PROGRAMMING
AND
INSTALLATION
GUIDES
FOR
XR150/XR550 PANELS
MODEL XR150/XR550 SERIES
CONTROL PANEL PROGRAMMING GUIDE

Contains programming instructions for use with the
Model XR150/XR550 Series Control Panels

When using the XR150/XR550 Series panel for any listing organization's approved methods, refer to this manual and the XR150/
XR550 Series Installation Guide (LT-1233). These documents outline the installation and programming requirements of all
applications for which the XR150/XR550 Series is approved.

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
couraged 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 computer 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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Introduction

1.1 Before You Begin

This guide provides programming information for DMP XR150/XR550 panels. After this Introduction, the remaining sections describe the functions of each programming menu item along with their available options. Before starting programming, 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 panel.

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

- XR150/XR550 Series Installation Guide (LT-1233)
- XR150/XR550 Series Programming Sheet (LT-1234)
- XR150/XR550 Users Guide (LT-1278)
- XR150/XR550 Compliance Listing Guide (LT-1330)

XR Series panels with Version 193 firmware and higher ship from DMP with a unique four digit default master code. This master code is generated using an algorithm based off of the last four-digits of the serial number to ensure that it cannot be duplicated. This code can be modified or deleted. In order to revert back to the default code of 99, use the initialize code option found in panel programming.

**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 1.

**Programming Sheet**

Included with the panel is the XR150/XR550 Series Programming Sheet (LT-1234) which lists all the programming prompts and available options for programming the panel. Before starting programming, we recommend you completely fill out each sheet with the programming options you intend to enter into the panel.

Having the completed XR150/XR550 Series Programming Sheet available to you before entering data in the panel helps prevent errors and can shorten the time you spend programming. The completed programming sheet also provides 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

**Caution:** Ground yourself before handling the panel. Touch any grounded metal, such as the enclosure, before touching the panel to discharge static. 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 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 XR150/XR550 Series Installation Guide (LT-1233).

**Program from any Keypad Address**

You can program the panel from any 32-character wireless keypad or hardwired keypad connected to the panel’s keypad data bus. See the XR150/XR550 Installation Guide (LT-1233) for keypad addressing and installation information for hardwired keypads.

**Wireless Keypad Association**

**Wireless LCD Keypad (9060, 9063):**

1. Press and hold the back arrow and CMD keys simultaneously until SET BRIGHTNESS displays.
2. Enter 3577 (INST) and press CMD.
3. Select KPD RF to start the RF survey communication. The keypad displays its wireless serial number and RF SURVEY.

**Wireless Graphic Touchscreen Keypad (9862):**

1. Press Options in the carousel menu.
2. Press the wrench icon or the Installer Options icon.
3. Enter 3577 (INST) and press CMD.
4. Press KPD RF to start the RF survey communication.
5. Reset the panel three times allowing the keypad bus transmit light to begin flashing between each reset. For 60 seconds, the panel listens for wireless keypads that are in RF Survey mode and have not been programmed or associated into another panel. Wireless keypads are assigned to the first open device position in Device Setup automatically based upon the order in which they are detected.
6. The keypad displays its wireless serial number and RF SURVEY when the keypad associates with the panel and the keypad logo LED turns from red to green.
INTRODUCTION

Accessing the Programmer
1. Momentarily place the Reset jumper over both of the RESET pins on the panel to reset the panel.
2. Enter 6653 (PROG) and press CMD to access the PROGRAMMER menu.

1.3 Encrypted Communications (XR550 with Encryption only)
Some installations require secure data communications. Use a unique passphrase to enable encrypted communications and provide a secure means for data communications. See Network Options.

An XR550 Series panel with encryption communicates using 128-bit or 256-bit AES encryption. If you currently have an XR550 Series panel with network installed, you can purchase a separate feature key to activate encrypted communications using the Feature Upgrade process. Encrypted communication cannot be enabled on a standard XR550 Series panel. See Feature Upgrade.

1.4 Programmer Operation
There are 20 programming items to choose from in the Programmer menu. To select a programming item, press any select key or area when the keypad displays the name of that item. See Table 1 below:

<table>
<thead>
<tr>
<th>Programming Item</th>
<th>Section in This Guide</th>
<th>Programming Item</th>
<th>Section in This Guide</th>
</tr>
</thead>
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<td>Output Information</td>
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<td>Communication</td>
<td>3</td>
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<td>Messaging Setup</td>
<td>5</td>
<td>Status List</td>
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<td>Device Setup</td>
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<td>7</td>
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<td>System Reports</td>
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<td>Zone Information</td>
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</tbody>
</table>

Table 1: Panel Programming Items

<table>
<thead>
<tr>
<th>Programming Item</th>
<th>Section in This Guide</th>
<th>Programming Item</th>
<th>Section in This Guide</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Options</td>
<td>9</td>
<td>Stop</td>
<td>19</td>
</tr>
<tr>
<td>Bell Options</td>
<td>10</td>
<td>Set Lockout Code</td>
<td>20</td>
</tr>
<tr>
<td>Output Options</td>
<td>11</td>
<td>Feature Upgrade</td>
<td>21</td>
</tr>
</tbody>
</table>

1.5 Programmer Lockout Codes
The panel allows you to access the Programmer menu without entering a lockout code. However, it is recommended that you install a Lockout Code to restrict programming to only those persons your company authorizes and restricts any unauthorized panel programming. See Set Lockout Code or use the steps below to set a Lockout Code:
1. Reset the panel.
2. Enter 6653 (PROG) at the keypad and press CMD until SET LOCKOUT CODE displays.
3. Press any select key or area to select the item.
4. At ENTER CODE: -, enter a 3 to 5 digit programmer Lockout Code and press CMD.
5. At ENTER AGAIN followed by ENTER CODE: -, enter the same 3 to 5 digit code and press CMD. The keypad displays CODE CHANGED.

Note: The Lockout Code range is 100-65535. The panel does not accept a 5-digit Lockout Code higher than 65535. Write the Lockout Code 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 Set Lockout Code.

1.6 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 6653 (PROG), the keypad displays RESET PANEL. You must reset the panel and enter 6653 (PROG) and begin programming within the next 30 minutes.

If you are already in the Programmer menu 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 function.

Note: Use the Stop function to save and exit panel programming. Ensure the keypad displays SAVING PROGRAM to save all programming.
1.7 Power Up
When the 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.

1.8 Keypads
DMP offers multiple keypads in a variety of styles that provide programming capabilities. Each keypad and its operation are shown and described in the following sections. See Figures 1, 2, and 3.
1.9 **Special Keys**
The following keys and areas are common to all DMP keypads:

**CMD (command)**
Pressing CMD allows you to advance through the keypad menus. As you advance through the Programmer menu, the keypad displays any current programming already stored in the panel memory. If no change is required for an option, press CMD to advance to the next step. CMD is also used to enter information into the panel’s memory such as phone numbers and zone names. Press CMD after entering information.

<— (back arrow)
Use the back arrow key to go back one step in the Programmer menu. The back arrow is also used when an error is made while entering information. Press the back arrow key once to delete the last character entered.

**Select Keys or Areas**
Thinline and Aqualite keypads have select keys and graphic touchscreen keypads have select areas. When you press a select key or area, the keypad displays the function or options above each key or in the select area. Displaying choices above individual select keys or in select areas allows the keys to be used for many different applications. During programming, the select keys or areas allow you to change information currently in panel memory by pressing the appropriate select key or area under or on the display. You then enter the new information using the number pad or standard keyboard. When there are more than four response options available, press CMD to display the remaining options and press the back arrow to view the previous four choices. The select keys or areas are used for selecting a section from the Programmer menu. Press any select key or select area when the desired programming section displays.

![Figure 4: Thinline/Aqualite/Wireless Select Keys](image)

![Figure 5: Graphic Touchscreen Select Areas](image)

1.10 **Entering Alphanumeric Characters**

**Number Pad**
1. Choose a character from the table.
2. Identify the Number the character correlates with and press it on the number pad.
3. Identify the Select Key or Area for the character and press that select key or area on the keypad. Press the select key or area again to display a lowercase letter.
4. When the desired character displays on the keypad, return to Step 1 to enter another character or press CMD if finished.

**Standard Keyboard**
1. Press ABC to access uppercase letters.
2. Press abc to access lowercase letters.
3. Press 1@# to access symbols.
4. Press 123 to access the number pad.

*Note:* Not all panel prompts accept letters and/or symbols. For example, pressing “P” at the “ENTER CODE” prompt will send a “6” to the panel.

![Figure 6: Standard Keyboard](image)
1.11 Keypad Displays Current Programming

Every programming option 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 select key or 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 CMD.

To change a programming option that requires a NO or YES response, press the select key or select area for the response not selected. For example, if the current option is selected as YES and you want to change it to NO, press the third select key or area and the display changes to NO. Press CMD to display the next option. See Figure 7.

1.12 Multiple Displays

For many programming and user options, (area selections, menu displays, status lists) there are several displays containing programming. For example, when a programming menu displays, keypads 1 through 16 display on two separate displays. First, keypads 1 through 8 display. Press CMD to display keypads 9 through 16. This same scheme is used for areas 1 through 32.

Note: Areas not pre-programmed at installation to display at this keypad cannot be viewed.

1.13 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, 8, 9, and 15 are not selected. In the Areas example, areas 3, 8, 9, 15, 19, 23, 25, and 31 are not selected. In both examples the numbers with asterisks are selected.

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 CMD to display the rest of the device or area numbers.

1.14 Compliance Instructions

This product incorporates field-programmable software. Refer to the XR150/XR550 Series Compliance Listing Guide (LT-1330) for additional compliance information.
Initialization

Note: When any panel programming is changed, the STOP function must be performed and SAVING PROGRAM must display on the keypad in order to save the programming changes. See *Stop*.

2.1 **Initialization**
This function allows you to clear selected parts of the panel program back to the factory defaults in preparation for system programming.

2.2 **Clear All Memory**

<table>
<thead>
<tr>
<th>INIT ALL?</th>
<th>NO</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURE?</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

NO - Leaves existing programming intact.
YES - Clears all memory then displays *RESET PANEL*. Reset the panel by shorting the RESET header and re-enter The Programmer menu to continue.

2.3 **Clear All Codes**

<table>
<thead>
<tr>
<th>CODES?</th>
<th>NO</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURE?</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

NO - Leaves existing codes intact.
YES - Clears the user code and user profile memory and assigns the last 4 digits of the panel serial number as the default user code. This user code is assigned to the highest user position. The user name for the default user code is created using the current programmed primary user language.

2.4 **Clear All Schedules**

<table>
<thead>
<tr>
<th>SCHEDS?</th>
<th>NO</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURE?</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

NO - Leaves existing schedules intact.
YES - Clears all shift and output schedules.

