



***NetworX***

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## **NetworX<sup>TM</sup> Series**

**NX-320E REMOTE POWER SUPPLY**

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**Installation and Startup**

*These instructions do not purport to cover all details or variations in equipment nor to provide every possible contingency to be met during installation, operation, and maintenance. If further information is desired or if particular problems arise that are not covered sufficiently for the purchaser's purpose, the matter should be referred to GE Security, Gladewater, Texas, USA.*

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*Please refer to the current GE Security product catalog for detailed warranty information.*

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## I. GENERAL DESCRIPTION

The NX-320E is a microprocessor controlled remote power supply module for the NetworX control panels (refer to Compatibility chart on the back of this manual). This power supply module has three (3) programmable outputs and one (1) dedicated bell output. A maximum of eight (8) power supply modules can be added to the NetworX control panel for a total output count of 32, of which 24 are programmable and 8 are dedicated bell outputs. These 24 programmable outputs can be used as auxiliary power, smoke detector power, siren driver power, etc. (see chart on page 11). Each power supply module has a Tamper terminal that can be used to supervise the metal enclosure. When the power supply module is connected to the NetworX control panel, the maximum total wire run from the panel to all devices, including the NX-320E, is 2500 feet. Additionally, the maximum total wire run from the power supply module to all outgoing devices is 2500 feet.



It is not recommended that multiple power supply modules be connected in series (cascaded).

## II. ORDERING INFORMATION

PART #	DESCRIPTION	PART #	DESCRIPTION
NX-320E	Remote Power Supply	NX-216E	16 Zone Expander
NX-8	NX-8V2 Control Panel only (48 zones)	NX-408E #	8 Zone Wireless Expansion Module (UL LISTED PART #60-904)
NX-8-KIT	NX-8V2 Control, NX-108E LED Keypad, & 16.5V 40VA Transformer	NX-416E #	16 Zone Wireless Expansion Module (UL LISTED PART #60-904)
NX-8-CF-KIT	NX-8 Commercial Fire Control Panel in NX-003-CF Enclosure, (2) NX-148E-CF LCD keypads; NX-870E Fire Supervision module; 16.5V 50VA Transformer	NX-448E #	48 Zone Wireless Expansion Module (UL LISTED PART #60-904)
NX-8E	NX-8E Control Panel only (192 zones)	NX-508E	Eight Output Module
NX-8E-KIT	NX-8E Control, NX-108E LED Keypad, & 16.5V 40VA Transformer	NX-870E	Fire Supervision Module
NX-8E-CF-KIT	NX-8E Commercial Fire Control Panel in NX-003-CF Enclosure, (2) NX-148E-CF LCD keypads; NX-870E Fire Supervision module; 16.5V 50VA Transformer	NX-003-CF	Commercial Fire Enclosure (Red)

# These wireless devices are UL listed for residential applications only.  
Please refer to the GE Security product catalog for warranty details.

## III. UNDERWRITERS LABORATORIES INFORMATION

UL365	Police Station Connected Burglar Alarm Units & Systems	UL985	Household Fire Warning Systems
UL609	Local Burglar Alarm Units & Systems	UL1023	Household Burglar Alarm Systems
UL864	Control Units for Fire-Protective Signaling Systems	UL1610	Central Station Burglar Alarm Units

When the NX-320E Remote Power Supply is used as part of a UL Commercial Fire security system:

- Unit is compatible with the following devices:
  - NX-148E-CF LCD keypad
  - NX-216E Zone Expander
  - NX-507E Relay Expander
  - Whealock NS-1215W or NS-121575W Siren
- A minimum of 18AWG shall be used for all field wiring. **Shielded wire is not recommended.**
- Use a 16.5VAC 50VA / 120V, 60Hz hard-wired transformer (Part #T-0002)

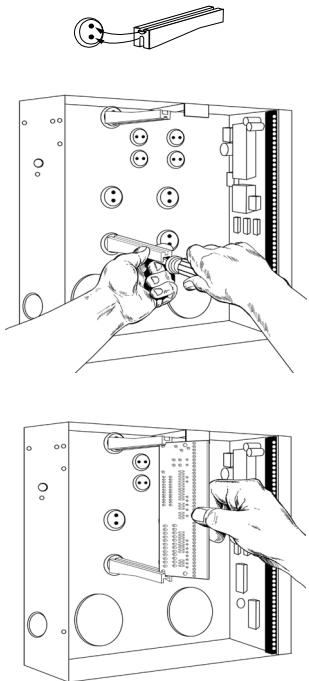
## IV. ENCLOSURE DIAGRAM

Inside the can, several 2-holed insertion points have been constructed. This allows for either vertical or horizontal placement of the modules. Notice that the insertion points have 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 screws 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* PCB guide should be positioned opposite of 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.



