PROGRAMMING INSTRUCTIONS

NAPCO®

HARDWIRE ==))) **WIRELESS**

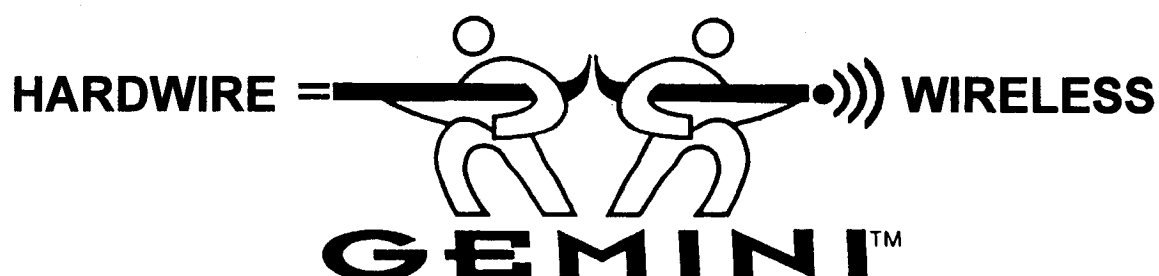## GEMINI™

GEM-P1632
CONTROL PANEL/COMMUNICATOR

Quick Start:

1. Refer to the wiring diagram, connect zone and keypad wiring.

2. Connect AC power and battery.

3. Install a keypad onto the system.

4. Configure the keypad (see page 40).

5. Acccess the Easy Menu Driven (Dealer Program) Mode:

   Press [4] [5] [6] [7F] [8A] [9 P] [FUNCTION]

   Dealer Code

   PRIOR/NO
   Press [INSTANT] Until "ACTIVATE PROGRAM Y/N" (GEM-RP1CAe2) or "TURNON PROG Y/N" (GEM-RP2ASe2) appears on LCD screen.

   NEXT/YES
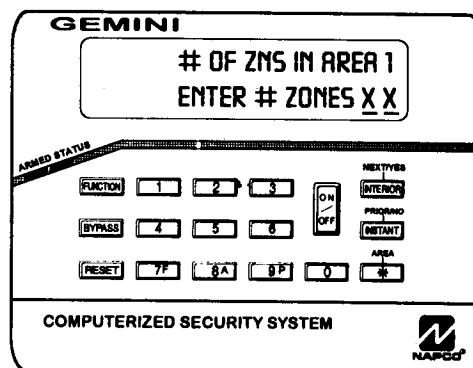   *Press* [INTERIOR] to Enter Dealer Program Mode (see page 6).

GEMINI

OF ZNS IN AREA 1
ENTER # ZONES X X

ARMED STATUS

FUNCTION	1	2	3	ON/OFF	INTERIOR
BYPASS	4	5	6		INSTANT
RESET	7F	8A	9P	0	*

COMPUTERIZED SECURITY SYSTEM

TABLE OF CONTENTS

Refer to accompanying GEM-P1632 Installation Instructions (WI808) for installation information.

NOTE: THESE PROGRAMMING INSTRUCTIONS ARE INTENDED AND WRITTEN FOR THE PROFESSIONAL INSTALLER HAVING SUITABLE EXPERIENCE AND INSTALLATION EQUIPMENT. THE UNIT IS DESIGNED TO BE PROGRAMMED USING AN IBM-COMPATIBLE COMPUTER WITH NAPCO PCD3000 SOFTWARE. AFTER PROGRAMMING, BE SURE TO RUN THE PCD3000 ERROR-CHECK UTILITY TO GUARD AGAINST PROGRAMMING CONFLICTS FOR THE TYPE OF SERVICE SELECTED FOR THE INSTALLATION.

SYSTEM PROGRAMMING OPTIONS

INTRODUCTION

The GEM-P1632 control panel may be programmed by various means, each of which will be covered in detail in the sections that follow. Keypad displays shown first are for a GEM-RP1CAe2, the recommended keypad for programming, then for the GEM-RP2ASe2. The GEM-RP2ASe2 keypad functions similarly; however, because of its reduced display capabilities, messages are abbreviated and will scroll through two or more screens. Zone descriptions *cannot* be programmed using a GEM-RP2ASe2 keypad.

☑ **Downloading From a Computer.** The is the preferred method. The panel may be downloaded from (or uploaded to) an IBM PC-compatible computer, with a 386 (or higher) microprocessor, either locally or remotely. Napco's PCD3000 Quickloader software, Version Update 3.26 or later features context-sensitive help screens as well as an error-checking utility that prevents programming of incompatible or conflicting data to ensure proper panel operation.

☑ **Easy Menu Driven Program (Dealer Program) Mode - Keypad Programming.** The Easy Menu Driven Program Mode allows keypad programming of number of zones in area 1, zone doubling, number of fire zones (both 4-wire and 2-wire), central station reporting, number of entry/exit zones, number of interior zones, number of keypads in area 1, central station telephone number, central station account number, central station receiver format, user codes, rf transmitter points, rf key fob transmitters and zone descriptions. For new panels, a custom default program may be created at the keypad. A menu-driven utility prompts the installer to configure the system. Further, detailed customization is done in the Direct Address Program Mode.

☑ **Direct Address (Dealer Program) Program Mode - Keypad Programming.** The Direct Address Program Mode is an extension of the Dealer Program Mode wherein data is entered at the keypad *by location*. This mode is accessed from the Easy Menu Driven Program Mode by pressing or [RESET] the button at any time.

☑ **User Program Mode - Keypad programming.** The User Program Mode is intended for authorized users and is limited to keypad programming of User Codes and Zone Descriptions.

DOWNLOADING FROM A COMPUTER

The control-panel program may be downloaded from the computer by either of the following methods.
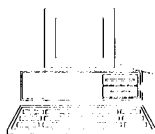
Local Downloading

(**Note:** This procedure should be used prior to installation, before peripheral devices are connected.)

For a direct high-speed data transfer to the control panel from a desktop computer, connect the download jack (JP2) on the panel to the LOCAL jack (J3) on the Napco PCI2000/3000 computer interface using the supplied 6-conductor cable. (Refer to PCI2000/3000 Installation Instructions WI443 for wiring diagram and procedures.)

Similarly, a high-speed local download may be made in the field using a notebook or laptop computer. Connect JP2 on the control panel to a Napco PCI-MINI computer interface using the 6-conductor cable supplied. (Refer to PCI-MINI Installation Instructions WI767.)

Remote Downloading

(Also see PCI2000/3000 Installation Instructions WI443.)

Function Mode. During this procedure, voice contact will be lost, therefore both the installer and the computer operator should be familiar with the operation. When a steady high-pitched tone is heard at the site phone, access the *ACTIVATE DOWNLOAD* Function then press the button or the YES ([INTERIOR]) button; the site phone will go dead. Hang up the phone and wait for a call from the central station confirming a successful download.

Callback Method. An installed, unattended panel may be programmed or reprogrammed remotely using the Callback-Method Download feature of the PCD3000 software. Remote downloading requires a modem compatible with the PCI2000/3000. Upon answering the call from the computer, the panel will verify the Download Security Code and, if confirmed, will establish a connection. If a Callback Number is programmed into the panel, the panel will automatically disconnect and call the computer at this number before establishing a connection.

EASY MENU DRIVEN PROGRAM MODE
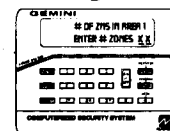
DEALER PROGRAM - PRELIMINARY INFORMATION [CAUTION ✋]

☞ Only Keypad #1 may be used for programming, however this keypad may be located in any area.

☞ The Default Dealer Code is [4][5][6][7F][8A][9P]. Use this code to enter the Dealer Program Mode to program a custom Dealer Code, which replaces the Default Dealer Code. If you clear your Dealer Code, use the Default Dealer Code once again to enter programming.

☞ After entering codes or data, press the save [ON/OFF] button. Data will not be stored into memory unless this button is pressed.

☞ If the keypad is in the Program Mode and no activity is detected for longer than 4 minutes, a steady tone will sound. Silence the sounder by pressing the [＊] button to continue, or pressing the [RESET] button to exit.

> **KEYPAD #1:** For ease of programming, it is recommended that a GEM-RP1CAe2 be used as Keypad #1. (Regardless of which keypad is selected, all *new* keypads are configured as Keypad #1 out of the box.)

If a GEM-RP2ASe2 is used, configure address jumpers as Keypad #1 (see Configuring the GEM-RP2ASe2 Keypad.) Use the [FUNCTION] button to manually scroll through each selected option and at the end of each programming line.

ACCESSING DEALER PROGRAM MODE

1. [4] [5] [6] [7F] [8A] [9P]   [FUNCTION]
    ──────────── Dealer Code ────────────

    PRIOR/NO
2. [INSTANT]   Until "ACTIVATE PROGRAM Y/N" (GEM-RP1CAe2) or
                 "TURNON PROG Y/N" (GEM-RP2ASe2)
                 appears on LCD screen.

    NEXT/YES
3. [INTERIOR]   Enter Dealer Program Mode

4. [RESET] [RESET]   Exit Dealer Program Mode when finished
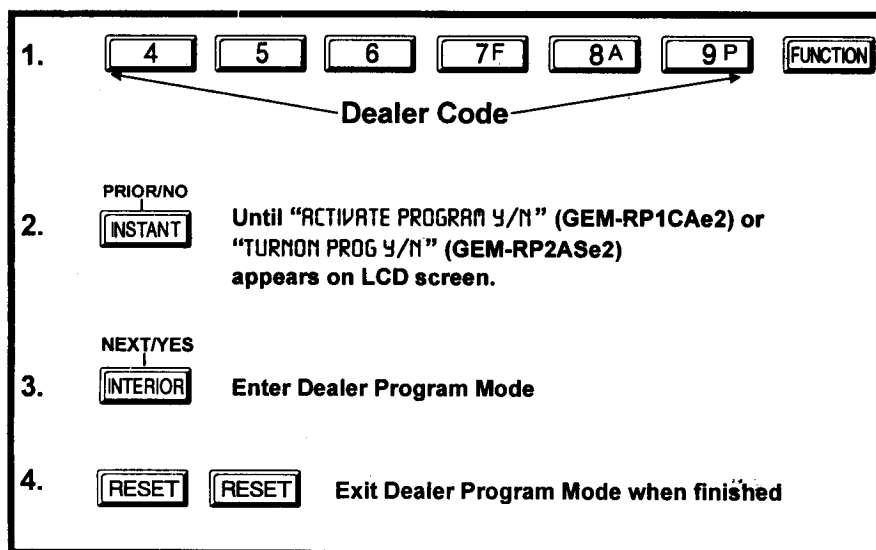
CUSTOMIZING A DEFAULT PROGRAM

For any *new* panel, you can design a default program that will best suit your application. Using this procedure, you will configure the panel for:

☑ the number of zones in area 1

☑ zone features (Zone Doubling, Exit/Entry, Follower & Fire)

☑ the number of keypads in area 1

☑ type of system (local/reporting)

☑ reporting features (telephone number, account number, receiver format)

☑ rf transmitter information (zone, RF ID number, etc.)

This procedure will automatically set up system keypads, EZMs, wireless transmitters, etc. After your basic default program has been loaded, you may alter it as necessary in the Direct Address Program Mode in the conventional manner.

> **NEW PANELS:** The custom default program may be created for *new* panels only. Once the panel has been programmed by any means, the number of areas, zones and keypads will be suppressed and cannot be changed. Should it be necessary to create a new custom default program, (a) from the Dealer Program Mode, press [RESET] to enter the Direct Address Program Mode; (b) access Location 1196 (*Clear Program*); (c) press [ON/OFF] and start over.

A. GEM-RP1CAe2 Keypad

To create your customized default program using a GEM-RP1CAe2 keypad, enter the following parameters and *record your information on the Easy Menu Programming Worksheet at the back of this manual.*

EASY MENU DRIVEN PROGRAM MODE

```
#OF ZNS IN AREA1
ENTER # ZONES __
```
(Direct Entry)

Number of Zones in Area 1 *(Appears for New Panel Only)*

Directly enter the number of zones to be programmed for Area 1. Valid entries are from 01 to 32. Directly enter each zone number, including leading zeros. Use number buttons [1] through [9P]. **NOTE:** Press the [0] button for a zero. The system is based on groups of 4 zones each (after the first 8 zones), and will automatically round up to the next group of 4. For example, if you enter 18, it will automatically convert this to 20 zones. Press [ON/OFF] to save. Press NEXT ([INTERIOR]) to proceed.

NOTE: If you are programming a 2 Area system, enter the total number of zones required for Areas 1 & 2. The Direct Address Program Mode can then be used to remove zones from Area 1 and place them in Area 2. See Zone Options. If Programming a Wireless Only system, or using wireless only on Zones 9-32, enter the total number of zones in system. Enter the transmitter points in the RF Transmitter section of the Easy Menu Driven Programming Mode.

```
EZ ZONE DOUBLING
ENABLED?    Y/N
```
(Press YES or NO)

Panel Zone Doubling *(Appears for New Panel Only)*

If the number of zones entered was 16 or less, press YES ([INTERIOR]) to effectively double the capacity of the control panel's hard wired zones from 8 to 16. The 16 zones will no longer be EOL zones, but will be designated for Normally Closed devices only. The terminal for Zone 1 will now support Zones 1 and 9 with the use of the supplied EZ Zone Doubling™ resistors, E & Z supplied. (Refer to Wiring Diagram and Installation Instructions). If Panel Zone doubling is not desired, press NO ([INSTANT]).

```
FIRE ZONES
ENTER ZONE # __
```
(Direct Entry)

Fire Zones in Area 1 *(Appears for New Panel Only)*

Enter the number of any zones which are to be used as Fire Zones (both 2-wire, 4-wire or wireless). Valid entries are from 01 to 32. Directly enter each zone number, including leading zeros, and Press [ON/OFF] to save, and then repeat for any additional zone(s). Press NEXT ([INTERIOR]) to proceed.

NOTE: If you are programming a 2 Area system, enter the total number of zones required for Areas 1 & 2. The Direct Address Program Mode can then be used to remove zones from Area 1 and place them in Area 2. See Zone Options.

```
2-WIRE FIRE ZNS
ENTER ZONE # __
```
(Direct Entry)

2-Wire Fire Zones in Area 1 *(Appears for New Panel Only)*

Enter the number of any Fire Zones (from previous question) which are to be used with 2-wire smoke detectors. The only valid entries are 07 and 08. Directly enter each zone number, including leading zeros. Press [ON/OFF] to save, and then repeat for any additional zone(s).

NOTE: Only zones which have been designated as Fire Zones in the prior question may be programmed as 2 Wire Fire zones. Press NEXT ([INTERIOR]) to proceed. **NOTE:** JP3 must be set to "2-WF" position for 2-wire fire zones (refer to Installation Instructions).

```
REPORT ALL ZONES
TO CENTRAL?  Y/N
```
(Press YES or NO)

Local or Central Station Reporting System *(Appears for New Panel Only)*

Press YES ([INTERIOR]) for all zones to report; press NO ([INSTANT]) for no zones to report (LOCAL SYSTEM).

```
┌─────────────────────────────────────┐
│  ENTRY/EXIT ZONES                    │
│  ENTER ZONE #    __                  │
└─────────────────────────────────────┘
```
(Direct Entry)

Exit/Entry Zones in Area 1 *(Appears for New Panel Only)*
Directly enter the number of any zones which are to be used as Entry/Exit zones. Valid entries are from 01 to 32. Directly enter each zone number, including leading zeros. Use number buttons `1` through `9P` **NOTE:** Press the `0` button for a zero. Press `ON OFF` to save and then repeat for any additional zone(s). **Press NEXT (INTERIOR) to proceed.**

NOTE: Chime will automatically be programmed for all E/E zones. If you are programming a 2 Area system, enter the total number of zones required for Areas 1 & 2. The Direct Address Program Mode can then be used to remove zones from Area 1 and place them in Area 2. See Zone Options.

```
┌─────────────────────────────────────┐
│  INTERIOR ZONES                      │
│  ENTER ZONE #  __                    │
└─────────────────────────────────────┘
```
(Direct Entry)

Interior Zones in Area 1 *(Appears for New Panel Only)*
Directly enter the number of any zones which are to be used as Interior Zones. Valid entries are from 01 to 32. Directly enter each zone number, including leading zeros. Use number buttons `1` through `9P` **NOTE:** Press the `0` button for a zero. Press `ON OFF` to save and then repeat for any additional zone(s). Press NEXT (INTERIOR) to proceed.

NOTE: All Interior zones will also be automatically programmed as Exit/Entry Follower zones. If you are programming a 2 Area system, enter the total number of zones required for Areas 1 & 2. The Direct Address Program Mode can then be used to remove zones from Area 1 and place them in Area 2. See Zone Options.

```
┌─────────────────────────────────────┐
│  # AREA 1 KEYPADS                    │
│  ENTER # KPS    __                   │
└─────────────────────────────────────┘
```
(Direct Entry)

Number of Keypads in Area 1 *(Appears for New Panel Only)*
Directly enter the number of Keypads to be installed in Area 1. Valid entries are from 01 to 07. Directly enter the number of keypads, including leading zeros. Use number buttons `1` through `9P`. **NOTE:** Press the `0` button for a zero. Press `ON OFF` to save. Press NEXT (INTERIOR) to proceed. **NOTE:** Area 2 keypads can only be assigned in Direct Address Programming. See Keypad Options.

```
┌─────────────────────────────────────┐
│  CENTRAL PHONE #                     │
│  _____                   │
└─────────────────────────────────────┘
```
(Direct Entry)

Central Station Receiver 1 Telephone Number
Using number buttons, enter telephone number of up to 16 digits including prefix letters, if necessary, for receiver 1. Enter digits 1–9; enter `*` `0` for a zero and `*` `1` through `*` `5` for letters B–F, respectively. **NOTE:** Pre-Dial Delay = "D"; Dial-Tone Detection = "E". Pressing the `0` button will produce a blank space (•).

Press `ON OFF` to save, then press NEXT (INTERIOR) to proceed. **NOTE:** Central Station Receiver 2 and 3 Telephone Numbers can only be entered in Direct Address Programming. See CS Receiver Options.

```
┌─────────────────────────────────────┐
│  CENTRAL STATION                     │
│  ACCOUNT #[ ____ ]                   │
└─────────────────────────────────────┘
```
(Direct Entry)

Central Station Receiver 1 Account Number
Enter an account number of up to four digits. Use number buttons 1–9. **NOTE:** Press the `0` button for a zero and press `*` `0` for a blank space (•). Press `ON OFF` to save. Press NEXT (INTERIOR) to proceed.

NOTE: Central Station Receiver 2 and 3 Account Numbers can only be entered in Direct Address Programming. See CS Reporting Options.

```
┌─────────────────────────────────┐
│   SEE WI FOR INFO               │
│   RCVR FORMAT  [0]              │
└─────────────────────────────────┘
```
(Direct entry)

Central Station Receiver 1 Format
From the table below, enter the central station's receiver format. Use number buttons for digits. **NOTE:** Press the [0] button for a zero and press [*][0]for a blank space (•). Enter [*][1] through [*][4] for B through E. Press [ON/OFF] to save. Press NEXT ([INTERIOR]) to proceed.

DATA ENTRY	CS RECEIVER 1 FORMAT
•(blank)	Ademco Slow, Silent Knight Slow
2	Radionics Fast
3	Silent Knight Fast
4	Radionics, DCI, Franklin Slow

DATA ENTRY	CS RECEIVER 1 FORMAT
5	Universal High Speed
B	SIA
C	Ademco Point ID
E	Pager

NOTE: Central Station Receiver 2 and 3 Formats can only be entered in Direct Address Programming. See CS Receiver Options.

```
┌─────────────────────────────────┐
│   ENTER USER CODE               │
│   U01 123 ___ - _1 - __         │
└─────────────────────────────────┘
```
    User #   User Code   Area 1 Area 2

Enter User Codes *(Press the [FUNCTION] button to set cursor.)*
For default program, enter up to 32 User Codes, with Area 1 and Area 2 Options.

☞ Press the [FUNCTION] button once to set the cursor to the *User Code*. Use the number buttons [1] through [9P] to enter a code of up to 6 digits. Enter up to 6 digits (4 digits is recommended) in the first six boxes from left to right for each user code. Valid entries are: 0-9. **NOTE:** Press the [0] button for a zero. No blank spaces in between; leave blank (•) any trailing boxes.

☞ If the programmed code was less than 6 digits, press the [FUNCTION] button once to set the cursor to the *Area 1 Options Level*. Refer to the table below for the available area options.

USER OPTIONS		
USER CODE (UP TO 6 DIGITIS)	AREA 1 OPTIONS	AREA 2 OPTIONS

USER AREA OPTIONS		
DATA ENTRIES		OPTION ENABLED
L	R	
•(blank)	•(blank)	Disabled
•(blank)	1	Arm/Disarm
•(blank)	2	Arm Only
•(blank)	3	Service
•(blank)	4	Access
•(blank)	Add 8	User Program

AREA OPTIONS: Up to 32 User Codes may be programmed.

☞ A. Select the desired Area Options (Area 1 and Area 2) from the table shown and enter in the remaining four boxes for each user code.

┌───┐
│ ***Example:*** Program a code of "2222" for user 02, with area │
│ 1 options of "Arm/Disarm" and "User Program". Enter "2222" │
│ for a user code, "•(blank) 9" for area 1 options and "•(blank) │
│ •(blank)"" for area 2 options. │
└───┘

AREA OPTIONS	EXPLANATION
Disabled	User Code not active in this area.
Arm/Disarm	Allows User Code to arm/disarm this area.
Arm Only	Prevents User Code from disarming this area.
Service	A Service Code has restricted arm/disarm rights; if an area is armed with a Service Code, a "SERVICE ON" appears on the GEM-RP1CAe2 keypad (a "S" on the GEM-RP2ASe2 keypad) and the area can be disarmed with any valid User Code, including a Service Code. If the area is armed with OTHER than a Service Code, it CANNOT be disarmed with a Service Code. This is typically used to allow tradesmen access to premises under control of the owner.
Access	This is normally used to activate a door striker while an area is disarmed. Also program <Access Control on PGM2 Output> and <PGM2 Output Access Control Time>.

☞ For Area 2 Options, press the [FUNCTION] button once again. Refer to the table above for available options.

NOTE: Enter [*][0] for blank space (•).

☞ Press [ON/OFF] to save each code. To proceed to the next User Code, press the [FUNCTION] button to set the cursor to the User Number and change it using the number buttons.

Program a new User Code as previously described. Remember to record your user codes in the Easy Menu Programming Worksheet at the back of this manual.

┌───┐
│ **CHANGING OR CANCELLING A CODE:** To change any code, merely program over the existing code as described above │
│ and press [ON/OFF] to save. Similarly, to cancel a code, blank out each number of the code press [ON/OFF] to save. │
└───┘

```
   ZN#     XMIT#+CS P
   ZN01- 000000:0- 0
```

Zone #	Xmitter	Check	Point
Mapped to	ID	Sum	#

RF Transmitter Points *(Press the* [FUNCTION] *button to set cursor.)*
(For wireless systems only. Also see Quick Method, which follows)
For each transmitter (key fob transmitters also), enter the zone number (01–32) to which the transmitter will be mapped, the 6-digit RF ID #:1-digit checksum number printed on the transmitter and box, the number of points (1–4); enter "9" for unsupervised (all points). **NOTE:** When programming the ID Code number, "A" = [✱][0]; "B" = [✱] [1]; "C" = [✱][2]; "D" = [✱][3];. "E" = [✱][4] "F" = [✱][5]. Press [ON/OFF] to save. Press NEXT ([INTERIOR]) to continue.

```
   ZN#     XMIT#+CS P
   ZN01- 000000:0- 0
```

```
   ZN#     XMIT#+CS P
   ZN01- ENROLL:A--
```

Quick Method. If a receiver is already installed in the panel, Napco transmitter wireless points can be programmed automatically ("enrolled") using the following procedure. **Note:** The transmitter point will be enrolled only if the signal strength is 3 or greater.

1. Enter the zone number to which the transmitter point will be mapped.

2. Press the [BYPASS] button to enter the Enroll mode. The red and green LEDs on the keypad will flash and the window will display as shown at left.

3. Open the loop of the point that is to be programmed (GEM-TRANS2 or GEM-TRANS4 only).

4. Install the transmitter battery. The keypad will beep to indicate that the point has been successfully enrolled. Multi-point transmitters can be mapped to successive zones simultaneously (Example 1) or to selected zones point by point (Example 2).

Example 1. A 4-point transmitter has the RF ID number 410078:1. Map the first three points to Zones 11–13, respectively.

1. Enter the Enroll mode as described in step 2 above.

2. Enter Zone "11".

3. Open the loops of points 1, 2 and 3.

4. Install the transmitter battery. The keypad will beep 3 times to indicate that three points have been programmed.

   ☞   Transmitter 410078:1, point 1 will be mapped to Zone 11.

   ☞   Transmitter 410078:1, point 2 will be mapped to Zone 12.

   ☞   Transmitter 410078:1, point 3 will be mapped to Zone 13.

The keypad will now display Zone 13, the last zone enrolled.

Example 2. A 2-point transmitter has the RF ID number 287613:1. Map point 1 to Zone 6 and point 2 to Zone 9.

1. Enter the Enroll mode as described above.

2. Enter Zone "06".

3. Open point-1 loop.

4. Install the battery. The keypad will beep once to indicate that one point has been programmed. (Transmitter 287613:1, point 1 will be mapped to Zone 6.)

5. Enter Zone "09".

6. Close point-1 loop and open point-2 loop.

7. Remove the transmitter battery, then re-install it. The keypad will beep once to indicate that one point has been programmed. (Transmitter 287613:1, point 2 is mapped to Zone 9.)

KEY FOB ZONE ASSIGNMENT: Keyfobs can also be assigned to zones to allow individual reporting. Each of the 4 keyfob buttons can be assigned to a zone. For example, On button = point 1; Off button = point 2; A1 = point 3; A2 = point 4. Up to 32 keyfobs can be assigned, providing multiple wireless panic buttons on a system, each reporting to the Central Station or a pager and/or annunciating on a keypad the keyfob zone number with description/location. *To assign a keyfob to a zone, program the keyfob as you would a transmitter, entering the keyfob's ID code, check sum and point number at the appropriate zone.*

NOTE: If assigning a keyfob to a zone, the "ON/OFF" buttons on the key fob will no longer arm and disarm the system.

```
KF A XMIT#+CS OP
01-0 000000:0  00
```

KF #	Area	Xmitter ID	Check Sum	Aux 1&2

KEYFOB AUX 1 & AUX 2 OPTIONS	
DATA ENTRIES	**OPTION ENABLED**
• (blank)	Instant
9	Panic
0	Auxiliary
C	PGM2 Output

Key Fob Transmitters *(Press the* 🔳 *button to set cursor.)*
For each Key Fob Transmitter, enter::

☞ the Key Fob Transmitter number (01–08).

☞ area number to which transmitter is assigned (1 or 2); enter 0 to disable keyfob.

☞ the 6-digit RF ID # printed on the transmitter (enter *all* numbers and/or letters, including leading "0"s, if any).

☞ 1-digit checksum number printed on the transmitter (enter *all* numbers and/or letters, including leading "0"s, if any).

Aux-1 Option (see key fob aux 1 & aux 2 options).

☞ Aux-2 Option (see key fob aux 1 & aux 2 options).

Press 🔳 to save. Press NEXT (🔳) to continue.

```
01-_ _ _ _ _ _ _ _ _ _ _ _ _
   _ _ _ _ _ _ _ _ _ _ _ _ _
```
(Direct Entry)

Enter Zone Descriptions

Use keys 🔲1 and 🔲2 to place the cursor; use keys 🔲3 and 🔲6 to select the character. For each zone, enter a description of up to two lines.

Press 🔳 to save each description. To proceed to the next description, place the cursor under the Zone Number (e.g. "01") and change the Zone Number using 🔲3 and 🔲6. Program a new description as above.

```
DEALER CODE
    456789
```
(Direct Entry)

Dealer Code
Directly enter the Dealer Code, including leading zeros. Use number buttons 🔲1 through 🔲9P. **NOTE:** Press the 🔲0 button for a zero. Press 🔳 to save.

```
DEALER CODE
RE-ENTER--
```
(Direct Entry)

Re-enter the Dealer Code to verify the previous code. Press 🔳 to save. Press NEXT (🔳) to proceed.

> **EXIT DEALER PROGRAM MODE:** This completes the custom default program. Press 🔳RESET to enter the Direct Address Program Mode for further programming or press 🔳RESET once again to end all programming and resume normal keypad operation.

CLEAR PROGRAM: Should it be necessary to create a new custom default program, (a) from the Dealer Program Mode, press 🔳RESET to enter the Address Program Mode; (b) access Location 1196 (*Clear Program*); (c) press 🔳 and start over.

B. GEM-RP2ASe2 Keypad

Enter the Dealer Security Code (456789) for a new panel or enter your custom Dealer Program Code if programmed. Press NO (INSTANT) repeatedly until "TURNON/PROG" is displayed. **NOTE:** If you pass "TURNON/PROG", you can scroll back by pressing the BYPASS buttton. Press YES (INTERIOR) to enter the Dealer Program Mode.

This keypad displays messages in multiple segments. Press the FUNCTION button to scroll through each segment. To create your customized default program using a GEM-RP2ASe2 keypad, enter the following parameters and record your information on the Easy Menu Programming Worksheet.

```
┌─────────────────────────┐
│                         │
│              ENT A1     │
│                         │
└─────────────────────────┘
┌─────────────────────────┐
│                         │
│              #ZN  _      │
│                         │
└─────────────────────────┘
        (Direct Entry)
```

Number of Zones in Area 1 *(Appears for New Panel Only)*
Directly enter the number of zones to be programmed for Area 1. Valid entries are from 01 to 32. Directly enter each zone number, including

leading zeros. Use number buttons [1] through [9P]. **NOTE:** Press the [0] button for a zero. The system is based on groups of 4 zones each (after the first 8 zones), and will automatically round up to the next group of 4. For example, if you enter 18, it will automatically convert this to 20 zones. Press [ON/OFF] to save. Press NEXT (INTERIOR) to proceed.

