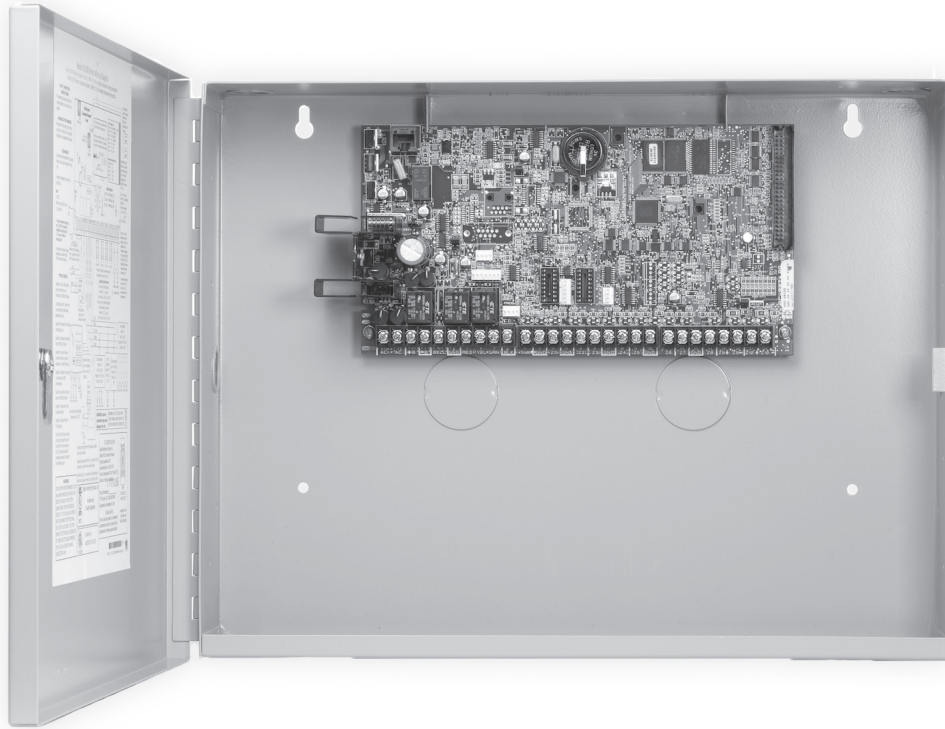


**PROGRAMMING  
AND  
INSTALLATION  
GUIDES  
FOR  
XR100 SERIES PANELS**





# PROGRAMMING GUIDE



## **XR100 SERIES CONTROL PANEL**

## **MODEL XR100 SERIES CONTROL PANEL PROGRAMMING GUIDE**

Contains programming instructions for use with the  
Model XR100 and XR100N Series Control Panel  
XR100FC and XR100NFC Series Fire Control Panel

When using the XR100 Series panel for any UL, NFPA, CSFM, or other listing organization's approved methods, refer to this manual and the XR100 Series Installation Guide (LT-0899) or XR100FC Series Installation Guide (LT-1087). These documents outline the installation and programming requirements of all applications for which the XR100 Series is approved.

### **FCC NOTICE**

**Note:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at this own expense.

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## Introduction

### 1.1 Before you Begin

This guide provides programming information for the DMP XR100 and XR100N Panel. After this Introduction, the remaining sections describe the functions of each programming menu item along with the available options. Before starting to program, we recommend that you read through the contents of this guide. The information contained here allows you to quickly learn the programming options and operational capabilities of the XR100 and XR100N panels.

In addition to this guide, you should also read and be familiar with the following XR100 Series documents:

- XR100 Series Installation Guide (LT-0899)
- XR100 Series Programming Sheet (LT-0897)
- XR500/XR100 User's Guide (LT-0683)

#### Internal Programmer

The panel contains all of its programming information in an on-board processor and does not require an external programmer. You can perform all programming tasks through a 32-character DMP alphanumeric keypad set to address one.

#### Programming Information Sheet

Included with each panel are the Programming Information Sheets. These list the various programming options and available options for programming the panel. Before starting to program, we recommend you completely fill out each sheet with the programming options you intend to enter into the panel. Having completed programming sheets available before entering data helps prevent errors and can shorten the time you spend programming. Completed sheets also provide you with an accurate panel program record you can keep on file for future system service or expansion. The remainder of this Introduction provides instructions for starting and ending a programming session using the alphanumeric keypad.

### 1.2 Getting Started



**Ground Yourself Before Handling the Panel!** Touch any grounded metal, such as the enclosure, before touching the panel to discharge static.

**Remove All Power From the Panel!** Remove all AC and Battery power from the panel before installing or connecting any modules, cards, or wires to the panel.

Before starting to program the XR100 Series panel, make sure the panel is properly grounded and AC and battery power is applied to the appropriate panel terminals. All wiring connections and grounding instructions are detailed in the XR100 Series Installation Guide (LT-0899).

#### Program from any Keypad Address or Wireless Keypad

You can program the XR100 panel from any 32-character wireless keypad or hardwired keypad connected to the panel's keypad data bus. See the XR100 Installation Guide for keypad addressing and installation information for hardwired keypads.

Wireless Keypads can be used for panel programming after being programmed in the panel manually or by using the Wireless Keypad Association operation.

To enable association operation in the keypad, access the Installer Options Menu (3577 (INST)) and select RF Survey. The keypad logo LEDs turn on Red until association is successful.

To enable association operation in the XR100 panel, reset the panel 3 times within 12 seconds. Allow the panel's keypad bus Transmit/Receive LEDs to turn back on between each reset.

For 60 seconds the panel listens for wireless keypads that are in the Installer Options Menu and have not been programmed, or associated into another panel. Those keypads are assigned to the first open device position automatically based upon the order in which they are detected. The keypad logo turns Green to indicate it has been associated with the panel. See the 9000 Series Wireless Keypad Installation Guide (LT-1107) for additional information.

#### Accessing the Programmer

1. Momentarily place the Reset jumper over both of the J16 pins to reset the panel.
2. Enter the code 6653 (PROG) and press COMMAND.
3. The keypad displays: **PROGRAMMER**.

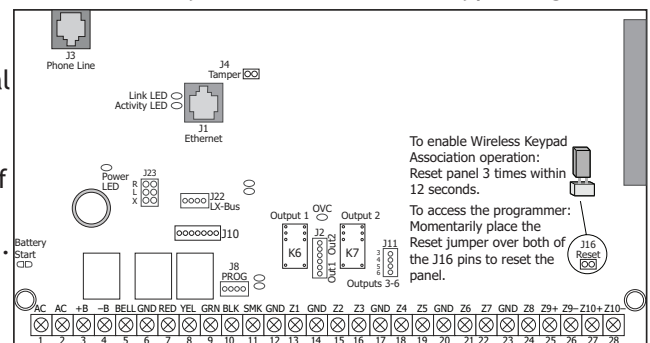


Figure 1: XR100 Series Panel Showing Reset

## 1.3 Programmer Operation

There are 18 programming sections to choose from:

Programming Item	Section in This Manual	Programming Item	Section in This Manual
Initialization	2	Output Information	12
Communication	3	Output Groups	13
Network Options	4	Menu Display	14
Messaging Setup	5	Status List	15
Device Setup	6	PC Log Reports	16
Remote Options	7	Area Information	17
System Reports	8	Zone Information	18
System Options	9	Stop	19
Bell Options	10	Set Lockout Code	20
Output Options	11		

To choose a section for programming, press any top row Select key when the keypad displays the name of that section. Sections 2 through 19 contain detailed instructions for each programming step.

## 1.4 Programmer Lockout Codes

The panel allows you to enter the programming function without entering a lockout code using steps 1 to 4 listed in Getting Started. We recommend, however, that you install a Lockout Code to restrict programming to only those persons your company authorizes. You can do this by using the **SET LOCKOUT CODE** feature in the Programmer. The Lockout Code restricts any unauthorized panel programming.

After resetting the panel and entering the code 6653, the keypad displays **PROGRAMMER**. Press **COMMAND** to advance through the programming sections until **SET LOCKOUT CODE** displays (after **STOP**). Press any top row Select key. The keypad displays **ENTER CODE: -**. Enter a 3 to 5 digit Programmer Lockout Code and press **COMMAND**. The keypad displays **ENTER AGAIN** followed by **ENTER CODE: -**. Enter the same 3 to 5 digit code a second time and press **COMMAND**. The keypad displays **CODE CHANGED**.

**Note:** The panel will not accept a 5-digit Lockout Code higher than 65535.

Before accessing programmer functions enter the new code number.

Write the Lockout Code number down and keep it in a secure place with access limited to authorized persons only. Lost Lockout Codes require the panel to be sent back to DMP for repair. You may cancel a Lockout Code by entering 00000 at the Set Lockout Code command.

## 1.5 Reset Timeout

The panel has a feature that requires you to enter the Programmer within 30 minutes of resetting the panel. After 30 minutes, if you attempt to program by entering the 6653 (PROG) code, the keypad displays: **RESET PANEL**. You must reset the panel and enter the program code then begin programming within the next 30 minutes.

If you are already in the Programmer and do not press any keys on the programming keypad for 30 minutes, the panel terminates programming. All data entered up to that time is Not saved unless you run the Stop routine.

**Note:** Use the Stop routine to exit panel Programming. Ensure the keypad displays “**SAVING PROGRAM**” to save all programming changes entered.

## 1.6 Power Up

When the XR100 Series panel is powered up after an AC power failure, any zone transitions are not recognized for 60 seconds. Normal zone processing resumes at the end of the 60 seconds.

## 1.7 Keypads

DMP offers multiple keypads in a variety of styles. All DMP keypads provide the same programming capabilities. Each keypad and its operation are shown and described in the following sections.

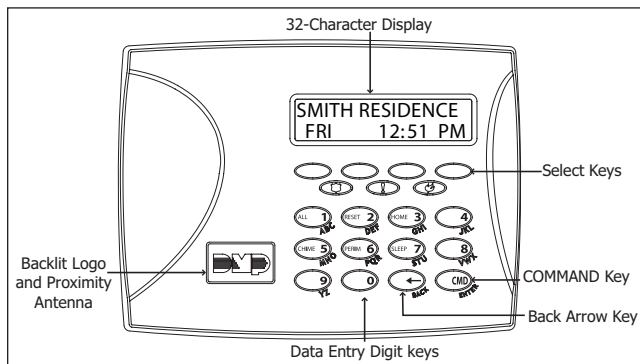


Figure 3: Wireless Keypad

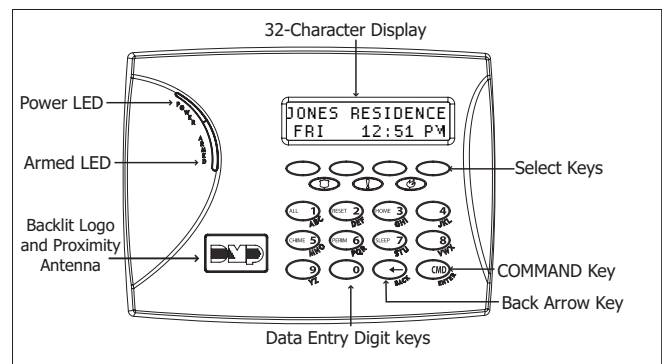


Figure 4: Thinline/Aqualite Keypad

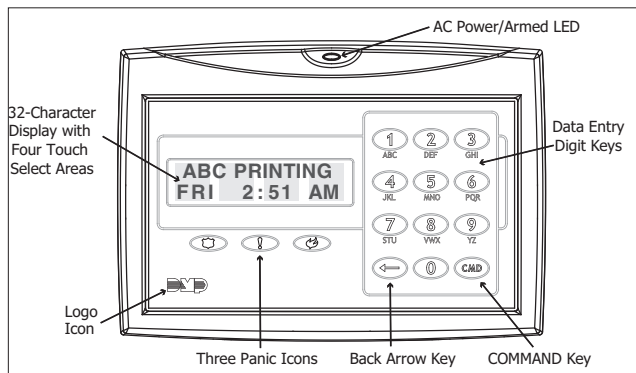


Figure 5: Clear Touch Keypad

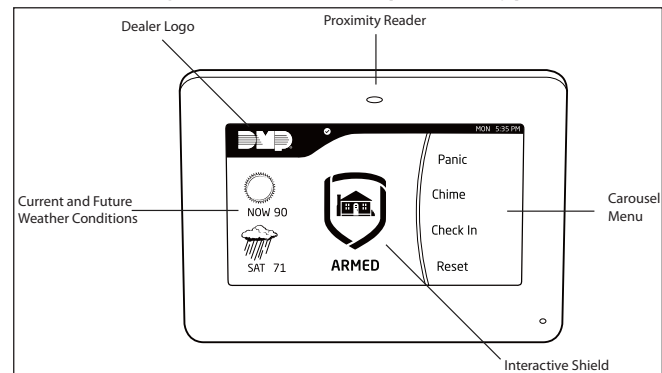


Figure 6: Graphic Touchscreen Keypad

## 1.8 Special Keys

The following special keys/areas are common to all DMP keypads.

### COMMAND (CMD) Key

Pressing the COMMAND key allows you to go forward through the programming menu and through each step of a programming section. As you go through the programming, the keypad display shows any current programming already stored in the panel memory. If no change is required for an option, press the COMMAND key to advance to the next step.

The COMMAND key is also used to enter information into the panel's memory such as phone numbers or zone names. Press the COMMAND key after entering information.

### Back Arrow (←) Key

Use the Back Arrow key to back up one step while programming. The Back Arrow key is also used when an error is made while entering information. Press the Back Arrow key once to erase the last character entered.

### Select Keys/Areas

The top row of keys are called the Select keys on Wireless, Thinline, and Aqualite keypads or Select Areas on Clear Touch and Graphic Touchscreen keypads. Each time you need to press a Select key, the keypad displays the function or options above one of the keys or in the Select Area. Displaying choices above individual Select keys or in Select Areas allows them to be used for many different applications. For example, you can enter AM or PM when programming the automatic test time or answer YES or NO for a system option.

During programming, the Select keys/areas also allow you to change information currently in panel memory by pressing the appropriate Select key/area under or on the display. You then enter the new information using the keypad data entry digit keys.

When there are more than four response options available, press the COMMAND key to display the next one to four options. Pressing the Back Arrow key allows you to review the previous four choices.

The Select keys/areas are also used for choosing a section from the programming menu. Press any Select key or touch the Select Area when the programming section name you want displays.

**Note: On Wireless, Thinline and Aqualite keypads,** when instructed to press the first Select key, press the far left Select key; the second Select key is the second from the left; third Select key is second from the right; and the fourth Select key is the far right key. See Figure 7.

**On Clear Touch and Graphic Touchscreen Keypads,** when instructed to press the first Select key, touch Select Area 1; the second Select key touch Select Area 2; third Select key touch Select Area 3; and the fourth Select key touch Select Area 4. See Figure 8.

## 1.9 Entering Alpha Characters

Some options during programming require you to enter alpha characters. To enter an alpha character, press or touch the key that has that letter written below it. The keypad displays the number digit of the key. Next, press the Select key/area that corresponds to the location of the letter under the key. Pressing a different Select key/area changes the letter. When another digit key is pressed, the last letter displayed is retained and the process starts over.

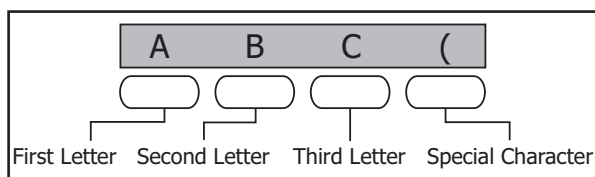


Figure 7: Thinline/Aqualite/Wireless Select Keys

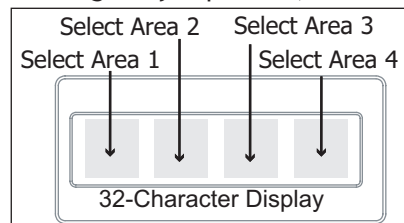


Figure 8: Clear Touch and Graphic Touchscreen Select Areas

## 1.10 Entering Non-Alpha Characters

To enter a space in an alpha entry, press the 9 digit key followed by the third Select key/area. The three characters on the 9 digit key are Y, Z, and space. You can also enter the following characters: - (dash), . (period), \* (asterisk), and # (pound sign) using the 0 (zero) key and the four Select keys/areas from left to right. For example, to enter a - (dash), press the 0 (zero) key and then the left Select key/area. A dash now appears in the keypad display. The table below shows the character locations for DMP keypads.

Key Number	Select Key 1	Select Key 2	Select Key 3	Select Key 4
1	A	B	C	(
2	D	E	F	)
3	G	H	I	!
4	J	K	L	?
5	M	N	O	/
6	P	Q	R	&
7	S	T	U	@
8	V	W	X	,
9	Y	Z	space	_
0	-	.	*	#

## 1.11 Keypad Displays Current Programming

Each programming option displayed at the keypad shows the currently selected option in the panel memory. These options are either shown as a number, a blank, or a **NO** or **YES**. To change a number or blank to a new number, press any top row Select key or touch any Select Area. The current option is replaced with a dash. Press the number(s) on the keypad you want to enter as the new number for that option. It is not necessary to enter numbers with leading zeros. The panel automatically right justifies the number when you press the COMMAND key.

To change a programming option that requires a **NO** or **YES** response, press the Select key or touch the Select Area for the response not selected. See Figure 9.

For example, if the current option is selected as **YES** and you want to change it to **NO**, on Thinline or Aqualite keypads press the third top row Select key. On Clear Touch and Graphic Touchscreen keypads touch Select Area 3. The display changes to **NO**. Press the COMMAND key to display the next option.

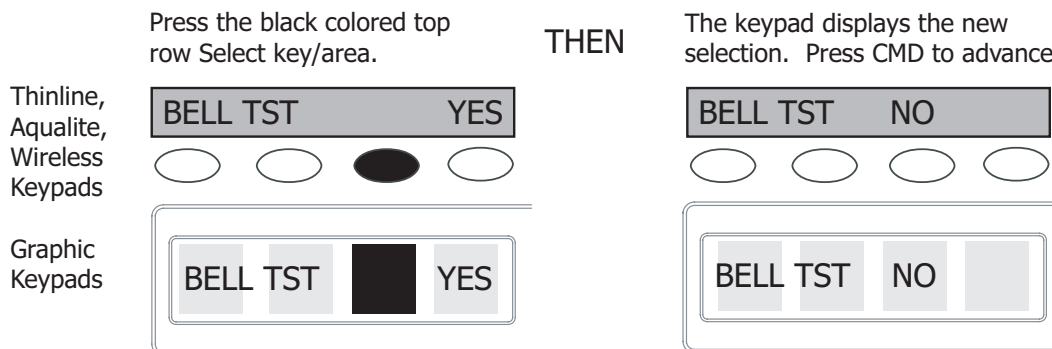


Figure 9: Changing the Current Programming Option



## 1.12 Asterisks in Programming

Asterisks display next to a programming option that is already selected. As shown in the example, options that are selected to display the current programming selection have an asterisk next to the number. Those that are not selected simply display the number. In the Devices example, keypads 3, 6, and 8 are not selected. In the Areas example, areas 3, 6, and 8 are not selected. In both examples the numbers with asterisks are selected.

Devices				Areas			
*1	*2	3	*4	*1	*2	3	*4
*5	6	*7	8	*5	6	*7	8

To select or deselect a number, simply enter the number using the digit keys on the keypad. This same scheme is used when viewing the panel armed status and other programming and operational functions. Remember to press the COMMAND key to display the rest of the device or area numbers.

## 1.13 Compliance Instructions (ANSI/UL 864)

This product incorporates field-programmable software. In order for the product to comply with the ANSI/ UL 864 requirements, certain programming features or options must be limited to specific values as indicated below. Refer to the XR100 Installation Guide (LT-0899) for additional information.

Program feature or option	Permitted in UL 864?	Possible settings	Settings permitted in UL 864
System Reports, RESTORAL	Y	NO, YES, DISARM	YES, DISARM
System Options, PWR FAIL HRS	Y	0, 1 - 15	1 – 3
System Options, RETARD DELAY for Waterflow Applications	Y	0, 1 - 250	1 – 90
Bell Options, FIRE TYPE	Y	STEADY, PULSED, TEMPORAL, NONE	STEADY OR TEMPORAL
Status List, SYSTEM TROUBLES	Y	Blank, 1 – 16	Any combination 1 – 16 addresses
Status List, FIRE TYPE	Y	Blank, 1 – 16	Any combination 1 – 16 addresses
Zone Information, TRANSMITTER SUPERVISION TIME for Model 1103	Y	0, 3, 60, 240	3
Zone Information, RETARD for Smoke Detectors	N	NO, YES	NO

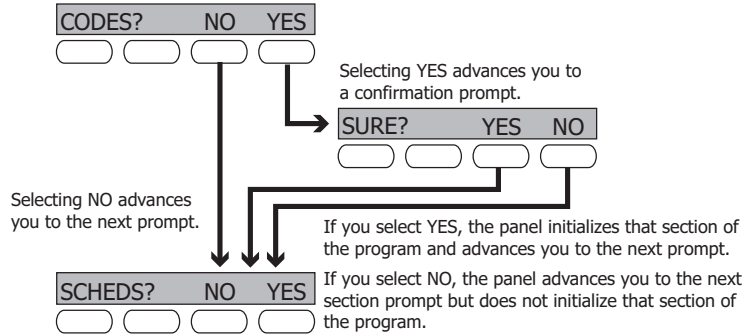
## Initialization

**NOTE: WHEN ANY PANEL PROGRAMMING IS CHANGED, THE STOP ROUTINE MUST BE RUN AND 'SAVING PROGRAM' MUST DISPLAY ON THE KEYPAD IN ORDER TO SAVE THE PROGRAMMING CHANGES. SEE SECTION 17.1.**

### 2.1 INITIALIZATION Initialization

This function allows you to clear selected parts of the panel program back to the factory defaults in preparation for system programming. Run the initialization function on all new installations.

For each section of the panel program you can initialize, a NO or YES option is provided.



### 2.2 INIT ALL? NO YES Clear All Memory

SURE? YES NO

**NO** - Leaves existing programming intact then displays Clear All Codes.

**YES** - Clears all memory then displays Reset Panel. Reset the panel by shorting J16 and re-enter programming mode to continue.

### 2.3 CODES? NO YES Clear All Codes

SURE? YES NO

**NO** - Leaves existing codes intact.

**YES** - Clears the user code and user profile memory and assigns user code number 99 to the highest user position.

**Note:** The user name for the default user code is created using the current programmed primary user language.

### 2.4 SCHEDULES? NO YES Clear All Schedules

SURE? YES NO

**NO** - Leaves existing schedules intact.

**YES** - Clears all shift, and output schedules.

### 2.5 EVENTS? NO YES Clear Display Events Memory

SURE? YES NO

**NO** - Leaves existing event memory intact.

**YES** - Clears the events memory.

### 2.6 ZONES? NO YES Clear Zone Information

SURE? YES NO

**NO** - Leaves existing zone information intact.

**YES** - Clears the zone information for all zones. All zones are marked \* UNUSED \* and must be renamed before being able to display on any system keypad.

### 2.7 AREAS? NO YES Clear Area Information

SURE? YES NO

**NO** - Leaves existing area information intact.

**YES** - Clears the area information for all areas. All areas are marked \* UNUSED \* and must be renamed before being able to display on any system keypad.

### 2.8 OUTPUTS? NO YES Clear Output Information

SURE? YES NO

**NO** - Leaves existing output information intact.

**YES** - Clears all programmed Output names and any output cutoff assignment.



2.9

COM/RMT?	NO	YES
SURE?	YES	NO

**Clear Communication and Remote Options**

NO - Leaves existing communication and remote options intact.

YES - Clears communication and remote options programming to factory defaults.

2.10

DEFAULTS	NO	YES
SURE?	YES	NO

**Set to Factory Defaults**

NO - Leaves existing panel programming intact.

YES - Sets the remainder of the panel programming back to the factory defaults.

**Note:** Sets the Programming and User language to English.

## Communication

- 3.1**      COMMUNICATION      **Communication**  
Configure the communication options for the panel. The information you program varies with the Communication Type you select.
- 3.2**      ACCOUNT NO: 12345      **Account Number**  
The Account Number is a 1 to 5 digit number used to identify which panel is sending a message. Enter the account number sent to the SCS-1R Receiver. Messages may be sent to a central station or via PC Log Reports to a PC. The default is 12345.  
**NET, CELL, and DD** - The range of valid account numbers for a panel is 1 to 65535. For accounts of four digits or less, do not enter leading zeros.  
**CID** - Choose an account number between 1 and 9999.
- 3.3**      XMIT DELAY: 30      **Transmit Delay**  
Enter the number of seconds (15 to 45) the panel waits before sending burglary zones (Night, Day, or Exit) reports to the receiver. Other zone type reports are sent immediately. Alarm bells and relay outputs are not delayed during this period. Program Burglary Outputs for pulsed or steady, and set Abort Reports to YES if Opening and Closing reports are not being sent. Enter 0 (zero) to disable this function. The default is 30.  
  
If the area where the alarm occurred is disarmed during the Transmit Delay time, only an Abort Report (S45) message is sent to the receiver. If the area where the alarm occurred is disarmed after the alarm message is sent to the receiver but before the Bell Cutoff time expires even if the alarm was silenced, an Alarm Cancelled (S49) message is sent. Otherwise the alarm is sent at the end of the delay. The Alarm Cancelled report cannot be disabled.  
**Note: For Commercial Burglary Installations, the combined Transmit Delay (Abort Window) and Entry Delay must not exceed one (1) minute.**
- 3.4**      PATH: -      **Communication Path**  
Up to eight communication paths may be programmed. Each path is designated as a primary or backup communication route. Path 1 is always Primary but other paths may be programmed as additional primary or backup.  
  
Each primary path establishes a new path group. A path group is made up of the primary path and its subsequent backup paths. Typical communication takes place on the primary path with backup paths being used only when the primary path fails or when the backup path is programmed to duplicate messages. There is no option to backup path 8.
- 3.5**      COMM TYPE: DD      **Communication Type**  
Specifies the communication method the panel uses on this path to report system events to DMP SCS-1R Receivers or non-DMP receivers. Default is DD for Path 1, and NONE for Path 2-8.  
  
**NONE** - For local systems. Selecting NONE ends communication programming.  
**DD** - Digital Dialer communications to a DMP SCS-1R Receiver.  
**NET** - Network communication using the panel onboard network connection. The DMP Network/Output reporting format is transmitted over a data network to the SCS-1R Receiver.  
**CID** - This option allows the panel to communicate to non-DMP receivers using the Contact ID format.  
**CELL** - This option allows communication over the cellular network using the 463C, 464-263C or 464-263H Cellular Communicators.

- 3.6** PATH TYPE: **BACKUP** **Path Type**  
The Path Type defines if the path is Primary or Backup. Because Path 1 is Primary, this option only displays for paths 2-8. Default is Backup.  
**Note:** If the Primary Communication Type is CELL, then the backup Communication Type can only be NET.
- 3.7** TEST RPT: **YES** **Test Report**  
Test Report determines if test reports are sent on this path. Reports are sent according to the programming in Test Frequency and Test Time. Default is Yes.  
Select YES to allow the programmed test report to be sent on the path currently being programmed.  
Select DEFER to not send a test report if the panel communicates any message to the receiver within the time set in Test Frequency. Select NO to not send test reports on this path.
- 3.8** TEST FREQ: **1 DY** **Test Frequency**  
Test Frequency determines the frequency of the test report. Enter a number from 1 to 60 and select DY (Day) or HR (Hour) by pressing the far right top row select key. Default is 1 Day.
- 3.9** TEST DAY: **SUN** **Test Day**  
Use this option to set the day of the Test Report. This option appears only when Test Report is Yes, Test Frequency is Day and a multiple of seven. Press the COMMAND key to display the first four days of the week. Press the COMMAND key to display the last three days. Select the day of the week to send the test report. Default is Sunday.
- 3.10** TEST TIME:  
**0:00 AM** **Test Time**  
Use this option to select the time of day for Test Reports. Select the hour, minute and AM/PM. Enter 0:00 AM to disable this feature. Default is 0:00 AM.
- 3.11** CHECKIN: NO YES **Check In**  
This option displays if the COMM TYPE is NET, or CELL. Check-in reports are a method of supervising the panel for communication with the receiver. For NET the default is YES. For CELL, the default is NO.  
CHECKIN:  
NO YES RND ADPT Select RND (Random) for the panel to check-in at random times from 6 to 60 minutes when all areas are disarmed. If any area is armed a check-in is sent every 6 minutes. Select ADPT (Adaptive) for a backup path to adapt to the check-in programming from this groups primary path if the primary path becomes unavailable. Check-in programming includes Check-in and Fail Time.  
CHECKIN:  
ADP3 Select ADP3 (Adaptive 3) for a backup path to adapt using a 3 minute Check-in and Fail Time if the primary path becomes unavailable. This option also indicates a Communication Trouble (S10) if the cell tower is unavailable for 3 minutes.  
CHECKIN MINS: **200** When YES is selected, enter the number of minutes between check-in reports, from 2 to 240 for NET or 3 to 240 for CELL, when the panel is armed or disarmed. For CELL, the default is 0. For NET the default is 200.
- 3.12** FAIL TIME: **240** **Fail Time**  
This option displays if CHECKIN is set to YES. Entering a FAIL TIME allows the receiver to miss multiple check-ins before logging that the panel is missing. The maximum fail time is 240 minutes. For example, if CHECKIN is 10 and FAIL TIME is 30, the receiver only indicates a Panel Not Responding after 30 minutes. The FAIL TIME must be equal to or greater than the CHECKIN time. Default is 0 for CELL. Default is 240 for NET.
- 3.13** RECEIVER IP **Receiver IP**  
This option displays only if the Communication Type is NET or CELL. Enter the Receiver IP address where the panel sends network messages. The Receiver IP Address must be unique and cannot be duplicated on the network. Enter all 12 digits and leave out the periods. For example, enter IP address 192.168.0.250 as 192168000250. The periods display automatically.

## 3.14 RECEIVER PORT - Receiver Port

RECEIVER PORT -
2001

Enter the receiver port number. Valid range is 1 to 65,535. Default is 2001.

## 3.15 FIRST PHONE NO. First Telephone Number

FIRST PHONE NO.
-----------------

This option displays only if the Communication Type is DD or CID.

This is the first number the panel dials when sending reports to the receiver. Phone numbers can have two lines of 16 characters each to equal up to 32 characters.

Enter P to program a three-second pause in the dialing sequence. The P character counts as part of the 32 allowable characters.

Enter R as the first character for rotary (pulse) phone function. The R character counts as part of the 32 allowable characters.

**Call Waiting:** You can place the “\* 7 0 P” (Star, Seven, Zero, Pause) in the telephone number first position to cancel Call Waiting. For example, program NET with second line DD and phone number \*70P555-1212, and you have NET with Call Waiting cancelled on the second line.



**Caution:** A call waiting cancel programmed on a non-call waiting telephone line would prevent communication to the central station.

## 3.16 SECOND PHONE NO. Second Telephone Number

SECOND PHONE NO.
------------------

The panel dials the second number when two successive tries using the first number fail. If the panel cannot reach the receiver after two attempts using the second number, it returns to the first number and makes two additional attempts. A total of ten dialing attempts are made using the first and second phone numbers.

Each number can be up to 32 characters in length including any P or R characters entered for pause or rotary connections or call waiting cancel option.

Should all ten attempts fail, the panel continues to attempt sending the message using the next programmed path. If all programmed communication paths fail, the panel clears the communication buffer and makes one communication attempt each hour to send a TRANSMIT FAILED (S87) report to the receiver. Access the User Menu Display Events feature to view the report information not sent to the receiver or download the report with DMP Remote Link™ software.

## 3.17 ADVANCED? NO YES Advanced Programming

ADVANCED? NO YES
------------------

Select Yes to enter the Advanced Programming menu for the communication path currently being programmed.

## 3.18 FIRST GPRS APN First GPRS APN

FIRST GPRS APN
SECURECOM400
-

Enter the first APN (Access Point Name). This allows an access point for cellular communication and is used to connect to a DNS network. The APN may contain two lines of 16 characters to equal 32 characters. Default is set to SECURECOM400.

**Note:** This option is not used when a 463C CDMA or 464-263C Cellular Communicator is used for communication.

SECOND GPRS APN
SECURECOM400
-

## Second GPRS APN

Enter the second APN (Access Point Name). This works as a backup in case the first APN fails. The APN may contain two lines of 16 characters to equal 32 characters. Default is set to SECURECOM400.

**Note:** This option is not used when a 463C CDMA or 464-263C Cellular Communicator is used for communication.

## 3.19 FAIL TEST HRS: 0 Fail Test Hours

FAIL TEST HRS: 0
------------------

This option sets the frequency for a Backup or Adaptive path to send a test report when the closest previous path fails within its path group.

For example, if a backup path is programmed to send a weekly test report and the Fail Test Frequency is set to 2 hours, when the previous path fails within its group, the backup path starts sending a test every 2 hours until the previous path restores. If Fail Test Frequency is set to 0, test reports are sent only according to Test Report programming. Range is 0 to 24 hours. Default is 0.

- 3.20** PROTOCOL: TCP **Protocol**  
 This option displays only when Communication Type is NET.  
 Select TCP to communicate over the network using TCP protocol. Select UDP to communicate using UDP protocol. Default is TCP.
- 3.21** RETRY SECONDS: 6 **Retry Seconds**  
 This option displays for NET Communication Types.  
 Enter the number of seconds (between 6 and 15) the panel should wait before retrying to send a message to the receiver if an acknowledgment was not received. The panel retries as many times as possible for a period of one minute before sending a network trouble message. For example, if retry time is set to 15, the panel retries four times. The default Retry Time is 6 seconds.  
**Note:** If TCP is enabled, the minimum Retry Time programmed is 6 seconds.
- 3.22** SUB CODE NO **Substitution Code**  
 This option displays when the Communication Type is NET, or CELL. The Panel Substitution Code increases the level of security by helping to ensure that the panel sending the message to the receiver has not been substituted by another panel. The default is NO.  
 Select YES to send a substitution code with every message.  
NO YES SHARED Select SHARED (SHR) to use the same substitution code as operating in the previous path.
- 3.23** 893A: NO YES **893A**  
 This option displays when the Communication Type is DD or CID.  
 The 893A option allows reports to be sent to the receiver on a second DD line using the 893A module. Default is No.  
 When using this option, Test Report messages (S07 Automatic Recall Test or S88 Unrestored System Recall Test) will be sent to the receiver at the frequency programmed in Test Frequency, alternating between the first and second phone line.  
 For example, a DD path with an 893A module set for daily test report frequency will send a test report through phone line 1 one day and phone line 2 the next day.  
2ND LINE PREFIX: If 893A option is set to YES, enter up to a 3 digit prefix to be dialed before the second phone number. If no prefix is entered, the second phone number is dialed as originally entered.  
-
- 3.24** ALARM SWITCH: 1 **Alarm Switch**  
 This option displays for DD or CID Communication Types.  
 Enter the number of attempts to send an alarm message before switching to the next path. Range is from 1 to 10. All non-alarm messages will be sent for 10 attempts on the dialer before a switch is initiated. If the path immediately following this channel is not a backup path, this option has no effect. Default is 1.
- 3.25** DUPLICATE ALARMS **Duplicate Alarms**  
 This option displays for BACKUP paths. If Yes is selected, the current backup path duplicates all alarms occurring on its group primary path. Default is No.
- 3.26** ALARM YES **Alarm Reports**  
 This option displays when the Path Type is Primary. All backup paths within the group follow the same programming for Alarm Reports. Default is Yes.  
NO YES FIRE When YES is selected, the following reports are sent to the receiver for all zone types:  
 • Alarm • Bypass • Reset • Restore  
 When FIRE is selected, the following reports are sent for Fire, Fire Verify and Supervisory Zones:  
 • Alarm • Bypass • Reset • Restore

- 3.27** SPV/TRBL **YES** **Supervisory/Trouble Reports**  
 This option displays when the Path Type is Primary. All backup paths within the group follow the same programming for Supervisory/Trouble Reports. Default is Yes.
- NO **YES** FIRE When YES is selected, the following reports are sent for all zone types:
- Trouble
  - Low Battery
  - Missing
  - Fault
  - Restorals
  - System Troubles
  - System Restoral
- When FIRE is selected, the following reports are sent for Fire, Fire Verify, and Supervisory Zones:
- Trouble
  - Low Battery
  - Missing
  - Fault
  - Restorals
  - System Troubles
  - System Restoral
- Serviceman reports are sent regardless of the selection made for Supervisory/Trouble reports.
- 3.28** O/C USER NO **YES** **Opening/Closing and User Reports**  
 This option displays when the Path Type is Primary. All backup paths within the group follow the same programming for Opening/Closing and User Reports. Default is Yes.
- When YES is selected, the following reports by user are sent to this receiver.
- Opening
  - Closing
  - Bypass
  - Reset
  - Code changes (including adding, deleting, changing)
  - Schedule changes (temporary, permanent, shift)
  - Holiday date changes
- 3.29** DOOR ACS **YES** **Door Access Report**  
 This option displays when the Path Type is Primary. All backup paths within the group follow the same programming for Door Access Reports. Default is Deny.
- NO YES **DENY** Select YES to enable Door Access Granted and Denied reports to this receiver whenever a door access is granted to a user. The Door Access Granted report is only sent if the keypad number has also been selected in Access Keypads under the **SYSTEM REPORTS** programming.
- Select DENY to enable Door Access Denied reports only to this receiver when a door access is denied to a user.
- 3.30** SEND COMM TRBL: **Send Communication Trouble**  
NO **YES** This option displays for each path and determines if and how communication trouble on the path is sent to the receiver. A trouble message indicates both the path number and communication type that failed. Default is Yes.
- 3.31** SEND PATH INFO: **Send Path Information**  
NO **YES** This option displays for each path and if YES, each panel message includes path information such as path number, communication type, and path type. Default is No.

## Network Options (XR100N only)

Network Options are provided to define the network configuration for the panel. This information will be used during communication of messages via network or email.

**Note:** IP addresses and port numbers may need to be assigned by the network administrator. When entering an IP, Gateway, or Subnet Mask address be sure to enter all 12 digits and leave out the periods. For example, IP address 192.168.000.250 is entered as 192168000250.

- 4.1**    **DHCP Mode Enabled**  
If the panel uses a dynamic IP address select YES. When set to YES, the panel operates using DHCP and does not use the Local IP Address number. When the DHCP option is set to NO, the panel uses the IP address entered in Local IP Address. The default value for DHCP mode is YES.
- 4.2**  **Local IP Address**  
 Enter the local IP address. The Local IP Address must be unique and cannot be duplicated. The default local IP address is 192.168.0.250.
- 4.3**  **Gateway Address**  
 Enter the local gateway address. The Gateway IP Address is needed to exit your local network. The default gateway address is 192.168.0.1.
- 4.4**  **Subnet Mask**  
 Enter the local subnet mask assigned to the panel. The default subnet mask address is 255.255.255.000.
- 4.5**  **DNS Server**  
 Enter the IP address of the DNS (Domain Name System) used by the panel to resolve domain names into IP addresses. The default address is 192.168.0.1.
- 4.6**  **734N Listen Port**  
 Enter the port number that the 734N/734N-WiFi will use to send communication to the panel. This must be the same port that is programmed in Panel IP Port within the 734N Communication programming menu.  
**Note:** The 734N Listen Port cannot be the same as the panel network programming port.
- 4.7**  **734N Passphrase**  
 Enter an 8 to 16-character Passphrase to encrypt communication with the 734N/734N-WiFi module. The 734N Passphrase must match the 734N Passphrase entered in Communication programming of the 734N. The Passphrase is blank by default.  
**Note:** A passphrase is required for operation.



## Messaging Setup

- 5.1** MESSAGING SETUP **Messaging Setup**
- This section allows you to enter the information needed to receive messages directly from the panel via email and MyAccess™ SMS Text using Network or Cellular communication. All of the name and password options below allow up to 32 lowercase characters to be entered. The Destination addresses allow up to 48 characters to be entered. System Name is displayed with initial caps.
- The transmitted messages are:
- Zone Alarms by Zone Name
  - Zone Troubles by Zone Name
  - Zone Bypass by User
  - Arming (Closings) by User
  - Disarming (Openings) by User
  - Late to Close
  - AC Power Trouble and Restoral
  - System Low Battery
  - Ambush
  - Abort, Cancel and Alarm Verified by User
  - Check-in by user
- 5.2** ENABLE MESSAGING **Enable Messaging**
- NO YES Select YES to allow the panel to send messages to three programmed destinations. Default is NO.
- 5.3** SYSTEM NAME **System Name**
- Enter a unique name for the panel. The panel name is used as the sender of the message. The text entered is displayed with initial caps. If this field is left blank, the panel account number is sent.
- 5.4** DESTINATION 1 **Destination 1**
- Enter the first email address or cell phone number where messages will be sent. The message can be sent to any device (computer, cell phone, PDA) as long as a valid email address or cell phone number is entered. When entering email addresses, press the 7 digit key followed by the fourth Select Key to add the @ symbol and the 9 digit key followed by the fourth Select Key to add the \_ symbol. See the Entering Non-Alpha Characters section for additional symbols.
- Note:** Mail servers that require Transport Layer Security (TLS) encryption are not supported by the XR100 Series.
- 5.5** DESTINATION 1  
USER NUMBER: 0 **Destination 1 User Number**
- If Destination 1 is a 10-digit cellular number, enter a user's user number from this account. This option is used when sending commands such as arming or disarming back to the panel using MyAccess™ SMS Text from the same cell phone or PDA. The user number must have the authority to perform the commands as if it occurred at the keypad. MyAccess™ SMS Text command operation is available in XR500 Series panels using version 205 or higher. Entering 0 (zero) disables this option. Default is 0.
- 5.6** DESTINATION 2 **Destination 2**
- Enter the second destination email address or cell phone number.
- 5.7** DESTINATION 2  
USER NUMBER: 0 **Destination 2 User Number**
- If Destination 2 is a cellular number, enter the user's User Number for arming/disarming authorization.
- 5.8** DESTINATION 3 **Destination 3**
- Enter the third destination email address or cell phone number.



- 5.9** DESTINATION 3  
USER NUMBER: 0 **Destination 3 User Number**  
If Destination 3 is a cellular number, enter the user's User Number for arming/disarming authorization.
- 5.10** EMAIL COMM TYPE  
NET CELL **Email Communication Type**  
Choosing NET sends email messages over the network. Choosing CELL sends email messages via cellular communication. Default is NET. This option displays if any destination above is an email address and the panel is a network panel (has an Ethernet connector).
- 5.11** O/C EMAIL NO YES **O/C Email**  
Select YES to allow the panel to send Opening and Closing reports via email. Default is NO. This option displays if any destination above is an email address.
- 5.12** O/C SMS NO YES **O/C SMS**  
Select YES to allow the panel to send Opening and Closing messages to a cell phone via SMS protocol. Default is NO. This option displays if any destination above is a cell phone number.
- 5.13** MONTHLY LIMIT: 0 **Monthly Limit**  
This option displays if any programmed destination is a cell phone number using NET or CELL communication or an email address using CELL communication. If all destinations are email addresses using NET communication, this option does not display. This number limits the monthly incoming and outgoing SMS messages allowed to be sent or received by the panel.  
  
A panel event that causes messages to be sent to destination cell phone numbers or destination email addresses is counted towards the panel's monthly limit. For example, if an alarm message is sent to a cell phone number and an email address using CELL communication, a total of 2 messages are counted towards the monthly limit for the panel. SMS messages sent from a cell phone to the panel, including status requests and MyAccess™ SMS Text messaging commands, also count toward the monthly limit. The limit is reset at midnight on the 14th of every month. Range is from 0 to 999. When 0 is entered, there is no limit on the number of messages able to be sent or received by the panel. Default is 0.  
  
**Note:** The SecureCom Wireless text plan selected for the panel should match or exceed the programmed Monthly Limit.
- The remaining options only appear if email messaging has been selected to be sent via network. The options allow the email server to be selected by the installing dealer. Typically this is the email service provided by the installing dealer. This allows opportunity for additional services to be provided to the end user.
- 5.14** SMTP SERVER  
- **SMTP Server**  
Enter the SMTP (Simple Mail Transfer Protocol) Server name. The SMTP email server is responsible for sending the email to its destination. An example SMTP email server name is: mail.somedomain.com. The domain should be the email server that provides email support for your alarm customers.
- 5.15** SMTP PORT: 25 **SMTP Server Port**  
The SMTP server port number is the port that the panel uses to initiate a TCP connection with the email server. The default port is 25.
- 5.16** SMTP USERNAME  
- **SMTP Username**  
Most SMTP servers require a username to send email. This is sent to the SMTP server in conjunction with the SMTP Password to provide email authentication to the server.
- 5.17** SMTP PASSWORD  
- **SMTP Password**  
Most SMTP servers require a password to send email. This is sent to the SMTP server in conjunction with the SMTP Username to provide email authentication to the server. Passwords display as lowercase.
- 5.18** FROM EMAIL  
- **From Email Address**  
Enter the email address on file with the email service. This displays in the email message as the sender's address.