## V. BATTERY CALCULATION TABLE

STANDBY TIME	TOTAL AUXILIARY CURRENT	STANDBY BATTERY CAPACITY	ALARM CURRENT
<b>24 hours</b>	1.9 Amps	51 AH	600 mA
	1.25 Amps	34 AH	1 Amp
	600 mA	17 AH	1 Amp
<b>48 hours</b>	900 mA	51 AH	1 Amp
	600 mA	34 AH	1 Amp
	300 mA	17 AH	1 Amp
<b>72 hours</b>	600 mA	51 AH	1 Amp
	400 mA	34 AH	1 Amp
	200 mA	17 AH	1 Amp

## VI. TERMINAL DESCRIPTIONS

Table VI:1

Terminal	Description
<b>DATA</b>	Connect to the <b>Data</b> terminal of the NetworX control panel (refer to Compatibility chart on the back of this manual). This terminal is the <i>incoming</i> data-signaling terminal to the power supply module. The maximum total wire run from the control panel to all devices, including the NX-320E is 2500 feet.
<b>COM</b>	Connect to the NetworX control panel <b>COMMON</b> terminal. This terminal supplies the common side of the power to the NX-320E board.
<b>POS</b>	Connect to control panel <b>AUX POWER +</b> terminal. This terminal supplies power to the NX-320E board.
<b>DATA</b>	This terminal is the <i>outgoing</i> data-signaling terminal for buss extension. The maximum total wire run from the NX-320E to all outgoing devices is 2500 feet.
<b>COM</b>	Common terminal for any device powered from the NX-320E.
<b>OUT A</b>	Programmable output current limited to 1.9 Amps.♦
<b>OUT B</b>	Programmable output current limited to 1.9 Amps. ♦
<b>COM</b>	Common terminal for any device powered from the NX-320E.
<b>OUT C</b>	Programmable output current limited to 1.9 Amps. ♦
<b>BELL +</b>	Positive of bell output current limited to 2.5 Amps, but 600mA for UL applications. Connect as in diagram on page 7.
<b>BELL -</b>	Negative of bell output current limited to 2.5 Amps, but 600mA for UL applications. Connect as in diagram on page 7.
<b>TAM</b>	This is an optional tamper terminal. To use this feature, connect the normally closed tamper switch between this terminal and <b>COM</b> . If switch 4 is off, this feature is not used.
<b>EARTH</b>	Earth Ground.
<b>AC</b>	AC Input. Connect to a 16.5V 50 VA Class II UL approved transformer.
<b>AC</b>	AC Input. Connect to a 16.5V 50 VA Class II UL approved transformer.

♦ Total of 1.9 Amps between outputs A,B,C.

♦♦ Total of 2.5 Amps between Bell and outputs.

NOTES: Refer to the control panel compatibility chart on the back of this manual.  
Shielded wire is not recommended.

## VII. WIRING REQUIREMENTS

Table VII:1

  
For **UL COMMERCIAL FIRE installations**, a minimum of 18 AWG shall be used for all field-wiring applications, regardless of this chart.

