64 = ACD Group 65 = Overflow Table (Program 41-09) 66 = Voice Mail Integration 67 = Off-Premise via ABB Dial Bin 68 = Incoming Ring Group	0
03	Delay Announcement Source Type	0 = ACI 1 = VRS (DSPDB) 2 = Voice Mail Integration	0
04	ACD Overflow Transfer Time	0-64800 (Sec.)	30

05	**Abbreviated Dial Area When Overflow)** This program defines which Abbreviated Dial dial to use when Program 41-08-02 is programmed with an entry of ’67’.	0 – 1999 (Abbreviated dial areas)	1999
06	**Incoming Ring Group When Overflow** This program defines which incoming Ring Group to use when Program 41-08-02 is programmed with an entry of ’68’.	1 – 100 (Incoming Ring Group)	1

Conditions

Delay announcement functions are not available for ACD pilot number call.

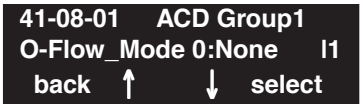
Feature Cross Reference

- Automatic Call Distribution (ACD)

Telephone Programming Instructions

To enter data for Program 41-08 (ACD Overflow Options):

1. Enter the programming mode.
2. 41 08

3. Enter the number of the item you want to program.

4. Select the ACD Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you’ve exited that series’s programming section.

Level:	Aspire S	Aspire M/L/XL
SA	• Not Available.	• Available.

Description

Use **Program 41-09 : ACD Overflow Table Setting** to define the ACD group to which a call will be transferred when overflow occurs.

Input Data

ACD Group No	01-64

Item No.	Priority Order Number	Transfer ACD Group Number With Overflow	Default
01	1-7	0-65 (0 = No setting, 65 = In-Skin Voice Mail Integration)	0

Conditions

If, while the call is ringing, the extension to which the call was transferred becomes available, both the extension and the overflow ACD group will ring.

Feature Cross Reference

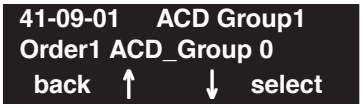
- Automatic Call Distribution (ACD)

Program 41 : ACD Setup
41-09 : ACD Overflow Table Setting

Telephone Programming Instructions

To enter data for Program 41-09 (ACD Overflow Table Setting):

1. Enter the programming mode.
2. 41 09



3. Enter the number of the item you want to program.

4. Select the ACD Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
SA	• Not Available.	• Available.

Description

Use **Program 41-10 : PGDAD Delay Announcement** to define the PGDAD port number to be used for the delay announcement.

This program is activated when the delay announcement source and options are assigned as PGDAD in Program 41-08.

Input Data

ACD Group No	01-64

Item No.	Item	Input Data	Default
01	1st Delay Announcement PGDAD Port Number	0-96 (0 = No setting)	0
02	2nd Delay Announcement PGDAD Port Number	0-96 (0 = No setting)	0
03	1st Delay Announcement Connection Timer	0-64800	4
04	2nd Delay Announcement Connection Timer	0-64800	60
05	**2nd Delay Announcement Sending Duration** Set the timer for the 2nd Delay announcement. Once this timer expires, the call will disconnect. To keep the call in queue, set this timer to “0”.	0-64800	0

Conditions

None

Feature Cross Reference

- Automatic Call Distribution (ACD)

Telephone Programming Instructions

To enter data for Program 41-10 (PGDAD Delay Announcement):

1. Enter the programming mode.
2. 41 10

3. Enter the number of the item you want to program.

4. Select the ACD Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
SA	• Not Available.	• Available.

Description

Use **Program 41-11 : VRS Delay Announcement** to assign the VRS message number to be used as the message source for the 1st and 2nd Delay Announcement Messages. Turn to Program 41-08 for more on setting up the ACD overflow options.

This program is activated when the delay announcement source and options are assigned as VRS in Program 41-08.

Input Data

ACD Group No	01-64

Item No.	Item	Input Data	Default
01	Delay Message Start Timer	0-64800	0
02	1st Delay Message Number	0-49 (0 = No message, 49 = Fixed message)	0
03	1st Delay Message Sending Count	0-255	0
04	2nd Delay Message Number	0-49 (0 = No message, 49 = Fixed message)	0
05	2nd Waiting Message Sending Count	0-255	0
06	Tone Kind at Message Interval	0 = Ring Back Tone 1 = MOH Tone 2 = BGM Source	0
07	ACD Forced Disconnect Time After the After 2nd Delay Message	0-64800	60

Conditions

None

Feature Cross Reference

- Automatic Call Distribution (ACD)

Telephone Programming Instructions

To enter data for Program 41-11 (VRS Delay Announcement):

1. Enter the programming mode.
2. 41 11

3. Enter the number of the item you want to program.

4. Select the ACD Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level: SA	Aspire S	Aspire M/L/XL
	• Not Available.	• Available.

Description

Use **Program 41-12 : Night Announcement Setup** to define the night announce voice resource and sending time for each ACD group. Night announcement availability depends on the setting in Program 41-03-02. The night announcement function is not available for ACD pilot number calls.

Input Data

ACD Group Number	01-64

Item No.	Item	Input Data	Default
01	Night Announcement Source Type	0 = ACI 1 = VRS (DSPDB)	0
02	Night Announcement ACI Port Number	0-96 (0 = No setting)	0
03	ACD Night Announce Sending Time	0-64800	30

Conditions

The night announcement function is not available for ACD pilot number call.

Feature Cross Reference

- Automatic Call Distribution (ACD)

Telephone Programming Instructions

To enter data for Program 41-12 (Night Announcement Setup):

1. Enter the programming mode.
2. 41 12

3. Enter the number of the item you want to program.

4. Select the ACD Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level: SA	Aspire S	Aspire M/L/XL
	• Not Available.	• Available.

Description

Use **Program 41-13 : VRS Night Announcement** to define the VRS message number to be used as the night announcement. This program is activated when the night announcement source is assigned as VRS in Program 41-12.

Input Data

ACD Group No	01-64

Item No.	Item	Input Data	Default
01	VRS Message Number	0-48 (0 = No message)	0
02	Tone Kind at Message Interval	0 = Ring Back Tone 1 = MOH Tone 2 = BGM Source	0

Conditions

None

Feature Cross Reference

- Automatic Call Distribution (ACD)

Program 41 : ACD Setup

41-13 : VRS Message Number for Night Announcement

Telephone Programming Instructions

To enter data for Program 41-13 (VRS Night Announcement):

1. Enter the programming mode.
2. 41 13

3. Enter the number of the item you want to program.

4. Select the ACD Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
SA	• Not Available.	• Available.

Description

Use **Program 41-14 : ACD Options** to set various options for ACD Groups. When you set an option for an ACD Group, the setting is in force (if applicable) for all agents within the group. The chart below shows each of the ACD options, the entries available, and the default entry.

Input Data

ACD Group No	01-64

Item No.	Item	Input Data	Default
01	**Emergency Call Operation Mode** The supervisor must be logged in and have an Emergency Key programmed for this feature. By pressing the key once, the supervisor monitors the call - pressing twice barges in on the call.	0=Call to system supervisory extension when group supervisory extension is busy. 1=No calls to system supervisory extension when group supervisory extension is busy.	0
02	**Automatic Wrap Up Mode** Enable/disable Automatic Wrap Up mode.	0=After wrap up mode key is pressed. 1=After call is finished automatically.	0
03	**ACD Priority for Overflow Calls** Determine whether the ACD group should use its own priority assignment or if it should follow the priority assigned in Program 41-03-03.	0=Own group's priority 1=Priority order by Program 41-03-03	0
04	**Automatic Answer** Enable/disable Automatic Answer for agents using headsets.	0=Off 1=On	0
05	-- Not used --		
06	**Call Queuing after 2nd Announcement** Use this option to determine whether an outside caller should hear a final announcement [ex: the company is closed] (1) or whether the caller should be placed back into queue for the ACD group (0).	0=Enable 1=Disable	0
07	**Automatic Off Duty for SLT** Enable/disable Automatic Off Duty (rest) mode for agents with SLT phones.	0=No change to off duty mode 1=Change to off duty mode automatically	0
08	ACD off duty mode	0=Can not receive internal call 1=Can receive internal call	0

09	Automatic Wrap Up End Time	0-64800 (Seconds)	0
10	**ACD No Answer Skip Time** Set how long a call into the ACD Group will ring an idle extension before routing to the next agent. This timer must be greater than Program 20-04-03 : Delay Ring Timer for the ACD Call Coverage Key with delayed ringing to work.	0-64800 (Seconds)	10
11	-- Not used --		
12	Start Headset Ear Piece Ringing (for SLT)	0-64800 (Seconds)	0

Conditions

None

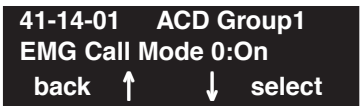
Feature Cross Reference

- Automatic Call Distribution (ACD)

Telephone Programming Instructions

To enter data for Program 41-14 (ACD Options):

1. Enter the programming mode.
2. 41 14



3. Enter the number of the item you want to program.

4. Select the ACD Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level: SA	Aspire S	Aspire M/L/XL
	• Not Available.	• Available.

Description

Use **Program 41-15 : ACD Queue Alarm Information** to assign the options for "Audible Indication" for Log Out / Off Duty mode for each ACD group.

These program settings will provide an alarm to the agents, but no Queue Status Display is indicated. ***Do not use these programs*** if the alarm options are defined in Program 41-20-01 through 41-20-05.

Feature	Available in Program 41-15	Available in Program 41-20
Queue Status Display	---	Yes
Queue Status Display Time	---	Yes
Alarm	Yes	Yes
Alarm Send Time	Program 41-15-02 determines the length/interval of the alarm.	Yes
Interval Time of Queue Status Display		Yes
Class of Service	---	Yes
Timing of alarm and display queue status	Alarm triggered after the number of calls in Program 41-15-01 is exceeded.	Alarm triggered after the number of calls in Program 41-20-01 is exceeded. Then follows Program 41-20-03 timing for displaying status.

Input Data

ACD Group No..	01-64

Item No.	Item	Input Data	Default
01	The number of calls in ACD Queue to activate Alarm information	0-200 (0 = No Alarm)	0
02	The interval time of Alarm information	0-64800 (Sec.)	0

Conditions

None

Feature Cross Reference

- Automatic Call Distribution (ACD)

Telephone Programming Instructions

To enter data for Program 41-15 (ACD Queue Alarm Information):

1. Enter the programming mode.
2. 41 15

3. Enter the number of the item you want to program.

4. Select the ACD Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level: SA	Aspire S	Aspire M/L/XL
	• Not Available.	• Available.

Description

Use **Program 41-16 : ACD Threshold Overflow** to define the value of the ACD threshold call overflow and the mode for each ACD group.

Input Data

ACD Group No	01-64

Item No.	Item	Input Data	Default
01	**Number of Calls in Queue** Define the maximum number of calls allowed in the ACD queue before overflow occurs.	0-200 (0 = No limitation)	0
02	**Operation Mode for ACD Queue** Define how the system should handle calls when the number of calls in queue exceeds the threshold.	0 = The longest waiting call is transferred 1 = The last waiting call is transferred 2 = Send Busy Tone	0

Conditions

None

Feature Cross Reference

- Automatic Call Distribution (ACD)

Telephone Programming Instructions

To enter data for Program 41-16 (ACD Threshold Overflow):

1. Enter the programming mode.
2. 41 16

3. Enter the number of the item you want to program.

4. Select the ACD Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level: SA	Aspire S	Aspire M/L/XL
	• Not Available.	• Available.

Description

Use **Program 41-17 : ACD Login Mode Setup** to define the ACD login mode for each extension. If the AIC Login Mode is enabled, set the AIC Login and AIC Logout service codes for the AIC members in Program 11-13-08 and 11-13-09.

Input Data

Extension Number	Up to 8 digits

Item No.	Login Mode	Default
01	0 = Normal Login Mode 1 = AIC Login Mode	0

Conditions

If set to '1', note that a supervisor can not log in/out an AIC member as they are not normal ACD agents.

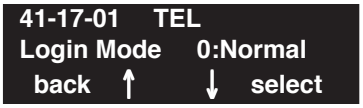
Feature Cross Reference

- Automatic Call Distribution (ACD)

Telephone Programming Instructions

To enter data for Program 41-17 (ACD Login Mode Setup):

1. Enter the programming mode.
2. 41 17



3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
SA	• Not Available.	• Available.

Description

Use **Program 41-18 : ACD Agent Identity Code Setup** to define the ACD Agent Identity Code Table.

Input Data

AIC Table No	001-512

Item No.	Item	Input Data	Default
01	ACD Agent Identity Code	Up to 4 digits	No setting
02	Default ACD Group Number	0-64 (0 = No setting)	0
03	ACD Group Number in Mode 1	0-64 (0 = No setting)	0
04	ACD Group Number in Mode 2	0-64 (0 = No setting)	0
05	ACD Group Number in Mode 3	0-64 (0 = No setting)	0
06	ACD Group Number in Mode 4	0-64 (0 = No setting)	0
07	ACD Group Number in Mode 5	0-64 (0 = No setting)	0
08	ACD Group Number in Mode 6	0-64 (0 = No setting)	0
09	ACD Group Number in Mode 7	0-64 (0 = No setting)	0
10	ACD Group Number in Mode 8	0-64 (0 = No setting)	0

Conditions

None

Feature Cross Reference

- Automatic Call Distribution (ACD)

Telephone Programming Instructions

To enter data for Program 41-18 (ACD Agent Identity Code Setup):

1. Enter the programming mode.
2. 41 18

3. Enter the number of the item you want to program.

4. Select the Agent Identity Code (AIC) number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
SA	• Not Available.	• Available.

Description

Use **Program 41-19 : Voice Mail Delay Announcement** to assign voice mail ACD Announcement Mailboxes as the message source for the 1st and 2nd Announcement Messages. This option is only applicable to ACD Overflow Modes 1, 4, 5 and 9 with announcement type 2 [Program 41-08-03]). This can also work with modes 2, 3, and 8, but Program 41-08-03 must be set to "0". Refer to Program 41-08 for more on setting up the ACD overflow options.

Input Data

ACD Group No	01-64

Item No.	Item	Input Data	Default
01	**Delay Message Start Timer** Determine how long the system waits before playing the Delay Message.	0-64800	0
02	**Mailbox Number for 1st Announcement Message** Assign voice mail ACD Announcement Mailbox as the message source for the 1st Announcement Message. This option is only applicable to ACD Overflow Modes 1, 4, 5 and 9 (source 0/type2). Use Program 41-08 to set up the ACD overflow options.	Dial (Up to 8 digits)	No Setting
03	**1st Delay Message Sending Count** Determine the 1st Delay Message Sending Count. This entry must be set to 1 or higher in order for the message to play.	0 = No Message Played, 1-255	0
04	**Mailbox Number for 2nd Announcement Message** Assign voice mail ACD Announcement Mailboxes as the message source for the 2nd Announcement Message. This option is only applicable to ACD Overflow Modes 1, 4, 5 and 9 (source 0/type2). Use Program 41-08 to set up the ACD overflow options.	Dial (Up to 8 digits)	No Setting
05	**2nd Delay Message Sending Count** Determine the 2nd Delay Message Sending Count. This entry must be set to 1 or higher in order for the message to play.	0 = No Message Played, 1-255	0
06	**Wait Tone Type at Message Interval** Define the what the caller will hear between the messages.	0 = Ring Back Tone 1 = MOH Tone 2 = BGM Source	0
07	**ACD Forced Disconnect Time After 2nd Announcement** Assign how long the system should wait after the end of the ACD delay message before disconnecting.	0-64800	60
08	**Delayed Message Interval Time** Set the timer for the interval between the Delayed Messages.	0-64800	20

Conditions

None

Feature Cross Reference

- Automatic Call Distribution (ACD)
- Voice Response Service (VRS)

Telephone Programming Instructions

To enter data for Program 41-19 (Voice Mail Delay Announcement):

1. Enter the programming mode.
2. 41 19

3. Enter the number of the item you want to program.

4. Select the ACD Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
SA	• Not Available.	• Available with software 1.11+.

Description

Use **Program 41-20 : ACD Queue Display Settings** to assign the options for the ACD Queue Status Display feature. This program allows the Queue Status Display, as well as an alarm to sound, when the parameters in this program are met.

Program 41-15 can also provide a queue alarm to the agents. The options in Program 41-20 should not be used if 41-15 is set.

Feature	Available in Program 41-15	Available in Program 41-20
Queue Status Display	---	Yes
Queue Status Display Time	---	Yes
Alarm	Yes	Yes
Alarm Send Time	Program 41-15-02 determines the length/interval of the alarm.	Yes
Interval Time of Queue Status Display		Yes
Class of Service	---	Yes
Timing of alarm and display queue status	Alarm triggered after the number of calls in Program 41-15-01 is exceeded.	Alarm triggered after the number of calls in Program 41-20-01 is exceeded. Then follows Program 41-20-03 timing for displaying status.

Input Data

ACD Group No	01-64

Item No.	Item	Input Data	Default
01	**Number of Calls in Queue** Set the number of calls that can accumulate in the ACD queue before the Queue Status Display (and optional queue alarm) occurs.	0=no display, 1-200	***Prior to 1.12:*** 0 ***1.12+:*** 5
02	**Queue Status Display Time** Set how long the Queue Status display remains on the telephone's display.	0-64800 seconds	***Prior to 1.12:*** 0 ***1.12+:*** 60

03	**Queue Status Display Interval** Set the interval that refreshes the Queue Status Alarm time in queue display and causes the optional queue alarm to occur on phones active on a call, logged out, or in wrap-up.	0-64800 seconds	0
04	**ACD Call Waiting Alarm** Enable or disable the queue alarm.	0 = Disable 1 = Enable	0
05	**ACD Call Waiting Alarm Send Time** Set how long the Call Waiting Alarm should sound.	0-64800 seconds	0

Conditions

None

Feature Cross Reference

- Automatic Call Distribution (ACD)

Telephone Programming Instructions

To enter data for Program 41-20 (ACD Queue Display Settings):

1. Enter the programming mode.
2. 41 20

   41-20-01 ACD Group1
   No of Queue (Disp.) 1
   back ↑ ↓ select

3. Enter the number of the item you want to program.

   41-15-nn ACD Groupnn
   nnnnn
   ← →

4. Select the ACD Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use Program **42-01 : System Options for Hotel/Motel** to assign the system options for Hotel/Motel Service.

Input Data

Item No.	Item	Input Data	Default
01	**Answering Message Mode for Wake Up Call (Hotel Mode)**	0 = MOH 1 = VRS Message 2 = VRS Message + Time	0
02	**Wake Up Call Message Assignment** VRS Message for Wake Up Calls. You'll need to make an entry for this program if you have selected option 2 or 3 in Item 1 above.	0-48 (0 = No setting)	0
03	**Wake Up Call No Answer**	0 = No transfer 1 = Transfer to the Operator	0
04	**Setup Message Mode for Wake Up Call (Hotel Mode)**	0 = Only Confirmation Tone 1 = VRS Message 2 = Time Information and VRS	0
05	**Wake Up Call Message Assignment**	0-48 = VRS Message Number	-

Conditions

None

Feature Cross Reference

- Hotel/Motel

Program 42 : Hotel Setup

42-01 : System Options for Hotel/Motel

Telephone Programming Instructions

To enter data for Program 42-01 (System Options for Hotel/Motel):

1. Enter the programming mode.
2. 42 01

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 42-02 : Hotel/Motel Telephone Setup** to define the basic operation of the Hotel/Motel extensions.

Input Data

Extension Number	Up to 8 digits

Item No.	Item	Input Data	Default
01	**Hotel Mode** If you want an extension to operate in the Hotel/Motel mode, 1. If you want the telephone to operate in the business mode, enter 0.	0 = Normal 1 = Hotel	0
02	**Toll Restriction Class When Check In** Assign an extension's Toll Restriction Class when it is checked in. The system has 15 Toll Restriction Classes (1-15). The entry you make in this option affects the telephone in all Night Service modes. (Refer to Programs 21-05 and 21-06 to set up the Toll Restriction dialing options.) When the extension is checked out, it uses the Toll Restriction Class set in Program 21-04.	1-15	1

Conditions

None

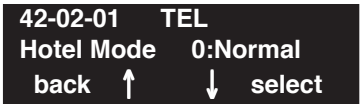
Feature Cross Reference

- Hotel/Motel

Telephone Programming Instructions

To enter data for Program 42-02 (Hotel/Motel Telephone Setup):

1. Enter the programming mode.
2. 42 02



3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 42-03 : Class of Service Options (Hotel)** to set the Hotel/Motel Class of Service (COS) options. Assign Class of Service to extensions in **Program 42-02 : Hotel/Motel Telephone Setup**. There are 15 Classes of Service. Refer to the following chart for a description of each COS option, its range and default setting. For additional Class of Service options, refer to Programs 20-06 - 20-14.

Input Data

Class of Service Number	01-15

Item No.	Item	Input Data	Default	
			Class 01	Class 02-15
01	Check-In Operation	0 = Off 1 = On	0	0
02	Check-Out Operation	0 = Off 1 = On	0	0
03	Room Status Output	0 = Off 1 = On	0	0
04	DND Setting for Other Extension	0 = Off 1 = On	0	0
05	Wake up Call Setting for Other Extension	0 = Off 1 = On	0	0
06	Room Status Change for Other Extension	0 = Off 1 = On	0	0
07	Restriction Class Changing for Other Extension	0 = Off 1 = On	0	0
08	Room to Room Call Restriction	0 = Off 1 = On	0	0
09	DND Setting for Own Extension	0 = Off 1 = On	0	0
10	Wake Up Call Setting for Own Extension	0 = Off 1 = On	0	0
11	Room Status Change for Own Extension	0 = Off 1 = On	0	0

Item No.	Item	Input Data	Default	
			Class 01	Class 02-15
12	**SLT Room Monitor** Enable (1) or disable (0) a single line telephone's ability to use Room Monitor.	0 = Off 1 = On	0	0
13	PMS Restriction Level	0 = Off 1 = On	0	0

Conditions

None

Feature Cross Reference

- Class of Service
- Hotel/Motel

Telephone Programming Instructions

To enter data for Program 42-03 (Class of Service Options (Hotel/Motel)):

1. Enter the programming mode.
2. 42 03

3. Enter the number of the item you want to program.

4. Select the Class of Service number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 42-04 : Hotel Mode One-Digit Service Codes** to set up the Hotel Mode one-digit service codes which are assigned in 42-02-01. For each Department Calling Group (1-8 or 1-64), you enter the destination for each single digit code (1-9, 0, *., #). The destination can be any code up to four digits long, such as an extension number or access code.

Input Data

Department (Extension) Group Number	Aspire S: 1-8 Aspire: 01-64

Item No.	Received Dial	Destination Number	Default
01	1-9,0,*,#	Up to 8 digits	No setting

Conditions

The one-digit codes you assign in this program wait until the Interdigit timer expires before executing.

Feature Cross Reference

- Hotel/Motel

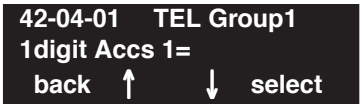
Program 42 : Hotel Setup

42-04 : Hotel Mode One-Digit Service Codes

Telephone Programming Instructions

To enter data for Program 42-04 (Hotel Mode One-Digit Service Codes):

1. Enter the programming mode.
2. 42 04



3. Enter the number of the item you want to program.

4. Select the Department/Telephone Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 42-05 : Hotel Room Status Printer** to set the CTA port to output the Hotel Data (Check-Out sheet, Room Status etc...) and the output options for the Hotel/Motel feature.

Input Data

Item No.	Item	Input Data	Default
01	Output Port Type	0 = No setting 1 = CTA	0
02	Output Destination Number	Up to 8 digit (Extension number which CTA/CTU is equipped.)	No setting
03	Wake Up Call No Answer Data	0 = Not output 1 = Output	0
04	Check-Out Sheet	0 = Not output 1 = Output	0

Conditions

Room Status Reports require a CTA and a compatible printer. Refer to Data Communications in the feature section for information.

Feature Cross Reference

- Hotel/Motel

Telephone Programming Instructions

To enter data for Program 42-05 (Hotel Room Status Printer):

1. Enter the programming mode.
2. 42 05

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 44-01 : System Options for ARS/F-Route** to define the system options for the ARS/F-Route feature.

Input Data

Item No.	Item	Input Data	Default
01	**ARS/F-Route Time Schedule** If this option is set to '0', the F-Route table selected is determined only by the digits dialed without any relation to the day or time of the call. If this option is set to '1', the system first refers to Program 44-10. If there is a match, the pattern defined in that program is used. If not, the F-Route pattern in Program 44-09 and time setting in 44-08 are used.	0 = Not Used 1 = Used	0

Conditions

None

Feature Cross Reference

- Automatic Route Selection (ARS)/F-Route

Telephone Programming Instructions

To enter data for Program 44-01 (System Options for ARS/F-Route):

1. Enter the programming mode.
2. 44 01

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 44 : ARS/F-Route Setup

44-02 : Dial Analysis Table for ARS/F-Route Access

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 44-02 : Dial Analysis Table for ARS/F-Route Access** to set the Pre-Transaction Table for selecting ARS/F-Route.

Input Data

Dial Analysis Table Number	1-120

Item No.	Item	Input Data	Default
01	**Dial** Set the number of digits to be analyzed by the system for ARS routing.	Up to 8 digits (Use line key 1 for a "Don't Care" digit, @)	No setting
02	**Service Type** • **Service Type 1 (Extension number)** The number goes to an extension after deleting the front digit(s). ***Additional data*** Assign the digit(s) to be deleted on top of the number for extension number usage. There must be at least one digit deleted. • **Service Type 2 (ARS/F-Route)** The number is controlled by ARS/F-Route table. ***Additional data*** If the ARS/F-Route Time Schedule is not used, assign the ARS/F-Route table number for Program 44-05. If the ARS/F-Route Time Schedule is used, assign the ARS/F-Route selection number for Program 44-04. • **Service Type 3 (Dial Extension Analyze Table)** The total length of the number exceeds more than 8 digits. ***Additional data*** Assign the Dial Extension Analysis Table number to be used in Program 44-03.	0=No setting 1=Extension Call 2=ARS/F-Route Table 3=Dial Extension Analyze Table	0

Item No.	Item	Input Data	Default
03	**Additional Data** For the Service Type selected in 44-02-02, enter the additional data required. • 1: Delete Digit = 0-255 (255=delete all digits) • 2: *[Program 44-01 : 0]* ARS/F-Route Table Number = 0-500 (0=No setting) Refer to Program 44-05. *[Program 44-01 : 1]* ARS/F-Route Select Table Number = 0-500 (0=No setting) Refer to Program 44-04. • 3: Dial Extension Analyze Table Number = 0-4 (0=No setting) Refer to Program 44-03.	• 1: Delete Digit = 0-255 (255 : delete all digits) • 2: 0-500 (0=No setting) • 3: Dial Extension Analyze Table Number = 0-4 (0=No setting)	0
04	**Dial Tone Simulation** If enabled, this option sends dial tone to the calling party once the routing is determined. This may be required if the central office at the destination does not send dial tone.	0=off 1=on	0

Conditions

None

Feature Cross Reference

- Automatic Route Selection (ARS)/F-Route

Telephone Programming Instructions

To enter data for Program 44-02 (Dial Analysis Table for ARS/F-Route Access):

1. Enter the programming mode.
2. 44 02

3. Enter the number of the item you want to program.

4. Select the Analyze Table number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

When Program 44-02-02 is set to type "3", use **Program 44-03 : Dial Analysis Extension Table** to set the dial extension analysis table. These tables are used when the analyzed digits must be more than 8 digits. If the received digits do not match the digits set in tables 1-250, table number 252 is used refer to the next Extension Table Area (1-4) to be searched. If the received digits are not identified in tables 1-250, the F-Route selection table number defined in table 251 is used.

Note: The item numbers indicated below are different when using PCPro/WebPro due to the window layout of the applications. Refer to the program within the PCPro/WebPro application to determine the correct item number.

Input Data

Extension Table Area Number	1-4

Dial Analysis Table Number	1-252

Dial Analysis Table Number : 1-250

Item No.	Item	Input Data	Default
01	Dial	Up to 24 digits Digits = 1-9, 0, *, #, @ (Press Line Key 1 for wild character @)	No setting
02	ARS/F-Route Select Table Number	0-500 (ARS/F-Route Table Number) With Program 44-01 set to 0, Program 44-05 is then checked. With Program 44-01 set to 1, Program 44-04 is then checked.	0

Dial Analysis Table Number : 251

Item No.	Item	Input Data	Default
03	ARS/F-Route Select table Number	0-500 (ARS/F-Route Table Number) With Program 44-01 set to 0, Program 44-05 is then checked. With Program 44-01 set to 1, Program 44-04 is then checked.	0

Program 44 : ARS/F-Route Setup
44-03 : Dial Analysis Extension Table

Dial Analysis Table Number : 252

Item No.	Item	Input Data	Default
04	Next Table Area Number	0-4	0

Conditions

None

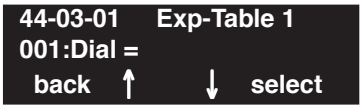
Feature Cross Reference

- Automatic Route Selection (ARS)/F-Route

Telephone Programming Instructions

To enter data for Program 44-03 (Dial Analysis Extension Table):

1. Enter the programming mode.
2. 44 03



3. Enter the number of the item you want to program.

4. Select the Extension Table number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 44-04 : ARS/F-Route Selection for Time Schedule** to assign each ARS/F-Route Selection number to an ARS/F-Route table number for each ARS/F-Route time mode. There are 8 time modes for ARS/F-Route Access.

Input Data

ARS/F-Route Selection Number	1-500

Item No.	ARS/F-Route Time Mode	ARS/F-Route Table Number	Default
01	1-8	0-500	0

Conditions

None

Feature Cross Reference

- Automatic Route Selection (ARS)/F-Route

Telephone Programming Instructions

To enter data for Program 44-04 (ARS/F-Route Selection for Time Schedule):

1. Enter the programming mode.
2. 44 04

   ```
   44-04-01    Select No 1
   F-Route Mode1=0
    back  ↑     ↓  select
   ```

3. Enter the number of the item you want to program.

   ```
   44-04-nn    Select No nnn
   nnnnn
     ←           →
   ```

4. Select the ARS/F-Route Selection number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 44 : ARS/F-Route Setup
44-05 : ARS/F-Route Table

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 44-05 : ARS/F-Route Table** to set the ARS/F-Route table. There are 4 kinds of order. If the higher priority trunk groups are busy, the next order group will be used. If a lower priority route is selected, the caller may be notified with a beep tone.

Input Data

ARS/F-Route Table Number	1-500

Priority Number	1-4

Item No.	Item	Input Data	Default
01	**Trunk Group Number** Select the trunk group number to be used for the outgoing ARS call.	0-100, 101-150, 255 (0 = No setting, 101-150 = Networking, 255 = Extension Call)	0
02	**Delete Digits** Enter the number of digits to be deleted from the dialed number.	0-255 (255 = Delete all)	0
03	**Additional Dial Number Table** Enter the table number (defined in Program 44-06) for additional digits to be dialed.	0-1000	0
04	**Beep Tone** Select whether or not a beep is heard if a lower priority trunk group is used to dial out.	0 = off 1 = on	0
05	**Gain Table Number for Internal Calls** Select the gain table number to be used for the internal call (defined in Program 44-07).	0-500 (0 = No setting)	0
06	**Gain Table Number for Tandem Connections** Select the gain table number to be used for the tandem call (defined in Program 44-07).	0-500 (0 = No setting)	0
07	**ARS Class of Service** Select the ARS Class of Service to be used for the table. An extension's ARS COS is determined in Program 26-04-01.	0-16	0

08	**Dial Treatment** Select the Dial Treatment to be used for the table. If a Dial Treatment is selected, Programs 44-05-02 and 44-05-03 are ignored and the Dial Treatment defined in Program 26-03-01 is used instead.	0-15	0

Conditions

None

Feature Cross Reference

- Automatic Route Selection (ARS)/F-Route

Telephone Programming Instructions

To enter data for Program 44-05 (ARS/F-Route Table):

1. Enter the programming mode.
2. 44 05

```
44-05-01  F-route TBL1
PRI1:TRK GP   =0
 back   ↑      ↓   select
```

3. Enter the number of the item you want to program.

```
44-05-nn  F-route TBLnnn
nnnnn
  ←              →
```

4. Select the ARS/F-Route Table number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 44 : ARS/F-Route Setup
44-06 : Additional Dial Table

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 44-06 : Additional Dial Table** to set the additional dial table to add prior to the dialed ARS/F-Route number. The Additional Dial Table used is determined in Program 44-05-03.

Input Data

Additional Dial Table Number	1-1000

Item No.	Additional Dial	Default
01	Up to 24 digits Enter: 1-9, 0, *, #, Pause (press line key 1 to enter a pause)	No setting

Conditions

None

Feature Cross Reference

- Automatic Route Selection (ARS)/F-Route

Telephone Programming Instructions

To enter data for Program 44-06 (Additional Dial Table):

1. Enter the programming mode.
2. 44 06

3. Enter the number of the item you want to program.

4. Select the Additional Dial Table number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 44-07 : Gain Table for ARS/F-Route Access** to set the gain/PAD table. If an extension dials ARS/F-Route number;

- The Extension Dial Gain Table is activated, which is assigned in Program 44-05.
- The Extension Dial Gain Table follows "Outgoing transmit" and "Outgoing receive" settings.

If the incoming call is transferred to another line using ARS/F-Route;

- The Tandem Gain Table is activated, which is assigned in Program 44-05.
- The Tandem Gain Table follows the "Incoming transmit" and "Incoming receive" settings for incoming line, and "Outgoing transmit" and "Outgoing receive" settings for the outgoing line.

Note: For ARS/F-Route calls, the CODEC gains defined in Program 14-01-02 and 14-01-03 are not activated.

Input Data

Gain Table Number	1-500

Item No.	Item	Input Data	Default
01	Incoming Transmit	1-63 (-15.5 ~ +15.5dB)	32
02	Incoming Receive	1-63 (-15.5 ~ +15.5dB)	32
03	Outgoing Transmit	1-63 (-15.5 ~ +15.5dB)	32
04	Outgoing Receive	1-63 (-15.5 ~ +15.5dB)	32

Conditions

None

Feature Cross Reference

- Automatic Route Selection (ARS)/F-Route

Program 44 : ARS/F-Route Setup
44-07 : Gain Table for ARS/F-Route Access

Telephone Programming Instructions

To enter data for Program 44-07 (Gain Table for ARS/F-Route Access):

1. Enter the programming mode.
2. 44 07

3. Enter the number of the item you want to program.

4. Select the Gain Table number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 44-08 : Time Schedule for ARS/F-Route** to define the daily pattern of the ARS/F-Route feature. ARS/F-Route has 10 time patterns. These patterns are used in Program 44-09 and 44-10. The daily pattern consists of 20 time settings.

Input Data

Schedule Pattern Number	01-10

Item No.	Time Number	Start Time	End Time	Mode
01	01-20	0000-2359	0000-2359	1-8

Default

All Schedule Patterns : 0:00 – 0:00, Mode 1

Example:

Pattern 1

0:00	8:00	18:00	22:00	0:00
Mode 3	Mode 1	Mode 2	Mode 3	

Time Number 01 : 00:00 – 08:00 Mode 3
Time Number 02 : 08:00 – 18:00 Mode 1
Time Number 03 : 18:00 – 22:00 Mode 2
Time Number 04 : 22:00 – 00:00 Mode 3

Pattern 2

0:00	0:00
Mode 2	

Time Number 01 : 0:00 – 0:00 Mode 2

Conditions

None

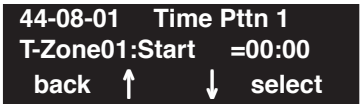
Feature Cross Reference

- Automatic Route Selection (ARS)/F-Route

Telephone Programming Instructions

To enter data for Program 44-08 (Time Schedule for ARS/F-Route):

1. Enter the programming mode.
2. 44 08



3. Enter the number of the item you want to program.

4. Select the Time Pattern number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 44-09 : Weekly Schedule for ARS/F-Route** to define a weekly schedule for using ARS/F-Route. The pattern number is defined in Program 44-08-01.