NOTE: If you are programming a 2 Area system, enter the total number of zones required for Areas 1 & 2. The Direct Address Program Mode can then be used to remove zones from Area 1 and place them in Area 2. See Zone Options. If Programming a Wireless Only system, or using wireless only on Zones 9-32, enter the total number of zones in system. Enter the transmitter points in the RF Transmitter section of the Easy Menu Driven Programming Mode.

```
┌─────────────────────────┐
│                         │
│              ZN DBL     │
│                         │
└─────────────────────────┘
┌─────────────────────────┐
│                         │
│              ENABL?     │
│                         │
└─────────────────────────┘
┌─────────────────────────┐
│                         │
│              Y/N        │
│                         │
└─────────────────────────┘
     (Press YES or NO)
```

Panel Zone Doubling *(Appears for New Panel Only)*

If the number of zones entered was 16 or less, press YES (INTERIOR) to effectively double the capacity of the control panel's hard wired zones from 8 to 16. The 16 zones will no longer be EOL zones, but will be designated for Normally Closed devices only. The terminal for Zone 1 will now support Zones 1 and 9 with the use of the supplied EZ Zone Doubling™ resistors, E & Z supplied. (Refer to Wiring Diagram and Installation Instructions). If Panel Zone doubling is not desired, press NO (INSTANT).

```
┌─────────────────────────┐
│                         │
│              ENT FR     │
│                         │
└─────────────────────────┘
┌─────────────────────────┐
│                         │
│              ZN#  _      │
│                         │
└─────────────────────────┘
        (Direct entry)
```

Fire Zones in Area 1 *(Appears for New Panel Only)*
Enter the number of any zones which are to be used as Fire Zones (both 2-wire and 4-wire). Valid entries are from 01 to 32. Directly enter each zone number, including leading zeros, and Press [ON/OFF] to save, and then repeat for any additional zone(s). Press NEXT (INTERIOR) to proceed.

NOTE: If you are programming a 2 Area system, enter the total number of zones required for Areas 1 & 2. The Direct Address Program Mode can then be used to remove zones from Area 1 and place them in Area 2. See Zone Options.

```
                         ENT2WF
```

```
                         ZN# _
```
(Direct entry)

2-Wire Fire Zones in Area 1 *(Appears for New Panel Only)*
Enter the number of any Fire Zones (from previous question) which are to be used with 2-wire smoke detectors. The only valid entries are 07 and

08. Directly enter each zone number, including leading zeros. Press 🔲 to save, and then repeat for any additional zone(s).
NOTE: Only zones which have been designated as Fire Zones in the prior question may be programmed as 2 Wire Fire zones. Press NEXT (e) to proceed. **NOTE:** JP3 must be set to "2-WF" position for 2-wire fire zones (refer to Installation Instructions).

```
                         REPORT
```

```
                         ALL ZN
```

```
                         Y/N
```
(Direct Entry)

Local or Central Station Reporting System *(Appears for New Panel Only)*
Press YES (INTERIOR) for all zones to report; press NO (INSTANT) for no zones to report (LOCAL SYSTEM).

```
                         ENT EE
```

```
                         ZN# _
```
(Direct Entry)

Exit/Entry Zones in Area 1 *(Appears for New Panel Only)*
Directly enter the number of any zones which are to be used as Entry/Exit zones. Valid entries are from 01 to 32. Directly enter each zone number, including leading zeros. Use number buttons 🔲 1 through 🔲 9P. **NOTE:** Press the 🔲 0 button for a zero. Press 🔲 to save and then repeat for any additional zone(s). **Press** NEXT (INTERIOR) to proceed.
NOTE: Chime will automatically be programmed for all E/E zones. If you are programming a 2 Area system, enter the total number of zones required for Areas 1 & 2. The Direct Address Program Mode can then be used to remove zones from Area 1 and place them in Area 2. See Zone Options.

```
                         ENTINT
```

```
                         ZN# _
```
(Direct Entry)

Interior Zones in Area 1 *(Appears for New Panel Only)*
Directly enter the number of any zones which are to be used as Interior Zones. Valid entries are from 01 to 32. Directly enter each zone number, including leading zeros. Use number buttons 🔲 1 through 🔲 9P. **NOTE:** Press the 🔲 0 button for a zero. Press 🔲 to save and then repeat for any additional zone(s). Press NEXT (INTERIOR) to proceed.
NOTE: All Interior zones will also be automatically programmed as Exit/Entry Follower zones. If you are programming a 2 Area system, enter the total number of zones required for Areas 1 & 2. The Direct Address Program Mode can then be used to remove zones from Area 1 and place them in Area 2. See Zone Options.

```
ENT A1
```

```
#KP  _
```
(Direct Entry)

Number of Keypads in Area 1 *(Appears for New Panel Only)*
Directly enter the number of Keypads to be installed in Area 1. Valid entries are from 01 to 07. Directly enter the number of keypads, including

leading zeros. Use number buttons ☐1 through ☐9P. **NOTE:** Press the ☐0 button for a zero. Press 🔘 to save. Press NEXT (INTERIOR) to proceed. **NOTE:** Area 2 keypads can only be assigned in Direct Address Programming. See Keypad Options.

```
PHONE#
```

```
————————
```

```
————————
```
(Direct Entry)

Central Station Receiver 1 Telephone Number
Using number buttons, enter telephone number of up to 16 digits including prefix letters, if necessary, for receiver 1. Enter digits 1–9; enter ☐*☐0

for a zero and ☐*☐1 through ☐*☐5 for letters B–F, respectively. **NOTE:** Pre-Dial Delay = "D"; Dial-Tone Detection = "E". Pressing the ☐0 button will produce a blank space (•).

Press 🔘 to save, then press NEXT (INTERIOR) to proceed. **NOTE:** Central Station Receiver 2 and 3 Telephone Numbers can only be entered in Direct Address Programming. See CS Receiver Options.

```
ACC #
```

```
[ ____ ]
```
(Direct Entry)

Central Station Receiver 1 Account Number
Enter an account number of up to four digits. Use number buttons 1–9. **NOTE:** Press the ☐0 button for a zero and press ☐*☐0 for a blank space (•). Press 🔘 to save. Press NEXT (INTERIOR) to proceed.
NOTE: Central Station Receiver 2 and 3 Account Numbers can only be entered in Direct Address Programming. See CS Reporting Options.

```
RECFMT
```

```
[0]
```
(Direct Entry)

Central Station Receiver 1 Format
From the table below, enter the central station's receiver format. Use number buttons for digits. **NOTE:** Press the ☐0 button for a zero and

press ☐*☐0 for a blank space (•). Enter ☐*☐1 through ☐*☐4 for B through E. Press 🔘 to save. Press NEXT (INTERIOR) to proceed.

NOTE: Central Station Receiver 2 and 3 Formats can only be entered in Direct Address Programming. See CS Receiver Options.

DATA ENTRY	CS RECEIVER 1 FORMAT	DATA ENTRY	CS RECEIVER 1 FORMAT
• (blank)	Ademco Slow, Silent Knight Slow	5	Universal High Speed
2	Radionics Fast	B	SIA
3	Silent Knight Fast	C	Ademco Point ID
4	Radionics, DCI, Franklin Slow	E	Pager

```
┌────────────────────────────┐
│                            │
│                  USER01    │
│                            │
└────────────────────────────┘
```

```
┌────────────────────────────┐
│                            │
│              _ _ _ _ _ _   │
└────────────────────────────┘
        (Direct Entry)
```

```
┌────────────────────────────┐
│                            │
│              OPT1  _ _     │
└────────────────────────────┘
        (Direct Entry)
```

```
┌────────────────────────────┐
│                            │
│              OPT2  _ _     │
└────────────────────────────┘
        (Direct Entry)
```

Enter User Codes *(Press the* [FUNCTION] *button to set cursor.)*
For default program, enter up to 32 User Codes, with Area 1 and Area 2 Options.

☞ Press the [FUNCTION] button once to set the cursor to the *User Code.* Use the number buttons [1] through [9P] to enter a code of up to 6 digits. Enter up to 6 digits (4 digits is recommended) in the first six boxes from left to right for each user code. Valid entries are: 0-9.

NOTE: Press the [0] button for a zero. No blank spaces in between; leave blank (•) any trailing boxes.

☞ If the programmed code was less than 6 digits, press the [FUNCTION] button once to set the cursor to the *Area 1 Options Level.*
Refer to the table below for the available area options

USER OPTIONS			
USER CODE (UP TO 6 DIGITIS)		AREA 1 OPTIONS	AREA 2 OPTIONS

USER AREA OPTIONS		
DATA ENTRIES		OPTION ENABLED
L	R	
•(blank)	•(blank)	Disabled
•(blank)	1	Arm/Disarm
•(blank)	2	Arm Only
•(blank)	3	Service
•(blank)	4	Access
•(blank)	Add 8	User Program

AREA OPTIONS: Up to 32 User Codes may be programmed.

☞ A. Select the desired Area Options (Area 1 and Area 2) from the table shown and enter in the remaining four boxes for each user code.

Example: Program a code of "2222" for user 02, with area 1 options of "Arm/Disarm" and "User Program". Enter "2222" for a user code, "•(blank) 9" for area 1 options and "•(blank) •(blank)"" for area 2 options.

AREA OPTIONS	EXPLANATION
Disabled	User Code not active in this area.
Arm/Disarm	Allows User Code to arm/disarm this area.
Arm Only	Prevents User Code from disarming this area.
Service	A Service Code has restricted arm/disarm rights; if an area is armed with a Service Code, a "SERVICE ON" appears on the GEM-RP1CAe2 keypad (a "S" on the GEM-RP2ASe2 keypad) and the area can be disarmed with any valid User Code, including a Service Code. If the area is armed with OTHER than a Service Code, it CANNOT be disarmed with a Service Code. This is typically used to allow tradesmen access to premises under control of the owner.
Access	This is normally used to activate a door striker while an area is disarmed. Also program <Access Control on PGM2 Output> and <PGM2 Output Access Control Time>.

☞ For Area 2 Options, press the [FUNCTION] button once again. Refer to the table above for available options.

NOTE: Enter [*] [0] for blank space (•).

Press [ON/OFF] to save each code. To proceed to the next User Code, press the [FUNCTION] button to set the cursor to the User Number and change it using the number buttons.

> **CHANGING OR CANCELLING A CODE:** To change any code, merely program over the existing code as described above and press [ON/OFF] to save. Similarly, to cancel a code, blank out each number of the code press [ON/OFF] to save.

```
                              ZN# 01
```
(Direct Entry)

```
                             000000
```
(Direct Entry)

```
                             :0 PT.
```
(Direct Entry)

RF Transmitter Points *(Press the* 🔲FUNCTION *button to set cursor.)*
(For wireless systems only. Also see Quick Method, which follows)

For each transmitter (key fob transmitters also), enter the zone number (01–32) to which the transmitter will be mapped, the 6-digit RF ID #:1-digit checksum number printed on the transmitter and box, the number of points (1–4); enter "9" for unsupervised (all points). **NOTE:** When programming the ID Code number, "A" = 🔲✱🔲 C ; "B" = 🔲✱🔲 1 ; "C" = 🔲✱🔲 2 ; "D" = 🔲✱🔲 3 . "E" = 🔲✱🔲 4 "F" = 🔲✱🔲 5 . Press 🔲 to save. Press NEXT (🔲INTERIOR) to continue.

Quick Method. If a receiver is already installed in the panel, Napco transmitter wireless points can be programmed automatically ("enrolled") using the following procedure. **Note:** The transmitter point will be enrolled only if the signal strength is 3 or greater.

1. Enter the zone number to which the transmitter point will be mapped.

2. Press the 🔲BYPASS button to enter the Enroll mode. The red and green LEDs on the keypad will flash and the window will display as shown at left. 3. Open the loop of the point that is to be programmed (GEM-TRANS2 or GEM-TRANS4 only).

4. Install the transmitter battery. The keypad will beep to indicate that the point has been successfully enrolled. Multi-point transmitters can be mapped to successive zones simultaneously (Example 1) or to selected zones point by point (Example 2).

Example 1. A 4-point transmitter has the RF ID number 410078:1. Map the first three points to Zones 11–13, respectively.

1. Enter the Enroll mode as described in step 2 above.

2. Enter Zone "11".

3. Open the loops of points 1, 2 and 3.

4. Install the transmitter battery. The keypad will beep 3 times to indicate that three points have been programmed.

 ☞ Transmitter 410078:1, point 1 will be mapped to Zone 11.

 ☞ Transmitter 410078:1, point 2 will be mapped to Zone 12.

 ☞ Transmitter 410078:1, point 3 will be mapped to Zone 13.

The keypad will now display Zone 13, the last zone enrolled.

Example 2. A 2-point transmitter has the RF ID number 287613:1. Map point 1 to Zone 6 and point 2 to Zone 9.

1. Enter the Enroll mode as described above.

2. Enter Zone "06".

3. Open point-1 loop.

4. Install the battery. The keypad will beep once to indicate that one point has been programmed. (Transmitter 287613:1, point 1 will be mapped to Zone 6.)

5. Enter Zone "09".

6. Close point-1 lpop and open point-2 loop.

7. Remove the transmitter battery, then re-install it. The keypad will beep once to indicate that one point has been programmed. (Transmitter 287613:1, point 2 is mapped to Zone 9.)

NOTE: If you are programming a 2 Area system, enter the rf transmitters to be mapped to the zones required for Areas 1 & 2. The Direct Address Program Mode can then be used to remove zones from Area 1 and place them in Area 2. See Zone Options.

KEY FOB ZONE ASSIGNMENT: Keyfobs can also be assigned to zones to allow individual reporting. Each of the 4 keyfob buttons can be assigned to a zone. For example, On button = point 1; Off button = point 2; A1 = point 3; A2 = point 4. Up to 32 keyfobs can be assigned, providing multiple wireless panic buttons on a system, each reporting to the Central Station or a pager and/or annunciating on a keypad the keyfob zone number with description/location. *To assign a keyfob to a zone, program the keyfob as you would a transmitter, entering the keyfob's ID code, check sum and point number at the appropriate zone.*

KFOB01

Key Fob Transmitters *(Press the [FUNCTION] button to set cursor.)*
For each Key Fob Transmitter, enter::

☞ the Key Fob Transmitter number (01–08).

AREA _

(Direct Entry)

☞ area number to which transmitter is assigned (1 or 2); enter 0 to disable keyfob.

000000

(Direct Entry)

☞ the 6-digit RF ID # printed on the transmitter (enter *all* numbers and/or letters, including leading "0"s, if any).

:0 0 0

(Direct Entry)

☞ 1-digit checksum number printed on the transmitter (enter *all* numbers and/or letters, including leading "0"s, if any).

Aux-1 Option (see key fob aux 1 & aux 2 options).

☞ Aux-2 Option (see key fob aux 1 & aux 2 options).

Press [ON/OFF] to save. Press NEXT ([INTERIOR]) to continue.

DEALER

Dealer Code
Directly enter the Dealer Code, including leading zeros. Use number buttons [1] through [9P] **NOTE:** Press the [0] button for a zero. Press [ON/OFF] to save.

— — — — — —

(Direct Entry)

Re-enter the Dealer Code to verify the previous code. Press [ON/OFF] to save. Press NEXT ([INTERIOR]) to proceed.

RE-ENT

(Direct Entry)

EXIT DEALER PROGRAM MODE: This completes the custom default program. Press [RESET] to enter the Direct Address Program Mode for further programming or press [RESET] once again to end all programming and resume normal keypad operation.

CLEAR PROGRAM: Should it be necessary to create a new custom default program, (a) from the Dealer Program Mode, press [RESET] to enter the Address Program Mode; (b) access Location 1196 *(Clear Program)*; (c) press [ON/OFF] and start over.

DIRECT ADDRESS PROGRAM MODE
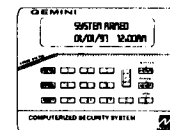
This is an extension of the Dealer Program Mode. This method of programming is used in conjunction with the Keypad Programming Worksheets that follow. Refer to these worksheets to identify the 4-digit location (address) of the feature to be programmed. An illustrative example is provided on the next page.

ADDRESS LOCATIONS	DATA ENTRY LOCATIONS	
	LEFT DIGIT	RIGHT DIGIT

0000 to 1198

HEXADECIMAL DATA
BLANK (·) = No Options
1 to 9 = Entries 1 to 9
0 = Entry of 10
B to F = Entries 11 to 15
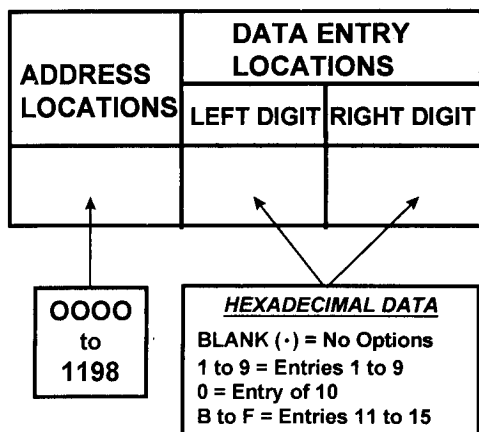
KEYPAD PROGRAMMING OVERVIEW

Direct Address Programming allows you to go directly to the address locations and change the data entries to customize your control panel options. Whereas the Easy Menu Program Mode is a simple quick start guide with limited options, the Direct Address Program Mode is more flexible allowing you to change all the options.

It consists of multiple address locations (up to 1198) with two data entry locations each (left and right) as shown in the adjacent diagram.

ACCESSING DIRECT ADDRESS PROGRAM MODE

1.
   [4] [5] [6] [7F] [8A] [9P] [FUNCTION]
   ◄────────── Dealer Code ──────────►

2.
   PRIOR/NO
   [INSTANT]
   Until "ACTIVATE PROGRAM Y/N"
   (GEM-RP1CAe2) or
   "TURN ON PROG Y/N" (GEM-RP2ASe2)
   appears on LCD screen.

3.
   NEXT/YES
   [INTERIOR]
   Enter Easy Menu Driven (Dealer Program) Mode

4.
   [RESET]
   Exit Easy Menu Driven Mode
   & Enter Direct Address Program Mode
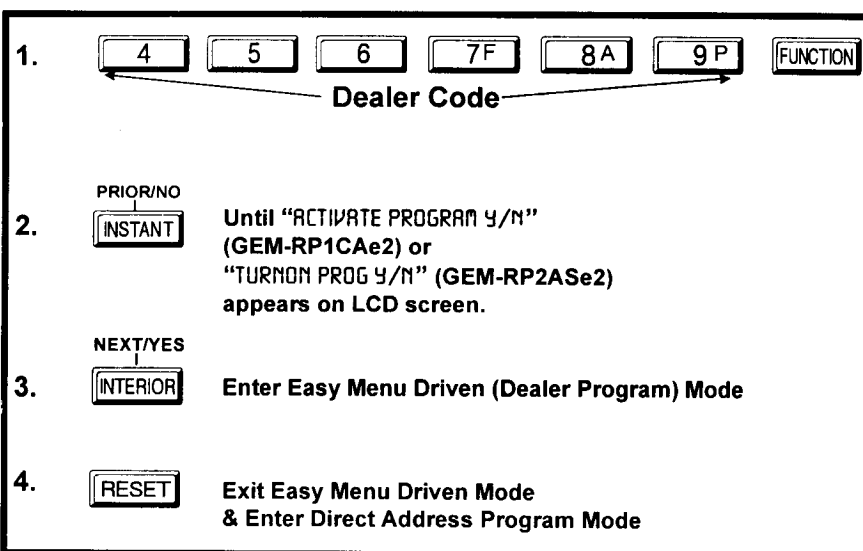
WHAT YOU SEE ON THE KEYPAD

GEM-RP1CAe2 Keypads

②
0000 3C
①

GEM-RP2ASe2 Keypad

②
0000 3C
①
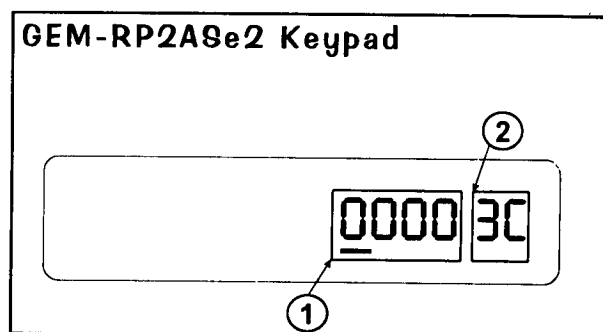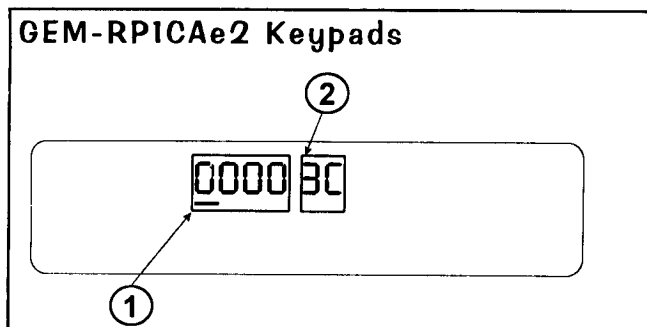
① = ADDRESS LOCATION
② = DATA ENTRY LOCATION

DIRECT ADDRESS PROGRAM MODE

DIRECT ADDRESS PROGRAM MODE KEYPAD COMMANDS

A. GEM-RP1CAe2 Keypads

```
0000 3C
```

TO ACCESS, PRESS [RESET] IN DEALER PROGRAM MODE.

1. TOGGLE CURSOR TO 4-DIGIT ADDRESS FIELD USING [FUNCTION] BUTTON.

2. ENTER ADDRESS NUMBER DIRECTLY USING NUMBER BUTTONS.

3. ENTER DATA DIRECTLY USING NUMBER BUTTONS. *

4. PRESS [ON/OFF] TO SAVE.

TO EXIT, PRESS [RESET].

NOTE: PRESS [0] TO CLEAR CHARACTER AT CURSOR.

SELECT NEXT/PRIOR ADDRESS.
(PRESS [*] [NEXT] TO JUMP TO NEXT PROGRAMMING BLOCK.

*PRESS "[•][0]"–"[•][5]" FOR 10–15 (A–F), RESPECTIVELY.

Fig. 1. Address Program Mode, GEM-RP1CAe2.

B. GEM-RP2ASe2 Keypad

```
00003C
```

TO ACCESS, PRESS [RESET] IN DEALER PROGRAM MODE.

1. TOGGLE CURSOR TO 4-DIGIT ADDRESS FIELD USING [FUNCTION] BUTTON.

2. ENTER ADDRESS NUMBER DIRECTLY USING NUMBER BUTTONS

3. ENTER DATA DIRECTLY USING NUMBER BUTTONS *

4. PRESS [ON/OFF] TO SAVE.

TO EXIT, PRESS [RESET].

NOTE: PRESS [0] TO CLEAR CHARACTER AT CURSOR.

SELECT NEXT/PRIOR ADDRESS.
(PRESS [*] [NEXT] TO JUMP TO NEXT PROGRAMMING BLOCK

*PRESS "[•][0]"–"[•][5]" FOR 10–15 (A–F), RESPECTIVELY.
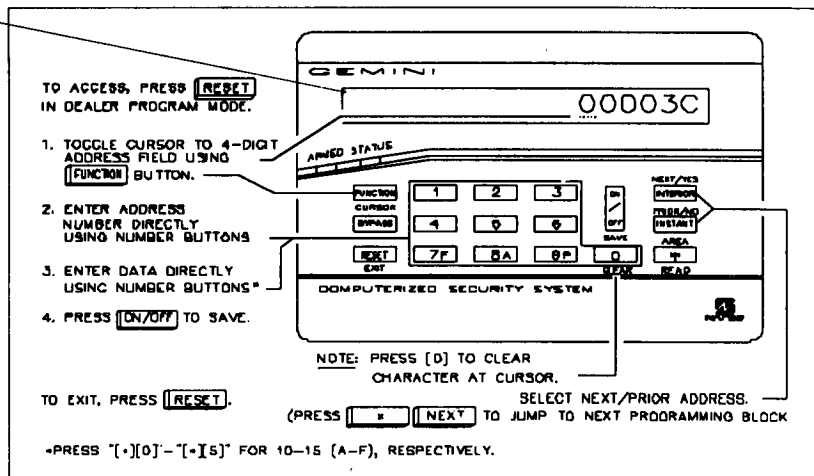
Fig. 2. Address Program Mode, GEM-RP2ASe2.

The displays shown below will appear after a brief delay.

☞ Use the [FUNCTION] button to toggle the cursor between the 4-digit address field and the data entry locations.

☞ Enter the address directly using the number buttons.

☞ The contents of the address will be read automatically, along with the feature name and programming information. The cursor will advance to the data field. Enter the required data directly using the number buttons.

☞ Press [ON/OFF] to save the contents of each address.

EXIT DIRECT ADDRESS PROGRAM MODE: When done, press [RESET] to exit and resume normal keypad operation. The panel is now programmed with your default program.

DIRECT ADDRESS PROGRAM MODE

PROGRAMMING OVERVIEW

The Keypad Programming Worksheets in the back are provided as an address-programming reference to help the installer modify his custom default program or to make minor field alterations to an existing panel program. It is recommended that the panel be uploaded to Napco's Quickloader software following any keypad programming and that the PCD3000's error-check feature be utilized to reduce the possibility of programming omissions or conflicts.

Note: Most of the addresses shown comprise two data entry locations, left and right digits. Program the *left digits on the left* data-display segment, and the *right digit* on the *right* segment. For those addresses having only *one* programmable nibble, program the *right* segment only; the left segment should display a blank (•).

Keep the Keypad Programming Worksheets on file for future reference.

General Programming Steps

☞ 1. Contact the central station to ascertain receiver format, data format, event codes, subscriber numbers and telephone number(s).

☞ 2. Select the desired features by circling ✏ the respective "address" boxes. Refer to the Programming Options and Worksheets for guidance in selecting the "data" (1,2,4,8) to be entered into those boxes.

☞ 3. Program the data entered in the boxes on the worksheets into the respective addresses. The display will show the entry numerically, but will display "0" for the number 10, and letters "B", "C", "D", "E", and "F" for the numbers 11 through 15, respectively. To program a 10, enter ✱ 0 . To program 11 through 15, enter ✱ 1 through ✱ 5 , respectively.

NOTE: See the Direct Address Programming Example on the following page.

DATA ENTRY SELECTIONS (BINARY VALUE CIRCLED) ✏				ENTRY TOTAL	PRESS ☞	KEYPAD DISPLAYS
8	4	2	1	blank	0	•
8	4	2	①	1	1	1
8	4	②	1	2	2	2
8	4	②	①	3	3	3
8	④	2	1	4	4	4
8	④	2	①	5	5	5
8	④	②	1	6	6	6
8	④	②	①	7	7F	7
⑧	4	2	1	8	8A	8
⑧	4	2	①	9	9P	9
⑧	4	②	1	10	✱ 0	0
⑧	4	②	①	11	✱ 1	B
⑧	④	2	1	12	✱ 2	C
⑧	④	2	①	13	✱ 3	D
⑧	④	②	1	14	✱ 4	E
⑧	④	②	①	15	✱ 5	

Table 1. Determining data entry for a location (each "nibble"). Numbers in parentheses indicate data for selected zones or features. (See Programming Worksheets that follow.)

Direct Address Programming Example

Example: Program Zones 6, 7 and 8 as Exit/Entry Follower Zones.

DETERMINE THE DATA ENTRIES

Referring to *ZONE FEATURES* in the Programming Worksheets that follow, Exit/Entry Follower for Zones 5 through 8 are located at address 0506, left digit. Circle 🖊 the data values for Zones 5–8.

Add the data values for Zones 6, 7 and 8: 2+4+8=14. From Tables 1 and 2, "14" is entered as [*][4] (E). The right digit (for Zones 1 through 4, none of which are Exit/Entry Follower Zones) is entered as a blank (•).

ZONE FEATURES									
ZONE FEATURE	SUM = 14 (LEFT DIGIT); CIRCLE 🖊				ADDRESS LOCATION	SUM = 0 "BLANK" (LEFT DIGIT); CIRCLE 🖊			
	ZONE 8	ZONE 7	ZONE 6	ZONE 5		ZONE 4	ZONE 3	ZONE 2	ZONE 1
EXIT/ENTRY FOLLOWER	⑧	④	②	1	0506	8	4	2	1

PROGRAM THE DATA ENTRIES

☞ 1. Enter the panel's Dealer Code (Address 0165), then press the [FUNCTION] button.

☞ 2. Answer NO ([INSTANT]) to all questions until "ACTIVATE PROGRAM Y/N" is displayed; then press YES ([INTERIOR]).
   Note: If you pass "ACTIVATE PROGRAM", scroll backward using the [BYPASS] button.

☞ 3. Press [RESET] to enter the Address Program Mode. Address "0000" will display.

☞ 4. Press [0][5][0][8A] to access Address 0506. *The data for both digits will display and the cursor will advance to the data field.*

☞ 5. Press [*][4] to enter an "E" in the left digit; press [0] to enter a blank (•) in the right digit.

☞ 6. Press [ON/OFF] to save.

Address *0506* is now programmed with "E•".

☞ 7. Enter another 4-digit address to continue programming or press [RESET] to exit and resume normal keypad operation.