LENGTH (IN FEET)	WIRE GAUGE
400	24
500	24
1000	24
2000	22
2500	20

**Note:**  
Shielded wire is NOT recommended.

## **VIII. LAYOUT**

**SHEIELDED WIRE IS NOT RECOMMENDED.**

BELL CIRCUIT  
CURRENT LIMITED TO

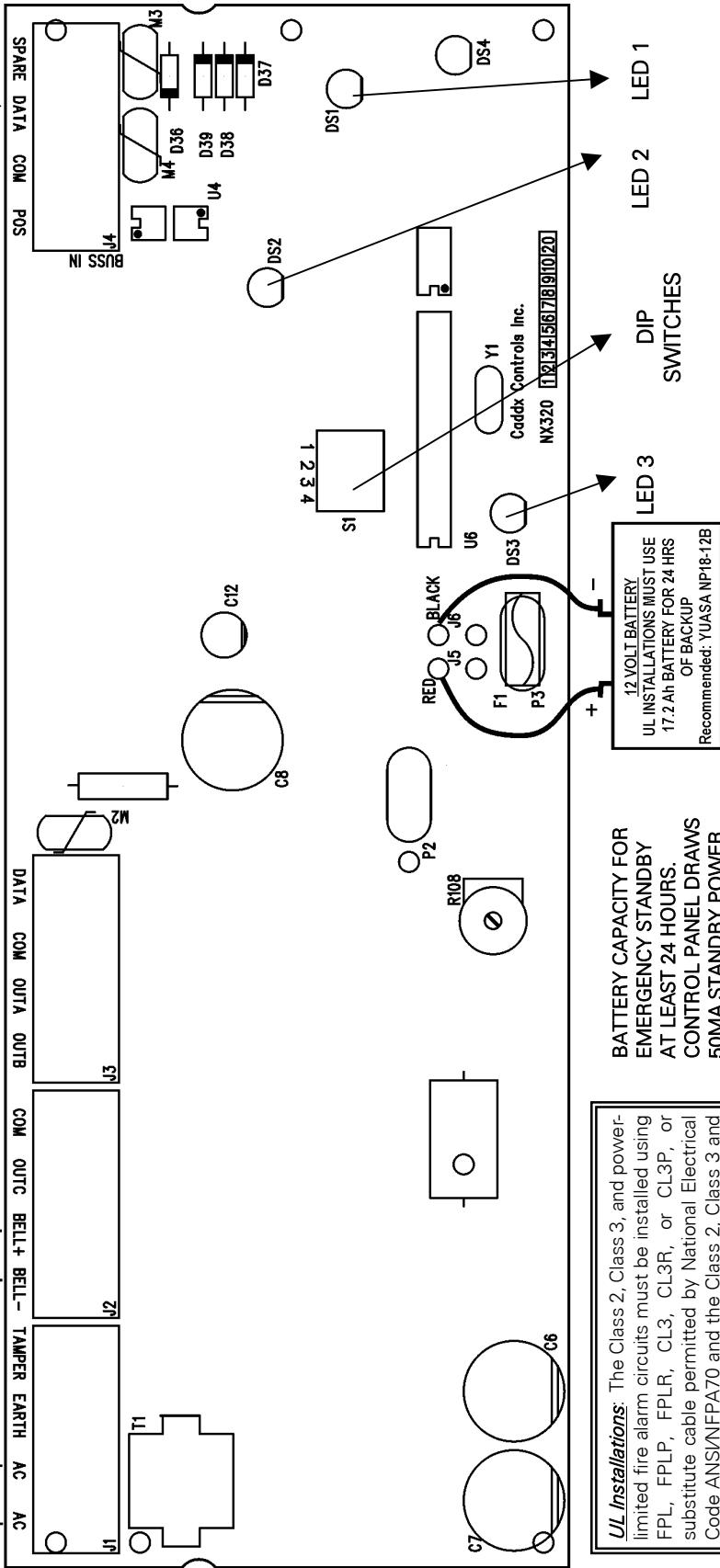
Recommended:  
Basler Model BE30614001  
120VAC 60Hz  
16.5VAC 50VA Class II

THE BELL OUTPUT IS VOLTAGE ONLY. IT IS PULSED (TEMPORAL) DURING A FIRE ALARM AND STEADY DURING A BURGLAR ALARM. IF THE BELL IS A COMMERCIAL FIRE BELL, THE DIODE (EOL-D5400) IS NOT NEEDED.

WELL NEEDED:

CONNECT TO  
CONTROL PANEL

CONNECT TO  
CONTROL PANEL



**UL Installations:** The Class 2, Class 3, and power-limited fire alarm circuits must be installed using FPL, FPLP, FPLR, CL3, CL3R, or CL3P, or substitute cable permitted by National Electrical Code ANSI/NFPA70 and the Class 2, Class 3 and power-limited fire alarm circuit conductors extending beyond the cable jacket must be separated a minimum of  $\frac{1}{4}$  inch or by non-conductive tubing or non-conductive barrier from all other conductors.

**BATTERY CAPACITY FOR  
EMERGENCY STANDBY  
AT LEAST 24 HOURS.  
CONTROL PANEL DRAWS  
50mA STANDBY POWER.**

**LED 3**  
**12 VOLT BATTERY**  
**UL INSTALLATIONS MUST USE**  
**17.2 Ah BATTERY FOR 24 HRS**  
**OF BACKUP**  
Recommended: VELASA NPD18-12D

DIP SWITCHES      LED 2      LED 1

**LED 3**

**12VOLT BATTERY**

UL INSTALLATIONS MUST USE  
17.2 Ah BATTERY FOR 24 HRS  
OF BACKUP

Recommended: VULAS AND 12V

## IX. ADDRESSING

The first thing that must be decided is the address of this particular power supply. This is the address that will be selected when programming the module. To set the address, use the table below.

Dip Switch 4 is used to disable the Tamper feature ("On = enabled / "Off" = disabled).

