



KEYPAD INSTALLATION INSTRUCTIONS

LIBRA DXK4RF-319 LIBRA DXK4RF-433 Digital Icon Keypads with Integral RF Receiver

This Guide includes programming instructions for the LIBRA LIB-P432EX, LIB-P432EXT, LIB-P432EXT-230 Control Panels.

This Guide is to be used in conjunction with the control panel Programming Instructions WI1690 and/or WI1771.

Quick Start:

1. Referring to the control panel wiring diagram, connect siren, auxiliary power, PGM output, remote bus, earth ground, zone and telephone wiring.
NOTE: See Installation Instructions for the appropriate control panel.
2. Connect AC power first and then the battery.
3. Configure the keypad (see page 3).
4. Access the Easy Menu Driven (Dealer Program) Mode:

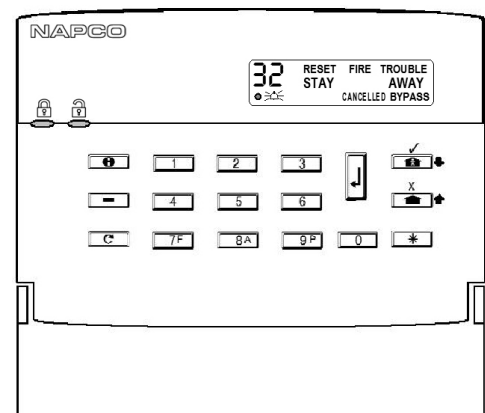
Press

↖ Dealer Code ↗

Press NO () Until "17" appears on the keypad display.

Press YES () to Enter Easy Menu Driven Dealer Program Mode.

The Easy Menu Driven Program Mode allows you to complete all basic programming functions by answering questions which allow the automatic programming of the control panel.



DXK4RF-319 Keypad
DXK4RF-433 Keypad

THE LIBRA-DXK4RF SERIES KEYPAD

DESCRIPTION

The LIBRA-DXK4RF series keypad is a multi-segment LCD digital keypad that is compatible with the LIBRA LIB-P432EX, LIB-P432EXT, LIB-P432EXT-230 control panels. Refer to User Guide OI349 for keypad operation instructions. **While the LIBRA-DXK4RF series keypads may be used to fully program the control panel, the GEM-DXRP1 or GEM-DXK1 keypads, with their easy to read two-line LCD displays, provide the optimum in ease of keypad programming.** **Note:** Do not mix "RP" series keypads with "K Series" keypads within one system.

The wireless system comprises a compatible LIBRA LIB-P432EX series control panel, at least one LIBRA-RECV receiver and one or more companion LIBRA-Series transmitters. Built inside the LIBRA-DXK4RF series keypad is a receiver to save space and simplify installation. The transmitters may be wireless smoke detectors, space-protection devices, window/door sensors, or other devices that report zone status and supervision information to the receiver without the use of wires.

The integral receiver inside the keypad will accommodate up to 32 wireless points. The receiver is connected to the control panel's 4-wire bus through the same 4 wires as the keypad. The receiver monitors each transmitter, updating transmitter status as reports are received, and conveys this information to the control panel. Also monitored is the elapsed time since the last report from each transmitter. If no report is received within a programmed time, a Supervisory Failure will result.

COMPATIBLE CONTROL PANELS

See WI1752 for installation and programming instructions with the GEM-P816, GEM-P1632, GEM-P3200 and GEM-P9600 control panels.

SPECIFICATIONS

Operating Voltage: 12VDC (supplied by panel)

Current Drain: 75 mA Standby

Note: Subtract keypad current from combined auxiliary current of the control panel.

Operating Temperature: 0° C to 49° C

Storage Temperature: 20° C to + 85° C

Power Requirements: 12VDC, 75mA (supplied by panel)

Antenna: ¼-wave (external wire), and internal antennas.

Dimensions: 5 7/8" x 4 3/8" x 1" (WxHxD)

ORDERING INFORMATION

Note: Any of the following Napco wireless transmitters may be used with the LIBRA-RECV Series Receivers. Batteries are included with all transmitters.

LIBRA-TRANS433 - Window/Door Sensor. This supervised, two-point transmitter provides an internal magnetic reed switch and/or terminals for two external normally-closed devices, or one external normally-open device.

LIBRA-PIR433 - Wireless PIR Motion Sensor.

LIBRA-SMK433 - Wireless Photoelectric Supervised smoke detector.

LIBRA-KEYF433 - Hand-Held Keyfob Transmitter. Key chain/Pendant remote arming or emergency transmitter.

LIBRA-GB433 - Glass-break sensor.

DL123A - Replacement Lithium Battery for LIBRA-TRANS433, LIBRA-PIR433 (2), and LIBRA-GB433 (2) (bulk packed).

LIBRA-RECV8-433: Wireless Receiver, 8 Zones

LIBRA-RECV16-433: Wireless Receiver, 16 Zones

LIBRA-RECV96-433: Wireless Receiver, 96 Zones (maximum 32 zones supported)

LIBRA-RECV255-433: Wireless Receiver, 255 Zones (maximum 32 zones supported)

For Sales and Repairs, call toll free: (800) 645-9445
For direct line to Technical Service, call toll free: (800) 645-9440
Internet: <http://www.napcosecurity.com>

INSTALLATION

Designing the System

A keypad should be located near each exit/entry door. However, give careful consideration to the location of the keypad, since it has a receiver built inside it. Regardless of where the control panel is mounted, the keypad should be centrally located within the premises, that is, equally distant from all transmitters. Metal objects close to the installation may adversely affect reception. Draw a layout of the system, identifying all proposed transmitter locations and anticipated keypad location. Also include notations indicating construction materials in use. Although wood and wallboard construction will have little effect upon signal strength at the receiver, concrete or brick can reduce signal strength by up to 35%, while steel-reinforced concrete or metal lath and plaster can reduce transmitter strength as much as 90%.