PROGRAMMING OPTIONS & WORKSHEETS

1. [4] [5] [6] [7F] [8A] [9P]   [FUNCTION]
    └─────────── Dealer Code ───────────┘

PRIOR/NO
2. [INSTANT]   Until "ACTIVATE PROGRAM Y/N"
                (GEM-RP1CAe2) or
                "TURNON PROG Y/N" (GEM-RP2ASe2)
                appears on LCD screen.

NEXT/YES
3. [INTERIOR] Enter Easy Menu Driven (Dealer Program) Mode

4. [RESET]   Exit Easy Menu Driven Mode
                & Enter Direct Address Program Mode

```
    0000 3C
```

TO ACCESS, PRESS [RESET]
IN DEALER PROGRAM MODE.

1. TOGGLE CURSOR TO
   4-DIGIT ADDRESS FIELD
   USING [FUNCTION] BUTTON.

2. ENTER ADDRESS NUMBER
   DIRECTLY USING NUMBER
   BUTTONS.

3. ENTER DATA DIRECTLY
   USING NUMBER BUTTONS.

4. PRESS [ON/OFF] TO SAVE.

TO EXIT, PRESS [RESET].

NOTE: PRESS [0] TO CLEAR
CHARACTER AT CURSOR.
SELECT NEXT/PRIOR ADDRESS.
(PRESS [*] [NEXT] TO JUMP TO NEXT PROGRAMMING BLOCK.)

*PRESS "[•0]"-"[•5]" FOR 10-15 (A-F), RESPECTIVELY.

Direct Address Program Mode: GEM-RP1CAe2.

```
    00003C
```

TO ACCESS, PRESS [RESET]
IN DEALER PROGRAM MODE.

1. TOGGLE CURSOR TO 4-DIGIT
   ADDRESS FIELD USING
   [FUNCTION] BUTTON.

2. ENTER ADDRESS
   NUMBER DIRECTLY
   USING NUMBER BUTTONS

3. ENTER DATA DIRECTLY
   USING NUMBER BUTTONS*

4. PRESS [ON/OFF] TO SAVE.

TO EXIT, PRESS [RESET].

NOTE: PRESS [0] TO CLEAR
CHARACTER AT CURSOR.
SELECT NEXT/PRIOR ADDRESS.
(PRESS [*] [NEXT] TO JUMP TO NEXT PROGRAMMING BLOCK.)

*PRESS "[•0]"-"[•5]" FOR 10-15 (A-F), RESPECTIVELY.

Direct Address Program Mode: GEM-RP2ASe2.

ENTRY TOTAL	PRESS	KEYPAD DISPLAYS
blank	[0]	•
1	[1]	1
2	[2]	2
3	[3]	3
4	[4]	4
5	[5]	5
6	[6]	6
7	[7F]	7
8	[8A]	8
9	[9P]	9
10	[*] [0]	0
11	[*] [1]	B
12	[*] [2]	C
13	[*] [3]	D
14	[*] [4]	E
15	[*] [5]	F

Determining data entry for an address location (left and right digits). (See Programming Worksheets that follow.)

ADDRESS 0000 TO 0002, 0711 & 0715 (SYSTEM DELAYS & TIMEOUTS)

EXIT DELAY (sec.)	ADDRESS 0000	
	LEFT	RIGHT

[Default = 3C]

ENTRY DELAY 1	ADDRESS 0001	
	LEFT	RIGHT

[Default = 1E]

ENTRY DELAY 2 (sec.)	ADDRESS 0002	
	LEFT	RIGHT

[Default = 1E]

ABORT DELAY (sec.)	ADDRESS 0715	
	LEFT	RIGHT

[Default = •(blank) •(blank)]

PGM2 Output Access Control Timeout (sec.)	ADDRESS 0711	
	LEFT	RIGHT

[Default = •(blank) •(blank)]

DATA ENTRIES		DELAY/ TIMEOUT
LEFT	RIGHT	
•(blank)	•(blank)	0 sec.
•(blank)	F	15 sec.
1	E	30 sec.
2	D	45 sec.
3	C	60 sec.
5	0	90 sec.
7	8	120 sec.
↓	↓	↓
F	F	255 sec.

☞ 1. Select delay/timeout (0-255 sec.) from the table shown.

☞ 2. Enter in corresponding address locations above (left and right digits).

☞ 3. For a desired *delay/timeout not listed* do the following:

     A. Choose a desired delay/timeout, ex: 20 sec.

     B. Divide it by 16

           ① Quotient ⟶ Left Digit

       16) 20

        - 16

         ④ Remainder ⟶ Right Digit

EXIT/ENTRY DELAYS: Apply only to zones programmed with the following options "Entry/Exit 1, Entry/Exit 2, Exit/Entry Follower". For UL Installations, the maximum exit delay is 60 seconds and the maximum entry delay is 45 seconds.

PROGRAMMING TIMEOUTS: Either use the tables provide or calculate your own timeout using the steps indicated.

ADDRESS 0716 & 0717 (SYSTEM DELAYS & TIMEOUTS)

CHIME TIMEOUT (¼sec.)	ADDRESS 0716	
	LEFT	RIGHT

[Default = •(blank) 2]

AC Fail Report Delay (min.)	ADDRESS 0717	
	LEFT	RIGHT

[Default = •(blank) •(blank)]

CHIME TIMEOUT OPTIONS		
DATA ENTRIES		TIMEOUT
LEFT	RIGHT	
•(blank)	•(blank)	0 ¼sec. = 0 sec.
•(blank)	2	2 ¼sec. = ½ sec.
•(blank)	3	3 ¼sec. = ¾ sec.
•(blank)	4	4 ¼sec. = 1 sec.
•(blank)	5	5 ¼sec. = 1.25 sec.
•(blank)	6	6 ¼sec. = 1.5 sec.
•(blank)	7	7 ¼sec. = 1.75 sec.
•(blank)	8	8 ¼sec. = 2 sec.
↓	↓	↓
F	F	255 ¼sec. = 63.25 sec.

AC Fail Report Delay Options		
DATA ENTRIES		DELAY
LEFT	RIGHT	
•(blank)	•(blank)	0 min.
•(blank)	1	1 min.
•(blank)	2	2 min.
•(blank)	3	3 min.
•(blank)	4	4 min.
•(blank)	5	5 min.
•(blank)	6	6 min.
↓	↓	↓
F	F	255 min. = 4 Hr., 30 min.

DEFAULTS: The defaults shown on this page and on the following pages are automatically set after exiting the Easy Menu Driven Mode.

☞ 1. Select delay/timeout from the tables shown.

☞ 2. Enter in corresponding address locations above (left and right digits).

☞ 3. For a desired *delay/timeout not listed* do the following:

     A. Choose a desired delay/timeout, ex: 20

     B. Divide it by 16

           ① Quotient ⟶ Left Digit

       16) 20

        - 16

         ④ Remainder ⟶ Right Digit

PROGRAMMING OPTIONS & WORKSHEETS

ADDRESS 0710, 0712, 0713 & 0714 (SYSTEM OUTPUT TIMEOUTS)

PGM2 Output Timeout (min.)	ADDRESS 0710	
	LEFT	RIGHT

[Default = •(blank) •(blank)]

Alarm Output Timeout (min.)	ADDRESS 0712	
	LEFT	RIGHT

[Default = 1 •(blank)]

Pulsed Alarm Output Timeout (min.)	ADDRESS 0713	
	LEFT	RIGHT

[Default = 1 •(blank)]

PGM1 Output Timeout (min.)	ADDRESS 0714	
	LEFT	RIGHT

[Default = •(blank) •(blank)]

DATA ENTRIES		DELAY/ TIMEOUT
LEFT	RIGHT	
•(blank)	•(blank)	0 min.
•(blank)	1	1 min.
•(blank)	2	2 min.
•(blank)	3	3 min.
•(blank)	4	4 min.
•(blank)	5	5 min.
•(blank)	6	6 min.
1	•(blank)	16 min.
↓	↓	↓
F	F	255 min.

☞ 1. Select timeout (0-255 min.) from the table shown.

☞ 2. Enter in corresponding address locations above (left and right digits).

☞ 3. For a desired *timeout not listed* do the following:

    A. Choose a desired delay/timeout, ex: 20 min.

    B. Divide it by 16

$$16 \overline{)20} \quad \begin{array}{l} ①\text{Quotient} \longrightarrow \text{Left Digit} \\ \underline{-16} \\ ④\text{Remainder} \longrightarrow \text{Right Digit} \end{array}$$

OUTPUT TIMEOUTS: If a timeout of "0 min." is selected, then the output will remain active (ON) until the system is reset or disarmed. For UL Residential Installations, the minimum timeout is 4 minutes. For UL Comercial Installations, the minimum timeout is 15 minutes.

ADDRESS 1183 & 0236-0255 (DOWNLOAD/CALLBACK OPTIONS)

No. Rings Before Pickup	ADDRESS 1183	
	LEFT	RIGHT
	blank (•)	

[Default = •(blank) •(blank)]

☞ 1. Enter in right digit only (left digit is not used).

☞ 2. Valid entries are: 1-9, 0 = 10, B = 11, C = 12, D = 13, E = 14, F = 15

Callback Telephone Number (Digits 1-20)	ADDRESS 0236-0255 (RIGHT DIGITS 1-20)																			
	0236	0237	0238	0239	0240	0241	0242	0243	0244	0245	0246	0247	0248	0249	0250	0251	0252	0253	0254	0255
	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R

[Default = •(blank) from digits 1-20]

☞ 1. Enter in right digit only (left digit is not used).

☞ 2. Enter up to 20 digits from left to right. **NOTE:** Leave trailing boxes blank (•).

☞ 3. Valid entries are: 1-9, B = ⁎ button, C = # button, D = 3 sec. pause, E = Wait for dial tone, F = ignore location

ADDRESS 0450-0485 (SYSTEM OPTIONS)

SYSTEM RESPONSE ACTIVATED BY GLOBAL EVENT/TROUBLE	GLOBAL SYSTEM EVENT/TROUBLE LEFT DATA VALUES (CIRCLE ✎)				ADDRESS 0450-0459			GLOBAL SYSTEM EVENT/TROUBLE RIGHT DATA VALUES (CIRCLE ✎)			
	Bell Superv.	EZM TAMPER	AC FAIL	LOW BATTERY	LEFT	ADDR	RIGHT	MEMORY FAILURE	RF RCVR. TROUBLE	TELCO FAILURE	TEST TIMER
Alarm Output	8	4	2	1		0450		8	4	2	1
Pulse Alarm Output	8	4	2	1		0451		8	4	2	1
PGM1 Output	8	4	2	1		0452		8	4	2	1
PGM2 Output	8	4	2	1		0453		8	4	2	1
Report Event Telco 1	8	4	2	1		0454		8	4	2	1
Report Restore Telco 1	8	4	2	1		0455		8	4	2	1
Report Event Telco 3	8	4	2	1		0458		8	4	2	1
Report Restore Telco 3	8	4	2	1		0459		8	4	2	1

[Default = •(blank) •(blank) from address 0450-0459]

SYSTEM RESPONSE ACTIVATED BY AREA 1 EVENT/TROUBLE	AREA 1 SYSTEM EVENT/TROUBLE LEFT DATA VALUES (CIRCLE ✎)				ADDRESS 0470-0477			AREA 1 SYSTEM EVENT/TROUBLE RIGHT DATA VALUES (CIRCLE ✎)			
	Keyfob Low Bat.	FAIL TO CLOSE	FAIL TO OPEN	KEYPAD TAMPER	LEFT	ADDR	RIGHT	KEYPAD AUX.	KEYPAD FIRE	KEYPAD PANIC	AMBUSH
Pulse Alarm Output	8	4	2	1		0470		8	4	2	1
Alarm Output	8	4	2	1		0471		8	4	2	1
PGM1 Output	8	4	2	1		0472		8	4	2	1
PGM2 Output	8	4	2	1		0474		8	4	2	1
Report Event Telco 1	8	4	2	1		0475		8	4	2	1
Report Event Telco 3	8	4	2	1		0477		8	4	2	1

[Default = •(blank) •(blank) from address 0470-0477]

SYSTEM RESPONSE ACTIVATED BY AREA 2 EVENT/TROUBLE	AREA 2 SYSTEM EVENT/TROUBLE LEFT DATA VALUES (CIRCLE ✎)				ADDRESS 0478-0485			AREA 2 SYSTEM EVENT/TROUBLE RIGHT DATA VALUES (CIRCLE ✎)			
	Keyfob Low Bat.	FAIL TO CLOSE	FAIL TO OPEN	KEYPAD TAMPER	LEFT	ADDR	RIGHT	KEYPAD AUX.	KEYPAD FIRE	KEYPAD PANIC	AMBUSH
Pulse Alarm Output	8	4	2	1		0478		8	4	2	1
Alarm Output	8	4	2	1		0479		8	4	2	1
PGM1 Output	8	4	2	1		0480		8	4	2	1
PGM2 Output	8	4	2	1		0482		8	4	2	1
Report Event Telco 1	8	4	2	1		0483		8	4	2	1
Report Event Telco 3	8	4	2	1		0485		8	4	2	1

[Default = •(blank) •(blank) from address 0478-0485]

☞ 1. Select the desired option by circling ✎ the data values for each digit (left and right).

☞ 2. Add the data values (ex: 15=1+2+4+8) from the selected options.

☞ 3. Enter in address location (left and right digits).

NOTE: Dark shaded data value box shows option not avialable.

ADDRESS 0718, 0719, 0720, 0721 & 0722 (SYSTEM OPTIONS)

ADDRESS 0718

SYSTEM OPTIONS	LEFT DATA VALUES (CIRCLE ✐)	LEFT DIGIT (SUM OF DATA VALUES)	RIGHT DIGIT (SUM OF DATA VALUES)	RIGHT DATA VALUES (CIRCLE ✐)	SYSTEM OPTIONS
RESERVED	1			1	Opening Report Only after Alarm Report
Enable AutoArm if not closed at end of windows	2			2	Closing Report Only on Conditional Close
Disable Time/Date at Keypad	4			4	Incl. Sel./Grp. Bypass in Cond. Close /Status
RESERVED	8			8	Status Report

[Default = •(blank) •(blank)]

ADDRESS 0719

SYSTEM OPTIONS	LEFT DATA VALUES (CIRCLE ✐)	LEFT DIGIT (SUM OF DATA VALUES)	RIGHT DIGIT (SUM OF DATA VALUES)	RIGHT DATA VALUES (CIRCLE ✐)	SYSTEM OPTIONS
Access Control on PGM2 Output	1			1	Auto Bell Test on Arming
Maintained Keyswitch Arming	2			2	Auto Reset after Burglary Outout Timeout
Enable Manager's Mode	4			4	Suppress Bypass Reminder when Armed
Disable Instant Mode	8			8	Enable Local Alarm on First "ZoneAND" Trip

[Default = •(blank) •(blank)]

ADDRESS 0720

SYSTEM OPTIONS	LEFT DATA VALUES (CIRCLE ✐)	LEFT DIGIT (SUM OF DATA VALUES)	RIGHT DIGIT (SUM OF DATA VALUES)	RIGHT DATA VALUES (CIRCLE ✐)	SYSTEM OPTIONS
Disable Function Mode Download	1			1	Interior 1 Normally Byapssed
Disable Callback Download	2			2	Enable 99 as Ambush code
PGM2 Output Chirp on Keyfob Arming	4			4	Reset Day Zone with Arm/Disarm Only
Change Pulse Output to Cadence	8			8	Enable Residential Fire

[Default = •(blank) •(blank)]

ADDRESS 0721

SYSTEM OPTIONS	LEFT DATA VALUES (CIRCLE ✐)	LEFT DIGIT (SUM OF DATA VALUES)	RIGHT DIGIT (SUM OF DATA VALUES)	RIGHT DATA VALUES (CIRCLE ✐)	SYSTEM OPTIONS
Line-Fault Test only when Armed	1			1	Enable Zone Doubling (Zones 9-16)
Enable Line-Fault Test	2			2	Wireless Trouble Activates Telco 1
RESERVED	4			4	Wireless Trouble Activates Telco 3
RESERVED	8			8	RESERVED

Default depends on Easy Menu Question
"EZ ZONE DOUBLING? Y/N".
If yes, then [Default = •(blank) 1].
If no, then [Default = •(blank) •(blank)].

ADDRESS 0722

SYSTEM OPTIONS	LEFT DATA VALUES (CIRCLE ✐)	LEFT DIGIT (SUM OF DATA VALUES)	RIGHT DIGIT (SUM OF DATA VALUES)	RIGHT DATA VALUES (CIRCLE ✐)	SYSTEM OPTIONS
Don't Clear PGM2 Output with Arm/Disarm	1			1	Automatic Interior Bypass
Two Ring Download	2			2	Veriphone Zones trip PGM2 Output
RESERVED	4			4	Veriphone Zones over Priority Alarms
RESERVED	8			8	RESERVED

[Default = •(blank) •(blank)]

☞ 1. Select the desired option by circling ✐ the data values for each digit (left and right).

☞ 2. Add the data values (ex: 15=1+2+4+8) from the selected options.

☞ 3. Enter in address location (left and right digits).

NOTE: Dark shaded data value box shows option not avialable.

NOTE: To select "Line-Fault Test only when Armed", you must also select "Enable Line-Fault Test" at address 0721.

ADDRESS 0170-0191, 0192-0213, 0214-0235 (CS RECEIVER OPTIONS)

CS Receiver 1 Format	ADDRESS 0170			CS Receiver 2 Format	ADDRESS 0192			CS Receiver 3 Format	ADDRESS 0214	
	L	R			L	R			L	R
	•(blank)				•(blank)				•(blank)	

DATA ENTRY RIGHT	CS RECEIVER FORMAT
•(blank)	Ademco Slow, Silent Knight Slow
2	Radionics Fast
3	Silent Knight Fast
4	Radionics, DCI, Franklin Slow
5	Universal High Speed
B	SIA
C	Ademco Point ID
E	Pager

Default for CS Receiver 1 Format depends on Easy Menu Question "RCVR FORMAT". [Default = •(blank) •(blank)] for CS Receivers 2 and 3 Formats.

CS RECEIVER FORMATS: Up to 3 CS Formats may be programmed.

☞ 1. Select the desired CS Receiver Format from the table shown.

☞ 2. Enter in the corresponding right digit address location (left digit is not used) for each CS Receiver. **NOTE:** Dark shaded data value box shows option not avialable.

CS RECEIVER OPTIONS	LEFT DATA VALUES (CIRCLE ✏)
Sum Check	1
3/1 with Extended Restores	2
RESERVED	4
RESERVED	8

ADDRESS 0171 (CS RECEIVER 1 OPTIONS)

LEFT DIGIT (SUM OF DATA VALUES)	RIGHT DIGIT (SUM OF DATA VALUES)

[Default = •(blank) •(blank)]

RIGHT DATA VALUES (CIRCLE ✏)	CS RECEIVER OPTIONS
1	1400Hz Handshake/Kissoff *
2	2300Hz Handshake/Kissoff *
4	Enable Zone Number on Pulse Alarm
8	Single Digit Only

CS RECEIVER OPTIONS	LEFT DATA VALUES (CIRCLE ✏)
Sum Check	1
3/1 with Extended Restores	2
RESERVED	4
RESERVED	8

ADDRESS 0193 (CS RECEIVER 2 OPTIONS)

LEFT DIGIT (SUM OF DATA VALUES)	RIGHT DIGIT (SUM OF DATA VALUES)

[Default = •(blank) •(blank)]

RIGHT DATA VALUES (CIRCLE ✏)	CS RECEIVER OPTIONS
1	1400Hz Handshake/Kissoff *
2	2300Hz Handshake/Kissoff *
4	Enable Zone Number on Pulse Alarm

CS RECEIVER OPTIONS	LEFT DATA VALUES (CIRCLE ✏)
Sum Check	1
3/1 with Extended Restores	2
RESERVED	4
RESERVED	8

ADDRESS 0215 (CS RECEIVER 3 OPTIONS)

LEFT DIGIT (SUM OF DATA VALUES)	RIGHT DIGIT (SUM OF DATA VALUES)

[Default = •(blank) •(blank)]

RIGHT DATA VALUES (CIRCLE ✏)	CS RECEIVER OPTIONS
1	1400Hz Handshake/Kissoff *
2	2300Hz Handshake/Kissoff *
4	Enable Zone Number on Pulse Alarm

CS RECEIVER OPTIONS: Select options for any of the three CS Receivers.

☞ 1. Select the desired option by circling ✏ the data values for each digit (left and right).

☞ 2. Add the data values (ex: 15=1+2+4+8) from the selected options.

☞ 3. Enter in address location (left and right digits).

NOTE: Dark shaded data value box shows option not avialable.

NOTE: * If both are selected, 1400Hz has priority over 2300Hz

CS Receiver 1 Telephone Number (Digits 1-20)	ADDRESS 0172-0191 (RIGHT DIGITS 1-20)																			
	0172	0173	0174	0175	0176	0177	0178	0179	0180	0181	0182	0183	0184	0185	0186	0187	0188	0189	0190	0191
	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R

CS Receiver 2 Telephone Number (Digits 1-20)	ADDRESS 0194-0213 (RIGHT DIGITS 1-20)																			
	0194	0195	0196	0197	0198	0199	0200	0201	0202	0203	0204	0205	0206	0207	0208	0209	0210	0211	0212	0213
	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R

CS Receiver 3 Telephone Number (Digits 1-20)	ADDRESS 0216-0235 (RIGHT DIGITS 1-20)																			
	0216	0217	0218	0219	0220	0221	0222	0223	0224	0225	0226	0227	0228	0229	0230	0231	0232	0233	0234	0235
	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R

Default for CS Receiver 1 Telephone Number depends on Easy Menu Question "CENTRAL PHONE #". [Default = •(blank)] across digits 1-20 for CS Receiver Telephone Numbers 2 and 3.

CS RECEIVER TELEPHONE NUMBERS: Enter telephone numbers for any of the three CS Receivers.

☞ 1. Enter in right digit only (left digit is not used).

☞ 1. Enter up to 20 digits from left to right. **NOTE:** leave trailing boxes blank (•).

☞ 3. Valid entries are: 1-9, B = ✱ button, C = # button, D = 3 sec. pause, E = Wait for dial tone, F = Ignore location

ADDRESS 0259-0347 (CS REPORTING OPTIONS)

CS Telco 1 Subscriber Opening/Closing ID Number (Area 1)	ADDRESS 0259-0262 (RIGHT DIGITS 1-4)			
	0259	0260	0261	0262
	R	R	R	R

CS Telco 1 Subscriber Opening/Closing ID Number (Area 2)	ADDRESS 0263-0266 (RIGHT DIGITS 1-4)			
	0263	0264	0265	0266
	R	R	R	R

CS Telco 1 Subscriber Event ID Number (Area 1)	ADDRESS 0267-0270 (RIGHT DIGITS 1-4)			
	0267	0268	0269	0270
	R	R	R	R

CS Telco 1 Subscriber Event ID Number (Area 2)	ADDRESS 0271-0274 (RIGHT DIGITS 1-4)			
	0271	0272	0273	0274
	R	R	R	R

CS Telco 1 Subscriber Event ID Number (System)	ADDRESS 0275-0278 (RIGHT DIGITS 1-4)			
	0275	0276	0277	0278
	R	R	R	R

CS Telco 2 Subscriber Opening/Closing ID Number (Area 1)	ADDRESS 0279-0282 (RIGHT DIGITS 1-4)			
	0279	0280	0281	0282
	R	R	R	R

CS Telco 2 Subscriber Opening/Closing ID Number (Area 2)	ADDRESS 0283-0286 (RIGHT DIGITS 1-4)			
	0283	0284	0285	0286
	R	R	R	R

CS Telco 2 Subscriber Event ID Number (Area 1)	ADDRESS 0287-0290 (RIGHT DIGITS 1-4)			
	0287	0288	0289	0290
	R	R	R	R

CS Telco 2 Subscriber Event ID Number (Area 2)	ADDRESS 0291-0294 (RIGHT DIGITS 1-4)			
	0291	0292	0293	0294
	R	R	R	R

CS Telco 2 Subscriber Event ID Number (System)	ADDRESS 0295-0298 (RIGHT DIGITS 1-4)			
	0295	0296	0297	0298
	R	R	R	R

CS Telco 3 Subscriber Opening/Closing ID Number (Area 1)	ADDRESS 0299-0302 (RIGHT DIGITS 1-4)			
	0299	0300	0301	0302
	R	R	R	R

CS Telco 3 Subscriber Opening/Closing ID Number (Area 2)	ADDRESS 0303-0306 (RIGHT DIGITS 1-4)			
	0303	0304	0305	0306
	R	R	R	R

CS Telco 3 Subscriber Event ID Number (Area 1)	ADDRESS 0307-0310 (RIGHT DIGITS 1-4)			
	0307	0308	0309	0310
	R	R	R	R

CS Telco 3 Subscriber Event ID Number (Area 2)	ADDRESS 0311-0314 (RIGHT DIGITS 1-4)			
	0311	0312	0313	0314
	R	R	R	R

CS Telco 3 Subscriber Event ID Number (System)	ADDRESS 0315-0318 (RIGHT DIGITS 1-4)			
	0315	0316	0317	0318
	R	R	R	R

Default for CS Telco 1 Subsriber Event ID Number (Area 1) depends on Easy Menu Question "ACCOUNT #". [Default = •(blank) •(blank) •(blank) •(blank)] for all other ID Numbers.

CS TELCO SUBSCRIBER ID NUMBERS: Enter the Subscriber Opening/Closing and Event ID Numbers for any of the 3 CS Receivers.

☞ 1. Enter in corresponding right digit address location (left digit is not used).

☞ 2. Enter 3 or 4 digits (depending on the CS receiver format) for each subscriber number from left to right.
   NOTE: Leave trailing boxes blank (•).

☞ 3. Valid entries are: 1-9, 0 and B-F. **NOTE:** A is not permitted.

CS REPORTING CODES	ADDRESS 0319-0330		
	LEFT	ADDR	RIGHT
Alarm Restore	•(blank)	0319	
Trouble	•(blank)	0320	
Trouble Restore	•(blank)	0321	
Xmitter Low Battery	•(blank)	0322	
Xmitter Supervision	•(blank)	0323	
Xmitter Tamper	•(blank)	0324	
Opening	•(blank)	0326	
Closing	•(blank)	0327	
Opening after Alarm		0328	
Conditional Close		0329	
Fail to Open		0330	

[Default = •(blank) •(blank) from address 0319-0330]

[Default = •(blank) •(blank) from address 0333-0347]

CS REPORTING CODES	ADDRESS 0333-0347		
	LEFT	ADDR	RIGHT
Telco Fail		0333	
RF Rec. Trouble		0334	
Memory Fail		0335	
Low Battery		0336	
Panel AC Fail		0337	
EZM Tamper		0338	
Alarm Output Superv.		0339	
Ambush		0340	
Panic		0341	
Fire		0342	
Auxiliary		0343	
Tamper		0344	
Fail to Close		0345	
Test Timer		0346	
Keyfob Low Battery		0347	

CS REPORTING CODES:

☞ 1. Enter in corresponding address location (left and right digits).
   NOTE: Left digit is the first digit and right digit is the second digit in a two digit CS receiver format.

☞ 2. Valid entries are: 1-9, 0 and B-F.
   NOTE: A is not permitted.

☞ 3. To disable a code leave boxes blank (•).

NOTE: Dark shaded data value box shows option not avialable.

ADDRESS 0358-0429 (CS REPORTING OPTIONS)

ADDRESS 0358-0365								ADDRESS 0366-0369				ADDRESS 0370-0373			
CONTROL PANEL ZONES REPORT CODE								GROUP 1 ZONES REPORT CODE				GROUP 2 ZONES REPORT CODE			
ZONE 1	ZONE 2	ZONE 3	ZONE 4	ZONE 5	ZONE 6	ZONE 7	ZONE 8	ZONE 9	ZONE 10	ZONE 11	ZONE 12	ZONE 13	ZONE 14	ZONE 15	ZONE 16
0358	0359	0360	0361	0362	0363	0364	0365	0366	0367	0368	0369	0370	0371	0372	0373
L R	L R	L R	L R	L R	L R	L R	L R	L R	L R	L R	L R	L R	L R	L R	L R

ADDRESS 0374-0377				ADDRESS 0378-0381				ADDRESS 0382-0385				ADDRESS 0386-0389			
GROUP 3 ZONES REPORT CODE				GROUP 4 ZONES REPORT CODE				GROUP 5 ZONES REPORT CODE				GROUP 6 ZONES REPORT CODE			
ZONE 17	ZONE 18	ZONE 19	ZONE 20	ZONE 21	ZONE 22	ZONE 23	ZONE 24	ZONE 25	ZONE 26	ZONE 27	ZONE 28	ZONE 29	ZONE 30	ZONE 31	ZONE 32
0374	0375	0376	0377	0378	0379	0380	0381	0382	0383	0384	0385	0386	0387	0388	0389
L R	L R	L R	L R	L R	L R	L R	L R	L R	L R	L R	L R	L R	L R	L R	L R

Default for Group Zone Report Codes depends on Easy Menu Question "RCVR FORMAT".

ZONE REPORT CODE OPTIONS	
DATA ENTRIES	
LEFT	RIGHT

PULSE EVENT CODE will be the first digit of the 2 digit reporting code. the second digit will be the second digit of the reporting zone. For example, for zone 9 (address 0366), if the right digit is "3", then the reporting code is "39". For example, for zone 15 (address 0372), if the right digit is "4", then the reporting code is "45".

☞ 1. Enter the desired Pulse Event Code for each zone.

DATA ENTRIES LEFT	MODEM CODE
1	Fire *
2	Panic
3	Burglary
4	Hold up
7	Gas Alarm
8	Heat Alarm
0	Auxiliary Alarm
B	24 Hour Auxiliary

MODEM CODES determine the zone types reported for the following formats: SIA and ADEMCO Point ID.