**Table IX:1**

Address	Dip switch 1	Dip switch 2	Dip switch 3
84	OFF	OFF	OFF
85	ON	OFF	OFF
86	OFF	ON	OFF
87	ON	ON	OFF
88	OFF	OFF	ON
89	ON	OFF	ON
90	OFF	ON	ON
91	ON	ON	ON

## X. ENROLLING

The NetworX control panel 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 NetworX control panel, and when the Program Mode is exited, it 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. Once a module is enrolled, if it is not detected by the control, the "Service" LED will illuminate.

## XI. UNDERSTANDING THE LEDS

The power supply module has four (4) red LEDs, which provide valuable information about its status. The following chart furnishes the indications of each LED.

**Table XI:1**

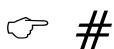
LED	Description
DS1	<i>Flashes</i> when data is transmitted out from the NX-320E.
DS2	<i>Flashes</i> when data is transmitted into the NX-320E.
DS3	<i>Flashes</i> during normal operation.
DS4	Used for hardware, and will only glow dimly when connected to the NetworX control panel (refer to Compatibility chart on the back of this manual).

## XII. PROGRAMMING

### A. USING THE LED KEYPAD

<u>ACTION</u>	<u>RESULT</u>
<b>1. Entering the Program Mode</b>	
 * 8	Enters the Program Mode. <i>Stay, Chime, Exit, Bypass &amp; Cancel/LEDS will flash.</i>
 Go To Program Code Factory Default is <b>9 7 1 3</b>	If the "Go To Program Code" is valid, the "Service" LED will flash and the 5 function LEDs will illuminate steady. You are now in the Program Mode and ready to select the module to program.
<b>2. Entering the Module Address:</b>	
 8 6 # (example only)	Refer to Table IX:1 on page 8 for the module address.  The Armed LED will illuminate while it is waiting for a programming location to be entered.
<b>3. Programming a Location:</b>	
 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.	
To Enter a Location:	
 [location] #	The Armed LED will flash. If the location is valid, the "Armed" LED will extinguish, the "Ready" LED will illuminate, and the zone LED's will show the data for the first segment of this location.
To Change Location Data:	
 [changed data]	The "Ready" LED will flash to indicate a data change in process and will continue until the data is saved.
 *	The new data is saved.  The keypad will advance to the next segment and display its data.
NOTE: These steps are repeated until the last segment is reached.	

To Exit a Location:

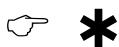


Exits from this location. The "Ready" LED will extinguish. The "Armed" LED will illuminate waiting for a new programming location to be entered.

To Review The Data:



The Armed LED will flash. If the location number is valid, the "Armed" LED will extinguish, the "Ready" LED will illuminate, and the zone LEDs will show the binary data for the first segment of this location.



(Do not enter data.)

The next segment is displayed. Each time \* is pressed, the data of the next segment will be displayed for review.

Shortcuts:



Previous location.



Same location.



Next sequential location.

#### 4. *Exiting the Program Mode:*



Exits this programming level.

### B. **USING THE LCD KEYPAD**

All steps required for programming are the same as the aforementioned LED keypad. The LCD keypad display will prompt you for the data required. While in the programming mode, and not in a location, the number in parenthesis is the location you were previously changing. For example, if the display reads, "Enter location, then # (5)", it is reminding you that location 5 was the last location you programmed. Refer also to "Programming Data" which follows.

### C. **PROGRAMMING DATA**

Programming data is always one of three types. One type of data is numerical, which can take on values from 0 -15, 0 - F, or 0 - 255 depending on the segment size. The other type of data, feature selection data, is used to turn features on/off. Use the following procedures with these data types:

#### 1. 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 3 LED = 4	Zone 5 LED = 16	Zone 7 LED = 64
Zone 2 LED = 2	Zone 4 LED = 8	Zone 6 LED = 32	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 [\*] to enter the data and advance to the next segment of that location. After the last segment of a location is programmed, pressing [\*] 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 error, and remain in that segment awaiting a valid entry.

## 2. 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 [\*]. 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 [\*] to enter the data, you will exit that location. This will now turn the "Ready" LED off and the "Armed" LED on. You are now ready to enter another programming location.

## **LOCATION 0            PROGRAMMING EVENT & TIME FOR OUTPUT A**

(2 segments of numerical data)

**Segment 1** is used to select the particular event that will trigger Output A. See following chart for the specific events that can be selected.

**Segment 2** is used to select the amount of time an output will remain activated when an output triggers. If this location is programmed as a zero, the output will follow the particular event.