## Device Setup

- 6.1**

DEVICE SETUP
--------------

**Device Setup**  
This section allows you to define the XR100 Series panel physical configuration. You can install and address up to eight **supervised** devices on the keypad data bus.
- 6.2**

DEVICE NO:-
-------------

**Device Number**  
Enter the device number of the keypad you are programming. The valid range is 1-8. If using a wireless keypad, program the device number in the Status List Auxiliary 1 Zones programming option to display wireless keypad troubles.  
**Note:** After you program each option for the first keypad, repeat these programming steps for each additional keypad.
- 6.3**

* UNUSED *
------------

**Device Name**  
A device name must be given to each device in the system. To add a device name, press any Select key. The default device name (DEVICE X) displays. Select COMMAND to accept the default name or press a Select key to enter a new name up to 32 alphanumeric characters. Press the COMMAND key.  
To remove a device from the system, delete the device name by pressing any Select key, then press the COMMAND key. The panel automatically programs the name as \* UNUSED \*.
- 6.4**

TYPE: <b>KEYPAD</b>
DOOR KPD FI EXP

**Device Type**  
This section allows you to select a device type for the selected device number.  
**DOOR** - The device is an access control device and is either a keypad using door strike functions or a Wiegand Interface Module.  
**KEYPAD** - The device is a keypad.  
**FIRE** - The device is a 630F Remote Annunciator.  
**EXPANDER** - The device is a Zone Expansion Module.  
**Note:** The following options display based on device type selected:
- 6.5**

DEVICE COMM TYPE
<b>KPD-BUS</b>

DEVICE COMM TYPE
KPD-BUS NETWORK

DEVICE COMM TYPE
KPD-BUS WIRELESS

**Device Communication Type**  
For a Device Type of DOOR, select KPD-BUS to communicate with the device on the keypad bus or select NETWORK to communicate with the device using a network connection. Default is KPD-BUS.  
For a Device Type of KEYPAD, select KPD-BUS to communicate with the device on the keypad bus or select WIRELESS to communicate with the device using a wireless connection. Default is KPD-BUS.
- 6.6**

WIRELESS? <b>NO</b> YES
-------------------------

**Wireless**  
Select YES to use a wireless keypad. Select NO to use a wired keypad. Default is NO. You can install and address up to four wireless keypads.
- 6.6.1**

SERIAL#: XXXXXXXX
-------------------

**Serial Number**  
Enter the eight-digit serial number found on the wireless keypad.
- 6.6.2**

SUPRVSN TIME: <b>240</b>
--------------------------

SELECT MINUTES:
0      60      240

**Supervision Time**  
Press any top row key to select the supervision time required for the device. Press COMMAND to accept the default time. Default is 240 minutes.  
Press the Select key under the required number of minutes. The device must check in at least once during this time or a missing condition is indicated for that device. Zero (0) indicates an unsupervised wireless keypad.  
**Note:** When the panel is reset, panel is powered down and powered up, or programming is complete, the supervision timer restarts for all wireless keypads.
- 6.7**

ACCESS AREAS:
1   2   3   4
5   6   7   8

**Access Areas**  
Press the COMMAND key to program Access Areas. To select an area, enter the area number using the digit keys on the keypad. When an area is selected, an asterisk appears next to the area number. Enter the number again to deselect the area. Refer to the Multiple Displays section at the beginning of this document.  
Users must have matching access area numbers assigned to their code to receive a door access at this device.

If you do not enter any area numbers, all users with Door Access authority receives a door access without regard to schedules. If the user code is programmed for Anti-Pass YES, then the user is logged into all matching areas. This user is not allowed to access these areas again until they have egressed the area. See Egress Areas.

When all areas accessed by a door are armed, the door is locked by the panel.

**Note: For an All/Perimeter, Home/Sleep/Away, or Home/Sleep/Away with Guest system, Access Areas should be left at factory default settings.**

## 6.8

EGRESS AREAS:			
1	2	3	4
5	6	7	8

### Egress Areas

Press the COMMAND key to program Egress Areas. To select an area, enter the area number using the digit keys on the keypad. When an area is selected, an asterisk appears next to the area number. Enter the number again to deselect the area. Refer to the Multiple Displays section at the beginning of this document.

**Note: For an All/Perimeter, Home/Sleep/Away, or Home/Sleep/Away with Guest system, Egress Areas should be left at factory default settings.**

**Note:** If an area is programmed as an access area, it cannot be programmed as an egress area and therefore does not display during Egress Areas programming.

Use this option to detect Anti-passback violations. Anti-passback requires a user to properly exit (egress) an area they have previously accessed. If users fail to exit through the proper card reader location they are not granted access on their next attempt. Users must have matching access area numbers assigned to their profile, to receive a door access at this device. If the user is programmed for Anti-Pass YES, then the user is logged out of all matching areas. This allows the user to again access the area. See Access Areas section.

If you do not enter any area numbers, all users with Door Access authority receives a door access without regard to schedules. If you are not using the Anti-Pass feature leave Egress Areas blank.

## 6.9

DISPLAY AREAS:			
*1	*2	*3	*4
*5	*6	*7	*8

### Display Areas

Press the COMMAND key to program Display Areas. To select an area between 1 and 8, enter the area number using the keypad digit keys. When an area is selected, an asterisk appears next to the area number. Enter the number again to deselect the area. Default is all area numbers. Refer to the Multiple Displays section at the beginning of this document.

Display Areas allows the XR100 Series burglary activities to be segmented so that only specific area(s) and their associated operation appear at a particular keypad. Area number(s) selected in this field affect the way users interact with the system from this particular device. For example: Program Device 1 to show only the zone activities and armed status of Area 1.

Enter the area number(s) that this keypad is to display. This allows specific area control from specific keypads, as well as annunciation of zones assigned to those area(s). When Display Areas is left defaulted (all areas selected), Menu Display and Status List items determine whether zone alarms and troubles display at this device, regardless of area assignment. Also, all system areas may be armed and disarmed from this device.

**Note: For an All/Perimeter or Home/Sleep/Away system, Display Areas should be left at factory default settings.**

For Home/Sleep/Away with Guest arming systems, the Display Areas selection determines which system the keypad arms and disarms. With areas 1, 2 or 3 being the first areas selected, the keypad is assigned to the Main system. With area 4, 5 or 6 being the first areas selected, the keypad is assigned to the Guest system.

#### User Action Allowed

When an area(s) is selected, the following user actions are allowed:

- Arming or Disarming of the area(s) selected from the ARM or DISARM menu
- Alarm Silence for the area(s) selected
- Zone Bypass of zones assigned to the area(s) selected
- Zone Monitor of zone assigned to the area(s) selected
- Shift schedule changes allowed for the area(s) selected
- Closing Check Schedule Extend is allowed for the area(s) selected
- Door Schedules changes are allowed for devices that have a matching area(s) as defined in Device Access Areas

- Door On/Off Menu operation is allowed for devices that have a matching area(s) as defined in Device Access Areas

**Note:** The previous user actions also require the matching area(s) be programmed in User Profile: Arm/Disarm area(s).

## Status Display Allowed

When an area(s) is chosen, the following displays are allowed:

- Armed Status of the selected area(s)
- Zone Alarms and troubles for burglary (NT, DY, EX, A1, A2) type zones assigned to the selected area(s)
- Late to Close status of the selected area(s)
- Zone Status (normal/fault) of zones that are assigned to the selected area(s)

## Options and Actions Not Affected

The following options are not affected by the Display Areas operation. The User Code authority level controls access to these items.

- Sensor Reset Menu
- Outputs On/Off Menu
- System Status Menu
- System Test/Panic Test
- User Profiles
- Forgive Anti-Passback
- Service Request
- Set System Time and Date
- Fire Drill
- Display Events
- 24-hour zones display at keypads based on Status List programming only

**Note:** A common area and its operations cannot be assigned to a specific keypad.

Display Areas example: When Device 1 has Display Areas set to 3, 5, and 8, it annunciates troubles and alarms only for zones assigned to those areas. When arming/disarming from Device 1, only areas 3, 5, and 8 may be armed/disarmed, even when the User Profile has authority to arm/disarm other system areas.

Exception: Disarming of other areas not selected in Display Areas can be accomplished by presenting a card that has disarming authority and matching profile areas with areas assigned in Device Access Areas.

6.10

STRIKE TIME: 5

## Strike Time

This option displays if DOOR is selected as Device Type.

Enter a door access time, between 1 and 250 seconds, during which a keypad or access control device relay is activated. Magnetic locks or electric door strikes are connected to the relay and released for the length of the strike time. Default is 5 seconds.

Enter 0 (zero) to activate the device relay with a toggle action. This allows the user to activate or deactivate the device relay each time a valid user code is entered. The device relay is activated or deactivated until a user code is entered again.

**Note:** The Request to Exit door access time of a keypad or Model 733 Wiegand Interface Module is not affected by this selection. It remains at 5 seconds.

6.11

STRIKE DELAY: 0

## Strike Delay

This option displays if DOOR is selected as Device Type.

Enter the number of minutes, 0 to 9, to delay a door strike after a valid code is entered or a card read occurs. When a valid code or card read or code is received, the activation of the door strike is delayed for the number of minutes programmed. The standard door strike message is sent to the Central Station receiver and logged in the Display Events at the time of card read or code entry and is not delayed. During this delay, all subsequent codes entered or cards presented to the reader for a door strike are ignored and no record of the attempt is stored. Enter 0 (zero) to disable. Default is 0 (zero).

6.12

FIRE EXIT NO YES

## Fire Exit Release

Select YES to allow the door access relay at this address to be released whenever Fire panic keys are pressed or a Fire or Fire Verify zone alarm is in the Status List. The relay is reset whenever a Sensor Reset is performed to remove all Fire and Fire Verify zone alarms from the Status List. Select NO to not allow the door access relay at this address to be released.

6.13

OUT GROUP NO YES

## Output Group

Select YES to allow the output group (relays) assigned to the user profile to turn ON when the device relay is activated for the programmed strike time. This could be used to operate an elevator control. Default is NO. See the User Profiles section in the Appendix of this document for more information about profiles.

6.14

OVERRIDE NO YES

## Schedule Override

Use this option to allow door ON/OFF schedules to be overridden by the armed condition of the system. Selecting YES causes the on time for a door schedule to be ignored when all areas assigned to Access Areas for this device are armed. Should any area become disarmed after the door schedule on time, the device output turns on. A door output which is on during a disarmed period automatically turns off when all access areas assigned to the device become armed, even if the scheduled off time has not been reached. This feature can be used to keep doors locked when a factory opens late, or is forced to close early, due to a snow storm or other cause. Select NO to allow door schedules to operate independent of system armed status.

**Note:** When OVERRIDE is YES and there are no areas programmed in ACCESS AREAS, the door schedule for that device does not work. Either set OVERRIDE to NO or enter an area number in ACCESS AREAS.

6.15

AUTO FORCE ARM  
DEVICE? NO YES

## Auto Force Arm Device?

Select YES to have all Display Areas assigned to this keypad automatically arm and force arm faulted zones at arming. The user is not prompted to select areas to arm or force arm faulted zones after choosing ARM at the keypad. If Closing Code is programmed as YES, only the matching areas between the Display Areas and the User Code's authorized areas arm. Also, when YES is selected, the user is not prompted to select areas to disarm after entering a code at Entry Delay or after choosing Disarm at the keypad. All matching areas assigned to the User Code and to this keypad are automatically disarmed. When NO is selected, the user is prompted to select areas (ALL NO YES) and choose to force arm or bypass at arming and disarming. Default is NO.

6.16

DOOR REAL-TIME  
STATUS? NO YES

## Door Real-Time Status?

Select YES to have real-time door status messages sent to PC Log reporting and Entré reporting for this device. Messages are sent anytime the panel turns the door relay on or off. Default is NO.

6.17

SEND DOOR FORCED  
MESSAGE? NO YES

## Send Door Forced Message?

Select YES to have the panel send a real-time door status message of Forced Open (FO) to PC Log reporting and Entré reporting when the door relay is off, but the door zone has transitioned from its normal state. Default is NO.

6.18

PROGRAM 734  
OPTIONS? NO YES

## Program 734/734N Options

Select YES to program a 734 or a 734N/734N-WiFi Wiegand Interface Module. The options displayed for a 734 or a 734N are the same.

To program a 734, the Device type must be set to DOOR and the Device Communication Type must be set to KPD BUS.

To program the 734N/734N-Wifi, the Device Type must be set to DOOR and the Device Communication Type must be set to NETWORK.

6.18.1

ACTIVATE ZONE 2  
BYPASS? NO YES

## Activate Zone 2 Bypass

Select YES to activate the Bypass option.

Selecting NO allows standard zone operation on Zone 2 and displays the ACTIVATE ZONE 3 REX option. Default setting is NO.

If the door being released by the 734/734N/734N-WiFi module is protected (contact installed), you can provide a programmable Bypass entry/exit timer by connecting its contact wiring to a 734/734N/ 734N-WiFi module Zone 2. When the on-board Form C relay activates and the user opens the door connected to Zone 2, the zone is bypassed for the number of seconds programmed in ZONE 2 BYPASS TIME allowing the user to enter/exit. If Zone 2 does not restore (door closed) within the programmed bypass time, the 734/734N/734N-WiFi piezo pulses during the last ten seconds. If Zone 2 restores prior to the end of the programmed time, the piezo silences. If the zone does not restore before the programmed time, the 734/734N/734N-WiFi ends the bypass and indicates the open or short zone condition to the panel.

6.18.2

ZONE 2 BYPASS  
TIME: 40

## Zone 2 Bypass Time

Enter the number of Bypass seconds to elapse before the Bypass timer expires. Range is from 20 to 250 seconds. Press any top row select key to enter the number of seconds. If the door remains open when the timer expires a zone open/short is sent to the panel for Zone 2. The default is 40 seconds.

6.18.3

RELOCK ON ZONE 2  
CHANGE? NO YES

## Relock on Zone 2 Change?

Selecting NO leaves the relay on when Zone 2 faults to an open or short condition during Bypass. Selecting YES turns the 734/734N/734N-WiFi relay off when Zone 2 changes state. The default is NO



## 6.18.4

ACTIVATE ZONE 3  
REX? **NO** YES

### Activate Zone 3 Request to Exit

Selecting YES activates the Zone 3 Request to Exit (REX) option.

Selecting NO allows standard zone operation on Zone 3 and displays the ACTIVATE ONBOARD SPEAKER option. Default setting is NO.

Optionally connect a PIR (or other motion sensing device) or a mechanical switch to Zone 3 to provide REX capability to the system. When Zone 3 **shorts**, the on-board Form C relay activates for the programmed number of seconds. During this time, the user can open the protected door to start the programmed Bypass™ entry/exit timer. After the programmed number of seconds, the relay restores the door to its locked state.

The 734/734N/734N-WiFi module provides a bypass-only option for REX on Zone 3. When Zone 3 opens from a normal state, only a Bypass occurs: the on-board relay does not activate. This bypass-only option uses two methods of REX. The first REX device provides the programmed Bypass entry/exit timer. The second REX device, or manual device such as a door knob, unlocks the door.

An example of the bypass-only configuration is a door to an office that is locked 24 hours a day. Users pass a REX motion detector positioned by the door to begin the programmed exit timer. Within the programmed number of seconds the user must then manually activate a second device, such as a REX device or manual door knob, to unlock the door. If the door is opened after the programmed number of seconds, the zone goes into alarm.

## 6.18.5

ZN 3 REX STRIKE  
TIME: **5**

### Zone 3 REX Strike Time

Enter the number of REX seconds to elapse. Range is from 5 to 250 seconds. Press any top row select key to enter the number of seconds. The default is 5 seconds.

Press the COMMAND key to move forward to the ACTIVATE ONBOARD SPEAKER option.

The Back Arrow returns to ACTIVATE ZONE 3 REX.

## 6.18.6

ACTIVATE ONBOARD  
SPEAKER? **NO** YES

### Activate Onboard Speaker

Select YES to enable the onboard piezo speaker for local annunciation. Select NO to turn the piezo off for all operations. This does not affect remote annunciator open collector (RA) operation. The default is NO.

## 6.18.7

CARD OPTIONS:  
**DMP**

### Card Options

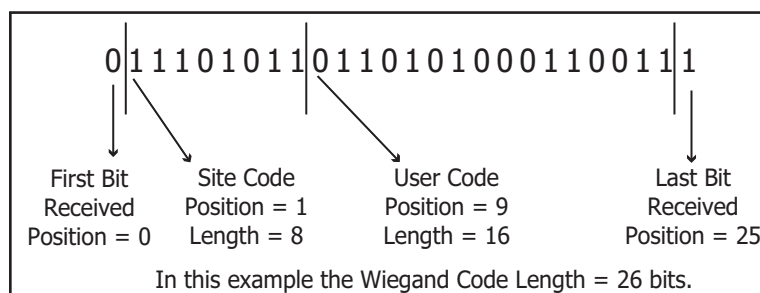
Press any top row Select key to display options. Press the select key under DMP, CUSTOM, or ANY to select that option. Select DMP to indicate the reader sends a 26-bit DMP data string. Press the COMMAND key to display REQUIRE SITE CODE.

**Note: When set to DMP, the 734/734N/734N-WiFi converts 17 bits of the 26-bit data string into a 5-digit number.**

Select CUSTOM if using a non-DMP card or user code length of 6 to 10 digits. Default is DMP.

Select ANY to allow all card reads to activate the door strike relay. The door strike relay is activated for the length of time programmed in ZN 3 REX STRIKE TIME. No user code information is sent to the panel.

CARD OPTIONS:  
**DMP** CUSTOM ANY



## 6.18.8

WIEGAND CODE  
LENGTH: **26**

### Custom Card Definitions

#### Wiegand Code Length

When using a custom credential, enter the total number of bits to be received in Wiegand code including parity bits.

Press any top row Select key to enter a number between 1-255 to equal the number of bits. Default is 26 bits.

Typically, an access card contains data bits for a site code, a user code, and start/stop/parity bits. The starting position location and code length must be determined and programmed into the 734/734N/734N-WiFi.

## 734 Site Code Programming

6.18.9

SITE CODE  
POSITION: 1

### Site Code Position

Enter the site code start position in the data string. Press any top row Select key to enter a number between 0-255. Default is 1.

6.18.10

SITE CODE  
LENGTH: 8

### Site Code Length

Enter the number of characters the site code contains. Press any top row Select key to enter a number between 1-16. Default is 8.

6.18.11

USER CODE  
POSITION: 9

### User Code Position

Define the User Code start bit position. Press any top row Select key to enter a number between 0-255. Default is 9.

6.18.12

USER CODE  
LENGTH: 16

### User Code Length

Define the number of User Code bits. Press any top row Select key to enter a custom number. Custom numbers can only be a number between 16-32. On a 734N/734N-WiFi module, custom numbers can be between 1-255. The default is 16.

6.18.13

REQUIRE SITE  
CODE? NO YES

### Require Site Code

Press the top row Select key under YES to use a site code.

In addition to User Code verification, door access is only granted when any one site code programmed at the SITE CODE ENTRY option matches the site code received in the Wiegand string.

6.18.13.1

SITE CODE 1: -

### Site Code Display

**734 Module:** You can program up to 8 three-digit site codes. Site code range is 0-999. Any previously programmed site codes display. Dashes represent blank site codes. Default is blank.

**Note:** A card with a site code greater than three digits cannot be used. Use only cards with three-digit site codes.

SITE CODE 1:  
(1-65,535) 127

**734N/734N-WiFi Module:** You can program up to 8 five-digit site codes. Site code range is 1-65535. Any previously programmed site codes display. Site Code 1 defaults to 127. Site Codes 2-8 default to blank. Dashes represent blank site codes.

Site Code 1 displays first. Enter a site code number followed by the Command key to advance to the next option, Site Code 2. To delete an existing site code, press any Select key. Either enter a new site code followed by Command, or press Command to leave blank and continue to the next site code. Repeat these steps to change, delete, or add up to 8 site codes.

6.18.14

NO OF USER CODE  
DIGITS: 5

### Number of User Code Digits

The 734 module recognizes user codes from four to ten digits in length. The 734N/734N-WiFi module recognizes user codes from 1-10 digits in length. Press any top row Select key to enter a user code digit length between 4-10 digits. This number must match the user code number length being used by the panel. Default is 5. For an XR100 Area System, use 4 to 10 digits (typically 5).

Any selection above 5 digits require entry of the custom card definitions with custom site and user code positions for the Wiegand string. When searching the bit string for the user code, the digits are identified and read from left to right.

## REMOTE OPTIONS

6.18.15

NO COMM WITH PNL  
OFF SITE ANY ON

### No Communication with Panel

This option defines the relay action when communication with the panel has not occurred for five seconds. Press any top row Select key to display relay action options. Press the Back Arrow key to return to the NO OF USER CODE DIGITS:.

Choose the action required:

Press the first Select key to choose OFF [Default] (Relay Always Off) – The relay does not turn on when any Wiegand string is received. Off does not affect any REX operation. Press the second Select key to choose SITE (Accept Site Code) – Door access is granted when the Wiegand site code string received matches any site code programmed at SITE CODE ENTRY. For details refer back to the REQUIRE SITE CODE option.

Press the third Select key to choose ANY (Any Wiegand Read) – Door access is granted when **any** Wiegand string is received.

Press the fourth Select key to choose ON (Relay Always On) – The relay is always on. Press the COMMAND key to display the next action.

Press the first Select key to choose LAST (Keep Last State) – The relay remains in the same state and does not change when communication is lost.

After choosing the action, the NO COMM WITH PNL option and the newly defined action display.

Programming is now complete. Press the COMMAND key to display DEVICE NO. granted when any Wiegand string is received.

NO COMM WITH PNL  
OFF

NO COMM WITH PNL  
SITE

NO COMM WITH PNL  
ANY

NO COMM WITH PNL  
ON

NO COMM WITH PNL  
LAST

## Remote Options

7.1

REMOTE OPTIONS

### Remote Options

This section allows you to enter the information needed for Remote Command/ Remote Programming operation.

7.2

RMT KEY:

### Remote Key

This option allows you to enter a code of up to 16 digits for use in verifying the authority of an alarm or service receiver to perform a remote command/ programming session. The Remote Link™ program must give the correct key to the panel before being allowed any remote functions. All panels are shipped from the factory with the key preset as blank.

To enter a remote key or change the current one, press a top row Select key and enter any combination of up to 16 digits. Press COMMAND. The current key display as astericks.

7.3

REMOTE DISARM?  
NO YES

### Remote Disarm

YES allows the panel to be disarmed remotely. NO disables remote disarming. Default is NO.

7.4

ARMED ANSWER

RINGS: 8

### Armed Answer Rings

Enter the number of rings the panel counts before answering the phone line when all system areas are armed. Any number from 0 to 15 can be entered. If 0 (zero) is entered, the panel does not answer the phone when all system areas are armed. The default Armed Rings is 8 (eight).

**Answering machine bypass procedure:** Entering a number greater than 0 (zero) into either Armed Rings or Disarmed Rings, allows a central station operator to connect remotely with the panel.

**How it works:** The operator calls the panel, allows the telephone to ring one time, and then hangs up. The panel stores this as an attempt to communicate. The operator then calls back within 30 seconds. The panel seizes the telephone line to allow remote programming.

**Note:** This feature does not interfere with the normal operation of the Arm Rings or Disarm Rings functions.

7.5

DISARMED ANSWER  
RINGS: 8

### Disarmed Answer Rings

Enter the number of rings the panel counts before answering the phone line while any system areas are disarmed. Any number from 0 to 15 can be entered. If 0 (zero) is entered, the panel does not answer the phone when any system area is disarmed. The default number of Disarmed Rings is 8 (eight).



- 7.6** PC MODEM ☐ NO ☒ YES **PC Modem**  
 YES allows the panel to answer the telco link and connect with Remote Link through the PC Modem at 2400 baud. NO disables PC Modem communication.
- 7.7** ALR RCVR ☐ NO ☒ YES **Alarm Receiver Authorization**  
 Select YES to enable remote commands and programming to be accepted from the alarm SCS-1R Receiver. The Remote Key option can also be required.  
 With YES selected, the panel requests the receiver key during its first communication with the first SCS-1R Receiver. The panel retains this alarm receiver key in memory and allows remote commands to be accepted from the alarm receiver. If an alarm occurs during a remote connect, the alarm report is immediately sent to this receiver only.  
 When NO is selected, remote commands and programming are not accepted from the alarm SCS-1R Receiver.
- 7.8** SVC RCVR ☐ NO ☒ YES **Service Receiver Authorization**  
 YES enables remote commands and programming to be accepted from a secondary service receiver other than the alarm SCS-1R Receiver. The Remote Key option can also be required.  
 With YES selected, the panel requests the service receiver key the first time it is contacted by the service receiver. The panel retains this service receiver key in memory and accepts remote commands from the service receiver.  
 If an alarm occurs during a remote connect, the panel disconnects from the service receiver and calls the alarm receiver. Alarm reports are only sent to the alarm receiver. It is important that the alarm receiver key and the service receiver key programmed at the central station are NOT the same so the panel can determine the difference between receivers.  
 When NO is selected remote commands and programming are not accepted from a secondary service receiver.  
 This option must be YES to allow programming from a directly connected computer or an iCOM/iCOM-E.
- 7.9** MANUFACTURER ☐ **Manufacturer Authorization**  
AUTH? ☐ NO ☒ YES Select YES to allow DMP Technical Support technicians to access the panel during system service or troubleshooting. This authorization automatically expires within one hour.  
 DMP remote service is provided on a read only basis: DMP technicians can look at the system programming and make suggestions only. Alterations can only be accomplished by installing company service personnel.
- 7.10** ALLOW NETWORK REMOTE? ☐ NO ☒ YES **Allow Network Remote**  
 This option displays only if the panel has network capability. YES allows remote programming over the network. Changing this option does not change any other network programming options. Default is YES.
- 7.10.1** NETWORK PROG ☐ **Network Programming Port**  
PORT:  Enter the programming port number. The programming port identifies the port used to communicate messages from the panel. The default Programming Port setting is 2001.
- 7.10.2** ENCRYPT NETWORK REMOTE? ☐ NO ☒ YES **Encrypt Network Remote**  
 YES encrypts data sent over network. Default is NO.
- 7.11** ALLOW CELL REMOTE? ☐ NO ☒ YES **Allow Cellular Remote**  
 YES allows remote programming using cellular connection. Default is YES.
- 7.11.1** FIRST GPRS APN  **First GPRS APN**  
 Enter the first APN (Access Point Name). This allows an access point for cellular communication and is used to connect to a DNS network. The APN may contain two lines of 16 characters to equal 32 characters. Default is set to SECURECOM400.
- SECOND GPRS APN  **Second GPRS APN**  
 Enter the second APN (Access Point Name). This works as a backup in case the first APN fails. The APN may contain two lines of 16 characters to equal 32 characters. Default is set to SECURECOM400.

## REMOTE OPTIONS

- 7.11.2**

ENCRYPT CELL REMOTE?	<b>NO</b>	YES
-------------------------	-----------	-----

**Encrypt Cellular Remote**  
YES encrypts data sent over a cellular connection. Default is NO.
- 7.12**

ENTRE CONNECTION:	<b>NONE</b>
----------------------	-------------

**Entré Connection**  
This option displays only if the panel has network capability. Select NET to allow a dedicated network connection with Entré. Options are NONE or NET. Default is NONE.
- 7.12.1**

ENTRE INCOMING TCP PORT:	<b>2011</b>
-----------------------------	-------------

**Entré Incoming TCP Port**  
This option displays only if NET is chosen for the Entré connection. Enter the programming port number for the incoming Entré connection. The programming port identifies the port used to communicate messages to and from the Entré software. This port cannot be the same port as programmed in Network Programming Port. The default Programming Port setting is 2011.
- 7.12.2**

ENTRE IP
000.000.000.000

**Entré IP Address**  
This option displays only if NET is chosen for the Entré connection. Enter the Entré IP address where the panel sends network messages. The Entré IP Address must be unique and cannot be duplicated on the network. Enter all 12 digits and leave out the periods. For example, enter IP address 192.168.0.250 as 192168000250. The periods display automatically. Default is 0.0.0.0
- 7.12.3**

ENTRE OUTBOUND TCP PORT:	<b>2001</b>
-----------------------------	-------------

**Entré Outbound TCP Port**  
This option displays only if NET is chosen for the Entré connection. Enter the programming port number for the outbound Entré connection. The programming port identifies the port used to communicate messages to the Entré software. Default is 2001.
- 7.12.4**

ENTRE BACKUP IP:
000.000.000.000

**Entré Backup IP Address**  
This option displays only if NET is chosen for the Entré connection. Enter the IP backup address where the panel sends network messages if the first Entré IP Address fails. The Entré IP Address must be unique and cannot be duplicated on the network. Enter all 12 digits and leave out the periods. For example, enter IP address 192.168.0.250 as 192168000250. The periods display automatically. Default is 0.0.0.0
- 7.12.5**

ENTRE BACKUP TCP PORT:	<b>2001</b>
---------------------------	-------------

**Entré Backup TCP Port**  
This option displays only if NET is chosen for the Entré connection. Enter the backup programming port number for the outbound Entré connection in case the connection to the primary IP fails. Default is 2001.
- 7.12.6**

ENTRE CHECKIN MINUTES:	<b>0</b>
---------------------------	----------

**Entré Checkin**  
Select the rate at which check-in messages are sent over the Entré connection. Select 0 (zero) to disable check in messages. Range is 0, 3-240 minutes. Default is 0.
- 7.12.7**

ENTRE PASSPHRASE
-

**Entré Passphrase**  
To enable encryption enter an 8 to 16-character Passphrase using alphanumeric characters. If you leave the Passphrase blank, the panel communicates with Entré, but the data is not encrypted. The Passphrase is blank by default.
- 7.13**

SEND LOCAL CHANGES?	<b>NO</b>
------------------------	-----------

**Send Local Changes**  
This option allows the panel to automatically update a remote programming computer at the central station with any changes made to the panel.
- |           |
|-----------|
| NO NET DD |
|-----------|

 Select NET or DD to send local programming changes or User Menu changes to user codes, user profiles, schedules, or holiday dates to Remote Link after exiting the programming or User Menu. If NET is selected, changes are sent using Network. If DD is selected, changes are sent using Dialer. Default is NO to disable this feature.
- 7.13.1**

REMOTE CHANGE IP
000.000.000.000

**Remote Change IP**  
This option displays when NET is selected for Send Local Changes. Enter the IP address containing up to 12 digits. The Net IP Address must be unique and cannot be duplicated on the network. Enter all 12 digits and leave out the periods. For example, enter IP address 192.168.0.250 as 192168000250. The periods display automatically. Default is 000.000.000.000

**7.13.2**  **Remote Change Port**  
 This option displays when NET is selected for Send Local Changes. Enter the Port number. Valid numbers are from 0 to 65535. Default is 2002.

**7.13.3**  **Remote Telephone Number**  
  
 This option displays when DD is selected for Send Local Changes. Press COMMAND to enter the phone number the panel dials when sending programming changes. After entering a phone number, the panel sends any panel changes to Remote Link.

The phone number can have two lines of 16 characters each to equal 32. Enter a P to program a two second pause in the dialing sequence. The P character counts as part of the 32 allowable characters. Enter \*70P as the string first characters to cancel call waiting. Dial tone detect is an automatic panel function.

## System Reports

**8.1**  **System Reports**  
 Select specific system reports the panel sends to the receiver.

**8.2**    **Abort Report**  
**YES** allows the panel to send an alarm abort report to the receiver any time an area is disarmed during Transmit Delay before an alarm report is sent and the Bell Cutoff Time has not expired. After disarming an area, if any other area remains armed and has zone(s) in alarm, the alarm abort report is not sent.  
 If the communication type is set to DD, a Warning: Alarm Bell Silenced report is also sent if the alarm bell is silenced.

**Note:** Abort Reports are not sent for Fire, Fire Verify, or Supervisory type zones.

**8.3**   **Restoral Reports**  
 This option allows you to control when and if a zone restoral report is sent to the central station receiver. Press any Select key to display the following options:  
   **NO** - Disables the zone restoral report option. Zones continue to operate normally but do not send restoral reports to the receiver.  
**YES** - Enables the zone restoral report option. Zone restorals are sent whenever a zone restores from a trouble or alarm condition.

**DISARM** - Causes the panel to send restoral reports for a non-24-hour zone whenever a zone that has restored from a trouble or alarm condition is disarmed. All 24-hour zones send restoral reports as they restore.

**Note:** For UL applications, Restoral Reports must be set to YES.

**8.4**    **Bypass Reports**  
**YES** allows the panel to send all zone bypasses, resets, and force arm reports to the receiver. The bypass report includes the zone number, zone name, and the user name and number of the individual operating the system. Reports are only sent if O/C User in Communications is set YES for Receiver 1 or Receiver 2.

**8.5**    **Schedule Change Reports**  
**YES** allows the panel to send all schedule changes to the receiver. The report includes the day, opening time, closing time, extend schedule time, and the user name and number of the individual making the change. Schedule changes made through Remote Link™ are not sent to the printer or Display Events.

**8.6**    **Code Change Reports**  
**YES** allows the panel to send all code additions, changes, and deletions to the receiver. The code change report includes the user name and number added or deleted and the user name and number of the individual making the change. Code changes made through Remote Link™ are not sent to the printer or Display Events. Reports are only sent if O/C User in Communications is set YES for Receiver 1 or Receiver 2. The default setting is YES.

- 8.7** ACCESS KEYPADS: **Access Keypads**  
 Select the keypad addresses (1 through 8) that send door access reports to the receiver. Enter the keypad number using the digit keys. An asterisk next to the number indicates that the keypad is selected.
- A report is sent with each door access made from the selected keypads. Keypads at addresses not selected still operate the door relay but do not send access reports. The report includes the user number, user name, keypad address, and device name.

- 8.8** AMBUSH NO YES **Ambush**  
 YES allows an ambush report to be sent anytime user code number 1 is entered at a keypad. NO disables the ambush report and allows user number 1 to operate the same as all other codes.

## System Options

- 9.1** SYSTEM OPTIONS **System Options**  
 This section allows you to select system-wide parameters.

- 9.2** SYSTEM: AREA **System**  
 This option allows you to program how the areas operate for arming and disarming. The options you can choose are listed below:

AREA A/P H/A GST

**AREA** - All eight areas can be programmed and operated independently.

**ALL/PERIMETER** - Area 1 is the Perimeter and Area 2 is the Interior.

**HOME/SLEEP/AWAY** - Area 1 is the Perimeter, Area 2 is the Interior, and Area 3 is the Bedrooms. With the HOME/SLEEP/AWAY option, the user can:

1. Select HOME to arm just the perimeter.
2. Select SLEEP to arm the perimeter and interior (non bedroom areas).
3. Select AWAY to arm all three areas.

**Note:** A Home/Sleep/Away system can be configured to use all three areas or only use the Home and Away areas.

**HOME/SLEEP/AWAY WITH GUEST**- This allows the alarm system to be divided into a main house HOME/SLEEP/AWAY system and a guest house that is also set up as a HOME/SLEEP/AWAY system.

Areas 1,2, and 3 are the Perimeter, Interior, and Bedrooms for the Main house system. Areas 4, 5, and 6 are the Perimeter, Interior, and Bedrooms for the Guest system. These areas are automatically assigned per system and cannot be changed. See Display Areas in Device Setup to assign keypads to a system. Zones are assigned to a system by assigning the system's area numbers to the zone in Zone Information programming.

When either All/Perimeter or Home/Sleep/Away is selected, the area names are automatically assigned and cannot be modified.

**Note:** Areas 3-6 in an All/Perimeter system and areas 4-6 in a Home/Sleep/Away system are not available for use and are initialized.

- 9.3** INST ARM NO YES **Instant Arming**  
 When YES is selected, the arming keypad displays INSTANT for selection during the exit countdown delay when arming fewer than all areas of the system. At the time instant arming is selected, any entry and exit delays programmed for the areas being armed are ignored. The entry delay for previously armed areas is not affected by instant arming. When NO is selected, INSTANT does not display during arming. Default is NO for an Area System, and YES for an All/Perimeter or Home/Sleep/Away system.

- 9.4** CLS WAIT NO YES **Closing Wait**  
 When YES is selected, the keypad displays ONE MOMENT... while waiting for an acknowledgement from the receiver before arming the selected area(s) and performing a Bell Test (if selected). Exit delays begin after the Closing Wait. Opening/Closing reports must be YES to enable Closing Wait.

9.5

ENTRY DLY 1:	30
ENTRY DLY 2:	60
ENTRY DLY 3:	90
ENTRY DLY 4:	120

## Entry Delay 1

Enter the Entry Delay time for all Exit type zones programmed to use Entry Delay 1. When an armed Exit type zone is faulted, the keypad prewarn tone begins sounding. All keypads programmed to prewarn for that zone display ENTER CODE:- and the name of the zone causing the entry delay. When the first digit of a code is entered, the prewarn tone stops at that keypad. If an invalid code is entered, the prewarn tone begins sounding again. The area must be disarmed before the delay expires or an alarm report is sent to the receiver and an alarm sounds. All zones in that area are delayed along with the Exit zone. Entry Delay times can be from 30 to 250 seconds. Repeat the above for each entry delay being used in the system.

**Note:** Specific Exit Error operation is based on the Entry Delay used (1-4) with an EX type zone. See Exit Delay.

**Note:** For UL Installations, the combined Transmit Delay (Abort Window) and Entry Delay must not exceed one (1) minute.

9.6

CRS ZONE TM:	4
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## Cross Zone Time

Enter the time allowed between zone faults. When zones are cross zoned, the same zone or a second cross zoned zone must fault within this time in order for an alarm report for both zones to be sent to the receiver. If the cross zone time expires without the second zone faulting, only a zone fault from the first zone is reported. Cross-zone time can be from 4 to 250 seconds. Entering 0 (zero) disables this function. Default is 4. See the Appendix.

9.7

RETARD DELAY:	10
---------------	----

## Zone Retard Delay

Enter the retard time assigned to Fire, Supervisory, Auxiliary 1, Auxiliary 2, Arming, and Panic type zones. The retard delay only functions when the zone is shorted. The zone must remain shorted for the entire length of the Retard Delay before being recognized by the panel. The Zone Retard Delay can be from 1 to 250 seconds. Entering a 0 (zero) disables this function.

9.8

PWR FAIL HRS:	1
---------------	---

## Power Fail Delay

This option tracks the duration of an AC power failure. When the AC power is off for the length of the programmed delay time, an AC power failure report is sent to the receiver. The delay time can be from 1 to 15 hours. Entering a 0 (zero) sends the power failure report after a 15-second delay. The default setting is 1.

**Note:** For UL burglary installations Power Fail Delay shall be programmed to 0 (zero).

**Note:** For UL fire installations, Power Fail Delay shall be programmed as required by the service of the panel. For Central Station service: 6-12, for Remote Station service: 12-15.

9.9

SWGRBYP TRIPS:	2
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## Swinger Bypass Trips

Enter the number of times (1-6) a zone can go into an alarm or trouble condition within one hour before being automatically bypassed. You can select one or two trips. Bypassed zones are automatically reset when the area they are assigned to is disarmed. All 24-hour zones are reset when any area of the system is disarmed. A programming Stop operation restores a bypassed zone. Entering 0 (zero) disables this function. Default is 2.

### How it works

The panel hour timer starts at 59 minutes past the hour. If the hour timer expires before the trip counter is exceeded, the trip counter returns to 0 (zero). If the trip counter is exceeded before the hour expires, the zone is automatically bypassed by the panel. A Bypass Report is sent to the receiver if Bypass Reports is YES.

**Note:** Not investigated by UL.



# SYSTEM OPTIONS

## 9.10 ☐ RST SBYP ☒ NO ☐ YES **Reset Swinger Bypass**

When YES is selected, an automatically bypassed zone is reset if it remains in a normal condition for one complete hour after being bypassed. A report of the automatic reset is sent to the receiver if Bypass Reports has been selected as YES. Default is NO.

**Note:** Not investigated by UL.

## 9.11 ☐ TIME CHG ☒ NO ☐ YES **Time Zone Changes**

This function allows the panel to request automatic time changes from the DMP SCS-1R Receiver on Path 1. For the receiver to send time changes, it must be programmed to send time changes and must be receiving time change updates from the network automation computer at least every 24 hours. Default is YES.

When time zone is programmed YES, enter the number (0-23) that indicates the Greenwich Time zone (GMT) where the panel is located. The default is 6.

GMT	City/Time Zone
0	London, Monrovia, Lisbon, Dublin, Casablanca, Edinburgh
1	Cape Verde Island, Azores
2	Mid-Atlantic, Fernando de Noronha
3	Buenos Aires, Georgetown, Brasília, Rio de Janeiro
4	Atlantic Time (Canada), Caracas, La Paz, Santiago
5	Eastern Time (US, Canada) Bogota, Lima, Arequipa
6	Central Time (US, Canada), Mexico City, Saskatchewan
7	Mountain Time (US, Canada), Edmonton
8	Pacific Time (US, Canada), Tijuana
9	Alaska
10	Hawaii
11	Midway Island, Samoa
12	Fiji, Marshall Island, Wellington, Auckland, Kwajalein, Kamchatka

GMT	City/Time Zone
13	New Cadelonia
14	Guam, Sydney
15	Tokyo, Seoul
16	Hong Kong, Singapore
17	Bangkok, Hanoi
18	Dhaka, Almaty
19	Islamabad, Karachi
20	Abu Dhabi, Kazan
21	Moscow, Bagdad
22	Eastern Europe
23	Rome, Paris, Berlin

## 9.12 ☐ LATCH SV ☒ NO ☐ YES **Latch Supervisory Zones**

Selecting YES latches supervisory zone alarms on the keypad display until the sensor reset operation is performed. Selecting NO automatically clears the alarm from the keypad display when the supervisory zone restores to a normal condition. Default is YES.

## 9.13 **Programming Menu Language**

Press the COMMAND key to select the programming language. Any changes in PROG LANGUAGE do not take effect until the STOP routine completes.

The current primary programming language displays. The default language is English. Press a Select key to change the primary programming language.

Select the primary programming language.  
 ENG = English (ENGLISH)  
 SPN = Spanish (ESPAÑOL)  
 FRN = French (FRANÇAIS)

The current secondary programming language displays. Selecting a secondary language allows the installer to view programming in English, Spanish, or French. When the Programming Menu is accessed, the installer is prompted to choose the programming display language. If SEC LANG: is set to NONE, the option to choose a language does not display. To select a secondary language, press the Select key below the language. Default is NONE.

Select the secondary programming language.  
 NONE = No secondary language options are displayed  
 ENG = English (ENGLISH)  
 SPN = Spanish (ESPAÑOL)  
 FRN = French (FRANÇAIS)

## 9.14

USER LANGUAGE

### User Menu and Status List Language

Press the COMMAND key to select User language.

PRI LANG: **ENGLISH**

The current primary user language displays. The default language is English. Press a Select key to change the primary User language.

ENG SPN FRN

Select the primary user language.

ENG = English (ENGLISH)

SPN = Spanish (ESPAÑOL)

FRN = French (FRANÇAIS)

SEC LANG: **NONE**

The current secondary user language displays. Selecting a secondary user language allows the user to view the User Menu and Status List text in English, Spanish, or French. When the User Menu is accessed, the user is prompted to choose the display language. Status List text displays in the selected language until another language is chosen. If SEC LANG: is set to NONE, the option to choose a language does not display. To select a secondary language, press the Select key below the language. Default is NONE.

For example, when Spanish is selected at a keypad, the User Menu and Status List text display in Spanish at **that** keypad. When the user later accesses the keypad, pressing the COMMAND key once displays the option for English, Spanish, or French. Pressing the COMMAND key again continues to display the Status List text in Spanish. Later on, if English or French is selected at **that** keypad, the User Menu and Status List text display in the selected language at **that** keypad.

NONE ENG SPN FRN

Select the secondary user language.

NONE = No secondary language options are displayed

ENG = English (ENGLISH)

SPN = Spanish (ESPAÑOL)

FRN = French (FRANÇAIS)

## 9.15

BYPASS LIMIT **0**

### Bypass Limit

Enter the maximum number of zones (0 to 8) that can be bypassed in any single area when that area is being armed at a keypad. If more zones than the limit are in a non-normal state or already bypassed at arming, arming does not occur and Arming Stopped displays. The Bypass limit does not affect auto arming, keyswitch arming, or remote arming. Entering 0 (zero) allows no limit. Default is 0 (zero).

## 9.16

WIRELESS  
HOUSE CODE: 0

### House Code

When using a DMP wireless system, enter a house code between 1 and 50. When using FA Series wireless enter 99. See Wireless programming in Zone Information. Default is 0 indicating no wireless system is being used.

The DMP house code identifies the panel, DMP receiver, and DMP transmitters to each other. When operating, the DMP receiver listens for transmissions that have the programmed house code and transmitter serial number.

**Note:** The flexibility of DMP two-way wireless operation allows an existing house code to be changed in the panel at any time. The transmitters may take up to two minutes to learn the new house code and continue operation.

**Note:** When any wireless zone programming is changed in the panel, wireless receiver zone programming is updated. At that point, all wireless zones display as normal for approximately 1 minute, regardless of the actual state of the zone.

## 9.17

DETECT WIRELESS  
JAMMING: **NO** YES

### Detect Wireless Jamming

This option displays when the House Code entered is for a DMP 1100 Series Wireless system (1-50). When enabled and the wireless receiver detects jamming, a trouble or alarm message displays in the Status List and is sent to the central station receiver. Select YES to enable jamming messages to display in the Status List. Select NO to disable jamming messages. Default is NO.

