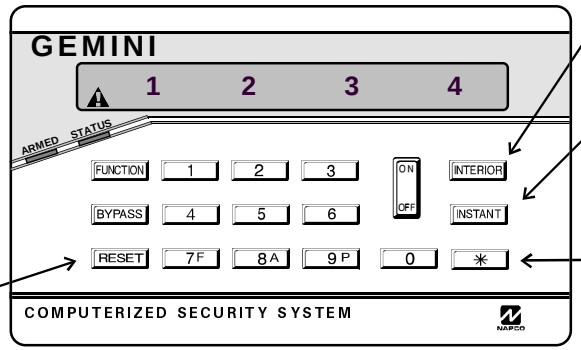
GEM-P400 Programming Instructions

Note: These Programming Instruction are intended to be used in conjunction with WI879A, please refer to WI879A for additional information, instructions and definitions.

DEALER PROGRAM MODE - KEYPAD KEY DEFINITION

NOTE:
After 15 minutes of keypad inactivity the keypad will emit a steady tone indicating the panel has been left in Dealer Program Mode. Enter Dealer Code to exit or press the [RESET] key to return to Dealer Program mode.



Set Key
Press this key before entering a Programming Block Number.

Scroll Key
Use this key to scroll through data that has been entered in Programming Blocks.

Blank Key
Press this key to disable all features within a LED type Programming Block or to blank out digits in a Direct Entry type Programming Block.

Hexadecimal Data Entry
To Enter a hexadecimal digit enter the following:

A=	* 1	D=	* 4
B=	* 2	E=	* 5
C=	* 3	F=	* 6

DEFAULTING THE PANEL

1. Remove power from the panel.
2. Remove all wiring from terminal 15 (PGM) and terminal 3.
3. Connect terminal 15 (PGM) to terminal 3.
4. Apply power to the GEM-P400 control panel.
5. After a few seconds the ARMED, READY and ⚠SYSTEM TROUBLE LEDs will flash.
6. The keypad will beep 3 times indicating the panel default values have been loaded.
7. Remove wiring between terminal 15 (PGM) and terminal 3.
8. Re-install original wiring for terminal 15 (PGM) and terminal 3.

Note: Any programming in *Dealer Options 1* [96] and *Dealer Options 2* [97] will not be defaulted. If *Dealer Code Lockout* has been programmed the panel will not default the Dealer Code.

Entering Dealer Program Mode

NOTE:
Entering Dealer Program Mode is not permitted while the panel is Armed, Reporting, or the Bell Output is on. To Enter Dealer Mode while the Bell is ON or the panel is Reporting or Armed; power up the panel and enter Dealer Mode within the first 3 minutes. Pressing the [RESET] key clears the 3 minute timer.

Enter [FUNCTION] [8A] +

Dealer Code

(4) (5) (6) (7) ON/OFF

Default Dealer Code shown in parentheses

ARMED	ON	Indicates the panel is in Dealer Program Mode. The panel is ready for a programming block to be entered.	
STATUS	OFF		
⚠ TROUBLE	FLASHING		

Exiting Dealer Program Mode

Enter [RESET] [FUNCTION] [8A]

Dealer Code

(4) (5) (6) (7) ON/OFF

ARMED	FLASHING	Indicates the panel is Ready to exit Dealer Program Mode. Enter the Dealer Code to exit.
STATUS	FLASHING	
⚠ TROUBLE	FLASHING	

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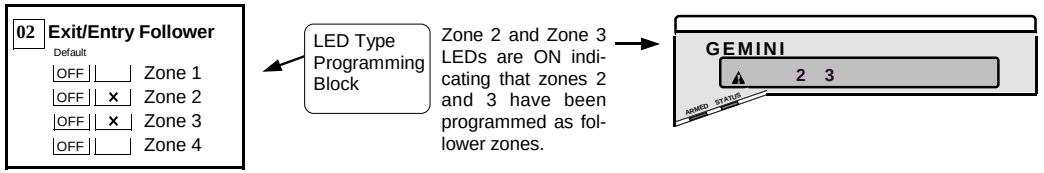
Types of Programming Blocks

LED Programming Block

Enable features by pressing the key that corresponds to the associated feature; the LED will turn ON. To disable a feature press the key again; the LED will turn OFF. To disable all features within a LED Type Programming Block press the [INSTANT] key; all LEDs will turn OFF.