2.5 **Clear Display Events Memory**

<table>
<thead>
<tr>
<th>EVENTS?</th>
<th>NO</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURE?</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

NO - Leaves existing events memory intact.
YES - Clears the events memory.

2.6 **Clear Zone Information**

<table>
<thead>
<tr>
<th>ZONES?</th>
<th>NO</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURE?</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

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 **Clear Area Information**

<table>
<thead>
<tr>
<th>AREAS?</th>
<th>NO</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURE?</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

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 **Clear Output Information**

<table>
<thead>
<tr>
<th>OUTPUTS?</th>
<th>NO</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURE?</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

NO - Leaves existing output information intact.
YES - Clears all programmed Output names and any output cutoff assignment.

2.9 **Clear Communication and Remote Options**

<table>
<thead>
<tr>
<th>COM/RMT?</th>
<th>NO</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURE?</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

NO - Leaves existing communication and remote options intact.
YES - Reset communication and remote options programming to factory defaults.

2.10 **Clear Wi-Fi**

<table>
<thead>
<tr>
<th>WIFI?</th>
<th>NO</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURE?</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

NO - Leaves existing Wi-Fi programming intact.
YES - Reset Wi-Fi programming to factory defaults.

2.11 **Set to Factory Defaults**

<table>
<thead>
<tr>
<th>DEFAULTS</th>
<th>NO</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURE?</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

NO - Leaves existing panel programming intact.
YES - Sets the panel’s programming back to factory default selections and clears all Z-Wave device programming and Favorites from the panel. Selecting YES does not clear the panel’s event memory, zones, user code information, or schedules.

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

3.1 Communication
Configure the communication options for the panel. The information you program varies with the Communication Type you select.

3.2 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 1-65535. A range of valid account numbers for a CID path is 1-9999. For accounts of four digits or less, do not enter leading zeros.

3.3 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.

3.4 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 Communication Type
Specifies the communication method the panel uses on this path to report system events to DMP SCS-1R, SCS-VR Receivers or non-DMP receivers. Default is NONE for Path 1, and NONE for Path 2-8.

NONE DD NET CID

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 or SCS-VR Receiver.
CID - This option allows the panel to communicate to DMP receivers using the Contact ID format.
CELL WIFI
CELL - This option allows communication over the cellular network using the 263LTE-V or 263H Cellular Communicators.
WIFI - Network communication to DMP Model SCS-1R or SCS-VR Receivers.

3.6 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 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 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 select key or area. Default is 1 Day.
3.9 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 CMD to display the first four days of the week. Press CMD to display the last three days. Select the day of the week to send the test report. Default is SUNDAY.

3.10 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 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 YES.
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.
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.
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
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 equal to CHECKIN for CELL. Default is 240 for NET.

3.13 Encryption (XR550 with Encryption only)
This option displays only if the Communication Type is NET or CELL. Select 128 or 256 to enable the encryption level for the path currently being programmed. Default is NO.
Note: 256-bit encrypted messages to the SCS-1R receiver only communicate when using SCS-104 Receiver Line Cards with Version 102 or higher software.

3.14 IPV6 Address
This prompt determines if the network path uses IPV6 for communication.

3.15 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.

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

3.17 First Telephone Number
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.
COMMUNICATION

3.18 **SECOND PHONE NO.**

**Second Telephone Number**
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.

3.19 **ADVANCED? NO YES**

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

3.20 **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 263LTE-V Cellular Communicator is used for communication.

3.21 **FAIL TEST HRS: 0**

**Fail Test Hours**
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.

3.22 **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.

3.23 **RETRY SECONDS: 6**

**Retry Seconds**
This option displays for NET Communication.

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.

3.24 **SUB CODE: NO**

**NO YES SHARED**

**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. Select SHARED (SHR) to use the same substitution code as operating in the previous path.

3.25 **893A: NO YES**

**2ND LINE PREFIX:**

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) are 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 sends a test report through phone line 1 one day and phone line 2 the next day.

If the 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.

3.26 **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 are 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.
3.27 **DUPLICATE ALARMS**

**NO** **YES**

**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**.

3.28 **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**.

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**

3.29 **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**.

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.

3.30 **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**
- **Code changes (including adding, deleting, changing)**
- **Closing**
- **Schedule changes (temporary, permanent, shift)**
- **Bypass**
- **Holiday date changes**
- **Reset**

3.31 **DOOR ACS**

**DENY**

**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**.

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.

3.32 **PANIC TST**

**NO** **YES**

**Panic Test (Network only)**

YES allows the panic zone test verification and failure results to be sent to the central station receiver. NO disables the panic test report. The default setting is **NO**. The system test start, stop, panic zone verification, and panic zone failure messages sent to the central station and the trips count operation are the same as used under the Walk Test. See Using the Walk Test section in the Appendix.

3.33 **SEND COMM TRBL:**

**NO** **YES**

**Send Communication Trouble**

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**.

3.34 **SEND PATH INFO:**

**NO** **YES**

**Send Path Information**

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

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

Note: Wi-Fi must be selected as Communication Type in the Communication section for Wi-Fi Setup to display.

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 Network Options
This option is for configuring the desired network settings. Press any select key or area to select.

4.2 WiFi Setup
This option is for connecting to the desired Wi-Fi network and will display only when Comm Type is set to Wi-Fi. Press any select key or area to select.

WPS LIST MANUAL displays. Press the first select key or area to choose WPS to automatically connect to a WPS enabled router. Press the second select key or area to choose LIST and see the name and signal strength of any Wi-Fi routers in range. Press the third or fourth select key or area to choose MANUAL and enter the name of the Wi-Fi router you wish to connect to. Pressing CMD displays TEST. To select TEST press the first select key or area to verify connection of your system to the Wi-Fi network.

4.2.1 WPS
When WPS is selected, SEARCHING displays. Press the WPS button on the Wi-Fi network router to which you are attempting to connect. SEARCHING displays for up to two minutes or until connected to the WPS enabled router. Refer to the router’s instruction manual for sending a security key to the XR150/XR550 Series panel.

If the panel fails to connect to the WPS enabled router, WPS FAILED RETRY? NO YES displays. Press the fourth select key or area to RETRY or press the third select key or area to display WPS LIST MANUAL.

4.2.2 List
When LIST is selected, SEARCHING displays until any Wi-Fi networks are found in range. Once available Wi-Fi networks are found the keypad displays the name of the SSID (Wi-Fi Network name) and signal strength of each network. Press CMD to scroll through the list of available Wi-Fi networks. When the desired network is displayed, press any select key or area to connect.

Note: If the panel is unable to detect the security type, W/L SECURITY with the default security type WPA-PSK displays. If a different security type is required, press CMD and WEP WPA NONE displays. Press the select key or area of the desired security type to choose.

When connecting to the Wi-Fi network the panel also detects the security type in use and W/L KEY: **************** displays. Enter the W/L KEY and the panel performs a connection test and CONNECTING displays. When successful, CONNECTED displays on the keypad. If the panel does not connect to the Wi-Fi network, NOT CONNECTED displays. Press CMD to return to the Wi-Fi SETUP main screen.

4.2.3 Manual
This option allows you to enter the desired network name using the keypad. When MANUAL is selected, the current settings display. Press CMD to continue with no change. SecureCom is the default.

Use the number keys on the keypad to enter a new or different SSID (Wi-Fi Network name), there is no need to press the select keys or areas. Once the SSID is entered, press CMD and SEARCHING displays.

When an SSID is entered for the first time or changed, the panel searches for the SSID entered to ensure communication. The keypad displays SSID FOUND or SSID NOT FOUND. When the SSID is found, the security type is also detected.

Note: Depending on the security type, the SSID might take several seconds to process. Enter up to 32 characters for the SSID from the network router to identify the network LAN. The SSID is blank by default. Use the chart below to enter lowercase or special characters. Each successive press of the select key or area gives additional options. For example, to enter Me5%, you would press key # 5, select key or area 1 (M); press key # 2, select key or area 2 twice (e); press key # 5 (5); press key # 7, select key or area 4 twice (%).
**NETWORK OPTIONS**

<table>
<thead>
<tr>
<th>Key Number</th>
<th>Select Key or area 1</th>
<th>Select Key or area 2</th>
<th>Select Key or area 3</th>
<th>Select Key or area 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A, a,</td>
<td>B, b</td>
<td>C, c</td>
<td>(, [, {</td>
</tr>
<tr>
<td>2</td>
<td>D, d</td>
<td>E, e</td>
<td>F, f</td>
<td>)], }</td>
</tr>
<tr>
<td>3</td>
<td>G, g</td>
<td>H, h</td>
<td>I, i</td>
<td>!, ^, ~</td>
</tr>
<tr>
<td>4</td>
<td>J, j</td>
<td>K, k</td>
<td>L, l</td>
<td>?, *,</td>
</tr>
<tr>
<td>5</td>
<td>M, m</td>
<td>N, n</td>
<td>O, o</td>
<td>/, \</td>
</tr>
<tr>
<td>6</td>
<td>P, p</td>
<td>Q, q</td>
<td>R, r</td>
<td>&amp;&lt;, $</td>
</tr>
<tr>
<td>7</td>
<td>S, s</td>
<td>T, t</td>
<td>U, u</td>
<td>@, %</td>
</tr>
<tr>
<td>8</td>
<td>V, v</td>
<td>W, w</td>
<td>X, x</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Y, y</td>
<td>Z, z</td>
<td>space, :</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** When \ is entered, the keypad displays ¥. When ~ is entered, -> displays.

While searching, SEARCHING displays on the keypad. If the 763 is unable to connect to the desired network and SSID NOT FOUND displays, press CMD to return to the main menu and WPS LIST MANUAL displays. Press CMD again to display TEST. Enter the Wireless Network Key for the network and press CMD to save the key.

<table>
<thead>
<tr>
<th>4.2.4</th>
<th>TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Test</strong></td>
<td>Press the first select key or area to select TEST and the 763 will attempt to verify connection of your system to the desired Wi-Fi network.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4.3</th>
<th>W/L SECURITY:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WPA-PSK</strong></td>
<td>When successful, W/L SECURITY displays. Select the security type based on the network router programming. The default network security type is WPA-PSK. Press any select key or area to display the other security options. The available options are WEP, WPA, and NONE. Press the first select key or area to choose WEP, press the second select key or area for WPA, press the third select key or area for NONE.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4.4</th>
<th>W/L KEY:</th>
</tr>
</thead>
<tbody>
<tr>
<td>***********************</td>
<td>This option displays only if Comm Type is set to Wi-Fi and Security option is not set to NONE. Enter the key provided from the network router's programming. WEP requires a network password of 10 characters (WEP64) or 26 characters (WEP128), using a combination of the number 0-9 and the letters A-F (See the chart above to enter lowercase or special characters).</td>
</tr>
</tbody>
</table>

WPA/WPA-PSK uses a custom key that allows 8 to 32 characters.