## 9.18

WLS AUDIBLE: DAY

### Wireless Audible Annunciation

This option displays when the House Code entered is for a DMP 1100 Series Wireless system (1-50). Press any top row key to select the keypad buzzer annunciation method for wireless low battery and missing messages. Select ANY to enable annunciation anytime. Select DAY to enable annunciation except during sleeping hours (9 PM to 9 AM). Select MIN (minimum) to annunciate only Fire and Fire Verify zones during daytime hours (9 AM to 9 PM). Default is DAY.

WIRELESS AUDIBLE  
ANY **DAY** MIN

## SYSTEM OPTIONS

- 9.19**

KEYPAD PANIC KEYS ENABLED: NO YES
--------------------------------------

**Enable Keypad Panic Keys**  
This option allows the two-button panic key operation selected at the keypad to send the Panic, Emergency, or Fire message to the central station receiver. Select YES to enable the two-button panic operation to operate. To disable the two-button panic operation, select NO. Default is YES.
- 9.20**

OCCUPIED PREMISE: NO YES
-----------------------------

**Occupied Premise**  
For All/Perimeter or Home/Sleep/Away systems, select YES to allow the panel to automatically disarm the interior area(s) when arming all areas and a perimeter zone is not tripped during the exit delay. Select NO to disable this feature. Default is YES.  
**Note:** With a Home/Sleep/Away with Guest arming system, this feature only applies to the main system.
- 9.21**

ENHANCED ZONE TEST: NO YES
-------------------------------

**Enhanced Zone Test**  
Select YES to allow enhanced zone test operation. The default is NO.  
Enhanced operation allows:
- Panic Test and Walk Test functions can be restricted to operate only during an Area 32, Shift 4 schedule if programmed. If no schedule is entered, the walk test always operates.
  - A Verify message is sent each time a zone is tested. If a zone is tripped multiple times, a Verify message is sent for each trip. This allows the Central Station to record the number of devices per zone.
  - The Verify message for each zone test is sent at the time the trip occurs instead of at the end of Walk Test.
  - The System Test Begin and System Test End Central Station messages indicate the type of zone being tested. The System Test Begin message also includes the user name and number.
- 9.22**

SEND 16 CHAR NAMES: NO YES
-------------------------------

**Send 16 Character Names**  
This option allows central stations to select being sent either the first 16 characters of the name field or the entire programmed name, up to 32 characters, for user name, user profile, zone name, area name, output name, and group name. Select YES to have the first 16 characters of the name field sent to the central station. Select NO to send the exact number of characters entered in the name field from 1 up to the maximum of 32 characters. Default is YES.  
**Note:** Using 32 character names increases the length of the DMP Serial 3 message from the panel to the receiver. The SCS-1R receiver does not require an update to pass these messages to the Host Automation System of the Central Station. Before using names longer than 16 characters, determine whether the Host Automation System of your Central Station can accept 17 to 32 character names. If not, only use 16 character names.
- 9.23**

KEYPAD ARMED LED ALL
KEYPAD ARMED LED ALL ANY

**Keypad Armed LED**  
This option displays only when using an Area system. Press any top row key to select the operation of the Armed LED on the keypad. Select ALL to require all keypad display areas to be armed before the keypad Armed LED turns on. Select ANY to turn on the keypad Armed LED when any keypad display area is armed. Default is ALL.
- 9.24**

USE FALSE ALARM QUESTION NO YES
------------------------------------

**Use False Alarm Question**  
Select YES to display IS THIS A FALSE ALARM? NO YES at the keypad in place of CANCEL VERIFY when a burglar alarm occurs. This operates for ALL/PERIM and HOME/SLEEP/AWAY arming systems. Default is NO.
- 9.25**

ALLOW OWN USER CODE CHG? NO YES
------------------------------------

**Allow Own User Code Change**  
This option allows users without user code authority to change their own user code. When YES is selected, the User Code menu displays USER CODE: \*\*\*\*\* at the keypad to allow that user to change their own code. If NO is selected, the user cannot change their personal user code. Default is NO.



## 9.26

PANIC SUPERVISION: <b>NO</b> YES
-------------------------------------

**Panic Supervision**

Select YES to enable a 30 day supervision of the Model 1145-1-B-PSV key fob.  
Default is NO.

This option allows a key fob that is lost or has a dead battery to be identified at the Central Station host automation system as a missing transmitter, without the need to apply a supervision time in zone information programming. SCS-VR Version 1.3.6 or higher is required to receive 1145-1-B-PSV supervision messages through the XR500 panel.

The 1145-1-B-PSV key fob supervision message is communicated to SCS-VR using all XR500 communication paths where Panic Test is YES within Advanced Communication programming. A supervision message is automatically sent from the key fob to SVS-VR every four hours, resetting the 30 day countdown timer for that key fob serial number. If the 30 day timer expires for a key fob serial number, SCS-VR will generate a zone missing message to the host automation system. For the application where the key fob is programmed into several XR100 Version 210 or higher panels, a supervision message sent through any XR100 into which the key fob is programmed will satisfy the 30 day timer. The SCS-VR zone missing message to host automation will be for the last panel account number where the key fob successfully communicated a supervision message to SCS-VR. The key fob MISSING is not displayed or recorded at the XR100 control panel.

## Bell Options

- 10.1** BELL OPTIONS **Bell Options**  
This section allows you to program the panel bell output functions.
- 10.2** BELL CUTOFF: 15 **Bell Cutoff Time**  
Enter the maximum time from 1 to 99 minutes the Bell Output remains on. If the area is disarmed, the cutoff time resets. Enter 0 (zero) to provide continuous bell output. The default is 15 minutes.  
**Note:** For SIA CP-01 False Alarm Reduction Installations, the Bell Cutoff Time must be set to a minimum of six (6) minutes.
- 10.3** BELL TST NO YES **Automatic Bell Test**  
Select YES to turn on the Bell Output for 2 seconds each time the system is completely armed from a **keypad**. This test is delayed until the Closing Wait acknowledge is received (if programmed). If the Closing Wait acknowledge is not received within 90 seconds, the bell test does not occur. Arming performed from an Arming zone or from Remote Link™ does not activate the Bell Test.
- 10.4** BELL OUTPUT: 0 **Bell Output**  
Enter the output number when needed to follow the panel Bell Output operation for all action and off conditions. Enter 0 (zero) to disable.  
**Note:** When BELL ACTION is set to T for Temporal Code 3, the Bell Output action for an LX-Bus output is pulse.  
**Note:** Bell Output should not be programmed for a Model 1135 Wireless Siren when programmed in Output Information to Trip with Panel Bell.
- 10.5** BELL ACTION . . . . . **Bell Action**  
This section defines the type of Bell Output for zone alarms. Press COMMAND to display the default Bell Output for each zone type. Press any Select key and enter S for a Steady Bell Output, P for a Pulsed output, T for a Temporal Code 3 output, and N for no Bell Output.  
**Note:** Trouble conditions do not activate the Bell Output.
- 10.5.1** FIRE TYPE: P **Fire Bell Action**  
Defines Bell Action for Fire Type zones. The default is P.
- 10.5.2** BURGLARY TYPE: S **Burglary Bell Action**  
Defines Bell Action for Burglary Type zones and Exit Error output. The default is set at S.
- 10.5.3** SUPRVSRY TYPE: N **Supervisory Bell Action**  
Defines Bell Action for Supervisory Type zones. The default is set at N.
- 10.5.4** PANIC TYPE: N **Panic Bell Action**  
Defines Bell Action for Panic Type zones. The default is set at N.
- 10.5.5** EMERGNCY TYPE: N **Emergency Bell Action**  
Defines Bell Action for Emergency Type zones. The default is set at N.
- 10.5.6** AUXLRY 1 TYPE: N **Auxiliary 1 Bell Action**  
Defines Bell Action for Auxiliary 1 Type zones. The default is set at N.
- 10.5.7** AUXLRY 2 TYPE: N **Auxiliary 2 Bell Action**  
Defines Bell Action for Auxiliary 2 Type zones. The default is set at N.

## Output Options

### 11.1

OUTPUT OPTIONS

#### Output Options

This section allows you to program panel output options. The panel provides two Form C relays (1 and 2) and four switched ground (open collector) outputs numbered 3 to 6. Use the J22 LX-Bus on the panel and multiple 716 Output Expander Modules to support up to 100 additional relay outputs. Alternately, when using the 1100X wireless receiver, 45 wireless outputs are available. Refer to the XR100 Series Installation Guide (LT-0899) for complete information.

Select from the following output numbers:

- 1 to 6
- 450 to 474 – Slow response time\* wireless outputs (activates within 15 seconds)
- 480 to 499 – Fast response time\* wireless outputs (activates within 1 second)
- 500 to 599 – LX-Bus output
- D1 to D8 – Keypad door strike relay for addresses 1-8
- G1 to G20 – Output group

\* The response time of a wireless output is the time it takes for a wireless output to activate once the panel event occurs. You determine whether a wireless output is a slow or fast response based on the output number assigned. A slow response output number extends battery life, but response time may be up to 15 seconds. A fast response output number responds within 1 second, but reduces battery life. Refer to the specific wireless output installation guide to determine battery life.

### 11.2.1

CO OUTS: - - - - -

#### Cutoff Output

Outputs 1 to 6 can be entered here to turn off after a time specified in CUTOFF TIME. To disable this option, press any Select key to clear the display then press COMMAND. The Cutoff Output displays dashes when no outputs are selected.

### 11.2.2

CUTOFF TIME: 0

#### Output Cutoff Time

If a Cutoff Output (1-6) is assigned, enter a Cutoff Time of 1 to 99 minutes for the output to remain on. Enter 0 (zero) for continuous output.

### 11.3

COMM TRBL OUT: 0

#### Communication Trouble Output

Enter the output number to turn on when a DD system fails to communicate on three successive dial attempts or if the backup communication line transmits a report. The Communication Trouble Output also turns on when NET is selected as the primary communication method and NET communication fails after one minute. When NET communication is restored the Communication Trouble Output automatically turns off.

To manually turn the output off, disarm any area or select Off for the output number in the User Menu Outputs On/Off section. Enter 0 (zero) to disable this output.

### 11.4

FIRE ALR OUT: 0

#### Fire Alarm Output

Enter the output number to turn on when a fire type zone is placed in alarm. The output is turned off using the Sensor Reset option while no additional fire type zones are in alarm. Enter 0 (zero) to disable. This output is not compatible with Cutoff Outputs.

### 11.5

FIRE TRB OUT: 0

#### Fire Trouble Output

Enter the output number to turn on when a fire type zone is placed in trouble, when a supervisory type zone is placed in trouble, or when any system monitor (AC, Battery, Phone Line 1 or Phone Line 2) is placed in trouble. The output turns off when all fire and supervisory type zones, or system monitors are restored to normal. Enter 0 (zero) to disable this output. This output is not compatible with Cutoff Outputs. This output can be connected to a lamp, LED, or buzzer using the DMP Model 716 Output Expansion Module.

## OUTPUT OPTIONS

11.6

PANIC ALM OUT: 0

### Panic Alarm Output

Enter the output number to turn on when any Panic type zone is placed in an alarm condition. The output is turned off after all Panic zones are restored from an alarm condition and a Sensor Reset is performed. Enter 0 (zero) to disable.

#### Wireless Outputs

- The Panic Alarm is compatible with the Model 1118 Wireless Remote Indicator Light and the Model 1116 Wireless Relay Output connected to a Model 572 Indicator LED.
- When a Panic Alarm occurs, the LED turns on steady for five minutes and then turns off.
- When a Panic Test is initiated from the keypad, the LED flashes quickly for five minutes.
- For a Panic Alarm, a fast response wireless output number is recommended.

11.7

AMBUSH OUT: 0

### Ambush Output

Enter the output number to turn on when an Ambush code is entered at a keypad. The output is turned off using the Sensor Reset option. Enter 0 (zero) to disable.

11.8

ENTRY OUT: 0

### Entry Output

Enter the output number to turn on at the start of the entry delay time. The output turns off when the area is disarmed or the entry delay time expires. Enter 0 (zero) to disable.

11.9

EXIT OUT: 0

### Exit Output

Enter the output number to turn on when an exit delay time starts in any area of the system. The output turns off when the area arms or when the arming has been stopped. Enter 0 (zero) to disable.

11.10

READY OUT: 0

### Ready Output

Enter the output number to turn on when all disarmed burglary zones are in a normal state. The output is turned off when any disarmed burglary type zone is in a bad state. Enter 0 (zero) to disable. This output is not compatible with Cutoff Outputs.

11.11

PH TRBL OUT: 0

### Telephone Trouble Output

Enter the output number to turn on when the phone line monitor on the panel phone line is lost. Enter 0 (zero) to disable this output.

11.12

LATE CLS OUT: 0

### Late To Close Output

Enter the output number to turn on at the expiration of a Closing schedule. The output activates simultaneously with the CLOSING TIME! keypad display. The output is turned off when the area is armed, the Closing is extended, or the schedule is changed. Enter 0 (zero) to disable this output.

11.13

DVC FAIL OUT: 0

### Device Fail Output

Enter the output number to turn on when an addressed device fails to respond to polling from the panel. A Missing Device report is sent to the receiver. The output is turned off when the device responds to polling or is removed from programming in the system. Enter 0 (zero) to disable this output and LX-Bus™ device fail reporting to the receiver. If any addressed device is unsupervised, this output cannot be used.

11.14

SNSR RST OUT: 0

### Sensor Reset Output

Enter the output number to turn on when a Sensor Reset is performed at a keypad. The output turns off automatically 5 seconds later. This function can be used to reset smoke detectors that are operated by an external power supply through a Model 716 Output Expander Module. Enter 0 (zero) to disable this output.

**11.15**

CLS WAIT OUT: 0

## Closing Wait Output

Enter the output number to turn on for approximately four (4) seconds when Closing Wait is programmed as YES and the panel successfully communicates the closing message at arming. If the closing message does not communicate successfully, this output does not turn on.

**11.16**

ARM-ALARM OUT: 0

## Arm-Alarm Output

Enter the output number to turn on steady when any area of the system is armed. If an alarm occurs causing the keypads to turn Red, this output pulses and continues to pulse for approximately five (5) minutes after the panel is disarmed. Enter 0 (zero) to disable.

### Wireless Outputs

- The Arm-Alarm Output is compatible with the Model 1117 Wireless LED Annunciator and the Model 1116 Wireless Relay Output connected to a Model 572 Indicator LED.
- When the Model 1117 is battery operated, the LED is off when the system is armed to conserve battery life. If an alarm occurs, the output flashes quickly.
- When using the Model 1116 connected to a Model 572, the LED is on when the system is armed. If an alarm occurs, the output pulses.
- To operate the Arm-Alarm output within one second, program a fast response number from 480 to 499. Fast response operation reduces overall wireless output battery life.
- To operate the Arm-Alarm output within 15 seconds, program a slow response number from 450 to 474. Slow response operation increases overall wireless output battery life.

**11.17**

SUPV ALM OUT: 0

## Supervisory Alarm Output

Enter the output number to turn on when a supervisory zone type is placed into an alarm. The output turns off when all supervisory type zones are restored to normal. Enter 0 (zero) to disable. Default is 0.

## Output Information

- 12.1** OUTPUT INFO **Output Information**  
This section allows you to program wireless outputs and name wired outputs.
- 12.2** OUTPUT NO. X X X **Output Number**  
Enter an output number. Entry range is 1 to 6, 450 to 474, 480 to 499, 500 to 599. In order for wireless output troubles to display at a keypad, the keypad address must be specified at the Auxiliary 1 Zones option in the Status List programming.
- 12.3** OUTPUT NAME **Output Name**  
This section allows you to define a 32 character alphanumeric name for any output numbers. The name can display on the keypad when a user performs the browser feature at Outputs On/Off. See the XR500/XR100 User's Guide (LT-0683) Appendix for browser operation.
- 12.4** OUTPUT REAL-TIME STATUS NO YES **Output Real-Time Status**  
Selecting YES allows Real-Time Status reports, such as Output ON, OFF, PULSE, or TEMPORAL to be sent using PC Log reports. Selecting NO disables Real-Time Status for this output device. Default is NO.
- 12.5** SERIAL#: XXXXXXXX **Serial Number**  
This option and the next option only display when the output number entered is for a wireless output. Enter the eight-digit serial number found on the wireless device.
- ALREADY IN USE OUTPUT NO: XXX This message displays when the serial number is already programmed for another output. The programmed output number displays.
- 12.6** SUPRVSN TIME: 240 **Supervision Time**  
Press any top row key to select the supervision time required for the wireless output. Press COMMAND to accept the default time. Default is 240 minutes.
- 0 3 60 240 Select the required number of minutes. The transmitter must check in at least once during this time or a missing condition is indicated for that zone. 1100 Series transmitters automatically check in based on the supervision time selected for the wireless zone, no additional programming is needed. Zero (0) indicates an unsupervised transmitter.
- The 3 minute supervision time is only available if using an 1135 Wireless Siren.
- Note:** When the panel is reset, a receiver is installed or powered down and powered up, or programming is complete, the supervision timer restarts for all wireless outputs.
- 12.7** TRIP WITH PANEL BELL NO YES **Trip with Panel Bell Option**  
This option displays when the wireless device is an 1135 wireless siren. Select YES to have the 1135 wireless siren follow the panel's bell output cadence for the zone type and bell cutoff time up to 15 minutes. Default is YES.



## Output Groups

- 13.1** OUTPUT GROUPS **Output Groups**  
This function allows you to assign outputs to groups. Output groups can be assigned to other areas of programming such as Output Options or Alarm Action of Zone Information, just like single outputs are assigned. This allows the entire group of outputs to turn on and off as required by the programming option.
- 13.2** GROUP NO: - **Group Number**  
Enter a group number from 1 to 20. Up to 20 different groups may be assigned.
- 13.3** GROUP NAME X X **Group Name**  
The group name displays. To change the default name, press any top row Select key then enter up to 32 characters for the group name. Press COMMAND to enter the outputs to be assigned to the group.
- 13.4** OUTPUT NO 1: 0 **Output Number**  
OUTPUT NO 2: 0  
OUTPUT NO 3: 0  
OUTPUT NO 4: 0  
OUTPUT NO 5: 0  
OUTPUT NO 6: 0  
OUTPUT NO 7: 0  
OUTPUT NO 8: 0  
Enter the Output number. Entry range is 1 to 6, 450 to 474, 480 to 499, 500 to 599 (outputs), D1 to D8 (doors), and G1 to G20 (groups). The maximum number of outputs that can be assigned to a specific group is eight.  
An output group may be assigned as one of the output numbers in another output group.  
**Example:** Output Group 1 consists of only four assigned outputs. Output Group 1 could be assigned as one output in Output Group 2. Output Group 2 could still have 7 other outputs assigned to that group. When Output Group 2 is turned on, 11 outputs could be turned on. This allows Output Groups to be assigned within other Output Groups providing many combinations.  
Output groups 1 to 10 can be assigned by a user profile for applications such as elevator control. See the XR500/XR100 User's Guide (LT-0683) Output Group section for additional information.  
Output groups 11 to 20 cannot be assigned to a profile and are available for installation applications such as special lighting, etc. To assign these groups to a profile, use Remote Link™ or System Link™ software from DMP.

## MENU DISPLAY

### Menu Display

- 14.1** MENU DISPLAY **Menu Display**  
Menu Display allows you to select at which keypad addresses the user can access the following functions.  
To select a keypad, enter the device number (keypad address) using the digit keys on the keypad. When a keypad is selected, an asterisk appears next to the keypad address. Enter the number again to deselect the keypad. Refer to the Multiple Displays section at the beginning of this document.
- 14.2** ARMED STATUS: **Armed Status**  

1	2	3	4
5	6	7	8

Enter the keypad addresses (1 through 8) that show the armed areas. The User Menu Armed Areas function also displays the custom area name you enter in Area Information.
- 14.3** TIME DISPLAY: **Time**  
Enter the keypad addresses that can display the time and day of the week.
- 14.4** ARM/DIS DISPLAY: **Arm/Disarm**  
Enter the keypad addresses from which users can arm and disarm areas.

## Status List

### 15.1

#### STATUS LIST

### Status List

This function allows you to select the zone alarms and troubles, and system monitor troubles displayed at the keypads. The Status List function operates automatically when the keypad is not performing any other function.

The keypad stays in the Status List until the user arms or disarms or selects a menu option. Status List alternates with the Armed Status on keypad addresses selected in the **Menu Display - Armed Status** section. You can choose to have System Monitor troubles placed in the list, the different zone types placed in the list, and at which keypad addresses they display.

To select a keypad, enter the device number (keypad address) using the digit keys on the keypad. When a keypad is selected, an asterisk appears next to the keypad address. Enter the number again to deselect the keypad. Refer to the Multiple Displays section at the beginning of this document.

### 15.2

#### DISPLAY KEYPADS:

### Display Keypads

This option defines which keypad addresses display the various status information. Any combination of addresses can be entered to display the status items that follow. If you do not want a particular status item to display, do not enter any addresses.

### 15.3

#### SYSTEM TROUBLES:

### System Monitor Troubles

1	2	3	4
5	6	7	8

Specifies the keypad addresses (1 through 8) where any trouble on a System Monitor displays. The System Monitors include the following:

- AC Power
- Battery Power
- Closing Check
- Panel Box Tamper
- Phone Line 1
- Phone Line 2 (requires the 893A Dual Phone Line Module)
- Wireless Receiver Trouble
- Wireless Jamming Trouble or Alarm

The System Monitor name is placed in the Status List and the keypad steady trouble buzzer sounds. The buzzer remains on until any keypad top row Select key is pressed. The name remains in the list until the condition is restored. The buzzer sounds at 10:00 am daily until the system trouble is cleared from the Status List.

### 15.4

#### FIRE ZONES:

### Fire Zones

1	2	3	4
5	6	7	8

Specifies the keypad addresses (1 through 8) where all fire zone alarms and troubles display. The zone name displays and, if it is a trouble condition, the keypad steady trouble buzzer sounds. The buzzer remains on until any top row Select key is pressed and a user code is entered. If a trouble condition remains in the display, the buzzer sounds at 10:00 am daily until the trouble is cleared from the Status List.

When using LCD Keypads, the panel provides distinct speaker tones from the keypad for Fire:

**On** - Fire zone alarm and Bell Output or Fire Bell Output is ON.

**Off** - Alarm Silence

## 15.5

### BURGLARY ZONES:

1	2	3	4
5	6	7	8

### Burglary Zones

Specifies the keypad addresses (1 through 8) where all burglary zone alarms and troubles display. Burglary zones include Night, Day, and Exit type zones. Burglary zone troubles remain in the list until the zone restores. All keypads are selected by default.

For zone alarms, only the last burglary zone tripped remains in the list. The alarm remains in the list until another burglary zone goes into alarm, any area of the system is disarmed. This ensures that if a burglary is in progress the last zone tripped remains in the list even if the zone is restored.

The keypad buzzer sounds for one second on burglary alarms.

When using LCD Keypads, the panel provides distinct speaker tones from the keypad for Burglary:

**On** - Burglary zone alarm and Bell Output or Burglary Bell Output is ON.

**Off** - Alarm Silence.

You can further define which keypad address shows a Burglary Zone event by entering that area number in the Display Areas menu during Device Setup.

## 15.6

### SPRVISORY ZONES:

1	2	3	4
5	6	7	8

### Supervisory Zones

Specifies the keypad addresses (1 through 8) where all supervisory zone alarms and troubles display. Supervisory zones are entered in the status list and sound the keypad buzzer until a valid user code is entered at any keypad address. If a trouble condition remains in the display, the buzzer sounds at 10:00 am daily until the supervisory trouble is cleared from the Status List.

## 15.7

### PANIC ZONES:

1	2	3	4
5	6	7	8

### Panic Zones

Specifies the keypad addresses (1 through 8) where all panic zone alarms and troubles display. The name of the zone remains in the list until the zone restores. The keypad buzzer does not sound for panic alarms or troubles.

## 15.8

### EMERGENCY ZONES:

1	2	3	4
5	6	7	8

### Emergency Zones

Specifies the keypad addresses (1 through 8) where all emergency zone alarms and troubles display. The name of the zone remains in the list until the zone restores. The keypad buzzer does not sound for emergency alarms or troubles.

## 15.9

### AUX 1 ZONES:

1	2	3	4
5	6	7	8

### Auxiliary 1 Zones

Specifies the keypad addresses (1 through 8) where all Auxiliary 1 zone alarms and troubles display. The name of the zone remains in the list until the zone restores. The keypad buzzer does not sound for Auxiliary 1 alarms or troubles.

You can further define which keypad address shows an Auxiliary 1 Zone event by entering that area number in the Display Areas menu during Device Setup.

## 15.10

### AUX 2 ZONES:

1	2	3	4
5	6	7	8

### Auxiliary 2 Zones

Specifies the keypad addresses (1 through 8) where all Auxiliary 2 zone alarms and troubles display. The name of the zone remains in the list until the zone restores. The keypad buzzer does not sound for Auxiliary 2 alarms or troubles.

You can further define which keypad address shows an Auxiliary 2 Zone event by entering that area number in the Display Areas menu during Device Setup.

## 15.11

COMM PATH TRBL:	
ALL	NO YES

### Communication Trouble

Specifies when communication troubles are displayed on keypads that are programmed to display System Monitor Troubles. Default is NO.

Select YES to display communication trouble when any communication path fails.

Select ALL to display communication trouble only when all paths have failed.

## PC Log Reports

- 16.1** PC LOG REPORTS **PC Log Reports**  
 This section allows you to program the types of PC Log Reports the panel sends through the J1 network connector directly on the XR100N panel. The reports include information such as the type of activity, time and date of the activity, and user name and number. These data reports can be accessed from a PC using the Advanced Reporting Module.  
**Note:** The network connection that sends PC Log Reports is not monitored for network trouble. The PC Log Reports option should NOT replace the primary communication method or act as a backup communication method.  
 If there is trouble with the network connection, the panel continues to attempt to send the PC Log Reports until the connection is reestablished. The panel then sends the reports. A Network Trouble message is **NOT** sent if the connection is lost since this report tool is not designed to be monitored by a receiver. The PC Log Reports have the lowest priority of panel reports sent.  
**Note:** To enable remote programming direct connection operation with the panel through the LX header (J22), do not enter a PC Log Address and set all report options to NO. Refer to the XR100 Series Installation Guide (LT-0899) for J22 connection and operation.
- 16.2** COMM TYPE: **NONE** **Communication Type**  
NONE NET Select the Communication Type to send the PC Log Reports. Default is NONE.
- 16.3** NET IP ADDRESS **Net IP Address**  
 This option displays when the Communication Type for PC Log Reports is NET. Enter the IP address containing up to 16 characters. The Net IP Address must be unique and cannot be duplicated on the network. Enter all 12 digits and leave out the periods. For example, enter IP address 192.168.0.250 as 192168000250. The periods display automatically.
- 16.4** NET PORT **2001** **Net Port**  
 This option displays when Communication Type for PC Log Reports is Net. Enter the Port number. Valid numbers are from 0 to 65535. Default is 2001.
- 16.5** ARM/DIS **NO** YES **Arm and Disarm Reports**  
 Sends arming, disarming and Late to Close events. Includes the area number, name and action, the user number and name, and the time and date.
- 16.6** ZONE **NO** YES **Zone Reports**  
 Sends changes in the status of active zones. Includes the zone number, name, type, the action (alarm, trouble, bypass, etc.), user number (if applicable), and area name. For a Walk Test, Verify and Fail messages are sent for each zone.
- 16.7** USR CMDS **NO** YES **User Command Reports**  
 Sends user code changes, schedule changes, and door access denied events.
- 16.8** DOOR ACS **NO** YES **Door Access Reports**  
 Sends door access activity: door number, user number and name, and time and date.
- 16.9** SUPV MSG **NO** YES **Supervisory Reports**  
 Sends system monitor reports, such as AC and battery, and system event reports. Supervisory Reports also sends the following reports:
- Abort
  - System Recently Armed
  - \*Late to Close
  - Exit Error
  - Alarm Bell Silenced
  - Ambush
  - Unauthorized Entry
- \* Only sent as a Supervisory Report if **Area Schedules** is not enabled, **Closing Check** is enabled, and an opening/closing schedule has been programmed.  
**Note:** To send these reports to the PC Log, you must enable SUPV MSG.

**16.10**

PC LOG REAL-TIME STATUS <b>NO</b> YES
--

**PC Log Real-Time Status**

Select YES to send Real-Time Status reports for zones, doors, and outputs. The specific reports must also be selected by individual zone or output. The Real-Time Status messages are sent to a PC running a graphic display software. Default is NO.

The messages that can be sent are:

- Door Open with zone number
- Door Closed with zone number
- Door Open with door number
- Door Closed with door number
- Output On
- Output Off
- Output Pulse
- Output Temporal

## Area Information

17.1

AREA INFORMATION

### Area Information

Allows you to assign functions to the different areas in the system. All non-24-hour zones must be assigned to an active area. See Zone Information.

You activate an area by assigning it a name. See Area Name. A name is given to each active area in place of a number to assist the user during arming and disarming. The Armed Status display is 1 2 3 4 5 6 7 8.

17.2

EXIT DELAY: 60

### Exit Delay

PC LOG REAL-TIME  
STATUS NO YES

Enter the exit delay time for all Exit type zones in this area. When the exit delay time starts, all activity on that zone and other non-24-hour zone types in the area is ignored until the exit delay expires. The keypad displays the Exit Delay time countdown and annunciates the Exit Delay tone at 8 second intervals until the last 10 seconds when annunciation is at 3 second intervals.

The exit delay can be from 30 to 250 seconds. Default is 60 seconds.

During Exit Delay, if an exit zone trips, then restores, and trips again, the Exit Delay timer restarts. This restart can occur only once. The Exit Delay restart is disabled when programmed for UL AA High Line Security operation.

**Exit Error Operation:** At arming, when an entry/exit zone (EX) is **faulted** at the end of the exit delay then one of two sequences occur:

For Entry Delay 1 EX type zones:

- the bell sounds for the length of time set in Bell Cutoff programming.
- the Entry Delay operation starts requiring code entry to disarm
- if not disarmed, a zone alarm and an exit error are sent to the receiver.

For Entry Delay 2-4 EX type zones:

- the zone is force armed and a zone force arm message is sent to the receiver
- an Exit Error is sent to the receiver
- the bell sounds for the length of time set in Bell Cutoff programming

17.3

BURG BELL OUT: 0

### Burglary Bell Output

Enter the output number (0 to 6, 500 to 599, G1 to G20, or D1 to D8) that is turned on any time a Burglary type zone is placed in alarm. The output is turned off when you disarm any area and no other Burglary type zones are in alarm. The output can also be turned off using the Alarm Silence option in the User Menu or by entering a user code with the authority to silence alarms. The duration of this bell output follows the time entered in the System Options>Bell Cutoff Time option. See the **Output Options - Bell Cutoff Time** section. If Bell Test is selected **YES**, the Burglary Bell Output entered here is turned on for two seconds each time the system is armed.

17.4

O/C RPTS NO YES

### Opening/Closing Reports

This option allows an Opening report to be sent to the receiver whenever any area is disarmed. A Closing report is also sent to the receiver when any area is armed.

17.5

CLS CHK NO YES

### Closing Check

Select YES to enable the panel to verify that all areas in the system are armed after permanent or extended schedules expire. If the Closing Check finds any areas disarmed past the scheduled time, the keypads selected to display System Trouble Status displays CLOSING TIME! and emits a steady beep. When Area Schedules is set to YES in Area Information, the specific area and name display followed by — LATE.

When Auto Arm is NO, if within ten minutes the system is not armed or if the schedule is not extended, a Late to Close report is sent to the SCS-1/SCS-1R Receiver. When Auto Arm is YES, the area arms. See Automatic Arming section.

If the area becomes disarmed outside of any schedule, the Closing Check sequence occurs after the Late Arm Delay time. See Late Arm Delay.



When Closing Check is NO and Auto Arm is YES, the system immediately arms when the schedule expires. No warning tone occurs.

In addition, when Closing Check is NO, the option to extend a schedule does not display when the schedule expires.

**17.6** CLS CODE NO YES

## Closing Code

When YES is selected, a code number is required for system arming. If NO is selected, a code number is not required for system arming.

**17.7** ANY BYPS NO YES

## Any Bypass

When YES is selected, zones can be bypassed without a code number during the arming sequence. A code number is always required to use the Bypass Zones option from the menu.

**17.8** AREA SCH NO YES

## Area Schedules

Select YES to allow each area to set its own shift schedules 1 to 4. Enter NO to provide one set of schedules for this system.

**Note:** Area Schedules are not designed to operate with All/Perimeter or Home/Sleep/Away systems.

**17.9** AREA NO: -

## Area Number

Enter the number of the area to program. After entering the area number, press COMMAND to enter the area name. Only Area systems allow the area name to be changed.

**Note:** When All/Perimeter or Home/Sleep/Away is selected as the system type, the Area Number does not display.

**17.9.1** INT PERIM

## All/Perimeter Programming

When All/Perimeter is selected as the system type, program the Interior and Perimeter areas as needed.

**17.9.2** INT BDRM PERIM

## Home/Sleep/Away Programming

When Home/Sleep/Away is selected as the system type, program the Interior, Bedroom, and Perimeter areas as needed.

**17.10** \* UNUSED \*

## Area Name

The area name can be up to 32 alphanumeric characters. To add an area name to the system, press any Select key and then enter up to 32 characters for the new area name. Press COMMAND to continue. For instructions on entering alphanumeric characters see section 1.7 Entering Alpha Characters. Inactive areas are marked \* UNUSED \*. Only systems programmed for Area has the option available to change the area name.

To mark an active area unused, press any top row Select key to delete the old name, then press the COMMAND key. The programmer automatically programs the name as \*UNUSED\*. If you have already cleared Area Information during Initialization, all areas are marked \* UNUSED \*. See Initialization section.

Home/Sleep/Away with Guest systems display the area name, but the names cannot be changed. The following are the display names that appear on the keypad:

Area	Display
1	Perimeter
2	Interior

Area	Display
3	Bedrooms
4	Guest Perimeter

Area	Display
5	Guest Interior
6	Guest Bedrooms

**17.11** ACCOUNT NO: 12345

## Account Number

Enter the account number to be sent to the receiver for this area. Choose an account number compatible with the Communication Type selected in Communications. The default Account Number is the one previously entered in Communications. This account number is used when sending area messages and events to the central station. See the Area Account Number Messages in the Appendix.

## AREA INFORMATION

### 17.12 AUTO ARM NO YES **Automatic Arming**

Select YES to allow this area to arm automatically according to permanent, temporary, or extended schedules. If no schedules are programmed, the area auto arms every hour.

If closing check is selected as YES, the automatic arming function does not take place until the expiration of a ten minute Closing Check delay. See Closing Check. If the area has been disarmed outside of any permanent or temporary schedule, the closing check sequence occurs one hour after the area is disarmed.

At arming, bad zones are handled according to the option selected in section Bad Zones. If a closing report is sent, the user number is indicated as SCH on the SCS-1R Receiver. NO disables automatic arming for this area.

**Note:** For ANSI/SIA CP-01 UL installations, Automatic Arming cannot be used for arming.

### 17.13 BAD ZONES: BYP **Bad Zones**

At the time of automatic arming, some zones in the area may not be in a normal condition. This option allows you to program the panel response to these bad zones. This option does not display if AUTO ARM is NO.

BYP FORC REF

**BYP** - All bad zones are bypassed. A report of the bypass is sent to the receiver if Bypass Reports is YES. The report indicates SCH as the user number.

**FORC** - All bad zones are force armed. Zones force armed in a bad condition are capable of restoring and reporting an alarm if tripped. A forced zone report is transmitted if Bypass Reports is YES. The report indicates SCH as the user number.

**REF** - The automatic arming is refused and no arming takes place. A No Closing report is sent to the receiver regardless of the Closing Check selection.

### 17.14 AUTO DIS NO YES **Automatic Disarming**

NO disables automatic disarming by schedule for this area. When YES is selected, the area automatically disarms according to permanent or temporary schedules. If an opening report is sent to the receiver, the user number is indicated as SCH.

**Note:** For ANSI/SIA CP-01 UL installations, Automatic Disarming cannot be used for disarming.

### 17.15 ARMED OUTPUT: 0 **Armed Output Number**

Enter the output to turn on when this area is armed. If an exit delay is used for this area, the Armed Output turns on at the start of the exit delay. The output is turned off when this area is disarmed. The output cannot be turned on from the User Menu Outputs On/Off option.

### 17.16 LATE OUTPUT: 0 **Late Output Number**

Enter the output to turn on when this area is not armed by its scheduled time and Area Late or Closing Time displays at a keypad and the keypad buzzer is on. The output is turned off when the keypad buzzer is silenced by pressing any key. Default is 0 (zero).

### 17.17 LATE/ARM DLY: 60 **Late Arm Delay**

Enter 4 to 250 minutes to delay before automatic re-arming occurs after the area becomes disarmed outside of schedules. See Closing Check. Default is 60 minutes.

**Note:** The Late Arm Delay can be superseded by the Re Arm Delay setting of the User Profile assigned to the user who disarmed the area. Refer to the Re Arm Delay section in the XR100 Series User's Guide (LT-0683).

## 17.18 | | | | |--------|-----------|-----| | COMMON | <b>NO</b> | YES | |--------|-----------|-----| Common Area

Select **YES** to enable this area to operate as a common area. This area is armed when the last area in the system is armed and is disarmed when the first area in the system is disarmed. You can have multiple common areas in each system. For the common area to work properly, do not assign the common area to any user code. When a user code can arm and disarm the common area from a keypad at any time, the common area does not function as a common area.

## 17.19 | | | | |-----------|-----------|-----| | ARM FIRST | <b>NO</b> | YES | |-----------|-----------|-----| Arm First Area

Select **YES** to enable this area to operate as an Arm First area. This area is automatically armed when any non-Arm First area assigned to the same keypad is armed but does not disarm when other areas become disarmed. Assign areas to keypads using the Display Areas option in Device Setup programming. You can have multiple Arm First areas in a system and divide them among keypads if needed. If an Arm First area has faulted zones that cannot be bypassed, arming stops and the areas are not armed. Correct the problem with the Arm First area and then begin the arming process again. Default value is **NO**.

**Note:** The Arm First automatic arming only occurs when arming from a keypad. Arming from a zone, schedule, or remotely is not affected and Arm First areas do not automatically arm.

## Zone Information

### 18.1 ZONE INFORMATION Zone Information

Zone Information allows you to define the operation of each protection zone used in the system. All protection zones, whether located on a panel, keypad, or zone expander are programmed the same way.

### 18.2 ZONE NO: - Zone Number

Enter the number of the zone you intend to program. Available zone numbers are shown in the table below. The keypad zone numbers begin with the keypad address and are followed by the particular zone from that keypad. For example, a 7073 at keypad address 7 would provide zones 71, 72, 73, and 74.

Press COMMAND to enter a zone name.

Address	Programming Zone Number
Panel	1-10
1	11-14
2	21-24
3	31-34
4	41-44
5	51-54
6	61-64
7	71-74
8	81-84
1100 Series Key Fob	400-449
LX-Bus 1	500-599

**Note:** For 1100 Series Key Fob zones (400-449), programming continues at the 1100 Series Key Fobs Section.

### 18.3 \* UNUSED \* Zone Name

Zone names can have up to 32 alphanumeric characters. A name must be given to each zone in the system. The name can display at the keypads during arming and disarming so the user does not have to memorize zone numbers. Users can associate a zone name with a particular protection point. A zone that is not part of the system must be marked unused.

To add a zone name to the system, press any Select key and then enter up to 32 characters for the new zone name. Press COMMAND to continue.

To mark a zone unused, delete the old name by pressing a top row Select key, then press the COMMAND key. The programmer automatically programs the name as \* UNUSED \*. If you have already cleared Zone Information during Initialization, the zones are marked \* UNUSED \*.

## 18.4

ZONE TYPE: BLANK

### Zone Type

The Zone Type defines the panel response to the zone being opened or shorted. This is called the Alarm Action. There are up to 13 possible alarm action responses depending on the zone type and any restrictions it may have. See the Zone Type chart in the Appendix.

When you assign a Zone Type to a zone, automatic zone responses are made. There are 12 Zone Types to choose from. Application descriptions for each zone type can be found in the Appendix of this manual.

To enter a new Zone Type, press any Select key. The display lists all of the available Zone Types four at a time.

-- NT DY EX

Blank, Night, Day, or Exit. Press COMMAND for additional zone types.

FI PN EM SV

Fire, Panic, Emergency, or Supervisory. Press COMMAND for additional zone types.

A1 A2 FV AR

Auxiliary 1, Auxiliary 2, Fire Verify, or Arming (keyswitch). Press the Back Arrow key to display the previous zone types. When the Zone Type you want displays, press the Select key beneath it.

If you select Blank, Night, Day, Exit, Auxiliary 1, Auxiliary 2, or Arming as the Zone Type, the zone must be assigned to an active area. If you select Fire, Fire Verify, Panic, Emergency, or Supervisory as the Zone Type, it is a 24-hour zone that is always armed and no area assignment is needed.

### Zone Type Specifications

The panel contains 12 default zone types for use in configuring the system. These zone types provide the most commonly selected functions for their applications. All zone types except the Arming zone type can be customized by changing the options listed below.

Refer to the Appendix for complete zone type descriptions.

## 18.5

AREA NO: -

### Area Assignment

Enter the area number where the Night, Day, Exit, Auxiliary 1, or Auxiliary 2 zone is being assigned. For an Area system, area numbers 1-8 can be assigned. For a Home/Sleep/Away with Guest system, area numbers 1-6 can be assigned.

AREA: PERIMETER

In an All/Perimeter or Home/Sleep/Away system, the currently selected area, Perimeter, Interior, Bedroom displays.

INT PERIM

On an All/Perimeter system, select INT to program zones for the interior area and select PERIM to program zones for the perimeter area.

INT BDRM PERIM

On a Home/Sleep/Away system, select INT to program zones for the interior area, select BDRM to program zones for the bedroom area, and select PERIM to program zones for the perimeter area.

## 18.6

FIRE BELL OUT: 0

### Fire Bell Output

This output (1 to 6, 500 to 599, G1 to G20, or D1 to D8) is turned on any time a Fire, Fire Verify, or Supervisory zone is placed in alarm. The output is turned off by any the following actions:

- When the User Menu Alarm Silence function is performed.
- When a valid user code is entered to silence the bell.
- When the Silence key is pressed on the 630F Remote Fire Command Center.
- Using the Outputs On/Off function in the User Menu.
- The expiration of the Bell Cutoff time.

This output can be connected to a lamp, LED, or buzzer using the DMP Model 716 Output Expansion Module.

## 18.7

ARM/DIS AREAS

### Arming Zone Area Assignment

In an Area or Home/Sleep/Away with Guest system, if the zone has been programmed as an Arming Type (AR), enter the areas that the zone controls.

When the zone changes from normal to shorted, the programmed areas toggle between the armed or disarmed condition using the Style programming below. When restored to normal, no action occurs. When the zone is opened from a normal (disarmed) state, a trouble is reported. When opened from a shorted (armed) state, an alarm is reported and the zone is disabled until you disarm the area(s) from either a keypad or Remote Link™ computer.

To visually indicate the armed state of the area(s), you can assign an Armed Output to individual areas and use remote LEDs at the keyswitch. The LED turns on or off to indicate to the user the armed state of the area(s).

ARM AREAS: PERIM

In an All/Perimeter or Home/Sleep/Away system, this option specifies the areas to be armed by the Arming Type zone. For All/Perimeter systems, choose PERIM or ALL, for Home/Sleep/Away or Home/Away systems, choose HOME, SLEEP, or AWAY.

PERIM ALL

Perimeter/All - Specify whether the arming zone arms just the Perimeter (PERIM) or the Perimeter and Interior areas (ALL) for All/Perimeter systems. When disarming, all areas are disarmed.

HOME SLEEP AWAY

Home/Sleep/Away - Specify whether the arming zone arms the Perimeter (HOME), the Perimeter and Interior (SLEEP), or all three areas (AWAY). When disarming, all areas are disarmed.

### Arming Zone Operation

If any bad zones are present when the Arming zone is shorted, the LED delays lighting for 5 seconds. If during the 5-second delay the Arming zone is shorted again no arming takes place. If 5 seconds expire without the zone shorting again or restoring to normal, the areas arm and bad zones are force armed. To allow bad zones to be force armed, the Any Bypass option must be set to YES. If Any Bypass option is set to NO, arming does not occur. See the Area Information - Any Bypass section. A priority zone cannot be force armed.

## 18.8

STYLE:

### Style

This option specifies the style for the arming/disarming operation. The default style is TGL (toggle). Press any Select key to display the STYLE options. To view more style options press the COMMAND key.

TGL ARM DIS STEP

**TGL (Toggle)** - When the zone changes from normal to shorted, the programmed areas toggle between the armed or disarmed condition. When restored to normal, no action occurs. When the zone opens from a normal (disarmed) state, a trouble is reported. When opened from a shorted (armed) state, an alarm is reported and the zone is disabled until you disarm the area(s) from either a keypad or Remote Link.

**ARM** - When the zone is shorted, the programmed areas are armed. When restored to normal, no action occurs. When the zone is opened from a normal (disarmed) state, a trouble is reported. When opened from a shorted (armed) state, an alarm is reported.

**DIS (Disarm)** - When programmed, a short disarms the programmed areas. When restored to normal, no action occurs. When the zone is opened from a normal (disarmed) state, a trouble is reported.

