NetworX NX-6

Installation Manual

CADDX Controls, Inc.
1-800-727-2339

General Description

The NetworX NX-6 from CADDX Controls represents a new approach to security systems design. Drawing on our experience in the world market as the largest exporter of USA manufactured controls, CADDX has developed the most flexible, durable, and user-friendly control ever seen in our industry. Featuring sophisticated software which allows up to 40 users to interface with 16 zones, 2 partitions, and a host of integrated fire, access, verification, and input/output modules, all reported with the most comprehensive and fast SIA and Contact ID formats. The NetworX design allows a fully loaded system to be housed in one single metal enclosure, establishing for the first time, a logical solution and design response to modular systems. Up to 3 modules can be added to expand the capabilities of th e NX-6.

Ordering Information

Caddx Part #	Description
NX-6 KIT	Includes NX-6 Control, NX-108 LED Keypad, & 16.5V 25VA Transformer
NX-6	NX-6 Control Only
NX-108	8 Zone LED Keypad
NX-116	16 Zone LED Keypad
NX-124	24 Zone LED Keypad
NX-148	Alphanumeric LCD Keypad
NX-200 **	Zone Doubling Kit (Includes 100 3.74k and 100 6.98k resistors)
NX-320 **	Smart Power Supply and Buss Extender
NX-408 #	8 Zone Wireless Expansion Module (UL LISTED PART #60-732)
NX-416 #	16 Zone Wireless Expansion Module (UL LISTED PART #60-732)
NX-508	Eight Output Module
NX-534 **	Two-Way Listen-In Module
NX-535 **	Two-Way Voice Module
NX-540 **	"Operator II" Telephone Interface Module
NX-580 **	Cellemetry Interface
NX-1308	8 Zone LED Door Design Keypad
NX-1316	16 Zone LED Door Design Keypad
NX-1324	24 Zone LED Door Design Keypad

** These products have not been tested and approved by Underwriters Laboratories, Inc.
 # These wireless devices are only UL listed for residential applications.

IMPORTANT NOTES:

①   **The maximum number of zones available is 16 regardless of the devices added. Information regarding zone doubling is located on page 7.**

①   **The 2-wire smoke option is automatically selected when Zone 7 is programmed as a "Fire" Zone Type. Refer to the Standard Zone Type chart on page 14. If Zone 7 is used as wireless "Fire" zone, the resistor must be placed on the 2-wire smoke loop. See diagram and terminal descriptions on pages 40 and 41.**

FEATURE DEFINITIONS

Abort

If enabled, the NX-6 will wait the programmed number of seconds in location 40 prior to sending an alarm. During this delay time, the "Cancel" LED will flash. To abort the report, type in a code and press the [Cancel] key. The LED will extinguish. If the report is not aborted within the allotted time, the LED will extinguish when the report is sent. "Dialer Delay" must be enabled in the "Characteristic Select" of locations 110-149. **(Loc. 40 and 110-149, pg. 20 and 28)**

AC Fail / Low Battery Report / Warning

The NX-6 can be programmed to report AC failure and/or Low Battery conditions to the central station. It can also be programmed to sound the keypad immediately upon detection of the condition. The AC failure report/warning can be delayed. **(Loc. 37 and 39, pg. 20)**

AC Power / Low Battery Sounder Alert

If enabled, the NX-6 will beep the keypad sounder upon arming or disarming if the AC power is missing or a low battery has been detected. **(Loc. 23, pg. 17)**

Arm / Disarm Codes

The NX-6 can have 40 four-digit or six-digit codes to arm/disarm the control.   All codes must have the same number of digits. The factory default for User #1 is [**1**]-[**2**]-[**3**]-[**4**] when using a 4-digit code, or [**1**]-[**2**]-[**3**]-[**4**]-[**5**]-[**6**] for a 6-digit code. This code can then be used to enter the new arm/disarm codes. **(Loc. 41, pg. 21**)

Automatic Arming   NOTE: This feature must be disabled for UL installations

If programmed, the NX-6 will Auto Arm at a specified time. At that time, the keypad will beep for 50 seconds before the panel arms. The arming process will be stopped if a code is entered on the keypad. The NX-6 will attempt to arm after every 45 minutes of inactivity until the next "opening" time (loc. 52), or until the system is armed. The 45-minute timer will be extended when there is activity in the building causing the "Ready" LED to turn off and on. The Auto Arming of a partition can be programmed to be silent. If closing reports are sent, the user code will be 97. **(Loc. 23, and 52-55, pg. 17 and 23)**

Automatic Bypass / Instant Arming

When enabled, the control panel can automatically bypass interior follower zones if an exit is not detected during the exit delay time. Entry delay zones can also be made instant. **(Loc. 23, segments 1 and 3, pg. 17)**

Auto Cancel / Abort

If enabled, the Cancel and/or Abort features will be automatic (pressing the Cancel button is not required). The Cancel and Abort features, in locations 23 and 40 respectively, must be enabled to permit this Auto feature to work. For proper operation of these features, "Dialer Delay" must be enabled in the "Characteristic Select" of locations 110-149 Zone Types. **(Loc. 41, pg. 21)**

Auto Test

This feature will cause the panel to call the central station to report a communicator test at a specified interval. **(Loc. 37 and 51, pg. 19 and 23)**

Auxiliary Outputs

The NX-6 has four programmable outputs that can be used to activate relays, LED's, etc. **(Refer to the terminal descriptions on pg. 41 and loc. 45-50, pg. 21-23)**

Auxiliary Power Over-current

The NX-6 will illuminate the "Service" LED on the keypad when too much current is drawn from any device powered by the system. This condition can be reported to the central station. Power down the system to clear. **(Loc. 37, pg. 19)**

Box Tamper

The NX-6 has an input for a normally closed tamper switch (see terminal drawing). The Box Tamper can be programmed to report and/or sound the siren and/or the keypad. These terminals can be enabled or disabled in programming. **(Loc. 37 and 39, pg. 19)**

Built In Siren Driver

The NX-6 has a built-in 112db siren driver. When desired, this built-in driver can be easily converted to a 1-amp voltage output through programming. **(Loc. 37, pg. 19)**

Bypass Toggle

This feature will enable the end user to toggle (turn on or off) the bypass of an interior zone with the system armed by pressing the [Bypass] key. **(Loc. 23, pg. 17)**

Call Back

When enabled, the control will use the call back phone number to call the download computer before beginning a download. **(Loc. 21, pg. 16)**

Cancel

If enabled, the NX-6 will send a "Cancel" report if when the system is disarmed and the [Cancel] button is pressed within 5 minutes of an alarm. Once the [Cancel] key is pressed, the "Cancel" LED will illuminate until the central station acknowledges the "Cancel" report. "Dialer Delay" must be enabled in the "Characteristic Select" of locations 110-149. **(Loc. 23, pg. 17)**

Code Required Options

The NX-6 can be programmed to require a code for bypassing zones and/or initiating a download using the [✱]-[9]-[8] or [✱]-[9]-[9] function. **(Loc. 23 and 41, pg. 17 and 21)**

Communication Formats

The NX-6 can report in multiple formats. It is recommended that you use Contact ID or SIA formats if possible. If you wish to report to a pager or in a 4+2 format to a central station, you must program each code to be reported. **(Loc. 56-83 and 110-149, pg. 24 - 28)**

Cross Zoning

This feature requires two or more trips on a zone or zones programmed as "cross zones" within a specified time before reporting an alarm. During the time between trips, the NX-6 can be programmed to sound the keypad and/or the siren. The NX-6 can also be programmed to report an alarm after two or more trips on the same zone. **(Loc. 37, 39, 40 and 110-149, pg. 19 - 20, 28)**

Dual / Split / Multiple Reports

The NX-6 can send communication reports to three different phone numbers for dual, split or multiple reports selectable by event or partition. **(Loc. 4, 10, and 16, pg. 12-15)**

Duress Code

If a duress code is programmed the NX-6 will send a duress signal whenever the panel is armed or disarmed with this code. If open/close reports are sent, the user code will be 254. **(Loc. 44, pg. 21)**

Dynamic Battery Test

The NX-6 can be programmed to perform a Dynamic Battery Test for a selected duration the first time the panel is armed or disarmed every day, as well as when the Test Function [✱][4] is performed. If the panel is not armed or disarmed, it will perform the test at midnight. The NX-6 can also be programmed to perform a missing battery test every 12 seconds. **(Loc. 37 and 40, pg. 19 and 20)**

Entry-Guard   NOTE: This feature must be disabled for UL installations

This unique low-level arming mode has been developed to reduce the most common source of false alarms. When armed in the "Stay" mode, the opening of any zones designated as "Entry Guard" will initiate the keypad sounder and start the entry delay before creating an alarm. All other zones will function as normal. This arming mode will encourage system owners to use their system more frequently when the premise is occupied. **(Loc. 111-149, pg. 28)**

Exit Error

If enabled, the NX-6 will send an "Exit Error Report" if an entry/exit zone is faulted at the instant the exit delay expires. This report will be sent along with the user number that armed the system, if the panel is not disarmed before the entry delay expires. The alarm report will also be sent. Even if this feature is not enabled, the siren will sound if any entry/exit zone is faulted at the instant the exit delay expires. **(Loc. 23, pg. 17)**

Expander Trouble

The NX-6 will report expander trouble to the central station if enabled. This condition will illuminate the "Service" LED on the keypad even if not reported. NOTE: The keypads are considered expanders. The number of the expansion devices reported can be found on page 39. **(Loc. 37, pg. 19)**

Fail to Communicate

The NX-6 will illuminate the "Service" LED if a report fails to reach the central station. If enabled, when the next report is successfully communicated, a "Fail to Communicate" code will be reported. **(Loc. 37, pg. 19)**

Fire Alarm Verification

When enabled, the NX-6 will verify a Fire alarm by requiring more than one trip on a smoke detector within a specified time before creating an alarm. **(Loc. 40, pg. 20) This feature is not approved for residential use in California.**

Force Arming   NOTE: This feature must be disabled for UL installations

When enabled, the NX-6 can be Force Armed with zones violated. Under this condition, if a force armable zone is not secure, the "Ready" LED will flash. At the end of the exit delay, these zones will become bypassed. If these zones become secured any time during the arming cycle, they will be unbypassed and active in the system. If "Bypass Report" is enabled, the force arming zones can be programmed to report bypass when they are Force Armed (default), or to not report bypass even if "Bypass Report" is enabled. **(Loc. 37, and 111-149, pg. 19 & 28)**

Group Bypass   NOTE: This feature must be disabled for UL installations

A designated group of zones can be programmed to bypass by pressing [**Bypass**]- [**0**]-[**Bypass**]- [**Bypass**] prior to arming. **(Loc. 111-149, pg. 28)**

Immediate Restore By Zone

The NX-6 can be programmed to send alarm and restore reports as soon as they occur, or wait until the siren time has expired. **(Loc. 37, pg. 19)**

Internal Event Log

Up to 185 events can be stored in memory along with the date and time of the event. These events can later be viewed through downloading or on an LCD keypad. **All reportable events report to the log.**

Keypad Activated Panics

The NX-6 has three keypad activated panics that will send reports to the central station: Auxiliary 1 (Fire), Auxiliary 2 (Medical), and Keypad Panic. Auxiliary 1 will activate the steady (Fire) siren, Auxiliary 2 will sound the keypad, and the Keypad Panic can be programmed to be silent or audible (sound siren). **(Loc. 23, pg. 17)**

Keypad Sounder Control

The NX-6 can be programmed to sound the keypad sounder for certain events. **(Loc. 39, pg. 20)**

Keypad Tamper

If enabled, the NX-6 will disable the keypad for 60 seconds and communicate a tamper signal to the central station if 30 keypresses are entered without producing a valid code. **(Loc. 23, pg. 17)**

Keyswitch Arm/Disarm

Any zone on the NX-6 can be programmed as a keyswitch zone. If this is done, a momentary short on this zone will arm/disarm the control. If opening/closing reports are sent, the user code will be 99. **(See "Default Zone Configurations", pg. 18)**

LED Extinguish

This feature will extinguish all LED's on the keypad, except the "Power" LED, after 60 seconds without a keypress. Pressing any numeric key will illuminate all LED's. **(Loc. 23, pg. 17)**

Local Programming Lockout

This feature will disable programming of all locations or specified locations from the keypad. **(Loc. 21, pg. 16)**

Log Full Report

A report can be sent to the central station when the event log is full. **(Loc. 37, pg. 19)**

Lost Clock Service Light

The NX-6 can be programmed to illuminate the "Service" LED when the internal clock has an invalid time due to power loss. **(Loc. 37, pg. 19)**

Manual Test

The NX-6 can be programmed to perform a bell and/or communicator test when [✱]-[**4**] is entered while the system is in the disarmed state. **(Loc. 37, pg. 19)**

On-Board Zone Disable

All hardwire zones on the NX-6 panel can be disabled to make a completely wireless alarm system. **(Loc. 37, pg. 19)**

Pager Format

Pager formats are 4+3 or 6+3 depending on the number of digits in the account code. The pager will send in this format: "**123456 ABC**" where 1 and 6 are the account number. For report codes that are not zone or user related, the "A" will be the first digit of the report code, "B" will be a zero (0) as a placeholder, and "C" will be the second digit of the code. For all other report codes, the "A" will be the event code while "B" and "C" represent the zone or user ID. **(Format Selection chart on pg. 13)**

Partitions

The NX-6 can be partitioned into a maximum of two separate systems with distinct reporting codes, user codes, and operating features for each system. **(Loc. 26 - 28, pg. 19)**

Program Code

The factory default for the "Go To Program" code is [**9**]-[**7**]-[**1**]-[**3**] when using a 4-digit code or, if the 6-digit option is used, the default is [**9**]-[**7**]-[**1**]-[**3**]-[**0**]-[**0**]. The program code can also be used as an Arm/Disarm code. If used as an Arm/Disarm code, and open/close reports are sent, the user code will be 255. **(Loc. 43, pg. 21)**

Quick Arm Feature

The NX-6 has a one button "Quick Arm" feature that can be used to arm the system by pressing the [**Exit**] key or the [**Stay**] key on the keypad. If closing reports are sent, the user code will be 98. **(Loc. 23, pg. 17)**

Recent Closing

If enabled, the NX-6 will send a "Recent Closing Report" to the central station if an alarm occurs within 5 minutes after the panel is armed. The user number that armed the system will also be sent. **(Loc. 23, pg. 17)**

Re-exit

The NX-6 has the ability to restart the exit delay for a quick exit without disarming the system by pressing the [**Exit**] key while the system is armed. **(Loc. 23, pg. 17)**

Shutdown

This mode will cause the keypads to turn off all LED's, except the "Power" LED, and not accept keypresses. **(Loc. 21, pg. 16)**

Siren Blast For Arming

The NX-6 can be programmed to give a one-second siren blast when the panel is armed, at the end of the exit delay, or when the central station receiver acknowledges the closing report. It can also give one blast for remote (keyswitch) arming and two blasts for remote disarming. **(Loc. 37, pg. 19)**

Siren Supervision

The NX-6 has a "Siren Supervision" circuit that will constantly monitor the siren on the NX-6 and can be programmed to report if the wires are cut. **(Loc. 37, pg. 19)**

Silent Exit Option

The exit delay can be silenced by pressing [✱]-[**Exit**] before arming the control panel, or when using the re-exit feature. The exit delay can also be silenced permanently in all partitions. (**Loc. 37, pg. 19)**

Start/End Programming and End Downloading

A report can be sent when local programming is started and ended. A report can also be sent when a download session ends. **(Loc. 37, pg. 19)**

Starting Zone

This feature is used when the keypad zone LEDs must correspond to different control panel zones. Let's say you have a 16-zone system with two 8-zone partitions. Each partition can utilize an 8-zone LED keypad by programming the **starting zone** in each keypad. In this example, zones 1-8 reside in partition #1, and zones 9-16 reside in partition #2. The **starting zone** for partition #1 keypads would be 1 and the **starting zone** for partition #2 keypads would be 9. **(Programming the LED Keypads, pg. 8)**

Swinger Shutdown   NOTE: This feature must be disabled for UL installations.

This feature allows a zone(s) to be automatically bypassed after a specified number of alarms. When a zone is tripped, the alarm 'counter' reflects "1" in memory. If a new (first) alarm is detected in a different zone, the counter remains at "1". If an alarm is detected on a previously tripped zone, the count increments to "2". The 'counter' will increment each time an alarm is detected on a zone with multiple trips. Bypassing will occur on the zone that causes the count to equal the number programmed in location 38; the 'counter' will reset to zero (0); and begin a new trip count where the next alarm will set the 'counter' to 1. If immediate restore is enabled in location 37, the alarms (and restores, if enabled) will be sent as they occur. If immediate restore is not enabled, a second or subsequent alarm will not be sent until the siren times out. **(Loc. 37 and 38, pg. 19)**

Telephone Line Monitor

The NX-6 has a Telephone Line Monitor that monitors the voltage and current of the telephone line for a detection of a faulted phone line. This condition can also be reported to the central station. If the report is enabled, only the Telephone Line Restore will be reported. **(Loc. 37, 39, and 40, pg. 19-20)**

Temporal Siren Disable

NOTE: This feature must NOT be disabled for UL installations.

If disabled, the Fire siren will be steady and Fire Voltage Out will be the same as Burglary (continuous). If enabled, the Fire siren will be temporal. **(Loc. 37, pg. 19)**

Tone Sniff Answering Machine Defeat

If enabled, only one call is required to defeat the answering machine. To use this feature you must have a Hayes 1200 Smart Modem or a Caddx 1200 module. From the computer, call the panel as normal. When the answering machine answers, the panel will hear the tones from the modem and seize the phone line for a download. **(Loc. 21, pg. 16)**

Two Call Answering Machine Defeat

If enabled, to defeat an answering machine, two telephone calls must be made to the premises. On the first call, let the phone ring one or two times. The control panel will detect these rings and start a 45-second timer, during which, the control panel will answer the next call on the first ring. **This is not recommended for commercial applications. (Loc. 21, pg. 16)**

Walk-Test Mode

If enabled, entering [✱] [Chime] followed by a user code will allow a walk-through zone test where all zones become silent and local (non-reporting). Each time a zone is faulted, the zone light on the LED keypad will illuminate and the chime will sound. The number of the faulted zone(s) will be displayed on the LCD keypad. It will also be entered into alarm memory and the internal log. To exit at any time during this mode, enter a user code. Otherwise the "Walk-Test Mode" will automatically exit after 15 minutes. **(Loc. 41, pg. 21)**

Wireless Sensor Missing/Low Battery

The NX-6 will send a report to the central station when a wireless sensor has detected a low battery or has not reported to the receiver. The "Service" LED will illuminate when either condition exists. **(Loc. 37, pg. 19)**

Zone Bypassed Sounder Alert

If enabled, the NX-6 will beep the keypad sounder upon arming if a zone is bypassed. **(Loc. 23, pg. 17)**

Zone Doubling

This feature allows you to use the six zones on the panel as twelve normally closed zones. When this feature is used, zone seven cannot be a two-wire smoke zone, and European double E.O.L. configuration cannot be used. **THIS FEATURE DOES NOT INCREASE THE TOTAL NUMBER OF AVAILABLE ZONES BEYOND 12.** Zones 7 - 12 should not programmed as "Fire" Zone Types when Zone Doubling is used. If one of the twelve zones must be a fire zone, it must be one of Zones 1 to 6. The corresponding upper zone will become unavailable. For example, if Zone 6 is a fire zone, then Zone 12 will not be available. **(Loc. 37, pg. 19)**

Zone Types

The NX-6 has 20 programmable Zone Types that determine how each zone will function and report. The default Zone Types are listed on page 18. **(Loc. 110-149, pg. 28)**

PROGRAMMING THE NX-6 LED KEYPADS

This section describes how to program the address and partition of each keypad as well as the options that are available. The address of the keypad is important because this is how the panel supervises the keypads. The factory default for the Master code is [**1**]-[**2**]-[**3**]-[**4**] when using a 4-digit code or [**1**]-[**2**]-[**3**]-[**4**]-[**5**]-[**6**] for a 6-digit code. The factory default for the "Go To Program" code is [**9**]-[**7**]-[**1**]-[**3**] for a 4-digit code or [**9**]-[**7**]-[**1**]-[**3**]-[**0**]-[**0**] for a 6-digit code.