☞ 1. Select the desired Modem Code for each zone from the table shown.

AREA	RIGHT DATA VALUES (CIRCLE ✐)
Area 1	1
Area 2	2
Reserved	4
Reserved	8

Disable Opening Reports	
ADDRESS 0426	
LEFT DIGIT (SUM OF DATA VALUES)	RIGHT DIGIT
	•(blank)

[Default = •(blank) •(blank)]

AREA	RIGHT DATA VALUES (CIRCLE ✐)
Area 1	1
Area 2	2
Reserved	4
Reserved	8

Disable Closing Reports	
ADDRESS 0427	
LEFT DIGIT (SUM OF DATA VALUES)	RIGHT DIGIT
	•(blank)

[Default = •(blank) •(blank)]

CS REPORT OPTIONS	LEFT DATA VALUES (CIRCLE ✐)
Cancel Next Test Timer on any Rpt.	1
Disable Wait for Silence	2
Disable Wait for Handshake	4
Disable DialTone Detect	8

ADDRESS 0429	
LEFT DIGIT (SUM OF DATA VALUES)	RIGHT DIGIT (SUM OF DATA VALUES)

[Default = •(blank) •(blank)]

RIGHT DATA VALUES (CIRCLE ✐)	CS RECEIVER OPTIONS
1	Backup Report on Telco 2
2	Touchtone Dialing Only *
4	Touchtone Dialing w/ Rotary Backup
8	Transmit "402" Open/Close Code

NOTE: If Touchtone Dialing or Touchtone w/Rotary Backup is not selected, then Rotary Dialing is automatically selected.

☞ 1. Select the desired option by circling ✐ the data values for each digit (left and right).

☞ 2. Add the data values (ex: 15=1+2+4+8) from the selected options.

☞ 3. Enter in address location (left and right digits).

**NOTE:** Dark shaded data value box shows option not avialable.

ADDRESS 0430-0449 (CS REPORTING OPTIONS)

User Opening Telco 1	LEFT DATA VALUES				ADDR 0430		RIGHT DATA VALUES				LEFT DATA VALUES				ADDR 0431		RIGHT DATA VALUES			
	User 8	User 7	User 6	User 5	LEFT	RIGHT	User 4	User 3	User 2	User 1	User 16	User 15	User 14	User 13	LEFT	RIGHT	User 12	User 11	User 10	User 9
	8	4	2	1			8	4	1	1	8	4	2	1			8	4	2	1

User Opening Telco 1	LEFT DATA VALUES				ADDR 0433		RIGHT DATA VALUES				LEFT DATA VALUES				ADDR 0432		RIGHT DATA VALUES			
	User 32	User 31	User 30	User 29	LEFT	RIGHT	User 28	User 27	User 26	User 25	User 24	User 23	User 22	User 21	LEFT	RIGHT	User 20	User 19	User 18	User 17
	8	4	2	1			8	4	1	1	8	4	2	1			8	4	2	1

User Opening Telco 1	ADDR 0434		RIGHT DATA VALUES			
	LEFT	RIGHT	User 00	User 99	User 98	User 97
	(blank)		8	4	2	1

User 97 = Auto Arming/Disarming
User 98 = Quickloader Arming/Disarming
User 99 = Easy Arming (Openings not aplicable)
User 00 = Keyswitch Arming

NOTE: These opening events will report as the user number shown.

User Closing Telco 1	LEFT DATA VALUES				ADDR 0435		RIGHT DATA VALUES				LEFT DATA VALUES				ADDR 0436		RIGHT DATA VALUES			
	User 8	User 7	User 6	User 5	LEFT	RIGHT	User 4	User 3	User 2	User 1	User 16	User 15	User 14	User 13	LEFT	RIGHT	User 12	User 11	User 10	User 9
	8	4	2	1			8	4	1	1	8	4	2	1			8	4	2	1

User Closing Telco 1	LEFT DATA VALUES				ADDR 0438		RIGHT DATA VALUES				LEFT DATA VALUES				ADDR 0437		RIGHT DATA VALUES			
	User 32	User 31	User 30	User 29	LEFT	RIGHT	User 28	User 27	User 26	User 25	User 24	User 23	User 22	User 21	LEFT	RIGHT	User 20	User 19	User 18	User 17
	8	4	2	1			8	4	1	1	8	4	2	1			8	4	2	1

User Closing Telco 1	ADDR 0439		RIGHT DATA VALUES			
	LEFT	RIGHT	User 00	User 99	User 98	User 97
			8	4	2	1

User 97 = Auto Arming/Disarming
User 98 = Quickloader Arming/Disarming
User 99 = Easy Arming (Openings not aplicable)
User 00 = Keyswitch Arming

NOTE: These opening events will report as the user number shown.

User Opening Telco 3	LEFT DATA VALUES				ADDR 0440		RIGHT DATA VALUES				LEFT DATA VALUES				ADDR 0441		RIGHT DATA VALUES			
	User 8	User 7	User 6	User 5	LEFT	RIGHT	User 4	User 3	User 2	User 1	User 16	User 15	User 14	User 13	LEFT	RIGHT	User 12	User 11	User 10	User 9
	8	4	2	1			8	4	1	1	8	4	2	1			8	4	2	1

User Opening Telco 3	LEFT DATA VALUES				ADDR 0443		RIGHT DATA VALUES				LEFT DATA VALUES				ADDR 0442		RIGHT DATA VALUES			
	User 32	User 31	User 30	User 29	LEFT	RIGHT	User 28	User 27	User 26	User 25	User 24	User 23	User 22	User 21	LEFT	RIGHT	User 20	User 19	User 18	User 17
	8	4	2	1			8	4	1	1	8	4	2	1			8	4	2	1

User Opening Telco 3	ADDR 0444		RIGHT DATA VALUES			
	LEFT	RIGHT	User 00	User 99	User 98	User 97
			8	4	2	1

User 97 = Auto Arming/Disarming
User 98 = Quickloader Arming/Disarming
User 99 = Easy Arming (Openings not aplicable)
User 00 = Keyswitch Arming

NOTE: These opening events will report as the user number shown.

User Closing Telco 3	LEFT DATA VALUES				ADDR 0445		RIGHT DATA VALUES				LEFT DATA VALUES				ADDR 0446		RIGHT DATA VALUES			
	User 8	User 7	User 6	User 5	LEFT	RIGHT	User 4	User 3	User 2	User 1	User 16	User 15	User 14	User 13	LEFT	RIGHT	User 12	User 11	User 10	User 9
	8	4	2	1			8	4	1	1	8	4	2	1			8	4	2	1

User Closing Telco 3	LEFT DATA VALUES				ADDR 0448		RIGHT DATA VALUES				LEFT DATA VALUES				ADDR 0447		RIGHT DATA VALUES			
	User 32	User 31	User 30	User 29	LEFT	RIGHT	User 28	User 27	User 26	User 25	User 24	User 23	User 22	User 21	LEFT	RIGHT	User 20	User 19	User 18	User 17
	8	4	2	1			8	4	1	1	8	4	2	1			8	4	2	1

User Closing Telco 3	ADDR 0449		RIGHT DATA VALUES			
	LEFT	RIGHT	User 00	User 99	User 98	User 97
			8	4	2	1

[Default = •(blank) •(blank) from address 0430-0449]

☞ 1. Select the desired option by circling ✒ the data values for each digit (left and right).

☞ 2. Add the data values (ex: 15=1+2+4+8) from the selected options.

☞ 3. Enter in address location (left and right digits).

NOTE: Dark shaded data value box shows option not avialable.

User 97 = Auto Arming/Disarming
User 98 = Quickloader Arming/Disarming
User 99 = Easy Arming (Openings not aplicable)
User 00 = Keyswitch Arming

ADDRESS 0737 TO 0742 (ENABLE EZM GROUP OPTIONS)

Group 1 (Zns. 9,10,11,12)		
ADDRESS 0737		
LEFT	RIGHT	
•(blank)		

Group 2 (Zns. 13,14,15,16)		
ADDRESS 0738		
LEFT	RIGHT	
•(blank)		

Group 3 (Zns. 17,18,19,20)		
ADDRESS 0739		
LEFT	RIGHT	
•(blank)		

Group 4 (Zns. 21,22, 23,24)		
ADDRESS 0740		
LEFT	RIGHT	
•(blank)		

Group 5 (Zns. 25,26,27,28)		
ADDRESS 0741		
LEFT	RIGHT	
•(blank)		

Group 6 (Zns. 29,30,31,32)		
ADDRESS 0742		
LEFT	RIGHT	
•(blank)		

[Default = •(blank) •(blank)] [Default = •(blank) •(blank)] [Default = •(blank) •(blank)] [Default = •(blank) •(blank)] [Default = •(blank) •(blank)] [Default = •(blank) •(blank)]

EZM TYPE		
DATA ENTRIES	OPTION	
RIGHT		
•(blank)	Not Used	
1	4-Zone EZM	
4	2-Zone EZM	

EZM TYPES: Up to 6 Groups of 4 Zones each may be programmed depending on the number of zones used and which EZM modules are connected. **NOTE:** Each 4 zone EZM represents 1 group; each 8 zone EZM represents 2 groups. *If Zone Doubling is enabled* (Address 0721), then the basic zone configuration increases from 8 to 16. In this case, groups 1 and 2 must not be used.

☞ 1. Select EZM type from the table shown.

☞ 2. Enter in corresponding address locations above (right digit only).
NOTE: Dark shaded data value box shows option not avialable.

ADDRESS 0743 & 0744 (AREA ARMING OPTIONS)

Priority Arming/ Area 1	ADDRESS 0743	
	L	R
	•(blank)	

[Default = •(blank) •(blank)]

Priority Arming/ Area 1	ADDRESS 0744	
	L	R
	•(blank)	

[Default = •(blank) •(blank)]

PRIORITY AREA ARMING:

☞ 1. Select option from the table shown.

☞ 2. Enter in corresponding right digit address location (left digit is not used).
NOTE: Dark shaded data value box shows option not avialable.

PIRORITY ARMING/AREA 1		
DATA ENTRIES		OPTION
LEFT	RIGHT	
•(blank)	•(blank)	Not Used
•(blank)	2	Enabled

PIRORITY ARMING/AREA 2		
DATA ENTRIES		OPTION
LEFT	RIGHT	
•(blank)	•(blank)	Not Used
•(blank)	1	Enabled

ADDRESS 0745 TO 0749 (AREA BELL CONTROL OPTIONS)

Burglary Output Turns Off upon Disarm			RIGHT DATA VALUES (CIRCLE ✎)	Output Turns Off when this Area Disarms
ADDRESS 0745			1	Area 1
LEFT DIGIT	RIGHT DIGIT (SUM OF DATA VALUES)		2	Area 2
•(blank)			4	Reserved
			8	Reserved

[Default = •(blank) •(blank)]

Pulse Output Turns Off upon Disarm			RIGHT DATA VALUES (CIRCLE ✎)	Output Turns Off when this Area Disarms
ADDRESS 0746			1	Area 1
LEFT DIGIT	RIGHT DIGIT (SUM OF DATA VALUES)		2	Area 2
•(blank)			4	Reserved
			8	Reserved

[Default = •(blank) •(blank)]

PGM1 Output Turns Off upon Disarm			RIGHT DATA VALUES (CIRCLE ✎)	Output Turns Off when this Area Disarms
ADDRESS 0747			1	Area 1
LEFT DIGIT	RIGHT DIGIT (SUM OF DATA VALUES)		2	Area 2
•(blank)			4	Reserved
			8	Reserved

[Default = •(blank) •(blank)]

PGM2 Output Turns Off upon Disarm			RIGHT DATA VALUES (CIRCLE ✎)	Output Turns Off when this Area Disarms
ADDRESS 0749			1	Area 1
LEFT DIGIT	RIGHT DIGIT (SUM OF DATA VALUES)		2	Area 2
•(blank)			4	Reserved
			8	Reserved

[Default = •(blank) •(blank)]

OUTPUT TURNS OFF UPON DISARM: Select options for any of the 4 Outputs.

☞ 1. Select the desired option by circling ✎ the data values for right digit only (left is not used).

☞ 2. Add the data values (ex: 15=1+2+4+8) from the selected options.

☞ 3. Enter in right digit address location.
NOTE: Dark shaded data value box shows option not avialable.

ADDRESS 0723 TO 0736 (KEYPAD OPTIONS)

Keypad 1 Area Assingment	ADDRESS 0723		
		L	R
		•(blank)	

[Default = •(blank) 1]

Keypad 2 Area Assingment	ADDRESS 0724		
		L	R
		•(blank)	

[Default = •(blank) 1]

Keypad 3 Area Assingment	ADDRESS 0725		
		L	R
		•(blank)	

[Default = •(blank) 1]

Keypad 4 Area Assingment	ADDRESS 0726		
		L	R
		•(blank)	

[Default = •(blank) 1]

Keypad 5 Area Assingment	ADDRESS 0727		
		L	R
		•(blank)	

[Default = •(blank) 1]

Keypad 6 Area Assingment	ADDRESS 0728		
		L	R
		•(blank)	

[Default = •(blank) 1]

Keypad 7 Area Assingment	ADDRESS 0729		
		L	R
		•(blank)	

[Default = •(blank) 1]

KEYPAD AREA ASSIGNMENT		
DATA ENTRIES		OPTION
LEFT	RIGHT	
•(blank)	1	Area 1
•(blank)	2	Area 2

KEYPAD AREA ASSIGNMENT: Up to 7 keypads may be programmed, if they are connected.

NOTE: Keypad Number is configured by setting its jumper settings. By default from the factory, each keypad is configured as number 1.

☞ 1. Select area assignment for each keypad from the table shown.

☞ 2. Enter in corresponding right digit address locations above (left digit is not used).

NOTE: Dark shaded data value box shows option not avialable.

KEYPAD NO.	KEYPAD OPTIONS				ADDRESS 0730-0736			KEYPAD OPTIONS			
	LEFT DATA VALUES (CIRCLE ✏)							RIGHT DATA VALUES (CIRCLE ✏)			
	RSRVD	PANEL ACCESS	EASY ARMING	AMBUSH	LEFT	ADDR	RIGHT	RSRVD	KEYPAD PANIC	KEYPAD AUX.	KEYPAD FIRE
1		4	2	1		0730			4	2	1
2		4	2	1		0731			4	2	1
3		4	2	1		0732			4	2	1
4		4	2	1		0733			4	2	1
5		4	2	1		0734			4	2	1
6		4	2	1		0735			4	2	1
7		4	2	1		0736			4	2	1

[Default = •(blank) •(blank) from address 0730-0736]

KEYPAD OPTIONS: Select options for any of the 7 keypads.

☞ 1. Select the desired option by circling ✏ the data values for each digit (left and right).

☞ 2. Add the data values (ex: 15=1+2+4+8) from the selected options.

☞ 3. Enter in address location (left and right digits).

NOTE: Dark shaded data value box shows option not avialable.

ADDRESS 0490 TO 0592 (ZONE OPTIONS - ZONES 1 TO 16)

ZONE OPTIONS	ZONES LEFT DATA VALUES (CIRCLE) ZN16	ZN15	ZN14	ZN13	L	ADDRESS 0546-0592	R	ZONES RIGHT DATA VALUES (CIRCLE) ZN12	ZN11	ZN10	ZN09	ZONES LEFT DATA VALUES (CIRCLE) ZN08	ZN07	ZN06	ZN05	L	ADDRESS 0490-0537	R	ZONES RIGHT DATA VALUES (CIRCLE) ZN04	ZN03	ZN02	ZN01
50ms Loop Response (1)	8	4	2	1				8	4	2	1	8	4	2	1		0490		8	4	2	1
Priority	8	4	2	1		0546		8	4	2	1	8	4	2	1		0491		8	4	2	1
Priority with Bypass	8	4	2	1		0547		8	4	2	1	8	4	2	1		0492		8	4	2	1
Auto-Bypass	8	4	2	1		0548		8	4	2	1	8	4	2	1		0493		8	4	2	1
Selective Bypass	8	4	2	1		0549		8	4	2	1	8	4	2	1		0494		8	4	2	1
Keyswitch Arming	8	4	2	1		0550		8	4	2	1	8	4	2	1		0495		8	4	2	1
Auto-Bypass Re-entry	8	4	2	1		0551		8	4	2	1	8	4	2	1		0496		8	4	2	1
Pre-Alarm Warning	8	4	2	1		0552		8	4	2	1	8	4	2	1		0497		8	4	2	1
Never Arm	8	4	2	1		0553		8	4	2	1	8	4	2	1		0498		8	4	2	1
24-Hour Zone	8	4	2	1		0554		8	4	2	1	8	4	2	1		0499		8	4	2	1
Alarm Output	8	4	2	1		0555		8	4	2	1	8	4	2	1		0500		8	4	2	1
Pulse Alarm Output	8	4	2	1		0556		8	4	2	1	8	4	2	1		0501		8	4	2	1
PGM1 Output	8	4	2	1		0557		8	4	2	1	8	4	2	1		0502		8	4	2	1
PGM2 Output	8	4	2	1		0558		8	4	2	1	8	4	2	1		0503		8	4	2	1
Entry/Exit 1	8	4	2	1		0559		8	4	2	1	8	4	2	1		0504		8	4	2	1
Entry/Exit 2	8	4	2	1		0560		8	4	2	1	8	4	2	1		0505		8	4	2	1
Exit/Entry Follower	8	4	2	1		0561		8	4	2	1	8	4	2	1		0506		8	4	2	1
Auto Reset	8	4	2	1		0562		8	4	2	1	8	4	2	1		0507		8	4	2	1
Swinger Shutdown	8	4	2	1		0563		8	4	2	1	8	4	2	1		0508		8	4	2	1
Chime	8	4	2	1		0564		8	4	2	1	8	4	2	1		0509		8	4	2	1
Abort Delay	8	4	2	1		0565		8	4	2	1	8	4	2	1		0510		8	4	2	1
Power-up Delay	8	4	2	1		0566		8	4	2	1	8	4	2	1		0511		8	4	2	1
Day Zone Open	8	4	2	1		0567		8	4	2	1	8	4	2	1		0512		8	4	2	1
Day Zone Short	8	4	2	1		0568		8	4	2	1	8	4	2	1		0513		8	4	2	1
Alarm on Day Zone	8	4	2	1		0569		8	4	2	1	8	4	2	1		0514		8	4	2	1
Alarm Telco 1	8	4	2	1		0570		8	4	2	1	8	4	2	1		0515		8	4	2	1
Alarm Restore 1	8	4	2	1		0571		8	4	2	1	8	4	2	1		0516		8	4	2	1
Trouble Telco 1	8	4	2	1		0572		8	4	2	1	8	4	2	1		0517		8	4	2	1
Trouble Restore 1	8	4	2	1		0573		8	4	2	1	8	4	2	1		0518		8	4	2	1
Alarm Telco 3	8	4	2	1		0574		8	4	2	1	8	4	2	1		0519		8	4	2	1
Alarm Restore 3	8	4	2	1		0575		8	4	2	1	8	4	2	1		0520		8	4	2	1
Trouble Telco 3	8	4	2	1		0576		8	4	2	1	8	4	2	1		0521		8	4	2	1
Trouble Restore 3	8	4	2	1		0577		8	4	2	1	8	4	2	1		0522		8	4	2	1
No EOL Resistor	8	4	2	1		0578		8	4	2	1	8	4	2	1		0523		8	4	2	1
Trouble on Open	8	4	2	1		0579		8	4	2	1	8	4	2	1		0524		8	4	2	1
Trouble on Short	8	4	2	1		0580		8	4	2	1	8	4	2	1		0525		8	4	2	1
Zone Area 1	8	4	2	1		0581		8	4	2	1	8	4	2	1		0526		8	4	2	1
Zone Area 2	8	4	2	1		0582		8	4	2	1	8	4	2	1		0527		8	4	2	1
Interior Bypass	8	4	2	1		0583		8	4	2	1	8	4	2	1		0528		8	4	2	1
Keypad Sounder on Alarm	8	4	2	1		0584		8	4	2		8	4	2			0529		8	4	2	1
2-Wire Smoke Detectors (2)	8	4	2	1		*(shaded)*						8	4				0530					
Fire	8	4	2	1		0586		8	4	2	1	8	4	2	1		0531		8	4	2	1
Fire Alarm Verification (3)	8	4	2	1		0587		8	4	2	1	8	4	2	1		0532		8	4	2	1
RF Car Alarm	8	4	2	1		0588		8	4	2	1	8	4	2	1		0533		8	4	2	1
Zone ANDing Group 1	8	4	2	1		0589		8	4	2	1	8	4	2	1		0534		8	4	2	1
Zone ANDing Group 2	8	4	2	1		0590		8	4	2	1	8	4	2	1		0535		8	4	2	1
Zone ANDing Group 3	8	4	2	1		0591		8	4	2	1	8	4	2	1		0536		8	4	2	1
Zone ANDing Group 4	8	4	2	1		0592		8	4	2	1	8	4	2	1		0537		8	4	2	1

☞ 1   ☞ 2   ☞ 4   ☞ 4   ☞ 2   ☞ 2   ☞ 4   ☞ 4   ☞ 2

☞ 1. Select the desired zone option.

ZONE OPTIONS
50ms Loop Response
Priority
Priority with Bypass
Auto-Bypass
Selective Bypass

☞ 2. Enable desired options for each zone by drawing a circle 🖊 around its corresponding binary data value.

NOTE: No circle = feature disabled.

ZN04	ZN03	ZN02	ZN01	
8	4	2	(1)	Draw Circle

☞ 3. Look up table for data entry.

DIGIT VALUE	DATA ENTRY
8 4 2 1	Blank (·)
8 4 2 (1)	1
8 4 (2) 1	2
8 4 (2)(1)	3
8 (4) 2 1	4
8 (4) 2 (1)	5
8 (4)(2) 1	6
8 (4)(2)(1)	7

DIGIT VALUE	DATA ENTRY
(8) 4 2 1	8
(8) 4 2 (1)	9
(8) 4 (2) 1	0
(8) 4 (2)(1)	B
(8)(4) 2 1	C
(8)(4) 2 (1)	D
(8)(4)(2) 1	E
(8)(4)(2)(1)	F

☞ 4. Enter data in address locations (left and right digits).

ADDRESS LOCATION		
L	ADDR	R
·(blank)	0490	1

NOTE: Dark shaded data value box shows option not avialable.

NOTE: See Direct Address Programming Example on page 20.

NOTES: 1. 50ms Loop Response only available for zones 1-8.
2. 2-wire Smoke Detectors only available for zones 7 & 8.
3. If Fire Alarm Verification is selected, then Fire must also be selected.

ADDRESS 0601 TO 0702 (ZONE OPTIONS - ZONES 17 TO 32)

ZONE OPTIONS	ZONES LEFT DATA VALUES (CIRCLE)				ADDRESS 0656-0702			ZONES RIGHT DATA VALUES (CIRCLE)				ZONES LEFT DATA VALUES (CIRCLE)				ADDRESS 0601-0647			ZONES RIGHT DATA VALUES (CIRCLE)			
	ZN32	ZN31	ZN30	ZN29	L	ADDR	R	ZN28	ZN27	ZN26	ZN25	ZN24	ZN23	ZN22	ZN21	L	ADDR	R	ZN20	ZN19	ZN18	ZN17
50ms Loop Response (1)	8	4	2	1				8	4	2	1	8	4	2	1				8	4	2	1
Priority	8	4	2	1		0656		8	4	2	1	8	4	2	1		0601		8	4	2	1
Priority with Bypass	8	4	2	1		0657		8	4	2	1	8	4	2	1		0602		8	4	2	1
Auto-Bypass	8	4	2	1		0658		8	4	2	1	8	4	2	1		0603		8	4	2	1
Selective Bypass	8	4	2	1		0659		8	4	2	1	8	4	2	1		0604		8	4	2	1
Keyswitch Arming	8	4	2	1		0660		8	4	2	1	8	4	2	1		0605		8	4	2	1
Auto-Bypass Re-entry	8	4	2	1		0661		8	4	2	1	8	4	2	1		0606		8	4	2	1
Pre-Alarm Warning	8	4	2	1		0662		8	4	2	1	8	4	2	1		0607		8	4	2	1
Never Arm	8	4	2	1		0663		8	4	2	1	8	4	2	1		0608		8	4	2	1
24-Hour Zone	8	4	2	1		0664		8	4	2	1	8	4	2	1		0609		8	4	2	1
Alarm Output	8	4	2	1		0665		8	4	2	1	8	4	2	1		0610		8	4	2	1
Pulse Alarm Output	8	4	2	1		0666		8	4	2	1	8	4	2	1		0611		8	4	2	1
PGM1 Output	8	4	2	1		0667		8	4	2	1	8	4	2	1		0612		8	4	2	1
PGM2 Output	8	4	2	1		0668		8	4	2	1	8	4	2	1		0613		8	4	2	1
Entry/Exit 1	8	4	2	1		0669		8	4	2	1	8	4	2	1		0614		8	4	2	1
Entry/Exit 2	8	4	2	1		0670		8	4	2	1	8	4	2	1		0615		8	4	2	1
Exit/Entry Follower	8	4	2	1		0671		8	4	2	1	8	4	2	1		0616		8	4	2	1
Auto Reset	8	4	2	1		0672		8	4	2	1	8	4	2	1		0617		8	4	2	1
Swinger Shutdown	8	4	2	1		0673		8	4	2	1	8	4	2	1		0618		8	4	2	1
Chime	8	4	2	1		0674		8	4	2	1	8	4	2	1		0619		8	4	2	1
Abort Delay	8	4	2	1		0675		8	4	2	1	8	4	2	1		0620		8	4	2	1
Power-up Delay	8	4	2	1		0676		8	4	2	1	8	4	2	1		0621		8	4	2	1
Day Zone Open	8	4	2	1		0677		8	4	2	1	8	4	2	1		0622		8	4	2	1
Day Zone Short	8	4	2	1		0678		8	4	2	1	8	4	2	1		0623		8	4	2	1
Alarm on Day Zone	8	4	2	1		0679		8	4	2	1	8	4	2	1		0624		8	4	2	1
Alarm Telco 1	8	4	2	1		0680		8	4	2	1	8	4	2	1		0625		8	4	2	1
Alarm Restore 1	8	4	2	1		0681		8	4	2	1	8	4	2	1		0626		8	4	2	1
Trouble Telco 1	8	4	2	1		0682		8	4	2	1	8	4	2	1		0627		8	4	2	1
Trouble Restore 1	8	4	2	1		0683		8	4	2	1	8	4	2	1		0628		8	4	2	1
Alarm Telco 3	8	4	2	1		0684		8	4	2	1	8	4	2	1		0629		8	4	2	1
Alarm Restore 3	8	4	2	1		0685		8	4	2	1	8	4	2	1		0630		8	4	2	1
Trouble Telco 3	8	4	2	1		0686		8	4	2	1	8	4	2	1		0631		8	4	2	1
Trouble Restore 3	8	4	2	1		0687		8	4	2	1	8	4	2	1		0632		8	4	2	1
No EOL Resistor	8	4	2	1		0688		8	4	2	1	8	4	2	1		0633		8	4	2	1
Trouble on Open	8	4	2	1		0689		8	4	2	1	8	4	2	1		0634		8	4	2	1
Trouble on Short	8	4	2	1		0690		8	4	2	1	8	4	2	1		0635		8	4	2	1
Zone Area 1	8	4	2	1		0691		8	4	2	1	8	4	2	1		0636		8	4	2	1
Zone Area 2	8	4	2	1		0692		8	4	2	1	8	4	2	1		0637		8	4	2	1
Interior Bypass	8	4	2	1		0693		8	4	2	1	8	4	2	1		0638		8	4	2	1
Keypad Sounder on Alarm	8	4	2	1		0694		8	4	2	1	8	4	2	1		0639		8	4	2	1
2-Wire Smoke Detectors (2)	8	4	2	1				8	4	2	1	8	4	2	1		0640		8	4	2	1
Fire	8	4	2	1		0696		8	4	2	1	8	4	2	1		0641		8	4	2	1
Fire Alarm Verification (3)	8	4	2	1		0697		8	4	2	1	8	4	2	1		0642		8	4	2	1
RF Car Alarm	8	4	2	1		0698		8	4	2	1	8	4	2	1		0643		8	4	2	1
Zone ANDing Group 1	8	4	2	1		0699		8	4	2	1	8	4	2	1		0644		8	4	2	1
Zone ANDing Group 2	8	4	2	1		0700		8	4	2	1	8	4	2	1		0645		8	4	2	1
Zone ANDing Group 3	8	4	2	1		0701		8	4	2	1	8	4	2	1		0646		8	4	2	1
Zone ANDing Group 4	8	4	2	1		0702		8	4	2	1	8	4	2	1		0647		8	4	2	1

☞ 1   ☞ 2   ☞ 4   ☞ 4   ☞ 2   ☞ 2   ☞ 4   ☞ 4   ☞ 2

☞ 1. Select the desired zone option.

ZONE OPTIONS
50ms Loop Response
Priority
Priority with Bypass
Auto-Bypass
Selective Bypass

☞ 2. Enable desired options for each zone by drawing a circle ✎ around its corresponding binary data value.
NOTE: No circle = feature disabled.

ZN20	ZN19	ZN18	ZN17
8	4	2	①

Draw Circle

☞ 3. Look up table for data entry.

DIGIT VALUE	DATA ENTRY		DIGIT VALUE	DATA ENTRY
8 4 2 1	Blank (·)		⑧ 4 2 1	8
8 4 2 ①	1		⑧ 4 2 ①	9
8 4 ② 1	2		⑧ 4 ② 1	0
8 4 ② ①	3		⑧ 4 ② ①	B
8 ④ 2 1	4		⑧ ④ 2 1	C
8 ④ 2 ①	5		⑧ ④ 2 ①	D
8 ④ ② 1	6		⑧ ④ ② 1	E
8 ④ ② ①	7		⑧ ④ ② ①	F

☞ 4. Enter data in address locations (left and right digits).