**Table XII:1**

#	Event	#	Event	#	Event
0	Always On	11	Smoke Power Reset	22	Disarmed
1	AC Fail (control or exp.) Does not follow AC Fail delay time	12	Yelping Siren	23	Ready to Arm
2	Low Battery (control or exp.)	13	Steady Siren	24	Not Ready to Arm
3	Dynamic Battery Test Time	14	Any Siren	25	Fire
4	Listen In	15	Steady Siren (temporal)	26	Fire Trouble
5	Line Seizure	16	Any Siren (temporal)	27	Chime
6	Telephone Line Fault	17	Alarm Memory	28	Beeping Keypad
7	Program Mode	18	Entry	29♦	Aux 1 Keypad Function
8	Over-current (control or exp.)	19	Exit	30♦	Aux 2 Keypad Function
9	Box Tamper (control or exp.)	20	Entry or Exit	31♦	Panic Keypad Function
10	Siren Tamper (control or exp.)	21	Armed	32♦	Code Entry (set codes in loc 8 – 17)

♦ If set to follow condition, these events will be one second.

## **LOCATION 1            PROGRAMMING SPECIAL FEATURES FOR OUTPUT A**

(2 segments of feature selection data)

**Segment 1** selects the following special conditions:

- 1 = "On" if output should time in minutes; "Off" if output times in seconds.
- 2 = "On" if output should latch until a code is entered; "Off" for timed.
- 3 = "On" if output should stop time when a code is entered.
- 4 = "On" for inverted output.
- 5 = "On" disables output during listen-in (only events 12-16).
- 6 = Reserved.
- 7 = Reserved.
- 8 = Reserved.

**Segment 2** selects the following partitions:

- 1 = "On" if the event should activate when it occurs in Partition 1.
- 2 = "On" if the event should activate when it occurs in Partition 2.
- 3 = "On" if the event should activate when it occurs in Partition 3.
- 4 = "On" if the event should activate when it occurs in Partition 4.
- 5 = "On" if the event should activate when it occurs in Partition 5.
- 6 = "On" if the event should activate when it occurs in Partition 6.
- 7 = "On" if the event should activate when it occurs in Partition 7.
- 8 = "On" if the event should activate when it occurs in Partition 8.

## **LOCATION 2            PROGRAMMING THE EVENT & TIME FOR OUTPUT B**

(2 segments of numerical data)

**Segment 1** is used to program the particular event that will trigger Output B. Refer to Table XII:1 on page 11 for the specific events that can be selected.

**Segment 2** is used to select the amount of time an output will remain activated when an output triggers. If this location is programmed as a zero, the output will follow the particular event.

## **LOCATION 3            PROGRAMMING SPECIAL FEATURES FOR OUTPUT B**

(2 segments of feature selection data)

**Segment 1** selects the following special conditions:

- 1 = "On" if output should time in minutes; "Off" if output times in seconds.
- 2 = "On" if output should latch until a code is entered; "Off" for timed.
- 3 = "On" if output should stop time when a code is entered.
- 4 = "On" for inverted output.
- 5 = "On" disables output during listen-in (only events 12-16).
- 6 = Reserved.
- 7 = Reserved.
- 8 = Reserved.

**Segment 2** selects the following partitions:

- 1 = "On" if the event should activate when it occurs in Partition 1.
- 2 = "On" if the event should activate when it occurs in Partition 2.
- 3 = "On" if the event should activate when it occurs in Partition 3.
- 4 = "On" if the event should activate when it occurs in Partition 4.
- 5 = "On" if the event should activate when it occurs in Partition 5.
- 6 = "On" if the event should activate when it occurs in Partition 6.
- 7 = "On" if the event should activate when it occurs in Partition 7.
- 8 = "On" if the event should activate when it occurs in Partition 8.

#### **LOCATION 4 PROGRAMMING THE EVENT & TIME FOR OUTPUT C**

(2 segments of numerical data)

**Segment 1** is used to program the particular event that will trigger Output C. Refer to Table XII:1 on page 11 for the specific events that can be selected.

**Segment 2** is used to select the amount of time an output will remain activated when an output triggers. If this location is programmed as a zero, the output will follow the particular event.

#### **LOCATION 5 PROGRAMMING SPECIAL FEATURES FOR OUTPUT C**

(2 segments of feature selection data)

**Segment 1** selects the following special conditions:

- 1 = "On" if output should time in minutes; "Off" if output times in seconds.
- 2 = "On" if output should latch until a code is entered; "Off" for timed.
- 3 = "On" if output should stop time when a code is entered.
- 4 = "On" for inverted output.
- 5 = "On" disables output during listen-in (only events 12-16).
- 6 = Reserved.
- 7 = Reserved.
- 8 = Reserved.