SET STARTING ZONE   (Refer to feature definitions)

Step 1   Enter [✱]-[**9**]-[**2**] [**program code**]. The "Service" LED will illuminate steady.

Step 2   Enter the starting zone for this keypad (**1-48**) followed by [✱].

SET KEYPAD OPTIONS

Step 1   Enter [✱]-[**9**]-[**3**] [**program code**]. The "Service" LED will flash.

Step 2   LEDs 1-8 can now be toggled on/off to enable/disable the functions in the following chart.

Step 3   After enabling/disabling the desired functions press [✱].

LED	KEYPAD FEATURE ENABLED
1	**Reserved.** *DO NOT PROGRAM THIS AT ALL!*
2	**Enable Silent Keypad option**. Silences the entry/exit sounder & chime only.
3	**Enable "Ding Dong" sound for chime -** If off, chime will be a single tone. (Loc. 40)
4	**Enable Keypress Silence option** - silences the pulsing keypad sounder for 5 seconds when a key is pressed.
5	**Enable Armed Status Suppression** - will not allow the keypad to display faulted or bypassed zones when the system is armed.
6	**Enable Panic, Fire, Medical Beeptone** - will sound a short beep to verify that the keypress was accepted.
7	**Suppresses the "Service" LED** - will not allow the "Service" LED to illuminate for any reason. If there is a system trouble, pressing [✱]-[**2**] will still show the Service menu. (***NOTE: For UL installations, the Service LED shall not be suppressed***.)
8	**Enable multi-partition viewing** - enables temporary viewing of all partitions by pressing [✱]-[**1**]-[partition number].

SET KEYPAD NUMBER AND PARTITION

Step 1   Enter [✱]-[**9**]-[**4**]-[**program code**]. The "Service" LED and the "Instant" LED will flash.

Step 2   Enter the keypad number (1-8).

Step 3   Press [✱]. The "Instant" LED will illuminate steady and the "Service" LED will remain flashing.

Step 4   Enter the partition number for the keypad. The keypad will automatically exit this mode now.

SET ELAPSED INCREMENTS SINCE LAST AUTOTEST

Step 1   Enter [✱]-[**9**]-[**5**]-[**program code**]. The "Service" LED will flash.

Step 2   Enter [100's digit] -[10's digit]-[1's digit]-[#]

SET SYSTEM DATE

Step 1   Enter [✱]-[**9**]-[**6**]-[**master code**]. The "Service" LED will flash.

Step 2   Enter "Day of Week"

1 = Sunday	**2 = Monday**	**3 = Tuesday**	**4 = Wednesday**
5 = Thursday	**6 = Friday**	**7 = Saturday**	

Step 3   Enter "Month Code". This must be two digits, i.e. [month 10's digit]-[month 1's digit].

01 = January	**02 = February**	**03 = March**	**04 = April**
05 = May	**06 = June**	**07 = July**	**08 = August**
09 = September	**10 = October**	**11 = November**	**12 = December**

Step 4   Enter "Day Code". This must be two digits, i.e. [day 10's digit]- [day 1's digit].

Step 5   Enter "Year Code". This must be two digits, i.e. [year 10's digit]-[year 1's digit].

SET SYSTEM CLOCK

Step 1	Enter [✱]-[**9**]-[**7**]-[**master code**]. The "Service" LED will flash.
Step 2	Enter "Hour Code". This must be two digits, i.e. [hour 10's digit]-[hour 1's digit].
Step 3	Enter "Minutes Code". This must be two digits, i.e. [minutes 10's digit]-[minutes 1's digit].

CHANGING USER CODES

Step 1	Enter [✱]-[**5**]-[**master code**]. The "Ready" LED will flash.
Step 2	Enter the 2-digit user number (always 2 digits, i.e. "03" for user 3). The "Ready" LED will illuminate steady.
Step 3	Enter the new user code designated for that individual. The "Ready" LED will flash indicating that the code was accepted. If it rejects the code, the sounder will beep 3 times. ***Note for NX1300 Series LED Keypad***: The zone lights will illuminate specifying the first digit of the "user code". (Lights 1-8 on = code is blank; lights 1-8 off = "0"; lights 1 and 8 = "9".) Use the up and down scroll keys to view the next digit or enter a new 4- or 6-digit "user code". While using the scroll keys you can change any digit by entering a new digit. This will advance you to the next digit.
Step 4	If another user code needs to be programmed, return to step 2.
Step 5	Press [**#**] while the "Ready" LED is flashing to exit the User Code Programming Mode.

ASSIGNING AUTHORITY LEVEL

Step 1	Enter [✱]-[**6**]-[**master code**]. The "Ready" LED will flash.
Step 2	Enter [2 digit user number] (always 2 digit such as 03 for user 3). The "Ready" LED will illuminate steady and the "Instant" LED will flash. Refer to the chart below for the description of each LED. Turn the LED on for the features that you desire.

LED	ATTRIBUTES IF LED 8 IS OFF	LED	ATTRIBUTES IF LED 8 IS ON
1	Reserved	1	Activate output #1
2	Arm Only	2	Activate output # 2
3	Arm Only After Close Window	3	Activate output # 3
4	Master arm/disarm (can program other codes)	4	Reserved
5	Arm/disarm code	5	Arm/disarm
6	Allowed to bypass zones (see location 23)	6	Bypass Zones
7	Code will send open / close reports	7	Open / Close Reporting
8	If this LED is on, LEDs 1-7 will use the chart to the right	8	If this LED is off, LEDs 1-7 use the chart to the left

Step 3	Enter [✱]. The "Instant" LED will illuminate steady. This moves you to the partition enable, which tells the system what partition this user can arm/disarm.
Step 4	LEDs 1-2 illuminate for each partition that the user has authorization for. To change any of these numbers, press 1-2 to permit or deny access to the user. *Example: If LED #2 is lit, then user has assigned access to that partition. By pressing the [**2**] key, the LED will go off indicating the user has been denied access to that partition.*)
Step 5	Enter [✱]. This returns you back to step 2 above. At this point you may enter another user number to assign attributes for. Continue this procedure until you have assigned authority levels to all users.
Step 6	Press [**#**] key to exit the Assigning Authority Level Program.

NOTE: Any master arm/disarm code can add or change a user code if the master code has access to the same partitions as the code being added/changed. Consequently, when programming the user codes for a partitioned system, leave at least one code (can be "Go to Program code" if enabled in location 43) with access to all partitions or you will not be able to add new users. If you desire the end user to be able to add new codes, you must remove the partition authority from all blank codes.

[✱]-[9]-[8] Pressing [✱]-[**9**]-[**8**] while the system is disarmed will cause the control to do a callback for a download. **NOTE: A valid user code may be required after [✱]-[9]-[8] if enabled in loc. 41.**

[✱]-[9]-[9] Pressing [✱]-[**9**]-[**9**] while the system is disarmed will cause the control panel to seize the phone line for a download. **NOTE: A valid user code may be required after [✱]-[9]-[9] if enabled in loc. 41.**

PROGRAMMING THE NX-6 CONTROL

ENTERING THE PROGRAM MODE

To enter the Program Mode, press [✱]-[**8**]. At this time, the five function LEDs (Stay, Chime, Exit, Bypass, & Cancel) will begin to flash. Next, enter the "Go To Program Code" (FACTORY DEFAULT IS [**9**]-[**7**]-[**1**]-[**3**]). If the "Go To Program Code" is valid, the "Service" LED will flash and the five function LEDs will illuminate steady. You are now in the Program Mode and ready to select the module to program.

SELECTING THE MODULE TO PROGRAM

Since all modules connected to the NX-6 are programmed through the keypad, the module you are program ming should be the first entry. To program the NX-6 Control Panel, enter [**0**]-[**#**]. The [**0**] is the module number of the control and the [**#**] is the entry key. Other module entry numbers can be found in their corresponding manuals.

PROGRAMMING A LOCATION

Once the number of the module to be programmed has been entered, the "Armed" LED will illuminate, indicating it is waiting for a programming location to be entered. Any location can be accessed by directly entering the desired programming location followed by the pound [**#**] key. If the location entered is a valid location, the "Armed" LED will extinguish, the "Ready" LED will illuminate and the binary data for the first segment of this location will be shown by the zone LED's. While entering new data, the "Ready" LED will begin flashing to indicate a data change in process. The flashing will continue until the new data is stored by pressing the [✱] key. Upon pressing the [✱] key, the keypad will advance to the next segment and display its data. This procedure is repeated until the last segment is reached. Pressing the [**#**] key will exit from this location, and the "Armed" LED will illuminate agai n waiting for a new programming location to be entered. If the desired location is the next sequential location, press the [POLICE] key. If the previous location is desired press the [FIRE] key. If the same location is desired press the [MEDIC] key. To re view the data in a location, repeat the above procedure, pressing the [✱] key without any numeric data entry. Each time the [✱] key is pressed, the programming data of the next segment will be displayed for review.

EXITING A LOCATION

After the last segment of a location is programmed, press [✱] to save the data, exit that location, turn the "Ready" LED off and the "Armed" LED on. To exit before the last segment, press [**#**]. As before, you are now ready to enter another programming location. If an attempt is made to program an invalid entry for a particular segment, the keypad sounder will emit a triple error beep (beep, beep, beep), and remain in that segment awaiting a valid entry.

EXITING THE PROGRAM MODE

When all the desired changes in programming have been made, press the [Exit] key to exit this programming l evel, and go to the "Select a Module To Program" level. If no additional modules are to be programmed, pressing the [Exit] key again will exit the program mode. If there is a module to be programmed, it may be selected by entering its address followed by the [**#**] key (see "Selecting the Module To Program" above). The procedure for programming these devices is the same as for the control panel, except the locations will be for the module selected.

PROGRAMMING DATA

Programming data is always one of two types. One type of data is numerical and can use values from 0 -15 or 0 -255 depending on the location's segment. The other type of data is a feature selection type. Feature selection data is used to turn features on or off. Use the following procedures when working with these two data types:
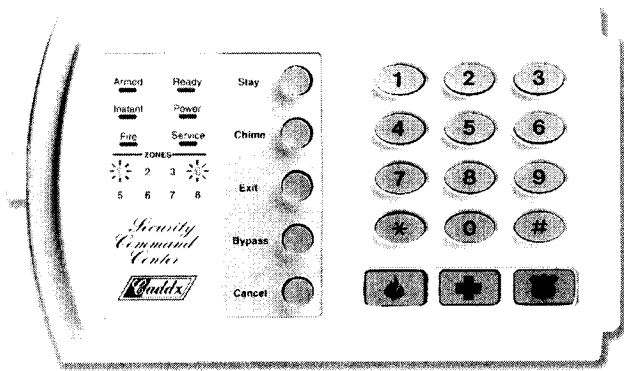
NUMERICAL DATA

Numerical data is programmed by entering a number from 0 -255 on the numeric keys of the system keypad. To view the data in a location, a binary process is used. With this process, the LED's for zones 1 through 8 are utilized, and the numeric equivalents of their illuminated LED's are added together to determine the data in a programming location. The numeric equivalents of these LED's are as follows:
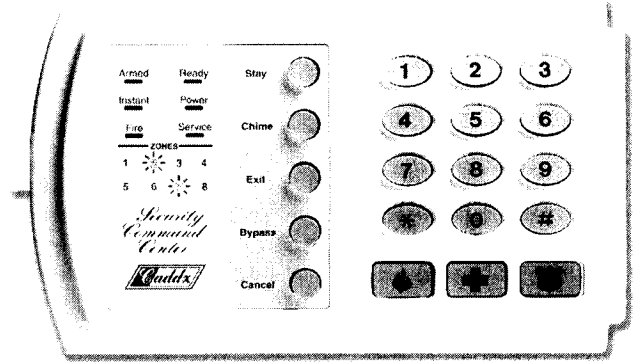
Zone 1 LED = **1**	Zone 2 LED = **2**	Zone 3 LED = **4**	Zone 4 LED = **8**
Zone 5 LED = **16**	Zone 6 LED = **32**	Zone 7 LED = **64**	Zone 8 LED = **128**

Example: If the numerical data to be programmed in a location is "66", press [**6**]-[**6**] on the keypad. The LED's for Zone 2 and Zone 7 will become illuminated indicating 66 is in that location (2 + 64 = 66). Once the data is programmed, press the [✱] key to enter the data and advance to the next segment of that location. After the last segment of a location is programmed, pressing the [✱] key will exit that location, turn the "Ready" LED off and the "Armed" LED on. As before, you are now ready to enter another programming location. If an attempt is made to program a number too large for a particular segment, the keypad sounder will emit a triple beep, indicating an erro r, and remain in that segment awaiting a valid entry. On the LCD keypad, the number in the location will be displayed. For locations with a maximum of 15, the hexadecimal equivalent will be displayed in parenthesis. Example: **11 (B)** or **14 (E)**.
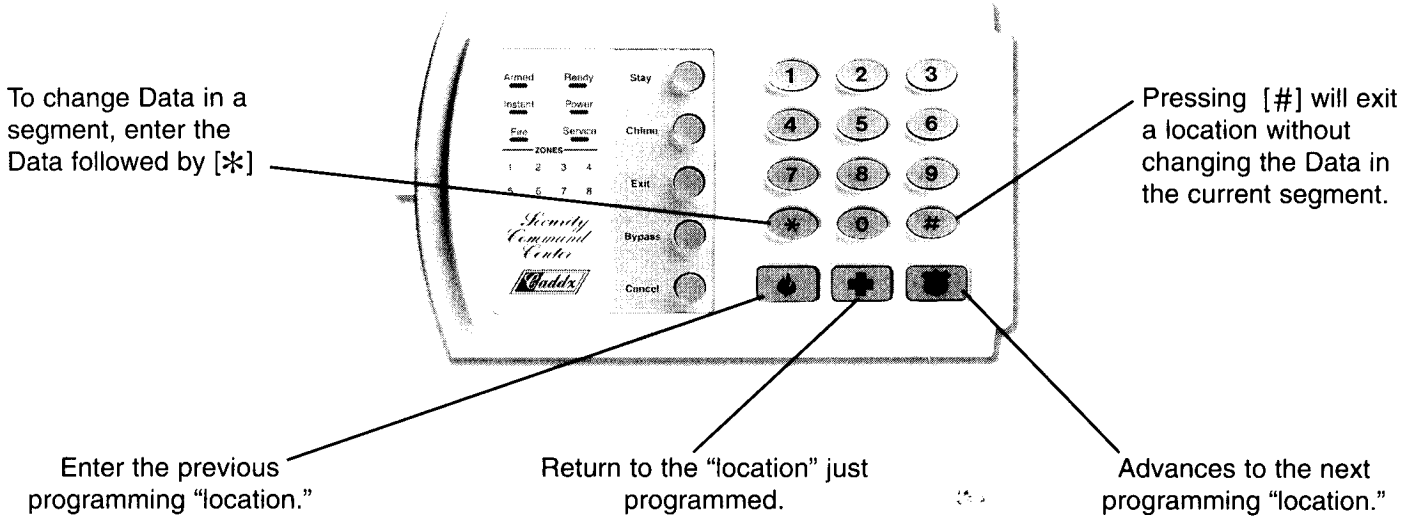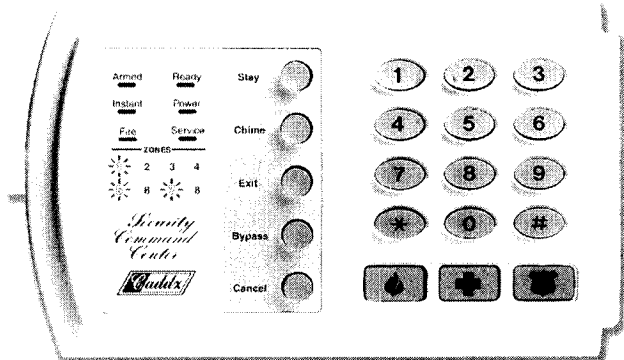
PROGRAMMING EXAMPLE - FIGURE 1 (Numerical Data)

NX-4 Control

Zone 1 LED = 1
Zone 4 LED = 8 } Data = 9

Zone 2 LED = 2
Zone 7 LED = 64 } Data = 66

To change Data in a segment, enter the Data followed by [✶]

Pressing [#] will exit a location without changing the Data in the current segment.

Enter the previous programming "location."

Return to the "location" just programmed.

Advances to the next programming "location."

PROGRAMMING EXAMPLE - FIGURE 2
(Feature selection Data)

Location 23 • Segment 1
1 = Quick Arm
2 = Re-Exit
3 = Auto Bypass
4 = Silent Keypad Panic
5 = Audible Keypad Panic
6 = Keypad Auxiliary 1
7 = Keypad Auxiliary 2
8 = Multi-Keypad Tamper

Press the key on the numeric Keypad that corresponds to the feature you wish to enable/disable. When an LED is "on" a feature is enabled, when "off" the feature is disabled. For example, with the 1, 5, & 7 LED's "on," Quick Arm, Audible Keypad Panic and Keypad Auxiliary 2 are enabled.

FEATURE SELECTION DATA: Feature selection data will display the current condition (on or off) of eight features associated with the programming location and segment selected. Pressing a button on the touchpad (1 thru 8) that corresponds to the "feature number" within a segment will toggle (on/off) that feature. Pressing any numeric key between [**1**] and [**8**] for selection of a feature, will make the corresponding LED illuminate (feature ON). Press the number again, and the LED will extinguish (feature OFF). You will see that numerous features can be selected from within one segment. For instance, if all eight features of a segment are desired, pressing [**1**]-[**2**]-[**3**]-[**4**]-[**5**]-[**6**]-[**7**]-[**8**] will turn on LED's 1 thru 8 as you press the keys, indicating that those features are enabled. **LCD Keypad Users Note: The numbers of the enabled features will be displayed. However, the features not enabled will display a hyphen (-).** After the desired setting of features is selected for this segment, press the [✱] key. This will enter the data and automatically advance to the next segment of the location. When you are in the last segment of a location and press the [✱] to enter the data, you will exit that location. This will now turn the "Ready" LED off and the "Armed" LED on. As before, you are now ready to enter another programming location.