**Note:** Depending on the security type, the key might take several seconds to process.

<table>
<thead>
<tr>
<th>4.5</th>
<th>USE IPV6:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NO YES</strong></td>
<td>At the IPv6 prompt, select YES to use an IPv6 address. The default is NO. IPv6 is DHCP only.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4.6</th>
<th>DHCP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NO YES</strong></td>
<td>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.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4.7</th>
<th>LOCAL IP ADDRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>192.168.0.250</strong></td>
<td>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. If IPv6 is YES, the IPv6 address will be shown.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4.8</th>
<th>GATEWAY ADDRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>192.168.0.1</strong></td>
<td>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. If IPv6 is YES, the IPv6 address will be shown.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4.9</th>
<th>SUBNET MASK</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>255.255.255.000</strong></td>
<td>Enter the local subnet mask assigned to the panel. The default subnet mask address is 255.255.255.000. If IPv6 is YES, the IPv6 address will be shown.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4.10</th>
<th>DNS SERVER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>192.168.0.1</strong></td>
<td>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. If IPv6 is YES, the IPv6 address will be shown.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4.11</th>
<th>PASSPHRASE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>-</strong></td>
<td>To enable encryption type an 8 to 16-character Passphrase using alphanumeric characters. If you leave the Passphrase blank, the panel communicates with the SCS-1R Receiver, but the data is not encrypted. The Passphrase is blank by default. An XR550 panel with encryption is capable of communicating 128-bit or 256-bit encrypted data to an SCS-104 line card installed at the receiver. The XR550 panel with encryption and</td>
</tr>
</tbody>
</table>
the receiver SCS-104 line card must have the same password called a Passphrase. DO NOT LOSE THE PASSPHRASE. A lost or forgotten Passphrase requires that the XR550 panel and every SCS-104 line card at the receiver be individually reprogrammed with a new passphrase.

**Note:** An XR550 panel with encryption communicates using AES encryption. If you currently have an XR550 panel with network installed, you may purchase a separate feature key to activate encrypted communications using the Feature Upgrade process described in the Feature Upgrade Section. Encrypted communication cannot be enabled on a standard XR550 panel. 256-bit encrypted messages to the SCS-1R receiver only communicate when using SCS-104 Receiver Line Cards with Version 102 or higher software.

4.12 **PORT: 2002**

**734N Listen Port**
Enter the port number that the 734N/734N-POE will use to send communication to the panel. This must be the same port that is programmed in Panel IP Port within the 734N/734N-POE Communication programming menu.

**Note:** The 734N Listen Port cannot be the same as the panel network programming port.

4.13 **734N PASSPHRASE**

**734N Passphrase**
Enter an 8 to 16-character Passphrase to encrypt communication with the 734N/734N-POE 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 **Enable Messaging**
Select YES to allow the panel to send messages to three programmed destinations. Default is NO.

5.2 **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.

5.3 **Destination 1**
Enter the first cell phone number where messages will be sent. The message can be sent to computers or cell phones as long as a valid cell phone number is entered.

5.4 **Destination 1 User Number**
Enter a valid 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 Entering 0 (zero) disables this option. Default is 0.

5.5 **Destination 2**
Enter the second destination cell phone number.

5.6 **Destination 2 User Number**
Enter a valid User Number for arming/disarming authorization.

5.7 **Destination 3**
Enter the third destination cell phone number.

5.8 **Destination 3 User Number**
Enter a valid User Number for arming/disarming authorization.
Device Setup

6.1 Device Setup
This section allows you to define the panels physical configuration. You can install and address up to sixteen supervised devices on the keypad data bus.

6.2 Custom Card Definitions
Select the slot number (1-8) that you would like to program a custom non-DMP card format into. The format that is programmed into slot 1 is the default format. In the event that a card with an unrecognized format is used, that card will be read in the format that is programmed in slot 1. To restrict card reads to specific formats, only program slots 2-8. For a chart of commonly used card formats and their defaults, refer to the 734 Installation Guide (LT-0737). If you select slot 1 and are updating an XR with firmware Version 182 or earlier, Format Name will automatically be named Single Card Format. and Weigand Code Length will default to 45.

6.2.1 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 select key or area 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-POE Module.

6.2.2 Site Code Position
Enter the site code start position in the data string. Press any select key or area to enter a number between 0-255. Default is 1.

6.2.3 Site Code Length
Enter the number of characters the site code contains. Press any select key or area to enter a number between 1-24. Default is 8.

6.2.4 User Code Position
Define the User Code start bit position. Press any select key or area to enter a number between 0-255. Default is 9.

6.2.5 User Code Length
Define the number of User Code bits. Press any select key or area to enter a custom number. On a 734 module, custom numbers can only be between 16-64. On a 734N/734N-POE module, custom numbers can be between 1-255. The default is 16.

6.2.6 Require Site Code
Press the select key or area 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.

6.2.7 Site Code Display
734 Module: You can program up to 8 eight-digit site codes. Site code range is 0-16,777,214. Any previously programmed site codes display. Dashes represent blank site codes. Default is blank.
734N/734N-POE Module: You can program up to 8 eight-digit site codes. Site code range is 0-16,777,214. 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 CMD key to advance to the next option, Site Code 2. To delete an existing site code, press any select key or area. Either enter a new site code followed by CMD, or press CMD to leave blank and continue to the next site code. Repeat these steps to change, delete, or add up to 8 site codes.

In this example the Wiegand Code Length = 26 bits.
6.2.8 **Number of User Code Digits**
The 734, 734N/734N-POE, and 734N-POE modules recognize user codes from 5-12 digits in length. Press any select key or area to enter a user code digit length. This number must match the user code number length being used by the panel. Default is 5. For an Area System, use 4 to 12 digits (typically 5). For all other systems and panels, use 4 digits. 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.

6.3 **Device Number**
Enter the address of the device you are programming. If using a wireless keypad, program the device number in the Status List Auxiliary 1 Zones programming option to display wireless keypad troubles. After you program each option for the first keypad, repeat these programming steps for each additional keypad. The valid range for KEYPAD, FIRE, and EXPANDER type devices is 1 - 16. The valid range for DOOR type devices is 1 - 16 and 501 - 961. Valid VPX device addresses 501, 601, 701, 801, 901. On XR150 panels, zone 501 is reserved for the 736V. For more information, refer to the 736V Installation Guide. See the AX Bus Addresses and 734 Zone Numbers chart on the previous page. Wireless keypads and network door controllers are not able to occupy address 1.

**DOOR Device Type**
The XR550 provides the ability to program an additional 16 doors of access to the system using 734, 734N, and 734N-POE Wiegand Interface Modules connected to any of the XR550's LX-Bus headers. This can be combined with the 16 doors of access available from the keypad bus for a total of 32 doors.

Door capacity can be increased to a maximum of 64 or 96 by applying purchased feature keys. Feature keys are purchased through DMP Customer Service and entered into the panel using a keypad or Remote Link. Call DMP Customer Service at 1-866-266-2826 for purchasing information.

**Programming and Operation**
Once a 734 address has been programmed for the bus, the LX-Bus is automatically converted from a hardwire zone expansion bus to a hardwire Access Expansion Bus (AX-Bus) and the bus begins to operate as shown below.

- Each 734 module provides one door relay and four protection zones to connect switches such as door and window contacts.
- 16 doors of access can be programmed per AX-Bus to a maximum of eighty (80) 734 modules. Please see the table below for available addresses.
- Any unused AX-Bus zone numbers may be programmed as wireless zones.

Hardwired zone expansion modules such as the 711, 714/714N-POE, 715-16 and others are incompatible with bus operation and cannot be used.

- Device Setup programming for AX-Bus address are automatically programmed as a door type. Device Type, Communication Type and Display Areas are not shown. Only 734 module programming is shown.

**Note:** An AX-Bus operation is compatible with 734, 734N, and 734N-POE modules and the Model XR550. Keypads must only be used on the keypad bus. AX-Bus operation is incompatible with the Model XR150 and XR350 control panels.
## Device Setup

### Device Addresses and 734, 734N, and 734N-POE Zone Numbers

<table>
<thead>
<tr>
<th>Keypad Bus</th>
<th>LX/AX Bus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Device/Door Zones</td>
<td>Device/Door Zones</td>
</tr>
<tr>
<td>1</td>
<td>11-14</td>
</tr>
<tr>
<td>2</td>
<td>21-24</td>
</tr>
<tr>
<td>3</td>
<td>31-34</td>
</tr>
<tr>
<td>4</td>
<td>41-44</td>
</tr>
<tr>
<td>5</td>
<td>51-54</td>
</tr>
<tr>
<td>6</td>
<td>61-64</td>
</tr>
<tr>
<td>7</td>
<td>71-74</td>
</tr>
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<td>14</td>
<td>141-144</td>
</tr>
<tr>
<td>16</td>
<td>161-164</td>
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</table>

### Device Addresses and 736V V-Plex Module Zone Numbers

<table>
<thead>
<tr>
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<th>Zones</th>
</tr>
</thead>
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<tr>
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<td>601</td>
<td>600-695</td>
<td>701</td>
<td>700-795</td>
<td>801</td>
<td>800-895</td>
<td>901</td>
<td>900-995</td>
</tr>
</tbody>
</table>

**Note:** Zones 96-99 on any LX-Bus that is connected to a 736V are diagnostic zones. For more information refer to the 736V V-Plex Advanced Settings Guide (LT-1934).

### 6.4 Device Name

A device name must be given to each device in the system. To add a device name, press any select key or area. The default device name (DEVICE X) displays. Select CMD to accept the default name or press any select key or area to enter a new name up to 32 alphanumeric characters. Press CMD.

To remove a device from the system, delete the device name by pressing any select key or area, then press CMD. The panel automatically programs the name as * UNUSED *.

### 6.5 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. Devices with an address higher than 16 are automatically assigned as a DOOR device type.

**KEYPAD** - The device type is a non-fire, non-access keypad.

**FIRE** - The device is a 630F Remote Annunciator.

**EXPANDER** - The device is a network zone expansion Module.

**VPX** - The device type is a V-Plex device. The valid zones for VPX devices are 501, 601, 701, 801, and 901.

### 6.6 Device Communication Type

**KEYPAD** - Select KPD for devices that are connected to the keypad bus. Select AX-BUS for addresses 501-964.

**WIRELESS** - Select WLS for wireless communication.

**NETWORK** - Select NET for devices that communicate over a network connection.
6.7

**Serial Number**

*Note:* This option only displays if Device Type is KEYPAD and Device Comm Type is WIRELESS.

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

**Supervision Time**

*Note:* This option only displays if Device Type is KEYPAD and Device Comm Type is WIRELESS.

