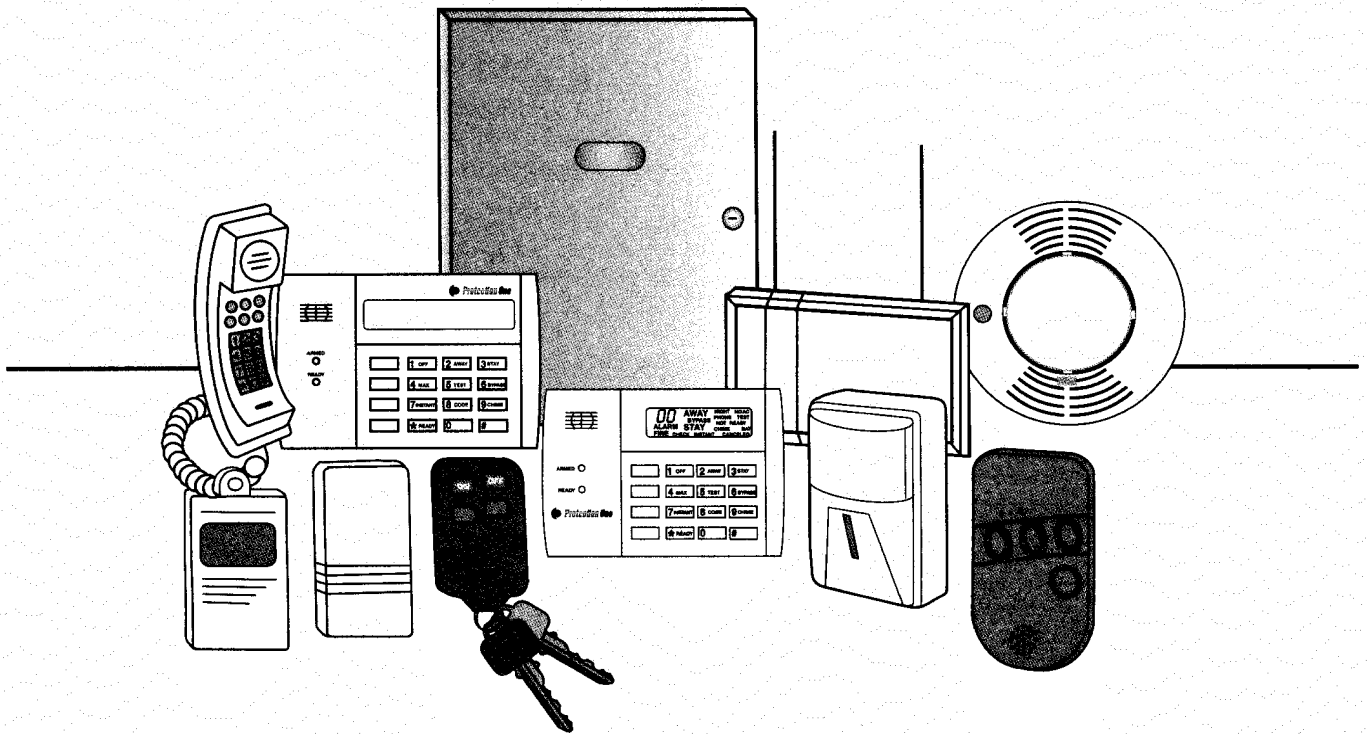


320P1

(VISTA-20PSIA with Custom Defaults)

Programming Guide



This control is a certified SIA-compliant control that meets SIA specifications for False Alarm Reduction.



www.ProtectionOne.com

This control supports upload/download programming capability via the Internet or Private local area network (Intranet). Refer to the separate Installation Supplement for details.

TO ENTER PROGRAMMING MODE (using an alpha keypad connected to the control):

- A. POWER UP, then press [*] and [#] at the same time, within 50 seconds of powering up (this method must be used if *98 was used to exit program mode). OR
- B. Initially, key: Installer Code (4 + 1 + 1 + 2) plus 8 + 0 + 0.

PROGRAMMING MODE COMMANDS

Task	Command/Explanation
Go to a Data Field	Press [*] + [Field Number], followed by the required entry.
Entering Data	When the desired field number appears, simply make the required entry. When the last entry for a field is entered, the keypad beeps three times and automatically displays the next data field in sequence. If the number of digits that you need to enter in a data field is less than the maximum digits available (for example, the phone number fields *41, *42), enter the desired data, then press [*] to end the entry. The next data field number is displayed.
Review a Data Field	Press [#] + [Field Number]. Data is displayed for that field number. No changes can be made in this mode.
Deleting an Entry	Press [*] + [Field Number] + [*]. (Applies only to fields *40 thru *46, *94, and pager fields)
Initialize Download ID	Press *96. Initializes download ID and subscriber account number. NOTE: This control does not support site-initiated downloading via the 7845i-ent.
Reset Factory Defaults	Press *97. Sets all data fields to original factory default values.
Zone Programming	Press *56. Zone characteristics, report codes, alpha descriptors, and serial numbers for RF transmitters.
Function Key Programming	Press *57. Unlabeled keypad keys (known as ABCD keys) for special functions
Zone Programming (Expert Mode)	Press *58. Same options as *56 mode, but with fewer prompts. Intended for those familiar with this type of programming, otherwise *56 mode is recommended.
Output Device Mapping	Press *79. Assign module addresses and map individual relays/powerline carrier devices
Output Programming	Press *80. 4229 or 4204 Relay modules, Powerline Carrier devices, or on-board triggers
Zone List Programming	Press *81. Zone Lists for relay/powerline carrier activation, chime zones, pager zones, etc.
Alpha Programming	Press *82. Zone alpha descriptors
Exit Program Mode with installer code lockout	Press *98. Exits programming mode and prevents re-entry by: Installer Code + 8 + 0 + 0. To reenter programming mode, the system must be powered down, then powered up. Then use method A above. See field *88 for other *98 Program mode lockout options.
Exit Program Mode	Press *99. Exits programming mode and allows re-entry by: Installer Code + 8 + 0 + 0 or method A above.

SPECIAL MESSAGES

OC = OPEN CIRCUIT (no communication between Keypad and Control).

EE or ENTRY ERROR = ERROR (invalid field number entered; re-enter valid field number).

After powering up, AC, dl (disabled) or Busy Standby and NOT READY will be displayed after approximately 4 seconds. This will revert to a "Ready" message in approximately 1 minute, which allows PIRS, etc. to stabilize. You can bypass this delay by pressing [#] + [0].

E4 or E8 = more zones than the expansion units can handle have been programmed. Display clears after you correct the programming.

TABLE OF DEVICE ADDRESSES

This Device	Uses Address	Reports as †	Enabled By...
RF Receiver	00	100	*56 zone programming: input device type entry
AUI 1	01	101	Automatic if AUI enable field *189 enabled for AUI 1
AUI 2	02	102	Automatic if AUI enable field *189 enabled for AUI 2
AUI 3	05	105	Automatic if AUI enable field *189 enabled for AUI 3
AUI 4	06	106	Automatic if AUI enable field *189 enabled for AUI 4
Long Range Radio††	03	103	automatic if output to long range radio field *29 enabled
4286 Voice Module	04	104	automatic if phone module access code field *28 enabled
Zone Expanders (4219/4229): module 1 (for zones 09 - 16) module 2 (for zones 17 - 24) module 3 (for zones 25 - 32) module 4 zones 33 - 40 module 5 zones 41 - 48	07 08 09 10 11	107 108 109 110 111	*56 zone programming: input device type entry, then: automatic if zone no. 9-16 entered as AW type or relay assigned automatic if zone no. 17-24 entered as AW type or relay assigned automatic if zone no. 25-32 entered as AW type or relay assigned automatic if zone no. 33-40 entered as AW type or relay assigned automatic if zone no. 41-48 entered as AW type or relay assigned
Relay Modules (4204): module 1 module 2 module 3 module 4	12 13 14 15	112 113 114 115	*79 output device programming: device address prompt: entered at device address prompt entered at device address prompt entered at device address prompt entered at device address prompt
Keypads: keypad 1 keypad 2 keypad 3 keypad 4 keypad 5 keypad 6 keypad 7 keypad 8	16 17 18 19 20 21 22 23	n/a n/a n/a n/a n/a n/a n/a n/a	data field programming as listed below: always enabled, all sounds enabled. data field *190 data field *191 data field *192 data field *193 data field *194 data field *195 data field *196
5800TM Module	28	n/a	automatic

† Addressable devices are identified by "1" plus the device address when reporting. Enter report code for zone 91 to enable addressable device reporting (default = reports enabled). See field *199 for addressable device (ECP) 3-digit/2-digit identification keypad display options.

†† The 320P1 supports upload/download via the Internet (IP) when used with the 7845i-ent long range radio. See note in field *29 Long Range Radio output.

