



Features Manual

Issue : 1.2
Date : April 2005
991434-5

Revision History

Issue No.	Date	Reason of Change
1.0	January 2005	Based on NEC AP 1 st Release Manual
1.1	February 2005	<p>Abbreviated Dialing Add Extension Abbreviated Dialing Add the operation of Common and Group Abbreviated dialing</p> <p>Remove references to Super Display telephones (Alphanumeric Display, Volume Controls)</p> <p>Attendant Call Queuing Add calls to IRG queue automatically. Add DDI calls to queue total.</p> <p>Central Office Calls, Answering Delete the option to listen/change the ring tones</p> <p>Caller ID Add type (FSK/DTMF), Abb dial alpha tagging and SLT caller ID Add Caller ID Sending</p> <p>Conference Remove reference to ADA for conversation recording</p> <p>Conference/Privacy Release Remove reference to ADA for conversation recording Add Cost Centre Codes</p> <p>Add Department Group options</p> <p>Add DDI</p> <p>Add DISA dial in mode and password</p> <p>DSS Console Remove Alternate answer option Remove the statement "there is no limit to the number of 64 button console per extension" Revise operation to XN120 method Headset - Add headset type limitations</p> <p>LCR Least Cost Routing – add additional operation detail</p> <p>Add Line Reversal</p> <p>Loop Keys - Add a note that each phone has a loop key on key 10</p> <p>Message Waiting -Remove ring reminder and VRS announcement for message waiting indication</p> <p>Music on hold - Add the exmoh socket on the main unit. Add additional info for MOH per DDI etc</p> <p>Name Storing - Add the truncation of names greater than 8 characters.</p> <p>Paging, Internal – remove codes 00-32 as only 0-6 are available on the XN120</p> <p>Park – Remove the Enhanced Dial Buffering as this is not an option. Remove Split feature as this requires 2 CALL keys, the XN120 only has 1 CALL key so split does not work.</p> <p>Programmable Function keys Add list of function codes Add diagrams to shows the key layout of the phone Add 24 button add on console Add Reason of Transfer Display</p>

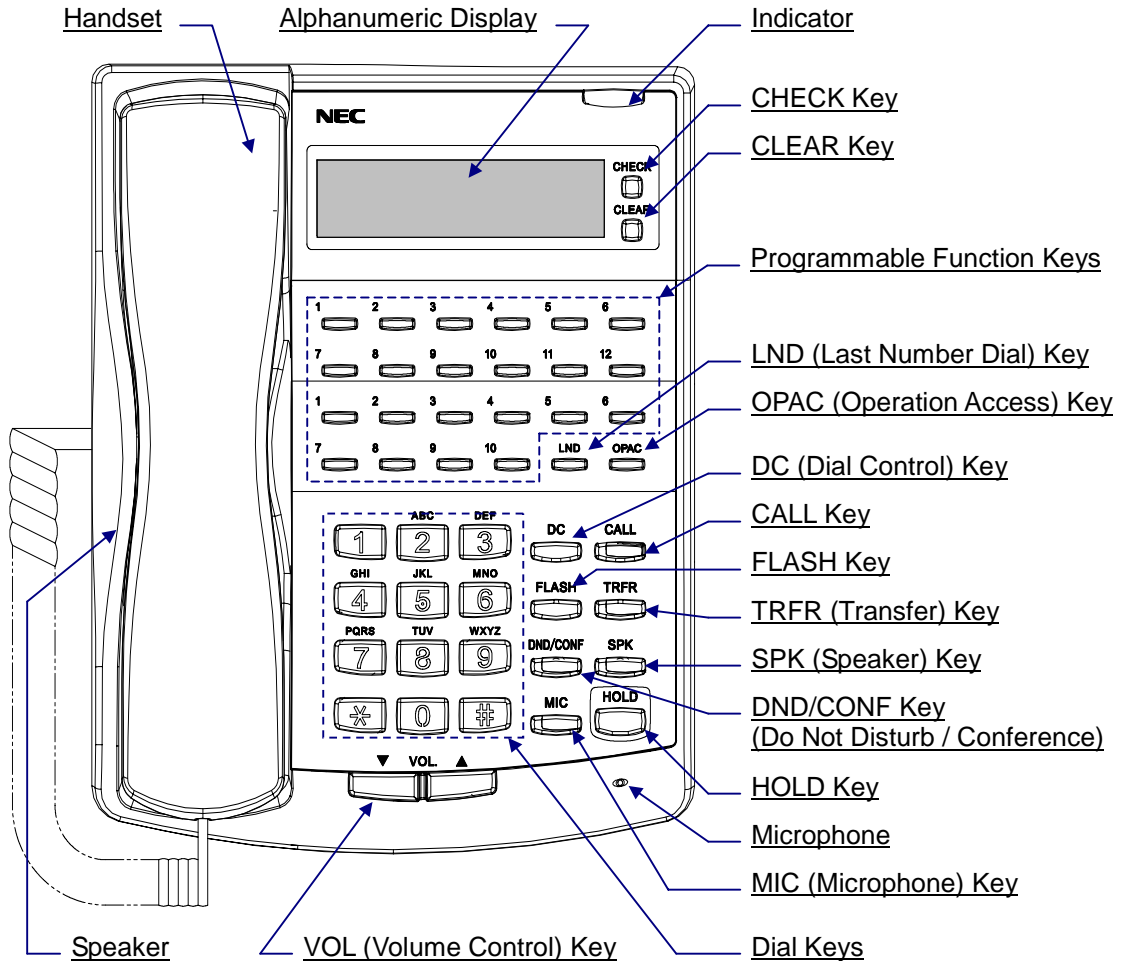
Issue No.	Date	Reason of Change
1.1	February 2005	Single Line telephone – Add specifications
		SMDR – Add correct output examples and options from the EXIFU guide.
		Add Trunk to Trunk Forwarding
		Add Trunk to Trunk Transfer
1.2	April 2005	Message Waiting Message Waiting has references to VRS indication. This has been removed as it is not available.
		Alphanumeric Display Add the multi language options.
		Central Office Calls – Answering Add Program 20-09-06 to select the display when an ISDN trunk call is ringing.
		Class of Service Add Program 20-09-06 to select the display when an ISDN trunk call is ringing.
		Direct Dial In Add Program 20-09-06 to select the display when an ISDN trunk call is ringing.

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Location of Controls

1. XN120 System Telephone

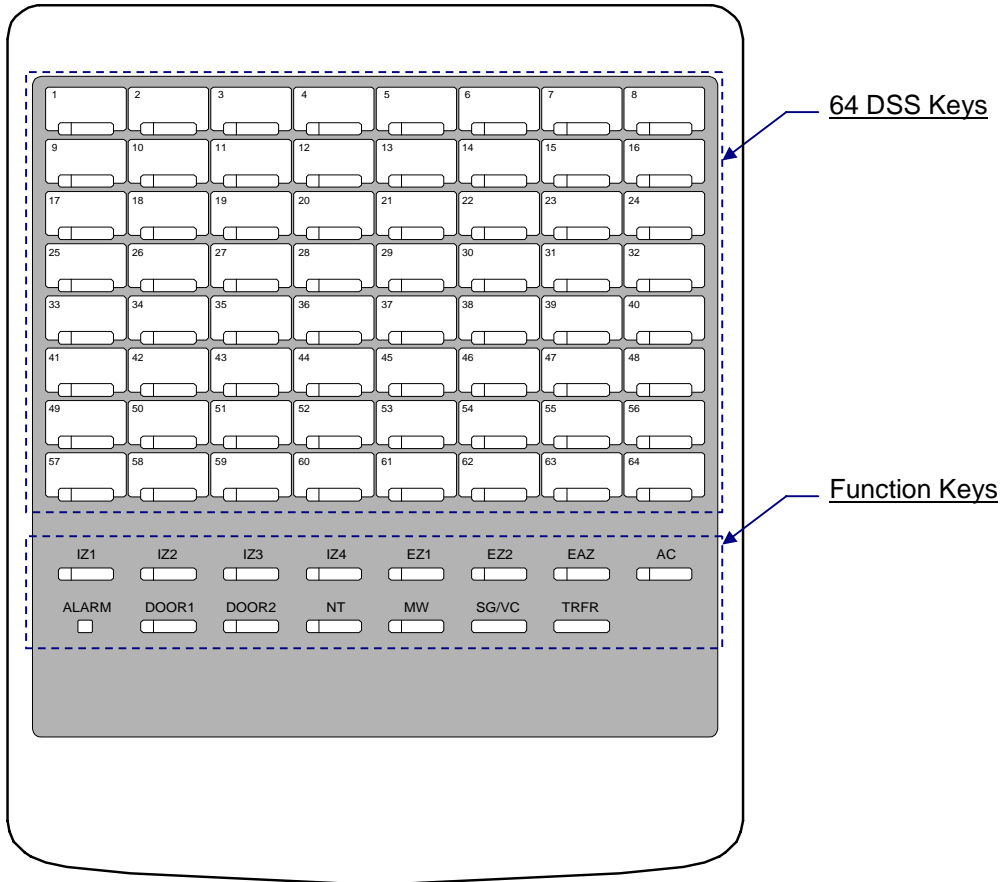


Functions	12TXH	12TH	6TXD	6TD
Programmable Keys	12	12	6	6
Additional Prg. Keys	10	10	10	10
Display	Yes	No	Yes	No
CHECK/CLEAR Keys	Yes	No	Yes	No
Handsfree	Yes	No (Talkback)	Yes	No (Talkback)
Accept DLS Console	Yes	No	Yes	No
Wall Mount Kit	Yes (Built-in)	Yes (Built-in)	Yes (Built-in)	Yes (Built-in)

 The BLF (Busy Lamp Field) on Additional Programmable Keys are not available on the standard type Key Telephones (12TD / 6TD).

Location of Controls

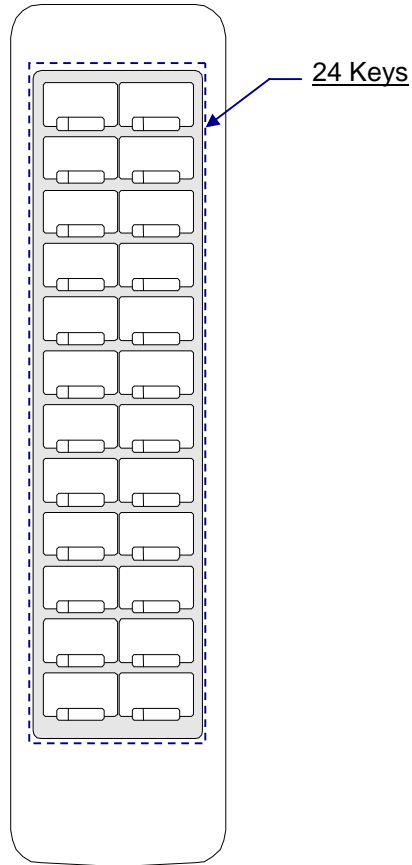
2. 64 Button DSS (Direct Station Selection) Console



Function Keys

Indication	Function Name
IZ1 ~ IZ4	Internal Paging (Zone 1 ~ 4)
EZ1 ~ EZ2	External Paging (Zone 1 and 2)
EAZ	External All Paging
AC	External / Internal All Call
DOOR1 ~ DOOR2	Doorphone Call (Doorphone 1 and 2)
NT	Night Mode Switching
M/W	Message Waiting
SG/VC	Intercom Call Mode Switching (Signal / Voice)
TRFR	Transfer

3. 24 Button Add On Console



Abbreviated Dialling

■ Description

Abbreviated Dialling 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 dialling a long telephone number, the extension user just dials the Abbreviated Dialling code.

There are three types of Abbreviated Dialling: Common, Group and Personal. All co-workers can share the Common Abbreviated Dialling numbers. All co-workers in the same Abbreviated Dialling Group can share their Group's Abbreviated Dialling numbers. Personal Abbreviated Dialling numbers are available only at a user's own extension. The system has 2000 Abbreviated Dialling bins that you can allocate between Common and Group Abbreviated Dialling. Each telephone has 20 Personal Abbreviated Dialling bins that are independent of the 2000 system bins.

Each Abbreviated Dialling bin can store a number up to 36 digits long.

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

Common Abbreviated Dialling

At default the system has 900 Common Abbreviated Dials set by Program 13-01-03. Although there are 2000 abbreviated dialling bins available we do not recommend that you increase the quantity of Common Abbreviated Dial bins (since the Personal Abbreviated bins are also accessed with bin numbers 900-919 by the user).

The entries of the Common Abbreviated bins can be set either with Program 13-04-01 or with Service Code 853. They can be dialled by pressing the DC key or Service Code 813 followed by the bin number.

Group Abbreviated Dialling

At default there are no groups assigned in Program 13-02-01. There are up to 32 groups available. You can set the quantity of bins available for each group; the quantity must be in multiples of 10. The bins used for each group cannot overlap any other group or the Common Abbreviated bins.

The entries of the Group Abbreviated bins can be set either with Program 13-04-01 or with Service Code 854. They can be dialled by Service Code 814 followed by the bin number.

When using Service Codes 854 and 814 the bin number starts at 000 for each group regardless of the actual start bin number defined in Program 13-02-01.

Personal Abbreviated Dialling

There are 20 Personal bins available for each extension.

The entries of the Personal Abbreviated bins can be set with Service Code 853 at each telephone. They can be dialled by Service Code 814 followed by the bin number 900-919.

DSS Console Chaining

DSS Console chaining allows an extension user with a DSS Console to chain to an Abbreviated Dialling number stored under a DSS Console key. The stored number dials out (chains) to the initial call. This can, for example, simplify dialling when calling a company with an Automated Attendant. You can program the bin for the company number under one DSS Console key and the client's extension number under the other DSS Console key. 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. See Programming below for additional details.

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

Features

Storing a Flash

To enhance compatibility with connected PBX lines, an Abbreviated Dialling 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 Dialling Programmable Function Key can also store an Abbreviated Dialling 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 Dialling bins assigned.

■ Programming

- 13-01-03 : Abbreviated Dialling Function Setup - Common Abbreviated Dialling Bins
- 13-02-01 : Group Abbreviated Dialling Bins
- 13-03-01 : Abbreviated Dialling Groups Assignment for Extensions
- 13-04-01 : Abbreviated Dialling Number and Name
- 13-05-01 : Abbreviated Dialling Trunk Group
- 14-02-06 : Analogue Trunk Data Setup - Pause Time
- 15-07-01 : Programming Function Keys
- 20-06-01 : Class of Service for Extensions
- 20-07-04 : COS Options - Storing Abbreviated Dialling Entries
- 20-08-03 : COS Options (Outgoing Call Service) - Common Abbreviated Dialling
- 20-08-04 : COS Options (Outgoing Call Service) - Group Abbreviated Dialling
- 30-03-01 : DSS Console Key Assignment

■ Related Features

- Account Codes
- Automatic Route Selection
- Central Office Calls, Placing
- Dial Tone Detection
- PBX Compatibility
- Programmable Function Keys
- Single Line Telephones
- Toll Restriction
- Trunk Group Routing

■ Operation

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

1. Press a SPK key.
2. Dial 853 (for common or personal) or 854 (for group).
3. Dial common or group storage code (000 - 1999), 900-919 are Personal Abbreviated bins.
Initially, there are 900 Common Abbreviated Dialling codes. There are Group Abbreviated Dialling codes only if you define them in programming.
4. Dial telephone number you want to store (up to 36 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 Dialling number.
When entering the name in the procedures below, refer to this chart. Names can be up to 12 digits long.

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 ! " # \$ % & ' ()
*	Enter characters: * + , - . / : ; < = > ?
#	# = Accepts an entry (only required if two letters on the same key are needed - ex: STA).
DND/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 or Personal Abbreviated Dialling number:

1. At system phone, press a SPK key.
OR
At single line set, lift handset.
2. Dial 813.
OR
Press DC key.
OR
Press Common Abbreviated Dialling key (PGM 15-07 or SC 851: 27).
To preselect, press a line key in step 1 (instead of CALL) before pressing the DC or Abbreviated Dialling key)
3. Dial Common Abbreviated Dialling storage code (000-999), 900-919 are Personal Abbreviated bins.
*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.*

Features

To dial a Group Abbreviated Dialling number:

1. At system phone, press a SPK key.
OR
At single line set, lift handset.
2. Dial 814.
OR
Press DC key.
OR
Press Group Abbreviated Dialling key (PGM 15-07 or SC 851: 28).
To pre-select, press a line key in step 1 (instead of CALL) before pressing the DC or Abbreviated Dialling key)
3. Dial the Group Abbreviated Dialling code (000-999).
The stored number dials out.
Unless you pre-select, 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.

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

1. Press CHECK.
2. For Common Abbreviated Dialling, press DC key.
Dial the Abbreviated Dialling 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 Dialling, press the Group Abbreviated Dialling key.
OR
For Common Abbreviated Dialling key, press the Common Abbreviated Dialling key.
3. Press CLEAR.
To display additional numbers, repeat from step 1.

Account Codes

■ Description

Account Codes are user-dialled 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 emergency assistance 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.

➤ **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 dialled 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.

Features

Redialled 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 redialled with these features, the user will need to re-enter 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

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

- 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 dialled (e.g., *1234*) appear on the SMDR report as part of the number dialled.
- 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
- 15-07-01 : Programming Function Keys
- 20-06-01 : Class of Service for Extensions
- 21-04-01 : Toll Restriction Class for Extensions
- 35-05-01 : Account Code Setup - Account Code Mode
- 35-05-02 : Account Code Setup - Forced Account Code Toll Call Setup
- 35-05-03 : Account Code Setup - Account Codes for Incoming Calls
- 35-05-04 : Account Code Setup - Hiding Account Codes
- 35-06-01 : Verified Account Code Table

■ Related Features

- Abbreviated Dialling
- Automatic Route Selection
- PBX Compatibility
- Station Message Detail Recording

■ 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 dialling 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 dialling a code (except 9). Refer to Central Office Calls, Placing 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 dialling the number, ARS is requesting that you enter an ARS Authorization Code. Refer to Automatic Route Selection (F-Route) for more information.

To dial an outside No. 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 dialling the number, ARS is requesting that you enter an ARS Authorization Code. Refer to Automatic Route Selection (F-Route) 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:
 - 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 *.

Features

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 dialling 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.

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 dialling 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 dialling 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.

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 dialling 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.

Alarm

■ Description

Alarm lets a system phone 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

■ Related Features

None

Features

■ Operation

To set the alarm:

1. At system phone, press a SPK 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 system phone, press SPK to hang up.
OR
At single line set, hang up.

To silence an alarm:

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

Alphanumeric Display

■ Description

System display telephones have a 2-line, 16 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.

The contrast can be adjusted with the Volume keys when the phone is idle.

With V1.30 software there are the following display languages available:

English, Spanish and Portuguese.

With software V1.32 there are the following display languages available:

English, French, Italian, Dutch, Norwegian, German, Portuguese, Spanish and Danish.

■ Conditions

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

The day of week is only available in English, regardless of the language setting of the telephone.

■ Default Setting

Enabled for all display telephones.

■ Programming

- 15-02-01 : Display Language
- 20-06-01 : Class of Service for Extensions
- 20-11-08 : Class of Service Options (Hold/Transfer Service) - Transfer Information Display

■ Related Features

Caller ID Display.

Direct Dial In

Name Storing

Reason of Transfer Display

Selectable Display Messaging

■ Operation

The language can be selected at each XN120 display phone.

To select the display language:

1. Press a SPK key.
2. Dial 778.
3. Enter the digit that corresponds to the language:
 - 1 = English
 - 2 = German (Deutsch)
 - 3 = French (Français)
 - 4 = Italian (Italiano)
 - 5 = Spanish (Español)
 - 6 = Dutch (Nederlands)
 - 7 = Portuguese (Portugues)
 - 8 = Norwegian (Norsk)
 - 9 = Danish (Dansk)
3. Press SPK to hang up.

Features

Attendant Call Queuing

■ Description

Attendant extensions can have up to 32 internal 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.

Attendant Call Queuing is a permanent, non-programmable system feature for each telephone assigned in Program 20-17-01.

Attendant call queuing is automatic for incoming exchange line calls to a Ring Group (Program 22-04-01 to place phones into ring groups).

The 32 call queue total include Intercom, DISA, DID, DDI, DIL and transferred calls.

Conditions

None

Default Setting

Enabled.

■ Programming

- 20-17-01 : Operator's Extension Number
- 24-02-01 : System Options for Transfer - Busy Transfer

■ Related Features

- Call Forwarding / Personal Greeting

■ Operation

None

Automatic Route Selection (F-Route)

■ Description

Automatic Route Selection (ARS) provides call routing and digit translation based on the digits a user dials. ARS consists of look up tables that compare the dialled digits and decide which translation table should be used. The decision can optionally be dependant on time and day of the week. The translation table will then delete and/or add digits select the trunk group and seize the outgoing trunk.

Conditions

Line keys, outgoing loop keys, outgoing trunk group keys, dialling 804+trunk group, dialling 805+trunk number, and abbreviated dial numbers assigned to a certain trunk group can all be used to by-pass ARS.

Default Setting

ARS is not programmed.

■ Programming

- 11-09-01 : Trunk Access Code
- 14-05-01 : Trunk Groups
- 14-07-01 : Trunk Access Map Setup
- 15-06-01 : Trunk Access Map for Extensions
- 44-01-01 : System Options for ARS/F-Route
- 44-02-01 : Dial Analysis Table for ARS/F-Route Access - Dial
- 44-02-02 : Dial Analysis Table for ARS/F-Route Access - Service Type
- 44-02-03 : Dial Analysis Table for ARS/F-Route Access - Additional Data
- 44-02-04 : Dial Analysis Table for ARS/F-Route Access - Dial Tone Simulation
- 44-03-01 : Dial Analysis Extension Table - Dial
- 44-03-02 : Dial Analysis Extension Table - Table Number
- 44-03-03 : Dial Analysis Extension Table - Table Number (251)
- 44-03-04 : Dial Analysis Extension Table - Next Table Number
- 44-04-01 : ARS/F-Route Selection for Time Schedule
- 44-05-02 : ARS/F-Route Table - Delete Digits
- 44-05-03 : ARS/F-Route Table - Additional Dial Number
- 44-05-04 : ARS/F-Route Table - Beep Tone
- 44-05-05 : ARS/F-Route Table - Gain Table Number for Internal Call
- 44-05-06 : ARS/F-Route Table - Gain Table Number for Tandem Connections
- 44-05-07 : ARS/F-Route Table - ARS Class of Service
- 44-05-08 : ARS/F-Route Table - Dial Treatment
- 44-06-01 : Additional Dial Table
- 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
- 44-08-01 : Time Schedule for ARS/F-Route
- 44-09-01 : Weekly Schedule for ARS/F-Route
- 44-10-01 : Holiday Schedule for ARS/F-Route

Features

■ Related Features

- Abbreviated Dialling
- Central Office Calls, Placing
- Dial Tone Detection
- Toll Restriction
- Trunk Group Routing
- Trunk Queuing/Camp On

■ Operation

Automatic when it is programmed.

Background Music

■ Description

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

■ Conditions

Refer to the XN120 Getting Started Guide 991409-5.

■ Default Setting

Not installed.

■ Related Features

- Music on Hold
- Single Line Telephones

■ Programming

- 10-03-01 : PGDU
- 20-06-01 : Class of Service for Extensions
- 20-13-30 : Class of Service Options (Supplementary Service) - Background Music
- 33-01 : ACI Setting

■ Operation

To turn Background Music on or off:

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

Features

Barge In

■ 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, may be illegal in certain circumstances. Legal advice should be sought prior to implementing any practice that monitors or records any telephone conversation. Some form of notification to all parties to a telephone conversation may be required, 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.

Conditions

None

Default Setting

Disabled

■ Programming

- 11-12-08 : Service Code Setup (for Service Access) - Barge In
- 11-16-02 : One-Digit Service Code Setup - Barge In
- 15-07-01 : Programming Function Keys
- 20-06-01 : Class of Service for Extensions
- 20-13-10 : Class of Service Options (Supplementary Service) - Barge In Mode
- 20-13-15 : Class of Service Options (Supplementary Service) - Barge In, Initiate
- 20-13-16 : Class of Service Options (Supplementary Service) - Barge In, Receive
- 20-13-17 : Class of Service Options (Supplementary Service) - Barge In Tone/Display
- 20-13-32 : Class of Service Options (Supplementary Service) - Multiple Barge In
- 20-14-11 : Class of Service Options for DISA/E&M - DISA/Tie Trunk Barge In
- 20-18-07 : Service Tone Timer - Intrusion Tone Repeat Time
- 21-01-03 : System Options for Outgoing Calls - Trunk Interdigit Time (External)

■ Related Features

- Conference
- Intercom
- Off Hook Signaling
- Privacy (Data)
- Programmable Function Keys

■ 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 a SPK 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., an intrusion tone is heard by all parties, depending on system programming, and all display system phones show the joined party.

If Barge In is not possible:

- the extension user will hear a warning tone

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.

Instead of the single digit service code, the service code 810 can also be dialled at this point.

Features

Call Forwarding

■ 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
- Call Forwarding Immediate
- Call Forwarding with Both Ringing
- Call Forwarding when Unanswered
- Personal Answering Machine Emulation (Not available with the DSPDB Voice Mail)

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.

■ Conditions

- Normally, the system does not allow the chaining of Call Forwards. For example, extension 216 forwards to 218, and 218 in turn forwards to 220. Calls to 216 route to 218. Calls to 218 route to 220. The system does allow a single chain, however, if the second extension in the chain is forwarded off-premise (713 + 6 + trunk access code + destination telephone number).
- Periodic reminder message requires a DSPDB board for Voice Response System (VRS).
- Call Forwarding an extension in a Department Group will prevent that extension from receiving Department Pilot Calls.
- 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.
- Ring Groups do not follow Call Forward to voice mail.
- Multiple Directory and Call Coverage Key calls do not follow Call Forwarding.

■ Default Setting

Enabled.

■ Programming

- 15-07-01 : Programming Function Keys
- 20-06-01 : Class of Service for Extensions
- 20-11-02 : Class of Service Options - Call Forwarding (When Busy)
- 20-11-03 : Class of Service Options - Call Forwarding (When Unanswered)
- 20-11-04 : Class of Service Options - Call Forwarding (Both Ringing)
- 24-02-03 : System Options for Transfer - Delayed Call Forwarding Time

■ Related Features

- Call Forwarding, Fixed
- Call Forwarding, Off-Premise
- Call Forwarding with Follow Me
- Call Forwarding/Do Not Disturb Override
- Central Office Calls, Answering
- Department Calling
- Do Not Disturb
- Programmable Function Keys
- Voice Response System (VRS)

■ Operation

To activate or cancel Call Forwarding:

1. Press a SPK key (or lift handset) + Dial 888.

Also allowed are 848 (Call Forward Immediate), 843 (Call Forward Busy), 845 (Call Forward No Answer), 844 (Call Forward, Busy/No Answer), or 842 (Call Forward Both Ring).

OR

Press Call Forwarding key (PGM 15-07 or SC 851: code 10).

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

5. Press SPK to hang up (hang up at SLT) if you dialled 888 in step 1.

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

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

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

6. Dial 1 plus extension to enable; dial 0 to disable.

DND flashes slowly. Once you activate Call Forwarding, only your Call Forwarding destination can place an Intercom call to you.

7. At system phone, press SPK to hang up.

OR

At single line set, hang up.

You'll hear stutter dial tone when placing a new call.

Features

Call Forwarding, Fixed

■ 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

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 201 + 202 + 203 + 204 set up for Fixed Call Forwarding when Busy. If extension 201 is busy, calls to 201 route to 202. If 202 is also busy, the calls route to 203 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., 201 + 202 + 203 + 201), the system rings the last extension in the chain (203). 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:

EXT AAA	AAA is the extension that initially placed the call.
TRANS << EXT 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.
- 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
- 24-06-01 : Fixed Call Forwarding
- 24-07-01 : Fixed Call Forwarding Off-Premise

■ Related Features

- Alphanumeric Display
- Call Forwarding
- Call Forwarding, Off-Premise
- Multiple Directory Numbers

■ Operation

None

Features

Call Forwarding, Off-Premise

■ 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 *
- Direct Inward Lines *
- DISA, DID, DDI and tie line calls to the forwarded extension *
- Transferred calls *

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).

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

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**.