Input Data

Item No.	Day Number	Schedule Pattern Number	Default
01	1 = Sunday	1-10	Pattern 1
	2 = Monday	1-10	Pattern 1
	3 = Tuesday	1-10	Pattern 1
	4 = Wednesday	1-10	Pattern 1
	5 = Thursday	1-10	Pattern 1
	6 = Friday	1-10	Pattern 1
	7 = Saturday	1-10	Pattern 1

Conditions

None

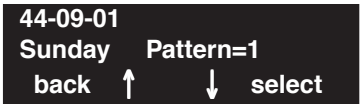
Feature Cross Reference

- Automatic Route Selection (ARS)/F-Route

Telephone Programming Instructions

To enter data for Program 44-09 (Weekly Schedule for ARS/F-Route):

1. Enter the programming mode.
2. 44 09



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 44-10 : Holiday Schedule for ARS/F-Route** to define a yearly schedule for ARS/F-Route. This schedule is used for setting special days such as national holidays. The pattern number is defined in Program 44-08-01.

Input Data

Item No.	Date	Schedule Pattern Number	Default
01	0101- 1231	0-10 (0 = No setting)	No Setting

Conditions

None

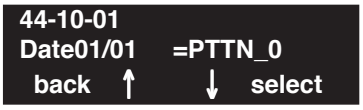
Feature Cross Reference

- Automatic Route Selection (ARS)/F-Route

Telephone Programming Instructions

To enter data for Program 44-10 (Holiday Schedule for ARS/F-Route):

1. Enter the programming mode.
2. 44 10



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

- For Your Notes -

Level:	Aspire S	Aspire M/L/XL
IN	• Available. • Program 45-01-10 available with software 4.94+.	• Available. • Program 45-01-10 available with software 4.94+.

Description

Use **Program 45-01 :Voice Mail Integration Options** to customize certain voice mail integration options.

Input Data

Item No.	Item	Input Data	Default
01	**Voice Mail Department Group Number** Assign which Extension (Department) Group number is to be assigned as the voice mail group (non-networked system). An entry of '0' means there is no voice mail installed. When using Centralized Voice Mail with Aspire Mail or IntraMail, this program and Program 45-01-08 must both be programmed with the same group number. Otherwise, the audio path may not connected properly.	Aspire S: 0-8 Aspire: 0 - 64 (0=no voice mail)	0
02	**Voice Mail Master Name** Enter the Voice Mail master name (non-networked system).	Up to 12 Characters	Voice Mail
03	**Voice Mail Screening** Enable/disable the system's ability to process the Call Screening commands (1 + extension number) sent from the Voice Mail. You should normally ***enable*** this option to allow for Voice Mail Call Screening. Disable this option if your system has been modified so that extensions begin with the digit 1 (e.g., 101, 102, etc.). Also see the Flexible System Numbering feature.	0 = Off 1 = On	1
04	**Park and Page** Enable/disable the system's ability to process the Voice Mail's Park and Page (*) commands. You should normally ***enable*** this option.	0 = Off 1 = On	1

05	**Message Wait** Enable/disable the system's ability to process the Voice Mail's Message Wait (#) commands. You should normally ***enable*** this option. If enabled, be sure that the programmed Message Notification strings don't contain the code #9 for trunk access.	0 = Off 1 = On	1
06	**Record Alert Tone Interval Time** This timer sets the interval between voice Mail Conversation Record alerts	0-64800 seconds	0
07	**Mailbox Number** Enter the extension number of the voice mail to be accessed as the centralized voice mail unit when the Networking feature is used.	Up to 8 Digits	-
08	**Networked Voice Mail Department Group Number** Assign which Extension (Department) Assign which Extension (Department) Group number is to be assigned as the voice mail group with a networked system. An entry of '0' means there is no voice mail installed. When using Centralized Voice Mail with Aspire Mail or Intra-Mail, this program and Program 45-01-01 must both be programmed with the same group number. Otherwise, the audio path may not connected properly.	Aspire S: 0 - 8 Aspire: 0 - 64 (0=no voice mail)	0
09	**Networked Voice Mail Master Name** Enter the Voice Mail master name (networked system).	Up to 12 Characters	C.V.M.
10	**NSL Protocol Support** This option must be enabled (1) in order for the display to use the NSL protocol.	0 = NSL Protocol Disabled 1 = NSL Protocol Enabled	0

Conditions

None

Feature Cross Reference

- Voice Mail

Telephone Programming Instructions

To enter data for Program 45-01 (Voice Mail Integration Options):

1. Enter the programming mode.
2. 45 01

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 45 : Voice Mail Integration
45-02 : NSL Option Setup

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 45-02 : NSL Option Setup** to customize the NSL options for Voice Mail integration.

Input Data

Item No.	Item	Input Data	Default
01	**Send DTMF Tone or 6KD Message** With 6KD enabled, the system uses NSL messages to communicate with an Intra-mail voice mail port (rather than DTMF tones). This is required for IntraMail operation.	0 = Sending DTMF Tone to SLT-VM Port 1 = Sending 6KD Message to Serial Port	0
02	Forced Send Dial Tone	0 = Normal 1 = Forced	0
03	**Send 5IA Message** With 51A enabled, when an IntraMail port is placing a call, the system will send NSL messages to Intramail that provide the call status. This typcially occurs during Make Call and Message Notification callouts. This is required for IntraMail operation.	0 = Off 1 = On	0
04	NSL Over LAN - Future Item - Not Yet Used -	0 = Off 1 = On	0

Conditions

None

Feature Cross Reference

- Voice Mail

Telephone Programming Instructions

To enter data for Program 45-02 (NSL Option Setup):

1. Enter the programming mode.
2. 45 02

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 45 : Voice Mail Integration
45-03 : NSL Timer Setup

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 45-03 : NSL Timer Setup** to customize the NSL timers for Voice Mail integration.

Input Data

Item No.	Item	Input Data	Default
01	Retry Timer	0-64800	4
02	Polling Interval	0-64800	20
03	1LS (Link Start Message) Interval	0-64800	20
04	Wait for 1LS Time	0-64800	30
05	Wait for 2ET Time	0-64800	60
06	Restart LVP Check Interval	0-64800	30
07	Wait for 1LR Time	0-64800	20

Conditions

None

Feature Cross Reference

- Voice Mail

Telephone Programming Instructions

To enter data for Program 45-03 (NSL Timer Setup):

1. Enter the programming mode.
2. 45 03

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

- For Your Notes -

Level:	Aspire S	Aspire M/L/XL
IN	• Available. • Item 16 requires software 2.64+. • Item 17 is not available in Aspire S.	• Not Available for Aspire L/XL. Aspire M requires software 4.93+. • Item 16 available for Aspire M with 4.93+. • Item 17 requires software 4.93+.

Description

Use **Program 47-01 : IntraMail System Options** to set up the IntraMail system-wide options.

Input Data

Item No.	Item	Input Data	Default
01	**DSPDB Voice Mail Type** (DSPDB VM Type) Use this option to enable the IntraMail PCB. Enter 0 for this option when IntraMail is installed. ***When changing a system from using a VRS to IntraMail, the system must be restarted after making this change.***	0 = IntraMail 1 = PVMU - Not available in North America	0 (IntraMail)
02	**IntraMail Master Name** (MasterName) Use this option to modify the name for all IntraMail ports. The system briefly displays this name when a display keyset user calls a Voice Mail port (either by pressing **MSG,** their voice mail key, or by dialing the master number). You should always end the name with the ## characters. The system substitutes the port number for the last #. Using the default name *IntraMail ##* for example, the keyset display shows *IntraMail #1* when calling port 1.	Up to 12 Characters	IntraMail ## (The system substitutes the port number for the # when calling the port).

03	**Subscriber Message Length** (Subs Msg Length) Use this option to set the maximum length of recorded messages for: • Subscriber Mailbox users dialing **RS** to record and send a message. • Extension users leaving a message in a Subscriber Mailbox. • Outside Automated Attendant callers accessing a mailbox via a GOTO command and then dialing **RS** to record and send a message. • Subscriber Mailbox Greetings. • Announcement Messages. • Call Routing Mailbox Instruction Menus. Note: The length of a Conversation Record is 10 times the *Subscriber Message Length*. Since the Conversation Record time cannot exceed 4095 seconds, any settings in *Subscriber Message Length* larger than 409 has no effect on the length of recorded conversations.	1-4095 seconds	120 seconds
04	**Non-Subscriber Message Length** (Mbox Msg Length) Use this option to set the maximum length of recorded messages for: • Automated Attendant callers leaving a message or Quick Message in a Subscriber Mailbox. • Outside callers transferred by an extension user to a Subscriber Mailbox.	1-4095 seconds	120 seconds
05	**Message Backup/Go Ahead Time** (Msg Bkup/Adv Time) Use this option to set the backup/go ahead interval. This interval sets how far IntraMail backs up when a user dials **B** while listening to a message. This interval also sets how far IntraMail jumps ahead when a user dials **G** while listening to a message.	1-60 Seconds	5 Seconds
06	**Fax Extension** (Fax Extension) Use this option to specify which system extension is the fax machine. When the Automated Attendant answers a call and detects fax (CNG) tone, it automatically transfers the call to this extension.	No entry (Press CLEAR). Extension number (e.g., 310)	No entry (Press CLEAR)

07	**Digital Pager Callback Number** (Pager CBack) Use this option to set the *Digital Pager Callback Number* portion of the Message Notification callout number for a digital pager. This is the portion of the callout number that is appended to the pager service telephone number. Normally, this option should be **X*M#**, where: • **X** is the number of the extension that generated the notification. • ***** is a visual delimiter (to make the pager display easier to read). • **M** is the number of new messages in the extension's mailbox. • **#** is the digit normally used by the pager service for positive disconnect.	**Digits** (12 maximum, using 0-9, # and *) **M** (Number of messages - entered by pressing **LK1**) **No entry (Entered by pressing CLEAR)**. ***X*** *(*Extension number - entered by pressing **LK2**) IntraMail automatically replaces the **X** command with the number of the extension that initially received the message.	X*M#
08	**Delay in Dialing Digital Pager Callback Number** (Pager Dial Delay) Use this option to set the delay (0-99 seconds) that occurs just before IntraMail dials the *Digital Pager Callback Number* portion of the Message Notification callout number for a digital pager. Set this delay so the pager service has enough time to connect to the digital pager before sending the callback number. Your pager service may be able to help you determine the best value for this option (**0-99** seconds). By default, this option is 9 seconds. When placing a digital pager notification, the system: 1. Seizes the trunk specified. 2. Dials the user-entered notification number (in **MSG** + **OP** + **N**). 3. Waits the **47-01-08: Delay in Dialing Digital Pager Callback Number** interval. 4. Dials the number entered in **47-01-07: Digital Pager Callback Number**. The system assumes that the notification number will complete dialing approximately 4 seconds after trunk seizure. This means that, by default, the Digital Pager Callback Number will be dialed into the pager service about 13 seconds after trunk seizure.	0-99 seconds	9 seconds
09	**Wait Between Digital Pager Callout Attempts** (Notify Pager Intvl) Use this option to set the minimum time (1-255 minutes) between unacknowledged or unanswered digital pager Message Notification callouts. (A subscriber acknowledges a digital pager notification by logging onto their mailbox.) After this interval expires, IntraMail will try the callout again (for up to the number of times set in **47-01-14: Number of Callout Attempts**). If the system dials the callout number and the pager service is busy, it will retry the number in one minute.	1-255 minutes	15 minutes

10	**Wait Between Non-Pager Callout Attempts** (Notify N-Pgr Intvl) Use this option to set the minimum time (1-255 minutes) between non-pager Message Notification callouts in which the destination answers, says "Hello," dials 1 to acknowledge and then enters the wrong security code.	1-255 minutes	20 minutes
11	**Wait Between Busy Non-Pager Callout Attempts** (Notify Busy Intvl) Use this option to set how long IntraMail will wait (1-255 minutes), after it dials a busy non-pager callout destination, before retrying the callout number.	1-255 minutes	15 minutes
12	**Wait Between RNA Non-Pager Callout Attempts** (Notify RNA Intvl) Use this option to set how long IntraMail will wait (1-255 minutes), after it dials an unanswered non-pager callout destination, before retrying the callout number. There are three types of unanswered non-pager callouts: • If the callout rings the destination longer than the **47-01-13: Wait for Answer Non-Pager Callout Attempts** option. • If the destination answers, says "Hello" (or the system detects answer supervision) and then hangs up without dialing 1 to log onto their mailbox. This typically happens if someone unfamiliar with notification answers the callout, or if the callout is picked up by an answering machine. • If the destination answers and then hangs up without saying "Hello." This typically happens if someone unfamiliar with the notification answers the callout (like the above example), or if the call is picked up by an answering machine with insufficient outgoing message volume.	1-255 minutes	30 minutes
13	**Wait for Answer Non-Pager Callout Attempts** (Notify RNA Rings) If a non-pager callout rings the destination longer than this interval (1-99 rings), IntraMail marks the call as unanswered (Ring No Answer) and hangs up.	1-99 rings	5 rings
14	**Number of Callout Attempts** (Notify Call Attmpt) Use this option to set how many times (1-99 attempts) IntraMail will retry an incomplete Message Notification callout. This total includes unacknowledged callouts, callouts to a busy destination, and callouts to an unanswered destination. This option applies to pager and non-pager callouts.	1-99 attempts	5 attempts

15	**Send Pager Callout Until Acknowledged** (Retry Until Ack) When this option is enabled (1), IntraMail will continue to retry a digital pager Message Notification callout until the notification is acknowledged. If this option is disabled (0), IntraMail will retry a digital pager Message Notification the number of times specified in **8004-Number of Callout Attempts**. This option does not apply to Message Notification callouts to telephone numbers. A digital pager notification is considered acknowledged when the recipient logs onto the mailbox.	1 = Enabled 0 = Disabled	0 (Disabled)
16	**Name Format** Use this option to determine how extension names should be entered in **15-01-01 : Basic Extension Data Setup - Extension Name** or via the telephone.	0 = First / Last 1 = Last / First	0
17	**Start of IntraMail Port** Set the starting port number to be used for IntraMail. This must be a port which is currently unassigned to a PCB. ***It is recommended to use the last 8 ports in the system (an entry of '505') or to start after the last possible physical port (an entry of '129') to avoid possible numbering issues with future PCB installations.*** The system will assign 8 ports beginning with the port number specified in this option. If a port within the specified range has already been used or the port range is exceeded, the entry will not be accepted. Due to the port assignment for the PCBs, the acceptable entries for this program jump in groups of 4 - starting with 001. For example, acceptable entries would be: 001, 005, 009, 013, 017, 021, etc. *This program is not available in the Aspire S.*	Port Number (*Aspire software 4.93-4.96:* 0 or 001-505 *Aspire software 4.98+ with Basic PAL:* 0-57 or *Feature Upgrade PAL:* 0-121)	0

Conditions

None

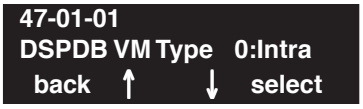
Feature Cross Reference

- Voice Mail

Telephone Programming Instructions

To enter data for Program 47-01 (IntraMail Basic Options):

1. Enter the programming mode.
2. 47 01



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 2.50+. • Item 15 available with software 2.64+.	• Not Available for Aspire L/XL. Aspire M requires software 4.93+.

Description

Use **47-02: IntraMail Station Mailbox Options** to set up a station's (extension's) mailbox. Station mailboxes are automatically assigned as Subscriber Mailboxes. Normally, IntraMail Station Mailbox numbers 1-26 should correspond to extensions 301-326.

Station Mailboxes are one of three mailbox categories: Station, Routing, and Master. You can also set up Master Mailboxes as Subscriber Mailboxes.

Input Data

Item No.	Item	Input Data	Default
01	**Mailbox Active** (Mailbox Active) Use this option to enable or disable the mailbox. An extension's mailbox is not accessible when it is disabled (even though its stored messages and configuration are retained in memory.) If disabled, a user pressing **MSG** will initiate a remote logon and be asked to enter their mailbox number. A voice prompt then announces, *"That mailbox does not exist."* To make programming easier, consider associating a mailbox number with a station port. For example, mailbox 1 could correspond to port 1, which in turn corresponds to extension 301.	1 (Yes - enabled) 0 (No - disabled)	Mailboxes 1-8 = 1 (Enabled) All other mailboxes = 0 (Disabled)
02	**Mailbox Number** (Mailbox Number) Use this option to select the extension number associated with the mailbox you are programming. Normally, mailbox 1 should use Mailbox Number 301, mailbox 2 should use Mailbox Number 302, etc. To make programming easier, consider associating a mailbox number with a station port. For example, mailbox 1 could correspond to port 1, which in turn corresponds to extension 301.	Digits (8 maximum, using 0-9)	Mailboxes 1-8 = 301-308. For all other mailboxes, there is no entry.
03	**Number of Messages** (Number of Messages) Use this option to set the maximum number of messages that can be left in the Subscriber Mailbox. If a caller tries to leave a message once this limit is reached, they hear, "*That mailbox is full.*" IntraMail then hangs up.	0-99 messages • To conserve storage space, enter 0 for all unused mailboxes.	99 messages for mailbox 1. 20 messages for all other mailboxes.

04	**Message Playback** (Message Playback) Use this option to set the Subscriber Mailbox message playback order. When a subscriber listens to their messages, IntraMail can play the oldest messages first (first-in-first-out, or FIFO), or the newest messages first (last-in-first-out, or LIFO).	0 (FIFO - first-in-first-out, or oldest messages first). 1 (LIFO - last-in-first-out, or newest messages first).	0 (FIFO - first-in-first-out, or oldest messages first)
05	**Auto Erase/Save of Messages** (Auto Erase/Save) Use this option to determine what happens when a Subscriber Mailbox user completely listens to a new message and then exits their mailbox without either saving (**SA**) or erasing (**E**) the message. Depending on the setting of this option, IntraMail will either automatically save or erase the message. If the mailbox user hangs up before listening to the *entire* new message, IntraMail retains the message as a new message.	0 (Erase) • After the subscriber listens to the entire new message and hangs up, IntraMail erases the message. 1 (Save) • After the subscriber listens to the entire new message and hangs up, IntraMail saves the message.	1 (Save)
06	**Message Retention** (Message Retention) Use this option to determine how long a Subscriber Mailbox will retain held and saved messages. If a message is left in a Subscriber Mailbox longer than this interval, IntraMail deletes it.	1-90 days 0 (Indefinite)	0 (Indefinite)
07	**Recording Conversation Beep** (Rec Conv Beep) Use this option to enable or disable the Conversation Record beep. If enabled, all parties on a call will hear the voice prompt *Recording* followed by a single beep when the extension user initiates Conversation Record. If disabled, the voice prompt and beep will not occur. When you disable the Conversation Record beep, the following voice prompts do not occur while IntraMail records the conversation: *"Recording" (followed by a beep)* *"That mailbox is full" (if the mailbox message storage capacity is reached)* *"You have reached the recording limit" (if the recorded message is too long)* The Aspire telephone system software provides an additional Conversation Record beep. This beep repeats according to the setting of **Program 45-01-06: Voice Mail Integration Options: Record Alert Tone Interval Time** (0-64800 seconds). To disable the Aspire telephone system Conversation Record beep, enter 0 for this option.	1 (Yes - enabled) 0 (No - disabled)	1 (Yes - enabled)
08	**Message Waiting Lamp** (Update MW Lamp) Use this option to enable or disable Message Waiting lamping at the extension associated with the Subscriber mailbox. For Subscriber Mailboxes, you should leave this option enabled. For Guest Mailboxes, you should leave this option disabled.	1 (Yes - enabled) 0 (No - disabled)	1 (Yes - enabled)

09	**Auto Attendant Do Not Disturb** (Auto-ATT DND) Use this option to enable or disable Auto Attendant Do Not Disturb. When a subscriber enables Auto Attendant Do Not Disturb, an Automated Attendant caller will route directly to the mailbox, hear the greeting, and be asked to leave a message. A subscriber can also enable Auto Attendant Do Not Disturb while recording their mailbox greeting.	1 (Yes - enabled) 0 (No - disabled)	0 (No - disabled)
10	**Forced Unscreened Transfer** (Forced UTRF) Use this option to enable or disable Automated Attendant Forced Unscreened Transfer for the Subscriber Mailbox. If enabled, each Screened Transfer (TRF) to the extension is converted to an Unscreened Transfer (UTRF). If disabled, Screened Transfers from the Automated Attendant occur normally.	1 (Yes - enabled) 0 (No - disabled)	0 (No - disabled)
11	**Auto Time Stamp** (Auto Time Stamp) Use this option to enable or disable Auto Time Stamp for the Subscriber Mailbox. If enabled, after the subscriber listens to a message IntraMail will announce the time and date the message was left. Auto Time Stamp will also announce the message sender (if known). A subscriber can also enable Auto Time Stamp from their mailbox.	1 (Yes - enabled) 0 (No - disabled)	0 (No - disabled)
12	**System Administrator** (System Admin) Use this option to designate the Subscriber Mailbox as a System Administrator. This allows the subscriber to use the **SA** options after logging onto their mailbox.	1 (Yes - enabled) 0 (No - disabled)	Mailbox 1 (301) = Enabled (1) All other mailboxes = Disabled (0)
13	**Dialing Option** (Dialing Option) Dialing Option provides additional dialing options for Next Call Routing Mailbox calls (see *Next Call Routing Mailbox* below). If enabled, a caller who accesses the Subscriber Mailbox to leave a message can dial any of the options in the Next Call Routing Mailbox's Dial Action Table. If disabled, the caller can only dial 0 (to use the Next Call Routing Mailbox's 0 action).	1 (Yes - enabled) 0 (No - disabled)	0 (No - disabled)
14	**Next Call Routing Mailbox** (Next CR Mbox) Use this option to assign a Next Call Routing Mailbox to the Subscriber Mailbox. This provides callers with additional dialing options while listening to a Subscriber Mailbox recorded or default greeting. The digits the caller can dial depends on the setting of the Next Call Routing Mailbox and Alternate Next Call Routing Mailbox options.	Call Routing Mailbox Number (1-3 digits, 01-016) No entry (Entered by pressing CLEAR)	**1** (Call Routing Mailbox 01) • By default, Call Routing Mailbox numbers are 01-08.

15	**Directory List** Use this option to specify the Directory List to which the Subscriber Mailbox belongs. When setting up Directory Dialing Mailboxes, you must specify which Directory List you want the Directory Dialing Mailbox to use. The Directory Dialing Mailbox can only call Subscriber Mailboxes that belong to the list it is programmed to use.	1-8 (lists 1-8) 0 (belongs to no lists) * (belongs to all lists)	0 (No entry)

Conditions

None

Feature Cross Reference

- Voice Mail

Telephone Programming Instructions

To enter data for Program 47-02 (IntraMail Station Mailbox Options):

1. Enter the programming mode.
2. 47 02

```
47-02-01    Mailbox1
Mailbox Active      1:Yes
 back  ↑     ↓  select
```

3. Enter the number of the item you want to program.

```
47-02-nn
nnnnn
 ←            →
```

4. Select the mailbox to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 2.50+.	• Not Available for Aspire L/XL. Aspire M requires software 4.93+.

Description

Use **47-03: Master Mailbox Options** to set up the 16 Master Mailboxes (01-16). A Master Mailbox is used for Department Group overflow and can be a Subscriber, Call Routing, or Announcement Mailbox.

Input Data

Item No.	Item	Input Data	Default
01	**Master Mailbox Active** (Mailbox Active) Use this option to enable or disable the Master Mailbox. A Master Mailbox is not accessible when it is disabled. IntraMail cannot use the Directory Dialing Mailbox unless it is active. By default, all Master Mailboxes are inactive (0). If the Directory Dialing Mailbox is not active, IntraMail routes the call to the Default Mailbox.	1 (Yes - enabled) 0 (No - disabled)	0 (No - disabled)
02	**Master Mailbox Number** (Mailbox Number) The Master Mailbox Number is the same as the Department Group master (pilot) number. Use this option to select the Department Group master (pilot) number associated with the Master Mailbox you are programming. Use this option to select the Master Mailbox (this is the Department Group pilot number which is being overflowed) you want to assign as a Directory Dialing Mailbox. By default, there are no Master Mailboxes assigned as Directory Dialing Mailboxes.	• Digits (8 maximum, using 0-9). • No entry (Entered by pressing CLEAR)	No entry

03	**Master Mailbox Type** (Mailbox Type) Use this option to set the Master Mailbox type. There are four types of IntraMail mailboxes: Call Routing (1), Announcement (2), Subscriber (3), and Directory Dialing (4). *If the Master Mailbox is a Call Routing Mailbox (1), go to 47-04: Master Call Routing Mailbox Options* on page 1341 *to set up the Master Mailbox options.* *If the Master Mailbox is an Announcement Mailbox (2), go to 47-05: Master Announcement Mailbox Options* on page 1343 *to set up the Master Mailbox options.* *If the Master Mailbox is a Subscriber Mailbox (3), go to 47-06: Master Subscriber Mailbox Options* on page 1345 *to set up the Master Mailbox options.* *If the Master mailbox is a Directory Dialing Mailbox (4), go to 47-14 : Master Directory Mailbox Options* on page 1374 *to set the Master Mailbox options.*	1 (Call Routing) 2 (Announcement) 3 (Subscriber) 4 (Directory Dialing) 0 (Undefined)	3 (Subscriber)

Conditions

None

Feature Cross Reference

- Voice Mail

Telephone Programming Instructions

To enter data for Program 47-03 (IntraMail Master Mailbox Options):

1. Enter the programming mode.
2. 47 03

3. Enter the number of the item you want to program.

4. Select the mailbox to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 2.50+.	• Not Available for Aspire L/XL. Aspire M requires software 4.93+.

Description

Use **47-04: Master Call Routing Mailbox Options** to set up a Master Mailbox (01-16) assigned as a Call Routing Mailbox in **47-03-03: Master Mailbox Type**.

Input Data

Item No.	Item	Input Data	Default
01	**Dial Action Table** (Dial Action Table) Use this option to assign the Dial Action Table to the Call Routing Mailbox. The Dial Action Table defines the dialing options for the call Routing Mailbox.	1-16 (Dial Action Table 1-16)	1 (Dial Action Table 1)
02	**Screened Transfer Timeout** (Scrn Trf Timeout Use this option to set how long a Screened Transfer (TRF) from the Automated Attendant will ring an unanswered extension before recalling. *This option has a similar function as Customize: Mailbox Options: Call Routing: [Call Handling] Options: Delay Rings Before Redirect Transfer in Aspire Mail.*	0-255 seconds Entering 0 causes immediate recall.	15 seconds
03	**Time Limit for Dialing Commands** (Dialing Timeout) This option determines how long IntraMail will wait for an Automated Attendant caller to dial before routing the call to the Timeout destination. *Be sure your Dial Action Tables have a Timeout action programmed.* If the caller waits too long to dial: *When the associated Dial Action Table has a Timeout action programmed, the caller routes to that destination.* *When the associated Dial Action Table does not have a Timeout action programmed, the Instruction Menu repeats 3 times and then IntraMail hangs up.*	0-99 seconds *Entering 0 causes the Automated Attendant to immediately route callers to the Timeout destination programmed in the active Dial Action Table.*	5 seconds
04	**Fax Detection** (Fax Detection) Use this option to enable or disable Fax Detection for the Call Routing Mailbox. In enabled, the IntraMail Automated Attendant (when using this Call Routing Mailbox) will detect incoming fax CNG tone. The fax call will then route to the company fax machine according to the setting of *47-01-06 : Fax Extension*. If disabled, the Automated Attendant will not detect incoming fax calls.	1 (Yes - enabled) 0 (No - disabled)	0 (No - disabled)

Conditions

None

Feature Cross Reference

- Voice Mail

Telephone Programming Instructions

To enter data for Program 47-04 (Master Call Routing Mailbox Options):

1. Enter the programming mode.
2. 47 04

3. Enter the number of the item you want to program.

4. Select the mailbox to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 2.50+.	• Not Available for Aspire L/XL. Aspire M requires software 4.93+.

Description

Use **47-05: Master Announcement Mailbox Options** to set up a Master Mailbox (01-16) assigned as an Announcement Mailbox in **47-03-03: Master Mailbox Type**.

Input Data

Item No.	Item	Input Data	Default
01	**Next Call Routing Mailbox** (Next CR Mbox) If you set up an Announcement Mailbox to answer Automated Attendant calls, use this option to provide additional routing options to the Automated Attendant callers. This option interacts with *Repeat Count* and *Hang Up After* below. For a detailed explanation of the interaction of these options, turn to: • Direct Announcement Mailbox Routing in the Aspire IntraMail System Guide, P/N 0893240. • Routed Announcement Mailbox Routing in the Aspire IntraMail System Guide, P/N 0893240.	Call Routing Mailbox Number (01-16) Undefined (0)	Undefined (0)
02	**Repeat Count** (Repeat Count) Enter the number of times you want the Announcement Mailbox message to repeat to callers. After an Announcement Mailbox caller initially listens to the message, it will repeat the number of times specified in this option. This option interacts with *Next Call Routing Mailbox* and *Hang Up After* when providing routing options. For a detailed explanation of the interaction of these options, turn to the following charts: • Direct Announcement Mailbox Routing in the Aspire IntraMail System Guide, P/N 0893240. • Routed Announcement Mailbox Routing in the Aspire IntraMail System Guide, P/N 0893240.	0 (No repeats) 1-10 (Announcement repeats 1-10 times)	0 (No repeats)
03	**Hang Up After** (HangUp) Use this option along with *Next Call Routing Mailbox* and *Repeat Count* above to provide additional routing options to Automated Attendant callers. For a detailed explanation of the interaction of these options, turn to the following charts: • Direct Announcement Mailbox Routing in the Aspire IntraMail System Guide, P/N 0893240. • Routed Announcement Mailbox Routing in the Aspire IntraMail System Guide, P/N 0893240.	1 (Yes - enabled) 0 (No - disabled)	0 (No - disabled)

Conditions

None

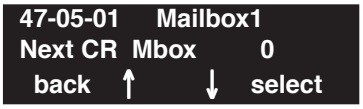
Feature Cross Reference

- Voice Mail

Telephone Programming Instructions

To enter data for Program 47-05 (Master Announcement Mailbox Options):

1. Enter the programming mode.
2. 47 05



3. Enter the number of the item you want to program.

4. Select the mailbox to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available. • Item 13 available with software 2.64+.	• Not Available for Aspire L/XL. Aspire M requires software 4.93+.

Description

Use **47-06: Master Subscriber Mailbox Options** to set up a Master Mailbox assigned as a Subscriber Mailbox in **47-03-03: Master Mailbox Type**.

Input Data

Item No.	Item	Input Data	Default
01	**Number of Messages** (Number of Messages) Use this option to set the maximum number of messages that can be left in the Subscriber Mailbox. If a caller tries to leave a message once this limit is reached, they hear, "*That mailbox is full*." IntraMail then hangs up.	0-99 messages To conserve storage space, enter 0 for all unused mailboxes.	20
02	**Message Playback** (Message Playback) Use this option to set the Subscriber Mailbox message playback order. When a subscriber listens to their messages, IntraMail can play the oldest messages first (first-in-first-out, or FIFO), or the newest messages first (last-in-first-out, or LIFO).	0 (FIFO - first-in-first-out, or oldest messages first). 1 (LIFO - last-in-first-out, or newest messages first).	0 (FIFO)
03	**Auto Erase/Save of Messages** (Auto Erase/Save) Use this option to determine what happens when a Subscriber Mailbox user completely listens to a new message and then exits their mailbox without either saving (**SA**) or erasing (**E**) the message. Depending on the setting of this option, IntraMail will either automatically save or erase the message. If the mailbox user hangs up before listening to the *entire* new message, IntraMail retains the message as a new message.	0 (Erase) After the subscriber listens to the entire new message and hangs up, IntraMail erases the message. 1 (Save) After the subscriber listens to the entire new message and hangs up, IntraMail saves the message.	1 (Save)
04	**Message Retention** (Message Retention) Use this option to determine how long a Subscriber Mailbox will retain held and saved messages. If a message is left in a Subscriber Mailbox longer than this interval, IntraMail deletes it.	1-90 days 0 (Indefinite)	0 (Indefinite)

05	**Recording Conversation Beep** (Rec Conv Beep) Use this option to enable or disable the Conversation Record beep. If enabled, all parties on a call will hear the voice prompt *Recording* followed by a single beep when the extension user initiates Conversation Record. If disabled, the voice prompt and beep will not occur. When you disable the Conversation Record beep, the following voice prompts do not occur while IntraMail records the conversation: *"Recording" (followed by a beep)* *"That mailbox is full" (if the mailbox message storage capacity is reached)* *"You have reached the recording limit" (if the recorded message is too long)* The Aspire telephone system software provides an additional Conversation Record beep. This beep repeats according to the setting of **Program 45-01-06: Voice Mail Integration Options: Record Alert Tone Interval Time** (0-64800 seconds). To disable the Aspire telephone system Conversation Record beep, enter 0 for this option.	1 (Yes - enabled) 0 (No - disabled)	1 (Yes - enabled)
06	**Message Waiting Lamp** (Update MW Lamp) Use this option to enable or disable Message Waiting lamping at the extension associated with the Subscriber mailbox. For Subscriber Mailboxes, you should leave this option enabled. For Guest Mailboxes, you should leave this option disabled.	1 (Yes - enabled) 0 (No - disabled)	1 (Yes - enabled)
07	**Auto Attendant Do Not Disturb** (Auto-ATT DND) Use this option to enable or disable Auto Attendant Do Not Disturb. When a subscriber enables Auto Attendant Do Not Disturb, an Automated Attendant caller will route directly to the mailbox, hear the greeting, and be asked to leave a message. A subscriber can also enable Auto Attendant Do Not Disturb while recording their mailbox greeting.	1 (Yes - enabled) 0 (No - disabled)	0 (No - disabled)
08	**Forced Unscreened Transfer** (Forced UTRF) Use this option to enable or disable Automated Attendant Forced Unscreened Transfer for the Subscriber Mailbox. If enabled, each Screened Transfer (TRF) to the extension is converted to an Unscreened Transfer (UTRF). If disabled, Screened Transfers from the Automated Attendant occur normally.	1 (Yes - enabled) 0 (No - disabled)	0 (No - disabled)
09	**Auto Time Stamp** (Auto Time Stamp) Use this option to enable or disable Auto Time Stamp for the Subscriber Mailbox. If enabled, after the subscriber listens to a message IntraMail will announce the time and date the message was left. Auto Time Stamp will also announce the message sender (if known). A subscriber can also enable Auto Time Stamp from their mailbox.	1 (Yes - enabled) 0 (No - disabled)	0 (No - disabled)

10	**System Administrator** (System Admin) Use this option to designate the Subscriber Mailbox as a System Administrator. This allows the subscriber to use the **SA** options after logging onto their mailbox.	1 (Yes - enabled) 0 (No - disabled)	0 (No - disabled)
11	**Dialing Option** (Dialing Option) Dialing Option provides additional dialing options for Next Call Routing Mailbox calls (see *Next Call Routing Mailbox* below). If enabled, a caller who accesses the Subscriber Mailbox to leave a message can dial any of the options in the Next Call Routing Mailbox's Dial Action Table. If disabled, the caller can only dial 0 (to use the Next Call Routing Mailbox's 0 action).	1 (Yes - enabled) 0 (No - disabled)	0 (No - disabled)
12	**Next Call Routing Mailbox** (Next CR Mbox) Use this option to assign a Next Call Routing Mailbox to the Subscriber Mailbox. This provides callers with additional dialing options while listening to a Subscriber Mailbox recorded or default greeting. The digits the caller can dial depends on the setting of the Next Call Routing Mailbox and Alternate Next Call Routing Mailbox options.	Call Routing Mailbox Number (1-3 digits) No entry (Entered by pressing CLEAR)	1 (Call Routing Mailbox 01) By default, Call Routing Mailbox numbers are 01=16.
13	**Directory List** Use this option to specify the Directory List to which the Subscriber Mailbox belongs. When setting up Directory Dialing Mailboxes, you must specify which Directory List you want the Directory Dialing Mailbox to use. The Directory Dialing Mailbox can only call Subscriber Mailboxes that belong to the list it is programmed to use.	1-8 (lists 1-8) 0 (belongs to no lists) * (belongs to all lists)	0 (No entry)

Conditions

None

Feature Cross Reference

- Voice Mail

Telephone Programming Instructions

To enter data for Program 47-06 (Master Subscriber Mailbox Options):

1. Enter the programming mode.
2. 47 06

3. Enter the number of the item you want to program.

4. Select the mailbox to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 2.50+.	• Not Available for Aspire L/XL. Aspire M requires software 4.93+.