***49 Split/Dual Reporting** [0]

0 = Standard/backup reporting only (all to primary)

Primary Phone No.	2nd Phone No.
1 = Alarms, Restore, Cancel	Others
2 = All except Open/Close, Test	Open/Close, Test
3 = Alarms, Restore, Cancel	All
4 = All except Open/Close, Test	All
5 = All	All

***50 Burglary Dialer Delay** [2,0]

Delay Time Delay Disable
Delay Time: 1 = 15 seconds; 2 = 30 seconds; 3 = 45 seconds

Delay Disable:
0 = use delay set in entry 1
1 = dial delay disabled for zones listed in zone list 6 (use zone list 6 to enter those zones that require dial delay to be disabled; these zones ignore the setting in entry 1)

UL: Dial delay plus entry delay must not exceed one minute; use zone list 6 to disable dial delay from appropriate zones, if necessary.

***53 SESCOA/Radionics Select** [0]

0 = Radionics (0-9, B-F); enter "0" for all non-SESCOA formats
1 = SESCOA (0-9 only reporting)

***54 Dynamic Signaling Delay** [2]

Select delay from 0 to 225 secs, in 15-sec increments.
0 = no delay (both signals sent); 1 = 15 secs; 2 = 30 secs, etc.
UL: Grade AA must be "0;" Grade A must be "15" max

***55 Dynamic Signaling Priority** [0]

0 = Primary Dialer first; 1 = Long Range Radio first.
For UL Commercial Burglary installations that use a DACT and LRR, this field must be "0".

***56, *57, *58 Menu Modes**
These are Menu Mode commands, not data fields, for Zone Programming, Function Key Programming, and Expert Mode Zone Programming respectively. See page 2 and respective sections later in this document.

TO PROGRAM SYSTEM STATUS, & RESTORE REPORT CODES (*59 thru *68, *70 thru *76, and *89):
For 3+1 or 4+1 Standard Format: Enter a code in the first box: 1-9, #+10 for 0, #+11 for B, #+12 for C, #+13 for D, #+14 for E, #+15 for F.
A 0 (not #+10) in the first box will disable a report. A 0 (not #+10) in the second box will result in automatic advance to the next field.
For Expanded or 4+2 Format: Enter codes in both boxes (1st and 2nd digits) for 1-9, 0, or B-F, as described above.
A 0 (not #+10) in the second box will eliminate the expanded message for that report. A 0 (not #+10) in both boxes will disable the report.
For Ademco Contact ID® Reporting: Enter any digit (other than 0) in the first box, to enable zone to report (entries in the second boxes are ignored).
A 0 (not #+10) in the first box disables the report.
UL: see installation instructions for requirements

SYSTEM STATUS REPORT CODES (*59-*68)

***59 Exit Error Alarm Report Code** [1]

SIA NOTE: Always enabled. Sends both exit error and zone alarm reports in the event of an exit error condition. Also see field *69.

***60 Trouble Report Code** [10]

***61 Bypass Report Code** [00]

***62 AC Loss Report Code** [00]

***63 Low Bat Report Code** [10]

***64 Test Report Code** [10]

Use Scheduling mode to set periodic test reports, or use the following key commands:
installer code +[#] + [0] + 0 = test report sent every 24 hours
installer code +[#] + [0] + 1 = test report sent once per week
installer code +[#] + [0] + 2 = test report sent every 28 day
Each mode sets schedule 32 to the stated repeat option; first test report sent 12 hours after command.

***65 Open Report Code** [0,0,0]

Part. 1 Part. 2 Common

***66 Arm Away/Stay Rpt Code** [0,0,0,0,0,0]

Away Stay Away Stay Away Stay
Part. 1 Part. 2 Common

***67 RF Trans. Low Bat Report Code** [11]

UL: must be enabled if wireless devices are used

***68 Cancel Report Code** [SIA NOTE: Report enabled.] [11]

***69 Recent Closing Report Code** [11]

SIA NOTE: Always enabled. Sends both recent closing and zone alarm reports if fault occurs within 2 min. after exit time expires. Also see field *59.

RESTORE REPORT CODES (*70 - *76)

***70 Alarm Restore Rpt Code** [0]

NOTE: Alarm restore signals indicate that respective alarm zone(s) are no longer faulted. Alarm restore reports are sent to the central station at bell timeout (field *33), if the zone(s) in alarm are actually restored to a non-faulted state at that time. Otherwise, alarm restore report(s) for respective alarm zones are sent when the system is disarmed.

If Reports Per Armed Period Per Zone (*93) is also programmed, the system will report alarm and restore codes as described above until the "Reports Per Armed Period" count is reached. Disarming and rearming will reset the "Reports Per Armed Period" count.

***71 Trouble Restore Rpt Code** [00]

***72 Bypass Restore Rpt Code** [00]

***73 AC Restore Rpt Code** [00]

***74 Low Bat Restore Rpt Code** [10]

***75 RF Trans. Lo Bat Rst Rpt Code** [00]

UL: must be enabled if wireless devices are used

***76 Test Restore Rpt Code** [00]

OUTPUT AND SYSTEM SETUP (*77 - *93)

***77 Daylight Savings Time** [4][10]

Start/End Month

0 = Disabled
1-12 = January-September (1 = Jan, 2 = Feb, etc)
#+10 = October; #+11 = November; #+12 = December

***78 Daylight Savings Time** [1][5]

Start/End Weekend

0 = disabled; 1 = first; 2 = second; 3 = third; 4 = fourth;
5 = last; 6 = next to last; 7 = third to last

***79, *80, *81, *82 Menu Modes**
These are Menu Mode commands, not data fields, for Output Device Mapping, Output Programming, Zone List Programming, and Alpha Programming respectively. See page 2 and their respective sections in the Installation and Setup Guide for procedures.

***84 Auto Stay Arm** [3]

0 = no; 1 = partition 1 only; 2 = partition 2 only; 3 = both partitions

***85 Cross Zone Timer** [0]

[This option not for use in UL installations.]

(assign cross zones on zone list 4, using *81 Menu mode)

0 = 15 seconds	6 = 2-1/2 min	#+12 = 8 min
1 = 30 seconds	7 = 3 min	#+13 = 10 min
2 = 45 seconds	8 = 4 min	#+14 = 12 min
3 = 60 seconds	9 = 5 min	#+15 = 15 min
4 = 90 seconds	#+10 = 6 min	
5 = 2 minutes	#+11 = 7 min	

NOTE: Cross zoning takes effect only after Exit Delay expires.

***86 Cancel Verify Keypad Display** [1]

0 = no "alarm canceled" display
1 = display "Alarm Canceled" when system is disarmed after an alarm has occurred. (To clear the "ALARM CANCELED" display, the user must enter the security code + OFF again.)

***87 Misc. Fault Delay Time** [0]

(used with Configurable Zone Types "digit 6")
0 = 15 seconds 6 = 2-1/2 min #+12 = 8 min
1 = 30 seconds 7 = 3 min #+13 = 10 min
2 = 45 seconds 8 = 4 min #+14 = 12 min
3 = 60 seconds 9 = 5 min #+15 = 15 min
4 = 90 seconds #+10 = 6 min
5 = 2 minutes #+11 = 7 min

UL: may only be used on non-burglar alarm/ non-fire alarm zones when used in fire and/or UL burglar alarm installation

***88 Program Mode Lockout Options** [0]

0 = standard *98 installer code lockout (reentry only by [*] + [#] within 50 seconds after power up)
1 = lockout [*] + [#] reentry after *98 exit (reenter via installer code or downloader only)
2 = not used
3 = lockout local programming after *98 exit (reenter by downloader only)

***89 Event Log Full Report Code** [00]

See box above field *59 for report code entries.

***90 Event Log Enables** [15]

NOTE: System messages are logged when any non-zero entry is made.
0 = None; 1 = Alarm/Alarm Restore
2 = Trouble/Trouble Restore;
4 = Bypass/Bypass Restore;
8 = Open/Close. *Example:* To select "Alarm/Alarm Restore", and "Open/Close", enter 9 (1 + 8); To select all, enter #15.

***91 Option Selection** [8, 0]

Options: 0 = None Options Call Waiting
4 = AAV UL: must use ADEMCO UVCM module Disable

8 = Exit Delay Restart/Reset UL: must be disabled
#+12 = AAV and Exit Delay Restart/Reset
SIA Guidelines: Exit Delay should be enabled.

Call Waiting Disable:
0 = call waiting not used
1 = call waiting disable digits (*70) entered in field *40; (when selected, the system dials the entry in field *40 only on alternate dial attempts; this allows proper dialing in the event call waiting service is later canceled by the user).

PAGER OPTIONS (*160- *172)

***160 Pager 1 Phone No.**

Enter up to 20 digits. 0-9; #+11 = '*'; #+12 = '#'; #+13 = 2-sec pause

***161 Pager 1 Characters**

Enter the optional prefix characters, up to 16 digits.
0-9; #+11 = '*'; #+12 = '#'; #+13 = 2-second pause.