Note: In difficult installations wherein distant transmitters pose reception problems, the use of multiple keypads and/or LIBRA-REC16433's throughout the premises is recommended. (The LIB-P432EX control panel will accommodate up to two receivers). Receivers are connected to the panel's 4-wire bus. They should be uniquely addressed (see *AD-DRESSING MULTIPLE RECEIVERS*). **Note:** If receivers are intermixed, the panel will only recognize the capacity of the lowest one.

After determining the general location for the keypad, additional time should be spent determining the exact location of keypad using the template provided. In addition to the hole in the wall used to connect the bus wires to the keypad, an additional hole should be made into the wall to allow the antenna wire to be recessed into the wall. The design of the keypad keeps the antenna as far away from the bus wires as possible so that RF noise emitted from the bus wires does not affect the sensitivity of the receiver. If the placement of both these holes are not carefully considered, additional effort may be required to drill through or chisel existing wall beams. In addition the tamper is located close to the antenna hole. If care is not taken to leave sufficient space between the antenna hole and the tamper, the tamper may not function correctly.

To open the case, insert a screwdriver into either slot at the bottom and push up with a slight twisting motion to release the retainer tab. Repeat for the other slot. Pull out at the bottom and lift off the two hooks at the top.

The LIBRA-DXK4RF series keypads feature a handy pull-up reference label. Before mounting the keypad onto the wall, push the Sliding Label Plate (with label and felt backing affixed and handle facing forward) down the guides at the rear of the keypad until it snaps into place. Once installed, the Sliding Label Plate cannot be removed without first removing the keypad from the wall. **Note:** The keypad fire and panic keys should not be considered a substitute for a listed manual initiating device, such as a pull box.

If installing onto a double-gang box, insert mounting screws through the two vertical elongated holes on the left side of the case and into the box. If the box is visible when viewed from the front, adjust the keypad vertically and tighten the screws. Then, using hardware suitable for the mounting surface, add one or two screws at the right side of the keypad case directly into the wall to ensure a secure installation. **Note:** *Do not over tighten the screws!* Uneven walls may cause the keypad case to distort.

WIRING

After the bus wires are brought through the bus wire hole, and the keypad back case is mounted the wires can be connected as shown in the table at the right. After connecting the wires care must be taken to loop the antenna wire carefully into the antenna hole as the front cover is connected to the keypad back case. The antenna should fall easily into the wall cavity away from the keypad bus wires. The wire should hang as straight as possible below the keypad for optimal reception. If the wire cannot be hung inside the wall, it is better for the wire to be cut flush with the printed circuit board rather than to have the wire become tangled behind the keypad.

COLOR	TERMINAL
RED	9
BLACK	10
GREEN	11
YELLOW	12
WHITE*	N/O PANIC
WHITE*	N/O PANIC

*Cut and insulate 2 white wires if not used.

KEYPAD AND RECEIVER ADDRESS JUMPERS

If more than one receiver is being utilized, each must be individually addressed so that it can be identified by the control panel. This is accomplished by the placement of jumper "RX" located in the upper right corner of the back of the keypad, as shown below. Factory default is no jumper, therefore making the receiver inside the keypad as RF Receiver #1. With the jumper in place, it is receiver #2. Refer to the Wiring Diagram for jumper configuration. **Note:** Each receiver leaves the factory internally configured as #1, therefore, if only one receiver is being used, address assignment is not required.

In summary, 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).
- Only Keypad No. 1 may be used for programming. (However, for ease of programming, it is recommended that a GEM-DXK1 be selected as Keypad #1).

Up to seven (7) LIBRA-DXK4RF series keypads may be addressed to the control panel (Keypads 1-7).

Keypads are configured by the proper selection of jumpers. Refer to the label on the keypad circuit board for jumper locations and a summary of settings. The keypad may be configured to disable touchpad backlight and entry sounder.

KEYPAD OPTION JUMPERS

- A: DISABLE PUSHBUTTON BACKLIGHT**
Cut Jumper A to disable touchpad pushbutton back-lighting.
- B: DISABLE LCD BACKLIGHT**
Cut Jumper B to disable liquid crystal display back-lighting.
- C: DISABLE KEYPAD SOUNDER**
Cut Jumper C to disable the keypad sounder.
- D: ENABLE KEYPAD TAMPER**
Cut Jumper D to enable the keypad tamper switch.

Option Jumpers

A	DISABLE PUSHBUTTON BACKLIGHT
B	DISABLE LCD BACKLIGHT
C	DISABLE KEYPAD SOUNDER
D	ENABLE KEYPAD TAMPER

Address Jumpers

Left Jumper ("RX") determines Receiver Number.
If empty, default is "1". Receiver number 2 if shorted.

Other three jumpers determine Keypad number, as per table below:

RX Receiver Number	Address Jumper			Keypad Number
	3	2	1	
Jumper ON = Receiver #2 Jumper OFF = Receiver #1	OFF	OFF	OFF or ON	1
	OFF	ON	OFF	2
	OFF	ON	ON	3
	ON	OFF	OFF	4
	ON	OFF	ON	5
	ON	ON	OFF	6
	ON	ON	ON	7

(OPEN BACK OF KEYPAD)

GETTING UP AND RUNNING

(Use the GEM-DXK1 to program. For the LIBRA-DXK4RF series keypads, see page 12, "RF Transmitter Points". Also see "Quick Method", which follows).

Using the GEM-DXK1 keypad, for each transmitter, enter:

- the zone number to which the transmitter will be mapped;
- the 6-digit ID Code: 1-digit checksum number printed on the transmitter and box;
- the wireless point number.

Note: When programming the ID Code at the keypad,

press for "A"

press for "B"

press for "C"

press for "D"

press for "E"

press for "F"

Press to save and () to continue.

Keyfob Transmitters. Referring to the programming instructions for the control panel, enter the following:


- an assigned Keyfob Transmitter number (1—16);

- the Area number(s) to which the Keyfob Transmitter is designated;
- the 6-digit hexadecimal identification code with 1-digit checksum number printed on the transmitter (enter all numbers and/or letters, including leading zeros, if any);
- Aux. 1 options (see programming worksheets);
- Aux. 2 options (see programming worksheets).