Conditions

- A) Call Forwarding Off-Premise requires ISDN, loop start trunks with disconnect supervision.
- B) The trunk access code and the outside telephone number combined cannot exceed 36 digits.
- C) Normally, the system does not allow the chaining of Call Forwards. For example, extension 216 forwards to 218, and 218 in turn forwards to 220. Calls to 216 route to 218. Calls to 218 route to 220. 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).
- 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
- Call Forward to Abbreviated Dial
- Door Box
- Toll Restriction
- Voice Response System (VRS)

■ Programming

- 11-10-04 : Service Code Setup (for System Administrator) - Storing Common Abbreviated Dialling Numbers
- 11-10-18 : Service Code Setup (for System Administrator) - Off-Premise Call Forward by Door Box
- 14-01-13 : Basic Trunk Data Setup - Loop Supervision
- 15-07-01 : Programmable Function Keys
- 20-06-01 : Class of Service for Extensions
- 20-11-12 : Class of Service Options (Hold/Transfer Service) - Call Forwarding Off- Premise
- 32-01-03 : Door Box Timers - Off-Premise Call Forward by Door Box Disconnect Timer

■ Operation

To activate Call Forwarding Off-Premise

1. At system phone, press a SPK key + Dial 713.

OR

Press Call Forward (Device) key (PGM 15-07 or SC 851: 17)

OR

At SLT, lift handset Dial 713.

2. Dial 6 + trunk access code.

Trunk access codes are 9 (ARS/Trunk Group Routing), 804 + Line Group (01- 25) or 805 + Line number (e.g., 05 for line 5).

3. Dial the outside number to which your calls should be forwarded.

4. (System Phone only) Press HOLD.

5. Press SPK (or hang up at SLT) to hang up if you dialled 713 in step 1.

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

To cancel Call Forwarding Off-Premise

1. At system phone, press a SPK key + Dial 713.

OR

Press Call Forward (Device) key (PGM 15-07 or SC 851: 17)

OR

At SLT, lift handset and dial 713.

2. Dial 6 + HOLD.

3. Press SPK (or hang up at SLT) to hang up if you dialled 713 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 system phone, press a SPK 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 (1-6).

3. Dial the Abbreviated Dialling 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.

Features

To cancel Call Forwarding Off-Premise

1. At system phone, press a SPK 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.

Call Forwarding to Abbreviated Dial

■ Description

Call Forwarding to Abbreviated Dial allows an extension user to forward their calls to an off-site location. By enabling Call Forwarding to abbreviated dial, 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 will route the off-site phone number over the trunk route set for the abbreviated dial bin.

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 *
- Direct Inward Lines *
- DISA, DID, DDI and tie line calls to the forwarded extension *
- Transferred calls *

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).

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

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**.

Conditions

- A) Call Forwarding Off-Premise requires ISDN, loop start trunks with disconnect supervision.
- B) The system does not allow the chaining of Call Forwards. For example, extension 216 forwards to 218, and 218 in turn forwards to 220. Calls to 216 route to 218. Calls to 218 route to 220. The system does allow a single chain, if the second extension in the chain is forwarded off-premise (848 + 1 + 813 + bin).
- 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.

Default Setting

Disabled.

■ Related Features

- Call Forwarding, Fixed
- Call Forward, Off Premise
- Door Box
- Toll Restriction
- Voice Response System (VRS)

Features

■ Programming

- 11-10-04 : Service Code Setup - Storing Common Abbreviated Dialling Numbers
- 11-10-18 : Service Code Setup - Off-Premise Call Forward by Door Box
- 14-01-13 : Basic Trunk Data Setup - Loop Supervision
- 15-07-01 : Programmable Function Keys
- 20-06-01 : Class of Service for Extensions
- 20-11-12 : Class of Service Options (Hold/Transfer Service) - Call Forwarding Off- Premise
- 32-01-03 : Door Box Timers - Off-Premise Call Forward by Door Box Disconnect Timer

■ Operation

To activate Call Forwarding Off-Premise

1. At system phone, press a SPK key + Dial 848.
OR
Press Call Forward key (PGM 15-07 or SC 851: 10)
OR
At SLT, lift handset Dial 848.
2. Dial 1 + 813 +1.
813 is the Abbreviated dial access code, can be replaced with the Group Abbreviated dial access code 814.
3. Dial the bin number to which your calls should be forwarded.
4. Press SPK (or hang up at SLT) to hang up if you dialled 848 in step 1.
Your DND or Call Forwarding (Device) Programmable Function Key flashes.

To cancel Call Forwarding Off-Premise

1. At system phone, press a SPK key + Dial 848.
OR
Press Call Forward (Device) key (PGM 15-07 or SC 851: 10)
OR
At SLT, lift handset and dial 848.
2. Dial 0.
3. Press SPK (or hang up at SLT) to hang up if you dialled 848 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 system phone, press a SPK 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 (1-8).
3. Dial the Abbreviated Dialling 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 by Door Box

1. At system phone, press a SPK 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.

Call Forwarding with Follow Me

■ 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
- 20-06-01 : Class of Service for Extensions
- 20-11-01 : Class of Service Options (Hold/Transfer Service) - Call Forwarding with Follow Me

■ Related Features

- Programmable Function Keys

■ Operation

To activate Call Forward Follow Me:

1. At a system phone other than your own, press a SPK key and dial 888.
OR
Press Call Forward (Station) key (PGM 15-07 or SC 851: 15).
OR
At SLT other than your own, lift handset and dial 888.
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 dialled 888 in step 1.
Your Call Forwarding (Station) Programmable Function Key flashes when Call Forwarding is activated.

To cancel Call Forward Follow Me:

1. At system phone, press a SPK key and dial 888.
OR
Press Call Forward (Station) key (PGM 15-07 or SC 851: 15).
OR
At SLT, lift handset and dial 888.
2. Dial 0.
3. SPK (or hang up at SLT) if you dialled 888 in step 1.
Your Call Forwarding (Station) Programmable Function Key goes out.

Features

Call Forwarding/Do Not Disturb Override

■ 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

- 15-07-01 : Programming Function Keys
- 20-06-01 : Class of Service for Extensions
- 20-13-04 : Class of Service Options (Supplementary Service) - Call Forwarding/DND Override

■ Related Features

- Programmable Function Keys

■ 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 Redirect

■ Description

Call Redirect allows a system phone 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:

- 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
- 20-06-01 : Class of Service for Extensions
- 20-11-16 : Class of Service Options (Hold/Transfer Service) - Call Redirect

■ 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.

A confirmation tone is heard over the telephone's speaker.

Features

Call Timer

■ Description

Call Timer lets a system phone 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 - Caller Timer)
- 20-06-01 : Class of Service for Extensions
- 21-01-03 : System Options for Outgoing Calls - Trunk Interdigit Time (External)

■ Related Features

Alphanumeric Display

■ Operation

To time your trunk calls:

1. Place trunk call.

The timer starts automatically.

Call Waiting / Camp On

■ 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

None

Default Setting

Enabled.

■ Programming

- 11-12-47 : Service Code Setup (for Service Access) - Call Waiting Answer / Split Answer for SLT
- 15-07-01 : Programming Function Keys
- 20-18-06 : Service Tone Timer - Call Waiting Tone Timer

■ Related Features

- Callback
- Dual Line Appearance/Off Hook Signaling
- Off Hook Signaling
- Programmable Function Keys
- Transfer
- Trunk Queuing/Camp-On

■ Operation

To Camp-On to a busy extension:

1. Call busy extension.
2. Dial 850 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 system phone, press a SPK key and Dial 870.
OR
At system phone, 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. **Single Line Telephone:**

- Recall and dial 894

To repeatedly split between the two calls.

Features

Callback

■ 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

An extension can leave only one Callback request at a time.

Default Setting

Enabled.

■ Programming

- 15-02-11 : Multi-Line Telephone Basic Data Setup - Callback Automatic Answer
- 15-07-01 : Programming Function Keys
- 20-01-07 : System Options - Callback Ring Duration Time
- 20-01-09 : System Options - Callback/Trunk Queuing Cancel Time

■ Related Features

- Call Waiting (Camp-On)
- Programmable Function Keys

■ Operation

To place a Callback:

1. Call unavailable (busy or unanswered) extension.
2. Dial 850 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 system phone, press a SPK key and Dial 870.
OR
At system phone, 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.

Features

Caller ID

■ Description

Caller ID allows a display system phone to show an incoming caller's telephone number (called the Directory Number or DN) and optional name. The Caller ID information is available as a post-answer or pre-answer display. Normally, the system provides the Caller ID pre-answer display.

With the post-answer display, the user sees the incoming caller's number/name after they answer the call. With the pre-answer display, the user previews the caller's number before picking up the ringing line. The pre-answer display is only available if the system has Automatic Handsfree for incoming line/loop keys disabled. Refer to the table on the following 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 the trunk's name if Caller ID is not installed. For incoming Intercom calls, the display will show the calling extension's name. You can set up the system to present the second call data automatically or allow the user to select the operation of second calls (with service code 779).

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.

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 calls (total of abandoned and unanswered). New calls replace old calls when the buffer fills.

Caller ID to Abbreviated Dial Name Tagging

If the received Caller ID number matches a number in the Abbreviated Dial bin the name assigned to the Abbreviated Dial bin will be displayed.

Note that if the received Caller ID includes the callers name then the Abbreviated Dial Name Tagging will not occur; the callers name will be displayed.

Caller ID to Single Line Telephones

The XN120 can send the caller ID to an analogue single line telephone (SLT) connected to one of the ST telephone ports. The system will also send the calling party number and name for internal calls to the SLT.

Note. When caller ID is enabled the ringing pattern is fixed at 2 Sec ON/4 Sec OFF for internal and external calls.

Conditions

To have pre-answer Caller ID from the voice mail, the call must be an unscreened transfer.

Default Setting

Receiving callers name and number is disabled for analogue trunks (to enable: set Program 14-02-10 for each trunk).

Sending caller ID (name and number) is disabled for SLT telephones (to enable: set Program 15-03-09 for each SLT telephone).

Sending callers name is enabled for SLT telephones (to disable: set Program 15-03-10 for each SLT telephone).

Receiving callers name and number is enabled for ISDN trunks, it cannot be disabled.

Caller ID Display				
Abbreviation		Description		
Absence code		Absence Reason Code P displays as PRIVATE Absence Reason Code O displays as OUT OF AREA		
CID-num		Caller ID number (Provided by telco)		
CID-name		Caller ID name (provided by telco)		
Trunk name		Trunk name provided by phone system (Program 14-01-01)		
NN:NN:NN		System's Caller Timer display		
HH:MM:SS		System Time		
YY:MM:DD		System Date		
Conditions	Row	Pre-Answer Display	Post-Answer Display	Display When Reviewing
With Caller ID name and number	1	CID-num	CID-num NN:NN:NN	CID-num HH:MM:SS
	2	CID-name	CID-name	CID-name
With Caller ID number Without Caller ID name With name absence code	1	Trunk name	Trunk name NN:NN:NN	CID-num
	2	CID-num	CID-num	HH:MM:SS YY:MM:DD
Without Caller ID number With Caller ID name With number absence code	1	Trunk name	Trunk name NN:NN:NN	CID-name
	2	CID-name	CID-name	HH:MM:SS YY:MM:DD
Without Caller ID number Without Caller ID name With number & name absence codes	1	Trunk name	Trunk name NN:NN:NN	Name Absence Code
	2	Name Absence Code	Name Absence Code	HH:MM:SS YY:MM:DD
Without Caller ID number Without Caller ID name With number absence code	1	Trunk name	Trunk name NN:NN:NN	Number Absence Code
	2	Number Absence Code	Number Absence Code	HH:MM:SS YY:MM:DD
Without Caller ID number Without Caller ID name With name absence code	1	Trunk name	Trunk name NN:NN:NN	Name Absence Code
	2	Name Absence Code	Name Absence Code	HH:MM:SS YY:MM:DD
Without Caller ID number Without Caller ID name Without any absence code	1	CID-num	CID-num nn:nn:nn	Trunk name
	2	Ringing	NO CALLER INFO	HH:MM:SS YY:MM:DD
Without time and date With absence reason	1			Trunk name
	2			Absence code
Without time and date With absence reason	1			Trunk name
	2			NO CALLER INFO

Features

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 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 '***6001*12345*'.

Caller ID Type (FSK/DTMF)

The type of Caller ID received can be set for each analogue trunk with Program 14-02-16.

The type of Caller ID sent to each SLT telephone can be set with Program 15-03-11.

ISDN Calls Display Reason for No Caller ID Information

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 telco information is not available, then the display will show "No Caller Info".

■ Programming

- 14-01-20 : Basic Trunk Data Setup - Block Outgoing Caller ID
- 14-01-21 : Caller ID Block Code
- 14-01-22 : Basic Trunk Data Setup - Caller ID to Voice Mail
- 14-02-06 : Trunk Receiving Type FSK / DTMF
- 14-02-10 : Analogue Trunk Data Setup - Caller ID
- 14-02-16 : Analogue Trunk Receive Type FSK/DTMF
- 15-03-09 : SLT Caller ID Sending – Name and number
- 15-03-10 : SLT Caller Name Sending
- 15-03-11 : SLT Transmit Type FSK / DTMF
- 20-06-01 : Class of Service for Extensions
- 20-08-15 : Class of Service (Outgoing Call Service) - Block Outgoing Caller ID
- 20-09-01 : Class of Service Options (Incoming Call Service) - Second Call for DID/DISA/DIL/E&M
- 20-09-02 : Class of Service Options (Incoming Call Service) - Caller ID Display
- 20-13-06 : Class of Service Options (Supplementary Service) Automatic Off-Hook Signal
- 20-19-01 : System Options for Caller ID - Caller ID Display Formatting
- 20-19-02 : System Options for Caller ID - Caller ID Wait Timer
- 20-19-03 : System Options for Caller ID - Edit Caller ID
- 80-02-01 : DTMF Tone Setup - Duration
- 80-02-02 : DTMF Tone Setup - Pause

■ Related Features

- Automatic Route Selection
- Station Message Detail Recording
- Voice Mail

■ Operation

None

Caller ID Sending

■ Description

Caller ID sending allows the XN120 to send the calling party's telephone number (CGPN) for outgoing ISDN calls. The CGPN is passed on by the Network provider to the called party.

Note – You may need to request this service with the ISDN Network provider.

The CGPN number can be set for each trunk and/or each extension, when both are set the extension will take priority over the trunk CGPN.

Conditions

This service may be restricted by the Network provider.

Default Setting

CLIP sending is enabled.

There are no entries for trunk or extension CLIP.

■ Programming

- 10-03-05 : CLIP Information Sending – enable/disable for each ISDN BRI circuit
- 15-01-04 : CLIP Information Sending – enable/disable for each extension
- 20-08-13 : CLIP Information Sending – enable/disable per COS
- 22-12-01 : ISDN Trunk CLIP – enter the CGPN to be sent for each ISDN trunk
- 20-13-01 : Extension CLIP– enter the CGPN to be sent for each extension

Features

Central Office Calls, Answering

■ 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 system phone and dialling 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, DDI, 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.

Conditions

None

Default Setting

Enabled.

■ Programming

- 10-03-03 : PCB Setup - Transmit CODEC Gain Type
- 10-03-04 : PCB Setup - Receive CODEC Gain Type
- 10-08-01 : Pre-Ringing Setup
- 14-01-02 : Basic Trunk Data Setup - Transmit CODEC Gain Type
- 14-01-03 : Basic Trunk Data Setup - Receive CODEC Gain Type
- 14-02-02 : Analogue Trunk Data Setup - Ring Detect Type
- 14-05-01 : Trunk Groups
- 14-06-01 : Trunk Group Routing
- 14-07-01 : Trunk Access Map Setup
- 15-02-02 : Multi-Line Telephone Basic Data Setup - Trunk Ring Tone
- 15-06-01 : Trunk Access Map for Extensions
- 15-07-01 : Programming Function Keys
- 20-02-09 : System Options for Multi-Line Telephones - Disconnect Supervision
- 20-06-01 : Class of Service for Extensions
- 20-09-06 : Incoming Time Information Display – Display time/name for ringing calls
- 20-10-07 : Class of Service Options (Answer Service) - Automatic Answer of Universal Calls
- 20-13-23 : Class of Service Options (Supplementary Service) - Display the Reason for Transfer
- 22-01-02 : System Options for Incoming Calls - Incoming Call Ring No Answer Alarm
- 22-01-03 : System Options for Incoming Calls - Ring No Answer Alarm Time
- 22-01-04 : System Options for Incoming Calls - DIL No Answer Time
- 22-03-01 : Trunk Ring Tone Range
- 22-04-01 : Incoming Extension Ring Group Assignment
- 22-05-01 : Incoming Trunk Ring Group Assignment
- 22-06-01 : Normal Incoming Ring Mode
- 22-08-01 : DIL/IRG No Answer Destination
- 23-03-01 : Universal Answer/Auto Answer
- 82-01-01 : Incoming Ring Tone

■ Related Features

- Central Office Calls, Answering Call Forward/DID/DIL/DISA/Do Not Disturb/ISDN
- Directed Call Pickup/Group Call Pickup
- Direct Inward Line
- Line Preference
- Long Conversation Cutoff/Warning Tone for Long Conversation
- Microphone Cutoff
- Night Service
- Programmable Function Keys
- Selectable Text Messaging

Features

■ Operation

To answer an incoming trunk call:

1. Lift handset.
2. At system phone, press flashing line key.

If you don't have a line or loop key for a trunk call ringing your phone, it rings on a 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 772 + Line number (01-51).

To use Universal Answer to answer a call ringing over the Paging system:

1. At system phone, press a SPK 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 872.

If you hear error tone, your extension's Class of Service prevents Universal Answer.

To listen to the incoming trunk ring choices (system phone only):

Not available.

To change the pitch of your incoming trunk ring (system phone only):

Not available.

Central Office Calls, Placing

■ 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
- Dialling a code for a specific trunk (805 + the trunk number)
- Dialling a code for a Trunk Group (804 + group number)
- Dialling a code for Trunk Group Routing or ARS (9)
- Dialling an Alternate Trunk Route Access Code (which you must define)

Conditions

None

Default Setting

Enabled.

■ Programming

- 10-03-03 : PCB Setup - Transmit CODEC Gain Type
- 10-03-04 : PCB Setup - Receive CODEC Gain Type
- 11-01-01 : System Numbering
- 11-09-01 : Trunk Access Code
- 11-09-02 : Trunk Access Code - Alternate Trunk Route Access Code
- 11-12-01 : Service Code Setup (for Service Access)
- 14-01-01 : Basic Trunk Data Setup - Trunk Name
- 14-01-02 : Basic Trunk Data Setup - Transmit CODEC Gain Type
- 14-01-03 : Basic Trunk Data Setup - Receive CODEC Gain Type
- 14-01-07 : Basic Trunk Data Setup - Outgoing Calls
- 14-01-10 : Basic Trunk Data Setup - DTMF Tones for Outgoing Calls
- 14-07-01 : Trunk Access Map Setup
- 15-06-01 : Trunk Access Map for Extensions
- 15-07-01 : Programming Function Keys
- 20-02-06 : System Options for Multi-Line Telephones – Pre-selection Time
- 20-02-09 : System Options for Multi-Line Telephones - Disconnect Supervision
- 20-06-01 : Class of Service for Extensions
- 20-08-02 : Class of Service Options (Outgoing Call Service) - Trunk Calls
- 21-15-01 : Alternate Trunk Route for Extensions
- 81-01-01 : Analogue Trunk Data Setup

■ Related Features

- Alphanumeric Display/Call Timer
- Automatic Route Selection
- Dial Tone Detection
- Handsfree
- Long Conversation Cutoff/Warning Tone for Long Conversation
- Loop Keys
- Microphone Cutoff
- Programmable Function Keys
- Trunk Group Routing
- Trunk Groups

Features

■ Operation

To place a call over a trunk group:

1. At system phone, press a SPK key.
OR
At single line set, lift handset.
2. Dial 804.
3. Dial line group number (01-25).
4. Dial number.
OR
1. At system phone, 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 system phone, press a SPK 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 system phone, 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 system phone, press a SPK key.
OR
At single line set, lift handset.
2. Dial 805.
3. Dial line number (e.g., 05 for line 5).
4. Dial number.
OR
1. At system phone, press line key (PGM 15-07 or SC 852: 01 to 51).
Also see the "Loop Keys" feature.
2. Dial number.

Class of Service

■ Description

Class of Service (COS) sets various features and dialling 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 dialling options for daytime operation, night time operation and even during lunch breaks. An extension's Class of Service can be changed in system programming or via a Service Code (normally 777).

Conditions

None

Default Setting

- All extensions have Class of Service 1 in all Night Service modes.
- See the Charts for the default settings of the individual options.

If changing Class of Service via Service Code:

- An extension can use Service Code 777 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 777 (Program 20-13-28 = 0).
- The default Service Code for this option is 777 (Program 11-11-24 = 777).

■ Programming

- 11-11-24 : Service Code Setup (for Setup/Entry Operation) - Change Extension Class of Service
- 20-06-01 : Class of Service for Extensions
- 20-07 through 20-14 : Class of Service Options
- If changing Class of Service via Service Code:
- 20-13-28 : Class of Service Options (Supplementary Service) - Allow Station COS to be Changed

Features

Class of Service Options (Administrator Level), Program 20-07				
Item No.	Item	Input Data	Default	Related Program
			COS 1 - 15	
01	Manual Night Service Enabled Enabled/disabled an extension's ability to use manual Night Service Switching	0- Off 1- On	0	11-10-01
02	Changing the Music on Hold Tone Enable/disable an extension's ability to change the Music on Hold tone	0- Off 1- On	0	11-10-02
03	Time Setting Enable/disable an extension's ability to set the Time via Service Code 828.	0- Off 1- On	1	11-10-03
04	Storing Abbreviated Dialling Entries Enables/disables an extension's ability to store Abbreviated Dialling numbers. With this disabled, an extension will display only the name assigned to the Abbreviated Dialling number - the telephone number will not be displayed. This could be used if you wish to prevent Account Codes from being displayed.	0- Off 1- On	1	11-10-04
05	Set/Cancel Automatic Transfer to Transfer	0- Off 1- On	1	11-10-06
06	- Not Used -			
07	- Not Used -			
08	- Not Used -			
09	- Not Used -			
10	Programmable Function Key Programming (Appearance Level) Enables/disables an extension's ability to program their Appearance function keys using Service Code 852 (by default).	0- Off 1- On	1	20-13-18
11	Forced Trunk Disconnect (analogue trunk only) Enables/disables an extension's ability to use Forced Trunk Disconnect	0- Off 1- On	0	
12	Trunk port disable	0- Off 1- On	0	11-10-27
13	VRS Record Enables/disable extension's ability to record, erase and listen to VRS messages	0- Off 1- On	1	
14	VRS General Message Listen Enables/disable extension's ability to dial 4 or Service Code 711 and listen to the General Message	0- Off 1- On	1	11-10-21
15	VRS General Message Record Enables/disables extension's ability to dial Service Code 712 and record, listen to or erase the General Message	0- Off 1- On	1	11-10-22
16	- Not Used -			
17	- Not Used -			
18	SMDR printout accumulated extension data	0- Off 1- On	0	11-10-23
19	SMDR printout accumulated STG data	0- Off 1- On	0	11-10-24
20	SMDR printout accumulated account code data	0- Off 1- On	0	11-10-25

Class of Service Options (Outgoing Call Service), Program 20-08				
Item No.	Item	Input Data	Default	Related Program
			COS1 - 15	
01	Intercom Calls Enable/disable Intercom calling for the extension.	0- Off 1- On	1	
02	Trunk Calls Enable/disable outgoing trunk calling for the extension.	0- Off 1- On	1	
03	Common Abbreviated Dialling	0- Off 1- On	1	
04	Group Abbreviated Dialling	0- Off 1- On	1	
05	Dial Number Preview Enable/disable an extension's ability to use Dial Number Pre-view	0- Off 1- On	1	
06	Toll Restriction Override Enables/disables Toll Restriction Override (Service Code 875).	0- Off 1- On	1	21-01-07 21-07
07	Repeat Redial Enables/disables an extension's ability to use Repeat Redial.	0- Off 1- On	1	
08	Toll Restriction Dial Block Enable (1) or disable (0) an extension's ability to use Dial Block.	0- Off 1- On	0	
09	Hotline/Extension Ringdown Enables/disables Ringdown Extension for extensions with this COS.	0- Off 1- On	0	
10	Switching from Handsfree Answerback to Forced Intercom Ringing Enables/disables an extension's ability to force Handsfree Answerback or Forced Intercom Ringing for outgoing Intercom calls.	0- Off 1- On	1	
11	Protect for the call mode switching from caller (Internal Call)	0- Off 1- On	0	
12	Department Group Step Calling Enables/disables an extension's ability to use Department Group Step Calling	0- Off 1- On	1	
13	CLIP	0- Off 1- On	1	
14	Call Address Information	0- Off 1- On	0	
15	Block Outgoing Caller ID Enable (1) or disable (0) 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 (defined in 14-01-21) before the user's dialled digits.	0- Off 1- On	0	14-01-20 14-01-21
17	ARS Override Access Map		0	

Features

Class of Service Options (Outgoing Call Service), Program 20-09				
Item No.	Item	Input Data	Default	Related Program
			COS1 - 15	
01	Second Call for DID / DISA / DIL	0- Off 1- On	0	
02	Caller ID Display Enables / disables the Caller ID display at an extension.	0- Off 1- On	1	
03	Sub Address Identification	0- Off 1- On	0	
04	Notification for Incoming Call List existence	0- Off 1- On	1	
05	Setting Handsfree Answerback and Forced Intercom Ringing Allow/prevents an extension from enabling Handsfree Answerback or Forced Intercom Ringing for their incoming Intercom calls	0- Off 1- On	1	11-11-15 11-11-16
06	Incoming Time Information Display Select the display when ISDN calls ring at a display phone.	0- Name 1- Time	1	14-01-01 22-11-03

Class of Service Options (Answer Service), Program 20-10				
Item No.	Item	Input Data	Default	
			COS1 - 15	
01	Group Call Pickup (Within Group) Enables/disables Group Call Pickup for calls ringing an extension's own Pickup Group (Service Code 867)	0- Off 1- On	1	
02	Call Pickup (Another Group) Group Call Pickup (Another Group) Enables/disables Group Call Pickup for calls ringing outside a group (Service Code 869)	0- Off 1- On	1	
03	Group Call Pickup for Specific Group Enables/disables an extension's ability to use Unscreened Transfer	0- Off 1- On	1	
04	Group Call Pickup Enable/disable an extension's ability to pick up a call ringing into a Pickup Group (Service Codes 867 and 868)	0- Off 1- On	1	
05	Directed Call Pickup for Own Group	0- Off 1- On	1	
06	Meet Me Conference and Paging Enables/disables an extension's ability to use Meet Me Conference and Paging	0- Off 1- On	1	
07	Automatic Answer of Universal Calls Enables/disables an extension's ability to use Universal Auto Answer (no service code required)	0- Off 1- On	1	
08	Auto Off-Hook Answer for Call Coverage Keys Enables (1) or disables (0) an extension's ability to answer an incoming call on a Call Coverage Key simply by lifting the handset.	0- Off 1- On	0	

Class of Service Options (Answer Service), Program 20-11			
Item No.	Item	Input Data	Default
			COS1 - 15
01	Call Forward Immediately Enables/disables an extension's ability to use Immediate Call Forward	0- Off 1- On	1
02	Call Forward When Busy Enables/disables an extension's ability to use Call Forward When Busy.	0- Off 1- On	1
03	Call Forwarding When Unanswered Enables/disables an extension's ability to use Call Forward When Unanswered.	0- Off 1- On	1
04	Call Forwarding (Both Ringing) Enables/Disables an extension's ability to activate Call Forwarding with Both Ringing.	0- Off 1- On	1
05	Call Forwarding with Follow Me Enables/disables an extension's ability to initiate Call Forwarding with Follow Me.	0- Off 1- On	1
06	Unscreened Transfer Enables/disables an extension's ability to use Unscreened Transfer.	0- Off 1- On	1
07	Transfer Without Holding Enables/disables an extension's ability to use Transfer Without Holding.	0- Off 1- On	0
08	Transfer Information Display Enables/disables an extension's incoming Transfer pre-answer display.	0- Off 1- On	1
09	Group Hold Initiate Enables/disables an extension's ability to initiate a Group Hold.	0- Off 1- On	1
10	Group Hold Answer Enables/disables an extension's ability to pick up a call on Group Hold	0- Off 1- On	1
11	Automatic On Hook Transfer Enables/disables an extension's ability to use Automatic On Hook Transfer.	0- Off 1- On	1
12	Call Forwarding Off-Premise Enables/disables an extension's ability to set up Call Forwarding Off-Premise for their phone.	0- Off 1- On	0
13	Operator Transfer After Hold Callback Enables/disables an extension's ability to have a call which recalls from hold transfer to the operator.	0- Off 1- On	0
14	Trunk to Trunk Transfer Restriction	0- Off 1- On	0
15	VRS Personal Greeting Enables/disables extension's ability to dial Service Code *47 to record, listen to or erase the General Message.	0- Off 1- On	1
16	Call Redirect Enable or disable a system phone 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	0
17	Call transfer setup for each telephone group	0- Off 1- On	1
18	No Recall Allow (0) or prevent (1) answered Transferred calls from recalling the originating extension.	0- Off 1- On	0
19	Normal/Extended Park Determine if an extension's Class of Service should allow either a normal or extended Park.	0-Normal 1-Extende	0
20	Ring Inward recall disable		0
21	On-Hook Trunk to Trunk Transfer Restriction		0