***162 Pager 1 Report Options** [0,0,0]

Part. 1 Part. 2 common
For each partition, select from the following options:
0 = no reports sent
1 = Opens/closes all users
4 = All alarms and troubles
5 = All alarms / troubles, and opens/closes for all users
12 = Alarms / troubles for zones entered in zone list 9
13 = Alarms / troubles for zones entered in zone list 9, and opens/closes for all users

***163 Pager 2 Phone No.**

Enter up to 20 digits. 0-9; #+11 = 'Q'; #+12 = '#'; #+13 = 2-sec pause

***164 Pager 2 Characters**

Enter the optional prefix characters, up to 16 digits.
0-9; #+11 = '*'; #+12 = '#'; #+13 = 2-second pause.

***165 Pager 2 Report Options**

***92 Phone Line Monitor Enable** [0,0]

UL: see Inst. Instructions for requirements 1 2

NOTE: Output Device must either be programmed to be STOPPED in field *80 or STOPPED by Code + # + 8 + output number.

Entry 1: 0 = disabled, 1-15 = 1 min - 15 min
(#+10 = 10 min; #+11 = 11 min; #+12 = 12 min; #+13 = 13 min; #+14 = 14 min; #+15 = 15 min)

Entry 2: 0 = Keypad display when line is faulted
1 = Keypad display plus keypad trouble sound
2 = Same as "1", plus programmed output device STARTS. If either partition is armed, external sounder activates also.

***93 Reports In Armed Period** [1,0]

Per Zone (Swinger Suppression) Restrict Unlimited
Restrict Report Pairs: Report Pairs Reports

1 = 1 report pair; 2 = 2 report pairs

Unlimited Reports Enable:

0 = restrict reports to the setting in entry 1
1 = unlimited reports for zones listed in zone list 7; (use zone list 7 to enter those zones that require unlimited reporting; these zones ignore the setting in entry 1)

DOWNLOAD INFORMATION (*94, *95)

***94 Download Phone No.**

Enter up to 20 digits, 0-9; #+11 for '*'; #+12 for '#'; #+13 for a 2-second pause. Do not fill unused spaces. If fewer than 20 digits, exit field by pressing *. To clear entries from field, press *94*.

UL: Up/downloading via phoneline may be performed only if a technician is at the site.
Up/downloading via the Internet has not been evaluated by UL.

***95 Ring Count For Downloading** [15]

NOTE: Do not enter "0" if using 4285/4286 Phone Module.
0 = Disable Station Initiated Download;
1-14 = number of rings (1-9, #+10=10, #+11=11, #+12=12, #+13=13, #+14=14);
15 = answering machine defeat (#+15=15).

***96 *97 Initialize/Reset Defaults**

This is a command, not a data field. See page 2.

***98 *99 Exit Commands**

This is a command, not a data field. See page 2.

[0,0,0]

Part. 1 Part. 2 common
See field *162 for reporting options. Select for each partition (use zone list 10 if using options 12 or 13).

***166 Pager 3 Phone No.**

Enter up to 20 digits. 0-9; #+11 = '*'; #+12 = '#'; #+13 = 2-sec pause

***167 Pager 3 Characters**

Enter the optional prefix characters, up to 16 digits.
0-9; #+11 = '*'; #+12 = '#'; #+13 = 2-second pause.

***168 Pager 3 Report Options** [0,0,0]

Part. 1 Part. 2 common
See field *162 for reporting options. Select for each partition (use zone list 11 if using options 12 or 13).

***169 Pager 4 Phone No.**

Enter up to 20 digits. 0-9; #+11 = '*'; #+12 = '#'; #+13 = 2-sec pause

***170 Pager 4 Characters**

Enter the optional prefix characters, up to 16 digits.
0-9; #+11 = '*'; #+12 = '#'; #+13 = 2-second pause.

***171 Pager 4 Report Options** [0,0,0]

Part. 1 Part. 2 common

See field *162 for reporting options. Select for each partition (use zone list 12 if using options 12 or 13).

***172 Pager Delay Option For Alarms** [3]

0 = none; 1 = 1 minute; 2 = 2 minutes; 3 = 3 minutes
This delay is for ALL pagers in the system.

MISCELLANEOUS SYSTEM FIELDS (*174-*181)

***174 Clean Me Reporting Options** [0]

(for ESL smoke detectors)
0 = disable; 1 = Clean Me signal reports;
NOTE: If Clean Me is enabled, you must enter "3" in field *56 programming for zone 1 response time.

***177 Device Duration 1, 2** [0] [0]

(used in *80 Menu mode-Device Actions 5/6) 1 2
0 = 15 seconds 6 = 2-1/2 min #+11 = 7 min
1 = 30 seconds 7 = 3 min #+12 = 8 min
2 = 45 seconds 8 = 4 min #+13 = 10 min
3 = 60 seconds 9 = 5 min #+14 = 12 min
4 = 90 seconds #+10 = 6 min #+15 = 15 min
5 = 2 minutes

***181 50/60 Hertz AC Operation** [0]

0 = 60 Hz; 1 = 50 Hz

CONFIGURABLE ZONE TYPE OPTIONS (*182-*185)

(see Configurable Zone Type Worksheet on page 7)

***182 Configurable Zone Type 90**

1 2 3 4 5 6 7 8 9 10

Enter the appropriate value for each entry, 1-10, based on the charts provided on the next page. Each entry is the sum of the values of its selected options
(0-9, #+10=10, #+11=11, #+12=12, #+13=13, #+14=14, #+15=15).
UL: Do not configure zones as a fire alarm or UL burglar alarm zone.

***183 Zone Type 90 Report Codes**

IMPORTANT: Use existing Contact ID® codes, if appropriate, or define unique codes in CID code range 750-789 (make sure the code does not conflict with existing, predefined Contact ID report codes; see the *System Communication* section of the inst. Instr. for a list of standard Contact ID codes).

90 ALARM ID: XXX
TROUBLE ID: XXX

Enter the desired 3-digit Contact ID® report codes for alarms and troubles occurring on zones assigned to this zone type. Enter the codes sequentially (all 6 digits). When entering digits, [#] moves cursor back, [*] moves forward. Press [*] when done to continue.

NOTE: Zone alarm report code (prompt in *56 Zone Programming) and Trouble report code (*60) and relevant restore codes (*70, *71) must be enabled in order for the Configurable Zone Type codes to be reported.

***184 Configurable Zone Type 91**

1 2 3 4 5 6 7 8 9 10

Enter the appropriate value for each entry, 1-10, based on the charts provided on the next page. Each entry is the sum of the values of its selected options
(0-9, #+10=10, #+11=11, #+12=12, #+13=13, #+14=14, #+15=15).
UL: Do not configure zones as a fire alarm or UL burglar alarm zone.

***185 Zone Type 91 Report Codes**

IMPORTANT: Use existing Contact ID® codes, if appropriate, or define unique codes in CID code range 750-789 (make sure the code does not conflict with existing, predefined Contact ID report codes; see the *System Communication* section of the inst. Instr. for a list of standard Contact ID codes).

91 ALARM ID: XXX
TROUBLE ID: XXX

Enter the desired 3-digit Contact ID® report codes for alarms and troubles occurring on zones assigned to this zone type. Enter the codes sequentially (all 6 digits). When entering digits, [#] moves cursor back, [*] moves forward. Press [*] when done to continue.

NOTE: Zone alarm report code (prompt in *56 Zone Programming) and Trouble report code (*60) and relevant restore codes (*70, *71) must be enabled in order for the Configurable Zone Type codes to be reported.

KEYPAD OPTIONS *189-*196

NOTES: 1. Options for keypad address 16 are set by the factory and cannot be changed.)

2. Each keypad must be assigned a unique address. Keypads programmed with the same address will give unpredictable results.

***189 AUI Device Enables** [1, 1, 0, 0]

(for Touch Screen Style Keypads) AUI 1 AUI 2 AUI 3 AUI 4
System supports up to four touch screen style keypads (e.g., Symphony Advanced User Interface, and 6270 Touch Screen Keypad).

NOTE: Use of touch screen style keypads does not affect the number of standard keypads supported.

AUI Compatibility Note: To ensure proper AUI device operation, connect only to controls having microprocessor version 3.0 or higher, and use AUI devices with the following rev levels: 6270 series use version 1.0.9 or higher; 8132/8142 (Symphony) series use version 1.1.175 or higher.

