GEM-P400 Programming Instructions
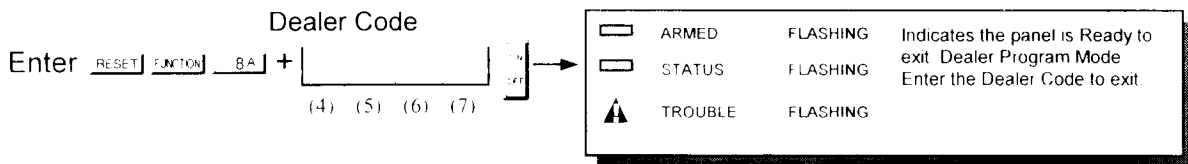
DEALER PROGRAM MODE - KEYPAD KEY DEFINITION

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

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

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

$*\ 1 = A$ $*\ 4 = D$

$*\ 2 = B$ $*\ 5 = E$

$*\ 3 = C$ $*\ 6 = F$

Entering Dealer Program Mode

Enter FUNCTION 8A + Dealer Code (4) (5) (6) (7) →

▭	ARMED	ON
▭	STATUS	OFF
⚠	TROUBLE	FLASHING

Indicates the panel is in Dealer Program Mode. The panel is ready for a programming block to be entered.

Exiting Dealer Program Mode

Enter RESET FUNCTION 8A + Dealer Code (4) (5) (6) (7) →

▭	ARMED	FLASHING
▭	STATUS	FLASHING
⚠	TROUBLE	FLASHING

Indicates the panel is Ready to exit Dealer Program Mode. Enter the Dealer Code to exit.

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.

Types of Programming Blocks

LED Programming Block

Enable features by pressing the Zone LED number associated with the 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 use the [INSTANT] key; all LEDs will turn OFF.

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

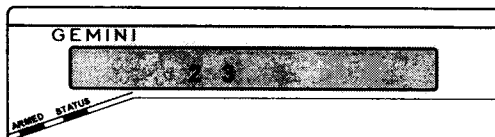   1. To Enter Programming Block 02, press
      [RESET](Beep)[0][2](Beep)

   2. Press the [2] key to select zone 2.

   3. Press the [3] key to select zone 3.

02	Follower Zones	
	Default	
	[OFF] [___]	Zone 1
	[OFF] [x]	Zone 2
	[OFF] [x]	Zone 3
	[OFF] [___]	Zone 4

LED Type Programming Block

Zone 2 and Zone 3 LEDs are ON indicating that zones 2 and 3 have been programmed as follower zones.

GEMINI

Direct Entry Programming Block

Enter data directly. For hexadecimal entries of A-F, use the [*] key + 1-6 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]

10	Exit Delay			
		0	6	0	Exit Delay, seconds
	(0)	(4)	(5)	Maximum Entry 255

Direct Entry Type Programming Block

(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 [9P]

   3. Press [*]

   4. Press [5]

44	Dialing Prefix	9	E		

▭ ARMED	OFF		Indicates the panel is in Dealer Program Mode and the next digit entered will be interpreted as a Hexadecimal digit. Valid entries are 1-6 (A-F).
▭ STATUS	FLASHING		
▲ TROUBLE	FLASHING		

Viewing Data in Programming Blocks

To view data within a programming Block enter the Program Block Number, then press the [INTERIOR] key, 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	
1		9	
2		*A/0	
3		B	
4		C	
5		D	
6		E	
7		F	

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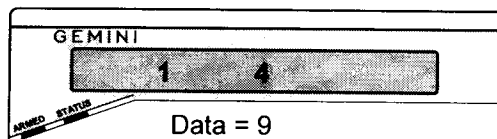
Zone #	Bit Value
1	1
2	2
3	4
4	8

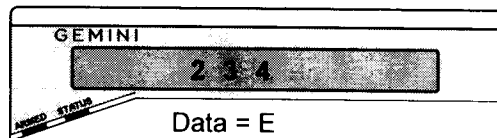**Example: Viewing the Dialing Prefix**

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

→ | 44 | Dialing Prefix | 9 | E | | |

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

GEMINI
Data = 9

(2) Press the [INTERIOR] key to view the 2nd digit.

GEMINI
Data = E

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

Zone Features

00 Exit/Entry

Default

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

01 Home/Away with Delay

Default

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

02 Exit/Entry Follower

Default

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

03 Auto-Bypass Reentry

Default

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

04 24-Hour Protection

Default

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

05 Loop Response 40 ms

Default

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

06 Open Circuit

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

08 PGM Output

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

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

21 Keypad Features

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 = Reserved

22 Miscellaneous Features

Default
| OFF | | Zn 1 LED ON = Abort Delay
| ON | | Zn 2 LED ON = Easy Exit (FUNCTION 0)
| ON | | Zn 3 LED ON = Swinger Shutdown
| OFF | | Zn 4 LED ON = Bell on Line Cut (Armed)

23 PGM Features

Default
| OFF | | Zn 1 LED ON = Audio Verification
| OFF | | Zn 2 LED ON = Access Output (FUNCTION 3)
| OFF | | Zn 3 LED ON = Follow Keypad Sounder
| OFF | | Zn 4 LED ON = Key Fob Chirp