**STEP** - A short arms the areas and beeps the keypads once. A normal condition causes no action. An open condition disarms the programmed areas and beep the keypads for one second.

**Note:** This arming style is designed for wireless arming pendants. When using a arming/disarming keyswitch locate the keyswitch within the protected area.

MNT

**MNT (Maintain)** - When the zone is shorted, the programmed areas are armed. When restored to normal, the programmed areas are disarmed and any alarm bells are silenced. When the zone is opened from a normal (disarmed) state, a trouble is reported. If opened from a shorted (armed) state, an alarm is reported and the zone is disabled until you disarm the area(s) from either a keypad or Remote Link.



## 18.9

NEXT ZN? NO YES

### Next Zone

Select YES to terminate zone programming. The display returns to Zone Number, allowing you to enter a new zone number. Select NO to make alterations to the Alarm Action for a zone. Alarm Action is defined beginning with section 15.12.

To program zones for wireless operation, select NO at the NEXT ZONE - NO YES option. The WIRELESS NO YES option displays. If the zone you are programming is intended for wireless devices, select YES. Select NO to continue programming non-wireless zones in the 500 to 599 range.

- Zones 400 to 449 can be programmed for 1100 Series Key Fobs.
- Zones 500 through 599 can be programmed for DMP Wireless.

## DMP Wireless

For a DMP 1100X Wireless Receiver set the House Code to 1-50. See House Code programming in System Options. Zones 500 through 599 can be programmed as Wireless zones. Set the XR100 Series panel J23 jumper to X to enable DMP Wireless operation. After power-up, briefly reset the panel using the J16 jumper to activate Wireless operation. Refer to the XR100 Series Installation Guide (LT-0899).

For an 1100 Series Key Fob see section 15.11.

**NOTE:** All wireless programming is stored in the XR100 Series panel. The 1100X Wireless Receiver obtains the necessary programming information from the panel each time the receiver powers up, when the programmer STOP routine is selected or the panel is reset. The receiver memory refresh takes up to 10 seconds to complete depending on the number of wireless zones programmed and the Red LED remains on during this time. Normal receiver operation is inhibited during the memory refresh period.

## 18.10

ZONE INFORMATION  
WIRELESS? NO YES

### Wireless

Select YES to program this zone as a DMP wireless zone. You must program the wireless House Code prior to adding DMP wireless zones to the system. See House Code programming in System Options. Default is NO.

### 18.10.1

TRANSMITTER  
SERIAL#: XXXXXXXX

### Serial Number Entry

Enter the eight-digit serial number found on the wireless device.

ALREADY IN USE  
ZONE NUMBER: XXX

This option displays when the serial number is already programmed for another zone. The programmed zone number displays.

### 18.10.2

TRANSMITTER  
CONTACT:XXXXXXXX

### Contact

This option displays if the serial number entered is for an 1101 or 1103 Universal Transmitter or 1114 Wireless Four-Zone Expander. Press any top row key to select the contact.

TRANSMTR CONTACT  
INT EXT

This option displays when programming an 1101 or 1103 Transmitter. Select INT to use the internal reed switch contacts. Select EXT to connect an external device to the 1101 or 1103 terminal block. Default is INTERNAL.

By allowing both of the Model 1101 or 1103 transmitter contacts (INT and EXT) to be used at the same time, two zones may be programmed from one transmitter. When using both contacts, you must use consecutive zone numbers. Zones 531 and 532 or zones 590 and 591 are acceptable zone assignments.

For example, program transmitter serial number 01345678 as Zone 521 with an INT contact type and Zone 522 with an EXT contact type. The same serial number is used for both zones.

**Note:** When using the 1103 Universal Transmitter in a UL listed Commercial Burglary installation, the external contact cannot be used.

## ZONE INFORMATION

TRANSMTR CONTACT  
1 2 3 4

This option displays when programming the 1114 Wireless Four-Zone Expander with four input contacts. The same serial number is used for all four contacts. Select the contact number to program. When using the contacts, you must use consecutive zone numbers. Default is Contact 1.

For example, use serial number 08345678 to program Contact 1 for Zone 561, Contact 2 for Zone 562, Contact 3 for zone 563, and Contact 4 for zone 564.

A tamper on the 1114 is transmitted as the zone number assigned to Contact 1.

ALREADY IN USE  
ZONE NUMBER: XXX

This message displays when the Contact is already programmed for another zone. The programmed zone number displays.

ZONE INFORMATION  
NORM OPN NO YES

This option only displays when EXT is selected as the Contact type. For external devices connected to the 1101 or 1103 terminal block, select NO to use normally closed (N/C) contacts. Select YES to use normally open (N/O) contacts. Default is NO.

**Note:** For UL listed installations, set Normally Open to NO.

### 18.10.3

TRANSMITTER  
SUPRVSN TIME: 240

#### Supervision Time

Press any top row key to select the supervision time required for the wireless zone. Press COMMAND to accept the default time. Default is 240 minutes.

SELECT MINUTES:  
0 3 60 240

Press the Select key under the required number of minutes. The transmitter must check in at least once during this time or a missing condition is indicated for that zone. 1100 Series transmitters automatically checkin based on the supervision time selected for the wireless zone, no additional programming is needed. If two zones share the same transmitter, the last programmed supervision time is stored as the supervision time for both zones. Zero (0) indicates an unsupervised transmitter.

ZONE INFORMATION  
WIRELESS? NO YES

The 3 minute supervision time is only available for zone types of Fire (FI), Fire Verify (FV), and Supervisory (SV).

**Note:** When the panel is reset or a receiver is installed or powered down and powered up, the supervision timer restarts for all wireless zones.

### 18.10.4

LED OPERATION  
NO YES

#### LED Operation

Select YES to turn on an 1142 Hold-up transmitter LED during Panic or Emergency operation. Select NO to turn the LED off during Panic or Emergency operation. The LED always operates when the transmitter case is open and the tamper is faulted. Default is YES.

**Note:** For UL listed holdup installations, set LED Operation to NO.

### 18.10.5

DISARM DISABLE  
NO YES

#### Disarm/Disable

Select YES to disable the zone tripped message from an 1103 Universal Transmitter (Version 107 or higher software) or 1126/1127 PIRs during the disarmed period. When disarmed, the transmitter or PIR only sends supervision, tamper, and low battery messages to extend transmitter battery life. For 1103 Transmitters, a zone tripped message is sent if the zone remains tripped for 20 seconds. Select NO to always send zone tripped messages in addition to supervision, tamper, and low battery. Default is YES.

### 18.10.6

WIRELESS PIR  
PULSE COUNT: 4

#### PIR Pulse Count

Select the number of infrared pulses (2 or 4) the 1126 or 1127 PIR should sense before sending a short message to the 1100X Series Receiver. Default is 4.

### 18.10.7

WIRELESS PIR  
SENSITIVITY: LOW

#### PIR Sensitivity

Select the sensitivity setting for the 1126 or 1127 PIR. Selecting LOW sets the PIR to operate at 75% sensitivity for installations in harsh environments. Selecting HIGH sets the PIR to maximum sensitivity. Default is LOW.

### 18.10.8

NEXT ZONE NO YES

#### Next Zone

Select YES to return to the ZONE NO: - option to program a new zone. Select NO to display the Alarm Action option.

## 1100 Series Key Fobs

For an 1100 Series Key Fob set the House Code to 1-50. See House Code programming in System Options. Only zones 400 to 449 can be programmed as 1100 Series Key Fob zones. Refer to the 1100 Series Key Fob Programming Sheet (LT-0706) and the 1100 Series Key Fob Install Guide (LT-0703) as needed. The following programming continues from the Zone Number Section when zone 400-449 is selected.

To operate arming and disarming properly, the Key Fob should be assigned to a User Number with appropriate area assignments, however, the User Number does not have to exist at the time the Key Fob is programmed. The Key Fob User Number can be added later by the User.

**Note:** Key Fobs have not been investigated by UL and are not intended for UL listed applications.

The following programming continues from the Zone Number section when zone 400-449 is selected.

### 18.11.1

KEY FOB USER  
NUMBER: XXXX

#### Key Fob User Number

Enter the User Number (1-9999) used to identify the Key Fob user and their arming and disarming authority at the receiver and panel. Default is blank.

Displays when the User Number entered does not exist in User Code programming. The key fob can be added, but the user must eventually be created to cause the key fob to operate.

### 18.11.2

TRANSMITTER  
SERIAL#: XXXXXXXX

#### Key Fob Serial Number

Enter the eight-digit serial number found on the wireless device.

### 18.11.3

TRANSMITTER  
SUPRVSN TIME: 0

#### Key Fob Supervision Time

Press any top row key to select the supervision time required for the key fob zone. Press COMMAND to accept the default time. Default is 0 for key fobs.

SELECT MINUTES:  
0 60 240

Press the Select key under the required number of minutes. The key fob must check in at least once during this time or a missing condition is indicated for that zone. 1100 Series key fobs automatically checkin based on the supervision time selected for the wireless zone, no additional programming is needed. Zero (0) indicates an unsupervised transmitter.

**Note:** When the panel is reset or a receiver is installed or powered down and powered up, the supervision timer restarts for all wireless zones.

### 18.11.4

NO. OF KEY FOB  
BUTTONS: X

#### Number of Key Fob Buttons

Enter the number of buttons (1, 2, or 4) on the Key Fob being programmed.

**Note:** If the key fob is a one-button model, programming continues at the Button Action section. Default button assignment for one-button key fobs is a Panic Alarm (PN) with no output assigned.

### 18.11.5

BUTTON:  
TOP BTM LFT RGT

#### Key Fob Button Selection (Four Buttons)

This option only displays if the Key Fob being programmed is a four-button model. Press the Select key under the Key Fob button to program. The following list identifies the default button assignments:

- TOP Arming with no areas assigned
- BTM Disarming with no areas assigned
- LFT Panic Alarm (PN) with no output assigned
- RGT Arming with Area 1 assigned

### 18.11.6

BUTTON:  
TOP BTM

#### Key Fob Button Selection (Two Buttons)

This option only displays if the Key Fob being programmed is a two-button model. Press the Select key under the Key Fob button to program. The following list identifies the default button assignments:

- TOP Arming with no areas assigned
- BTM Disarming with no areas assigned

## ZONE INFORMATION

### 18.11.7

BUTTON ACTION: XXXXXXXX
----------------------------

BUTTON ACTION? ARM DIS TGL STA
-----------------------------------

BUTTON ACTION? PN PN2 EM EM2
---------------------------------

USER XXXX NOT IN USE
-------------------------

BUTTON ACTION? OUT RST UN
------------------------------

#### Button Action

This option specifies the Button Action? for an individual Key Fob button. The default action displays. Press any Select key to display the Button Action? options. To view more options press the COMMAND key.

**ARM (Arm)** - Arms selected areas and force arms bad zones.

**DIS (Disarm)** - Disarms selected areas.

**TGL (Togl Arm)** - Toggles arm/disarm for selected areas and force arms bad zones.

**STA (Status)** - Causes the Key Fob LED to indicate the arm/disarm status of the system.

**PN (Panic)** - Triggers a Panic zone type alarm with no restoral.

**PN2 (Panic 2)** - Triggers a Panic zone type alarm with no restoral when pressed simultaneously with any other Panic 2 button. No action occurs when pressed alone.

**EM (Emerg)** - Triggers an Emergency zone type alarm with no restoral.

**EM2 (Emerg 2)** - Triggers an Emergency zone type alarm with no restoral when pressed simultaneously with any other Emergency 2 button. No action occurs when pressed alone.

**OUT (Output)** - Causes an output to turn on steady, pulse, momentary, toggle or off.

**RST (Snsr Rst)** - Causes the panel to perform a standard Sensor Reset.

**UN (Unused)** - The button is not used and performs no action.

### 18.11.8

aaa BUTTON PRESS TIME: DDDDD
---------------------------------

BUTTON PRESS: SHORT LONG
-----------------------------

#### Button Press Time

This option specifies the amount of time (SHORT or LONG) the user must press the button before the key fob sends a message to the wireless receiver. The default press time displays. Press any Select key to set the Button Press Time for Arm, Disarm, Toggle, Status, Output, and Sensor Reset.

**Note:** The Button Press Time is not programmable on Panic (PN or PN2), Emergency (EM or EM2) or Unused (UN) zones. For those zones the button press time is always two (2) seconds.

**SHORT** - Press the button for one-half (1/2) second to send the message to the wireless receiver.

**LONG** - Press the button for two (2) seconds to send the message to the wireless receiver.

### 18.11.9

ARM/DIS AREAS:			
1	2	3	4
5	6	7	8

#### Arm/Disarm Area Selection

In an Area system or Home/Sleep/Away with Guest system, this specifies the areas to be armed/disarmed by the Key Fob button being programmed. To select an area between 1 and 8, enter the area number using the keypad digit keys. Default is no areas enabled.

In order to arm or disarm selected areas, the Profile assigned to the User Number needs to have the same area numbers selected. Any area may be selected at Arm/Disarm Areas but only matching area numbers are armed or disarmed when the specific button is pressed. For example, in Areas selection, areas 1, 3, and 7 are selected. In the User Profile Arm and Disarm Areas, areas 1, 2, 4, and 7 are selected. When the user presses the button to Arm or Disarm area(s), only matching areas 1 and 7 Arm/Disarm.

**Note:** When more areas are selected at Arm/Disarm Areas than are authorized in the User Profile, in the future the user can be given access authority to additional areas through the User Profile without requiring additional panel programming to select Arm/Disarm Areas. See User Profiles in the Appendix or refer to the XR500/XR100 Series User's Guide (LT-0683).

ARM AREAS: PERIM

In an All/Perimeter or Home/Sleep/Away system, this specifies the area to be armed by the Key Fob button being programmed. For All/Perimeter systems, choose PERIM or ALL, for Home/Sleep/Away or Home/Away systems, choose HOME, SLEEP, or AWAY.

**Note:** Areas 3 and higher in an All/Perimeter system, and areas 4 and higher in a Home/Sleep/Away system are not available for use.

After selecting the areas, for one-button key fobs the Zone No.: option displays. For two-button or four-button key fobs, the Key Fob Button Selection option displays to program additional buttons.

## 18.11.10 OUTPUT NO: XXX

### Output Number

You can specify a relay output to operate when OUT (Output), PN (Panic), PN2 (Panic 2), EM (Emergency), or EM2 (Emergency 2) is selected for a key fob Button Action and the button is pressed. Valid range is 1 to 6, 500 to 599, D1 to D8, or G1 to G20. For an output turned on by a PN, PN2, EM, or EM2 button action, the output turns off when any area is disarmed.

To enter an output number, press a top row Select key followed by the output number. Press the COMMAND key.

## 18.11.11 ACTION: XXXXXXXX

### Output Action

This option allows you to define the Key Fob output operation (STD, MOM, TGL, OFF) when PN, PN2, EM, or EM2 is selected for a Key Fob Button Action and the button is pressed. For an output turned on by a PN, PN2, EM, or EM2 button action, the output turns off when any area is disarmed by Key Fob button press. The currently programmed action displays.

OUTPUT ACTION?  
STD PLS MOM TGL

**STD (Steady)** - The output is turned on and remains on until the area is disarmed, an output cutoff time expires, or the output is reset from the keypad menu.

**PLS (Pulse)** - The output alternates one second on and one second off. **Note:** The pulsing rate for a Model 716 relay attached to the LX-Bus is 1.6 seconds.

**MOM (Momentary)** - The output is turned on only once for one second.

**TGL (Toggle)** - The output alternates between the armed and disarmed condition. When restored to normal, no action occurs. When the zone opens from a normal (disarmed) state, a trouble is reported. When opened from a shorted (armed) state, an alarm is reported and the zone is disabled until the area(s) is disarmed from either a keypad or Remote Link.

OUTPUT ACTION?  
OFF

**OFF (Off)** - The output is turned off. If programmed, the output was turned on by some other means such as another button press, a zone action, or a schedule.

## 18.11.12 NEXT ZONE NO YES

### Next Zone

Select YES to return to the ZONE NO: - option to program a new zone. Select NO to display the Alarm Action option.

**Note:** All wireless programming is stored in the XR500 Series panel. The 1100X Wireless Receiver obtains the necessary programming information from the panel each time the receiver powers up, when the programmer STOP routine is selected or the panel is reset. The receiver memory refresh takes up to 10 seconds to complete depending on the number of wireless zones programmed and the Red LED remains on during this time. Normal receiver operation is inhibited during the memory refresh period.



## ZONE INFORMATION

### 18.12 ALARM ACTION . . . **Alarm Action**

This option allows you to change any Zone Type standard definitions. When the Zone Type is specified, the Alarm Action for that zone is stored in memory.

If the Zone Type is Blank, Night, Day, Exit, Auxiliary 1, or Auxiliary 2 it is a non-24-hour zone and the Alarm Action programming begins with Disarmed Open.

If the Zone Type is Fire, Panic, Emergency, or Supervisory it is a 24-hour zone that is always armed and the Alarm Action programming begins with Armed Open.

The Fire Verify Zone Type functions the same as Fire Type, with the following exceptions: When a Fire Verify zone initiates an alarm, the panel performs a Sensor Reset. If any Fire Verify zone initiates an alarm within 120 seconds after the reset, an alarm is indicated. If an alarm is initiated after 120 seconds, the cycle is repeated and a zone fault report is sent to the receiver.

Do NOT program Fire Verify Zone Types for Zone Retard.

### 18.13 DISARMED OPEN **Disarmed Open**

Defines the action taken by the panel when the zone is opened while the area is disarmed. There are three actions to define: Report to transmit, Relay Output to activate, and Relay Output action.

You must also make these selections for the Disarmed Short, Armed Open, and Armed Short zone conditions. Press COMMAND to continue.

### 18.14 MSG: TROUBLE **Report to Transmit**

Press any Select key to display the following report options: A, T, L, S, and - (dash).

**ALARM** - Select A to send an alarm report to the receiver and activate the bell output according to zone type. The zone name appears in the panel alarmed zones and status lists.

**TROUBLE** - Select T to send a trouble report to the receiver. The zone name appears in the panel alarmed zones and status lists.

**Note:** UL requirements prevent the Alarm (A) and Trouble (T) action for Fire (FI), and Fire Verify (FV) zone types from being changed.

**LOCAL** - When you select L, an alarm report is NOT sent to the receiver. The bell output activates and the zone name appears in the panel alarmed zones and status lists.

- **(Dash)** - When you select a - (dash), reports are NOT sent to the receiver. The bell output does not activate and there is no display in the panel alarmed zones or status list. Only the relay output selected in the next section operates.

D S

**DOOR PROPPED** - Selecting D allows the following operation: The time programmed into ENTRY DLY 4 in the **System Option** section begins to count without displaying on keypad. If the time expires and the zone has not returned to normal, the keypad trouble buzzer starts and CLOSE THE DOOR appears on the keypads programmed into the PREWARN ADDRESS section. The time programmed into ENTRY DLY 4 begins to count down again internally. If the time expires a second time and the zone has not returned to normal, a fault report is sent to the receiver and the zone name - OPEN message displays on the keypads until a code is entered. The bell output does not activate for the Door Propped operation.

**SILENCE/RESET** - Select S when the zone (not FI, SV, or FV) is connected to a DMP Model 303 Silence/Reset switch, the zone can be used to silence the alarm bell and perform a sensor reset without using a keypad. A report is NOT sent to the receiver except for the bell silence report.

### 18.15 OUTPUT NO: 0 **Output Number**

You can specify any of the Relay Outputs on the XR100 Series panel to be activated by a zone condition (1 to 6, 500 to 599 if Model 716 used, D1 to D8, G1 to G20). The output can be activated regardless of the report to transmit or whether or not the zone is programmed as local. An output activated by an armed zone is turned off when the zone area is disarmed by a user.

To enter an output number, press a top row Select key followed by the output number. Press the COMMAND key.



- 18.16**    **OUTPUT:**    **NONE**    **Output Action**  
 Entering an Output Number displays this option. This option allows you to assign an output action to the relay: Steady, Pulse, Momentary, or Follow.  
**STD PLS MOM FOLW**    **STEADY** - The output is turned on and remains on until the area is disarmed, an output cutoff time expires, or the output is reset from the keypad menu.  
**PULSE** - The output alternates one second on and one second off. **Note:** The pulsing rate for a Model 716 relay attached to the LX-Bus is 1.6 seconds.  
**MOMENTARY** - The output is turned on only once for one second.  
**FOLLOW** - The output is turned on and remains on while the zone is in an off normal, or bad condition. When the zone restores, the output is turned off.  
**Note:** For Day Zone types, when an output is turned on, a user code with silence authority can turn the output off.  
 After you make the three selections in the sections above, the display prompts you for the same three selections for Disarmed Short, Armed Open, and Armed Short conditions. If the zone is a 24-hour type, only the Armed Open and Armed Short conditions display. When you have programmed all of the zone conditions, the Swinger Bypass selection then displays.
- 18.17**    **SWGR BYP NO YES**    **Swinger Bypass**  
 Selecting YES allows the zone to be swinger bypassed by the panel according to the specifications programmed in Swinger Bypass Trips and Reset Swinger Bypass. The Bypass condition displays in the keypad Status List. Selecting NO disables swinger bypassing for this zone.  
**How it works**  
**A    T    L    -**  
 If within one hour, a zone trips the total number of times AS specified in Swinger Bypass Trips, the panel bypasses it until the following conditions occur; the area in which the zone is assigned is disarmed, the zone is manually reset through the Bypass Zones? keypad User Menu function, the zone remains normal for one hour and the Reset Swinger Bypass is YES.  
 If the zone trips fewer than the specified times within one hour, the bypass trip counter returns to 0 (zero) and the process must be repeated.  
 A report of the swinger bypass is sent to the receiver if Bypass Reports is YES.  
**Note: Not investigated by UL.**
- 18.18**    **PREWARN KEYPADS:**    **Prewarn Keypad Addresses**  
 At the entry delay start, all keypad addresses selected here display ENTER CODE:-. If you want the prewarn to sound at all 8 addresses, leave the default setting. To delete an address, press the matching number on the keypad. To disable prewarning at all keypads, press a top row Select key to clear the addresses shown. Press the COMMAND key when the address selection is complete.  
 The prewarn tone stops at the keypad where the first user code digit is entered. If no keys are pressed for five seconds or an invalid user code is entered, the prewarn tone resumes at that keypad.
- 18.19**    **ENTRY DELAY:**    **1**    **Entry Delay**  
 Select the entry timer for this zone. Entry timers 1 to 4 are programmed in System Options.
- 18.20**    **RETARD NO YES**    **Zone Retard Delay**  
 When you select YES, the zone operates with the zone retard delay. The retard functions only in zone short conditions.  
 The zone must remain shorted for the full length of the retard delay before the panel recognizes its condition. If you select NO, the zone operates without a retard delay.  
**Note: For UL installations, Zone Retard Delay shall not be used for burglary zones.**
- 18.21**    **PRESGNL KEYPADS:**    **Presignal Keypad Addresses**  
 You can enable any combination of keypad addresses to sound a presignal tone during the time a zone is in retard delay. The presignal tone silences when the zone restores or the retard delay expires.  
 To enable a presignal address, press any top row Select key followed by the number of the keypad address. You can enable the presignal for all 8 keypad addresses.  
 To disable a presignal address press the matching number digit again. Press the COMMAND key when the address selection is complete. The Presignal option is only displayed when Retard is selected as YES.

## ZONE INFORMATION

### 18.22 ☐ FAST RSP ☒ NO ☐ YES **Fast Response**

Select YES to provide a zone response time of 167ms. Select NO to provide a normal zone response time of 500ms. Zones 500 to 599 have a fixed response time and do not display this option.

### 18.23 ☐ CRS ZONE ☒ NO ☐ YES **Cross Zone**

Select YES to enable cross zoning for this zone. Cross zoning requires one or more armed zones to fault within a programmed time before an alarm report is sent to the receiver. When the first cross zoned zone trips, the cross zone time specified in System Options begins to count down. When a second cross zoned zone trips or the first zone trips a second time before the end of the count down, the bell action assigned to the zone activates and the panel sends an alarm report for both zones. If no other cross zoned zone trips before the cross zone time expires, the panel sends only a zone fault report to the receiver.

Cross zoning is not compatible with all zone types: You can not enable cross zoning for Fire verify zones or for any Fire zones that have Retard Delay enabled.

**Note: For UL Installations, Cross Zoned zones must protect the same area.**

### 18.24 ☐ PRIORITY ☒ NO ☐ YES **Priority**

Select YES to provide additional protection for the premises by requiring this zone to be in a normal condition before its assigned area can be armed.

### 18.25 ☐ FIRE PANEL SLAVE INPUT: ☒ NO ☐ YES **Fire Panel Slave Input**

This option is available on Fire Zones (FI) only and allows a fire zone the ability to provide slave communication operation for a separate fire alarm control panel. If YES, this zone will transmit a restoral immediately when restored by the fire panel being monitored. A sensor reset is not required to generate the restoral message. If NO, this zone will operate as a standard fire type zone and a sensor reset is required before the zone will return to normal. Default is NO.

### 18.26 ☐ FOLLOW AREA: **Area Follower**

Allows Night, Day, Aux 1, or Aux 2 burglary zones to be delayed by following any exit or entry delay that is currently running in the area that is specified. Default is 0.

### 18.27 ☐ ZONE REAL-TIME STATUS ☒ NO ☐ YES **Zone Real-Time Status**

Selecting YES allows Real-Time Status reports, such as Door Open or Closed with zone number, to be sent using PC Log reporting. Selecting NO disables Real-Time Status for this zone. Default is NO.

### 18.28 ☐ ZONE AUDIT DAYS: **Zone Audit Days**

Enter the number of days (0 to 365) allowed to elapse without the zone being tripped before a fault message is sent. The message is sent to the receiver(s) programmed to receive Supervisory/Trouble Reports at 10:00 am following the expiration of the timer. Each time the zone is tripped, the Zone Audit Days timer restarts and begins to countdown the number of days programmed. After the countdown expires, a fault message is sent and the Zone Audit Days timer restarts and begins to countdown the number of days programmed. Available for all zone types except fire and fire verify. Enter 0 (zero) to disable this function. Default is 0 (zero).

### 18.29 ☐ REPORT WITH ACCT NO. FOR AREA: **Report with Account Number for Area**

This option is only available for 24-hour zone types (Fire, Fire Verify, Panic, Emergency, or Supervisory).

Enter the area number (1-32) to assign as a 24-hour zone type. This option sends the account number of the programmed area with messages. If the entered area number does not exist or is not valid, the account number programmed in the Communication section is sent. Select 0 (zero) to have the report sent with the account number programmed in Communication. Default is 0

## Stop

### 19.1

STOP

#### Stop

Save Programming

**WHEN ANY PANEL PROGRAMMING IS CHANGED, THE STOP ROUTINE MUST BE RUN AND 'SAVING PROGRAM' MUST DISPLAY ON THE KEYPAD IN ORDER TO SAVE THE PROGRAMMING CHANGES.**

At the STOP option, pressing any Select key allows you to exit the Programmer function of the panel. When selected, the panel performs an internal reset and exits the programmer.

The STOP routine causes the following conditions to occur:

- All 1100 Series DMP Wireless transmitters are reset to NORMAL
- The panel Status List is cleared

During the reset, all keypad displays are momentarily blank for two seconds. After the reset, the programming function terminates and the keypads return to the status list display.

The STOP option does not disarm the system. Any new areas or zones that were added during programming are not armed until the system is disarmed and armed again.

#### Power Up

For 60 seconds after power up on the XR100 Series panel, any zone transitions are not recognized. Normal zone processing resumes at the end of the 60 seconds.

## SET LOCKOUT CODE

### Set Lockout Code

### 20.1

SET LOCKOUT CODE

#### Set Lockout Code

Pressing COMMAND at the STOP option displays SET LOCKOUT CODE. This allows you to program a code that is then required to gain access to the panel internal Programmer through the keypad. You can change this code at any time to any combination of numbers from three to five digits long. You do not need to enter leading zeros when using the lockout code. Initializing the panel does not clear a Lockout Code. Lockout Codes can be changed through Remote Link.

Once you have changed the code, it is important to write it down somewhere and store it in a safe place. Lost Lockout Codes require the panel to be sent back to DMP for repair. You may cancel a Lockout Code by entering 00000 at the Set Lockout Code command.

#### Lockout Code restriction

Do not set a Lockout Code higher than 65535.

## Appendix

### 21.1 False Alarm Reduction

#### System Recently Armed report

The System Recently Armed report (S78) is sent to the receiver when a burglary zone goes into alarm within two minutes of the system being armed.

### 21.2 Diagnostics function

The XR100 Series panel contains a Diagnostics function that allows you to test the communication integrity of the LX-Bus™, identify individual zones, and also display the present electrical state of any zone. The Diagnostics function also allows you to test the integrity of the cellular communication, cellular signal, and email communication. To use Diagnostics, reset the panel, enter the Diagnostics code 2313 (DIAG), and press COMMAND.

#### Test LX-Bus

This function allows you to test the ability of the 481, 462N, 463C, 464-263C or 464-263H Interface Cards to communicate with zone and output expander modules connected to their LX-Bus circuits. Press any top row Select key when **TEST LX-BUS** displays.

The keypad displays **LX-BUS:**. Using the digit keys, enter the LX-Bus number 1 to test that LX-Bus circuit. The keypad now displays **ADDRESS: -**. Enter a 2-digit LX-Bus device address and press COMMAND. When testing LX-Bus devices, enter only the addresses to which the modules have been set.

**Important Note:** A device address is not the same as a zone number. If you are testing 714 or 715 Zone Expander Modules, which each contain four zones, the device address is the first zone number. When the panel polls a 714 on the LX-Bus, it recognizes it as a four zone device and does not poll the remaining three zones. The 714 module internally polls the remaining zones and transmits any status changes to the panel. This greatly reduces the amount of time it takes the panel to poll all LX-Bus devices.

The keypad next displays **TESTING . . . STOP** during the device testing. At any time, you can Select **STOP** to end polling. The panel records the number of no responses from the device. If all polls are received back by the panel correctly, the keypad displays **00000/65535 FAIL**.

If one or more polling attempts fail, the keypad displays **\*\*\*\*\*/65535 FAIL** with the \* representing the number of failed polling attempts. A display of **65535/65535 FAIL** indicates a problem with the interface card or its LX-Bus wiring such as a bad or broken wire, harness not properly connected, or excessive noise or distance. It can also mean that a zone number was entered that did not match a device address. Press the Back Arrow key to enter a new device address or press COMMAND to exit the **TEST LX-BUS**.

#### Zone Finder

The second Diagnostic function is the Zone Finder. Press COMMAND to display **ZONE FINDER**. This function allows you to identify individual zones on devices connected to the LX-Bus of an interface card, the panel, or any zones on the keypad data bus. To use **ZONE FINDER**, press any top row Select key. The display changes to **FAULT ZONE**. The next zone on the system that changes from a normal to an open or shorted state is displayed as **ZONE NO: \*\*\***. To continue, press the Back Arrow key.

#### Zone State

Press the COMMAND to display the third Diagnostic function: **ZONE STATE**. This function allows you to enter any zone number and check its current electrical state (Normal, Open, or Shorted). Press any Select key. The display changes to **ZONE NUMBER: \_**. Enter in the zone number you want to check and press COMMAND. The panel displays the current state of the zone as **NRML** (normal), **OPEN**, or **SHORT**.

#### LX-Bus Status

The fourth Diagnostic function is the **LX-BUS STATUS**. This function allows the panel to poll all devices connected to the LX-Bus of an interface card and check for any Overlapped, Missing, or Extra addresses. Below is a description of each status item:

**Overlap** - An overlap occurs when one device address is the same as any of the last three zones on another 714 or 715. The overlap feature cannot determine when two devices have the same address.

**Example:** Model 714 Address 00 = Zones 500 501 502 503, and the Model 711 Address 02 = Zone 502. Zone 502 would report as an Overlap because both the 714 and 711 have devices set to 502.

**Missing** - A missing occurs when a zone between 500 and 599 has been programmed in **ZONE INFORMATION** and no device with that zone address has been installed on the LX-Bus. To correct the problem, check your zone programming and zone expansion module addressing.

**Extra** - A device is installed on the LX-Bus but none of its zones are programmed into the system.

#### MAC Address

Short for Media Access Control address. This hardware address uniquely identifies each network node. Not to be confused with an IP address, which is assignable. In the Diagnostics function, the MAC address is the panel on-board network hardware address. Press any top row Select key to display the panel MAC address. Press the COMMAND key to view the next option.

### Serial Number

This number is the network communicator serial number. Reference this number for communicator date-of-manufacture, hardware version, etc. Press any top row Select key to display the Serial Number. Press the COMMAND key to view the next option.

### Current Flash

This option displays Flash 1 or Flash 2 indicating which physical flash chip the panel is currently using. Press any top row Select key to display the current flash information. Press the COMMAND key to view the next option.


### Communication Status

This option tests the individual components of cellular or network communication. The displayed results are shown below.

#### Cellular Results:

Successful Display	Failure Display
MODEM OPERATING	NO MODEM FOUND
IDENTIFIED	NO SIM CARD
TOWER DETECTED	NO TOWER
REGISTERED	NOT REGISTERED

SIGNAL:   
CONTINUE? NO YES

This displays the cellular signal strength of the nearest tower for the SIM card carrier. The s represent the signal strength 0-7. Select YES to continue through the remaining component tests. Select NO to stop testing and return to the COMM STATUS option.

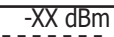
Successful Display	Failure Display
NOC SUCCESS	NOC ERROR
COMM PATH GOOD	NO ACK RECEIVED

#### Network Results:

Successful Display	Failure Display
LINK OK	LINK ERROR
DHCP OK	DHCP ERROR
GATEWAY FOUND	NO GATEWAY
DEST FOUND	NO DESTINATION
COMM PATH GOOD	NOT CONNECTED
	NO ACK RECEIVED

### Cellular Signal Strength (CELL SIGNAL)

-XX dBm  
SIGNAL: 

This option provides a way to test the cellular signal strength of the nearest tower for the SIM card carrier. Press any top row Select key to display cell signal strength. The X's represent the numerical value of the cell signal strength in -dBm. The s represent the signal strength 0-7.

### Activate Cell

To begin the cellular activation for a 463C or 464-263C Interface Module, verify that the module has been activated for the panel using Remote Link. At the keypad, press any top row Select key when **ACTIVATE CELL** is displayed. When the **SURE NO YES?** confirmation menu appears press the Select key beneath YES to complete the cellular activation.

**Note:** This option only displays if a 463C or 464-263C Interface Module is attached to the panel.

Successful Display	Failure Display
CELL ACTIVATED	NOT ACTIVATED

### Email Status

The Email Status menu tests each component of the panel's e-mail communication. The test proceeds until the first component failure or until all components have been tested with positive results. The test screen displays after each component and displays for two seconds or until the CMD key has been pressed. The displayed results are shown below.

#### Email Results:

Successful Display	Failure Display
EMAIL ENABLED	EMAIL DISABLED
LINK OK	LINK ERROR
SMTP SERVER OK	INVALID SERVER
DEST ADDRESS OK	DEST ADDR FAILED
CONNECTING	CANNOT CONNECT
AUTH MODE SENT	AUTH MODE FAILED
PASSWORD SENT	BAD PASSWORD (or USERNAME)

Successful Display	Failure Display
FROM ADDR SENT	FROM ADDR FAILED
DEST ADDR SENT	DEST ADDR FAILED
DATA MODE SENT	DATA MODE FAILED
MESSAGE SENT	MSG SEND FAILED
DISCONNECTED	DISCONNECT FAIL
EMAIL SUCCESS	



## Exiting the Diagnostics program

To exit the Diagnostics function, press the COMMAND key until **STOP** displays. Press any Select key to exit the diagnostics function. The keypad returns to the Status List display.

## 21.3 Using the 984 Command Function

This feature allows you to connect to a service receiver, primarily used to bring a new account on-line, upload panel programming completed in Remote Link™, and perform a Communication Status Test for CELL and NET paths.

Note: When not in the Programming Menu, the function 984 + COMMAND can be entered at the keypad, and a remote options menu appears. This menu contains the following options:

**NUMBER:** The panel allows you to enter into the keypad a phone number you want the panel to dial. Enter any required prefixes and area codes. After completing panel programming in Remote Link, set a trap to seize the panel when it calls. Traps are set by selecting Panel > Trap. Refer to the Remote Link User's Guide (LT-0565), or the Remote Link Help File.

Then, from the panel, enter 984 and press the COMMAND key, while the panel is in the Status List. The keypad display changes to **NBR TEST PICKUP**. Press the Select key under **NBR**. Enter the phone number for the service receiver connected to the Remote Link computer. Press each number key slowly and deliberately. The panel dials each number as it is pressed. If you make a mistake, press the Back Arrow key. The panel stops dialing and return to the Status List.

You can enter up to 32 characters for the phone number. Once you have entered 16 characters the LCD display is full: Press the COMMAND key to enter the final 16 characters. To enter a # (pound sign) press the '0' then the fourth (far right) Select key, and to enter an \* (asterisk) press the third Select key. Program a pause by entering the letter P. Program CID message communication by entering the letter T in the first position. Cancel call waiting by entering \*70P as the first characters. These characters are counted as part of the allowable 32 characters. Press COMMAND after you enter the phone number.

The panel calls the receiver connected to Remote Link to download the new programming. Remote Link then traps the panel.

**Note:** The panel makes ten attempts to reach the receiver. While attempting to contact the receiver, if the panel needs to send an alarm report, the panel stops dialing and uses the phone line to send its report.

**TEST:** The panel allows you to perform a Communication Status Test on each component of the panel's cellular or network communication paths. While the Status List displays, enter 984 and press the COMMAND key. The keypad display changes to **NBR TEST PICKUP**. Press the Select key under **TEST** to allow the panel to perform a Communication Status Test. The display prompts the user for a user code to be entered. The user code must have the authority to perform a System Test.

Upon entry of a Cell or Network path when prompted, the test runs and the results display on the keypad. See Diagnostic Functions section for a description of the Communication Status results.

**PICKUP:** The panel picks up the phone line when Remote Link™ calls in. The phone must be ringing before selecting PICKUP. After completing panel programming in Remote Link, connect to the panel by selecting Panel > Connect. Refer to the Remote Link User's Guide (LT-0565), or Help File for complete information about connecting to panels.

While the panel displays in the status list and the telephone line at the panel rings, enter 984 and press the COMMAND key. The keypad display changes to **NBR TEST PICKUP**. Press the Select key under **PICKUP** to allow the panel to seize the line. The panel immediately seizes the phone line and sends a carrier tone to the receiver. A verification process occurs and, if successful, the panel grants remote access to its programming and Event Buffer.

After the panel has seized the line, send the file from Remote Link by selecting Panel > Send. Remote Link then uploads the new programming into the panel. You may also Request Events by selecting Panel > Request Events in Remote Link. The panel begins sending the first event or access that occurred on or after the start date specified by Remote Link and finishes by sending the last event or access that occurred on or before the end date specified by Remote Link. If necessary, a Request Events upload in progress can be cancelled.

### Keypad Displays

When either the **RMT** or **PICKUP** options are used, the keypad displays **LINE SEIZED**. This indicates that the panel has seized the line and is executing its program. If the line cannot be accessed, or if the **RMT** or **PICKUP** options are used before all connects attempts are made, the keypad displays **SYSTEM BUSY**.



## 21.4 Using the Walk Test

The XR100 Series panel provides a walk test feature that allows a single technician to test the protection devices connected to zones on the system. Conduct the Walk Test within 30 minutes of resetting the panel. The Walk Test automatically ends if no zones are tripped for 20 minutes. TEST IN PROGRESS displays at all keypads programmed with the same Area Display features. When five minutes remain, TEST END WARNING displays. The Walk Test only tests zones assigned to the areas programmed into the keypad in Area Display. If any areas are armed the Walk Test does not start and SYSTEM ARMED displays.

**Note:** If the Panic Supervision option is enabled in SYSTEM OPTIONS, the panic button on any programmed key fob can be tested during the Walk Test. When the panic button is pressed a verification message is sent by the receiver.

WALK TEST

### Walk Test

To conduct the Walk Test, reset the control panel by momentarily placing a jumper on J16. From the keypad, enter the code 8144 and press COMMAND. The keypad displays WALK TEST for four seconds. If the system is monitored and the communication type is DD or NET, the system sends a System Test Begin report to the central station. After four seconds, the keypad displays the zone type choices for testing.

\*BG \*FI \*PN \*SV

### Zone Types

Select the zone type you want to test. An asterisk next to the zone type indicates the zone type chosen for testing. Press the Select key again to deselect the zone type. When you have selected all the zone types you want for testing, press the COMMAND key to display the next Walk Test option. Pressing the Back Arrow key exits the Walk Test.

**BG** (Burglary zones) - Select **BG** to test burglary zones. Includes all NT, DY, EX, A1, and A2 zones.

**FI** (Fire zones) - Select **FI** to test fire zones. Includes all FI and FV zones.

**PN** (Panic zones) - Select **PN** to test panic zones. Includes all PN and EM zones.

You do **NOT** have to hold the zones for 2 seconds in normal mode. You are only required to hold the panic during the Walk Test because the zone takes additional time to report when the system is in test mode.

**SV** (Supervisory zones) - Select **SV** to test supervisory zones. Includes all SV zones.

**Note:** During the Walk Test, trip each zone device or button on the system for 1 to 2 seconds.

WLS PIR

**WLS** (Wireless Check-in Test) - Select WLS to automatically test wireless transmitter communications. Includes all wireless devices except key fobs and transmitters programmed for a supervision time of 0 (zero).

**PIR** (Wireless PIR Walk Test) - The PIR Walk Test allows the installer to verify the 1126 operation. When enabled, the 1126 LED flashes each time motion is detected for up to 30 minutes. This is a local test only and no messages are sent to the Central Station.

BELL NO YES

### Bell Action

This option selects the bell output action when a zone under test faults. This option allows the panel bell, and/or burglary bell, and/or fire bell to turn ON and then OFF each time a zone is tripped (opened or shorted).

**NO** - Select NO for no bell output action during Walk Test.

**YES** - Select YES to turn on any bell output for 2 seconds during Walk Test.

**PULS** - Select PULS to turn on any bell output for 1/4 second during Walk Test. Any LX-Bus device output turns on for 1.6 seconds due to the polling cycle.

TRIPS: XXX END

### Trip Counter For Walk Test

Once in the Walk Test, walk around and trip each protective device. Continue tripping devices until the entire system is tested.

With each zone trip during the Walk Test:

- Keypad display increments each time a selected zone is opened or shorted
- The keypad buzzes for two seconds
- The panel sounds the alarm bells as programmed in Bell Action
- Each time a FI, FV, or SV zone trips, a Sensor Reset occurs.

If **ENHANCED ZONE TEST** is selected as YES:

A Verify message is sent at the time the zone trip occurs instead of at the end of the Walk Test. For FI, FV or SV zone types, the Verify message is sent at the initial trip. For all other zone types, the Verify message is sent when the zone restores. This allows the Central Station to count the number of devices per zone.

**END** - Select END to stop the Walk Test. When the Walk Test ends or a 20-minute time-out expires, a final Sensor Reset occurs. The System Test End message is sent to the receiver along with Verify and Fail messages for each zone under test. Faulted zones then display on the keypad.

CKIN:XXX/ZZZ END

## Trip Counter For DMP Wireless Check-in Test (WLS)

Displays the number of wireless zones that automatically communicate a supervision check-in message.

- The number of zones that check in. (XXX in the example).
- The total number of wireless zones programmed for supervision that should check in. (ZZZ in the example).

**END** - Select END to stop the Wireless Check-in Test. When the test ends or a 20-minute time-out expires, normal wireless zone processing returns. If all transmitters check-in, both numbers match within three (3) minutes. If a transmitter has multiple zones (1101, 1114, etc.), all zones are included in the counts. Failed wireless zones display on the keypad.

TEST END WARNING

## Test End Warning

When five minutes remain on the 20 minute Walk Test timer, the keypad displays TEST END WARNING . If no additional test zone trips occur, the test ends and a final Sensor Reset automatically occurs. The System Test End message is sent to the receiver along with Verify and Fail messages for each zone under test. Faulted zones then display on the keypad.

**Note:** Key fobs do not send failure messages in order to prevent functioning key fobs that are not present at the time of the test from being reported as MISSING.

SOUTH LOBBY

## Failed Zones Display

ZONE: 10 -FAIL

For each zone that did not trip (failed) at least once during the Walk Test, all keypads with matching Area Display programming display the zone name and number and buzz for one second. Any selected (\*FI \*PN \*SV) 24-hour zone that is faulted at the end of the Walk Test displays a trouble condition for that zone regardless of the message programmed for the open or short condition of the zone and a zone trouble is sent to the receiver. Press the COMMAND key to display the next failed zone.

**Note:** For the Wireless Check-in Test, failed wireless zones display only on the keypad. Zone Verify/Fail reports are not sent to the central station receiver for the wireless check-in test.

## 21.5 Keypad Speaker Operation

When using LCD Keypads, the panel provides distinct speaker tones from the keypad for Fire, Burglary, Zone Monitor, and Prewarn events. The list below details the conditions under which the speaker is turned on and off for each event.

Fire	On - Fire zone alarm and Bell Output or Fire Bell Output is ON. Off - Alarm Silence.
Burglary	On - Burglary zone alarm and Bell Output or Burglary Bell Output is ON. Off - Alarm Silence.
Zone Monitor	On - One time only when a monitored zone is tripped. Off - After one tone.
Prewarn	On - During Entry Delay. Off - When Entry Delay expires.