1 LED Programming Block Example
Program zones 2 and 3 as *Follower Zones.*

1. Enter Programming Block 02, by pressing [RESET] (Beep), then [0] [2] (Beep).
2. Press the [2] key to select zone 2.
3. Press the [3] key to select zone 3.

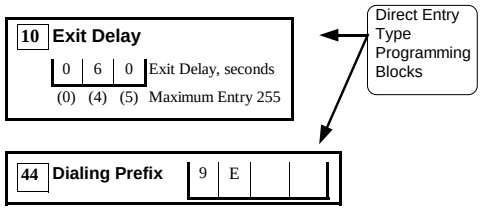


Direct Entry Programming Block

Enter data directly. For hexadecimal entries of A-F, use the [✳] key + [1] through [6] keys, respectively. Use the [INSTANT] key to blank out digits in Direct Entry type programming blocks. Default values are shown in parentheses.

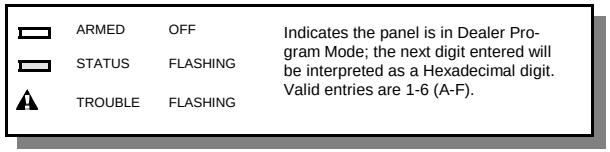
1 Direct Entry Programming Example 1
Program the panel for a 60 second *Exit Delay.*

1. Press [RESET] (Beep) [1] [0] (Beep).
2. Press [0] [6] [0].



2 Direct Entry Programming Example 2
(Hexadecimal data entry)
Program *Telephone Prefix Number* with a 9E.

1. Press [RESET] (Beep) [4] [4] (Beep).
2. Press [9 P]
3. Press [✳]
4. Press [5]



Viewing Data in Programming Blocks

To view data within a programming Block enter the Program Block Number, the 1st digit will be displayed. Press the INTERIOR key to view the 2nd digit, continue pressing the INTERIOR key until all digits within the Programming Block have been viewed. Data will be displayed in the binary format shown in the table below:

Value	Data Displayed	Value	Data Displayed
0/Blank		8	4
1	1	9	1 4
2	2	*A/0	2 4
3	1 2	B	1 2 4
4	3	C	3 4
5	1 3	D	1 3 4
6	2 3	E	2 3 4
7	1 2 3	F	1 2 3 4

* **NOTE:**
In the following Programming Blocks, data that has been entered as a '0' will be displayed as an 'A': *Subscriber ID Numbers, Phone Numbers, Pager Leading and Trailing digits and Report Codes.*

Zone #	Bit Value
1	1
2	2
3	4
4	8

For Technical Assistance, Contact the NAPCO Toll Free Helpline ☎
(800) 645-9440

NOTE:
The Following Programming Options are not permitted for UL installations: [05], [06], [23-2], [26-3] and [26-4].

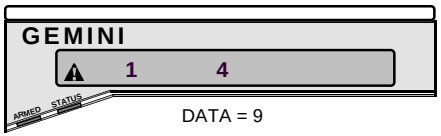
The (UL) symbol by a programming Block indicates the programming option is not permitted for UL installations.

NOTE:
For information about programming blocks refer to GEM-P400 Installation Manual WI879A.

Example: Viewing the Dialing Prefix

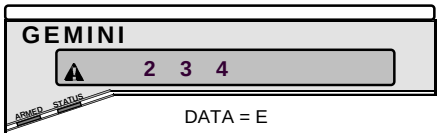
A Dialing Prefix of 9E has been programmed at Programming Block Number 44 (outside access number). Follow the steps below to view the data.:

① Press RESET 4 4 to enter Programming Block 44. The 1st digit of Programming Block 44 is displayed.



DATA = 9

② Press the INTERIOR key to view the 2nd digit.



DATA = E

Zone Features

00 Exit/Entry Zones

Default

ON	____	Zone 1
OFF	____	Zone 2
OFF	____	Zone 3
OFF	____	Zone 4

03 Auto Bypass Reentry Zones

Default

OFF	____	Zone 1
OFF	____	Zone 2
OFF	____	Zone 3
OFF	____	Zone 4

06 Open Circuit Zones

Default

OFF	____	Zone 1
OFF	____	Zone 2
OFF	____	Zone 3
OFF	____	Zone 4

See wiring diagram for Open Circuit wiring.