24 PGM Features

Default
| OFF | | Zn 1 LED ON = Panic 2
| OFF | | Zn 2 LED ON = AUX
| OFF | | Zn 3 LED ON = Panic
| OFF | | Zn 4 LED ON = Test Timer

25 PGM Features

Default
| OFF | | Zn 1 LED ON = AC Fail
| OFF | | Zn 2 LED ON = Low Battery
| OFF | | Zn 3 LED ON = Reserved
| OFF | | Zn 4 LED ON = Armed

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**

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

⟶ | | (4)

36 **System Reporting, Telco 1**

Default
OFF			Zn 1 LED ON = Keypad Panic 2 (7F *)
OFF			Zn 2 LED ON = Keypad AUX (8A *)/Ambush
ON			Zn 3 LED ON = Keypad Panic (9F *)
OFF			Zn 4 LED ON = Test Timer

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

37 **System Reporting, Telco 1**

Default
OFF			Zn 1 LED ON = AC Fail Report
ON			Zn 2 LED ON = Low Battery Report
OFF			Zn 3 LED ON = Reserved
OFF			Zn 4 LED ON = Reserved

34 **Zone Report, Telco 1**

Default
ON			Zone 1
ON			Zone 2
ON			Zone 3
ON			Zone 4

38 **System Restores, Telco 1**

Default
OFF			Zn 1 LED ON = AC Restore Report
OFF			Zn 2 LED ON = Battery Restore Report
OFF			Zn 3 LED ON = Reserved
OFF			Zn 4 LED ON = Reserved

35 **Zone Restore, Telco 1**

Default
OFF			Zone 1
OFF			Zone 2
OFF			Zone 3
OFF			Zone 4

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

6

Backup Telephone Number Programming

40	Subscriber ID Number (Telephone Number 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

Communicator Features

44 Dialing Prefix | | | | | | |

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

45 Communicator Features

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

Default

OFF		__	Zn 1 LED ON = No Dial Tone Detection
OFF		__	Zn 2 LED ON = 2:1 Rotary Dialing
OFF		__	Zn 3 LED ON = Reserved
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

[1] Ademco Slow
[2] Radionics Slow
[3] Silent Knight Fast   ⟶ |___|
[4] Universal High Speed   (4)
[5] Reserved
[6] Point ID
[7] Pager
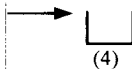
56 System Reporting, Telco 3

Default
| OFF | | Zn 1 LED ON = Keypad Panic 2 (|_7F_|_*_|)
| OFF | | Zn 2 LED ON = Keypad AUX (|_8A_|_*_|)/Ambush
| OFF | | Zn 3 LED ON = Keypad Panic (|_9P_|_*_|)
| OFF | | Zn 4 LED ON = Test Timer

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

57 System Reporting, Telco 3

Default
| OFF | | Zn 1 LED ON = AC Fail Report
| OFF | | Zn 2 LED ON = Low Battery Report
| OFF | | Zn 3 LED ON = Reserved
| OFF | | Zn 4 LED ON = Reserved

54 Zone Report, Telco 3

Default
| OFF | Zone 1
| OFF | Zone 2
| OFF | Zone 3
| OFF | Zone 4

58 System Restores, Telco 3

Default
| OFF | | Zn 1 LED ON = AC Restore Report
| OFF | | Zn 2 LED ON = Battery Restore Report
| OFF | | Zn 3 LED ON = Reserved
| OFF | | Zn 4 LED ON = Reserved

55 Zone Restore, Telco 3

Default
| OFF | | Zone 1
| OFF | | Zone 2
| OFF | | Zone 3
| OFF | | Zone 4

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

8

Report Codes

60 Zone Report Codes

| | Zone 1 Alarm Code
(3)

| | Zone 2 Alarm Code
(3)

| | Zone 3 Alarm Code
(3)

| | Zone 4 Alarm Code
(3)

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

61 Point ID Report Codes

| | Zone 1 Alarm Code
(3)

| | Zone 2 Alarm Code
(3)

| | Zone 3 Alarm Code
(3)

| | Zone 4 Alarm Code
(3)

Code	Description
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 Restore Code

| | Zone 1, 2, 3 & 4 Restore Code
(E)

63 System Report Codes

| | | Keypad Panic 2 (7F *)
(1) (1)

| | | Keypad AUX (8A *)
(2) (3)

| | | Keypad Panic (9P *)
(2) (1)

| | | Test Timer
(F) (F)

| | | AC Fail
(F) (9)

| | | Low Battery
(F) (8)

64 System Restore Code

| | (AC Restore, Battery Restore)
(E)

65 Opening and Closing Codes

| | Closing Code
(C)

| | Opening Code
(B)

66 Ambush Report Code

| | Ambush Code
(2) (2)

9

Wireless

Transmitters	RF ID #	Point
71 Zone 1	|_|_|_|_|_|_| : |	|_|
72 Zone 2	|_|_|_|_|_|_| : |	|_|
73 Zone 3	|_|_|_|_|_|_| : |	|_|
74 Zone 4	|_|_|_|_|_|_| : |	|_|

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

RF ID # XXXXXX:X

Key Fobs	RF ID #	AUX 1 AUX 2
81 Key Fob 1	|_|_|_|_|_|_| : |	|_|_|
82 Key Fob 2	|_|_|_|_|_|_| : |	|_|_|

AUX 1 & 2 Programming

1 Panic
2 AUX
3 Bell ON
4 PGM
5 Instant
6 Access on PGM

Programming Example
Map point 2 of a window
door transmitter, with
RF ID# 0012B0:0
to Zone 3.