LOADING FACTORY DEFAULTS

To load the factory defaults, enter the program mode using the procedure on page 10, then type [**9**]-[**1**]-[**0**]-[**#**]. The keypad will beep 3 times indicating that the loading is in progress. The loading takes about 6 seconds.

ENROLLING MODULES AND KEYPADS

For supervision purposes, the NX-6 has the ability to automatically find and store in its memory, the presence of all keypads, zone expanders, wireless receivers, and any other module connected to the data terminal. This allows these modules to be supervised by the control panel. To enroll the modules, enter the Program Mode of the NX-6 control panel as described on page 10. When the Program Mode is exited, the NX-6 control will automatically enroll the devices. The enrolling process takes about 12 seconds, during which time the "Service" LED will illuminate. User codes will not be accepted during the enrolling process. If a speaker is attached to the NX-6, it will click at this time. If a siren or bell is attached to the NX-6, it will sound for about 1 second. Once a module is enrolled, if it is not detected by the control, the "Service" LED will illuminate.

CONTROL PANEL PROGRAMMING LOCATIONS

(Various locations intentionally omitted. Attempts to access these reserved locations will cause the keypad to sound an error beep.)

LOCATION 0	PROGRAMMING PHONE #1	20 segments, numerical data

The first telephone number is programmed in location 0. A "14" indicates the end of the phone number. Delays of 4 seconds can be programmed at any point in the phone number by programming a "13" in the appropriate segment. If tone dialing is desired, program a "15" in the segment where tone dialing should begin. If the entire number should be tone dialing, program a "15" in the first segment. Program an "11" for a "✱", and a "12" for a "#".

LOCATION 1	ACCOUNT CODE FOR THE PHONE #1	6 segments, numerical data

The account code sent when Phone #1 is dialed is programmed in location 1. Program a "10" in the segment immediately after the last digit of the account code. If the account code is 6 digits long, program all 6 segments.

LOCATION 2	COMMUNICATOR FORMAT FOR PHONE #1	1 segment, numerical data

Location 2 contains the communicator format used to transmit to the receiver connected to Phone #1. Consult the instructions for your central station receiver to determine which format is compatible. Select a format from the list on the following page. If you require a format other than those listed, review the override options described in location 18, to build the appropriate format. A "15" must be programmed in location 2 in addition to the entries in location 18 in order to create a special format. If this location contains a "0", the built-in communicator will be disabled, and the NX-6 will function as a local only control.

LOCATION 3	DIAL ATTEMPTS/BACKUP CONTROL PHONE # 1	2 segments, numerical data

Segment 1   Dial attempts: Location 3, Segment 1 is used to enter the number of dial attempts (1 to 15 Attempts) the communicator will make to Phone #1 before ending the notification process. Factory default is "8" and the communicator will make eight (8) attempts to the first number.

Segment 2   Phone #1 Backup Control: Programming a "**0**" in Segment 2 of this location will cause the NX-6 to make the designated number of attempts to Phone #1 and #2 before setting the "Fail To Communicate" condition and stop reporting. Programming a "**1**" in this segment will cause the NX-6 to stop trying to communicate after the designated number of attempts have been made to Phone #1. If a "**2**" is programmed in this segment, it will cause the NX-6 to make the dial attempts in increments of two. The first two attempts will be made to Phone #1, the next two attempts to Phone #2, then repeating until the total number of attempts designated in Segment 1 is completed.

FORMAT SELECTIONS

DATA	FORMAT	DESCRIPTION
0	Local	Communicator is disabled
1	Universal 4+2	Two digit event code 1800hz transmit 2300hz handshake double round parity 40pps
2	3+1 fast (or 4+1)	One digit event code 1900Hz transmit 1400Hz handshake double round parity 20pps
3	Reserved	Reserved
4	Pager	3 digit event code DTMF transmission
5	3/1 or 4/1 slow	1800hz transmit 2300hz handshake double round parity 20 p.p.s. hex capability
6	3/1 or 4/1 slow	1800hz transmit 1400hz handshake double round parity 20 p.p.s. hex capability
7	3/1 or 4/1 fast	1800hz transmit 2300hz handshake double round parity 40 p.p.s. hex capability
8	3/1 or 4/1 fast	1800hz transmit 1400hz handshake double round parity 40 p.p.s. hex capability
9	3/1 or 4/1 fast with parity	1800hz transmit 2300hz handshake single round w/parity 40 p.p.s. hex capability
10	3/1 or 4/1 fast with parity	1800hz transmit 1400hz handshake single round w/parity 40 p.p.s. hex capability
11	4+2 express	Two-digit event code DTMF transmission
12	4+2 fast	Two-digit event code 1900hz transmit 1400hz handshake double round parity 20 p.p.s.
13	Ademco Contact ID	DTMF (see pages 37-38)
14	SIA	FSK (see pages 37-38)
15	Custom format	(See location 18, page 16)

LOCATION 4	EVENTS REPORTED TO PHONE # 1	2 segments, feature selection

Phone #1 has two programming locations that are used to select which events are reported to this phone number. Location 4 is used to select which events are reported to Phone #1.   Location 5 is used to select which partitions are reported to Phone #1.   If dual or split reporting is not desired, location 4 should be used to select all events to Phone #1 and location 5 should be left at the factory default of "0". If dual or split reporting is desired, and the split is based on the event type (such as alarm, open/close, etc.), location 4 should be used to select only those events that should be reported to Phone #1 and location 5 should be left at the factory default of "0". If dual or split reporting is desired, and the split is based on partition, location 4 should be programmed as a "0" and location 5 should be used to select those partitions that should be reported to Phone #1.   If no events should be reported to Phone #1, both locations should be programmed as "0" (disabling all options). **Use Table 1.1 on page 14 to identify the events to be reported for Phone #1.**

Table 1.1

Segment 1	
1	Alarms and Alarm Restores
2	Opening and Closings
3	Zone Bypass and Bypass Restores
4	Zone Trouble and Trouble Restores
5	Power Fail, Low Battery, Power Restore, and Low Battery Restore
6	Bell Cut , Telephone Line Cut, Bell Cut Restore, Telephone Line Restore
7	Test Reports
8	Start and End programming, Download complete
Segment 2	
1	Zone and Box Tamper and Tamper Restore
2	Auxiliary Power Overcurrent and Restore
3	Wireless Sensor Missing and Restore
4	Wireless Sensor Low Battery and Restore
5	Expander Trouble and Restore
6	Fail To Communicate
7 & 8	Reserved

LOCATION 5	PARTITIONS REPORTED TO PHONE #1	1 segment, feature selection

Location 5 is used when events to be reported to a phone number are based upon the partition regardless of the event. Program a "1" for Partition 1, and a "2" for Partition 2.   If this location is used, location 4 should be "0".

LOCATION 6	PROGRAMMING PHONE #2	20 segments, numerical data

Phone #2 is programmed in location 6. A "14" indicates the end of the phone number. D elays of four seconds can be programmed at any point in the phone number by programming a "13" in the appropriate segment. If tone dialing is desired, program a "15" in the segment where tone dialing should begin. If the entire number should be tone dial ing, program a "15" in the first segment. Program an "11" for a "✱", and a "12" for a "#".

LOCATION 7	ACCOUNT CODE FOR THE PHONE #2	6 segments of numerical data

The account code sent when Phone #2 is dialed is programmed in location 7. Program a "10" in the segment immediately after the last digit of the account code. If the account code is 6 digits long, program all 6 segments. If this location is left unprogrammed, account code 1 will be used when the second phone number is dialed.

LOCATION 8	COMMUNICATOR FORMAT FOR PHONE # 2	1 segment, numerical data

Location 8 contains the communicator format used to transmit to the receiver connected to Phone #2. Consult the instruction manual for your central station receiver to determine which format i s compatible, and select from the 15 formats listed on page 13. If you require a format other than those listed, review the override options described in Location 18 to build the appropriate format. A "15" must be programmed in location 8 in addition to the entries in location 18 in order to create a special format. If this location contains a "0", format 1 will be used when Phone #2 is dialed.

LOCATION 9	DIAL ATTEMPTS/BACKUP CONTROL PHONE #2	2 segments, numerical data

Segment 1   **Dial attempts:** Segment 1 of Location 9 is used to enter the number of dial attempts (1 to 15 attempts) the communicator will make to Phone #2 before ending the notification process. Factory default is "0" and the communicator will make the same number of attempts as those p rogrammed in location 3.

Segment 2   **Phone #2 Backup Control:** Programming a "**0**" in Segment 2 of this location will cause the NX-6 to make the designated number of attempts to Phone #2 and #1 before setting the "Fail To Communicate" condition and stop reporting. Programming a "**1**" in this segment will cause the NX-6 to stop trying to communicate after the designated number of attempts have been made to Phone #2. If a "**2**" is programmed in this segment, it will cause the NX-6 to make the dial attempts in increments of two. The first two attempts will be made to Phone #2, the next two attempts to Phone #1, then repeating until the total number of attempts designated in Segment 1 is completed.

LOCATION 10	EVENTS REPORTED TO PHONE #2	2 segments of feature selection

Phone #2 can be used to back up Phone #1 or for a second receiver to multi-report or split report events. Phone #2 has two programming locations that are used to select which events are reported to this phone number. Location 10 is used to select which events are reported to Phone #2, and location 11 is used to select which partitions are reported to Phone #2. If dual or split reporting is not desired, location 10 and location 11 should be left at the factory default of "0". If multi-reporting or split reporting is desired, and the split is based on the event type (such as alarm, open close etc.), location 10 should be used to select only those events that should be reported to Phone #2, and location 11 should be left at the factory default of "0". If dual or split reporting is desired, and the split is based on partition, then location 10 should be programmed as "0", and location 11 should be used to select those partitions that should be reported to the Phone #2. If no events should be reported to Phone #2, both locations should be "0". **Use Table 1.1 on page 14 to identify the events to be reported for Phone #2.**

LOCATION 11	PARTITIONS REPORTED TO PHONE #2	1 segment, feature selection

Location 11 is used when events to be reported to a phone number are based upon the partition regardless of the event. Program a "1" for Partition 1 and a "2" for Partition 2. If this location is used, location 10 should be "0".

LOCATION 12	PROGRAMMING PHONE #3	20 segments, numerical data

Phone #3 is programmed in location 12. A "14" indicates the end of the phone number. Delays of four seconds can be programmed at any point in the phone number by programming a "13" in the appropriate segment. If tone dialing is desired, program a "15" in the segment where tone dialing should begin. If the entire number should be tone dialing, program a "15" in the first segment. Program an "11" for a "∗", and a "12" for a "#".

LOCATION 13	ACCOUNT CODE FOR PHONE #3	6 segments, numerical data

The account code sent when Phone #3 is dialed is programmed in location 13. Program a "10" in the segment immediately after the last digit of the account code. If the account code is 6 digits long, program all 6 segments. If location 6 is left unprogrammed, account code 1 will be used when the Phone #3 is dialed.

LOCATION 14	COMMUNICATOR FORMAT FOR PHONE #3	1 segment, numerical data

Location 14 contains the communicator format used to transmit to the receiver connected to phone #3. Consult the instruction manual for your central station receiver to determine which format is compatible, and select from the 15 formats listed on page 13. If you require a format other than those listed, review the override options described in Location 18 to build the appropriate format. A "15" must be programmed in location 14 in addition to the entries in location 18 to create a special format. If this location contains a "0", format 1 will be used when Phone #3 is dialed.

LOCATION 15	DIAL ATTEMPTS/BACKUP CONTROL PHONE #3	2 segments, numerical data

Segment 1 **Dial Attempts:** Segment 1 of Location 15 is used to enter the number of dial attempts (1 to 15 attempts) the communicator will try to Phone #3 before ending the notification process. Factory default is "0" and the communicator will make the same number of attempts as those programmed in location 3.

Segment 2 **Phone # 3 Backup Control:** Programming a "**0**" in Segment 2 of this location will cause the NX-6 to make the designated number of attempts to Phone #3 and #2 before setting the "Fail To Communicate" condition and stop reporting. Programming a "**1**" in this segment will cause the NX-6 to stop trying to communicate after the assigned number of attempts have been made to Phone #3. If a "**2**" is programmed in this segment, it will cause the NX-6 to make the dial attempts in increments of two. The first two attempts will be made to Phone #3, the next two attempts to Phone #2, repeating until the total number of attempts reflected in Segment 1 is completed.

LOCATION 16	EVENTS REPORTED TO PHONE #3	2 segments, feature selection

Phone #3 can be used for a third receiver to multi-report or split report events. Phone #3 has two programming locations that are used to select which events are reported to this phone number. Location 16 is used to select which events are reported to Phone #3, and Location 17 is used to select which partitions are reported to Phone #3. If dual or split reporting is not desired, locations 16 and 17 should be left at the factory default of "0". If multi-reporting or split reporting is desired, and the split is based on the event type (such as alarm, open/close, etc.), then location 16 should be used to select only those events that should be reported to Phone #3 and location 17 should be left at the factory default of "0". If dual or split reporting is desired, and the split is based on partition, then location 16 should be programmed to "0" and location 17 should be used to select the partitions that should be reported to Phone #3. If no events should be reported to Phone #3, both locations should be "0". **Use Table 1.1 on page 14 to identify the events to be reported for Phone #3.**

LOCATION 17	PARTITIONS REPORTED TO PHONE #3	1 segment, feature selection

Location 17 is used when events to be reported to a phone number are based upon the partition regardless of the event. Program a "1" for Partition 1, and a "2" for Partition 2. If this location is used, location 16 should be "0".

LOCATION 18	CUSTOM COMMUNICATOR FORMAT	See locations 2, 8, & 14

Segment 1

① On for 1800hz transmit; Off for 1900hz.
② On for 2300hz handshake; Off for 1400hz.
③ On for cksum parity; Off for double round parity.
④ On for 2 digit event code; Off for 1 digit event code.
⑤ Reserved.
⑥ Reserved.
⑦ On for 20 p.p.s.; Off for 10 or 40 p.p.s.
⑧ On for 10 p.p.s.; Off for 20 or 40 p.p.s.

Segment 2

① On for pager format (no handshake required).
② On for 1400/2300 handshake.
③ Reserved
④ Reserved.
⑤ On for Contact ID.
⑥ On for SIA.
⑦ On for Contact ID or 4+3.
⑧ On for DTMF.

Segments 3 & 4   Reserved.

LOCATION 19	DOWNLOAD ACCESS CODE	8 segments, numerical data

Location 19 contains the eight-digit access code the NX-6 must receive from the downloading software before the panel will permit downloading to occur. The factory default code is 84800000.

LOCATION 20	NUMBER OF RINGS TO ANSWER	1 segment, numerical data

Location 20 contains the number of rings to answer for a download. Enter a number from "0" (disabled) to "15". Factory default is "8" and the NX-6 will answer on 8 rings.

LOCATION 21	DOWNLOAD CONTROL	1 segment, feature selection

Location 21 contains the feature selections for the controlling of download sessions. The following features can be enabled or disabled using this location. (See the feature definitions beginning on page 3)

① On enables two call answering machine defeat.
② On enables tone sniff answering machine defeat.
③ On requires call back before download session.
⇨ ④ Shutdown.
⇨ ⑤ On locks all local programming.
⇨ ⑥ On locks programming of all locations associated with the communicator.
⇨ ⑦ On locks out download section. **(If "On", locations 19 - 22 cannot be viewed from the keypad; can only be viewed from the keypad when "Off".)**
⑧ On enables call back at auto test interval.

⇨ **These can only be viewed from the keypad, must be changed through downloading.**

LOCATION 22	DOWNLOAD CALL BACK NUMBER	20 segments, numerical data

If a telephone number is programmed into this location, and "Require Callback" is enabled in location 21, the control panel will hang up for approximately 36 seconds (ensuring that the calling party has disconnected), and then call back. If tone dialing is desired, program an "15" in the segment where tone dialing should begin. If the entire number should be tone dialing, program an "15" in the first segment. Four-second delays can be obtained anywhere in the sequence by programming a "13" in the appropriate delay location. **WARNING:** THE CALLBACK PHONE NUMBER SHOULD ALWAYS BE REVIEWED FOR ACCURACY BEFORE DISCONNECTING.

LOCATION 23	PARTITION 1 FEATURE AND REPORT SELECTIONS	3 segments, feature selection

Location 23 is used to enable certain features that can be accessed or are visible to the user from the keypad of the system. In addition, certain communicator reports are enabled in location 23. Each of these features can be enabled by partition. For additional partition information see locations 88-91 on page 27. **If the feature selection location for any partition is left blank, that partition will use this location for the feature selection.** This location contains 3 segments of 8 features each. (See the definitions beginning on page 3.)

Segment 1	

① On enables the Quick Arm feature.
② On enables the Re-exit feature.
③ On enables the Automatic Bypass feature.
④ On enables the Silent Keypad Panic feature **(overrides the audible panic selection)**.
⑤ On enables the Audible Keypad Panic feature.
⑥ On enables the Keypad Aux 1 feature (FIRE).
⑦ On enables the Keypad Aux 2 feature (MEDICAL).
⑧ On enables the Keypad Multiple Code Attempt Tamper feature.

Segment 2	

① On enables the LED Extinguish feature.
② On enables the Require Code for Bypassing feature.
③ On enables the Zone Bypassed Sounder Alert feature.
④ On enables the AC Power/Low Battery Sounder Alert feature.
⑤ On enables Bypass toggle.
⑥ On enables Silent Auto Arm.
⑦ On enables the Automatic Instant feature.
⑧ Reserved.

Segment 3	

① On enables Opening and Closing reports.
② On enables Zone Bypass reporting.
③ On enables Zone Restore reporting.
④ On enables Zone Trouble reporting.
⑤ On enables Zone Tamper reporting.
⑥ On enables the Cancel reporting.
⑦ On enables the Recent Closing report.
⑧ On enables the Exit Error report.

LOCATION 24	**ENTRY / EXIT TIMERS**	4 segments, numerical data

Location 24 is used to program the Entry/Exit times. There are 2 separate Entry/Exit times.

Segment 1	

Entry time 1 This is the entry time that will be used when a delay 1 zone type initiates an entry delay. Valid entries are 10-255 seconds.

Segment 2	

Exit time 1 This is the exit time that will be used for all zones designated as delay 1. Valid entries are 10-255 seconds.

Segment 3	

Entry time 2 This is the entry time that will be used when a delay 2 zone type initiates an entry delay. Valid entries are 10-255 seconds.

Segment 4	

Exit time 2 This is the exit time that will be used for all zones designated as delay 2. Valid entries are 10-255 seconds.

STANDARD (Default) ZONE TYPES

Zones can be programmed to be one of twenty different zone types (configurations). Zone Types # 17 - 20 can be used for wireless or hardwired zones using European double EOL configuration. Table 1.1 lists the standard (default) zone types. These twenty zone types can be customized by programming locations 110 -149.