Features

Class of Service Options (Supplementary Service), Program 20-13			
Item No.	Item	Input Data	Default
			COS1 - 15
01	Long Conversation Alarm Enables/disables the Warning Tone for Long Conversation (not for SLTs)	0- Off 1- On	1
02	Long Conversation Cutoff (Incoming) Enables/disables an extension's ability to use Long Conversation Cut-off for incoming calls.	0- Off 1- On	0
03	Long Conversation Cutoff (Outgoing) Enables/disables an extension's ability to use Long Conversation Cut-off for outgoing calls.	0- Off 1- On	0
04	Call Forwarding/DND Override Enables/disables an extension's ability to use Call Forwarding/DND Override.	0- Off 1- On	1
05	Automatic Off Hook Signaling (for KST)/Call Waiting (for SLT) Allows a busy extension to manually (0) or automatically (1) receive off hook signals.	0- Off 1- On	1
06	Automatic Off Hook Signaling Allows a busy extension to manually (0) or automatically (1) receive off hook signals.	0- Off 1- On	0
07	Message Waiting Enables/disables an extension's ability to leave Message Waiting.	0- Off 1- On	1
08	Conference Enables/disables an extension's ability to initiate a conference or Meet Me Conference.	0- Off 1- On	1
09	Privacy Release Enables/disables an extension's ability to initiate a Voice Call Conference.	0- Off 1- On	1
10	Barge In Mode Enables the extension's Barge In to be speech mode (0) or Monitor mode (1).	0- Off 1- On	0
11	Room Monitor, Initiating Extension Enable/disable an extension's ability to initiate Room Monitor.	0- Off 1- On	0
12	Room Monitor, Extension Being Monitored Enable/disable an extension's ability to be monitored.	0- Off 1- On	0
13	Continued Dialling Enable/disable an extension's ability to use Continued Dialling which allows DTMF signal sending while talking on extension.	0- Off 1- On	1
14	Department Calling Enable/disable an extension's ability to call a Department Group.	0- Off 1- On	1
15	Barge In, Initiate Enables/disables Barge In at initiating extension.	0- Off 1- On	1
16	Barge In, Receive Blocks/allows Barge In at the receiving extension.	0- Off 1- On	1
17	Barge In Tone/Display Use this option to enable/disable the Barge In tone. If enabled, callers hear an alert tone and their display indicates the Barge In when another extension barges into their conversation. If disabled, there is no alert tone or display indication.	0- Off 1- On	1
18	Programmable Function Key Programming (General Level) Enables/disables 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
19	Selectable Display Messaging Enables/disables an extension's ability to use Selectable Display Messaging.	0- Off 1- On	1

Class of Service Options (Supplementary Service), Program 20-13			
Item No.	Item	Input Data	Default
			COS1 - 15
20	Account Code/Toll Restriction Operator Alert Enables/disables operator alert when an extension improperly enters an Account Code or violates Toll Restriction.	0- Off 1- On	1
21	Extension Name Enables/disables an extension's ability to program its name	0- Off 1- On	1
22	Called Party Status Display the detail state of called party	0- Off 1- On	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
24	Privacy Release by Pressing Line Key Enable (1) or disable (0) 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
27	Busy on seizing virtual extension	0- Off 1- On	1
28	Allow COS to be Changed Enable (1) or disable (0) the ability of an extension's COS to be Changed via Service Code 777.	0- Off 1- On	0
29	Paging Display Enables (1) or disables (0) an extension's ability to display paging information.	0- Off 1- On	1
30	Background Music In an extension's Class of Service, allow (1) or prevent (0) an extension from turning Background Music on and off.	0- Off 1- On	1
31	Connected Line identification (COLP)	0- Off 1- On	0
32	Deny Multiple Barge Ins Enable (1) or disable (0) the extension's ability to have multiple users' Barge In to their conversation.	0- Off 1- On	0
34	Block Manual Off-Hook Signaling Enable (1) or disable (0) an extension's ability to block off-hook signals manually sent from a co-worker.	0- Off 1- On	0
35	Block Camp-On Enable (1) or disable (0) an extension's ability to block callers from dialling the service code (assigned in 11-16-05) to Camp On.	0- Off 1- On	0
36	Call Timer In an extension's Class of Service, enable (1) or disable (0) an extension's ability to use the Call Timer.	0- Off 1- On	1
38	Headset Ear Piece Ringing		0

Features

Class of Service Options (DISA Service), Program 20-14			
Item No.	Item	Input Data	Default
			COS1 - 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
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
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
04	Common Abbreviated Dialling This option enables or disables a DISA or tie trunk caller's ability to use the system's Common Abbreviated Dialling.	0- Off 1- On	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
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
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
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
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
10	Call Forward Setting by Remote Via DISA	0- Off 1- On	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

■ Related Features

- Night Service

■ Operation

To change an extension's Class of Service (via Service Code 777):

1. Press a SPK key.
2. Dial 777.
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 Sta#-
12. Go to step 3 and enter another extension number.
OR
Press SPK to hang up.

Features

Conference

■ 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 XN120 Main unit provides 32 Conference circuits, to have any number of internal or external parties conferenced up to 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).

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 202 followed by extension 203, Split will cycle from the trunk, to 202 and finally to 203. 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.

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.

Conditions

Conversation recording also uses conference circuits; each conversation recording will use 2 conference circuits.

Default Setting

Enabled.

■ Programming

- 10-07-01 : Conversation Record Circuits
- 11-12-08 : Service Code Setup (for Service Access) - Barge In
- 11-12-47 : Service Code Setup (for Service Access) - Call Waiting Answer / Split Answer for SLT
- 11-16-02 : Program 11-16 : One-Digit Service Code Setup - Barge In
- 14-01-04 : Basic Trunk Data Setup - Transmit Gain Level for Conference and Transfer Calls
- 15-07-01 : Programming Function Keys
- 20-06-01 : Class of Service for Extensions
- 20-13-08 : Class of Service Options (Supplementary Service) - Conference
- 20-13-15 : Class of Service Options (Supplementary Service) - Barge In Initiate
- 20-13-16 : Class of Service Options (Supplementary Service) - Barge In Receive
- 20-14-11 : Class of Service Options For DISA/E&M - DISA/Tie Trunk Barge In

■ Related Features

- Central Office Calls, Placing
- Conference, Voice Call
- Direct Inward System Access (DISA) / Tie Lines
- Meet Me Conference
- Meet Me Paging
- Programmable Function Keys
- Tandem Trunking

■ Operation

To establish a Conference:

System Phone

1. Establish Intercom or trunk call.
2. Press DND/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 DND/CONF or Conference key twice.
If you cannot add additional parties to your Conference, you have exceeded the system's Conference limit.
5. Repeat steps 2-4 to add more parties.

Single Line Set

1. Establish Intercom or trunk call.
2. ***Single Line Telephone***
Recall and dial 826.
3. Dial extension you want to add.
OR
Access trunk call.
4. ***Single Line Telephone***
Recall and repeat step 3 to add more parties.
OR
Recall twice to set up the Conference.
If you cannot add additional parties to your Conference, you have exceeded the system's Conference limit.

To exit a Conference without affecting the other internal parties:

System Phone

1. Hang up.
*If you press Hold while on a call with two outside callers, the outside callers hear Music on Hold.
If you are the only internal extension that is part of a conference that includes two or more exchange lines then hanging up will clear the trunk calls.*

Single Line Set

1. Hang up.
If you are not permitted to use Tandem Trunking, outside callers may hear Music on Hold.

Features

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 system phones 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 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 dialled at this point.

Conference, Voice Call/Privacy Release

■ Description

Voice Call Conference lets extension users 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

None.

Default Setting

Disabled.

■ Programming

- 10-07-01 : Conversation Record Circuits
- 14-01-19 : Basic Trunk Data Setup - Privacy Mode Toggle Option
- 15-07-01 : Programming Function Keys
- 20-06-01 : Class of Service for Extensions
- 20-13-09 : Class of Service Options (Supplementary Service), Privacy Release
- 31-01-04 : System Options for Internal/External Paging - Privacy Release Time

■ Related Features

- Conference
- Programmable Function Keys
- Single Line Telephones

■ Operation

To join a Voice Call Conference (if invited):

1. After Conference request, press indicated line key.

To exit a Voice Call Conference without affecting the other parties:

1. Press SPK to hang up.

Features

Continued Dialling

■ Description

Continued Dialling 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 Dialling:

- **Continued Dialling for Intercom Calls**
Depending on an extension's Class of Service, a system phone user may be able to dial additional digits after their Intercom call connects. In systems with Voice Mail, for example, Continued Dialling lets extension users dial the different options after the Voice Mail answers. Without Continued Dialling, extension users cannot access these Voice Mail options.
- **Continued Dialling for Trunk Calls**
Continued Dialling 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 Dialling, the system's Toll Restriction will cut off the call after a specific number of dialled digits. See Programming below for additional information.

NOTICE

Continued Dialling may make the system more susceptible to toll fraud.
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Conditions

None

Default Setting

Enabled.

■ Programming

- 20-06-01 : Class of Service for Extensions
- 20-13-13 : Class of Service Options (Supplementary Service) - Continued Dialling
- 21-04-01 : Toll Restriction Class
- 21-05-03 : Toll Restriction Class - Restriction of Local Call
- 21-05-04 : Toll Restriction Class - Maximum Number of Digits Table Assignment

■ Related Features

- Pulse to Tone Conversion
- Toll Restriction

■ Operation

To use Continued Dialling:

1. Place Intercom or trunk call.
2. Continue dialling after call connects.

Toll Restriction and Class of Service programming may limit Continued Dialling.

Cost Centre Codes

■ Description

Certain Network providers can accept a Cost Centre Code (CCC) that will be used to provide an itemised bill from their Network provider.

The CCC is inserted automatically by the XN120 before the dialled digits and is stripped off by the Network provider.

There are two methods that the XN120 can send CCC to the Network:

Send the CCC to the direct carrier.

OR

Send the CCC within the Least Cost Routing (LCR) access codes. You can then get extension billing from the indirect carrier.

■ Conditions

You must confirm the quantity of CCC digits required by the Network provider otherwise calls will not route correctly.

Confirm with the Network provider that Cost Centre Codes are supported if you also have Carrier Pre-Select (CPS) operation.

■ Default Setting

Disabled.

■ Programming

- 14-01-23 : LCR Mode – Select type 2: LCR ON(Cost Centre Code only).
- 26-07-01 : Cost Centre Codes – Set the CCC for each extension.

■ Related Features

- LCR – Least Cost Routing
Cost Centre Codes can be combined with the LCR operation.

■ Operation

The operation is automatic and cannot be bypassed.

Features

Department Calling

■ Description

With Department Calling, an extension user can call an idle extension within a pre-programmed Department Group by dialling 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. The system allows up to 32 Department Calling Groups.

Department Group Name

When an internal extension is queued at a busy department group the name will be displayed at the system phone's display. The user will see: WAITING (group name). The group name is set by Program 16-01-01.

Department Group Routing

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. Priority routing is selected by Program 16-01-02.

With Circular Routing, each call rings a new extension, providing an easy type of Uniform Call Distribution (UCD).

For example, in a Department Group set for circular routing with extensions 210 (Priority 1), 211 (Priority 2) and 212 (Priority 3).

- The first call rings 210.
- The second call rings 211.
- The third call rings 212.
- The fourth call rings 210 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. Overflow routing is set by Program 16-01-03.

Hunting Mode

Ringing calls can step around members of the group once only and stop at the last member or repeatedly search for a free member. Hunting mode is set by Program 16-01-04.

Simultaneous Ringing

All idle members of the department group can ring simultaneously for internal and outside calls to the pilot number. Calls do not cycle between group members. Simultaneous ringing can be automatic (all members ring when the call is placed to the pilot number) or manual (the call to the pilot number will step around each member of the group until the caller selects simultaneous ring mode). The automatic/manual option is selected by Program 16-01-05. To select manual mode the user must either dial the service code 780 (set by Program 11-12-09) or the single digit service code set by Program 11-16-10.

Note, when automatic is selected the operation of Program 16-01-10 is effected. Calls to the pilot number will not receive ringback tone if all members are busy, they will receive busy tone and will not wait for a member to become free.

Recall Restriction

Calls transferred to the pilot number that do not get answered will recall at the extension that

transferred the call. The transfer recall can be restricted (turned off) by Program 16-01-07. When the transfer recall is restricted the transferred call will ring the group until it is answered or the caller clears down.

Maximum Queuing Limit

The quantity of ISDN DDI trunk calls queuing at a busy Department Group can be limited when all members of the group are busy. When the queue limit is reached further calls will receive busy indication. The number of calls in the queue can be set by Program 16-01-08.

If the queue limit is set to 0 then no ISDN DDI calls will be queued.

Note that the queue limit will be ignored if enhanced hunting is set in Program 16-01-10 or you have enabled Busy step on for the DDI in Program 22-11-04.

No Answer Step On Time

An un-answered call ringing at a member of a department group will step on to the next available member after a preset time, set by Program 16-01-09. If the timer is set to 0 the step on will be disabled.

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:

- Normal Hunting (Program 16-01-10 = 0)
A call to the pilot number will hunt past a busy group member to the first available extension. The call will continue to ring the extension until it is answered or the calling party hangs up, it will also step on to the next available member after the No Answer Step On Time, timer 16-01-09. Calls to the group when all members are busy will receive busy tone.
- Busy (Program 16-01-10 = 1)
A call to the pilot number will ring the first idle member of a Department group, following the priority or circular routing. The call will continue to ring the extension until it is answered or the calling party hangs up, it will not step on to the next available member. If the Department Group has Priority Routing enabled, and the highest priority member is busy, the call will step on to the next available member. Calls to the group when all members are busy will receive ring back tone and wait for a member to become free.
- No Answer (Program 16-01-10 = 2)
A call to the pilot number will ring the first idle member of a Department group, following the priority or circular routing. The call will continue to ring the extension until it is answered or the calling party hangs up, it will also step on to the next available member after the No Answer Step On Time, timer 16-01-09. If the Department Group has Priority Routing enabled, and the highest priority member is busy, the call will wait for the extension to become free and will not step on to the next available member. Calls to the group when all members are busy will receive ring back tone and wait for a member to become free.
- Busy & No Answer (Program 16-01-10 = 3)
A call to the pilot number will ring the first idle member of a Department group, following the priority or circular routing. The call will continue to ring the extension until it is answered or the calling party hangs up, it will also step on to the next available member after the No Answer Step On Time, timer 16-01-09. If the Department Group has Priority Routing enabled, and the highest priority member is busy, the call will step on to the next available member and continue to step on after the No Answer Step On Time. Calls to the group when all members are busy will receive ring back tone and wait for a member to become free.

Note that enhanced hunting will effect the operation of simultaneous ringing and maximum queue limit.

Features

Queue Announcements

If a call in queue is an outside call, and the system has DSPDB daughter board installed for VRS, the queued caller can hear a customer recorded announcement.

Up to two different announcements can be given to the queued caller.

There is also a pre-recorded announcement, *"Please hold on. All lines are busy. Your call will be answered when a line becomes free."*

The queue announcements are assigned by Program 22-15 for each group.

Note, DDI calls will not receive the queue announcement if the queue limit is set to 0 in Program 16-01-08, enhanced hunting is set to normal hunting in Program 16-01-10 and the DDI has no transfer set in Program 22-11-05 as calls will not queue at the busy group. You must set either a queue limit greater than 0 or set enhanced hunting to allow calls to queue at a busy group or set a transfer option in 22-11-05.

User Log In/Log Out

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 system phone can optionally have a function key programmed for one-button log in and log out operation.

Secondary Group Allocation

An extension can be a member of one Department Group by allocation in Program 16-02-01. An extension can also be a secondary member of other Department Groups by allocation in Program 16-03-01. Each Department Group can have up to 16 secondary members.

When a Department Group contains a secondary member allocated in Program 16-03-01 then the simultaneous ring option (automatic and manual) is not available.

Conditions

When a DIL rings to a Department Group, the DIL will not follow overflow programming (Programs 22-01-04 and 22-08).

If an extension sets call forward it will be removed from any department groups. Department group calls cannot follow the call forward.

If an extension sets DND External it will not receive any outside calls to the department group.

If an extension sets DND Internal it will not receive any internal calls to the department group.

If an extension sets DND All it will not receive any outside or internal calls to the department group.

Default Setting

Disabled.

■ Programming

- 11-07-01 : Department Group Pilot Numbers
- 15-07-01 : Programming Function Keys
- 16-01-01 : Department Group Basic Data Setup - Department Name
- 16-01-02 : Department Group Basic Data Setup - Department Calling Cycle
- 16-01-03 : Department Group Basic Data Setup - Department Routing When Busy
- 16-01-04 : Department Group Basic Data Setup - Hunting Mode
- 16-01-05 : Department Group Basic Data Setup - Simultaneous Ring Mode
- 16-01-06 : Department Group Basic Data Setup - Group Withdraw Mode (not available)
- 16-01-07 : Department Group Basic Data Setup - Recall Restriction
- 16-01-08 : Department Group Basic Data Setup - Maximum Queue Limit
- 16-01-09 : Department Group Basic Data Setup - Department Hunting No Answer Time
- 16-01-10 : Department Group Basic Data Setup - Enhanced Hunting
- 16-02-01 : Department Group Assignment for Extensions

- 16-03-01 : Secondary Department Group Assignment
- 20-06-01 : Class of Service for Extensions
- 20-13-14 : Class of Service Options (Supplementary Service) - Department Calling
- 22-02-01 : Incoming Call Trunk Setup
- 22-07-01 : DIL Assignment

■ Related Features

- Department Step Calling
- Multiple Directory Numbers / Call Coverage
- Transfer
- Voice Mail
- Voice Response System - VRS

■ Operation

To call a department:

1. At system phone, press a SPK 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.

To log out of your Department Calling Group:

While you are logged out, Department Calling cannot route calls to your extension.

1. Press a SPK key.

2. Dial 750 + 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 a SPK key.

2. Dial 750 + 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.

Features

Department Group - Call Forward

■ Description

Department Group Call Forward allows a user to set call forward for calls routed to a department group.

The forward can be set for each department group and each department group can have its own destination number that the calls are forwarded to. The destination can be either an internal extension/pilot number or an off premise number.

The feature will operate for calls via ISDN trunk ports that are set as DDI (Type 3 in Program 22-02-01) and internal calls to the pilot number.

The call forward is controlled by service codes and function keys. The destination can also be changed by the user for each night mode (1-8).

When call forward is set all incoming calls to the department group will be forwarded immediately or after a delay. Call forward after a delay can only be set via function key 59 and will only operate for incoming DDI calls to the department group. The delay time is set by Program 24-02-08.

The destination of the call forward is saved in an Abbreviated Dial bin, the bin is defined by Program 24-05-01. If a different call forward destination is required for each night mode then a different Abbreviated Dial bin must be defined for each night mode. To route the call off premise you must enter a trunk access digit (e.g. 9) before the destination number. If there is no trunk access digit the call will route internally. The internal number can be an extension or another department group pilot number.

It is also possible to chain the call forwards, for example if department group 01 is forwarded to department group 02 and group 02 is also forwarded extension 250 then calls to department group 01 will ring at extension 250.

A call that is forwarded off premise will be disconnected after timers 25-07-07 & 08.

The outgoing trunk route is defined by Program 21-03-01. A free trunk within this route will be used when a call is forwarded off premise.

Conditions

Analogue trunks must have disconnect clear enabled when call forward off premise is set, this is to ensure the lines are cleared when a call is disconnected.

The call forward destination cannot be set from an analogue SLT via Service Code 704.

Default Setting

The service code to enable department group forwarding is 702.

The service code to disable department group forwarding is 703.

The service code to set/change the destination number is 704.

Abbreviated Dial bin 1999 is used as the call forward destination for all night modes.

The disconnect timers are set to give a warning tone after 30 seconds and then disconnect after another 15 seconds.

The outgoing trunk route is not defined.

Disconnect clear is not set.

Trunk to trunk call forward setting is enabled in Class of Service.

■ Programming

- 11-11-25 : Service Code - 702
- 11-11-26 : Service Code - 703
- 11-10-08 : Service Code - 704
- 13-04-01 : Abbreviated Dial Name and Number
- 14-01-13 : Trunk to Trunk Transfer
- 15-07-01 : Programming Function Keys (Codes 58 and 59)
- 20-11-07 : Class of Service
- 21-03-01 : Trunk Route for Automatic Trunk to Trunk Routing
- 24-04-01 : Destination Abbreviated Dial Bin Number (bin 1999 is used at default)

- 25-07-07 & 08 : DISA Conversation Timers

■ Related Features

- Department Calling
- Trunk to Trunk Transfer
- Call Forward Off Premise
- Call Forward to Abbreviated Dial Bin
- Programmable Function Keys

■ Operation

To set the destination number for each department group.

(Cannot be set from an analogue SLT.)

1. Press SPK to go off hook.
2. Dial 704.
3. Dial the department group number (01 to 64).
4. Dial the night mode number (1 to 8).
5. Dial the off premise destination number (include any trunk access digits for off premise).
6. Press HOLD to set the destination for other night modes.
7. Press SPK to hang up.

Note that at step 5 the destination number will be saved to the Abbreviated Dial bin number specified by Program 24-05-01 for the chosen night mode.

If the same Abbreviated Dial bin is also used for other night modes then you do not need to set them separately. For example at default bin number 1999 is used for all night modes so when a night mode destination number is set for any night mode it will be used for all night modes.

To set the call forward for incoming calls to a department group:

1. Press SPK to go off hook.
 2. Dial department group call forward service code - 702.
 3. Dial the department group number (01 to 64).
 4. Press SPK to hang up.
 5. Repeat steps 1 to 4 for further department groups.
- Or
6. Press the department group call forward function key (851+58+group number). The key will flash red when the call forward is set.

To cancel the call forward for incoming calls to a department group:

1. Press SPK to go off hook.
 2. Dial department group call forward cancel service code - 703.
 3. Dial the department number (01 to 64).
 4. Press SPK to hang up.
 5. Repeat steps 1 to 4 for further department groups.
- Or
6. Press the department group call forward function key (851+58+group number). The key will go out when the call forward is cancelled.

To set delayed call forward for incoming DDI Calls:

1. Press the department group delayed call forward function key (851+59+group number). The key will flash red when the call forward is set.
2. Incoming DDI calls will ring at the department group until a timer expires (Program 24-02-08)
3. When the timer expires the call to the department group will forward to the destination number.

To cancel delayed call forward for incoming DDI Calls:

1. Press the flashing department group delayed call forward function key (851+59+group number). The key will go off when the call forward is cancelled.

Features

Department Step Calling

■ 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

- 11-16-01 : Single Digit Service Code Setup
- 15-07-01 : Programming Function Keys
- 20-06-01 : Class of Service for Extensions
- 20-08-12 : Class of Service Options (Outgoing Call Service) - Department Step Calling

■ Related Features

- Department Calling
- Programmable Function Keys

■ Operation

To make a Step Call:

You step through Extension Groups set in Program 16-02.

1. Place call to busy Department Group member.
OR
Place call to Department Group pilot number.
2. Press Step Call key (PGM 15-07 or SC 851: 36).
3. Repeat step 2 to call other Department Group members.

Dial Number Preview

■ Description

Dialling Number Preview lets a display system phone user dial and review a number before the system dials it out. Dialling Number Preview helps the user avoid dialling errors.

Conditions

An extension user cannot edit the displayed number.
If the DSPDB is installed the user must dial * to begin preview dial.

Default Setting

Enabled.

■ Programming

- 20-06-01 : Class of Service for Extensions
- 20-08-05 : Class of Service Options (Outgoing Call Service) - Dial Number Preview

■ Related Features

- Central Office Calls, Placing

■ Operation

To use Dial Number Preview to place a call (system phone only):

1. Do not lift the handset or press a SPK key.
2. **To preview any number**, press *.
To preview an Abbreviated Dial number, press DC.
3. Dial number you want to call.
The number displays.
4. 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 SPK key.
OR
To cancel the number without dialling it out, press HOLD.

Features

Dial Pad Confirmation Tone

■ 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

- 20-06-01 : Class of Service for Extensions
- 20-18-05 : Service Tone Timer - System Phone Confirmation Tone

■ Related Features

- Single Line Telephones - this feature is not available at a single line telephone.

■ Operation

To enable Dial Pad Confirmation Tone:

1. Press a SPK key
2. Dial 824

To disable Dial Pad Confirmation Tone:

1. Press a SPK key
2. Dial 824

Dial Tone Detection

■ 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 dialling 805 and the trunk's number), the system will drop the trunk if dial tone does not occur. If the user accesses the trunk via a Trunk Group (by dialling 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 Dialling
- Central Office Calls, Placing
- Last Number Redial
- Loop Keys (outbound)
- Save Number Dialed
- Tie Lines
- Trunk Group Routing
- Trunk Groups

Conditions

None

Default Setting

Disabled for manually dialled calls; enabled for automatically dialled 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 805 + 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 timeout
	1	0	Trunk drops
	1	1	Trunk reroutes after timeout

- 10-09-01 : DTMF and Dial Tone Circuit Setup
- 14-02-05 : Analogue Trunk Data Setup - Dial Tone Detection for Directly Accessed Trunks
- 21-01-05 : System Options for Outgoing Calls - Dial Tone Detection Timer
- 80-03-01 : DTMF Tone Receiver Setup
- 80-04-01 : Call Progress Tone Detector Setup
- 14-02-11 : Analogue Trunk Data Setup - Next Trunk in Rotary if No Dial Tone

■ Related Features

See Description above.

■ Operation

Dial Tone Detection is automatic if enabled in programming.

Features

Direct Dial In (DDI)

■ Description

Direct Inward Dialling (DID or DDI) 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 number 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 Dialling requires DDI service from the Network Provider.

In addition to direct dialling 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., 200-499), use the translation tables to convert the digits received. For example, a translation table could convert digits 500-799 to extension numbers 200-499.

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 up to 8 digit DID service. 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.

DID Camp-On

DID Camp-On sets what happens to DID calls to busy extensions when you have Busy Intercept disabled (22-11-04). With DID Camp-On enabled, a call to a busy extension camps-on. If Program 22-11-04 is set for No Answer step on, the call will step on after the DID Ring No Answer Time interval (22-01-06). It will step on to the programmed DID Intercept extension ring group or Voice Mail (22-11-05/06). 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 dialling options. If the caller misdials, 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 dialled 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 dialled 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.

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 analysing 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 misdials, 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.

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 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.

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 new DID intercept feature is not yet supported.

When the DID Intercept destination is programmed for the VRS, it is necessary to program this similar to a VRS OPA trunk in Program 2205.

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).

Features

Conditions

- (A.) DID service must be purchased from your local telephone company.
- (B.) BRI DID requires a BRIU PCB.

Default Setting

Disabled.

■ Programming

- 10-09-01 : DTMF and Dial Tone Circuit Setup
- 14-05-01 : Trunk Groups
- 15-07-01 : Programming Function Keys
- 20-09-01 : Class of Service Options (Incoming Call Service) - Second Call for DID/ DISA/ DIL/ E&M
- 21-01-02 : System Options for Outgoing Calls - Intercom Interdigit Time
- 22-01-06 : System Options for Incoming Calls - DID Ring-No-Answer Time
- 0414 - System Timers (Part B), Timer 13: DID Intercept No Answer Second Destination Timer
- 0419 - Class of Service Options (Part B), Item 12: Off-Hook Ringing
- 0419 - Class of Service Options (Part B), Item 15: DID Call Waiting
- 22-02-01 : Incoming Call Trunk Setup
- 22-04-01 : Incoming Extension Ring Group Assignment
- 22-09-01 : DID Basic Data Setup - Expected Number of Digits
- 22-09-02 : DID Basic Data Setup - Received Vacant Number Operation
- 20-09-06 : DDI Name/Time display – Display option when DDI calls ring at a display phone
- 22-10-01 : DID Translation Table Setup
- 22-11-01 : DID Translation Table Number Conversion - Received Number
- 22-11-02 : DID Translation Table Number Conversion - Target Number
- 22-11-03 : DID Translation Table Number Conversion - Dial-In Name
- 22-11-04 : DID Translation Table Number Conversion - Transfer Operation Mode
- 22-11-05 : DID Translation Table Number Conversion - Transfer Destination 1
- 22-11-06 : DID Translation Table Number Conversion - Transfer Destination 2
- 22-11-07 : DID Translation Table Number Conversion - Call Waiting (DDI Camp On)
- 22-11-08 : DID Translation Table Number Conversion - Maximum Number of Calls
- 22-11-09 : DID Translation Table Number Conversion - MOH Source
- 22-11-10 : DID Translation Table Number Conversion - ACI Music Source Port
- 22-11-11 : IRG Transfer
- 22-13-01 : DID Trunk Group to Translation Table Assignment
- 34-01-02 : E&M Tie Line Basic Setup - DID/E&M Incoming Signaling Type
- 80-03-01 : DTMF Tone Receiver Setup
- 80-04-01 : Call Progress Tone Detector Setup
- 81-02-01 : DIOPU Initial Data Setup

■ Related Features

- Central Office Calls, Answering
- Direct Inward Line
- Direct Inward System Access (DISA)
- Off Hook Signaling
- Programmable Function Keys
- Station Message Detail Recording (SMDR)

Direct Inward Line (DIL)

■ 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 22-08 assignment or PC Attendant, the call rings according to the Ring Group assignments in 22-04 and 22-05.
 3. If none of the destinations in steps 1-3 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
- 15-06-01 : Trunk Access Map for Extensions
- 15-07-01 : Programming Function Keys
- 20-09-01 : Class of Service Options (Incoming Call Service) - Second Call for DID/ DISA/ DIL
- 22-01-04 : System Options for Incoming Calls - DIL No Answer Time
- 22-02-01 : Incoming Call Trunk Setup
- 22-04-01 : Incoming Extension Ring Group Assignment
- 22-07-01 : DIL Assignment
- 22-08-01 : DIL/IRG No Answer Destination

■ Related Features

- Call Forwarding
- Central Office Calls, Answering
- Central Office Calls, Placing
- Department Calling
- Do Not Disturb
- Group Call Pickup
- Name Storing
- Private Line
- Off Hook Signaling
- Programmable Function Keys
- Ring Groups

Features

■ Operation

To answer a call on your Direct Inward Line:

1. Lift handset.

2. At system phone, press flashing line key for DIL.

If you don't have a line key for the DIL, the DIL rings a 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 system phone, press line key for DIL

OR

Dial 805 and the DIL trunk number (e.g., 05).