**Segment 2** selects the following partitions:

- 1 = "On" if the event should activate when it occurs in Partition 1.
- 2 = "On" if the event should activate when it occurs in Partition 2.
- 3 = "On" if the event should activate when it occurs in Partition 3.
- 4 = "On" if the event should activate when it occurs in Partition 4.
- 5 = "On" if the event should activate when it occurs in Partition 5.
- 6 = "On" if the event should activate when it occurs in Partition 6.
- 7 = "On" if the event should activate when it occurs in Partition 7.
- 8 = "On" if the event should activate when it occurs in Partition 8.

#### **LOCATIONS 6 & 7 RESERVED**

## **LOCATION 8      CODES 1-10 OUTPUT ENABLE**

(10 segments of feature selection data)

When activating outputs with a user code (event #30), location 8 can be used to restrict certain codes from activating certain outputs. Location 8 contains 10 segments. Segment 1 corresponds to user 1; Segment 10 corresponds to user 10. The LEDs correspond to outputs A - C.

**Table XII:2**

LED	DESCRIPTION
1	"On" if code will activate Output A; "Off" if it will not.
2	"On" if code will activate Output B; "Off" if it will not.
3	"On" if code will activate Output C; "Off" if it will not.
4	Reserved.

## **LOCATION 9      CODES 11-20 OUTPUT ENABLE**

(10 segments of feature selection data)

When activating outputs with a user code (event #30), location 9 can be used to restrict certain codes from activating certain outputs. Location 9 contains 10 segments. Segment 1 corresponds to user 11; Segment 10 corresponds to user 20. The LEDs correspond to outputs A - C (see Table XII:2).

## **LOCATION 10      CODES 21-30 OUTPUT ENABLE**

(10 segments of feature selection data)

When activating outputs with a user code (event #30), location 10 can be used to restrict certain codes from activating certain outputs. Location 10 contains 10 segments. Segment 1 corresponds to user 21; Segment 10 corresponds to user 30. The LEDs correspond to outputs A - C (see Table XII:2 on page 14).

## **LOCATION 11      CODES 31-40 OUTPUT ENABLE**

(10 segments of feature selection data)

When activating outputs with a user code (event #30), location 11 can be used to restrict certain codes from activating certain outputs. Location 11 contains 10 segments. Segment 1 corresponds to user 31; Segment 10 corresponds to user 40. The LEDs correspond to outputs A - C (see Table XII:2 on page 14).

## **LOCATION 12      CODES 41-50 OUTPUT ENABLE**

(10 segments of feature selection data)

When activating outputs with a user code (event #30), location 12 can be used to restrict certain codes from activating certain outputs. Location 12 contains 10 segments. Segment 1 corresponds to user 41; Segment 10 corresponds to user 50. The LEDs correspond to outputs A - C (see Table XII:2 on page 14).

## **LOCATION 13      CODES 51-60 OUTPUT ENABLE**

(10 segments of feature selection data)

When activating outputs with a user code (event #30), location 13 can be used to restrict certain codes from activating certain outputs. Location 13 contains 10 segments. Segment 1 corresponds to user 51; Segment 10 corresponds to user 60. The LEDs correspond to outputs A - C (see Table XII:2 on page 14).

## **LOCATION 14      CODES 61-70 OUTPUT ENABLE**

(10 segments of feature selection data)

When activating outputs with a user code (event #30), location 14 can be used to restrict certain codes from activating certain outputs. Location 14 contains 10 segments. Segment 1 corresponds to user 61; Segment 10 corresponds to user 70. The LEDs correspond to outputs A - C (see Table XII:2 on page 14).

## **LOCATION 15      CODES 71-80 OUTPUT ENABLE**

(10 segments of feature selection data)

When activating outputs with a user code (event #30), location 15 can be used to restrict certain codes from activating certain outputs. Location 15 contains 10 segments. Segment 1 corresponds to user 71; Segment 10 corresponds to user 80. The LEDs correspond to outputs A – C (see Table XII:2 on page 14).

## **LOCATION 16      CODES 81-90 OUTPUT ENABLE**

(10 segments of feature selection data)

When activating outputs with a user code (event #30), location 16 can be used to restrict certain codes from activating certain outputs. Location 16 contains 10 segments. Segment 1 corresponds to user 81; Segment 10 corresponds to user 90. The LEDs correspond to outputs A - C (see Table XII:2 on page 14).

## **LOCATION 17      CODES 91-99 OUTPUT ENABLE**

(9 segments of feature selection data)

When activating outputs with a user code (event #30), location 17 can be used to restrict certain codes from activating certain outputs. Location 17 contains 9 segments. Segment 1 corresponds to user 91; Segment 9 corresponds to user 99. The LEDs correspond to outputs A - C (see Table XII:2 on page 14).