Enter each touch screen keypad's home partition
0 = disable; 1 = partition 1; 2 = partition 2; 3 = partition 3 (common)

Device Addresses:

Touch Screen (AUI) device 1: Must set AUI device address to 1
Touch Screen (AUI) device 2: Must set AUI device address to 2
Touch Screen (AUI) device 3: Must set AUI device address to 5
Touch Screen (AUI) device 4: Must set AUI device address to 6

***190 Keypad 2 Device Address 17** [0] [0]

Partition: 0 = keypad disabled; Partition Sound
1-3 = part. no. (3 = common)

Sound: 0 = no suppression
1 = suppress arm/disarm and E/E beeps
2 = Suppress chime beeps only
3 = suppress arm/disarm, E/E, and chime beeps

***191 Keypad 3 Device Address 18** [0] [0]

See field *190 for entries. Partition Sound

***192 Keypad 4 Device Address 19** [0] [0]

See field *190 for entries. Partition Sound

***193 Keypad 5 Device Address 20** [0] [0]

See field *190 for entries. Partition Sound

***194 Keypad 6 Device Address 21** [0] [0]

See field *190 for entries. Partition Sound

***195 Keypad 7 Device Address 22** [0] [0]

See field *190 for entries. Partition Sound

***196 Keypad 8 Device Address 23** [0] [0]

See field *190 for entries. Partition Sound

***197 Exit Time Display Interval** [0]

0 = no display; 1-5 = seconds between display refresh
NOTE: If enabled and using only 2-digit fixed-word keypads (e.g., 6150RF), do not set exit delay time greater than 96 seconds. See Inst. Instr. for explanation.

TOUCH SCREEN DEVICE NOTE: If using more than one touch screen device (e.g., 6270, Symphony) with the system, leave field *197 Exit Time Display Interval set to the default value "0." The 6270 automatically displays remaining exit time in one-second increments.

***198 Display Partition Number** [0]

(for Alpha Display Keypads)
0 = no; 1 = yes (partition no. appears on Alpha Display)

***199 ECP Fail Display** [0]

0 = 3-digit display ("1" + device address)
1 = 2-digit fixed-display as "91"

Configurable Zone Types Worksheets

Configurable zone types 90 and 91 can be programmed via downloader software or from a keypad using data fields *182-*185. Configurable zone types 92 and 93 can only be programmed using the downloader software.

Programming Configurable Zone Type options involves making 10 entries in data field *182 for zone type 90 and field *184 for zone type 91, where each entry represents the sum of the values of the various options shown in the tables below. Use fields *183 and *185 to program Contact ID report codes for these zone types.

ENTRY 1 (See note 5 for RF zones)		ENTRY 2 (See note 5 for RF zones)		
Response when system disarmed and zone is:		Auto Restore		Vent Zone
Intact EOL <i>RF zone normal</i>	Open <i>RF zone N/A</i>	Shorted <i>RF zn off-normal</i>		
0 = normal 1 = alarm 2 = trouble 3 = fault	0 = normal 4 = alarm 8 = trouble 12 = fault	0 = normal 1 = alarm 2 = trouble 3 = fault see note 6	0 = no 4 = yes	0 = no 8 = yes
Entry 1 = EOL + Open		Entry 2 = Short + auto restore + vent zone		

ENTRY 3 (See note 5 for RF zones)		ENTRY 4 (See note 5 for RF zones)		
Response when armed STAY and zone is:		Byp. when disarmed		Byp. when armed
Intact EOL <i>RF zone normal</i>	Open <i>RF zone N/A</i>	Shorted <i>RF zn off-normal</i>		
0 = normal 1 = alarm 2 = trouble 3 = fault	0 = normal 4 = alarm 8 = trouble 12 = fault	0 = normal 1 = alarm 2 = trouble 3 = fault see note 6	0 = no 4 = yes	0 = no 8 = yes
Entry 3 = EOL + Open		Entry 4 = Short + byp. disarmed + byp. armed		

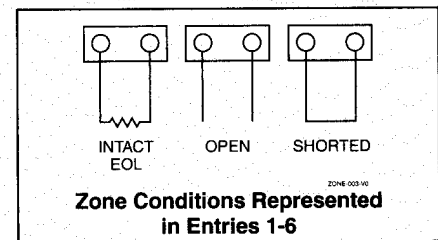
ENTRY 5 (See note 5 for RF zones)		ENTRY 6 (See note 5 for RF zones)		
Response when armed AWAY and zone is:		Dial Delay (see field *50)		Fault Delay (see field *87)
Intact EOL <i>RF zone normal</i>	Open <i>RF zone N/A</i>	Shorted <i>RF zn off-normal</i>		
0 = normal 1 = alarm 2 = trouble 3 = fault	0 = normal 4 = alarm 8 = trouble 12 = fault	0 = normal 1 = alarm 2 = trouble 3 = fault see note 6	0 = no 4 = use delay	0 = no 8 = use delay see note 1
Entry 5 = EOL + Open		Entry 6 = Short + dial delay + fault delay		

ENTRY 7		ENTRY 8		
Display Faults	Power Reset/Verification	Use Entry Delay 1/2	Use Exit Delay	Respond as Interior Type
0 = show alarms when armed & disarmed 1 = don't show alarms when armed (show alarms, trbles, faults when disarmed) 3 = never show any alarms, trbles, faults	0 = no 4 = power reset after fault (by code + OFF) 12 = verification (see zone type 16)	0 = no 1 = delay 1 2 = delay 2	0 = no 4 = use exit delay	0 = no 8 = yes see note 2
Entry 7 = fault display + power reset/verification		Entry 8 = entry delay 1/entry delay 2 + exit delay + interior zone type		

ENTRY 9		ENTRY 10		
Alarm Sounds	Use Bell Timeout	Respond as Fire Zone	Trouble Sounds	Chime when Chime Mode On
0 = none 1 = steady keypad 2 = steady bell and keypad 3 = pulsing bell and keypad	0 = no 4 = yes see fields *32, *33	0 = no 8 = yes see zone type 09; see note 4	0 = none 1 = periodic beep 2 = trouble beeps	0 = no 4 = yes
Entry 9 = alarm sounds + bell timeout + fire zone		Entry 10 = trouble sounds + chime		

Entries for Fields *182 and *184		
Entry	Zone Type 90 (field *182)	Zone Type 91 (field *184)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

To calculate the value for each entry:
Simply add the values of the selected options in each of the entry's columns (one option per column). For example, to program Entry 2 for "alarm response to short," "auto restore on," but not a "vent zone," enter 5 ("1" for alarm short + "4" for auto restore yes + "0" for vent zone no).



NOTES:

- Do not use the "fault delay" option with a configurable zone type if it is set for an entry or exit delay, otherwise unpredictable results may occur.
- To create an interior type zone, select "respond as interior zone type" (entry 8, interior type = yes), and set zone response to "fault" in entries 3-4 to ensure fault displays; do not set as "normal," "alarm," or "trouble."
- Do not set fire zones to respond as a "fault" (entries 1-6), otherwise faults will not display unless the [*] key is pressed.
- 4219/4229 modules must use EOLRs or unpredictable results may occur.
- RF Zones: The "open" option in entries 1, 3, and 5 is not applicable for RF zones. Use the "intact EOL" option for normal RF zone conditions and "shorted" for off-normal RF zone conditions.
- Zone-Doubling/Double-Balanced: A short on either zone of a zone-doubled pair or on a double-balanced zone causes a tamper condition.
 - For double-balanced zones, this entry must be "0."
 - For zone-doubled zones, **both** zones of the doubled pair must be assigned the same response to a short.

*56 Zone Programming Menu Mode

(press *56 while in Program mode)

The Zone Programming Worksheet is on page 13.

For each of the following prompts, make the desired entry, followed by the [*] key to accept the entry. Refer to the Installation and Setup Guide for detailed explanations for each prompt.

SET TO CONFIRM?

0 = no; 1 = yes (See XMIT TO CONFIRM prompt later in this section.) **We recommend that you confirm the programming of every transmitter.**

ENTER ZN NUM.

01-64, 91, 92, 95, 96, 99

To quit, enter 00 to quit (returns to data field mode).

SUMMARY SCREEN:

System displays a summary of the entered zone's current programming. Press [*] to continue.

ZONE TYPE

00 = Not used	07 = 24-Hr Audible	20 = Arm-STAY*
01 = Entry/exit #1	08 = 24-Hr Aux	21 = Arm-AWAY*
02 = Entry/exit #2	09 = Fire	22 = Disarm*
03 = Perimeter Resp	10 = Interior w/Delay	23 = No Alarm
04 = Interior Follower	12 = Monitor Zone	24 = Silent Burglary
05 = Trouble Day/Alarm Night	14 = Carbon Monoxide	77 = Keyswitch
06 = 24-Hr Silent	16 = Fire w/Verify	81 = AAV Monitor Zone

*5800 button-type transmitters only 90-93 = Configurable

PARTITION

1, 2, or 3-common

REPORT CODE

1-9, 10 for 0, 11 for B, 12 for C, 13 for D, 14 for E, 15 for F
For Contact ID®, enter any non-zero entry as the first digit to enable reporting for this zone.
To disable the report code for this zone, enter 00.