## 21.6 Cross Zoning

Caution must be taken when cross zoning devices to ensure that the Cross Zone Time is long enough to allow an intruder to trip both devices before it expires. A Cross Zone Time that is too short may allow an intruder to trip the devices and allow only a zone fault report be sent to the central station.

When a Cross Zoned zone trips a FAULT report is sent to the SCS-1R Receiver. When two Cross Zoned zones trip within the Cross Zone Time, both zones send ALARM signals to the receiver. For example, if zones 1 and 2 are Cross Zoned zones, and only zone 1 trips, a FAULT report is sent to the receiver for zone 1. If zone 1 trips and zone 2 trips within the Cross Zone Time, an ALARM report is sent to the receiver for zone 1 and zone 2.

Report Type	Immediately	Delayed
Alarm	Y	
Trouble	Y	
Restore	Y	
Opening		Y
Closing		Y
Bypass	Y	
Reset	Y	
Supervisory	Y	
Add Codes		Y
Delete Codes		Y
Change Codes		Y
Permanent Schedule Change		Y
Temporary Schedule Change		Y
Door Access		Y
Door Access Denied	Y	
Late to Close	Y	
Force Armed Zone	Y	

## 21.7 Events Manager

The Events Manager allows you to delay sending certain reports to the central station receiver. Reports can be kept in the panel memory until overwritten by new activity or held until the memory buffer reaches 50 events or 50 door access granted events. When the buffer is full, the panel automatically sends the stored reports to the central station receiver. Below is a list of panel reports you can delay using the Events Manager option.

## 21.8 User Profiles

A profile defines the authority of each user code in the system. Profiles are programmed in the Keypad User Menu. Several characteristics associated with each User Profile define its authority within the system. To effectively program an XR100 Series system, you must understand the interrelationship between profiles, devices, output groups, and areas. Below is a brief explanation of the User Profile elements. For more information about user profiles, refer to the XR500/XR100 User's Guide (LT-0683).

**Profile Number** - Each profile may be assigned a unique number from 1 to 99.

**Note:** Profiles cannot be changed via keypad in an All/Perimeter or Home/Sleep/Away system. Use the default profiles 1 through 10. Refer to the User Profiles Record and the XR500/XR100 User's Guide (LT-0683).

**Profile Name** - Each profile may be assigned a 32-character name. The Profile Number is the default name.

**Area Number** - Each profile may be assigned specific areas of the system for arming and disarming. When creating profiles 1 to 98, NO areas are assigned by default. The default for profile 99 is ALL areas assigned. Profile 99 is preprogrammed in the system at the factory.

**Access Area Number** - Each profile may be assigned door access area assignments. Default for profile 1 to 98 is NO areas assigned. Default for profile 99 is ALL areas assigned. Profile 99 is preprogrammed at the factory.

**Output Group Assignment** - Each profile may be assigned an output group number from 1 to 10. Default for profile 1 to 98 is NO output group assigned. Default for profile 99 is output group 10. Your system may be programmed to turn on an output group at certain keypads when door access occurs.

**User Menu Assignments** - Each user profile may have any of the menus assigned to it as shown in the User Profile Record below. The User Profile Record lists the user menu profile assignments and the system functions users are allowed to access based on the profile numbers assigned to their codes.

Always make sure that at least one administrator in your system has a profile with all authorities and areas.

## 21.9 User Profiles Record

This User Profiles Record can be used as a tool when programming Devices, Profiles, Areas, and Output Groups. Because these programming options are interrelated, use this sheet to plan the system before you begin the installation and programming process.

Profile #	Profile Name	Arm/Disarm Areas	Access Areas	Output Group	Arm	Disarm	Alarm Silence	Sensor Reset	Door Access	Armed Area	Outputs On/Off	Zone Status	Bypass Zones	Zone Monitor	System Status	System Test	User Profiles	User Codes	Schedules	Time	Display Events	Service Request	Fire Drill	Extend Schedules	Temp User Code	Anti-passback	Easy Arm/Disarm	Shift/Time Access	Re Arm Delay	Sec Language
																											1 2 3 4 A			
																											1 2 3 4 A			
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## 21.10 Zone Type Descriptions

This section describes applications for the default zone types in Zone Information programming.

### -- (Blank Zone)

Customizable zone type. By default, no actions are programmed to occur with Blank Zone. A zone name must be entered to use this zone type: This zone type is not the same as an \*UNUSED\* zone.

### NT (Night Zone)

Controlled instant zone used for perimeter doors and windows and interior devices such as PIRs and Glassbreak detectors.

### DY (Day zone)

Used for emergency doors or fire doors to sound the keypad buzzer and display the zone name when the zone is faulted. Day zones also send alarm reports to the receiver during the system armed periods.

### EX (Exit zone)

Initiates the entry delay timer when its assigned area is fully armed. Also, can initiate an exit delay timer to allow a user to exit an area after the arming process starts.

### PN (Panic zone)

Used for connecting to mechanical devices that allow a user to signal an emergency alarm. Panic zones can provide either a silent or audible alarm with or without reporting to a central station receiver.

### EM (Emergency zone)

These are used for reporting medical or other non-panic emergencies to the central station receiver.

### SV (Supervisory zone)

Used to provide 24-hour zone supervision to devices associated with fire systems. Typical applications are tamper switches on Post Indicator Valves (PIVs), gate valves, and low and high temperature gauges.

### FI (Fire zone)

Used for any type of powered or mechanical fire detection device. Typical applications are for smoke detectors, sprinkler flowswitches, manual pull stations, and beam detectors. Retard, cross zoning, and presignal options are available for the Fire zone type.

### FV (Fire Verify zone)

Used primarily for smoke detector circuits to verify the existence of an actual fire condition. When a Fire Verify zone initiates an alarm, the panel performs a Fire Reset. If any Fire Verify zone initiates an alarm within 120 seconds after the reset, an alarm is indicated. If an alarm is initiated after 120 seconds, the cycle repeats.

### A1 and A2 (Auxiliary 1 and Auxiliary 2)

These zones are similar to a Night zone and are typically used to protect restricted areas within a protected premises.

### AR (Arming zone)

This zone allows you to connect a keyswitch to a zone and use it to arm and disarm one or more areas.

## 21.11 Zone Type Specifications

The XR100 Series panel contains multiple default zone types for use in configuring the system. These zone types provide the most commonly selected functions for their applications. All zone types can be customized by changing the variable options listed below. The Keypad Bus Zone Information table below reflects the zone types for Keypad Bus Zones. The XR100 Series LX-Bus Zone Information table below reflects the zone types for LX-Bus Zones.

Keypad Bus Zone Information	Type	Area	Fire Bell	Disarmed Open			Disarmed Short			Armed Open			Armed Short																
Assign Disarm condition of NT, DY, EX, A1, and A2 only	-- NT	PERIM INT BDRM or 1 to 8	Output *	Message	Output *	Action	Message	Output *	Action	Message	Output *	Action	Message	Output *	Action	Swinger	Prewarn	Entry Delay	Retard Delay	Presignal	Fast Response	Cross Zone	Priority	Follow Area	Real-Time Rpts	Door Number	Style		
Assign Prewarn and Entry Delay for EX only	DY EX			A T L - D S		S P M F	A T L - D S		S P M F	A T L - D S		S P M F	A T L - D S		S P M F	N or Y	1 to 8	1 or 4	N or Y	1 to 8	N or Y	N or Y	N or Y	0 to 8	N or Y	0 to 8	TGL ARM DIS STEP MNT		
Assign Retard and Presignal for FI, SV, A1, and A2 only	FI PN																												
	EM SV																												
Zone Type Defaults	A1 A2 FV AR																												
Night	NT			-	0	S	-	0	S	A	0	S	A	0	S	Y					N	N	N	0	N	0			
Day	DY			T	0	S	T	0	S	A	0	S	A	0	S	Y					N	N	N	0	N	0			
Exit	EX			-	0	S	-	0	S	A	0	S	A	0	S	Y	1-8	1			N	N	N		N	0			
Fire	FI		0							T	0	S	A	0	S	N			N	+	N	N	N						
Panic	PN									T	0	S	A	0	S	N					N	N	N						
Emergency	EM									T	0	S	A	0	S	N					N	N	N						
Supervisory	SV		0							T	0	S	A	0	S	N			N	+	N	N	N						
Auxiliary 1	A1			T	0	S	A	0	S	T	0	S	A	0	S	N			N	+	N	N	N	0	N	0			
Auxiliary 2	A2			T	0	S	A	0	S	T	0	S	A	0	S	N			N	+	N	N	N	0	N	0			
Fire Verify	FV		0							T	0	S	A	0	S	N					N		N						
Arming	AR																										TGL		
Zone Name	*Output Options: 1 to 6, 450 to 474, 480 to 499, 500 to 599, D1 to D8, G1 to G20.    + = Set retard to YES before selecting presignal.    v = Zone functions not available.																												

### 21.11.1 Keypad Bus Zone Type Defaults

These are complete spellings of the abbreviations used for the zone types, such as Night and Exit.

**Type** - These are the abbreviations used for the zone types, such as NT and EX.

**Area** - For an Area system or a Home/Sleep/Away with Guest system this is 1 to 8. For an All/Perimeter or Home/Sleep/Away system, this is the Interior, Bedroom, or Perimeter. Select the area for NT, DY, EX, A1, A2, and AR types.

**Fire Bell Out** - Only available for FI, FV, and SV zones. Use any output zone number listed.

**Message** - A = alarm report, T = trouble report, L = local, no report, - (dash) = no report, D = door propped (When SV zone is connected to 303 Silence/Reset Switch), S = sensor reset/alarm silence, C = early morning ambush cancel.

**Output** - These are 1 to 6 on-board and 500 to 599 off-board relay outputs, 450 to 474 and 480 to 499 wireless outputs, D1 to D8, and G1 to G20.

**Action** - This selects the action of the output: S = steady, P = pulse, M = momentary, and F = follow

**Swinger** - The zone can be automatically bypassed after a programmed number of trips.

**Prewarn** - This selects the keypad address that sounds the entry prewarn for this zone.

**Entry Delay** - This is the entry delay timer selected as the default for this zone.

**Retard Delay** - Provides a programmed retard time before an alarm initiates from a shorted zone. When used on an arming zone, the retard delay occurs when the zone is shorted before the armed state has changed. If the arming zone has Maintain as the Style, the retard delay also occurs when the zone returns to a normal state.

**Presignal** - Provides a keypad tone for zones in retard delay. Retard must be YES before Presignal can be selected.

**Fast Response** - Provides a 167ms zone response instead of the normal 500ms response.

**Cross Zone** - Provides cross zoning with any of the 574 zones.

**Priority** - Requires this zone to be in a normal condition before the area can be armed.

**Style** - The abbreviations for arming zone style:

TGL = Toggle, ARM = Arm only, DIS = Disarm only, STEP = Wireless arming, MNT = Maintain







## 21.12 Common Keypad Messages

There are several common keypad messages that the keypad displays to inform the technician and end-user. The common messages are described below. Possible solutions are also provided.

Message	Meaning	Possible Solutions
INVALID AREA	The user has attempted a door access for an area they are not assigned.	Change the user access areas if access to the area is needed. If access is not needed, the user cannot enter the area.
INVALID CODE	The user code you entered is not recognized by the system.	Check the user code and try again.
INVALID PROFILE	A user attempted a function that is outside of the assigned profile.	Check the user profile settings.
INVALID TIME	A user code assigned to a specific schedule has entered outside of the valid schedule.	See Schedules and User Codes.
CLOSING TIME	The scheduled has expired but the area is not armed.	Users still on the premise should arm the system or extend the schedule to a later time.
LATE TO CLOSE	The system was not armed at its scheduled closing time.	Users still on the premise should arm the system or extend the schedule to a later time.
FAILED TO EXIT	A user assigned the anti-passback option has attempted to re-enter an area from which they did not exit properly.	The user must exit the area through the proper door. If not possible, your system administrator should select the Forgive option in the User Codes menu.
AC TROUBLE	The system is not getting proper power.	Check that all AC connections are good.
BATTERY TROUBLE	The battery is either low or missing.	Check that the battery connections are good and the battery is still good.
PHONE LINE 1 TROUBLE	There is trouble with the phone line supervision.	Plug in the phone line.
SYSTEM TROUBLE or SERVICE REQUIRED	There is a problem with one or more components in the system.	Make sure the J16 jumper is removed from the panel. Make sure there is not a short or open condition on the green data wire to the keypad. You may also need to check that all of the keypads and expansion modules on the bus are good.
SYSTEM BUSY	The system is performing another task with a higher priority.	Wait a few moments for the system to complete the task. Make sure the J16 jumper is not on the panel. If the message displays for a long period of time, the processor could be locked up.
4-WIRE BUS TROUBLE	There is not a supervised device on the bus.	Program a device to be supervised.
	There is low voltage or an open yellow wire.	Make sure all wires are connected.
	Two devices share the same address.	Program one of the devices to a unique address.
TRANSMIT FAIL	The panel has attempted to communicate with the central station 10 times and has not succeeded.	Verify your communication type, account number, and phone number. Make sure the telephone line is connected and working properly.
NON-POLLED ADDRESS	The device is not set to DOOR, KEYPAD or FIRE in Device Setup during programming.	Program the device as DOOR, KEYPAD or FIRE in Device Setup.
ENTER CODE (entering Programming)	A lockout code has been programmed for the panel.	Enter the lockout code.
WIRELESS TROUBLE	The panel is unable to communicate with the wireless receiver.	Verify the receiver is properly connected to the panel. Verify the correct House Code is programmed in System Options.
	The wireless receiver is missing.	

## 21.13 Area Account Number Messages

XR100 systems send an area account number instead of the system account number with the following panel messages/events based on the area assigned to the zone that initiated the alarm:

- WARNING: Alarm Bell Silenced (S34)
- Abort Signal Received (S45)
- Cancel Signal Received (S49)
- ALERT: System Recently Armed (S78)
- ALERT: Exit Error (S80)
- ALARM: Verify Signal Received (S96) (not currently sent on area arming systems)

The XR100 has always sent the area account number for the following messages:

- Zone event messages for all non-24 hour zones assigned to an area
- Arming
- Disarming

The XR100 sends the following messages using the area account number based on the lowest area number in Display Areas programming from the keypad being used:

- User Code Add/Change/Delete
- Door Access/Denied
- User 1 Ambush and Early Morning Ambush
- System Test Begin/End
- Unauthorized Entry
- Service Code and Service Request

The XR100 sends the following messages using the area account number based on the area number:

- Late to Arm for area schedules

## Revisions to This Document

This section explains the changes made to this document during this revision. It lists the date and identifies the change(s) made, the related section number and section heading, and a summary of the change.

### Guide

Version	Section Number and Heading	Quick Explanation of Changes
1.17	3.5 Communications Type	Added 464-263C and 464-263H reference
	3.18	Added 464-263C reference
	21.2	Removed 463G, added 464-263C AND 464-263H reference
1.16	1.7 Keypads	Added 7800 reference
	1.8 Special Keys	Added 7800 Reference
	1.11 Keypad Displays Current Programming	Added 7800 Reference
1.15	3.5 Communication Type	Added 463C reference
	3.18 First GPRS APN	Added 463C reference
	21.2 Diagnostics Function	Added Activate Cell information
1.14	9.25 Change Own User Code	Added section
	9.26 Panic Supervision	Added section

## Certifications

ANSI/SIA CP-01-2010 False Alarm Reduction  
California State Fire Marshal (CSFM)  
FCC Part 15

FCC Part 68 Registration ID CCKAL00BXR500  
New York City (FDNY COA #6167)

ANSI/UL 294	Access Control System Units
ANSI/UL 365	Police Connected Burglar
ANSI/UL 609	Local Burglar
ANSI/UL 1023	Household Burglar
ANSI/UL 1076	Proprietary Burglar
ANSI/UL 1610	Central Station Burglar
ANSI/UL 1635	Digital Burglar
ANSI/UL 985	Household Fire Warning
ANSI/UL 864	Fire Protective Signaling
ANSI/UL 294	Access Control System Units
ANSI/UL 1076	Proprietary Burglar
ANSI/UL 1610	Central Station Burglar
ANSI/UL 864	Fire Protective Signaling
UL Standard Line Security	

## Compatible with Devices listed for

ANSI/UL 268	Smoke-Automatic Fire Detectors
ANSI/UL 346	Waterflow Indicators for Fire Protective Signaling Systems
ANSI/UL 636	Holdup Alarm Units and Systems Accessory UL Bank, Safe, and Vault



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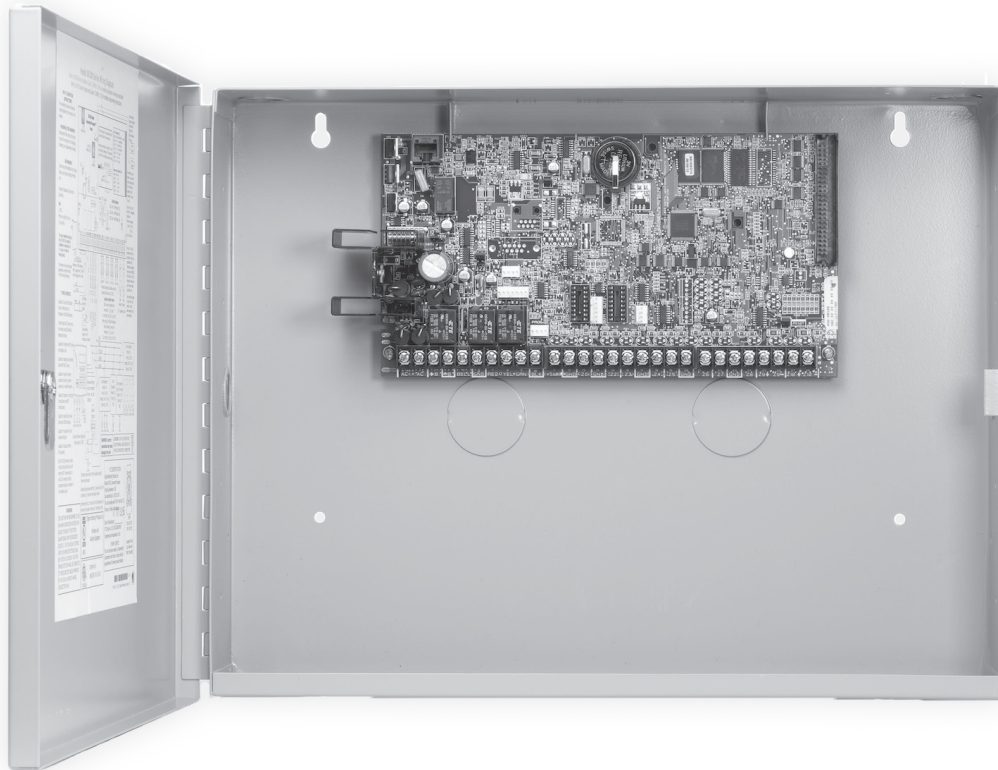
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# INSTALLATION GUIDE



## **XRI00 SERIES CONTROL PANEL**

## **MODEL XR100 SERIES CONTROL PANEL INSTALLATION GUIDE**

### **FCC NOTICE**

This equipment generates and uses radio frequency energy and, if not installed and used properly in strict accordance with the manufacturer's instructions, may cause interference with radio and television reception. It has been type tested and found to comply with the limits for a Class A computing device in accordance with the specification in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the installer is encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna

- Relocate the computer with respect to the receiver

- Move the computer away from the receiver

- Plug the compute into a different outlet so that computer and receiver are on different branch circuits

If necessary, the installer should consult the dealer or an experienced radio/television technician for additional suggestions. The installer may find the following booklet, prepared by the Federal Communications Commission, helpful:

"How to identify and Resolve Radio-TV Interference Problems."

This booklet is available from the U.S. Government Printing Office, Washington D.C. 20402  
Stock No. 004-000-00345-4

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## Product Specifications

### 1.1 Power Supply

Transformer Input:	Model 327, plug-in — Primary input: 120 VAC, 60 Hz, Secondary output: 16.5 VAC 50 VA Model 322/323, wire-in — Primary input: 120 VAC, 60 Hz, Secondary output: 16 VAC 56 VA Model 324/324P, wire-in — Primary input: 120 VAC, 60 Hz, Secondary output: 16 VAC 100 VA
Standby Battery:	12 Vdc, 1.0 Amps Max. charging current Models 364, 365, 366, 368, or 369 Replace every 3 to 5 years
Auxiliary*:	12 Vdc output at 1.5 Amp Max 12Vdc output at 325mA when used with two Model 364 batteries in the Model 341 enclosure
Bell Output*:	12 Vdc at 1.5 Amp Max

All circuits are inherent Power Limited except the red battery wire and AC terminal.

\* For Commercial Fire installations, see the Compliance Instructions section.

### 1.2 Communication

- Built-in network communication to DMP SCS-1R or SCS-VR Receivers (XR100N only)
- Built-in dialer communication to DMP SCS-1R Receivers
- Optional cellular communication to DMP SCS-1R or SCS-VR Receivers
- Built-in Contact ID communication to DMP SCS-1R Receivers
- Optional 893A Dual Phone Line Module with phone line supervision
- Can operate as a local panel

### 1.3 Panel Zones

Eight 1k Ohm EOL burglary zones (zones 1 to 8)

Two 3.3k Ohm EOL powered zone with reset (zones 9 and 10)

### 1.4 Keypad Bus

You can connect up to a total of eight of the following supervised keypads and expansion modules to the keypad bus:

- Alphanumeric keypads
- Single-zone detectors
- Wireless Keypads (maximum of 4)
- Four- and/or single-zone expansion modules
- Access control modules

### 1.5 LX-Bus™

You can connect the following devices to the LX-Bus™ provided on the panel or by the DMP 481, 462N, 462P, 463C, 464-263C and 464-263H Interface Cards up to the maximum number of LX-Bus™ addresses. See Accessory Devices in section 3.4.

- Sixteen-, eight-, four- and/or single-zone expansion modules
- Model 521LX or 521LXT Smoke Detectors with CleanMe
- Model 2W-BLX or 2WT-BLX Smoke Detectors
- Graphic annunciator modules
- Relay output expansion modules

### 1.6 Outputs

The XR100 Series provide two Single Pole, Double Throw (SPDT) relay outputs which require the installation of two Model 305 relays, each rated 1 Amp at 30 Vdc resistive (power limited sources only). A Model 431 Output Harness is required to use these outputs.

The XR100 Series panels also provide four open collector outputs rated for 50mA each. The open collector outputs provide ground connection for a positive voltage source. A Model 300 Output Harness is required to use these outputs.

### 1.7 Enclosure Specifications

The XR100 Series panels are shipped in an enclosure with a transformer, End-of-Line resistors, battery leads, user's guide, and programming sheets.

Enclosure Model	Size	Color(s)	Construction (Cold Rolled Steel)
350	17.5"W x 13.5"H x 3.5"D	Gray (G) or Red (R)	18-Gauge
350A	17.5"W x 13.5"H x 3.75"D	Gray (G)	18-Gauge with 16-Gauge door
341	12.45"W x 6.55"H x 3.15"D	Gray (G)	20 Gauge

## Panel Features

### 2.1 Description

The DMP XR100 Series panel is a versatile 12 Vdc, combined access control, burglary, and fire communicator panel with battery backup. The XR100 Series provides eight on-board burglary zones and two on-board 12 Vdc Class B powered zones. The powered zones have a reset capability to provide for 2-wire smoke detectors, relays, or other latching devices. The XR100 Series can communicate to DMP SCS-1R or SCS-VR Receivers using digital dialer, cellular, network, or Contact ID communication.

### 2.2 Zone Expansion

Up to 142 additional zones are available on the XR100 Series using DMP LCD keypad remote zone capability and zone expansion modules. The panel keypad data bus supports up to eight supervised device addresses with each address supporting up to four programmable expansion zones.

Up to 100 zones are available using the on board LX-Bus, Model 481, 462N, 462P, 463C, 464-263C and 464-263H Interface Cards, and any combination of single, four, eight, or 16-zone expansion modules and single-zone LX-Bus™ detectors.

### 2.3 Output Expansion

In addition to the two SPDT relays and four programmable open collector outputs on the XR100 Series, you can also connect up to 25 programmable Model 716 Output Expansion Modules. These modules can provide an additional 100 programmable SPDT relays.

The XR100 Series provides 100 Output Schedules for programming the 716 to perform a variety of annunciation and control functions. Also assign the 716 outputs to any panel Output Options such as Fire Alarm, Communication Fail, or Phone Trouble Outputs. Refer to the 716 Installation Guide (LT-0183).

The LX-Bus™ also supports the Model 717 Graphic Annunciator Module. Each 717 module supplies 20 switched ground outputs that follow the state of their assigned zones.

**Note:** The 717 supports the first eight Keypad Bus addresses. Refer to the 717 Installation Guide (LT-0235) and 716 Installation Guide (LT-0183).

### 2.4 Central Station Communication

Program the XR100 Series panel for reporting to DMP SCS-1R or SCS-VR Receivers using digital dialer, cellular, network, or Contact ID communication. The XR100 Series connects at the premises to a standard RJ31X or RJ38X telephone jack. Use the DMP 893A Dual Phone Line Module when connecting the XR100 Series panel to two separate phone lines in fire or burglary applications.

### 2.5 Caution Notes

Throughout this guide you will see caution notes containing information you need to know when installing the panel. These cautions are indicated with a yield sign. Whenever you see a caution note, make sure you completely read and understand its information. Failing to follow the caution note can cause damage to the equipment or improper operation of one or more components in the system. See the example shown below.



***Always ground the panel before applying power to any devices:*** The XR100 Series must be properly grounded before connecting any devices or applying power to the panel. Proper grounding protects against Electrostatic Discharge (ESD) that can damage system components.

### 2.6 Compliance Instructions

For applications that must conform to a local authorities installation standard or a National Recognized Testing Laboratory certificated system, please see the Wiring Diagrams for Notification Appliances and the Listed Compliance Specifications section near the end of this guide for additional instructions.

## System Components

### 3.1 Description

The DMP XR100 Series system is made up of an alarm panel with a built-in communicator, an enclosure, battery, one 16.5 VAC transformer, and keypads. You can use up to sixteen supervised 32-character LCD keypads; network communications; zone and output expansion modules; and initiating and indicating circuit modules. You can also connect auxiliary devices to the panel's output relays to expand the basic system control capability. Combined current requirements of additional modules may require an auxiliary power supply. Refer to the XR100 Series Power Requirements section in this guide when calculating power requirements.

## 3.2 Wiring Diagram

The XR100 Series diagram below shows some of the accessory modules you can connect for use in various applications. A brief description of each module follows in section 3.4.

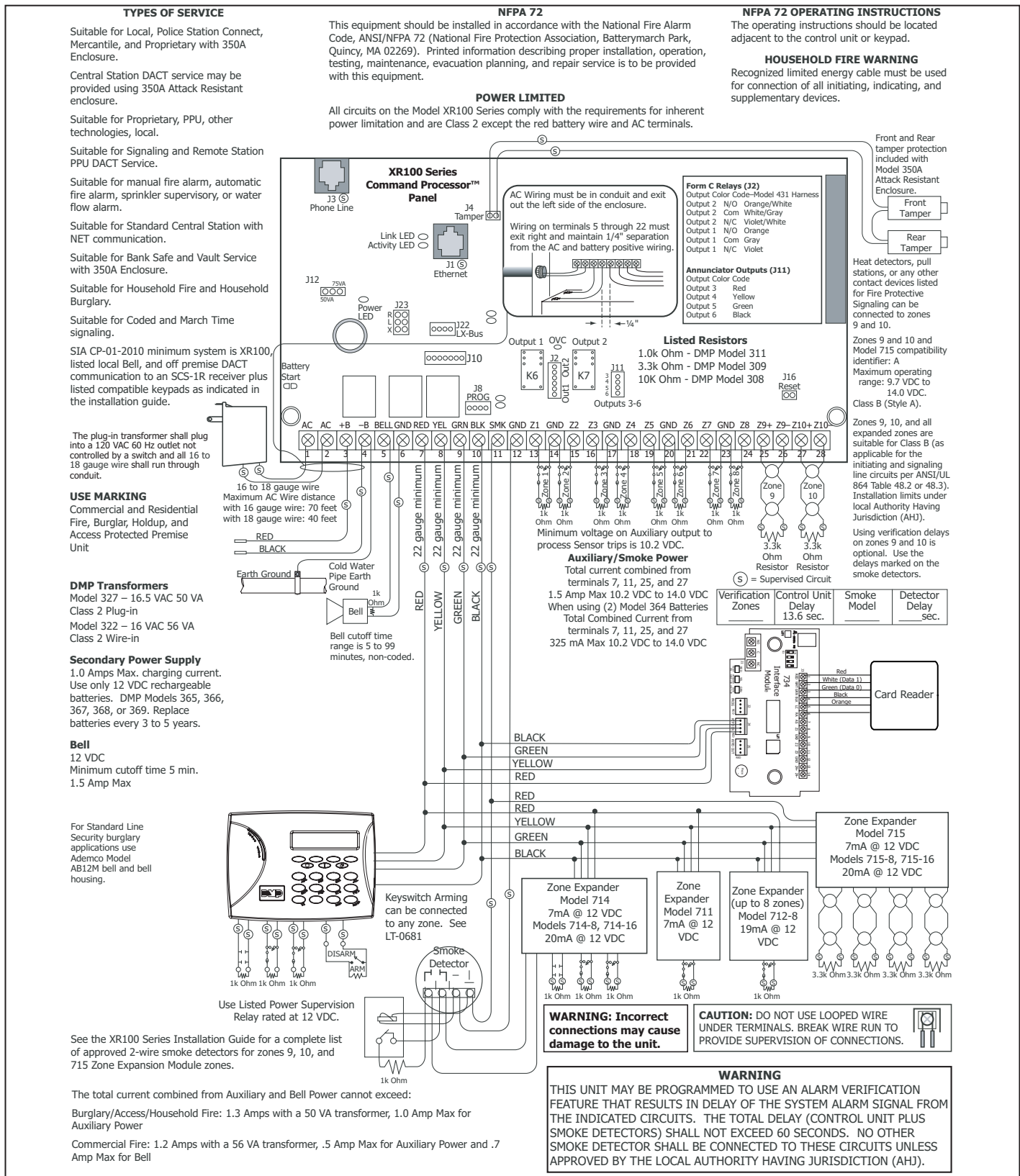


Figure 1: XR100 Series Wiring Diagram

## 3.3 Lightning Protection

Metal Oxide Varistors and Transient Voltage Suppressors help protect against voltage surges on XR100 Series input and output circuits. Additional surge protection is available by installing the DMP 370 or 370RJ Lightning Suppressors.

# INTRODUCTION

## 3.4 Accessory Devices

Interface Card	
462N Network Interface Card	Allows you to connect the XR100 Series to any compatible data network and use its communication capability in place of standard dial out telephone lines. The 462N also provides an LX-Bus™ for connecting zone and output expansion modules to the panel.
463C CDMA Cellular Communicator Card	Allows you to connect the XR100 Series to any compatible CDMA/SMS network. The 463C also provides an LX-Bus™ for connecting zone and output expansion modules to the panel.
464-263C/464-263H Cellular Communicator Card	Provides a fully supervised alarm communication path over the CDMA network or HSPA + network for XR500 Series panels. The 464-263C or 464-263H also provides an LX-Bus™ for connecting zone and output expansion modules to the panel.
481 Expansion Interface Card	Provides one LX-Bus for connecting up to 100 zone and output expansion modules.
Expansion Modules	
710 Bus Splitter/Repeater	Allows you to increase keypad or LX-Bus™ wiring distance to 2500 feet.
711 Single Point Zone Expanders	Provides one Class B zone for connecting burglary devices.
714, 714-8, 714-16 Zone Expanders	Provides Class B zones for connecting burglary and non-powered fire devices.
712-8 Zone Expander	Provides Class B zones for connecting burglary devices.
715, 715-8, 715-16 Zone Expanders	Provides 12 Vdc Class B powered zones for connecting smoke detectors, glassbreak detectors, and other 2- or 4-wire devices.
716 Output Expander	Provides four Form C relays (SPDT) and four switched grounds (open collector) for use in a variety of remote annunciation and control applications for use on the LX-Bus only.
717 Graphic Annunciator Module	Provides 20 zone following annunciator outputs (open collector) for use in a variety of remote annunciation and control applications for use on the LX-Bus only.
734, 734N, 734N-WiFi Wiegand Interface Module*	Provides system codeless entry, and arming and disarming using access control readers.
DMP Two-Way Wireless Devices	
1100X/1100XH Wireless Receiver	Supports up to 100 devices in residential or commercial wireless operation.
1100R Repeater	Provides additional range for wireless devices.
1101 Universal Transmitter	Provides both internal and external contacts that may be used at the same time to yield two individual reporting zones from one wireless transmitter.
1102 Universal Transmitter	Provides an external contact.
1103 Universal Transmitter	Provides both internal and external contacts that may be used at the same time to yield two individual reporting zones from one wireless transmitter. Requires EOL resistor for external contact. Provides Disarm/Disable functionality.
1106 Universal Transmitter	Provides both internal and external contacts that may be used at the same time to yield two individual reporting zones from one wireless transmitter.
1107 Micro Window Transmitter*	Provides a window transmitter and magnet
1114 Four-Zone Expander*	Provides four wireless zones
1116 Relay Output*	Provides one Form C relay
1117 LED Annunciator*	Provides a visual system status indicator
1118 Remote Indicator Light*	Provides a visual indication of a Panic situation
1119 Door Sounder*	Provides a battery powered sounder
1121 PIR Motion Detector	Provides motion detection with pet immunity.
1126R PIR Motion Detector*	Ceiling mount motion detector with panel programmable sensitivity and Disarm/Disable functionality.
1127C/1127W PIR Motion Detector	Wall mount motion detector with panel programmable sensitivity and Disarm/Disable functionality.
1129 Glassbreak Detector*	Detects the shattering of framed glass mounted in an outside wall and provides full-pattern coverage and false-alarm immunity.
1131 Recessed Contact*	Provides a recessed contact option for door or window applications.
1135/1135DB Wireless Sounder*	Provides a wireless sounder.
1139 Bill Trap*	Provides a silent alarm option for retail and banking cash drawers.
* Security Device Only: This device has not been investigated and shall not be used in listed installations.	

## 3.4 Accessory Devices (continued)

1141 Wall Button*	One button wall mounted wireless transmitter.
1142BC Two-button Hold-up Belt Clip Transmitter	Provides portable two-button hold-up operation.
1142 Two-button Hold-up Transmitter	Provides permanently mounted under-the-counter two-button hold-up operation.
1145-4 (Four-Button)* 1145-2 (Two-Button) * 1145-1 (One-Button)*	Key Fob transmitters designed to clip onto a key ring or lanyard.
1161 Residential Smoke Detector	Residential smoke detector with sounder.
1162 Residential Smoke/Heat Detector	Residential smoke/heat detector with sounder and fixed rate-of-rise heat detector.
1165 Commercial Smoke Detector	Commercial smoke detector.
1165H Commercial Smoke/Heat Detector	Commercial smoke/heat detector with fixed rate-of-rise heat detector.
1165HS Commercial Smoke/Heat Detector and Sounder	Commercial smoke/heat detector with fixed rate-of-rise heat detector and sounder.
1183-135F Heat Detector	Fixed temperature heat detector
1183-135R Heat Detector	Fixed temperature and rate-of-rise heat detector
1184 Carbon Monoxide Detector	Carbon monoxide detector
<b>Indicating and Initiating Devices</b>	
860 Relay Module	Provides dry relay contacts that are programmable and controlled from the DMP panel annunciator outputs. Includes one Form C (SPDT) relay rated 1 Amp @ 30 Vdc. Sockets are provided to allow the addition of three Model 305 plug-in relays.
866 Style W Notification Circuit Module	Provides supervised alarm current using the XR100 Series panel bell output and up to 5 Amps at 12 or 24 Vdc when using a listed auxiliary power supply. The 866 can supervise 2-wire Style W circuits for opens and shorts.
867 Style W LX-Bus Notification Circuit Module	Provides supervised alarm current using the XR100 Series panel bell output and up to 5 Amps at 12 or 24 Vdc when using a listed auxiliary power supply. The 867 connects to the XR100 Series panel LX-Bus™ and provides one 2-wire Style W notification circuit for ground faults, open and short conditions. Individual Bell Relay addresses Bell Ring styles.
869 Dual Class A Style D Initiating Module	Provides two Class A, Style D, 4-wire initiating zones for connecting waterflow switches and other non-powered fire and burglary devices.
<b>Accessory Modules and Keypads</b>	
893A Dual Phone Line Module	Allows you to supervise two standard phone lines connected to an XR100 Series panel. The 893A module monitors the main and backup phone lines for a sustained voltage drop and alerts users when the phone line is bad.
LCD keypads	Allows you to control the panel from various remote locations. Connect up to sixteen supervised Model 630F Remote Fire Command Center, Model 7060, 7063, 7070, 7073, 7160, 7163, 7170, 7173 Thinline™ keypads, 7060A, 7063A, 7070A, 7073A Aqualite™ keypads, or 7872, 7873 Graphic Touchscreen keypads to the keypad bus using terminals 7, 8, 9, and 10.
9000 Series Wireless Keypad	Allows you to control the panel from various remote locations. Connect up to four 9060/9063 Wireless Keypads.
9800 Series Wireless Graphic Touchscreen keypads	Allows you to control the panel from various remote locations. Connect up to four keypads. 9862 Wireless Keypads.
<b>Addressable Smoke Detectors</b>	
521LX, 521LXT	Single-zone, addressable conventional smoke, smoke/heat detectors that connect to the LX-Bus. Includes remote maintenance reporting, drift compensation, and multi-criteria detection.
2W-BLX, 2WT-BLX	Single-zone, addressable conventional smoke, smoke/heat detectors that connect to the LX-Bus. Includes drift compensation.
<b>* Security Device Only: This device has not been investigated and shall not be used in listed installations.</b>	



## Installation

### 4.1 Mounting the Enclosure

The metal enclosure for the XR100 Series must be mounted in a secure, dry place to protect the panel from damage due to tampering or the elements. It is not necessary to remove the XR100 Series PCB when installing the enclosure. Figure 2 shows the mounting hole locations for both the Model 350/350A Enclosures.

The 350A Attack Resistant enclosure is factory shipped with one knockout on the top left of the enclosure. As needed, additional knockouts or antenna exits may be added at the time of installation. See Figure 2 for the positions on the enclosure that can be added. Each additional knockout must be filled with conduit.

**Note:** When using the XR100 Series panel for UL Listed applications, use the Model 350, 349, 341, or 352S enclosure for standby batteries. When using the 352S in UL listed applications, the enclosure must be surface mounted on the wall.

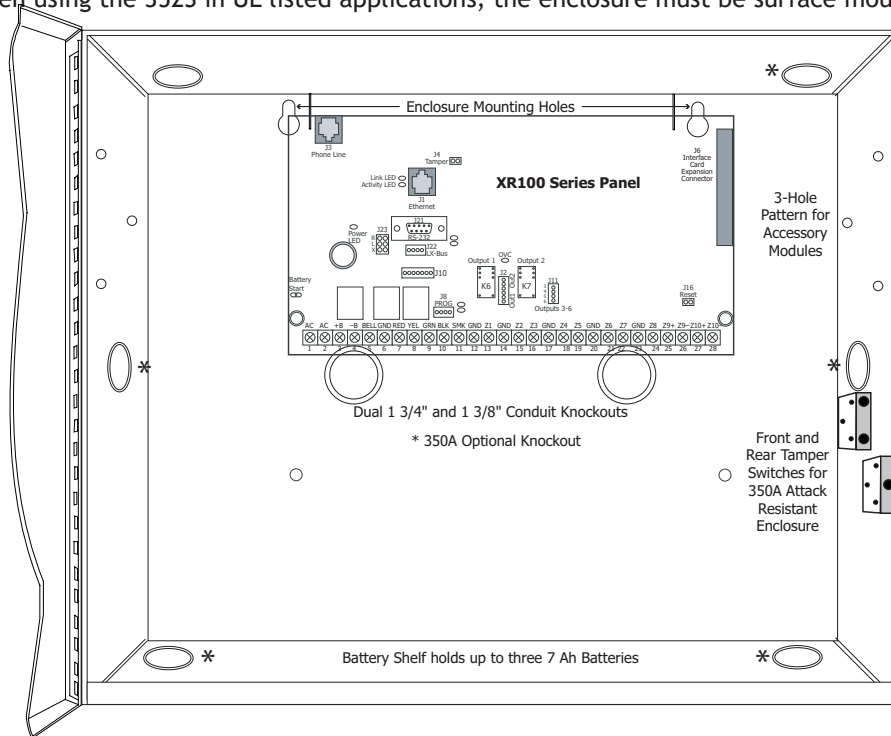


Figure 2: XR100 Series in Model 350 or 350A Enclosure

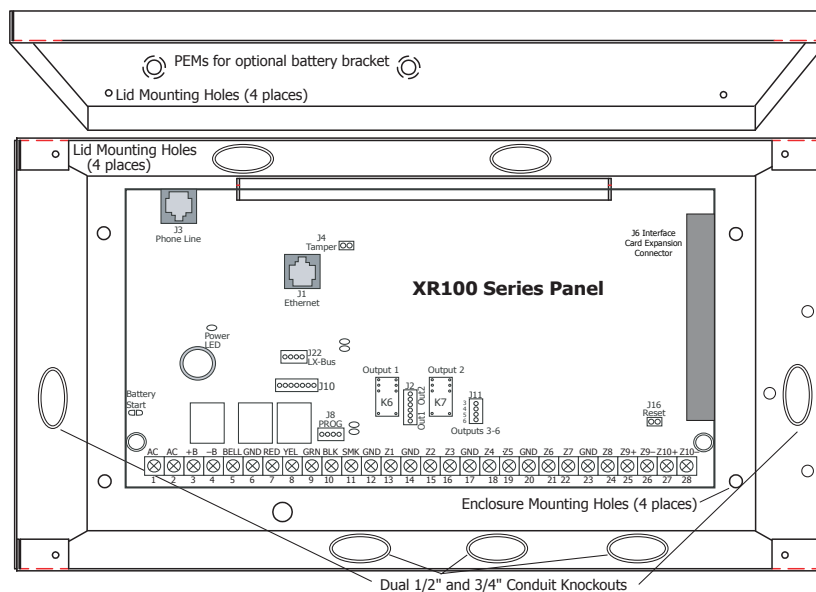


Figure 3: XR100 Series in Model 341 Enclosure

## 4.2 Mounting Keypads and Zone Expansion Modules

DMP LCD keypads have removable covers that allow you to easily mount the keypad to a wall or other flat surface using the screw holes on each corner of the base. Before mounting the base, connect the keypad wire harness leads to the keypad cable from the panel and to any device wiring run to that location. Then attach the harness to the pin connector on the PC board, mount the base, and install the keypad cover making sure all of the keys extend through their respective holes.

For mounting keypads on solid walls, or for applications where conduit is required, use the Model 695 1-1/2" deep or the Model 696 1/2" deep backboxes.

The DMP 711, 712-8, 714, 715, 716, and 717 modules are each contained in molded plastic housings with removable covers. The base provides you with mounting holes for installing the unit to a wall, switch plate, or other surface.

## 4.3 Connecting LX-Bus and Keypad Bus Devices

Several factors determine the DMP LX-Bus™ and keypad bus performance characteristics: the wire length and gauge used, the number of devices connected, and the voltage at each device. When planning an LX-Bus™ and keypad bus installation, keep in mind the following information:

1. DMP recommends using 18 or 22-gauge **unshielded** wire for all keypad and LX-Bus circuits. **Do not** use twisted pair or shielded wire for LX-Bus and keypad bus data circuits. All 22-gauge wire must be connected to a power-limited circuit and jacket wrapped.
2. On keypad bus circuits, to maintain auxiliary power integrity when using 22-gauge wire do not exceed 500 feet. When using 18-gauge wire do not exceed 1,000 feet. To increase the wire length or to add devices, install an additional power supply that is listed for Fire Protective Signaling, power limited, and regulated (12 Vdc nominal) with battery backup.  
**Note:** Each panel allows a specific number of supervised keypads. Add additional keypads in the unsupervised mode. Refer to the panel installation guide for the specific number of supervised keypads allowed.
3. Maximum distance for any one bus circuit (length of wire) is 2,500 feet regardless of the wire gauge. This distance can be in the form of one long wire run or multiple branches with all wiring totaling no more than 2,500 feet. As wire distance from the panel increases, DC voltage on the wire decreases. Maximum number of LX-Bus devices per 2,500 feet circuit is 40.
4. Maximum voltage drop between the panel (or auxiliary power supply) and any device is 2.0 Vdc. If the voltage at any device is less than the required level, add an auxiliary power supply to the circuit. When voltage is too low, the devices cannot operate properly.

For additional information refer to the LX-Bus/Keypad Bus Wiring Application Note (LT-2031).

### Expansion Interface Cards (Models 481, 462N, 463C, 464-263C and 464-263H)

The LX-Bus provided on these cards requires only a 4-wire cable between the card and any devices connected to the bus. You can connect devices (zone or output expansion modules) together on the same cable or provide separate runs back to the card. The LX-Bus provides up to 100 zones or outputs.