ADDRESS LOCATION		
L	ADDR	R
·(blank)	0603	1

NOTE: Dark shaded data value box shows option not avialable.

NOTES: 1. 50ms Loop Response only available for zones 1-8.
2. 2-wire Smoke Detectors only available for zones 7 & 8.
3. If Fire Alarm Verification is selected, then Fire must also be selected.

NOTE: See Direct Address Programming Example on page 20.

ADDRESS 1038 TO 1053 & 1180 (RF RECEIVERS & SUPERVISORY TIMERS)

Number of RF Receivers	ADDRESS 1180		DATA ENTRIES	Number of RF Receivers
	L	R	RIGHT	
	• (blank)		• (blank)	None
			1	1
			2	2

Default for Number of Receivers depends on Easy Menu Question for RF Transmitters.

RF RECEIVERS: Up to 2 RF Receivers may be programmed. **NOTE:** This adds wireless capability to the system, increasing up to 32 the number of zones.

☞ 1. Select the number of receivers from the table shown.

☞ 2. Enter in corresponding right digit address location shown (left digit is not used).

RF SUPERVISORY TIMER	RF TRANSMITTER	ADDRESS 1038-1045		
		LEFT	ADDR	RIGHT
Type 0	Window/Door, 2 Pt.		1038	
Type 1	Window/Door, 2 Pt.		1039	
Type 2	Window/Door, 2 Pt.		1040	
Type 3	Window/Door, 2 Pt.		1041	
Type 4	Window/Door, 4 Pt.		1042	
Type 5	PIR		1043	
Type 6	PIR		1044	
Type 7	Smoke detector		1045	

[Default = • (blank) • (blank) from address 1038-1045]

RF SUPERVISORY TIMER	RF TRANSMITTER	ADDRESS 1046-1053		
		LEFT	ADDR	RIGHT
Type 8	Smoke Detector		1046	
Type 9	Keyfob		1047	
Type A	Dual Tech.		1048	
Type B	Keyfob		1049	
Type C	Window/Door, 2 Pt.		1050	
Type D	PIR		1051	
Type E	Smoke Detector		1052	
Type F	Napco Glass Break		1053	

[Default = • (blank) • (blank) from address 1046-1053]

RF SUPERVISORY TIMERS		
DATA ENTRIES		DELAY
LEFT	RIGHT	
• (blank)	• (blank)	0 min.
• (blank)	1	10 min.
• (blank)	2	20 min.
• (blank)	3	30 min.
• (blank)	4	40 min.
• (blank)	5	50 min.
• (blank)	6	60 min.
• (blank)	7	70 min.
• (blank)	8	80 min.
• (blank)	9	90 min.
• (blank)	0	100 min.
• (blank)	B	110 min.
• (blank)	C	120 min.
• (blank)	D	130 min.
• (blank)	E	140 min.
• (blank)	F	150 min.
1	• (blank)	160 min.
1	1	170 min.
1	2	180 min.
1	3	190 min.
1	4	200 min.
1	5	210 min.
1	6	220 min.
1	7	230 min.
1	8	240 min.
1	9	250 min.
1	0	260 min.
1	B	270 min.
1	C	280 min.
1	D	290 min.
1	E	300 min.
1	F	310 min.
2	• (blank)	320 min.
2	1	330 min.

RF SUPERVISORY TIMERS: RF Supervisory Timers may be programmed for each type of transmitter used.

☞ 1. Select delay (70-2550 min.) from the table shown.

☞ 2. Enter in corresponding address location shown (left and right digits).

☞ 3. For a desired *timer not listed* do the following:

A. Choose a desired timer (intervals of 10), ex: 200 min.

B. Divide it by 10, ex: 200/10 = 20

C. Divide it by 16

① Quotient ——→ Left Digit

16 ⟌ 20
− 16
④ Remainder ——→ Right Digit

RF SUPERVISORY TIMERS		
DATA ENTRIES		DELAY
LEFT	RIGHT	
2	2	340 min.
2	3	350 min.
2	4	360 min.
2	5	370 min.
2	6	380 min.
2	7	390 min.
2	8	400 min.
↓	↓	↓
F	F	2550 min. = 42 Hr., 30 min.

ADDRESS 0750 TO 0829 (EXTERNAL RELAY CONTROL)

ADDRESS 0750-1002 (RELAY EVENT 1)				
0750	0751	0752	0753	0754
L | R	L | R	L | R	L | R	L | R
•(blank)	•(blank)			

ADDRESS 0755-0759 (RELAY EVENT 2)				
0755	0756	0757	0758	0759
L | R	L | R	L | R	L | R	L | R
•(blank)	•(blank)			

ADDRESS 0760-0764 (RELAY EVENT 3)				
0760	0761	0762	0763	0764
L | R	L | R	L | R	L | R	L | R
•(blank)	•(blank)			

ADDRESS 0765-0769 (RELAY EVENT 4)				
0765	0766	0767	0768	0769
L | R	L | R	L | R	L | R	L | R
•(blank)	•(blank)			

ADDRESS 0750-0774 (RELAY EVENT 5)				
0770	0771	0772	0773	0774
L | R	L | R	L | R	L | R	L | R
•(blank)	•(blank)			

ADDRESS 0750-0779 (RELAY EVENT 6)				
0775	0776	0777	0778	0779
L | R	L | R	L | R	L | R	L | R
•(blank)	•(blank)			

ADDRESS 0780-0784 (RELAY EVENT 7)				
0780	0781	0782	0783	0784
L | R	L | R	L | R	L | R	L | R
•(blank)	•(blank)			

ADDRESS 0750-0789 (RELAY EVENT 8)				
0785	0786	0787	0788	0789
L | R	L | R	L | R	L | R	L | R
•(blank)	•(blank)			

ADDRESS 0790-0794 (RELAY EVENT 9)				
0790	0791	0792	0793	0794
L | R	L | R	L | R	L | R	L | R
•(blank)	•(blank)			

ADDRESS 0750-0799 (RELAY EVENT 10)				
0795	0796	0797	0798	0799
L | R	L | R	L | R	L | R	L | R
•(blank)	•(blank)			

ADDRESS 0800-0804 (RELAY EVENT 11)				
0800	0801	0802	0803	0804
L | R	L | R	L | R	L | R	L | R
•(blank)	•(blank)			

ADDRESS 0805-0809 (RELAY EVENT 12)				
0805	0806	0807	0808	0809
L | R	L | R	L | R	L | R	L | R
•(blank)	•(blank)			

ADDRESS 0750-0814 (RELAY EVENT 13)				
0810	0811	0812	0813	0814
L | R	L | R	L | R	L | R	L | R
•(blank)	•(blank)			

ADDRESS 0815-0819 (RELAY EVENT 14)				
0815	0816	0817	0818	0819
L | R	L | R	L | R	L | R	L | R
•(blank)	•(blank)			

ADDRESS 0820-0824 (RELAY EVENT 15)				
0820	0821	0822	0823	0824
L | R	L | R	L | R	L | R	L | R
•(blank)	•(blank)			

ADDRESS 0825-0829 (RELAY EVENT 16)				
0825	0826	0827	0828	0829
L | R	L | R	L | R	L | R	L | R
•(blank)	•(blank)			

RELAY EVENT OPTIONS				
RELAY	AREA	TIMEOUT	EVENT ID	COND.
L | R	L | R	L | R	L | R	L | R

☞ 1   ☞ 2   ☞ 3   ☞ 4   ☞ 5

[Default = •(blank) •(blank) from address 0750-0829]

RELAY EVENT RELAY # OPTIONS: Each relay event can be assigned to any of the 8 available relay numbers.

☞ 1. Select the relay from the table shown; enter in corresponding right digit address location (left digit is not used).

RELAY EVENT AREA OPTIONS: Each relay event can be assigned to Area 1 or Area 2.

☞ 2. Select the area from the table shown; enter in corresponding right digit address location (left digit is not used).

RELAY EVENT RELAY #	
DATA ENTRIES RIGHT	RELAY #
•(blank)	NONE
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8

RELAY EVENT AREAS	
DATA ENTRIES RIGHT	OFF/ON AREA DISARM
•(blank)	NONE
1	Area 1
2	Area 2

RELAY EVENT TIMEOUTS: Each relay event can be assigned a timeout depending on Alarm Type option.

☞ 3. If Alarm Type (see next page) is selected for timeout in minutes or seconds, select the timeout from the table shown in minutes or seconds and enter in corresponding address location (left digit and right digits).

RELAY EVENT TIMEOUTS (Alarm Type is selected for Timeout Type in min. or sec.)		
LEFT	RIGHT	TIMEOUT
•(blank)	•(blank)	0 min./sec.
•(blank)	1	1 min./sec.
•(blank)	2	2 min./sec.
•(blank)	3	3 min./sec.
•(blank)	4	4 min./sec.
•(blank)	5	5 min./sec.
•(blank)	6	6 min./sec.
•(blank)	7	7 min./sec.
•(blank)	8	8 min./sec.
•(blank)	9	9 min./sec.
•(blank)	0	10 min./sec.

RELAY EVENT TIMEOUTS (Alarm Type is selected for Timeout Type in min. or sec.)		
LEFT	RIGHT	TIMEOUT
•(blank)	B	11 min./sec.
•(blank)	C	12 min./sec.
•(blank)	D	13 min./sec.
•(blank)	E	14 min./sec.
•(blank)	F	15 min./sec.
1	•(blank)	16 min./sec.
1	1	17 min./sec.
1	2	18 min./sec.
1	3	19 min./sec.
1	4	20 min./sec.
1	5	21 min./sec.

RELAY EVENT TIMEOUTS (Alarm Type is selected for Timeout Type in min. or sec.)		
LEFT	RIGHT	TIMEOUT
1	6	22 min./sec.
1	7	23 min./sec.
1	8	24 min./sec.
1	9	25 min./sec.
1	0	26 min./sec.
1	B	27 min./sec.
1	C	28 min./sec.
1	D	29 min./sec.
↓	↓	↓
F	F	2550 min./sec.

NOTE: For a desired timeout not listed do the following:
A. Choose a desired timeout, ex: 20 sec.
B. Divide it by 16

① Quotient ⟶ Left Digit

16) 20
-16
④ Remainder ⟶ Right Digit

RELAY EVENT ID CODES: Each relay event can be assigned any of the available event IDs from the table.

☞ 4. Select Event ID from the table shown; enter in corresponding address locations (left and right digit).

RELAY EVENT ID CODES		
DATA ENTRIES		OPTION
LEFT	RIGHT	
•(blank)	•(blank)	Area 1 Arm/Disarm
•(blank)	1	Area 2 Arm/Disarm
•(blank)	8	Zone 1
•(blank)	9	Zone 2
•(blank)	0	Zone 3
•(blank)	B	Zone 4
•(blank)	C	Zone 5
•(blank)	D	Zone 6
•(blank)	E	Zone 7
•(blank)	F	Zone 8
1	•(blank)	Zone 9
1	1	Zone 10
1	2	Zone 11
1	3	Zone 12
1	4	Zone 13
1	5	Zone 14
1	6	Zone 15
1	7	Zone 16
1	8	Zone 17
1	9	Zone 18
1	0	Zone 19
1	B	Zone 20
1	C	Zone 21
1	D	Zone 22
1	E	Zone 23
1	F	Zone 24
2	•(blank)	Zone 25
2	1	Zone 26
2	2	Zone 27
2	3	Zone 28
2	4	Zone 29
2	5	Zone 30
2	6	Zone 31
2	7	Zone 32
3	•(blank)	Area 1 Keypad Ambush
3	1	Area 1 Keypad Panic
3	2	Area 1 Keypad Fire
3	3	Area 1 Keypad Medical
3	4	Area 1 Keypad Tamper
3	5	Area 1 Fail to Open
3	6	Area 1 Fail to Close
3	8	Area 2 Keypad Ambush
3	9	Area 2 Keypad Panic
3	0	Area 2 Keypad Fire
3	B	Area 2 Keypad Medical
3	C	Area 2 Keypad Tamper
3	D	Area 2 Fail to Open

RELAY EVENT ID CODES		
DATA ENTRIES		OPTION
LEFT	RIGHT	
3	E	Area 2 Fail to Close
4	•(blank)	Test Timer
4	2	Bus Fail
4	3	Guarded RAM Fail
4	4	Low Battery
4	5	AC Fail
4	6	EZM Tamper
4	D	RFEZM Trouble (Fail Tamper)
4	E	RXTx Tamper
4	F	RXTx Trouble (LB/Supervisory)
D	•(blank)	Keypad Fail
D	1	EZM Fail
D	2	Quickloader Device Control
D	4	Quickloader System Reset
D	5	General System Reset
D	8	Area 1 General System Alarm
D	9	Area 2 General System Alarm
F	•(blank)	Relay Group 1
F	1	Relay Group 2
F	8	Area 1 Entry Relay
F	9	Area 2 Entry Relay

RELAY EVENT CONDITION OPTIONS: Each relay event can be assigned an alarm type; and an activation condition; also, select a timeout type for each.

☞ 5A. Select Alarm Type and Timeout Type from the table shown; enter in corresponding address location (left digit). **NOTE:** Select timeout from previous page.

☞ 5B. Select Activation from the table shown; enter in corresponding address location (right digit).

RELAY EVENT ALARM TYPE OPTIONS		
LEFT DATA ENTRIES	ALARM TYPE	TIMEOUT TYPE
•(blank)	Burglary	Minutes
1	Fire	Minutes
4	Day Zone	Minutes
8	Burglary	Seconds
9	Fire	Seconds
C	Day Zone	Seconds

RELAY EVENT ACTIVATION CONDITIONS	
RIGHT DATA ENTRIES	OPTIONS
1	Alarm
2	Restore
3	Trouble
4	Trouble Restore
5	Follow Zone

ADDRESS 1196 & 1198 (SYSTEM RESET FEATURES)

```
┌─────────────────────────────┐
│      1196 XX                │
│                             │
└─────────────────────────────┘
```
GEM-RP1CAe2 Keypads

```
┌─────────────────────────────┐
│              1196XX         │
│                             │
└─────────────────────────────┘
```
GEM-RP2ASe2 Keypad

Clear Dealer Program (Erases Dealer Program)

CAUTION ✋ Erases the dealer program. Use this feature to start a cust-momized default program.

Access Location 1196, then press 🔲 the button. Data entry is not allowed.

NOTE: Enter Easy Menu Driven Program Mode to program system again.

```
┌─────────────────────────────┐
│      1198 XX                │
│                             │
└─────────────────────────────┘
```
GEM-RP1CAe2 Keypads

```
┌─────────────────────────────┐
│              1198XX         │
│                             │
└─────────────────────────────┘
```
GEM-RP2ASe2 Keypad

Cold Start (Erases Entire Program)

CAUTION ✋ Erases the entire program (codes, schedules, etc), leaving the panel as it came right out of the box.

Access Location 1198, then press 🔲 the button. Data entry is not allowed.

NOTE: Some features (schedules) can only be programmed again with the Downloading Software.

USER PROGRAM MODE

PRELIMINARY INFORMATION

The User Program Mode is covered in detail in the operating instructions for the keypad in use.

☞ Only Keypad #1 may be used for programming, however this keypad may be located in any area.

☞ The Program Mode cannot be accessed while the communicator is transmitting except during the first three minutes after power-up.

☞ After entering codes or data, press the save [ON/OFF] button. Data will not be stored into memory unless this button is pressed.

☞ If the keypad is in the Program Mode and no activity is detected for longer than 4 minutes, a steady tone will sound. Press the [RESET] to silence the sounder and exit the User Program Mode.

> **Note:** For ease of programming, it is recommended that a GEM-RP1CAe2 be used as Keypad #1. (A new GEM-RP1CAe2 is automatically configured as Keypad #1.)

If a GEM-RP2ASe2 is used, configure address jumpers as Keypad #1 (see the section of this manual Configuring the GEM-RP2ASe2 Keypad). Use the [FUNCTION] button to manually scroll the display at the end of each programming line.

ACCESSING USER PROGRAM MODE

1. New Panel: Default User Code (123)
    Existing Panel: Any Code with User Program Option Enabled

2. PRIOR/NO
    [INSTANT]   Until "ACTIVATE PROGRAM Y/N" (GEM-RP1CAe2) or
    "TURNON PROG Y/N" (GEM-RP2ASe2) appears on
    LCD screen.

    NEXT/YES

3. [INTERIOR]   Enter User Program Mode
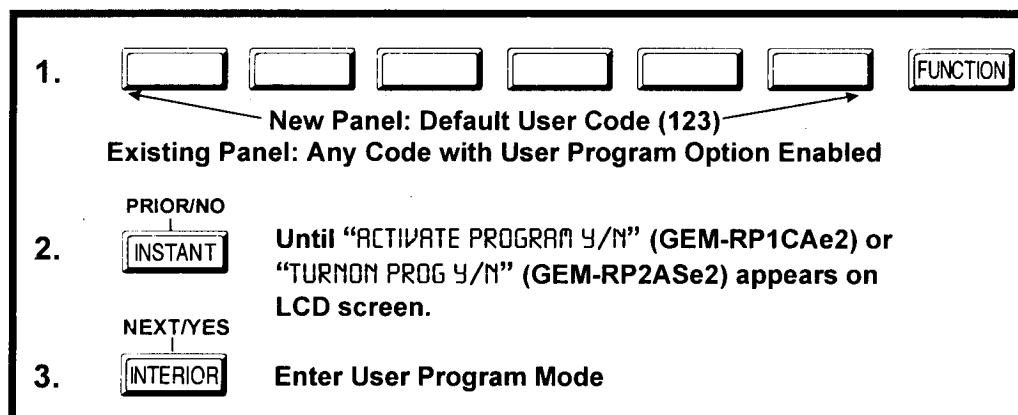
USER CODES

    UO1 123   -E3-
    ENTER USER CODE

GEM-RP1CAe2 Keypad: (Direct Entry)

Up to 32 User Codes may be programmed. Refer to Figs. 3 & 4. (In this mode, *only* the code is programmable; the accompanying Authority Level and Access-Control Byte must be programmed in the Dealer Program Mode.)

☞ Use the [FUNCTION] button to place the cursor over the User Number.

☞ Enter a User Number (01–32) using the number buttons. The cursor will then advance to the User Code and read the existing code, if any.

TO PROGRAM USER CODES,

1. SET CURSOR POSITION USING [FUNCTION] BUTTON.

2. ENTER USER NUMBER (2 DIGITS) DIRECTLY USING NUMBER BUTTONS.

3. ENTER CODE (1–6 DIGITS) DIRECTLY USING NUMBER BUTTONS.

4. PRESS [ON/OFF] TO SAVE.

NOTE: PRESS [*] [0] TO CLEAR CHARACTER AT CURSOR.
TO CONTINUE PRESS [NEXT] OR [PRIOR] BUTTON.
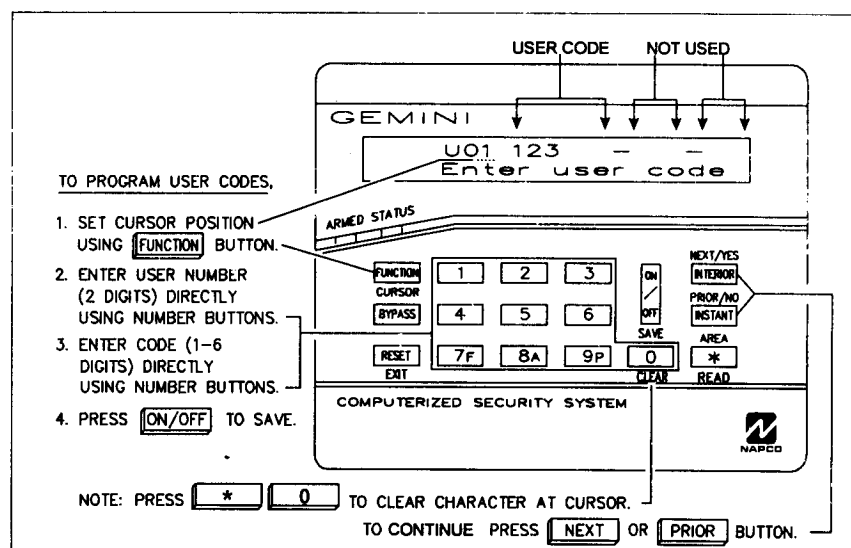
Fig. 3. User Program Mode: Programming User Codes.

ZONE DESCRIPTIONS

☞ Enter the new User Code using the number buttons (0-9). If an old code is displayed, program over it. To erase the digit at the cursor, press [*] [0].

☞ Press the [ON/OFF] button to save the code in memory.

☞ Repeat this procedure for each user. To proceed to Zone-Description programming, press the NEXT ([INTERIOR]) button or the PRIOR ([INSTANT]) button.

```
USER01
```
GEM-RP2ASe2 Keypad

```
123___
```
(Direct Entry)
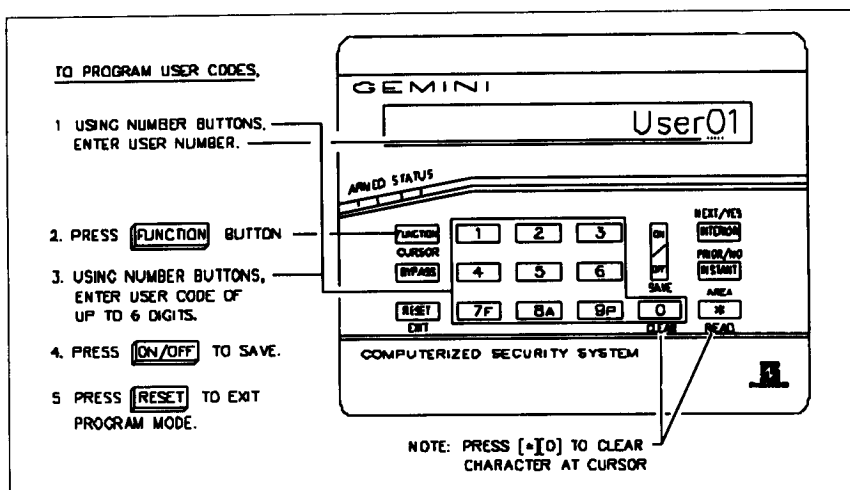
Fig. 5. User Program Mode: Programming Zone Descriptions.

ZONE DESCRIPTIONS (GEM-RP1CAe2 KEYPADS ONLY)

```
01-_____
   _____
```

Enter an identifying description for each zone. Buttons [1] and [2] set the cursor position; buttons [3] and [6] scroll numbers, letters, punctuation marks, etc.

☞ Position the cursor over the displayed Zone Number (i.e., "01") using buttons [1] and [2].

☞ Change the Zone Number using buttons [3] and [6].
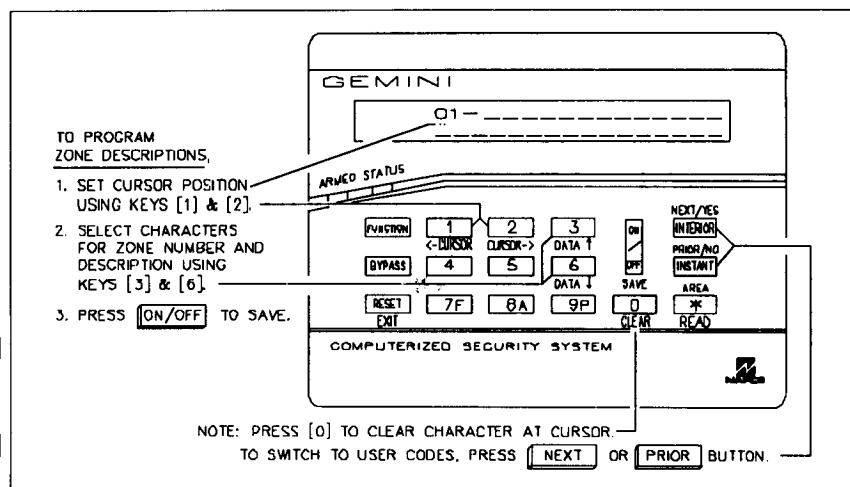
Fig. 5. User Program Mode: Programming Zone Descriptions.

☞ Position the cursor over the first character of the description field. Advancing the cursor between characters, program a description of up to two lines for the new zone using buttons [3] and [6].

☞ Press the [ON/OFF] button to save. Advance to the next zone as in Steps 1 and 2 above and repeat this procedure until all zones have been programmed.

USER PROGRAM MODE

KEYPAD CONFIGURATION MODE

KEYPAD CONFIGURATION MODE *(vertical side tab)*
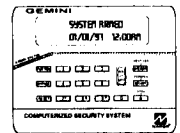
This section will focus on configuring the GEM-RP1CAe2 and GEM-RP2ASe2 Keypads. If there is more than one keypad in the system, *only Keypad No. 1 may be used for programming.*

KEYPAD INSTALLATION

Two types of keypads may be used with the GEM-P1632: the GEM-RP1CAe2 and the GEM-RP2ASe2. Each must be assigned an address number (1–7) and each requires its own configuration procedure (see *CONFIGURING THE KEYPADS*, which follows, and DIRECT ADDRESS KEYPAD AREA OPTIONS). At least 1 keypad must be used; only 1 is required for a single-area Commercial Burglary installation.

GEM-RP1CAe2 - is a 2-line combination fire/burglary/access keypad capable of supporting 4 EZM zones and a PGM output. A GEM-RP1CAe2 is recommended for use as Keypad #1.

GEM-RP2ASe2. - is a utility LCD keypad combining several preset LCD words with a limited message line.
NOTE: Due to space constraints, available messages are abbreviated and will scroll automatically.

CONFIGURING THE KEYPADS

A total of up to 7 keypads may be connected to the panel. GEM-RP1CAe2 and GEM-RP2ASe2 keypads may be intermixed but require different configuration procedures, as described in the following paragraphs.

Configuring the GEM-RP1CAe2 Keypad

Each GEM-RP1CAe2 keypad must be configured for (a) keypad tactile beep; (b) entry sounder; (c) keypad address; (d) compatibility number; (e) EZM address; and (f) zone response.

To enter the GEM-RP1CAe2 Configuration Mode:

1. Remove the back cover and move jumper JP1 (located at the upper-right corner of the control panel board) from Pins 2-3 (bottom two) to Pins 1-2 (top two).

2. After about 15 seconds, the display will read "xx OUT OF SYSTEM", where XX indicates the keypad address.

KEYPAD
CONFIGURE

NORMAL

3. Press [1] [1] [1] [2] [3] [FUNCTION] and proceed as follows. (Repeat the following procedure for all keypads.)

```
KEYPAD BEEP    ON
```
Keypad Tactile Beep
Upon entering the Keypad Configuration Mode, "KEYPAD BEEP ON" will be displayed, indicating that the tactile beep, which sounds when any button is pressed, is on. To turn off the tactile beep, press the [ON/OFF] button (the [ON/OFF] button will toggle the tactile beep on and off). Press the [FUNCTION] button to continue or press the [RESET] button to exit.

```
ENTRY SOUNDER ON
```
Entry Sounder

To turn off the keypad sounder during entry time, press the [ON/OFF] button (the [ON/OFF] button will toggle the tactile beep on and off). Press the [FUNCTION] button to continue or press the [RESET] button to exit.

```
KP ADDRESS    01
```
Keypad Address
If more than one keypad is installed, each must be assigned a unique keypad address (that is, no two keypads may be numbered alike):

☞ keypads must be numbered consecutively (missing numbers are not permitted)

☞ only Keypad No. 1 may be used for programming.

To assign the keypad number, proceed as follows:

1. Enter the assigned keypad number 01–07, then press the [ON/OFF] button to save. A valid number will be acknowledged by a short beep; an invalid number will be rejected by a long beep.

2. Press the [FUNCTION] button to continue or press the [RESET] button to exit.

```
NEW COMPAT# 0000
```

Compatibility Number

The compatibility number is a 4-digit security code that, if programmed into both the control panel and each GEM-RP1CAe2 keypad, dedicates the keypad to only that panel. That is, (a) similar keypads not having the correct compatibility number will not operate in the system and (b) a keypad may not be removed for use on a system with a different compatibility number. **Note:** (1) If assigning compatibility numbers, record and store them in a safe place. (2) The GEM-RP2ASe2 Keypad will function with or without a Compatibility Number.

While the compatibility number may be changed, the old number must be known in order to program the new number. **NOTE:** If neither the control panel nor the keypad is given a compatibility number, both default to "0000" (thereby maintaining compatibility).

To program the compatibility number, press the 🄵🅄🄽🄲🅃🄸🄾🄽 button until "NEW COMPAT# 0000" is displayed. Enter the 4-digit compatibility number that is programmed into the panel. **Note:** If the keypad had been previously programmed for a compatibility number other than "0000", the display would read "OLD COMPAT# xxxx". Enter the existing number before attempting to change it.

Press the 🄵🅄🄽🄲🅃🄸🄾🄽 button to continue or press the 🅁🄴🅂🄴🅃 button to exit.

```
EZM ADDRESS    01
```

EZM Address

The keypad's internal EZM (Expansion Zone Module) may be utilized to provide four additional wired zones. Whether used alone or in conjunction with optional GEM-EZM series modules or other keypad EZMs, it must be assigned a unique address (or *Group* number, see Keypad Programming Workbook) similar to its keypad address. If no other EZMs are to be used, designate the keypad as Group "01" at the "EZM ADDRESS 00" display. In multiple-EZM systems, enter an assigned group number "01" through "06". (Each EZM must have a unique assigned group number, starting with "01" and proceeding consecutively.) Press the 🄵🅄🄽🄲🅃🄸🄾🄽 button to continue or press the 🅁🄴🅂🄴🅃 button to exit.

```
ZN RESPONSE    00
```

Zone Response

The normal loop response of each keypad expansion zone is 750mS, however the response time of any zone can be reduced to 50mS as follows.