Quick Method (Using the GEM-DXK1 keypad)

If a receiver is already installed in the panel, Napco Transmitter wireless points can be programmed automatically ("enrolled"). **Note:** (1) The transmitter point will be enrolled only if the signal strength is 3 or greater. (2) Enroll a single-point device by merely powering it up. (3) *Quick Method* is not applicable to keyfob transmitters.

Enter the Program Mode. Scroll to the RF Transmitter Points entry screen and proceed as follows:

1. Enter the zone number to which the transmitter point will be mapped.
2. Press  to enter the Enroll Mode. The red and green LED's on the keypad will flash and will display as shown below (GEM-DXK1).



3. Open the loop of the point that is to be programmed.
4. Install the transmitter battery. The keypad will indicate that the point has been successfully enrolled.

Multi-point transmitters can be mapped to successive zones simultaneously (Example 1) or to selected point by point (Example 2).

Example 1: A 2 point transmitter has the ID Code number 410078. Map the two points to Zones 11 and 12 respectively.

1. Enter the Enroll mode as described in step 2 above.
2. Enter Zone "11".
3. Open the loops of points 1 and 2.
4. Install the transmitter battery. The keypad will beep twice to indicate that two points have been enrolled.
 - Transmitter 410078, point 1 will be mapped to Zone 11
 - Transmitter 410078, point 2 will be mapped to Zone 12
 The keypad will now display Zone 12, the last zone enrolled.

Example 2: A 2-point transmitter has the 1D Code number 287613. 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 point 1 will be mapped to Zone 6).
5. Enter Zone "09"
6. 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, point 2 is Zone 9).

CHECKING TRANSMITTERS

The status of each transmitter may be checked at the keypad. Referring to the control panel installation instructions and the user's guide for the keypad in use, display transmitter status to show (a) the zone to which transmitter point is mapped; (b) the transmitter's 6-digit RF ID number (c) the point number; (d) transmitter status (normal, open, low battery, etc.); and (e) the signal strength of its last transmission.

Testing Wireless Signal Strength

To test the operation of wireless transmitters, proceed as follows.

1. Enter the Fault-Find Mode from the Function Menu (use Dealer Security Code to enter).
2. Fault a point of the transmitter to be tested by opening the loop. If the signal strength of the transmitter is 3 or greater, the keypad will beep, as follows:

WIRELESS SIGNAL STRENGTH	
Signal Power	Beeps
0-2	0
3	1
4-5	2
6-7	3
8-10	4

☞ 3. Restore the wireless point (close the loop). When restored, the keypad will beep once regardless of signal strength.

Note: With the LIBRA-DXK4RF series keypads, signal strength is not displayed but is annunciated by beeps as per the above table. For installations that include several transmitters, multiple receivers may be connected to the panel. (Only the highest signal strength will be displayed). **Note:** When using the Fault-Find Mode on wireless zones, the keypad will beep when the zone is opened or closed only if the signal strength of the transmitter is 3 or greater. Signal strengths less than 3 will be entered into the system log (except in the Fault-Find Mode).

WIRELESS SYSTEM TROUBLES

The following system-trouble codes displayed at the keypad(s) are related to wireless operation.

Transmitter Troubles

Note: Also displayed with the transmitter trouble code are the zone number ("NN") to which Point 1 is mapped and the transmitter's identification number.

WI LOBATT - E05-NN. Transmitter low battery. **Note:** If all transmitters were installed at the same time, it is recommended to replace all transmitter batteries to avoid service callbacks.

LOBATT KEYFOB - E18-NN. Keyfob transmitter low battery.

WL TRBL - E04-NN. Supervisory failure. Indicates that a transmitter has not "checked in" within the programmed timeout. Check the transmitter for a dead battery (see note above). Also, check for an object in the path of the transmitter blocking reception.

WL TAMPER - E15-NN. Tamper condition indicates that a transmitter case is open . Re-install cover.

Receiver Troubles

Note: Also displayed with the receiver trouble code is the receiver number ("NN").

RF REC JAMMED - E16-NN. Transmitter interference from nearby radio-frequency source.

RF REC RES TRBL - E06-NN. Receiver response trouble (data failure between receiver and control panel). Check the wiring between the receiver and the panel.

RF REC TAMPER - EI 7-NN. Receiver open. Install cover.

LED INDICATIONS

Note: The LED's are located on the back of the keypad, centered on the printed circuit board on top. DS2 is on the left and DS10 is on the right.

Red LED (DS10)





RED LED	RECEIVER CONDITION
OFF	No Power
ON	Powered, but not communicating with panel
FLASHING	Powered, properly communicating with panel






Green LED (DS2)

The green LED will flash while receiving a transmission having a signal strength of 4 or greater, indicating a signal of sufficient strength. **Caution:** A green LED display with no transmitter in operation *is a sign of high ambient RF interference. If the green LED remains lit continuously, relocate the receiver.*


EASY PROGRAM MODE OVERVIEW (Using a LIBRA-DXK4RF Series Keypad)


ENTERING THE EASY KEYPAD PROGRAM MODE


- 1 Enter the Dealer Security Code (default = 456789) for a new panel or enter your custom Dealer Program Code if programmed and press .
- 2 Press **NO** ("X" or ) repeatedly until function "17" (Activate Program Mode) is displayed.
NOTE: If you pass "17" you can scroll back by pressing .
- 3 Press **YES** ("✓" or ) to enter the Dealer Program Mode.

Use the following guide to answer the Easy Program Mode questions which will quickly allow you to create a custom default program. Press  to set cursor, **NEXT** ("✓" or ) to go forwards, **PRIOR** ("X" or ) to go backwards,  to save and  twice to exit the Easy Program Mode.