**Note:** Do not use twisted pair or shielded wire when connecting an LX-Bus or keypad bus.

## 4.4 Wireless Keypad Association

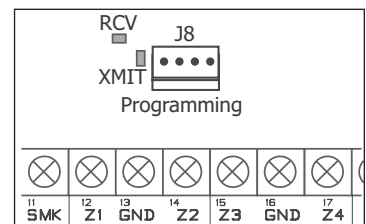
Enable Wireless Keypad Association operation on both the keypad and panel.

To enable association operation in the keypad, access the Installer Options Menu (3577 (INST)) and select RF Survey). The keypad logo LEDs turn on Red until association is successful.

To enable association operation in the XR100 panel, reset panel 3 times within 12 seconds.

Allow the keypad bus Transmit/Receive LEDs to turn back on between each reset.

For 60 seconds the panel listens for wireless keypads that are in the Installer Options Menu (3577 CMD) and have not been programmed, or associated into another panel. Those keypads are assigned to the first open device position automatically based upon the order in which they are detected. The keypad logo turns Green to indicate it has been associated with the panel.





## Primary Power Supply

### 5.1 AC Terminals 1 and 2

Connect the transformer wires to terminals 1 and 2 on the panel. Use no more than 70 ft. of 16 gauge or 40 ft. of 18 gauge wire between the transformer and the XR100 Series.



***Always ground the panel before applying power to any devices:*** The XR100 Series must be properly grounded before connecting any devices or applying power to the panel. Proper grounding protects against Electrostatic Discharge (ESD) that can damage system components. See Earth ground section 6.2.

### 5.2 Transformer Types

Use Model 327 (16.5 VAC 50 VA) plug-in or Model 322/323 (16 VAC 56 VA), or 324/324P (16 VAC 100 VA) wire-in transformer. Use Model 322/323 or 324/324P wire-in transformers when required by the Authority Having Jurisdiction (AHJ).



The transformer must be connected to an unswitched 120 VAC 60 Hz electrical outlet with at least .87A of available current. ***Never share the transformer output with any other equipment.***

### 5.3 J12 3-Pin Header for Transformer Types

Place the jumper on the left two pins labeled 50VA for a Maximum 2 Amp (Bell+Aux+Smoke=2 Amp) when using the Model 322/323 56VA, or 327 50VA plug-in transformer (default).

Place the jumper on the right two pins labeled 75VA for a Maximum 3 Amp (Bell+Aux+Smoke=3 Amp) when using the Model 324/324P 100 VA wire-in transformer.

**Note:** For UL Commercial Fire installations, refer to the Universal Fire Alarm Specifications, Transformer section, for more information.

## Secondary Power Supply

### 6.1 Battery Terminals 3 and 4

Connect the black battery lead to the negative battery terminal. The negative terminal connects to the enclosure ground internally through the XR100 Series circuit board. Connect the red battery lead to the battery positive terminal. Observe polarity when connecting the battery.

You can add a second battery in parallel using the DMP Model 318 Dual Battery Harness. **DMP requires each battery be separated by a PTC in the battery harness wiring to protect each battery from a reversal or short within the circuit.**

For listed installations, all batteries shall be installed in a DMP Model 350, 349, 341, 342, or 352S enclosure and all wiring shall run through conduit.

The enclosure shall be installed to the left of the XR100 Series enclosure to ensure Battery and AC wire separation.

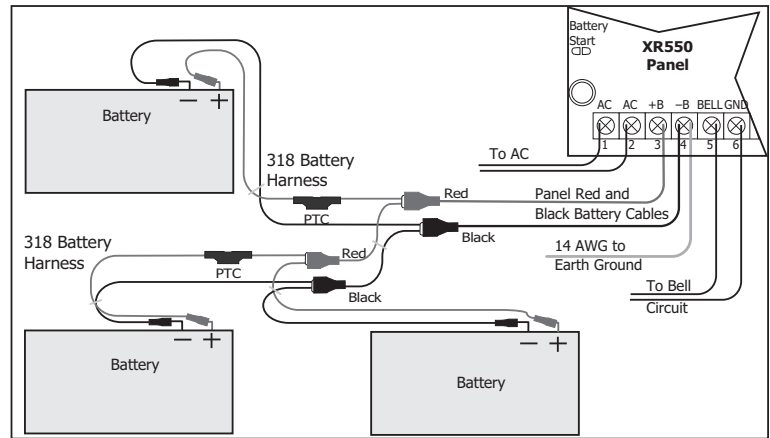


Figure 3: Wiring Multiple Batteries

**Use sealed lead-acid batteries only:** Use the DMP Model 364 (12 Vdc 1.3 Ah), Model 365 (12 Vdc 9 Ah), Model 366 (12 Vdc 18 Ah), Model 368 (12 Vdc 5.0 Ah), or Model 369 (12 Vdc 7 Ah) sealed lead-acid rechargeable battery. Batteries supplied by DMP have been tested to ensure proper charging with DMP products.

GEL CELL BATTERIES CANNOT BE USED WITH THE XR100 SERIES PANEL.



### 6.2 Earth Ground (GND)

To provide proper transient suppression, XR100 Series panel terminal 4 must be connected to earth ground using 14 gauge or larger wire. DMP recommends connecting to a cold water pipe, ground rod, or building ground only. Do not connect to an electrical ground or conduit, sprinkler or gas pipes, or to a telephone company ground.

### 6.3 Battery Only Restart

When powering up the XR100 Series panel without AC power, briefly short across the battery start pads to pull in the battery cutoff relay. The leads need a momentary short only. Once the relay has pulled in, the battery voltage holds it in that condition. If the XR100 Series panel is powered up with an AC transformer, the battery cutoff relay is pulled in automatically. For more information refer to Figure 1.

### 6.4 Battery Replacement Period

DMP recommends replacing the battery every 3 to 5 years under normal use.

### 6.5 Discharge/Recharge

The XR100 Series battery charging circuit float charges at 13.9 Vdc at a maximum current of 1.0 Amps using a 50 VA or 56 VA transformer. Listed below are the various battery voltage level conditions:

Battery Trouble:	Below	11.9 Vdc
Battery Cutoff:	Below	10.2 Vdc
Battery Restored:	Above	12.6 Vdc

### 6.6 Battery Supervision

The XR100 Series tests the battery when AC power is present. The test is done every three minutes and lasts for five seconds. During the test, the panel places a load on the battery; if the battery voltage falls below 11.9 Vdc a low battery is detected. If AC power is not present, a low battery is detected any time the battery voltage falls below 11.9 Vdc.

If a low battery is detected with AC power present, the test repeats every two minutes until the battery charges above 12.6 Vdc indicating the battery has restored voltage. If a weak battery is replaced with a fully charged battery, the restored battery will not be detected until the next two minute test is completed.

### 6.7 Battery Cutoff

The panel disconnects the battery any time the battery voltage drops below 10.2 Vdc. This prevents battery deep discharge damage.

# INSTALLATION

## 6.8 XR100 Series Power Requirements

During AC power failure, the XR100 Series panel and all connected auxiliary devices draw their power from the battery. All devices must be taken into consideration when calculating the battery standby capacity. The following table lists the XR100 Series panel power requirements. You must add the additional current draw of keypads, zone expansion modules, smoke detector output, and any other auxiliary devices used in the system for the total current required. The total is then multiplied by the number of standby hours required to calculate the total ampere-hours required.

Standby Battery Power Calculations	Standby Current		Alarm Current	
XR100 Series Control Panel	Qty <u>1</u>	180mA <u>180</u> mA	Qty <u>1</u>	180mA <u>180</u> mA
Relay Outputs 1-2 (ON)	Qty _____	30mA _____	Qty _____	30mA _____
Switch Grounds 3-6 (ON)	Qty _____	5mA _____	Qty _____	5mA _____
Active Zones 1-8	Qty _____ x	1.6mA _____	Qty _____ x	2mA* _____
Active Zones 9-10	Qty _____	4mA _____	Qty _____	30mA _____
2-Wire Smoke Detectors	Qty _____	0.1mA _____	Qty _____	0.1mA _____
Panel Bell Output				1500mA _____ mA
893A Dual Phone Line Module	Qty _____ x	12mA _____	Qty _____ x	50mA _____
462N Network Interface Card	Qty _____ x	50mA _____	Qty _____ x	50mA _____
463C CDMA Cellular Communicator Card	Qty _____ x	22mA _____	Qty _____ x	22mA _____
464-263C CDMA Cellular Communicator	Qty _____ x	15mA _____	Qty _____ x	48mA _____
464-263H HSPA+ Cellular Communicator	Qty _____ x	15mA _____	Qty _____ x	48mA _____
481 Expansion Interface Card	Qty _____ x	15mA _____	Qty _____ x	15mA _____
1100X Wireless Receiver	Qty _____ x	46mA _____	Qty _____ x	46mA _____
1100XH Wireless High Power Receiver	Qty _____ x	160mA _____	Qty _____ x	160mA _____
860 Relay Output Module (one relay active)	Qty _____ x	34mA _____	Qty _____ x	34mA _____
All four relays active		138mA _____		138mA _____
865 Style W or X Notification Module	Qty _____ x	26mA _____	Qty _____ x	85mA _____
866 Style W Notification Module	Qty _____ x	45mA _____	Qty _____ x	76mA _____
867 LX-Bus Style W Notification Module	Qty _____ x	30mA _____	Qty _____ x	86mA _____
869 Dual Style D Initiating Module	Qty _____ x	25mA _____	Qty _____ x	75mA _____
630F Remote Fire Command Center	Qty _____ x	63mA _____	Qty _____ x	92mA _____
7060/7160 Thinline/7060A Aqualite Keypad	Qty _____ x	72mA _____	Qty _____ x	80mA _____
7063/7163 Thinline/7063A Aqualite Keypad	Qty _____ x	85mA _____	Qty _____ x	100mA _____
7070/7170 Thinline/7070A Aqualite Keypad	Qty _____ x	72mA _____	Qty _____ x	87mA _____
Active Zones (EOL Installed)		1.6mA _____	Qty _____ x	2mA* _____
7073/7173 Thinline/7073A Aqualite Keypad	Qty _____ x	85mA _____	Qty _____ x	100mA _____
Active Zones (EOL Installed)		1.6mA _____	Qty _____ x	2mA* _____
7872 Graphic Touchscreen Keypad	Qty _____ x	145mA _____	Qty _____ x	215mA _____
Active Zones (EOL Installed)	Qty _____ x	1.6mA _____	Qty _____ x	2.0mA _____
7873 Graphic Touchscreen Keypad	Qty _____ x	143mA _____	Qty _____ x	243mA _____
Active Zones (EOL Installed)	Qty _____ x	1.6mA _____	Qty _____ x	2.0mA _____
734 Wiegand Interface Module	Qty _____ x	15mA _____	Qty _____ x	15mA _____
Active Zones (EOL Installed)	Qty _____ x	1.6mA _____	Qty _____ x	2mA* _____
Annunciator (ON)		x	Qty _____ x	20mA _____
734N Wiegand Interface Module	Qty _____ x	146mA _____	Qty _____ x	148mA _____
Active Zones (EOL Installed)	Qty _____ x	1.6mA _____	Qty _____ x	2mA* _____
Annunciator (ON)			Qty _____ x	20mA _____
Wiegand Reader	Qty _____ x	200mA _____	Qty _____ x	200mA _____
734N-WiFi Wiegand Interface Module	Qty _____ x	146mA _____	Qty _____ x	148mA _____
Active Zones (EOL Installed)	Qty _____ x	1.6mA _____	Qty _____ x	2mA* _____
Annunciator (ON)			Qty _____ x	20mA _____
Wiegand Reader	Qty _____ x	200mA _____	Qty _____ x	200mA _____
<b>Copy Sub-Totals to next page</b>	Sub-Total Standby _____ mA		Sub-Total Alarm _____ mA	

\*Based on 10% of active zones in alarm.

Standby Battery Power Calculations	Standby Current	Alarm Current
736P POPIT Interface Module Radionics Popex, POPITs, OctoPOPITs	Qty _____ x 25mA _____ Qty _____ x _____mA _____	Qty _____ x 25mA _____ Qty _____ x _____mA _____
738A Ademco Wireless Interface Module	Qty _____ x 75mA _____	Qty _____ x 75mA _____
710 Bus Splitter/Repeater Module	Qty _____ x 32mA _____	Qty _____ x 32mA _____
711 Zone Expansion Module Active Zone (EOL Installed)	Qty _____ x 11mA _____ Qty _____ x 1.6mA _____	Qty _____ x 11mA _____ Qty _____ x 2mA* _____
714 Zone Expansion Module Active Zones (EOL Installed)	Qty _____ x 7mA _____ Qty _____ x 1.6mA _____	Qty _____ x 7mA _____ Qty _____ x 2mA* _____
712-8 Zone Expansion Module Active Zones (EOL Installed)	Qty _____ x 17mA _____ Qty _____ x 1.6mA _____	Qty _____ x 17mA _____ Qty _____ x 2mA* _____
714-8, 714-16 Zone Expansion Module Active Zones (EOL Installed)	Qty _____ x 20mA _____ Qty _____ x 1.6mA _____	Qty _____ x 20mA _____ Qty _____ x 2mA* _____
715 Zone Expansion Module Active Zones (EOL Installed) 2-Wire Smokes	Qty _____ x 7mA _____ Qty _____ x 4mA _____ Qty _____ x .1mA _____	Qty _____ x 7mA _____ Qty _____ x 30mA* _____ Qty _____ x .1mA _____
715-8, 715-16 Zone Expansion Modules Active Zones (EOL Installed) 2-Wire Smokes	Qty _____ x 20mA _____ Qty _____ x 4mA _____ Qty _____ x .1mA _____	Qty _____ x 20mA _____ Qty _____ x 30mA* _____ Qty _____ x .1mA _____
716 Output Expansion Module Active Form C Relays	Qty _____ x 13mA _____	Qty _____ x 13mA _____ Qty _____ x 12mA _____
717 Graphic Annunciator Module Annunciator Outputs	Qty _____ x 10mA _____	Qty _____ x 10mA _____ Qty _____ x 1mA _____
521LX, 521LXT Smoke Detectors	Qty _____ x 8.8mA _____	Qty _____ x 28mA* _____
2W-BLX, 2WT-BLX Smoke Detectors	Qty _____ x 11mA _____	Qty _____ x 31mA* _____
COSMOD2W Module COSMO-2W Smoke and CO Detectors	Qty _____ x 45mA _____ Qty _____ x 1mA _____	Qty _____ x 174mA*# _____ Qty _____ x 50mA*# _____
572 Indicator LED	Qty _____ x 20mA _____	Qty _____ x 20mA _____
Aux. Powered Devices on Terminals 7 and 11 Other than Keypads and LX-Bus Modules	_____mA	_____mA
<b>Sub-Totals this page only</b>	Sub-Total Standby _____mA	Sub-Total Alarm _____mA
<b>Sub-Totals from previous page</b>	Sub-Total Standby _____mA	Sub-Total Alarm _____mA
*Based on 10% of active zones in alarm	Total Standby _____mA	Total Alarm _____mA
# For systems that are not central station monitored, multiply alarm current by 12.		
<div style="display: flex; justify-content: space-between;"> <div> <p>Total Standby _____mA x number of Standby Hours needed _____ = _____mA-hours</p> <p>Total Alarm _____mA + _____mA-hours</p> <p style="margin-left: 150px;">Total _____mA-hours</p> <p style="margin-left: 150px;">X .001</p> <p style="margin-left: 150px;">= _____Amp-hrs</p> </div> <div style="text-align: right;"> <p>Required</p> </div> </div>		

Refer to section 6.9 for standby battery selection.

# INSTALLATION

## 6.9 Standby Battery Selection

To choose the type and number of batteries needed for 24, 60, or 72 hours of standby power based on the Amp Hours Required calculation from section 6.8 XR100 Series Power Requirements, perform the following:

1. Select the desired standby hours required from the table below: 24, 60, or 72 hours
2. Select the desired battery size: Model 368 (12 Vdc 5.0 Ah), Model 369 (12 Vdc 7 Ah), Model 365 (12 Vdc 9 Ah), Model 366 (12 Vdc 18 Ah), or Model 364 (12 Vdc 1.3Ah) when using the Model 341 enclosure.
3. Select a Max. Ah Available number that is just greater than the number calculated in Amp Hours Required.
4. Install the number of batteries shown in the corresponding No. of Batteries required column.

**Example:** If the Amp Hours Required calculation equals 22 Ah for 24 hours of standby time and 4.5 Ah batteries are desired, install six (6) Model 368 (12 Vdc, 5.0 Ah) batteries.

**Note:** You can use either a Model 327 Plug-in 50 VA or Model 322/323 Wire-in 56 VA with up to 36 Ah of batteries. The Model 324/324P Wire-in 100 VA Transformer may be used with any of the battery choices listed below.

For listed installations, all batteries shall be installed in a DMP Model 341, 349, 350 or 352S enclosure and all wiring shall run through conduit. The enclosure shall be installed to the left of the XR100 Series enclosure to ensure Battery and AC wire separation.

### 24 hours of standby power

5.0 Ah Batteries		7 Ah Batteries		7.7 Ah Batteries		9 Ah Batteries		18 Ah Batteries	
Max. Ah Available	No. of Batteries	Max. Ah Available	No. of Batteries	Max. Ah Available	No. of Batteries	Max. Ah Available	No. of Batteries	Max. Ah Available	No. of Batteries
8	2	6	1	6	1	8	1	16	1
12	3	12	2	13	2	16	2	32	2
16	4	18	3	20	3	24	3	48	3
20	5	24	4	27	4	32	4		
24	6	31	5	34	5	40	5		
28	7	37	6	41	6				
32	8	43	7						
36	9								
40	10								

**Note:** 48 hours is the typical battery recharge time for any of the Number of Batteries shown in this section.

### 60 hours of standby power

7 Ah Batteries		7.7 Ah Batteries		9 Ah Batteries		18 Ah Batteries	
Max. Ah Available	No. of Batteries	Max. Ah Available	No. of Batteries	Max. Ah Available	No. of Batteries	Max. Ah Available	No. of Batteries
13	2	14	2	17	2	17	1
20	3	22	3	26	3	34	2
27	4	29	4	34	4	52	3
33	5	37	5	43	5	69	4
40	6	44	6	52	6		
47	7	52	7	61	7		
54	8	59	8	69	8		
60	9	67	9				
67	10						

**Note:** 48 hours is the typical battery recharge time for any of the Number of Batteries shown in this section.

### 72 hours of standby power

9 Ah Batteries		18 Ah Batteries	
Max. Ah Available	No. of Batteries	Max. Ah Available	No. of Batteries
16	2	16	1
25	3	33	2
33	4	50	3
42	5	67	4
50	6		
59	7		
67	8		

**Note:** 72 hours is the typical battery recharge time required for any of the Number of Batteries shown in this section.

**Note:** If the Amp Hours Required calculation is greater than any Max. Ah Available number shown on a table, then add power supply(s) to power some system devices allowing the Amp Hours Required calculation to be reduced. See the 710 Bus Splitter/Repeater Installation Guide (LT-0310).

## **Bell Output**

### **7.1 Terminals 5 and 6**

Terminal 5 supplies positive 12 Vdc to power alarm bells or horns. This output can be steady, pulsed, or temporal depending upon the Bell Action specified in Output Options. Terminal 6 is the ground reference for the bell circuit. This supervised output detects 1k Ohms or less as normal. The indicating appliance can supply this resistance. If using a horn or siren, a 1k Ohm 1/2 W EOL resistor (provided) should be added across the bell circuit to provide supervision. See the Notification Appliance section for a list of approved notification appliances and the Wiring Diagrams for connections.

## **Keypad Bus**

### **8.1 Description**

XR100 Series panel terminals 7, 8, 9, and 10 are for the keypad bus. You can connect up to eight supervised keypads and multiple unsupervised keypads to the XR100 Series. In addition to DMP LCD keypads, you can also connect any combination of zone expansion modules to the data bus. Refer to the specific device Installation sheet for the maximum number of keypad Bus devices.

Refer to the section titled LX-Bus for complete information about the LX-Bus 4-pin header and expansion slot.

**Note:** Do not use shielded wire for LX-Bus/Keypad Bus circuits.

### **8.2 Terminal 7 - RED**

This terminal supplies positive 12 Vdc regulated to power DMP LCD keypads and zone expansion modules. Terminal 7 also supplies power for any auxiliary device. The ground reference for terminal 7 is terminal 10.

The output current is shared with the smoke power output on terminal 11 and Zones 9 and 10. Current draw for all connected devices must not exceed the panel maximum current rating. See Power Supply in the Compliance section for maximum current in a fire listed application.

### **8.3 Terminal 8 - YELLOW**

Terminal 8 receives data from keypads and zone expansion modules. It cannot be used for any other purpose.

### **8.4 Terminal 9 - GREEN**

Terminal 9 transmits data to keypads and zone expansion modules. It cannot be used for any other purpose.

### **8.5 Terminal 10 - BLACK**

Terminal 10 is the ground reference for DMP LCD keypads, zone expansion modules, and all auxiliary devices being powered by terminal 7.

### **8.6 J8 Programming Connection**

A 4-pin header (J8) is provided to connect a keypad when using a DMP Model 330 Programming Cable. This provides a quick and easy connection for panel programming.

You may also use the J8 Programming Header to connect Keypad Bus devices. This is an alternative to connecting keypad bus devices to terminals 7, 8, 9, and 10.

### **8.7 OVC LED**

The Overcurrent LED (OVC) lights Red when the devices connected to the Keypad Bus and LX-Bus(es) draw more current than the panel is rated for. The OVC is located above Outputs 1 and 2 on the panel and turns a steady Red when lit. When the OVC LED lights Red, the LX-Bus(es) and Keypad bus are shut down.

## **Smoke and Glassbreak Detector Output**

### **9.1 Terminals 11 and 12**

Terminal 11 supplies positive 12 Vdc regulated to power 4-wire smoke detectors and other powered devices. This output can be turned off by the user for 5 seconds using the Sensor Reset User Menu option to allow latched devices to reset. Terminal 12 is the ground reference for terminal 11.

### **9.2 Current Rating**

The Output current from terminal 11 is shared with terminals 7, 25, and 27.



The total current draw of all devices powered from the panel must be included with terminal 11 calculations and must not exceed the maximum output rating.

## Protection Zones

### 10.1 Terminals 13–24

Zones 1 to 8 (terminals 13 to 24) on the XR100 Series panel are all grounded burglary zones. For programming purposes, the zone numbers are 1 through 8. Listed below are terminal 13 to 24 connection functions.

Terminal	Function	Terminal	Function
13	Zone 1 voltage sensing	19	Zone 5 voltage sensing
14	Ground for Zones 1 and 2	20	Ground for Zones 5 and 6
15	Zone 2 voltage sensing	21	Zone 6 voltage sensing
16	Zone 3 voltage sensing	22	Zone 7 voltage sensing
17	Ground for Zones 3 and 4	23	Ground for Zones 7 and 8
18	Zone 4 voltage sensing	24	Zone 8 voltage sensing

The voltage sensing terminal measures the voltage across a 1k Ohm End-of-Line resistor to ground. Use DMP Model 311 1k Ohm resistors. Dry contact sensing devices can be used in series (normally-closed) or in parallel (normally-open) with any of the burglary protection zones.

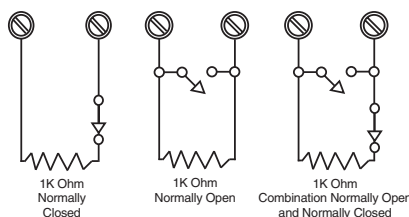


Figure 4: Protection Zone Wiring

### 10.2 Operational Parameters

Each protection zone detects three conditions: Open, Normal, and Short. Listed below are voltage and resistance parameters for each condition:

Condition	Resistance on zone	Voltage on positive terminal
Open	over 1300 ohms	over 2.0 Vdc
Normal	600 to 1300 ohms	1.2 to 2.0 Vdc
Short	under 600 ohms	under 1.2 Vdc

### 10.3 Zone Response Time

A condition must be present on a zone for 500 milliseconds before it is detected by the XR100 Series panel. Ensure detection devices used on the protection zones are rated for use with this delay. Zones 1-10 can also be programmed for a fast response delay of 160 milliseconds.

### 10.4 Keyswitch Arming Zone

Using a keyswitch on an Arming type zone allows you to arm and disarm selected areas without having to enter a user code.

## Powered Zones for 2-Wire Smoke Detectors

### 11.1 Terminals 25–26 and 27–28

Panel terminals 25 through 28 provide two resettable Class B, Style A, 2-wire powered zones. For programming purposes the zone numbers are 9 and 10.

**Note:** The maximum wire length for either zone 9 or zone 10 is 3000 feet using 18 AWG or 1000 feet using 22 AWG. The maximum voltage is 14 Vdc and maximum current is 1.25mA DC. The maximum line impedance is 100 Ohms. The maximum short circuit current is 56mA.

When using all other zone expansion modules, use UL Listed Model 309 EOL resistors. The UL compatibility identifier for the zones is A.

**Note:** Do not mix detectors from different manufacturers on the same zone.



**Caution:** Performing a Sensor Reset momentarily drops power to the devices on Terminal 11 (SMK), Zones 9 and 10. The panel views these zones (9 and 10) as “Open” while the power is absent.



## 11.2 Compatible 2-Wire Smoke Detector Chart

Manufacturer	Model	Detector ID	Base	Base ID	DC Voltage Range	# of Detectors (12V/24V)	Zone Expansion Modules	Panel Zones
Hochiki	SLR-835B-2 SLR-835BH-2	HD-6	N/A		8-35	14	715, 715-8, 715-16	9 & 10
EST	521B, 521BXT, 521NB, 521NBXT	S09A			6.5-20	12	715, 715-8, 715-16	9 & 10
System Sensor	2W-B, 2WT-B	A			8.5-35	10	715, 715-8, 715-16	9 & 10
System Sensor	2WTA-B	A	(*)		8.5-35	12	715, 715-8, 715-16	9 & 10
System Sensor	2WTR-B	A	(*)		8.5-35	1	715, 715-8, 715-16	9 & 10
System Sensor	1151, 2151	A	B110PL, B401		8.5-35	10	715, 715-8, 715-16	9 & 10
System Sensor	COSMO-2W (using COSMOD2W)	A			8.5-35	12	714, 714-8, 714-16, 715, 715-8, 715-16	1-10

(\*) = Must be used in conjunction with System Sensor Polarity Reversal Module model RRS-MOD.

Figure 5: Compatible 2-Wire Smoke Detectors

## Dry Contact Relay Outputs

### 12.1 Description

The XR100 Series panel provides two programmable auxiliary SPDT relays when equipped with two DMP Model 305 relays in sockets K6 (Output 1) and K7 (Output 2) and a Model 431 Output Harness on the J2 4-pin Header. Each relay provides one SPDT set of contacts that can be operated by any of the functions listed below:

- |   |                          |
|---|--------------------------|
| 1) Activation by zone condition: Steady, Pulsing, Momentary, and Follow               |                          |
| 2) Activation by 24-hour 7-day schedule: One on and one off time a day for each relay |                          |
| 3) Manual activation from the DMP LCD keypad menu                                     |                          |
| 4) Communication failure  | 8) Exit and Entry timers |
| 5) Armed area annunciation  | 9) System Ready          |
| 6) Fire Alarm or Fire Trouble or Supervisory  | 10) Late to Close        |
| 7) Ambush Alarm   |                          |

Refer to the XR100 Series Programming Guide (LT-0896) for specific information.

### 12.2 Contact Rating

The Model 305 relay contacts are rated for 1 Amp at 30 Vdc (allows .35 power factor). Connect auxiliary power to the Relay Output 1 common terminal by installing the gray harness wire to terminal 7. Current draw for all connected devices must not exceed the panel maximum current rating.

### 12.3 Model 431 Output Harness Wiring

The relay contacts are accessible by installing the DMP 431 Output Harness on the 4-pin header labeled J2. Output 2 uses the top three prongs, and Output 1 uses the bottom three prongs. The wire harness and contact locations are shown below:

Contact	Color
Output 1 normally closed	Violet
Output 1 common	Gray
Output 1 normally open	Orange
Output 2 normally closed	Violet with white stripe
Output 2 common	White with gray stripe
Output 2 normally open	Orange with white stripe

The relay contacts must be connected to devices located within the same room as the XR100 Series panel.

## Annunciator Outputs

### 13.1 Description

The four programmable annunciator outputs can be programmed to indicate the activity of the panel zones or conditions occurring on the system. Annunciator **outputs do not provide a voltage but instead switch-to-ground** a voltage from another source. The outputs can respond to any of the conditions listed in the Description section for Dry Contact Relays. Maximum voltage is 30 Vdc @ 50mA.

### 13.2 Model 300 Harness Wiring

Access the open collector outputs by installing DMP 300 Harness on the 4-pin header labeled J11. The output locations are shown below. For UL applications, devices connected to the outputs must be located within the same room as the panel.

Output	Color	Wire	Output	Color	Wire
3	Red	1	5	Green	3
4	Yellow	2	6	Black	4

### 13.3 Model 860 Relay Module

Connect a Model 860 Relay Module to the J11 on the XR100 Series panel to provide relays for outputs 3-6. Use these relays for electrical isolation between the alarm panel and other systems or for switching voltage to control various functions. Power is supplied to the relay coils from a single wire connected to the panel auxiliary power terminal 7. The module includes one relay and provides three additional sockets for expansion of up to four relays. Mount the 860 inside the panel enclosure using the 3-hole pattern and plastic standoffs. Refer to the 860 Module Install Sheet (LT-0484) as needed.

**Relay Contact Rating:** 1 Amp at 30 Vdc (allows .35 power factor)

## J23 6-Pin Header

### 14.1 Description

The XR100 Series panel supports Direct Programming, LX-Bus, and, DMP Wireless operation. Only one operation can function at a time. Install a jumper on one pair of J23 header pins to indicate how the panel is programmed to operate. Refer to the table below when installing a jumper on J23. When a jumper is installed or moved on the 6-pin header, briefly reset the panel using the J16 jumper to activate the selected operation.

**Note:** Only one operation, Direct Programming, LX-Bus, or DMP Wireless can function at a time.

J23 6-pin Header	
Letter	Operation
R	Direct Programming
L	LX-Bus
X	1100 Series DMP Wireless

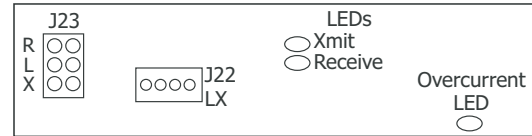


Figure 6: J23 6-pin Header

## J22 LX-Bus Expansion Connector

### 15.1 Description

The XR100 Series panel supports one LX-Bus circuit that provides 100 expansion zones, DMP Wireless that provides 100 wireless zones, or direct connect programming. Enable J22 LX-Bus Header to use the 100 expansion or wireless zones.

### 15.2 J22 LX-Bus Header

**Note:** Only one operation, Direct Programming, LX-Bus, or DMP Wireless can function at a time. See the Connecting LX-Bus and Keypad Bus Devices section for maximum wiring distances.

For each connection, respect wire colors when connecting devices and use all four wires. After placing the jumper on the J23 6-Pin header to enable the required operation, briefly reset the panel using the J16 jumper to activate operation.

**Wireless Bus Operation:** Place a jumper on the two pins next to the letter “X” on the J23 6-Pin header. When using J22 as a wireless bus, connect a DMP Model 300 4-wire Harness to the J22 4-pin header labeled LX. Connect the other end to the J3 header on the 1100X or 1100XH Wireless Receiver. This provides up to 100 wireless zones numbered 500 to 599. Refer to the 1100X Wireless Receiver Install Guide (LT-0708) or 1100XH Wireless Receiver Install Guide (LT-0970).

**LX-Bus Operation:** Place a jumper on the two pins next to the letter “L” on the J23 6-pin header. When using J22 as an LX-Bus, connect a DMP Model 300 4-wire Harness to the J22 6-pin header labeled LX. This provides 100 LX-Bus zones numbered 500-599.

**Note:** Do NOT use shielded wire when using the LX-Bus.

**Direct Programming Operation:** Place a jumper on the two pins next to the letter “R” on the J23 6-Pin header. When using J22 as a direct programming port, connect a the 4-wire connector from DMP Model 399 Harness to the J22 4-pin header labeled LX. Connect the Model 399 DB-9 connector onto an RS-232 port on a Laptop computer. This allows direct panel programming from the attached computer.

### 15.3 LX-Bus Interface Cards

You can add one Interface Card (Model 481, 462N, 463C, 464-263C or 464-263H) to the XR100 Series using the J6 Interface Card Connector located on the board right edge. The Interface Cards provide up to 100 LX-Bus Zones. Refer to the following table to identify zone locations and numbers relative to J22 operation.

J22 LX-Bus Enabled (Set J23 to “X”)		AND	One Interface Card	
Wireless-Bus	Zone Numbers		LX-Bus	Zone Numbers
1	500-599		1	500-599

### 15.4 LX-Bus LEDs

The two LEDs, located near the bottom-right corner of J21 indicate data transmission and receipt. The top LED flashes green to indicate the panel is transmitting LX-Bus data. The bottom LED flashes yellow to indicate the panel is receiving LX-Bus data.

### 15.5 OVC LED

The Overcurrent LED (OVC) lights Red when the devices connected to the Keypad Bus and LX-Bus(es) draw more current than the panel is rated for. The OVC is located above Outputs 1 and 2 on the panel and turns a steady Red when lit. When the OVC LED lights Red, the LX-Bus(es) and Keypad bus shut down.

## J1 Ethernet Connector (XR100N only)

### 16.1 Description

The J1 Ethernet Connector is available on the XR100N Network version to connect directly to an Ethernet network using a standard patch cable. The maximum line impedance is 100 Ohms.

### 16.2 Ethernet LEDs

The two LEDs, located to the left of J1 Ethernet Connector, indicate network connection. The top, Link LED lights up green to indicate a valid receive connection from the host network. The bottom, Activity LED flashes yellow to indicate messages are being sent and received.

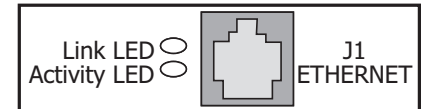


Figure 7: J1 Header and LEDs

## J3 Telephone RJ Connector

### 17.1 Description

Connect the panel to the public telephone network by installing a DMP 356 RJ Cable between the panel J3 connector and the RJ31X or RJ38X phone jack. The maximum line impedance is 100 Ohms. **CAUTION** - To reduce the risk of fire, use only No. 26 AWG or larger telecommunication line cord, such as DMP Model 356 Series Phone Cords.

### 17.2 J10 893A Connector

Connect an 893A Dual Phone Line Module to J10 on the XR100 Series. Refer to the 893A Installation Sheet (LT-0135) for complete information.

### 17.3 Notification

The user must not repair registered terminal equipment. In case of trouble, immediately unplug the device from the telephone jack. The factory warranty provides for repairs. Registered terminal equipment may not be used on party lines or in connection with coin telephones. Notify the telephone company with the following information:

- The particular line(s) where the service is connected
- The FCC registration number as listed in Section 18.1
- The ringer equivalence
- The device make, model, and serial number

### 17.4 Phone Line Monitor

The XR100 Series panel has a built-in telephone monitor that monitors the phone line voltage to verify the connection to the central office. Figure 8 and the table below identify the phone block pin layout, wire numbers, and colors.

Wire Number	Wire Color
1	Gray
2	Orange
3	Black
4	Red
5	Green
6	Yellow
7	Blue
8	Brown

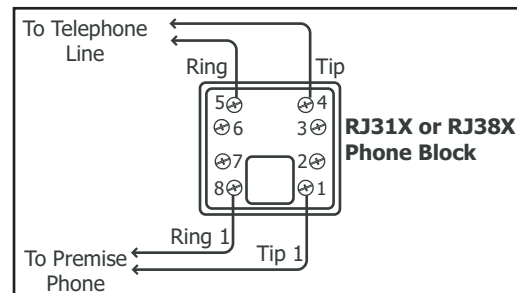


Figure 8: Phone Jack Wiring

The wires on the RJ31 that feed pins 4 and 5 should be the ONLY wires on the D-marc. All other house phone wiring should be tied to pins 1 and 8 coming back from the RJ31.

Dial tone must come into RJ31X on pins 4 and 5 and go back to house phones from pins 1 and 8. Follow these steps to determine if panel is seizing the line:

- Unplug phone cord from RJ31X
- Place butt-set on pins 4 and 5
- Listen for dial tone. With dial tone present, lift either wire from pins 1 or 8
- Listen for dial tone again. If the dial tone is present, RJ31X wiring is correct. If no dial tone is present, the RJ31X wiring is backwards. Rewire so dial tone is coming IN on 4 and 5.

If you still have trouble with the phone line, you may need to replace the RJ cord. If the dial tone is still not present, swap out the RJ31X phone block.

## 17.5 FCC Registration

The Model XR100 Series complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. On the outside of the enclosure of this equipment is a label that contains, among other information, a product identifier in the format US:CKKAL00BXR500. If requested this number must be provided to the telephone company.

A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. See installation instructions for details.

The Ringer Equivalence Number (REN) is used to determine the number of devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company.

If the XR100 Series causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.

If trouble is experienced with the Model XR100 Series, for repair or warranty information, please contact DMP at the address and telephone number listed on the back of this document. If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.

If your premises has specially wired alarm equipment connected to the telephone line, ensure the installation of the XR100 Series does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer.

**Caution:** To ensure proper operation, this equipment must be installed according to the installation instructions in this manual. To verify that the equipment is operating properly and can successfully report an alarm, this equipment must be tested immediately after installation, and periodically thereafter, according to the test instructions in this document and the XR100 Series Programming Guide (LT-0896). Additionally, verification of Line Seize capability should be made immediately after installation, and periodically thereafter, in order to ensure that this equipment can initiate a call even when other equipment (telephone, answering system, computer modem, etc.) connected to the same line is in use.

## Reset and Tamper Headers

### 18.1 J16 Reset Header

The reset header is located just above the terminal strip on the right side of the circuit board and is used to reset the XR100 Series microprocessor. To reset the panel when first installing the system, install the reset jumper before applying power to the panel. After connecting the AC and battery, remove the reset jumper.

To reset the panel while the system is operational, for example, prior to reprogramming, install the reset jumper without powering down the system. Remove the reset jumper after one or two seconds.

After resetting the panel, begin programming within 30 minutes. If you wait longer than 30 minutes, you must reset the panel again.

### 18.2 J4 Tamper Header

The J4 header is for use with the optional DMP 306 Tamper Harness. The harness connects to one or more tamper switches mounted inside the panel enclosure to supervise against unauthorized enclosure opening or removal. Refer to the wiring diagram on the enclosure door for correct tamper switch wiring.

#### How the Tamper Works

If the enclosure is opened or removed while one or more of the system areas are armed, a panel tamper alarm is indicated. If all areas are disarmed, a panel tamper trouble is indicated.

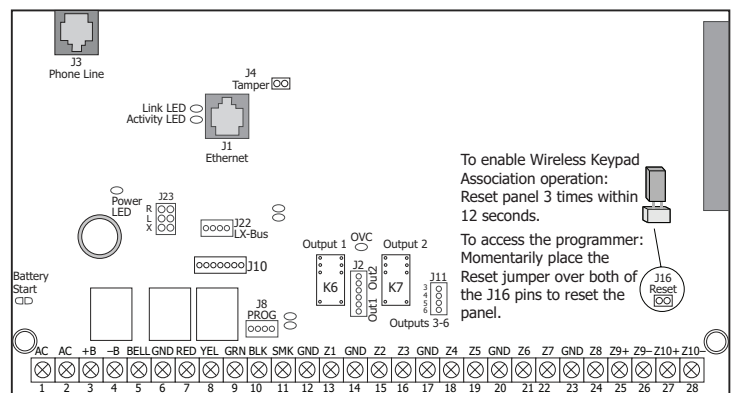


Figure 9: XR100 Series Panel Showing the Reset Jumper

## Listed Compliance Specifications

### 19.1 Introduction

For applications that must conform to a local authorities installation standard or a National Recognized Testing Laboratory certificated system, please see the following sections.

## Universal Burglary Specifications

### 20.1 Introduction

The programming and installation specifications contained in this section must be completed when installing the XR100 Series panel in accordance with any of the UL burglary standards. Additional specifications may be required by a particular standard. See the XR100 Series Programming Guide (LT-0896).

### 20.2 Wiring

All wiring must be in accordance with NEC, ANSI/NFPA 70, UL 681, and UL 827 for all burglary installations. All transformer wires must be installed in conduit.

### 20.3 Transformer

The total combined Auxiliary and Bell outputs cannot exceed 1.3 Amps with a 50 VA Transformer. The total combined Auxiliary and Bell outputs cannot exceed 1.9 Amps with a 56 VA or 100 VA Transformer.

### 20.4 Control Outside of Protected Area

A Potter EVD or Sentrol 5402 should be used in place of a lined cabinet when the panel is installed outside of the protected area. Front and rear tamper switches are required. Refer to the system wiring diagram and Figure 2.

### 20.5 Police Station Phone Numbers

The digital dialer telephone number programmed for communication must not be a police station phone number.

### 20.6 Bypass Reports

The Bypass Reports option must be programmed as YES for all UL burglary applications.

### 20.7 System Maintenance

To ensure continuous satisfactory operation of any alarm system, proper installation and regular maintenance by the installing alarm company and frequent testing by the end user is essential. Offering a maintenance program acquainting the user with the correct procedures for system use and testing is also the responsibility of the installing alarm company.

### 20.8 Listed Receivers

Operation has been verified with the DMP SCS-VR and SCS-1R receivers and any Central Station Receiver that accepts industry standard Contact ID (DTMF) format. It is the installer's responsibility to verify compatibility between the panel and the receiver used during installation. The installer shall verify the compatibility of the receiver and the system on a yearly basis.

### 20.9 Power Supply Supervision

For commercial burglary applications the power supply for all local bells shall be under 24-hour protection. Refer to the Secondary Power Supply section in this document.

### 20.10 Wireless Tamper

The Zone Information Disarmed Open Message to Transmit must be programmed Trouble (T). (Not applicable to UL 1023.)

### 20.11 Wireless External Contact

When used, the External Contact of 1101 or 1102 must be programmed Normally Closed.

### 20.12 Wireless Supervision Time

The Zone Information Supervision Time cannot be set to 0 (zero).

### 20.13 Detect Wireless Jamming

The Detect Wireless Jamming option must be programmed YES. (Not applicable to UL 1023.)

### 20.14 Standby Batteries

Use battery Models 365 (12 Vdc 9Ah), 366 (12 Vdc 18Ah), 368 (12 Vdc 5.0Ah), and 369 (12 Vdc 7Ah) with the XR100 panel when installed in the 341, 350, 350A, or 352 enclosures. The Model 364 (12Vdc 1.3Ah) battery is for use with the XR100 panel when using the 341 enclosure with the optional 341B Battery Bracket. The Model 364 battery is rated for 4 hours of standby time.



## **Area Information**

### **21.1 Ownership**

The control unit system shall be under one ownership.

### **21.2 Annunciation**

The System shall be installed so that when arming any area from any keypad, the local bell shall annunciate.

### **21.3 Trouble Display**

The Status List programming shall be set to annunciate all trouble messages at all keypads.

### **21.4 Closing Wait**

The Closing Wait option must be programmed YES.

### **21.5 Local Bell Supervision**

When a local bell is employed, the power supply for the bell shall be under 24-hour protection. Proper personnel for maintenance or security of the system shall be able to disarm that area.

## **Household Burglar-Alarm System Units ANSI/UL 1023**

### **22.1 Audible Devices**

At least one listed audible device (Ademco AB12M) rated to operate over the voltage rate of 11.7 Vdc to 12.8 Vdc and rated at 85 DB minimum must be used.

### **22.2 Auxiliary Circuits**

At least one burglary alarm initiating device shall be used on the system. If the voltage for the device is applied by the control unit the burglary alarm initiating device shall be rated to operate over the range of 11.5 Vdc to 12.7 Vdc.

### **22.3 Bell Cutoff**

The Bell Cutoff time cannot be less than five minutes.

### **22.4 Entry Delay**

The maximum entry delay used must not be more than 45 seconds.

### **22.5 Exit Delay**

The maximum exit delay used must not be more than 60 seconds.

### **22.6 Weekly Test**

The product should be tested weekly.

### **22.7 Wireless Audible Annunciation Option**

The Wireless Audible option must be selected as DAY for residential applications.

## **Central-Station and Proprietary Burglar-Alarm Units ANSI/UL 1610 AND ANSI/UL 1076**

### **23.1 Opening/Closing Reports**

The Opening/Closing Reports option must be programmed as YES.

### **23.2 Closing Wait**

The Closing Wait option must be programmed YES.

### **23.3 Entry Delay**

The maximum entry delay used must not be more than 60 seconds when using the Model 350A or 350H Attack Resistant Housing.

### **23.4 Exit Delay**

The maximum exit delay used must not be more than 60 seconds.

### **23.5 Proprietary Dialer**

The Model XR100 Series provides proprietary service when configured as a digital dialer.

### **23.6 DACT Central Station**

DACT Central Station service can be provided by adding an Ademco AB12M bell and bell housing and placing the XR100 Series panel into the Model 350A or 350H Attack Resistant Housing.

### **23.7 Bell Cutoff**

The Bell Cutoff time cannot be less than 15 minutes.