Description

Use **47-07: IntraMail Routing Mailbox Options** to set up the 16 Routing. Routing Mailboxes can be either Announcement or Call Routing Mailboxes.

Input Data

Item No.	Item	Input Data	Default
01	**Routing Mailbox Active** (Mailbox Active) Use this option to enable or disable the mailbox. A Routing Mailbox is not accessible when it is disabled. If the Directory Dialing Mailbox is not active (0), IntraMail routes the call to the Default Mailbox.	1 (Yes - enabled) 0 (No - disabled)	1 (Yes - enabled)
02	**Routing Mailbox Type** (Mailbox Type) Use this option to set the Routing Mailbox type: Call Routing (1) or Announcement (2).	1 (Call Routing) 2 (Announcement) 4 (Directory Dialing)	Mailboxes 01-08 = 1 (Call Routing). Mailboxes 09-16 = 2 (Announcement)

Conditions

None

Feature Cross Reference

- Voice Mail

Telephone Programming Instructions

To enter data for Program 47-07 (IntraMail Routing Mailbox Options):

1. Enter the programming mode.
2. 47 07

3. Enter the number of the item you want to program.

4. Select the mailbox to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 2.50+.	• Not Available for Aspire L/XL. Aspire M requires software 4.93+.

Description

Use **47-08: Call Routing Mailbox Options** to set the options for mailboxes assigned as Call Routing Mailboxes in **47-07-02: Routing Mailbox Type**.

Input Data

Item No.	Item	Input Data	Default
01	**Dial Action Table** (Dial Action Table) Use this option to assign the Dial Action Table to the Call Routing Mailbox. The Dial Action Table defines the dialing options for the call Routing Mailbox	1-16 (Dial Action Table 1-16)	1 (Dial Action Table 1)
02	**Screened Transfer Timeout** (Scrn Trf Timeout Use this option to set how long a Screened Transfer (TRF) from the Automated Attendant will ring an unanswered extension before recalling. *This option has a similar function as Customize: Mailbox Options: Call Routing: [Call Handling] Options: Delay Rings Before Redirect Transfer in Aspire Mail.*	0-255 seconds Entering 0 causes immediate recall.	15 seconds
03	**Time Limit for Dialing Commands** (Dialing Timeout) This option determines how long IntraMail will wait for an Automated Attendant caller to dial before routing the call to the Timeout destination. *Be sure your Dial Action Tables have a Timeout action programmed.* If the caller waits too long to dial: *When the associated Dial Action Table has a Timeout action programmed, the caller routes to that destination.* *When the associated Dial Action Table does not have a Timeout action programmed, the Instruction Menu repeats 3 times and then IntraMail hangs up.*	0-99 seconds Entering 0 causes the Automated Attendant to immediately route callers to the Timeout destination programmed in the active Dial Action Table.	5 seconds
04	**Fax Detection** (Fax Detection) Use this option to enable or disable Fax Detection for the Call Routing Mailbox. In enabled, the IntraMail Automated Attendant (when using this Call Routing Mailbox) will detect incoming fax CNG tone. The fax call will then route to the company fax machine according to the setting of *47-01-06 : Fax Extension*. If disabled, the Automated Attendant will not detect incoming fax calls.	1 (Yes - enabled) 0 (No - disabled)	0 (No - disabled)

Program 47 : IntraMail
47-08: Call Routing Mailbox Options

Conditions

None

Feature Cross Reference

- Voice Mail

Telephone Programming Instructions

To enter data for Program 47-08 (Call Routing Mailbox Options):

1. Enter the programming mode.
2. 47 08

```
47-08-01    Mailbox1
Dial Action Table     1
 back  ↑      ↓   select
```

3. Enter the number of the item you want to program.

```
47-08-nn
nnnnn
 ←              →
```

4. Select the mailbox to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 2.50+.	• Not Available for Aspire L/XL. Aspire M requires software 4.93+.

Description

Use **47-09: Announcement Mailbox Options** to set the options for mailboxes assigned as Announcement Mailboxes in **47-07-02: Routing Mailbox Type**.

Input Data

Item No.	Item	Input Data	Default
01	**Next Call Routing Mailbox** (Next CR Mbox) If you set up an Announcement Mailbox to answer Automated Attendant calls, use this option to provide additional routing options to the Automated Attendant callers. This option interacts with *Repeat Count* and *Hang Up After* below. For a detailed explanation of the interaction of these options, turn to: • Direct Announcement Mailbox Routing in the Aspire IntraMail System Guide, P/N 0893240. • Routed Announcement Mailbox Routing in the Aspire IntraMail System Guide, P/N 0893240.	Call Routing Mailbox Number (1-16) Undefined (0)	Undefined (0)
02	**Repeat Count** (Repeat Count) Enter the number of times you want the Announcement Mailbox message to repeat to callers. After an Announcement Mailbox caller initially listens to the message, it will repeat the number of times specified in this option. This option interacts with *Next Call Routing Mailbox* and *Hang Up After* when providing routing options. For a detailed explanation of the interaction of these options, turn to: • Direct Announcement Mailbox Routing in the Aspire IntraMail System Guide, P/N 0893240. • Routed Announcement Mailbox Routing in the Aspire IntraMail System Guide, P/N 0893240.	0 (No repeats) 1-10 (Announcement repeats 1-10 times)	0 (No repeats)
03	**Hang Up After** (HangUp) Use this option along with *Next Call Routing Mailbox* and *Repeat Count* above to provide additional routing options to Automated Attendant callers. For a detailed explanation of the interaction of these options, turn to: • Direct Announcement Mailbox Routing in the Aspire IntraMail System Guide, P/N 0893240. • Routed Announcement Mailbox Routing in the Aspire IntraMail System Guide, P/N 0893240.	1 (Yes - enabled) 0 (No - disabled)	0 (No - disabled)

Conditions

None

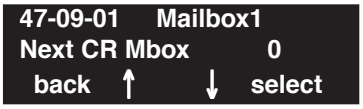
Feature Cross Reference

- Voice Mail

Telephone Programming Instructions

To enter data for Program 47-09 (Announcement Mailbox Options):

1. Enter the programming mode.
2. 47 09



3. Enter the number of the item you want to program.

4. Select the mailbox to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 2.50+.	• Not Available for Aspire L/XL. Aspire M requires software 4.93+.

Description

Use **47-10: IntraMail Trunk Options** to assign IntraMail options for each trunk. Currently, only **47-10-01: Answer Table Assignment** is available.

Input Data

Item No.	Item	Input Data	Default
01	**Answer Table Assignment** (Answer Table) Use this option to assign an IntraMail Answer Table to each Direct Inward Line (DIL) the Automated Attendant should answer. The Automated Attendant follows the routing specified by the selected Answer Table.	Answer Table (1-8)	1 (Answer Table 1)

Conditions

None

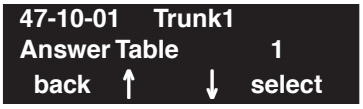
Feature Cross Reference

- Voice Mail

Telephone Programming Instructions

To enter data for Program 47-10 (IntraMail Trunk Options):

1. Enter the programming mode.
2. 47 10



3. Enter the number of the item you want to program.

4. Select the trunk to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 2.50+.	• Not Available for Aspire L/XL. Aspire M requires software 4.93+.

Description

Use **47-11: IntraMail Answer Table Options** to set options for the Answer Tables. IntraMail provides 8 Answer Tables (1-8). To set up the schedules for each Answer Table, go to **47-12: IntraMail Answer Table Schedule**.

Input Data

Item No.	Item	Input Data	Default
01	**Answer Schedule Override** (Schedule Override) Use this option to enable or disable Answer Schedule Override for the selected Answer Table. If enabled (and you make an entry for *Override Mailbox* below), the active Answer Table will route calls to the Override Mailbox.	1 (Yes - enabled) 0 (No - disabled)	0 (No - disabled)
02	**Override Mailbox Category** (Override MB Ctg) Use this option to specify the category of the mailbox to which Automated Attendant calls should route when you enable Answer Schedule Override. IntraMail mailbox categories are Subscriber Mailbox, Master Mailbox, and Routing Mailbox. IntraMail handles the routing according to the type of mailbox (Subscriber, Call Routing, or Announcement) within the specified category: *If the Override Mailbox is a Subscriber Mailbox, the outside caller hears the mailbox greeting (if recorded) and can leave a message.* *If the Override Mailbox is an Announcement Mailbox, the outside caller will hear the recorded announcement. Depending on how the Announcement Mailbox is programmed, IntraMail will then hang up, reroute the call, or provide additional dialing options.* *If the Override Mailbox is a Call Routing Mailbox, the outside caller will hear the instruction menu and can dial any options allowed by the associated Dial Action Table.*	1 (Subscriber Mailbox) 2 (Master Mailbox) 3 (Routing Mailbox) 0 (Undefined)	0 (Undefined)
	Override Mailbox Number (Override MB Num) Use this option to specify the mailbox to which Automated Attendant calls should route when you when you enable Answer Schedule Override. The mailbox number you select in this option should match the mailbox category specified in **47-11-02: Override Mailbox Category** above.	Digits (3 maximum, using 0-9)	No entry

03	**Default Mailbox Category** (Default MB Ctg) Use this option to specify the category of mailbox used as the Default Mailbox. IntraMail mailbox categories are Subscriber Mailbox, Master Mailbox, and Routing Mailbox. IntraMail uses the Default Mailbox whenever an Answer Schedule is not in effect. IntraMail handles the routing according to the type of mailbox (Subscriber, Call Routing, or Announcement) within the specified category: *If the Default Mailbox is a Subscriber Mailbox, the outside caller hears the mailbox greeting (if recorded) and can leave a message.* *If the Default Mailbox is an Announcement Mailbox, the outside caller will hear the recorded announcement. Depending on how the Announcement Mailbox is programmed, IntraMail will then hang up, reroute the call, or provide additional dialing options.* *If the Default Mailbox is a Call Routing Mailbox, the outside caller will hear the instruction menu and can dial any options allowed by the associated Dial Action Table.*	1 (Subscriber Mailbox) 2 (Master Mailbox) 3 (Routing Mailbox) 0 (Undefined)	AnswerTable 1 = 3 (Routing Mailbox) AnswerTable 2-8 = 0 (Undefined)
	Default Mailbox Number (Default MB Num) Use this option to set the Answer Table's Default Mailbox number. IntraMail uses the Default Mailbox whenever an Answer Schedule is not in effect. By default, this occurs at all times ***other than*** Monday through Friday from 8:30 AM to 5:00 PM.	Digits (3 maximum, using 0-9)	AnswerTable 1 = 1 AnswerTable 2-8 = No entry
04	**Next Answer Table** (Next Answer Table) When 10 Answer Schedules within an Answer Table are not sufficient, use this option to link two Answer Tables together. IntraMail treats the two linked tables as a single 20 entry Answer Table.	Answer Table (1-8) 0 (Undefined)	0 (Undefined)

Conditions

None

Feature Cross Reference

- Voice Mail

Telephone Programming Instructions

To enter data for Program 47-11 (IntraMail Answer Table Options):

1. Enter the programming mode.
2. 47 11

3. Enter the number of the item you want to program.

4. Select the table to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 47 : IntraMail

47-12: IntraMail Answer Schedules

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 2.50+.	• Not Available for Aspire L/XL. Aspire M requires software 4.93+.

Description

Use **47-12: IntraMail Answer Schedules** to set up the IntraMail Automated Attendant Answer Schedules. There are eight Answer Tables, with up to 10 Answer Schedules in each Answer Table.

Note: The item numbers indicated below are different when using PCPro/WebPro due to the window layout of the applications. Refer to the program within the PCPro/WebPro application to determine the correct item number.

Input Data

Answer Schedule Table Number	01-16

Item No.	Item	Input Data	Default
01	**Schedule Type** (Entryxx Schedule Type) Use this option to assign a Schedule Type to the selected Answer Schedule. The Schedule Type determines how the Answer Schedule answers calls. The schedule can be one of the following types: • **1. Day of the Week** A Type 1 Answer Schedule runs on a specific day of the week. For this type of schedule, you select: - The day of the week the schedule should run: - The schedule start time. - The schedule end time. - The Call Routing or Announcement Mailbox used to answer calls. • **2. Range of Days** A Type 2 Answer Schedule runs for a range of days. For this type of schedule, you select: - The day of the week the schedule should start. - The day of the week the schedule should stop. - The time on the start day the schedule should start. - The time on the stop day the schedule should stop. - The Call Routing or Announcement Mailbox used to answer the calls. • **3. Date** A type 3 Answer Schedule runs only on a specific day of the year. For this type of schedule, you select: - The specific date the schedule should run. - On the selected date, the time the schedule should start. - On the selected date, the time the schedule should stop. - The Call Routing or Announcement Mailbox used to answer the calls.	1 (Day of the Week) 2 (Range of Days) 3 (Date) 0 (Undefined)	Answer Table 1/Schedule 1 = 2 (Range of Days) All other schedules = 0 (Undefined)

02	**Answering Mailbox Category** (Entryxx MB Ctg) Use this option to specify the category of mailbox to which Automated Attendant calls should route when the schedule is in effect. IntraMail mailbox categories are Subscriber Mailbox, Master Mailbox, or Routing Mailbox. IntraMail handles the routing according to the exact type of Subscriber, Master, or Routing Mailbox specified. • *If the Answering Mailbox is a Subscriber Mailbox, the outside caller hears the mailbox greeting (if recorded) and can leave a message.* • *If the Answering Mailbox is an Announcement Mailbox, the outside caller will hear the recorded announcement. Depending on how the Announcement Mailbox is programmed, IntraMail will then hang up, reroute the call, or provide additional dialing options.* • *If the Answering Mailbox is a Call Routing Mailbox, the outside caller will hear the instruction menu and can dial any options allowed by the associated Dial Action Table.* • *If the Answering Mailbox is a Directory Dialing Mailbox, the outside caller will hear the Directory Dialing Message and can reach an extension by dialing the first few letters of the person's name.*	1 (Subscriber Mailbox) 2 (Master Mailbox) 3 (Routing Mailbox) 0 (Undefined)	0 (Undefined)
	Answering Mailbox Number (Entryxx MB Num) Use this option to set the number of the Answering Mailbox the Automated Attendant uses when the selected schedule is in effect. This mailbox is defined in **47-12-02: Answering Mailbox Category**.	Digits (3 maximum, using 0-9)	Answer Table 1/Schedule 1 = 1 All other Answer Schedules = No entry
03	**Day of the Week** (Entryxx Day) For Day of the Week (Type 1) Answer Schedules, use this option to select the day of the week the Answer Schedule should be active.	1 (Sunday) 2 (Monday) 3 (Tuesday) 4 (Wednesday) 5 (Thursday) 6 (Friday) 7 (Saturday)	1 (Sunday)
04	**Start Day** (Entryxx Start Day) For Range of Days (Type 2) Answer Schedules, use this option to select the day of the week the Answer Schedule should start.	1 (Sunday) 2 (Monday) 3 (Tuesday) 4 (Wednesday) 5 (Thursday) 6 (Friday) 7 (Saturday)	1 (Sunday) Answer Table 1/ Schedule 1 = 2 (Monday) All other schedules = 1 (Sunday)
05	**End Day** (Entryxx End Day) For Range of Days (Type 2) Answer Schedules, use this option to select the day of the week the Answer Schedule should end.	1 (Sunday) 2 (Monday) 3 (Tuesday) 4 (Wednesday) 5 (Thursday) 6 (Friday) 7 (Saturday)	Answer Table 1/Schedule 1 = 6 (Friday) All other Answer Schedules = 1 (Sunday)

06	**Date** (Entryxx Date) For Date (Type 3) Answer Schedules, use this option to select the date the Answer Schedule should be active.	MMDD For example: - 0101 = January 1 - 1231 = December 31 - 0000 = No date set	0000 = No date set
07	**Schedule Start Time** (Entryxx Start Time) Use this option to specify the time the Answer Schedule should start. It applies to Day of the Week (Type 1), Range of Days (Type 2), and Date (Type 3) schedules. (To make a schedule run continuously, make the same entry for **47-12-07: Schedule Start Time** and **47-12-08: Schedule End Time**.)	HHMM (24-hour clock) For example: - 0130 = 1:30AM - 1700 = 5:00PM	Answer Table 1/Schedule 1 = 08:30 (8:30AM) All other schedules are undefined.
08	**Schedule End Time** (Entryxx End Time) Use this option to specify the time the Answer Schedule should end. It applies to Day of the Week (Type 1), Range of Days (Type 2), and Date (Type 3) schedules. (To make a schedule run continuously, make the same entry for **47-12-07: Schedule Start Time** and **47-12-08: Schedule End Time**.)	HHMM (24-hour clock) For example: - 0130 = 1:30AM - 1700 = 5:00PM	Answer Table 1/Schedule 1 = 1700 (5:00PM). All other schedules = 0000 (Undefined).

Type 1 (Day of the Week) Answer Schedule Options

Type 1 (Day of Week) Example

In this example, Answer Table 1 routes calls as follows:

Schedule 1 uses Routing Mailbox 2 and runs Sunday from 8:30AM to 5:00PM.
Schedule 2 uses Subscriber Mailbox 3 and runs Wednesday from 10:30AM to 5:00PM.
Schedule 3 uses Routing Mailbox 4 and runs Tuesday from 9:00AM to 10:00AM.
At all other times, routing is handled by the Default Mailbox specified in ***47-11-03: Default Mailbox Category*** *and* ***47-11-03: Default Mailbox Number****.*

When setting up Answer Tables with multiple types, build the Answer Schedules in the following order:

Range of Days
Day of Week
Date

Type 1 (Day of Week) Example		
Answer Table 1		
	Answer Schedule 1 Answer Schedule 1 is a Day of Week schedule that runs Sunday from 8:30AM to 5:00PM.	
		47-12-01: Entry01 Schedule Type = 1
		47-12-02: Entry01 MB Ctg = 3 **47-12-02: Entry01 MB Num** = 2
		47-12-03: Entry01 Day = 1
		47-12-04: Entry01 Start Day = 1 (Entry doesn't matter)
		47-12-05: Entry01 End Day = 1 (Entry doesn't matter)
		47-12-06: Entry01 Date (MMDD) = 0000 (Entry doesn't matter)
		47-12-07: Entry01 Start Time = 0830 (8:30AM)
		47-12-08: Entry01 End Time = 1700 (5:00PM)
	Answer Schedule 2 Answer Schedule 2 is a Day of Week schedule that runs Wednesday from10:30AM to 5:00PM.	
		47-12-01: Entry01 Schedule Type = 1
		47-12-02: Entry01 MB Ctg = 1 **47-12-02: Entry01 MB Num** = 3
		47-12-03: Entry01 Day = 4
		47-12-04: Entry01 Start Day = 1 (Entry doesn't matter)
		47-12-05: Entry01 End Day = 1 (Entry doesn't matter)
		47-12-06: Entry01 Date (MMDD) = 0000 (Entry doesn't matter)
		47-12-07: Entry01 Start Time = 1030 (10:30AM)
		47-12-08: Entry01 End Time = 1700 (5:00PM)
	Answer Schedule 3 Answer Schedule 3 is a Day of Week schedule that runs Tuesday from9:00AM to 10:00AM.	
		47-12-01: Entry01 Schedule Type = 1
		47-12-02: Entry01 MB Ctg = 3 **47-12-02: Entry01 MB num** = 4
		47-12-03: Entry01 Day = 3
		47-12-04: Entry01 Start Day = 1 (Entry doesn't matter)
		47-12-05: Entry01 End Day = 1 (Entry doesn't matter)
		47-12-06: Entry01 Date (MMDD) = 0000 (Entry doesn't matter)
		47-12-07: Entry01 Start Time = 0900 (9:00AM)
		47-12-08: Entry01 End Time = 1000 (10:00PM)

Type 2 (Range of Days) Answer Schedule Options

Type 2 (Range of Days) Example

In this example, Answer Table 1 routes calls as follows:

Schedule 1 uses Routing Mailbox 1 and runs Sunday through Wednesday from 8:30AM to 5:00PM.

Schedule 2 uses Routing Mailbox 2 and runs Thursday and Friday from 11:00AM to 1:00PM.

At all other times, routing is handled by the Default Mailbox specified in ***47-11-03: Default Mailbox Category*** *and* ***47-11-03: Default Mailbox Number.***

When setting up Answer Tables with multiple types, build the Answer Schedules in the following order:

Range of Days
Day of Week
Date

Type 2 (Range of Days) Example		
Answer Table 1		
	Answer Schedule 1 Answer Schedule 1 is a Range of Days schedule that starts schedule that runs Sunday through Wednesday from 8:30AM to 5:00PM.	
		47-12-01: Entry01 Schedule Type = 2
		47-12-02: Entry01 MB Ctg = 3 **47-12-02: Entry01 MB Num** = 1
		47-12-03: Entry01 Day = 1 (Entry doesn't matter)
		47-12-04: Entry01 Start Day = 1 (Sunday)
		47-12-05: Entry01 End Day = 4 (Wednesday)
		47-12-06: Entry01 Date (MMDD) = 0000 (Entry doesn't matter)
		47-12-07: Entry01 Start Time = 0830 (8:30AM)
		47-12-08: Entry01 End Time = 1700 (5:00PM)
	Answer Schedule 2 Answer Schedule 2 is a Range of Days schedule that runs Thursday and Friday from 11:00AM to 1:00PM.	
		47-12-01: Entry01 Schedule Type = 2
		47-12-02: Entry01 MB Ctg = 3 **47-12-02: Entry01 MB Num** = 2
		47-12-03: Entry01 Day = 1 (Entry doesn't matter)
		47-12-04: Entry01 Start Day = 4 (Wednesday)
		47-12-05: Entry01 End Day = 5 (Thursday)
		47-12-06: Entry01 Date (MMDD) = 0000 (Entry doesn't matter)
		47-12-07: Entry01 Start Time = 1100 (11:00AM)
		47-12-08: Entry01 End Time = 1300 (1:00PM)

Type 3 (Date) Answer Schedule Options

Type 3 (Date) Example

In this example, Answer Table 1 routes calls as follows:

Schedule 1 uses Routing Mailbox 1 and runs every day from 8:30AM to 5:00PM.

Schedule 2 uses Routing Mailbox 9 and runs only on Christmas day from 8:30AM to 5:00PM.

At all other times, routing is handled by the Default Mailbox specified in ***47-11-03: Default Mailbox Category*** *and* ***47-11-03: Default Mailbox Number****.*

When setting up Answer Tables with multiple types, build the Answer Schedules in the following order:

Range of Days
Day of Week
Date

Type 3 (Date) Example		
Answer Table 1		
	Answer Schedule 1 Answer Schedule 1 is a Range of Days schedule that starts schedule that runs every day from 8:30AM to 5:00PM.	
		47-12-01: Entry01 Schedule Type = 2
		47-12-02: Entry01 MB Ctg = 3 **47-12-02: Entry01 MB Num** = 1
		47-12-03: Entry01 Day = 1 (Entry doesn't matter)
		47-12-04: Entry01 Start Day = 1 (Sunday)
		47-12-05: Entry01 End Day = 1 (Sunday)
		47-12-06: Entry01 Date (MMDD) = 0000 (Entry doesn't matter)
		47-12-07: Entry01 Start Time = 0830 (8:30AM)
		47-12-08: Entry01 End Time = 1700 (5:00PM)
	Answer Schedule 2 Answer Schedule 2 is a Date schedule that runs only on Christmas day from 8:30AM to 5:00PM.	
		47-12-01: Entry01 Schedule Type = 3
		47-12-02: Entry01 MB Ctg = 3 **47-12-02: Entry01 MB Num** = 9
		47-12-03: Entry01 Day = 1 (Entry doesn't matter)
		47-12-04: Entry01 Start Day = 1 (Entry doesn't matter)
		47-12-05: Entry01 End Day = 1 (Entry doesn't matter)
		47-12-06: Entry01 Date (MMDD) = 1225 (December 25, Christmas day)
		47-12-07: Entry01 Start Time = 0830 (8:30AM)
		47-12-08: Entry01 End Time = 1700 (5:00PM)

Conditions

None

Feature Cross Reference

- Voice Mail

Telephone Programming Instructions

To enter data for Program 47-12 (IntraMail Answer Schedules):

1. Enter the programming mode.
2. 47 12

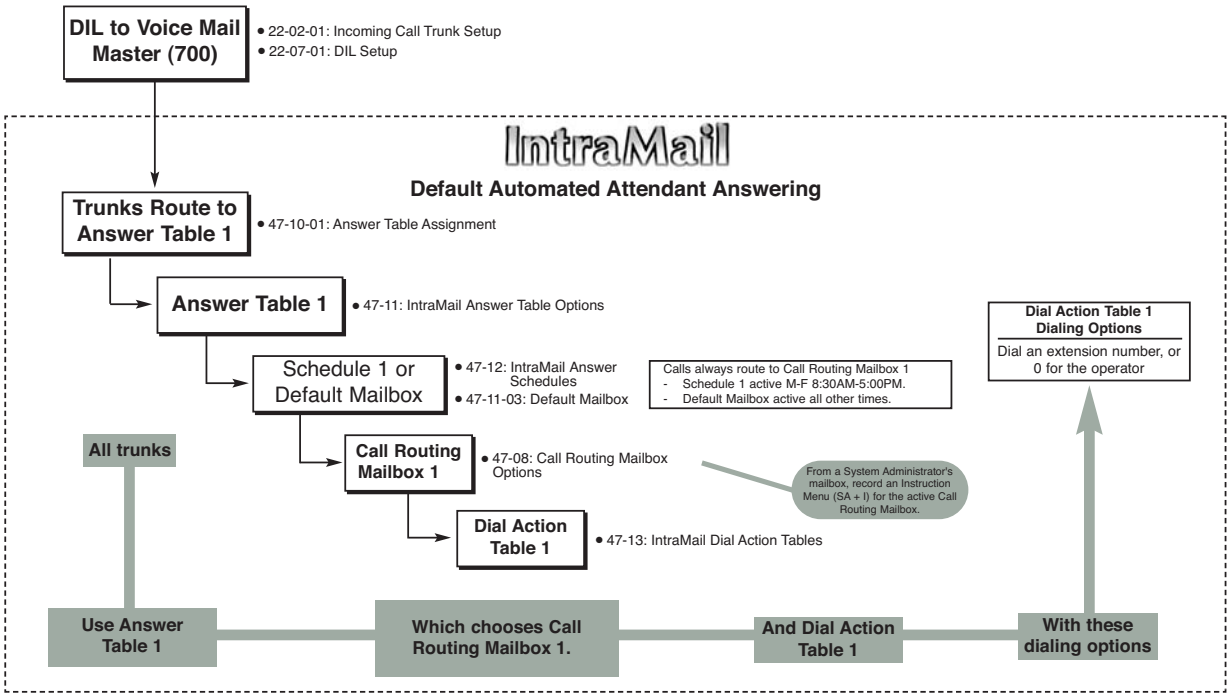
3. Enter the number of the item you want to program.

4. Select the table to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 2.50+.	• Not Available for Aspire L/XL. Aspire M requires software 4.93+.

Description

Use **47-13: IntraMail Dial Action Tables** to set up the IntraMail Dial Action Tables. The Dial Action Table defines the options than an Automated Attendant caller can dial. A Dial Action Table is associated with a Call Routing Mailbox, which is in turn associated with an Answer Table. When an Answer Table is active, its associated Call Routing Mailbox selects the Dial Action Table which provides dialing options to callers. The illustration below shows how this works in a default IntraMail system. There are 16 Dial Action Tables.



Dial Action Table Actions

- **TRF Action - Screened Transfer (1) (TRF)**
  Use this action to allow an Automated Attendant caller to place a Screened Transfer to an extension. After an Automated Attendant caller dials an extension, IntraMail calls (screens) the destination to see if the transfer can go through.

  If the destination is available, the Automated Attendant rings it. If the destination answers, the call goes through.

  If the destination doesn't answer within a preset interval, is busy, or is in Do Not Disturb, the Automated Attendant doesn't extend the call. It then provides the caller with additional options.

  Number Option

  Normally, the corresponding Number option should be XXX. Note that the key you choose for this action is the first digit of the called extension number.

  - For example, to allow callers to place Screened Transfers to extensions 301-399, for key 3 enter TRF for the *Action* and XXX for the corresponding *Number.*

    To have Screened Transfer call a specific extension, the corresponding Number option should be that extension's number. The caller then dials that single digit to reach the extension.

  - For example, to have caller's dial 8 to reach extension 303, for key 8 enter TRF for the *Action* and 303 for the corresponding *Number.*

- **UTRF Action - Unscreened Transfer (2) (UTRF)**
  Use this action to allow an Automated Attendant caller to place an Unscreened Transfer to an extension. This is similar to telephone system unscreened transfers in which the transferring party immediately extends the call. After an Automated Attendant caller dials an extension, IntraMail transfers the call to the destination and hangs up. Any recalls or additional routing are handled by the telephone system - just as with any other unscreened transfer.

  Number Option

  Normally, the corresponding Number option should be XXX. Note that the key you choose for this action is the first digit of the called extension number.

  - For example, to allow callers to place Unscreened Transfers to extensions 301-399, for key 3 enter UTRF for the *Action* and XXX for the corresponding *Number.*

    To have Unscreened Transfer call a specific extension, the corresponding Number option should be that extension's number. The caller then dials that single digit to reach the extension.

  - For example, to have caller's dial 8 to reach extension 303, for key 8 enter UTRF for the *Action* and 303 for the corresponding *Number.*

- **REC1 Action - Quick Message With Greeting (3) (REC1)**
  Use this action to allow an Automated Attendant caller to leave a Quick Message at an extension. With this action, the caller *will* hear the extension's greeting prior to leaving the message.

  Number Options

  To have the caller leave a quick Message at a specific extension, the corresponding Number option should be the extension number.

  To have the caller leave a Quick Message at any caller-dialed extension, the corresponding Number option should be IXXX.

  To have the caller leave a Quick Message at a caller-dialed extension in a specific range, the corresponding Number option should be XXX.

  - For example, to allow callers to leave a Quick Message extensions 301-399, for key 3 enter REC1 for the *Action* and XXX for the corresponding *Number.*

- **REC2 Action - Quick Message Without Greeting (4)**
  (REC2)
  Use this action to allow an Automated Attendant caller to leave a Quick Message at an extension. With this action, the caller *will not* hear the extension's greeting prior to leaving the message. Instead, the caller hears the voice prompt "*Recording"* followed by a beep.

  Number Option

  To have the caller leave a quick Message at a specific extension, the corresponding Number option should be the extension number.

  To have the caller leave a Quick Message at any caller-dialed extension, the corresponding Number option should be IXXX.

  To have the caller leave a Quick Message at a caller-dialed extension in a specific range, the corresponding Number option should be XXX.

  - For example, to allow callers to leave a Quick Message extensions 301-399, for key 3 enter REC2 for the *Action* and XXX for the corresponding *Number.*

- **LOGON Action - Log Onto Voice Mail (5)**
  (LOGON)
  Use this key action to allow an Automated Attendant caller to log onto Voice Mail. Depending on programming (see *Number Option* below), the caller is logged directly into a Subscriber Mailbox or is prompted to enter a Subscriber Mailbox of their own choosing. ***You cannot use the LOGON option with Call Routing and Announcement Mailboxes.***

  Number Option

  To log directly into a specific Subscriber Mailbox, enter the ***mailbox number*** *in the corresponding Number option.*

  - For example, to have key 4 log directly into Subscriber Mailbox 305, for key 4 enter LOGON for the *Action* and 305 for the corresponding *Number.*

    To have IntraMail request Automated Attendant callers to select a Subscriber Mailbox to log into, enter ***N*** *in the corresponding Number option. The key you choose must represent the first digit in the Subscriber Mailbox numbers.*

  - For example, to have the Automated Attendant request callers to enter the number of the Subscriber Mailbox into which they wish to log, for key 3 enter LOGON for the *Action* and N for the corresponding *Number.* When callers dial 3, they hear, "*Please enter your mailbox number."*

    To have IntraMail require Automated Attendant callers to enter a Subscriber Mailbox to log into (without playing an announcement), enter ***XXX*** *in the corresponding Number option. The key you choose must represent the first digit in the Subscriber Mailbox numbers.*

  - For example, to allow callers to log onto mailboxes 301-399, for key 3 enter LOGON for the *Action* and XXX for the corresponding *Number.*

    To log into ***any*** *valid Subscriber Mailbox, enter* ***IXXX*** *in the corresponding Number option.*

  - For example, to allow callers to dial 1 plus any Subscriber Mailbox number to log on, for key 1 enter LOGON for the *Action* and IXXX for the corresponding *Number.*

- **Hang Up Action (6)**
  (HNGUP)
  When an Automated Attendant caller presses a key assigned to this action, IntraMail says "*Goodbye"* and immediately hangs up.

  Number Option

  There is no entry required in the corresponding Number option.

- **GOTO Action - Go to Mailbox (7)**
  (GOTO)
  Use this option to provide Automated Attendant callers with the ability to route to Call Routing and Announcement Mailboxes. For example, a caller can dial a digit for Sales, and then go to the Call Routing or Announcement Mailbox that provides the dialing options and instructions for Sales.

  Number Option

  *To have Automated Attendant callers dial a single digit to go to a Call Routing or Announcement Mailbox, enter the **mailbox number** in the corresponding Number option.*

  - For example, to have key 1 go to Call Routing Mailbox 01, for key 1 enter GOTO for the *Action* and 01 for the corresponding *Number.*

  *To have IntraMail require Automated Attendant callers to enter a Call Routing or Announcement Mailbox to go to, enter **XXX** in the corresponding Number option. The key you choose must represent the first digit in the mailbox numbers.*

  - For example, to allow callers to go to mailboxes 000-015, for key 0 enter GOTO for the *Action* and XXX for the corresponding *Number.*

  *To log into **any** valid Call Routing or Subscriber Mailbox, enter **IXXX** in the corresponding Number option.*

  - For example, to allow callers to dial 1 plus any Call Routing or Announcement Mailbox number to go to, for key 1 enter GOTO for the *Action* and IXXX for the corresponding *Number.*

- **UND Action - Undefined Routing (0)**
  (UND)
  Use this key action if you want a key to have no routing (no operation). When an Automated Attendant caller presses an undefined key, they hear, "*That is an invalid entry.*" The caller can then dial another option.