Table 1.1	STANDARD ZONE TYPE DESCRIPTIONS
"1"	**DAY ZONE -** Instant when system is armed trouble zone when system is disarmed.
"2"	**24-HOUR AUDIBLE** - Creates an instant yelping siren alarm regardless of the armed state of the control panel.
"3"	**ENTRY/EXIT DELAY 1-** A trip will start entry delay 1. The lack of a trip during exit delay will enable the Automatic Bypass or Instant mode if so programmed.
"4"	**FOLLOWER WITH AUTO- BYPASS DISABLED -** This zone will be instant when the system is armed and no entry or exit delays are being timed. It is delayed during entry and exit delay times. This zone will not automatically bypass even if enabled in Segment 1 of Location 23.
"5"	**INTERIOR FOLLOWER WITH AUTO- BYPASS ENABLED -** This zone will be instant when the system is armed and no entry or exit delay is being timed. It is delayed during entry and exit delay times. This zone will automatically bypass if enabled in Segment 1 of Location 23.
"6"	**INSTANT -** This zone creates an instant alarm whenever it is tripped and the Armed LED is on.
"7"	**24-HOUR SILENT -** Creates an instant silent alarm regardless of the armed state of the control panel. It will not display on the keypad.
"8"	**FIRE -** This zone will light the Fire LED and sound the temporal siren each time the zone is shorted. It will also rapidly flash the Fire LED indicating a trouble if the zone is open.
"9"	**ENTRY/EXIT DELAY 2-** A trip will start entry delay 2. The lack of a trip during exit delay will enable the Automatic Bypass or Instant mode if so programmed.
"10"	**24 HOUR SILENT SUPERVISED-** Creates an instant silent alarm regardless of the armed state of the control panel. It will display on the keypad.
"11"	**KEYSWITCH ZONE -** This zone type will arm and disarm the partition or partitions of the control panel that it resides in each time the zone is shorted. Keyswitch arming will report as user #99.
"12"	**INTERIOR FOLLOWER WITH "CROSS ZONE" ENABLED** - This zone will be instant when the system is armed and no entry or exit delay is being timed. It is delayed during entry and exit delay times. If a "Cross Zone" is not being timed it will start a "Cross Zone" timer. If a "Cross Zone" is being timed it will create an instant alarm. This zone will automatically bypass when enabled in Segment 1 of Location 23.
"13"	**INSTANT ENTRY GUARD -** This zone creates an instant alarm whenever it is tripped and the Stay LED is off. It will start an entry delay time 2 if it is tripped and the system is armed and the Stay LED is on.
"14"	**ENTRY/EXIT DELAY 1 WITH GROUP BYPASS ENABLED -** A trip will start entry delay 1. This zone will bypass when the "Group Bypass" command is entered at the keypad. The lack of a trip during exit delay will enable the Automatic Bypass or Instant mode if so programmed.
"15"	**INTERIOR FOLLOWER WITH GROUP BYPASS ENABLED -** This zone will be instant when the system is armed and no entry or exit delays are being timed. It is delayed during entry/exit delay times. This zone will bypass when the "Group Bypass" command is entered at the keypad. This zone will automatically bypass if enabled in Segment 1 of Location 23.
"16"	**INSTANT WITH GROUP BYPASS ENABLED -** This zone creates an instant alarm whenever it is tripped and the Armed LED is on. This zone will bypass when the "Group Bypass" command is entered at the keypad.
"17"	**ENTRY/EXIT DELAY 1 WITH TAMPER ENABLED-** A trip will start entry delay 1. The lack of a trip during exit delay will enable the Automatic Bypass or Instant mode if so programmed. **This Zone Type can be used to enable tamper on a wireless transmitter.**
"18"	**INTERIOR FOLLOWER WITH TAMPER AND AUTO-BYPASS ENABLED -** This zone will be instant when the system is armed and no entry or exit delay is being timed. It is delayed during entry and exit delay times. This zone will automatically bypass if enabled in Segment 1 of Location 23. **This zone type can be used to enable tamper on a wireless transmitter.**
"19"	**INSTANT WITH TAMPER ENABLED -** This zone creates an instant alarm whenever it is tripped and the Armed LED is on. **This zone type can be used to enable tamper on a wireless transmitter**.
"20"	**ENTRY/EXIT DELAY 2 WITH TAMPER ENABLED-** A trip will start entry delay 2. The lack of a trip during exit delay will enable the Automatic Bypass or Instant mode if so programmed. **This zone type can be used to enable tamper on a wireless transmitter.**

NOTE: To null a zone, program the zone in "Partition Select" as zero (0) in all partitions and do

LOCATION 25	ZONE TYPE FOR ZONES 1-8	8 segments, numerical data

Location 25 contains the zone type (configuration) for zones 1-8. Segment 1 is for zone 1, and Segment 8 is for zone 8. Default zone types are found in the Table 1.1 on page 18. To customize a zone type, see loc. 110 - 149, page 28.

LOCATION 26	PARTITION SELECT, ZONES 1-8	8 segments, feature selection

Location 26 is used to select the partition(s) that zones 1 - 8 reside in. A zone may reside in any combination of the 2 partitions. **If a burglary zone resides in more than 1 partition, it will only be active when all partitions it resides in are armed. A zone that resides in more than 1 partition will be reported to its lowest partition number.** Location 26 has 8 segments. Segment 1 corresponds to zone 1, and Segment 8 corresponds to zone 8.

Segments 1- 8	① Partition #1
	② Partition #2

LOCATION 27	ZONE TYPE FOR ZONES 9-16	8 segments, numerical data

Location 27 contains the zone type (configuration) for zones 9 -16. Segment 1 is for zone 9, and Segment 8 is for zone 16. Default zone types are found in Table 1.1 on page 18. To customize a zone type, see page 28.

LOCATION 28	PARTITION SELECT, ZONES 9-16	8 segments, feature selection

Location 28 is used to select the partition(s) that zones 9-16 reside in. A zone may reside in any combination of the 2 partitions. **If a burglary zone resides in more than 1 partition, it will only be active when all partitions it resides in are armed. A zone that resides in more than 1 partition will be reported to its lowest partition.** Location 28 has 8 segments. Segment 1 corresponds to zone 9 and Segment 8 corresponds to zone 16.

Segments 1- 8	① Partition #1
	② Partition #2

LOCATION 37	SIREN AND SYSTEM SUPERVISION	5 segments, feature selection

Location 37 is used to enable various system feature and reporting options. (Refer to the feature definitions.)

Segment 1
① On if siren sounds for "Telephone Line Cut" when armed.
② On if siren sounds for "Telephone Line Cut" when disarmed.
③ On if siren blast at arming.
④ On if siren blast at exit expiration.
⑤ On if siren blast at closing kissoff.
⑥ On if siren sounds during a "Cross Zone" verification time.
⑦ On if siren sounds for a Zone or Box Tamper.
⑧ On if siren blasts 1 time for keyswitch or wireless arming; 2 times for disarming.

Segment 2
① On if siren driver should be a voltage output. Off if on board siren driver enabled.
② On if siren sounds for expander trouble (required for UL installations).
③ On for Immediate Restore by Zone.
④ On if Dynamic Battery Test performed at arming. Off if performed at disarming. (Loc. 40)
⑤ On if Battery Missing Test is performed every 12 seconds.
⑥ On if Manual Bell Test performed during [✱]-[4] test function.
⑦ On if Manual Communicator Test performed during [✱]- [4] test function.
⑧ On if Box Tamper terminals on the control panel are enabled.

Segment 3
① On if Box Tamper reporting enabled.
② On if AC Fail reporting enabled.
③ On if Low Battery reporting enabled.
④ On if Aux. Power Over current reporting enabled.
⑤ On if Siren Supervision reporting enabled.
⑥ On if Telephone Line Cut reporting enabled.
⑦ Reserved.
⑧ On if Expander Trouble reporting enabled.

Segment 4
① On if Fail To Communicate report enabled.
② On if Log Full report enabled.
③ On if Autotest report enabled.

④ On if Start/End programming report enabled.
⑤ On if End Download report enabled.
⑥ On if Sensor Low Battery report enabled.
⑦ On if Sensor Missing report enabled.
⑧ Reserved.

Segment 5

① On enable Lost Clock service light.
② On enables Zone Doubling for zones 7 -12 (requires NX-200 Zone Doubling Kit).
③ On disables on-board zones.
④ On will allow two trips on same cross-zone to activate an alarm.
⑤ On will **not** allow zones that are force armed to report bypass.
⑥ On enables Silent Exit option.
⑦ Use internal crystal for clock.
⑧ Disable Temporal Siren on Fire. (**Note: Must not be disabled for UL listed systems.**)
Refer to the feature definitions beginning on page 3.

LOCATION 38	SWINGER SHUTDOWN COUNT	

Location 38 contains the number of trips on a zone before that zone is bypassed automatically.   Refer to the feature definitions beginning on page 3. **NOTE: For UL installations, this feature shall be disabled.**

LOCATION 39	KEYPAD SOUNDER CONTROL	1 segment, feature selection

① On if keypad sounds for "Telephone Line Cut" when the system is armed.
② On if keypad sounds for "Telephone Line Cut" when disarmed.
③ On if keypad sounds upon AC Power Failure.
④ On if keypad sounds when a Low Battery is detected.
⑤ On if keypad sounds during Cross Zone trip time.
⑥ On if keypad sounds for zone and box tampers.
⑦ Reserved.
⑧ On if keypad sounds for expander trouble (required for UL installations).

LOCATION 40	SYSTEM TIMERS	10 segments, numerical data

Location 40 contains the duration of various system timing functions. Example: If you desire the duration of the Dynamic Battery Test to be 30 minutes, you should program [3]-[0]-[✱] in segment 1 of this location. The [3]-[0] is the number of minutes, and the [✱] stores the data and moves to the next segment of this location.

Segment 1	Dynamic Battery Test duration (0 - 255 minutes) **"0" = no test**
Segment 2	AC Fail report delay (0 - 255 minutes)
Segment 3	Power Up Delay (0 - 60 seconds) **"0" = no delay**
Segment 4	Siren time (1 - 255 minutes)
Segment 5	Telephone Line Cut delay (0 - 255 seconds) **"0" = no TLM**
Segment 6	Cross Zone time (0 - 255 minutes) **"0" = no Cross Zoning**
Segment 7	Chime time in 50 mS (1/20th second) increments (0 - 255 mS)
	Note: 255 mS = 12 seconds; "0" follows zone, "255" is latched
Segment 8	Dial delay (0 - 255 seconds) **0 = no abort delay**
Segment 9	Fire Alarm Verification time (120 - 255 seconds) **"0"= no Fire Alarm Verification** ✱
Segment 10	Listen-In time (0 - 255 seconds) **" 0" = no Listen-In time**

Note: The "Listen-In" feature cannot be enabled for UL Listed systems. The "Dynamic Battery Test" feature cannot exceed four (4) hours. The dial delay shall be set to -0-.

✱ **This feature is not approved for residential use in California.**

LOCATION 41	SPECIAL FEATURES	1 segment, feature selection

① On enables the 6-digit code option. If 6-digit option is enabled, all arm/disarm codes and the "Go To Program Code" are 6 digits. If this option is enabled, the default user #1 code is [**1**]-[**2**]-[**3**]-[**4**]-[**5**]-[**6**]. **NOTE: IF YOU ENABLE THIS OPTION, VERIFY THAT THE "GO TO PROGRAM CODE" IS A 6-DIGIT CODE BEFORE EXITING PROGRAMMING.**
② On requires code entry for [✱]-[**9**]-[**8**] "Call back for download" and [✱]-[**9**]-[**9**] "Answer incoming call for download" functions.
③ On enables "Auto Cancel/Abort". Refer to feature definitions beginning on page 3.
④ On enables "Walk-Test Mode". Refer to feature definitions beginning on page 3.
⑤ - ⑧ Reserved.

LOCATION 42	GO TO PROGRAM CODE	6 segments, numerical data

Location 42 contains the "Go To Program Code". This location contains either a 4 or 6-digit code. *If the 6-digit code option is enabled in Location 41, this code must contain six (6) digits.* If this option is not enabled in location 41, the last 2 segments (digits) will be ignored. With the NX-6 disarmed, the "Go To Program Code" can be used to enter the Program Mode.

LOCATION 43	GO TO PROGRAM CODE PARTITION AND AUTHORIZATION	2 segments, feature selection

The "Go To Program Code" can be used as a standard arm/disarm code. When using the code to arm or disarm, the user ID is 255. (This code may not be changed in the Run Mode.)

Segment 1

① Reserved.
② On enables "Go To Program Code" as an arm only code.
③ On enables "Go To Program Code" as an arm only after closing.
④ On enables "Go To Program Code" as a master arm/disarm code (can change user codes)
⑤ On enables "Go To Program Code" as an arm/disarm code.
⑥ On enables "Go To Program Code" to bypass zones.
⑦ On enables "Go To Program Code" opening and closing reports.
⑧ Reserved.

Segment 2

① On enables the "Go To Program Code" for Partition #1.
② On enables the "Go To Program Code" for Partition #2.

LOCATION 44	DURESS CODE	6 segments, numerical data

Location 44 contains the "Duress" code. This Location contains either 4 or 6 digits. *If the 6-digit code option is enabled in Location 41, this code must contain six (6) digits.* If the 6-digit option is not enabled in location 41, the last 2 digits will be ignored. **If the duress code is programmed, it will work for all partitions.**

LOCATION 45	AUXILIARY OUTPUT, PARTITION SELECTION	4 segments, feature selection

Location 45 is used to select which partition(s) the events must occur in before the output will activate. Location 45 has 4 segments. Segment 1 corresponds to Output 1, and Segment 4 corresponds to Output 4.

Segments 1 - 4

① Partition #1
② Partition #2

LOCATION 46	AUXILIARY OUTPUT, SPECIAL TIMING	4 segments, feature selection

Location 46 contains special timing feature activation for the four auxiliary outputs. Segment 1 corresponds to Auxiliary Output 1, Segment 4 corresponds to Auxiliary Output 4.

Segments 1 - 4

① On if output should be timed in minutes; Off if timed in seconds.
② On if output should latch; Off if output should be timed.
③ On if output should stop timing upon code entry; Off if the output should continue to time upon code entry.
④ On if output should only activate between the closing and opening time in loc. 52 and 53.
⑤ On if output should only activate between the opening and closing time in loc. 52 and 53.
⑥ On if output should be inverted (0 volts going to 12 volts when activated).
⑦ Reserved.
⑧ Reserved.

LOCATION 47	AUXILIARY OUTPUT #1, EVENT AND TIME	2 segments, numerical data

Segment 1 Use Table 2.1 to select the event that will activate Auxiliary Output 1.

Segment 2 Program the timing from 0-255 (minutes or seconds, depending on data programmed in Segment 1, Location 46). Programming a "0" makes the output follow the event.

LOCATION 48	AUXILIARY OUTPUT #2, EVENT AND TIME	2 segments, numerical data

Segment 1 Use Table 2.1 to select the event that will activate Auxiliary Output 2.

Segment 2 Program the timing from 0-255 (minutes or seconds, depending on data programmed in Segment 2, Location 46). Programming a "0" makes the output follow the event.

LOCATION 49	AUXILIARY OUTPUT #3, EVENT AND TIME	2 segments, numerical data

Segment 1 Use Table 2.1 to select the event that will activate Auxiliary Output 3.

Segment 2 Program the timing from 0-255 (minutes or seconds, depending on data programmed in Segment 3, Location 46). Programming a "0" makes the output follow the event.

LOCATION 50	AUXILIARY OUTPUT #4, EVENT AND TIME	2 segments, numerical data

Segment 1 Use Table 2.1 to select the event that will activate Auxiliary Output 4.

Segment 2 Program the timing from 0-255 (minutes or seconds, depending on data programmed in Segment 4, Location 46). Programming a "0" makes the output follow the event.

AUXILIARY OUTPUT EVENT SELECTION

Table 2.1

DATA		EVENT	DATA		EVENT	DATA		EVENT
0	√	Burglary Alarm	19		Exit	38		Download In Process
1	√	Fire Alarm	20		Entry or Exit	39		Smoke Power
2	√	24 Hour Alarm	21		Armed State	40		Short Circuit (Over-current)
3	√	Trouble Alarm	22		Disarmed State	41		Box Tamper
4	√	Tamper Alarm	23		Ready	42		Siren Tamper
5		Yelping Siren (Burglary)	24		Not Ready	43		Any Open
6		Temporal Siren (Fire)	25		Fire	44		Any Short
7		Any Siren	26		Fire Trouble	45		Any Fault (Open/ Short on Non-Fire Zone)
8		Any Bypass	27		Chime	46	√	Any Alarm
9		AC Fail	28	√	Expander Trouble	47		Beeping Keypad
10		Low Battery	29		Dynamic Battery Test Time	48	√	Code Entry (See note)
11	√	Duress	30		Open Period	49	❖ √	Key FOB Function 1
12	√	Aux 1 Keypad Zone	31		Closed Period	50	❖ √	Key FOB Function 2
13	√	Aux 2 Keypad Zone	32		Listen-In	51	√	Always On
14	√	Panic Keypad Zone	33		Line Seizure	52		Flashing in Alarm
15		Keypad Tamper	34		Ground Start	53		Armed AWAY
16	√	Autotest	35		Fail To Communicate	54		Armed STAY
17		Alarm Memory	36		Telephone Line Fault			
18		Entry	37		Program Mode			

❖ **Events 49 & 50 require NX-408, NX-416, or NX-448 wireless receivers to operate.**
√ **If set to follow condition, these events will be 1 second.**
NOTES: When Event 48 is programmed, it is possible to program a user code's authorization to select which output(s) a particular code will activate. When LED 8 is on for an authorization, then LEDs 1 - 4 correspond to that code activating outputs 1 - 4 respectively. **(See programming the LED keypads on page 8.)**

LOCATION 51	**AUTOTEST CONTROL**	4 segments, numerical data

Segment 1   Program a "1" if the interval is to be in hours. Program a "0" if in days. Program a "2" to suppress the daily test or a "3" to suppress the hourly test if any report has been sent.

Segment 2   Program the Autotest interval from 1-255 hours/days.

Segment 3   Program the Autotest report hour in 24-hour format (if the interval is in hours, this segment is ignored).

Segment 4   Program the Autotest report time, number of minutes after the hour.

LOCATION 52	**OPENING TIME**	2 segments, numerical data

Location 52 contains the time in 24 hour format the NX-6 enables codes designated as arm only after closing. This time is only valid on those days programmed in location 54. **Note: Opening time must be earlier than closing time for Auto Arm, Auxiliary Outputs, or Code Authorization to function properly**.

Segment 1   Program the hour of the opening time.

Segment 2   Program the minutes after the hour of the opening time.

LOCATION 53	**CLOSING TIME/AUTOMATIC ARMING TIME**	2 segments, numerical data

Location 53 contains the time in 24-hour format the NX-6 disables the disarm capability for codes designated as arm only after closing. This is also the time the Automatic Arming sequence will begin (if enabled in location 55). **Note:** Opening time must be earlier than closing time for Auto Arm, Aux. Outputs, or Code Authorization to function properly.

Segment 1   Program the hour of the closing / auto arm time.

Segment 2   Program the minutes after the hour of the closing / auto arm time.