## 23.8 Standard Line Security

Standard Line Security is provided when configured as a Path 1 NET system using an XR100N panel. The NET Check-in time must be set to 03 minutes or RND. When programmed for Standard Line Security, Exit Time Restart is disabled. When a dialer is required for 06 minute check-in time, an attack resistant enclosure (DMP Model 350A or 350H) is required. When the check-in time is set to a number less than 200 seconds, an attack resistant enclosure is not required.

The XR100 Series Protected Premises Control Unit is suitable for Standard Line Security service when configured for NET communication with SCS-1R receiving system. This configuration is approved for the following:

AMCX - Central Station Alarm Units

APOU - Proprietary Alarm Units

## 23.9 Wireless Audible Annunciation Option

The Wireless Audible option must be selected as ANY for commercial applications.

## 23.10 CELL Only, Standard Line Security

Standard Line Security is provided when programmed using Model 463C, 464-263C or 464-263H for CELL with no backup. XR100 cellular communication is used as primary with a 3 minute check-in when armed or disarmed.

Path 1 programming	
Comm Type: = CELL	Checkin: = 3 minute
Path Type: = Primary	Fail Time: = 3 minute
Sub Code: = NO or YES	Test Rpt: = NO

## 23.11 NET with CELL as Alternate Primary and Dialer Backup, Standard Line Security

Standard Line Security is provided when programmed using Model 463C, 464-263C or 464-263H for CELL with no backup. XR100 network communication is used as primary with a 6 minute check-in when armed, and a random check-in over a 60 minute period when disarmed. CELL is the backup path and set to daily test. Should the NET primary path become disabled, CELL adapts the same check-in time programmed for the primary communication and becomes an alternate primary path. The dialer path is used as the backup if both NET and CELL fail to receive acknowledgement from the receiver.

This method of operation causes the CELL alternate primary to adapt to the 6 minute NET primary check-in rate when the NET primary is unavailable maintaining line supervision and precludes the need for a central station runner to respond to the NET primary failure.

Path 1 programming	Path 2 programming	Path 3 programming
Comm Type: = NET	Comm Type: = CELL	Comm Type: = DD
Path Type: = Primary	Path Type: = Backup (operates as alternate primary)	Path Type: = Backup (operates as second method)
Test Rpt: = NO	Test Rpt: = YES	Test Rpt: = YES
Checkin: = 6 minute, or RND (random)	Test Freq: = Daily	Test Freq: = Daily
Fail Time: = 6 minute, or RND (random)	Checkin: = ADAPT	Duplicate Alarms: = YES
Sub Code: = YES	Sub Code: = Shared	

## 23.12 NET with CELL as Backup and Adaptive Primary, Standard Line Security

Standard Line Security is provided when programmed using NET communication and Model 463C, 464-263C or 464-263H for CELL as backup and as needed adapts and takes over as primary. XR100 network communication is used as primary with a 6 minute check-in when armed, and a random check-in over a 60 minute period when disarmed. CELL is the backup path and set to daily test. Should the primary path become disabled, the CELL adapts to a special 3 minute check-in time and because of that check-in rate becomes the primary without the requirement of an additional backup. This method of operation causes the CELL backup to adapt to the 3 minute check-in rate when the NET primary is unavailable becoming a standalone primary without the need for a backup. This maintains line supervision and precludes the need for a central station runner to respond to the NET primary failure.

Path 1 programming	Path 2 programming
Comm Type: = NET	Comm Type: = CELL
Path Type: = Primary	Path Type: = Backup (operates as second method)
Test Rpt: = NO	Test Rpt: = YES
Checkin: = 6 minute, or RND (random)	Test Freq: = Daily
Fail Time: = 6 minute, or RND (random)	Checkin: = ADAPT3
Sub Code: = YES	Duplicate Alarms: = YES
	Sub Code: = Shared

## **Holdup Alarm Units ANSI/UL 636**

### **24.1 UL 1610 Required**

The programming and installation specifications contained in this section must be completed in addition to ANSI/UL 1610 Specifications when installing a Model 1142 with a Model XR100 Series panel.

### **24.2 1100X Wireless Receiver**

The Model 1100X Wireless Receiver in conjunction with the Model 1142 Holdup Alarm Transmitter must be installed in the system.

### **24.3 Wireless Supervision Time**

The Zone Information Supervision Time must be a maximum of 240 minutes.

### **24.4 LED Display**

The LED Operation option display must be set to NO when using a Model 1142 Holdup Alarm Transmitter.

### **24.5 Jamming Detection**

The Detect Wireless Jamming option must be set to YES.

### **24.6 Local Alarm**

The Bell Action for a PN (Panic) type zone must be programmed as N (None).

### **24.7 Message to Transmit**

The Armed Open and Armed Short messages for a PN (Panic) type zone must be programmed to A (Alarm).

### **24.8 Wireless Audible Annunciation Option**

The Wireless Audible option must be selected as ANY for commercial applications.

## **Digital Burglar Alarm Communicator System Units ANSI/UL 1635**

### **25.1 System Trouble Display**

The Status List Display must include at least one keypad that displays system monitor troubles.

### **25.2 Digital Dialer Telephone Number**

Both programmed telephone numbers must begin with a P.

### **25.3 Test Time**

The Test Time option must be programmed so that the XR100 Series sends a report once every 24 hours.

### **25.4 Closing Wait**

The Closing Wait option must be programmed YES.

## **Police Station Connected and Local Burglar Alarm Units ANSI/UL 365**

### **26.1 System Trouble Display**

The Status List Display must include at least one keypad that displays system monitor troubles.

### **26.2 Entry Delay**

The maximum entry delay used must not be more than 60 seconds when using the Model 350A or 350H housing.

### **26.3 Exit Delay**

The maximum exit delay used must not be more than 60 seconds.

### **26.4 Bell**

A local audible signal appliance must be used such as Ademco AB12M bell and bell housing.

The alarm housing for a mercantile alarm system without a remote alarm transmission connection shall be mounted on the outside of the building, visible from a public street or highway. It shall be accessible for examination and repair. It shall also be located not more than four stories above the street level unless:

- a) A second alarm sounding device and housing, intended for outside service, is mounted adjacent to the premises or area of the building in which the alarm system is installed or
- b) A second alarm sounding device, intended for inside service, is mounted within the premises.

In either case, the outside alarm sounding device and housing may be mounted as high as the seventh floor.

## 26.5 Bell Cutoff

The Bell Cutoff time cannot be less than 15 minutes.

## 26.6 Automatic Bell Test

The Automatic Bell Test option must be programmed as YES.

## 26.7 Standard Line Security

Standard Line Security is provided when configured as a Path 1 NET system using an XR100N panel. The NET Check-in time must be set to 06 minutes or RND When programmed for Standard Line Security, Exit Time Restart is disabled. When a dialer is required for 06 minute check-in time, an attack resistant enclosure (DMP Model 350A or 350H) is required. When the check-in time is set to a number less than 200 seconds, an attack resistant enclosure is not required.

The XR100 Series Protected Premises Control Unit is suitable for Standard Line Security service when configured for NET communication with SCS-1R receiving system.

## 26.8 Wireless Audible Annunciation Option

The Wireless Audible option must be selected as ANY for commercial applications.

## 26.9 CELL Only, Standard Line Security

Standard Line Security is provided when programmed using Model 463C for CELL with no backup. XR100 cellular communication is used as primary with a 3 minute check-in when armed or disarmed.

Path 1 programming	
Comm Type: = CELL	Checkin: = 3 minute
Path Type: = Primary	Fail Time: = 3 minute
Sub Code: = NO or YES	Test Rpt: = NO

## 26.10 NET with CELL as Alternate Primary and Dialer Backup, Standard Line Security

Standard Line Security is provided using NET communication with Model 463C for CELL as an alternate primary and with digital dialer as a backup. XR100 network communication is used as primary with a 6 minute check-in when armed, and a random check-in over a 60 minute period when disarmed. CELL is the backup path and set to daily test. Should the NET primary path become disabled, CELL adapts the same check-in time programmed for the primary communication and becomes an alternate primary path. The dialer path is used as the backup if both NET and CELL fail to receive acknowledgement from the receiver.

This method of operation causes the CELL alternate primary to adapt to the 6 minute NET primary check-in rate when the NET primary is unavailable maintaining line supervision and precludes the need for a central station runner to respond to the NET primary failure.

Path 1 programming	Path 2 programming	Path 3 programming
Comm Type: = NET	Comm Type: = CELL	Comm Type: = DD
Path Type: = Primary	Path Type: = Backup (operates as alternate primary)	Path Type: = Backup (operates as second method)
Test Rpt: = NO	Test Rpt: = YES	Test Rpt: = YES
Checkin: = 6 minute, or RND (random)	Test Freq: = Daily	Test Freq: = Daily
Fail Time: = 6 minute, or RND (random)	Checkin: = ADAPT	Duplicate Alarms: = YES
Sub Code: = YES	Sub Code: = Shared	

## 26.11 NET with CELL as Backup and Adaptive Primary, Standard Line Security

Standard Line Security is provided when programmed using NET communication and Model 463C for CELL as backup and as needed adapts and takes over as primary. XR100 network communication is used as primary with a 6 minute check-in when armed, and a random check-in over a 60 minute period when disarmed. CELL is the backup path and set to daily test. Should the primary path become disabled, the CELL adapts to a special 3 minute check-in time and because of that check-in rate becomes the primary without the requirement of an additional backup. This method of operation causes the CELL backup to adapt to the 3 minute check-in rate when the NET primary is unavailable becoming a standalone primary without the need for a backup. This maintains line supervision and precludes the need for a central station runner to respond to the NET primary failure.

Path 1 programming	Path 2 programming
Comm Type: = NET	Comm Type: = CELL
Path Type: = Primary	Path Type: = Backup (operates as second method)
Test Rpt: = NO	Test Rpt: = YES
Checkin: = 6 minute, or RND (random)	Test Freq: = Daily
Fail Time: = 6 minute, or RND (random)	Checkin: = ADAPT3
Sub Code: = YES	Duplicate Alarms: = YES
	Sub Code: = Shared

## Police Station Connected and Local Burglar Alarm Units ANSI/UL 609

### 27.1 Mercantile

For Mercantile and Police Station Connect operation the Model XR100 Series must be mounted in a Attack Resistant Housing, (DMP Model 350A or 350H).

### 27.2 Entry Delay

The maximum entry delay used must not be more than 60 seconds when using the Model 350A or 350H housing.

### 27.3 Exit Delay

The maximum exit delay used must not be more than 60 seconds.

### 27.4 Mercantile Safe and Vault

When the DMP Model 350A or 350H housing is used, the XR100 Series provides operation as a mercantile safe and vault alarm. Bell Supervision and wiring must be in accordance with ANSI/UL 681. When the XR100 Series is mounted outside the safe or vault, tamper protection and the Sentrol Model 5402 or Potter EVD listed vibration detectors should be used.

### 27.5 Bell

A local audible signal appliance must be used such as Ademco AB12M bell and bell housing.

In a mercantile burglar alarm system, a mercantile alarm sounding device located within a building but outside the protected area, is acceptable, provided it is rated for outside service and alarm conditions are transmitted to:

- a) The dispatch location of the law enforcement agency having jurisdiction over the protected property or
- b) A central station or residential monitoring station complying with the Standard for Central Station Alarm Services, UL 827.

In a mercantile burglar alarm system, an alarm sounding device located within the area of greatest protection, or outside the area of greatest protection but within an area protected by an alarm system and that shares a common control unit with the system installed in the area of greatest protection, is acceptable provided it is rated for inside service and alarm conditions are transmitted to:

- a) The dispatch location of the law enforcement agency having jurisdiction over the protected property or
- b) A central station or residential monitoring station complying with the Standard for Central Station Alarm Services, UL 827.

An inside sounding device shall be mounted at least 10 feet (3.05 m) above the floor or at the surface of the ceiling. When there is fixed construction within the area that could provide access for an intruder, the alarm sounding device shall also be mounted at least 4 feet (1.2 m), as measured horizontally, away from the edges of the fixed construction or at least 10 feet (3.05 m) above it so as to minimize access by an intruder.

### 27.6 Wireless Audible Annunciation Option

The Wireless Audible option must be selected as ANY for commercial applications.

## Access Control System Units ANSI/UL 294

### 28.1 Panel Designation

The XR100 Series panels are designated stand alone units.

### 28.2 Tamper Protection

For Listed Access Control installations, a tamper switch must be used.

### 28.3 Transformer

The total combined Auxiliary and Bell outputs cannot exceed 1.3 Amps with a 50 VA Transformer. The total combined Auxiliary and Bell outputs cannot exceed 1.9 Amps with a 56 VA Transformer.

### 28.4 Compatible Devices

The following devices are compatible with the XR100 Series panels.

Access Control	
734/734N/734N-WiFi Wiegand Interface Module*	Proximity reader connector
OP-08CB Motion Detector	Infrared sensor
PB-2 REX Button *	Exit control push button
PP-6005B Proxpoint Plus® Reader	Proximity reader
MP-5365 Miniprox® Reader	Slimline proximity reader
PR-5455 ProxPro® II Reader	Long range reader with sounder
MX-5375 Maxi-Prox™ Reader	Long range reader compatible with 1351 Prox Pass
* This device has not been investigated and shall not be used in listed installations.	

## Universal Fire Alarm Specifications

### 29.1 Introduction

The programming and installation specifications contained in this section must be completed when installing the Model XR100 Series in accordance with any of the ANSI/UL or NFPA fire standards. Additional specifications may be required by a particular standard. See the XR100 Series Programming Guide (LT-0896).

### 29.2 Wiring

All wiring must be in accordance with NEC, ANSI/NFPA 70.

### 29.3 Transformer

Use the Model 322/323 wire-in 16 VAC 56 VA or Model 324/324P wire-in transformer mounted within 20 feet of the panel and connected by conduit.

For UL Commercial Fire installations, the total current combined from Auxiliary and Bell Power cannot exceed: 1.2 Amps with a 56 or 100 VA transformer; .5 Amp Max for Auxiliary Power and .7 Amp Max for Bell

For UL Residential Fire installations, the total combined Auxiliary and Bell outputs cannot exceed 1.3 Amps with a 50 VA Transformer. The total current combined from Auxiliary and Bell Power cannot exceed: 1.9 Amps with a 56 VA or 100 VA transformer

### 29.4 End-of-Line Resistor

The DMP Model 310 1k Ohm EOL resistor should be used on all 1k Ohm EOL fire zones.

### 29.5 System Trouble Display

The Status List Display must include at least one keypad that displays system monitor troubles.

### 29.6 Fire Display

The Status List Display must include at least one keypad that displays troubles and alarms on fire type zones.

### 29.7 Police Station Phone Number

The digital dialer telephone number programmed for communication must not be a police station phone number, unless that phone number is specifically provided for that purpose.

### 29.8 System Maintenance

To ensure continuous satisfactory operation of any alarm system, proper installation and regular maintenance by the installing alarm company and frequent testing by the end user is essential. Offering a maintenance program and acquainting the user with the correct procedures for system use and testing is also the responsibility of the installing alarm company.

### 29.9 Audible Alarm

Fire Type zones should be programmed to activate an audible alarm. The Bell Action for Fire Type zones should not be programmed as "N".

### 29.10 Fire Zone Programming

If a retard delay is used on a waterflow zone, it cannot exceed 90 seconds and any retard delay in the waterflow initiating devices must be subtracted from the 90 seconds allowed. The retard delay should not be used on a zone with smoke detectors.

### 29.11 Class A Style D Zones

If required, the DMP 869 Dual Style D Initiating Module provides for connection of two Class A Style D zones to the Model XR100 Series. See the 869 Installation Guide (LT-0186) and sections 20.2 and 28.2 of this guide for wiring information.

### 29.12 Listed Receivers

Operation has been verified with the DMP SCS-VR and SCS-1R receivers and any Central Station Receiver that accepts industry standard Contact ID (DTMF) format. It is the installer's responsibility to verify compatibility between the panel and the receiver used during installation. The installer shall verify the compatibility of the receiver and the system on a yearly basis.

### 29.13 Standby Batteries

For UL listed applications, the panel must have 24 hour battery standby operation. The Model 364 battery should not be used for fire installations.

## Control Units for Fire-Protective Signaling Systems ANSI/UL 864, NFPA 72

### 30.1 Power Supply

For listed installations, the 50 VA Plug-in transformer cannot be used.

The total combined current from Terminal 7, 11, 25, and 27 cannot exceed 1.2 Amps.

### 30.2 Zone Restoral Reports

The Restoral Reports option must be selected as YES or Disarm.

### 30.3 Power Fail Delay

The Power Fail Delay option must be selected as required by the service of the panel. For Central Station service: 6-12, for Remote Station service: 12-15.

### 30.4 Sprinkler Supervisory

Any zone used for sprinkler supervisory must be programmed with "SPRINKLR XXX" as the zone name. The last three characters in the zone name may be assigned a number to identify the zone. The Model 893A Dual Phone Line Module must be used on all sprinkler supervisory systems.

### 30.5 DACT Systems

A DACT system may be configured as one of the following:

Path 1 Type DD Primary and Path 2 Type DD Backup

Path 1 Type DD Primary and Path 2 Type CELL Backup

Path 1 Type DD Primary and Path 2 Type NET Backup

#### Path 1 Type DD Primary and Path 2 Type DD Backup

Use two telephone lines and the Model 893A Dual Phone Line Module to provide two phone line connections to the system. Two different telephone numbers must be programmed for digital communication. Do not connect to ground start or party lines.

Path 1 Programming	Path 2 Programming
Comm Type = DD	Comm Type = DD
Path Type = Primary	Path Type = Backup
Test Rpt = Yes	Test Rpt = Yes
Test Freq = 1 Dy	Test Freq = 1 Dy
893A = Yes	

#### Path 1 Type DD Primary and Path 2 Type CELL Backup

When using a telephone line and cellular as backup,

Path 1 Programming	Path 2 Programming
Comm Type = DD	Comm Type = CELL
Path Type = Primary	Path Type = Backup
Test Rpt = Yes	Test Rpt = Yes
Test Freq = 1 Dy	Test Freq = 1 Dy
	Receiver IP Address
	First GPRS APN

#### Path 1 Type DD Primary and Path 2 Type NET Backup

When using a telephone line and a Network IP as backup,

Path 1 Programming	Path 2 Programming
Comm Type = DD	Comm Type = NET
Path Type = Primary	Path Type = Backup
Test Rpt = Yes	Test Rpt = Yes
Test Freq = 1 Dy	Test Freq = 1 Dy
	Receiver IP Address



## 30.6 Local Protective Signaling Systems

The DMP Model 865, 866, or 867 Notification Circuit Module must be used on the bell circuit for detection of shorts and grounds. Any burglary or other off premises communication must be done with the Model 893A Dual Phone Line Module. For local commercial fire installations, the 893A is required.

## 30.7 Remote Station Protective Signaling Systems

You must provide 60 hours of standby battery. See section 6.9 in this guide for standby battery calculations. Two Radionics Model D127 Reversing Relay Modules provide two reversing polarity telephone connections. See the D127 Installation Instruction sheet for wiring details. A DMP Model 893A is used to provide two line dialer communication.

## 30.8 Fire Protective Signaling Systems using Internet/Intranet/Cell Networks

An Other Transmission Technologies system as defined in UL 864 9th Edition, Section 40.7 may be configured as NET Primary using a hardwire IP network or CELL Primary using a Model 463C CDMA Cellular Communicator with or without a backup path. The system may be configured as one of the following:

### Path 1 Type NET or CELL Primary with no Backup

Path 1 Programming	
Comm Type = NET or CELL	Checkin Min = 5
Path Type = Primary	Failtime Min = 5
Test Rpt = No	Sub Code = Yes
Checkin = Yes	Send Comm Trbl = Yes

### Path 1 Type NET Primary and Path 2 Type DD Backup

Path 1 Programming	Path 2 Programming
Comm Type = NET	Comm Type = DD
Path Type = Primary	Path Type = Backup
Test Rpt = Yes	Test Rpt = Yes
Test Freq = 1 Dy	Test Freq = 1 Dy
Send Comm Trbl = Yes	Send Comm Trbl = Yes
Comm Path Trbl = Yes (Status List Programming)	

### Path 1 Type NET Primary and Path 2 Type CELL Backup

Path 1 Programming	Path 2 Programming
Comm Type = NET	Comm Type = CELL
Path Type = Primary	Path Type = Backup
Test Rpt = Yes	Test Rpt = Yes
Test Freq = 1 Dy	Test Freq = 1 Dy
Send Comm Trbl = Yes	Send Comm Trbl = Yes
Comm Path Trbl = Yes (Status List Programming)	

### Path 1 Type CELL Primary and Path 2 Type NET Backup

Path 1 Programming	Path 2 Programming
Comm Type = CELL	Comm Type = NET
Path Type = Primary	Path Type = Backup
Test Rpt = Yes	Test Rpt = Yes
Test Freq = 1 Dy	Test Freq = 1 Dy
Send Comm Trbl = Yes	Send Comm Trbl = Yes
Comm Path Trbl = Yes (Status List Programming)	

## 30.9 Combination Systems

For combination fire and burglary systems, powered burglary devices (PIR, Glassbreak, etc.) must be powered from a separate UL Listed power supply (DMP Model 505-12). This requirement is not needed for non-powered burglary devices (door contacts, etc.) which only connect to the zone input of zone expanders or keypads. Refer to Powered Burglary Devices in this document.

For combination fire and burglary systems, burglary sounding devices such as sirens and bells must be energized using panel relays, 860 relays, or 716 relays. Programming the output to activate the relay must occur using the Burglary Bell Output option in Area Information or by the Alarm Action output option of Zone Information. The Burglary Bell Action option of the panel Bell Options must be programmed as None.



### 30.10 Remote Annunciators

At least one Model 630F Remote Annunciator must be used on the system. All fire alarms, fire troubles and supervisory alarms or troubles must be annunciated only on the 630F. All burglary alarms or troubles must only be annunciated on non-fire keypads. See Status List options of the XR100 Series Programming Guide (LT-0896).

### 30.11 Notification Appliances

The following table indicates the approved notification appliances that can be used with the XR100 Series system.

Wheelock Model No.	Description	Max No. of Appliances using 56 VA/100 VA
MT-12/24	Multi-tone Horn	8
MB-G6-12	Bell, 6 inch	16
MB-G10-12	Bell, 10 inch	16
ST Series	Strobe, 15/75 candela	5
HS Series	Horn Strobe, 15/75 candela	5
SM-12/24-R	Sync Module, Single circuit	
DSM-12/24-R	Sync Module, Dual circuit	

### 30.12 Cross Zoning

When using cross zoning, there must be a minimum of two detectors installed in each protected space and detector installation spacing must be 0.7 times the linear spacing in accordance with National Fire Alarm Code, NFPA 72.

### 30.13 Ground Fault

For supervised circuits, ground fault is detected at 0 (zero) Ohms.

### 30.14 Wireless Testing

When using the 1100X or 1100XH Wireless Receiver for Fire Protective Signaling, after all transmitters are in position, the WLS option of the panel's Walk Test must be operated and all transmitters programmed for Fire (FI) or Supervisory (SV) must show that their checkin message was received.

### 30.15 Wireless Supervision

When using the 1103 Universal Transmitter for Fire Protective Signaling, supervision time must be set for 3 minutes. Supervision time cannot be set to 0 (zero).

## Household Fire Warning System Units ANSI/UL 985, NFPA 72

### 31.1 Bell Output Definition

The Model XR100 Series panel Bell Output must be programmed to operate steady on burglary alarms and pulsed or temporal on fire alarms.

### 31.2 Audible Devices

At least one listed audible device rated to operate over the voltage rate of 11.7 Vdc to 12.8 Vdc and rated at 85 DB minimum must be used.

### 31.3 Auxiliary Circuits

At least one fire alarm initiating device shall be used on the system. If the voltage for the device is applied by the control unit the fire alarm initiating device shall be rated to operate over the range of 11.5 Vdc to 12.7 Vdc.

### 31.4 Bell Cutoff

The Bell Cutoff time cannot be less than five minutes.

### 31.5 Detect Wireless Jamming

The Detect Wireless Jamming option must be programmed YES.

### 31.6 Wireless Supervision Time

The Zone Information Supervision Time must be 3 minutes.

### 31.7 Wireless Fire Verification

When used, the Model 1161 and 1162 wireless smoke detectors must not be programmed as Fire Verification (FV) zone type.

## California State Fire Marshal Specifications

### 32.1 Bell Output Definition

The Model XR100 Series panel Bell Output must be programmed to operate steady on burglary alarms and pulsed, temporal, or California School Code on fire alarms. See the XR100 Series Programming Guide (LT-0896).

## New York City (FDNY) Specifications

### 33.1 Introduction

The programming specifications contained in section 33.2 or 33.3 must be completed when installing the XR100 Series panel for New York City (FDNY) fire alarm installations for IP communication applications.

**Note:** Fire alarm installations that use **two digital dialer telephone lines** do not need to comply with these two sections.

### 33.2 Network and Cellular Communication, Primary and Secondary

When installed as a central station Internet (Network) communicator or slave transmitter both primary and secondary channels of communication shall be required and shall meet the conditions below. Network communication shall be used as primary channel of communication with Central Station and a 463C Cellular Communicator shall be used as the secondary channel of communication or in reverse order: 463C Cellular Communicator as primary and Network connection as the secondary channel.

#### Path 1 Type NET Primary and Path 2 Type CELL Backup Programming

Path 1 Programming	Path 2 Programming
Comm Type = NET	Comm Type = CELL
Path Type = Primary	Path Type = Backup
Checkin Min = 5	Checkin Min = 5
Failtime Min = 5	Failtime Min = 5
Test Rpt = Yes	Test Rpt = Yes
Test Freq = 1 Dy	Test Freq = 1 Dy
Send Comm Trbl = Yes	Send Comm Trbl = Yes
Comm Path Trbl = Yes (Status List Programming)	

#### Path 1 Type CELL Primary and Path 2 Type NET Backup Programming

Path 1 Programming	Path 2 Programming
Comm Type = CELL	Comm Type = NET
Path Type = Primary	Path Type = Backup
Checkin Min = 5	Checkin Min = 5
Failtime Min = 5	Failtime Min = 5
Test Rpt = Yes	Test Rpt = Yes
Test Freq = 1 Dy	Test Freq = 1 Dy
Send Comm Trbl = Yes	Send Comm Trbl = Yes
Comm Path Trbl = Yes (Status List Programming)	

Please see The City of New York Fire Department Certificate of Approval # 6123 or #6145 for additional installation instructions.

### 33.3 Digital Dialer Primary and Network Secondary Communication

When used with a central office communicator or a transmitter, the installation and operation of the equipment and devices shall comply with 3RCNY 17-01. The installation shall employ the digital dialer as the primary communicator (using telephone line) with network IP communication as backup or secondary means of communication. It shall have the capability of transmitting separate and distinct signals to indicate manual pull station alarm, automatic detection alarm, sprinkler waterflow alarm, supervisory signal indications and trouble indications.

#### 33.3.1 Communication Programming

For digital dialer communication with supervised network backup, program the following:

PRIMARY COMM TYPE = DD  
FIRST PHONE NUMBER = Central Station Receiver Phone Number  
BACKUP COMM TYPE = NET  
RECEIVER  
ALARMS = YES

### 33.4 Wiring

All wiring must be in accordance with NEC, ANSI, and NFPA 70. All network cabling must be installed in accordance with NFPA 70 for communication circuits.

### 33.5 Additional Requirements

Program and install the equipment to comply with NFPA basic fire requirements. Refer to the Universal Fire Alarm Specifications and ANSI/UL 864 NFPA 72 Specifications in this document.

## False Alarm Reduction Programmable Options

### 34.1 Shipping Defaults and Recommended Programming for ANSI/SIA CP-01-2010

SIA CP-01 FEATURE PARAGRAPH # AND DESCRIPTION	DMP XR100 SERIES PROGRAMMING GUIDE LT-0896 SECTION #	REQUIREMENT	RANGE	SHIPPING DEFAULT	RECOMMENDED PROGRAMMING*
4.2.2.1 Exit Time	14.2 Exit Delay	Required (Programmable)	45 sec. - 250 sec.	60 Seconds	60 Seconds
4.2.2.2 Progress Annunciation	14.2 Exit Delay	Allowed	Individual keypads may be disabled per zone	All keypads enabled	All keypads enabled
4.2.2.3 Exit Time Restart	14.2 Exit Delay	Required Option	For re-entry during exit time	Enabled	Enabled
4.2.2.5 Auto Stay Arm on Unvacated Premises	32.3 Occupied Premise - See XR100 Series Install Guide (LT-0681)	Required Option (except for remote arming)	Area 1 = Perimeter Area 2 = Interior	Enabled	Enabled for Residential Applications
4.2.4.4 Exit Time and Progress Annunciation/ Disable - for Remote Arm	Not Available on Remote Arming	Allowed Option	Progress Annunciation Always disabled for Remote Arming	Not Available	Remote Arming not allowed for CP-01 installations.
4.2.3.1 Entry Delay(s)	8.3 Entry Delay	Required (Programmable)	30 sec. - 240 Sec. **	30 Seconds	At least 30 Seconds **
4.2.5.1 Abort Window - for Non-Fire Zones	3.7 Transmit Delay	Required Option	Disable by zone or zone type	Enabled NT DY EX Zone	Enabled
4.2.5.1 Abort Window Time - for Non-Fire Zones	3.7 Transmit Delay	Required (Programmable)	15 sec. - 45 sec. **	30 Seconds	At least 15 Seconds **
4.2.5.1.2 Abort Annunciation	3.7 Transmit Delay	Required Option	Annunciate that no alarm was transmitted (S45)	Yes	Yes
4.2.5.4.1 Cancel Annunciation	Always Enabled - Not Programmable	Required Option	Annunciate that a Cancel was transmitted (S49)	Always Enabled	Yes
4.2.6.1 & 4.2.6.2 Duress Feature	User Code + 1 = Ambush Code Not Available	Allowed Option	No 1 + derivative of another user code/no duplicates with other user codes	Code +1 Always Disabled	Not Programmable
4.3.1 Cross Zoning	15.21 Cross Zone	Required Option	Yes/No Zone Programming	No	Enabled using two or more programmed zones
4.3.1 Programmable Cross Zoning Time	8.4 Cross Zone Time	Allowed	4 sec. - 250 sec.	4 Seconds	Per walk path in protected premises
4.3.2 Swinger Shutdown	8.7 Swinger Bypass Trips	Required (Programmable)	1-6 trips	2 trips	2 trips
4.3.2 Swinger Shutdown Disable	15.15 Swinger Bypass	Allowed	For non-police response zones	Yes	Enabled (all zones)
4.3.3 Fire Alarm Verification	15.4 Zone Type	Required Option	FV Type Zone	No	Yes as required (unless sensors can self verify)
4.5 Call Waiting Cancel	3.19 Telephone Number	Required Option	Include 70P in Telephone Number*	Disabled	Enabled if user has call waiting
4.6.3 System Test	17.5 Walk Test	Allowed	Test all protection devices	N/A	N/A
4.6.5 Communications	17.5 Walk Test	Not Allowed	N/A	N/A	N/a
* Programming at installation may be subordinate to other UL requirements for the intended application. ** For UL Installations, combined Entry Delay and Transmit Delay should not exceed 1 minute.					

### 34.2 Call Waiting

The Call Waiting default setting is disabled. To cancel the Call Waiting feature, program \* (star) 7 0 P (pause), the standard telephone code prefix that cancels call waiting, into the telephone number string. Cancel Call Waiting for telephone lines that have Call Waiting operational on the telephone line. See the XR100 Series Programming Guide (LT-0896).



**Caution:** A call waiting cancel programmed on a non-call waiting telephone line, would prevent communication to the central station.

### 34.3 Occupied Premise

When only two areas are used, and area one is named Perimeter, and area two is named Interior, and no exit type zone transition occurs during the exit delay because the premise continues to be occupied, the Interior area will automatically disarm at the end of the exit delay.

### 34.4 Entry Delay

Only use Entry Delay 1. Do not use Entry Delay 2, 3, or 4. See the XR100 Series Programming Guide (LT-0896).

### 34.5 Minimum Installation Requirements

SIA CP-01-2010 minimum system installation requirements include an XR100 Series, a UL listed local Bell, and off premise DACT communication to an SCS-1R receiver plus one of the following compatible keypads.

- 630F Fire Command™ Center

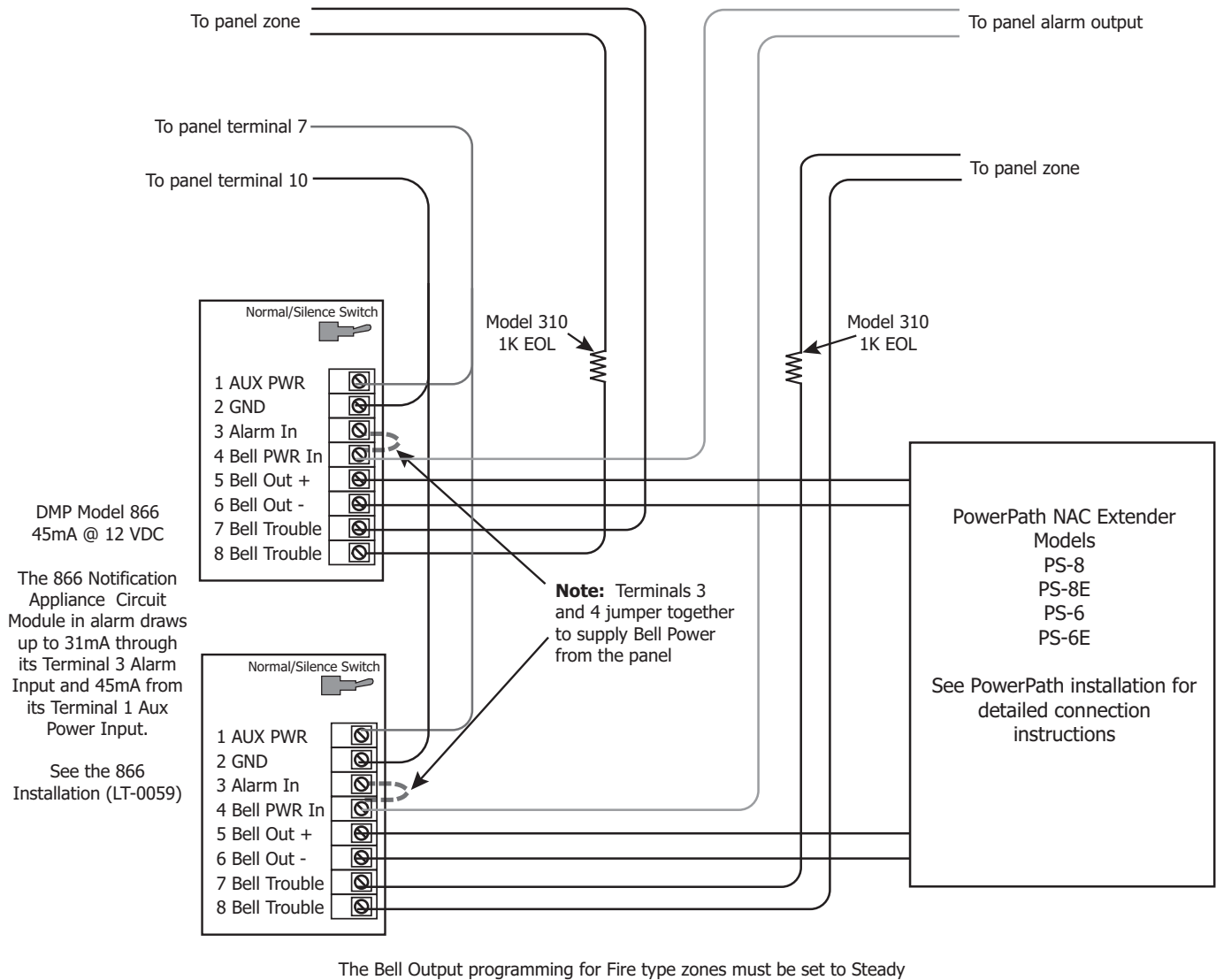
- 7060, 7063, 7070, or 7073 Thinline™ keypads

- 7060A, 7063A, 7070A, or 7073A Aqualite™ keypads

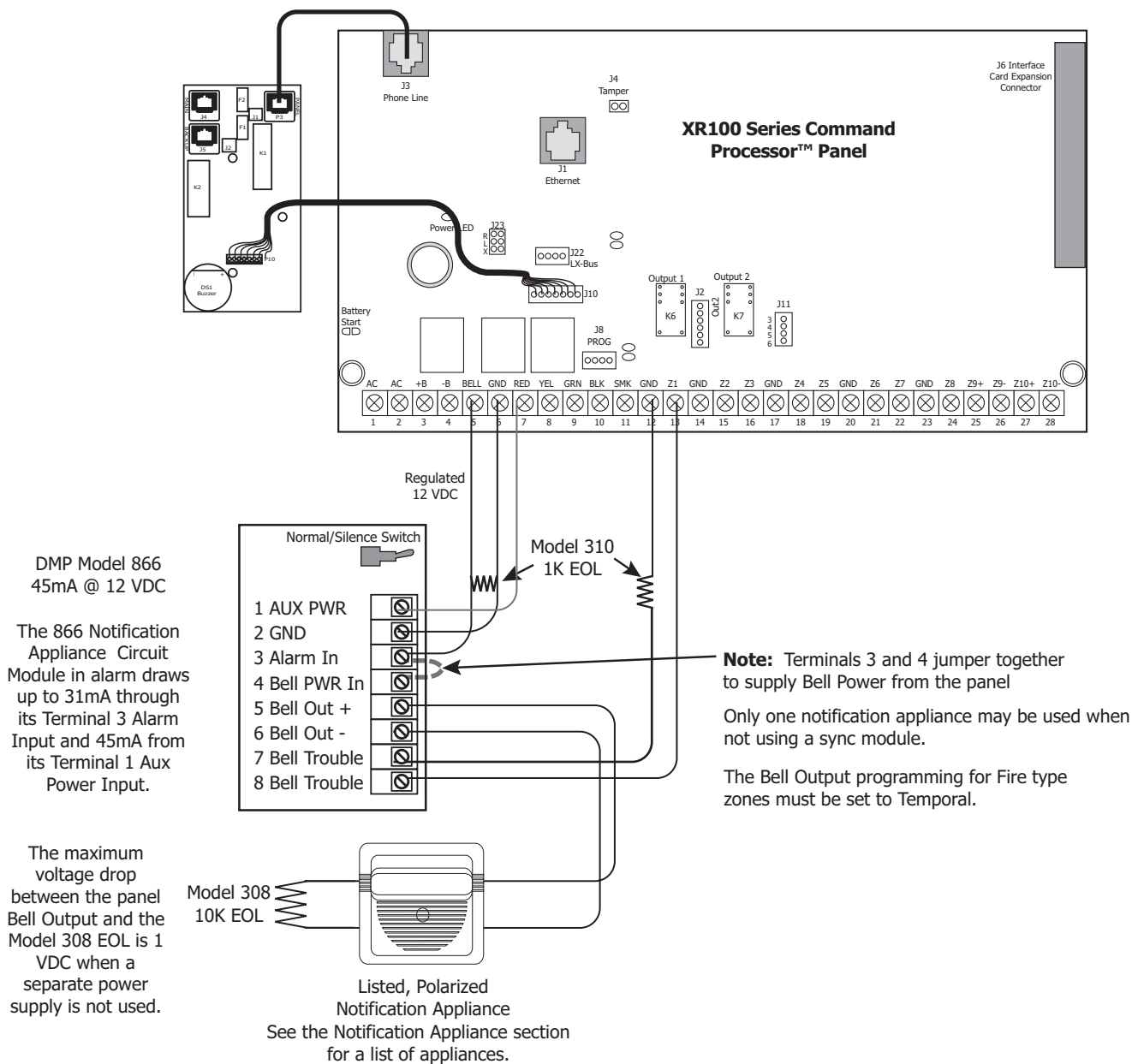
- 7160, 7163, 7170, or 7173 Thinline™ keypads