OR

Dial 804 and the DIL trunk group number (e.g., 05).

OR

Dial 9 for Trunk Group Access

3. Dial number.

Direct Inward System Access (DISA)

■ 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 a 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 dialling restrictions for DISA callers. This allows you to control the capabilities of the DISA callers dialling 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., 01). 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 Dialling**
The system's Common Abbreviated Dialling bins may be available to DISA callers. This could save the DISA caller time when dialling.
- **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 805 followed by the trunk's number (e.g., 01). 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.
- **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.

Features

DISA Toll Restriction

The digits a DISA caller dials for an outgoing call may be subject to the system's Toll Restriction.

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 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 dialling a code to continue the conversation or disconnect.

DISA Dial in Mode

You can select the method that the digits dialled by a DISA caller are routed by the system by Program 25-01-01.

You can select Intercom mode where the received digits are used to route the DISA caller or you can select Convert mode where the received digits are passed to the DDI Conversion table.

When you select the Convert mode the operation of the DISA call is the same as a DDI call, as follows:

The trunk port that the DISA call is received on will define the trunk group number (Program 14-05-01).

The trunk group number will define the DDI table area for each night mode (Program 22-13-01).

The DDI table area is defined by Program 22-10-01. You now have the DDI conversion table to be used as the convert table.

The quantity of digits that the DISA caller must dial is define by Program 22-09-01 (default is 4 digits).

The digits received are then compared to the receive dial entries of the DDI table (Program 22-11-01), if an exact match is found the call will be routed to the DDI target number (Program 22-11-02). If a match is not found the DISA call will be disconnected.

If the DDI target number is invalid the call will not use the DISA option for Wrong Dial (Program 25-03-01). If the DDI target is invalid the options for the DDI will be used (Program 22-11-06 & 06).

If the DDI target number is busy/no answer the call will not use the DISA option for Busy/RNA (Program 25-04-01). If the DDI target is busy/RNA the options for the DDI will be used (Program 22-11-04).

DISA Password/User ID

You can enable/disable the DISA password per trunk port by Program 25-01-02. When enabled all DISA callers must enter a valid 6-digit password before the call can proceed; the passwords are defined in Program 25-08-01. The DISA password is used to assign a DISA Class of Service.

If the DISA password is disabled the incoming caller does not need to enter any password to access all of the DISA options.

Care should be taken when the password is disabled as any DISA caller can access outgoing trunks and paging zones etc.

Conditions

The DISA caller must use a DTMF dial telephone. DISA trunks should have disconnect supervision to prevent phantom calls should the caller abandon the call.

Default Setting

Disabled.

■ Programming

- 10-09-01 : DTMF and Dial Tone Circuit Setup
- 11-01-01 : System Numbering
- 11-09-02 : Trunk Access Code - Alternate Trunk Route Access Code
- 14-01-02 : Basic Trunk Data Setup - Transmit CODEC Gain Type
- 14-01-13 : Basic Trunk Setup - Loop Disconnect Supervision
- 20-01-05 : System Options - DTMF Receiver Active Time
- 20-09-01 : Class of Service Options (Incoming Call Service) - Second Call for DID/ DISA/
- 20-14-01 - 20-14-11 : Class of Service Options for DISA/E&M
- 21-15-01 : Alternate Trunk Route for Extensions
- 22-01-11 : System Options for Incoming Calls - VRS Waiting Message Interval Time
- 22-02-01 : Incoming Call Trunk Setup
- 22-04-01 : Incoming Extension Ring Group Assignment
- 25-03-01 : DID/DISA Transfer Ring Group With Incorrect Dialling
- 25-04-01 : DID/DISA Transfer Ring Group With No Answer/Busy
- 25-07-01 : System Timers for DID/DISA - DISA Dial Tone Time
- 25-07-02 : System Timers for DID/DISA - DID/DISA No Answer Time
- 25-07-07 : System Timers for DID/DISA -DISA Conversation Warning Tone Time
- 25-07-08 : System Timers for DID/DISA - DISA Long Conversation Disconnect
- 25-07-09 : System Timers for DID/DISA - DISA Internal Paging Time
- 25-07-10 : System Timers for DID/DISA - DISA External Paging Time
- 25-07-13 : System Timers for DID/DISA - DID/DISA Busy Tone Interval
- 25-08-01 : DISA User ID Setup
- 25-09-01 : Class of Service for DISA Users
- 25-10-01 : Trunk Group Routing for DISA
- 25-11-01 : DISA Toll Restriction Class
- 25-12-01 : Alternate Trunk Group Routing for DISA
- 25-13-02 : System Option for DISA - Continue Code for DISA Trunk-to-Trunk
- 25-13-03 : System Option for DISA - Disconnect Code for DISA Trunk-to-Trunk
- 80-03-01 : DTMF Tone Receiver Setup

■ Related Features

- Automatic Route Selection
- Central Office Calls, Answering
- Direct Inward Dialling (DID) / Direct Inward Line (DIL) / Voice Response System (VRS)
- Long Conversation Cutoff
- Voice Response System (VRS)

Features

■ Operation

To place a DISA call into the system (from any DTMF dial 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 (200-295).
 - 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 (1-25) for an outside call.
 - OR
 - Dial 805 + a trunk number (1-51) for an outside call.
 - OR
 - Dial 813 + Common Abbreviated Dialling bin number.
 - OR
 - Dial 0 for the operator.
 - OR
 - Dial 801 + an Internal Paging Zone number (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.

Direct Station Selection (DSS) Console

■ Description

The DSS Consoles (64-Button, 24-Button) gives a system phone 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

You can also program the DSS Console keys to store Function codes. This provides the DSS Console user with many of the features available on Programmable Feature Keys.

The maximum number of 64 button DSS Consoles allowed on the system is 9. Each XN120 unit can have 3 64-button consoles.

An extension can have one 64-button DSS console assigned.

An extension (display system phone only) can have one 24-button DSS console connected.

An extension can have both a 24-button DSS and 64-button DSS console installed.

Installation of the Consoles

The 64-button console plugs into an XN120 main/expansion unit or a 308/008 card. It must be connected to port 8 of each unit/card. Each console will take a port on the system. The console is assigned to a system phone in Program 30-02. The keys are set in Program 30-03, each key has a function number and optional additional data.

The 24-button console plugs into any system phone with a display via the adaptor socket in the base of the phone, it does not take a port on the system. The keys are set either via Program 15-07 or by service codes 851/852 from the system phone it is plugged into. Each key has a function number and optional additional data.

Refer to the XN120 Getting Started Guide 991409-5 for detailed instructions for the consoles.

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 LEDES 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 system phone connected, ***start programming the DLS keys at key number 23.***

Default Setting

- No 64-button DSS Consoles assigned (in Program 30-02).
- All 64-button DSS Console key ranges are DSS/One Touch for extension numbers 200-263.
- Once a 64-button DSS Console is enabled, the console's keys are DSS/One Touch keys (Program 30-03).
- Once a 24-button console is attached the keys are Not Defined (Program 15-07).

Features

■ Programming

- 10-03-01 : Terminal Type
- 10-03-09 : PCB Setup
- 15-07-01 : Programming Function Keys
- 20-02-03 : System Options for System Telephones - BLF Control and
- 20-06-01 : Class of Service for Extensions
- 30-01-01 : DSS Console Operating Mode
- 30-02-01 : DSS Console Extension Assignment
- 30-03-01 : DSS Console Key Assignment

■ Related Features

- Central Office Calls, Answering and Placing
- Door Box
- Night Service
- One-Touch Calling
- Paging, External and Internal
- Programmable Function Keys

■ Operation

Calling an extension from your DSS Console:

Optional for 64-Button Consoles.

1. Press DSS Console key.
*If the call voice-announces, you can make it ring by dialling 1.
If you don't have Handsfree, you must lift handset to speak.*

Placing a trunk call from your 24-Button DSS Console:

1. Press DSS Console key assigned to trunk.
2. Dial outside number.
If you don't have Handsfree, you must lift the handset to speak.

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.

Calling a Door Box from your 64-button DSS Console:

1. Press DOOR1 or DOOR2.
If you don't have Handsfree, you must lift the handset to talk to the Door Box.

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 an External Page using your 64-button DSS Console:

1. Press DSS Console External Page zone key (EZ1, EZ2 or EAZ).
*If the zone you want is busy, try again later.
If you don't have Handsfree, lift the handset to make your announcement.*

Making an Internal Page using your 64-button DSS Console:

1. Press DSS Console Internal Page zone key (IZ1 – IZ4).

If the zone you want is busy, try again later.

If you don't have Handsfree, lift the handset to make your announcement.

Switching the Night Service mode from your 64-button DSS Console:

1. Press Night Service (NT) key.

The NT key will flip the system between DAY1 and NIGHT1 mode.

Using a DSS Console key as a Programmable Function Key:

You can store Function codes under DSS Console keys.

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.

Features

Directed Call Pickup

■ 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) Directed Call Pickup does not pick up calls recalling an extension (such as Hold and Transfer recalls) or calls on Hold.
- B) 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

- 20-10-05 : Class of Service Options (Answer Service) - Directed Call Pickup for 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
- Personal Park
- Voice Mail

■ Operation

To use Directed Call Pickup to intercept a call to a co-worker's extension:

1. At system phone, press a SPK key.

OR

At single line set, lift handset.

2. Dial 715.
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.

Do Not Disturb

■ 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 cancelled

Conditions

If there is no Call Forwarding key (Program 15-07: 10 - 17), the DND key will blink when the extension is forwarded.

Default Settings

Enabled for all extensions.

■ Programming

- 11-12-01 : Service Code Setup (for Service Access) - Call Forwarding/DND Override
- 11-16-06 : Single Digit Service Code Setup - DND/Call Forward Override
- 20-06-01 : Class of Service for Extensions
- 20-13-04 : Class of Service Options (Supplementary Service) - Call Forward/DND Override

■ Related Features

- Call Forwarding
- Call Forwarding/Do Not Disturb Override
- Central Office Calls, Answering
- Direct Inward Line (DIL)
- Distinctive Ringing, Tones and Flash Patterns

Features

■ Operation

To activate or deactivate Do Not Disturb while your extension is idle:

System Phone

1. Do not lift the handset.
2. Press DND key.
OR
Press a SPK 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

Door Box

■ 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 system phone 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 Relay Contact Specifications	
Contact Configuration	Normally Open
Maximum Load	500mA@24 VDC
	250mA@120 VAC

The system can have up to six Door Boxes.

Conditions

Refer to the 2PGDU Guide 99142-5 for additional details.

Default Setting

Enabled

■ Programming

- 10-03-01 : PCB Setup - Channel 1 Terminal Type
- 32-01-01 : Door Box Timers - Door Box Answer Time
- 32-01-02 : Door Box Timers - Door Lock Cancel Time
- 32-02-01 : Door Box Ring Assignments
- 32-03-01 : Door Box Basic Setup - Chime Pattern
- 32-03-02 : Door Box Basic Setup - CODEC Transmit Gain Setup

■ Related Features

- Paging, External
- Single Line Telephones, Analogue Single Line Sets

Features

■ Operation

To call a Door Box:

System Phone

1. Press a SPK key.
2. Dial 802.
3. Dial Door Box Number (1-6).

Single Line Telephone

1. Lift handset.
2. Dial 802.
3. Dial Door Box Number (1-6).

To activate the Door Box strike:

System Phone

1. While talking to the Door Box, press the Flash key.

Single Line Telephone

1. While talking to the Door Box, press the Recall key.

To answer a Door Box chime:

1. Lift handset.

Fax Machine Compatibility

■ Description

Fax Machine Compatibility lets you integrate a customer-provided fax machine into your telephone system. You have the following options:

- **Transfer to Fax**
Transfer to Fax allows an extension user to Transfer their active voice call to a company fax machine. After the Transfer completes, the user's outside caller can start their fax machine and send the fax. This would benefit a salesperson on the road, for example. The salesperson could call their secretary and give a general report - and then fax detailed figures when the conversation is over.
- **Direct Inward Line to Fax**
DILs provide direct routing to fax machines installed as system extensions. Use a DIL for a "fax only" line for unattended sending and receiving of faxes.

Conditions

None

Default Setting

Disabled.

■ Programming

Refer to **Central Office Calls, Answering** and **Central Office Calls, Placing** for trunk programming.

■ Related Features

- Central Office Calls, Placing / Central Office Calls, Placing
- Direct Inward Line
- One-Touch Calling
- Ring Groups
- Single Line Telephones - Analogue/Digital
- Voice Response System (VRS)
- Voice Mail

■ Operation

To transfer a call to the fax machine:

System Phone

1. Press HOLD.
You hear Transfer dial tone.
2. Dial fax machine extension number.
*If you have Automatic On Hook Transfer and the extension you call is busy, pressing CALL returns you to the call.
If the called extension doesn't answer, you can dial another extension number or press CALL to return to the call.*
3. Hang up.
If you don't have Automatic On Hook Transfer, you must press the TRF Key to Transfer the call.

Single Line Set

1. Recall.
2. Dial fax machine extension number.
If the called extension doesn't answer, you can dial another extension number or recall to return to the call.
3. Hang up.

Features

Flash

■ 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

None.

Default Setting

Enabled.

■ Programming

- 14-02-03 : Analogue Trunk Data Setup - Flashing
- 14-02-04 : Analogue Trunk Data Setup - Flash for Timed Flash or Disconnect
- 15-02-05 : System Telephone Basic Data Setup - Transfer Key Operation Mode
- 15-03-04 : Single Line Telephone Basic Data Setup - Flashing
- 20-06-01 : Class of Service for Extensions
- 81-01-14 : Analogue Trunk Initial Data Setup - Recall 1
- 81-01-15 : Analogue Trunk Initial Data Setup - Recall 2

■ Related Features

- PBX Compatibility
- Toll Restriction
- Voice Mail

■ Operation

To flash the trunk you are on:

System Phone and Digital Single Line

1. Press FLASH.

Single Line Set

1. Recall.
2. Dial 806.

Flexible System Numbering

■ 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 four 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 you have to.

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)	Customize the Service Codes.
11-16 : Single Digit Service Code Setup	Assign the Single Digit Service Codes. These are the post-dialling codes a user can dial after placing an Intercom call to a co-worker.

Conditions

- 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.
- If the extension numbering plan is changed from '2xx' to '1xx', and you would like to consecutively press two DSS keys without toggling the hook switch, Program 11-16-05 must be removed. If not, pressing the second DSS key will actually change voice/ringing call to the first extension.
- 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)
 11-02 11-04 11-06 11-07
 11-08 15-01-01 15-07 15-12
 15-14 21-11

11-01 Type 1 (Service Codes)
 11-10 11-11 11-12 11-15
 15-14 21-11 30-03

- Any feature which requires dialling a code or extension number can be affected.

Features

Default Setting

Extensions are numbered consecutively (Program 11-02 and 11-04) from:

- 200 (port 01) to 295 (port 96)

■ Programming

- 11-01-01 : System Numbering
- 11-02-01 : Extension Numbering
- 11-09-01 : Trunk Access Code
- 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)
- 11-16-01 : Single Digit Service Code Setup

■ Related Features

None

■ Operation

None

Forced Trunk Disconnect

■ 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

None

Default Setting

Disabled.

■ Programming

- 20-06-01 : Class of Service for Extensions
- 20-07-11 : Class of Service Options (Administrator Level) - Forced Trunk Disconnect

■ Related Features

- Central Office Calls, Placing

■ Operation

To disconnect a busy trunk:

System Phone

1. Press line key for trunk.

OR

Dial trunk access code (805 + trunk number).

You hear busy tone. Trunk numbers are 01-51.

2. Dial 724.

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 (805 + trunk number) for the trunk disconnected in Step 2.

Single Line Telephone

1. Dial trunk access code (805 + trunk number).

You hear busy tone. Trunk numbers are 01-51.

2. Dial 724.

You hear confirmation beeps as the system disconnects the line.

3. Recall.

You can now place a call on the free line.

4. Dial the trunk access code (805 + trunk number) for the trunk disconnected in Step 2.

Features

Group Call Pickup

■ 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 dialling 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 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
- A call ringing the user's own pickup group

Conditions

A Call Pickup Group cannot have an associated name.

Default Setting

Enabled.

■ Programming

- 15-07-01 : Programming Function Keys
- 20-06-01 : Class of Service for Extensions
- 20-10-01 : Class of Service Options (Answer Service) - Group Call Pickup Within Group
- 20-10-02 : Class of Service Options (Answer Service) - Group Call Pickup from Another Group
- 20-10-03 : Class of Service Options (Answer Service) - Group Call Pickup for Specific Group
- 20-10-04 : Class of Service Options (Answer Service) - Group Call Pickup
- 20-10-05 : Class of Service Options (Answer Service) - Directed Call Pickup for Own Group
- 23-02-01 : Call Pickup Groups

■ Related Features

- Central Office Calls, Answering
- Directed Call Pickup
- Hold / Park
- Multiple Directory Numbers / Call Coverage
- Programmable Function Keys

■ Operation

To answer a call ringing another phone in your Pickup Group:

1. At system phone, press a SPK key.

OR

At single line telephone, lift handset.

2. (System Phone only) Press Group Call Pickup key (PGM 15-07 or SC 851: 24).

OR

Dial 856 or 867.

Service Code 867 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 system phone, press a SPK key.

OR

At single line telephone, lift handset.

2. (System Phone 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 system phone, press a SPK key.

OR

At single line telephone, lift handset.

2. (System Phone only)

Press Group Call Pickup key (PGM 15-07 or SC 851: 26 + group).

OR

Dial 868 and the group number (1-9 or 01-32).

Features

Handsfree and Monitor

■ Description

Handsfree allows a system phone 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

None

Default Setting

Enabled.

■ Programming

- 20-06-01 : Class of Service for Extensions

■ Related Features

- Central Office Calls, Answering / Central Office Calls, Placing
- Handsfree Answerback
- Microphone Cutoff
- Single Line Telephones
- Prime Line Selection

■ 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

■ Description

Handsfree Answerback permits a system phone 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 is not available at an analogue single line telephone.

■ Default Setting

Enabled.

■ Programming

- 20-02-12 : System Options for System Telephones - Forced Intercom Ringing
- 20-06-01 : Class of Service for Extensions
- 20-08-10 : Class of Service Options (Outgoing Call Service) - Switching from Handsfree
- 20-09-05 : Class of Service Options (Incoming Call Service)
 - Setting Handsfree Answerback/Forced Intercom Ringing

■ Related Features

- Related Features
- Handsfree and Monitor
- Microphone Cutoff
- Single Line Telephones

■ Operation

To enable Handsfree Answerback for your incoming Intercom calls:

1. Press a SPK 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 a SPK 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.

Features

Headset Operation

■ Description

A system phone 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 in the headset mode 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)

Conditions

- A) While in the headset mode, 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) Only compatible headsets should be used.
Plantronics S12 (Adapter and headset)
Plantronics M12E Vista Base with any H-series headset
Technical note: the XN120 handset has a dynamic microphone (as opposed to an Electret type) ensure the headset you connect is compatible with this type of microphone.

Default Setting

Disabled.

■ Programming

- 15-07-01 : Programming Function Keys
- 20-02-05 : System Options for System Telephones - Headset Busy Mode
- 20-02-12 : System Options for System Telephones - Forced Intercom Ringing

■ Related Features

- Handsfree Answerback/Forced Intercom Ringing
- Programmable Function Keys
- Single Line Telephones

■ Operation

To enable the headset:

1. 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.
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.



■ 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 system phone 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.

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.

Features

■ Programming

- 14-01-16 : Basic Trunk Data Setup - Forced Release of Held Call
- 14-07-01 : Trunk Access Map Setup
- 15-02-06 : System Telephone Basic Data Setup - Hold Key Operating Mode
- 15-02-07 : System Telephone Basic Data Setup - Automatic Hold for CO Line
- 15-06-01 : Trunk Access Map for Extensions
- 15-07-01 : Programming Function Keys
- 16-02-01 : Department Group Assignment for Extensions
- 20-06-01 : Class of Service for Extensions
- 20-11-09 : Class of Service Options (Hold/Transfer Service) - Group Hold Initiate
- 20-11-10 : Class of Service Options (Hold/Transfer Service) - Group Hold Answer
- 20-11-13 : Class of Service Options (Hold/Transfer Service) - Hold Recall to Operator
- 20-17-01 : Operator's Extension
- 24-01-01 : System Options for Hold - Hold Recall Time
- 24-01-02 : System Options for Hold - Hold Recall Callback Time
- 24-01-03 : System Options for Hold - Exclusive Hold Recall Time
- 24-01-04 : System Options for Hold - Exclusive Hold Recall Callback Time
- 24-01-05 : System Options for Hold - Forced Release of Held Calls Interval

■ Related Features

- Related Features
- Music on Hold
- Programmable Function Keys
- Single Line Telephones

■ Operation

System Hold

To place an outside call on System Hold (System Phone only):

1. Press HOLD.

A line/loop/CALL key flashes slowly while on Hold; flashes fast when recalling.

OR

1. If you know the specific line number, dial 772 + Line number (01-51).

To pick up an outside call on System Hold:

System Phone

1. Press flashing line/loop/CALL key.

OR

1. If you know the specific line number, dial 772 + Line number (01-51).

Exclusive Hold

To place an outside call on Exclusive Hold:

System Phone

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.

To pick up an outside call on Exclusive Hold:

System Phone

1. Press flashing line/loop/CALL key.

Group Hold

To place a call on Hold so anyone in your extension group can pick it up:

System Phone

1. Press HOLD.
2. Dial 832.
3. Press SPK to hang up.

Single Line Telephone

1. Recall.
2. Dial 832.
3. Hang up.

To pick up a call on Group Hold:

System Phone

1. Press a SPK 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 CONF/DND key flashes.
2. Press SPK to hang up.

To pick up an Intercom call on Intercom Hold:

1. Press SPK.
or
Press flashing CONF/DND key.

Features

Hotline

■ Description

Hotline gives a system phone 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)

Conditions

An extension user cannot use Hotline to pick up a call ringing their partner's extension.

Default Setting

Disabled.

■ Programming

- 15-07-01 : Programming Function Keys
- 20-02-03 : System Options for System Telephones - BLF Control and
- 20-06-01 : Class of Service for Extensions

■ Related Features

- Distinctive Ringing, Tones and Flash Patterns
- Do Not Disturb
- Handsfree Answerback/Forced Intercom Ringing
- Hotline, External
- Off Hook Signaling
- Programmable Function Keys

■ Operation

To place a call to your Hotline partner:

1. Press Hotline key (PGM 15-07 or SC 851: 01 + partner's extension number)

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

If your telephone rings, lift handset.



■ 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 for more.

Conditions

Preventing ICM calls does not affect dialling other service codes, including Emergency calls.

Default Setting

Enabled.

■ Programming

For Intercom . . .

- 20-06-01 : Class of Service for Extensions
- 20-08-01 : Class of Service Options (Outgoing Call Service) - Intercom Calls
- 20-17-01 : Operator's Extension
- 20-18-01 : Service Tone Timer - Extension Dial Tone Time
- 21-01-02 : System Options for Outgoing Calls - Intercom Interdigit Time
- 82-01-01 : Incoming Ring Tone - Intercom Ring Tone

For Handsfree Answerback/Forced Intercom Ringing . . .

- 20-02-12 : System Options for System Telephones - Forced Intercom Ringing
- 20-06-01 : Class of Service for Extensions
- 20-08-10 : Class of Service Options (Outgoing Call Service) - Switching from Handsfree
- 20-09-05 : Class of Service Options (Incoming Call Service) - Setting Handsfree Answerback/Forced Intercom Ringing

■ Related Features

- Handsfree Answerback/Forced Intercom Ringing
- Intercom Abandoned Call Display
- Line Preference
- Name Storing

Features

■ Operation

To place an Intercom call:

1. At system phone, press a SPK 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 (System Phone Only):

1. Press CHECK.
2. Press CALL.

Your display shows your telephone's extension number, port number and extension/Department Group.

3. Press CLEAR to return the normal time/date display.

To change how Intercom calls ring your extension:

1. Press the CALL key.
2. Dial 823 to have calls ring your extension.

OR

3. Dial 821 to have calls voice announce to your extension.

Last Number Redial

■ 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 dialling the digits.

Last Number Redial saves in system memory the last 36 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 pre-select a specific trunk if desired.

Redial List

The system allows display telephones to have a Redial List. Up to 10 dialled 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 dialled, the oldest number is automatically erased to make room for the new number.

Conditions

Redial List requires the use of a display telephone. Non-display and single line phones cannot use this feature.

Default Setting

Enabled.

■ Programming

- 11-12-12 : Service Code Setup (for Service Access) - Last Number Dial
- 11-12-17 : Service Code Setup (for Service Access) - Clear Last Number Dialling Data
- 15-02-13 : System Telephone Basic Data Setup - Redial List Mode
- 20-06-01 : Class of Service for Extensions

■ Related Features

- Automatic Route Selection
- Repeat Redial
- Save

Features

■ Operation

To redial your last call:

1. Without lifting the handset, press LND.

The last dialled number is displayed.

2. To redial the last number, press #.

OR

Search for the desired number from the Redial List by pressing the LND then 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 dialled.

OR

1. At system phone, 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 system phone, press a CALL key.

OR

At single line telephone, lift handset.

2. Dial 816.

The system automatically selects a trunk from the same group as your original call and dials the last number dialled.

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 a CALL key, or
- Press SPK

2. Press HOLD.

To erase the stored number:

1. At system phone, press a SPK key.

OR

At single line telephone, lift handset.

2. Dial 876.

LCR – Least Cost Routing

■ Description

Least cost routing allows the system to automatically select the indirect carrier defined by routing tables within the system.

An indirect carrier is accessed via the PSTN lines connected to the system (these are the direct carrier lines), a special access code is used to select the indirect carrier, and all dialled digits are passed to the indirect carrier for routing of the call to the destination.

The routing tables list the leading digits of numbers dialled by the users and the associated indirect carrier access code. It is possible to route calls to more than one indirect carrier.

Conditions

The PSTN numbers accepted by the indirect carrier may vary, consult the carrier for details.

Special attention must be given to Emergency calls (Police/Fire/Ambulance etc.), if you route emergency calls to an indirect carrier you must confirm that they will accept this type of call.

It is normal practice to have an 'override code' that the users can dial to route the call to a chosen carrier (direct or indirect) in the event of faults with the carrier.

F-Route/ARS operation takes place on the digits dialled by the user, before the trunk is seized. LCR will use the digits sent to line i.e. after any translation by F-Route/ARS.

Toll Restriction takes place on the digits dialled by the user. Toll restriction check will take place after any F-Route/ARS operation and before the LCR operation.

Local area calls cannot be routed via an indirect carrier that also has Cost Centre Codes enabled. This is due to the order that the digits are dialled out by the system. Local calls can be routed via an indirect carrier if Cost Centre Codes are not required.

Default Setting

Disabled.

■ Programming

Before Least Cost Routing can take place each trunk must be enabled by Program 14-01-23.

Calls made via a trunk that is disabled will route to the direct carrier only.

14-01-23 : LCR Service

Set this item to 1 to enable least cost routing.