Press any select key or area to select the supervision time required for the device. Press CMD to accept the default time. Default is 240 minutes.

Press the select key or area 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.

6.8

**Access Areas**

Press CMD 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. Press CMD to display the next set of areas. 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.

6.9

**Egress Areas**

Press CMD 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. Press CMD to display the next set of areas. 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. 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.

6.10

**Display Areas**

Press CMD to program Display Areas. To select an area between 1 to 32, 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. Press CMD to display the next set of areas. Default is all area numbers. Refer to the Multiple Displays section at the beginning of this document.

Display Areas allows the panels 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 1 system. With area 7, 8 or 9 being the first areas selected, the keypad is assigned to the Guest 2 system (Guest 2 only applies to XR550 systems). Keypads can have additional areas assigned for Event Display.

**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
- System Test/Panic Test
- Service Request
- Fire Drill
- Outputs On/Off Menu
- User Profiles
- Set System Time and Date
- 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 20, 21, and 22, it annunciates troubles and alarms only for zones assigned to those areas.

When arming/disarming from Device 1, only areas 20, 21, and 22 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.

### 6.11 Strike Time

**STRIKE TIME:** 5

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 734/734N Wiegand Interface Module is not affected by this selection. It remains at 5 seconds.

### 6.12 Strike Delay

**STRIKE DELAY:** 0

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).

### 6.13 Fire Exit Release

**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.
6.14 **Public Door**
Select YES to allow the door access relay at this address to be locked whenever the Lockdown command is issued from the keypad User Menu or remote command. Select NO to not allow the door access relay at this address to be released. Default is NO.

6.15 **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.

6.16 **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.

6.17 **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.

6.18 **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.

6.19 **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.

6.20 **Program 734/734N Options**
Select YES to program a 734 or a 734N/734N-POE Wiegand Interface Module. The options displayed for a 734 or 734N are the same. This is available for Keypad Bus, AX Bus, and Network Doors.

To program the 734, the Device Type must be set to DOOR and the Device Communication Type must be set to KPDBUS.

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

6.20.1 **Card Options**
Select DMP to allow only the DMP card format for access. The menu advances to REQUIRE SITE CODE.

Select CUSTOM to disable DMP format and program slots 1-8 as needed. The menu advances to FORMAT NO. The format that is programmed into slot 1 is the default format. In the event that a card with an unrecognized format is programmed when adding a credential, that card will be read in the format that is programmed in slot 1. To restrict card reads to specific formats, only program slots 2-8.

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

6.20.2 **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-POE module is protected (contact
6.20.3 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 select key or area 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.

6.20.4 RELOCK ON ZONE 2 CHANGE? NO YES

**Relock on Zone 2 Change?**
Selecting NO leaves the relay on for the door access time when Zone 2 restores. Selecting YES turns the 734/734N/734N-POE relay off and relocks the door when Zone 2 changes state. The default is NO.

6.20.5 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-POE 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.

6.20.6 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 select key or area to enter the number of seconds. The default is 5 seconds.

6.20.7 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.

6.20.8 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 approximately ten seconds. Press any select key or area 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 or area 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 or area 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 or area to choose ANY (Any Wiegand Read) — Door access is granted when any Wiegand string is received.
- Press the fourth select key or area to choose ON (Relay Always On) — The relay is always on.
- Press the first select key or area 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 CMD to display DEVICE NO.
Remote Options

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

7.2 Remote Key
This option allows you to enter a code of up to 16 characters. The Remote Link™ or Entré 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 select key or area and enter any combination of up to 16 digits. Press CMD. The current key displays as asterisks.

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

7.4 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 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
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 is 8 (eight).

7.6 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 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 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.

7.9 Manufacturer Authorization
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
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 Programming 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
YES encrypts data sent over network. Default is NO.

7.11 Allow Cellular Remote
YES allows remote programming using cellular connection. Default is YES.

7.11.1 APN:
SECURECOM400

7.11.2 Encrypt Cellular Remote
YES encrypts data sent over a cellular connection. Default is NO.

7.12 Entré Connection
This option displays if the panel has network or cellular capability. Select NET to allow a dedicated network connection with Entré. Options are NONE, NET, or CELL. Default is NONE.

7.12.1 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 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 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 Entré Backup Connection
This option displays if NET or CELL is chosen for the Entré connection. Enter the backup address where the panel sends network messages if the first Entré connection fails. The Entré connection must be unique and cannot be duplicated on the network. If the backup connection is NET, 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 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 Entré Reports
This option displays only if NET is chosen for the Entré connection. Choose which types of system reports are sent to Entré. Press CMD to view all of the Entré report options. Choose YES to enable arming/disarming, zone, user code, door access, or supervisory message reports. All Entré reports default to 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.

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.
**User Command Reports**
Sends user code changes, schedule changes, and door access denied events.

**Door Access Reports**
Sends door access activity: door number, user number and name, and time and date.

**Supervisory Reports**
Sends system monitor reports, such as AC and battery, and system event reports. Supervisory Reports also sends the following reports:
- Abort
- Exit Error
- Ambush
- System Recently Armed
- Alarm Bell Silenced
- Unauthorized Entry
- Late to Close*

* Only sent as a Supervisory Report if Area Schedules is not enabled, Closing Check is enabled, and an opening/closing schedule has been programmed.

**Video Reports**
Enabling this feature will allow the panel to send video system reports to Entré when an OpenEye® event message has been received from a camera.

7.12.7 **ENTRE CHECKIN**
- **MINUTES:** 0

7.12.8 **ENTRE PASSPHRASE**
- 

7.13 **INTEGRATOR CONNECTION:** NONE

7.13.1 **INTGRTR INCOMING**
- **TCP PORT:** 8011

7.13.2 **INTEGRATOR IP**
000.000.000.000

7.13.3 **INTGRTR OUTBOUND**
- **TCP PORT:** 8001

7.13.4 **INTEGRATOR BACKUP IP:**
- NONE NET CELL

7.13.5 **INTGRTR BKUP TCP PORT:** 8001

7.13.6 **INTEGRATOR REPORTS**
- 

**Note:** To send these reports to the PC Log, you must enable SUPV MSG.

### 7.12.7 **ENTRE 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.

### 7.12.8 **ENTRE 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 **INTEGRATOR CONNECTION**
This option displays if the panel has network or cellular capability. Select NET to allow a dedicated network connection with the integrator. Options are NONE, NET, or CELL. Default is NONE.

### 7.13.1 **INTGRTR INCOMING**
This option displays only if NET is chosen for the integrator connection. Enter the programming port number for the incoming connection. The programming port identifies the port used to communicate messages to and from the integrator software. This port cannot be the same port as programmed in Network Programming Port. The default Programming Port setting is 8011.

### 7.13.2 **INTEGRATOR IP ADDRESS**
This option displays only if NET is chosen for the integrator connection. Enter the integrator IP address where the panel sends network messages. The integrator 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

### 7.13.3 **INTGRTR OUTBOUND**
This option displays only if NET is chosen for the integrator connection. Enter the programming port number for the outbound connection. The programming port identifies the port used to communicate messages to the integrator software. Default is 8001.

### 7.13.4 **INTEGRATOR BACKUP CONNECTION**
This option displays if NET or CELL is chosen for the integrator connection. Enter the backup address where the panel sends network messages if the first integrator connection fails. The connection must be unique and cannot be duplicated on the network. If the backup connection is NET, 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

### 7.13.5 **INTGRTR BKUP TCP PORT**
This option displays only if NET is chosen for the integrator connection. Enter the backup programming port number for the outbound connection in case the connection to the primary IP fails. Default is 8001.

### 7.13.6 **INTEGRATOR REPORTS**
This option displays only if NET is chosen for the integrator connection. Choose which types of system reports are sent to the integrator. Press CMD to view all of the integrator report options. Choose YES to enable arming/disarming, zone, user code, door access, or supervisory message reports. All reports default to YES.
## Remote Options

### 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.

### 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.

### User Command Reports
Sends user code changes, schedule changes, and door access denied events.

### Door Access Reports
Sends door access activity: door number, user number and name, and time and date.

### 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
- Unauthorized Entry
- Supervisory Reports also sends the following reports:
- Area Schedules
- Closing Check
- 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.

### Video Reports
Enabling this feature will allow the panel to send video system reports to the integrator when an OpenEye® event message has been received from a camera.

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

### Send Local Changes
This option allows the panel to automatically update Remote Link at the central station with any changes made to the panel.

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.

#### 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

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

#### Remote Telephone Number
This option displays when DD is selected for Send Local Changes. Press CMD 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.

### App Key
Enter the 8-digit App Key obtained in your Dealer Settings tab at DMPDealerAdmin.com. This option is a security feature of the Virtual Keypad app used only when your Dealer Settings at DMPDealerAdmin.com have “EASYconnect” set as the Communication Type.

This communication option is only available for panels with onboard network and is used to eliminate the need for a static IP address programmed in Network Options. To enter a new App Key, press any select key or area and enter any combination of 8 digits. Press CMD. The default for this option is blank.
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 or area 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.

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
Select the keypad addresses (1 through 16) 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. Press CMD to display the next set of keypads.

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
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.

8.9 Late To Open
Enter 1-240 as the number of minutes to elapse that the system may remain armed after the opening time of a schedule without sending a Late To Open message. If the system continues to be armed after the Late To Open minutes expire, a Late To Open message is sent to the central station. Default is 0, which disables the Late To Open option.

8.10 Early To Close
Enter 1-240 as the number of minutes that the system can be armed prior to the scheduled closing time. If the system is armed prior to the Early to Close minutes, an Early To Close message is sent to the central station. Default is 0, which disables the Early to Close option.

8.11 Video Reports
Enabling this feature will allow the panel to send video system reports when an OpenEye event message has been received from a camera.


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** - All 32 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 two other guest houses that also are set up as HOME/SLEEP/AWAY systems.

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 1 house system.

Areas 7, 8, and 9 are the Perimeter, Interior, and Bedrooms for the Guest 2 house 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 3-32 in an All/Perimeter system, areas 4-32 in a Home/Sleep/Away system, and areas 9-32 in a Home/Sleep/Away with Guest 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

**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 **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 **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.

9.9 **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. 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.

9.10 **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.

9.11 **Zone Activity Hours**
This option provides supervision of a person living alone for non-activity. Enter the number of hours, 0 to 9, allowed to elapse without a disarmed zone being tripped before a message is sent to the receiver. Default is 0 (zero).

When the system is disarmed, the timer begins to countdown the number of hours programmed. Each time activity occurs, the timer restarts the countdown. Before the countdown time expires, the keypad sounds a tone and PRESS ANY KEY displays to allow the user to restart the activity timer. The duration of the tone is the number of seconds programmed for Entry Delay 2.