LOCATION 54	**DAYS OF WEEK EACH PARTITION IS OPEN**	2 segments, feature selection

Location 54 selects which days of the week each partition is open. On these days, "arm only after close window" codes will be able to arm and disarm during open window. **NOTE: If any partition is not programmed to be opened and is programmed to Auto-Arm (Location 55), the NX-6 will try to arm every 45 minutes for the duration of the closed period.** On days not selected here, "arm only after close window" codes will not disarm. Segment 1 is for partition 1, and segment 8 is for partition 8**. (See locations 52 and 53 for the opening and closing times for the open days.)**

Segments 1- 2
① Open on Sunday.
② Open on Monday.
③ Open on Tuesday.
④ Open on Wednesday.
⑤ Open on Thursday.
⑥ Open on Friday.
⑦ Open on Saturday.
⑧ Reserved.

LOCATION 55	**DAYS OF WEEK PARTITIONS WILL AUTO ARM**	2 segments, feature selection

Location 55 selects which days each partition will auto arm. Segment 1 is for partition 1, and segment 2 is for partition 2. If a zone is faulted when the panel tries to auto arm, the zone will be bypassed.

Segments 1- 2
① Auto Arming on Sunday.
② Auto Arming on Monday.
③ Auto Arming on Tuesday.
④ Auto Arming on Wednesday.
⑤ Auto Arming on Thursday.
⑥ Auto Arming on Friday.
⑦ Auto Arming on Saturday.
⑧ Reserved.

SLOW FORMAT COMMUNICATOR CODES

LOCATIONS 56- 83 ARE ONLY USED WHEN REPORTING EVENTS TO A PAGER OR USING A SLOW FORMAT SUCH AS 4+2. WHEN USING CONTACT ID OR SIA, THERE IS NO NEED TO PROGRAM THESE LOCATIONS.

LOCATION 56	**RESTORE**	2 segments, numerical data

Location 56 contains the event code for a zone "Restore" for a 4+2 format. The digit pr ogrammed in this location will be sent as the tens digit in place of the alarm event code. **The zone ID will always be reported as the ones digit of the zone number (i.e. 9 for zone 29).** Any segment left as "0" will follow the Segment 1 selection.

   Segment 1 = Partition #1 Restore Code   **Segment 2 =** Partition #2 Restore Code

LOCATION 57	**BYPASS**	2 segments, numerical data

Location 57 contains the event code for a zone "Bypass" for a 4+2 format. The digit programmed in this location will be sent as the tens digit. **The zone ID will always be reported as the ones digit of the zone number (i.e. 9 for zone 29).** Any segment left as "0" will follow the Segment 1 selection.

   Segment 1 = Partition #1 Bypass Code   **Segment 2 =** Partition #2 Bypass Code

LOCATION 58	**TAMPER**	2 segments, numerical data

Location 58 contains the event code for a zone "Tamper" for a 4+2 format. The digit programmed in this location will be sent as the tens digit. The zone ID will always be reported as the zone number (i.e. 9 for zo ne 29). Any segment left as "0" will follow the Segment 1 selection.

   Segment 1 = Partition #1 Tamper Code   **Segment 2 =** Partition #2 Tamper Code

LOCATION 59	**TROUBLE**	2 segments, numerical data

Location 59 contains the event code for a zone "Trouble" for a 4+2 format. The digit programmed in this location will be sent as the tens digit. The zone ID will always be reported as the zone number (i.e. 9 for zone 29). Any segment left as "0" will follow the Segment 1 selection.

   Segment 1 = Partition #1 Trouble Code   **Segment 2 =** Partition #2 Trouble Code

LOCATION 60	**SENSOR LOW BATTERY**	2 segments, numerical data

Location 60 contains the event code for a zone "Sensor Low Battery" for a 4+2 format. The digit programmed in this location will be sent as the tens digit.. **The zone ID will always be reported as the zone number (i.e. 9 for zone 29).** Any segment left as "0" will follow the Segment 1 selection.

   Segment 1 = Partition #1 Sensor Low Battery Code   **Segment 2** = Partition #2 Sensor Low Battery Code

LOCATION 61	**SENSOR MISSING**	2 segments, numerical data

Location 61 contains the event code for a zone "Sensor Missing" for a 4+2 format. The digit programmed in this location will be sent as the tens digit.. **The zone ID will always be reported as the zone number (i.e. 9 for zone 29).** Any segment left as "0" will follow the Segment 1 selection.

   Segment 1 = Partition #1 Sensor Missing Code   **Segment 2** = Partition #2 Sensor Missing Code

LOCATION 62	**DURESS**	2 segments, numerical data

Location 62 contains the tens and ones digits that will be sent for a 4+2 format if the Duress code is enabled in location 44. Segment 1 contains the tens digit, segment 2 contains the ones digit.

LOCATION 63	**KEYPAD AUXILIARY 1**	2 segments, numerical data

Location 63 contains the tens and ones digits that will be sent for a 4+2 format if the keypad "Auxiliary 1" (FIRE) is enabled in the partition feature selection. Segment 1 contains the tens digit, segment 2 contains the ones digit.

LOCATION 64	**KEYPAD AUXILIARY 2**	2 segments, numerical data

Location 64 contains the tens and ones digits that will be sent for a 4+2 format if the keypad "Auxiliary 2" (MEDICAL) is enabled in the partition feature selection. Segment 1 contains the tens digit, segment 2 contains the ones digit.

LOCATION 65	KEYPAD PANIC	2 segments, numerical data

Location 65 contains the tens and ones digits that will be sent for a 4+2 format if the keypad "Panic" is enabled in the partition feature selection Segment 1 contains the tens digit, segment 2 contains the ones digit.

LOCATION 66	KEYPAD MULTIPLE CODE ENTRY (TAMPER)	2 segments, numerical data

Location 66 contains the tens and ones digits that will be sent for a 4+2 format if the keypad "Multiple Code Entry" (Tamper) is enabled in the partition feature selection. Segment 1 contains the tens digit, segment 2 contains the ones digit.

LOCATION 67	BOX TAMPER & BOX TAMPER RESTORE	4 segments, numerical data

Location 67 contains the tens and ones digits that will be sent for a 4+2 format if the "Box Tamper" feature is enabled in location 37. Segment 1 contains the tens digit of the "Box Tamper". Segment 2 contains the ones digit of the "Box Tamper". Segment 3 contains the tens digit of the "Box Tamper Restore". Segment 4 contains the ones digit of the "Box Tamper Restore".

LOCATION 68	AC FAIL & AC FAIL RESTORE	4 segments, numerical data

Location 68 contains the tens and ones digits for a 4+2 format that will be sent if "AC Fail Reporting" is enabled. Segment 1 contains the tens digit of the "AC Fail Reporting". Segment 2 contains the ones digit of the "AC Fail Reporting". Segment 3 contains the tens digit of the "AC Fail Restore". Segment 4 contains the ones digit of the "AC Fail Restore".

LOCATION 69	LOW BATTERY & LOW BATTERY RESTORE	4 segments, numerical data

Location 69 contains the tens and ones digits for a 4+2 format that will be sent if "Low Battery Reporting" is enabled.. Segment 1 contains the tens digit of the "Low Battery Reporting". Segment 2 contains the ones digit of the "Low Battery Reporting". Segment 3 contains the tens digit of the "Low Battery Restore". Segment 4 contains the ones digit of the "Low Battery Restore".

LOCATION 70	AUX POWER OVER-CURRENT & RESTORE	4 segments, numerical data

Location 70 contains the tens and ones digits for a 4+2 format that will be sent if "Aux Power Over-current Reporting" is enabled. Segment 1 contains the tens digit of the "Aux Power Over-current Reporting". Segment 2 contains the ones digit of the "Aux Power Over-current Reporting". Segment 3 contains the tens digit of the "Aux Power Over-current Restore". Segment 4 contains the ones digit of the "Aux Power Over-current Restore".

LOCATION 71	BELL TAMPER & RESTORE	4 segments, numerical data

Location 71 contains the tens and ones digits for a 4+2 format that will be sent if siren supervision reporting is enabled. Segment 1 contains the tens digit of the "Bell Tamper Reporting". Segment 2 contains the ones digit of the "Bell Tamper Reporting". Segment 3 contains the tens digit of the "Bell Tamper Restore". Segment 4 contains the ones digit of the "Bell Tamper Restore".

LOCATION 72	TELEPHONE LINE CUT & RESTORE	4 segments, numerical data

Location 72 contains the tens and ones digits for a 4+2 format that will be sent if "Telephone Line Cut Reporting" is enabled. Segment 1 contains the tens digit of the "Telephone Line Cut Reporting". Segment 2 contains the ones digit of the "Telephone Line Cut Reporting". Segment 3 contains the tens digit of the "Telephone Line Cut Restore". Segment 4 contains the ones digit of the "Telephone Line Cut Restore".

LOCATION 74	EXPANDER TROUBLE & RESTORE	4 segments, numerical data

Location 74 contains the tens and ones digits for a 4+2 format that will be sent if "Expander Trouble Reporting" is enabled. Segment 1 contains the tens digit of the "Expander Trouble Reporting". Segment 2 contains the ones digit of the "Expander Trouble Reporting". Segment 3 contains the tens digit of the "Expander Trouble Restore". Segment 4 contains the ones digit of the "Expander Trouble Restore".

LOCATION 75	FAIL TO COMMUNICATE	2 segments, numerical data

Location 75 contains the tens and ones digits for a 4+2 format that will be sent if the "Fail To Communicate Reporting" is enabled. Segment 1 contains the tens digit, segment 2 contains the ones digit.

LOCATION 76	**LOG FULL**	2 segments, numerical data

Location 76 contains the tens and ones digits for a 4+2 format if the "Log Full Reporting" is enabled. Segment 1 contains the tens digit, segment 2 contains the ones digit.

LOCATION 77	**OPENING**	2 segments, numerical data

Location 77 contains the tens digit of a 4+2 format if the "Opening Reporting" is enabled. **The ones digit is the ones digit of the user number that did the opening. If the user is greater than 9, the numbers will begin repeating**. If it is required to report openings and closings for more than 9 users, Contact ID or SIA format must be used. Any segment left as "0" will follow the Segment 1 selection.

   Segment 1 = Partition #1 Opening Code   **Segment 2 =** Partition #2 Opening Code

LOCATION 78	**CLOSING**	2 segments, numerical data

Location 78 contains the tens digit of a 4+2 format if the "Closing Reporting" is enabled. **The ones digit is the ones digit of the user number that did the closing. If the user is greater than 9, the numbers will begin repeating**. If it is required to report openings and closings for more than 9 users, Contact ID or SIA format must be used. Any segment left as "0" will follow the Segment 1 selection.

   Segment 1 = Partition #1 Closing Code   **Segment 2 =** Partition #2 Closing Code

LOCATION 79	**AUTOTEST**	2 segments, numerical data

Location 79 contains the tens and ones digits for a 4+2 format that will be sent if the "Autotest" or "Manual T est" is enabled. Segment 1 contains the tens digit segment 2 contains the ones digit.

LOCATION 80	**RECENT CLOSING & EXIT ERROR**	2 segments, numerical data

Location 80 contains the tens digit for a 4+2 format that will be sent if "Recent Closing" and/or "Exit Error Reporting" is enabled. Segment 1 contains the tens digit for the "Recent Closing Reporting". Segment 2 contains the digit for the "Exit Error Reporting". **The ones digit is the ones digit of the user who closed. If the user number is greater than 9, the numbers will begin repeating (i.e. 9 for user 29).** If it is required to report Recent Closings and Exit Errors for more than 9 users, Contact ID or SIA format must be used.

LOCATION 81	**START & END PROGRAM**	4 segments, numerical data

Location 81 contains the tens and ones digits for a 4+2 format that will be sent if "Start / End Programming Reporting" is enabled. Segment 1 contains the tens digit of the "Start Program Reporting". Segment 2 contains the ones digit of the "Start Program Reporting". Segment 3 contains the tens digit of the "End Program Reporting". Segment 4 contains the ones digit of the "End Program Reporting".

LOCATION 82	**END DOWNLOAD**	4 segments, numerical data

Location 82 contains the tens and ones digits for a 4+2 format that will be sent if "End Downloading Reporting" is enabled. Segment 1 and 2 are reserved. Segment 3 contains the tens digit of the "End Download Reporting". Segment 4 contains the ones digit of the "End Download Reporting". **NOTE: A start download report will be sent to the internal event log.**

LOCATION 83	**CANCEL**	1 segment, numerical data

Location 83 contains the tens digit for a 4+2 format that will be sent if "Cancel Reporting" is enabled. Segment 1 contains the tens digit for the "Cancel Communicator Reporting". **The ones digit is the ones digit of the user who canceled. If the user number is greater than 9, the numbers will begin repeating (i.e. 9 for user 29).** If it is required to report Cancels for more than 9 users, Contact ID or SIA format must be used.

PARTITIONING CODES & FEATURES

LOCATIONS 88-91 ARE FOR PROGRAMMING DIFFERENT ACCOUNT CODES AND/OR FEATURES FOR EACH PARTITION. IF A LOCATION IS NOT PROGRAMMED, THE FEATURE FOR PARTITION 1 AND ACCOUNT CODE FOR THE PHONE NUMBER WILL BE USED.

LOCATION 88	ACCOUNT CODE FOR PARTITION 1	6 segments, numerical data

Location 88 contains the account code sent when partition 1 is reported. **If location 88 is left unprogrammed (all "10"s), then the account code corresponding to the phone number dialed will be used.** If the account code is less than six digits, program a "10" in the segment immediately after the last digit of the account code. If the account code is 6 digits long, program all 6 segments.

LOCATION 89	ACCOUNT CODE FOR PARTITION 2	6 segments, numerical data

Location 89 contains the account code sent when partition 2 is reported. **If location 89 is left unprogrammed (all "10"s), then the account code corresponding to the Phone number dialed will be used.** If the account code is less than six digits, program a "10" in the segment immediately after the last digit of the account code. If the account code is 6 digits long program all 6 segments.

LOCATION 90	PARTITION 2 FEATURES & REPORTING ENABLE	3 segments, feature selection

Location 90 is used to enable certain features that can be accessed or are visible to the user from the keypad of the system. In addition, certain communicator reports are enabled in this location. Each of these features can be enabled by partition. This location contains 3 segments, with eight possible features per segment. Refer to Location 23, Segments 1,2, and 3 (page 17) for the feature selections. **If all segments are blank (nothing enabled), the features for partition 1 will be used.**

LOCATION 91	PARTITION 2 ENTRY EXIT TIMERS	4 segments, numerical data

Location 91 is used to enter in seconds the Entry and Exit times. There are 2 separate entry and exit times. Valid entries are 10-255 seconds. **If all segments are "0", the entry and exit times for partition 1 will be used.**

Segment 1   Entry time 1   Entry time that will be used when a Delay 1 zone type initiates an entry delay.
Segment 2   Exit time 1   Exit time that will be used for all zones designated as Delay 1.
Segment 3   Entry time 2   Entry time that will be used when a Delay 2 zone type initiates an entry delay.
Segment 4   Exit time 2   Exit time that will be used for all zones designated as Delay 2.

CUSTOMIZING ZONE TYPES (Configuration Groups)

***LOCATIONS 110-149 ARE USED TO CHANGE THE ZONE TYPES AS LISTED IN THE TABLE ON PAGE 18.
THESE LOCATIONS ARE CONSIDERED ADVANCED PROGRAMMING AND SHOULD ONLY BE CHANGED WITH
A THOROUGH UNDERSTANDING OF THE OPERATION OF EACH BIT.***

LOCATION 110	**ZONE TYPE 1 ALARM EVENT CODE**	1 segment, numerical data

Location 110 contains the event code sent for a Contact ID or SIA report. The desired event code should be chosen from the list on page 38. The zone ID will be that zone that is in alarm. If 4+2 format is being used, the number programmed in this location will be sent as the tens digit. When using 4+2 the digit in location 110 should be from 1 -15. The zone ID for 4+2 formats will be the ones digit of the zone that is in alarm.

LOCATION 111	**ZONE TYPE 1 CHARACTERISTICS**	3 segments, feature selection

Table 3.1

Segment 1	① Fire (turn on if this is a fire zone).
	② 24 hour (turn on for non-fire 24 hour zones).
	③ Keyswitch zone. (normally open switch)
	④ Follower (turn on for burglary zones that are Instant during non-entry times).
	⑤ Delay 1 zone (follows timer 1 entry and exit times).
	⑥ Delay 2 zone (follows timer 2 entry and exit times).
	⑦ Interior (turn on if this zone should Automatically Bypass or Bypass for Stay Arming).
	⑧ Local only (turn on if this zone should not be reported).
Segment 2	① On will beep the keypad for alarm.
	② On will sound the yelping siren for alarm.
	③ On if zone type will sound the temporal siren for alarm.
	④ On if zone type will chime.
	⑤ On if zone type can be bypassed.
	⑥ On if zone type is included in the group shunt.
	⑦ On if zone type is force armable.
	⑧ On if zone type is entry guard.
Segment 3	① RESERVED
	② On enables Double End Of Line (D.E.O.L.) Tamper zone. Mainly used for tamper on wireless zones.
	③ On enables Trouble Reporting zone. (Day zone and Fire zones)
	④ On if zone type is a Cross Zone.
	⑤ On enables Dialer Delay zone. (See location 40, page 20)
	⑥ On if zone type will swinger shutdown. (See location 38, page 20)
	⑦ On enables Restore reporting.
	⑧ On enables Listen-In. (See location 40, page 20)

LOCATION 112 - LOCATION 149	**ZONE TYPES 2 THROUGH 20**	

Locations 112 - 149 contain the remaining 19 Zone Types information. Locations 112 and 113 correspond to Zone Type 2, and Locations 148 and 149 correspond to Zone Type 20. The **EVEN** numbered locations reflect the Zone Type Alarm Event Code while the **ODD** numbered locations designate the Zone Type Characteristics. Use the description found in Location 110 for programming the Alarm Event Codes, and use Table 3.1 shown above to select the Zone Type Characteristics. Refer also to the Programming Worksheets.

NX-6 PROGRAMMING WORKSHEETS

(⇨ Factory defaults for segments are in **bold italics** text. Some locations have been intentionally omitted. Attempts to access these reserved locations will cause the keypad to sound an error beep.)