1. Of the following, circle the number(s) in parentheses associated with the zone(s) to be changed:

Zone 1=(1); Zone 2=(2); Zone 3=(4); Zone 4=(8)

2. Add up the circled numbers.

3. At the keypad, enter the sum as a two-digit number "01" through "15" on the display, then press the [ON/OFF] Button.

Example. Change Zones 2, 3 and 4 to 50mS response.

1. Circle numbers for Zones 2, 3 and 4: (2), (4) and (8).

2. Add up the circled numbers: 2 + 4 + 8 = 14.

3. Enter "*14*" at the keypad, then press the 🔘 button.

Press the 🄵🅄🄽🄲🅃🄸🄾🄽 button to continue or press the 🅁🄴🅂🄴🅃 button to exit the Keypad Configuration Mode (display will read "01 OUT OF SYSTEM"). Then replace Jumper JP5 across Pins 1–2 (top two).
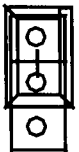
KEYPAD CONFIGURATION MODE

Configuring the GEM-RP2ASe2 Keypad

Up to 7 GEM-RP2ASe2 keypads may be connected to the panel (Keypads 1–7). Each must be configured for a keypad address. In addition, the keypad may be configured to disable (a) touchpad backlight; (b) LCD backlight; and (c) entry sounder. Keypads are configured by the proper selection of jumpers. Refer to the label on the circuit board fishpaper (LA1390) for jumper locations and a summary of settings.

KEYPAD NO.	ADDRESS JUMPER			
	1	2	3	PARK
1	OFF or ON *	OFF	OFF	
2	OFF	ON	OFF	STORE SPARE JUMPER IN THIS POSITION
3	ON	ON	OFF	
4	OFF	OFF	OFF	
5	ON	OFF	ON	
6	OFF	ON	ON	
7	ON	ON	ON	

Keypad Address

If more than one keypad is installed,

☞ each must be assigned a unique address (that is, no two keypads may be numbered alike);

☞ keypads must be addressed consecutively (that is, missing numbers are not permitted); and

☞ only Keypad No. 1 may be used for programming. (However, for ease of programming, it is recommended that a GEM-RP1CAe2 be selected as Keypad #1.)

Assign the keypad address number by selecting Jumpers J1–3 in accordance with the table at left.

Note: (1) Keypads are factory supplied with no jumpers installed and a as such are automatically configured as Keypad No. 1. (2) Only one keypad in the system may be configured as Keypad No. 1, otherwise none will function.

Touchpad Backlight

Cut Jumper A to disable touchpad backlighting to conserve 11mA standby current.

LCD Backlight

Cut Jumper B to disable LCD backlighting.

Entry Sounder

Cut Jumper C to disable the sounder. (Do not disable in UL applications.)

NAPCO®

Name:	Address:
Account Number:	Installer:

Area 1: # of Zones = ☐ , # of Keypads = ☐ ; **NOTE:** Area 2 zones are selected in Direct Address Mode.

Zone Doubling?: ☐ Yes, ☐ No

Enter Fire Zones (1-32): _____ *2-Wire Fire Zones?:* Zone 7 ☐ Yes, ☐ No; Zone 8 ☐ Yes, ☐ No;

Enter Entry/Exit Zones (1-32): _____ *Enter Interior Zones (1-32):* _____

Report All Zones to Central?: ☐ Yes, ☐ No

Central Station Phone Number: ☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Central Station Account Number: ☐☐☐☐

Central Station Receiver Format:

☐ – =Ademco Slow; Silent Knight Slow

☐ 2=Radionics Fast

☐ 3=Silent Knight Fast

☐ 4=Radionics, DCI, Franklin Slow

☐ 5=Universal High Speed

☐ B=SIA

☐ C=Ademco Point ID

☐ E=Pager

User Codes:

USER #	CODE (up to 6 digits)					AREA 1 OPTIONS	AREA 2 OPTIONS
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

USER #	CODE (up to 6 digits)					AREA 1 OPTIONS	AREA 2 OPTIONS
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							

EASY MENU PROGRAMMING WORKSHEETS

RF Transmitter Points:

XMTR. #	ZONE #	RF ID					CHECK SUM	# OF POINT
1								
2								
3								
4								
5								
6								
7								
8								

XMTR. #	ZONE #	RF ID					CHECK SUM	# OF POINT
9								
10								
11								
12								
13								
14								
15								
16								

XMTR. #	ZONE #	RF ID					CHECK SUM	# OF POINT
17								
18								
19								
20								
21								
22								
23								
24								

XMTR. #	ZONE #	RF ID					CHECK SUM	# OF POINT
25								
26								
27								
28								
29								
30								
31								
32								

Key Fob Transmitters:

KF #	RF ID					CHECK SUM	OPTION 1	OPTION 2
1								
2								
3								
4								
8								
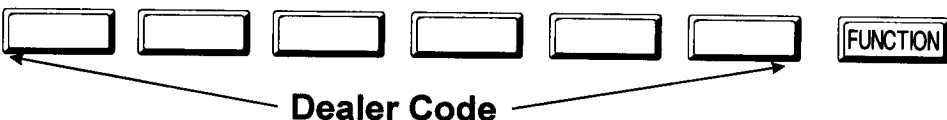
EASY MENU PROGRAMMING WORKSHEETS

Zone Descriptions (GEM-RP1CAe2 Keypads Only):

ZN	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
01																													
02																													
03																													
04																													
05																													
06																													
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32																													

Access Easy Menu Driven (Dealer Program) Mode:

1. ☐ ☐ ☐ ☐ ☐ ☐ [FUNCTION]

← **Dealer Code** →

2. PRIOR/NO [INSTANT]   Until "ACTIVATE PROGRAM Y/N"
(GEM-RP1CAe2) or
"TURNON PROG Y/N" (GEM-RP2AS2)
appears on LCD screen.

3. NEXT/YES [INTERIOR]   Enter Dealer Program Mode

4. [RESET] [RESET]   Exit Dealer Program Mode when finished

PROGRAMMING OPTIONS INDEX

PROGRAMMING OPTION	PROGRAM MODE	ADDRESS LOCATION	PAGE NUMBER
3/1 with Extended Restores	Direct Address	0171, 0193 & 0215	26
Abort Delay	Direct Address	0715	12
AC Fail Report Delay	Direct Address	0717	12
Access Control on PGM2 Output	Direct Address	0719	22
Alarm Ouptut Timeout	Direct Address	0712	23
Auto Bell Test on Arming	Direct Address	0719	25
Auto Reset after Burglary Output Timeout	Direct Address	0719	25
Automatic Interior Bypass	Direct Address	0722	25
Backup Reporting on Telco 2	Direct Address	0429	28
Callback Telephone Number	Direct Address	0236-0255	23
Cancel Next Test timer on any Report	Direct Address	0429	28
Change Pulse Output to Cadence	Direct Address	0719	25
Chime Timeout	Direct Address	0716	22
Closing Report only on Conditional Close	Direct Address	0718	25
CS Receiver 1, 2 & 3 Telephone Numbers	Direct Address	0172-0191, 0194-0213 & 0216-0235	26
CS Receiver 1, 2 & 3 Formats	Direct Address	0170, 0192 & 0214	26
CS Telco 1, 2 & 3 Subscriber Event ID Numbers (System)	Direct Address	0275-0278, 0295-0298 & 0315-0318	27
CS Telco 1, 2 & 3 Subscriber Event ID Numbers (Area 1)	Direct Address	0227-0270, 0287-0290 & 0307-0310	27
CS Telco 1, 2 & 3 Subscriber Event ID Numbers (Area 2)	Direct Address	0271-0274, 0291-0294 & 0311-0314	27
CS Telco 1, 2 & 3 Subscriber Opening/Closing ID Numbers (Area 1)	Direct Address	0259-0262, 0279-0282 & 0299-0302	27
CS Telco 1, 2 & 3 Subscriber Opening/Closing ID Numbers (Area 2)	Direct Address	0263-0266, 0291-0294 & 0303-0306	27
Dealer Code	Easy Menu Driven	N/A	10
Disable Callback Download	Direct Address	0720	25
Disable Closing Reports	Direct Address	0427	28
Disable Function Mode Download	Direct Address	0720	28
Disable Opening Reports	Direct Address	0426	28
Disable Wait for Handshake	Direct Address	0429	28
Disable Wait for Silence	Direct Address	0429	28
Enable Manager's Mode	Direct Address	0719	25
Enable 99 as Ambush Code	Direct Address	0720	25
Enable Auto Arm if not closed	Direct Address	0718	25
Enable Line Fault Test	Direct Address	0721	25
Enable Residential Fire	Direct Address	0720	25
Enable Transmitter Telco 1	Direct Address	0721	25
Enable Transmitter Telco 3	Direct Address	0721	25
Enable Zone Doubling	Direct Address	0721	25
Enable Zone Number on Pulse Alarm	Direct Address	0171, 0193 & 0215	26
Entry Delay 1	Direct Address	0001	22
Entry Delay 2	Direct Address	0002	22
Exit Delay	Direct Address	0000	22
Enable EZM Group	Direct Address	0737-0742	30
Include Select/Group Bypass in Conditional Close/Status	Direct Address	0718	25
Interior 1 Normally Bypassed	Direct Address	0720	25
Key fob Transmitters	Easy Menu Driven	N/A	10
Number of Rings before Pickup	Direct Address	1183	23
Opening Report only after Alarm Report	Direct Address	0718	25
PGM1 Output Timeout	Direct Address	0714	23
PGM2 Output Timeout	Direct Address	0710	23
PGM2 Output Access Control Timeout	Direct Address	0711	22
PGM2 Output Chirp on Key fob Arming	Direct Address	0722	25
PGM2, Don't Clear Output with Arm/Disarm	Direct Address	0722	25
Pulsed Alarm Output Timeout	Direct Address	0713	23

PROGRAMMING OPTION	PROGRAM MODE	ADDRESS LOCATION	PAGE NUMBER
Reset Day zone with Arm/Disarm only	Direct Address	0720	25
RF Transmitter Points	Easy Menu Driven	N/A	9
Status Report	Direct Address	0718	25
Sum check	Direct Address	0171, 0193 & 0215	26
Suppress Bypass Reminder when Armed	Direct Address	0719	25
Touchtone Dialing Only	Direct Address	0429	28
Touchtone Dialing w/Rotary Backup	Direct Address	0429	28
Transmit "402" Open/Close Code	Direct Address	0429	28
Two Ring Download	Direct Address	0722	25
User Codes	Easy Menu Driven	N/A	8
User Opening/Closing Telco 1 & 3 (Users 00-32 & 97-99)	Direct Address	0430-0449	29
Veriphone Zones over Priority Alarms	Direct Address	0722	25
Veriphone Zones trip PGM2 Output	Direct Address	0722	25
Zone Descriptors	Easy Menu Driven	N/A	10
Zones Report Code (Zones 1-32)	Direct Address	0358-0389	28

PROGRAMMING OPTIONS INDEX

GLOSSARY

Abort Delay *(Do not program for UL Applications.)*
A delay period that allows cancellation of the central-station report. This is done by disarming the control panel within the delay period. Program zones for *Abort Delay*; see *Time Selection* for delay time.
Note: If *Abort Delay* is selected for a 24-Hour Zone, the zone must be cleared before disarming the area.

Ac Failure; Ac-Fail Report Delay
If ac power is removed from the control panel, "E01-00 AC POWER FAIL" will display at the keypad with a flashing "SYS/TRBL" reminder and a pulsing sounder. Press the [RESET] Button to silence the sounder; the "SYS/TRBL" reminder will remain on and "SYSTEM READY" will appear in the display. If a User Code is entered within 5 minutes, the panel may be armed successfully. After 5 minutes, the system trouble will again display.
Ac Failure may be programmed to activate the burglary output or any external relay, and/or report to a central station (program *Panel AC-Fail* Report). An alarm and/or restore report to the central station will occur immediately unless an *Ac-Fail Report Delay* is programmed (see *Time Selection*). Ac Failure is logged immediately upon detection.

Access Control; Access Control (Panel Access) on PGM2 Output; PGM2 Output Access Control Time; Keypad Access; Access Only; Access Logging
Note: The GEM-P1632 has not been evaluated by UL for compliance with UL294 (Access Control Systems).
If *Access Control on Auxiliary Output* is selected, entering the Access Code while disarmed will trip the panel's Auxiliary output. This is commonly used to activate a door strike for the purposes of remotely unlocking a door. Each keypad is individually selected for *Panel Access* (see *Keypad Features*). Also program *Auxiliary Relay Access Control* time (see *Time Selection*). **Note:** Do not program the Auxiliary Relay as an output on alarm. Also, do not program *Enable Brownout Limits on Ac Failure*.
Keypad Access is selectable for any keypad 1–8 by appropriate programming of the Access Byte of any User Code; program the Access Byte for those keypad numbers (1–8) that are to respond to the User Code (see *Access-Control Keypads* herein and *User Codes, Authority Levels & Keypad Access Control Byte* in the Programming Workbook, WI818). Note, however, that if the Access Byte is programmed, the code will no longer function as an Arm/Disarm Code. Also, if *Access Only* is programmed for any keypad, that keypad will be dedicated for keypad access. It will then display "ENTER CODE" and will no longer be capable of arming or disarming.
Entering a valid code at the keypad will cause a 5-second output on the keypad's PGM line with a pulsing sounder and the display "**ENTER NOW**" (or other customized message). If *Access Logging* is programmed, keypad access control will be added to the event log, by keypad.
An RB1000 Relay may be used to activate a door strike. Power to the door strike should be supplied from an independent source.

Access Number for Outside Line
Some subscribers will have a telephone system that requires one digit to access an outside line. Also, the first dial tone encountered (prior to the access number) may have a frequency that is different from that of the accessed dial tone (440Hz). One or more 4-second Pre-Dial Delay "*D*"s may be entered before the access number instead of a dial tone with frequency "E". See *Pre-Dial Delay; Telephone Numbers*. (**Note:** The panel features automatic dial-tone detection and will normally not require any "E"s. To disable this feature, see address 0429.)
If the subscriber's system uses an access number, contact the telephone-equipment supplier to find out if a dial tone other than 440Hz is received prior to dialing the access number. If the communicator must delay before dialing the access number instead of attempting to recognize the dial tone, find out how many 4-second delays must be programmed.

Alarm on Day Zone See *Day Zone*

Alarm Outputs (See *Wiring Diagram* for UL requirements.)
The GEM-P1632 has three outputs: *Bell, PGM1* and *PGM2*. The following table summarizes wiring for signalling an alarm in typical installations. See ***Time Selection*** for timeout durations.

GLOSSARY

OUTPUT	WIRING	REMARKS
Bell Output	3(+) & 4(−)	Single bell; program Burg Relay for Burg; Pulsed Burg for Fire
PGM1 Output	5(+) & 7(-)	Programmable Output
PGM2 Output	5(+) & 8(-)	Programmable Output

Alarm Outputs

In UL installations, (1) see *Time Selection* for timeout requirements; (2) combination residential burglary/fire systems require distinctly different signals for burglary and fire.

Note: All relays are "wet" contacts. For dry contacts, cut respective jumper (see *Wiring Diagram*).

Alarm; Alarm Restore Telco 1/Telco 3 See *Report Telco 1/Telco 3*

Alarm; Alarm Restore Telco 2 See *Backup Report on Telco 2*

Alarm Verification *(Not for use in California.)*

An alarm on any Fire Zone programmed for Alarm Verification will cause all zones to power down for i2 seconds. (All devices must be wired with + power on Terminal 25.) After this time, power is restored and a 4-second power-up time is started. Thereafter, the zone will be active again. This represents a total processing delay of 16 seconds from the time the alarm is first detected. If an alarm condition still exists at this time or reoccurs within 2 minutes, an alarm will be initiated, otherwise the zone will return to its original state. **Note:** A zone programmed for *Alarm Verification* must be programmed as a *Fire Zone* as well.

Ambush

A two-digit code that is entered immediately prior to (and as part of) the regular Disarm Code. This will access the Ambush Zone, typically causing a silent report to be sent to a central station. Thus, should a user be forced to disarm, he can silently signal an emergency while appearing to be merely disarming the system. The Ambush Zone will automatically report when programmed to report on alarm.

To program, (a) program Ambush to report on alarm; (b) enter two digits as the Ambush Code; and (c) enter an Ambush-Zone Alarm Report Code. Each keypad is enabled for Ambush individually (see *Keypad Features*).

Inform the user what the Ambush Code is, and that his Arm/Disarm Code must be entered less than 10 seconds after the Ambush Code for an ambush report to be sent.

Answering Machine Pickup Without Line Seizure See *Callback-Method Download*.

Anti-Jam Time

If the communicator does not detect a dial tone within 12 seconds, the *Anti-Jam* feature will be activated. That is, the communicator will go off line for a 16-second anti-jam interval in order to free the telephone circuit from an incoming call, then make another 12-second attempt at dial-tone detection. If still unsuccessful, the communicator will again go off line for 16 seconds, then proceed to dial anyway.

Areas; Zone Area 1–Zone Area 2; Priority Area Arming

Although the default program will automatically set up Zones 1 through 8 for *Zone Area 1*, the panel may be partitioned into two areas. Each zone must be assigned to at least one area. At least one zone must be assigned to Area 1. If a zone is selected for both areas, that common zone will not arm until both areas are armed. If any zone disarms, the common zone will disarm.

In a multiple-area system, be sure to also program

☑ Enable User Code by Area (see *User Codes/Authority Levels*);

☑ Keypad Area Assignments

☑ Bell Control (determines which bells an area may silence);

☑ *Subscriber Opening/Closing ID Numbers* and **Event ID Numbers** (if reporting);

☑ System Trouble Subscriber ID Number

If *Priority Area Arming* is selected, the *Priority Area* must be armed before the *Arming Area* can be armed.

GLOSSARY

Auto Bell Test on Arming (Required for UL Mercantile installations.).
This will activate the Burglary Output briefly 10 seconds after the area is armed. If the alarm does not sound, the device may be defective.

Auto-Bypass (Do not program for UL installations.); Auto-Bypass Re-entry
Zones programmed for *Auto-Bypass* will be bypassed (automatically removed) if in trouble when arming. A momentary beep will sound at the keypad to warn that the system has been armed without the protection of the auto-bypassed zone. (Note that the exit/entry door must be closed before arming, otherwise the Exit/Entry Zone will be auto-bypassed.) **Note:** A zone in trouble that is not programmed for *Auto-Bypass* will cause an alarm on arming after a 10-second arming delay.
If *Auto-Bypass Re-entry* is selected, securing a zone that is programmed for *Auto-Bypass*, while armed, will cause that zone to re-enter the system in an armed state.

Auto Disarm Rearm Delay
If the panel was auto-disarmed on schedule and a rearm delay is programmed (see *Time Selection*), the panel will automatically rearm after the delay if no activity has been detected.

Auto Interior Bypass See *Interior Zones by Area*

Auto-Reset; Auto-Reset After Burglary Output Timeout
If a zone signals an alarm and is selected for *Auto-Reset*, it will automatically rearm itself as soon as the alarm condition is cleared. Auto-Reset may be delayed to occur after the Burglary Output timeout period by selecting *Auto-Reset After Burglary Output Timeout* and *Auto-Reset*. Zones that are not programmed for *Auto-Reset* will not be capable of signalling another alarm until (a) the cause of the alarm has been corrected and (b) the control panel is disarmed. Also see *Swinger Shutdown.*

Auxiliary Relay See *Alarm Outputs*

Backup Report on Telco 2
If *Backup Reporting* is selected and the communicator does not reach the first telephone number after two attempts, seven attempts will be made to reach the second telephone number. Enter *Subscriber Identification Numbers* for Telephone 2 and other information required for Telephone 2. Also program *Backup Report on Telco 2*. Any zone programmed to report to Telco 1 will backup report to Telco 2. **Note:** Subscriber Identification Numbers for both Telephones 1 and 2 must be entered, even if they are the same.

Battery
12Vdc standby power source in the control panel to provide backup protection in the event of a power loss. Napco's RBAT4 (optional) is rated at 4 ampere-hours, the RBAT6 (optional) at 6 ampere-hours. The battery is an integral part of the system and must be installed, even if ac power is present. Change the battery every 5 years or as required.

Bell Control
In any system, the ability to silence any combination of alarm devices (outputs) initiated from any area. *Bell Control* must be programmed for all systems to be able to silence an alarm. For example, in a two-area system, each area could be programmed to silence only those alarms initiated within its own area; or both areas could be programmed to silence an alarm initiated from either area.

Burglary Output See *Alarm Outputs*

Bus Failure
Communication failure on the 4-wire bus will cause a system trouble and a report to the central station. Program System Trouble Reports and Report Codes for the 4-Wire Bus.

Bypass Faulted Zones
If programmed, pressing the [*] and [BYPASS] Keys simultaneously will bypass all zones in trouble (except Fire and PIR Zones) that are also programmed for *Selective Bypass*. The message, "BYPASSED ALL ZONE FAULTS" will display.

Call Waiting *See Disable Call Waiting*

Callback-Method Download; Answering Machine Pickup Without Line Seizure; Disable Callback Download (Required for UL installations); **Disable Answering Machine Download** (Required for UL installations); Disable Function-Mode Download; Number of Rings Before Pickup

Data may be downloaded remotely to the panel after a programmed number of rings (3 to 15) and a control-panel confirmation callback. Program the number of rings; if not programmed, the panel will pick up after 15 rings.

This method will accommodate an answering machine at the site. (*Disable Answering Machine Download* must *not* be programmed.) The answering machine will pick up on its programmed number of rings, as usual. The panel will then listen for the signal from the PCD3000 software and seize the line from the house phones as well as the answering machine and the connection will subsequently be established. **Note:** The number of rings programmed into the panel must exceed that of the answering machine.

Program *Disable Callback Download* to prevent unauthorized downloading to an unattended panel. Program *Disable Answering Machine Download* to inhibit downloading to a telephone connected to an answering machine. Program *Disable Function-Mode Download* to prevent downloading at the keypad.

Cancel Next Test Timer Report on Any Report *See Test Timer*

Chime *(Displays "MONITOR" on GEM-RP2ASe2 Keypads)*

This annunciator feature may be used on any zone to sound a tone at the keypad while disarmed when the zone goes into trouble. Access the *ACTIVATE CHIME* function to enable or disable the Chime Mode. This feature is programmable by zone and for duration of tone (see *Time Selection*). A time must be programmed for the chime to function.

Clear Program

Caution: Erases the dealer program. Use this feature to start a new customized default program. Access Location 1196, then press the [ON/OFF] Button.

Closing Report; Closing Report Only on Conditional Closing; Conditional Closing; Include Selective/Group Bypass In Conditional Closing/Status; Status Report

On arming, the communicator can transmit a unique Closing Code for each user and a status report that identifies the problem zone to the central station. Note that *Subscriber Identification Numbers* and a Closing Code must be entered for any closing report.

Select which users will report closings for each telephone number, even if *Closing Report Only on Conditional Closing* is selected. Normally, a closing report will consist of the Closing Code and the number of the user that armed. If the user armed with an auto-bypassed zone (or selective/group bypassed zone if *Include Selective/Group Bypass In Conditional Closing/Status* was programmed), the *Conditional Closing Code* will also be sent.

Select *Closing Report Only on Conditional Closing* to report only when arming with an auto-bypassed zone (and selective-/group-bypassed zone if *Include Selective/Group Bypass in Conditional Closing/Status* is programmed).

Select *Status Report* to send a closing followed by a status report that identifies the problem zone(s). A typical Status Report is represented by the following example.

Example (4/2 Format). A burglar breaks into a commercial establishment during the night, breaking the window foil on Zone 5. The Open/Close Subscriber Identification Number is *"1234"*; the Alarm Code for Zone 5 is *"3,5"* (Burglary Zone 5); the Subscriber Identification Number is *"6789"*; the Closing Code is *"C"*. The communicator will send the following report to the central station.

When alarm occurs:

"6789 35" – Alarm, Zone 5

Closing Report:

"1234 C1" – Closing, User 1 (User 1 returned, inspected damage & rearmed; the same transmission would occur for User 11, 21, 31, etc.)

"1234 F5" – Trouble, Zone 5 (zone status at time of closing: Window foil still broken; Zone 5 auto-bypasses, repair required; the same transmission would occur for Zone 15, 25, 35, etc.)

Cold Start

Caution: Erases the entire program (codes, schedules, etc.), leaving the panel as it came right out of the box. Access Location 1198, then press the [ON/OFF] Button.

Data Format

Ask the central station which of these formats to use.

Two-Digit or 4/2 Format. Some central-station receivers require that a four-digit Account Code followed by a two-digit Alarm Code be sent in each report. **Example.** In a certain installation, the Alarm Subscriber Number is *"1234"*; a burglary alarm occurs on Zone 1. The Alarm Code for Zone 1 is *"3"*. The communicator will send *"1234 31"* (Account No. 1234; Alarm, Zone 1). 1400Hz Handshake/Kissoff. 1400Hz Handshake overrides 2300Hz Handshake if both are selected.

2300Hz Handshake/Kissoff. Used with the following receiver formats: Radionics, DCI & Franklin Slow; Radionics Fast; Sescoa, Vertex, DCI & Franklin Fast; Radionics BFSK. 1400Hz Handshake overrides 2300Hz Handshake if both are selected.

Zone Number on Pulse Alarm. If selected, an Alarm Code need not be programmed (the zone number will replace the Alarm Code), however codes for restore, trouble, etc. are still required. Thus, in the foregoing example, if *"E"* is the designated Restore Code, and Zone 24 trips and is restored, the communicator will send *"1234 24"* (Account No. 1234; Alarm, Zone 24) followed by *"1234 E6"* (Account No. 1234; Zone 24 Restored).

Single-Digit Event Code Format. The single digit sent for a particular event can be either the Event Code or the units digit of the zone number.

Sum-Check Format. Sum Check is a sophisticated data format used to enhance the speed and check the accuracy of the received transmission. This format should be preferred whenever the central station is capable of receiving it. After transmitting the Subscriber Identification Number and the Alarm Code, the communicator sends a verifying digit that is the sum of both. The receiver compares the verifying digit with the sum of the other numbers to check transmission accuracy.

3/1 with Extended Restores. Some receivers require a three-digit Account Code followed by a single-digit Alarm Code. **Example.** In another installation, the Alarm Subscriber Number is *"123"*; an alarm on Zone 1 is restored. The Restore Code for Zone 1 is *"E,1"*. The communicator will send *"123 E"* (Account No. 123 Restored); followed by *"EEE 1"* (Restored, Zone 1).

Modem Formats. Modem formats (SIA, Point ID, Express, 4/3/1, Modem 2) are preset and automatic but require a Type for each zone. Program *Zone Type* as follows: Fire* = "1" (**Note:** Not for Modem 2 Receivers); Panic = "2"; Burglary = "3"; Holdup = "4"; Gas Alarm = "7"; Heat Alarm = "8"; Auxiliary Alarm = "A" (Keypad displays "0"); 24-Hour Aux. Alarm = "B".

Pager Formats. The control panel has provisions for dialing a pager phone number. The panel will wait for ringing, wait for silence, then send its data. *Caution:* Because there is no handshake/kissoff, *this feature should only be used for Double Reporting; it may not be used for Backup Reporting.* Only one report is sent for any call. Pager digits are limited to "0" through "9". Digits represented by "A" through "F" will be converted to "0"s for transmission purposes. Pager formats are 10 digits, arranged as illustrated by the following examples.

Alarms, restores, etc. are transmitted in a 3-3-4 arrangement representing Report Code, Descriptor and Account Number.

Example 1. Burglary, Zone 22 (Report Code = "3".)

Transmits: <u>003</u> <u>022</u> <u>1234</u>, where

003 = Report Code (always two zeros + programmable Report-Code digit, 0–9);

022 = Descriptor (always one zero + 2-digit descriptor, zone number: 01–32);

1234 = Account Number (4 digits, programmable).

Openings, closings, etc. are transmitted in a similar arrangement

Example 2. Closing, User 12 (Closing Code = "8")

Transmits <u>008</u> <u>012</u> <u>1234</u>, where

008 = Report Code (always two zeros + programmable Opening/Closing digit, 0–9)

012 = Descriptor (always one zero + 2-digit descriptor (user number: 01–32);

1234 = Account Number (4 digits, programmable).

Keypad Report Codes and System Report Codes are transmitted in the same format.

Compatible Receivers. The following receivers are compatible with the GEM-P1632.

☑ **FBI CP220.** *Formats:* Ademco Slow; Silent Knight Slow; Silent Knight Fast; Sescoa; Vertex; DCI; Franklin Slow; Franklin Fast; SIA; Radionics Slow; Radionics Fast; Radionics BFSK; FBI 4/3/1; Universal High Speed.

☑ **Ademco 685.** *Formats:* Ademco Slow; Silent Knight Slow; Silent Knight Fast; Sescoa; Vertex; DCI; Franklin Slow; Franklin Fast; Radionics Slow; Radionics Fast; Radionics BFSK; Universal High Speed; Ademco Point ID; Ademco Express.

☑ **Radionics 6500.** *Formats:* Ademco Slow; Silent Knight Slow; Silent Knight Fast; Sescoa; Vertex; DCI; Franklin Slow; Franklin Fast; Radionics Slow; Radionics Fast; Radionics BFSK; Universal High Speed.

☑ **Osborne-Hoffman Quickalert.** *Formats:* Ademco Slow; Silent Knight Slow; Silent Knight Fast; Sescoa; Vertex; DCI; Franklin Slow; Franklin Fast; SIA; Radionics Slow; Radionics BFSK; Universal High Speed; Ademco Point ID; Ademco Express.