Select the SUPV/TRBL receiver option in communication programming to send S93 ALARM: User Activity Not Detected, S94 Alert: Activity Check Enabled, and S95 Alert: Activity Check Disabled messages.

When an open/close schedule is programmed, the timer only counts down during the scheduled open period. Also, when a schedule is programmed, if the timer is counting down and the scheduled open time occurs, the timer resets and begins the countdown again.

9.12 **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 difference between the Greenwich Time zone (GMT) and where the panel is located. The default is 6.

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

*Arizona, Hawaii, American Samoa, Guam, Puerto Rico, and the Virgin Islands do not observe daylight savings time.
9.13 **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.

9.14 **Programming Menu Language**
Press CMD to select the programming language. Any changes in PROG LANGUAGE do not take effect until the STOP routine completes.

**PRI LANG:** ENGLISH
The current primary programming language displays. The default language is ENGLISH. Press a Select key to change the primary programming language.

- **ENG** = English (ENGLISH)
- **SPN** = Spanish (ESPAÑOL)
- **FRN** = French (FRANCAIS)

**SEC LANG:** NONE
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 or area below the language. Default is NONE.

**PRI LANG:** ENGLISH
Select the primary programming language.

- **ENG** = English (ENGLISH)
- **SPN** = Spanish (ESPAÑOL)
- **FRN** = French (FRANCAIS)

**SEC LANG:** NONE
Select the secondary programming language.

- **NONE** = No secondary language options are displayed
- **ENG** = English (ENGLISH)
- **SPN** = Spanish (ESPAÑOL)
- **FRN** = French (FRANCAIS)

9.15 **User Menu and Status List Language**
Press CMD to select User language.

**PRI LANG:** ENGLISH
The current primary user language displays. The default language is ENGLISH. Press any select key or area to change the primary User language.

Select the primary user language.

- **ENG** = English (ENGLISH)
- **SPN** = Spanish (ESPAÑOL)
- **FRN** = French (FRANCAIS)

**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 or area below the language. Default is NONE.

- **NONE** = No secondary language options are displayed
- **ENG** = English (ENGLISH)
- **SPN** = Spanish (ESPAÑOL)
- **FRN** = French (FRANCAIS)

9.16 **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).

9.17 **House Code**
When using a DMP wireless system, enter a house code between 1 and 50. 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. 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.
9.18 Wireless Encryption

Encryption allows the panel to communicate with encrypted 1100 Series wireless devices. Select ALL to allow encryption for all the wireless devices programmed into the panel. Select BOTH to allow encryption for selected wireless devices programmed into the panel. Select NONE to don't allow encryption for wireless devices programmed into the panel. The default is NONE.

9.19 Enter Passphrase

Enter PASSPHRASE displays if you select ALL or BOTH for wireless encryption. In order for the panel to support encrypted 1100 Series wireless devices, a passphrase must be entered. The passphrase must be an 8-digit hexadecimal number which determines the system's encryption key.

9.20 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.

9.21 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.

9.22 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.

9.23 Occupied Premises

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. This False Alarm Reduction feature will keep a user from arming the entire system when they do not exit and remain in the premise. Select NO to not automatically disarm interior area(s). Default is YES Select NO to disable this feature. Default is YES. With a Home/Sleep/Away with Guest arming system, this feature only applies to the main system.

9.24 Enhanced Zone Test

Select YES to allow enhanced zone test operation for Walk Test (8144), Panic Test, and Burglary Zone Test in the User Menu. The default is NO.

Enhanced operation allows:
- A Verify message to be 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 to be 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.

9.25 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.
### 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**.

### Use False Alarm Question
This option allows users to investigate a burglary alarm prior to disarming the system and send an Alarm Verified or Alarm Cancelled message to the Central Station. Select YES to display IS THIS A FALSE ALARM?  NO  YES when a burglar alarm occurs. Select NO to display CANCEL  VERIFY. Default is YES. When a burglar alarm occurs in an area system and a user code is entered at a keypad Status List, keypads programmed as KPD in Device Setup display IS THIS A FALSE ALARM? NO YES or CANCEL VERIFY. The option is not displayed at devices programmed as DOOR. Selecting NO or Verify sends an alarm cancelled message to the Central Station. Selecting YES or CANCEL sends an alarm cancelled message to the Central Station and disarms the areas that the user has the authority to disarm. This display remains on the keypad until a selection is made, the Back Arrow is pressed, or the internal system bell cutoff timer expires.

### 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**.

### Panic Supervision
Select YES to enable a 30 day supervision of the Model 1144-1P-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 1144-1P-PSV supervision messages through the XR550 panel.

The 1144-1P-PSV key fob supervision message is communicated to SCS-VR using all XR550 communication paths where Panic Test is YES within Advanced Communication. In addition, this option allows for manual testing of 1144-1P-PSV key fobs during Walk Test (8144) or Panic Test from the User Menu. A key fob that is successfully activated during these test modes will cause an increment to the keypad display TRIPS counter and a Verify message is sent to SCS-VR for that zone. For those 1144-1P-PSV key fobs that are programmed into the panel but not manually tested, a Fail message is NOT displayed at the keypad and is not sent to SCS-VR. A supervision message is automatically sent from the key fob to SCS-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 XR550 Version 210 or higher panels, a supervision message sent through any XR550 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 XR550 control panel.

### Weather Zip Code
This option allows local U.S.A. weather updates to display on the keypad when it is connected to an XR Series panel that is operating over a network or cellular connection. Enter the zip code of the user at this option. When no number is entered weather conditions are not displayed. Default is 0 (zero). If using a 7800 Series keypad, the current weather conditions and the next day’s forecast display as graphics on the Main Screen. All other DMP keypads display the weather information in the Status List programming.

### EOL Selection
Select the resistance value in kOhms that the system will expect for end of line resistors. Values can be set at either 1k or 2.2k. This adjusts the voltage threshold used to determine open, short, or normal zone conditions for zones 1-8 on XR Series panels. Default is 1k. Zones 9-10 on XR Series panels are defaulted to 3.3k.

### Celsius Temperature Option
This option determines whether the panel should use Celsius Units for displayed temperatures and for sending temperatures to Z-Wave thermostats. The default is **NO**.
Bell Options

10.1 Bell Options
This section allows you to program the panel bell output functions.

10.2 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: To support the Alarm Verify feature on an All/Perimeter or Home/Sleep/Away system, set the Bell Cutoff Time to greater than 0.

10.3 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
Enter the output/Favorite 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
This section defines the type of Bell Output for zone alarms. Press CMD to display the default Bell Output for each zone type. Press any select key or area and enter S for a Steady Bell Output, P for a Pulsed output, T for a Temporal Code 3 output, 4 for a Temporal Code 4 output, and N (default) for no Bell Output. Enable this feature to latch a bell action to a keypad for Panic zones.
Note: Trouble conditions do not activate the Bell Output.

10.5.1 Fire Bell Action
Defines Bell Action for Fire Type zones. The default is T.

10.5.2 Burglary Bell Action
Defines Bell Action for Burglary Type zones and Exit Error output. The default is S.

10.5.3 Supervisory Bell Action
Defines Bell Action for Supervisory Type zones. The default is N.

10.5.4 Panic Bell Action
Defines Bell Action for Panic Type zones. The default is N.

10.5.5 Emergency Bell Action
Defines Bell Action for Emergency Type zones. The default is N.

10.5.6 Auxiliary 1 Bell Action
Defines Bell Action for Auxiliary 1 Type zones. The default is N.

10.5.7 Auxiliary 2 Bell Action
Defines Bell Action for Auxiliary 2 Type zones. The default is N.

10.5.8 Carbon Monoxide (CO)
Defines Bell Action for Carbon Monoxide (CO) Type Zones. The default is set at 4.
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. Expand the system up to 500 additional relay outputs using any LX-Bus on the panel, or multiple 716 Output Expander Modules. In addition, 45 wireless outputs are available when using the 1100X Series wireless receiver. Refer to the XR150/XR550 Series Installation Guide (LT-1233) 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 999 — LX-Bus output, Relay output, Zone expansion output
- D01 to D16 — Keypad door strike relay for addresses 1-16
- F1 to F20 — To activate Z-Wave Favorites
- 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 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 or area to clear the display then press CMD. The Cutoff Output displays dashes when no outputs are selected.

11.2.1 Cutoff 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 Communication Trouble Output

Enter the output/Favorite 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 Alarm Output

Enter the output/Favorite 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 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.

11.6 Panic Alarm Output

Enter the output/Favorite 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.

Wired 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 Output

Enter the output/Favorite 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/Favorite 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  BEG EXIT OUT: 0

**Begin Exit Output**
This output/Favorite turns on any time an exit delay time starts. The output turns off when the system arms or when the arming has been stopped. Enter 0 (zero) to disable.

11.10  END EXIT OUT: 0

**End Exit Output**
This output/Favorite turns on any time an exit delay time ends. The output turns off when the system disarms. Enter 0 (zero) to disable.

11.11  READY OUT: 0

**Ready Output**
Enter the output/Favorite 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.

11.12  ARMED HOME: 0
ARMED SLEEP: 0
ARMED AWAY: 0
ARMED ALL: 0
ARMED PERIM: 0
ARMED OUT: 0

**Armed Output**
The entered output turns on any time the system is armed. The keypad display is dependent on the system’s arming type.
For Home/Away systems, only the HOME and AWAY screens display. If a Bedroom area is programmed into the panel, the SLEEP screen also displays. For All/Perimeter systems, the ALL and PERIM screens display. For Area systems, the ARMED OUT screen displays.
All options are defaulted to 0 (zero). The output turns off when the system completely disarms. Enter 0 (zero) to disable this output.

11.13  DISARMED OUT: 0

**Disarmed Output**
This output/Favorite turns on when all areas of the panel are disarmed. The output turns off when an area is armed.

11.14  PH TRBL OUT: 0

**Telephone Trouble Output**
Enter the output/Favorite number to turn on when the phone line monitor on the panel phone line is lost. Enter 0 (zero) to disable this output.

11.15  LATE CLS OUT: 0

**Late To Close Output**
Enter the output/Favorite 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.

11.16  DVC FAIL OUT: 0

**Device Fail Output**
Enter the output/Favorite 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.

11.17  SNSR RST OUT: 0

**Sensor Reset Output**
Enter the output/Favorite 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.

11.18  CLS WAIT OUT: 0

**Closing Wait Output**
Enter the output/Favorite 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.

11.19  ARM-ALARM OUT: 0

**Arm-Alarm Output**
Enter the output/Favorite 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.

11.20 SUPV ALM OUT: 0
Supervisory Alarm Output
Enter the output/Favorite 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.

11.21 HEAT SAVER TEMPERATURE: 0
Heat Saver Temperature
Enter the desired temperature setting for all Z-Wave thermostats when the system is armed ALL or AWAY. When the system is disarmed the thermostats return to their previous settings. The range is 1-99 degrees. Enter 0 (zero) to disable.