01 Home/Away with Delay Zones

Default

OFF	____	Zone 1
OFF	____	Zone 2
OFF	____	Zone 3
OFF	____	Zone 4

04 24 Hour Protection Zones

Default

OFF	____	Zone 1
OFF	____	Zone 2
OFF	____	Zone 3
OFF	____	Zone 4

07 Burg (Steady) Output

Default

ON	____	Zone 1
ON	____	Zone 2
ON	____	Zone 3
ON	____	Zone 4

02 Exit/Entry Follower Zones

Default

OFF	____	Zone 1
OFF	____	Zone 2
OFF	____	Zone 3
OFF	____	Zone 4

05 40 ms Loop Response Zones

Default

OFF	____	Zone 1
OFF	____	Zone 2
OFF	____	Zone 3
OFF	____	Zone 4

08 Programmable Output (PGM)

Default

ON	____	Zone 1
ON	____	Zone 2
ON	____	Zone 3
ON	____	Zone 4

System Times

10 Exit Delay

[ ][ ][ ] Exit Delay, seconds
(0) (4) (5) Maximum Entry 255

11 Entry Delay

[ ][ ][ ] Entry Delay, seconds
(0) (3) (0) Maximum Entry 255

12 Burg (Steady) Output Time-out

[ ][ ][ ] Bell Time-out, minutes
(0) (0) (5) Maximum Entry 255

13 Reserved

14 Test Timer Interval

[ ][ ][ ] Test Timer, days
(0) (0) (1) Maximum Entry 255

15 Line Cut Time-to-Fail (Disabled = 000)

[ ][ ][ ] Line Cut Time-to-Fail, seconds
(0) (0) (0) **Enable Feature**-Valid Entries 10-255

16 Wireless Supervisory Timer

[ ][ ] Supervisory Timer, hours
(1) (2) Maximum Entry 26

System Features

20 Keypad Features 1

Default
- OFF [ ] Zn 1 LED ON = *****Keypad Panic 2 (7 F *)
- OFF [ ] Zn 2 LED ON = *****Keypad AUX (8 A *)
- ON [ ] Zn 3 LED ON = *Keypad Panic (9 P *)
- OFF [ ] Zn 4 LED ON = *****Ambush (4th User Code)

*See Note 1

21 Keypad Features 2

Default
- ON [ ] Zn 1 LED ON = Audible panic
- OFF [ ] Zn 2 LED ON = Exit/Entry with Urgency
- ON [ ] Zn 3 LED ON = Display Bypass (ARMED)
- OFF [ ] Zn 4 LED ON = Disable Code Entry Beeps

22 Miscellaneous Features 1

Default
- OFF [ ] Zn 1 LED ON = Abort Delay
- ON [ ] Zn 2 LED ON = Easy Arm/Easy Exit
- ON [ ] Zn 3 LED ON = Swinger Shutdown
- OFF [ ] Zn 4 LED ON = Bell on Line Cut (Armed)

23 Programmable Output (PGM) Features 1

Default
- OFF [ ] Zn 1 LED ON = Audio Verification
- NL OFF [ ] Zn 2 LED ON = *Access Output (FUNCTION 3)
- OFF [ ] Zn 3 LED ON = *Follow Keypad Sounder
- OFF [ ] Zn 4 LED ON = *Keyfob/Keyswitch Chirp

*See Note 2

24 Programmable Output (PGM) Features 2

Default
- OFF [ ] Zn 1 LED ON = Reserved
- OFF [ ] Zn 2 LED ON = AUX
- OFF [ ] Zn 3 LED ON = Panic
- OFF [ ] Zn 4 LED ON = Test Timer

25 Programmable Output (PGM) Features 3

Default
- OFF [ ] Zn 1 LED ON = AC Fail
- OFF [ ] Zn 2 LED ON = Low Battery
- OFF [ ] Zn 3 LED ON = *Trouble
- OFF [ ] Zn 4 LED ON = Armed

*See Note 3

26 Miscellaneous Features 2

Default
- OFF [ ] Zn 1 LED ON = Momentary Keyswitch Arming
- OFF [ ] Zn 2 LED ON = Reserved
- NL OFF [ ] Zn 3 LED ON = Inhibit Fail to Communicate
- NL OFF [ ] Zn 4 LED ON = Inhibit Low Battery Display

NOTE 1:
Additional programming required for reporting, see Blocks [36]&[56].

NOTE 2:
Cannot be programmed with any other Programmable Output (PGM) Feature.