1 Enter Dealer Mode.
2 Enter #(beeps)7 3 (beeps)
3 Enter 0 0 1 2 * 2 0 0
4 Enter 2 (beeps) ↑
                Hexadecimal B Entry

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

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

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

Downloading

90 Callback Telephone Number | | | | | | | | | | | | | | |

91 Ring Count

| | |

(0)   (9)   Maximum Entry 15

92 Downloading Features

Default

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

Dealer Programming

94 Dealer Code

| | | | |

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

95 User 1 Code

| | | | |

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

96 Dealer Options

Default

OFF		Zn 1 LED ON = Dealer Code Lockout
OFF		Zn 2 LED ON = User 1 Code Lockout
OFF		Zn 3 LED ON = Reserved
OFF		Zn 4 LED ON = Reserved
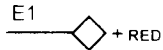
E1 ◇ + RED   RECHARGEABLE
                  BATTERY
                  12 VDC 4AH

E2 ◇ – BLACK

GEM-P400 WIRING DIAGRAM [NAPCO]
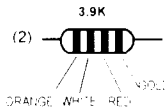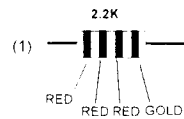(REFER TO INSTALLATION INSTRUCTIONS WI879)
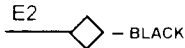
RESIDENTIAL BURG (4 HOUR STANDBY)
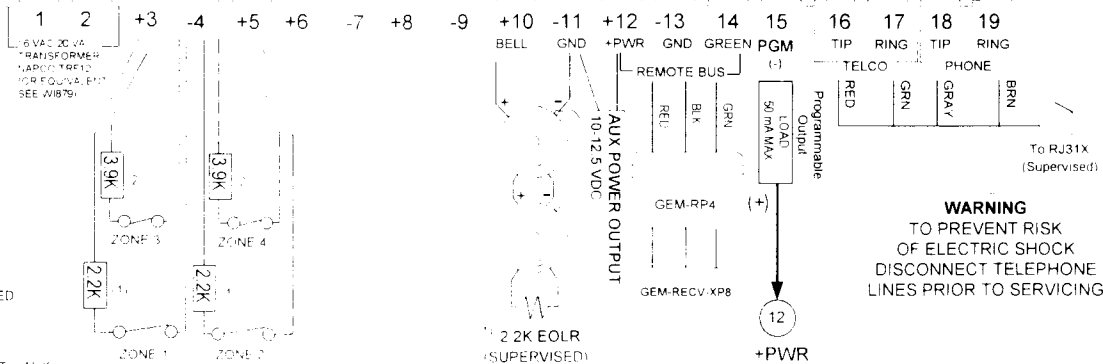
COMBINED STANDBY = 250 mA   BELL = 2 0 AMP

COLD WATER GROUND
CONNECTION
USE ONLY COLD WATER
PIPE OR BURIED GROUND
ROD USE AT LEAST #16
AWG WIRE

ALL OUTPUTS ARE CURRENT LIMITED

NOT USED

EARTH
GROUND

2.2K
(1)
RED
RED RED GOLD

3.9K
(2)
ORANGE WHITE RED GOLD

(3) ALL ZONE RESISTORS MUST BE INSTALLED
    EVEN IF ZONE IS NOT USED

(4) COMBINED STANDBY = KEYPAD CURRENT + AUX
    POWER CURRENT

1   2   +3   -4   +5   +6   -7   +8   -9   +10   -11   +12   -13   14   15   16   17   18   19

16 VAC 20 VA
TRANSFORMER
(NAPCO TRF12
OR EQUIVALENT
SEE WI879)

BELL   GND   +PWR   GND   GREEN   PGM   TIP   RING   TIP   RING
                                                       (-)
                               REMOTE BUS   TELCO   PHONE
                                                              RED   GRN   GRAY   BRN

3.9k   3.9k

ZONE 3   ZONE 4

2.2K   2.2K

ZONE 1   ZONE 2

AUX POWER OUTPUT
10-12 5 VDC

RED
BLK
GRN

GEM-RP4   (+)

GEM-RECV-XP8

2 2K EOLR
(SUPERVISED)

Programmable
Output
LOAD
50 mA MAX

To RJ31X
(Supervised)

WARNING
TO PREVENT RISK
OF ELECTRIC SHOCK
DISCONNECT TELEPHONE
LINES PRIOR TO SERVICING

12

+PWR