11.22 COOL SAVER TEMPERATURE: 0
Cool Saver Temperature
Enter the desired temperature setting for all Z-Wave thermostats when the system is armed ALL or AWAY. When the system is disarmed the thermostats return to their previous settings. The range is 1-99 degrees. Enter 0 (zero) to disable.

11.23 OUTPUT OPTIONS CO ALRM OUT: XXX
Carbon Monoxide Alarm Output
This output turns on any time a Carbon Monoxide Zone (CO) is placed in alarm. The output is turned off using Sensor Reset option while no additional CO type zones are in alarm.

11.24 OUTPUT OPTIONS LOCKDOWN OUT: XXX
Lockdown Alarm Output
This output turns on any time a Lockdown Output Zone is placed in alarm. The output is turned off using Sensor Reset option.

11.25 OUTPUT OPTIONS ZN MNTR OUT: XXX
Zone Monitor Output
This output turns on momentarily when a zone monitor tone is activated on keypads. If zone monitoring is turned off, the zone monitor output will not trigger. When a sensor reset is performed, the alert message will be cleared from the status list.
### Output Information

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.1</td>
<td><strong>Output Information</strong>&lt;br&gt;Program wireless outputs and name wired outputs.</td>
</tr>
<tr>
<td>12.2</td>
<td><strong>Output Number</strong>&lt;br&gt;Enter an output number. Entry range is 1 to 6, 450 to 474, 480 to 499, 500 to 999.&lt;br&gt;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.</td>
</tr>
<tr>
<td>12.3</td>
<td><strong>Output Name</strong>&lt;br&gt;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 XR150/XR550 User’s Guide (LT-1278) Appendix for browser operation.</td>
</tr>
<tr>
<td>12.4</td>
<td><strong>Output Real-Time Status</strong>&lt;br&gt;Selecting YES allows Real-Time Status reports of a hardwire device, 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.</td>
</tr>
<tr>
<td>12.5</td>
<td><strong>Serial Number</strong>&lt;br&gt;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.&lt;br&gt;This message displays when the serial number is already programmed for another output. The programmed output number displays.</td>
</tr>
<tr>
<td>12.6</td>
<td><strong>Supervision Time</strong>&lt;br&gt;Press any select key or area to select the supervision time required for the wireless output. Press CMD to accept the default time. Default is 240 minutes.&lt;br&gt;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.&lt;br&gt;The 3 minute supervision time is only available if using an 1135 Wireless Siren. <strong>Note:</strong> 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.</td>
</tr>
<tr>
<td>12.7</td>
<td><strong>Trip with Panel Bell Option</strong>&lt;br&gt;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.</td>
</tr>
</tbody>
</table>
13.1 **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 Number**

Enter a group number from 1 to 20. Up to 20 different groups may be assigned.

13.3 **Group Name**

The group name displays. To change the default name, press any select key or area then enter up to 32 characters for the group name. Press CMD to enter the outputs to be assigned to the group.

13.4 **Output Number**

Enter the Output number. Entry range is 1 to 6, 450 to 474, 480 to 499, 500 to 999 (outputs), F1 to F20 (Favorites), D01 to D16 (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 XR150/XR550 User’s Guide (LT-1278) 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**

**14.1 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. Press the CMD key to display the next set of keypads (9 through 16). Refer to the Multiple Displays section at the beginning of this document.

**14.2 Armed Status**

Armed Status

Enter the keypad addresses (1 through 16) that show the armed areas. The User Menu Armed Areas function also displays the custom area name you enter in Area Information. When only areas one to eight are used, the Armed Status display is 1 2 3 4 5 6 7 8. When areas nine or higher are used the system Armed Status display reads ALL SYSTEM ON or SYSTEM ON. Press CMD to display additional areas. Refer to the Multiple Displays section at the beginning of this document and in the XR150/XR550 User’s Guide (LT-1278).

**14.3 Time**

Enter the keypad addresses that can display the time and day of the week. Refer to the Multiple Displays section at the beginning of this document and in the XR150/XR550 User’s Guide (LT-1278).

**14.4 Arm/Disarm**

Arm/Disarm

Enter the keypad addresses from which users can arm and disarm areas. Refer to the Multiple Displays section at the beginning of this document and in the XR150/XR550 User’s Guide (LT-1278).
15.1 **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. Press CMD to display the next set of keypads (9 through 16). Refer to the Multiple Displays section at the beginning of this document.

15.2 **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 Monitor Troubles**

Specifies the keypad addresses (1 through 16) 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 select key or area 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**

Specifies the keypad addresses (1 through 16) where all fire zone alarms and troubles display. The zone name displays and, if it is a trouble condition, the keypad sounds a trouble tone until a valid user code is entered at the keypad. 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**

Specifies the keypad addresses (1 through 16) 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 a valid user code is entered at the keypad. 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, or 10 minutes elapse without an alarm. 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 **Supervisory Zones**

Specifies the keypad addresses (1 through 16) 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:** Panic Zones
Specifies the keypad addresses (1 through 16) where all panic zone alarms and troubles display. The name of the zone remains in the list until a Sensor Reset is performed. The keypad will sound if Bell Action is enabled in Bell Options.

15.8 **EMERGENCY ZONES:** Emergency Zones
Specifies the keypad addresses (1 through 16) 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:** Auxiliary 1 Zones
Specifies the keypad addresses (1 through 16) 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:** Auxiliary 2 Zones
Specifies the keypad addresses (1 through 16) 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 **CO ZONES:** Carbon Monoxide Zones
Specifies the keypad addresses (1 through 16) where all carbon monoxide zone alarms and troubles display. Carbon monoxide 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 carbon monoxide trouble is cleared from the Status List.

15.12 **COMM PATH TRBL:** 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.
16.1 **PC Log Reports**

This section allows you to program the types of PC Log Reports the panel sends through the ETHERNET Port directly on the 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. See the XR150/XR550 Series Installation Guide (LT-1233) for detailed Ethernet setup information or the XR150/XR550 Series User’s Guide (LT-1278) for more information.

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: The PC Log Address String entered CANNOT be the same as that entered in Communication.

16.2 **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. The default is 000.000.000.000 and turns the output off.

16.3 **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.

16.4 **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.

16.5 **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.

16.6 **User Command Reports**

Sends user code changes, schedule changes, and door access denied events.

16.7 **Door Access Reports**

Sends door access activity: door number, user number and name, and time and date.

16.8 **Supervisory Reports**

Sends system monitor reports, such as AC and battery, and system event reports. Supervisory Reports also sends the following reports:

- Abort
- Exit Error
- System Recently Armed
- Ambush
- Alarm Bell Silenced
- Unauthorized Entry
- Late to Close*

* 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.

16.9 **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

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.

When only areas one to eight are used, the Armed Status display is 1 2 3 4 5 6 7 8. When areas nine or higher are used the system Armed Status display reads ALL SYSTEM ON or SYSTEM ON. Press CMD to display additional areas. Refer to the Multiple Displays section at the beginning of this document and in the XR150/XR550 User’s Guide (LT-1278).

### 17.2 Exit Delay

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.

**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 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-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.

### 17.4 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.

### 17.5 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.

### 17.6 Area Schedules

Select YES to allow each area to follow individual sets of area schedules programmed in the User Menu. Select NO for all areas to follow only one set of schedules in the User Menu. See the panel User Guide to add schedules to the panel.

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

### 17.7 Early Morning Ambush (Network panels only)

Enter the number of minutes (1 to 15) before a silent alarm (Early Morning Ambush S33) is sent to the central station using the area 1 account number. Enter 0 (zero) to disable this option.
When a user code is entered to disarm area 1 at a keypad or reader with Access Areas assigned to area 1, the same or different user code must be entered within the programmed number of minutes to prevent an ambush message from being sent to the receiver. The second user code also must have authority to disarm area 1. In addition, a zone activation with Alarm Action Message C also cancels the Early Morning Ambush timer and stops an Ambush message from being sent to the receiver. See Report to Transmit section in Zone Information.

The keypad does not display any indication that the ambush timer is running. Indications can be provided by assigning an output number to Entry Out and Ambush Out in Output Options. Entry Out turns on one minute before the timer expires and turns off at expiration. Ambush Out turns on at the timers’ expiration and turns off when Sensor reset is performed.

17.8 AREA NO: -

Area Number
Enter the number of the area to program. After entering the area number, press CMD 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 INT PERIM

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

17.9.1 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.

17.9.2 * 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 or area and then enter up to 32 characters for the new area name. Press CMD 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 arming have the option available to change the area name.

To mark an active area unused, press any select key or area to delete the old name, then press CMD. 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:

<table>
<thead>
<tr>
<th>Area</th>
<th>Display</th>
<th>Area</th>
<th>Display</th>
<th>Area</th>
<th>Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Perimeter</td>
<td>4</td>
<td>Guest1 Perimeter</td>
<td>7</td>
<td>Guest2 Perimeter</td>
</tr>
<tr>
<td>2</td>
<td>Interior</td>
<td>5</td>
<td>Guest1 Interior</td>
<td>8</td>
<td>Guest2 Interior</td>
</tr>
<tr>
<td>3</td>
<td>Bedrooms</td>
<td>6</td>
<td>Guest1 Bedrooms</td>
<td>9</td>
<td>Guest2 Bedrooms</td>
</tr>
</tbody>
</table>

17.10 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.

17.11 O/C RPTS NO YES

Opening/Closing Reports
This option allows an Opening/Closing report to be sent to the receiver when this area is disarmed or armed.

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** - 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.

17.15 **BURG BELL OUT: 0**  
**Burglary Bell Output**  
Enter the output number (0 to 6, 500 to 999, G1 to G20, D01 to D16, or F1 to F20) 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.

17.16 **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.

17.17 **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).

17.18 **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 XR150/XR550 Series User’s Guide (LT-1278).

17.19 **BANK/SAF NO YES**  
**Bank Safe & Vault (XR550 with Network or Encryption only)**  
NO disables the Bank Safe & Vault feature for this area. When selected as YES, schedules set for any area and the time of day cannot be changed while the area is armed.  

**Program schedules before arming**: A Bank Safe & Vault area can only be disarmed during scheduled times. If the area becomes armed before programming a schedule, the panel must be reset before the area can be disarmed from a keypad or the Bank Safe & Vault option in **Area Information** must be set to NO.  

Zones assigned to Bank Safe & Vault areas cannot be bypassed or force armed. Do not assign Bank Safe & Vault area to an Arming zone. Arming zones can disarm Bank Safe & Vault areas outside of a schedule.

17.20 **COMMON NO 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.

17.21 **ARM FIRST NO 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.