The operation of dialled numbers beginning with a digit 1 can be changed by Program 26-01-04.

26-01-04 : LCR Mode Option

Set to UK operation - numbers beginning with digit 1 will use Program 26-08-01 for manual override operation.

Set to Not UK operation - numbers beginning with digit 1 will use Program 26-02-01 i.e. not use manual override operation.

Outgoing calls via an LCR enabled trunk will check each dialled digit against the entries of Program 26-02-01.

If the digits dialled do not match an entry the call will use the default carrier set by 26-05 Carrier table 1.

26-02-01 : Digit analyse Table

Enter the dialling code (normally just the STD code e.g. 01509), do not enter any trunk access digits (e.g. 901509).

There are 200 entries available, each entry can have up to 16 digits.

A wildcard can be entered. A wildcard means any dialled digit. Enter @ for a wildcard (press function key 01 during KeyTel Programming for a wildcard)

Features

For each entry you must specify the carrier table to use by Program 26-02-06, the carrier table is 1-25 and is set by Program 26-05.

26-02-06 : LCR Carrier Table

Enter the carrier table to use.

Note.

There are no settings required in Program 26-02-02, 26-02-03, 26-02-04, 26-02-05, 26-03 & 26-04. These are used by ARS operation. Therefore you must ensure that ARS is disabled in Program 26-01-01 otherwise Program 26-02-02, 26-02-03, 26-02-04, 26-02-05, 26-03 & 26-04 will be enabled.

In the LCR carrier table you can specify:

26-05-01 : Delete Digits

Delete leading digits - This is used to delete an override code dialled by the user.

Specify the quantity of leading digits to be deleted.

26-05-02 : Access Code

Access Code - The access code of the indirect carrier. This is specified by the indirect carrier.

The access code can be up to 16 digits in length, it is possible to enter Pause (P) and Change to DTMF (@). A pause is entered with function key 01 and change to DTMF with function key 02 during KeyTel programming. Refer to Change to DTMF Operation for further details.

26-05-03 : Authorisation table number

Authorisation code table - An optional PIN code. There are 10 entries available, they are specified in Program 26-06.

26-05-04 : Cost Centre Code

Cost Centre Code - An optional code to identify the extension making the call for billing. The cost centre code is specified for each extension by Program 26-07.

If an Authorisation Code is required it is selected from Program 26-06. The authorisation code is used to identify the customer for billing. You must confirm the authorisation code with the indirect carrier otherwise all calls via the indirect carrier will fail.

26-06-01 : Authorisation Code Table

There are 10 entries available each of up to 10 digits in length.

If a Cost Centre Code is required it is set by Program 26-07. The CCC is used to identify the user for billing. You must confirm the number of digits required by the indirect carrier.

26-07-01 : Cost Centre Codes

There is an entry for each extension installed on the Aspire system. Each entry can be up to 6 digits in length.

You must ensure that every extension has a valid cost centre code otherwise calls will fail from extensions that do not have a valid CCC.

If the customer wants an override code to bypass the LCR routing it is entered using Program 26-08. For UK operation the override code must begin with a digit 1, refer to Program 26-01-04 for LCR operation mode.

26-08-01 : Manual Override Access Code Table

There 10 entries each of up to 4 digits in length.

If you have entered any Manual Override codes in Program 26-08 you also have the option to prevent Emergency calls being made to an indirect carrier that cannot accept this type of call.

This table is only required if you have entered an override code that will route to an indirect carrier that cannot accept Emergency calls.

26-09-01 : Manual Override Exemption Table

There are 25 tables each of up to 4 digits in length. There are default entries of 999 and 112 for UK operation.

Change to DTMF Operation

In Program 26-05-02 the @ symbol will have different operation for Analogue trunks or ISDN trunks.

Analogue Trunks

At the point in the dialled digits where the @ appears the Aspire will revert to DTMF dialling. This is only required when the analogue trunk is set the Loop Disconnect dialling in Program 14-02-01.

ISDN Trunks

At the point in the dialled digits where the @ appears the Aspire will stop dialling and wait for the CONNECT from the indirect carrier. The Aspire will then continue to dial DTMF in the B-channel. The DTMF digits will be received by the indirect carrier for routing.

This is only required for indirect carriers that have a two stage setup process where the Access code is dialled in the D-channel to the direct carrier and all other digits are dialled as DTMF in the B-channel to the indirect carrier.

Order of LCR Routing Digits

When a user dials a number that is routed by LCR the individual LCR elements will be dialled to line as shown below.

<Access Code> <Authorisation Code> <CCC> <Delete leading digits> <Dialled digits>

■ **Related Features**

- Cost Centre Codes

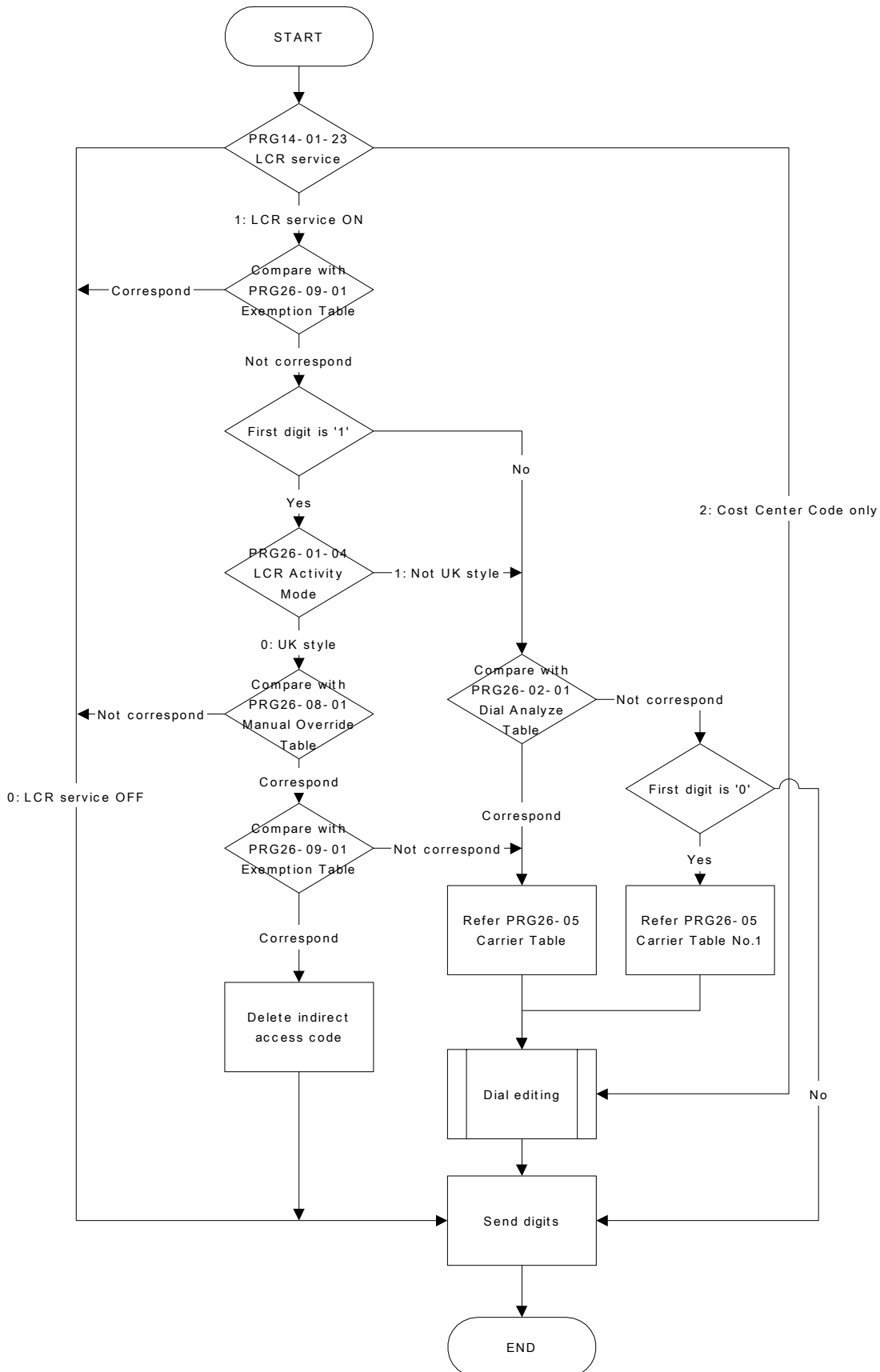
■ **Operation**

Feature is automatic once programmed.

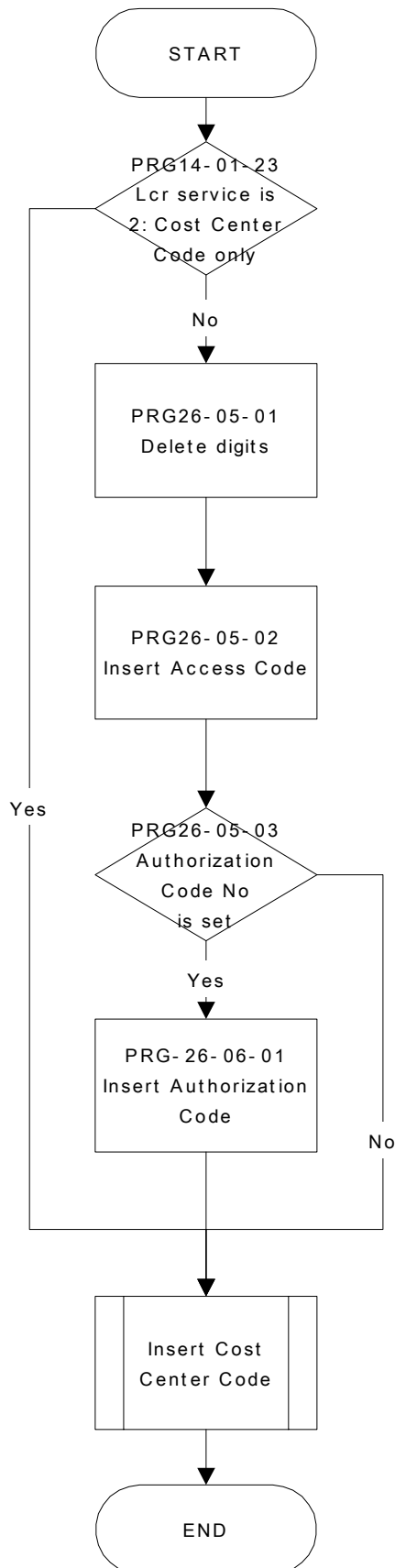
Refer to the diagrams below for details of the LCR operation.

Features

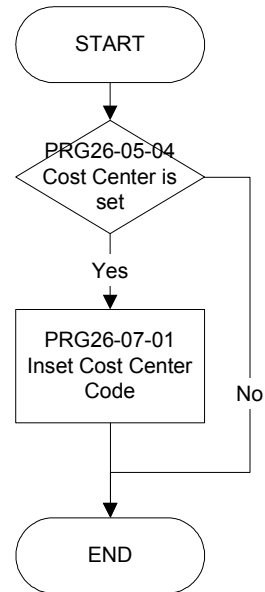
LCR Basic Operation



LCR Dial Editing



LCR Cost Centre Code



Features

Line Preference

■ Description

Line Preference determines how a system phone 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 system phone user answers calls. When a call rings the system phone, 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 system phone user places calls. If a system phone has Outgoing Intercom Line Preference, the user hears Intercom dial tone when they lift the handset. If a system phone 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 system phone 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
- 14-06-01 : Trunk Group Routing
- 14-07-01 : Trunk Access Map Setup
- 15-01-02 : Basic Extension Data Setup - Outgoing Trunk Line Preference
- 15-02-09 : System Telephone Basic Data Setup - Ringing Line Preference for Intercom Calls
- 15-02-10 : System Telephone Basic Data Setup - Ringing Line Preference for Trunk Calls
- 15-06-01 : Trunk Access Map for Extensions
- 20-10-07 : Class of Service Options (Answer Service) - Automatic Answer of Universal Calls
- 22-01-01 : System Options for Incoming Calls - Incoming Call Priority
- 22-04-01 : Incoming Extension Ring Group Assignment
- 22-05-01 : Incoming Trunk Ring Group Assignment
- 23-03-01 : Universal Answer/Auto Answer

■ Related Features

- Direct Inward Line
- Ring Groups
- Trunk Group Routing

■ 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.

Features

Line Reversal - Analogue Trunks

■ Description

Line reversal is supplied by the network provider to indicate when the called party has answered. It is therefore only available for outgoing calls made from the Aspire system.

Line reversal is only available for analogue trunks connected to COIU PCB's.

When the line reversal is detected by the Aspire the call timer (at the system phone with a display) will start.

The call duration of the SMDR will also start when the line reversal is detected, this gives an accurate indication of call durations.

Without line reversal the call timer and SMDR call duration will start after a timer (Program 21-01-03).

Conditions

Line reversal must also be supplied by the network provider.

Default Setting

Polarity reverse and timeout.

■ Programming

14-02-08 : Answering Condition - Select polarity reverse only or polarity reverse and timeout

21-01-03 : Trunk Inter digit timer - Set the timeout duration

Long Conversation Cutoff

■ 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 analogue 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
- 14-01-15 : Basic Trunk Data Setup - Long Conversation Alarm Before Cut Off
- 20-06-01 : Class of Service for Extensions
- 20-13-02 : Class of Service Options (Supplementary Service)
 - Long Conversation Cutoff (Incoming)
- 20-13-03 : Class of Service Options (Supplementary Service)
 - Long Conversation Cutoff (Outgoing)
- 20-21-03 : System Options for Long Conversation
 - Long Conversation Cutoff Timer for Incoming Calls
- 20-21-04 : System Options for Long Conversation
 - Long Conversation Cutoff Timer for Outgoing Calls

■ Related Features

- Central Office Calls, Answering/Central Office Calls, Placing
- Direct Inward System Access (DISA)/Tie Lines
- Warning Tone for Long Conversation

■ Operation

Feature is automatic once programmed.

Features

Loop keys

■ Description

Loop keys are uniquely programmed function keys that simplify placing and answering trunk calls. Loop keys are used when the phone does not have a line key for the trunk. The loop key gives the user a key with lamp that to make holding/transferring of trunk calls easier.

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

Each system phone has a both way loop key assigned to key 10.

■ Programming

- 14-05-01 : Trunk Groups
- 14-07-01 : Trunk Access Map Setup
- 15-06-01 : Trunk Access Map for Extensions
- 15-07-01 : Programming Function Keys
- 15-13-01 : Loop Keys
- 20-07-10 : Class of Service Options (Administrator Level), Programmable Function Key Programming (Appearance Level)
- 22-04-01 : Incoming Extension Ring Group Assignment
- 22-05-01 : Incoming Trunk Ring Group Assignment

■ Related Features

- Automatic Route Selection (ARS) / Central Office Calls, Answering / Central Office Calls, Placing
- Off Hook Signaling
- Programmable Function Keys
- Ring Groups
- Direct Inward Dialling (DID) / Direct Inward Line (DIL) / Direct Inward System Access (DISA) / Tie Lines

■ 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:

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)
 - 01-25 = 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.

Features

Meet Me Conference

■ 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 dialling a Meet Me Conference code. Meet Me Conference lets extension users have a telephone meeting -- without leaving the office.

Conditions

Each block assigned in Program 10-07 for Conversation Recording reduces the number of blocks available for Conference.

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
- 15-07-01 : Programming Function Keys
- 20-06-01 : Class of Service for Extensions
- 20-10-06 : Class of Service Options (Answer Service) - Meet Me Conference and Paging
- 31-01-04 : System Options for Internal/External Paging - Privacy Release Time

■ Related Features

- Conference
- Meet Me Paging
- Programmable Function Keys

■ Operation

Meet Me External Conference

To make a Meet Me External Conference:

System Phone

1. While on a call, press Conference key (PGM 15-07 or SC 851: 07).
2. Dial 803 and the External Paging Zone code (1-6 or 0 for All Call)
OR
Dial 751 and the Combined Paging Zone code 1-6 (for Internal/External Zones 1-6)
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, recall and dial 826.
2. Dial 803 and the External Paging zone code (1-8 or 0 for All Call).
OR
Dial 751 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 recall twice.
5. Repeat steps 1-4 for each co-worker you want to add.

To join a Meet Me External Conference:

1. At system phone, press a SPK key.
OR
At single line telephone, lift handset.
2. Dial 865.
3. Dial the announced External Paging Zone code (0-6).
You connect to the other parties.

Meet Me Internal Conference:

To make a Meet Me Internal Conference:

System Phone

1. While on a call, press Conference key (PGM 15-07 or SC 851: 07).
2. Dial 801 and the Internal Paging Zone code (0-6 or 00-32).
OR
Dial 751 and the Combined Paging Zone code 1-6 (for Internal/External Zones 1-6) 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, recall and dial 826.
2. Dial 801 and the Internal Paging Zone code (0-6 or 00-32).
OR
Dial 751 and the Combined Paging Zone code 1-8 (for Internal/External Zones 1-6) or 0 (for Internal/External All Call).
3. Announce the zone.
4. When co-worker answers your page, press the recall twice.
5. Repeat steps 1-4 for each co-worker you want to add.

To join a Meet Me Internal Conference:

1. At system phone, press a SPK 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.

Features

Meet Me Paging

■ 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

External paging requires an external paging device to 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 : Programming Function Keys

20-06-01: Class of Service for Extensions

20-10-06 : Class of Service Options (Answer Service) - Meet Me Conference and Paging

■ Related Features

Meet Me Conference

Meet Me Paging Transfer

Paging, Internal / Paging, External

Programmable Function Keys

■ Operation

Meet Me External Page:

To make a Meet Me External Page:

1. At system phone, press a SPK key.

OR

At single line telephone, lift handset.

2. Dial 803 and the External Paging Zone code (1-6 or 0 for All Call).

OR

Dial 751 and the Combined Paging Zone code 1-6 (for Internal/External Zones 1-6) or 0 (for Internal/External All Call).

3. Announce the zone.

OR

1. At system phone, 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 system phone, press a SPK key.

OR

At single line telephone, lift handset.

2. Dial 865.

3. Dial the announced External Paging Zone (0-6).

You connect to the other party.

Meet Me Internal Page

To make a Meet Me Internal Page:

1. At system phone, press a SPK key.
OR
At single line telephone, lift handset.
2. Dial 801 and dial the Internal Paging Zone code (0-6, 00-32).
OR
Dial 751 and the Combined Paging Zone code 1-6 (for Internal/External Zones 1-6)
or 0 (for Internal/External All Call).
3. Announce the zone.
OR
1. At system phone, 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 system phone, press a SPK 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.

Features

Meet Me Paging Transfer

■ 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

External paging requires a 2PGDU unit 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 : Programming Function Keys
- 20-06-01 : Class of Service for Extensions
- 20-10-06 : Class of Service Options (Answer Service) - Meet Me Conference and Paging

■ Related Features

- Meet Me Conference
- Meet Me Paging
- Paging, External
- Paging, Internal
- Programmable Function Keys

■ Operation

Meet Me External Paging Transfer

To make a Meet Me External Paging Transfer:

1. At system phone, while on a call, press HOLD.
OR
At single line telephone, while on a call, recall.
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 (1-6 or 0 for All Call).
OR
Dial 751 and the Combined Paging Zone code 1-6 (for Internal/External Zones 1-6) 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 system phone, press a SPK key.
OR
At single line telephone, lift handset.
2. Dial 865.
3. Dial the announced External Paging Zone (0-6).
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 system phone, while on a call, press HOLD.
OR
At single line telephone, while on a call, recall.
2. Press Internal Paging Zone key (PGM 15-07 or SC 851: 20 + zone).
OR
Dial 801 and the Internal Paging Zone code (0-6 or 00-32).
OR
Dial 751 and the Combined Paging Zone code 1-6 (for Internal/External Zones 1-6) 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 system phone, press a SPK 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.

Features

Memo Dial

■ Description

While on an outside call, Memo Dial lets a display system phone user store an important number for easy redialling 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 dialled digits do not output over the trunk. Dialling 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 : Programming Function Keys

■ Related Features

- Central Office Calls, Placing
- Last Number Redial
- Single Line Telephones
- Save Number Dialed

■ 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 a 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 a CALL key.
2. Press Memo Dial key (PGM 15-07 or SC 851: 31).

Message Waiting

■ 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 system phone 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.

Message Waiting Available for Single Line Telephones

This feature provides message waiting indications to single line telephones without message waiting lamps. The system provides special dial tone as an additional method of indicating a message waiting on a single line telephone with or without a message waiting lamp.

Note the following items for this feature:

- This feature can apply to any analogue single line telephone.
- Since it's possible that a user will pick up the handset and dial without listening for dial tone, the system is able to detect dialling during special dial tone.
- All of the message waiting indication methods may be active at any SLT.
- Options are available based on a station's class of service.
- These signalling methods are available to all analogue single line telephones, whether connected to a 308M/308ME card.
- The Message Wait dial tone will be a system tone and can be changed in Program 80-01 Service tone number 3.

Conditions

Message waiting lamps at the SLT must be compatible with the XN120 operation (24V to 100V switching at 500mS interval).

Default Setting

Enabled.

Features

■ Programming

- 15-07-01 : Programming Function Keys
- 20-06-01 : Class of Service for Extensions
- 20-13-07 : Class of Service Options (Supplementary Service) - Message Waiting
- 80-01-01 : Service Tone Setup - Message Wait Dial Tone

■ Related Features

- Handsfree Answerback/Forced Intercom Ringing
- Programmable Function Key
- Single Line Telephones
- Voice Mail

■ Operation

To leave a Message Waiting:

1. Call busy or unanswered extension.
2. Press Message Waiting key (PGM 15-07 or SC 851: 38)
3. Hang up.

With system phone 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 system phone, press a SPK key and dial 841.
OR
Press Message Waiting key (PGM 15-07 or SC 851: 38).
OR
At single line telephones, lift the handset and dial 841.

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 system phone, press a SPK 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 system phone, press a SPK 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 841.

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 VOLUME ▲ or VOLUME ▼ to scroll through your display.
4. When you find the message you want to answer, press a SPK key. 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.

Single Line Telephones Without Message Waiting Lamps:

With special dial tone only:

1. Lift handset.

The system provides the special Message Wait dial tone immediately.

Features

Microphone Cutoff

■ Description

Microphone Cutoff lets a system phone 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
- 20-06-01 : Class of Service for Extensions

■ Related Features

- Handsfree Answerback/Forced Intercom Ringing
- Programmable Function Keys
- Single Line Telephones

■ 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.

Multiple Directory Numbers / Call Coverage

■ Description

Multiple Directory Numbers let a system phone have more than one extension number. Calls can route to the system phone's installed number or to the system phone'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 system phone 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 system phone 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 system phone 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.

Features

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 calls to more than one extension. 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).
- Program 15-07: Assign a Call Coverage key (*03) to an extension for the virtual extension number assigned.

The end user can then simply transfer the call to the virtual extension number (example: 5400). To allow calls to be queued at the virtual you must place the virtual within a Department Group and have the user transfer calls to the pilot number, the call is in placed in a queue and will be answered in turn as soon as the extension is available.

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).

Default Setting

Disabled.

■ Programming

- 11-04-01 : Virtual Extension Numbering
- 15-01-01 : Basic Extension Data Setup - Extension Name
- 15-02-21 : System Telephone Basic Data Setup, Virtual Extension Access Mode
- 15-07-01 : Programming Function Keys
- 15-08-01 : Incoming Virtual Extension Ring Tone Setup
- 15-09-01 : Virtual Extension Ring Assignment
- 15-10-01 : Incoming Virtual Extension Ring Tone Order Setup
- 15-11-01 : Virtual Extension Delayed Ring Assignment
- 20-04-03 : System Options for Virtual Extensions - Call Coverage Delay Interval
- 20-06-01 : Class of Service for Extensions
- 20-07-10 : Class of Service Options (Administrator Level) - Programmable Function Key
- 20-10-08 : Class of Service Options (Answer Service) - Auto Off-Hook Answer for Call Coverage Keys
- 23-04-01 : Ringing Line Preference for Virtual Extensions

■ Related Features

- Class of Service
- Department Calling
- Do Not Disturb / Off-Hook Signaling
- Group Call Pickup
- Line Preference
- Programmable Function Keys

■ 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 a 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 a 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.

Features

Music on Hold

■ Description

Music on Hold (MOH) sends music to calls on Hold and parked calls. The music lets the caller know that their 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 either the EXMOH socket of the main unit or an audio port of a 2PGDU card.

Note: In accordance with copyright law, a license may be required 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 Infrontia hereby disclaims any liability arising out of the failure to obtain such a license.

Refer to the 2PGDU Guide 991420-5 for further details related to external music on hold connections.

Music on Hold Source

There are 3 options available: (Program 10-04-01 & 10-04-02)

Internal Music Tune - The tune is set by Program 10-04-02.

External Source - Via the EXMOH input or audio input via a 2PGDU card.

Silence - Callers on hold hear silence.

Music on Hold per DDI Number

The music on hold source can be selected for individual DDI numbers by Program 22-11-09.

There are 3 options available:

0 - Use the music source set by Program 10-04-01.

1 - Back Ground Music input on the NTCPU port

2 - ACI input via a 2PGDU card.

The music source will be used for incoming DDI calls only.

Music on Hold for Internal calls

The music source is set by Program 10-04-01.

It is not possible to have an input via a 2PGDU card for internal calls, the external input must be via the XN120 Main Unit (EXMOH input).

Music on Hold for non-DDI Trunk calls

The music on hold source is set per trunk port by Program 14-08

There are 3 options available:

0 - Use the music source set by Program 10-04-01

1 - Back Ground Music input on the NTCPU port

2 - ACI input via a 2PGDU card.

The music source will be used for outgoing trunk calls or incoming non-DDI calls only.

Conditions

None.

Default Setting

Disabled.

■ Programming

- 10-04-01 : Music on Hold Setup - Music on Hold Source Selection
- 10-04-02 : Music on Hold Setup - Music Selection for Internal Source
- 10-04-03 : Music on Hold Setup - Audio Gain Setup
- 14-08-01 : Music on Hold Source for Trunks
- 14-08-02 : Music on Hold Source Port Number
- 20-06-01 : Class of Service for Extensions
- 20-07-02 : Class of Service Options (Administrator Level) - Changing the Music on Hold Tone
- 22-11-09 : MOH type per DDI
- 22-11-10 : MOH ACI port number per DDI
- 33-01-01 : ACI Port Type Setup

■ Related Features

- Single Line Telephones

■ 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 (Silence)
 - 01 XN120 Tune
 - 02 XN120 Tune (There is only 1 tune available on the XN120)
4. Press SPK to hang up.

This service code setting will change the music on hold tone for any call that is set to use Program 10-04-01 as the music on hold source.

When Program 10-04-01 is not set as the MOH source then the music on hold tone played to the held caller is shown below.

Program 10-04 setting	Type of call placed on hold	MOH set by Service Code 881=00	MOH set by Service Code 881=01 or 02
Program 10-04-01 set to 0 (XN120 tune)	Internal call	Silence	XN120 tune
	DDI call with 22-11-09=0 (Uses 10-04-01)	Silence	XN120 tune
	DDI call with 22-11-09=1 (BGM input)	BGM Input defined by 33-01-01	BGM Input defined by 33-01-01
	DDI call with 22-11-09=2 (EXMOH input)	EXMOH Input defined by 22-11-10	EXMOH Input defined by 22-11-10
Program 10-04-01 set to 1 (External)	Internal call	Silence	EXMOH Input on XN120 Main Unit
	DDI call with 22-11-09=0 (Uses 10-04-01)	Silence	EXMOH Input on XN120 Main Unit
	DDI call with 22-11-09=1 (BGM input)	BGM Input defined by 33-01-01	BGM Input defined by 33-01-01
	DDI call with 22-11-09=2 (EXMOH input)	EXMOH Input defined by 22-11-10	EXMOH Input defined by 22-11-10

Features

Name Storing

■ Description

Extensions and trunks can have names instead of just circuit numbers. These names show on a system phone'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 characters long, consisting of alphanumeric characters, punctuation marks and spaces.

Conditions

Although you can set up to 12 characters for the name there will be certain displays where all 12 can not be displayed, in this case the name will be truncated. Try to keep the names 8 characters or less, this will prevent the names being truncated on the display.

Default Setting

Enabled.

■ Programming

- 14-01-01 : Basic Trunk Data Setup - Trunk Name
- 15-01-01 : Basic Extension Data Setup - Extension Name
- 15-07-01 : Programmable Function Keys
- 20-06-01 : Class of Service for Extensions
- 20-09-02 : Class of Service Options (Incoming Call Service) - Trunk Name Display, Incoming
- 20-13-21 : Class of Service Options (Supplementary Service) - Extension Name

■ Related Features

- Single Line Telephones

■ Operation

To program an extension's name:

1. Press a SPK 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 characters maximum, try to have 8 or less to prevent the name being truncated.