LOC	PG	DESCRIPTION	DEFAULT	PROGRAMMING DATA
0	12	PHONE #1	***14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14***	__ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __
1	12	PHONE #1, ACCOUNT CODE	***10 - 10 - 10 - 10 - 10 - 10***	__ __ __ __ __ __
2	12	PHONE #1, REPORTING FORMAT	***0***	__
3	13	PHONE #1, DIAL ATTEMPTS BACKUP CONTROL	***8*** ***0***	__ __
4	13	PHONE #1, SELECT EVENTS TO REPORT TO PHONE #1 **Segment #1** ***1 - Alarms and Restores*** ❑ ***2 - Open / Close*** ❑ ***3 - Bypass*** ❑ ***4 - Zone Trouble*** ❑ ***5 - Power Trouble (AC Fail or Low Battery)*** ❑ ***6 - Siren & Telephone Fault*** ❑ ***7 - Test Reports*** ❑ ***8 - Program, Download, & Log Full*** ❑ **Segment # 2** ***1 - Tampers*** ❑ ***2 - Short Circuit*** ❑ ***3 - Sensor Lost*** ❑ ***4 - Sensor Low Battery*** ❑ ***5 - Expander Trouble*** ❑ ***6 - Failure to Communicate*** ❑ ***7 - Reserved*** ***8 - Reserved***		
5	14	PHONE #1 SELECT WHICH PARTITIONS REPORT TO PHONE #1 1 - Partition #1 ❑ 2 - Partition #2 ❑		
6	14	PHONE #2	***14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14***	__ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __
7	14	PHONE #2, ACCOUNT CODE	***10 - 10 - 10 - 10 - 10 - 10***	__ __ __ __ __ __
8	14	PHONE #2, REPORTING FORMAT	***0***	__
9	14	PHONE #2, DIAL ATTEMPTS BACKUP CONTROL	***8*** ***0***	__ __
10	15	PHONE #2, SELECT EVENTS TO REPORT TO PHONE #2 Segment #1 1 - Alarms and Restores ❑ 2 - Open / Close ❑ 3 - Bypass ❑ 4 - Zone Trouble ❑ 5 - Power Trouble (AC Fail or Low Battery) ❑ 6 - Siren & Telephone Fault ❑ 7 - Test Reports ❑ 8 - Program, Download, & Log Full ❑ Segment # 2 1 - Tampers ❑ 2 - Short Circuit ❑ 3 - Sensor Lost ❑ 4 - Sensor Low Battery ❑ 5 - Expander Trouble ❑ 6 - Failure to Communicate ❑ 7 - Reserved 8 - Reserved		
11	15	PHONE #2 SELECT WHICH PARTITIONS REPORT TO PHONE #2 1 - Partition #1 ❑ 2 - Partition #2 ❑		
12	15	PHONE #3	***14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14***	__ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __
13	15	PHONE #3, ACCOUNT CODE	***10 - 10 - 10 - 10 - 10 - 10***	__ __ __ __ __ __
14	15	PHONE #3, REPORTING FORMAT	***0***	__
15	15	PHONE #3, DIAL ATTEMPTS BACKUP CONTROL	***8*** ***0***	__ __

LOC	PG	DESCRIPTION	DEFAULT	PROGRAMMING DATA
16	15	PHONE #3, SELECT EVENTS TO REPORT TO PHONE #3 Segment #1 1 - Alarms and Restores ❑ 2 - Open / Close ❑ 3 - Bypass ❑ 4 - Zone Trouble ❑ 5 - Power Trouble (AC Fail or Low Battery) ❑ 6 - Siren & Telephone Fault ❑ 7 - Test Reports ❑ 8 - Program, Download, & Log Full ❑ Segment # 2 1 - Tampers ❑ 2 - Short Circuit ❑ 3 - Sensor Lost ❑ 4 - Sensor Low Battery ❑ 5 - Expander Trouble ❑ 6 - Failure to Communicate ❑ 7 - Reserved 8 - Reserved		
17	16	PHONE #3 SELECT WHICH PARTITIONS REPORT TO PHONE #3 1 - Partition #1 ❑ 2 - Partition #2 ❑		
18	16	FORMAT OVERRIDE Segment #1 TURN "**ON**" FOR: TURN "**OFF**" FOR: 1 - 1800hz transmit ❑ 1900hz ❑ 2 - 2300hz handshake ❑ 1400hz ❑ 3 - Cksum parity ❑ double round parity ❑ 4 - 2 digit event code ❑ 1 digit code ❑ 5 - Reserved Reserved 6 - Reserved Reserved 7 - 20 p.p.s. ❑ 10 or 40 p.p.s. ❑ 8 - 10 p.p.s. ❑ 20 or 40 p.p.s. ❑ Segment #2 TURN "**ON**" FOR: 1 - Pager format (no handshake required) ❑ 2 - 1400/2300 handshake ❑ 3 - Reserved 4 - Reserved 5 - Contact ID ❑ 6 - SIA ❑ 7 - Contact ID or 4+3 ❑ 8 - DTMF ❑		
19	16	DOWNLOAD ACCESS CODE	*8-4-8-0-0-0-0-0*	__ __ __ __ __ __ __ __
20	16	RINGS TO ANSWER DOWNLOAD	*8*	__
21	16	DOWNLOAD CONTROL 1 - Enables two call answering machine defeat ❑ 2 - Enables tone sniff answering machine defeat ❑ 3 - Requires callback before downloading ❑ 4 - Shutdown control panel ❑ 5 - Lock out local programming ❑ 6 - Lock out communicator programming ❑ 7 - Lock out download section ❑ 8 - Enables callback at autotest interval ❑		
22	16	CALLBACK PHONE NUMBER	*14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14*	__ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __
23	17	FEATURE SELECTION, PARTITION #1		

Location 23 feature selection detail:

	Segment #1	Segment #2	Segment #3
1 -	Quick Arm ❑	LED extinguish enable ❑	Open/Close ❑
2 -	Re-Exit ❑	Require user code for bypassing zones ❑	Bypass ❑
3 -	Auto Bypass ❑	Bypass sounder alert ❑	Restore ❑
4 -	Silent Panic ❑	*AC power/low battery sounder alert ❑*	Trouble ❑
5 -	*Audible Panic ❑*	Enables bypass toggle ❑	Tamper ❑
6 -	Auxiliary 1 ❑	Enables silent auto arm ❑	Cancel ❑
7 -	Auxiliary 2 ❑	Enables automatic instant ❑	Recent Closing ❑
8 -	Multi Keypress Tamper ❑	Reserved	Exit Error ❑

LOC	PG	DESCRIPTION	DEFAULT	PROGRAMMING DATA
24	17	ENTRY/EXIT TIMERS, PARTITION 1		
		Segment #1 (Entry Time #1)	*30*	__
		Segment #2 (Exit Time #1)	*60*	__
		Segment #3 (Entry Time #2)	*30*	__
		Segment #4 (Exit Time #2)	*60*	__
25	19	ZONES 1-8, ZONE TYPES	*3-5-6-6-6-6-6-6*	__ __ __ __ __ __ __ __
26	19	ZONES 1-8, PARTITION SELECTION (Segment 1=Zone 1 thru Segment 8=Zone 8)		

Location 26 partition selection detail:

Segment #1	Segment #3	Segment #5	Segment #7
1 - Partition #1 ❑	*1 - Partition #1 ❑*	*1 - Partition #1 ❑*	*1 - Partition #1 ❑*
2 - Partition #2 ❑	2 - Partition #2 ❑	2 - Partition #2 ❑	2 - Partition #2 ❑
Segment # 2	Segment #4	Segment #6	Segment #8
1 - Partition #1 ❑	*1 - Partition #1 ❑*	*1 - Partition #1 ❑*	*1 - Partition #1 ❑*
2 - Partition #2 ❑	2 - Partition #2 ❑	2 - Partition #2 ❑	2 - Partition #2 ❑

LOC	PG	DESCRIPTION	DEFAULT	PROGRAMMING DATA
27	19	ZONES 9-16, ZONE TYPES	*6-6-6-6-6-6-6-6*	__ __ __ __ __ __ __ __
28	19	ZONES 9-16, PARTITION SELECTION (Segment 1=Zone 9 thru Segment 8=Zone 16)		

LOC 28 (continued):

Segment #1	Segment #3	Segment #5	Segment #7
1 - Partition #1 ❑	*1 - Partition #1* ❑	*1 - Partition #1* ❑	*1 - Partition #1* ❑
2 - Partition #2 ❑	2 - Partition #2 ❑	2 - Partition #2 ❑	2 - Partition #2 ❑
Segment # 2	Segment #4	Segment #6	Segment #8
1 - Partition #1 ❑	*1 - Partition #1* ❑	*1 - Partition #1* ❑	*1 - Partition #1* ❑
2 - Partition #2 ❑	2 - Partition #2 ❑	2 - Partition #2 ❑	2 - Partition #2 ❑

LOC	PG	DESCRIPTION
37	19	SIREN AND SYSTEM SUPERVISION

Segment #1

1 - *Siren sounds for telephone line cut while armed* ❑
2 - *Siren sounds for telephone line cut while disarmed* ❑
3 - Siren blast at arming ❑
4 - Siren blast at exit delay expiration ❑
5 - Siren blast at closing kissoff ❑
6 - Siren sounds during a cross zone verification time ❑
7 - *Siren sounds for a tamper* ❑
8 - Siren blast one time for keyswitch arming, two times for disarming ❑

Segment #2

1 - Convert siren driver to voltage out ❑
2 - Siren sounds for expander trouble (required for U.L.) ❑
3 - Immediate restore by zone ❑
4 - Dynamic battery test performed upon arming ❑
5 - Battery missing test performed every 12 seconds ❑
6 - *Manual bell test performed during [✱]-[4] test function* ❑
7 - Manual communicator test performed during [✱]-[4] test function ❑
8 - Box tamper enabled. ❑

Segment #3

1 - Box Tamper report enabled ❑
2 - AC Fail report enabled ❑
3 - Low Battery report enabled ❑
4 - Auxiliary power over current report enabled ❑
5 - Siren supervision report enabled ❑
6 - Telephone Line Cut report enabled ❑
7 - Reserved.
8 - Expander trouble report enabled ❑

Segment #4

1 - Failure To Communicate report enabled ❑
2 - Log Full report enabled ❑
3 - Autotest report enabled ❑
4 - Start and End Programming report enabled ❑
5 - End Download report enabled ❑
6 - Sensor Low Battery report enabled ❑
7 - Sensor Missing report enabled ❑
8 - Reserved.

Segment #5

1 - Lost Clock service LED enable ❑
2 - Enables Zone Doubling for zones 7-12 (requires NX-200 Zone Doubling Kit) ❑
3 - Disables on-board zones ❑
4 - Enables two trips on the same cross-zone to activate the alarm ❑
5 - Disables bypass reports for force armed zones ❑
6 - Silent exit ❑
7 - Clock uses internal crystal ❑
8 - Disable Temporal Siren on Fire (**must NOT disable for UL systems**) ❑

LOC	PG	DESCRIPTION	DEFAULT	PROGRAMMING DATA
38	20	SWINGER SHUTDOWN COUNT	*0*	_

LOC	PG	DESCRIPTION	DEFAULT	PROGRAMMING DATA
39	20	KEYPAD SOUNDER CONTROL		
		1 - Keypad sounds for Telephone Line Cut when in the Armed state ❑ *2 - Keypad sounds for Telephone Line Cut when in the Disarmed state* ❑ 3 - Keypad sounds upon AC Power Failure ❑ 4 - Keypad sounds upon Low Battery Detection ❑ 5 - Keypad sounds during Cross Zone Trip Time ❑ *6 - Keypad sounds for Tamper Alarm* ❑ 7 - Reserved. 8 - Keypad sounds for expander trouble (required for UL) ❑		
40	20	SYSTEM TIMERS		
		Seg # 1 - Dynamic Battery Test duration (0-255 minutes) 2 - AC Failure report delay (0-255 minutes) 3 - Power Up Delay (0-60 seconds) 4 - Siren Time (1-255 minutes) 5 - Telephone Line Cut delay (0-255 seconds) 6 - Cross Zone Time (0-255 minutes) 7 - Chime Time in 50 mS increments (0-255 mS) 8 - Dialer delay (0-255 seconds) 9 - Fire Alarm Verification Time (120-255 seconds) 10 - Listen-In Time (0-255 seconds)	*0* *5* *0* *8* *0* *5* *3* *0* *0* *0*	__ __ __ __ __ __ __ __ __ __
41	21	SPECIAL FEATURES		
		1 - Enables 6-digit code option -– all Arm/Disarm/'Go To Program' codes require 6 digits ❑ 2 - Requires valid user code entry for [✶]-[9]-[8] and [✶]-[9]-[9] functions to work ❑ 3 - Enable Auto Cancel / Abort ❑ 4 - Enable Walk-Test Mode ❑ 5-8 Reserved.		
42	21	GO TO PROGRAM CODE	*9-7-1-3-0-0*	_ _ _ _ _ _
43	21	GO TO PROGRAM CODE PARTITION AND AUTHORIZATION		
		Segment #1		
		1 - Reserved. 2 - Enables "Go To Program Code" as an arm only code ❑ 3 - Enables "Go To Program Code" as an arm only after closing ❑ 4 - Enables "Go To Program Code" as a master arm/disarm code (can change user codes) ❑ 5 - Enables "Go To Program Code" as an arm/disarm code ❑ 6 - Enables "Go To Program Code" to bypass zones ❑ 7 - Enables "Go To Program Code" opening and closing reports ❑ 8 - Reserved.		
		Segment #2		
		1 - Enables "Go To Program Code" for partition #1 *2 - Enables "Go To Program Code" for partition #2*		
44	21	DURESS CODE	*15-15-15-15-15-15*	__ __ __ __ __ __
45	21	AUXILIARY OUTPUTS 1-4 PARTITION SELECTION		
		Segment #1 Segment #2 Segment #3 Segment #4 *1 - Partition #1* ❑ *1 - Partition #1* ❑ *1 - Partition #1* ❑ *1 - Partition #1* ❑ *2 - Partition #2* ❑ *2 - Partition #2* ❑ *2 - Partition #2* ❑ *2 - Partition #2* ❑		

LOC	PG	DESCRIPTION	Segments				
			1	2	3	4
46	21	AUXILIARY OUTPUTS 1-4 SPECIAL TIMING (Segment 1 = Aux 1, Segment 4= Aux 4)				
		1 - Auxiliary output timed in minutes	❑	❑	❑	❑
		2 - Auxiliary output to latch	❑	❑	❑	❑
		3 - Auxiliary output to stop timing upon user code entry	❑	❑	❑	❑
		4 - Auxiliary output to activate only between closing and opening time	❑	❑	❑	❑
		5 - Auxiliary output to activate only between opening and closing time	❑	❑	❑	❑
		6 - Invert auxiliary output (0 volts going to 12 volts when activated) 7 - Reserved. 8 - Reserved	❑	❑	❑	❑

LOC	PG	DESCRIPTION	DEFAULT	PROGRAMMING DATA
47	22	AUXILIARY OUTPUT #1, EVENT & TIME		
		Segment #1: Program the event number for output #1 **Segment #2:** Program the timing for output #1	*0=Burglary alarm* *10 seconds*	___ ___

LOC	PG	DESCRIPTION	DEFAULT	PROGRAMMING DATA
48	22	AUXILIARY OUTPUT #2, EVENT & TIME		
		Segment #1: Program the event number for output #2 **Segment #2:** Program the timing for output #2	*1=Fire alarm* *10 seconds*	___ ___
49	22	AUXILIARY OUTPUT #3, EVENT & TIME		
		Segment #1: Program the event number for output #3 **Segment #2:** Program the timing for output #3	*2= 24 Hour Alarm* *10 seconds*	___ ___
50	22	AUXILIARY OUTPUT #4, EVENT & TIME		
		Segment #1: Program the event number for output #4 **Segment #2:** Program the timing for output #4	*39 - Smoke Power* *0=Follow condition*	___ ___
51	23	AUTOTEST CONTROL		
		Segment #1: Program a "1" if the interval is hours, a "0" if in days. Program a "2" to suppress the daily test or a "3" to suppress the hourly test.	*0*	___
		Segment #2: Program the autotest interval from 1-255 days or hours.	*24*	___
		Segment #3: Program the autotest report in 24-hour time format.	*2*	___
		Segment #4: Program the autotest report time, minutes after the hour.	*0*	___
52	23	OPENING TIME		
		Segment #1: Program the hour of the opening time **Segment #2:** Program the minutes after the hour of the opening time	*8* *0*	___
53	23	CLOSING TIME / AUTO ARMING TIME		
		Segment #1: Program the hour of the closing time / auto arming time **Segment #2:** Program the minutes after hour of closing/ auto arming time	*20* *0*	
54	23	DAYS OF THE WEEK EACH PARTITION IS OPEN	**Segments 1 - 2**	**Partition 1 -2**
		Sunday	*1*	❑ ❑
		Monday	*2*	❑ ❑
		Tuesday	*3*	❑ ❑
		Wednesday	*4*	❑ ❑
		Thursday	*5*	❑ ❑
		Friday	*6*	❑ ❑
		Saturday	*7*	❑ ❑
		Reserved	*8*	
55	23	DAYS OF THE WEEK EACH PARTITION WILL "AUTO ARM"	**Segments 1 - 2**	**Partition 1 -2**
		Sunday	1	❑ ❑
		Monday	2	❑ ❑
		Tuesday	3	❑ ❑
		Wednesday	4	❑ ❑
		Thursday	5	❑ ❑
		Friday	6	❑ ❑
		Saturday	7	❑ ❑
		Reserved	8	
		COMMUNICATOR CODES FOR SLOW SPEED FORMATS ONLY		
56	24	RESTORE COMMUNICATOR CODE		
		Segment #1: Partition #1 Restore code **Segment #2:** Partition #2 Restore code	*14* *0*	___ ___
57	24	BYPASS COMMUNICATOR CODE		
		Segment #1: Partition #1 Bypass code **Segment #2:** Partition #2 Bypass code	*0* *0*	___ ___
58	24	TAMPER COMMUNICATOR CODE		
		Segment #1: Partition #1 Tamper Code **Segment #2:** Partition #2 Tamper Code	*0* *0*	___ ___
59	24	TROUBLE COMMUNICATOR CODE		

LOC	PG	DESCRIPTION	DEFAULT	PROGRAMMING DATA
		Segment #1: Partition #1 Trouble Code	*0*	___
		Segment #2: Partition #2 Trouble Code	*0*	___
60	24	SENSOR LOW BATTERY COMMUNICATOR CODE		
		Segment #1: Partition #1 Sensor Low Battery Code	*0*	___
		Segment #2: Partition #2 Sensor Low Battery Code	*0*	___
61	24	SENSOR MISSING COMMUNICATOR CODE		
		Segment #1: Partition #1 Sensor Missing Code	*0*	___
		Segment #2: Partition #2 Sensor Missing Code	*0*	___
62	24	DURESS	*0-0*	__ __
63	24	AUXILIARY 1	*0-0*	__ __
64	24	AUXILIARY 2	*0-0*	__ __
65	25	KEYPAD PANIC	*0-2*	__ __
66	25	KEYPAD MULTIPLE CODE ENTRY TAMPER	*0-0*	__ __
67	25	BOX TAMPER / BOX TAMPER RESTORE	*0-0-0-0*	__ __ __ __
68	25	AC FAIL / AC RESTORE	*0-0-0-0*	__ __ __ __
69	25	LOW BATTERY / LOW BATTERY RESTORE	*0-0-0-0*	__ __ __ __
70	25	POWER SHORT / POWER SHORT RESTORE	*0-0-0-0*	__ __ __ __
71	25	BELL TAMPER / BELL TAMPER RESTORE	*0-0-0-0*	__ __ __ __
72	25	TELEPHONE LINE CUT / TELEPHONE LINE CUT RESTORE	*0-0-0-0*	__ __ __ __
74	25	EXPANDER TROUBLE / EXPANDER TROUBLE RESTORE	*0-0-0-0*	__ __ __ __
75	25	FAILURE TO COMMUNICATE	*0-0*	__ __
76	26	LOG FULL COMMUNICATOR CODE	*0-0*	__ __
77	26	OPENING COMMUNICATOR CODE		
		Segment #1: Partition #1 Opening Code	*11*	__
		Segment #2: Partition #2 Opening Code	*0*	__
78	26	CLOSING COMMUNICATOR CODE		
		Segment #1: Partition #1 Closing Code	*12*	__
		Segment #2: Partition #2 Closing Code	*0*	__
79	26	AUTOTEST COMMUNICATOR CODE	*0-0*	__ __
80	26	RECENT CLOSING AND EXIT ERROR	*0-0*	__ __
81	26	START PROGRAMMING / END PROGRAMMING	*0-0-0-0*	__ __ __ __
82	26	END DOWNLOAD	*0-0-0-0*	__ __ __ __
83	26	CANCEL COMMUNICATOR CODE	*0*	__
88	27	PARTITION 1, ACCOUNT CODE	*10-10-10-10-10-10*	__ __ __ __ __ __
89	27	PARTITION 2, ACCOUNT CODE	*10-10-10-10-10-10*	__ __ __ __ __ __
90	27	PARTITION 2, FEATURE SELECTION		