### 17.22 NO ARM DIS ALL

**Dual Authority (XR550 with Network or Encryption only)**

Dual Authority requires two user codes to be entered at a system keypad to disarm and/or arm this area. Dual Authority must be enabled per user in User Profiles in order to use this feature. When a user presents a user code to a keypad requesting to disarm or arm this area, 2ND CODE displays and requires the entry of a different user code with at least the same authority. The second user code must be entered within 30 seconds.

Select ARM to require two user code entries in order to arm this area. Select DIS (disarm) to require two user code entries in order to disarm this area. Selecting the DIS option also enables Dual Authority for Access Control. Select ALL to require two user code entries in order to both arm and disarm this area, or select NO to disable Dual Authority for this area. The default is NO.
18.1 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, Security Command keypad, or zone expander are programmed the same way.

18.2 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 CMD to enter a zone name.

Note: The available LX-Bus connections for the panels are:
XR150-LX500
XR550-LX500 through LX900

<table>
<thead>
<tr>
<th>Address</th>
<th>Programming Zone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panel</td>
<td>1-10</td>
</tr>
<tr>
<td>1</td>
<td>11-14</td>
</tr>
<tr>
<td>2</td>
<td>21-24</td>
</tr>
<tr>
<td>3</td>
<td>31-34</td>
</tr>
<tr>
<td>4</td>
<td>41-44</td>
</tr>
<tr>
<td>5</td>
<td>51-54</td>
</tr>
<tr>
<td>6</td>
<td>61-64</td>
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<tr>
<td>7</td>
<td>71-74</td>
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<tr>
<td>8</td>
<td>81-84</td>
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<tr>
<td>9</td>
<td>91-94</td>
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<td>10</td>
<td>101-104</td>
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<td>12</td>
<td>121-124</td>
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<td>14</td>
<td>141-144</td>
</tr>
<tr>
<td>15</td>
<td>151-154</td>
</tr>
<tr>
<td>16</td>
<td>161-164</td>
</tr>
<tr>
<td>1144 Series Key Fob</td>
<td>400-449</td>
</tr>
<tr>
<td>LX-Bus 500</td>
<td>500-599</td>
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<tr>
<td>LX-Bus 600</td>
<td>600-699</td>
</tr>
<tr>
<td>LX-Bus 700</td>
<td>700-799</td>
</tr>
<tr>
<td>LX-Bus 800</td>
<td>800-899</td>
</tr>
<tr>
<td>LX-Bus 900</td>
<td>900-999</td>
</tr>
</tbody>
</table>

Note: For 1144 Series Key Fob zones (400-449), programming continues at the 1144 Series Key Fobs Section.

18.3 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 or area and then enter up to 32 characters for the new zone name. Press CMD to continue.

To mark a zone unused, delete the old name by pressing any select key or area, then CMD. The programmer automatically programs the name as * UNUSED *. If you have already cleared Zone Information during Initialization, the zones is marked * UNUSED *.

18.4 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 13 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 or area. The display lists all of the available Zone Types four at a time.

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

**Fire, Panic, Emergency, or Supersisory. Press CMD for additional zone types.**

**Auxiliary 1, Auxiliary 2, Fire Verify, Arming (keyswitch). Press CMD for additional zone types.**

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, Supersisory, or CO 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 13 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.

**Arming zone type programming continues at Arming Zone Area Assignment.**

### 18.5 Area Assignment

<table>
<thead>
<tr>
<th>AREA NO: -</th>
<th>AREA:</th>
<th>INT</th>
<th>PERIM</th>
<th>INT</th>
<th>BDRM</th>
<th>PERIM</th>
</tr>
</thead>
</table>

**Enter the area number where the Night, Day, Exit, Auxiliary 1, or Auxiliary 2 zone is being assigned.**

For an Area system, area numbers 1-32 can be assigned. For a Home/Sleep/Away with Guest system, area numbers 1-9 can be assigned.

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

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

**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 Output

This output (1 to 6, 500 to 999, F1 to F20, G1 to G20, or D01 to D16) is turned on any time a Fire, Fire Verify, or Supervisory zone is placed in alarm. The output is turned off by any of 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 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 shorted (armed) state, a trouble is reported. When opened from a normal (disarmed) 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).

**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.**

**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 - 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 forced 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**

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

- **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 an arming/disarming keyswitch locate the keyswitch within the protected area.

- **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 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 18.12.

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 999 range.

- Zones 400 to 449 can be programmed for 1144 Series Key Fobs.
- Zones 500 through 999 can be programmed for DMP 1100 Series Wireless.

**DMP Wireless**

For a DMP 1100X Wireless Receiver set the House Code from 1 to 50. See House Code programming in System Options. Briefly reset the panel using the RESET jumper to activate Wireless operation. Refer to the XR150/XR550 Series Installation Guide (LT-1233).

For an 1144 Series Key Fob see section 18.11. If using a 738T, follow the installation steps listed in the 738T Wireless Translator Installation Guide. (LT-1760)

**NOTE:** All wireless programming is stored in the 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 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 Serial Number Entry**

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

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

**18.10.2 Contact**

This option displays if the serial number entered is for an 1101, 1103, or 1106 Universal Transmitter or 1114 Wireless Four-Zone Expander. Press any select key or area to select the contact.

This option displays when programming an 1101, 1103, or 1106 Transmitter. Select INT to use the internal reed switch contacts. Select EXT to connect an external device to the...
1101, 1103, or 1106 terminal block. Default is INTERNAL.

By allowing both of the 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 890 and 891 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.

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.

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

This option only displays when EXT is selected as the Contact type. For external devices connected to the 1101, 1103 or 1106 terminal block, select NO to use normally closed (N/C) contacts. Select YES to use normally open (N/O) contacts. Default is NO.

18.10.3 Supervision Time

Press any select key or area to select the supervision time required for the wireless zone. Press CMD to accept the default time. Default is 240 minutes.

Note: Refer to the Wireless Check-in and Supervision Time Definitions section of the Appendix for supervision information.

Press the select key or area 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.

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

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.

18.10.5 Disarm/Disable

Select YES to disable the Zone Tripped message from 1101/1102/1106 Universal Transmitters (Version 108 of higher software), 1103 Universal Transmitters (Version 107 or higher software) or 1122/1126/1127 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 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 PIR Pulse Count

Select the number of infrared pulses (2 or 4) the 1122, 1126, or 1127 PIR should sense before sending a short message to the 1100X Series Receiver. Default is 4.

18.10.7 PIR Sensitivity

Select the sensitivity setting for an 1122, 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 Pet Immunity

This option displays for the 1122 Wireless PIR Motion Detector. Select whether or not to enable pet immunity. Selecting YES allows pet immunity for animals up to 55 pounds. Default is NO.

18.10.9 Next Zone

Select YES to return to the ZONE NO: - option to program a new zone. Select NO to display the Alarm Action option.
18.11 1144 Series Key Fobs
For an 1144 Series Key Fob set the House Code from 1 to 50. See House Code programming in System Options.
Only zones 400 to 449 can be programmed as 1144 Series Key Fob zones. Refer to the 1100 Series Key Fob Programming Sheet (LT-0706) supplied with the 1100X Series Wireless Receiver and the 1144 Series Key Fob Install Guide (LT-1449) as needed.

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

18.11.1 Key Fob User Number

**Enter the User Number (1-9999) used to identify the key fob user and their arming and disarming authority. 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 added to cause the key fob to operate.

18.11.2 Key Fob Serial Number

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

18.11.3 Key Fob Supervision Time

Press any select key or area to select the supervision time required for the key fob zone. Press CMD to accept the default time. Default is 0 for key fobs.

Press the select key or area 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.

1144 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 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 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 or area 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 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 or area 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

18.11.7 Button Action

This option specifies the Button Action for an individual key fob button. The default action for the button selected is displayed. Press any select key or area to display the Button Action options. To view more options press CMD.

yy = the name of the button being programmed (TOP, BTM, LFT, RGT).

- **ARM (Arm)** - Arms selected areas and force arms bad zones.
- **DIS (Disarm)** - Disarms selected areas.
- **TGL (Toggle Arm)** - Toggles arm/disarm for selected areas and force arms bad zones when arming.
- **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 (Sensor Reset) - Causes the panel to perform a standard Sensor Reset.

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

18.11.8 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 or area 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 ARM AREAS:

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 32, 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 XR150/XR550 Series User’s Guide (LT-1278).

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 ACTION:

You can specify any relay output/Favorite 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 999, D01 to D16, F1 to F20, 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/Favorite number, press any select key or area followed by the output/Favorite number. Press CMD.

18.11.11 OUTPUT ACTION:

**Output Action**

This option allows you to define the output action (STD, PLS, MOM, TGL, OFF) for the selected output number. The default is STEADY.

**yyy** = the name of the button being programmed (TOP, BTM, LFT, RGT).

**xxxxxxxx** = the currently defined output action.

**STD (Steady)** - The output is turned on and remains on.

**PLS (Pulse)** - The output alternates one second on and one second off. 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 on state and off state. Each button press toggles the output state.
Note: Toggle is not available for key fob button output programmed G1 to G20.

**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.

**Note:** When the output is assigned to PN/PN2 or EM/EM2 button action and is turned on, the output turns off when any area is disarmed.

When the output action is steady, pulse or toggle and the output is turned on, the output remains on until:
- the output cutoff time expires
- the output is reset from the keypad menu
- toggled off

### 18.11.12 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 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.

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

### 18.12 V-Plex Serial Number Entry
If installing a 736V V-Plex module, enter the eight-digit serial number found on the V-Plex device. The serial number will start with the letter A, followed by a 7-digit serial number. In the address, A indicates that the device is a Honeywell product. (Ex. A1015893 is a device with serial number 1015893.)

### 18.13 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, Auxiliary 2, or Instant it is a non-24-hour zone and the Alarm Action programming begins with Disarmed Open.

If the Zone Type is Fire, Panic, Emergency, Supervisory, or CO 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.

### 18.14 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 CMD to continue.

### 18.15 Report to Transmit
Press any select key or area to display the following report options: A, T, L, D, S, C, 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.

- **D** - 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.

**DOOR PROPPED** - Selecting D allows the ENTRY DLY 4 in the System Options section to begin 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, the output (if programmed in zone information) triggers and 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.

SENSOR RESET - When the zone state changes, the bell is silenced, a Sensor Reset is performed and a Alarm Bell Silenced Message (S34) is sent.

CANCEL AMBUSH - Select C for the zone to cancel the Early Morning Ambush timer and stop an Ambush message from being sent to the receiver. Faulting the zone takes the place of a second user code being entered at the keypad and is only available for non-fire type zones. Area assignment for the zone does not affect this option. See Early Morning Ambush in Area Information programming.

18.16 Output Number

You can specify any of the Relay Outputs on the panel to be activated by a zone condition (1 to 6, 500 to 999 if Model 716 used, D01 to D16, 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 any select key or area followed by the output number.