HARDWARE TYPE

Appears only for zones 02-08. Zone 1 is automatically set for EOL operation. Enter the desired hardware type:
0 = EOL; 1 = NC; 2 = NO; 3 = zone doubling (ZD); 4 = double-balanced (DB)

RESPONSE TIME

For hardwired zones 01-08. Enter the desired response time for this zone:
0 = 10mSec; 1 = 350mSec; 2 = 700mSec; 3 = 1.2 secs (see field *174).
NOTE: If zone doubling is being used, the response time selected for zones 02-08 automatically applies to each zone's associated doubled zone.

INPUT TYPE

Skipped for zones 2-8, and for zones 10-16 if zone-doubling enabled. Enter the input type: 2 = AW (Aux wired zone); 3 = RF (supervised RF); 4 = UR (unsupervised RF); 5 = BR (unsupervised button type)
NOTE: To change the input type of a previously programmed wireless device to a wired zone, you must first delete the transmitter's serial number.

INPUT S/N

Enroll the transmitter's serial number and loop number as follows:

- a. Transmit two open/close sequences (for button-type transmitters, press and release the button twice, waiting about 4 seconds before pressing the button the second time).

OR

- b. Manually enter the 7-digit serial number printed on the label of the transmitter. Press the [*] key to move to the "L" position, then enter the loop number.

Use the [A] (Advance) and [B] (Back) keys to move the cursor forward and back within the screen. Pressing the [C] (Copy) key will insert the previously enrolled serial number, if desired (used when programming a transmitter with several input loops).

To delete an existing serial number, enter 0 in the loop number field. The serial number will change to 0's. If 0 was entered in error, simply re-enter the loop number or press [#], and the serial number will return to the display.

2. Press [*] to continue. The system now checks for a duplicate serial/loop number.
If no duplicate is found, the display shows the serial number and loop number.
3. Press [*] to continue to confirmation screen.

(prompts continued in next column)

XMIT TO confirm

Appears if you answered "Yes" at the "Set to Confirm" prompt. Activate the loop input or button that corresponds to this zone.

Press [*] to continue.

If the serial/loop number transmitted does not match the serial number entered, a display showing the entered and the received serial/loop numbers appears.

If so, activate the loop input or button on the transmitter once again. If a match is not obtained, press the [#] key twice and then enter (or transmit) the correct serial number.

Press [*] to continue

If the serial number transmitted matches the serial number entered, the keypad will beep 3 times and a summary display will appear, showing that zone's programming. An "s" indicates that a transmitter's serial number has been enrolled.

Press [*] to accept the zone information and continue.

PROGRAM ALPHA?

Press 1 if you want to program descriptors for the zone now, and refer to the *82 Descriptor Programming section for procedure. To program descriptors later, enter 0 (no).

Press [*] to return to the ENTER ZN NUM prompt.

*58 Expert Zone Programming Mode

(press *58 while in Data Programming mode)

SET TO CONFIRM?

Select whether you want confirmation of wireless device enrollment. (See "XMIT TO CONFIRM" prompt later in this section.) **We recommend that you confirm the programming of every transmitter.**

SUMMARY SCREEN

```
Zn ZT P RC HW: RT
01 09 1 10 EL 1
```

(Typical for Zone 1, initial summary screen)

```
Zn ZT P RC IN: L
10 00 1 10 RF: -
```

(Typical for entered zone number; zone 10 in this example)

System displays summary of zone 1's current programming.

Enter the zone number being programmed, then press [*]. A summary screen for that zone is displayed, along with any current programming values, and the cursor moves to the Zone Type location. The cursor then automatically moves to the next locations after each entry is made.

Special Function Keys:

- [A] (Advance) and [B] (Back) keys on the keypad move the cursor within the screen.
- [C] (Copy) key will insert the previous zone's attributes, if desired.
- [D] key starts the **Wireless Key Programming Templates** menu (see Wireless Key Programming Templates section that follows this section).

Sequentially enter Zone Type (ZT), Partition (P), and Report Code (RC; 0-9 only; use *56 mode to enter hex codes), then Hardware Type (HW) and Response Time (RT) for basic wired zones 1-8 or Input Device Type (IN) for zones 9 and higher (Loop Number [L] is programmed at the INPUT S/N prompt).

See *56 Zone Programming Menu Mode section described earlier for entry values.

Press [*] to save the programming and continue. If needed, press the [#] key to back up without saving.

- For wireless devices (input types RF, UR, BR), continue to the INPUT S/N (serial number/loop number) and XMIT TO CONFIRM prompts described earlier in the *56 Zone Programming Menu Mode section. When done, the display returns to the initial summary screen prompt to let you program the next zone.

- For wired devices, the display returns to the initial summary screen prompt to let you program the next zone.

To Quit, enter 00 at the zone number location and press [*].

Wireless Key Programming Templates (press the [D] key from *58 Menu mode Summary Screen)

This procedure programs the wireless keys, but a key is not active for arming/disarming until it is assigned to a user number (see **System Operation** section, Assigning Attributes Command in the Installation Instructions).

TEMPLATE ?

Enter desired template number 1-6 (see chart below), then press [*] to continue.

To exit the Template screen, press [#]. The system returns to the *58 Menu mode Summary Screen.

TEMPLATE SUMMARY

L	01	02	03	04
T	23	22	21	23

The selected template is displayed.

The top line represents loop numbers, the bottom line represents each loop's zone type.

Press [*] to accept template and continue.

PARTITION

Enter the partition (1, 2, or 3-common) in which the key is to be active.

Press [*] to continue.

ENTER START ZONE

The system displays the lowest zone number of the highest available consecutive 4-zone group.

To start at a different zone number, enter the zone desired, and press [*]. If the system has four consecutive zones beginning with that zone, the zone number is displayed. If not, the system will again display a suggested zone that can be used.

If the required number of consecutive zones is not available at all, the system will display "00".

Press [*] to accept.

Continue to the INPUT S/N (serial number/loop number) and XMIT TO CONFIRM prompts described earlier in the *56 Menu Mode section.

IMPORTANT: When confirmed, the key is not active for arming/disarming until it is assigned to a user number (using the assigning attributes command, attribute "4"). See System Operation section in Installation Instructions.

When done, the keypad beeps three times and the display returns to the ENTER START ZONE prompt to let you enter the starting zone for the next wireless key.

Wireless Key Predefined Default Templates

For 5804	Loop	Function	Zone Type	For 5804BD	Loop	Function	Zone Type
TEMPLATE 1	1	No Response	23	TEMPLATE 4	1	No Response	23
	2	Disarm	22		2	No Response	23
	3	Arm Away	21		3	Arm Away	21
	4	No Response	23		4	Disarm	22
TEMPLATE 2	1	No Response	23	TEMPLATE 5	1	No Response	23
	2	Disarm	22		2	Arm Stay	20
	3	Arm Away	21		3	Arm Away	21
	4	Arm Stay	20		4	Disarm	22
TEMPLATE 3	1	24-hour audible	7	TEMPLATE 6	1	24-hour audible	7
	2	Disarm	22		2	Arm Stay	20
	3	Arm Away	21		3	Arm Away	21
	4	Arm Stay	20		4	Disarm	22

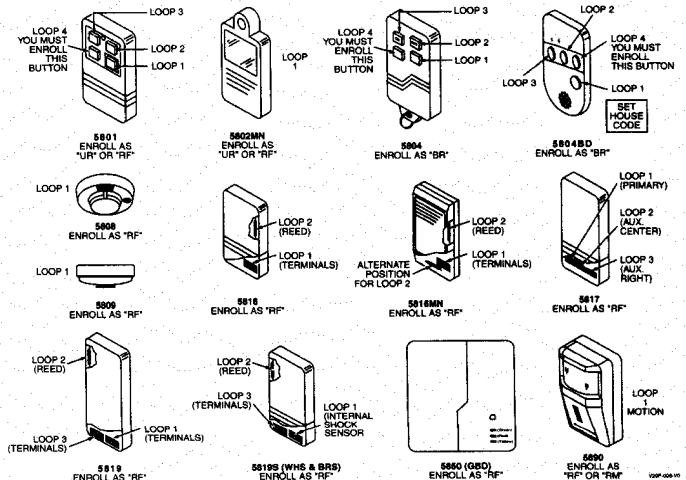
5800 Series Transmitter Input Loop Identification

All of the transmitters illustrated have one or more unique factory assigned input (loop) ID numbers. Each of the inputs requires its own programming zone (e.g., a 5804's four inputs require four programming zones).

For information on any transmitter not shown, refer to the instructions accompanying that transmitter for details regarding loop numbers, etc.

UL NOTE: The following transmitters are not intended for use in UL installations: 5802MN, 5802MN2, 5804, 5804BD, 5814, 5816TEMP, 5819, 5819WHS & BRS, and 5850.