NOTE 3:
Includes Bell Cut, Receiver Fail-to-Respond, Receiver Tamper, Receiver JAM, Transmitter Low Battery and Transmitter Supervisory Faliure.

Telephone Number 1 Programming

30 Subscriber ID Number

31 Telephone Number 1

NOTE:
A fixed Dial Tone Detection (E) is included prior to the *Dialing Prefix* (Block Number 44). Programming an E is not required for Telco 1, Telco 2 and Telco 3. If dial tone detection is not desired select *No Dial Tone Detection* in Communicator Features (Block Number 46). Program a D if a 4 second delay is required.

32 Receiver Format

[0]	Disabled
[1]	Ademco Slow
[2]	Radionics Slow
[3]	Silent Knight Fast
[4]	Universal High Speed
[5]	Reserved
[6]	Point ID
[7]	Pager

→ [ ] (4)

33 Receiver Options

Default

ON [ ] Zn 1 LED ON = 2300 Hz Handshake/Kissoff
OFF [ ] Zn 2 LED ON = Sumcheck
OFF [ ] Zn 3 LED ON = Single Digit
OFF [ ] Zn 4 LED ON = No Handshake/Pager Extend

34 Zone Report, Telco 1

Default

ON [ ] Zone 1
ON [ ] Zone 2
ON [ ] Zone 3
ON [ ] Zone 4

35 Zone Restore Report, Telco 1

Default

OFF [ ] Zone 1
OFF [ ] Zone 2
OFF [ ] Zone 3
OFF [ ] Zone 4

36 System Reporting, Telco 1

Default

OFF [ ] Zn 1 LED ON = *KP Panic 2 (7F *)
OFF [ ] Zn 2 LED ON = *KP AUX (8A *)/Ambush
ON [ ] Zn 3 LED ON = *KP Panic (9P *)
OFF [ ] Zn 4 LED ON = Test Timer

*See Note 1

NOTE 1:
Requires features to be enabled, see block [20].

37 System Reporting, Telco 1

Default

OFF [ ] Zn 1 LED ON = AC Fail Report (15 min. report delay)
ON [ ] Zn 2 LED ON = Low Battery Report
OFF [ ] Zn 3 LED ON = *Trouble Report
OFF [ ] Zn 4 LED ON = Reserved

*See Note 2

38 System Restore Report, Telco 1

Default

OFF [ ] Zn 1 LED ON = AC Restore Report
OFF [ ] Zn 2 LED ON = Battery Restore Report
OFF [ ] Zn 3 LED ON = Trbl Restore Report
OFF [ ] Zn 4 LED ON = Reserved

39 Opening Closing Report, Telco 1

Default

OFF [ ] Zn 1 LED ON = User 1 Reporting
OFF [ ] Zn 2 LED ON = User 2 Reporting
OFF [ ] Zn 3 LED ON = User 3 Reporting
OFF [ ] Zn 4 LED ON = User 4 Reporting

NOTE 2:
Includes Bell Cut, Receiver Fail-to-Respond, Receiver Tamper, Receiver JAM, Transmitter Low Battery and Transmitter Supervisory Faliure.

ZONE 3 TX LOW BATTERY "RF TRAN LOW BAT, ZN03"

Backup Telephone Programming

40 Subscriber ID Number (Telco 2)

41 Telephone Number 2

NOTE:
A fixed Dial Tone Detection (E) is included prior to the *Dialing Prefix* (Block Number 44). Programming an E is not required for Telco 1, Telco 2 and Telco 3. If dial tone detection is not desired select *No Dial Tone Detection* in Communicator Features (Block Number 46). Program a D if a 4 second delay is required.

42 Receiver Format

[1]	Ademco Slow
[2]	Radionics Slow
[3]	Silent Knight Fast
[4]	Universal High Speed
[5]	Reserved
[6]	Point ID
[7]	Pager

→ [ ] (4)

43 Receiver Options

Default

ON [ ] Zn 1 LED ON = 2300 Hz Handshake/Kissoff
OFF [ ] Zn 2 LED ON = Sumcheck
OFF [ ] Zn 3 LED ON = Single Digit
OFF [ ] Zn 4 LED ON = No Handshake

44 Dialing Prefix

Dialing Prefix for Telco 1, Telco 2 & Telco 3.