## **LOCATION 18      A/C DELAY AND DYNAMIC BATTERY TEST**

(2 segments of feature selection data)

Location 18 is used to enable the A/C delay and the Dynamic Battery Test, both of which are timed in minutes. The factory default is **5-0**, meaning the A/C power will be off for 5 minutes before a report is sent or a *Service* light will illuminate, and the Dynamic Battery Test is disabled ("0" minutes). If you desire the A/C delay to be 8 minutes and the Dynamic Battery Test to be 3 minutes, you would program [8]-[3].

## **LOCATION 19      DEVICE OPTIONS**

(8 segments of feature selection data)

Location 19 is used to enable various system features of the power supply module.

**Table XII:3**

LED	Description
1	<b>On for AC report always sent; Off follows control</b> <ul style="list-style-type: none"> <li>▪ If enabled, an AC Fail report will be sent if power is lost for the time programmed in Location 18.</li> <li>▪ If "off", the report will only be sent if the control panel has not sent an AC Power Lost report, and AC Fail report is enabled in Location 37 of the panel.</li> </ul>
2	<b>On enables periodic Battery Test</b> <ul style="list-style-type: none"> <li>▪ Enables Battery Missing every 30 seconds.</li> </ul>
3	<b>On enables Low Battery reporting</b> <ul style="list-style-type: none"> <li>▪ If enabled, the power supply module will report Low Battery to the central station.</li> </ul>
4	<b>On enables Siren Tamper/Trouble reporting</b> <ul style="list-style-type: none"> <li>▪ If enabled, the power supply module will report a Siren Tamper to the central station.</li> </ul>
5-8	<b>Reserved</b>

## XIII. PROGRAMMING WORKSHEETS

(Defaults are printed in *bold italics* text.)

At Default:

Output A = AUX POWER  
 Output B = AUX POWER  
 Output C = SMOKE POWER

LOC	PAGE	DESCRIPTION	DEFAULT	DATA
<b>0</b>	11	OUTPUT A EVENT & TIME	<b>0 10</b>	--
<b>1</b>	12	OUTPUT A SPECIAL FEATURES  Segment 1 1 = "On" if timed in minutes; "Off" if timed in seconds. 2 = "On" if latched until code is entered; "Off" for timed. <b>3 = "On" if output should stop time when a code is entered.</b> 4 = "On" for inverted output. 5 = "On" disables output during listen-in. 6-8 = Reserved	Segment 2 <b>1 = Partition 1</b> <b>5 = Partition 5</b> <b>2 = Partition 2</b> <b>6 = Partition 6</b> <b>3 = Partition 3</b> <b>7 = Partition 7</b> <b>4 = Partition 4</b> <b>8 = Partition 8</b>	
<b>2</b>	12	OUTPUT B EVENT & TIME	<b>0 10</b>	--
<b>3</b>	12	OUTPUT B SPECIAL FEATURES  Segment 1 1 = "On" if timed in minutes; "Off" if timed in seconds. 2 = "On" if latched until code is entered; "Off" for timed. <b>3 = "On" if output should stop time when a code is entered.</b> 4 = "On" for inverted output. 5 = "On" disables output during listen-in. 6-8 = Reserved.	Segment 2 <b>1 = Partition 1</b> <b>5 = Partition 5</b> <b>2 = Partition 2</b> <b>6 = Partition 6</b> <b>3 = Partition 3</b> <b>7 = Partition 7</b> <b>4 = Partition 4</b> <b>8 = Partition 8</b>	
<b>4</b>	13	OUTPUT C EVENT & TIME	<b>11 8</b>	--
<b>5</b>	13	OUTPUT C SPECIAL FEATURES  Segment 1 1 = "On" if timed in minutes; "Off" if timed in seconds. 2 = "On" if latched until code is entered; "Off" for timed. 3 = "On" if output should stop time when a code is entered. <b>4 = "On" for inverted output.</b> 5 = "On" disables output during listen-in. 6-8 = Reserved.	Segment 2 <b>1 = Partition 1</b> <b>5 = Partition 5</b> <b>2 = Partition 2</b> <b>6 = Partition 6</b> <b>3 = Partition 3</b> <b>7 = Partition 7</b> <b>4 = Partition 4</b> <b>8 = Partition 8</b>	
<b>6 &amp; 7</b>	13	RESERVED		