The 5827BD and 5800TM can be used in UL Listed Residential Burglar installations.



*57 Function Key Programming (press *57 while in Data Programming mode)

The Function Key Worksheet is on page 14.

PRESS KEY TO PGM

Press the desired function key to be programmed, A-D, then press [*] to continue.

When done, press 0 to exit this mode and return to data field mode.

NOTE: A key programmed as a function key is no longer available to be used as an end-user macro key or panic key.

PARTITION

Enter the partition (1-3) in which this function key will be active.

KEY "A" FUNC

Enter the desired function for this key:

- 00 = For the Function key selected, the function will be as follows (default):
 - If A selected = Zone 95 (emergency key, same as [1] [*] pair)
 - If B selected = Zone 99 (emergency key, same as [*] [#] pair)
 - If C selected = Zone 96 (emergency key, same as [3] [#] pair)
 - If D selected = Single-button paging (continued in next column)

KEY "A" FUNC (continued)

- 01 = Single-button paging (sends a 999-9999 message to pager)
- 02 = Display time
- 03 = Arm AWAY (reports as User 00 if closing reports are enabled)
- 04 = Arm STAY (reports as User 00 if closing reports are enabled)
- 05 = Arm NIGHT-STAY (reports as User 00 if closing reports enabled)
- 06 = Step Arming (arms STAY, then NIGHT-STAY if enabled, then AWAY)
- 07 = Output Device Command (for device programmed as system operation type 66 in *80 Menu Mode)
- 08 = Communication Test (sends Contact ID code 601)
- 09 -12= Macro Keys 1-4 respectively (defined by [#] [6] [6] command)

Press [*] to continue; returns to key number prompt with the next function key letter displayed.

*79 Menu Mode

(press *79 while in Programming mode)

The *79 Device Mapping Worksheet is on page 14.

ENTER OUTPUT NO.

01-18 = relays/X-10; 17-18 = on-board triggers

[*] to continue

OUT NORM LOW (appears only for triggers 17/18)

0 = no (standard default); sets the output level normally high

1 = yes; sets the output normally low (can be used for resetting 4-wire smoke detectors)

[*] to return to Output Number prompt

OUTPUT TYPE

0 = delete; 1 = relay (skip to "B" prompt); 2 = Powerline Carrier device (skip to "A" prompt)

[*] to continue.

"A" (if X-10 was selected)

UNIT No.

Enter the unit code (01-16, set at the device).

[*] to return to the Output Number prompt continue

"B" (if relay was selected)

MODULE ADDR

Enter the predefined address for this module (07-15; see Table of Device Addresses on page 2).

Make sure the module's DIP switches are set to the selected address.

[*] to continue

REL POSITION (actual relay number on module)

For 4204 modules, relay numbers are 1-4. For 4229 modules, relay numbers are 1-2.

[*] to return to the Output Number prompt for programming the next device

*80 Menu Mode

(press *80 while in Programming mode)

The Output Definition Worksheet is on page 15.

OUTPUT FUNCT.

Enter the output function number to be defined: 01-48;

[*] to continue; 00 = exit

SUMMARY SCREEN

01	A	E	P	Trig
?00	0	0	-	ZL=00

This screen displays a summary of the current output programming
A = Output Action; E = Triggering event; P = Partition; Trig = Trigger type
Question mark indicates the device shown has not been mapped. Use *79 Menu mode to map the device.

[*] to continue

ACTIVATED BY

0 = delete (deletes the output function and any previous programming); a confirmation prompt appears.

To delete this output definition, press 1. If you do not want to delete this output, press 0.

1 = zone list (go to "A" prompt); 2 = zone type (go to "B" prompt); 3 = zone number (go to "C" prompt)

Press [*] to continue

"A" (if zone list was selected)

ZN LIST

Enter the desired zone list number (01-08). At the ENTER EVENT prompt, enter the zone list event that will activate this output (0 = restore; 1 = alarm; 2 = fault; 3 = trouble)

Press [*] to continue and skip to the "Output Action" prompt.

"B" (if zone type was selected)

ENTER ZN TYPE

Enter the desired zone type. See list below *80 Worksheet for zone types.

At the PARTITION prompt, enter the partition in which this zone type will occur (0 = any partition; 1 = partition 1; 2 = partition 2; 3 = partition 3).

Press [*] to continue and skip to the "Output Action" prompt.

"C" (if zone number was selected)

ENTER ZN NO.

Enter the desired zone number, then press [*] to continue. At the ENTER EVENT prompt, enter the zone event that will activate this output (0 = restore; 1 = alarm/fault/trouble).

Press [*] to continue to the OUTPUT ACTION prompt

OUTPUT ACTION

0 = off; 1 = Close for 2 seconds; 2 = Close and Stay Closed; 3 =

Continuous Pulse 1 sec on and 1 sec off

4 = Change Device State; 5 = Duration 1 (see data field *177); 6 = Duration 2 (see data field *177)

Press [*] to continue.

*80 Menu Mode (continued)

ENTER OUTPUT NO.

Enter the device output number (programmed in *79 Menu Mode) you want associated with this output.

01-16 = output no. 17-18 = on-board triggers

Press [*] to continue.

SUMMARY SCREEN

A summary screen appears showing the programmed settings.

Press [*] to return to OUTPUT FUNCTION NUMBER prompt.

*81 Menu Mode

(press *81 while in Programming mode)

The Zone List Worksheet is on page 14.

ZONE LIST NO.

Enter the zone list number (01-12) to program (or 00 to exit this mode).

Press [*] to continue.

ENTER ZN NUM.

Enter each zone number (01-64) to add to the zone list, followed by

pressing [*] (example, 01*, 02*, 03*).

Press 00 to continue.

IMPORTANT: Do not include fire zones in zone lists that are used to STOP device actions.

DEL ZN LIST?

0 = don't delete list; current zone list remains saved

1 = delete this zone list; All zones in the zone list will be deleted.

[*] to continue

DELETE ZONE?

0 = don't delete zones; save the entire zone list and return to the Zone List No. prompt

1 = go to next prompt to delete zones

[*] to continue

ZN TO DELETE?

Enter each zone (01-64) to be deleted from the list, following each with [*].

00 when done to return to the Zone List No. prompt.

*82 Alpha Descriptor Programming

PRE-DEFINED DESCRIPTORS

PROGRAM ALPHA

0 = no (quit Alpha mode)

1 = yes

Press [*] or [#] to continue.

CUSTOM WORDS

0 = no (continue to descriptor programming)

1 = yes (go to custom word programming)

Press 0 to program standard alpha descriptors. The system will then display the descriptor for zone 1.

To program custom words, press 1 (custom words are described later).

Press [*] to continue.

* ZN 01

Descriptor screen for zone 1 appears. To program a descriptor (up to 3 words) for a zone, do the following:

1. Press [*] plus the desired zone number (existing descriptor, if any, is displayed), then press [*] plus the zone number again (flashing cursor appears).
2. a. Press [#] plus the 3-digit number from the Alpha Vocabulary List on page 11 for the first word.
b. Press [6] to accept the word and move the cursor for the next word.
3. Repeat steps 2a and 2b for the second and third words (if used).
4. When all words have been entered, press [8] to save the descriptor for that zone. The flashing cursor disappears.
5. Repeat steps 1-4 to assign a descriptor for the next zone.
6. When all descriptors have been entered, press [*] + 0 + 0 (or simply press [#]) after the last descriptor has been saved to return to the PROGRAM ALPHA? prompt.
Enter 0 (no) at the prompt to exit this mode and return to Data Field mode.

*82 Alpha Descriptor Programming (continued)

ADDING CUSTOM WORDS (up to 10 words)

For custom words, the keys have the following functions:

- | | |
|-----|--|
| [4] | moves cursor one space to the left. |
| [6] | moves cursor one space to the right. |
| [8] | saves the new word in the system's memory. |

- Select Custom Word mode (enter 1) when the prompt "CUSTOM WORD ?" is displayed.
- Enter the number (01-10, or 11, 12, 13 for partition descriptors—see below) of the custom word or word string to be created, corresponding to index numbers 245 - 254 respectively. A cursor appears at the beginning of the second line.
NOTE: Custom words 8, 9, and 10 are "reminder words" that can be programmed to display using Scheduling Mode.
- Refer to the Character (ASCII) Chart on the next page. Press [#], followed by the two-digit entry for the first letter you would like to display (e.g., # 6 5 for "A"). The cursor moves to the right, in position for the next character.
To delete a character, simply enter the SPACE character (#32) at the unwanted character's location.