Input Data

Dial Action Table Number	01-16

Key No.	Dial Action Table Action	Additional Data
1 2 3 4 5 6 7 8 9 0 * # TIME-OUT	• TRF Action - Screened Transfer (1) (TRF) • UTRF Action - Unscreened Transfer (2) (UTRF) • REC1 Action - Quick Message With Greeting (3) (REC1) • REC2 Action - Quick Message Without Greeting (4) (REC2) • LOGON Action - Log Onto Voice Mail (5) (LOGON) • Hang Up Action (6) (HNGUP) • GOTO Action - Go to Mailbox (7) (GOTO) • UND Action - Undefined Routing (0) (UND)	• **Digits** Entry : **0-9, #,** and ***** (8 digits max.) Use Dial Action Table digits to route an Automated Attendant call to a specific location (such as an extension). For example, to set up a TRF Action to route to extension 305, for digit 3 enter TRF for the *Action* and 305 for the corresponding *Number*. • **Caller Dialed Digits** Entry : **X** *(Entered by pressing LK2)* Use the X option to route an Automated Attendant call based on digits the caller dials. Each X entry represents one caller-dialed digit. For example, to set up a TRF Action to route to any caller dialed extension in the 301-399 range, for digit 3 enter TRF for the *Action* and XXX for the corresponding *Number*. • **Ignore Digits** Entry : **I** *(Entered by pressing LK3)* Use the I option to represent any digit dialed by the Automated Attendant caller that IntraMail ignores for routing. An example of this is REC action assigned to the * key in Dial Action Table 1 by default. The *Action* is REC2 and the *Number* is IXXX. This means that a caller can dial * + any mailbox number to leave a Quick Message in that mailbox. IntraMail ignores the first digit dialed by the caller (*), and routes according to the next 3 digits dialed. • **No Routing** Entry : **N** *(Entered by pressing LK1)* Use the N option when you want no Automated Attendant routing to automatically occur. This can be used with the LOGON action when you want to prompt the caller to enter a mailbox number. To do this for the # key (for example), for the # key enter LOGON for the *Action* and N for the corresponding *Number*. When the caller dials #, they hear, "*Please enter the mailbox number. Or, to exit, press the pound key.*" • **Pause** Entry : **P** *(Entered by pressing LK4)* Use the P option when you want the Automated Attendant to pause while dialing. *To set the duration of the pause, use 81-01-16: Pause Time. The default for the pause is 75s mS.*

Conditions

None

Defaults

Dial Action Table Default Settings		
Key	Dial Action Table 1	Dial Action Tables 2-16
1	UND (Undefined)	UND (Undefined)
2	UND (Undefined)	UND (Undefined)
3	UTRF to XXX (Unscreened Transfer to user-dialed extension)	UND (Undefined)
4	UTRF to XXX (Unscreened Transfer to user-dialed extension)	UND (Undefined)
5	UND (Undefined)	UND (Undefined)
6	UND (Undefined)	UND (Undefined)
7	UND (Undefined)	UND (Undefined)
8	UND (Undefined)	UND (Undefined)
9	HNGUP (Hangup)	UND (Undefined)
0	UTRF to 301 (Unscreened Transfer to 301)	UND (Undefined)
*	REC1 to IXXX (Quick Message with greeting to user-dialed extension)	UND (Undefined)
#	LOGON to IXXX (Logon to user-dialed mailbox)	UND (Undefined)
TIMEOUT	UTRF to 301 (Unscreened Transfer to 301)	UND (Undefined)

Note: TIMEOUT provides the routing for rotary dial callers.

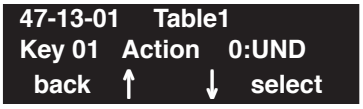
Feature Cross Reference

- Voice Mail

Telephone Programming Instructions

To enter data for Program 47-13 (IntraMail Dial Action Tables):

1. Enter the programming mode.
2. 47 13



3. Enter the number of the item you want to program.

4. Select the table to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 47 : IntraMail

47-14 : Master Directory Mailbox Options

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 2.64+.	• Not Available for Aspire L/XL. Aspire M requires software 4.93+.

Description

Use **47-14: Master Directory Mailbox Options** to set up the Master Mailbox assigned as a Directory Dialing Mailbox in 47-03-03: Master Mailbox Type.

Input Data

Item No.	Item	Input Data	Default
01	**Minimum Number of Letters Required** Use this option to specify the minimum number of letters the caller should dial in order to be routed by the Directory Dialing Mailbox. Callers must dial this minimum number of letters, followed by **#**.	1-3	1
02	**Directory List Number to Use** Use this option to specify which Directory List the Directory Dialing Mailbox should use. The Directory Dialing Mailbox can only call Subscriber Mailboxes that are in the list specified by this option.	1-8 (lists 1-8)	1 (list 1)
03	**Extension Name Match** Use this option to determine which portion of the extension's programmed name Directory Dialing will be used to route the call. The setting you choose in this option depends on how you set up **47-01-16 : IntraMail Basic Options - Name Format**. For example, if 47-01-16 was set to last/first (2) and 47-14-03 was set to first (1), an entered name of "Mary Jones" would be routed by "Jones", not "Mary". If 47-01-16 was set to first/last (1) and 47-14-03 was set to first (1), Directory Dialing would route by "Mary".	1 (first) or 2 (last)	1 (first)
04	**Unscreened or Screened Transfer** Use this option to define the action Directory Dialing uses when routing a call.	0 = Screened Transfer 1 = Unscreened Transfer	0
05	**Screened Transfer Timeout** Use this option to set how long a Screened Transfer (STRF) from the Directory Dialing Mailbox will ring an unanswered extension before recalling. • The **24-02-04 : System options for Transfer - Transfer Recall Time** interval has no interaction with this timer.	0 = no recall 1-255 seconds	15 (seconds)

06	**Time Limit for Dialing Commands** This option determines how long IntraMail will wait for the caller connected to the Directory Dialing Mailbox to dial before repeating the Directory Dialing Message. If the caller doesn't dial within three repeats of the message, IntraMail routes the call to the Next Call Routing Mailbox for the Directory Dialing Mailbox.	0 = no timeout 1-99 seconds	5 (seconds)
07	**Fax Detection** Use this option to enable or disable Fax Detection for the Directory Dialing Mailbox. If enabled (1), the Directory Dialing Mailbox will detect incoming fax CNG tone. The fax will then route to the company fax machine according to the settings of **47-01-06 : IntraMail Basic Options - Fax Extension**. If disabled (0), the Directory Dialing Mailbox will not detect incoming fax calls.	0 = Disabled 1 = Enabled	0
08	**Next Call Routing Mailbox** Use this option to specify the Next Call Routing Mailbox for the Directory Dialing Mailbox. If a Next Call Routing Mailbox is specified, the following will occur: • If the caller dials 0 while listening to the Directory Dialing Message, they route to the 0 action programmed into the Dial Action Table associated with the Next Call Routing Mailbox. • If the caller dials # while listening to the Directory Dialing Message, they route immediately to the Next Call Routing Mailbox and listen to the recorded Instruction Menu Message for that mailbox.	1-16	0

Conditions

None

Feature Cross Reference

- Voice Mail

Telephone Programming Instructions

To enter data for Program 47-14 (Master Directory Mailbox Options):

1. Enter the programming mode.
2. 47 14

3. Enter the number of the item you want to program.

4. Select the mailbox to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 2.64+.	• Not Available for Aspire L/XL. Aspire M requires software 4.93+.

Description

Use **47-15: Routing Directory Mailbox Options** to set up the Routing Mailbox assigned as a Directory Dialing Mailbox in 47-07-02: Routing Mailbox Type.

Input Data

Item No.	Item	Input Data	Default
01	**Minimum Number of Letters Required** Use this option to specify the minimum number of letters the caller should dial in order to be routed by the Directory Dialing Mailbox. Callers must dial this minimum number of letters, followed by **#**.	1-3	1
02	**Directory List Number to Use** Use this option to specify which Directory List the Directory Dialing Mailbox should use. The Directory Dialing Mailbox can only call Subscriber Mailboxes that are in the list specified by this option.	1-8 (lists 1-8)	1 (list 1)
03	**Extension Name Match** Use this option to determine which portion of the extension's programmed name Directory Dialing will be used to route the call. The setting you choose in this option depends on how you set up **47-01-16 : IntraMail Basic Options - Name Format**. For example, if 47-01-16 was set to last/first (2) and 47-15-03 was set to first (1), an entered name of "Mary Jones" would be routed by "Jones", not "Mary". If 47-01-16 was set to first/last (1) and 47-15-03 was set to first (1), Directory Dialing would route by "Mary".	0 (first) or 1 (last)	0 (first)
04	**Unscreened or Screened Transfer** Use this option to define the action Directory Dialing uses when routing a call.	0 = Screened Transfer 1 = Unscreened Transfer	0
05	**Screened Transfer Timeout** Use this option to set how long a Screened Transfer (STRF) from the Directory Dialing Mailbox will ring an unanswered extension before recalling. • The **24-02-04 : System options for Transfer - Transfer Recall Time** interval has no interaction with this timer.	0 = no recall 1-255 seconds	15 (seconds)

06	**Time Limit for Dialing Commands** This option determines how long IntraMail will wait for the caller connected to the Directory Dialing Mailbox to dial before repeating the Directory Dialing Message. If the caller doesn't dial within three repeats of the message, IntraMail routes the call to the Next Call Routing Mailbox for the Directory Dialing Mailbox.	0 = no timeout 1-99 seconds	5 (seconds)
07	**Fax Detection** Use this option to enable or disable Fax Detection for the Directory Dialing Mailbox. If enabled (1), the Directory Dialing Mailbox will detect incoming fax CNG tone. The fax will then route to the company fax machine according to the settings of **47-01-06 : IntraMail Basic Options - Fax Extension**. If disabled (0), the Directory Dialing Mailbox will not detect incoming fax calls.	0 = Disabled 1 = Enabled	0
08	**Next Call Routing Mailbox** Use this option to specify the Next Call Routing Mailbox for the Directory Dialing Mailbox. If a Next Call Routing Mailbox is specified, the following will occur: • If the caller dials 0 while listening to the Directory Dialing Message, they route to the 0 action programmed into the Dial Action Table associated with the Next Call Routing Mailbox. • If the caller dials # while listening to the Directory Dialing Message, they route immediately to the Next Call Routing Mailbox and listen to the recorded Instruction Menu Message for that mailbox.	1-16	0

47-15: Routing Directory Dialing Mailbox Options (Entry Range) [Default Setting]		
CALL1 + **#*#*** + Password (12345678) + **HOLD** + **4714** + Option. ■ This selects the option chosen for Master Mailbox 1. There are 16 available Master Mailboxes (1-16).		
	01	**Min Num Letters** (1-3) [1]
	02	**Directory List** (1-8) [1]
	03	**Name Match** (0=First portion of programmed name, 1=Second portion of programmed name) [0]
	04	**Transfer Option** (0=Screened Transfer, 1=Unscreened Transfer) [0]
	05	**Scrn Trf Timeout** (1-255 seconds, 0=No recall) [15]
	06	**Dialing Timeout** (1-99 seconds, 0=No timeout) [5]
	07	**Fax Detection** (0=Disabled, 1=Enabled) [0]
	08	**Next CR Mbox** (1-16, 0-Entered by pressing CLEAR=Undefined) [0]
Press this:		**To do this:**
Editing		
HOLD		Enter (accept) data you entered and advance to the next prompt, or advance to the next prompt without changing your entry.
-1	**+1**	Scroll backwards (**-1**) or forwards (**+1**) through the list of available entries.
←	→	When editing an entry, moves the cursor left or right.
CONF		When editing an entry, delete the character to the left of the cursor.
CLEAR		When editing an entry, **CLEAR** erases the entire entry from the display.
Line Keys (LK)		Where indicated, press a line key to enter a specific value for the selected option.
Navigation		
FLASH		**FLASH** + Mailbox number + **FLASH** selects a new mailbox number
MSG or back		Backs up to the previous level (e.g., from Option to Series, or from Series to Program).
↓	↑	Scroll consecutively backwards or forwards through selected Option or Series.
select		Selects currently displayed Option or Series

Conditions

None

Feature Cross Reference

- Voice Mail

Telephone Programming Instructions

To enter data for Program 47-15 (Routing Directory Mailbox Options):

1. Enter the programming mode.
2. 47 15

3. Enter the number of the item you want to program.

4. Select the mailbox to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:
IN

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Tone 64 available with 2.63+ software.	• Tone 64 available with 2.63+ software.

Description

Use **Program 80-01 : Service Tone Setup** to define up to 64 Service Tones. Each service tone is defined by the combination of 32 Basic Tones.

Input Data

Service Tone Number	01-64

Item No.	Item	Input Data
01	Repeat Count	0-255 (0 is endless)

Unit Number	1-8

Item No.	Item	Input Data
02	Basic Tone Number	1-33 (0=No Tone, 33=Default Time Slot)
03	Duration Count	1-255 (100-25500ms)
04	Gain Level (dB)	1-63 (-15.5 ~ +15.5)

Table-1A : Basic Tone

Basic Tone No.	Frequency (Hz)	Level (dB)
01	400	- 13
02	520	-13
03	580	-13
04	660	-13
05	700	-13
06	800	-13
07	880	-13
08	1050	-13
09	350 / 440	-16 / -16

Basic Tone No.	Frequency (Hz)	Level (dB)
17	520 / 650	-13 / -19
18	650 / 780	-13 / -19
19	780 / 1040	-13 / -19
20	1040	-13
21	- reserve -	-
22	- reserve -	-
23	- reserve -	-
24	- reserve -	-
25	- reserve -	-

Basic Tone No.	Frequency (Hz)	Level (dB)
10	440 / 480	-16 / -16
11	480 / 620	-21 / -21
12	440	-16
13	- reserve -	-
14	520 / 650	-19 / -13
15	650 / 780	-19 / -13
16	780 / 1040	-19 / -13

Basic Tone No.	Frequency (Hz)	Level (dB)
26	- reserve -	-
27	- reserve -	-
28	- reserve -	-
29	- reserve -	-
30	- reserve -	-
31	- reserve -	-
32	- reserve -	-

Default

Service Tone No.	Service Tone	Repeat Count	Unit Count	Basic Tone No.	Duration	Gain Level (dB)
1	No Tone	0	Basic 1 Basic 2	0 0	10 0	32 (0dB)
2	Intercom Dial Tone	0	Basic 1 Basic 2	9 0	10 0	32 (0dB)
3	Special Dial Tone	0	Basic 1 Basic 2 Basic 3 Basic 4 Basic 5 Basic 6 Basic 7	0 9 0 9 0 9 0	2 1 1 1 1 77 0	32 (0dB) 32 (0dB) 32 (0dB) 32 (0dB) 32 (0dB) 32 (0dB)
4	Internal Recall Dial Tone	2	Basic 1 Basic 2 Basic 3	9 0 0	1 1 0	32 (0dB) 32 (0dB)
5	Trunk Dial Tone	0	Basic 1 Basic 2	9 0	10 0	32 (0dB)
6	Busy Tone	0	Basic 1 Basic 2 Basic 3	0 11 0	5 5 0	20 (-6dB) 20 (-6dB)
7	DND Busy Tone and Select-able Display Message Tone	0	Basic 1 Basic 2 Basic 3	0 1 0	2 2 0	32 (0dB) 32 (0dB)
8	Busy Tone	0	Basic 1 Basic 2 Basic 3	0 11 0	5 5 0	20 (-6dB) 20 (-6dB)
9	Internal Reorder Tone	0	Basic 1 Basic 2 Basic 3	11 0 0	3 2 0	20 (-6dB) 20 (-6dB)

Service Tone No.	Service Tone	Repeat Count	Unit Count	Basic Tone No.	Duration	Gain Level (dB)
10	Internal Interrupt Tone	0	Basic 1 Basic 2 Basic 3	11 0 0	3 2 0	20 (-6dB) 20 (-6dB)
11	Internal Confirmation Tone	3	Basic 1 Basic 2 Basic 3	0 9 0	1 1 0	32 (0dB) 32 (0dB)
12	Internal Hold Tone	0	Basic 1	0	0	-
13	External Hold Tone	0	Basic 1	0	0	-
14	Intercom Ringback Tone	0	Basic 1 Basic 2 Basic 3	10 0 0	10 30 0	20 (-6dB) 20 (-6dB)
15	Override Tone	1	Basic 1 Basic 2	12 0	5 0	32 (0dB)
16	Lock-Out Tone	0	Basic 1 Basic 2 Basic 3	0 6 0	1 1 0	32 (0dB) 32 (0dB)
17	Clock Alarm Tone	0	Basic 1 Basic 2 Basic 3 Basic 4 Basic 5	6 0 6 0 0	1 1 1 7 0	32 (0dB) 32 (0dB) 32 (0dB) 32 (0dB)
18	BGM	0	Basic 1	0	0	-
19	Door Box Chime 1	3	Basic 1 Basic 2 Basic 3 Basic 4 Basic 5 Basic 6 Basic 7	4 4 2 2 2 0 0	2 2 3 4 6 5 0	38 (+3dB) 26 (-3dB) 38 (+3dB) 26 (-3dB) 14 (-9dB) 32 (0dB)
20	Door Box Chime 2	3	Basic 1 Basic 2 Basic 3 Basic 4 Basic 5 Basic 6 Basic 7	7 7 5 5 5 0 0	2 2 3 4 6 5 0	38 (+3dB) 26 (-3dB) 38 (+3dB) 26 (-3dB) 14 (-9dB) 32 (0dB)
21	Door Box Chime 3	3	Basic 1 Basic 2 Basic 3 Basic 4 Basic 5 Basic 6 Basic 7	8 8 6 6 6 0 0	2 2 3 4 6 5 0	38 (+3dB) 26 (-3dB) 38 (+3dB) 26 (-3dB) 14 (-9dB) 32 (0dB)

Service Tone No.	Service Tone	Repeat Count	Unit Count	Basic Tone No.	Duration	Gain Level (dB)
22	Door Box Chime 4	3	Basic 1 Basic 2 Basic 3 Basic 4 Basic 5 Basic 6 Basic 7	4 4 2 2 2 0 0	1 1 2 2 3 2 0	38 (+3dB) 26 (-3dB) 38 (+3dB) 26 (-3dB) 14 (-9dB) 32 (0dB)
23	Door Box Chime 5	3	Basic 1 Basic 2 Basic 3 Basic 4 Basic 5 Basic 6 Basic 7	7 7 5 5 5 0 0	1 1 2 2 3 2 0	38 (+3dB) 26 (-3dB) 38 (+3dB) 26 (-3dB) 14 (-9dB) 32 (0dB)
24	Door Box Chime 6	3	Basic 1 Basic 2 Basic 3 Basic 4 Basic 5 Basic 6 Basic 7	8 8 6 6 6 0 0	1 1 2 2 3 2 0	38 (+3dB) 26 (-3dB) 38 (+3dB) 26 (-3dB) 14 (-9dB) 32 (0dB)
25	Service Set Tone	3	Basic 1 Basic 2 Basic 3	0 9 0	1 1 0	32 (0dB) 32 (0dB)
26	Service Clear Tone	3	Basic 1 Basic 2 Basic 3	0 9 0	1 1 0	32 (0dB) 32 (0dB)
27	Talkback Tone	2	Basic 1 Basic 2 Basic 3	0 6 0	1 1 0	32 (0dB) 32 (0dB)
28	**Speaker Monitor Tone** This tone is what the originator hears when placing a handsfree speaker ICM call. Note: The received ICM tone can not be changed.	1	Basic 1 Basic 2 Basic 3	0 6 0	1 1 0	32 (0dB) 32 (0dB)
29	Door Relay Tone	1	Basic 1 Basic 2 Basic 3	0 6 0	1 1 0	32 (0dB) 32 (0dB)
30	Door Box Call Tone	1	Basic 1 Basic 2 Basic 3	0 6 0	1 1 0	32 (0dB) 32 (0dB)
31	Paging Tone	2	Basic 1 Basic 2 Basic 3	0 6 0	1 1 0	32 (0dB) 32 (0dB)

Service Tone No.	Service Tone	Repeat Count	Unit Count	Basic Tone No.	Duration	Gain Level (dB)
32	Splash Tone 1	1	Basic 1 Basic 2 Basic 3	0 6 0	1 1 0	32 (0dB) 32 (0dB)
33	Splash Tone 2	2	Basic 1 Basic 2 Basic 3	0 6 0	1 1 0	32 (0dB) 32 (0dB)
34	Splash Tone 3	3	Basic 1 Basic 2 Basic 3	0 6 0	1 1 0	32 (0dB) 32 (0dB)
35	**1 Second Signal Tone** Used for Long Conversation Warning Tone.	1	Basic 1 Basic 2	6 0	10 0	32 (0dB)
36	Sensor Alarm Tone 1	0	Basic 1 Basic 2 Basic 3	10 0 0	10 30 0	32 (0dB) 32 (0dB)
37	Sensor Alarm Tone 2	0	Basic 1 Basic 2 Basic 3	0 11 0	2 3 0	32 (0dB) 32 (0dB)
38	Sensor Alarm Tone 3	0	Basic 1 Basic 2 Basic 3	0 11 0	5 5 0	32 (0dB) 32 (0dB)
39	Ring Busy Tone	0	Basic 1 Basic 2 Basic 3 Basic 4 Basic 5 Basic 6 Basic 7	0 11 0 11 10 0 0	5 5 5 5 10 20 0	32 (0dB) 32 (0dB) 32 (0dB) 32 (0dB) 32 (0dB) 32 (0dB)
40	Internal Call Waiting Tone	1	Basic 1 Basic 2	12 0	2 0	32 (0dB)
41	Intrusion Tone	1	Basic 1 Basic 2	12 0	5 0	32 (0dB)
42	Conference Tone	0	Basic 1	0	0	32 (0dB)
43	Intrusion Tone 2	0	Basic 1	0	0	32 (0dB)
44	External Dial Tone	0	Basic 1 Basic 2	9 0	1 0	26 (-3dB)
45	External Ring Back Tone	0	Basic 1 Basic 2 Basic 3	10 0 0	10 30 0	32 (0dB) 32 (0dB)
46	DID Error Tone	0	Basic 1 Basic 2 Basic 3	0 10 0	5 5 0	32 (0dB) 32 (0dB)
47	External Busy Tone	0	Basic 1	11	0	-

Service Tone No.	Service Tone	Repeat Count	Unit Count	Basic Tone No.	Duration	Gain Level (dB)
48	Voice Mail Message Waiting, Special Dial Stutter Dial Tone (analog sets)	0	Basic 1 Basic 2 Basic 3	9 0 0	1 1 0	32 (0dB) 32 (0dB)
49	-- Not Used --	0	0	0	0	32 (0dB)
50		0	Basic 1 Basic 2 Basic 3 Basic 4	10 12 0 0	10 2 30 0	32 (0dB) 32 (0dB) 32 (0dB)
51		0	Basic 1 Basic 2 Basic 3	12 4 0	3 2 0	32 (0dB) 32 (0dB)
52		1	Basic 1 Basic 2	12 0	3 0	32 (0dB)
53		1	Basic 1 Basic 2	12 0	10 0	32 (0dB)
54		0	Basic 1	0	0	-
55	Generate tone for TAPI2.1	0	Basic 1	3	0	-
56	Warning Beep Tone Signaling	1	Basic 1 Basic 2	2 0	8 0	32 (0dB)
57	Headset Ringing Tone	0	Basic 1 Basic 2 Basic 3 Basic 4 Basic 5 Basic 6	0 2 0 2 0 0	2 1 1 1 20 0	32 (0dB) 32 (0dB) 32 (0dB) 32 (0dB) 32 (0dB)
58	Opening Chime Tone, External Paging	1	Basic 1 Basic 2 Basic 3 Basic 4 Basic 5 Basic 6 Basic 7 Basic 8	2 2 14 14 15 15 16 16	2 2 2 2 2 2 6 4	32 (0dB) 26 (-3dB) 32 (0dB) 26 (-3dB) 32 (0dB) 26 (-3dB) 32 (0dB) 26 (-3dB)
59	Ending Chime Tone, External Paging	1	Basic 1 Basic 2 Basic 3 Basic 4 Basic 5 Basic 6 Basic 7 Basic 8	20 20 19 19 18 18 17 17	2 2 2 2 2 2 6 4	32 (0dB) 26 (-3dB) 32 (0dB) 26 (-3dB) 32 (0dB) 26 (-3dB) 32 (0dB) 26 (-3dB)
60	Splash Tone 1 (Mute)	1	Basic 1 Basic 2 Basic 3	0 6 0	1 1 0	8 (-12dB) 8 (-12dB)

Service Tone No.	Service Tone	Repeat Count	Unit Count	Basic Tone No.	Duration	Gain Level (dB)
61	Splash Tone 2 (Mute)	2	Basic 1 Basic 2 Basic 3	0 6 0	1 1 0	8 (-12dB) 8 (-12dB)
62	Splash Tone 3 (Mute)	3	Basic 1 Basic 2 Basic 3	0 6 0	1 1 0	8 (-12dB) 8 (-12dB)
63	Ring Over Page	0	Basic 1 Basic 2 Basic 3	10 0 0	10 30 0	32 (0dB) 32 (0dB)
64	**Music On Hold System Tone** The tone heard by the user when placed on hold when Program 10-04-01 set to "2".	0	Basic 1 Basic 2 Basic 3 Basic 4 Basic 5	6 0 6 0 0	1 1 1 50 0	32 (0dB) 32 (0dB) 32 (0dB) 32 (0dB)

Conditions

The system must be reset in order for any changes to these items take affect.

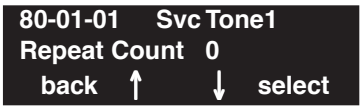
Feature Cross Reference

- Selectable Ring Tones

Telephone Programming Instructions

To enter data for Program 80-01 (Service Tone Setup):

1. Enter the programming mode.
2. 80 01



3. Enter the number of the item you want to program.

4. Select the Service Tone to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 80 : Basic Hardware Setup for System
80-02 : DTMF Tone Setup

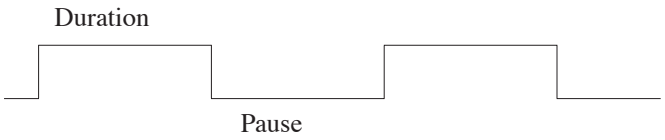
Level:	Aspire S	Aspire M/L/XL
MF	• Available.	• Available.

Description

Use **Program 80-02 : DTMF Tone Setup** to define the duration (on time) and pause (off time) for DTMF dialing. This option affects all trunk line calls system wide. You make separate entries for duration and pause. It is also possible to adjust the level of both high and low frequency tone.

Input Data

Item No.	Item	Input Data	Default
01	Duration	1-255	5 (100 ms)
02	Pause	1-255	5 (100 ms)
03	Tone Level (Low) (dB)	1-97 (-45.0 ~ +3)	69 (-11dB)
04	Tone Level (High)	1-97 (-45.0 ~ +3)	65 (-13dB)



Conditions

This program will not be displayed in PCPro until signing in with the MF level password.

Feature Cross Reference

- Selectable Ring Tones

Telephone Programming Instructions

To enter data for Program 80-02 (DTMF Tone Setup):

1. Enter the programming mode.
2. 80 02

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 80 : Basic Hardware Setup for System

80-03 : DTMF Tone Receiver Setup

Level:	Aspire S	Aspire M/L/XL
MF	• Available.	• Available.

Description

Use **Program 80-03 : DTMF Tone Receiver Setup** to define the various levels and timers for the DTMF Tone Receiver

Input Data

DTMF Tone Receiver Type Number	1 = DTMF Receiver for Extension 2 = DTMF Receive for Trunk 3 = - Reserve - 4 = - Reserve - 5 = - Reserve -

Item No.	Item	Input Data
01	Detect Level	0 = 0dBm ~ -25dBm 1 = -5dBm ~ -30dBm 2 = -10dBm ~ -35dBm 3 = -15dBm ~ -40dBm 4 = -20dBm ~ -45dBm 5 = -25dBm ~ -50dBm 6 = -30dBm ~ -55dBm
02	Start delay time	0-255 (0.25ms-64ms)
03	Min. detect level	0-15 detect level 0 : –15dBm(0) to –30dBm(15) detect level 1 : –30dBm(0) to –45dBm(15) detect level 2 : –40dBm(0) to –55dBm(15)
04	Max. detect level	0-15 detect level 0 : 0dBm(0) to –15dBm(15) detect level 1 : –15dBm(0) to –30dBm(15) detect level 2 : –30dBm(0) to –45dBm(15)
05	Forward twist level	0-9 (1dB ~ 10dB)
06	Backward twist level	0-9 (1dB ~ 10dB)
07	ON detect time	1-255 (15+15ms ~ 3825ms)
08	OFF detect time	1-255 (15+15ms ~ 3825ms)

Default

Item No.	Item	Type 1	Type 2	Type 3	Type 4	Type 5
01	Detect Level	0	0	0	0	0
02	Start delay time	0	0	0	0	0
03	Min. detect level	10(-25dBm)	15(-30dBm)	10(-25dBm)	10(-25dBm)	10(-25dBm)
04	Max. detect level	2 (-2dBm)	2 (-2dBm)	2 (-2dBm)	2 (-2dBm)	2 (-2dBm)
05	Forward twist level	5 (6dBm)	5 (6dBm)	5 (6dBm)	5 (6dBm)	5 (6dBm)
06	Backward twist level	0 (1dBm)	0 (1dBm)	0 (1dBm)	0 (1dBm)	0 (1dBm)
07	ON detect time	1 (30ms)	1 (30ms)	1 (30ms)	1 (30ms)	1 (30ms)
08	OFF detect time	1 (30ms)	1 (30ms)	1 (30ms)	1 (30ms)	1 (30ms)

Conditions

This program will not be displayed in PCPro until signing in with the MF level password.

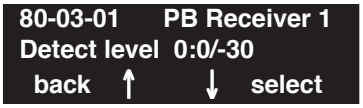
Feature Cross Reference

- Selectable Ring Tones

Telephone Programming Instructions

To enter data for Program 80-03 (DTMF Tone Receiver Setup):

1. Enter the programming mode.
2. 80 03



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 80 : Basic Hardware Setup for System

80-04 : Call Progress Tone Detector Setup

Level:	Aspire S	Aspire M/L/XL
MF	• Available.	• Available.

Description

Use **Program 80-04 : Call Progress Tone Detector Setup** to define the various levels and timers for the Call Progress Tone Detector

Input Data

Tone Detector Type No	1 = Dial Tone for Trunk 2 = Busy Tone for Trunk 3 = Ring Back Tone for Trunk 4 = - Reserve - 5 = - Reserve -

Item No.	Item	Input Data
01	Detect Level	0 = 0dBm ~ -25dBm 1 = -5dBm ~ -30dBm 2 = -10dBm ~ -35dBm 3 = -15dBm ~ -40dBm 4 = -20dBm ~ -45dBm 5 = -25dBm ~ -50dBm 6 = -30dBm ~ -55dBm
02	Min. detect level	0-15 detect level 0 : –15dBm(0) to –30dBm(15) detect level 1 : –30dBm(0) to –45dBm(15) detect level 2 : –40dBm(0) to –55dBm(15)
03	S/N ratio	0-4 (0dB ~ -20dB)
04	No tone time	1-255 (30+30-7650ms) (0 = No detection)
05	Pulse Count	1-255
06	ON min. time	1-255 (30+30-7650ms)
07	ON max. time	0-255 (30+30-7650ms) (0 = No detection)
08	OFF min. time	1-255 (30+30-7650ms)
09	OFF max. time	1-255 (30+30-7650ms) (0 = No detection)
10	-- Reserve --	0-8
11	-- Reserve --	0-8

Default

Item No.	Item	Type1 (DT)	Type2 (BT)	Type3 (RBT)	Type4	Type5
01	Detect Level	0 (0..-30dBm)	0 (0..-30dBm)	0 (0..-30dBm)	0	0
02	Min. detect level	15 (-30dBm)	15 (-30dBm)	15 (-30dBm)	0	0
03	S/N ratio	4 (-20dB)	4 (-20dB)	4 (-20dB)	0	0
04	No tone time	132 (3990ms)	132 (3990ms)	132 (3990ms)	0	0
05	Pulse Count	1	1	1	0	0
06	ON min. time	63 (1500ms)	12 (390ms)	25 (780ms)	0	0
07	ON max. time	0 (Not detect)	20 (630ms)	40 (1230ms)	0	0
08	OFF min. time	1 (60ms)	12 (390ms)	52 (1590ms)	0	0
09	OFF max. time	1 (60ms)	20 (630ms)	80 (2430ms)	0	0
10	-- Reserve --	1	1	1	0	0
11	-- Reserve --	0	0	0	0	0

Conditions

This program will not be displayed in PCPro until signing in with the MF level password.

Feature Cross Reference

- Selectable Ring Tones

Telephone Programming Instructions

To enter data for Program 80-04 (Call Progress Tone Detector Setup):

1. Enter the programming mode.
2. 80 04

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 80 : Basic Hardware Setup for System
80-05 : Date Format for SMDR and System Reports

Level:	Aspire S	Aspire M/L/XL
MF	• Available.	• Available.

Description

Use **Program 80-05 : Date Format for SMDR and System Reports** to define the date format when printing out the SMDR, alarm report, system information report, etc.

Input Data

Item No.	Date Format	Default
01	0 = American Format (Month / Date / Year) 1 = Japanese Format (Year / Month / Date) 2 = European Format (Date/Month/Year)	0

Conditions

This program will not be displayed in PCPro until signing in with the MF level password.

Feature Cross Reference

- Station Message Detail Recording
- Time and Date

Telephone Programming Instructions

To enter data for Program 80-05 (Date Format for SMDR and System Reports):

1. Enter the programming mode.
2. 80 05

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

- For Your Notes -

Program 81 : Basic Hardware Setup for Trunk

81-01 : COIU Initial Data Setup

Level:
MF

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Item 12 renamed to Caller ID Detection Time with software 4.93+.	• Item 12 renamed to Caller ID Detection Time with software 4.93+.

Description

Use **Program 81-01 : COIU Initial Data Setup** to define the various basic timers for COIU PCBs.

Input Data

Item No.	Item	Input Data	Default
01	Companding Method Type	0 = u-law 1 = A-law	0 (u-law)
02	Loop Current Detection Time	1-255 (8-2040mS)	75 (600ms)
03	Clear Signal (Open Loop) Detection Time	1-255 (8-2040mS)	90 (720ms)
04	Ringing Signal Detection Minimum Time	1-255 (8-2040mS)	13 (104ms)
05	Single Ringing Detection Minimum Time	0-255 (0,8-2040mS)	82 (656ms)
06	Double Ringing Detection Minimum off Time	0-255 (0,8-2040mS)	13 (104ms)
07	Double Ringing Detection Maximum off Time	0-255 (0,8-2040mS)	50 (400ms)
08	Ringing Signal Not Detected Minimum	1-255 (8-2040mS)	88 (704ms)
09	Abandoned Call Detection Timer	1-255 (64-16320mS)	94 (6016ms)
10	Continuous Ringing Minimum Time	0-255 (0,8-2040mS)	38 (304ms)
11	Continuous Ringing Maximum Time	0-255 (0,8-2040mS)	88 (704ms)
12	***Prior to 4.93 Software:*** AC Impedance Timer ***Software 4.93+:*** **Caller ID Detection Time** If an entry other than "0" is made, the actual waiting time is the value x 64ms. For example, if the timer is set to 46, the COIU waits 46 x 64ms = 2944ms). If a problem exists with Caller ID displaying, the recommended entry to try first would be "46".	***Prior to 4.93 Software:*** 1-255 (64-16320mS) ***Software 4.93+:*** 0 = COIU waits 500ms from end of first ring to beginning of FSK signal for Caller ID 1 - 255 = The COIU waits for the Caller ID FSK signal from when the first ring pulse was detected.	***Prior to 4.93 Software:*** 4 (256ms) ***Software 4.93+:*** 0
13	Grounding Time	1-255 (4-1020mS)	9 (36ms)

Program 81 : Basic Hardware Setup for Trunk

81-01 : COIU Initial Data Setup

Item No.	Item	Input Data	Default
14	**Flash (Hooking 1)** This sets the flash (Hooking 1) duration for analog trunk calls. See Program 14-02-04.	1-255 (16-4080mS)	50 (800ms)
15	**Flash (Hooking 2)** This sets the flash (Hooking 2) duration for analog trunk calls. See Program 14-02-04.	1-255 (16-4080mS)	156 (2496ms)
16	Pause Time	1-255 (16-4080mS)	16 (1024ms)
17	PFT Idle Detection Time	1-255 (64-16320mS)	47 (3008ms)
18	Grounding Start Time	1-255 (8-2040mS)	6 (48ms)
19	Grounding Start Give-Up Time	1-255 (64-16320mS)	47 (3008ms)
20	Loop Reverse Detect Minimum Time	1-255 (8-2040mS)	13 (104ms)
21	Loop Reverse Detect Maximum Time	1-255 (8-2040mS)	107 (856ms)
22	Loop Disconnect Detect Minimum Time	1-255 (8-2040mS)	50 (400ms)
23	Loop Disconnect Detect Maximum Time	1-255 (8-2040mS)	80 (640ms)
24	On Hook Normal Detect Time	1-255 (8-2040mS)	3 (24ms)
25	On Hook Reverse Detect Time	1-255 (8-2040mS)	2 (16ms)
26	On Hook Disconnect Detect Time	1-255 (16-4080mS)	188 (3008ms)
27	Pulse Dial Break Time (10pps)	1-255 (4-1020mS)	8 (32ms)
28	Pulse Dial Make Time (10pps)	1-255 (4-1020mS)	4 (16ms)
29	Inter-Digit Time (10pps)	1-255 (32-8160mS)	19 (608ms)
30	Pulse Dial Break Time (20pps)	1-255 (4-1020mS)	4 (16ms)
31	Pulse Dial Make Time (20pps)	1-255 (4-1020mS)	2 (8ms)
32	Inter-Digit Time (20pps)	1-255 (32-8160mS)	16 (512ms)
33	Charging Pulse Minimum Duration Time	1-255 (8-2040mS)	9 (72ms)
34	Charging Pulse Minimum Period Time	1-255 (8-2040mS)	29 (232ms)
35	Charging Pulse Minimum Interval Time	1-255 (8-2040mS)	6 (48ms)

Conditions

This program will not be displayed in PCPro until signing in with the MF level password.