ANSWERING A QUESTION IN THE EASY PROGRAM MODE






The Easy Program Mode the questions will be in the form of a 2-digit number flashing in the digital display. Pressing  will set the cursor into the next field to answer the question.

Using this book as a guide, enter the appropriate data in response to each question and then press  to save.

If no additional programming is necessary for the question, press **NEXT** ("✓" or ) to go to the next question.



REVIEWING THE DATA ENTRY IN THE EASY PROGRAM MODE

The data entered in response to an Easy Program Mode question may be reviewed before saving.

- After entering the data before pressing  to save,  may be pressed until the 2 digit question number appears flashing in the display again.
- Pressing  will step through all the fields of the question for review and will then result in the 2 digit question number flashing in the display again.
 - ☞ If the data is correct, press  to save.
 - ☞ If the data is not correct, press  to set the cursor into the next field and again enter the appropriate data.








Note: The contents of an Easy Program Mode question may be reviewed after the initial programming of the control, with the exception of the questions which are marked (Appears for New Panel Only). These questions set up the basic structure of the control panel program (Number of zones in an area, etc.) and cannot be viewed or altered once set.

EXITING THE DEALER PROGRAM MODE














If in the Easy Program Mode, press  to enter the Direct Address Program Mode. Press  once again to end all programming and resume normal keypad operation.

RESETTING THE CONTROL PANEL TO FACTORY DEFAULT

If necessary, the control panel can be returned to the factory default and be re-programmed from scratch.

- For the GEM-P816 and GEM-P1632, enter the Direct Address program mode, go to location 1198 and press .
(     )






GEM-DXK4RF Keypad Easy Program Driven Menu

Enter the Default Dealer Program Code ("456789") for a new panel or enter your custom Dealer Program Code if programmed. Press , followed by **PRIOR** ("X" or ) repeatedly until "17" is displayed (you can scroll back by pressing ). Press **NEXT** ("✓" or ) to enter Dealer Program Mode. For the GEM-DXK4RF, questions are in the form of a 2-digit number flashing in the display. Press  to set the cursor into the next field to answer the question, press  again to scroll through each segment, and press **NEXT** ("✓" or ) to go to the next question. To review your Easy Program Mode responses (before pressing  to save), press  until the 2-digit question number flashes in the display again. If the data is correct, press  to save. If the data is incorrect, press  to set the cursor into the next field and again enter your data. **Note:** Review your Easy Program Mode responses after the initial programming of the control, except for questions marked "For New Panel Only". These questions set up the basic structure of the panel program ("Number of Zones in an Area", etc.) and cannot be viewed or altered once set. To exit the Dealer Program Mode, press **RESET** () twice to resume normal keypad operation. To return the panel to the factory default, enter the Direct Address Program Mode, go to location 2286 and press .

01

(Direct Entry)



Total Number of Zones *(Appears for New Panel Only)*

Directly enter the total number of zones to be programmed. Valid entries are from 01 to 32. Directly enter the total number of zones, including leading zeros. Use number buttons  through . **NOTE:** Press the  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  to save. Press **NEXT** ("✓" or ) to proceed.

03

(Press YES "✓" or NO "X")



Panel Zone Doubling *(New Program Only)*

- To double the number of hardwired panel zones from 8 to 16, press **NEXT** ("✓" or )
- If Panel Zone doubling is not desired, press **PRIOR** ("X" or )
- The 16 zones will remain EOL terminated zones, requiring Normally Closed devices only.
- Refer to Wiring Diagram and Installation Instructions for wiring instructions

04

(Direct Entry)

Fire Zones *(Appears for New Panel Only)*



Enter the zone number of any 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  to save, and then repeat for any additional zone(s). Press **NEXT** ("✓" or ) to proceed.

NOTE: If you are programming a multiple Area system, enter the zone number of zones required for Areas 1-4. The Direct Address Program Mode can then be used to remove zones from Area 1 and place them in Areas 2-4. See Zone Options.

06

(Press YES "✓" or NO "X")






Local System or C.S. Reporting System *(Appears for New Panel Only)*

Press **NEXT** ("✓" or ) for all zones to report; press **PRIOR** ("X" or ) for no zones to report (LOCAL SYSTEM).

07

(Direct Entry)

Exit/Entry Zones *(Appears for New Panel Only)*







Directly enter the zone numbers which are to be used as Exit/Entry zones. Valid entries are from 01 to 32. Directly enter each zone number, including leading zeros. Use number buttons  through . **NOTE:** Press the  button for a zero. Press  to save and then repeat for any additional zone(s). Press **NEXT** ("✓" or ) to proceed.

NOTE: Exit/Entry Zones will have an entry delay of 30 seconds and an exit delay of 60 seconds.

08

(Direct Entry)

Interior Zones *(Appears for New Panel Only)*




Directly enter the zone numbers 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  through . **NOTE:** Press the  button for a zero. Press  to save and then repeat for any additional zone(s). Press NEXT (" or ) to proceed.

NOTE: All Interior zones will also be automatically programmed as "Exit/Entry Follower" and "Power Up Delay" zones.

09

(Direct Entry)




24 Hour Zones in Area 1 *(New Program Only)*

- Enter the zone numbers of zones to be used as 24 Hour zones.
- Valid entries are from 01 to 32. Directly enter each zone number, including leading zeros.
- Press  to save and repeat for any additional zone(s); press NEXT (" or ) to proceed.

10

(Direct Entry)

Chime Zones in Area 1 *(New Program Only)*




- Enter the zone numbers which are to be used as Chime Zones.
- Valid entries are from 01 to 32. Directly enter each zone number, including leading zeros.
- Press  to save and then repeat for any additional zone(s), press NEXT (" or ) to proceed.

NOTE: A chime time of 2 seconds will be automatically programmed.

11

(Direct Entry)

Chime 2 Zones in Area 1 *(New Program Only)*




- Enter the zone numbers which are to be used as Chime 2 Zones.
- Valid entries are from 01 to 32. Directly enter each zone number, including leading zeros.
- Press  to save and then repeat for any additional zone(s), Press NEXT (" or ) to proceed.