5. Press HOLD.

When entering names in the procedures below, refer to this chart. Names can be up to 12 digits long.	
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 ! " # \$ % & ' ()
*	Enter characters: * + , - . / : ; < = > ?
#	# = Accepts an entry (only required if two letters on the same key are needed - ex: SR). Pressing # again = Space.
DND/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.
FLASH	Change to Chinese character set. Indicated by the = mark at the left of the name e.g. ENTER NAME 200 =

6. Press SPK to hang up.

Features

Night Service

■ 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 (1-4), 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 eight 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. 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.

Conditions

A) 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	

B) Almost all features are affected by Night Mode except for the following:

- Dial Tone Detection
- External Alarm Sensors
- Flexible System Numbering
- Pulse to Tone conversion
- SMDR
- Volume Control

Default Setting

System is always in the Day Mode.

Automatic night mode switching is disabled (Program 12-01-02=0).

Manual night mode switching is enabled on the system (Program 12-01-01=1) but disabled in the telephones Class of Service (Program 20-07-01=0).

■ Programming

- 10-21-01 : Hardware Setup, External Source Control Switch Selection
- 11-10-01 : Service Code Setup (for System Administrator) - Day / Night Mode Switching
- 12-01-01 : Night Mode Function Setup - Manual Night Service Enable
- 12-01-02 : Night Mode Function Setup - Automatic Night Service Enabled
- 12-02-01 : Automatic Night Service Patterns
- 12-03-01 : Weekly Night Service Switching
- 12-04-01 : Holiday Night Service Switching
- 12-05-01 : Night Mode Group Assignment for Extensions
- 12-06-01 : Night Mode Group Assignment for Trunks
- 12-07-01 : Text Data for Night Mode
- 14-07-01 : Trunk Access Map Setup
- 15-06-01 : Trunk Access Map for Extensions
- 15-07-01 : Programmable Function Keys
- 20-06-01 : Class of Service for Extensions
- 20-07-01 : Class of Service Options (Administrator Level) - Manual Night Mode Switching
- 22-04-01 : Incoming Extension Ring Group Assignment
- 22-05-01 : Incoming Trunk Ring Group Assignment
- 22-08-01 : DIL/IRG No Answer Destination
- 31-05-01 : Universal Night Answer

■ Related Features

- Central Office Calls, Answering and Placing/Ring Groups
- Paging, External
- Programmable Function Keys
- Voice Response System (VRS)

Features

■ Operation

To activate Night Service by dialling codes:

1. At system phone, press a SPK key.
OR
At single line telephone, lift handset.
2. Dial 818.
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

■ 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 signalling gives the caller the choice of using Off Hook Signaling or activating other features. Extensions without automatic signalling have manual signalling. 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, a single beep in the handset, a beep in the speaker, 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 (DID, trunk). 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 signalling, without Off Hook/Call Wait signalling or no signalling. 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 the service code (assigned in 11-16-04) at busy or busy/ring to signal the extension. If enabled (blocked), nothing happens when the caller dials the service code (assigned in 11-16-04) to off hook signal.
- **Block Camp On**
If an extension has Block Camp On enabled, callers to the extension cannot dial the service code (assigned in 11-16-05) to Camp On after hearing busy or busy/ring. If the extension has Block Camp On disabled, callers are not prevented from dialling the service code (assigned in 11-16-05) 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

Features

■ Programming

- 11-12-03 : Service Code Setup (for Service Access) - Override (Off Hook Signaling)
- 11-16-04 : Single Digit Service Code Setup - Intercom Off Hook Signaling
- 15-02-12 : System Telephone Basic Data Setup - Off Hook Ringing
- 15-07-01 : Programming Function Keys
- 20-06-01 : Class of Service for Extensions
- 20-13-05 : Class of Service Options (Supplementary Service) - Off Hook Signaling Receive
- 20-13-06 : Class of Service Options (Supplementary Service) - Automatic Off Hook Signaling
- 20-18-06 : Service Tone Timer - Call Waiting Tone Timer

■ Related Features

- Call Waiting/Camp On and Callback
- Direct Inward Dialling (DID)
- Handsfree and Monitor
- Hotline/Reverse Voice Over
- Intercom
- One-Touch Calling
- Programmable Function Keys
- Single Line Telephones

■ Operation

To send Off Hook Signals to an extension busy on a call:

Your extension may send Off Hook Signals automatically.

1. Press Off Hook Signaling key (PGM 15-07 or SC 851: 33).

OR

1. Press SPK
2. Dial 809

You hear ringback.

To have your call voice-announce, dial 1.

Paging, External

■ Description

With External Paging, a user can broadcast announcements over paging equipment connected to external Paging zones. When a user pages one 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 External Paging zones requires a port on a 2PGDU unit, with a maximum of two external paging circuits per unit. You must have three 2PGDU unit to get the six 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 XN120 Getting Started Guide 991409-5 and 2PGDU Guide 991420-5 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 Paging zones 1-6 and All Call. Refer to Paging, Internal 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 (for combined page operation). This allows the system to save processor time and speed up system operation.

Conditions

- A) External Paging requires 2PGDU unit and customer-provided Paging equipment.
- B) With Combined Paging, the system will 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

No External Paging defined.

■ Programming

- 10-21-01 : Hardware Setup - External Source Control Switch Selection
- 15-07-01 : Programming Function Keys
- 20-06-01 : Class of Service for Extensions
- 20-13-29 : Class of Service Options (Supplementary Service) - Paging Display
- 31-01-02 : System Options for Internal/External Paging - Page Announcement Duration
- 31-04-01 : External Paging Zone Group zone.
- 31-05-01 : Universal Night Answer
- 31-06-01 : External Speaker Control
- 31-06-04 : External Speaker Control - CODEC Transmit Gain Setup
- 31-08-01 : BGM on External Paging

Features

■ Related Features

- Central Office Calls, Placing
- Door Box
- Night Service (Universal Night Answer)
- Paging, Internal
- Programmable Function Keys

■ 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 system phone, press a SPK key.

OR

At single line telephone, lift handset.

2. Dial 803 and the External Paging Zone code (1-6 or 0 for All Call).

OR

Dial 751 and the Combined Paging Zone code 1-6 (for Internal/External Zones 1-6) 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.

Paging, Internal

■ Description

Internal Paging lets extension users broadcast announcements to other system phone 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 1-6 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 be able to 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 2PGDU unit.
- 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 allows 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 : Programming Function Keys
- 20-06-01 : Class of Service for Extensions
- 20-13-29 : Class of Service Options (Supplementary Service) - Paging Display
- 31-01-01 : System Options for Internal/External Paging - All Call Paging Zone Name
- 31-01-02 : System Options for Internal/External Paging - Page Announcement Duration
- 31-02-01 : Internal Paging Group Assignment - Internal Paging Group Number
- 31-02-02 : Internal Paging Group Assignment - Internal All Call Paging Receiving
- 31-03-01 : Internal Paging Group Settings - Internal Paging Group Name
- 31-03-02 : Internal Paging Group Settings - Internal Paging Tone
- 31-07-01 : Combined Paging Assignments

Features

■ Related Features

- Meet Me Paging / Meet Me Paging Transfer
- Paging, External
- Programmable Function Keys

■ Operation

To make an Internal Page announcement:

System Phone

1. Press the zone's Internal Paging key (PGM 15-07 or SC 851: 21 + 1-6 or 01-32 for zones, 22 for All Call).

OR

1. Press a SPK key.
2. Dial 801 and the Paging Zone number (0-6).

Dialling 0 calls All Call Internal Paging.

OR

Dial 751 and the Combined Paging Zone code 1-6 (for Internal/External Zones 1-6) 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 (0-6).

Dialling 0 calls All Call Internal Paging.

Dial 751 and the Combined Paging Zone code 1-8 (for Internal/External Zones 1-6) or 0 (for Internal/External All Call).

3. Make announcement.
4. Hang up.

Park

■ 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.

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.

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) 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

- 15-07-01 : Programming Function Keys
- 20-06-01 : Class of Service for Extensions
- 20-11-19 : Class of Service Options (Hold/Transfer Service) - Normal/Extended Park
- 24-01-02 : System Options for Hold - Hold Recall Callback Time
- 24-01-06 : System Options for Hold - Park Hold Time
- 24-01-07 : System Options for Hold - Extended Park Hold Time
- 24-03-01 : Park Group

Features

■ Related Features

- Hold
- Programmable Function Keys

■ 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 system phone, press HOLD.

OR

At a single line telephone, recall.

OR

2. Dial 831 and the Park orbit (1-64).

If you hear busy tone, the orbit is busy. Try another orbit by dialling 831 and the new 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 system phone, press a SPK key.

OR

At single line telephone, lift handset.

2. Dial 861 and the Park orbit (1-64).

To park a call at your extension:

1. Do not hang up.
2. Press HOLD and dial 773.
At a SLT, recall instead of pressing HOLD.
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 pick up a call parked at an extension (yours or a co-workers):

1. **If parked at your extension:**

Press a SPK key and dial 773.

At an SLT, lift handset and dial 773.

OR

If parked at a co-workers extension

Press a SPK key dial 715 plus the co-workers extension number.

At an SLT, lift handset and dial 715 plus the co-worker's extension number.

PBX Compatibility

■ 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 Single Line 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 dialling PBX extensions. In this case, the only valid numbers are those dialled 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 dialling, Abbreviated Dialling, 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
- 14-02-01 : Analogue Trunk Data Setup - Signaling Type (DP/DTMF)
- 14-04-01 : Behind PBX Setup - Behind PBX
- 21-04-01 : Toll Restriction Class
- 21-05-12 : Toll Restriction Class - PBX Call Restriction
- 21-06-08 : Toll Restriction Table Data Setup - PBX Access Code
- 81-01-14 : Analogue Trunk Initial Data Setup - Recall 1

Features

■ Related Features

- Account Codes
- Abbreviated Dialling
- Central Office Calls, Answering/ Ring Groups
- Central Office Calls, Placing
- Direct Inward Lines
- Direct Inward System Access
- Flash
- Pulse to Tone Conversion
- Toll Restriction
- Trunk Groups and Trunk Group Routing
- PBX trunks can follow normal system Toll Restriction.

■ Operation

To place a call over a PBX trunk:

1. At system phone, press a SPK key and dial 804.
OR
At single line telephone, lift handset and dial 804.
2. Dial PBX trunk group number (1-9, 01-32 or 001-100).
3. Dial PBX access code and number
OR
1. (System Phone only) Press PBX trunk group key (PGM 15-07 or SC 852: *02 + group).
2. Dial PBX access code and number.
OR
1. At system phone, press a SPK key and dial 9.
OR
At single line telephone, lift handset and dial 9.
2. Dial PBX access code and number.
OR
1. At system phone, press a SPK key.
OR
At single line telephone, Lift handset.
2. Dial 805.
3. Dial PBX trunk number (e.g., 05 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.

Prime Line Selection

■ Description

Prime Line Selection allows an extension 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.

A prime line is effectively a single exchange line placed into its own trunk group for outgoing access and its own ring group for incoming ringing.

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).
- **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 that whenever a customer calls in, the dispatcher just lifts the handset to get their call. (Incoming Prime Line Preference can optionally seize an idle line appearance).

Conditions

None

Default Setting

Disabled.

■ Programming

- 14-05-01 : Trunk Groups – place the line into its own group
- 14-06-01 : Trunk Group Routing – assign the trunk group that contains the prime line
- 14-07-01 : Trunk Access Map Setup
- 15-01-02 : Basic Extension Data Setup - Outgoing Trunk Line Preference
- 15-02-10 : System Telephone Basic Data Setup - Ringing Line Preference for Trunk Calls appearance.
- 15-06-01 : Trunk Access Map for Extensions
- 21-02-01 : Trunk Group Routing for Extensions
- 22-01-01 : System Options for Incoming Calls - Incoming Call Priority
- 22-04-01 : Incoming Extension Ring Group Assignment
- 22-05-01 : Incoming Trunk Ring Group Assignment – place the exchange line into its own ring group

■ Related Features

- Central Office Calls, Placing
- Direct Inward Lines/Direct Inward System Access
- Line Preference
- Voice Mail

Features

■ 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.

Private Line

■ Description

A Private Line is a trunk reserved for a system phone 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.

A private line is one that is assigned to a single telephone, no other phones have access to the line.

- Incoming only
The system phone has a Private Line only for incoming calls. The user cannot place calls on the Private Line.
- Outgoing only
The system phone has a Private Line only for outgoing calls. The Private Line does not ring for incoming calls.
- Both ways
The system phone has a Private Line for both incoming and outgoing calls.

Conditions

None

Default Setting

Disabled.

■ Programming

- 14-07-01 : Trunk Access Map Setup – assign the line to its own TAM
- 15-06-01 : Trunk Access Map for Extensions – assign the TAM that contains the private line
- 15-07-01 : Programming Function Keys
- 22-02-01 : Incoming Call Trunk Setup
- 22-04-01 : Incoming Extension Ring Group Assignment
- 22-05-01 : Incoming Trunk Ring Group Assignment
- 22-07-01 : DIL Assignment

■ Related Features

- Call Forwarding
- Central Office Calls, Placing
- Line Preference
- Prime Line Selection
- Programmable Function Keys
- Single Line Telephones
- Toll Restriction
- Transfer
- Voice Mail

■ 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.

Features

Programmable Function Keys

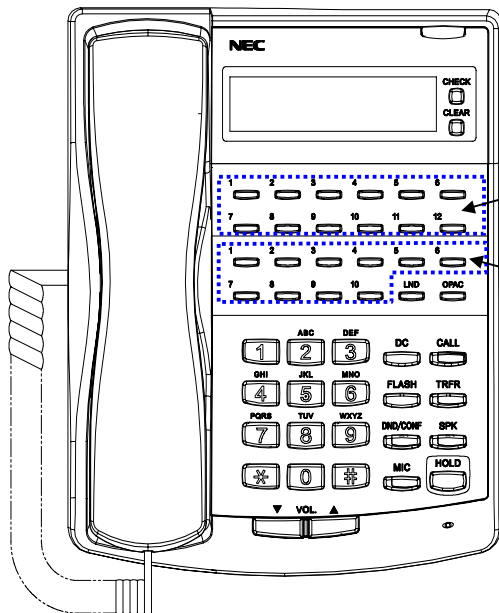
■ Description

Each system phone has Programmable Function Keys. Programmable Function Keys simplify placing calls, answering calls and using certain features. You can customize the function of a system phone's programmable keys with XN120 Configuration Mode, or the extension user can do it themselves. The phones have 12 Programmable Function Keys plus 10 additional keys (speed dial keys).

Note. The 22 keys (12+10) are ALL programmable function keys, they are separated into two groups (1-12 and 1-10) on the phone because the speed dial keys do not have lamps on the XN120 Talk phone. When programming the keys within XN120 configuration mode with Program 15-07-01 remember that the keys are numbered 1 to 22.

Keys 1-12 in Program 15-07-01 are function keys 1-12 on the phone.

Keys 13-22 in Program 15-07-01 are speed dial keys 1-10 on the phone.

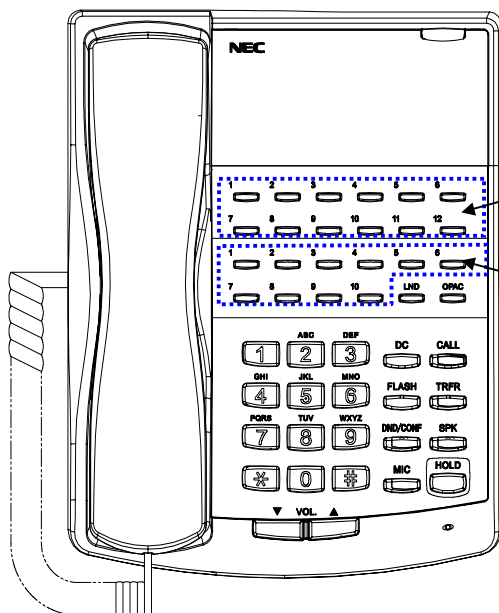


12 Programmable Function Keys

With dual colour lamps.

10 Programmable Function Keys (Speed Dial Keys)

With dual colour lamps.



12 Programmable Function Keys

With dual colour lamps.

10 Programmable Function Keys (Speed Dial Keys)

No lamps.

Conditions

- A) When a key is programmed using service code 852, that key cannot be reprogrammed with a function using the 851 code until the key is undefined (000). For example with a Park Key programmed by dialling 852 + *04 must be undefined by dialling 852 + 000 before it can be programmed as a Voice Over key by dialling 851 + 48.
- B) Using Program 92-01 to copy a system phone'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 numbers of keys than the extension to which the programming is being copied.

Default Setting

The 12 function keys are line keys (e.g., key 1 = line 01) for lines 1 to 12.
Speed dial keys 1 to 9 are not defined.
Speed dial key 10 is a Loop Key (type *05+0).

■ Programming

- 15-07-01 : Programming Function Keys
- 20-06-01 : Class of Service for Extensions
- 20-07-10 : Class of Service Options (Administrator Level) - Programmable Function Key

Note: When programming a feature as a Programmable Function Key, refer to the feature's description for additional programming options.

■ Related Features

- Abbreviated Dialling/One-Touch Calling
- Direct Station Selection (DSS) Console (24 button add on console)

■ 24 Button Add on Console

The 24 button add on console can be attached to any XN120 Vision phone and will provide 24 additional programmable function keys.

The keys can be programmed by the user with service codes 851 or 852 in exactly the same way as the 22 function keys on the phone.

They can also be programmed within XN120 Configuration Mode using program 15-07-01. The add on console uses keys 23 to 46 within program 15-07-01.

Features

■ Operation

You can change the function keys on the phone AND on the 24 Button Add on Console with this operation.

To change the function of a programmable function key (speed dial key):

1. Press a SPK key.
2. Dial 851.
3. Press the key you want to program. (keys 1 to 9)
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 below) and line keys 01-51.

To undefine a key, enter 000.

To change the function of a programmable function key:

1. Press a SPK key.
2. Dial 852.
3. Press the key you want to program. (keys 1 to 12)
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 01-51.*

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 dialling 852 + *04 must be undefined by dialling 000 before it can be programmed as a Voice Over key by dialling 851 + 48.*

To check the function of a programmable key (XN120 Vision phone only):

1. Press CHECK.
2. Press the programmable key.

The programmed function displays.

Function Number List (00-99) for Service Code 851

Function Number	Function	Additional Data	LED Indication
00	Not defined		
01	DSS/One-Touch	Extension number or any numbers(Max. 36 digits)	Red On: Extension Busy Off : Extension Idle Rapid Blink(Red): DND or Call Forward Setup
02	Microphone Key (ON/OFF)		Red On : MIC On Off: MIC Off
03	DND Key		Red-On : DND Setup
04	BGM(ON/OFF)		Red On : BGM On Off : BGM Off
05	Headset		Red On: Headset Operating
06	Transfer Key		None
07	Conference Key		Red-On : Conference Operating
08	Incoming Caller-ID List		Slow Blink(Red):Existing New CID Red-On : Existing Check CID Off : No CID
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

Features

Function Number	Function	Additional Data	LED Indication
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	Call Forward - Follow Me		Slow Blink(Red): Forwarding state Rapid Blink(Red):Forwarded 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
18	Text Message Setup	Message No.(00-20)	Red On: Feature active by Function Key
19	External Group Paging	External Paging Zone No. (1-6)	Red On : Active
20	External All Call Paging		Red On : Active
21	Internal Group Paging	Internal Paging No.1-32	Red On : Active
22	Internal All Call Paging		None
23	Meet-Me Answer to Internal Paging		None
24	Call Pickup for Own Group		None
25	Call Pickup for Another Group		None
26	Call Pickup for Specified Group	Call Pickup Group Number 01-32	None
27	Abbreviated Dial-Common/Private	Abbreviated dial No. (Common/ Private)	None
28	Abbreviated Dial-Group	Abbreviated dial No. (Group)	None
29	Repeat Dial		Rapid Blink (Red) : Under a repeat dial
30	Saved Number Redial		None
31	Memo Dial		None
32	Meet-Me Conference		None
33	Off-Hook Signaling		None
34	Break-In		None
35	Camp-On, Call-Back		Red-On : Under Camp-On or reservation
36	Department Step Call		None
37	DND/FWD Override Call		None
38	Message Waiting		None
39	Room Monitor		Rapid Blink(Red) : Monitored Slow Blink(Red) : Monitoring
40	Handset Transmission Cut-off		Red On: Transmission Cut-off
41	Secretary(Buzzer) Call	Extension No. (Max.4 digits)	Red On : Transmission Side Rapid Blink(Red) : Receiver Side
42	Boss-Secretary Call	Extension No. (Max.4 digits)	Red On : Boss-Secretary mode
43	Series Call		None
44	Common Hold		None
45	Exclusive Hold		None
46	Department Group Log Out		Red On : Logged out
47	-Not Used-	-	-

Features

Function Number	Function	Additional Data	LED Indication
48	-Not Used-	-	-
49	Call Redirect	Extension Number or Voice Mail Number (Max.4 digits)	None
50	Account Code		None
51	-Not Used-	-	-
52	Incoming Call Queuing Message Setup	Incoming Ring Group No.1-25	Red On : Under setting
53	Queuing Message Starting		Red On : Active
54	External Call Forward by Doorphone Box		Red On : Active
55	Extension Name Edit		None
56	Presence Display Operation	1-100	Red On : Presence
57	Presence Display Indication	1-100	Red On : Presence
58	Department Incoming Call-Immediate	Extension Group No. 01-32	Slow Blink(red) : Active
59	Department Incoming Call-Delay	Extension Group No. 01-32	Slow Blink(red) : Active
60	Department Incoming Call-DND	Extension Group No. 01-32	Slow Blink(red) : Active
63	Outgoing Call Without Caller-ID(ISDN)		Red On : Active
64	-Not Used-	-	-
65	-Not Used-	-	-
66	CTI Communication		Red On : CTI active
67	Mail Box(DSPDBU)	Extension No. or Department Group No. (Max.4 digits)	Rapid Blink(Green) : New Message Received Red On : Listening to messages Slow Flash : New Message Restriction Mode
68	Voice Mail Service (DSPDBU)	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 Recording Service(DSPDBU)	0 : Conversation recording 1 : Delete, Re-recording 2 : Delete 3 : Immediate delivery	0..In case of conversation recording Rapid Blink(Red): Under recording (No Destination) Red On : Under recording (Appointed Extension)
70	Automated Attendant for Extension(DSPDBU)	Extension No. or Department Group No. (Max.4 digits)	Red On : Setup All Calls Rapid Blink(Red) : Setup No Answer Calls Slow Blink(Red) : Busy / No Answer Calls Wink Blink(Red) : Busy Calls
71	Change Attendant Message(DSPDBU)	Extension Number or Pilot Number (Max.4 digits)	None
72	-Not Used-	-	-
73	-Not Used-	-	-
74	-Not Used-	-	-
75	-Not Used-	-	-

Features

Function Number	Function	Additional Data	LED Indication
76	Toll Restriction in Credit	Extension Number (Max.4 digits)	
77	-Not Used-	-	-
78	-Not Used-	-	-
79	-Not Used-	-	-
80	Tandem Ring Setup Key	(Max.4 digits)	Red On : Master Side
81	Automatic Transfer to Transfer Key	Trunk Line No.1-51	Red On : Set

Function Number List (*00-*99) for Service Code 852

Function Number	Function	Additional Data	LED Indication
*00	Not used		
*01	Trunk Key	Trunk Number 1-51	
*02	Trunk Group/ Loop Key	Trunk Group Number 01- 25	
*03	Virtual Extension Key	Extension Number. or Department Group Number (Max.4 digits)	
*04	Park Hold Key	Park Number 01-64	
*05	Hybrid Operation Key(Loop key)	0-2 0 : Incoming 1 : Outgoing 2 : Both	

Features

Pulse to Tone Conversion

■ Description

An extension can use Pulse to Tone Conversion on trunk calls. Pulse to Tone Conversion lets a user change their extension's dialling mode while placing a call. For systems in a Dial Pulse area, this permits users to access dial-up services from their Dial Pulse line. The user can, for example:

- Place a call to a tele-banking system over a DP trunk.
- Depending on programming:
Manually implement Pulse to Tone Conversion
OR
Wait 10 seconds.
- Dial the tele-banking 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 : Analogue Trunk Data Setup - DP to DTMF Conversion Options

■ Related Features

- Central Office Calls, Placing

■ Operation

To convert your phone's dialling 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 dialling.

Repeat Redial

■ Description

If a system phone 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 will cancel Repeat Redial.

■ Default Setting

Enabled.

■ Programming

- 15-07-01 : Programming Function Keys
- 20-06-01 : Class of Service for Extensions
- 20-08-07 : Class of Service Options (Outgoing Call Service) - Repeat Redial
- 21-08-01 : Repeat Dial Setup - Repeat Redial Count
- 21-08-02 : Repeat Dial Setup - Repeat Redial Interval Time
- 21-08-03 : Repeat Dial Setup - Repeat Dial Calling Timer

■ Related Features

- Automatic Route Selection
- Central Office Calls, Placing
- Last Number Redial/Save Number Dialed
- Networking
- Single Line Telephones

■ 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 DC + 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 DC.
2. Press LND.
OR
1. Press Repeat Redial Key (PGM 15-07 or SC 851: 29).

See also Last Number Redial.

Features

Reason of Transfer Display

■ Description

The display at a system phone can show the reason that a call is ringing when it has been diverted/forwarded to them.

The reason can be call forward, DND or Absence message at the original target phone. The secondary target phone is then aware of the state of the original phone user and can answer the call appropriately.

Conditions

This feature is available at the XN120 Vision phone only.

The feature will operate for DDI calls, DIL calls and DUD/DISA calls.

It will not operate for calls ring within a ring group.

Default Setting

Disabled.

■ Programming

20-13-23 : Display reason of transfer.

■ Operation

The operation is automatic.

The display at the secondary target phone will show the following reasons the call has transferred to their phone.

Original extension has this set	At the secondary target extension the display will show
Call Forward Immediate	TRANSFER < name
Call Forward on Busy	TRANSFER BUSY < name
Call Forward on No Answer	TRANSFER No Answer< name
DND	TRANSFER DND < name
Absence Message (e.g. In Meeting Until 10:00)	In Meeting Until 10:00 < name

Ring Groups

■ Description

Ring Groups determine how trunks ring extensions. Generally, trunks ring extensions 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 system allows up to 25 Ring Groups.

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 LOOP key (speed dial key 10). 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, extension 200 is a member of Ring Group 1 so will ring for all trunk calls.

■ Programming

- 15-07-01 : Programming Function Keys
- 22-04-01 : Incoming Extension Ring Group Assignment
- 22-05-01 : Incoming Trunk Ring Group Assignment
- 22-08-01 : DIL/IRG No Answer Destination
- 22-12-01 : DID Intercept Ring Group
- 25-03-01 : DID/DISA Transfer Ring Group With Incorrect Dialling

Note: For incoming calls, Ring Group programming (22-04/22-05) overrides Access Map programming (14-07/15-06).

■ Related Features

- Direct Inward Dial (DID) / Direct Inward System Access (DISA)
- Direct Inward Line (DIL)
- Night Service
- Programmable Function Keys
- Transfer

■ Operation

Refer to Central Office Calls, Answering.

Features

Ringdown Extension, Internal / External

■ Description

With a Ringdown Extension, a user can call another extension, outside number, or Abbreviated Dialling 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 dialling 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
- 20-08-09 : Class of Service Options (Outgoing Call Service) - Hotline/Extension Ringdown
- 21-01-09 : System Options for Outgoing Calls - Ringdown Extension Timer
- 21-11-01 : Extension Ringdown (Hotline) Assignments

■ Related Features

- Abbreviated Dialling
- Call Forwarding
- Call Waiting/Camp On, Callback and Off Hook Signaling
- Do Not Disturb
- Handsfree Answerback/Forced Intercom Ringing
- Multiple Directory Numbers/Call Coverage Keys

■ 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 system phone):

1. Do not lift handset.
2. Press a SPK key.
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

■ 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.

CAUTION

The use of monitoring, recording, or listening devices to eavesdrop, monitor, retrieve, or record telephone conversation or other sound activities, may be illegal in certain circumstances. Legal advice should be sought prior to implementing any practice that monitors or records any telephone conversation. Some form of notification to all parties to a telephone conversation may be required, 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.

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) A system phone user cannot monitor a single line phone and a single line phone cannot monitor a system phone.

Default Setting

Disabled.

■ Programming

- 15-07-01 : Programming Function Keys
- 20-06-01 : Class of Service for Extensions
- 20-13-11 : Class of Service Options (Supplementary Service) - Room Monitor, Initiating
- 20-13-12 : Class of Service Options (Supplementary Service) - Room Monitor, Extension

■ Related Features

- Programmable Function Keys

Features

■ 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 770.
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 770.
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.