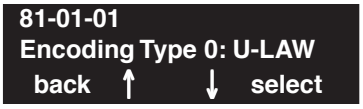
Feature Cross Reference

- Central Office Calls, Placing

Telephone Programming Instructions

To enter data for Program 81-01 (COIU Initial Data Setup):

1. Enter the programming mode.
2. 81 01



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 81 : Basic Hardware Setup for Trunk

81-02 : DIOPU Initial Data Setup

Level:	Aspire S	Aspire M/L/XL
MF	• Available.	• Available.

Description

Use **Program 81-02 : DIOPU Initial Data Setup** to define the various basic timers for the DIOPU cards.

Input Data

Item No.	Item	Input Data	Default
01	Companding method type	0 = u-law 1 = A-law	0 (u-law)
02	Answer Signal Time	1-255 (4-1020mS)	6 (24ms)
03	Clear Signal (Open Loop) Detection Time	1-255 (100-25500mS)	7 (700ms)
04	Ringing Signal Detection Min. Time	1-255 (8-20240mS)	10 (80ms)
05	Hook Flash Time	1-255 (8-20240mS)	25 (200ms)
06	Pause Time	1-255 (1-255 Seconds)	94 (94 Sec)
07	WINK/DELAY Duration Time	1-255 (8-20240mS)	20 (160ms)
08	Incoming-WINK/DELAY Send Time	1-255 (100-25500mS)	3 (300ms)
09	Seizure-WINK/DELAY Receive Max. Time	1-255 (100-25500mS)	48 (4800ms)
10	Receive WINK/DELAY Duration Min. Time	1-255 (8-20240mS)	13 (104ms)
11	Receive WINK/DELAY Duration Max. Time	1-255 (8-20240mS)	31 (248ms)
12	Receive DP Make Min. Time	1-255 (4-1020mS)	5 (20ms)
13	Receive DP Make Max. Time	1-255 (4-1020mS)	50 (200ms)
14	Receive DP Break Min. Time	1-255 (4-1020mS)	5 (20ms)
15	Receive DP Break Max. Time	1-255 (4-1020mS)	50 (200ms)
16	Receive DP Inter-Digit Time	1-255 (8-20240mS)	6 (48ms)
17	Loop Off Guard Time	0-255 (0,100-25500mS)	20 (2000ms)
18	DP Break Time (10pps)	1-255 (4-1020mS)	16 (64ms)
19	DP Make Time (10pps)	1-255 (4-1020mS)	8 (32ms)
20	DP Inter-Digit Time (10pps)	1-255 (100-25500mS)	38 (3800ms)
21	DP Break Time (0pps)	1-255 (4-1020mS)	8 (32ms)
22	DP Make Time (20pps)	1-255 (4-1020mS)	4 (16ms)
23	DP Inter-Digit Time (20pps)	1-255 (100-25500mS)	29 (2900ms)

Conditions

This program will not be displayed in PCPro until signing in with the MF level password.

Feature Cross Reference

- Central Office Calls, Placing

Telephone Programming Instructions

To enter data for Program 81-02 (DIOPU Initial Data Setup):

1. Enter the programming mode.
2. 81 02

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 81 : Basic Hardware Setup for Trunk

81-03 : 4TLIU Initial Data Setup

Level:	Aspire S	Aspire M/L/XL
MF	• Available.	• Available.

Description

Use **Program 81-03 : 4TLIU Initial Data Setup** to define the various basic timers for the E&M tie line PCB.

Input Data

Item No.	Item	Input Data	Default
01	Companding method type	0 = u-law 1 = A-law	0 (u-law)
02	Answer Signal Time	1-255 (4-1020mS)	6 (60ms)
03	Clear Signal (Open Loop) Detection Time	1-255 (100-25500mS)	7 (700ms)
04	Ringing Signal Detection Min. Time	1-255 (8-20240mS)	10 (100ms)
05	Ringing Signal Stop Detection Time	1-255 (100-25500mS)	7 (700ms)
06	Hook Flash Time	1-255 (8-20240mS)	20 (200ms)
07	Pause Time	1-255 (1-255Sec)	50 (3000ms)
08	WINK/DELAY Duration Time	1-255 (8-20240mS)	20 (200ms)
09	Incoming-WINK/DELAY Send Time	1-255 (100-25500mS)	3 (300ms)
10	Seizure-WINK/DELAY Receive Max. Time	1-255 (100-25500mS)	48 (4800ms)
11	Receive WINK/DELAY Duration Min. Time	1-255 (8-20240mS)	13 (130ms)
12	Receive WINK/DELAY Duration Max. Time	1-255 (8-20240mS)	31 (310ms)
13	Receive DP Make Min. Time	1-255 (4-1020mS)	5 (10ms)
14	Receive DP Make Max. Time	1-255 (4-1020mS)	50 (100ms)
15	Receive DP Break Min. Time	1-255 (4-1020mS)	5 (10ms)
16	Receive DP Break Max. Time	1-255 (4-1020mS)	50 (100ms)
17	Pause Time After WINK/DELAY Receive	1-255 (8-20240mS)	13 (104ms)
18	Loop Off Guard Time	0-255 (0,100-25500mS)	20 (2000ms)
19	DP Break Time (10pps)	1-255 (4-1020mS)	32 (64ms)
20	DP Make Time (10pps)	1-255 (4-1020mS)	16 (32ms)
21	DP Inter-Digit Time (10pps)	1-255 (100-25500mS)	19 (608ms)
22	DP Break Time (0pps)	1-255 (4-1020mS)	16 (32ms)
23	DP Make Time (20pps)	1-255 (4-1020mS)	8 (16ms)
24	DP Inter-Digit Time (20pps)	1-255 (100-25500mS)	16 (512ms)

Conditions

This program will not be displayed in PCPro until signing in with the MF level password.

Feature Cross Reference

- Tie Lines

Telephone Programming Instructions

To enter data for Program 81-03 (4TLIU Initial Data Setup):

1. Enter the programming mode.
2. 81 03

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 81 : Basic Hardware Setup for Trunk
81-04 : ISDN BRI Layer 1 (T-Point) Initial Data Setup

Level:	Aspire S	Aspire M/L/XL
MF	• Available.	• Available.

Description

Use **Program 81-04 : ISDN BRI Layer 1 (T-Point) Initial Data Setup** to define the various basic options for layer 1 of ISDN BRI.

Input Data

Item No.	Item	Input Data	Default
01	Wait Time for Physical Activation (Timer 3)	1-255 (200-5100ms)	100 (20 sec.)
02	Detection Time for Physical Deactivation	1-255 (200-5100ms)	5 (1 sec.)

Conditions

This program will not be displayed in PCPro until signing in with the MF level password.

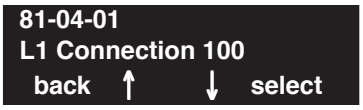
Feature Cross Reference

- ISDN Compatibility

Telephone Programming Instructions

To enter data for Program 81-04 (ISDN BRI Layer 1 (T-Point) Initial Data Setup):

1. Enter the programming mode.
2. 81 04



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
MF	• Available.	• Available.

Description

Use **Program 81-05 : ISDN BRI & PRI Layer 2 (T-Point) Initial Data Setup** to define the various basic options for layer 2 of ISDN BRI/PRI.

Input Data

Item No.	Item	Input Data	Default
01	Timer T200	1-255 (100-25500ms)	10 (1sec.)
02	Timer T201	1-255 (100-25500ms)	10 (1sec.)
03	Timer T202	1-255 (100-25500ms)	20 (2sec.)
04	Timer T203	1-255 (100-25500ms)	200 (20sec.)
05	N200	1-255	3
06	N201	1-65535 (Byte)	260
07	N202	1-255	3

Conditions

This program will not be displayed in PCPro until signing in with the MF level password.

Feature Cross Reference

- ISDN Compatibility

Telephone Programming Instructions

To enter data for Program 81-05 (ISDN BRI & PRI Layer 2 (T-Point) Initial Data Setup):

1. Enter the programming mode.
2. 81 05

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level: MF	Aspire S	Aspire M/L/XL
	• Available.	• Available.

Description

Use **Program 81-06 : ISDN BRI & PRI Layer 3 (T-Point) Timer Setup** to define the various basic timers for layer 3 of ISDN BRI/PRI (defined in Program 10-03-04).

Input Data

Layer 3 Timer Type Number	1-5

Item No.	Item	Input Data	Default
01	T301	0,180-254(sec)	180(sec)
02	T302	1-254(sec)	15(sec)
03	T303	1-254(sec)	4(sec)
04	T304	0-254(sec)	30(sec)
05	T305	1-254(sec)	30(sec)
06	T306	0-254(sec)	30(sec)
07	T307	1-254(sec)	180(sec)
08	T308	1-254(sec)	4(sec)
09	T309	1-254(sec)	90(sec)
10	T310	0-180(sec)	180(sec)
11	T312	1-254(sec)	6(sec)
12	T313	1-254(sec)	4(sec)
13	T314	1-254(sec)	4(sec)
14	T316	(T317+1)-254(sec)	120(sec)
15	T317	1-(T316-1)	60(sec)
16	T318	1-254(sec)	4(sec)
17	T319	1-254(sec)	4(sec)
18	T320	1-254(sec)	30(sec)
19	T321	1-254(sec)	30(sec)
20	T322	1-254(sec)	4(sec)

Conditions

This program will not be displayed in PCPro until signing in with the MF level password.

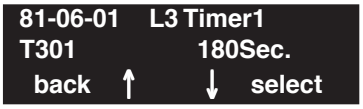
Feature Cross Reference

- ISDN Compatibility

Telephone Programming Instructions

To enter data for Program 81-06 (ISDN BRI & PRI Layer 3 (T-Point) Timer Setup):

1. Enter the programming mode.
2. 81 06



3. Enter the number of the item you want to program.

4. Select the Layer 3 Timer number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:
IN

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Option 4 (Specified Data) uses Program 81-09.	• Option 4 (Specified Data) changed to use Program 81-09 with software 1.04+.

Description

Use **Program 81-07 : CODEC Filter Setup for Analog Trunk Ports** to define the CODEC (QSLAC) Filter for each analog trunk port.

Input Data

Trunk Port Number	001-200

Item No.	Item	CODEC Filter Type	Default
01	CODEC Filter Setup for Analog Trunk Ports	0 = No filter 1 = 0dB Loss 2 = 4dB Loss 3 = 8dB Loss 4 = Specified Data - This option uses the entries defined in Program 81-09.	2

Conditions

None

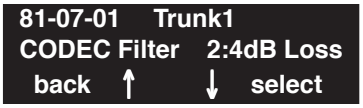
Feature Cross Reference

- Central Office Calls, Answering
- Central Office Calls, Placing

Telephone Programming Instructions

To enter data for Program 81-07 (CODEC FilterSetup for Analog Trunk Ports):

1. Enter the programming mode.
2. 81 07



3. Enter the number of the item you want to program.

4. Select the trunk number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 81-08 : T1 Trunk Timer Setup** to define the various basic timers for each T1 trunk type.

Input Data

Layer 3 Timer Type Number	1-5

Item No.	Item	Input Data	Default
01	Loop - Answer Signal Detection Time	1-250 (4msec - 1020msec)	15 (60msec)
02	Ground - Answer Signal Detection Time	1-250 (4msec - 1020msec)	15 (60msec)
03	DID - Answer Signal Detection Time	1-250 (4msec - 1020msec)	15 (60msec)
04	E&M - Answer Signal Detection Time	1-250 (4msec - 1020msec)	15 (60msec)
05	OPX - Answer Signal Detection Time	1-250 (4msec - 1020msec)	15 (60msec)
06	Loop - Clear Signal Detection Time	1-255 (100msec - 25500msec)	6 (600msec)
07	Ground - Clear Signal Detection Time	1-255 (100msec - 25500msec)	6 (600msec)
08	DID - Clear Signal Detection Time	1-255 (100msec - 25500msec)	6 (600msec)
09	E&M - Clear Signal Detection Time	1-255 (100msec - 25500msec)	6 (600msec)
10	OPX - Clear Signal Detection Time	1-255 (100msec - 25500msec)	6 (600msec)
11	Loop - Ringing Signal Detection Time	1-250 (8msec - 2040msec)	10 (80msec)
12	Ground - Ringing Signal Detection Time	1-250 (8msec - 2040msec)	10 (80msec)
13	DID - Ringing Signal Detection Time	1-250 (8msec - 2040msec)	10 (80msec)
14	E&M - Ringing Signal Detection Time	1-250 (8msec - 2040msec)	10 (80msec)
15	OPX - Ringing Signal Detection Time	1-250 (8msec - 2040msec)	10 (80msec)
16	Loop - Ringing Signal Stop Detection Time	1-255 (100msec - 25500msec)	50 (3200msec)
17	Ground - Ringing Signal Stop Detection Time	1-255 (100msec - 25500msec)	50 (3200msec)
18	DID - Ringing Signal Stop Detection Time	1-255 (100msec - 25500msec)	50 (3200msec)
19	E&M - Ringing Signal Stop Detection Time	1-255 (100msec - 25500msec)	50 (3200msec)
20	OPX - Ringing Signal Stop Detection Time	1-255 (100msec - 25500msec)	50 (3200msec)
21	Loop - Loop Current Detection Time	1-250 (4msec - 1020msec)	40 (200msec)
22	Ground - Loop Current Detection Time	1-250 (4msec - 1020msec)	40 (200msec)
23	DID - Loop Current Detection Time	1-250 (4msec - 1020msec)	40 (200msec)

Program 81 : Basic Hardware Setup for Trunk

81-08 : T1 Trunk Timer Setup

Item No.	Item	Input Data	Default
24	E&M - Loop Current Detection Time	1-250 (4msec - 1020msec)	40 (200msec)
25	OPX - Loop Current Detection Time	1-250 (4msec - 1020msec)	40 (200msec)
26	All - DP Break Send Time	1-250 (4msec - 1020msec)	15 (60msec)
27	All - DP Make Send Time	1-250 (4msec - 1020msec)	10 (40msec)
28	All - DP Inter-digit Send Time	1-255 (100msec - 25500msec)	7 (700msec)
29	Loop - Hookflash Send Time	1-255 (100msec - 25500msec)	5 (500msec)
30	Ground - Hookflash Send Time	1-255 (100msec - 25500msec)	5 (500msec)
31	DID - Hookflash Send Time	1-255 (100msec - 25500msec)	5 (500msec)
32	E&M - Hookflash Send Time	1-255 (100msec - 25500msec)	5 (500msec)
33	OPX - Hookflash Send Time	1-255 (100msec - 25500msec)	5 (500msec)
34	All - Pause Send Time	1-255 (100sec - 25500sec)	3 (700sec)
35	DID - Wink Send Duration Time	1-250 (8msec - 2040msec)	25 (200msec)
36	DID - Delay Send Duration Time	1-250 (8msec - 2040msec)	25 (200msec)
37	DID - Incoming Wink Send Duration Time	1-255 (1100msec - 25500msec)	3 (300msec)
38	E&M - Wink Send Duration Time	1-250 (8msec - 2040msec)	25 (200msec)
39	E&M - Delay Send Duration Time	1-250 (8msec - 2040msec)	25 (200msec)
40	DID - Incoming Wink Send Duration Time	1-255 (100msec - 25500msec)	3 (300msec)
41	DID - Time Out Seizure-Wink/Delay Receive Maximum Time	1-255 (100msec - 25500msec)	48 (4800msec)
42	DID - Wink Signal, Receive Wink Duration Minimum Time	1-250 (8msec - 2040msec)	12 (96msec)
43	DID - Wink Signal, Receive Wink Duration Maximum Time	1-250 (8msec - 2040msec)	45 (360msec)
44	E&M - Time Out Seizure-Wink/Delay Receive Maximum Time	1-255 (100msec - 25500msec)	48 (4800msec)
45	E&M - Wink Signal, Receive Wink Duration Minimum Time	1-250 (8msec - 2040msec)	12 (96msec)
46	DID - Wink Signal, Receive Wink Duration Maximum Time	1-250 (8msec - 2040msec)	45 (360msec)
47	All - Receive DP Make Minimum Time	1-250 (4msec - 1020msec)	3 (12msec)
48	All - Receive DP Make Maximum Time	1-250 (4msec - 1020msec)	19 (76msec)
49	All - Receive DP Break Minimum Time	1-250 (4msec - 1020msec)	3 (12msec)
50	All - Receive DP Break Maximum Time	1-250 (4msec - 1020msec)	25 (100msec)
51	All - Receive DP Inter-digit Minimum Time	1-250 (4msec - 1020msec)	125 (500msec)
52	E&M - Receive Hookflash Duration Minimum Time	1-255 (100msec - 25500msec)	3 (300msec)
53	E&M - Receive Hookflash Duration Maximum Time	1-255 (100msec - 25500msec)	6 (600msec)

Item No.	Item	Input Data	Default
54	OPX - Receive Hookflash Duration Minimum Time	1-255 (100msec - 25500msec)	3 (300msec)
55	OPX - Receive Hookflash Duration Maximum Time	1-255 (100msec - 25500msec)	6 (600msec)
56	Loop - Loop Off Guard Time	1-255 (100msec - 25500msec)	20 (2000msec)
57	Ground - Loop Off Guard Time	1-255 (100msec - 25500msec)	20 (2000msec)
58	DID - Loop Off Guard Time	1-255 (100msec - 25500msec)	20 (2000msec)
59	E&M - Loop Off Guard Time	1-255 (100msec - 25500msec)	20 (2000msec)
60	OPX - Loop Off Guard Time	1-255 (100msec - 25500msec)	20 (2000msec)
61	OPX - Double Ringing Send Time 1	1-255 (100msec - 25500msec)	5 (500msec)
62	OPX - Double Between Ringing Send Time 1	1-255 (100msec - 25500msec)	5 (500msec)
63	OPX - Double Ringing Send Time 2	1-255 (100msec - 25500msec)	25 (2500msec)
64	OPX - Double Between Ringing Send Time 2	1-255 (100msec - 25500msec)	30 (3000msec)
65	OPX - Single Ringing Send Time 1	1-255 (100msec - 25500msec)	10 (1000msec)
66	OPX - Single Between Ringing Send Time 1	1-255 (100msec - 25500msec)	9 (900msec)
67	Loop - Guard Time 1	1-255 (100msec - 25500msec)	9 (900msec)
68	Ground - Guard Time 1	1-255 (100msec - 25500msec)	9 (900msec)
69	DID - Guard Time 1	1-255 (100msec - 25500msec)	9 (900msec)
70	E&M - Guard Time 1	1-255 (100msec - 25500msec)	9 (900msec)
71	OPX - Guard Time 1	1-255 (100msec - 25500msec)	9 (900msec)
72	All - Guard Time 2	1-250 (4msec - 1020msec)	3 (12msec)
73	All - Dial Sending Complete time	1-255 (100msec - 25500msec)	20 (2000msec)
74	All - On-Hook Bit Send Time	1-255 (100msec - 25500msec)	40 (4000msec)
75	Loop - Open Loop Time	1-255 (100msec - 25500msec)	6 (600msec)
76	Ground - Open Loop Time	1-255 (100msec - 25500msec)	6 (600msec)
77	DID - Open Loop Time	1-255 (100msec - 25500msec)	6 (600msec)
78	E&M - Open Loop Time	1-255 (100msec - 25500msec)	6 (600msec)
79	OPX - Open Loop Time	1-255 (100msec - 25500msec)	6 (600msec)
80	Loop - Close Loop Time	1-250 (4msec - 1020msec)	13 (52msec)
81	DID - Close Loop Time	1-250 (4msec - 1020msec)	13 (52msec)
82	Ground Loop - Close Loop Time	1-250 (4msec - 1020msec)	13 (52msec)

Conditions

None

Feature Cross Reference

- T1 Trunking

Telephone Programming Instructions

To enter data for Program 81-08 (T1 Trunk Timer Setup):

1. Enter the programming mode.
2. 81 08

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available with software 1.04+.

Description

The system will use the settings in **Program 81-09 : COIU CODEC Filter Data Setup** when **Program 81-07-01 : CODEC Filter Setup for Analog Trunk Ports** is set to "4 - Specified Data".

These values should not be changed from their default settings unless directed by NEC'S Technical Service department.

The side tone of the COIU is adjusted using all 16 values, however, special software is required in order to compute these values. The setting is not proportional to the gain level. To change these values, contact NEC's Technical Service department for assistance.

Input Data

Item	Description	Range	Default
01	B1 Filter (01)	0-255	171
02	B1 Filter (02)	0-255	221
03	B1 Filter (03)	0-255	76
04	B1 Filter (04)	0-255	44
05	B1 Filter (05)	0-255	19
06	B1 Filter (06)	0-255	160
07	B1 Filter (07)	0-255	186
08	B1 Filter (08)	0-255	26
09	B1 Filter (09)	0-255	51
10	B1 Filter (10)	0-255	226
11	B1 Filter (11)	0-255	107
12	B1 Filter (12)	0-255	190
13	B1 Filter (13)	0-255	170
14	B1 Filter (14)	0-255	208
15	B2 Filter (01)	0-255	162
16	B2 Filter (02)	0-255	192

Conditions

None

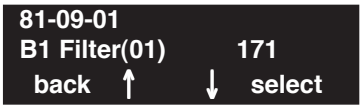
Feature Cross Reference

- Central Office Calls, Answering
- Central Office Calls, Placing

Telephone Programming Instructions

To enter data for Program 81-09 (COIU CODEC Filter Data Setup):

1. Enter the programming mode.
2. 81 09



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 82 : Basic Hardware Setup for Extension

82-01 : Incoming Ring Tone

Level:	Aspire S	Aspire M/L/XL
MF	• Available.	• Available.

Description

Use **Program 82-01 : Incoming Ring Tone** to set the incoming ring tones, which are the tones a user hears when a call rings an extension. These tones are grouped into four ring tone *Ranges* (1-4), also called patterns, that consist of a combination of frequencies. (You assign a specific *Range* to trunks in Program 22-03 and to extensions in Program 15-02.) Within each *Range* there are three frequency *Types:* High, Middle and Low. (Service Code 820 allows users to choose the *Type* for their incoming calls.) Each *Type* in turn consists of two frequencies and the modulation "played" simultaneously to make up the tone. These frequencies are determined by their Frequency Number selected in Items 1 and 2 (see below). In this program, you assign the two *Frequency Numbers* and *Modulation* for each *Type*, for each of the four *Ranges*. The chart below shows the default *Frequency Numbers* for each *Type* in each *Range*.

Input Data

Incoming Ringing Tone Number	1 = Pattern 1 (Trunk Incoming) 2 = Pattern 2 (Trunk Incoming) 3 = Pattern 3 (Trunk Incoming) 4 = Pattern 4 (Trunk Incoming) 5 = Intercom Incoming Pattern

Ringing Tone Type Number	1 = High 2 = Mid 3 = Low

Item No.	Item	Input Data
01	Frequency 1	1 = 520Hz 2 = 540Hz 3 = 660Hz 4 = 760Hz 5 = 1100Hz 6 = 1400Hz 7 = 2000Hz
02	Frequency 2	
03	Modulation	0 = No modulation 1 = 8Hz modulation 2 = 16Hz modulation 3 = envelope

Program 82 : Basic Hardware Setup for Extension

82-01 : Incoming Ring Tone

Default

Incoming Ringing Tone Number	Tone Type	Frequency 1	Frequency 2	Modulation
Pattern 1 (Trunk Incoming)	High Mid Low	1100 660 520	1400 760 660	16Hz Modulation 16Hz Modulation 16Hz Modulation
Pattern 2 (Trunk Incoming)	High Mid Low	1100 660 520	1400 760 660	8Hz Modulation 8Hz Modulation 8Hz Modulation
Pattern 3 (Trunk Incoming)	High Mid Low	2000 1400 1100	760 660 540	16Hz Modulation 16Hz Modulation 16Hz Modulation
Pattern 4 (Trunk Incoming)	High Mid Low	2000 1400 1100	760 660 540	8Hz Modulation 8Hz Modulation 8Hz Modulation
Intercom Incoming Pattern	High Mid Low	1100 660 520	1400 760 660	8Hz Modulation 8Hz Modulation 8Hz Modulation
Alarm Sensor Pattern	High Mid Low	760 760 760	760 760 760	No Change No Change No Change

Conditions

This program will not be displayed in PCPro until signing in with the MF level password.

Feature Cross Reference

- Distinctive Ringing Tones and Flash Patterns
- Selectable Ring Tones

Telephone Programming Instructions

To enter data for Program 82-01 (Incoming Ring Tone):

1. Enter the programming mode.
2. 82 01

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 82 : Basic Hardware Setup for Extension
82-03 : DSS Console LED Pattern Setup

Level:	Aspire S	Aspire M/L/XL
MF	• Available.	• Available.

Description

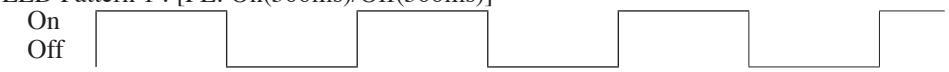
Use **Program 82-03 : DSS Console LED Pattern Setup** to define the LED patterns for special functions on a DSS console.

Input Data

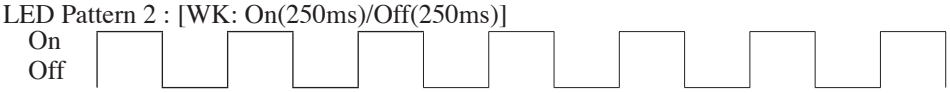
Item No.	Item	Input Data	Default
01	ACD Log In	0-7	1
02	ACD Log Out	0-7	4
03	ACD Emergency Call	0-7	3

LED Pattern 0 : [OFF]

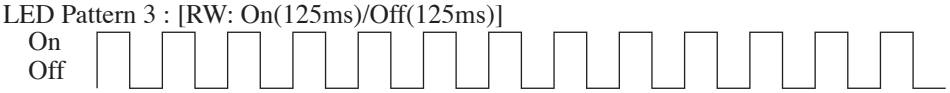
LED Pattern 1 : [FL: On(500ms)/Off(500ms)]



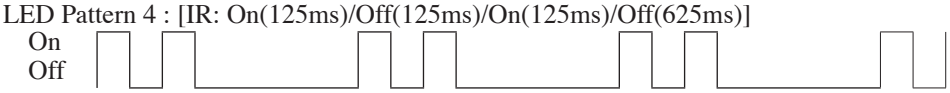
LED Pattern 2 : [WK: On(250ms)/Off(250ms)]



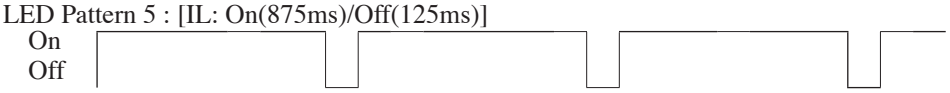
LED Pattern 3 : [RW: On(125ms)/Off(125ms)]



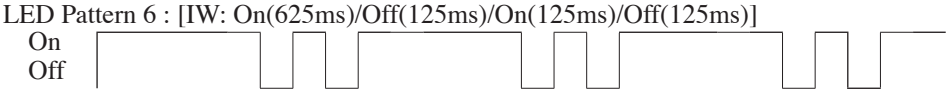
LED Pattern 4 : [IR: On(125ms)/Off(125ms)/On(125ms)/Off(625ms)]



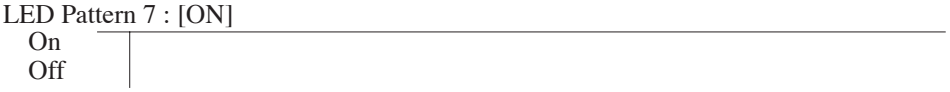
LED Pattern 5 : [IL: On(875ms)/Off(125ms)]



LED Pattern 6 : [IW: On(625ms)/Off(125ms)/On(125ms)/Off(125ms)]



LED Pattern 7 : [ON]



Conditions

This program will not be displayed in PCPro until signing in with the MF level password.

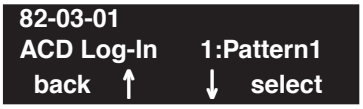
Feature Cross Reference

- Direct Station Selection (DSS)

Telephone Programming Instructions

To enter data for Program 82-03 (DSS Console LED Pattern Setup):

1. Enter the programming mode.
2. 82 03



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 82 : Basic Hardware Setup for Extension

82-04 : SLIU Initial Data Setup

Level:	Aspire S	Aspire M/L/XL
MF	• Available.	• Available.

Description

Use **Program 82-04 : SLIU Initial Data Setup** to define the various basic timers for the ASTU PCB.

Input Data

Item No.	Item	Input Data	Default
01	Companding method type	0 = u-law 1 = A-law	0 (u-law)
02	Ringing frequency	0 = 25Hz 1 = 20Hz 2 = 16Hz	2 (16Hz)
03	Minimum break time	1-255 (5ms-1275ms)	2 (10ms)
04	Maximum break time	1-255 (5ms-1275ms)	20 (100ms)
05	Minimum make time	1-255 (5ms-1275ms)	2 (10ms)
06	Maximum make time	1-255 (5ms-1275ms)	20 (100ms)
07	Minimum hook flash time	1-255 (5ms-1275ms)	21 (105ms)
08	Maximum hook flash time	1-255 (5ms-1275ms)	200 (1000ms)
09	Minimum ground flash time	1-255 (5ms-1275ms)	21 (105ms)
10	Minimum off-hook time	1-255 (5ms-1275ms)	21 (105ms)
11	No detection time after off-hook	1-255 (5ms-1275ms)	60 (300ms)
12	No detection time after pulse dial detection	1-255 (5ms-1275ms)	70 (350ms)
13	Loop disconnect time, Reversal time	1-255 (10ms-2550ms)	60 (600ms)
14	Ring, Message wait period time	1-255 (5ms-1275ms)	150 (750ms)

Conditions

This program will not be displayed in PCPro until signing in with the MF level password.

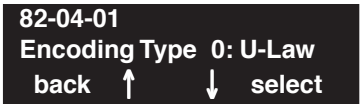
Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 82-04 (SLIU Initial Data Setup):

1. Enter the programming mode.
2. 82 04



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 82 : Basic Hardware Setup for Extension

82-05 : ISDN BRI & PRI Layer 2 (S-Point) Initial Data Setup

Level:	Aspire S	Aspire M/L/XL
MF	• Available.	• Available.

Description

Use **Program 82-05 : ISDN BRI & PRI Layer 2 (S-Point) Initial Data Setup** to define the various basic options for the layer 2 of ISDN BRI/PRI S-Point.

Input Data

Item No.	Item	Input Data	Default
01	Timer T200	1-255 (100-25500ms)	10 (1 sec.)
02	Timer T201	1-255 (100-25500ms)	10 (1 sec.)
03	Timer T202	1-255 (100-25500ms)	20 (2 sec.)
04	Timer T203	1-255 (100-25500ms)	100 (10 sec.)
05	N200	1-255	3
06	N201	1-65535 (Byte)	260
07	N202	1-255	3

Conditions

This program will not be displayed in PCPro until signing in with the MF level password.

Feature Cross Reference

- ISDN Compatibility

Telephone Programming Instructions

To enter data for Program 82-05 (ISDN BRI & PRI Layer 2 (S-Point) Initial Data Setup):

1. Enter the programming mode.
2. 82 05

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 82 : Basic Hardware Setup for Extension

82-06 : ISDN BRI & PRI Layer 3 (S-Point) Timer Setup

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 82-06 : ISDN BRI & PRI Layer 3 (S-Point) Timer Setup** to define the various basic timers for layer 3 of ISDN BRI/PRI S-Point (defined in Program 10-03-04).

Input Data

Layer 3 Timer Type Number	1-5

Item No.	Item	Input Data	Default
01	T301	0,180-254 (sec)	180 (sec)
02	T302	1-254 (sec)	10 (sec)
03	T303	1-254 (sec)	4 (sec)
04	T304	0-254 (sec)	20 (sec)
05	T305	1-254 (sec)	30 (sec)
06	T306	0-254 (sec)	30 (sec)
07	T307	1-254 (sec)	180 (sec)
08	T308	1-254 (sec)	4 (sec)
09	T309	1-254 (sec)	90 (sec)
10	T310	0-180 (sec)	30 (sec)
11	T312	1-254 (sec)	6 (sec)
12	T313	1-254 (sec)	4 (sec)
13	T314	1-254 (sec)	4 (sec)
14	T316	(T317+1)-254 (sec)	120 (sec)
15	T317	1-(T316-1)	60 (sec)
16	T318	1-254 (sec)	4 (sec)
17	T319	1-254 (sec)	4 (sec)
18	T320	1-254 (sec)	30 (sec)
19	T321	1-254 (sec)	30 (sec)
20	T322	1-254 (sec)	4 (sec)

Conditions

None

Program 82 : Basic Hardware Setup for Extension
82-06 : ISDN BRI & PRI Layer 3 (S-Point) Timer Setup

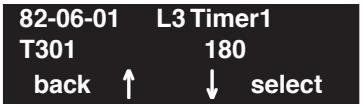
Feature Cross Reference

- ISDN Compatibility

Telephone Programming Instructions

To enter data for Program 82-06 (ISDN BRI & PRI Layer 3 (S-Point) Timer Setup):

1. Enter the programming mode.
2. 82 06



3. Enter the number of the item you want to program.

4. Select the Layer 3 Timer number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 82 : Basic Hardware Setup for Extension
82-07 : CODEC Filter Setup for Analog Station Ports

Level:
IN

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Option 4 (Specified Data) uses Program 82-09.	• Option 4 (Specified Data) changed to use Program 82-09 with software 1.04+.
• Expanded port capacity not available.	• Expanded port range requires software 4.0E+ and Aspire XL hardware.

Description

Use **Program 82-07 : CODEC Filter Setup for Analog Station Ports** to define the CODEC (QSLAC) Filter for each analog extension port.

Input Data

Extension Port Number	Aspire S: 01-50 Aspire M/L: 001-256 Aspire XL: 001-384

Item No.	Item	CODEC Filter Type	Default
01	CODEC Filter Setup for Analog Station Ports	0 = No filter 1 = 0dB Loss 2 = 4dB Loss 3 = 8dB Loss 4 = Specified Data - This option uses the entries defined in Program 82-09.	1

Conditions

None

Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 82-07 (CODEC Filter Setup for Analog Station Ports):

1. Enter the programming mode.
2. 82 07

   ```
   82-07-01     Extn Port1
   CODEC Filter  1:00dB Loss
    back   ↑      ↓   select
   ```

3. Enter the number of the item you want to program.

   ```
   82-07-nn     Extn Portnnn
   nnnnn
     ←              →
   ```

4. Select the extension port number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 82 : Basic Hardware Setup for Extension

82-08 : Sidetone Volume Setup

Level:	Aspire S	Aspire M/L/XL
MF	• Available.	• Available with software 1.04+.

Description

Program 82-08 : Sidetone Volume Setup allows adjust of the keyset sidetone volume.