LOC	PAGE	DESCRIPTION										
8	14	Codes 1-10 Output Enable (Circle the numbers to program)										
		User	1	2	3	4	5	6	7	8	9	10
		Output #A	1	1	1	1	1	1	1	1	1	1
		Output #B	2	2	2	2	2	2	2	2	2	2
		Output #C	3	3	3	3	3	3	3	3	3	3
9	14	Codes 11-20 Output Enable (Circle the numbers to program)										
		User	11	12	13	14	15	16	17	18	19	20
		Output #A	1	1	1	1	1	1	1	1	1	1
		Output #B	2	2	2	2	2	2	2	2	2	2
		Output #C	3	3	3	3	3	3	3	3	3	3
10	14	Codes 21-30 Output Enable (Circle the numbers to program)										
		User	21	22	23	24	25	26	27	28	29	30
		Output #A	1	1	1	1	1	1	1	1	1	1
		Output #B	2	2	2	2	2	2	2	2	2	2
		Output #C	3	3	3	3	3	3	3	3	3	3
11	14	Codes 31-40 Output Enable (Circle the numbers to program)										
		User	31	32	33	34	35	36	37	38	39	40
		Output #A	1	1	1	1	1	1	1	1	1	1
		Output #B	2	2	2	2	2	2	2	2	2	2
		Output #C	3	3	3	3	3	3	3	3	3	3
12	14	Codes 41-50 Output Enable (Circle the numbers to program)										
		User	41	42	43	44	45	46	47	48	49	50
		Output #A	1	1	1	1	1	1	1	1	1	1
		Output #B	2	2	2	2	2	2	2	2	2	2
		Output #C	3	3	3	3	3	3	3	3	3	3
13	14	Codes 51-60 Output Enable (Circle the numbers to program)										
		User	51	52	53	54	55	56	57	58	59	60
		Output #A	1	1	1	1	1	1	1	1	1	1
		Output #B	2	2	2	2	2	2	2	2	2	2
		Output #C	3	3	3	3	3	3	3	3	3	3
14	15	Codes 61-70 Output Enable (Circle the numbers to program)										
		User	61	62	63	64	65	66	67	68	69	70
		Output #A	1	1	1	1	1	1	1	1	1	1
		Output #B	2	2	2	2	2	2	2	2	2	2
		Output #C	3	3	3	3	3	3	3	3	3	3
15	15	Codes 71-80 Output Enable (Circle the numbers to program)										
		User	71	72	73	74	75	76	77	78	79	80
		Output #A	1	1	1	1	1	1	1	1	1	1
		Output #B	2	2	2	2	2	2	2	2	2	2
		Output #C	3	3	3	3	3	3	3	3	3	3
16	15	Codes 81-90 Output Enable (Circle the numbers to program)										
		User	81	82	83	84	85	86	87	88	89	90
		Output #A	1	1	1	1	1	1	1	1	1	1
		Output #B	2	2	2	2	2	2	2	2	2	2
		Output #C	3	3	3	3	3	3	3	3	3	3
17	15	Codes 91-99 Output Enable (Circle the numbers to program)										
		User	91	92	93	94	95	96	97	98	99	
		Output #A	1	1	1	1	1	1	1	1	1	
		Output #B	2	2	2	2	2	2	2	2	2	
		Output #C	3	3	3	3	3	3	3	3	3	

LOC	PAGE	DESCRIPTION	DEFAULT	DATA
18	15	A/C Delay (in minutes) Dynamic Battery Test (in minutes)	5 0	— —
19	15	Device Options (Circle the numbers to program)  1=On for AC report always sent; Off follows control <b>2=On enables periodic battery test</b> <b>3=On enables low battery reporting</b> <b>4=On enables siren tamper/trouble reporting</b>	5=Reserved 6=Reserved 7=Reserved 8=Reserved	

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## *NOTES*

## XIV. SPECIFICATIONS

<b>NX-320E DIMENSIONS</b>	2.0" Wide 9.0" High 4.0" Deep
<b>CURRENT DRAW</b>	AC Input: 120V, 60Hz, 650mA 10 mA Standby 16.5 VAC 50 VA Transformer
<b>AUXILIARY POWER</b>	Limited to 2.5 Amps with 50 VA 12V DC,
<b>BATTERY</b>	51Ah for 24 hrs of battery backup 3 – 17 Ah in parallel
<b>OPERATING TEMPERATURE</b>	32 to 120 degrees F
<b>SHIPPING WEIGHT</b>	8 lbs.

### **COMPATIBLE CONTROL PANELS:**

- |                       |   |
|-----------------------|---|
| <b>NX-8 or NX-8V2</b> | 48 zone Household Fire & Burglary, Commercial Burglary control  |
| <b>NX-8-CF</b>        | 48 zone Commercial Fire control                                 |
| <b>NX-8E</b>          | 192 zone Household Fire & Burglary, Commercial Burglary control |
| <b>NX-8E-CF</b>       | 192 zone Commercial Fire control                                |



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