- Repeat Step 3 to create the desired word(s). Each word can be a maximum of 10 characters (except custom message/partition descriptor word numbers 11, 12, and 13, which can be a maximum of 16 characters).
- When the word is complete, press the [8] key to save the custom word(s) in the vocabulary list and return to the "CUSTOM WORD ?" display.
- Repeat Steps 1-5 for other custom words to be entered. To change a custom word, just overwrite it. When all words have been programmed, enter 0 at the "CUSTOM WORD ?" prompt to return to the Program Alpha prompt. Enter 0 again to exit Descriptor mode.

To Assign Partition/Custom Message Descriptors, use Adding Custom Words procedure, but use the following word numbers in step 2:
11 = partition 1; 12 = partition 2; 13 = common lobby

ALPHA VOCABULARY LIST (For Entering Zone Descriptors)

000 (Word Space)	• 057 DOOR *	- L -	- R -	- V -
• 001 AIR	• 059 DOWN	• 106 LAUNDRY *	155 RADIO	209 VALVE
• 002 ALARM *	• 060 DOWNSTAIRS	• 107 LEFT	• 156 REAR	210 VAULT
004 ALLEY	061 DRAWER	108 LEVEL	157 RECREATION	212 VOLTAGE
005 AMBUSH	• 062 DRIVEWAY	• 109 LIBRARY *	159 REFRIGERATION	- W -
• 006 AREA	• 064 DUCT	• 110 LIGHT	160 RF	213 WALL
• 007 APARTMENT	- E -	111 LINE	• 161 RIGHT	214 WAREHOUSE
• 009 ATTIC *	• 065 EAST	• 113 LIVING *	• 162 ROOM *	• 216 WEST
010 AUDIO	066 ELECTRIC	• 114 LOADING	163 ROOF	• 217 WINDOW *
- B -	067 EMERGENCY *	115 LOCK	- S -	• 219 WING
• 012 BABY *	068 ENTRY	116 LOOP	164 SAFE	220 WIRELESS
• 013 BACK *	• 069 EQUIPMENT	117 LOW	165 SCREEN	- X -
• 014 BAR	• 071 EXIT *	• 118 LOWER	166 SENSOR	222 XMITTER
• 016 BASEMENT *	072 EXTERIOR	- M -	• 167 SERVICE	- Y -
• 017 BATHROOM *	- F -	• 119 MACHINE	• 168 SHED *	223 YARD
• 018 BED	• 073 FACTORY	121 MAIDS	169 SHOCK	- Z -
• 019 BEDROOM *	075 FAMILY	122 MAIN *	• 170 SHOP *	224 ZONE (No.)
020 BELL	• 076 FATHERS	• 123 MASTER *	171 SHORT	• 225 ZONE *
• 021 BLOWER	• 077 FENCE	• 125 MEDICAL *	• 173 SIDE *	• 226 0
• 022 BOILER	• 079 FIRE *	126 MEDICINE	174 SKYLIGHT	• 227 1
023 BOTTOM	• 080 FLOOR *	128 MONEY	175 SLIDING *	• 228 1ST *
025 BREAK	081 FLOW	129 MONITOR	• 176 SMOKE *	• 229 2
• 026 BUILDING	082 FOIL	• 130 MOTHERS	• 178 SONS	• 230 2ND *
- C -	• 083 FOYER	• 131 MOTION *	• 179 SOUTH	• 231 3
028 CABINET	084 FREEZER	132 MOTOR	180 SPRINKLER	• 232 3RD *
• 029 CALL	• 085 FRONT *	- N -	• 182 STATION	• 233 4
030 CAMERA	- G -	• 134 NORTH	184 STORE	• 234 4TH
031 CAR	• 089 GARAGE *	135 NURSERY	• 185 STORAGE *	• 235 5
033 CASH	• 090 GAS	- O -	186 STORY	• 236 5TH
034 CCTV	091 GATE	• 136 OFFICE *	190 SUPERVISED *	• 237 6
035 CEILING	• 092 GLASS	• 138 OPEN *	191 SUPERVISION	• 238 6TH
036 CELLAR	093 GUEST	139 OPENING	192 SWIMMING	• 239 7
• 037 CENTRAL	094 GUN	• 140 OUTSIDE	193 SWITCH	• 240 7TH
038 CIRCUIT	- H -	142 OVERHEAD	- T -	• 241 8
• 040 CLOSED *	• 095 HALL *	- P -	194 TAMPER	• 242 8TH
• 046 COMPUTER	• 096 HEAT	143 PAINTING	196 TELCO	• 243 9
047 CONTACT	098 HOLDUP	• 144 PANIC *	197 TELEPHONE	• 244 9TH
- D -	099 HOUSE	145 PASSIVE	• 199 TEMPERATURE	245 Custom Word #1
• 048 DAUGHTERS	100 INFRARED	• 146 PATIO *	200 THERMOSTAT	246 Custom Word #2
049 DELAYED	• 101 INSIDE *	147 PERIMETER	• 201 TOOL	247 Custom Word #3
• 050 DEN *	102 INTERIOR	• 148 PHONE	202 TRANSMITTER	248 Custom Word #4
051 DESK	103 INTRUSION	150 POINT	- U -	249 Custom Word #5
• 052 DETECTOR *	- J -	151 POLICE *	• 205 UP	250 Custom Word #6
• 053 DINING *	104 JEWELRY	152 POOL *	• 206 UPPER	251 Custom Word #7
054 DISCRIMINATOR	- K -	• 153 POWER	• 207 UPSTAIRS *	252 Custom Word #8
055 DISPLAY	• 105 KITCHEN *		• 208 UTILITY *	253 Custom Word #9
				254 Custom Word #10

Note: Bulleted (*) words in **boldface type** are those that are also available for use by the 4285/4286 Phone Module. If using a Phone module, and words other than these are selected for Alpha descriptors, the module will not provide annunciation of those words. *Italicized* words followed by an asterisk indicate those words supported by the 6160V/6150V Voice Keypads

CHARACTER (ASCII) CHART (For Adding Custom Words)

32 (space)	41)	50 2	59 ;	68 D	77 M	86 V
33 !	42 *	51 3	60 <	69 E	78 N	87 W
34 "	43 +	52 4	61 =	70 F	79 O	88 X
35 #	44 ,	53 5	62 >	71 G	80 P	89 Y
36 \$	45 -	54 6	63 ?	72 H	81 Q	90 Z
37 %	46 .	55 7	64 @	73 I	82 R	
38 &	47 /	56 8	65 A	74 J	83 S	
39 '	48 0	57 9	66 B	75 K	84 T	
40 (49 1	58 :	67 C	76 L	85 U	

Setting Schedules (Installer Code + [#] + [6] [4])

ENTER SCHED NO.

01-16 = end-user schedules; 17-32 = installer-only schedules

[*] to continue.

To Quit, enter 00.

ENTER EVENT

00 = clear event

01 = Relay On/Off

02 = User Access

03 = Latch Key Report to Pager (sent to all pagers in the user's partition; message sent is 777-7777. User must be enabled for paging and system must be armed before reporting can occur.)

04 = Forced Stay Arming (Forced bypass is automatically enabled regardless of setting in field *23)

05 = Forced Away Arming (Forced bypass is automatically enabled regardless of setting in field *23)

06 = Auto Disarm

07 = Display "Reminder"

10 = Display custom words (if selected, system displays custom words 8, 9, and 10 at defined time. Can be used as installer's reminder message to the end user); programmable by installer only

11 = Periodic Test Report (see key commands in **Test Report Code**, data field *64, to quickly set periodic test reporting intervals); programmable by installer only

[*] to continue.

DEVICE NUMBER (for event 1 relay on/off)

01-18; [*] to continue.

GROUP NUMBER (for event 2 user access)

1-8; [*] to continue.

PARTITION (for events 3-7,10,12)

0 = all partitions; 1 = partition 1; 2 = partition 2; 3 = common

[*] to continue.

START

01-12 = hour; 00-59 = minute; 0 = AM; 1 = PM; to select days, position the cursor under the desired days using the [*] key to move forward, then press "1" to select the day.

[*] to continue.

STOP (for events 1 relay on/off; 2 user access; 3 latch key report)

See START for entries. [*] to continue.

REPEAT

0 = do not repeat; 1 = repeat schedule weekly; 2 = repeat schedule biweekly (every other week); 3 = repeat schedule every third week; 4 = repeat schedule every fourth week

[*] to continue

RANDOMIZE (for events 01 and 11)

0 = no; 1 = yes

If selected, the scheduled start and stop times will vary within 60 minutes of the "hour" time. For example, if a schedule is set to start at 6:15pm, it will do so the first time 6:15pm arrives, but on subsequent days it will start anytime between 6:00 and 6:59 p.m.

NOTE: Do not use the random option if the start and stop times are within the same "hour" setting, otherwise unpredictable results may occur (e.g., the randomized stop time may occur before the start time).

[*] to continue and return to ENTER SCHED NO. prompt to program the next schedule.