There are two levels, based on whether the connected trunk is a digital trunk or analog trunk.

Input Data

Item	Description	Input	Digital Sidetone Level	Analog Sidetone Level
01	Sidetone Volume	0	-54 (dB)	-54 (dB)
		1	-48 (dB)	-54 (dB)
		2	-42 (dB)	-54 (dB)
		3	-36 (dB)	-48 (dB)
		4	-30 (dB)	-42 (dB)
		5	-24 (dB)	-36 (dB)
		6	-18 (dB)	-30 (dB)
		7	12 (dB)	-24 (dB)
		8	-12 (dB)	-18 (dB)
		9	-12 (dB)	-12 (dB)

Conditions

This program will not be displayed in PCPro until signing in with the MF level password.

Feature Cross Reference

- Central Office Calls, Answering
- Central Office Calls, Placing

Telephone Programming Instructions

To enter data for Program 82-08 (Sidetone Volume Setup):

1. Enter the programming mode.
2. 82 08

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 82 : Basic Hardware Setup for Extension

82-09 : SLIU CODEC Filter Data Setup

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available with software 1.04+.

Description

The system will use the settings in the new **Program 82-09 : SLIU CODEC Filter Data Setup** when **Program 82-07-01 : CODEC Filter Setup for Analog Station Ports** is set to "4 - Specified Data".

These values should not be changed from their default settings unless directed by NEC'S Technical Service department.

The side tone of the SLIU is adjusted using all 16 values, however, special software is required in order to compute these values. The setting is not proportional to the gain level. To change these values, contact NEC's Technical Service department for assistance.

Input Data

Item	CODEC Filter Item	Description	Range	Default
01	01	B1 Filter (01)	0-255	171
	02	B1 Filter (02)	0-255	221
	03	B1 Filter (03)	0-255	76
	04	B1 Filter (04)	0-255	44
	05	B1 Filter (05)	0-255	19
	06	B1 Filter (06)	0-255	160
	07	B1 Filter (07)	0-255	186
	08	B1 Filter (08)	0-255	26
	09	B1 Filter (09)	0-255	51
	10	B1 Filter (10)	0-255	226
	11	B1 Filter (11)	0-255	107
	12	B1 Filter (12)	0-255	190
	13	B1 Filter (13)	0-255	170
	14	B1 Filter (14)	0-255	208
	15	B2 Filter (01)	0-255	162
	16	B2 Filter (02)	0-255	192

Conditions

None

Feature Cross Reference

- Central Office Calls, Answering
- Central Office Calls, Placing

Telephone Programming Instructions

To enter data for Program 82-07 (SLIU CODEC Filter Data Setup):

1. Enter the programming mode.
2. 82 07

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

- For Your Notes -

Program 83: Hardware Setup for Aspire Wireless

83-11 : Aspire Wireless Configuration

Level:	Aspire S	Aspire M/L/XL
MF	• Not Available.	• Available.

Description

Use **Program 83-11 : Aspire Wireless Configuration** to define the Aspire Wireless (DECT) options.

Input Data

Item No.	Item	Input Data	Default
01	**Location Area Level** Use this program to define the location area - whether the Base Stations/RFPs are all in the same area or whether each Base Station in located in a different area.	0=whole area 1=each different	0 [whole area]
02	**Authentication** This program enables (1) or disables (0) the authentication procedure for the phone when placing and receiving calls.	0 = Disabled 1 = Enabled	1 (Enabled)
03	**Encryption** This program enables (1) or disables (0) encryption for the phone when placing and receiving calls.	0 = Disabled 1 = Enabled	1 (Enabled)

Conditions

This program will not be displayed in PCPro until signing in with the MF level password.

Feature Cross Reference

- Aspire Wireless

Program 83: Hardware Setup for Aspire Wireless
83-11 : Aspire Wireless Configuration

Telephone Programming Instructions

To enter data for Program 83-11 (Aspire Wireless Configuration):

1. Enter the programming mode.
2. 83 11

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Not Available.	• Available.

Description

Use **Program 83-12 : Aspire Wireless Measurement** to define the Aspire Wireless (DECT) Base Station measurement.

Input Data

Item No.	Item	Input Data	Default
01	**DECT Measurement** This program measures the length of cables connecting the PCB and Base Stations so that the system can find the best signal transmitting timing for handover. Enter Program 83-12-01, press 1 then HOLD. The system will then restart all Base Stations/RFPs (this takes 3-5 minutes) and then they will use the best timing possible. This program should be used any time the Base Station configuration is changed (adding or deleting Base Stations or changing connecting cables).	-	-

Conditions

This program will not be displayed in PCPro until signing in with the MF level password.

Feature Cross Reference

- Aspire Wireless

Telephone Programming Instructions

To enter data for Program 83-12 (Aspire Wireless Measurement):

1. Enter the programming mode.
2. 83 12

   83-12-01
   Start measuring(1)?
   back ↑ ↓ select

3. Enter "1" + HOLD.

   The system will then restart all Base Stations/RFPs (this takes 3-5 minutes) and then they will use the best timing possible.

4. Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available. • Items 60 and 61 available. • Item 62 available with software 2.63+.	• Available. • Items 60 and 61 available with software 1.18+. Requires VOIPU PCB firmware 3.2+. • Item 62 available with software 2.63+.

Description

Use **Program 84-01 : CODEC Information Basic Setup** to define the data of H.323 trunks. These settings apply to IP Networking and H.323 Trunks.

Note that the value of Item 33 (Audio Capability Priority) determines which CODEC settings to use. This means, for example, that if G.711 is selected in Item 33, the settings in Items 5-12 and 19-21 will be ignored.

Input Data

Item No.	Item	Input Data	Default	Description
01	-- Not Used --			
02	Number of G711 Audio Frame	2 = 20 ms 3 = 30 ms	3	Maximum number of G711 Audio Frame
03	G711 Silence Detection Mode	0:Disable 1:Enable	0	Define whether the silence detection enables on G711 or not
04	G711 type	0:A-law 1: u-law	1	Set the type of G711 (A-law or u-law)
05	G729 Audio Frame	1 = 10 ms 2 = 20 ms 3 = 30 ms 4 = 40 ms 5 = 50 ms 6 = 60 ms 7 = 70 ms 8 = 80 ms	3	Maximum number of G729 Audio Frame
06	G729	0:Disable 1:Enable	0	
07	G.729 Jitter Buffer Minimum	0-500 ms	30	
08	G.729 Jitter Buffer Type	0-500 ms	60	
09	G.729 Jitter Buffer Maximum	0-500 ms	120	
10	-- Not Used --			

Program 84 : Hardware Setup for VoIP
84-01 : CODEC Information Basic Setup

Item No.	Item	Input Data	Default	Description
11	Number of G723 Audio Frame	1 = 30 msec 2 = 60 msec	1	Maximum number of G723 Audio Frame
12	G723	0:Disable 1:Enable	0	
13	Maximum value of Jitter Delay	0-65535 msec	60 msec	Maximum value of Jitter Delay for audio delay
14	-- Not Used --			
15	Jitter Buffer Mode	1 = static 2 = adaptive during silence 3 = adaptive immedi-ately	1	Set the mode of Jitter Buffer
16	G.711 Jitter Buffer (min.)	0~145 ms	30	Set the minimum value of G.711 Jitter Buffer
17	G.711 Jitter Buffer (typ)	0~145 ms	60	Set the average value of G.711 Jitter Buffer
18	G.711 Jitter Buffer (max)	0~145 ms	120	Set the maximum value of G.711 Jitter Buffer
19	G.723,G.729 Jitter Buffer (min.)	0~500 ms	30	Set the minimum value of G.723, G.729 Jitter Buffer
20	G.723, G.729 Jitter Buffer (typ)	0~500 ms	60	Set the average value of G.723, G.729 Jitter Buffer
21	G.723,G.729 Jitter Buffer (max)	0~500 ms	120	Set the maximum value of G.723, G.729 Jitter Buffer
22	VAD threshold	0-30 (-20db~+10db) 0:-20db (-50dbm) 1:-19db (-49dbm) : 20 = 0db (-30dbm) : 29 = 9dbm (-21dbm) 30:10dbm (-20dbm)	20	Threshold of silence detection Change value based –30 Become invalid item if item 03 is set to Disable

Item No.	Item	Input Data	Default	Description
23	Idle Noise Level	5000-7000 (-5000 ~ -7000dbm) 5000 = -5000dbm : 7000 = -7000dbm	7000	Noise level of silence
24	Echo canceler mode	0 = Disable 1 = Enable	1	Determine whether or not to use Echo canceller.
25	Echo canceler tail size	1 = 8 ms 2 = 16 ms 3 = 32mS	2	Become invalid item if item 24 is set to Disable
26	Echo canceler nlp mode	0 = Disable 1 = Enable	0	Non-linear processing mode
27	Echo canceler nlp noise	40-70 (-40~-70) 40 = -40 dbm : 70 = -70 dbm	70	Become invalid item if item 26 is set to Disable
28	Echo canceler cng cfg	0 = adaptive 1 = fixed	0	Become invalid item if item 26 is set to Disable
29	Echo canceler 4w det	0 = Disable 1 = Enable	0	
30	TX Gain	0-28 (-14~+14) 0 = -14 dbm 1 = -13 dbm : 14 = 0 dbm : 27 = 13 dbm 28 = 14 dbm	14	
31	RX Gain	0-28 (-14~+14) 0 = -14 dbm 1 = -13 dbm : 14 = 0 dbm : 27 = 13 dbm 28 = 14 dbm	14	
32	-- Not Used --			
33	Audio Capability Priority	0:G711 PT 1:G723 PT 2:G729 PT	0	The option selected here determines what other options are applied from this program.

Program 84 : Hardware Setup for VoIP
84-01 : CODEC Information Basic Setup

Item No.	Item	Input Data	Default	Description
34	Bandwidth Control	0:Disable 1:Enable	0	Controls the voice bandwidth on an H.323 trunk.
35	Maximum Bandwidth	0-65535kbps	0	The maximum total bandwidth limitation for voice packets.
36	Fax Max Rate	24 = V.27ter, 2400 bps 48 = V.27ter, 4800 bps 72 = V.29, 7200 bps 96 = V.29, 9600 bps 120 = V17, 12000 bps 144 = V.17, 14400 bps	5	
37	Fax Playout FIFO Nominal Delay	0-600 ms	300 ms	Increase the value for networks which experience large packet losses.
38	Fax Packet Size	20-48 bytes	20	
39	Fax Modem Transmit Level	0-13 0dBm -13dBm	6 (-6dBm)	
40	Fax Modem CD Threshold	0 = -26dBm 1 = -33dBm 2 = -43dBm	1	
41	Fax No Activity Timeout Duration	10-32000 sec	30	
42	Override Encapsulation Method	0 = Open Channel Defined Packet Encapsulation 1 = T.38 UDP 2 = T.38/TRP UDP	1	T.38/TRP UDP Voice-Fax Close-Reopen
43	High Speed Data Packet Rate	10-80 ms	60	
44	Low Speed Data Redundancy	0-8	0	
45	High Speed Data Redundancy	0-2	0	
46	TCF Handling Method	1 = TCF is Locally Generated and Checked 2 = TCF is Sent Over the Network	1	For H.323 negotiation
47	Maximum Low Speed Data Packetization		1	
48	Transmit Network Timeout	10-32000 sec	150 sec	
49	Eflag Start Timer	0-65535	2600 ms	
50	Eflag Stop Timer	0-65535	2300 ms	
51	Fax Relay: Scan Line Fix Up Feature	0 = Disable 1 = Enable	1	

Item No.	Item	Input Data	Default	Description
52	Fax Relay: Eflags for First DIS	0 = Disable 1 = Enable	1	
53	Fax Relay: FOP Protocol Enhancement	0 = Disable 1 = Enable	1	
54	Fax Relay: NSF Override	0 = Disable 1 = Enable	0	
55	T30: ECM	0 = Disable 1 = Enable	1	
56	T30: MR Page Compression	0 = Disable 1 = Enable	1	
57	NSF Country Code	0-65535	Blank	Fax Relay - NSF Override Disable
58	NSF Vendor Code	65535	Blank	Fax Relay - NSF Override Disable
59	Fax Relay Function	0 = Disable 1 = Enable	0	Determine whether or not the Fax Relay function should be used.
60	Echo Canceller Config Type	0 = Auto 1 = Type 1 2 = Type 2 3 = Type 3	1	
61	Echo Auto Gain Control	0 - 5	0	
62	H.323 DTMF Payload Number	0 = VOIPU 1 = RFC2833 2 = H.245 3 = Disable	0	Define the H.323 DTMF Payload Number.

Conditions

You must log out of system programming in order for changes to the following items will take affect:

Item 39
Item 40
Item 41
Item 49
Item 50
Item 51
Item 52
Item 53
Item 54
Item 55
Item 56
Item 57
Item 58

Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 84-01 (CODEC Information Basic Setup):

1. Enter the programming mode.
2. 84 01

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 84-02 : H.225, H.245 Information Basic Setup** to define the data of H.225 and H.245.

It is recommended that these settings are left at the default values unless you are advised to change the values by NEC Infrontia.

Input Data

Item No.	Item	Input Data	Default	Description
01	H.225 Alerting Timer	0-255 sec	180 sec	
02	H.225 Setup Acknowledge Timer	0-255 sec	9 sec	
03	H.225 Setup Timer	0-255 sec	4 sec	
04	H.225 Info Ack Timer	0-255 sec	9 sec	
05	H.225 Call Proceeding Timer	0-255 sec	10 sec	
06	-- Not Used --			
07	H.245 Master Slave Determination Timer	0-255 sec	5 sec	
08	H.245 Master Slave Determination Retry Count	0-255 sec	3 sec	
09	H.245 Capability Exchange Timer	0-255 sec	5 sec	
10	H.245 Logical Channel Establishment Timer	0-255 sec	50 sec	Unidirectional or bi-directional logical channel establishment timer
11	H.245 Mode Request Procedures Timer	0-255 sec	50 sec	
12	H.245 Close Logical Channel Timer	0-255 sec	50 sec	
13	H.245 Round Trip Delay Timer	0-255 sec	50 sec	
14	H.245 Maintenance Loop	0-255 sec	50 sec	
15	RAS GRQ Timer	0-255 sec	5 sec	
16	GRQ Retry Count	0-255	2	
17	RAS RRQ Timer	0-255 sec	5 sec	
18	RRQ Retry Count	0-255	3	
19	RAS URQ Timer	0-255 sec	3	

Program 84 : Hardware Setup for VoIP

84-02 : H.225, H.245 Information Basic Setup

Item No.	Item	Input Data	Default	Description
20	URQ Retry Count	0-255	1	
21	RAS ARQ Timer	0-255 sec	5 sec	
22	ARQ Retry Count	0-255	2	
23	RAS BRQ Timer	0-255 sec	5 sec	
24	BRQ Retry Count	0-255	2	
25	RAS IRR Timer	0-255 sec	5 sec	
26	IRR Retry Count	0-255	2	
27	RAS DRQ Timer	0-255 sec	8 sec	
28	DRQ Retry Count	0-255	2	
29	RAS LRQ Timer	0-255 sec	5 sec	
30	LRQ Retry Count	0-255	2	
31	RAS RAI Timer	0-255 sec	3 sec	
32	RAI Retry Count	0-255	2	
33	Call Signaling Port Number	0-65535	1730	It is control port for IP Telephone
34	- Not Used -			
35	Fast Start	0 = Disable 1 = Enable	1	If VoIP is used for networking, the Fast Start option must be enabled.
36	RAS	0-65535	20001	
37	Terminal Type	0-255	60	H.245 Terminal Type

Conditions

None

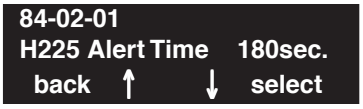
Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 84-02 (H.225, H.245 Information Basic Setup):

1. Enter the programming mode.
2. 84 02



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 84 : Hardware Setup for VoIP
84-03 : NGT Information Basic Setup

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 84-03 : NGT Information Basic Setup** to define the details of NGT (new generation telephone).

Input Data

Terminal Type	1 = Dterm IP / Aspire Keyset with IP Adapter 2 = Smart Phone 3 = Bandle IP Phone

Note: Only items 04 and 05 will be used.

Item No.	Item	Input Data	Default	Description
01	NGT Signal Receive Port Number	0-65535	3001	
02	DRS Port Number	0-65535	3000	
03	- Not Used -			
04	- Not Used -			
05	- Not Used -			
06	Area	0 = Japan 1 = USA 2 = Australia 3 = EU 4 = Asia 5 = Other Country	0	
07	Type of Service Mode	1:Invalid 2:IP Precedence 3:Diffserve	1	
08	Type of service	0x00-0xff (use line keys 1-6 for letters A-F)	C0	This data will be sent to NGT Terminal when NGT Terminal is registered.
09	Start Port	1-512	1	This entry indicates the starting port number for IP terminals.

Item No.	Item	Input Data	Default	Description
10	Local	0: 1: 2: 3: 4: 5: 6: 7: 8: 9:	0	

Conditions

None

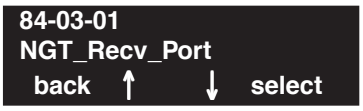
Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 84-03 (NGT Information Basic Setup):

1. Enter the programming mode.
2. 84 03



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 84 : Hardware Setup for VoIP
84-04 : VOIPU PCB DHCP Server Mode Setup

Level:
MF

Aspire S	Aspire M/L/XL
• Available.	• Available.
• With software 2.63+, this program requires the manufacturer level password.	• With software 2.63+, this program requires the manufacturer level password.

Description

Use **Program 84-04 : VOIPU PCB DHCP Server Mode Setup** to determine whether the VOIPU PCB should use a manually assigned IP Address or if it should obtain its IP Address from a DHCP server.

Input Data

Item No.	Description	Input Data	Default
01	**DHCP Server Mode** Define whether or not the DHCP Server is used. If this item is set to 0:Disable, the values in Program 84-05 will be used. If this item is set to 1:Enable, the VoIPU will try to obtain an IP address from a DHCP Server. The DHCP server could be external (ie. on the LAN), or could be the NTCPU (if Program 10-13-01 is enabled)	0:Disable 1:Enable	0

Conditions

- The system programming must be exited before this program option takes affect.
- This program will not be displayed in PCPro until signing in with the MF level password.

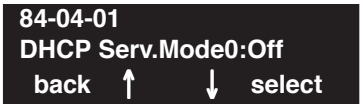
Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 84-04 (VOIPU PCB DHCP Server Mode Setup):

1. Enter the programming mode.
2. 84 04



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 84 : Hardware Setup for VoIP
84-05 : VOIPU IP Address Setup

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 84-05 : VOIPU IP Address Setup** to define the IP Address of the VOIPU PCB.

Input Data

Slot Number	01-16

Item	Description	Input Data	Default	Related Program
01	**IP Address** Sets the IP Address of each VoIPU PCB. Each slot (1-16) on the Aspire has a setting. The IP Address will be increased in accordance with the slot number. If Program 84-04 is enabled, this setting will be ignored	1.0.0.1–126.255.255.254 128.1.0.1–191.254255.254 192.0.1.1–223.255.254.254	Slot 1: 172.16.0.20 Slot 2: 172.16.0.21 Slot 3: 172.16.0.22 Slot 4: 172.16.0.23 Slot 5: 172.16.0.24 Slot 6: 172.16.0.25 Slot 7: 172.16.0.26 Slot 8: 172.16.0.27 Slot 9: 172.16.0.28 Slot 10: 172.16.0.29 Slot 11: 172.16.0.30 Slot 12: 172.16.0.31 Slot 13: 172.16.0.32 Slot 14: 172.16.0.33 Slot 15: 172.16.0.34 Slot 16: 172.16.0.35	84-04 This become invalid data if Program 84-04 is set to 1:Enable.
02	**LAN Interface** This sets the mode for the NIC (Network Interface Card) on the VoIPU. This can usually be set to Auto Detect.	0 = Auto Detect 1 = 100 Mbps, Full Duplex 2 = 100 Mbps, Half Duplex 3 = 10 Mbps, Full Duplex 4 = 10 Mbps, Half Duplex	0	

Conditions

The system programming must be exited before these program options to take affect.

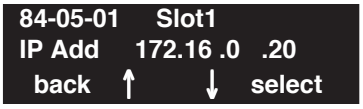
Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 84-05 (VOIPU IP Address Setup):

1. Enter the programming mode.
2. 84 05



3. Enter the number of the item you want to program.

4. Select the slot number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 84 : Hardware Setup for VoIP

84-06 : VOIPU Setup

Level:
IN

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Items 13 and 14 available.	• Items 13 and 14 available with software 1.18+. Requires VOIPU PCB firmware 3.2+.

Description

Use **Program 84-06 : VOIPU Setup** to setup the details of VOIPU PCB.

Input Data

SLOT Number	01-16

Item No.	Item	Input Data	Default	Description
01	RTP Port Number	0-65535	10020	
02	RTCP Port Number	RTP Port Number + 1	10021	It has to be RTP Port Number + 1.
03	H.245 Port Number	0-65535	10100	
04	Fractlost Threshold	0-4294967295 ms	0	The data will be sent to the NTCPU if the value exceeds the defined value.
05	Packets Lost Threshold	0-4294967295	0	The data will be sent to the NTCPU if the value exceeds the defined value.
06	Ext High Sequence Threshold	0-4294967295	0	The data will be sent to the NTCPU if the value exceeds the defined value.
07	Jitter Threshold	0-4294967295 sec	0	The data will be sent to the NTCPU if the value exceeds the defined value.
08	Last LSR Threshold	0-4294967295	0	The data will be sent to the NTCPU if the value exceeds the defined value.
09	Delay LSR Threshold	0-4294967295	0	The data will be sent to the NTCPU if the value exceeds the defined value.
10	DTMF Behavior	0 = DTMF Relay disabled 1 = In-Band DTMF relay, do NOT report to Host processor 2 = Out of Band DTMF relay, do not pass tones as voice	0	• Inbound - DTMF is transferred by RTP packets. • Outbound - DTMF is transferred by H.245 protocol.
11	Ready/Ready-Answer Port Number	0-65535	4000	

12	Long Tail Echo Mode	0 = Off 1 = On	0	
13	Long Tail Echo Code Type	1 = G.729AB 2 = G.723.1	1	
14	Long Tail Echo Tail Size	1 = 8msec 2 = 16msec 3 = 32msec 4 = 64msec 5 = 128msec	5	

Conditions

The system programming must be exited before these program options to take affect.

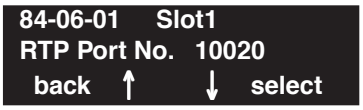
Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 84-06 (VOIPU Setup):

1. Enter the programming mode.
2. 84 06



3. Enter the number of the item you want to program.

4. Select the slot number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 84 : Hardware Setup for VoIP
84-07 : Firmware Download Setup

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 84-07 : Firmware Download Setup** to setup the download data for the IP phone.

Input Data

Item No.	Item	Input Data	Default	Description
01	Server Mode	0 = TFTP 1 = FTP	0	
02	File Server	1.0.0.1 ~ 126.255.255.254 128.1.0.1-191.254.255.254 192.0.1.1-223.255.254.254	0.0.0.0	
03	Log-in Name	20 Characters Max.	No Setting	
04	Password	20 Characters Max.	No Setting	

Conditions

None

Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 84-07 (Firmware Download Setup):

1. Enter the programming mode.
2. 84 07

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 84 : Hardware Setup for VoIP
84-08 : Firmware Name Setup

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 84-08 : Firmware Name Setup** to setup the firmware name of the IP phone for download.

Input Data

Terminal Type	1 = ITR-16DK-1D 2 = IP-RD 3 = IP-R 4 = ITR-32D-1D 5 = IP1WW_IP_Adapter 6 = ITR-LC-1 7 = IP1NA-24TIXH 8 = IP1WW-24TIXH

Item No.	Item	Input Data	Default	Description
01	Firmware Directory	64 Characters Maximum	No Setting	
02	Firmware File Name	30 Characters Maximum	No Setting	

Conditions

None

Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 84-08 (Firmware Download Setup):

1. Enter the programming mode.
2. 84 08

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 84 : Hardware Setup for VoIP
84-09 : VLAN Setup

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 84-09 : VLAN Setup** to setup the VLAN data.

Input Data

Item No.	Item	Input Data	Default
01	VLAN	0 = Disable 1 = Enable	0
02	VLAN ID	1 - 4094	1
03	Priority	0 - 7	0

Conditions

The system programming must be exited before these program options to take affect.

Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 84-09 (VLAN Setup):

1. Enter the programming mode.
2. 84 09

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level: IN	Aspire S	Aspire M/L/XL
	• Available.	• Available.

Description

Use **Program 84-10 : ToS Setup** to setup the ToS data.

Input Data

Protocol Type	1 = DRS 2 = Protims 3 = Voice Control 4 = H.323 5 = RTP_RTCP 6 = SIP

Item No.	Item	Input Data	Default	Description
01	ToS Mode	0 = Disable 1 = IP Precedence 2 = Diffserv	0	
02	Priority, IP Precedence	0-7 (0=low, 7-high)	0	01 ToS, 1:IP Precedence
03	Low Delay	0-1 (0=normal delay, low delay)	0	01 ToS, 1:IP Precedence
04	Wide Band (throughout)	0-1 (0=normal through put, 1=high through put)	0	01 ToS, 1:IP Precedence
05	High Reliability	0-1 (0=normal reliability, 1=low reliability)	0	01 ToS, 1:IP Precedence
06	Low Cost	0-1 (0=normal cost, 1=low cost)	0	01 ToS, 1:IP Precedence
07	Priority (Diffserv)	0-63	0	01 ToS, 2:Diffserv

Conditions

The system needs to be reset in order for these program options to take affect.

Program 84 : Hardware Setup for VoIP
84-10 : ToS Setup

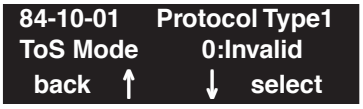
Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 84-10 (ToS Setup):

1. Enter the programming mode.
2. 84 10



3. Enter the number of the item you want to program.

4. Select the Protocol type to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:
IN

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Items 29 and 30 available.	• Items 29 and 30 available with software 1.18+. Requires VOIPU PCB firmware 3.2+.
• Item 1 and 7 entries increased with software 2.63+.	• Item 1 and 7 entries increased with software 2.63+.

Description

Use **Program 84-11 : Dterm IP CODEC Information Basic Setup** to setup the basic CODEC options for the Dterm IP phone (IPhone or a keyset with an IP adapter).

Input Data

Type	1 - 5

Item No.	Item	Input Data	Default
01	**G711 Audio Frame** Prior to software 2.63, the only entry possible was "3". With software 2.63+, additional entries are available. **Note:** Currently, only the Aspire S system can use the 10ms setting. Aspire will provide this option in the future	1 - 3 (1 = 10ms, 2 = 20 ms, 3 = 30ms)	3
02	G711 VAD Mode	0...Disable 1...Enable	0
03	G711 Type	0...A-law 1...u-law	1
04	G.711 Jitter Buffer Min	0~145 ms	30
05	G.711 Jitter Buffer Type	0~145 ms	60
06	G.711 Jitter Buffer Max	0~145 ms	120
07	**G.729 Audio Frame** Prior to software 2.63, the only entry possible was "3" or "4". With software 2.63+, additional entries are available The phone must be able to support 80 ms (the NEC IPhone and IP adapter only support up to 40 ms). **Note:** Currently, only the Aspire S system can use the 10ms setting. Aspire will provide this option in the future.	1-8 (1 = 10ms, 2 = 20ms, etc.)	3
08	G.729 VAD Mode	0 = Disable 1 = Enable	0

Item No.	Item	Input Data	Default
09	G.729 Jitter Buffer Min	0~500 ms	30
10	G.729 Jitter Buffer Type	0~500 ms	60
11	G.729 Jitter Buffer Max	0~500 ms	120
12	G.723 Audio Frame	1-2	1
13	G.723 VAD Mode	0 = Disable 1 = Enable	0
14	G.723 Jitter Buffer Min	0~500 ms	30
15	G.723 Jitter Buffer Type	0~500 ms	60
16	G.723 Jitter Buffer Max	0~500 ms	120
17	Jitter Buffer Mode	1 = static 2 = adaptive during silence 3 = adaptive immed	1
18	VAD Threshold	0-30 (19db~+10db, Adaptec threshold) 0 = Adaptec threshold 1 = -19db(-49dbm) : 20 = 0db (-30dbm) : 29 = 9dbm(-21dbm) 30 = 10dbm(-20dbm)	20
19	Idle Noise Level	5000-7000 (-5000 thru -7000dbm) 5000:-5000dbm : 7000:-7000dbm	7000
20	Echo Canceler Mode	0 = Disable 1 = Enable	1
21	**Echo Canceler Tail Size** 84-11-21 - Disable	1 = 8 ms 2 = 16 ms 3 = 32mS	2
22	**Echo Canceler NLP Mode** Non-linear processing mode	0 = Disable 1 = Enable	0
23	**Echo Canceler NLP Noise** 84-11-22 - Disable	40-70 (-40~-70) 40 = -40 dbm : 70 = -70 dbm	70

Item No.	Item	Input Data	Default
24	**Echo Canceler CNG CFG** 84-11-22 - Disable	0 = adaptive 1 = fixed	0
25	Echo Canceler 4w Det	0 = Disable 1 = Enable	0
26	RX Gain	0-28 (-14~+14) 0 = -14 dbm 1 = -13 dbm : 14 = 0 dbm : 27 = 13 dbm 28 = 14 dbm	14
27	TX Gain	0-28 (-14~+14) 0 = -14 dbm 1 = -13 dbm : 14 = 0 dbm : 27 = 13 dbm 28 = 14 dbm	14
28	Audio Capability Priority	0:G711_PT 1:G723_PT 2:G729_PT	0
29	Echo Canceller Config Type	0 = Auto 1 = Type 1 2 = Type 2 3 = Type 3	0
30	Echo Auto Gain Control	0 - 5	0

Conditions

None

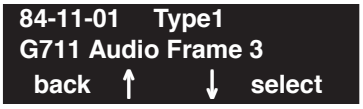
Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 84-11 (Dterm IP CODEC Information Basic Setup):

1. Enter the programming mode.
2. 84 11



3. Enter the number of the item you want to program.

4. Select the type number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:
IN

Aspire S	Aspire M/L/XL
• Available.	• Available.
• Items 29 and 30 available.	• Items 29 and 30 available with software 1.18+. Requires VOIPU PCB firmware 3.2+.
• Item 1 and 7 entries increased with software 2.63+.	• Item 1 and 7 entries increased with software 2.63+.
• Item 31 available with software 2.63+.	• Item 31 available with software 2.63+.
• Item 32 available with software 4.93+.	• Item 32 available with software 4.93+.

Description

Use **Program 84-12 : H.323 Phone CODEC Information Basic Setup** to setup the CODEC information of H.323 phones.

Input Data

Item No.	Item	Input Data	Default
01	**G711 Audio Frame** Prior to software 2.63, the only entry possible was "2" or "3". With software 2.63+, additional entries are available. **Note:** Currently, only the Aspire S system can use the 10ms setting. Aspire will provide this option in the future.	1 - 3 (1 = 10ms, 2 = 20 ms, 3 = 30ms)	3
02	G711 VAD Mode	0 = Disable 1 = Enable	0
03	G711 Type	0 = A-law 1 = μ-law	1
04	G.711 Jitter Buffer Min	0~145 ms	30
05	G.711 Jitter Buffer Type	0~145 ms	60
06	G.711 Jitter Buffer Max	0~145 ms	120
07	**G.729 Audio Frame** Prior to software 2.63, only entries 3-8 were available. With software 2.63+, additional entries are available. **Note:** Currently, only the Aspire S system can use the 10ms setting. Aspire will provide this option in the future	1-8 (1 = 10ms, 2 = 20ms, etc.)	3
08	G.729 VAD Mode	0 = Disable 1 = Enable	0

Item No.	Item	Input Data	Default
09	G.729 Jitter Buffer Min	0~500 ms	30
10	G.729 Jitter Buffer Type	0~500 ms	60
11	G.729 Jitter Buffer Max	0~500 ms	120
12	G.723 Audio Frame	1-2	1
13	G.723 VAD Mode	0 = Disable 1 = Enable	0
14	G.723 Jitter Buffer Min	0~500 ms	30
15	G.723 Jitter Buffer Type	0~500 ms	60
16	G.723 Jitter Buffer Max	0~500 ms	120
17	Jitter Buffer Mode	1 = static 2 = adaptive during silence 3 = adaptive immed	1
18	VAD Threshold	0-30 (19db~+10db, Adaptec threshold) 0 = Adaptec threshold 1 = -19db(-49dbm) : 20 = 0db (-30dbm) : 29 = 9dbm(-21dbm) 30 = 10dbm(-20dbm)	20
19	Idle Noise Level	5000-7000 (-5000_-7000dbm) 5000:-5000dbm : 7000:-7000dbm	7000
20	Echo Canceler Mode	0 = Disable 1 = Enable	1
21	**Echo Canceler Tail Size** 84-12-20 - Disable	1 = 8 ms 2 = 16 ms 3 = 32mS	2
22	**Echo Canceler NLP Mode** Non-linear processing mode	0 = Disable 1 = Enable	0
23	**Echo Canceler NLP Noise** 84-12-22 - Disable	40-70 (-40~-70) 40 = -40 dbm : 70 = -70 dbm	70

Item No.	Item	Input Data	Default
24	**Echo Canceler CNG CFG** 84-12-22 - Disable	0 = adaptive 1 = fixed	0
25	Echo Canceler 4w Det	0 = Disable 1 = Enable	0
26	TX Gain	0-28 (-14~+14) 0 = -14 dbm 1 = -13 dbm : 14 = 0 dbm : 27 = 13 dbm 28 = 14 dbm	14
27	RX Gain	0-28 (-14~+14) 0 = -14 dbm 1 = -13 dbm : 14 = 0 dbm : 27 = 13 dbm 28 = 14 dbm	14
28	Audio Capability Priority	0:G711_PT 1:G723_PT 2:G729_PT	0
29	Echo Canceller Config Type	0 = Auto 1 = Type 1 2 = Type 2 3 = Type 3	0
30	Echo Auto Gain Control	0 - 5	0
31	**DTMF Relay Mode** Define the DTMF Payload (Networking)	0 = Disable 1 = RFC2833 2 = VOIPU	2
32	**FAX Relay** Select "2" for FAX Relay to SLT (Program 15-03-03:special), Trunk and networking. Refer to Program 84-01-36 through 84-01-57 for FAX Relay options.	0 = Disable 1 = Enable 2 = Each Port Mode	0

Conditions

None

Program 84 : Hardware Setup for VoIP

84-12 : H.323 Phone CODEC Information Basic Setup

Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 84-12 (H.323 Phone CODEC Information Basic Setup):

1. Enter the programming mode.
2. 84 12

   ```
   84-12-01
   G711 Audio Frame 3
    back  ↑    ↓  select
   ```

3. Enter the number of the item you want to program.

   ```
   84-12-nn
   nnnnn
     ←          →
   ```

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 2.63+.	• Available with software 2.63+.

Description

Use **Program 84-13 : SIP Trunk CODEC Information Basic Setup** to setup the basic CODEC options for SIP trunks.