NOTE: A chime time of 2 seconds will be automatically programmed.
Chime 2 zones give a distinct pulsating tone when zone is faulted.

12

(Direct Entry)

Exit/Entry2 Zones in Area 1 *(New Program Only)*




- Enter the zone numbers of zones to be used as Exit/Entry zones.
- Valid entries are from 01 to 32. Directly enter each zone number, including leading zeros.
- Press  to save and repeat for any additional zone(s); press NEXT (" or ) to proceed.

NOTE: An Exit/Entry 2 Entry Time of 30 sec. will automatically be programmed.

13

(Direct Entry)




50 mS Loop Response Zones *(New Program Only)*

- Enter the zone numbers of zones to be have a 50mS loop response.
- Valid entries are from 01 to 8. Directly enter each zone number, including leading zeros.
- Press  to save and then repeat for any additional zone(s), press NEXT (" or ) to proceed. **Note:** Time can also be adjusted via address 2280.

14

(Direct Entry)

Aux Output Activated on Alarm Zones *(New Program Only)*



- Enter the zone numbers of zones to activate the PGM2 Output upon alarm.
- Valid entries are from 01 to 32. Directly enter each zone number, including leading zeros.
- Press  to save and then repeat for any additional zone(s), Press NEXT (" or ) to proceed.

NOTE: A PGM2 Output Timeout of 15 Minutes will automatically be programmed.

15

(Direct Entry)

Sensor Watch Zones (New Program Only)



- Enter the zone numbers of zones to be Sensor Watch zones.
- Valid entries are from 01 to 32. Directly enter each zone number, including leading zeros.
- Press  to save and then repeat for any additional zone(s), press NEXT ("✓" or ) to proceed.

NOTE: A Sensor Watch Time of 24 hours will automatically be programmed.

16

(Direct Entry)



Keypad Sounder On Alarm Zones (New Program Only)

- Enter the zone numbers of all zones to activate the Keypad Sounder upon alarm.
- Valid entries are from 01 to 32. Directly enter each zone number, including leading zeros.
- Press  to save and then repeat for any additional zone(s), press NEXT ("✓" or ) to proceed.

17

(Direct Entry)


Auto Bypass Re-entry Zones (New Program Only)

- Enter the zone numbers of zones to be Auto Bypass Re-entry zones.
- Valid entries are from 01 to 32. Directly enter each zone number, including leading zeros.
- Press  to save and then repeat for any additional zone(s), press NEXT ("✓" or ) to proceed.
- Auto Bypass Re-entry Zones allow the system to be armed with the zone faulted but come back into the system (armed) when the zone is subsequently closed.

18

(Press YES "✓" or NO "X")


Enable No EOLR Zones (New Program Only)

- Press NEXT ("✓" or ) to program all zones except 24 Hr & fire zones for No End Of Line Resistor. Press the PRIOR/NO button to continue.

19

(Press YES "✓" or NO "X")


Enable Telco Line Fault Test?

- Press NEXT ("✓" or ) to enable Telco Line Fault Test.
 - Press the PRIOR/NO button to continue.
- NOTE:** There is a preset 60 second Telco Line Fault Test Delay.

20

(Press YES "✓" or NO "X")


Enable Burg Output Chirp on KeyFob?

- Press NEXT ("✓" or ) to enable Burg Output Chirp on KeyFob Arm / Disarm.
 - Press the PRIOR/NO button to continue.
- NOTE:** The Burg Output will chirp once on Keyfob Arm and twice on Keyfob Disarm.

21

(Press YES "✓" or NO "X")

Enable SIA CP-01?

- Press NEXT ("✓" or ) to enable.
- Press the PRIOR/NO button to continue.

The SIA CP-01 Features are designed to reduce the incidence of false alarms. **NOTE:** Do not enable unless reporting, otherwise system trouble *Fail to Communicate* may occur.

22

(Direct Entry)

Number of Keypads

Directly enter the total number of Keypads to be installed. Valid entries are from 01 to 07. Directly enter the number of keypads, including leading zeros. Use number buttons [1] through [9P].

NOTE: Press [0] for a zero. Press [↓] to save. Press NEXT ("✓" or [Home]) to proceed.

24

(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. Use number buttons [1] through [9P] for digits 1–9; press [*][0] for a zero and [*][1] through [*][5] for letters B–F, respectively. **NOTE:** Pre-Dial Delay = "D"; Dial-Tone Detection = "E". Pressing [0] will produce a blank space (*). Press [↓] to save. Press NEXT ("✓" or [Home]) to proceed. **NOTE:** Central Station Receiver 2 and 3 Telephone Numbers can only be entered in Direct Address Programming. See CS Receiver Options.

25

(Direct Entry)

Central Station Receiver 1 Account Number

Enter an account number of up to four digits. Use number buttons [1] through [9P] for digits 1–9. **NOTE:** Press the [0] button for a zero and press the [*][0] buttons for a blank space (*). Press [↓] to save. Press NEXT ("✓" or [Home]) to proceed. **NOTE:** Central Station Receiver 2 and 3 Account Numbers can only be entered in Direct Address Programming. See CS Reporting Options.

26

(Direct Entry)

Central Station Receiver 1 Format

From the table below, enter the central station's receiver format. Use number buttons [1] through [9P]. **NOTE:** Press the [0] button for a zero and press [*][0] for a blank space (*). Press [*][1] through [*][4] for letters B–E, respectively. Press [↓] to save. Press NEXT ("✓" or [Home]) to proceed.

DATA ENTRY	CS RECEIVER 1 FORMAT
blank(*)	Ademco Slow, Silent Knight Slow
1	Sescoa, Vertex, DCI, Franklin Fast
2	Radionics Fast
3	Silent Knight Fast
4	Radionics, DCI, Franklin Slow
5	Universal High Speed
8	Radionics BFSK

DATA ENTRY	CS RECEIVER 1 FORMAT
9	FBI 4/3/1
0	Radionics Modem 2
B	SIA
C	Ademco Point ID
D	Ademco Express
E	Pager

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

27

(Direct Entry)

Enter User Codes (Press the [⏏] button to set cursor)

Enter up to 64 User Codes with User Options for each code. Refer to the tables below for available data entries for User Options.