SCHEDULES WORKSHEET (installer code + [#] + [6] [4]; master code can only access schedules 01-16 and events 00-07)

No.	Event (see list below)	Device No. for "01" events: enter 01-18	Group No. for "02" events: enter 1-8	Partition for "04-06" events: enter 1, 2, or 3	Start Time/ Days	Stop Time/ Days	Repeat (1-4)	Random (yes/no)
01								
02								
03								
04								
05								
06								
07								
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								

Events: **Master/Installer**

00 = clear event

01 = device on/off

02 = user access

03 = latch key report

04 = forced STAY arm

05 = forced AWAY arm

06 = auto disarm

07 = display "reminder"

Installer Only

10 = display custom words 8-10

11 = periodic test report

Repeat Options: 0 = none; 1 = repeat weekly; 2 = repeat every other week; 3 = repeat every third week; 4 = repeat every fourth week

***56 ZONE PROGRAMMING WORKSHEET** [default shown in brackets]

Zone	Zn Type	Part.	Report	Hardware Type	Rsp. Time	Location	
1	[09]	[1]		[EOL]	[1]		
2	[01]	[1]		[EOL]	[1]		
3	[02]	[1]		[EOL]	[1]		
4	[03]	[1]		[EOL]	[1]		
5	[03]	[1]		[EOL]	[1]		
6	[03]	[1]		[EOL]	[1]		
7	[04]	[1]		[EOL]	[1]		
8	[04]	[1]		[EOL]	[1]		
Zone	Zn Type	Part.	Report	Input Type	Loop	Serial No.	Location
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							
46							
47							
48							
49		[1]					[BR]
50		[1]					[BR]
51		[1]					[BR]
52		[1]					[BR]
53		[1]					[BR]
54		[1]					[BR]
55		[1]					[BR]
56		[1]					[BR]
57		[1]					[BR]
58		[1]					[BR]
59		[1]					[BR]
60		[1]					[BR]
61		[1]					[BR]
62		[1]					[BR]
63		[1]					[BR]
64		[1]					[BR]
95	[00]	N/A**			N/A	N/A	keypad [1] / [*]
96	[00]	N/A**			N/A	N/A	keypad [3] / [#]
99	[07]	N/A**			N/A	N/A	keypad [*] / [#]

NOTES:
 Zone Type: see chart on page 12;
 Report Code: enabled if any digit entered as 1st digit;
 Hardwire Type (zns 1-8):
 0 = EOL 3 = ZD
 1 = NC 4 = DB
 2 = NO
 Input Type:
 2 = AW (zones 9-48)
 3 = RF (zones 9-48)
 4 = UR (zones 9-48)
 5 = BR (zones 49-64)
NOTE: Zones 9-16 not available if zone doubling enabled.
 Response Time:
 0 = 10msec
 1 = 350msec
 2 = 700msec
 3 = 1.2 sec
Reserved Zones
 91 = addressable device report enable/disable default zone type = [05].
 92 = Duress report enable/disable

** Emergency key zones 95, 96, and 99 report the partition of the keypad used to activate the emergency zones.

***57 FUNCTION KEY WORKSHEET**

Option	Function	A			B			C			D			Comments
		P1	P2	com	P1	P2	com	P1	P2	com	P1	P2	com	
01	Paging													
02	Time Display													
03	Arm AWAY	[03]	[03]	[03]										
04	Arm STAY				[04]	[04]	[04]							
05	Arm NIGHT-STAY													
06	Step Arming													
07	Device Activation												Device:	
08	Comm. Test									[08]	[08]	[08]		
09	Macro Key 1							[09]	[09]	[09]			Assign each macro key to only a single partition. †	
10	Macro Key 2												Assign each macro key to only a single partition. †	
11	Macro Key 3												Assign each macro key to only a single partition. †	
12	Macro Key 4												Assign each macro key to only a single partition. †	
00	Emergency Keys:	zone 95			zone 99			zone 96			paging			
	Personal Emergency												n/a	
	Silent Alarm												n/a	
	Audible Alarm												n/a	
	Fire												n/a	

Emergency Keys: A = paired keys [1] / [*] (zone 95); B = paired keys [*] / [#] (zone 99); C = paired keys [3] / [#] (zone 96)
 † There are only four macros system-wide.

OUTPUT RELAYS/POWERLINE CARRIER (X-10) DEVICES WORKSHEET FOR *79, *80 and *81.
 Applicable only if Relays and/or Powerline Carrier Devices are to be used.

***79 RELAY/POWERLINE CARRIER (X-10) DEVICE MAPPING (Must program before using *80)**

Output No.	OUTPUT TYPE				Description
	Module Addr.	Relay Pos (1-4)	X10 Unit No.		
01					
02					
03					
04					
05					
06					
07					
08					

Output No.	OUTPUT TYPE				Description
	Module Addr.	Relay Pos (1-4)	X10 Unit No.		
09					
10					
11					
12					
13					
14					
15					
16					
17		On-Board Trigger 1			norm output =
18		On-Board Trigger 2			norm output =

***81 ZONE LISTS WORKSHEET**

Fill in the required data on the worksheet below and follow the procedure in the installation manual as you enter the data during the displays and prompts that appear in sequence.

NOTE: Record desired zone numbers below, noting that a list may include *any* or *all* of system's zone numbers.

List No.	Used For...	Contains These Zones...
01	General Purpose (GP)	
02	General Purpose	
03	Chime-by-Zone or GP	(see field *26 for Chime-by-Zone option)
04	Cross Zones or GP	(see field *85 for Cross Zone Timer option)
05	Night-Stay Zones or GP	
06	Dial Delay Disable	(see field *50 for Dial Delay Disable option)
07	Unlimited Reports	(see field *93 for Unlimited Reports option)
08	General Purpose	
09	Zones activating pager 1	
10	Zones activating pager 2	
11	Zones activating pager 3	
12	Zones activating pager 4	

***80 OUTPUT DEFINITIONS**

Fill in the required data on the worksheet below and follow the programming procedure in the installation manual as you enter the data during the displays and prompts that appear in sequence.

- Notes:** 1. For Relays, 4229 and 4204 devices are programmed in *79, *80, and *81 modes.
 2. For Powerline Carrier devices (plcd), field *27 must be programmed with a House Code.
 3. Tamperers of expansion units cannot be used to operate devices.

Output Function Number 1-48	Activation Type and Detail				Partition Number (P) (if using ZT trig) 0 = any 1 = partition 1 2 = partition 2 3 = common	Event (for zone list/activated by)		Action 0 = off 1 = close 2 secs 2 = stay closed 3 = pulse 4 = toggle 5 = duration 1†† 6 = duration 2††	Output Number 1-18	Device Type R = relay T = trigger X = X10
	Activated by 0=delete 1=zn list 2=zn type 3=zn no.	Zone List (ZL) 1-8 = list	Zone Type (ZT) (see table below)	Zone No. (ZN) 00=none 01-64		By Zone List	By Zone No.			
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										
46										
47										
48										

ZONE TYPE/SYSTEM OPERATION - Choices for Zone Types are:

- | | | | |
|------------------------|------------------------------|--------------------------|-----------------------|
| 00 = Not Used | 05 = Trouble Day/Alarm Night | 10 = Interior w/Delay | 24 = Silent Burglary |
| 01 = Entry/Exit#1 | 06 = 24 Hr Silent | 12 = Monitor Zone | 77 = Keypad |
| 02 = Entry/Exit#2 | 07 = 24 Hr Audible | 14 = Carbon Monoxide | 81 = AAV Monitor Zone |
| 03 = Perimeter | 08 = 24 Hr Aux | 16 = Fire w/Verification | 90-93 = Configurable |
| 04 = Interior Follower | 09 = Fire | 23 = No Alarm Response | |

Choices for System Operation are:

- | | | |
|-----------------------------|----------------------------|--------------------------|
| 20 = Arming-Stay | 38 = Chime | 52 = Kissoff |
| 21 = Arming-Away | 39 = Any Fire Alarm | 54 = Fire Zone Reset |
| 22 = Disarming (Code + OFF) | 40 = Bypassing | 58 = Duress |
| 31 = End of Exit Time | 41 = **AC Power Failure | 60 = AAV Trigger |
| 32 = Start of Entry Time | 42 = **System Battery Low | 66 = Function key† |
| 33 = Any Burglary Alarm | 43 = Communication Failure | 67 = Bell Failure |
| 36 = **At Bell Timeout*** | | 68 = TELCO Line Fault |
| | | 78 = Keypad red LED††† |
| | | 79 = Keypad green LED††† |

Note: In normal operation mode:
 Code + # + 7 + NN Key Entry **starts** Device
 Code + # + 8 + NN Key Entry **stops** Device

- ** Use 0 (any) for Partition No. (P) entry.
 *** Or at Disarming, whichever occurs earlier.
 † Use *57 Menu mode to assign the function key.
 †† Duration is set in program field *177.
 ††† Device action not used for these choices.