Input Data

Item No.	Item	Input Data	Default
01	**84-13-01 : SIP Trunk CODEC Information Basic Setup - G.711 Audio Frame Number** Set the G.711 Audio Frame Number.	1-3	2
02	**84-13-02 : SIP Trunk CODEC Information Basic Setup - G.711 VAD Detection Mode** Enable or disable the G.711 VAD Detection Mode.	0 = Disable 1 = Enable	0
03	**84-13-03 : SIP Trunk CODEC Information Basic Setup - G.711 Type** Define the G.711 type.	0 = A-law 1 = μ-law	1
04	**84-13-04 : SIP Trunk CODEC Information Basic Setup - G.711 Jitter Buffer (Min)** Set the minimum G.711 Jitter Buffer.	0-145 ms	30 ms
05	**84-13-05 : SIP Trunk CODEC Information Basic Setup - G.711 Jitter Buffer (Type)** Set the G.711 Jitter Buffer type.	0-145 ms	60 ms
06	**84-13-06 : SIP Trunk CODEC Information Basic Setup - G.711 Jitter Buffer (Max)** Set the maximum G.711 Jitter Buffer.	0-145 ms	120 ms
07	**84-13-07 : SIP Trunk CODEC Information Basic Setup - G.729 Audio Frame Number** Set the G.729 Audio Frame Number.	1-8	3
08	**84-13-08 : SIP Trunk CODEC Information Basic Setup - G.729 VAD Detection Mode** Enable or disable the G.729 VAD Detection Mode.	0 = Disable 1 = Enable	0
09	**84-13-09 : SIP Trunk CODEC Information Basic Setup - G.729 Jitter Buffer (Min)** Set the minimum G.729 Jitter Buffer.	0-500 ms	30 ms
10	**84-13-10 : SIP Trunk CODEC Information Basic Setup - G.729 Jitter Buffer (Type)** Set the G.729 Jitter Buffer type.	0-500 ms	60 ms

Item No.	Item	Input Data	Default
11	**84-13-11 : SIP Trunk CODEC Information Basic Setup - G.729 Jitter Buffer (Max)** Set the maximum G.729 Jitter Buffer.	0-500 ms	120 ms
12	**84-13-12 : SIP Trunk CODEC Information Basic Setup - G.723 Audio Frame Number** Set the G.723 Audio Frame Number.	1-2	1
13	**84-13-13 : SIP Trunk CODEC Information Basic Setup - G.723 VAD Detection Mode** Enable or disable the G.723 VAD Detection Mode.	0 = Disable 1 = Enable	0
14	**84-13-14 : SIP Trunk CODEC Information Basic Setup - G.723 Jitter Buffer (Min)** Set the minimum G.723 Jitter Buffer.	0-500 ms	30 ms
15	**84-13-15 : SIP Trunk CODEC Information Basic Setup - G.723 Jitter Buffer (Type)** Set the G.723 Jitter Buffer type.	0-500 ms	60 ms
16	**84-13-16 : SIP Trunk CODEC Information Basic Setup - G.723 Jitter Buffer (Max)** Set the maximum G.723 Jitter Buffer.	0-500 ms	120 ms
17	**84-13-17 : SIP Trunk CODEC Information Basic Setup - Jitter Buffer Mode** Set the Jitter Buffer Mode.	1 = Static 2 = Adaptive during silence 3 = Adaptive immediately	3
18	**84-13-18 : SIP Trunk CODEC Information Basic Setup - VAD Threshold** Set the VAD (voice activity detection) threshold.	0-30 (-19db~+10db) 1 = -19db (-49dbm) : 20 = 0db (-30dbm) : 29 = 9dbm (-21dbm) 30 =10dbm (-20dbm)	20
19	**84-13-19 : SIP Trunk CODEC Information Basic Setup - Idle Noise Level** Set the idle noise level.	5000-7000 (-5000dbm ~ -7000dbm)	7000
20	**84-13-20 : SIP Trunk CODEC Information Basic Setup - Echo Canceller Mode** Enable or disable the Echo Canceller Mode.	0 = Disable 1 = Enable	1
21	**84-13-21 : SIP Trunk CODEC Information Basic Setup - Echo Canceller Tail Size** Define the Echo Canceller Tail Size.	1 = 8ms 2 = 16ms 3 = 32ms	2
22	**84-13-22 : SIP Trunk CODEC Information Basic Setup - Echo Canceller NLP Mode** Enable or disable the Echo Canceller NLP Mode.	0 = Disable 1 = Enable	0

Item No.	Item	Input Data	Default
23	**84-13-23 : SIP Trunk CODEC Information Basic Setup - Echo Canceller NLP Noise** Define the Echo Canceller NLP Noise level.	40-70 (-40dbm ~ -70dbm)	70
24	**84-13-24 : SIP Trunk CODEC Information Basic Setup - Echo Canceller CNG CFG** Set the Echo Canceller CNG CFG.	0 = Adaptive 1 = Fixed	0
25	**84-13-25 : SIP Trunk CODEC Information Basic Setup - Echo Canceller 4W DET** Enable or disable the Echo Canceller 4W DET.	0 = Disable 1 = Enable	0
26	**84-13-26 : SIP Trunk CODEC Information Basic Setup - TX Gain** Set the transmit gain.	0-28 (-14dbm ~ +14dbm) 0 = -14dbm 1 = -13 dbm : 14 = 0dbm : 27 = 13dbm 28 = 14dbm	10
27	**84-13-27 : SIP Trunk CODEC Information Basic Setup - RX Gain** Set the receive gain.	0-28 (-14dbm ~ +14dbm) 0 = -14dbm 1 = -13 dbm : 14 = 0dbm : 27 = 13dbm 28 = 14dbm	10
28	**84-13-28 : SIP Trunk CODEC Information Basic Setup - Audio Capability Priority** Define the CODEC Priority.	G711_PT G723_PT G729_PT	G711_PT
29	**84-13-29 : SIP Trunk CODEC Information Basic Setup - Echo Canceller Config. Type** Define the Echo Canceller Config. Type.	0-3	0
30	**84-13-30 : SIP Trunk CODEC Information Basic Setup - Auto Gain Control** Define the Auto Gain Control.	0-5	0
31	**84-13-31 : SIP Trunk CODEC Information Basic Setup - DTMF Payload Number** Define the DTMF Payload Number.	96-127	110
32	**84-13-32 : SIP Trunk CODEC Information Basic Setup - DTMF Relay Mode** Determine the DTMF setup.	0 = Disable 1 = Enable	0

Conditions

None

Program 84 : Hardware Setup for VoIP
84-13 : SIP Trunk CODEC Information Basic Setup

Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 84-13 (SIP Trunk CODEC Information Basic Setup):

1. Enter the programming mode.
2. 84 13

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:
IN

Aspire S	Aspire M/L/XL
• Available with software 2.63+.	• Available with software 2.63+.
• Item 10 requires software 2.65+.	• Item 10 requires software 2.65+.

Description

Use **Program 84-14 : SIP Trunk Basic Information Setup** to define the basic setup for SIP trunks.

Input Data

Item No.	Item	Input Data	Default
01	**INVITE ReTx Count** Set the INVITE Re TX Count.	0-255	7
02	**Request ReTX Count** Set the Request Re TX Count.	0-255	11
03	**Response ReTX Count** Set the Response Re TX Count.	0-255	7
04	**Request ReTX Start Time** Set the Request Re TX Start Time.	0-65535 (0ms-6553.5 seconds)	5 (500ms)
05	**Request MAX ReTX Interval** Set the Request MAX Re TX Interval.	0-65535 (0ms-6553.5 seconds)	40 (4000ms)
06	**SIP Trunk Port** Set the SIP Trunk port number (Receiving Transport for Aspire SIP).	1-65535	5060
07	**Session Timer Value** Set the Session Timer Value.	0-65535 seconds	0 (0 means "session timer is OFF")
08	**Minimum Session Timer Value** Set the Minimum Session Timer Value.	0-65535 seconds	1800 seconds
09	**Called Party Information** Set the Called Party Information.	0 = Request URI 1 = To header	0
10	**URL Type** Select either SIP URL (0) or TEL URL (1) for SIP Initial INVITE.	0 = SIP URL 1 = TEL URL	0

Conditions

None

Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 84-14 (SIP Trunk Basic Information Setup):

1. Enter the programming mode.
2. 84 14

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 84-15 : H.323 Keep Alive Setup** to setup the conditions for keeping a call to an H.323 phones alive when NetMeeting does not answer.

Input Data

Item No.	Item	Input Data	Default	Description
01	Automatic Deletion of Registration Information	0 = Disable 1 = Enable	0	
02	Keep Alive Message Interval	1-10 (minutes)	1	
03	Keep Alive Message Timeout	1-10 (seconds)	5	
04	Keep Alive Timeout	1-5 (minutes)	3	

Conditions

None

Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 84-15 (H.323 Keep Alive Setup):

1. Enter the programming mode.
2. 84 15

```
84-15-01
KeepAlive AutoDel  0:Off
 back  ↑     ↓  select
```

3. Enter the number of the item you want to program.

```
84-15-nn
nnnnn
  ←          →
```

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 84 : Hardware Setup for VoIP
84-16 : VOIPU Limiter Control Gain Setup

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available with software 1.11+.

Description

Use **Program 84-16 : VOIPU Limiter Control Gain Setup** to set the gains for the VOIPU PCB.

Input Data

Item No.	Item	Input Data	Default
01	**RX Limiter Control Gain** This option controls the limiter gain for IP to PCM direction. This option adds gain to the voice input from the LAN and removes it from the voice output to highway.	0-30 (-15 ~ +15) 0 = -15 dBM 1 = -14 dBm : 15 = 0 dBm : 29 = 14 dBm 30 = 15 dBm	25 (+10 dBm)
02	**TX Limiter Control Gain** This option controls the limiter gain for PCM to IP direction. This option adds the gain to the voice input from highway and removes it from the voice output to the LAN.		15 (0 dBm)
03	**RX Limiter Control Gain - COIU** This option controls the limiter gain for a COIU call in the IP to PCM direction.		15 (0 dBm)
04	**TX Limiter Control Gain - COIU** This option controls the limiter gain for a COIU call in the PCM to IP direction.		15 (0 dBm)

Conditions

None

Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 84-16 (VOIPU Limiter Control Gain Setup):

1. Enter the programming mode.
2. 84 16

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 84 : Hardware Setup for VoIP
84-17 : VOIPU Echo Canceller Control Setup

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available with software 1.18+. Requires VOIPU PCB firmware 3.2+.

Description

Use **Program 84-17 : VOIPU Echo Canceller Control Setup** to set the enhanced Echo Canceller function for the VOIPU PCB. The Type defined here is assigned in Program 84-01-60 (H.323 trunks), 84-11-29 (DtermIP), and 84-12-29 (H.323 phones).

Input Data

Type	1 - 5

Item No.	Item	Input Data	Default
01	Echo Canceller Mode	0 = Disable 1 = Enable	1 (Enabled)
02	**Echo Canceller Tail Size** If 84-06-12 (Long Tail Echo Mode) = on, this value is ignored – 84-06-14 is used instead. Only effective if 84-17-01 = enable.	1 = 8ms 2 = 16ms	2 (16ms)
03	Echo Canceller NLP Mode	0 = Disable 1 = Enable	0 (Disabled)
04	**Echo Canceller CNG CFG** Only effective if 84-17-03 = enable.	0 = Adaptive 1 = Fixed	0 (Adaptive)
05	**Echo Canceller NLP Noise** Only effective if 84-17-04 = fixed.	40 - 70 (-40dBm - 70dBm)	60 (-60dBm)
06	**NLP Aggressiveness Control** Determines if value in 84-17-07 is + or -. Only effective if 84-17-03 = enabled.	0 = + 1 = -	1 (-)
07	**NLP Aggressiveness Control Value** Setting of NLP strength. This entry is positive or negative based on the entry in 84-17-06.	0 - 32767	11000
08	**NLP Comfort Noise Configuration** Only effective if 84-17-03 = enabled.	0 - 32767	0
09	Echo Canceller 4W Detect	0 = Disable 1 = Enable	1 (Enabled)

Conditions

None

Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 84-17 (VOIPU Echo Canceller Control Setup):

1. Enter the programming mode.
2. 84 17

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 84 : Hardware Setup for VoIP
84-18 : VOIPU Echo Canceller Control Setup

Level:	Aspire S	Aspire M/L/XL
MF	• Available.	• Available with software 1.18+. Requires VOIPU PCB firmware 3.2+.

Description

Use **Program 84-18 : VOIPU Echo Canceller Control Setup** to set the advanced Echo Canceller functions for the VOIPU PCB. This function supports the following features:

- Supports long echo tail size (max. 128 msec)
- Adds adjustment parameters for echo cancellation

Input Data

Item No.	Item	Input Data	Default
01	NLP Level Configuration	0 = Off 1 = On	0 (Off)
02	Coeff Control	0 = Keep 1 = Reset	0 (Keep)
03	Auto Update Control	0 = On 1 = Off	0 (On)
04	Search Freeze Control	0 = Freeze 1 = Execute	1 (Execute)
05	(Debug) MIPS Agent Control	0 = Execute 1 = Freeze	0 (Execute)

Conditions

This program will not be displayed in PCPro until signing in with the MF level password.

Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 84-18 (VOIPU Echo Canceller Control Setup - MF):

1. Enter the programming mode.
2. 84 18

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 84 : Hardware Setup for VoIP

84-19 : SIP Extension CODEC Information Basic Setup

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 2.63+.	• Available with software 2.63+.

Description

Use **Program 84-19 : SIP Extension CODEC information Basic Setup** to define the CODEC information for the SIP extensions.

Input Data

Item No.	Item	Input Data	Default
01	**G.711 Audio Frame Number** Set the G.711 Audio Frame Number.	1-3	3
02	**G.711 VAD Detection Mode** Enable or disable the G.711 VAD Detection Mode.	0=Disable 1=Enable	0
03	**G.711 Type** Define the G.711 type.	0=A-law 1=μ-law	1
04	**G.711 Jitter Buffer (Min)** Set the minimum G.711 Jitter Buffer.	0-145 ms	30 ms
05	**G.711 Jitter Buffer (Type)** Set the G.711 Jitter Buffer type.	0-145 ms	60 ms
06	**G.711 Jitter Buffer (Max)** Set the maximum G.711 Jitter Buffer.	0-145 ms	120 ms
07	**G.729 Audio Frame Number** Set the G.729 Audio Frame Number.	1-8	3
08	**G.729 VAD Detection Mode** Enable or disable the G.729 VAD Detection Mode.	0=Disable 1=Enable	0
09	**G.729 Jitter Buffer (Min)** Set the minimum G.729 Jitter Buffer.	0-500 ms	30 ms
10	**G.729 Jitter Buffer (Type)** Set the G.729 Jitter Buffer type.	0-500 ms	60 ms
11	**G.729 Jitter Buffer (Max)** Set the maximum G.729 Jitter Buffer.	0-500 ms	120 ms
12	**G.723 Audio Frame Number** Set the G.723 Audio Frame Number.	1-2	1
13	**G.723 VAD Detection Mode** Enable or disable the G.723 VAD Detection Mode.	0=Disable 1=Enable	0

Item No.	Item	Input Data	Default
14	**G.723 Jitter Buffer (Min)** Set the minimum G.723 Jitter Buffer.	0-500 ms	30 ms
15	**G.723 Jitter Buffer (Type)** Set the G.723 Jitter Buffer type.	0-500 ms	60 ms
16	**G.723 Jitter Buffer (Max)** Set the maximum G.723 Jitter Buffer.	0-500 ms	120 ms
17	**Jitter Buffer Mode** Define the Jitter Buffer Mode.	1=Static 2=Adaptive During Silence 3=Adaptive Immediately	3
18	**VAD Threshold** Set the VAD (voice activity detection) threshold.	0-30 (-19db~+10db) 1 = -19db (-49dbm) : 20 = 0db (-30dbm) : 29 = 9dbm (-21dbm) 30 =10dbm (-20dbm)	20
19	**Idle Noise Level** Set the idle noise level.	5000-7000 (-5000dbm ~ -7000dbm)	7000
20	**Echo Canceller Mode** Enable or disable the Echo Canceller Mode.	0=Disable 1=Enable	1
21	**Echo Canceller Tail Size** Define the Echo Canceller Tail Size.	1=8ms 2=16ms 3=32ms	2
22	**Echo Canceller NLP Mode** Enable or disable the Echo Canceller NLP Mode.	0=Disable 1=Enable	0
23	**Echo Canceller NLP Noise** Define the Echo Canceller NLP Noise level.	40-70 (-40dbm ~ -70dbm)	70
24	**Echo Canceller CNG CFG** Set the Echo Canceller CNG CFG.	0=Adaptive 1=Fixed	0
25	**Echo Canceller 4W DET** Enable or disable the Echo Canceller 4W DET.	0=Disable 1=Enable	0
26	**TX Gain** Set the transmit gain.	0-28 (-14dbm ~ +14dbm) 0 = -14dbm 1 = -13 dbm : 14 = 0dbm : 27 = 13dbm 28 = 14dbm	10

Item No.	Item	Input Data	Default
27	**RX Gain** Set the receive gain.	0-28 (-14dbm ~ +14dbm) 0 = -14dbm 1 = -13 dbm : 14 = 0dbm : 27 = 13dbm 28 = 14dbm	10
28	**Audio Capability Priority** Define the CODEC Priority.	0=G711PT 1=G723_PT 3=G723_PT	0
29	**Echo Canceller Config. Type** Define the Echo Canceller Config. Type.	0-3	0
30	**Auto Gain Control** Define the Auto Gain Control.	0-5	0
31	**DTMF Payload Number** Set the DTMF setup (RFC2833).	96-127	96

Conditions

None

Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 84-19 (SIP Extension CODEC Information Setup):

1. Enter the programming mode.
2. 84 19

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 84 : Hardware Setup for VoIP
84-20 : SIP Extension Basic Information Setup

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 2.63+.	• Available with software 2.63+.

Description

Use **Program 84-20 : SIP Extension Basic Information Setup** to define the basic options for the SIP extensions.

Input Data

Item No.	Item	Input Data	Default
01	**Registrar/Proxy Port** Set the Registrar/Proxy Port.	1-65535	5070
02	**Session Timer Value** Set the Session Timer Value.	0-65535 (0=session timer is OFF)	180
03	**Minimum Session Timer Value** Set the Minimum Session Timer.	0-180 seconds	180
04	**Called Party Information** Set the Called Party Information.	0=Request URI 1=TO header	0
05	**Expire Value of Invite** Set the Expire Value of Invite.	0-256 seconds	60

Conditions

None

Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 84-20 (SIP Extension Basic Information Setup):

1. Enter the programming mode.
2. 84 20

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

- For Your Notes -

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 85-01 : SHUBU LAN Setup** to define the LAN setup for each slot.

Input Data

Hub Slot	1-16
Hub Port	0-8

Item No.	Item	Input Data	Default	Description
01	Auto Negotiation	0 = Enable 1 = Disable	0	
02	Link Speed	0 = 10Mbps 1 = 100Mbps	1	85-01-01 - Disable
03	Half Duplex/Hull Duplex	0 = Half 1 = Full	1	85-01-01 - Disable
04	Auto MDI/MDIX	0 = MDIX 1 = MDI 2 = Auto	2	When 85-01-01 is enabled, Auto MDI/MDIX will function.
05	Back Pressure	0 = Disable 1 = Enable	0	85-01-01 - Disable, 85-03-01 - Half
06	Flow Control	0 = Disable 1 = Enable	0	Full Duplex - 802.3x 85-01-01 - Disable 85-03-01 - Full

Conditions

None

Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 85-01 (SHUBU LAN Setup):

1. Enter the programming mode.
2. 85 01

3. Enter the number of the item you want to program.

4. Select the slot number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 85-02 : VLAN Setup** to define the VLAN setup for each SHUBU PCB.

Input Data

Hub Slot	1-16

Item No.	Item	Input Data	Default
01	VLAN Mode	0 = Disable 1 = Enable	0
02	Port 1 VLAN ID	1 - 4095	1
03	Port 2 VLAN ID	1 - 4095	1
04	Port 3 VLAN ID	1 - 4095	1
05	Port 4 VLAN ID	1 - 4095	1
06	Port 5 VLAN ID	1 - 4095	1
07	Port 6 VLAN ID	1 - 4095	1
08	Port 7 VLAN ID	1 - 4095	1
09	Port 8 VLAN ID	1 - 4095	1

Conditions

None

Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 85-02 (VLAN Setup):

1. Enter the programming mode.
2. 85 02

3. Enter the number of the item you want to program.

4. Select the slot number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 85-03 : Priority Setup** to set the priority of packet management for each SHUBU PCB.

Input Data

Hub Slot	1-16
Hub Port	0-8

Item No.	Item	Input Data	Default
01	Default Priority	0 = Disable 2 = Low 3 = High	0
02	RX High	0 - 7	1
03	TX High	0 - 7	7
04	TX Low	0 - 7	0

Conditions

None

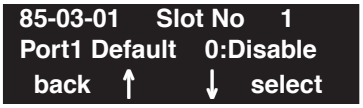
Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 85-03 (Priority Setup):

1. Enter the programming mode.
2. 85 03



3. Enter the number of the item you want to program.

4. Select the slot number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 85-04 : Port Mirroring Setup** to define the port mirroring setup for each SHUBU PCB.

Input Data

Hub Slot	1-16

Item No.	Item	Input Data	Default	Description
01	Port Mirroring	0 = Disable 1 = Enable	0	
02	Source Port	1 - 8	1	
03	Target Port	1 - 8	1	

Conditions

None

Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 85-04 (Port Mirroring Setup):

1. Enter the programming mode.
2. 85 04

3. Enter the number of the item you want to program.

4. Select the slot number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level: IN	Aspire S	Aspire M/L/XL
	• Available.	• Available.

Description

Use **Program 85-05 : SHUBU VLAN Group Settings** to define the VLAN group setup for each SHUBU PCB.

Input Data

Slot	1-16
VLAN Group	00-15

Item No.	Item	Input Data	Default	Description
01	VLAN ID	0 - 4095	0	
02	Port	00000000 - 11111111	00000000	
03	Tag Insert	00000000 - 11111111	00000000	

Conditions

None

Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 85-05 (SSHUBU VLAN Group Settings):

1. Enter the programming mode.
2. 85 05

3. Enter the number of the item you want to program.

4. Select the slot number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 90-01 : Installation Date** to define the installation date of system.

Input Data

Item No.	Item	Input Data	Default
01	Year	00-99	00 (No Setting)
02	Month	01-12	00 (No Setting
03	Day	01-31	00 (No Setting

Conditions

None

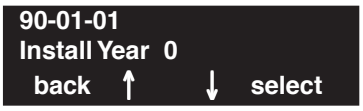
Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 90-01 (Installation Date):

1. Enter the programming mode.
2. 90 01



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 90 : Maintenance Program
90-02 : Setting the Programming Password

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 90-02 : Setting the Programming Password** to set the system passwords. For password entry purposes, the system allows 8 users to be defined. Each user can have a:

- Unique alphanumeric name (up to 10 alphanumeric characters long.
- Password entry of up to 8 digits (using 0-9, # and *)
- Password level

The "IN" level password is used by the "System Installer" for system programming purposes. The "SA" or "SB" level password cannot access the "IN" level programs. The reverse type (white on black) just beneath the Description heading is the program's access level. You can only use the program if your access level meets or exceeds the level the program requires. ("SA" level password can access to "SA" or "SB" programs, and "SB" level password can access to "SB" programs only.)

!! Caution !!
It is NOT recommended to change this data unnecessarily. If the digits are changed and then forgotten, there may be no normal way to enter the program mode again.

Input Data

User Number	1-8

Item No.	Item	Input Data
01	User Name	Max. 10 characters
02	Password	Up to 8 digits
03	User Level	0 = Prohibited user 1 = MF (Manufacturer level) 2 = IN (Installer level) 3 = SA (System administrator level 1) 4 = SB (System administrator level 2)

Default

User No.	User Name	Password	Level	Level Description
1	NEC-I	374772	1 (MF)	Manufacturer Level - Access to all system programs
2	ASPIRE	12345678	2 (IN)	Installer Level - Access to all programs IN level programs
3	ADMIN1	0000	3 (SA)	System Administrator Level 1 - Restricted access
4	ADMIN2	9999	4 (SB)	System Administrator Level 2 - More restricted access
5	-- Not Used --	-- Not Used --	-	
6	-- Not Used --	-- Not Used --	-	
7	-- Not Used --	-- Not Used --	-	
8	-- Not Used --	-- Not Used --	-	

Conditions

More than one extension can be in the programming mode.

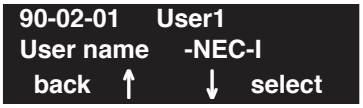
Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 90-02 (Setting the Programming Password):

1. Enter the programming mode.
2. 90 02



3. Enter the number of the item you want to program.

4. Select the User number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
SA	• Available.	• Available.

Description

Use **Program 90-03 : Save Data** to save the programmed data on the SRAM and Flash ROM to the 16M ATA Removable Compact Flash Memory card. This program should be used after changing the programmed data.

Input Data

Item No.	Item	Input Data
01	Save Data	Dial 1 and HOLD (Press only HOLD key to cancel)

Conditions

(A.) When reloading a customer database, the system must be reset (either using Program 90-08 or power down/power up) before all uploaded programming will take affect.
(B.) This program is only available in telephone programming.

Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 90-03 (Save Data):

1. Enter the programming mode.
2. 90 03

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 90 : Maintenance Program
90-04 : Load Data

Level:	Aspire S	Aspire M/L/XL
SA	• Available.	• Available.

Description

Use **Program 90-04 : Load Data** to load the system data from the inserted Compact Flash Memory to the SRAM and Flash ROM in the system.

Input Data

Item No.	Item	Input Data
01	Load Data	Dial 1 and HOLD (Press only HOLD key to cancel)

Conditions

(A.) After uploading the programming, reset the system and wait a few minutes for the system to reset completely before accessing any lines or special system features. Otherwise, some unusual LED indications may be experienced.

(B.) Aspire S and Aspire Customer Databases Not Interchangeable
Due to database differences, saved customer databases are **not** interchangeable between the Aspire S and Aspire systems.

The PCPro will prevent the upload of an incorrect database by disabling the Upload button when the system database does not match the system to which you are connected.

However, when using **Program 90-04 : Load Data**, the system will not be able to prevent an incorrect upload. It is important to make sure you only load data saved *from* an Aspire S *to* an Aspire S system and data saved *from* an Aspire *to* an Aspire system.

(C.) This program is only available in telephone programming.

Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 90-04 (Load Data):

1. Enter the programming mode.
2. 90 04

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 90 : Maintenance Program
90-05 : Slot Control

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 90-05 : Slot Control** to reset or delete (uninstall) circuit boards (slots 1-16).

Delete allows you to completely uninstall the PCB. You might want to do this if you want to remove a PCB and plug it into a different slot - and still retain the port assignments. If a different type of interface card is being installed into a slot previously used (example; changing from a ATRU to DSTU PCB), the slot should be deleted (option 1) first before installing the new interface card.

Reset allows you to send a reset code.

Input Data

Menu Number	1 = Delete 2 = Reset

Item No.	Item	Input Data
01	Slot Control	Slot Number (1-16)

Conditions

(A.) When you delete or reset a PCB, you must first remove it from its slot then run Program 90-05. When reusing the slot for another PCB, you must plug the PCB in or reset the system before the system will use the slot again.

(B.) This program is only available in telephone and WebPro programming.

Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 90-05 (Slot Control):

1. Enter the programming mode.
2. 90 05

3. Enter the number of the item you want to program.

4. Select the Menu number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter the slot number for the PCB + HOLD.

   The slot is deleted or reset, depending on the menu option selected. If the PCB is deleted, the display will advance to 90-06.
6. Press MSG once to enter a new item number.

   OR

   Press MSG until you've exited that series's programming section.

Program 90 : Maintenance Program
90-06 : Trunk Control

Level:	Aspire S	Aspire M/L/XL
SA	• Available.	• Available.

Description

Use **Program 90-06 : Trunk Control** is used for the trunk maintenance. Busy Out lets you block a PCB from placing outgoing calls (just like placing the PCB switch down). Once busied out, none of the ports on the PCB can be used for new calls. Existing calls, however, are not torn down.

Input Data

Menu Number	0 = Set Busy Out 1 = Reset/Release Busy Out

Item No.	Item	Input Data
01	Trunk Control	Trunk Port Number: Aspire S: 1-8 Aspire: 001-200

Conditions

This program is only available in telephone and WebPro programming.

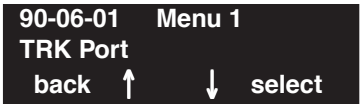
Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 90-06 (Trunk Control):

1. Enter the programming mode.
2. 90 06



3. Enter the number of the item you want to program.

4. Select the Menu number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 90 : Maintenance Program
90-07 : Extension Control

Level:	Aspire S	Aspire M/L/XL
SA	• Available.	• Available.

Description

Use **Program 90-07 : Extension Control** is used for the extension maintenance.

Input Data

Menu Number	1 = Hardware Reset 2 = Software Reset

Item No.	Item	Input Data
01	Extension Control	Extension Number (up to 8 digits)

Conditions

This program is only available in telephone and WebPro programming.

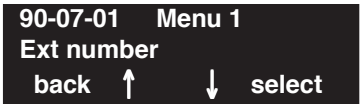
Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 90-07 (Extension Control):

1. Enter the programming mode.
2. 90 07



3. Enter the number of the item you want to program.

4. Select the Menu number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 90-08 : System Reset** is used to perform a system reset.

Input Data

Item No.	Item	Input Data
01	System Reset	Dial 1 and HOLD (Press only HOLD key for cancel)

Conditions

After restoring a customer database, the system must be reset using Program 90-08 or by powering down/powering up before all the restored programming will take affect.

Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 90-08 (System Reset):

1. Enter the programming mode.
2. 90 08

3. Enter the number of the item you want to program.

4. Dial 1 + HOLD to reset the system or press HOLD to cancel.
5. Press MSG until you've exited that series's programming section.

Program 90 : Maintenance Program
90-09 : Automatic System Reset Time

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 90-09 : Automatic System Reset Time** to define the time the system will automatically reset.

Input Data

Item No.	Item	Input Data	Default
01	Month	00-12 *(Note 1)*	00
02	Day	00-31 *(Note 2)*	00
03	Hour	00-23	00
04	Minute	00-59	00

Note 1. If the Month is set to "00" and Day has been set, the system will automatically be reset every month of defined day.

Note 2. If the Day is set to "00" and the Time (Hour and Minute) has been set, the system will automatically be reset every day of defined time.

Conditions

None

Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 90-09 (Automatic System Reset Time):

1. Enter the programming mode.
2. 90 09

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 90 : Maintenance Program
90-10 : System Alarm Setup

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 90-10 : System Alarm Setup** to assign a status to system alarms. You can designate an alarm as Major or Minor. This program also assigns whether or not the alarm is displayed to a key telephone and whether or not the alarm information is reported to the pre-defined destination.

Input Data

Alarm Number	001-100

Item No.	Item	Input Data
01	Alarm Type	0 = Not set 1 = Major Alarm 2 = Minor Alarm
02	Report	0 = Not report (No auto-dial) 1 = Report (auto-dial)

Default

Alarm	Type	Report	Note	Is Used To Advise of . . .	Action
1	2 (MIN)	0	Board Initialization Error	Initialization failure or the PCB is defective.	Remove and reinstall the PCB. If RECover message is received in the alarm report, the PCB is good. If not, replace with a new PCB.
2	2 (MIN)	0	Board Initial Test Error	PCB initial test failure or the PCB is defective.	Remove and reinstall the PCB. If RECover message is received in the alarm report, the PCB is good. If not, replace with a new PCB.
3	2 (MIN)	0	Board Installation Error	PCB was unplugged without using the proper procedure.	Check the PCB installation.
4	2 (MIN)	0	Communication Error Between Board and NTCPU	PCB communication failure has occurred.	Remove and reinstall the PCB. If RECover message is received in the alarm report, the PCB is good. If not, replace with a new PCB.

Alarm	Type	Report	Note	Is Used To Advise of . . .	Action
5	0	0	Download Error	Download may have failed because the PCB is blocked (disabled) or the sub-program does not exist on the system flash card.	After unblocking the PCB, if RECover message is received in the alarm report, it is corrected. If not, then replace the system flash card.
6	0	0	PCB Blocking		
7	1 (MAJ)	0	Power Failure	System power supply may be defective or commercial power is off.	Check the system AC switch, fuse and AC outlet. If still faulty, replace the power supply.
8	1 (MAJ)	0	RAM Backup Battery Error	RAM backup battery on the CPRU PCB is unplugged or defective.	Check the battery connector. If it is connected correctly, then replace the battery.
9	0	0	Blocking (No default setting)	Failure may have occurred because: • Terminal blocking detected. • Terminal is unplugged. • Wire is disconnected. • DSTU card is defective.	Check the terminal wiring and reconnect properly. Then unplug and plug in the PCB. If RECover message is received in the alarm report, it is correct. If not, replace the PCB and/or terminal.
10	0	0	ISDN Link Error		
11	0	0	CTI Link Error		
12	0	0	ACD MIS Link Error		
13	0	0		-- Not Used in U.S. --	
14	0	0	NTCPU-LAN Link Error		
15	0	0	Networking Keep Alive Error		
:	:	:	:		
30	2 (MIN)	0	SMDR Buffer Full	The SMDR buffer is full.	Check the printer for the SMDR.
:	:	:	:		
35	0	0	CS Blocking	-- Not Used in U.S. --	
36	0	0	CS Error Information 1	-- Not Used in U.S. --	
37	0	0	CS Transmission Error	-- Not Used in U.S. --	
38	0	0	CSIU Dch Error	-- Not Used in U.S. --	
39	0	0	CSIU Transmission Error	-- Not Used in U.S. --	

Alarm	Type	Report	Note	Is Used To Advise of . . .	Action
40	0	0	CS Error Information 2	-- Not Used in U.S. --	
41	0	0			
:	:	:			
50	0	0	System Startup Notification		
51	0	0	System Data Revision		
52	0	0	VM/HD Replacement Request		
60	0	0	SIP Registration Error Notification		
61	0	0	SIP Extension Error Notification		
62	0	0	DtermIP Error Notification		
:	:	:			
100	0	0	-- Not Used --		

Conditions

None

Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 90-10 (System Alarm Setup):

1. Enter the programming mode.
2. 90 10

3. Enter the number of the item you want to program.

4. Select the Alarm number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 90 : Maintenance Program

90-11 : System Alarm Report

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 90-11 : System Alarm Report** to define the details of the system alarm report.

Input Data

Item No.	Item	Input Data	Default
01	**System Alarm Display Telephone** Assign the display keyset extension number that should receive system alarms.	Extension Number (Up to 8 digits)	No setting
02	**Report Method** When alarm reports are to be EMailed, set this option to "1".	0 = No report 1 = EMail Address	0
04	**- Not Used -**	-	0
06	**SMTP Host Name** When alarm reports are to be EMailed, set the SMTP name (ex: smtp.yourisp.com) or IP address. Contact your ISP (internet service provider) for the correct entry if needed.	Up to 255 Characters	No setting
07	**SMTP Host Port Number** When alarm reports are to be EMailed, set the SMTP host port number. Contact your ISP (internet service provider) for the correct entry if needed.	0-65535	25
08	**To EMail Address** When alarm reports are to be EMailed, set this EMail address to which the report should be sent.	Up to 255 Characters	No setting
09	**Reply Address** When alarm reports are to be EMailed, set this EMail address to which any replies should be EMailed.	Up to 255 Characters	No setting
10	**From Address** When alarm reports are to be EMailed, set this EMail address from which the report is being sent. This entry is required for EMailing alarms.	Up to 255 Characters	No setting
11	**DNS Primary Address** When alarm reports are to be EMailed, set the DNS primary address.	0.0.0.0-255.255.255.255	0.0.0.0

12	**DNS Secondary Address** When alarm reports are to be EMailed, set the DNS secondary address.	0.0.0.0-255.255.255.255	0.0.0.0
13	**Customer Name** When alarm reports are to be EMailed, enter a name which will be used to identify the particular system.	Up to 255 Characters	No setting

Conditions

None

Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 90-11 (System Alarm Setup):

1. Enter the programming mode.
2. 90 11

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 90 : Maintenance Program

90-12 : System Alarm Output

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 90-12 : System Alarm Output** to set the options for the alarm report. This program has 6 separate menu options. Define the output port to be used as the output for system alarm report and set the system alarm options. The system can have up to 50 reports.