## Wiring Diagrams

### 35.1 866 with NAC Extender

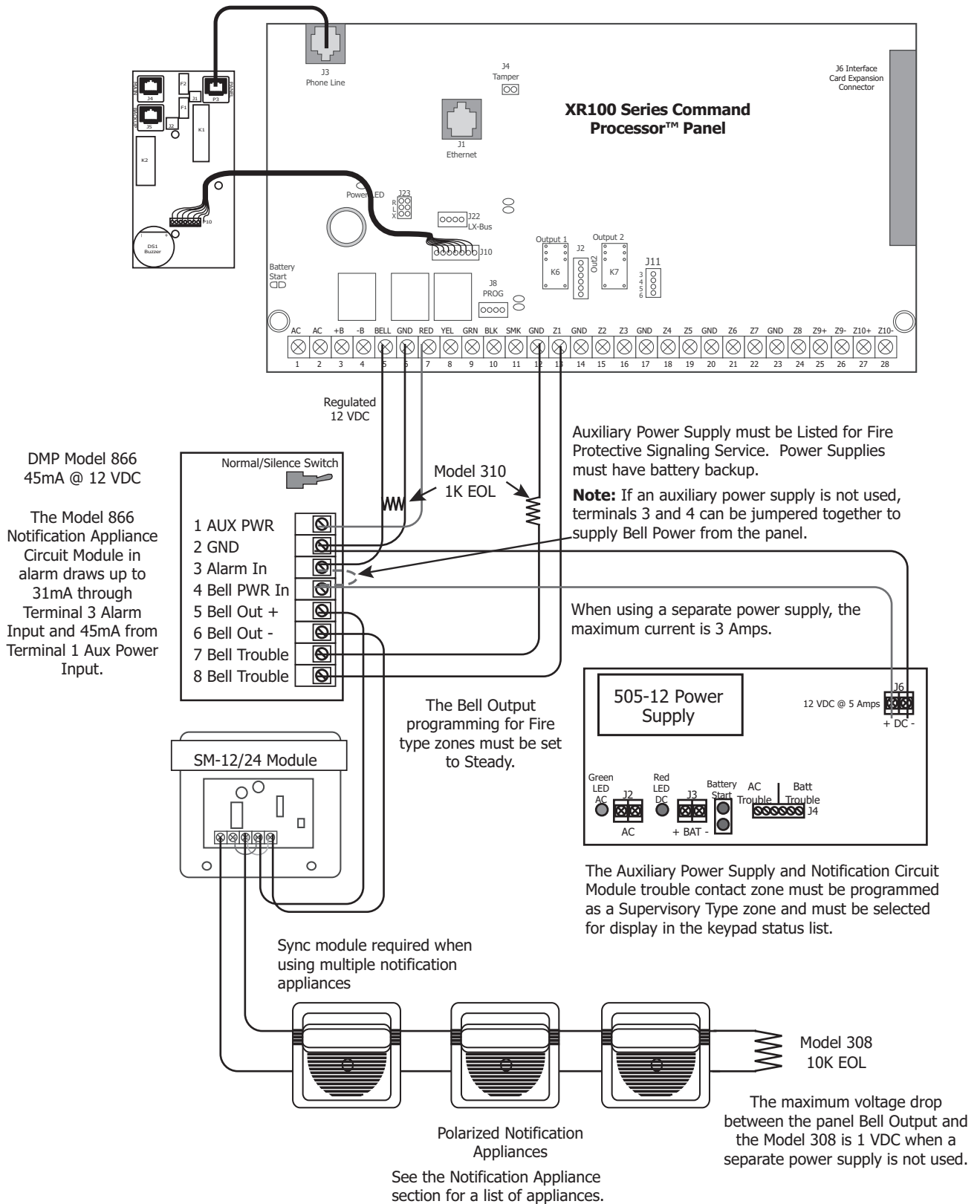


## 35.2 866 Class B Style W using Single Notification Appliance

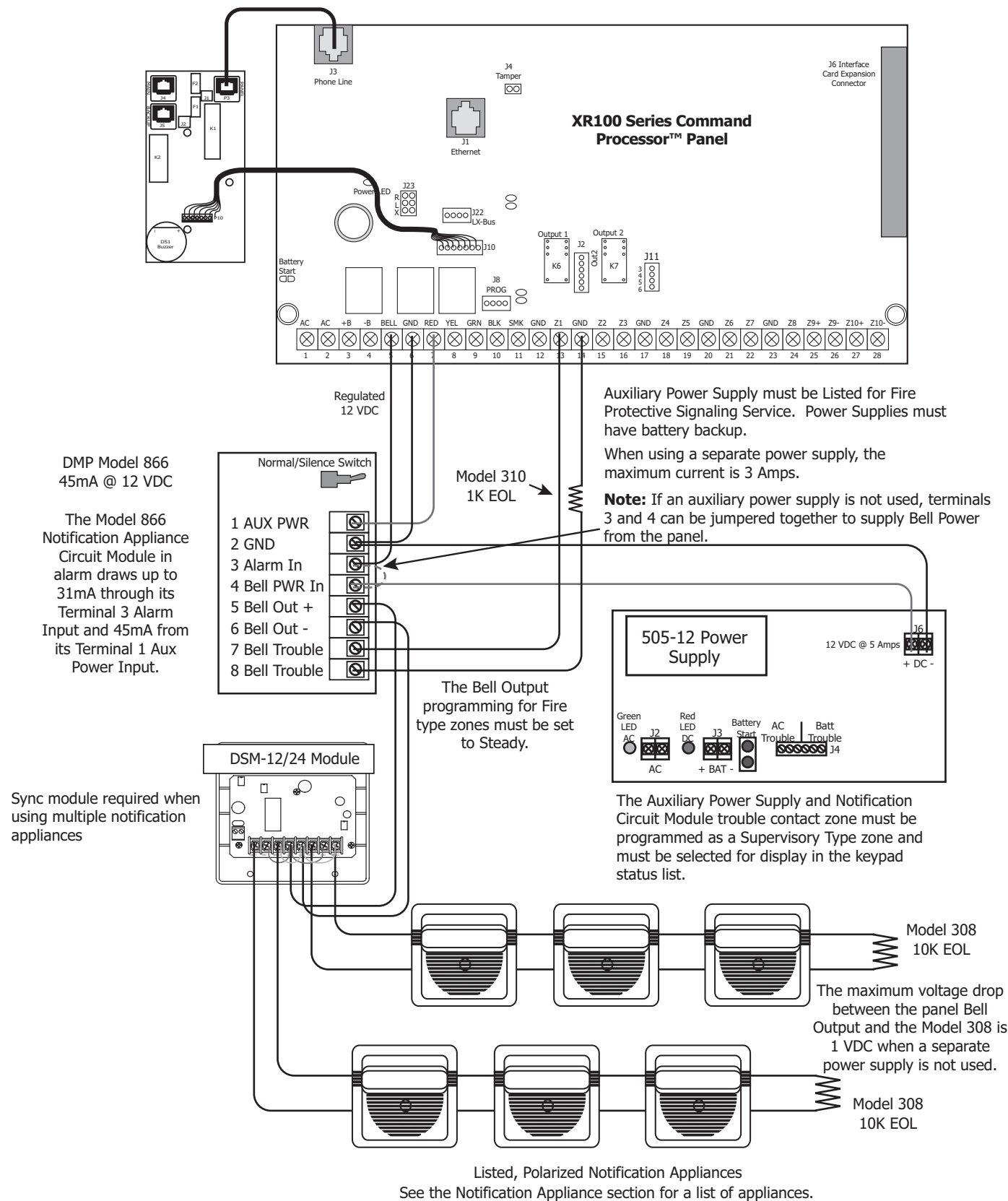




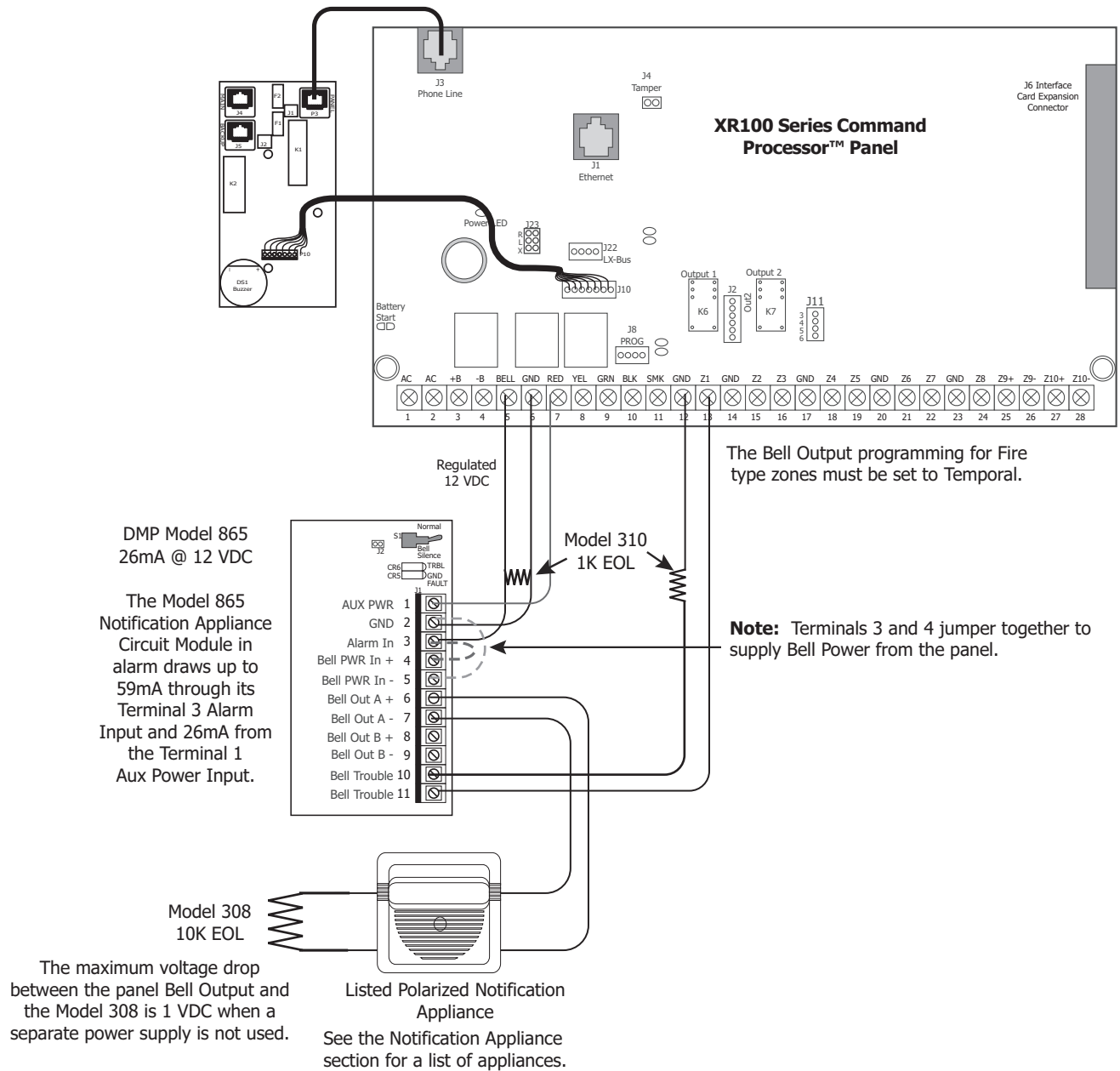
## 35.3 866 Class B Style W Multiple Notification Appliances Circuit



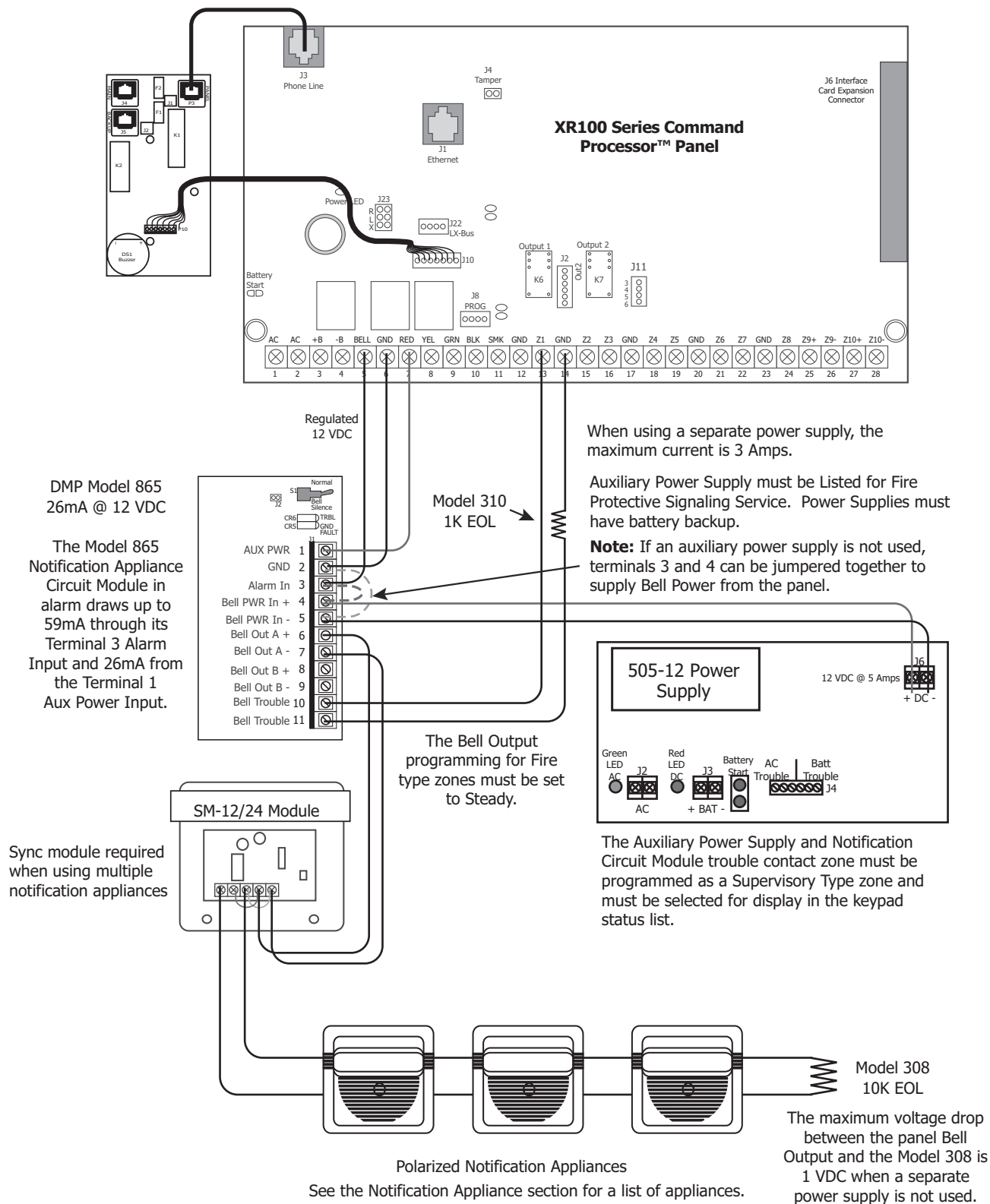
## 35.4 866 Class B Style W Dual Notification Appliances Circuits



## 35.5 865 Class B Style W using Single Notification Appliance



## 35.6 865 Class B Style W Multiple Notification Appliance Circuit



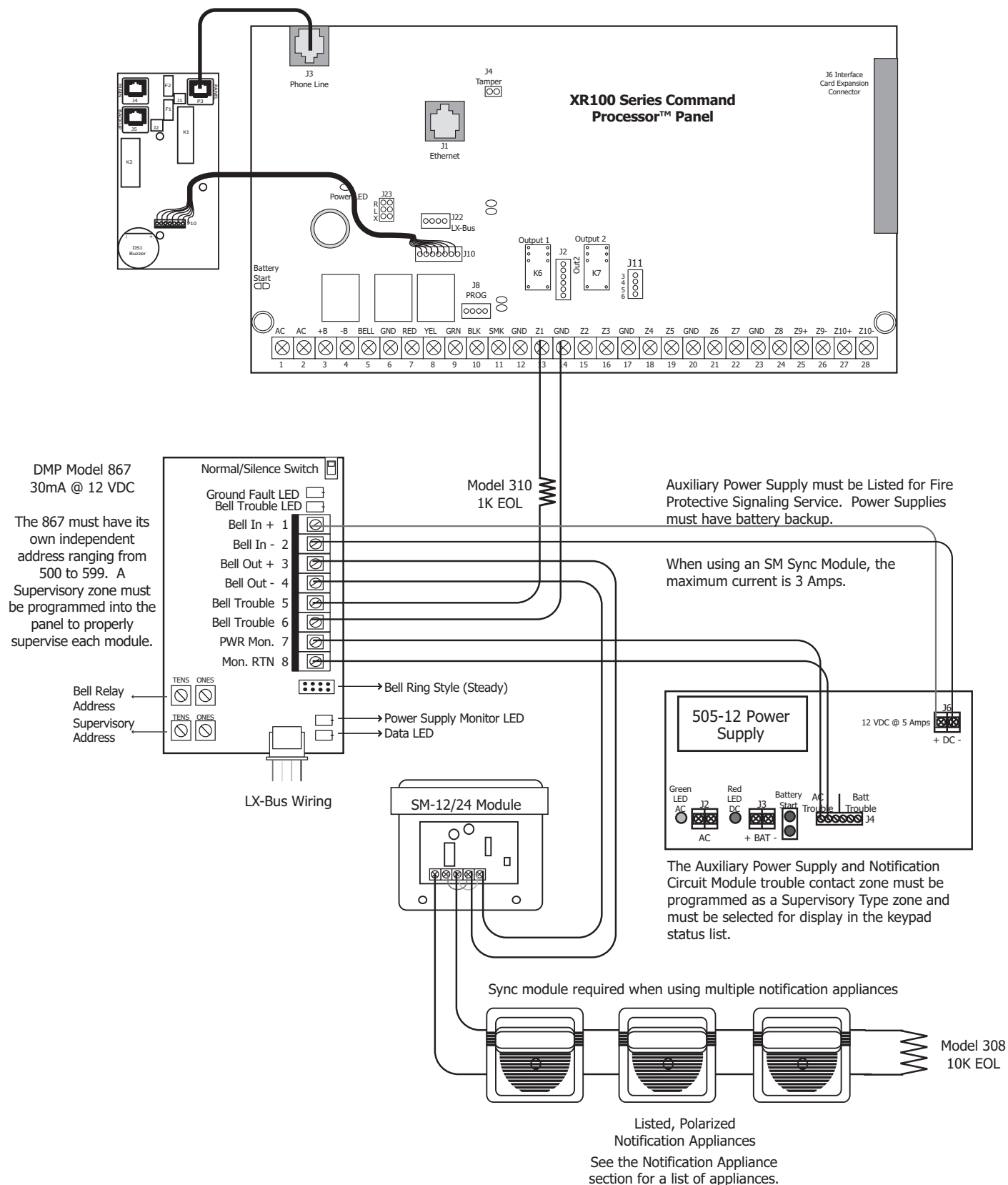






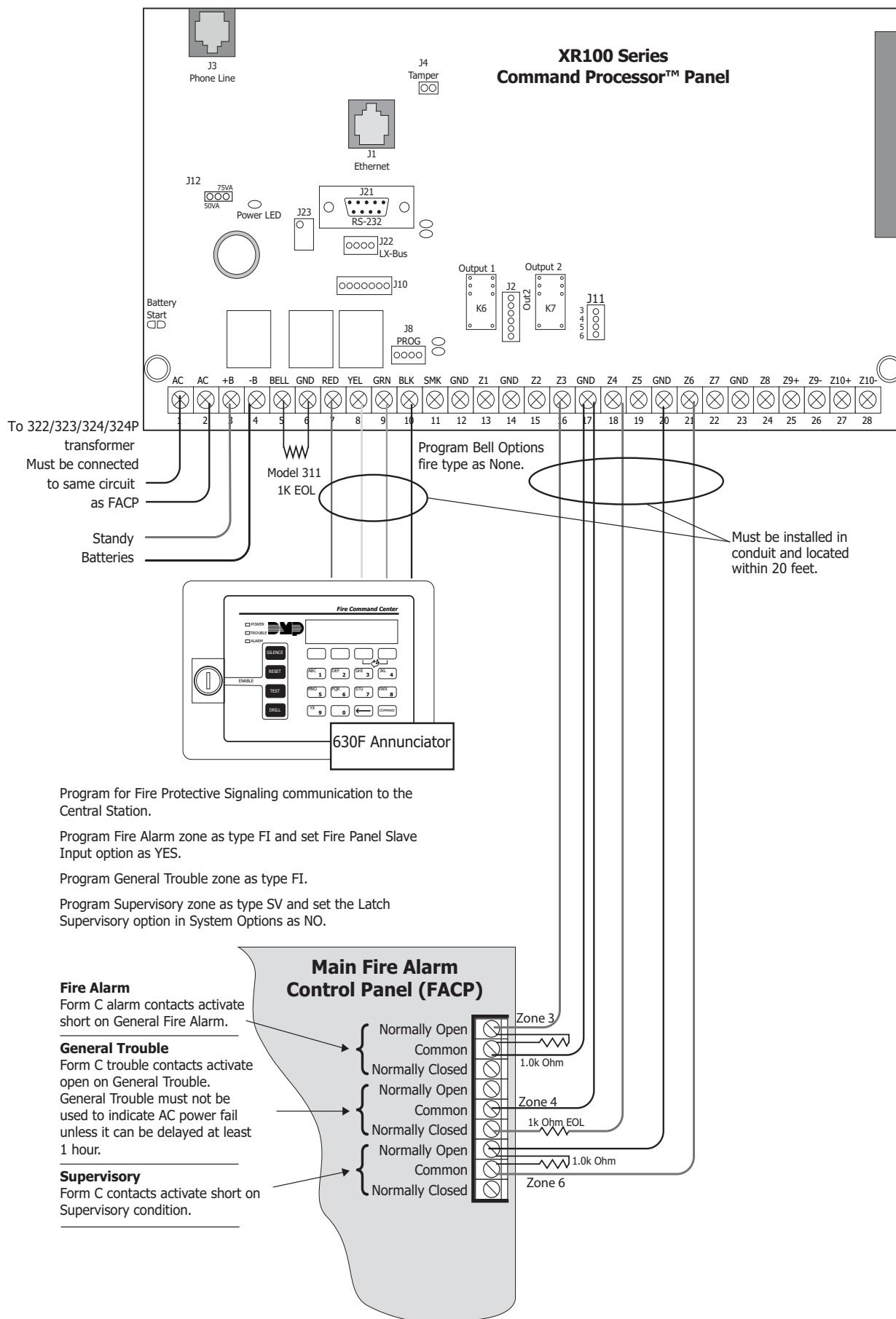


## 35.10 867 Class B Style W Multiple Notification Appliance Circuit

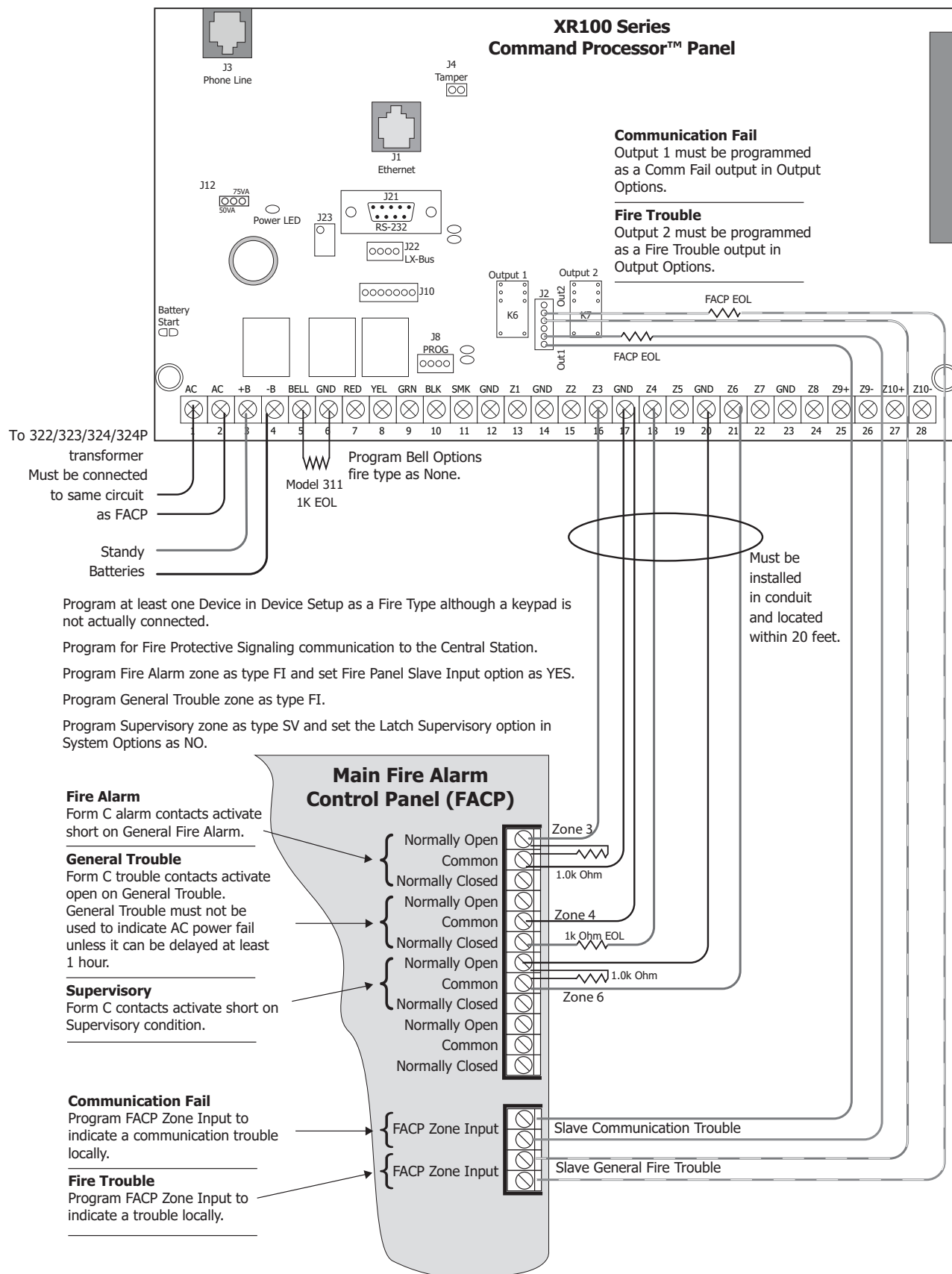




## 35.12 Panel Slave Communicator for FACP using 630F Annunciator

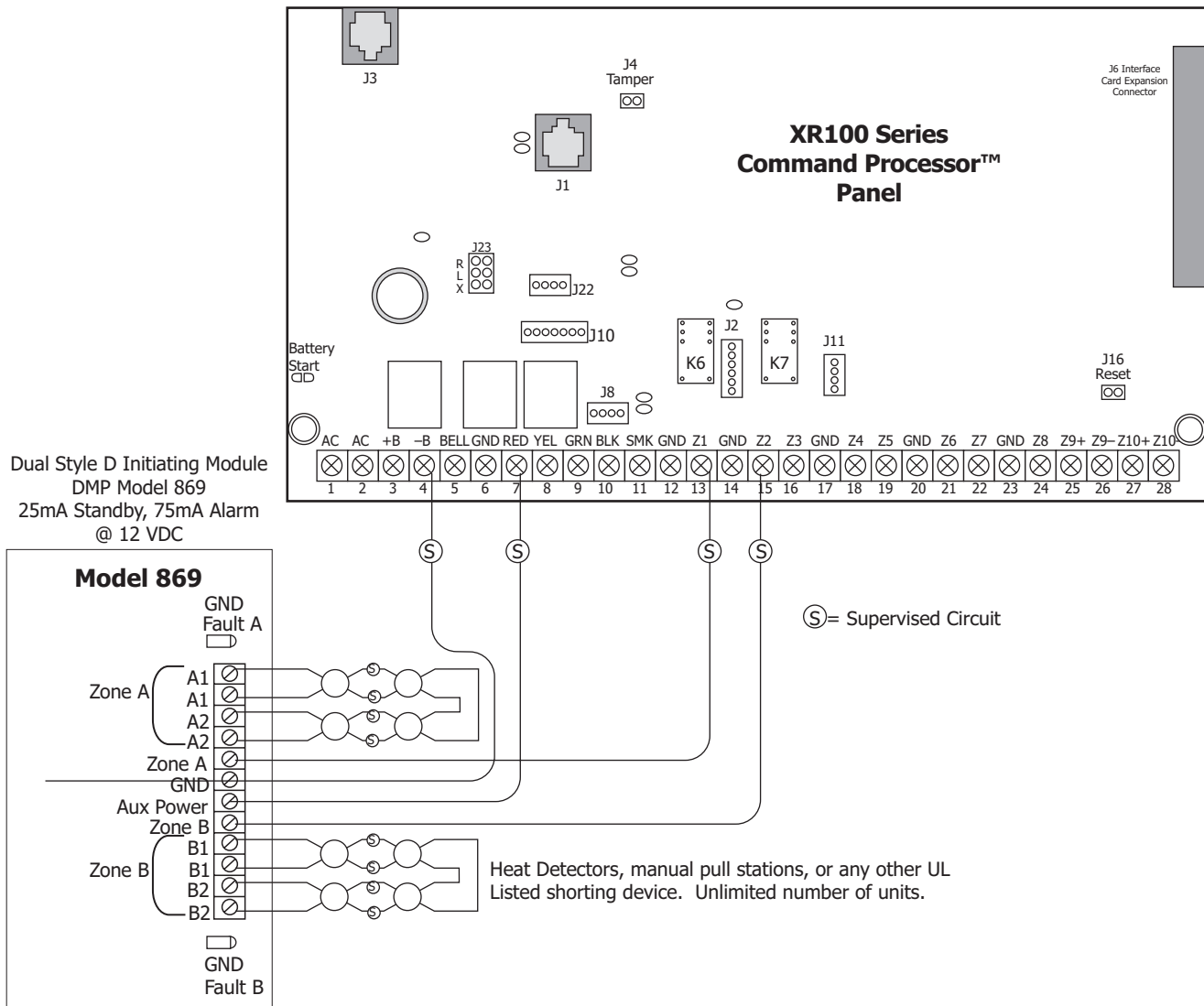


### 35.13 Panel Slave Communicator using Outputs



# WIRING DIAGRAMS

## 35.14 Dual Style D Zone Module Installation

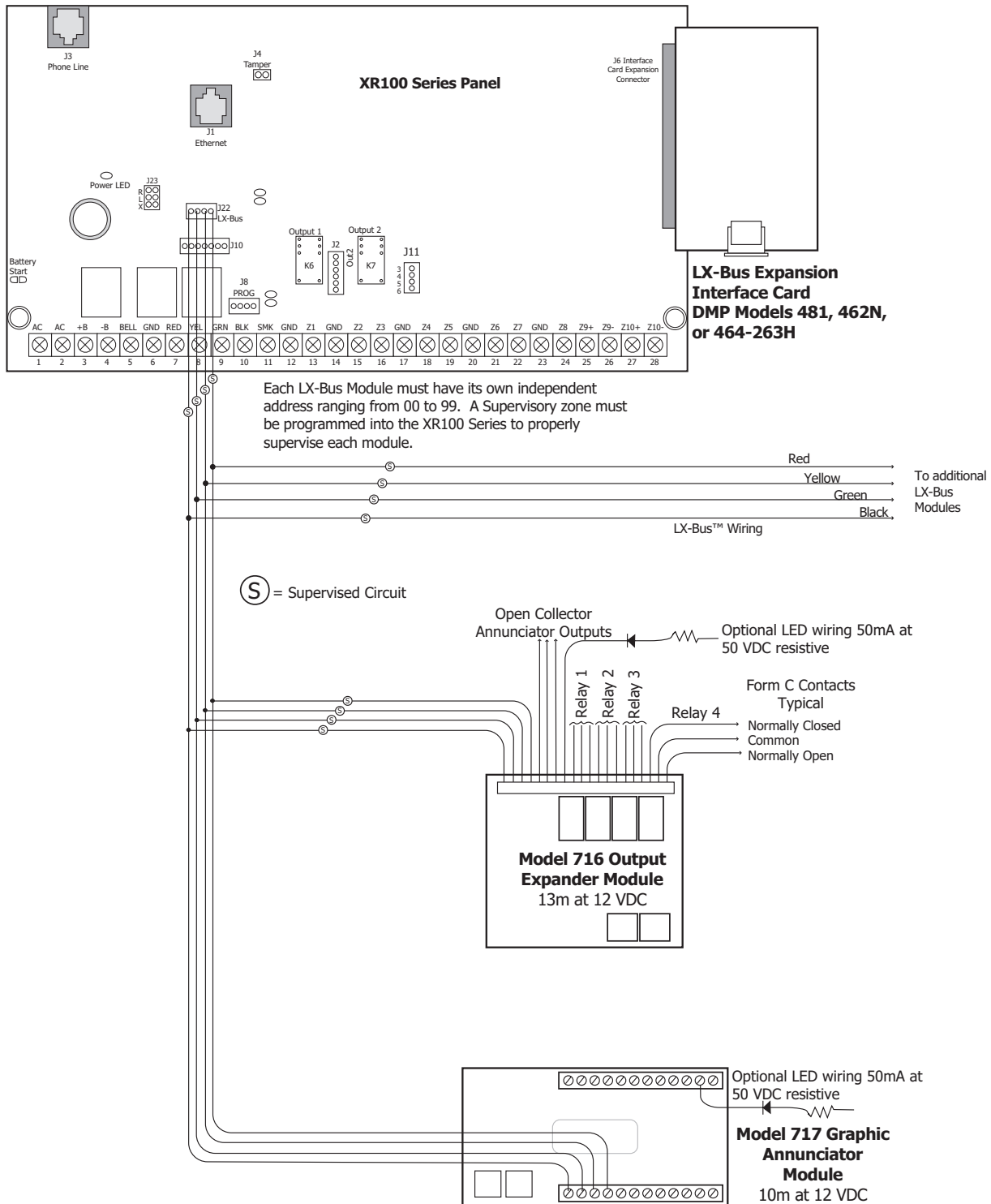






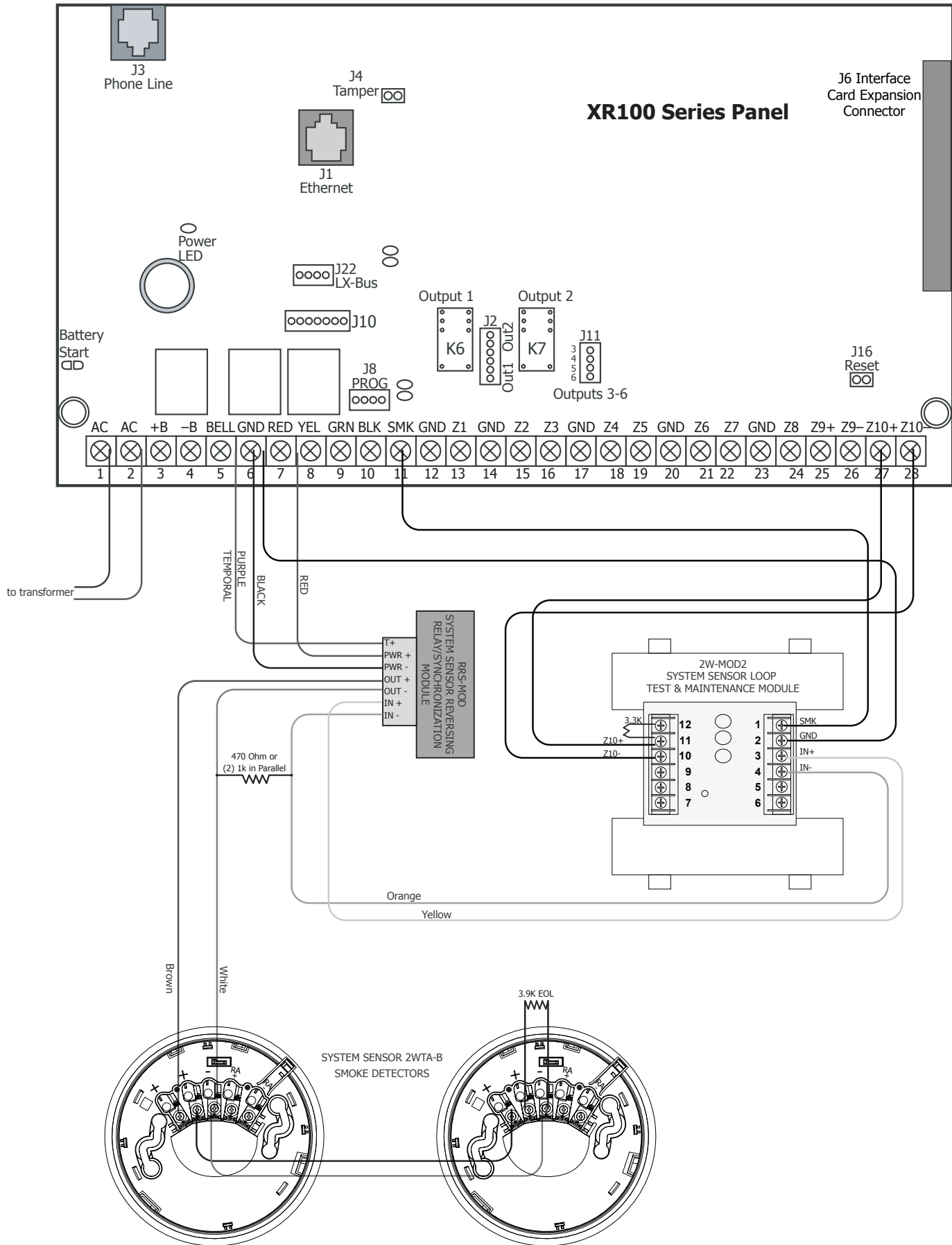
- For UL Standard Line Security applications, the panel must be installed and programmed to meet burglary alarm system requirements.
- The panel must be installed and programmed for reporting all alarm conditions through the integral DACT or network connection to the same central station that monitors the D8122.
- The D8122 must be installed in the same enclosure as the XR100 Series panel using the supplied mounting hardware. Refer to the STUD8121A/D8122 Operation and Installation Guide.
- Derived Channel Communication is not applicable for ULC Canadian Installations.

## 35.16 LX-Bus™ Module Connection



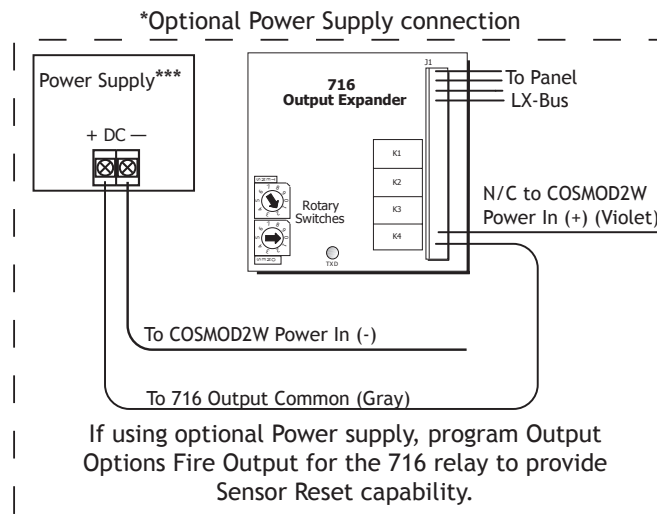
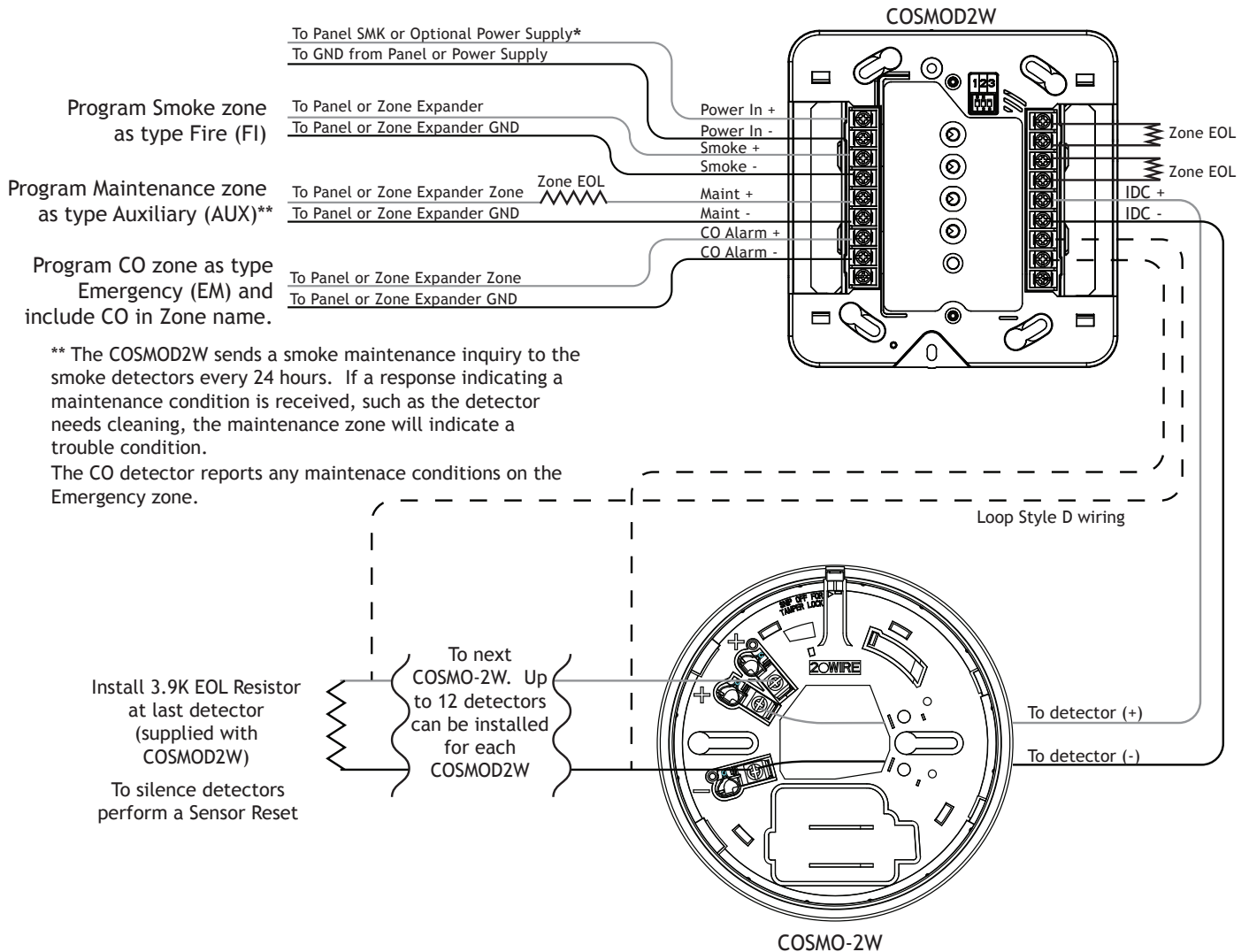


## 35.19 System Sensor 2-Wire Smoke Detectors



## 35.20 System Sensor i4 Series Smoke and CO Detectors Using A Single COSMOD2W Module

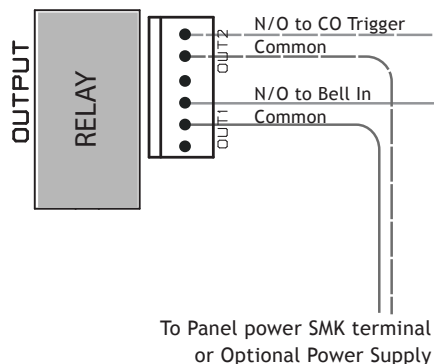
See i4 Series Interface Module Installation and Maintenance Instructions for additional information.



\*\*\* Listed for Fire Applications, output limited power, regulated

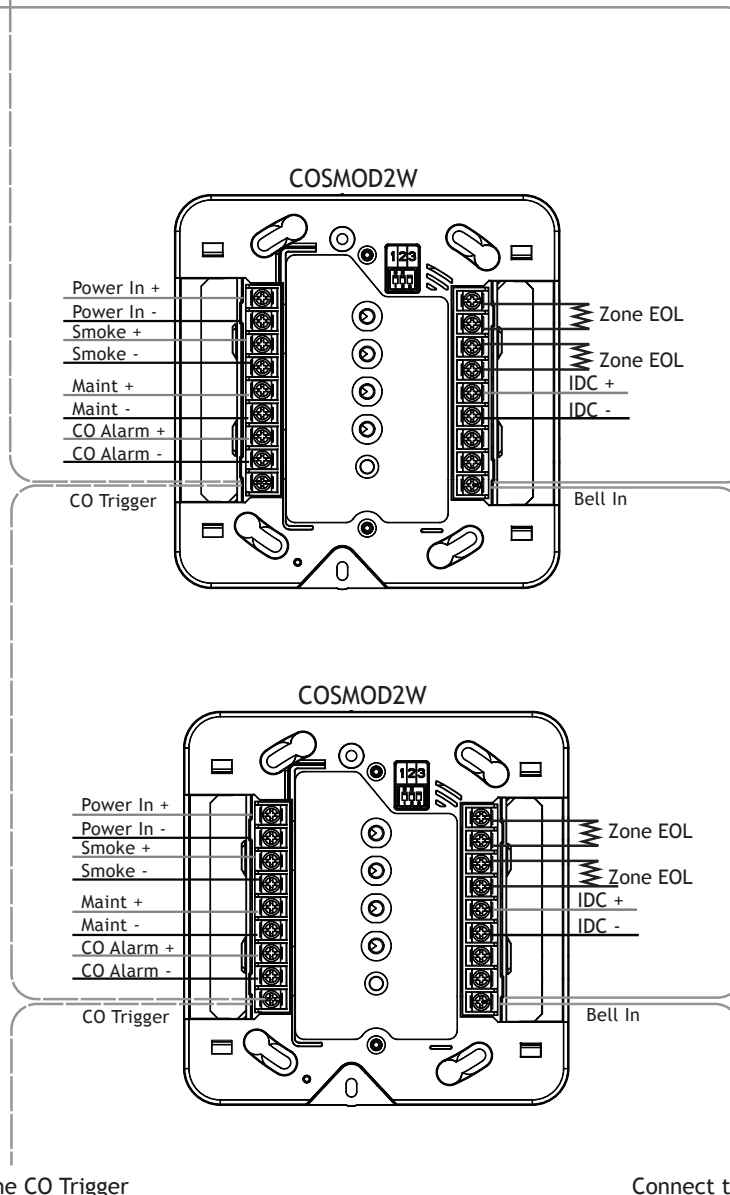
## 35.21 System Sensor i4 Series Smoke and CO Detectors Using Multiple COSMOD2W Modules

See i4 Series Interface Module Installation and Maintenance Instructions for additional information.



If installing multiple COSMOD2W Interface modules, connect the Bell In terminal to a N/O relay output to turn on **ALL** COSMOD2W smoke detector sounders during a fire alarm. Connect the Output Common to the panel SMK or optional Power Supply positive terminal (+). In Bell Options, program Bell Output for the relay output number. Program the Bell Output Bell Action as Temporal (T).

To turn on **ALL** CO detector sounders installed on multiple COSMOD2W modules during a CO alarm, connect the CO Trigger to a N/O relay output. Connect the Output Common to the panel SMK or optional Power Supply positive terminal (+). In Zone Information Alarm Action, program each COSMOD2W Emergency Zone (CO Alarm) for the COSMO-2W to turn on the relay output Steady (STD) when the zone is in a shorted condition.



Connect the CO Trigger

Connect the Bell In



## Revisions to This Document

This section explains the changes that were made to this document during this revision. This section lists the date the change was made, the section number and heading, and a quick summary of the change.

Ver.	Section Number and Heading	Summary of Changes
1.25	11.2 Compatible 2-Wire Smoke Detector Chart	Updated to current devices
	35.20 System Sensor i4 Series Smoke and CO Detectors Using A Single COSMOD2W Module	Added Wiring Diagram
	35.21 System Sensor i4 Series Smoke and CO Detectors Using Multiple COSMOD2W Modules	Added Wiring Diagram
1.24	1.5 LX-Bus	Added Model 2W-BLX and 2WT-BLX Smoke Detector references
	3.4 Accessory Devices	Added Model 2W-BLX and 2WT-BLX Smoke Detector references
	6.8 XR100 Power Requirements	Added Model 2W-BLX and 2WT-BLX Smoke Detector references
1.23	Complete Guide	Added 464-263C and 464-263H references
	3.4 Accessory Devices	Updated for current products
	6.8 XR100 Power Requirements	Updated for current products
	23.10 CELL Only, Standard Line Security	Added 464-263C and 464-263H references
	23.11 NET with CELL as Alternative Primary and Dialer Backup, Standard Line Security	Added 464-263C and 464-263H references
	23.12 NET with CELL as Backup and Adaptive Primary, Standard Line Security	Added 464-263C and 464-263H references
1.22	6.1 Battery Terminal 3 and 4	Updating model 368
	6.9 Standby Battery Selection	Updating model 368
	20.14 Standby Batteries	Updating model 368
1.21	20.8 Listed Receivers	Clarified listed receivers for contact ID
	29.12 Listed Receivers	Clarified listed receivers for contact ID
1.20	3.2 Wiring Diagram	Add 734 to Wiring Diagram
	31.6 Wireless External Contact	Removed 1101, 1102, and 1105 section

## Certifications

California State Fire Marshall (CSFM)

ANSI/SIA CP-01-2010 False Alarm Reduction

FCC Part 15

FCC Part 68 Registration ID CCKAL00BXR500

New York City (FDNY COA #6167)

ANSI/UL 294	Access Control System Units
ANSI/UL 365	Police Connected Burglar
ANSI/UL 609	Local Burglar
ANSI/UL 1023	Household Burglar
ANSI/UL 1076	Proprietary Burglar
ANSI/UL 1610	Central Station Burglar
ANSI/UL 1635	Digital Burglar
ANSI/UL 2017	General Purpose Signaling Devices and Systems
ANSI/UL 864	Fire Protective Signaling 9th Edition
ANSI/UL 985	Household Fire Warning
Compatible with Devices listed for	
ANSI/UL 268	Smoke-Automatic Fire Detectors
ANSI/UL 346	Waterflow Indicators for Fire Protective Signaling Systems
ANSI/UL 636	Holdup Alarm Units and Systems
	Accessory
UL Standard Line Security	



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