45 Communicator Features 1

Default

ON [ ] Zn 1 LED ON = Communicator Enabled
ON [ ] Zn 2 LED ON = DTMF w/ Rotary Back up
OFF [ ] Zn 3 LED ON = DTMF only
OFF [ ] Zn 4 LED ON = Backup to Telco 2

46 Communicator Features 2

Default

OFF [ ] Zn 1 LED ON = No Dial Tone Detection
OFF [ ] Zn 2 LED ON = 2:1 Rotary Dialing
OFF [ ] Zn 3 LED ON = Backup if < 4 attempts
OFF [ ] Zn 4 LED ON = Reserved

Telephone Number 3 Programming

50 Subscriber ID Number

51 Telephone Number 3

NOTE:
A fixed Dial Tone Detection (E) is included prior to the *Dialing Prefix* (Block Number 44). Programming an E is not required for Telco 1, Telco 2 and Telco 3. If dial tone detection is not desired select *No Dial Tone Detection* in Communicator Features (Block Number 46). Program a D if a 4 second delay is required.

52 Receiver Format

→ [ ] (4)

[0]	Disabled
[1]	Ademco Slow
[2]	Radionics Slow
[3]	Silent Knight Fast
[4]	Universal High Speed
[5]	Reserved
[6]	Point ID
[7]	Pager

53 Receiver Options

Default

ON [ ] Zn 1 LED ON = 2300 Hz Handshake/Kissoff
OFF [ ] Zn 2 LED ON = Sumcheck
OFF [ ] Zn 3 LED ON = Single Digit
OFF [ ] Zn 4 LED ON = No Handshake/Pager Extend

54 Zone Report, Telco 3

Default

OFF [ ] Zone 1
OFF [ ] Zone 2
OFF [ ] Zone 3
OFF [ ] Zone 4

55 Zone Restore Report, Telco 3

Default

OFF [ ] Zone 1
OFF [ ] Zone 2
OFF [ ] Zone 3
OFF [ ] Zone 4

56 System Reporting, Telco 3

Default

OFF [ ] Zn 1 LED ON = *KP Panic 2 (7F *)
OFF [ ] Zn 2 LED ON = *KP AUX (8A *)/Ambush
OFF [ ] Zn 3 LED ON = *KP Panic (9P *)
OFF [ ] Zn 4 LED ON = Test Timer

*See Note 1

NOTE 1:
Requires features to be enabled, see block [20].

57 System Reporting, Telco 3

Default

OFF [ ] Zn 1 LED ON = AC Fail Report (15 min. report delay)
OFF [ ] Zn 2 LED ON = Low Battery Report
OFF [ ] Zn 3 LED ON = *Trouble Report
OFF [ ] Zn 4 LED ON = Reserved

*See Note 2

58 System Restore Report, Telco 3

Default

OFF [ ] Zn 1 LED ON = AC Restore Report
OFF [ ] Zn 2 LED ON = Battery Restore Report
OFF [ ] Zn 3 LED ON = Trbl Restore Report
OFF [ ] Zn 4 LED ON = Reserved

59 Opening Closing Report, Telco 3

Default

OFF [ ] Zn 1 LED ON = User 1 Reporting
OFF [ ] Zn 2 LED ON = User 2 Reporting
OFF [ ] Zn 3 LED ON = User 3 Reporting
OFF [ ] Zn 4 LED ON = User 4 Reporting

NOTE 2:
Includes Bell Cut, Receiver Fail-to-Respond, Receiver Tamper, Receiver JAM, Transmitter Low Battery and Transmitter Supervisory Faliure.

ZONE 3 TX LOW BATTERY "RF TRAN LOW BAT, ZN03"

Report Codes

60 Zone Report Codes

[ ] (3) Zone 1 Alarm Code
[ ] (3) Zone 2 Alarm Code
[ ] (3) Zone 3 Alarm Code
[ ] (3) Zone 4 Alarm Code

NOTE:
The second digit of the *Report Code* is the number of the zone that is reporting. For example zone 5 report code (default of 3) would be 35.