☞ Press [⏏] once to set cursor to the User Number and enter the desired User Number. Press [⏏] once again to set the cursor to the User Code. Use the number buttons [1] through [9P] to enter a code from 3 to 6 digits. Enter up to 6 digits (4 digits are recommended) in the first six boxes from left to right for each user code. Valid entries are: 0-9. **Note:** Press [0] for a zero. No blank spaces in between; leave blank (*) any trailing boxes. If an "Ambush Prefix" (Address 0495) is entered, *do not* program the first two digits of ANY User Code as the same digits entered for the "Ambush Prefix".

☞ If the programmed code is less than 6 digits, press [⏏] to set the cursor to USER OPTIONS.

☞ Refer to the tables on the next page for the available User Option data entries.

USER OPTIONS				
USER CODE (UP TO 6 DIGITS)	AREA 1 OPTIONS	AREA 2 OPTIONS	AREA 3 OPTIONS	AREA 4 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(+)	5	Ambush
blank(+)	Add 8	* User Program
4	blank(+)	Bypass Enable

USER OPTIONS: Area 1-4 options for 64 Users:

Select the desired options from the table shown and enter in the remaining boxes for each user code.

Example: Program a code of "1234" for user 02, with Area 1 options of "Arm/Disarm" and "User Program":

With "27" displayed in keypad window, press , (User 2), , (User Code), (User Area 1 options), (User Area 2 Options), and (save).

Notes: (1) For User Code, press for Blank Space; (2) For User Options, press for Blank Space.

CODE TYPE	EXPLANATION
Disabled	User Code not active.
Arm/Disarm	Allows User Code to arm/disarm.
Arm Only	Prevents User Code from disarming.
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-DXRP2 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 strike. Also program "Access Control on PGM2 Output" (Address 0719) and "PGM2 Output Access Control Timeout" (Address 0711).
Ambush	There are two types of Ambush Codes: (1) A 2-digit code (prefix) that is entered immediately prior to (and as part of) the regular User Code and (2) A separate and unique User Code. Disarming with an Ambush Code will cause 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.
* User Program	User Program Option is enabled for Keypad 1 only, wherever it is connected. To enable User Program Option for any user add 8 to the data entry Option (see example). Then, User Programming can be performed only at Keypad 1 by a user code with user program enabled.
Bypass Enable	Security Bypass--Bypass is enabled only with a security code.

Related User Options: "Enable Global Ambush Code" (Address 1422) & "Global Ambush Code" (Address 2045).

CHANGING OR CANCELING A CODE: To change any code, merely program over the existing code as described above and press to save. Similarly, to cancel a code, blank out each number of the code and press to save. **Note:** Duplicate User Codes are not allowed; therefore a duplicate Code entered in the LCD Window will erase when is pressed.

28

RF Transmitter Points (Press the button to set cursor)

(For wireless systems only. Also see Quick Method, which follows).

For each transmitter (keyfob transmitters also), enter the zone number (01-64) to which the transmitter will be mapped, the 6-digit RF ID#: 1-digit checksum number printed on the transmitter and box, the point number (1-4); enter "9" for unsupervised (all points). **NOTE:** When programming the ID Code number, "A" = ; "B" = ; "C" = ; "D" = ; "E" = ; "F" = . Press to save. Press NEXT (" " or) to proceed.

Quick Enroll 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 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).

KEYFOB ZONE ASSIGNMENT: Keyfobs can also be assigned to zones to allow multiple wireless panic buttons on one alarm system, each reporting to a central station, a pager or having a description on the keypad that describes the person holding the keyfob, the location where the person holding the keyfob is stationed, or the special purpose of the keyfob button being depressed. *See the next page on keyfob Zone Assignment.*



Keyfob Transmitters (Press to set cursor).

Keyfobs can be programmed as "Arm/Disarm" devices (refer to WI752).

For each Keyfob Transmitter, enter:

The Keyfob Transmitter number (01–08).

Area number to which transmitter is assigned (1 - 4); 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 keyfob aux 1 & aux 2 options).

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

Press to save. Press NEXT (" or ") to proceed.

DATA ENTRY	AUX 1/AUX 2 OPTIONS
0	None
1	Relay Group 1 Toggle
2	Relay Group 2 Toggle
9	Panic
A	Auxiliary
B	Instant
C	PGM2 Output Toggle
D	Access on PGM2 Output
E	Arm Stay
F	Interior Button

NOTE: Keyfobs 1-8 report openings and closings as Users 57-64.

Note: If the Keyfob is converted for Two Button "Emergency Use" (by cutting an internal jumper), both top or bottom buttons must be depressed to activate an alarm. In this case, the Aux-1 and Aux-2 cannot be programmed.

Keyfob Transmitters as Zone Input Devices (refer to display above: press PRIOR (" or ") to go backwards).



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 64 keyfobs (using 1 button) or 32 keyfobs (using 2 buttons) or 16 keyfobs (using all 4 buttons) or any combination up to a maximum of 64 controlled zones 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. The "Quick Method" is not allowed. The zone may be hardwired to a sensor as well as assigned to a keyfob (either one will activate the zone alarm output). **NOTE:** If assigning a keyfob to a zone, the "ON/OFF" buttons on the keyfob will no longer arm/disarm the system. The keyfob is converted to a "panic only" device.