Location 90 feature selection:

Segment #1	Segment #2	Segment #3
1 - Quick Arm ❑	LED extinguish enable ❑	Open/Close ❑
2 - Re-Exit ❑	Require user code for bypassing zones ❑	Bypass ❑
3 - Auto Bypass ❑	Bypass sounder alert ❑	Restore ❑
4 - Silent Panic ❑	AC power/low battery sounder alert ❑	Trouble ❑
5 - Audible Panic ❑	Enables bypass toggle ❑	Tamper ❑
6 - Auxiliary 1 ❑	Enables silent auto arm ❑	Cancel ❑
7 - Auxiliary 2 ❑	Enables automatic instant ❑	Recent Closing ❑
8 - Multi Keypress Tamper ❑	Reserved	Exit Error ❑

LOC	PG	DESCRIPTION	DEFAULT	PROGRAMMING DATA
91	27	PARTITION 2, ENTRY/EXIT TIMERS		
		Segment #1 (Entry Time #1)	*0*	__
		Segment #2 (Exit Time #1)	*0*	__
		Segment #3 (Entry Time #2)	*0*	__
		Segment #4 (Exit Time #2)	*0*	__

LOC	PG	DESCRIPTION	DEFAULT	PROGRAMMING DATA
		CUSTOMIZING ZONE TYPES (GROUPS)		
110	28	ZONE TYPE 1 ALARM EVENT CODE	*8*	___
111	28	ZONE TYPE 1 CHARACTERISTIC SELECTION **Segment #1** 1 - Fire (enable for fire zone) ❑ 2 - 24 Hour (enable for non-fire 24 hour zone) ❑ 3 - Keyswitch zone ❑ 4 - Follower (enable for burg zones that are instant during non -entry times) ❑ 5 - Delay 1 zone (enable to follow Timer #1 Entry/Exit) ❑ 6 - Delay 2 zone (enable to follow Timer #2 Entry/Exit) ❑ 7 - Interior (Enable for auto bypass or stay arming) ❑ 8 - Local Only (enable if zone is not to be reported) ❑ **Segment #2** *1 - Keypad audible on alarm* ❑ *2 - Yelping siren on alarm* ❑ 3 - Temporal siren on alarm ❑ 4 - Chime ❑ *5 - Bypassable* ❑ 6 - Group Shunt ❑ 7 - Force armable ❑ 8 - Entry Guard ❑ **Segment #3** 1 - Reserved 2 - Double End of Line Tamper zone ❑ *3 - Trouble zone (Day zone)* ❑ 4 - Cross Zone ❑ *5 - Dialer Delay zone* ❑ *6 - Swinger zone* ❑ *7 - Restore reporting* ❑ *8 - Listen-In* ❑		
		THE DEFAULTS LISTED IN THE ODD NUMBERED LOCATIONS BELOW REPRESENT THE THREE SEGMENTS OF EACH OF THOSE LOCATIONS. USE THE THREE SEGMENT CHARTS FROM TABLE 3.1, PAGE 28 TO UNDERSTAND THESE DEFAULTS.		
112	28	ZONE TYPE 2 ALARM EVENT CODE	*2*	_____
113	28	ZONE TYPE 2 CHARACTERISTIC SELECT	*2-125-78*	_____ _____ _____
114	28	ZONE TYPE 3 ALARM EVENT CODE	*7*	_____
115	28	ZONE TYPE 3 CHARACTERISTIC SELECT	*5-1245-5678*	_____ _____ _____
116	28	ZONE TYPE 4 ALARM EVENT CODE	*5*	_____
117	28	ZONE TYPE 4 CHARACTERISTIC SELECT	*45-125-5678*	_____ _____ _____
118	28	ZONE TYPE 5 ALARM EVENT CODE	*5*	_____
119	28	ZONE TYPE 5 CHARACTERISTIC SELECT	*457-125-5678*	_____ _____ _____
120	28	ZONE TYPE 6 ALARM EVENT CODE	*4*	_____
121	28	ZONE TYPE 6 CHARACTERISTIC SELECT	*0-1245-5678*	_____ _____ _____
122	28	ZONE TYPE 7 ALARM EVENT CODE	*0*	_____
123	28	ZONE TYPE 7 CHARACTERISTIC SELECT	*2-0-78*	_____ _____ _____
124	28	ZONE TYPE 8 ALARM EVENT CODE	*1*	_____
125	28	ZONE TYPE 8 CHARACTERISTIC SELECT	*1-13-378*	_____ _____ _____
126	28	ZONE TYPE 9 ALARM EVENT CODE	*7*	_____
127	28	ZONE TYPE 9 CHARACTERISTIC SELECT	*6-1245-5678*	_____ _____ _____
128	28	ZONE TYPE 10 ALARM EVENT CODE	*2*	_____
129	28	ZONE TYPE 10 CHARACTERISTIC SELECT	*24-5-78*	_____ _____ _____
130	28	ZONE TYPE 11 ALARM EVENT CODE	*3*	_____

LOC	PG	DESCRIPTION	DEFAULT	PROGRAMMING DATA
131	28	ZONE TYPE 11 CHARACTERISTIC SELECT	*3-0-0*	_____ _____ _____
132	28	ZONE TYPE 12 ALARM EVENT CODE	*5*	_____
133	28	ZONE TYPE 12 CHARACTERISTIC SELECT	*457-125-45678*	_____ _____ _____
134	28	ZONE TYPE 13 ALARM EVENT CODE	*4*	_____
135	28	ZONE TYPE 13 CHARACTERISTIC SELECT	*0-12458-5678*	_____ _____ _____
136	28	ZONE TYPE 14 ALARM EVENT CODE	*7*	_____
137	28	ZONE TYPE 14 CHARACTERISTIC SELECT	*5-12456-5678*	_____ _____ _____
138	28	ZONE TYPE 15 ALARM EVENT CODE	*5*	_____
139	28	ZONE TYPE 15 CHARACTERISTIC SELECT	*457-1256-5678*	_____ _____ _____
140	28	ZONE TYPE 16 ALARM EVENT CODE	*4*	_____
141	28	ZONE TYPE 16 CHARACTERISTIC SELECT	*0-12456-5678*	_____ _____ _____
142	28	ZONE TYPE 17 ALARM EVENT CODE	*7*	_____
143	28	ZONE TYPE 17 CHARACTERISTIC SELECT	*5-1245-25678*	_____ _____ _____
144	28	ZONE TYPE 18 ALARM EVENT CODE	*5*	_____
145	28	ZONE TYPE 18 CHARACTERISTIC SELECT	*457-125-25678*	_____ _____ _____
146	28	ZONE TYPE 19 ALARM EVENT CODE	*4*	_____
147	28	ZONE TYPE 19 CHARACTERISTIC SELECT	*0-1245-25678*	_____ _____ _____
148	28	ZONE TYPE 20 ALARM EVENT CODE	*7*	_____
149	28	ZONE TYPE 20 CHARACTERISTIC SELECT	*6-1245-25678*	_____ _____ _____

ZONE DESCRIPTIONS

1		9	
2		10	
3		11	
4		12	
5		13	
6		14	
7		15	
8		16	

APPENDIX 1 REPORTING FIXED CODES IN CONTACT ID AND SIA

The table below list the event codes sent for the following reports (if enabled) when using CONTACT ID or SIA formats.

REPORT	CONTACT ID	SIA
MANUAL TEST	601	RX
AUTOTEST	602	RP
OPEN (user number)	401	OP
CLOSE (user number)	401	CL
CANCEL (user number)	406	OC
DOWNLOAD COMPLETE	412	RS
START PROGRAM	627	LB
END PROGRAM	628	LX
RECENT CLOSE (user number)	401	CR
EXIT ERROR (user number)	457	EE
EVENT LOG FULL	605	JL
FAIL TO COMMUNICATE	354	RT
EXPANDER TROUBLE (device number)	333	ET
EXPANDER RESTORE (device number)	333	ER
TELEPHONE FAULT	351	LT
TELEPHONE RESTORE	351	LR
SIREN TAMPER (device number)	321	YA
SIREN RESTORE (device number)	321	YH
AUX POWER OVER CURRENT (device number)	312	YP
AUX POWER RESTORE (device number)	312	YQ
LOW BATTERY (device number)	309	YT
LOW BATTERY RESTORE (device number)	309	YR
AC FAIL (device number)	301	AT
AC RESTORE (device number)	301	AR
BOX TAMPER (device number)	137	TA
BOX TAMPER RESTORE (device number)	137	TR
KEYPAD TAMPER	137	TA
KEYPAD PANIC AUDIBLE	120	PA
KEYPAD PANIC SILENT	121	HA
DURESS	121	HA
KEYPAD AUXILIARY 1	110	FA
KEYPAD AUXILIARY 2	100	MA
RF SENSOR LOST (zone number)	381	*T
RF SENSOR RESTORE (zone number)	381	*R
SENSOR LOW BATTERY (zone number)	384	XT
SENSOR BATTERY RESTORE (zone number)	384	XR
ZONE TROUBLE (zone number)	380	*T
ZONE TROUBLE RESTORE (zone number)	380	*R
ZONE TAMPER (zone number)	137	TA
ZONE TAMPER RESTORE (zone number)	137	TR
ZONE BYPASS (zone number)	570	*B
BYPASS RESTORE (zone number)	570	*U

* The character transmitted in this slot will be the first character from the event code of the zone that is bypassed or in trouble. (See locations 110 - 141)

THE NUMBER IN PARENTHESES FOLLOWING THE EVENT IS THE NUMBER THAT WILL BE REPORTED AS THE ZONE NUMBER. IF THERE ARE NO PARENTHESES, THE ZONE WILL BE "0". SEE PAGE 39 FOR THE DEVICE NUMBERS.

APPENDIX 2 REPORTING ZONE CODES IN SIA OR CONTACT ID

The NX-6 has the ability to report SIA level 1 transmissions to either or both phone numbers. Each report in SIA consists of an Event Code and a Zone or User ID. The Zone ID will be the zone number that is in alarm. The event code will come from the chart below and be programmed in the Zone Type event code.

Programmed Event Code	SIA Code	Description
0	HA	Holdup Alarm
1	FA	Fire Alarm
2	PA	Panic Alarm
3	BA	Burglary Alarm
4	BA	Burglary Alarm
5	BA	Burglary Alarm
6	UA	Untyped Alarm
7	BA	Burglary Alarm
8	BA	Burglary Alarm
9	UA	Untyped Alarm
10	HA	Holdup Alarm
11	MA	Medical Alarm
12	PA	Panic alarm
13	TA	Tamper Alarm
14	RP	Periodic Test
15	GA	Gas Alarm
16	KA	Heat Alarm
17	WA	Water Alarm
18	QA	Emergency Alarm
19	SA	Sprinkler Alarm
20	ZA	Freeze Alarm

The NX-6 has the ability to report Ademco Contact ID transmissions. Each report in Contact ID consists of an Event Code and a Zone ID. The zone ID is the zone that created the alarm. The event code will come from the chart below and be programmed in the Zone Type event code.

Programmed Event Code	Contact ID Code	Description
0	122	Silent Panic
1	110	Fire Alarm
2	120	Panic Alarm
3	130	Burglary Alarm
4	131	Perimeter Alarm
5	132	Interior Alarm
6	133	24 Hour Burglary
7	134	Entry Alarm
8	135	Day/Night Alarm
9	150	Non Burglary 24 Hour
10	121	Duress Alarm
11	100	Medical Alarm
12	123	Audible Panic Alarm
13	137	Tamper Alarm
14	602	Periodic Test
15	151	Gas Detected
16	158	High Temp
17	154	Water Leakage
18	140	General Alarm
19	140	General Alarm
20	159	Low Temp

APPENDIX 3 EXPANDER NUMBERS FOR REPORTING EXPANDER TROUBLE

The tables below list the device numbers that will be reported for trouble conditions.

Device	Device # reported
NX-6 Control Panel	0
NX-534 Two Way Listen In	64
NX-540 NetworX "Operator"	40
NX-580 Cellemetry Interface	76

See page 37 for possible report codes.

KEYPADS

KEYPAD	PARTITION 1	PARTITION 2
1	192	193
2	200	201
3	208	209
4	216	217
5	224	225
6	232	233
7	240	241
8	248	249

REMOTE POWER SUPPLY (NX-320)

Address & Dip Switch Setting	
84 (All switches off)	**88** (Switch 3 on)
85 (Switch 1 on)	**89** (Switch 1 & 3 on)
86 (Switch 2 on)	**90** (Switch 2 & 3 on)
87 (Switch 1 & 2 on)	**91** (All switches on)

WIRELESS RECEIVER (NX-408, NX-416, NX-448)

Switch Setting	Expander # Reported
All switches off	35
Switch 1 on	32
Switch 2 on	33
Switch 1 & 2 on	34

OUTPUT MODULE (NX-508)

| Address & Dip Switch Setting	
24 (Switch 1 & 2 on)	**28** (Switch 1,2,& 3 on)
25 (Switch 3 on)	**29** (All switches off)
26 (Switch 1 & 3 on)	**30** (Switch 1 on)
27 (Switch 2 & 3 on)	**31** (Switch 2 on)

THIS LED IS FOR PROPER CIRCUIT OPERATION ONLY

TRANSMISSION OF THE FIRE ALARM SIGNAL TO A FIRE ALARM HEADQUARTERS OR CENTRAL STATION SHALL BE PERMITTED ONLY WITH THE APPROVAL OF THE LOCAL AUTHORITY HAVING JURISDICTION. THE BURGLAR ALARM SIGNAL SHALL NOT BE TRANSMITTED TO A POLICE EMERGENCY NUMBER. EQUIPMENT IS TO BE INSTALLED IN ACCORDANCE WITH NFPA (985,55.1.P).

LED3

U.L. INSTALLATIONS
The Class 2, Class 3, and power-limited fire alarm circuits must be installed using CL3, CL3R, or CL3P, or substitute cable permitted by National Electrical Code ANSI/NFPA 70 and the Class 2, Class 3 and power-limited fire alarm circuit conductors extending beyond the cable jacket must be separated a minimum of ¼ inch or by non- conductive tubing or non-conductive barrier from all other conductors.

BLACK
RED +
−
12 VOLT 4 OR 6.5 AH BATTERY
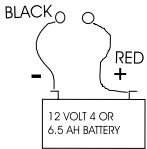
LED2
THIS LED IS FOR PROPER CIRCUIT OPERATION ONLY

BATTERY CAPACITY FOR EMERGENCY STANDBY AT LEAST 4 HOURS. CONTROL PANEL DRAWS 60mA IN STANDBY.

Suggested Battery Replacements: Panasonic #LCR12V4BP and Yuasa #NP4-12.

AUDIO TAP

WARNING TO PREVENT RISK OF ELECTRIC SHOCK- ALWAYS DISCONNECT THE TELEPHONE LINE PRIOR TO SERVICING.
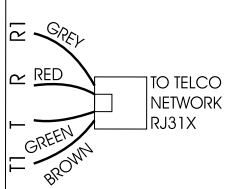
DATA TAP

IF BOX TAMPER IS ENABLED IN LOCATION 37, CONNECT A NORMALLY CLOSED SWITCH TO THESE PINS.

BOX TAMPER

AUX 4 DEFAULTS TO SMOKE + AND CAN BE USED AS ZONE 7 FOR 2 WIRE SMOKE LOOP. CONNECT BETWEEN AUX 4 & COM. REMOVE W3 FOR 2 WIRE SMOKE.

W3

GREY
RED
GREEN
BROWN
R1 R R T T1
TO TELCO NETWORK RJ31X

EARTH
AC
AC
BELL -
BELL +   (Supervised)
DATA
COM   (Supervised)
POS
COM
AUX +
6
COM
5
4
COM
3
2
COM
1
AUX 4 (SMOKE +)
3
2
1

KEYPAD

ZONES

AUXOUT

KEYPAD POS AND AUX + TERMINALS ARE LIMITED TO 1 AMP.

THE TOTAL STANDBY CURRENT DRAWN FROM TERMINALS SMOKE+, KEYPAD POS AND AUX PRW+, WHEN ADDED TOGETHER, MUST NOT EXCEED. 700mA WITH A 40 or 50VA TRANSFORMER. 400mA WITH A 25VA TRANSFORMER.

ALL ZONE INPUTS ARE SUPERVISED.

ALL CIRCUITS ARE CLASS 2 POWER LIMITED, EXCEPT BATTERY CIRCUIT.

CADDX KEYPAD PART #
NX-108   NX-116   NX-124
NX-148   NX-1308
NX-1316   NX-1324

MAX 16 KEYPADS PER SYSTEM + 3 OTHER DEVICES. MAX. WIRE RUN IS 2500'.

COMPATIBLE SMOKE DETECTOR MODELS:
MAX - 20 V   MIN - 0 V
Sentrol Models: 429AT, 521BXT, 521B
System Sensor: 1151, 2100, 2100T, 2151
Hochiki America SLK-835
Detection Systems: DS250, DS250TH, DS282, DS282TH, DS282THS, DS282THC.

DO NOT MIX MODELS!

CADDX NX-6
CADDX CONTROLS, INC.
GLADEWATER, TX 75647

2 WIRE SMOKE DETECTORS
MAX NUMBER OF DETECTORS IS 20

USE ONLY COMPATIBLE SMOKE DETECTORS AS SPECIFIED IN BOX ON LEFT

TO AUX 4
TO COMMON

COMPATIBILITY IDENTIFIER #3800-0001
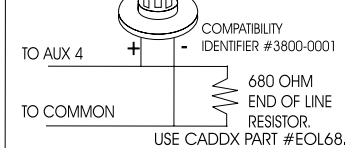
680 OHM END OF LINE RESISTOR.
USE CADDX PART #EOL68.

MAKE SURE TO SET THE JUMPER ON THE PANEL FOR 2 WIRE SMOKE LOOP.