61 Point ID Report Codes

[ ] (3) Zone 1 Alarm Code
[ ] (3) Zone 2 Alarm Code
[ ] (3) Zone 3 Alarm Code
[ ] (3) Zone 4 Alarm Code

1	RESERVED
2	PANIC
3	BURGLARY
4	HOLDUP
5	GENERAL ALARM
6	RESERVED
7	GAS ALARM
8	HEAT ALARM
9	RESERVED
A	AUXILIARY
B	24 HOUR ALARM

62 Zone Codes

[ ] (E) Zone 1, 2, 3, & 4 Restore Code
[ ] (F) Zone 1, 2, 3, & 4 Trouble Code

63 System Report Codes

[ ][ ] (1) (1) Keypad Panic 2 (7F *)
[ ][ ] (2) (3) Keypad AUX (8A *)
[ ][ ] (2) (1) Keypad Panic (9P *)
[ ][ ] (F) (F) Test Timer
[ ][ ] (F) (9) AC Fail
[ ][ ] (F) (8) Low Battery
[ ][ ] (F) (1) *Trouble

*See Note 1

64 System Restore Code

[ ] (E)

NOTE 1:
Includes Bell Cut, Receiver Fail-to-Respond, Receiver Tamper, Receiver JAM, Transmitter Low Battery and Transmitter Supervisory Faliure.

65 Opening and Closing Code

[ ] (C) Closing Code
[ ] (B) Opening Code

66 Ambush Report Code

[ ][ ] (2) (2)

Enhanced Communicator Features

67 Telephone Number 1

Default
OFF [ ] Zn 1 LED ON = Opening after Alarm (Cancel Code)
OFF [ ] Zn 2 LED ON = Conditional Closing
OFF [ ] Zn 3 LED ON = Reserved
OFF [ ] Zn 4 LED ON = Reserved

68 Telephone Number 3

Default
OFF [ ] Zn 1 LED ON = Opening after Alarm (Cancel Code)
OFF [ ] Zn 2 LED ON = Conditional Closing
OFF [ ] Zn 3 LED ON = Reserved
OFF [ ] Zn 4 LED ON = Reserved

Wireless

Transmitters

		RF ID #	Point
71	Zone 1		
72	Zone 2		
73	Zone 3		
74	Zone 4		

Enter the RF ID# located on the Transmitter and Key Fob labels.

RF ID # XXXXXX:X

Enter the point number to be associated with the zone. If only one point of GEM-TRANS2 is used, enter a **1** in this location. For GEM-GB, GEM-DT, GEM-PIR enter a **1** in this location.

Programming Example

Map point 1 of a window door transmitter, with RF ID# 0012B0:0 to Zone 3.

73 **Zone 3** | 0 | 0 | 1 | 2 | B | 0 | :0 | | 1 |

1. Enter Dealer Mode.
2. Enter RESET (beeps) 7F 3 (beeps)
3. Enter 0 0 1 2 ✳ 2 0 0
4. Enter 1 (beeps)

Hexadecimal B Entry

Note: If the RF ID# in step 3 is not entered correctly the keypad will emit a 1 second tone indicating incorrect entry. Repeat steps 2 - 4 above.

Keyfobs

		RF ID #	AUX 1	AUX 2
81	Keyfob 1			
82	Keyfob 2			

AUX 1 & 2 Programming

1 Panic
2 AUX
3 Bell ON
4 PGM
5 Instant
6 Access on PGM
7 Full Set System
8 Interior

Hexadecimal Data Entry

To Enter a hexadecimal digit enter the following: A= ✳ 1 B= ✳ 2 C= ✳ 3 D= ✳ 4 E= ✳ 5 F= ✳ 6

Downloading

90 Callback Telephone Number

91 Ring Count

(0) (9) Maximum Entry 15

92 Downloading Features

Default

ON | | Zn 1 LED ON = Ring Method
OFF | | Zn 2 LED ON = Answering Machine override
OFF | | Zn 3 LED ON = Function 6(FUNCTION 6) Download
OFF | | Zn 4 LED ON = Reserved

93 Auto Download ID Number

Dealer Programming

94 Dealer Code

(4) (5) (6) (7)

95 User 1 Code

(1) (2) (3) (4)

96 Dealer Options 1

Default

OFF | | Zn 1 LED ON = Dealer Code Lockout
ON | | Zn 2 LED ON = User 1 Code Lockout
OFF | | Zn 3 LED ON = Reserved
OFF | | Zn 4 LED ON = Reserved

97 Dealer Options 2

Default

OFF | | Zn 1 LED ON = *International Dialing Protocol
OFF | | Zn 2 LED ON = *Invert Bell Output
OFF | | Zn 3 LED ON = System Trouble Auto Reset
OFF | | Zn 4 LED ON = User 1 Code-Program only