ZONE DESCRIPTIONS: GEM-DXK3 or GEM-DXRP3 cannot be used to enter Zone Descriptions. To enter Zone Descriptions, you must use the GEM-DXK1 or GEM-DXRP1 keypad or the Napco Quickloader Software.
DATE ENTRY: GEM-DXK3 or GEM-DXRP3 cannot be used to enter the date. To enter Date, you must use the GEM-DXK1 or GEM-DXRP1 keypad (Version 5 or later) or the Napco Quickloader Software.
TIME ENTRY: GEM-DXK3 or GEM-DXRP3 cannot be used to enter the time. To enter Time, you must use the GEM-DXK1 or GEM-DXRP1 keypad (Version 5 or later) or the Napco Quickloader Software.




33



(Direct Entry)





Dealer Code

Directly enter the Dealer Code, including leading zeros. Use the  through  buttons.

NOTE: Press  for a zero. Press  to save.

Re-enter the Dealer Code to verify the previous code. Press  to save. Press NEXT ("" or ) to proceed. **NOTE:** The Dealer Code can be two or more digits (up to 6 digits).

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

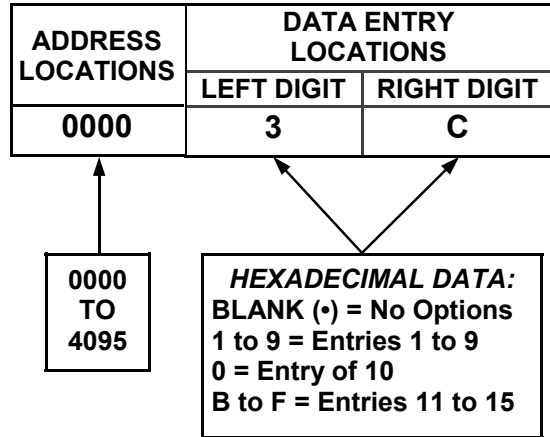
CLEAR PROGRAM: Should it be necessary to create a new custom default program, (a) from the Dealer Program Mode, press  to enter the Address Program Mode; (b) access Location 2285 (Clear Program) or 2286 (Cold Start); (c) press  and then (d) press  to exit the Dealer Program Mode. A System Trouble Condition will occur. Press  to silence the keypad.

DIRECT ADDRESS PROGRAM MODE

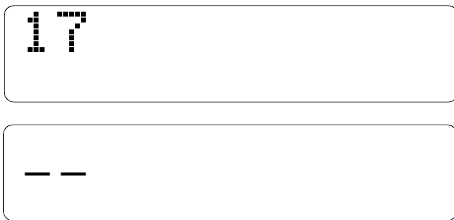
This is an extension of the Dealer Program Mode. This method of programming is used in conjunction with the Keypad Programming Worksheets contained in the control panel programming guide. Refer to these worksheets to identify the 4-digit location (address) of the feature to be programmed. An illustrative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

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 with two data entry locations each (left and right) as shown in the adjacent diagram.



ACCESSING DIRECT ADDRESS PROGRAM MODE

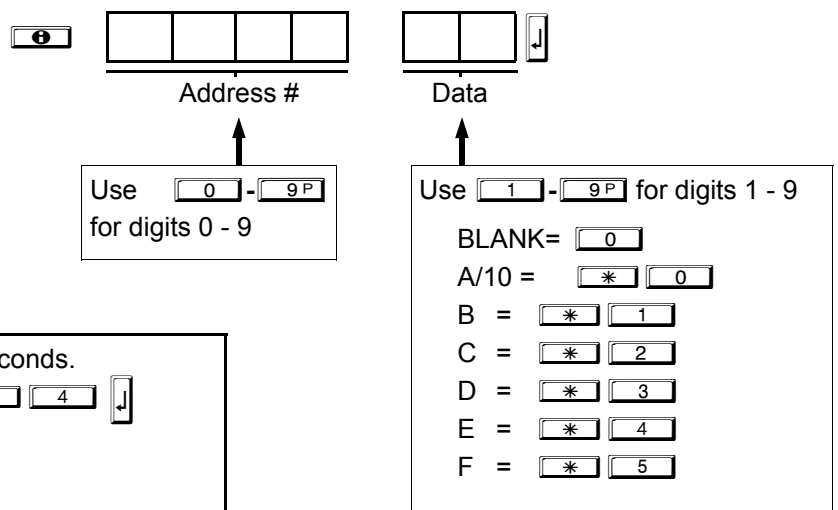


(Direct Entry)

- 1 Enter the Dealer Security Code (default = 456789) for a new panel or enter your custom Dealer Program Code if programmed.
- 2 Press
- 3 Press NO ("X" or) repeatedly until function "17" (Activate Program Mode) is displayed.
- 4 Press YES ("✓" or) to enter the Dealer Easy Program Mode.
- 5 Press

ENTERING DATA IN THE ADDRESS PROGRAM MODE

- 1 Press .
- 2 Enter the 4 digit Address location.
- 3 Enter the 2 digit data.
- 4 Press to save.