This unit provides Residential fire alarm service when installed according to ANSI/NFPA72-1993 (National Fire Protection Association, Batterymarch Park, Quincy, MA 02269) This unit provides Grade A Residential Burglar alarm service. In conjunction with the NX-003-C enclosure, this unit provides the following Commercial Burglar alarm service: Grade A Local, Police Connect with Basic Line Security, and Grades B & C Central Station.

Aux. Outs 1 - 3 Current limited to 250 microamps when output is positive and 250 mA when output is negative.

Aux. Out 4 (designed as Smoke +) Current limited to 250 mA when output is positive and 250 microamps when negative.

LIGHTNING PROTECTION THE CONTROL PANEL MUST BE EARTH GROUNDED FOR LIGHTNING PROTECTION TO WORK EFFECTIVELY. THE GROUND CONNECTION SHOULD BE TIED TO A VERIFIED COLD WATER PIPE OR A DEDICATED METAL ROD 6' TO 10' LONG. USE MINIMUM 14 GAUGE WIRE.
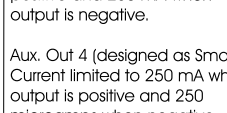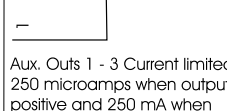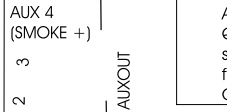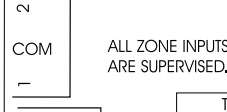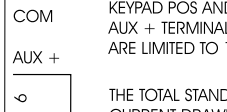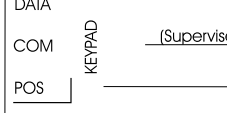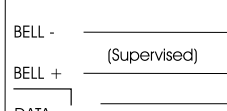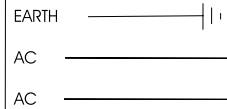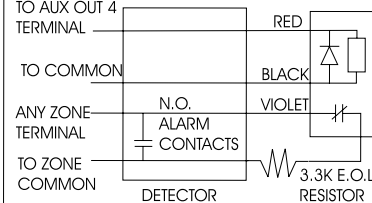
UL LISTED TRANSFORMER 16.5V 25, 40, OR 50 VA CLASS II. DO NOT CONNECT TO A RECEPTACLE THAT IS CONTROLLED BY A SWITCH.

TRANSFORMER PART #51-15000008 NX848TRV1 MODEL #R96-0301AT 600 OHM

120V AC 60Hz PRIMARY 3.5 AMP MAX.

DO NOT CONNECT 120 VAC TO TERMINAL STRIP.

BUILT IN SIREN DRIVER FOR 15 OR 30 WATT SPEAKERS 4,8 OR 16 OHM LOAD.

CURRENT LIMITED TO 2.5 AMP MAXIMUM.

FOR VOLTAGE OUTPUT PROGRAM LOCATION 37, SEGMENT 2, FEATURE 1.

(Supervised)   +

TO ADDITIONAL KEYPADS AND EXPANSION DEVICES.

4 WIRE SMOKE DETECTOR
TO AUX OUT 4 TERMINAL   RED
TO COMMON   BLACK
ANY ZONE TERMINAL   N.O. ALARM CONTACTS   VIOLET
TO ZONE COMMON
DETECTOR   3.3K E.O.L RESISTOR

U.L. LISTED E.O.L. SUPERVISION RELAY (ESL #204A or Equivalent).

USE CADDX PART #EOL33

ANY ZONE TERMINAL   ANY COM TERMINAL   ANY ZONE TERMINAL   ANY COM TERMINAL

6.98K E.O.L. (7 - 12)
3.74K E.O.L. (1 - 6)

3.3K E.O.L.
TAMPER CONTACT
3.3K E.O.L.

DOUBLED ZONE CONFIGURATION. THE 3.74K RESISTOR IS FOR ZONES 1 - 6 THE 6.98K RESISTOR IS FOR ZONES 7 - 12 IF A DOUBLED ZONE IS USED AS A FIRE ZONE THE HIGH ZONE (7 - 12) IS NOT USABLE.

EUROPEAN DOUBLE E.O.L. CONFIGURATION

ANY ZONE TERMINAL   ANY COM TERMINAL   ANY ZONE TERMINAL   ANY COM TERMINAL

3.74K E.O.L.
3.3K E.O.L.

DOUBLED ZONE CONFIGURATION USED AS A FIRE ZONE.

NORMALLY OPEN CONTACT WITH E.O.L. RESISTOR.

ANY ZONE TERMINAL   ANY COM TERMINAL   ANY ZONE TERMINAL   ANY COM TERMINAL

3.3K E.O.L.
3.3K E.O.L.

NORMALLY CLOSED CONTACT WITH E.O.L. RESISTOR.

2 NORMALLY OPEN CONTACT AND 2 NORMALLY CLOSED CONTACT WITH E.O.L. RESISTOR.

ANY ZONE TERMINAL   ANY COM TERMINAL

3.3K E.O.L.

1 NORMALLY OPEN CONTACT AND 1 NORMALLY CLOSED CONTACT WITH E.O.L. RESISTOR.

E.O.L RESISTORS

DOUBLE E.O.L. ZONES 1 - 6
BRN
BRN
YEL
VIOLET
ORG
3.74K

DOUBLE E.O.L. ZONES 7 - 12
BRN
BRN
GRAY
WHT
BLUE
6.98K

2 WIRE SMOKE E.O.L. For UL Systems, use Caddx #EOL68
GOLD
BRN
GRAY
BLUE
680

SINGLE ZONE E.O.L. For UL Systems, use Caddx #EOL33
GOLD
RED
ORG
ORG
3.3K

28-0219 v4

TERMINAL DESCRIPTION

TERMINAL	DESCRIPTION
R1	House Telephone Ring (Grey)
R	Telephone Ring (Red)
T	Telephone Tip (Green)
T1	House Telephone Tip (Brown)
EARTH	Earth Ground. Connect to a cold water pipe or a 6 to 10 foot driven rod.
AC	AC input. Connect to a 16.5V 25, 40 or 50 VA Class ll U.L. approved transformer.
BELL + & BELL -	If used as a siren output(default), the speaker rating should be 15 watt at 8 or 16 Ω, or 30/40 watt at 4, 8, or 16 Ω. If voltage output is selected in location 37, this output becomes voltage output, 12VDC, 1 Amp maximum load. **NOTE: A 3.3K resistor may be required across the bell terminals when a 12 VDC siren is used. If no resistor is used, you may experience voltage leakage into the siren which will cause these devices to output a small signal.**
KP DATA	Connect to the data terminal on the keypads and the expanders. When connecting more than one keypad to the end of the wire, a higher gauge wire will be required. Maximum number of devices is 8 keypads + 3 other devices.
KP COM	Connect to the Common terminal on the keypads and the expanders.
KP POS	Connect to the Positive terminal on the keypads and the expanders. This terminal and AUX PWR + are limited to 1 amp total current when added together.
COM	Connect negative wire of powered devices such as motion detectors and smoke detectors.
AUX PWR+	Connect positive wire of all powered devices except smoke detectors and keypads. This terminal and KP POS are limited to 1 amp total current when added together.
ZONE 6	Connect to one side of zone 6 loop. Connect the other side to com terminal. Open or short causes alarm.
COM	Common (-) terminal for zones 5 & 6.
ZONE 5	Connect to one side of zone 5 loop. Connect the other side to COM terminal. Open or short causes alarm.
ZONE 4 - ZONE 1	Connect as described for zones 5 & 6. (See the wiring diagram for examples.)
AUX OUT 4 SMOKE + (ZONE 7)	Smoke detector power 12VDC (for those jurisdictions that allow the Priority zone to be used with smoke detectors). Current limited to 250 mA when output is positive and 250 microamps when output is negative. This output defaults to Smoke Power, but can be re-configured. **Zone 7 may be used for a 2-wire smoke detector using a 680 Ω E.O.L. resistor. W3 must be removed for 2-wire smoke detector loop. For use as Aux Out 4, W2 must be set. The 2-wire smoke loop cannot be enabled if Zone Doubling is used.**
AUX OUT 3 - AUX OUT 1	Connect negative lead of low current device [relay, LED (install 1K resistor in series with LED), etc.]. Connect positive lead of device to AUX PWR +. Current limited to 250 microamps maximum when output is positive and 250 mA when output is negative.

NETWORX KEYPAD WIRING REQUIREMENTS

(NOTE: These numbers are for one keypad at the end of the wire. When connecting more than one device to the end of the wire, a higher gauge wire will be required.)

	WHEN CONNECTED TO NX-6	WHEN CONNECTED TO NX-320
Length in feet	Wire Gauge	Wire Gauge
250	24	22
500	20	18
1000	18	16
1500	16	14
2500	14	12

LOCAL TELEPHONE COMPANY INTERFACE INFORMATION

TELEPHONE CONNECTION REQUIREMENTS

Except for telephone company provided ringers, all connections to the telephone network shall be made through standard plugs and standard telephone company provided jacks or equivalent in such a manner as to allow for immediate disconnection of the terminal equipment. Standard jacks shall be so arranged that if the plug connected thereto is withdrawn, no interference to the operation of the equipment at the customers' premises which remains connected to the telephone network, shall occur by reason of such withdrawal.

INCIDENCE OF HARM

Should terminal equipment or protective circuitry cause harm to the telephone network, the telephone company shall, where practical, notify the customer that temporary discontinuance of service may be required. However, where prior notice is not practical, the telephone company may temporarily discontinue service if such action is deemed reasonable in the circumstances. In the case of such temporary discontinuance, the telephone company shall promptly notify the customer who will be given the opportunity to correct the situation. The customer also has the right to bring a complaint to the FCC if he feels the disconnection is not warranted.

CHANGES IN TELEPHONE COMPANY EQUIPMENT OR FACILITIES

The telephone company may make changes in its communications facilities, equipment, operations, or procedures where such action is reasonably required and proper in its business. Should any such change render the customers terminal equipment incompatible with the telephone company facilities, the customer shall be given adequate notice to make modifications to maintain uninterrupted service.

GENERAL

The FCC prohibits customer provided terminal equipment be connected to party lines.

IMPORTANCE OF THE RINGER EQUIVALENCE NUMBER

The Ringer Equivalence Number (REN) of this device is 0.1B. This number is a representation of the electrical load that it applies to your telephone line.

MALFUNCTION OF THE EQUIPMENT

In the event that the device should fail to operate properly, the customer shall disconnect the equipment from the telephone line to determine if it is the customers equipment that is not functioning properly. If the problem is with the device, the customer shall discontinue use until it is repaired.

EQUIPMENT INFORMATION

MANUFACTURER OF CONNECTING EQUIPMENT: **CADDX CONTROLS, INC.**
FCC REGISTRATION NUMBER: GCQUSA-25950-AL-E, RINGER EQUIVALENCE: 0.1 B

UNDERWRITERS LABORATORIES INFORMATION

The NetworX NX-6 holds the following listings from Underwriters Laboratories:

Household Burglary (UL1023)
Household Fire (UL985)
Local Grade A Mercantile, Police Station Connect w/Basic Line Security (UL609) (requires NX-003-C enclosure)
Grade B & C Central Station Burglar Alarm Unit (UL1635)
**Home Health Care Signaling (UL1637)**

When installing an NX-6 in compliance with Underwriters Laboratories, the following instructions must be observed:
- Initiating and indicating devices must be rated at 11.5 to 12.4 V DC residential, 12.0 V DC commercial.
- When using partitioning in Commercial Burglary applications, the main control must be protected by a 24-hour alarm circuit.
- Force Arming and Auto Arming shall not be enabled.
- For residential fire applications, the indicating devices shall be a Wheelock 34T-12 or equivalent.
- The "Listen-In" feature shall not be enabled.
- The Siren/Bell Test shall be enabled. The auxiliary outputs controlling the audible device require a minimum cutoff time of 15 minutes for commercial burglary or 4 minutes for residential applications.
- For residential fire installations, the Dynamic Battery Test time cannot exceed four (4) hours.
- Ringback shall be enabled on UL commercial burglary installations.
- On commercial burglary installations, the fire initiating circuits shall not be connected.
- The Entry-Guard feature shall be disabled.
- Swinger Shutdown shall be disabled.
- Group Bypassing shall be disabled.
- Delay before dial seizure shall be set to "0".
- Total current draw from aux power connections at terminal positions POS, AUX PWR, and SMOKE PWR must not exceed 400 mA.
- Remote Downloading shall not be used on UL listed systems.
- For residential burglary applications, the maximum entry and exit delay times shall be 45 and 60 seconds respectively. The exit delay time shall not exceed 60 seconds for commercial burglar alarm applications.
- The keyswitch option shall not be used.
- The Telephone Line Monitor shall be enabled.
- The Telephone Line Cut delay shall not exceed 90 seconds.
- 24-hour communicator test transmission is required.
- For 24 hours of standby power using a 7.0 AH battery, limit auxiliary power load to 140 mA.
- For 24 hours of standby power using a 17.2 AH battery, limit auxiliary power load to 400 mA.
- The silent keypad option shall not be enabled.
- UL has only verified compatibility with the following listed DACRs and formats: Sure-Gard SG-MLR2-DG: 2,9,10,12,13,14; Silent Knight 9000 - 2,12; FBI - CP220FBI, 13; and Ademco 685: 2,11,12, and 13.
- For burglary installations, cross-zoned detectors shall overlap 100 percent in the area of coverage and similar coverage areas must be used. For example, interior protection is cross-zoned with interior protection, and so on.
- Expander trouble must activate the siren (Loc 37, Segment 2, LED 2)
- For UL 1637, expander trouble must activate keypad sounder (Loc 39, Segment 1, LED 8)
- The keypad used with wireless receivers and hardwire expansion must be able to display all zones in the system.

MINIMUM SYSTEM CONFIGURATIONS FOR UL INSTALLATIONS
(Residential Fire, Residential Burglary, Commercial Burglary)
- The NetworX NX-6 panel is necessary to initiate Residential and Commercial installations.
- At least one compatible keypad is needed for all applications.
- At least one bell fixture is required for all applications, except Grade C Central Station. For Grade A Local, the AD10-12 bell and Grade A bell housing shall be used.
- Commercial UL applications require #NX-003-C metal enclosure. Supplied screws to be used.
- A minimum of two (2) keypads are required for Home Health applications and each keypad must be set to a unique address.
- The wireless devices are only UL listed for residential applications.
- The DACT shall be enabled for all commercial burglary applications.

NX-6 BOARD INSTALLATION
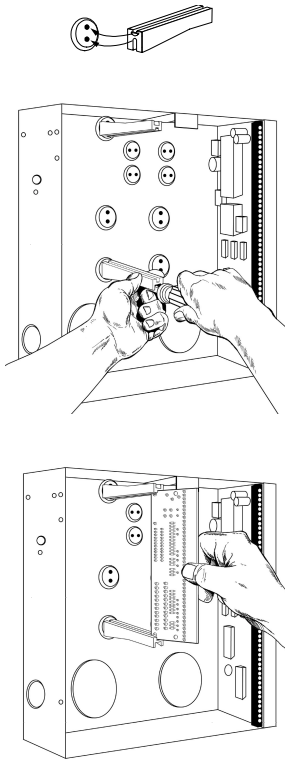
Inside the can, several 2-holed insertion points have been constructed. This allows for either vertical or horizontal placement of the modules. Notice that each insertion point has two sizes of holes – a larger hole and a smaller hole.

Diagram 1: The black plastic PCB guides are grooved on one edge where the PC board will be seated. The end with the half-moon protrusion fits into the larger hole. The smaller hole is for the screw.

Diagram 2: Place the *first* black plastic PCB guide in the top insertion point, grooved edge downward. The half-moon protrusion will be in the large hole. It does not require force. Insert one of the provided screw into the smaller hole (from inside the can) to secure it in place. A screwdriver should reach through the notch that runs the length of the guide to tighten the screw. The *second* PBC guide should be positioned opposite the first (grooved edge up) and placed in the lower insertion point, using the same procedures described above. Once mounted, screw it in securely.

Diagram 3: The PC Board should slide freely in the grooves of both guides.

DECLARATION

(Applies to products which have the CE mark attached)

This equipment has been approved in accordance with Council Decision 98/482/EC for Pan-European single terminal connection to the public switched telephone network (PSTN). However, due to differences between the individual PSTNs provided in different countries, the approval does not, of itself, give an unconditional assurance of successful operation on every PSTN network termination point.

In the event of problems, you should contact your equipment supplier in first instance.

SYSTEM NOTES

SPECIFICATIONS

OPERATING POWER	16.5 VAC 25, 40, or 50 VA Transformer
AUXILIARY POWER	
w/25 VA Transformer	12 VDC Regulated 500 mA
w/40 or 50 VA Transformer	12 VDC Regulated 1 AMP
w/NX-320 Power Supply	12 VDC Regulated 2 AMPS + Panel power
LOOP RESISTANCE	
Standard Loop	300 Ohms Maximum
2-Wire Smokes	30 Ohms Maximum
BUILT-IN SIREN DRIVER	2-tone (Temporal and Yelp)
LOOP RESPONSE	500mS
OPERATING TEMPERATURE	32 to 120 degrees F
LED KEYPAD	
Current Draw	130 mA max.
Zones Normal w/o Sounder	55 mA
Dimensions	6.4" Wide
	4.0" High
	1.1" Deep
NX-148 LCD KEYPAD	
Current Draw	110 mA max.
w/o Sounder	75 mA
Dimensions	6.4" Wide
	5.3" High
	1.0" Deep
METAL ENCLOSURE DIMENSION	11.25" Wide
	11.25" High
	3.50" Deep
SHIPPING WEIGHT	9 lbs.

FIVE YEAR LIMITED WARRANTY

CADDX CONTROLS, INC. GUARANTEES THIS PRODUCT AGAINST DEFECTIVE PARTS AND WORKMANSHIP FOR TWENTY-FOUR (24) MONTHS FROM DATE OF MANUFACTURING. IF ANY DEFECT APPEARS DURING THE WARRANTY PERIOD, RETURN IT TO CADDX POSTAGE PREPAID. THE UNIT WILL BE REPAIRED AND RETURNED AT NO CHARGE.

FOR THE REMAINING 36 MONTHS OF WARRANTY, THE CHARGE TO REPAIR OR REPLACE THIS UNIT WILL NOT EXCEED $10.00 PLUS SHIPPING AND HANDLING.

CADDX ASSUMES NO LIABILITY FOR CONSEQUENTIAL OR INDIRECT DAMAGE AND ACCEPTS NO RESPONSIBILITY FOR REPAIRING DAMAGE TO THE PRODUCT CAUSED BY MISUSE, CARELESS HANDLING, OR WHERE REPAIRS HAVE BEEN MADE BY OTHERS.

NO OTHER GUARANTEE, WRITTEN OR VERBAL, IS AUTHORIZED BY OR ON BEHALF OF CADDX CONTROLS, INC., GLADEWATER, TEXAS.

CADDX CONTROLS, INC.
1420 NORTH MAIN STREET
GLADEWATER, TEXAS 75647
TOLL FREE 800-727-2339
FAX 903-845-6811
www.caddx.com