☑ **Silent Knight 9000.** *Formats:* Ademco Slow; Silent Knight Slow; Silent Knight Fast; Sescoa; Vertex; DCI; Franklin Slow; Franklin Fast; Radionics Slow; Radionics Fast; Radionics BFSK; Universal High Speed; SIA.

Day Zone(Open; Short); **Alarm on Day Zone; Disable Auto-Reset on Day Zone; Reset Day Zone with Arm/Disarm Only; Enable Watch, Areas 1-2** (By Area)

A *Day Zone* will give an audible and visual indication at the keypad if there is a problem on the loop while disarmed. Open- and short-circuit conditions are programmed separately, by zone. This feature may be used to warn of a problem (a break in a window foil, for example) during the day, when the panel is not normally armed. When the Day Zone is tripped, "DAY ZONE TRBL" and the zone number(s) will alternately display at the keypad and the sounder will pulse. Press the [RESET] Button to silence the sounder and reset the keypad. "ZONE FAULT" will be displayed until the condition is corrected. If *Reset Day Zone With Arm/Disarm Only* is programmed, arm and disarm the panel to reset the Day-Zone indication at the keypad.

If *Alarm on Day Zone* is programmed for a zone, a Day Zone condition will cause the alarm outputs programmed for that zone (sirens, relays) to activate.

Note: (1) If a zone is programmed for both *Day Zone Open* and *Day Zone Short*, either condition must be reset before the other can activate. (2) *Day Zone Short* will not function if *No EOL Resistor* is also programmed.

Report Trouble or *Trouble Restore* is programmed in conjunction with *Day Zone Open/Day Zone Short* and *Trouble on Open/Trouble on Short* (the trouble reported will be that programmed under *Day Zone Open* and/or *Day Zone Short*).

Note: Do not program a Day Zone for 24-hour protection. The keypad will annunciate as a Day Zone but the panel will transmit an Alarm Code and a Trouble Code when tripped.

Program *Disable Auto-Reset on Day Zone* to prevent repeated Day-Zone trips. This will cause the keypad display and sounder to activate only once in any arm/disarm period.

If *Enable Watch* is selected (by area), zones programmed for Day Zone can only be activated when *ACTIVATE WATCH* is accessed. (See Section 3.) Arming and disarming will turn off the Watch Mode. If Report Trouble is selected, a trouble on a Day Zone will be reported only when the Watch Mode is on.

Dealer Security Code See *Master Security Code*

Dial-Tone Detection; Disable Auto Dial-Tone Detection

The panel features automatic dial-tone detection to ensure that a dial tone is present before the communicator dials. To disable this feature, program an "8" in Location 0429.

When an "E" is programmed before the first digit of an outside telephone number, the communicator dial-tone detection circuit is set to detect the standard 440Hz dial tone. The "E" is generally entered in the location immediately preceding the telephone number.

It may be necessary to program at least one 4-second pre-dial delay before a dial-tone detection "E". With certain nonstandard exchanges, pre-dial delay "D"s may be used without a dial-tone detection "E". (See *Access Number for Outside Line; Pre-Dial Delay; Telephone Numbers.*)

Digital Dialer Test

Activating the digital dialer test from the Function Menu (*ACTIVATE DIALER TEST*) will send the programmed report code to the central station. Program *DD TEST* for *SYSTEM-TROUBLE REPORTS* and enter a *DD TEST* Report Code. Note that in this case the report code received is not indicative of a system trouble, but is an indication of a successful transmission.

Should the transmission fail, the keypad will display "E03-00 COMM FAIL". This system trouble may be reset by pressing the [RESET] Button. Any successful subsequent report will also clear the system trouble.

Disable Answering Machine Download See *Callback-Method Download*

Disable Auto-Reset on Day Zone See *Day Zone*

Disable Auto Status
Non 24-Hour Zones that are open (or shorted) normally display "ZONE FAULTS" (while disarmed) followed by the zone number(s) and description(s). In high-security applications, program *Disable Auto Status*. Unsecured zones will then be indicated by a "CHECK STATUS" display. Status may be displayed manually using the *DISPLAY STATUS* function, however a valid user code will be required.

Disable Auto-Unbypass on Disarming
Normally, manually bypassed zones revert to active (disarmed) zones on disarming. Select this feature to maintain bypassed zones on disarming until manually unbypassed.

Disable Call Waiting (TouchTone® Dialing Only)
A digital communicator connected to a telephone line with *Call Waiting* may be disrupted by this feature. However, most lines with *Call Waiting* also have *Selective Call Waiting*, which permits the feature to be turned off by dialing a "∗70" just before the telephone number. A "∗" will be dialed by programming a "B".
If the installation has the *Call Waiting* feature, be sure that it also has *Selective Call Waiting*, and confirm the disable code with the telephone company. Then program this code ("B70") directly before the phone numbers (after dial-tone detection or pre-dial delay) in the telephone-number locations. See *Telephone Numbers*.
Caution: Should the user cancel his *Call Waiting* service, the communicator will dial a wrong number unless the phone number is corrected.

Disable Callback Download See *Callback-Method Download*

Disable Code Required for Easy Bypass See *Selective Bypass* (Do not program in UL Installations)

Disable Fire Reset (by Area)
Normally, pressing the [RESET] Button will momentarily remove power to the smoke detectors. If *Disable Fire Reset* is selected for any area, the [RESET] Button will no longer activate the Reset Output so that the integrity of the smoke detector's Alarm Memory feature (LED indication) will be maintained. Also see *Alarm Outputs; Smoke Detectors*.
Disable Function-Mode Download See *Callback-Method Download*

Disable Openings/Closings
Provides the flexibility of disabling openings and/or closings from any area(s).

Disable Wait-for-Handshake/Kissoff
Causes data transmission to start immediately after the telephone number.

Disable Wait-for-Silence (Pager Format)
Causes data transmission to start immediately after the pager telephone number.

Double Reporting See *Report Telco 3*

Download Security Code See *Master Security Code*

"E" Lugs (E5, E7, E19)

E5 -

E7 -

E19 - See *Veri-Phone: Silence All Outputs During Audio Session*

Use Napco Part No. WL1 for field wiring.

Easy Arming

Permits quick arming by simply pressing the [ON/OFF] Button. Each keypad may be individually programmed for *Easy Arming* (see **Keypad Features**). Disarming still requires entry of a valid user code. Do not program *Easy Arming* in UL installations. If closings are reported, *Easy Arming* will report as User 99.

Enable Burg Output Warning On Entry

Causes the Burglary Output to "chirp" if the entry door is opened within 60 seconds after exit time has elapsed. This feature may be useful in cases where a keypad is not within audible range to remind a user to disarm if inadvertently exiting after exit delay has expired.

Enable Exit Delay Restart See *Entry/Exit Delay*

Enable Line Fault Test

Enable Line Fault Test will cause the panel to monitor the phone line. A failure will display as "E08-00 TELCO LINE1 FAIL". Program this system trouble to activate the Burglary Output.

Enable Local Alarm on First Zone "AND" Trip See *Zone ANDing* (Do not program in UL installations.)

Enable User Code by Area See *User Codes/Authority Levels/Access Bytes*

Entry/Exit Delay; Entry/Exit 1; Entry/Exit 2; Entry Relay; Enable Exit-Delay Restart

Delays permit exit and entry through the Entry/Exit Zone(s) after the system is armed without setting off an immediate alarm. Entry delay allows the user time to enter and disarm the panel. Exit delay allows the user to leave the premises after the panel has been armed. Unless the keypad has been configured otherwise, the sounder will come on and will pulse during the last 10 seconds of entry delay to remind the user to disarm.

Two individually-programmable entry-delay times are provided to accommodate different entry zones. If two or more Exit/Entry Zones are entered in succession, the delay programmed for the last Exit/Entry Zone entered will take precedence over all others. Exit-Delay time and Entry-Delay time may each be programmed for up to 255 seconds (4¼ minutes). See *Time Selection.*

An external relay may be programmed to trip upon entry (see Programming Manual: *Relay Event ID Codes, Area Entry Relays*), and remain on for a programmed duration.

If the system has been armed with *Exit-Delay Restart* enabled, when the exit door is opened and then closed, the programmed exit delay will restart at 60 seconds. Thus, if a long exit delay is programmed, it will be reduced to 60 seconds after exiting, yet still allow reentry before entry time starts. If re-entry occurs within that 60 seconds, exit delay will restart once again (and *only* once again) at 60 seconds.

If re-entry occurs within 60 seconds after exit delay has expired, the alarm will sound a 2-second warning (with the entry sounder) to remind the user to disarm. (*Exit-Delay Restart* may be useful in reducing false alarms caused by a user who re-enters the premises shortly after exiting.)

Note: In UL installations, maximum exit delay is 60 seconds; maximum entry delay is 45 seconds. In UL Mercantile installations, maximum entry delay is 60 seconds.

Entry delay may be cancelled by pressing the [INSTANT] Button prior to arming, however it will be restored automatically upon disarming. (When armed with Instant protection, an "*I*" will appear at the right side of the display.)

Exit/Entry Follower

A zone programmed as an *Exit/Entry Follower* will ignore detection during the exit delay, and only during entry delay if the Exit/Entry Zone is entered first. Thus, detection devices (passive infrared detectors, for example) along the path between the keypad and the exit/entry door will not signal an alarm during exit/entry delay under normal conditions. However, if a device in the Exit/Entry Follower Zone detects a violation when the exit/entry door has *not* first been entered, there will be no entry delay and the Exit/Entry Follower Zone will go into an instant alarm.

If the panel is armed with the entry delays cancelled (Instant protection), any violation on the Exit/Entry Zone or the Exit/Entry Follower Zone will cause an immediate alarm.

Expansion Zones; EZM Type; EZM Tamper See *Tamper*

Zones 9–32 or 17–32 are *expansion zones* added to the basic system using expansion zone modules (EZMs). Any combination of GEM-EZM4 (4 zones), GEM-EZM8 (8 zones) and/or the 4-zone modules integral to each GEM-RP1CAe2 keypad may be used. Refer to Section 2: *ADDING EXPANSION ZONES* and the *Wiring Diagram*. Also see the instructions accompanying each module for wiring information.

Regardless of how the modules are arranged, the expansion zones are divided into consecutively-numbered groups of four. Each 4-zone module comprises one group of zones; each 8-zone module comprises two groups. Each group is assigned a number.

For each EZM group, program *EZM Type* (two nibbles, left and right), as follows: *EZM Not Used:* leave both nibbles blank (••); *Burglary EZM:* enter "1" in the right nibble (•1).

Extended Format See *Data Format*

EZ Zone Doubling allows the hardwired zones to be expanded from 8 to 16 without the use of an EZM. Additional EZMs may be connected to increase zones from 16 to 32.

Fire; Keypad Fire

Any zone may be programmed for *Fire*. Connect normally-open devices across a Fire Zone. (The EOL2.2K end-of-line resistor must be installed.) A short across the zone will cause a fire alarm, which will be indicated at the keypad by a "FIRE" LCD display and pulsing sounder. An open circuit on the Fire Zone will identify a trouble and cause flashing "FIRE" LCD display and pulsing sounder after a 10-second delay. The sounder may be silenced using the [RESET] Button. The LED will go off within 30 seconds after reset if the alarm or trouble is cleared. For Smoke-Detector Reset, see **Alarm Outputs.**

A fire condition that has not been restored will cause the zone number and description to scroll. To reset (acknowledge) the condition, enter a valid code, then press [RESET]. If *Keypad Fire* is programmed, pressing both [F] and [*] keypad buttons at the same time will sound a fire panic alarm and display "******FIRE******" at the keypad. The Keypad Fire function is supplementary to the hardwired zones. **Note:** This feature shall not be considered a substitute for listed manual initiating devices.

Include Selective/Group Bypass In Conditional Closing/Status See *Closing Report;* Interior Zones by Area; Interior Normally Bypassed; Auto Interior Bypass

Removal of a programmed group of interior zones from the system will permit freedom of movement throughout the premises but still afford protection from intrusion through armed perimeter zones. Pressing the [INTERIOR] Button prior to arming will select the Interior Zones, then arm to bypass. The next time the control panel is disarmed, all bypassed zones will automatically revert to non-bypassed (disarmed) zones. When the [INTERIOR] Button is pressed, the "BYPASSED" reminder will come on.

The bypassed zones may be displayed on the keypad (see *GEM-RP1CAe2 FUNCTION MODE*).

If *Interior Normally Bypassed* is selected, all Interior Zones will always be inactive. The "BYPASSED" reminder will always display, indicating that only partial protection will be provided upon arming. To temporarily restore interior protection, press the [INTERIOR] Button; the "BYPASSED" reminder will go out upon arming, denoting full protection, however Interior Zones will once again be bypassed the next time the panel is disarmed.

If *Auto Interior Bypass* is programmed, all Interior Zones will automatically provide protection if the Exit/Entry doors are opened during exit delay. (**Note:** *Interior Normally Bypassed* must be programmed.) If [INTERIOR] is pressed while armed, exit delay will restart and Exit/Entry doors may be opened to permit someone to exit (while others remain on premises) without causing an alarm.

Jumpers (Refer to *Wiring Diagram* for UL configuration.)

JP1: Keypad Configuration Jumper (top-right corner, above micro shield) is installed across top and center pins for normal operation. When configuring GEM-RP1CAe2 keypads, move jumper across center and lower pins.

JP3: 2-Wire Fire jumpers. Select Zones 7 and/or 8 for use as either 2-Wire Fire Zones or Burglary Zones. **Note:** If customizing a single-area default program, Zone 8 is configured as a 2-Wire Fire Zone. In a two-area default program, Zones 7 and 8 are configured as 2-Wire Fire Zones common to both areas; be sure to move JP7 Zone-7 jumper to the *2-WF* position (see *Wiring Diagram*).

GEM-RP1CAe2 Keypad Jumpers.

Refer to label LA1374 on the circuit board fishpaper for jumper locations and a summary of settings.

JP1: Cut to enable Keypad Tamper.

W1 & W3: Cut both to disable touchpad backlighting.

W2: Cut to disable LCD backlighting.

GEM-RP2ASe2 Keypad Jumpers.

Refer to label LA1390 on the circuit board fishpaper for jumper locations and a summary of settings. See *Section 3: Configuring the GEM-RP2ASe2 Keypad* for jumper selection.

Key Fob Transmitters

Aux. Output Chirp on Key-Fob Arming

Don't Clear Aux. Relay with Arm/Disarm

Aux. Output Chirp on Key-Fob Arming will cause a 1-second chirp to sound on arming and a 2-second chirp on disarming. Use the steady output of a siren driver. Do not use a voice siren driver.

Programming a "C as the Key-Fob Aux-1 or Aux-2 option will provide the ability to toggle the Aux. Relay on or off. If there is an Aux. Relay timeout programmed, it will follow this timeout unless toggled off by the key fob. To provide key-fob-only control, program no timeout. Program *Don't Clear Aux. Relay with Arm/Disarm* to prevent a disarm from resetting the Aux. Relay. Key-fob users can report openings and closings. Key fobs 1–8 report as Users 25–32, respectively.

Keypad Access see *Access Control*

Keypad Area Assignments

In multiple-area systems, assign an Area Number ("1" or "2") to each keypad. Note that each address comprises 2 *nibbles*; enter the *Area Number* in the *right* nibble.

Keypad Features

The following programmed system features will activate only if they have also been enabled at the keypad.

- ☑ Ambush
- ☑ Easy Arming
- ☑ Access Control
- ☑ Keypad (Police) Panic
- ☑ Keypad Auxiliary Panic
- ☑ Keypad Fire Panic

Keypad Panic See *Panic Zone*

Keypad Sounder on Alarm

If a programmed zone goes into alarm, the keypad sounder will activate and will remain activated until the [RESET] Button is pressed or the system is disarmed.

Keypad Tamper See *Tamper*

Keyswitch Arming

The area will arm/disarm when the programmed zone is momentarily shorted (momentary keyswitch). To supervise the keyswitch, program the zone for *Day Zone on Open*.

Line-Reversal Module, M278

The Line-Reversal Module allows the panel to be monitored by a central station through leased lines. On alarm, the module reverses normal line-voltage polarity. For details, refer to the instructions furnished with the module.

Loop Response (750mS required for UL installations)

Loop response is the amount of time in milliseconds (mS) that a normally-closed circuit must remain open, or a normally-open circuit must remain closed, to trigger an alarm. The slower the loop response, the more immune the system will be to intermittents (*"swingers"*). Loop response times for Zones 1 through 8 are programmed into the control panel; those for Zones 9 through 32 are selected at the respective keypad or expansion module. (Refer to keypad instructions and EZM Installation Instructions.)

Selectable loop-response times for Zones 1–8 are:

750mS (.75 sec.): The slowest loop-response time, recommended for use with magnetic contacts, window foil, etc. Unless programmed otherwise, loop-response time will be 750mS for all zones.

50mS (.05 sec.): Used for momentary Panic Buttons and area-protection devices, such as photoelectric eyes, passive infrared sensors, floor mats, etc.

10mS (.01 sec.): An extremely fast loop response used primarily for window bugs.

Low Battery (Required for UL Mercantile installations)

A low-battery system trouble will annunciate at the keypad when the battery terminal voltage drops below normal. This condition may signal a local sounding device, report to a central station (program *Panel Low Bat* Report Code), or both. If a battery is installed and low terminal voltage is detected, a restore will not occur until the battery is recharged to its specified level and passes a dynamic test. The dynamic test may be initiated manually by pressing the [RESET] Button, or it will be initiated automatically, every four hours, by the panel.

In wireless installations, when displaying rf transmitter status, a "LoBatt" indication denotes a low-battery condition at the transmitter.

Master Security Code; Dealer Security Code; Download Security Code

The factory-programmed *Master Security Code* (printed on the label affixed to the micro can) is unique and cannot be changed. Use this code to enter the Program-2 Mode (Dealer Program Mode) to program (or change) the *Dealer Security Code*. If a Dealer Security Code is programmed, both the Dealer Security Code and the Master Security Code will work. However, should system RAM fail, only the Master Security Code will work.

The *Dealer Security Code* is needed to enter the Program-2 Mode, thus allowing the dealer to program codes, zone features, reporting features and zone descriptions (see Programming Manual WI818). This code may be changed as required.

Important! The label containing the Master Security Code should be removed. Record the code in a secure place for reference as programming changes cannot be made without it (or the Dealer Security Code).

To change the Dealer Security Code, access the *PROGRAM 2* Mode. Advance to the "PROG" screen, then change the 6-digit code as required.

The *Download Security Code* is the six-digit code required to establish connection to the PCD3000 Software.

Memory Failure

A User or Dealer Memory error will cause the sounder to pulse, the "SYS/TRBL" reminder to flash, and the display to read "E19-00 USER MEM ERROR " or "E20-00 DEALER MEM ERROR". Press the [RESET] Button to silence the sounder ("SYSTEM READY" will display, along with the "SYS/TRBL" reminder). Activate *RESET SYSTEM TROUBLE* to manually reset the system trouble. A Memory Failure can be programmed to activate an alarm output and/or report using its associated system Report Code.

Never Arm *(Do not use for primary Burglary protection)*

A zone programmed as *Never Arm* cannot go into alarm. If tripped, it will display at the keypad when the *DISPLAY STATUS* function is selected. A chime will sound at the keypad while armed or disarmed if *Chime* is also programmed for that zone, and enabled. This feature is suggested for use as a garage-door or driveway monitor, or similar application.

No EOL Resistor

Program for any zone not wired with a 2200Ω end-of-line resistor (Napco Part No. EOL2.2K). This will disable any zone-short indication (if programmed, *Day Zone Short* is disabled). If not programmed, an end-of-line resistor must be installed. **Note:** This selection is automatically disabled for zones selected as *Fire*.

Number of Rings Before Pickup See *Callback-Method Download*

One-Button Arming See *Easy Arming*

Opening Report; Opening Report Only After Alarm Report (Do not program for UL installations)

Opening and closing reports are generally used in commercial installations. On disarming, the communicator can send an Opening Code for Users 1–32 (*Opening Report*), or it may transmit only when the control panel is disarmed after an alarm has been reported (*Opening Report Only After Alarm Report*). (**Note:** Key Fobs 1–8 report as Users 25–32.) Subscriber Identification Numbers and Opening Codes must be entered for either opening report.

Program *Opening Report Only After Alarm Report* to report only when disarming after an alarm report. This feature may be used by the central station to verify that the subscriber has responded and disarmed the panel. If *Opening Report Only After Alarm Report* is selected, also select *Opening Report* for each user.

Panic Zone; Keypad Aux Panic; Keypad (Police) Panic; Keypad Fire Panic See *Fire*; Remote Panic

The *Panic Zone* is always a 24-Hour Zone. Each keypad is individually selectable for keypad panics (see *Keypad Features*). If *Keypad Panic* is programmed for a keypad, police panic is activated by simultaneously pressing the [P] and [∗] Buttons. If *Keypad Aux.* is programmed, pressing [A] and [∗] Buttons simultaneously will trip an auxiliary emergency alarm. If *Keypad Fire* is programmed, pressing [F] and [∗] at the same time will activate fire panic.

A remote panic button may be connected to a GEM-RP2ASe2 Keypad. Splice the two white wires from the keypad to a normally-open momentary-contact pushbutton. Additional panic buttons may be wired in parallel with the first. If remote panic will not be used, insulate both white wires, as a short across them will cause a panic alarm. (In UL installations, remote-panic buttons must be located within 3 feet of the keypad, with no intervening walls or barriers.

Power-Up Delay

If programmed, power-up will be delayed for 5 minutes to allow devices such as PIRs time to stabilize (warm up). This will prevent false alarms when ac power is restored after a long power outage and the backup battery is discharged.

Pre-Alarm Warning *(Not for UL applications)*

Programmable by zone, this feature will cause an alarm to sound only at the keypad for the duration of the programmed abort delay (see *Abort Delay; Time Selection*). After the delay has elapsed, the alarm output will activate and a report will be sent. **Note:** If no Abort Delay time is programmed, *Pre-Alarm Warning* time will be 10 seconds.

Pre-Dial Delay

A *Pre-Dial Delay* may be used whenever a delay is required before dialing. It may be required when programming *Dial-Tone Detection*, which causes the communicator to wait before it attempts to detect a dial tone (see *Dial-Tone Detection*). Certain telephone exchanges send a nonstandard dial tone that the communicator may not be able to detect. With these nonstandard exchanges, it is possible to program *Pre-Dial Delay* rather than *Dial-Tone Detection*. This will cause the communicator to wait for a predetermined period of time before dialing rather than look for a nonstandard dial tone.

Contact the telephone-equipment supplier to find out how long a delay is required before dialing. Select *Pre-Dial Delay* by programming one "D" for each 4-second delay required immediately before the telephone number. **Note:** In UL installations, do not program more than one "D" before the telephone number.

See *Backup Report on Telco 2; Report Telco 3 (Double or Split Reporting)*. Also see *Access Number for Outside Line; Telephone Numbers*.

Priority Area Arming

Prevents area arming if the alternate *Priority Area* has not yet been armed.

Priority Zone (Required for all zones in UL installations.)

A zone that will prevent arming if in trouble. If an attempt is made to arm, the sounder will come on and "ZONES NOT NORMAL / CAN'T ARM" will be displayed for 4 seconds. The keypad may be reset by simply pressing the [ON/OFF] Button. The problem on a Priority Zone must be corrected before the panel can be armed.

Any zone may be selected as a *Priority Zone*. A zone in trouble that is neither a *Priority* Zone nor an *Auto-Bypass* Zone will cause an alarm on arming.

Priority Zone with Bypass

A Priority Zone that will permit arming if the priority condition is bypassed. If the system is so programmed, the zone will auto-bypass and (optional) the condition will be reported to a central station.

As above, if an attempt is made to arm, the sounder will come on and "ZONES NOT NORMAL / CAN'T ARM" will be displayed. To reset the keypad, press the [ON/OFF] Button; the display will read "ZONE FAULTS". To arm the panel, press the [RESET] Button, then enter the User Code.

Any zone not selected as a *Priority* Zone may be programmed as a *Priority Zone with Bypass*.

Pulse Burglary Output See *Alarm Outputs*

Receiver Format

The communicator can be programmed to transmit to any standard central-station receiver. A receiver format must be entered for each telephone number used, but a different format may be assigned to each. Refer to **Backup Report on Telco 2** and **Report Telco 3** to determine whether or not Telephones 2 and/or 3 will be programmed. Call the central station for each telephone number used to confirm the type of receiver in use. Select the receiver format entry for each telephone number from the following table.

ENTRY	RECEIVER FORMAT	DATA FREQ. (Hz)	DUTY CYCLE (ON/OFF)	INTERDIGIT TIME
(blank)	Ademco, Silent Knight Slow	1900	60/40mS	600mS
1	Sescoa, Vertex, DCI, Franklin Fast	1800	30/20	800
2	Radionics Fast	1850	13/12	400
3	Silent Knight Fast	1900	40/30	560
4	Radionics, DCI, Franklin Slow	1800	60/40	600
5	Universal Hi-Speed	1850	30/20	350
8	Radionics BFSK			
9	4/3/1*		Modem formats	
A	Radionics Modem 2*			
B	SIA*			
C	Point ID*			
D	Express (TouchTone 4/2 format)			

*These formats do not use programmable codes, but Event ID Codes to identify the type of zone as follows:

1 – Fire

2 – Panic

3 – Burglary

4 – Holdup

7 – Gas Alarm

8 – Heat Alarm

A – Auxiliary Alarm (keypad displays "0")

B – 24-Hour Auxiliary Alarm

Relay Control (External Relays)

In addition to the three relay outputs provided on the motherboard, up to 24 external relays can be controlled from the keypad through the use of RM3008 Relay Modules. The RM3008 is designed for external remote mounting. Each contains 8 relays; three units will provide a total of 24 relays.

For each relay, program four 2-nibble address locations.

1st Location (XXX1): Program the area having the ability to shut off the relay in the right nibble.

2nd Location (XXX2): Program relay timeout. The left nibble has a time factor of 16; the right a time factor of 1 (also see *Time Selection*). If timeout units are in minutes (see 4th Location), maximum programmable time is 4¼ hours; if timeout units are in seconds, 4¼ minutes. **Note:** Program a minimum timeout of 3 seconds; if locations are left blank, the relay will not time out.

3rd Location (XXX3): Enter an Event ID Code. A list of Event ID Codes is provided in the Programming Manual.

4th Location (XXX4): Left nibble, program (a) *Zone Type* and (b) *Timeout Units* as follows.

(a) Select *Zone Type* (Leave blank for Burglary Zone):

"1" = Fire; "4" = Day Zone.

(b) If relay timeout will be in seconds, add "8" to *Zone Type* (a) above. Otherwise, relay timeout will be in minutes.

4th Location (XXX4): Right nibble, program *type of activation* as follows:

"1" = Alarm; "2" = Restore; "3" = Trouble; "4" = Trouble Restore; "5" = Follow Open Zones; "6" Follow Shorted Zones. (Leave blank if relay is not used.)

Relay Follows Zone

External Relays can be programmed to follow an open or shorted zone. Program External Relay to *Activate On* "5" to follow an open zone, or "6" to follow a shorted zone. If values are entered in *Time* locations, the relay will time out after the programmed time.

Relay Outputs See *Alarm Outputs*

Remote Panic See *Panic Zone*

Report Telco 1; Report Telco 3 (Double or Split Reporting)

Alarms, alarm restores, troubles and trouble restores may be selected individually for each zone. Violation of a zone selected to report will communicate the code(s) selected for that zone to the central station.

Normally, *Report Telco 1* is used to report to the central station. *Report Telco 3* is used when certain zones will report to a different receiver (split reporting); *Report Telco 1* and *Report Telco 3* are both used on the same zone to report to two receivers successively (Double Reporting). (Double Reporting requires a successful report to Telco 1 before reporting to Telco 3.) Also see *Backup Report on Telco 2.*

Reset Day Zone with Arm/Disarm Only See *Day Zone*

Reset Relay See *Alarm Outputs*

Selective Bypass

Disable Code Required for Easy Bypass (Not for UL installations.)

Any or all zones (1–32) programmed for *Selective Bypass* may be removed from the system, but each must be removed separately. Refer to *BYPASSING ZONES* in Section 3 for operation.

Security Bypass, recommended for commercial applications, requires entry of a valid user code.

Easy Bypass, recommended for residential applications, is selected by programming *Disable Code Entry for Easy Bypass;* this will permit bypassing/unbypassing zones without the need of entering a code (see *Easy Bypass* in Section 3). Do not program this feature in high-security applications.

When one or more zones is bypassed, the "BYPASSED" reminder on the GEM-RP1CAe2 keypad will display.

Silence All Outputs During Audio Session See *Veri-Phone*

Single-Digit Format See *Data Format*

Smoke Detectors

Connect smoke detectors as shown in the following diagrams. The normally-closed contacts of the Reset Relay are used to reset the smoke detectors.

Two-Wire Smoke Detectors. Two-wire smoke detectors may only be used only on Zones 7 and 8. Up to 10 compatible 2-wire smoke detectors may be wired to each zone. In Residential applications, program *Pulse Burg Output*. Program *Disable Fire Reset* in the applicable area(s).

Zones 7 and 8 have been designed so they can be easily configured as 2-wire smoke detector zones by means of jumpers (JP3) located above Terminal 21.

1. Program Zones 7 and/or 8 for *2-Wire Smoke Detectors* and *Fire*.

2. If Zone 7 is selected as a 2-Wire Fire Zone, move the left jumper on JP3 from the top two pins (BURG) to the bottom two pins (2WF).