*See Note 1

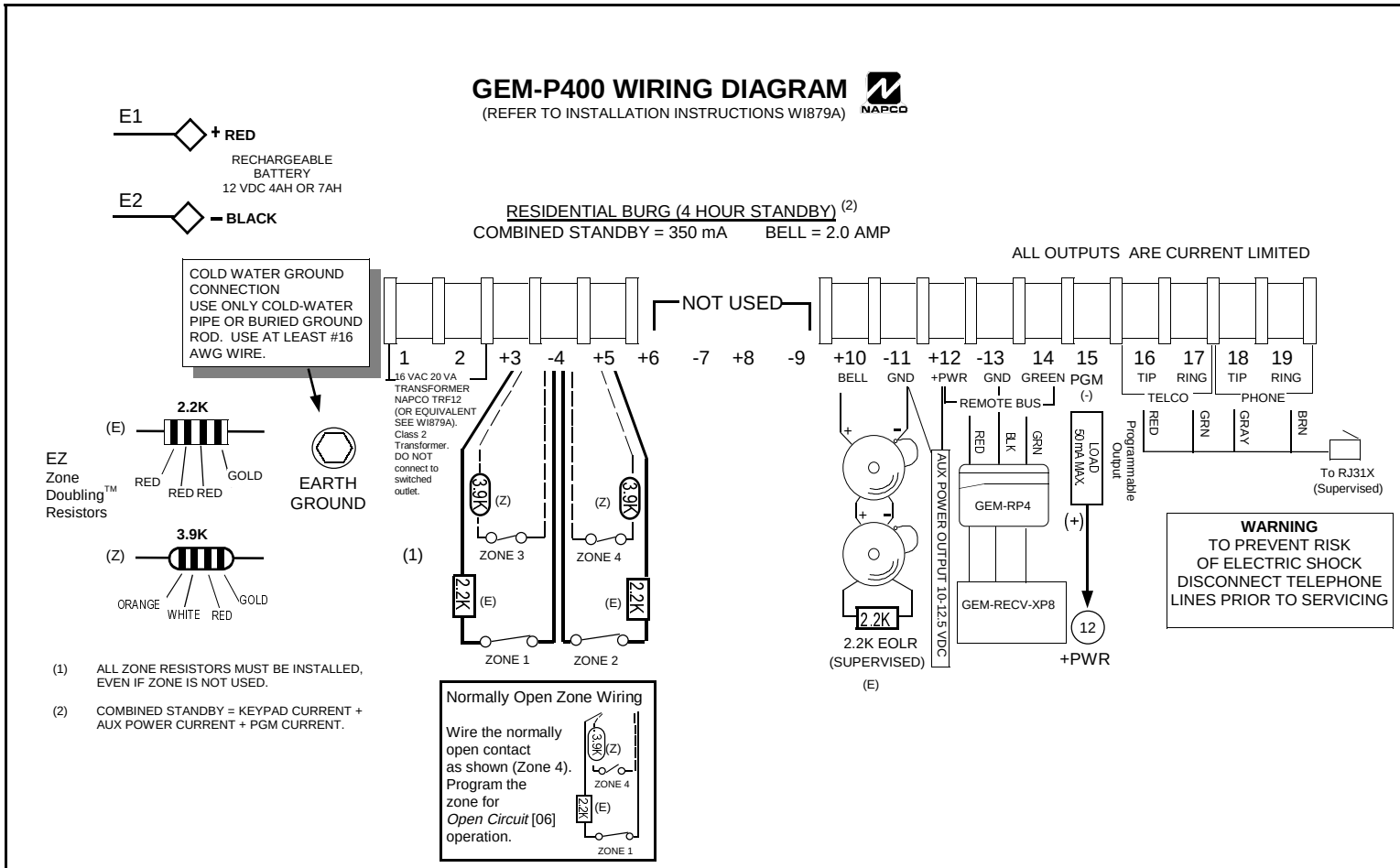
98 Number of Re-Dials

(9)

NOTE 1:
International Features

GEM-P400 WIRING DIAGRAM

(REFER TO INSTALLATION INSTRUCTIONS WI879A)



(1) ALL ZONE RESISTORS MUST BE INSTALLED, EVEN IF ZONE IS NOT USED.

(2) COMBINED STANDBY = KEYPAD CURRENT + AUX POWER CURRENT + PGM CURRENT.