Input Data

Item No.	Item	Input Data	Default
01	**Output Port Type** Indicate the type of connection used for the System Alarms. The baud rate for the COM port should be set in Program 10-21-02.	0 = No setting 1 = COM port (NTCPU) 2 = USB port (NTCPU) 3 = -- Reserve – 4 = CTA/CTU	0
02	**Destination Extension Number** If the output port type (item 1) is set to CTA/CTU, enter the extension number with the CTA/CTU connection.	Extension Number (Up to 8 digits)	No setting
03	Output All Alarm Reports	Print All? (Yes = 1)	-
04	Printout New Alarm Reports	Print New? (Yes = 1)	-
05	Clear All Alarm Reports	All Clear? (Yes = 1)	-
06	Output Mode	0 = Manual 1 = Auto	0

Conditions

None

Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 90-12 (System Alarm Output):

1. Enter the programming mode.
2. 90 12

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 90 : Maintenance Program
90-13 : System Information Output

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 90-13 : System Information Output** to define the output port to be used as the system information output. The baud rate for the COM port should be set in Program 10-21-02.

Input Data

Item No.	Item	Input Data	Default
01	**Output Port Type** Indicate the type of connection used to print the system information.	0 = No setting 1 = COM port (NTCPU) 2 = USB port (NTCPU) 3 = -- Reserve – 4 = CTA/CTU	0
02	**Destination Extension Number** If the output port type (item 1) is set to CTA/CTU, enter the extension number with the CTA/CTU connection.	Extension Number (Up to 8 digits)	No setting
03	**Output Command** Dialing 1 from this program sends the system report to the connected device.	Dial 1 and press HOLD (Press only HOLD key for cancel)	-

Conditions

None

Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 90-13 (System Information Output):

1. Enter the programming mode.
2. 90 13

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
   When outputting the data (item 3), press 1 then press HOLD to print.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 90 : Maintenance Program
90-16 : Main Software Information

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 90-16 : Main Software Information** to display the main software information on the NTCPU. This information can also be viewed outside of system programming by pressing CHECK and then the HOLD key on any display keyset.

Input Data

Item No.	Item	Data	Component
01	Version Number	01.00~99.99	ASCII Code (5 Byte)
02	Software Release Date	May 22 2002 17:53:46	ASCII Code (20 Byte)

Conditions

None

Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 90-16 (Main Software Information):

1. Enter the programming mode.
2. 90 16

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.. • With software 4.96+, items 10, 12-17 have been removedas they are not used by the Aspire S.	• Available.

Description

Use **Program 90-17 : Firmware Information** to display the firmware information on the NTCPU and other PCBs.

Input Data

Item No.	Item	Data	Component
01	DSP Firmware Version Number	00.00.00.00 - 15.15.15.15	BCD Code (2 Byte)
02	DSPDBU Firmware Version Number	00.00.00.00 - 15.15.15.15	BCD Code (2 Byte)
03	ESI Firmware Version Number	00.00 - 15.15	BCD Code (1 Byte)
04	SLI Firmware Version Number	00.00 - 15.15	BCD Code (1 Byte)
05	COI Firmware Version Number	00.00 - 5.15	BCD Code (1 Byte)
06	BRI Firmware Version Number	00.00 - 15.15	BCD Code (1 Byte)
07	PRI Firmware Version Number	00.00 - 15.15	BCD Code (1 Byte)
08	CSIU Firmware Version Number	00.00 - 15.15	BCD Code (1 Byte)
09	CS Firmware Version Number	00.00 - FF.FF	BCD Code (1 Byte)
10	TLI Firmware Version Number ***Not Available for Aspire S***	00.00 - 15.15	BCD Code (1 Byte)
11	DIOP Firmware Version Number	00.00 - 15.15	BCD Code (1 Byte)
12	T1IU Firmware Version Number ***Not Available for Aspire S***	00.00 - 15.15	BCD Code (1 Byte)
13	VMSU Firmware Version Number ***Not Available for Aspire S***	00.00 - 15.15	BCD Code (1 Byte)
14	SHUBU Firmware Version Number ***Not Available for Aspire S***	00.00 - 15.15	BCD Code (1 Byte)
15	DSIU Firmware Version Number ***Not Available for Aspire S***	00.00 - 15.15	BCD Code (1 Byte)
16	APSU Firmware Version Number ***Not Available for Aspire S***	00.00 - 15.15	BCD Code (1 Byte)

Item No.	Item	Data	Component
17	VDHTU Firmware Version Number ***Not Available for Aspire S***	00.00 - 15.15	BCD Code (1 Byte)
19	32ESIU Firmware Version Number	00.00 - 15.15	BCD Code (1 Byte)

Conditions

None

Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 90-17 (Firmware Information):

1. Enter the programming mode.
2. 90 17

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
SA	• Not Available.	• Not Available.

Description

This program is not used.

Program 90 : Maintenance Program
90-19 : Dial Block Release

Level:	Aspire S	Aspire M/L/XL
SA	• Available.	• Available.

Description

When the extension number is entered in **Program 90-19 : Dial Block Release**, the extension will be released from the Dial Block restriction.

Input Data

Extension Number	Up to 8 digits

Item No.	Item	Input Data
01	Dial Block Release	[Release?] : Dial 1 and press HOLD (Press only HOLD key for cancel)

Conditions

This program is only available in telephone and WebPro programming.

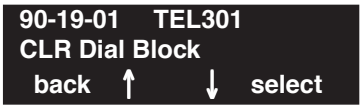
Feature Cross Reference

- Toll Restriction

Telephone Programming Instructions

To enter data for Program 90-19 (Dial Block Release):

1. Enter the programming mode.
2. 90 19



3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 90-20 : Traffic Report Data Setup** to define the details of the traffic report.

Input Data

Item No.	Item	Input Data	Default
01	Call Traffic Output	0 = Not measured 1 = Measure	0
02	- Not Used -	-	0
03	**- Not Currently Available -** All Line Busy Output	0 = Not detected 1-256 (Report when the data is reached to the defined value)	0
04	**- Not Currently Available -** DTMF Receiver Busy Output		0
05	**- Not Currently Available -** Dial Tone Detector Busy Output		0
06	**- Not Currently Available -** Caller ID Receiver Busy Output		0
07	**- Not Currently Available -** Voice Mail Channel All Busy Output		0
08	**- Not Currently Available -** ACD Operator All Busy Output		0
09	**- Not Currently Available -** Attendant Channel All Busy Output		0
10	**- Not Currently Available -** Base Station All Busy Output		0

Conditions

None

Feature Cross Reference

- Traffic Management Reporting (TMS)

Telephone Programming Instructions

To enter data for Program 90-20 (Traffic Report Data Setup):

1. Enter the programming mode.
2. 90 20

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 90-21 : Traffic Report Output** to define the output port to be used as the traffic report output.

Input Data

Item No.	Item	Input Data	Default
01	Output port type	0 = No setting 1 = COM port (NTCPU) 2 = USB port (NTCPU)	0

Conditions

None

Feature Cross Reference

- Traffic Management Reporting (TMS)

Telephone Programming Instructions

To enter data for Program 90-21 (Traffic Report Output):

1. Enter the programming mode.
2. 90 21

```
90-21-01
Output_Port    0:None
 back  ↑   ↓  select
```

3. Enter the number of the item you want to program.

```
90-21-nn
nnnnn
 ←              →
```

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 90 : Maintenance Program
90-22 : NGT Terminal Version Information

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 90-22 : NGT Terminal Version information** to define the hardware and firmware version of the NGT terminal.

Input Data

Terminal Type	1:Dterm IP 2:Smart Phone 3:Bandle IP Phone 4:ITR-32D-1D 5:IP1WW_IP_Adapter 6:ITR-LC-1 7:IP1NA-24TIXH 8:IP1WW-24TIXH

Item No.	Item	Input Data	Default
01	Hardware Version	00~FF	00
02	Firmware Version	00.00~FF.FF	00.00

Conditions

None

Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 90-22 (NGT Terminal Version Information):

1. Enter the programming mode.
2. 90 22

3. Enter the number of the item you want to program.

4. Select the Telephone Type/Kind number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 90 : Maintenance Program
90-23 : Deleting Registration of IP Telephones

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 90-23 : Deleting Registration of IP Telephones** to delete the registered IP telephone from the system.

Input Data

Extension Number	Up to 8 digits

Item No.	Item	Input Data
01	Delete IP Telephone	[Delete?] : Dial 1 and press HOLD (Press only HOLD key for cancel)

Conditions

This program is only available in telephone and WebPro programming.

Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 90-23 (Deleting Registration of IP Telephones):

1. Enter the programming mode.
2. 90 23

3. Enter the number of the item you want to program.

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 90-24 : System Alarm Report Notification Time Setup** to set up when the alarm report will print.

Input Data

Notification Number	1-12

Item No.	Item	Input Data	Default
01	Month	00-12 (00=disabled)	00
02	Day	00-31	00
03	Hour	00-23	00
04	Minute	00-59	00

Conditions

None

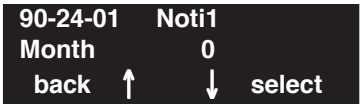
Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 90-24 (System Alarm Report Notification Time Setup):

1. Enter the programming mode.
2. 90 24



3. Enter the number of the item you want to program.

4. Select the Telephone Type/Kind number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 90-25 : System Alarm Report CC Mail Setup** to define the mail address to receive the system alarm report CC Mail setup.

Input Data

CC Number	1-5

Item No.	Item	Input Data	Default
01	CC Mail Address	Up to 255 Characters	No Setting

Conditions

None

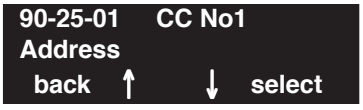
Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 90-25 (System Alarm Report CC Mail Setup):

1. Enter the programming mode.
2. 90 25



3. Enter the number of the item you want to program.

4. Select the Telephone Type/Kind number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 90 : Maintenance Program

90-26 : Program Access Level Setup

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 90-26 : Program Access Level Setup** to define the password access level required to change a system program.

Input Data

Program Numbers	1001 - 9201

Item No.	Item	Input Data	Default
01	Maintenance Level	1 = MF Level 2 = IN Level 3 = SA Level 4 = SB Level	Refer to the LEVEL indication for each individual program (located in the upper left-hand corner at the beginning of each program.

Conditions

None

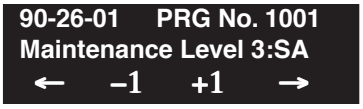
Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 90-26 (Program Access Level Setup):

1. Enter the programming mode.
2. 90 26



3. Enter the number of the item you want to program.

4. Select the program number to be set by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 90 : Maintenance Program
90-27 : Aspire Wireless System ID

Level:	Aspire S	Aspire M/L/XL
IN	• Not Available.	• Available.

Description

Use **Program 90-27 : Aspire Wireless System ID** to view or delete the ID number associated with the DSIU PCB. The system ID is a unique number embedded into the DSIU PCBs. This program data cannot be edited, but it can be viewed or deleted. After deleting the ID, the Aspire Wireless (DECT) PCB will be reset by the system. When exchanging DSIU PCBs, the system ID for the first PCB must first be deleted before installing the new PCB as each PCB has its own number.

Input Data

Item No.	Item	Input Data	Default
01	System ID	-	-

Conditions

None

Feature Cross Reference

Aspire Wireless

Telephone Programming Instructions

To enter data for Program 90-27 (Aspire Wireless System ID):

1. Enter the programming mode.
2. 90 27

   90-27-01
   No Identity Value
   back ↑ ↓ select

3. Enter the number of the item you want to program.

   90-27-01
   No Identity Value
   ← →

4. Enter data for the item you selected + HOLD.
5. Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available with software 1.18+. Requires VOIPU PCB firmware 3.2+.

Description

Use **Program 90-30 : VOIPOU Firmware Information** to display the firmware information on the VOIPU PCB.

Input Data

Item No.	Item	Data	Default
01	Firmware Version Number	00.00.00.00 - 15.15.15.15	00.00
02	LTEC Mode	0 = Off 1 = On	0 (Off)
03	LTEC CODEC		0

Conditions

None

Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 90-30 (VOIPU Firmware Information):

1. Enter the programming mode.
2. 90 30

   ```
   90-30-01        Slot1
   FW VersionNO    00.00
    back  ↑   ↓  select
   ```

3. Enter the number of the item you want to program.

   ```
   90-30-nn
   nnnnn
    ←              →
   ```

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 90 : Maintenance Program
90-31 : DIM Over Ethernet

Level:	Aspire S	Aspire M/L/XL
IN	• Available.	• Available.

Description

Use **Program 90-31 : DIM Over Ethernet** to define the setup used for DIM access over an ethernet connection.

Input Data

Item No.	Item	Input Data	Default
01	**Enable Access** Enable (1) or disable (0) the system's ability to allow DIM access via an ethernet connection.	0 = Disable 1 = Enable	0
02	**User Name** Enter the user name to be used when opening the terminal software. ***This entry is case-sensitive.***.	Up to 20 alphanumeric characters	ASPIRE
03	**Password** Enter the password to be used when opening the terminal software. ***This entry is case-sensitive.***	Up to 20 alphanumeric characters	12345678

Conditions

None

Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 90-31 (DIM Over Ethernet):

1. Enter the programming mode.
2. 90 31

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

- For Your Notes -

Program 91 : Aspire Wireless Subscription

91-06 : Aspire Wireless Subscription, New

Level:
SA

Aspire S	Aspire M/L/XL
• Not Available.	• Available.
• Port capacity for auto port assignment not available.	• Port range for auto port assignment changed with software 4.0E+.

Description

Program 91-06 : Aspire Wireless Subscription, New is used when registering an Aspire Wireless (DECT) phone to the system. You can select the port number to which the new phone will be subscribed, or you can enter "0" to have the system automatically assign an available port. This program is also used to enter the IPEI number assigned to the phone. Possible error messages seen while in this program are detailed below.

Refer to Phone Subscribing in the Aspire Wireless Manual (P/N 0893103) for complete details on subscribing a phone.

Prompt	Meaning
Rejected	The subscription procedure was rejected.
Canceled	You stopped the subscription procedure before it completed by pressing HOLD.
Canceled by Timer	The subscription procedure took longer than 10 minutes.
DECT has Not Worked	The DSIU PCB is not working.
Already Subscribed	The port number chosen it in use by another terminal.
No Port to Subscribe	There are no available port numbers.
Used by Port xxx	The Aspire Wireless (DECT) phone which has the IPEI you entered is subscribed to another port.

Conditions

This program is only available in telephone programming.

Feature Cross Reference

- Aspire Wireless

Program 91 : Aspire Wireless Subscription

91-06 : Aspire Wireless Subscription, New

Telephone Programming Instructions

To enter data for Program 91-06 (Aspire Wireless Subscription, New):

1. Enter the programming mode.
2. 90 27

3. To have the system automatically assign a port number to the phone, press "0" then HOLD. This assigns an available port within the range of 385-512.
   To manually select a port number, enter an available port number (002-512) then press HOLD.

   *The display shows **IPEI?**. The IPEI (International Portable Equipment Identity) is a unique number embedded into each Aspire Wireless phone.*
4. Enter the IPEI number for the Aspire Wireless phone or enter * as a wild character and the system will automatically retrieve the number for the phone being set up. Press HOLD. When the display shows "Ready?(1:Yes)", press 1 then HOLD.

   The IPEI number is the 13-digit serial number which is located on the label in the phone's battery compartment.
5. The display shows the port number assigned to the phone and the 4-digit AC (Authentication Code) number. **DO NOT PRESS HOLD** at this point or the subscription will be cancelled.
6. Using the Aspire Wireless phone to be registered, press the Menu key then press the Left Arrow key twice to display the **Login** option. Press OK.
7. Press the Right Arrow key once to display the **Subscription Create** option. Press OK.
8. The Aspire Wireless phone will search for the DSIU PCB and display the PCB's ID number once found.

   This may take a few seconds. If the ID number does not appear, check Program 90-27-01 to make sure the PCB is recognized.
9. Press OK.
10. Enter the 4-digit AC number displayed in Step 4 (Program 91-06-01) and press OK.
11. Once the phone has been registered, the phone will beep and ((.)) will appear in the lower left-hand corner. Program 91-06-01 will now show COMPLETED. Press HOLD and register another phone if required or continue with the next step.

    Prior to deleting an Aspire Wireless (DECT) phone from the system using **Program 91-07-01 : DECT Subscription - Delete***, make sure the DSIU PCB is installed in the system. If the DSIU is removed when Program 91-07-01 is run, the system will retain the DECT setting. This will prevent the Aspire Wireless phone(s) from being registered in the system again.*
12. Press MSG until you've exited that series's programming section.

Program 91 : Aspire Wireless Subscription

91-07 : Aspire Wireless Subscription, Delete

Level:	Aspire S	Aspire M/L/XL
SA	• Not Available.	• Available.

Description

Use **Program 91-07 : Aspire Wireless Subscription, Delete** to remove an Aspire Wireless (DECT) phone from the system.

Prior to deleting an Aspire Wireless (DECT) phone from the system, make sure the DSIU PCB is installed in the system. If the DSIU is removed when Program 91-07-01 is run, the system will retain the DECT setting. This will prevent the Aspire Wireless phone(s) from being registered in the system again.

Input Data

Item No.	Item	Input Data	Default
01	**Aspire Wireless Subscription, Delete** Delete one or all Aspire Wireless phones on the system. You can delete an individual phone by entering its port number or you can remove all the Aspire Wireless phones by entering "0".	Port Number or "0" to remove all Aspire Wireless phones.	-

Conditions

This program is only available in telephone programming.

Feature Cross Reference

- Aspire Wireless

Program 91 : Aspire Wireless Subscription

91-07 : Aspire Wireless Subscription, Delete

Telephone Programming Instructions

To enter data for Program 90-27 (Aspire Wireless System ID):

1. Enter the programming mode.
2. 90 27

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available. • Copying Program 23-02 requires software 2.67+.	• Available. • Copying Program 23-02 requires software 2.67+.

Description

Use **Program 92-01 : Copy by Extension Number** to copy the data for one program to another keyset, trunk , group, etc. Refer to the following charts to see which programs which can be copied.

Input Data

Program Number	XX-XX

Item No.	Item	Input Data
01	**Source Number** Enter the extension, trunk, group, etc. from which the data will be copied.	• In case of Trunk Base : Trunk Port Number 1-8 or 1-200 • In case of Trunk Group Base : Trunk Group Number 1-8 or 1-100 • In case of Extension Base : Extension Number (up to 8 digits) • In case of Department Group Base : Department Group Number 1-8 or 1-64 • In case of DSS : DSS Console Number 1-4 or 1-32
	Destination Number (From) Enter the first extension, trunk, group, etc. number to which the information is to be copied.	
	Destination Number (To) Enter the last extension, trunk, group, etc. number to which the information is to be copied. If the information is only be copied to one extension, trunk, group, etc., enter the information entered in the Destination Number (From) entry.	

Program 92 : Copy Program

92-01 : Copy by Extension Number

Note: Copy Program is applicable only for the following programs.

Trunk Port Base

Program No.	Program Name	Note
14-01	Trunk Basic Data Setup	Copy all data except Trunk Name (Item 01).
14-02	Analog Trunk Data Setup	
14-04	Behind PBX Setup	
14-08	Music on Hold Source for Trunks	
14-09	ACI Conversation Recording Destination for Trunk	
21-03	Trunk Group Routing for Trunks	
21-12	ISDN Calling Party Number Setup for Trunk	
22-02	Incoming Service Type Setup	
22-03	Trunk Ring Tone Setup	
22-05	IRG Assignment for Normal Ring Trunk	
22-08	Second IRG Setup for unanswered DIL / IRG	
31-05	Incoming Ring Tone Audible on External Speaker	

Trunk Group Base

Program No.	Program Name	Note
35-03	SMDR Port Assignment for Trunk Group	

Extension Base

(Refer to Program 92-03-01 to copy these programs by port number.)

Program No.	Program Name	Note
15-01	Extension Basic Data Setup (include Virtual Extension)	Copy all data except extension name (item 01).
15-02	Multi-Line Telephone Basic Data Setup	
15-03	Single Line Telephone Basic Data Setup	
15-04	PHS Terminal Basic Data Setup	Copy Item 11, 12 and 13.
15-06	Trunk Access Map for Extension	
15-07	Programmable Function Key	

15-08	Incoming Virtual Extension Ring Tone Setup	
15-09	Virtual Extension Ring Assignment	
15-10	Incoming Virtual Extension Ring Tone Order Setup	
15-11	Virtual Extension Delayed Ring Assignment	
15-12	Conversation Recording Destination for Extension	
20-06	Class of Service for Extension	
21-02	Trunk Group Routing for Extensions	
21-04	Toll Restriction Class for Extensions	
21-11	Hotline Assignment	
23-02	Call Pickup Group	
23-03	Ringing Line Preference	
23-04	Ringing Line Preference for Virtual Extensions	
24-03	Park Group Assignment	
31-02	Internal Paging Group Assignment	

Department Group Base

Program No.	Program Name	Note
16-01	Department (Extension) Group Basic Data Setup	Copy all data except Group Name (Item 01).
35-04	SMDR Port Assignment for Department Group	

DSS Console Base

Program No.	Program Name	Note
30-01	DSS Console Operation Mode	
30-03	DSS Key Assignment	

Conditions

Using this program to copy a keyset's Programmable Function Keys will copy all the keys whether they exist on the phone to which the programming is being copied. This may cause confusion when trying to define a key which is already defined but which doesn't exist on the phone (will display as "DUPLICATE DATA"). It is recommend to either clear these non-existent keys or to only copy from an extension which has the same or fewer number of keys than the extension to which the programming is being copied.

Program 92 : Copy Program

92-01 : Copy by Extension Number

Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 92-01 (Copy by Extension Number):

1. Enter the programming mode.
2. 92 01

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:
IN

Aspire S	Aspire M/L/XL
• Available with software 2.65+.	• Available with software 2.65+.
• Copying Program 23-02 requires software 2.67+.	• Copying Program 23-02 requires software 2.67+.

Description

Use **Program 92-03 : Copy by Port Number** to copy the data for a keyset to another keyset based on the port number. Refer to the following chart to see which programs which can be copied.

Copy Program is applicable only for the following programs.
(Refer to Program 92-01-01 to copy these programs by extension number.)

Program No.	Program Name	Note
15-01	Extension Basic Data Setup (include Virtual Extension)	Copy all data except extension name (item 01).
15-02	Multi-Line Telephone Basic Data Setup	
15-03	Single Line Telephone Basic Data Setup	
15-04	PHS Terminal Basic Data Setup	Copy Item 11, 12 and 13.
15-06	Trunk Access Map for Extension	
15-07	Programmable Function Key	
15-08	Incoming Virtual Extension Ring Tone Setup	
15-09	Virtual Extension Ring Assignment	
15-10	Incoming Virtual Extension Ring Tone Order Setup	
15-11	Virtual Extension Delayed Ring Assignment	
15-12	Conversation Recording Destination for Extension	
20-06	Class of Service for Extension	
21-02	Trunk Group Routing for Extensions	
21-04	Toll Restriction Class for Extensions	
21-11	Hotline Assignment	
23-02	Call Pickup Group	
23-03	Ringing Line Preference	
23-04	Ringing Line Preference for Virtual Extensions	
24-03	Park Group Assignment	
31-02	Internal Paging Group Assignment	

Input Data

Item No.	Item	Input Data
01	**Copy Function** Enter the program from which the data will be copied.	4-Digit Program Number (ex: 15-07 = 1507)
	Copy Source Enter the extension port number from which the information is to be copied.	Extension Number (max. 8 digits)
	Copy Start Enter the first extension port number to which the information is to be copied.	Extension Number (max. 8 digits)
	Copy End Enter the last extension port number to which the information is to be copied. If the information is only be copied to one port number, enter the information entered in the Copy Start entry.	Extension Number (max. 8 digits)

Conditions

Using this program to copy a keyset's Programmable Function Keys will copy all the keys whether they exist on the phone to which the programming is being copied. This may cause confusion when trying to define a key which is already defined but which doesn't exist on the phone (will display as "DUPLICATE DATA"). It is recommend to either clear these non-existent keys or to only copy from an extension which has the same or fewer number of keys than the extension to which the programming is being copied.

Feature Cross Reference

None

Telephone Programming Instructions

To enter data for Program 92-03 (Copy by Port Number Program):

1. Enter the programming mode.
2. 92 03

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
   OR
   Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 92 : Copy Program
92-04 : Extension Data Swap

Level:
IN

Aspire S	Aspire M/L/XL
• Available with software 2.65+.	• Available with software 2.65+.
• Additional programs added for swapping requires software 2.67+.	• Additional programs added for swapping requires software 2.67+.

Description

Use **Program 92-04 : Extension Data Swap** to swap an extension's programming to another extension number.

The following extension-based programs can be swapped:

Program No.	Program Name
11-02	Extension Numbering
12-05	Night Mode Group Assignment for Extensions [1]
13-03	Abbreviated Dialing Group Assignment for Extensions [1]
15-01	Extension Basic Data Setup (include Virtual Extension)
15-02	Multi-Line Telephone Basic Data Setup
15-03	Single Line Telephone Basic Data Setup
15-06	Trunk Access Map for Extension
15-07	Programmable Function Key
15-08	Incoming Virtual Extension Ring Tone Setup
15-09	Virtual Extension Ring Assignment
15-10	Incoming Virtual Extension Ring Tone Order Setup
15-11	Virtual Extension Delayed Ring Assignment
15-12	Conversation Recording Destination for Extension
15-13	Loop Keys [1]
15-14	Programmable One-Touch Keys [1]
16-02	Department Group Assignment for Extensions [1]
20-06	Class of Service for Extension
21-02	Trunk Group Routing for Extensions
21-04	Toll Restriction Class for Extensions
21-07	Toll Restriction Override Password Setup
21-10	Dial Block Restriction Class Per Extensions [1]
21-11	Hotline Assignment
21-13	ISDN Calling Party Number Setup for Extensions [1]
21-15	Individual Trunk Group Routing for Extensions [1]
21-18	IP Trunk Calling Party Number Setup for Extensions [1]

21-19	IP Trunk (SIP) Calling Party Number Setup for Extensions [1]
21-20	SIP Trunk Call Discernment Setup for Extensions [1]
22-04	Incoming Extension Ring Group Assignment [1]
22-06	Normal Incoming Ring Mode [1]
23-02	Call Pickup Group
23-03	Ringing Line Preference
23-04	Ringing Line Preference for Virtual Extensions
24-03	Park Group Assignment
24-06	Fixed Call Forwarding [1]
24-07	Fixed Call Forwarding Off-Premise [1]
26-04	ARS Class of Service [1]
26-07	Not used in U.S. [1]
31-02	Internal Paging Group Assignment
41-02	ACD Group and Agent Assignments [1]
41-17	ACD Login Mode Setup [1]
42-02	Hotel/Motel Telephone Setup [1]

[1] These items require software 2.67+.

Input Data

Item No.	Item	Input Data
01	**Extension Data Swap** Enter the two extension numbers which should be swapped. After pressing HOLD, the system data for the programs listed in the table above will be swapped. Any user-defined programming stored in the SRAM will not be swapped (for example, Call Forward set up, Selectable Display Messaging, etc.).	**Extension Number 1:** Extension Number (max. 8 digits) **Extension Number 2:** Extension Number (max. 8 digits)

Program 92 : Copy Program
92-04 : Extension Data Swap

Conditions

- Any user-defined programming stored in the SRAM will not be swapped (for example, Call Forward set up, Selectable Display Messaging, etc.).
- ***The extensions to be swapped must be idle*** while the swap is performed, or an "Invalid" error message will be received.
- Data for virtual extension's cannot be swapped.
- When a swap is performed, the following actions are executed for the swapped extensions.
  - Camp On Clear (Program 11-12-05)
  - Common Cancel (Program 11-12-37)
  - Last Number Redial Clear (Program 11-17-17)
  - Saved Number Clear (Program 11-12-18)
  - Incoming History data is deleted.
- ***Using Program 92-04-01 will also swap the order in which these extensions are displayed in all extension-related programs***. This means that the system will no longer display all the extension numbers from low to high. For example, if port 2 and 6 were swapped, when viewing the extensions in 15-02-01, the extensions will display in the following order: 301, 306, 303, 304, 305, 302.

Feature Cross Reference

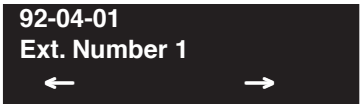
Maintenance

Telephone Programming Instructions

To enter data for Program 92-04 (Extension Data Swap):

1. Enter the programming mode.
2. 92 04

3. Enter the number of the item you want to program.



4. Enter data for the item you selected + HOLD.
5. Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 4.0E+.	• Available with software 4.0E+.

Description

Use **Program 92-05 : Data Swap Password** to define the password to be used by each extension when using the Extension Data Swap feature using a service code.

Input Data

Item No.	Item	Input Data	Default
01	**Password for Extension Data Swap** This program defines the password to be used by each extension when using the Extension Data Swap feature using a service code.	0 - 9, *, # (Fixed 4 digits)	No Setting

The following extension-based programs can be swapped:

Program No.	Program Name
11-02	Extension Numbering
12-05	Night Mode Group Assignment for Extensions
13-03	Abbreviated Dialing Group Assignment for Extensions
15-01	Extension Basic Data Setup (include Virtual Extension)
15-02	Multi-Line Telephone Basic Data Setup
15-03	Single Line Telephone Basic Data Setup
15-06	Trunk Access Map for Extension
15-07	Programmable Function Key
15-08	Incoming Virtual Extension Ring Tone Setup
15-09	Virtual Extension Ring Assignment
15-10	Incoming Virtual Extension Ring Tone Order Setup
15-11	Virtual Extension Delayed Ring Assignment
15-12	Conversation Recording Destination for Extension
15-13	Loop Keys
15-14	Programmable One-Touch Keys
16-02	Department Group Assignment for Extensions
20-06	Class of Service for Extension
21-02	Trunk Group Routing for Extensions
21-04	Toll Restriction Class for Extensions
21-07	Toll Restriction Override Password Setup
21-10	Dial Block Restriction Class Per Extensions

Program 92 : Copy Program
92-05 : Data Swap Password

Program No.	Program Name
21-11	Hotline Assignment
21-13	ISDN Calling Party Number Setup for Extensions
21-15	Individual Trunk Group Routing for Extensions
21-18	IP Trunk Calling Party Number Setup for Extensions
21-19	IP Trunk (SIP) Calling Party Number Setup for Extensions
21-20	SIP Trunk Call Discernment Setup for Extensions
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Conditions

(A.) Any user-defined programming stored in the SRAM will not be swapped (for example, Call Forward set up, Selectable Display Messaging, etc.).

(B.) The extensions to be swapped must be idle while the swap is performed, or an "Invalid" error message will be received.

(C.) Data for virtual extension's cannot be swapped.

(D.) When a swap is performed, the following actions are executed for the swapped extensions.
- Camp On Clear (Program 11-12-05)
- Common Cancel (Program 11-12-37)
- Last Number Redial Clear (Program 11-12-17)
- Saved Number Clear (Program 11-12-18)
- Incoming History data is deleted.

(E.) Using this option will also swap the order in which these extensions are displayed in all extension-related programs . This means that the system will no longer display all the extension numbers from low to high. For example, if port 2 and 6 were swapped, when viewing the extensions in 15-02-01, the extensions will display in the following order: 301, 306, 303, 304, 305, 302.

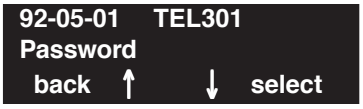
Feature Cross Reference

- Maintenance

Telephone Programming Instructions

To enter data for Program 92-05 (Data Swap Password):

1. Enter the programming mode.
2. 92 05



3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 92 : Copy Program
92-06 : Fill Extension Data

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 4.93+.	• Available with software 4.93+.

Description

Use **Program 92-06 : Fill Extension Data** to fill program entries for a range of extensions to the same as a designated source extension. In addition, program data can be deleted for a range of ports (see Program 92-07).

Input Data

Item No.	Item	Input Data
01	**Fill Extension Data** Enter the 4-digit program number you would like to fill. For example, Program 11-02 would be entered as "1102". Enter the source extension number (the extension which contains the data to be used) and press HOLD. Next, enter the first extension number to be filled and press HOLD. Enter the last extension number to be filled and press HOLD. The data from the source extension for that program will then be entered into the range of extensions defined.	• 4-Digit Program Number (no hypens) • Source Extension Number • First Extension Number in Destination • Last Extension Number in Destination

The Fill program can be used only with the following programs:

Program No.	Program Name
11-02	Extension Numbering
11-04	Virtual Extension Numbering
11-06	ACI Extension Numbering
11-07	Department Group Pilot Numbers
11-08	ACI Group Pilot Number
11-17	ACD Group Pilot Number

Conditions

(A.) With the Fill function, if the data is out of range, the display will show "Invalid Data" and allow you to reenter the range.

(B.) If data to be filled is duplicate data, the display will show "Fail to fill" and allow you to reenter the range.

Feature Cross Reference

- Maintenance

Telephone Programming Instructions

To enter data for Program 92-06 (Fill Extension Data):

1. Enter the programming mode.
2. 92 06

3. Enter the number of the item you want to program.

4. Enter the 4-digit program number you would like to fill (xxxx).

5. Enter the source extension number (which contains the data to be used) + HOLD.

6. Enter the first extension number to be filled + HOLD.

7. Enter the last extension number to be filled + HOLD.

8. Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

Program 92 : Copy Program
92-07 : Delete Port Data

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 4.93+.	• Available with software 4.93+.

Description

Use **Program 92-07 : Delete Port Data** to delete data for a range of ports.

Input Data

Item No.	Item	Input Data
01	**Delete Port Data** Enter the 4-digit program number you would like to delete. For example, Program 11-02 would be entered as "1102". Enter the first port number to be deleted and press HOLD. Enter the last port number to be deleted and press HOLD. The data for that program will then be erased for the range of ports defined.	• 4-Digit Program Number (no hypens) • First Port Number to be Deleted • Last Port Number into be Deleted

The Delete program can be used only with the following programs:

Program No.	Program Name
11-02	Extension Numbering
11-04	Virtual Extension Numbering
11-06	ACI Extension Numbering
11-07	Department Group Pilot Numbers
11-08	ACI Group Pilot Number
11-17	ACD Group Pilot Number

Conditions

(A.) If the range of ports entered for the Delete function includes all ports, port 001 will not be deleted (to ensure phone programming can still be accessed).

Feature Cross Reference

- Maintenance

Telephone Programming Instructions

To enter data for Program 92-07 (Delete Port Data):

1. Enter the programming mode.
2. 92 07

3. Enter the number of the item you want to program.

4. Enter the 4-digit program number you would like to delete (xxxx).

5. Enter the first port number to be deleted + HOLD.

6. Enter the last port number to be deleted + HOLD.

7. Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

- For Your Notes -

Level:	Aspire S	Aspire M/L/XL
IN	• Available with software 2.62+.	• Available with software 2.62+..

Description

Use **Program 99-01 : MF Options** to adjust certain system functions.

Input Data

Item No.	Item	Input Data	Default
16	**System Clock Adjustment** Automatically adjust the system clock forward or backward at every midnight. The system clock of some Aspire S cabinets may not be accurate. With this program, the system is able to automatically adjust the system clock at every midnight. ***This program is only available through telephone programming.*** ***No other programs in 99-01-xx should be adjusted. Leave all other entries at their default setting.***	• 0 = No adjustment • 1 - 127 = seconds to be added to clock • 128 - 255 = seconds to be backed up on the clock (-128 to -1 seconds).	0
32	**Type of Number** Use this option to define the ISDN numbering plan to allow the calling party information to be passed to some telcos. **Note that with software 4.93+, Program 10-03-18 is used instead.**	0 = Unknown 1 = International number 2 = National number 3 = Network Specific number 4 = Subscriber number 5 = Abbreviated number	3
33	**Numbering Plan Identification** passed to some telcos. **Note that with software 4.93+, Program 10-03-19 is used instead.**	0 = Unknown 1 = ISDN numbering plan 2 = Data numbering plan 3 = Telex numbering plan 4 = National standard numbering plan 5 = Private numbering plan	1

Conditions

None

Feature Cross Reference

- ISDN Compatibility
- Time and Date

Program 99 : MF Options
99-01 : MF Options

Telephone Programming Instructions

To enter data for Program 99-01 (MF Options):

1. Enter the programming mode.
2. 99 01

3. Enter the number of the item you want to program.

4. Enter data for the item you selected + HOLD.
5. Press MSG once to enter a new item number.
   OR
   Press MSG until you've exited that series's programming section.

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