3. Similarly, if Zone 8 is selected as a 2-Wire Fire Zone, move the right jumper on JP3 from the top two pins (BURG) to the bottom two pins (2WF).

4. Connect 2-wire smoke detectors to Zones 7 and/or 8 as shown in the GEM-P1632 Installation Instructions (WI808).

Four-Wire Smokes. If installing 4-wire smokes, subtract smoke-detector alarm current from available standby current. See *COMPATIBLE UL-LISTED DEVICES*.

Wire 4-wire smokes as shown in the GEM-P1632 Installation Instructions (WI808). Program each zone for *Fire*. Also program zones for *Pulse Burglary Output,* and *Disable Fire Reset* in the applicable area(s) (System Options). If they are of the self-resetting type, 4-wire smokes may be powered from Terminals 25 and 22.

Split Reporting See *Report Telco 3*

Start Exit Delay After Ringback

When a closing report is successfully received, the central station will acknowledge by returning a kissoff signal. When the kissoff is received by the communicator, a 2-second ringback tone will sound at the keypad. *Start Exit Delay After Ringback* will cause the exit delay to start after the ringback sounds.

If this option is chosen and no ringback sounds shortly after the control panel is armed, exit delay will not start and opening the exit/entry door will cause an instant alarm. To manually start the exit delay, select the *START EXIT TIME* function, then press the [ON/OFF] Button to execute.

Note: (1) If this feature is selected, Exit/Entry Follower Zones will not arm until either a ringback sounds or the *START EXIT TIME* function is used. (2) If communicator, telephone lines or central-station receiver is out of service, the system will be armed without communication capability.

Status Report See *Closing Report*

Subscriber Identification Numbers

If reporting openings and/or closings, program *Subscriber Opening/Closing Identification Numbers* for each area for each telephone number used. If reporting events, program Subscriber ID Numbers for each area for each telephone number used. Subscriber ID numbers must be programmed for each area and telephone number, even if all are the same. Start with the left-most location.

Sum Check See *Data Format*

Suppress "BYPASSED" Reminder When Armed (Must be enabled in all UL systems)

Program to inhibit the LCD "BYPASSED" display while armed.

Swinger Shutdown (Do not program for UL Installations.)

Program for zones with *Auto-Reset* to only reset twice (3 alarms) until rearmed to prevent *"swingers"* (intermittents) from causing repeated false alarms. See *Auto-Reset*. The *Swinger-Shutdown* feature is programmable by zone, but is not applicable to Ambush.

System Troubles (Global and Area)   .

System troubles may be programmed to report to any telephone number and/or activate any output. Also program *Subscriber ID Numbers, Telephone Numbers*, and *Report Codes* for each system trouble.

Note: RF TROUBLE will report for *RF Low Battery, RF Supervisory Failure* or *GEM-DT Self-Test Failure*.

Tamper; EZM Tamper; Keypad Tamper; RF Tamper

Removing the cover of an expansion zone module will cause the sounder to pulse and the "SYS/TRBL" reminder to flash. The keypad will display "E13-NN BURG EZM TAMPER", where "*NN*" denotes the module number. Press the [RESET] Button to silence the sounder ("SYSTEM READY" will display). Correct the problem, then select *RESET SYSTEM TBL* to manually reset the system trouble display.

Removing a keypad from the wall causes a similar system trouble indication. The keypad will display "E11-NN BURG KPD TAMPER", where "*NN*" denotes the keypad number. Press the [RESET] Button to silence the sounder ("SYSTEM READY" will display). To manually reset the system trouble, correct the problem then select *RESET SYSTEM TBL*.

Note: If either of the tamper conditions is not corrected within 5 minutes, the system trouble will again display at the keypad.

A Tamper condition can be programmed to activate the burglary output and/or report using its associated system Report Code.

In wireless installations, when displaying rf transmitter status, a "Tamper" indication denotes that the transmitter case is open.

Telco Fail See *Enable Line-Fault Test*

Telco Line Test Delay See *Enable Line-Fault Test; Time Selection.*

Telephone Numbers

To report to a central station, *Telephone Number 1* must be programmed. *Telephone Number 2* is programmed for Backup Reporting; *Telephone Number 3* is programmed for Double or Split Reporting.

Private telephone systems may require a *Dial-Tone Detection* "E" or *Pre-Dial Delay* "D", followed by an access number to obtain an outside line. (See *Access Number for Outside Line*.)

It should be noted here that the telephone number need not actually start in the first location shown, and may not end in the last. Extra locations have been provided to allow for one or more prefix digits: a *Pre-Dial Delay "D"* or a *Dial-Tone Detection "E"*. What *is* important is that the telephone number, with its associated *Pre-Dial Delay, Access Number*, and *Dial-Tone Detection*, be wholly contained within that group of locations, and that they be in their proper sequence.

Test Timer; Cancel Next Test Timer Report on Any Report

The test timer schedule is programmed using Napco's PCD3000 Quickloader Software. If *Test Timer* is programmed, an automatic test report will be transmitted to the central station on the scheduled day(s) at the scheduled time. (UL installations require a report at least every 24 hours.) To report test timer, select *Report Test Timer* and program a report code. Program the *Test Timer* event schedule and reporting time.

If *Cancel Next Test Timer Report on Any Report* is programmed, any report will cause the next test-timer transmission to be aborted, however subsequent test-timer transmissions will report as scheduled. Do not program this feature in UL installations.

Timeout

Specifies the length of time that an alarm, alert, or delay will remain active. *Auxiliary Output Access Control Time, Abort-Delay Time*, and *Chime Time* must be programmed, or the feature will not activate. See *Time Selection.*

Time Selection

The following times are programmable:

TIME[1]	UNITS	MAX. PROG. TIME
PGM2 OUTPUT	MIN.	UNTIMED[2]
PGM2 OUTPUT ACCESS CONTROL TIME	SEC.	4 MIN, 15 SEC (255 SEC)
BURGLARY OUTPUT	MIN.	UNTIMED[1][2]
PULSE-BURG OUTPUT	MIN.	UNTIMED[1][2]
PGM1 OUTPUT	MIN.	UNTIMED[2]
ABORT DELAY	SEC.	4 MIN, 15 SEC (255 SEC)[3]
CHIME TIME	¼SEC.	63.25 SEC (255 QTR-SEC)[3]
AC-FAIL REPORT DELAY	10 MIN.	42 HR, 30 MIN (2550 MIN)
EXIT DELAY	SEC.	4 MIN, 15 SEC (255 SEC)[4]
ENTRY DELAY 1	SEC.	4 MIN, 15 SEC (255 SEC)[4]
ENTRY DELAY 2	SEC.	4 MIN, 15 SEC (255 SEC)[4]
AUTO ARM REARM DLY	MIN.	4 HR, 15 MIN (255 MIN)

NOTES: (1) The output used for Burglary must be at least 4 minutes in Residential UL installations, 15 minutes in Commercial UL installations. (2) If both locations are left blank, this feature will remain active until the system is disarmed. When both locations are programmed "F", maximum time will be 4 hours, 15 minutes (255 minutes). (3) If both locations are left blank, this feature will not activate (timeout = 0). (4) In UL installations: Maximum Exit Delay = 60 sec; Maximum Entry Delay = 45 sec. (5) If programming locations are left blank, delay will default to 10 sec. (6) Time in units of disarmed hours (accumulated between armed periods).

Any timeout up to those shown in the foregoing table may be programmed. Note that each of the above times is programmed in two locations. The first location has an assigned time factor of 16, the second a time factor of 1.

1st BOX	2nd BOX
tx16	tx1

Time t:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Entry:	*	1	2	3	4	5	6	7	8	9	0	B	C	D	E	F

*Blank.

Note: If both programming locations are left blank, refer to the notes in the *Time Selection* table for feature timeout.

To select a time up to 15 seconds, 15 minutes, 15 hours, or 15 days, program the respective entry into the second box only; *do not program the first box.* To select a time greater than 15 seconds, 15 minutes, 15 hours or 15 days, program *both* boxes as follows:

1. For the feature selected, choose an appropriate time in units shown (all seconds, minutes, hours, or days — not minutes and seconds, etc.).

2. Divide the time chosen by 16. Enter the *quotient* in the *1st BOX* and the *remainder* in the *2nd BOX*.

3. Check entries by adding the contents of the *2nd BOX* to 16 times the contents of the *1st BOX*. (Remember that a "zero" entry represents 10.)

Example. Program *Entry Delay 1* for 1½ minutes.

1. *Entry Delay 1* is in units of seconds, thus delay time is 90 seconds.

2. Divide by 16: 90/16 = 5 (quotient) + 10 (remainder). Enter the *quotient* in the *1st BOX* and the *remainder* in the *2nd BOX*:

1st BOX	2nd BOX
5	0
quotient	remainder ("0" for 10)

3. Check entries (remember, a "0" entry = 10): (16x5) + 10 = 90.

TouchTone Dialing Only; TouchTone Dialing with Rotary Backup

Select *TouchTone Dialing Only* if the subscriber has TouchTone service. TouchTone dialing is faster than rotary dialing, but not always as reliable.

For the communicator to use TouchTone on all dial attempts, program *TouchTone Dialing Only*. To use TouchTone on the first attempt with subsequent Rotary dial, program *TouchTone Dialing with Rotary Backup. TouchTone Dialing Only* will override *TouchTone Dialing with Rotary Backup* if both are selected. Note that if Backup Reporting is also selected, the

communicator will alternate between TouchTone and rotary dial to reach Telephone 1, then Telephone 2. See *Backup Report on Telco 2.*

Transmit "402" Closing Code

Program to send a *"402"* closing code (for *Ademco Point ID* modem format) in place of a *"401"* code.

Trouble

An abnormal zone condition (a break in a normally-closed loop; a short on a normally-open loop; or either on an end-of-line-resistor supervised loop) when disarmed.

Trouble on a Burglary Zone is automatically displayed at the keypad unless *Disable Auto Status* is programmed. If a Burglary Zone is in trouble, it will go into alarm about 10 seconds after arming. However, if *Auto Bypass* is programmed, the keypad will beep upon arming (does not apply to selective- or group-bypassed zones).

Trouble (open and/or short circuit) on a Day Zone is indicated by a pulsing sounder; display the Day Zone(s) in trouble on the LCD. Keypad indications are reset by the [RESET] Button unless *Reset Day Zone With Arm/Disarm* is selected.

Trouble on a Fire Zone will be indicated by the "FIRE/TRBL" reminder and the sounder. An open circuit (trouble) will cause a flashing "FIRE" display and a pulsing sounder after a 15-second delay. (A short circuit will cause an alarm condition: steady-on "FIRE" display and pulsing sounder.) The [RESET] Button will silence the sounder. Clear the trouble, then press the [RESET] Button once again. The keypad will reset after a brief delay.

Trouble on Open; Trouble on Short; Trouble on Night Open *(Not for UL installations)*

Trouble on Open will identify an open circuit on a loop as a trouble. *Trouble on Short* will identify a short circuit as a trouble. *Trouble on Night Open*, which will identify an open circuit on a normally-closed zone while armed as a trouble condition (*not an alarm*), is intended for use with a Napco Monitor-Series dual-technology sensor. While there will be no indication at the keypad, any of these trouble conditions can be reported if *Report Trouble* is programmed as well. See *Sensor Watch.*

Trouble/Trouble Restore Telco 1/Telco 3 See *Report Telco 1/Telco 3*

Trouble/Trouble Restore Telco 2 See *Backup Report on Telco 2*

Two-Digit Format See *Data Format*

Two-Wire Smoke Detectors See *Smoke Detectors*

User Codes/Authority Levels/Access Bytes; User Closing and Opening Reports by Telephone Numbers; Enable User Code by Area

Up to 32 six-digit User Codes are programmable, each with its dedicated Authority Level and Access Byte. (The Authority Level comprises an Option Code.) Refer to Programming Manual WI818 for descriptions of levels and options.

If reporting to a central station, program *User Closing and Opening Reports by Telephone Numbers.* In multiple-area systems, program *Enable User Code by Area.*

Veri-Phone™; Silence All Outputs During Audio Session; Veri-Phone Zones Priority Over Alarms; Veri-Phone Zones Trip Auxiliary Relay

If *Silence All Outputs During Audio Session* is selected, all output relays will turn off whenever an active low is applied to control-panel Lug E19 (Listen In). Connect Veri-Phone Terminal 16 (INHO) to Lug E19. **Note:** Do not program *Keypad Sounder on Alarm* for Listen-In Zones.

If *Veri-Phone Zones Priority Over Alarms* is programmed and an active low is applied to the panel's Listen-In Lug (E19), any subsequent alarm reports (except fire alarms) generated during an audio session will be delayed until the end of the session. (Whenever a listen-in session is in progress, the Veri-Phone will output an active low at its INHO Terminal (16) and Lug E1.)

Program *Veri-Phone Zones Trip Auxiliary Relay* to have selectable Listen-In Zones. Connect Veri-Phone Terminal 14 (TRIGH) to control-panel Terminal 8 (AUX. N/O). Program the zone or event for *Auxiliary Relay.* Do not use the Auxiliary Relay for any other purpose.

Watch Mode (by Area) See *Day Zone*

Zone ANDing, Groups 1–2 (Not for UL installations); Enable Local Alarm on First Zone "AND" Trip (Not for UL installations)
Up to two groups of at least two zones each can be "*AND*"ed, wherein the system will go into alarm only if any two zones of the group are tripped within a prescribed time. This feature is designed to afford redundant protection for devices, such as glassbreak detectors, PIRs, etc., that may show a tendency to false under certain conditions. Program each group for any number of Zones 1–32. All zones in any group must be within the same area. Do not mix 24-Hour Zones and non-24-Hour Zones within the same group. Do not include a Panic Zone as part of any group.
Note: Any zone that is bypassed or goes into swinger shutdown will automatically disable *Zone Anding* for the entire group.
If **Enable Local Alarm on First Zone "AND" Trip** is programmed, a trip on any zone of the group will cause an alarm indication at the keypad only; there will be no communication to the central station.

Zone Area 1–Zone Area 2 See *Areas*

Zone Number on Pulse Alarm See *Data Formats: Two-Digit Format*

Zone Type See *Data Formats: Modem Formats*

2-Wire, 4-Wire Smoke Detectors See *Smoke Detectors*

4-Wire Bus Failure See *Bus Failure*

24-Hour Zone
A zone that provides protection at all times, whether or not the system is armed. If programmed for silent alarm (no relays or keypad sounder programmed), the green LED will go out if the zone is tripped. **Note:** The zone description will display on the LCD, therefore do not program a "panic" message for Panic Zones.
Note: Do not program a Day Zone as a 24-Hour Zone.

NOTES

KEYPAD PROGRAMMING MODES

FUNCTION MODE

KEYPAD PROGRAMMING MODES

Keypad Commands

Scroll Down	FUNCTION	1	2	3	ON/OFF	NEXT/YES INTERIOR	Yes	
Scroll Up	BYPASS	4	5	6		PRIOR/NO INSTANT	No	
Exit	RESET	7F	8A	9P	0	AREA ✱		

```
            START FUNCTION
                 MODE
                   |
                   v
            Press [FUNCTION]
                   |
                   v
      DISPLAY           Yes    Zones Bypassed
      ZN BYPASSED Y/N  ----->  Display Activated  ------------------+
            |                                                        |
            | No                                                     |
            v                                                        |
      ACTIVATE          Yes                                          |
      BELL TEST Y/N    ----->  Bell Test Activated  ----------------+
            |                                                        |
            | No                                                     |
            v                                                        |
      ACTIVATE/         Yes                                          |
      DEACTIVATE       ----->  Chime Toggle On/Off  --->  Exit Automatically
      CHIME Y/N                                                      |
            |                                                        |
            | No                                                     |
            v                                                        |
      RESET             Yes                                          |
      SYSTEM TRBL Y/N  ----->  Reset System Trouble  --------------+
            |                                                        |
            | No                                                     |
            v                                                        |
      ACTIVATE          Yes                                          |
      FAULT FIND Y/N   ----->  Activate Fault Find  ---------------+
            |                                                        |
            | No                                                     |
            v                                                        |
      TO ARM IN 1-4HRS  Yes   DELAY ARM? Y/N  Yes   System to Arm in
      PRESS 1-4 /N     ----->                ----->  number of hours  -->
            |                      |                  entered w/delay
            | No                   | No                                |
            v          <-----------+                                   |
      ACTIVATE          Yes                                            |
      PROGRAM Y/N      -------------------------------------------------+
            |
            | No
            v
      ACTIVATE          Yes    Download
      DOWNLOAD Y/N     ----->  Activated  --->  Exit Automatically
            |
            | No
            +----> (back to start)
```

DEALER MODE

START DEALER PROGRAM MODE

[4] [5] [6] [7F] [8A] [9P] [FUNCTION]
Dealer Code

Keypad Commands

Scroll Down	[FUNCTION]	[1]	[2]	[3]	ON/OFF	NEXT/YES [INTERIOR]	Yes
Scroll Up	[BYPASS]	[4]	[5]	[6]		PRIOR/NO [INSTANT]	No
Exit	[RESET]	[7F]	[8A]	[9P]	[0]	AREA [*]	

DISPLAY ZN BYPASSED Y/N — Yes → Zones Bypassed Display Activated → Exit Automatically

No ↓

ACTIVATE BELL TEST Y/N — Yes → Bell Test Activated → Exit Automatically

No ↓

ACTIVATE/DEACTIVATE CHIME Y/N — Yes → Chime Toggle On/Off → Exit Automatically

No ↓

RESET SYSTEM TRBL Y/N — Yes → Reset System Trouble → Exit Automatically

No ↓

ACTVATE FAULT FIND Y/N — Yes → Activate Fault Find → Exit Automatically

No ↓

TO ARM IN 1-4HRS PRESS 1-4 /N — Yes → **DELAY ARM? Y/N** — Yes → System to Arm in number of hours entered w/delay → Exit Automatically

No → No

ACTIVATE PROGRAM Y/N — Yes → Go to Easy Menu Driven Mode → See next page.

No ↓

ACTIVATE DOWNLOAD Y/N — Yes → Download Activated → Exit Automatically

No ↓

EASY MENU DRIVEN MODE

Keypad Commands

Set Cursor — FUNCTION — 1 2 3 — Execute ON/OFF — NEXT/YES INTERIOR — Yes/Scroll Down

BYPASS — 4 5 6 — PRIOR/N INSTANT — No/Scroll Down

Exit — RESET — 7F 8A 9P — 0 — * — AREA

Easy Menu Driven Mode

Enter # of Zones in Area 1

EZ ZONE DOUBLING ENABLED? Y/N — Yes

No

Enter Fire Zone Numbers in Area 1

Enter 2-Wire Fire Zone Numbers in Area 1

REPORT ALL ZONES TO CENTRAL? Y/N — Yes

No

Enter Entry/Exit Zone Numbers in Area 1

Enter Interior Zone Numbers in Area 1

Enter Number of Keypads in Area 1

Enter Central Station 1 Telephone Number

Enter CS Receiver 1 Account Number

Enter CS Receiver 1 Format

Enter User Codes for both Areas

Enter RF Xmitter to Zone Mapping

Enter Keyfob Area Mapping

Enter Zone Descriptions

Enter Dealer Code

Press RESET (at any time)

Go to Direct Address Mode

Press RESET (again)

EXIT

GEM-P1632 Programming Instructions   NAPCO Security Systems

USER MODE

Keypad Commands

Scroll Down/ Set Cursor	[FUNCTION]
Scroll Up	[BYPASS]
Exit	[RESET]

[1] [2] [3]

[4] [5] [6]

[7F] [8A] [9P] [0] [*]

Execute [ON/OFF]

NEXT/YES [INTERIOR] → Yes

PROGRAM [INSTANT] → No

AREA [*]

START USER PROGRAM MODE

[1] [2] [3] [FUNCTION]
New Panel: Default User Code (123)
Existing Panel: Any Code with User Program Option Enabled

ACTIVATE BELL TEST Y/N — Yes → Bell Test Activated

No ↓

ACTIVATE/ DEACTIVATE CHIME Y/N — Yes → Chime Toggle On/Off → Exit Automatically

No ↓

TO ARM IN 1-4HRS PRESS 1-4 /N — Yes → **DELAY ARM? Y/N** — Yes → System to Arm in number of hours entered w/delay

No ↓ / No →

ACTIVATE PROGRAM Y/N — Yes →

No ↓

ACTIVATE DOWNLOAD Y/N — Yes → Download Activated → Exit Automatically

No ↓

Enter User Codes for both Areas

↓

Enter Zone Descriptions

Press [RESET] (at any time to exit)

↓

EXIT

GEM-P1632 Programming Instructions

NAPCO Security Systems

GEM-P1632
WIRING DIAGRAM
(REFER TO OPERATION AND INSTALLATION INSTRUCTIONS W808)
BATTERY STANDBY CURRENT

NAPCO SECURITY SYSTEMS, INC.
AMITYVILLE, N.Y. 11701

This equipment should be installed in accordance with Chapter 2 of the National Fire Alarm Code, ANSI/NFPA 72-1993 (National Fire Protection Association Batterymarch Park, Quincy, MA 02269). and local codes. Information describing proper installation, operation, testing, maintenance, evacuation planning, and repair service is to be provided with this equipment. UL Listed Limited Energy Cable is required.

RESIDENTIAL AND COMMERCIAL BURGLARY STANDBY/ALARM CURRENT CHART

16.5V TRANSFORMER	BATTERY	COMBINED STANDBY CURRENT	PANEL ALARM CURRENT	STANDBY TIME
40VA/50VA	4AH	650mA	2.0A	4 HOURS
20VA	4AH	500mA	2.0A	4 HOURS

RESIDENTIAL FIRE AND COMBINATION RESIDENTIAL BURGLARY AND FIRE STANDBY/ALARM CURRENT CHART

16.5V TRANSFORMER	BATTERY	COMBINED STANDBY CURRENT	PANEL ALARM CURRENT	STANDBY TIME
40VA/50VA	7AH	120mA	520mA(1)	24 HOURS
20VA	7AH	120mA	360mA(1)	24 HOURS

REFER TO W808 FOR EXPANDED CURRENT SPECIFICATIONS.

4 AMP HOUR OR 6 AMP HOUR RECHARGEABLE BATTERY 12VDC

(−)□ — BLACK
(+)□ — RED

AC IN, 16.5V/60Hz VIA TRF11 OR TRF12 CLASS 2 TRANSFORMER (A) DO NOT CONNECT TO SWITCHED OUTLET

◇E1
◇E2

(E) 2.2K

(SUPERVISED)

(+)BELL
(−)BELL

AUX PWR

USING A RB1000 FOR 12V OUTPUT ON PGM-1 OR PGM-2

PGM-1 OR PGM-2

+12V ALARM

(−) BLK
(+) RED

N/O N/C COM
RB1000

PGM 1
PGM 2

RED
BLK
GRN
YEL

REMOTE BUS

SEE NOTE (2)

COLD WATER GROUND CONNECTION. USE ONLY COLD-WATER PIPE OR BURIED GROUND ROD. USE AT LEAST #16 AWG WIRE

EARTH GROUND

(GEM-RP1CAe) 2 LINE KEYPAD

ORANGE / GREY — Z1
BLUE / GREY — Z2
VIOLET / GREY — Z3
WHITE / GREY — Z4

EZ Zone Doubling™ Resistors

(E) 2.2K
RED RED RED GOLD

(Z) 3.9K
ORANGE WHITE RED GOLD

PCD LOCAL DOWNLOAD CONNECTION
NOT FOR TEL. LINES J3

E10

ZONE 7 __ ZONE 8
BURG   BURG
2-WF   2-WF

E5
E19

WARNING
TO PREVENT RISK OF ELECTRIC SHOCK DISCONNECT TELEPHONE LINES PRIOR TO SERVICING.

KEYPAD CONFIGURE
NORMAL

STANDARD ZONE WIRING (12VDC 5mA)

13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
(+)	(−)	(+)	(+)	(−)	(+)	(+)	(−)	(−)	(−)	(+)	(+)	(−)				

TELCO   PHONE

2.2K ZONE 1, 2.2K ZONE 2, 2.2K ZONE 3, 2.2K ZONE 4, 2.2K ZONE 5, 2.2K ZONE 6, 2.2K ZONE 7, 2.2K ZONE 8

FIRE PWR
RED RING GRN GRAY BRN
R13'X

EZ Zone Doubling™ Wiring (ONLY FOR N.C. BURG. ZONES)

13	14	15	16	17	18	19	20	21	22	23	24	25
(+)	(−)	(+)	(−)	(−)	(−)	(−)	(−)	(+)	(−)	(+)	(−)	(−)

Z9 Z1 / Z10 Z2 / Z11 Z3 / Z12 Z4 / Z13 Z5 / Z14 Z6 / Z15 Z7 / Z16 Z8

2 WIRE SMOKE DETECTOR WIRING
ZONE 7 __ ZONE 8
BURG   BURG
2-WF   2-WF

23 24 25
(−)(−)(−)

2.2K   2.2K
ZONE 7 ZONE 8

4 WIRE SMOKE DETECTOR WIRING
PROGRAMMED FIRE ZONE   POWER
(+)(−)   25 (−)

OPTIONAL THERMOSTAT

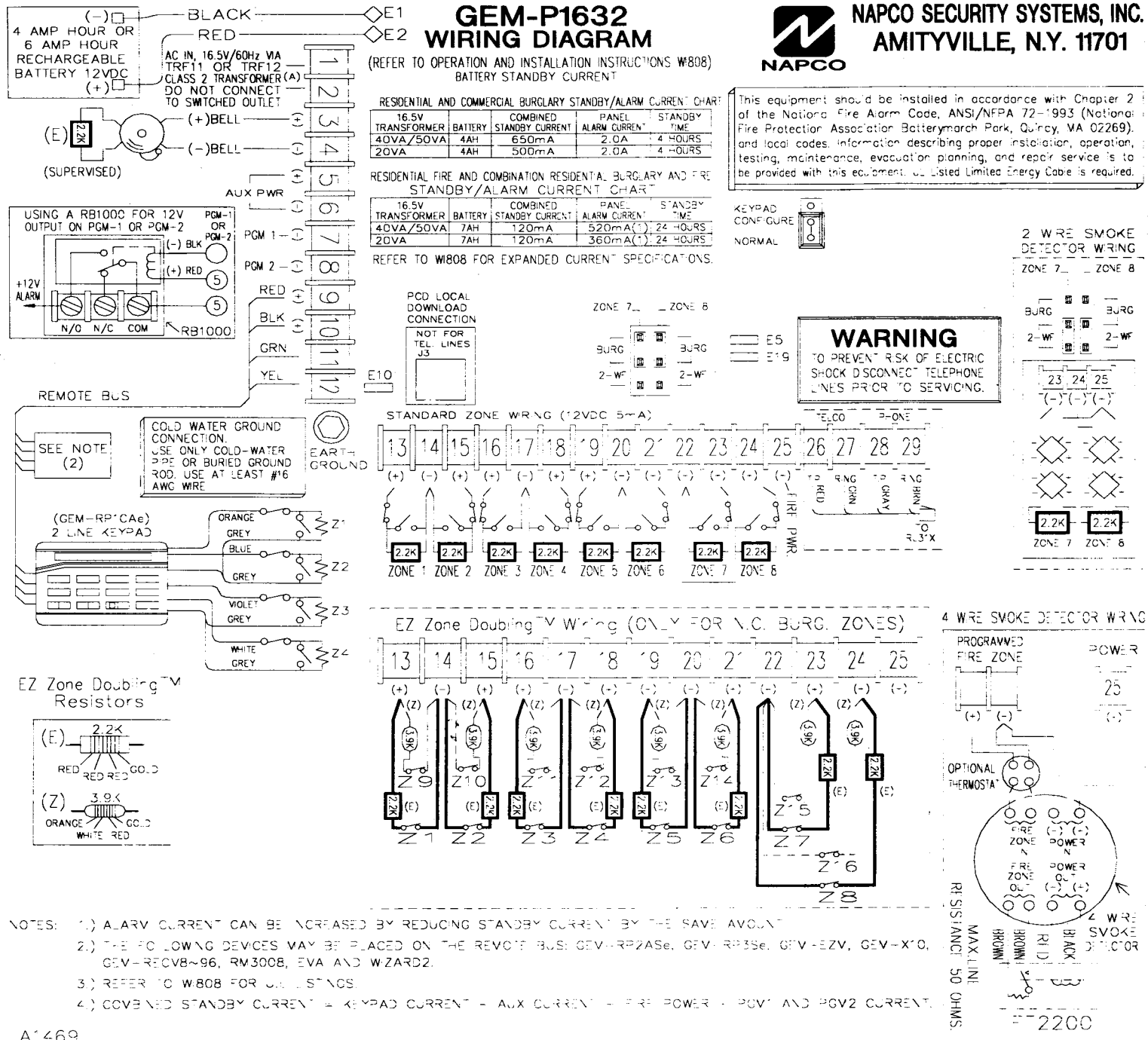FIRE ZONE N (−)(−) POWER N
FIRE ZONE OUT (−)(+) POWER OUT

4 WIRE SMOKE DETECTOR
BLACK RED BROWN BROWN

MAX LINE RESISTANCE 50 OHMS

PF2200

NOTES:
1.) ALARM CURRENT CAN BE INCREASED BY REDUCING STANDBY CURRENT BY THE SAME AMOUNT

2.) THE FOLLOWING DEVICES MAY BE PLACED ON THE REMOTE BUS: GEM-RP2ASe, GEM-RP3Se, GEM-EZV, GEM-X10, GEM-RECV8~96, RM3008, EVA AND WIZARD2.

3.) REFER TO W808 FOR UL LISTINGS.

4.) COMBINED STANDBY CURRENT = KEYPAD CURRENT + AUX CURRENT + FIRE POWER + PGM1 AND PGM2 CURRENT.

LA1469