Save Number Dialed

■ 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 dialling 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 dialled number up to 36 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 pre-select a specific trunk if desired.

Conditions

None

Default Setting

Enabled.

■ Programming

- 15-07-01 : Programming Function Keys

■ Related Features

- Automatic Route Selection
- Central Office Calls, Placing
- Dial Tone Detection
- Last Number Redial
- Programmable Function Keys
- Repeat Redial

Features

■ Operation

To save the outside number you just dialled (up to 36 digits):

Use this feature before hanging up.

System Phone

1. Press Save Number Dialled key (PGM 15-07 or SC 851: 30).

Single Line Telephone

1. Recall.
2. Dial 815.

To redial a saved number:

System Phone

1. (Optional) Press line key.

This selects a specific trunk for the call.

2. Press Save Number Dialled key (PGM 15-07 or SC 851: 30).

The stored number dials out.

OR

1. Press a SPK key
2. Dial 815.

OR

- Press Save Number Dialled key (PGM 15-07 or SC 851: 30).

Save Number Dialled automatically selects a trunk from the same group as your original call. The stored number dials out.

Single Line Telephone

1. Recall.
2. Dial 815.

To check to see the number you have saved:

1. Press Save Number Dialled 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 a CALL key, or
- Press SPK

2. Press CLEAR.

To clear your saved number:

System Phone

1. Press a SPK 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)

■ 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 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 : Programming Function Keys

■ Related Features

- Programmable Function Keys
- Single Line Telephones

■ 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.*

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.

Features

Secretary Call Pickup

■ Description

Secretary Call Pickup lets a system phone 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

Secretary Call Pickup is not available to single line telephone users.

Default Setting

Disabled.

■ Programming

- 15-07-01 : Programming Function Keys

■ Related Features

- Call Forwarding with Follow Me
- Programmable Function Keys
- Secretary Call (Buzzer)
- Single Line Telephones

■ 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.

Selectable Display Messaging

■ Description

An extension user can select a pre-programmed Selectable Display Message for their extension. Display system phone 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 system phone user calling the extension would see the message. Other than displaying the message, the system puts the call through normally. 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 16 characters). For example, an extension user could select the message "B-TRIP BACK" 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 Business Trip. The system allows for a maximum of 50 phones using the Selectable Display Messaging feature at the same time.

The default messages are:

No.	Message	Change "#" to ...
01	MEETING BY ##:##	Time (when meeting done)
02	ROOM - #####	Room Number
03	COME BACK ##:##	Time (when returning) 24H mode
04	CALL #####	11 digits (phone number)
05	CALL AFTER ##:##	Time (when returning)
06	LUNCH BACK ##:##	Time (when returning)
07	B. TRIP BACK ##/##	Date (when returning)
08	B. TRIP #####	10 digits (where reached)
09	GONE FOR THE DAY	
10	DAY OFF BY ##/##	Date (when returning)
11-20	MESSAGE 11-20	

Messages 11-20 are available for the user to select their own messages. They must be pre-set by the installer with Program 20-16-01.

Conditions

None

Default Setting

Enabled.

■ Programming

- 15-07-01 : Programming Function Keys
- 20-02-07 : System Options for System Telephones - Time and Date Display Mode
- 20-06-01 : Class of Service for Extensions
- 20-13-19 : Class of Service Options (Supplementary Service) - Selectable Display Messaging
- 20-16-01 : Selectable Display Messages

Features

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 ! “ # \$ % & ‘ ()
*	Enter characters: * + , - . / : ; < = > ?
#	# = Accepts an entry (only required if two letters on the same key are needed - ex: STA).
DND/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.

■ Related Features

- Do Not Disturb
- Programmable Function Keys

■ Operation

To select a message:

1. Press a SPK key + dial 713.
OR
Press Call Forward (Device) key (PGM 15-07 or SC 851: 17).
OR
Press a CALL key + press Text Message key (PGM 15-07 or SC 851: 18) + enter digits to append, if needed + SPK to hang up.
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.

To cancel a message:

1. Press a SPK key + dial 713.
OR
Press Call Forward (Device) key (PGM 15-07 or SC 851: 17).
OR
Press a 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.

Serial Call

■ 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 a caller on the phone. I need to talk to them again. Just hang up when you're done and I'll get them 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 : Programming Function Keys

■ Related Features

- Programmable Function Keys
- Single Line Telephones
- Transfer

■ 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.

Features

Single Line Telephones, Analogue Sets

■ Description

The system is compatible with Dial Pulse and DTMF analogue 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 system phone users. With Single Line Telephones, you can have your system simulate PBX type operation.

SLT port specification

Idle voltage	24VDC
Loop current	20mA
Ringing Voltage (frequency)	180V P-P (25Hz sinusoidal)
Time Break recall	65 to 1000mS Configured by Program 82-04-04, 82-04-07 & 82-04-08
Message Waiting Indication	24V to 100V switched idle voltage at 500mS cycle
Caller ID	FSK or DTMF after first ring pulse Configured by Program 15-03-11
Maximum cable length	1500 metres (0.5mm conductor) (Approximately 250 Ohm loop resistance)
Voice Mail Connection	Yes

Conditions

- A) Dial Pulse 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
- 10-03-03 : PCB Setup - Transmit CODEC Gain Type
- 10-09-01 : DTMF and Dial Tone Circuit Setup
- 15-03-01 : Single Line Telephone Basic Data Setup - SLT Signaling Type
- 15-03-03 : Single Line Telephone Basic Data Setup - Terminal Type
- 20-03-02 : System Options for Single Line Telephones
 - Ignore Received DP Dial on DTMF SLT Port
- 20-13-13 : Class of Service Options (Supplementary Service) - Continued Dialling
- 80-03-01 : DTMF Tone Receiver Setup
- 80-04-01 : Call Progress Tone Detector Setup
- 82-04-01 : Initial Data Setup

■ Related Features

Single line telephone users have access to the following features:

Abbreviated Dialling	Intercom
Account Codes	Handsfree Answerback/Forced
Alarm	Intercom Ringing
Automatic Route Selection	Last Number Redial
Barge In	Line Preference
Call Forwarding	Meet Me Conference
Call Forwarding with Follow Me Group	Meet Me Paging
Call Pickup	Meet Me Paging Transfer
Call Forwarding/DND Override	Message Waiting
Call Waiting/Camp On with Split	Night Service
Callback	Off Hook Signaling
Central Office Calls, Answering	Paging
Last Number Redial	PBX Compatibility
Central Office Calls, Placing	Pulse to Tone Conversion
Conference	Ringdown Extension
Department Calling	Save Number Dialed
Department Step Calling	Toll Restriction
Directed Call Pickup	Transfer
Do Not Disturb	Trunk Queuing and Camp On
Door Box	Voice Mail
Flash	Warning Tone for Long Conversation
Forced Trunk Disconnect	
Group Call Pickup	
Hold	

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.

Features

Station Message Detail Recording

■ 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 dialled 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 your 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.
- **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.

Conditions

The SMDR report does not include Intercom calls.

The SMDR call buffer stores call records when the SMDR device is unavailable. When the buffer fills, each new call is not recorded. The alarm display telephone assigned in Program 90-11-01 shows "SMDR Buffer Full," indicating that the buffer is full. To clear the buffer, the SMDR information must be output. When not using SMDR, make sure Program 90-13-01=0 or Program 90-11-01=0 otherwise the SMDR alarm will display to the extension in Program 90-11-01 or to the operator's extension.

SMDR requires a connection to the EXIFU via a COM port.

Features

Sample SMDR Report

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CLASS	TIME	LINE	DURATION	STATION	DIALLED No./CLI	RD/COST	ACCOUNT
01 POT	10:44	LINE 001	00:00:30	STA 224	12039265400	8841	
02 POT	10:46	LINE 001	00:00:45	STA 224	18874521	0	
03 POT	10:47	LINE 001	00:00:29	STA 218	12039265441	0	
04 PIN	10:48	LINE 002	00:01:39				NO ANSWER
05 ALB	10:50	02	00:01:40				

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.)
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
RD/COST	For outgoing calls, the cost if enabled. For incoming calls, the ring duration.
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	Incoming ISDN trunk call
IVOT	Outgoing ISDN trunk call

SMDR Report Format	
Character Position	Field Definition
Header Line	
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	
Header Line 2	
1-3	Spaces
4-8	CLASS
9-10	Spaces
11-14	TIME
15-18	Spaces
19-22	LINE
23-26	Spaces
27-34	DURATION
35-36	Spaces
37-43	STATION
44-46	Spaces
47-53	DIALLED
54	Space
55-61	No./CLI
62-63	Spaces
64-70	RD/COST
71	Space
72-78	ACCOUNT
CR & LF	
SMDR Record	
1-2	Call record number 01-55
3	Space
4-8	Call type (e.g., POT for outgoing)
9	Space
10-14	Time in 24 hour clock (HH:MM)
15	Space
16-25	Line number (e.g., 001)
26	Space
27-34	Call Duration (HH:MM:SS)
35	Space
36-45	Station number (STA, space, nnnn) or name
46	Space
47-61	Number dialled (15 digits maximum)
62-63	Spaces
64-70	Ring duration for incoming. Cost for outgoing
71	Space
72-80	Account number or NO ANSWER

Features

SMDR Output Options

You can change the information output via the SMDR. The following options are available.

Omit dialled digits

Program 35-01-04

The SMDR will replace the dialled digits with an X character.

This will prevent the administrator seeing the exact number dialled but will not prevent any billing operation of the call logging application.

CLASS	TIME	LINE	DURATION	STATION	DIALLED No./CLI	RD/COST	ACCOUNT
01	POT	10:44	LINE 001	00:00:30	STA 224	120392654XX	8841

Minimum quantity of dialled digits

Program 35-01-05

The SMDR will only output the call record if the minimum quantity of digits are dialled for an outgoing call.

Minimum call duration

Program 35-01-06

The SMDR will only output the call record if the minimum call duration is reached for incoming and outgoing calls.

Minimum ring duration

Program 35-01-07

The SMDR will only output the call record if the minimum ring duration is reached for incoming abandoned calls. An abandoned call is shown as NO ANSWER on the SMDR.

This timer does not affect calls that are answered.

Trunk name or number

Program 35-02-03

The SMDR can either enter the trunk name or trunk number in the LINE field for each call record.

The trunk name is set in program 14-01-01.

CLASS	TIME	LINE	DURATION	STATION	DIALLED No./CLI	RD/COST	ACCOUNT
01	POT	10:44	Line 001	00:00:30	STA 224	120392654XX	8841

The trunk number is from 001 to 051.

CLASS	TIME	LINE	DURATION	STATION	DIALLED No./CLI	RD/COST	ACCOUNT
01	POT	10:44	001	00:00:30	STA 224	120392654XX	8841

Extension name or number

The SMDR can either enter the extension name or extension number in the STATION field for each call record.

The extension name is set in program 15-01-01.

CLASS	TIME	LINE	DURATION	STATION	DIALLED No./CLI	RD/COST	ACCOUNT
01	POT	10:44	001	00:00:30	P. Jones	120392654XX	8841

The extension number is set in program 11-01-02.

CLASS	TIME	LINE	DURATION	STATION	DIALLED No./CLI	RD/COST	ACCOUNT
01	POT	10:44	001	00:00:30	224	120392654XX	8841

All Lines Busy

Program 35-02-10

The SMDR will output a call record each time a trunk group has all lines busy simultaneously.

The LINE field will show the trunk group number that is busy.

The DURATION field shows how long all lines were busy.

CLASS	TIME	LINE	DURATION	STATION	DIALLED No./CLI	RD/COST	ACCOUNT
05	ALB	10:50 002	00:01:40				

DDI Name output

Program 35-02-12

The call records for incoming ISDN DDI calls can show the name assigned to the DDI in the LINE field.

The DDI names are assigned in program 22-11-03 for each DDI number.

CLASS	TIME	LINE	DURATION	STATION	DIALLED No./CLI	RD/COST	ACCOUNT
01	IVIN	10:44 Main No	00:00:30	STA 224	01765768691		

Date output for each call record

Program 35-02-14

The call records can include the date in the LINE field.

The date is output as dd/mm followed by a space and then three digits to indicate the line number.

Note. When you enable date output the following options are ignored.

Program 35-02-03, Trunk name or number

Program 35-02-12, DDI name output

CLASS	TIME	LINE	DURATION	STATION	DIALLED No./CLI	RD/COST	ACCOUNT
01	IVIN	10:44 09/03 001	00:00:30	STA 224	01765768691		

DDI or CLIP number output

Program 35-02-15

The call records for incoming ISDN DDI calls can show the DDI number instead of the CLIP number in the DIALLED No./CLI field.

CLASS	TIME	LINE	DURATION	STATION	DIALLED No./CLI	RD/COST	ACCOUNT
01	IVIN	10:44 001	00:00:30	STA 224	643111		

DDI number or Line information output

Program 35-02-16

The call records for incoming ISDN DDI calls can show the DDI number instead of the line name or number in the LINE field.

CLASS	TIME	LINE	DURATION	STATION	DIALLED No./CLI	RD/COST	ACCOUNT
01	IVIN	10:44 643111	00:00:30	STA 224	01765768691		

Features

Default Setting

Disabled.

■ Programming

- 10-21-02 : Hardware Setup - Baud Rate for COM Port
- 14-01-06 : Basic Trunk Data Setup - SMDR Print Out
- 15-01-03 : Basic Extension Data Setup - SMDR Printout
- 35-01-01 : SMDR Options - Output Port Type
- 35-01-02 : SMDR Options - Output Destination Number
- 35-01-04 : SMDR Options - Omit (Mask) Digits
- 35-01-05 : SMDR Options - Minimum Number of SMDR Digits
- 35-01-06 : SMDR Options - Minimum Call Duration
- 35-01-07 : SMDR Options - Minimum Ringing Time
- 35-02-01 : SMDR Output Options - Toll Restricted Call
- 35-02-02 : SMDR Output Options - PBX Calls
- 35-02-03 : SMDR Output Options - Display Trunk Name or Number
- 35-02-04 : SMDR Output Options - Daily Summary
- 35-02-05 : Weekly Summary and
- 35-02-06 : Monthly Summary
- 35-02-08 : SMDR Output Options - Incoming Calls
- 35-02-09 : SMDR Output Options - Print Name or Number
- 35-02-14 : SMDR Output Options - Date
- 35-02-16 : SMDR Output Options - Print Trunk Name or Received Dialed Number
- 80-05-01 : Date Format for SMDR and System Reports
- 90-12-01 : System Alarm Output - Output Port Type
- 90-12-02 : System Alarm Output - Destination Extension Number
- 90-13-01 : System Information Output - Output Port Type
- 90-13-02 : System Information Output - Destination Extension Number

■ Related Features

- PBX Compatibility

■ Operation

Once installed and programmed, SMDR operation is automatic.

Tandem Trunking (Unsupervised Conference)

■ Description

Tandem Trunking allows an extension user to join two or more outside callers in a trunk-to-trunk Conference. 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 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 two methods for Enhanced Tandem Trunking:

- Method A - Set Up Without Transfer Key
An extension user can set up Tandem Trunking (Unsupervised Conference) by using the CONF key. This option uses a uniquely programmed Transfer key to set up a tandem call.
- Method B - Tandem Trunking on Hang Up
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.

Conditions

- A) Tandem Trunking requires analogue loop start trunks with disconnect supervision or ISDN trunks.
- B) The maximum number of trunk-to-trunk conferences allowed is determined by the Conference feature setup. See Programming below.

Default Setting

Disabled.

■ Programming

Tandem Trunking Method A - Tandem Trunking from Conference

- 10-07-01 : Conversation Record Circuits
- 14-01-04 : Basic Trunk Data Setup - Transmit Gain Level for Conference and Transfer Calls
- 14-01-05 : Basic Trunk Data Setup - Receive Gain Level for Conference and Transfer Calls
- 14-01-13 : Basic Trunk Data Setup - Loop Supervision
- 15-07-01 : Programming Function Keys
- 20-06-01 : Class of Service for Extensions
- 20-13-08 : Class of Service Options (Supplementary Service) - Conference
- 20-13-10 : Class of Service Options (Supplementary Service) - Barge In Mode
- 20-11-14 : Class of Service Options (Hold/Transfer Service) - Trunk-to-Trunk Transfer

Features

Tandem Trunking Method B - Tandem Trunking on Hang up

- 10-07-01 : Conversation Record Circuits
- 14-01-04 : Basic Trunk Data Setup – Transmit Gain Level for Conference and Transfer Calls
- 14-01-05 : Basic Trunk Data Setup - Receive Gain Level for Conference and Transfer Calls
- 14-01-13 : Basic Trunk Data Setup - Loop Disconnect Supervision
- 15-07-01 : Programming Function Keys
- 20-06-01 : Class of Service for Extensions
- 20-07-11 : Class of Service Options (Administrator Level) - Forced Trunk Disconnect
- 20-13-08 : Class of Service Options (Supplementary Service) - Conference
- 20-13-10 : Class of Service Options (Supplementary Service) - Barge In Mode
- 20-11-14 : Class of Service Options (Hold/Transfer Service) - Trunk-to-Trunk Transfer

■ Related Features

- Central Office Calls, Answering / Central Office Calls, Placing
- Conference, Voice Call
- Meet Me Conference
- Meet Me Paging

■ Operation

Method A - Tandem Trunking from Conference

To set up a Tandem Call:

1. Place or answer first trunk call.
2. Press CONF key.
3. Place or answer second trunk call.
4. To add more calls to the tandem call, repeat from Step 2. or to set up the tandem call, press CONF key twice.

This sets up a Conference between you and both outside parties.

5. Press Transfer key (PGM 15-07 or SC 851: 06).

To end the Tandem Call:

1. Press either flashing line key.
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.
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 disconnect the Conference, you must use Forced Trunk Disconnect (i.e., Press the line key + 724).

Method B - Tandem Trunking on Hang up

To set up a Tandem Call:

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) or hang up.

This sets up an Unsupervised Conference with both outside parties.

The line keys for the trunks light steadily (red).

To disconnect the Conference, use Forced Trunk Disconnect (i.e., Press line key + 724).

Time and Date

■ 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 Response System

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
- 20-02-07 : System Options for System Telephones - Time and Date Display Mode
- 20-06-01 : Class of Service for Extensions
- 20-07-03 : Class of Service Options (Administrator Level) - Time and Date

■ Related Features

- Class of Service
- Single Line Telephones

■ Operation

The date must be set in system programming (10-01).

To set the system Time:

1. Press a SPK 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 (00-60).
5. Press SPK to hang up.

Features

Toll Restriction

■ 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 112 and 999 (112 & 999 are emergency calls), for example, put 112 and 999 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 60 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 Dialling**
Abbreviated Dialling can bypass or follow Toll Restriction. If you allow many users to program Abbreviated Dialling, consider Toll Restricting the numbers they dial. If only administrators can program Abbreviated Dialling, Toll Restriction may not be necessary. You can separately restrict Group and Common Abbreviated Dialling.
- **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 dialling 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 dialling 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.

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.
- C) Toll Restriction is applied when accessing ARS.

Default Setting

Disabled.

Features

■ Programming

- 14-01-08 : Basic Trunk Data Setup - Toll Restriction
- 20-06-01 : Class of Service for Extensions
- 20-08-02 : Class of Service Options (Outgoing Call Service) - Trunk Calls
- 20-13-20 : Class of Service Options (Supplementary Service)
- Account Code/Toll Restriction Operator Alert
- 21-04-01 : Toll Restriction Class
- 21-05-01 : Toll Restriction Class - International Call Restriction Table
- 21-05-02 : Toll Restriction Class - International Call Permit Table
- 21-05-03 : Toll Restriction Class - Restriction of Local Call
- 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 Dialling
- 21-05-10 : Toll Restriction Class - Restriction for Group Abbreviated Dialling Numbers
- 21-05-11 : Toll Restriction Class - Intercom Call Restriction
- 21-05-12 : Toll Restriction Class - PBX Call Restriction
- 21-06-01 : Toll Restriction Table Data Setup - International Call Restrict Table
- 21-06-02 : Toll Restriction Table Data Setup - International Call Permit Table
- 21-06-03 : Toll Restriction Table Data Setup - Maximum Number of Digits Table Assignment
- 21-06-04 : Toll Restriction Table Data Setup - Common Permit Code Table
- 21-06-05 : Toll Restriction Table Data Setup - Common Restrict Table
- 21-06-06 : Toll Restriction Table Data Setup - Permit Code Table
- 21-06-07 : Toll Restriction Table Data Setup - Restrict Code Table
- 21-06-08 : Toll Restriction Table Data Setup - PBX Access Codes

■ Related Features

- Central Office Calls, Placing
- Direct Inward System Access (DISA) / Tie Lines
- Toll Restriction, Dial Block
- Toll Restriction Override

■ 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.

Toll Restriction, Dial Block

■ 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
- 11-11-33 : Service Code Setup (for Setup/Entry Operation) - Dial Block
- 20-06-01 : Class of Service for Extensions
- 20-08-01 : Class of Service Options (Outgoing Call Service)
- 20-08-08 : Toll Restriction Dial Block
- 21-09-01 : Dial Block Setup - Toll Restriction Class With Dial Block
- 21-09-02 : Dial Block Setup - Supervisor Password
- 21-10-01 : Dial Block Restriction Class Per Extension
- 90-19-01 : Dial Block Release

■ Related Features

- Toll Restriction

Features

■ Operation

To set Dial Block:

1. At system phone, press a SPK key.
OR
At single line telephone, lift handset.
2. Dial 700.
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 system phone, press a SPK key.
OR
At single line telephone, lift handset.
2. Dial 700.
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 system phone, press a SPK key.
OR
At single line telephone, lift handset.
2. Dial 701.
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 system phone, press a SPK key.
OR
At single line telephone, lift handset.
2. Dial 701.
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

■ 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 CALL and dial their override code.
- Press a line key or dial a trunk access code (e.g., 9 or 805 002).
- 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.

Conditions

None

Default Setting

Disabled.

■ Programming

- 11-11-36 : Service Code Setup (for Setup/Entry Operation) - Walking Toll Restriction
- 20-08-06 : Class of Service Options (Outgoing Call Service) - Toll Restriction Override
- 21-01-07 : System Options for Outgoing Calls - Toll Restriction Override Time
- 21-14-01 : Walking Toll Restriction Password Setup - User ID
- 21-14-02 : Walking Toll Restriction Password Setup - Walking Toll Restriction Class Number
- 35-02-06 through 35-02-11 : SMDR Output Options

■ Related Features

- Station Message Detail Recording
- Toll Restriction
- Voice Response System (VRS)

■ Operation

To temporarily override a restricted extension's Toll Restriction:

You can override restriction for only one call at a time.

1. At system phone, press a SPK key.
OR
At single line telephone, lift handset.
2. Dial 763.
3. Dial the 6-digit Toll Restriction Override code. If you wait too long before going to the next step, you may have to repeat the procedure. You'll hear error tone if you dial your code incorrectly.
4. Press idle line key or dial trunk access code.
5. Dial number without restriction.

Features

Transfer

■ 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 204 can answer a trunk, press HOLD, dial 205 and hang up. The system extends the call to extension 205. Without Automatic On-Hook Transfer, the call would stay on Hold at extension 204 when the user hangs up. To extend the call, the user at extension 204 would have to press TRFR or a Transfer Programmable 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.

Conditions

None

Default Setting

Enabled.

■ Programming

- 15-07-01 : Programming Function Keys
- 20-02-01 : System Options for System Telephones - Retrieve the Line After Transfer
- 20-03-01 : System Options for Single Line Telephones - SLT Call Waiting Answer Mode
- 20-03-02 : System Options for Single Line Telephones - MOH or Ringback on Transferred Calls
- 20-06-01 : Class of Service for Extensions
- 20-11-06 : Class of Service Options (Hold/Transfer Service) - Unscreened Transfer
- 20-11-07 : Class of Service Options (Hold/Transfer Service) - Transfer Without Holding
- 20-11-08 : Class of Service Options (Hold/Transfer Service) - Transfer Display
- 20-11-11 : Class of Service Options (Hold/Transfer Service) - Automatic On Hook Transfer
- 20-11-18 : Class of Service Options (Hold/Transfer Service) - No Recall
- 24-02-01 : System Options for Transfer - Busy Transfer
- 24-02-03 : System Options for Transfer - Delayed Call Forwarding Time
- 24-02-04 : System Options for Transfer - Transfer Recall Time

■ Related Features

- Caller ID
- Call Forwarding
- Meet Me Paging Transfer
- One-Touch Calling
- Serial Call

■ Operation

Transferring Trunk Calls

To Transfer a trunk call to a co-worker's extension:

1. At system phone, press HOLD.
OR

At single line telephone, recall.

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 recall. If a call has been transferred and the single line user has hung up the handset, the call can be retrieved by dialling 715 and the extension number to which it had been transferred.

3. Announce call and press TRFR or hang up.

If you don't have Automatic On Hook Transfer, you must press TRFR 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 recall. If a call has been transferred and the single line user has hung up the handset, the call can be retrieved by dialling 715 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 (system phone 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 system phone, press HOLD.
OR

At single line telephone, recall.

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 recall. If a call has been transferred and the single line user has hung up the handset, the call can be retrieved by dialling 715 and the extension number to which it had been transferred.

3. Announce your call and press TRFR 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. If your co-worker just speaks toward their phone to answer, the Intercom call being transferred disconnects when you hang up. To Transfer the call unscreened, press your Transfer Programmable Function Key and hang up without making an announcement.

Features

Trunk Group Routing

■ 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.

Conditions

None

Default Setting

Enabled. All trunks are in Group 1.

■ Programming

- 11-01-01 : System Numbering
- 11-09-01 : Trunk Access Code
- 11-09-02 : Trunk Access Code - Alternate Trunk Route Access Code
- 14-05-01 : Trunk Groups
- 14-06-01 : Trunk Group Routing
- 14-07-01 : Trunk Access Map Setup
- 15-06-01 : Trunk Access Map for Extensions
- 15-07 : Programming Function Keys
- 21-02-01 : Trunk Group Routing for Extensions
- 21-15-01 : Alternate Trunk Route for Extensions
- 23-03-01 : Universal Answer/Auto Answer
- 25-10-01 : Trunk Group Routing for DISA
- 25-12-01 : Alternate Trunk Group Routing for DISA
- 34-03-01 : Trunk Group Routing for E&M Tie Lines

■ Related Features

- Automatic Route Selection (ARS)
- Central Office Calls, Placing
- Data Communications / Direct Inward System Access (DISA) / Tie Lines
- Dial Tone Detection
- Programmable Function Keys
- Ringing Line Preference
- Trunk Groups

■ Operation

To place a call using Trunk Group Routing:

1. At system phone, press a SPK key.
OR
At single line telephone, lift handset.
2. Dial 9.
3. Dial number.
OR
1. At system phone, press Trunk Group Routing key (PGM 15-07 or SC 852: *05).
Also see the "Loop Keys" feature.
2. Dial number.

Trunk Groups

■ Description

Trunk Groups let you optimise 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. The system allows up to 25 trunk groups.

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.

Conditions

None

Default Setting

All trunks are in group 1.

■ Programming

- 10-09-01 : DTMF and Dial Tone Circuit Setup
- 14-02-11 : Analogue Trunk Data Setup - Next Trunk in Rotary if No Dial Tone
- 14-05-01 : Trunk Groups
- 14-07-01 : Trunk Access Map Setup
- 15-06-01 : Trunk Access Map for Extensions
- 15-07-01 : Programming Function Keys
- 20-02-02 : System Options for System Telephones - Trunk Loop Access Key Operating Mode
- 21-01-02 : System Options for Outgoing Calls - Dial Tone Detection Timer

■ Related Features

- Abbreviated Dialling
- Automatic Route Selection
- Central Office Calls, Placing
- Dial Tone Detection
- Direct Inward Dialling (DID)
- Loop Keys
- Programmable Function Keys
- Ring Groups
- Tie Lines
- Trunk Group Routing

Features

■ Operation

To place a call over a trunk group:

1. At system phone, press a SPK key.

OR

At single line telephone, lift handset.

2. Dial 804.

3. Dial trunk group number (1-9 or 01-25).

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.

Trunk Queuing/Camp On

■ 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 : Programming Function Keys
- 20-01-08 : System Options - Trunk Queuing Callback Time
- 20-01-09 : System Options - Callback/Trunk Queuing Cancel Time
- 20-06-01 : Class of Service for Extensions
- 20-11-07 : Class of Service Options (Hold/Transfer Service) - Transfer Without Holding

■ Related Features

- Automatic Route Selection
- Call Waiting/Camp On and Callback
- Central Office Calls, Placing
- Programmable Function Keys

■ Operation

To queue for a busy trunk:

1. Try to access busy trunk.
2. 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 Queuing/Camp On request:

1. At system phone, press a SPK key.
OR
At single line telephone, lift handset.
2. Dial 870.
3. At system phone, press SPK to hang up.
OR
4. At single line telephone, hang up.