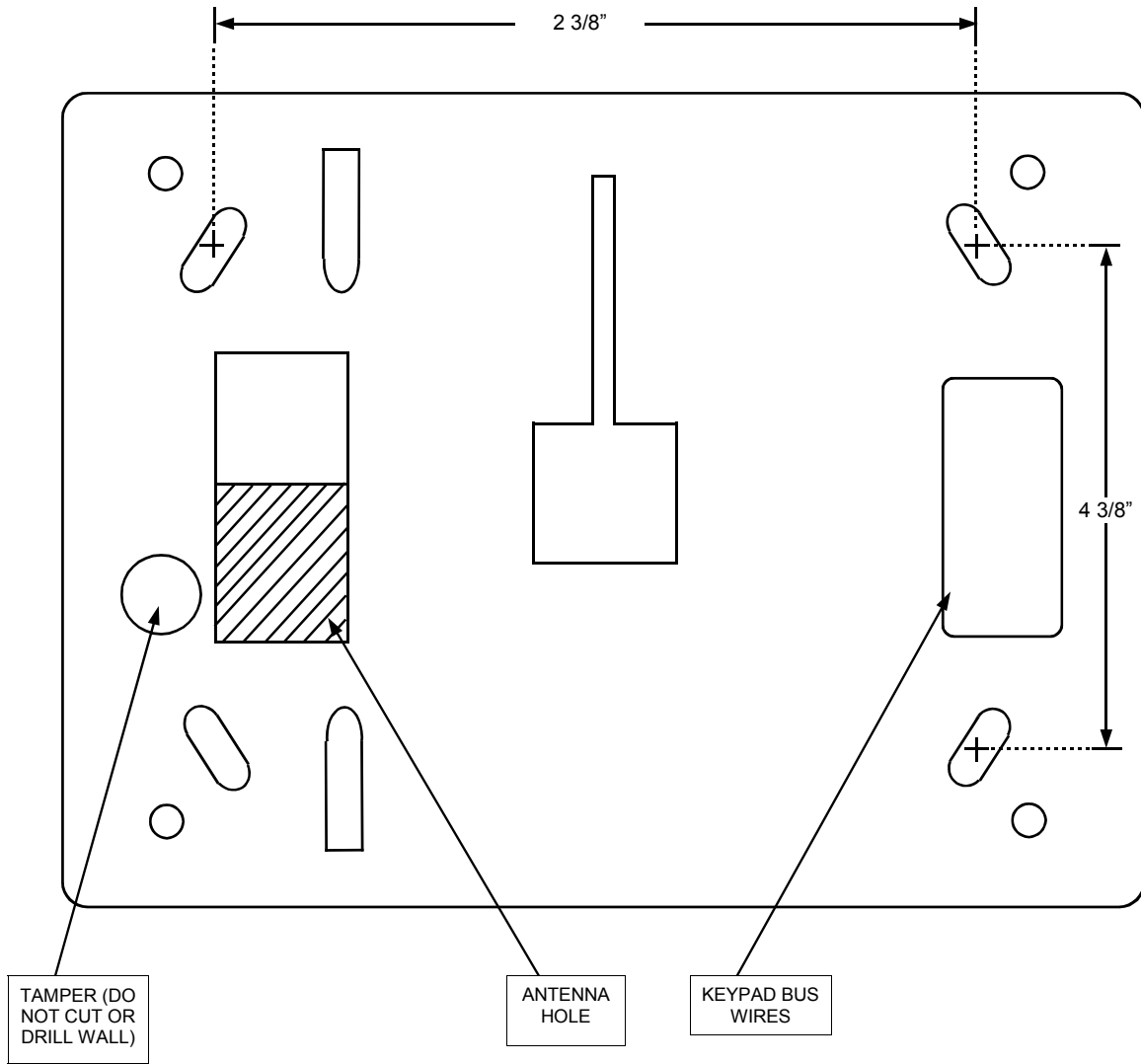
EXAMPLE: Program an Alarm Timeout of 30 seconds.

Press

- Alarm Timeout location = 0712
- 30 second timeout = 1E

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MOUNTING TEMPLATE



NOTES

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NAPCO SECURITY SYSTEMS, INC. (NAPCO) warrants its products to be free from manufacturing defects in materials and workmanship for *thirty-six months* following the date of manufacture. NAPCO will, within said period, at its option, repair or replace any product failing to operate correctly without charge to the original purchaser or user.

This warranty shall not apply to any equipment, or any part thereof, which has been repaired by others, improperly installed, improperly used, abused, altered, damaged, subjected to acts of God, or on which any serial numbers have been altered, defaced or removed. Seller will not be responsible for any dismantling or reinstallation charges.

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Any action for breach of warranty, including but not limited to any implied warranty of merchantability, must be brought within the six months following the end of the warranty period. IN NO CASE SHALL NAPCO BE LIABLE TO ANYONE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, EVEN IF THE LOSS OR DAMAGE IS CAUSED BY THE SELLER'S OWN NEGLIGENCE OR FAULT.

In case of defect, contact the security professional who installed and maintains your security system. In order to exercise the warranty, the product must be returned by the security professional, shipping costs prepaid and insured to NAPCO. After repair or replacement, NAPCO assumes the cost of returning products under warranty. NAPCO shall have no obligation under this warranty, or otherwise, if the product has been repaired by others, improperly installed, improperly used, abused, altered, damaged, subjected to accident, nuisance, flood, fire or acts of God, or on which any serial numbers have been altered, defaced or removed. NAPCO will not be responsible for any dismantling, reassembly or reinstallation charges.

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NAPCO RECOMMENDS THAT THE ENTIRE SYSTEM BE COMPLETELY TESTED WEEKLY.

Warning: Despite frequent testing, and due to, but not limited to, any or all of the following; criminal tampering, electrical or communications disruption, it is possible for the system to fail to perform as expected. NAPCO does not represent that the product/system may not be compromised or circumvented; or that the product or system will prevent any personal injury or property loss by burglary, robbery, fire or otherwise; nor that the product or system will in all cases provide adequate warning or protection. A properly installed and maintained alarm may only reduce risk of burglary, robbery, fire or otherwise but it is not insurance or a guarantee that these events will not occur. CONSEQUENTLY, SELLER SHALL HAVE NO LIABILITY FOR ANY PERSONAL INJURY, PROPERTY DAMAGE, OR OTHER LOSS BASED ON A CLAIM THE PRODUCT FAILED TO GIVE WARNING. Therefore, the installer should in turn advise the consumer to take any and all precautions for his or her safety including, but not limited to, fleeing the premises and calling police or fire department, in order to mitigate the possibilities of harm and/or damage.

NAPCO is not an insurer of either the property or safety of the user's family or employees, and limits its liability for any loss or damage including incidental or consequential damages to NAPCO's original selling price of the product regardless of the cause of such loss or damage.

Some states do not allow limitations on how long an implied warranty lasts or do not allow the exclusion or limitation of incidental or consequential damages, or differentiate in their treatment of limitations of liability for ordinary or gross negligence, so the above limitations or exclusions may not apply to you. This Warranty gives you specific legal rights and you may also have other rights which vary from state to state.



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