Features

Trunk to Trunk Forwarding

■ Description

Trunk to trunk forwarding refers to the forwarding of incoming trunk calls off premise. The forward can be set for each trunk and each trunk can have its own destination number that the calls are forwarded to.

The feature can be set for trunk ports that are set as Normal (Type 0 in Program 22-02-01) and can be used for COIU and ISDN trunk ports.

The call forward is controlled by service codes. The destination can also be changed by the user for each night mode (1-8).

When call forward is set all incoming calls to the trunk will be forwarded immediately.

The destination of the call forward is saved in an Abbreviated Dial bin, the bin is defined by Program 24-04-01. If a different call forward destination is required for each night mode then a different Abbreviated Dial bin must be defined for each night mode.

A call that is forwarded will be disconnected after timers 25-07-07 & 08.

The outgoing trunk route is defined by Program 21-03-01. A free trunk within this route will be used when a call is forwarded.

Trunk to trunk transfer must be enabled for each trunk by Program 14-01-13. If this item is not enabled the call forward can not be set.

Conditions

Analogue trunks must have disconnect clear enabled to ensure the lines are cleared when a call is disconnected.

Trunk to trunk call forward can not be set from an analogue SLT.

Default Setting

The service code to enable trunk to trunk forwarding is 833.

The service code to disable trunk to trunk forwarding is 834.

The service code to set/change the destination number is 835.

Abbreviated Dial bin 1999 is used as the call forward destination for all night modes.

The disconnect timers are set to give a warning tone after 30 seconds and then disconnect after another 15 seconds.

The outgoing trunk route is not defined.

Trunk to trunk transfer is disabled.

Disconnect clear is not set.

Trunk to trunk call forward setting is enabled in Class of Service.

■ Programming

- 11-10-06 : Service Code 833
- 11-10-07 : Service Code 834
- 11-10-08 : Service Code 835
- 13-04-01 : Abbreviated Dial Name and Number
- 14-01-13 : Trunk to trunk Transfer
- 20-07-05 : Class of Service
- 21-03-01 : Trunk Route for Automatic Trunk to Trunk Routing
- 24-04-01 : Destination Abbreviated Dial Bin Number
- 25-07-07 & 08 : DISA Conversation Timers

■ Related Features

- Trunk to Trunk Transfer
- Call Forward Off Premise
- Call Forward to Abbreviated Dial Bin
- Department Group Call Forward

■ Operation

To set the destination number for each trunk port.

Press SPK to go off hook.

Dial 835.

Dial the trunk port number (001 to 200).

Dial the night mode number (1 to 8).

Dial the off premise destination number (do not include any trunk access digits).

Press HOLD to set the destination for other night modes.

Press SPK to hang up.

Note that at step 5 the destination number will be saved to the Abbreviated Dial bin number specified by Program 24-04-01 for the chosen night mode.

If the same Abbreviated Dial bin is also used for other night modes then you do not need to set them separately. For example at default bin number 1999 is used for all night modes so when a night mode destination number is set for any night mode it will be used for all night modes.

To set the call forward for incoming calls to a trunk:

Press SPK to go off hook.

Dial trunk to trunk call forward service code - 833.

Dial the trunk port number (001 to 200).

Press SPK to hang up.

Repeat steps 1 to 4 for further trunk ports.

To cancel the call forward for incoming calls to a trunk:

Press SPK to go off hook.

Dial trunk to trunk call forward cancel service code - 834.

Dial the trunk port number (001 to 200).

Press SPK to hang up.

Repeat steps 1 to 4 for further trunk ports.

Features

Trunk to Trunk Transfer

■ Description

Trunk to trunk transfer refers to the connection of any two trunk ports together.

Hold and Transfer.

An extension user places one trunk call on hold and then either makes an outgoing call, answers an incoming call or retrieves a call from hold and transfers the two trunk calls together.

Withdraw from Conference.

An extension user sets up a conference call with two (or more) trunk calls and then withdraws from the conference, leaving the trunk callers connected.

Extension User sets Call Forward Off Premise.

An incoming trunk call is routed to an extension with call forward off premise. The user can set call forward off premise by setting call forward to an Abbreviated Dial bin or by Service Code 713+6+Trunk Access Code+off premise number.

A Trunk is routed directly Off Premise.

The Aspire is configured to route the incoming DDI trunk directly to an off premise number. This is set in Program 22-11-02 by entering the trunk access code followed by the off premise extension number as the target for the DDI number e.g. 901509643111.

Conditions

Two outgoing analogue trunks can not be connected together, this is because a disconnect clear signal is not generated by the PSTN for calls originated by the PBX.

The following tables show the settings required to allow the various trunk to trunk options.

For each call type the programming required is listed, use the key below for each Program number.

A - Program 14-01-13 Trunk to Trunk Transfer

B - Program 14-02-12 Network Disconnect Clear Signal for Analogue trunks

Two trunks call to be transferred		Required Settings
Trunk Call Type	Trunk Call	
Incoming Analogue	Incoming Analogue	A and B
	Outgoing Analogue	A and B
	Outgoing ISDN	A
Outgoing Analogue	Outgoing Analogue	Not available
	Outgoing ISDN	A
ISDN	Any trunk call type	A

Disconnect timers for trunk to trunk calls.

Program 24-02-07, Trunk to Trunk disconnect timer, will disconnect all call types. The default setting is 1800 Seconds (30 minutes).

Program 25-07- items 07 & 08, DISA disconnect timers, will disconnect calls routed automatically by the Aspire. This includes calls forwarded off premise and trunks routed directly off premise.

Trunk Routing for calls routed directly off premise.

Program 20-14-02 - An ISDN DDI routed directly off premise must have the Route Option enabled for DISA Class 1.

Program 21-03-01 - An ISDN DDI routed directly off premise will need the trunk route defining for each incoming ISDN trunk port.

Trunk to Trunk transfer restriction.

Program 20-11-14 - Must be set to 0 (Not restricted) to allow an extension to perform Hold and Transfer of two trunk calls.

Default Setting

Trunk to Trunk transfer is disabled, Program 14-01-13.

Network Disconnect signal is disabled, Program 14-02-12.

Off Premise call forward is disabled, Program 20-11-12.

Trunk to Trunk disconnect timer is set to 1800 Seconds, Program 24-02-07.

DISA conversation (Trunk to Trunk conversation) timer is set to 45 Seconds, Program 25-07-07 & 08.

Route option for DISA class 1 is disabled, Program 20-14-02.

Trunk route for all trunk ports is set to 0 (None), Program 21-03-01.

Trunk to Trunk Transfer restriction is set to 'not restricted' for all classes of service, Program 20-11-14.

■ Programming

- 14-01-13 : Trunk to Trunk Transfer
- 14-02-12 : Network Disconnect Signal
- 20-11-12 : Off Premise Call Forward
- 20-11-14 : Trunk to Trunk Transfer Restriction
- 20-14-02 : Route Option for DISA
- 21-13-01 : Trunk Outgoing Route Access
- Trunk to Trunk Disconnect Timer
- 25-07-07 & 08 : DISA Conversation Timer

■ Related Features

- Hold
- Transfer
- Call Forward to Abbreviated Dial
- Call Forward Off Premise
- Trunk to Trunk Forwarding

■ Operation

Refer to each Related Feature

Features

Voice Mail

■ Description

The DSPDB daughter board with Compact Flash provides the option for Voice Mail System capable of the following features:

- Personal greeting/mailbox
- Conversation record
- General trunk answering guidance greeting

Conditions

300 mailboxes max

Storage time is limited to DSPDB compact flash size (1 hour standard)

100 messages per mailbox max.

3 selectable personal greetings

Default Setting

Disabled.

■ Programming

- 11-12-39 : Service code setup (for Service Access) - VRS Access
- 20-06-01 : Class of Service for Extensions
- 20-07-13 : Class of Service Options (Administrator Level) - VRS Record
- 15-07-01 : Programmable function keys
- 14-09-01 : Conversation Recording destination for trunks
- 14-09-02 : Automatic Recording
- 14-09-03 : Recording contents storing method
- 14-09-04 : Automatic recording for outgoing call
- 15-12-01 : Conversation recording destination for extensions
- 15-12-02 : Automatic recording for extensions
- 15-12-03 : Recording contents storing method
- 15-12-04 : Automatic recording for outgoing call
- 22-05-01 : Incoming trunk ring group assignment
- 40-01-01 : Voice mail basic setup - Voice channels
- 40-01-02 : Voice mail basic setup - Time stamp
- 40-01-03 : Voice mail basic setup - Conversation record for after transfer
- 40-01-04 : Voice mail basic setup - Auto. attendant for non-existing extensions
- 40-01-05 : Voice mail basic setup - Maintenance time
- 40-01-06 : Voice mail basic setup - Automatic message erase
- 40-02-01 : Mailbox setup - Mailbox number
- 40-02-02 : Mailbox setup - Mailbox password
- 40-03-01 : Message recording setup - voice mail recording time
- 40-03-02 : Message recording setup - Guidance message in case recording not allowed
- 40-03-03 : Message recording setup - Automatic answering transmission for busy line
- 40-04-01 : Live recording setup - operation mode when mailbox is not defined
- 40-04-02 : Live recording setup - Temporary box number
- 40-04-03 : Live recording setup - Live recording display
- 40-05-01 : Call information setup (for notification) - Maximum number of outgoing calls
- 40-05-02 : Call information setup (for notification) - Trunk route number
- 40-05-03 : Call information setup (for notification) - ISDN calling number setting
- 40-05-04 : Call information setup (for notification) - Calling interval (extension)
- 40-05-05 : Call information setup (for notification) - Calling interval (trunk)
- 40-05-06 : Call information setup (for notification) - Maximum calling count (extension)

- 40-05-07 : Call information setup (for notification) - Maximum calling count (trunk)
- 40-06-01 : Trunk answering Service Setting - Operation mode
- 40-06-02 : Trunk answering Service Setting - transmission guidance number
- 40-06-03 : Trunk answering Service Setting - Message box number
- 40-07-01 : Voice Mail language setting - System setting
- 40-08-01 : Voice Mail language setting - Mailbox setting
- 40-09-01 : Voice Mail Multiple Address Group setup

■ Related Features

- Direct Inward Dialling (DID) or Direct Dial In (DDI)
- Direct Inward Line (DIL)
- Programmable Function Keys
- Date & Time setup
- Night service settings

■ Operation

Using Voice Mail Related Function Keys:

We recommend setting up Voice Mail related function keys on your Keyphone, DSS console to allow you to use Voice Mail efficiently. (See Programmable Function Keys)

Code 67 + mail box number - Mail box key for direct access to mailbox

Code 68 + 0 - Voice Mail service - skip message forward and replaying

Code 68 + 1 - Voice Mail service - skip message backward and replaying

Code 69 + 0 - Conversation record - Start and stop manual conversation record

Code 69 + 1 - Conversation record - Delete a recorded conversation and re-record

Code 69 + 2 - Conversation record - Cancel call record and delete

Code 70 + mail box number - Auto Attendant setting - set call forward to Voice Mail.

Code 71 + mail box number - Switch answering message - select one of three greetings

To set up a Voice Mail related function key on a Programmable Function key:

1. Press idle SPK key.
2. Dial 851.
3. Press the key you want to program.
4. Enter the 2-digit code, and any additional information needed for the key and press HOLD.
(For Conversation Record, Enter Code 69 + 0).

To check the function of a programmable key:

1. Press CHECK.
2. Press the programmable key.
The programmed function displays.

Service and Option code list:

In order to use the various services provided by voice mail, operation codes must be input. There are two types of operation codes:

1. Service code: following the voice guidance, a code to select the service.
2. Option code: a number to select optional settings or operations of a service.

Features

List of Voice Mail Service and Option Codes

Service Function	Service Code	Optional Function within a service	Option Code
Help guidance	0#		-
Play Messages	1#	Replay message	1#
		Pause/restart the play back	4#
		Erase message and play next message	7#
		Save message and play next message	9#
		Copy the message	2#
		Skip playback forward 8 seconds	3#
		Skip play back backward 8 seconds	6#
		Broadcast the message	28#
		Exit from a service	*#
Erase all message	7#		
Broadcast a message to a multiple address group	2#		
Answering message No.1	Play	31#	
	Record	32#	
	Erase	37#	
Answering message No.2	Play	35#	
	Record	33#	
	Erase	38#	
Answering message No.3	Play	36#	
	Record	34#	
	Erase	39#	
Message Notification	61#	Notify to an extension	1#
		Notify to an external number	2#
		Cancel notification	0#
		Exit	*#
Set Automated Attendant	62#		
Play messages "First in First Out"	63#		
Play messages "Last in First Out"	64#		
Password setting	65#		
Message registration control setting	66#		
Exit	*#		

Personal Automated Attendant:

Forwarding/Cancelling forward to voice mail from a keyphone

1. If the keyphone has an Auto Attendant key (code 70 + mailbox), this key acts as a toggle for call forwarding for the extension/mailbox assigned to the key. The key toggles through Forward All, No Answer, Busy, No Answer/Busy, and Cancel.
2. If the keyphone does not have an Auto Attendant key it is only possible to 'forward all calls' to the voice mail, this is achieved by dialling the service code in 11-12-39 (default - 884), entering your mailbox number (and password if enabled) and dialling option code 62#, this is a toggle between forward all and cancel.

Forwarding/Cancelling forward to voice mail from an SLT

1. Dial the Voice Mail service code in 11-12-39 (default - 884), dial option code 62#, this act as a toggle between forward and cancel.

Setting greeting messages

1. If calling from a keyphone with Voice Mail Access key (code 67 + mailbox), press that key, if calling from an SLT or a keyphone without Voice Mail access key, dial the Voice Mail Access code in 11-12-39 (default - 884) and enter your mailbox number.
2. There are 3 greeting messages available for each mailbox. Service codes are available to record, play or erase each individual message.

Message Number Function Service code

Message 1 Play 31#
Message 1 Record 32#
Message 1 Erase 37#
Message 2 Play 35#
Message 2 Record 33#
Message 2 Erase 38#
Message 3 Play 36#
Message 3 Record 34#
Message 3 Erase 39#

To record a message

1. Press idle SPK key.
OR
At a single line telephone, lift handset.
2. Dial the Voice Mail service code in 11-12-39 (default - 884)
3. Enter your mailbox number followed by # (and password if enable).
4. Dial 32# (Record message 1).
5. When you hear, "Please record your message" followed by a beep, record your message.
6. Press 9# to end recording
7. Hang up to save the message.

To listen to a previously recorded message

1. Press idle SPK key.
OR
At a single line telephone, lift handset.
2. Dial the Voice Mail service code in 11-12-39 (default - 884)
3. Enter your mailbox number followed by # (and password if enable).
4. Dial 31# (Play message 1).
You'll hear the previously recorded message.
5. Hang up.

Features

To erase a previously recorded VRS message:

1. Press idle SPK key.
OR
At a single line telephone, lift handset.
2. Dial the Voice Mail service code in 11-12-39 (default - 884)
3. Enter your mailbox number followed by # (and password if enable).
4. Dial 37# (Erase message 1).
You'll hear, "Do you wish to erase a announce message. Please dial 0 followed by # to accept."
5. Dial 0# to erase a message.
6. Hang up.

Selecting message to play

1. If calling from a keyphone with 'Change Attendant Message' key (code 71 + mailbox), press that key, if calling from an SLT or a keyphone without 'Change Attendant Message' key, the answering message cannot be changed.
2. The 'Change Attendant Message' key toggles to select the answering message and the lamp indicates which message is selected :

Message 1 = Lamp extinguished

Message 2 = lamp steady

Message 3 = lamp flashing.

If "Busy Line Attendant Feature" has been set at installation, answering message 3 will play when the extension is busy, therefore messages 1 & 2 can only be used normal answering for Automated Attendant.

Setting Password:

You can set a four digit password to your mailbox.

1. If calling from a keyphone with Voice Mail Access key for the mailbox (code 67 + mailbox) press the key, if calling from an SLT or a keyphone without Voice Mail access key dial the Voice Mail Access code in 11-12-39 (default - 884) and enter your mailbox number (and password if enabled).
2. Dial service code 65#
3. Enter your new four digit password followed by #.
4. Your password will be spoken back to you followed by the prompt "Please dial 0# for yes, or dial 1# for no".
5. Enter 0 then # to confirm.
6. You will be prompted "your password has been registered. Service code please"
7. Hang up.

Deleting your password:

1. If calling from a keyphone with Voice Mail Access key for the mailbox (code 67 + mailbox) press the key, if calling from an SLT or a keyphone without Voice Mail access key dial the Voice Mail Access code in 11-12-39 (default - 884) and enter your mailbox number (and password if enabled).
2. Dial service code 65#.
3. At password prompt dial '9999' followed by #.
4. You will be prompted "your password will be erased, dial 0# for yes, or dial 1# for no".
5. Dial 0 then #.
6. You will be prompted that you password has been erased.

Listening to messages:

1. If calling from a keyphone with Voice Mail Access key for the mailbox (code 67 + mailbox), press that key, if calling from an SLT or a keyphone without Voice Mail access key dial the Voice Mail Access code in 11-12-39 (default - 884) and enter your mailbox number.
2. Upon entry from a keyphone using Voice Mail Access key, the messages are automatically played back, if entering using the service code dial Service code 1# to listen to messages.

Record a message to send to a mailbox:

1. Lift handset and dial Voice Mail Access code in 11-12-39 (default - 884).
2. Upon answer the voice mail will respond with the prompt "This is Voice service centre, the mailbox number please"
3. Dial *, the mailbox number you wish to send a message to, then #.
4. Record message
5. Hang up

Record a message to send to a Broadcast List:

It is possible to send a message to up to 100 mailboxes simultaneously. This feature is set up at installation and can create up to 10 Broadcast lists containing up to 100 mailboxes in each using programming command 40-09-01.

1. If calling from a keyphone with Voice Mail Access key for the mailbox (code 67 + mailbox) press that key, if calling from an SLT or a keyphone without Voice Mail access key, dial the Voice Mail Access code in 11-12-39 (default - 884) and enter your mailbox number (and password if enabled).
2. Dial service code 2 followed by #.
3. Dial abbreviated Broadcast list number.
4. Record Message.
5. Hang up.

Setting Message Notification:

It is possible to set notification if a message is left in your mailbox. The notification can call an extension or an external number.

1. If calling from a keyphone with Voice Mail Access key for the mailbox (code 67 + mailbox), press that key, if calling from an SLT or a keyphone without Voice Mail access key, dial the Voice Mail Access code in 11-12-39 (default - 884) and enter your mailbox number (and password if enabled).
2. Dial Service Code 61 followed by #.
3. You will be prompted "Dial 1# for an extension call, 2# for an outside call, or 0# to cancel.
4. If either 1# or 2# is selected enter number to be dialled followed by # (it is not necessary to enter the trunk access code for an external number).
5. The dialled number will be read out. Press 0# to confirm.

Cancelling Message Notification:

1. If calling from a keyphone with Voice Mail Access key for the mailbox (code 67 + mailbox), press that key, if calling from an SLT or a keyphone without Voice Mail access key dial the Voice Mail Access code in 11-12-39 (default - 884) and enter your mailbox number (and password if enabled).
2. Dial service code 61 followed by #.
3. You will be prompted "Dial 1# for an extension call, 2# for an outside call, or 0# to cancel.
4. Dial 0 then #.
5. Dial 0 then # to accept.
6. You will then be prompted "the setting has been cancelled".

Features

Conversation Recording:

Conversation record is set up at install with the option of either Automatic or manual recording. Automatic conversation record automatically records the call upon answer whereas manual conversation recording requires the depression of a function key to evoke the service.

To perform manual conversation record a key must be programmed on the keyphone. The Conversation Record key (code 69+0) is programmed via command 15-07-01 or service code 851.

In order to evoke manual conversation recording simply press the Conversation Record key during a telephone conversation.

Conversation recording can also be configured at installation via commands 14-09 and 15-12 to either record to your mailbox or to define the mailbox after the call has finished via a 'callback'. If the callback option is specified the voice mail will call you back after the conversation has ended and you to specify a mailbox for storage, after specify a valid mailbox followed by # the voice mail will confirm the message has been saved. If you do not answer the callback the recorded conversation will be deleted, if you do not specify the mailbox number during the callback the recorded conversation will be deleted.

Voice Mail access from external:

It is possible to 'log in' to your mailbox from an external source.

1. Dial into your personal greeting
2. Listen to your greeting
3. After your greeting has played two short beeps will be heard, enter your password followed by #.
4. You will then have access to the service code options for your mailbox.

To record a trunk answering Guidance message:

1. Press idle SPK key.
OR
At a single line telephone, lift handset.
2. Dial 716.
3. Dial 7 (Record).
4. Dial the Guidance message number you want to record (01-48).
Ensure that the message number selected for the Guidance is not used for other VRS functions e.g. queue messages etc.
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 record trunk answering Guidance message:

1. Press idle SPK key.
OR
At a single line telephone, lift handset.
2. Dial 716.
3. Dial 5 (Listen).
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 trunk answering Guidance message:

1. Press idle SPK key.
OR
At a single line telephone, lift handset.
2. Dial 716.
3. Dial 3 (Erase).
4. Dial the number of the VRS message you want to erase (01-48).
5. Press HOLD (system phone only) to cancel the procedure without erasing (and return to step 3).
OR
Hang up to erase the message.

Features

Voice Response System (VRS)

■ Description

The DSP daughter board provides the option for Voice Response System (VRS) which gives the system voice recording and playback capability. This enhances the system with:

- **VRS Messages** - are 48 system messages used for the General Message, Automated Attendant greetings and the Preamble
- **General Message** - provides a pre-recorded 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
- **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
- **Preamble** - alerts callers using lines that have call recording or caller pay service etc.
- **Time, Date and Station Number Check** - lets a system phone 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 and the Preamble message. The maximum duration of any one VRS message is not programmable. VRS messages are stored permanently in the event of a power failure.

Any on-premise extension, DISA or DID caller can listen, record and erase VRS Messages (unless restricted in programming). DISA and DID callers use the same procedures as on-premise users, except that they must additionally enter a VRS password.

General Message

A General Message is a pre-recorded 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 system phone 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. 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 Dialling

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.

Personal Greetings are stored permanently. If there is a commercial power failure or if the system resets, any recorded Personal Greetings are kept.

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.

Features

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. 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 pre-recorded 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 pre-recorded 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 pre-recorded 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 Dialling**
Single Digit Dialling 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 dialling 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.

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 200 when it is busy, they hear, “Station 200 is busy. For Callback, dial 2.”

Preamble Message

If the system has trunks that are part of the Caller Paid Service, the VRS can automatically play a pre-recorded message when a user answers the call. This pre-recorded message should describe the Caller Paid Service features and cost. The Preamble Message ensures that the caller is always aware that they have accessed a “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 Caller Paid Service calls as there are available VRS ports. If a Caller Paid Service call 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 Caller Paid Service 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 system phone 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 Number). To listen to the time and date, the user presses 8 (for Time).

Conditions

- A) Park and Page announcements will only repeat once.
- B) VAU Record time is fixed at 2 minutes and it cannot be changed.

Default Setting

Disabled.

Features

■ Programming

- 11-12-54 : Service Code Setup (for Service Access) - VRS Routing
- 15-07-01 : Programming Function Keys
- 20-06-01 : Class of Service for Extensions
- 20-07-13 : Class of Service Options (Administrator Level) - VRS Record
- 20-07-14 : Class of Service Options (Administrator Level) - VRS General Message Listen
- 20-07-15 : Class of Service Options (Administrator Level) - VRS General Message Record
- 20-11-15 : Class of Service Options (Hold/Transfer Service) - VRS Personal Greeting
- 22-02-01 : Incoming Call Trunk Setup
- 22-04-01 : Incoming Extension Ring Group Assignment
- 24-02-03 : System Options for Transfer - Delayed Call Forwarding Time
- 25-02-01 : DID/DISA VRS Error Message
- 25-03-01 : DID/DISA Transfer Ring Group With Incorrect Dialling
- 25-04-01 : DID/DISA Transfer Ring Group With No Answer/Busy
- 25-05-01 : DID/DISA Error Message Assignment
- 25-06-02 : DID/DISA One-Digit Code Attendant Setup
- 25-07-02 : System Timers for DID/DISA - DID/DISA No Answer Time
- 25-13-01 : System Option for DISA - VRS Password
- 31-02-01 : Internal Paging Group Assignment - Internal Paging Group Number
- 31-04-01 : External Paging Zone Group
- 31-07-01 : Combined Paging Assignments
- 40-08-01 : Voice Prompt Language Assignment for Mailboxes
- 40-10-01 : Voice Announcement Service Option - VAU Fixed Message
- 40-10-02 : Voice Announcement Service Option - General Message Number
- 40-10-03 : Voice Announcement Service Option - VRS No Answer Destination
- 40-10-04 : Voice Announcement Service Option - VRS No-Answer Time
- 40-10-05 : Voice Announcement Service Option - Park and Page Repeat Timer
- 40-11-01 : Pre-Amble Message Assignment

■ Related Features

- Voice Mail

■ Operation

VRS MESSAGES

To record a VRS message:

1. Press a CALL key.
OR
At a single line telephone, lift handset.
2. Dial 716.
3. Dial 7 (Record).
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 a CALL key.
OR
At a single line telephone, lift handset.
2. Dial 716.
3. Dial 5 (Listen).
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 a CALL key.
OR
At a single line telephone, lift handset.
2. Dial 716.
3. Dial 3 (Erase).
4. Dial the number of the VRS message you want to erase (01-48).
5. Press HOLD (system phone 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 716 and the VRS password.
4. Dial the function you want.
7 = Record
5 = Listen
3 = Erase
5. Dial the message number (01-48), record the message and press # to end recording.
*If you dialled 7 to record, you can dial # to listen to the message you just recorded.
If you dialled 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.*

Features

GENERAL MESSAGE

To listen to the General Message: System Phone 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 (General).

OR

1. At a single line telephone, lift the handset and dial 711.

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 a CALL key.

OR

At a single line telephone, lift handset.

2. Dial 712.
3. Dial the function you want.

7 = Record

5 = Listen

3 = Erase

If you dialled 7 to record, press # to end the recording.

If you dialled 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 dialled 3 to erase the General Message, you must go to step 4 (hang up). To cancel without erasing on a system phone, 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 a CALL key (or lift handset at SLT) and dial 713.

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 dialling the Voice Mail master number)

- Off-premise via Common Abbreviated Dialling (by entering 813 + 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

4 = Intercom 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 a CALL key (or lift handset at SLT).
2. Dial 713 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 a CALL key (or lift handset at SLT) and dial 713.
OR
Press Call Forwarding (Device) key (PGM15-07 or SC 851: 17).
2. Dial 7 + When you hear, "Please start recording," record your 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 751 + 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 a CALL key (or lift handset at SLT).
2. Dial 815 + your extension number.

To cancel your Park and Page:

1. Press a CALL key (or lift handset at SLT).
2. Dial 713 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 system phone:**

1. Do not lift the handset or press a CALL key.
2. Dial 6 for extension Number.

To check the system time and date from any system phone extension:

1. Do not lift the handset or press a CALL key.
2. Dial 8 for Time and date.

PREAMBLE**To answer a 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.

Features

Volume Controls

■ Description

Each system phone 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 UP or VOLUME DOWN 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.

Conditions

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

Default Setting

Enabled.

■ Programming

None

■ Related Features

None

■ Operation

To adjust the volume of incoming ringing and splash tone:

1. If the phone is idle, dial 829. If the phone is ringing, skip to Step 2.
2. Press VOLUME ▲ or VOLUME ▼.

To adjust the volume of 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

■ 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 can 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 analogue 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.

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 for all trunks.

■ Programming

- 14-01-17 : Basic Trunk Data Setup - Trunk to Trunk Warning Tone for Long Conversation Alarm
- 20-06-01 : Class of Service for Extensions
- 20-13-01 : Class of Service Options (Supplementary Service) - Long Conversation Alarm
- 20-21-01 : System Options for Long Conversation - Long Conversation Alarm 1
- 20-21-02 : System Options for Long Conversation - Long Conversation Alarm 2
- 21-01-03 : System Options for Outgoing Calls - Trunk Interdigit Time (External)
- 25-07-07 : System Timers for DID/DISA - DISA Conversation Warning Tone Time
- 25-07-08 : System Timers for DID/DISA - DISA Long Conversation Disconnect
- 25-13-02 : System Option for DISA - Continue Code for DISA Trunk to Trunk

■ Related Features

- Central Office Calls, Answering
- Central Office Calls, Placing / Toll Restriction
- Direct Inward System Access (DISA)
- Intercom
- Long Conversation Cutoff
- Single Line Telephones

Features

■ 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.

- For Your Notes -

Empowered by Innovation

NEC

NEC Infrontia LTD

75 Swingbridge Road
Loughborough
Leicestershire
LE11 5JB

<http://www.necinfrontia.co.uk>