Press CMD.

18.17 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.

Note: Some wireless devices whether powered using an AC adaptor or a battery, ignore some output action programming.

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 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.

18.18 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.

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.

18.19 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 16 addresses, leave the default setting.

To delete an address, press the matching number on the keypad. To disable prewarning at all keypads, press any select key or area to clear the addresses shown. Press CMD 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.

18.20 Chime

Option is only shown for Night, Exit, and Instant zones. Select either NONE, DB (doorbell), ASC (ascend), or DSC (descend) to assign that tone to a zone. Default is DOORBELL for Exit zones and NONE for Night and Instant zones.
18.21 **ENTRY DELAY:** 1  
*Entry Delay*  
Select the entry timer for this zone. Entry timers 1 to 4 are programmed in System Options.

18.22 **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.

18.23 **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 select key or area followed by the number of the keypad address. You can enable the presignal for all 16 keypad addresses. To disable a presignal address press the matching number digit again. Press **CMD** when the address selection is complete. The Presignal option is only displayed when Retard is selected as YES.

18.24 **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 999 have a fixed response time and do not display this option.

18.25 **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.

18.26 **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.

18.27 **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.

18.28 **FOLLOW AREA:** 0  
*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.

18.29 **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.

18.30 **TRAFFIC COUNT NO YES**  
*Traffic Count*  
This option is only displayed for NT, EX, and IN type zones. Select YES to provide reporting to the receiver of the number of zone trips while in a disarmed state. The number of trips will be included with the area closing message and reported to the central station automation system. Traffic Count data for the 10 lowest numbered zones with Traffic Count set to YES is also sent to the Virtual Keypad™ App if enabled at DMDDealerAdmin.com. Default is NO.

18.31 **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).

18.32 REPORT WITH ACCT NO. FOR AREA: 0

Report with Account Number for Area
This option is only available for 24-hour zone types (Fire, Fire Verify, Panic, Emergency, Supervisory, and CO).
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

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 or area 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.

Missing LX-Bus™ Modules Displayed

The Programmer includes a feature following the STOP routine that displays the name of any programmed LX-Bus module not currently connected to the panel.

Power Up

When the 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.
20.1 **Set Lockout Code**

Pressing `CMD` 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 display.

**Lockout Code restriction**
The Lockout Code range is 100-65535. Do not set a Lockout Code higher than 65535.
Feature Upgrade

21.1 Feature Upgrade

In the Programming Menu, pressing CMD at the SET LOCKOUT CODE option displays FEATURE UPGRADE. This allows you to enable additional features in the panel. Press any select key or area to display the first available feature. ENABLED or DISABLED displays indicating whether this feature is currently used in this panel. Press CMD to display additional feature(s).

To enable a feature, press any select key or area anywhere in the features list to display the ENTER KEY option.

Enter the factory-supplied feature key for the specific panel and press CMD. The feature specific to the key displays as ENABLED. If the feature key entered is not accepted, the ENTER KEY option displays again.

Re-enter the feature key and press CMD.

21.1.1 Encryption

Enable this feature to provide 128-bit or 256-bit AES data encryption. This feature upgrade can only be enabled on an XR550 panel with network. For installations where an XR550 panel is installed, it is recommended the XR550 be replaced with an XR550 panel with encryption. To verify encryption installation, access System Status in the User Menu to verify the encryption status (OFF, ON). If the status displays OFF, a Passphrase has not been entered in Network Options and data transmissions are not encrypted. See Network Options to set up a Passphrase.

21.1.2 All No Yes Option

This feature offers the ability to disable the ALL NO YES option at arming or disarming. When this feature is enabled, the ALL NO YES option does not display at any system keypad during arming or disarming. Each area assigned to the user profile is chosen to be armed or disarmed independently.

21.1.3 Service User Authentication

This feature offers the ability to authenticate service personnel before allowing access to panel programming or performing any user operations. When this feature is enabled and a valid Service User code is entered for system operation or 6653 is entered for programming, the Service Code entry option displays.

When the service person enters the Service Code, the panel authenticates the code with the Service Code pre-programmed in either the SCS-1R or SCS-VR receivers, and access to panel programming or the User Menu is granted. The Service Code can be used for system operation for 30 minutes before authenticating again. If the code entered is not validated, access to programming or the User Menu using the Service User code is denied.

Note: The Service User code is user number zero (0) and can only be created in the panel remotely. The SCS-1R receiver must have firmware version 902 or higher to authenticate service personnel.

21.1.4 32 Door Add On A/ 32 Door Add On B

This Feature Upgrade is only compatible with the XR550 panel operating with Version 111 firmware or higher. Enable this feature to increase the door capacity for a maximum of 64 or 96 doors by applying purchased feature keys. XR150 and XR350 are incompatible with this feature upgrade.

32 Door Add On A adds 32 more doors available on the AX-Bus for a total of 64 doors.

32 Door Add On B adds another 32 doors to the AX-Bus for the maximum of 96 doors.

See Device Setup for more detailed information.

Purchasing Feature Upgrades

If you would like to purchase a feature upgrade, the authorized purchasing agent for your company may contact DMP Customer Service in writing via e-mail (CUSTOMERSERVICE@DMP.COM) or call (866) 266-2826 from 8 AM to 5 PM central standard time. Include the upgrade feature(s) to enable and the panel serial number(s) on the request. A separate feature key is issued for each panel. The feature key only enables the requested feature on the specified panel.

The panel serial number can be located in several different ways: Printed on a label located on the right side of the PCB.

- Using panel diagnostics. See the Appendix.
  - Initial Panel Connection screen
  - System Information screen.
APPENDIX

22.1 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.

22.2 Diagnostics Function

The 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 CMD.

Test LX-Bus
This function allows you to test the ability of the panel to communicate with zone and output expander modules connected to the LX-Bus circuits.

To continue, press any select key or area. The keypad displays LX-BUS: . Using the digit keys, enter the LX-Bus number, 1 to 5, to test that LX-Bus circuit. The keypad now displays ADDRESS: - . Enter a 2-digit LX-Bus device address and press CMD. When testing LX-Bus devices, enter only the addresses to which the modules have been set. Press any select key or area when TEST LX-BUS displays.

Important Note: A device address is not the same as a zone number. If you are testing 714/714N-POE, or 715 Zone Expander Modules, which each contain four zones, the device address is the first zone number. When the panel polls a 714/714N-POE on the LX-Bus, it recognizes it as a four zone device and does not poll the remaining three zones. The 714/714N-POE 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 0000/65535 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 CMD to exit the TEST LX-BUS.

Zone Finder
The second Diagnostic function is the Zone Finder. Press CMD 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 select key or area. 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 CMD 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 or area. The display changes to ZONE NUMBER: _ . Enter in the zone number you want to check and press CMD. 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 714/714N-POE 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 999 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.

X-Bus
This option displays the version and date code of a connected wireless receiver. In order to view this, the receiver should be connected and a House Code should be programmed.

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 select key or area to display the panel MAC address. Press CMD 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 select key or area to display the Serial Number. Press CMD to view the next option.

**Loader Version**
This display is for factory use only. Press any select key or area to display the factory Loader Version. Press CMD 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 select key or area to display the current flash information. Press CMD 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:**

<table>
<thead>
<tr>
<th>Successful Display</th>
<th>Failure Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODEM OPERATING</td>
<td>NO MODEM FOUND</td>
</tr>
<tr>
<td>IDENTIFIED</td>
<td>NO SIM CARD</td>
</tr>
<tr>
<td>TOWER DETECTED</td>
<td>NO TOWER</td>
</tr>
<tr>
<td>REGISTERED</td>
<td>NOT REGISTERED</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Successful Display</th>
<th>Failure Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONNECTED</td>
<td>CONNECT ERROR</td>
</tr>
<tr>
<td>COMM PATH GOOD</td>
<td>NO ACK RECEIVED</td>
</tr>
</tbody>
</table>

**Network Results:**

<table>
<thead>
<tr>
<th>Successful Display</th>
<th>Failure Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>LINK OK</td>
<td>LINK ERROR</td>
</tr>
<tr>
<td>DHCP OK</td>
<td>DHCP ERROR</td>
</tr>
<tr>
<td>GATEWAY FOUND</td>
<td>NO GATEWAY</td>
</tr>
<tr>
<td>DEST FOUND</td>
<td>NO DESTINATION</td>
</tr>
<tr>
<td>COMM PATH GOOD</td>
<td>NOT CONNECTED</td>
</tr>
<tr>
<td></td>
<td>NO ACK RECEIVED</td>
</tr>
</tbody>
</table>

**Cellular Signal Strength (CELL SIGNAL)**

This option provides a way to test the cellular signal strength of the nearest tower for the SIM card carrier. Press any select key or area 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 (263LTE-V Only)**

Note: If the 263LTE-V Cellular Communicator has not been previously activated, Automatic Cellular Activation is performed when the panel powers up or is reset. Activate Cell is only necessary when Automatic Cellular Activation is not successful and communication was not established.

To begin the cellular activation for a 263LTE-V Cellular Communicator, verify that the 263LTE-V has been added to the panel using the Dealer Admin Site, Tech APP, Remote Link, or by calling Customer Service (1-800-641-4282).

**PC Programming**

This allows the user to Remote Program the panel using a 399 cable attached to LX500. When the select key or area is pressed, the panel displays PROGRAMMING... at this time the panel does not communicate with any LX bus attached to LX500, and the 399 cable can be used to connect via Remote Link. PROGRAMMING... will display at the keypad for the duration of the Remote Session. Once the session has ended, or if no Remote Link connection has been established after one minute, the keypad displays RECONNECT LX BUS. From this point, if the LX500 bus should be connected within one minute.

When using the 399 cable to program the panel, the connection type should be “Direct” and the baud rate set to 38400. This connection may be used for all Remote Programming, including Remote Update.
Z-Wave Information
This option allows the installer to view the hardware and software level of the 738Z that is connected to the system.

Test Z-Wave
This feature allows the installer to test panel communication with Z-Wave devices. A successful test indicates a response from a device. Press any select key or area to view the Z-Wave Device List. Press CMD to advance through each Z-Wave device and press any select key or area to begin the test on the device displayed. The name of the device displays above the device number. The current number of successful communications followed by the total number of attempts displays to the right of the device number. The test stops after 99 attempts. Press CMD to view the final number of successful communications.

Initialize Z-Wave
This option allows installers to initialize Z-Wave Options.

Wi-Fi Signal Strength (Wi-Fi SIGNAL)
This option tests the signal strength of the selected SSID. Press any select key or area to display Wi-Fi signal strength. The ▐'s represent the signal strength 0-7.

<table>
<thead>
<tr>
<th>Number of Bars</th>
<th>Indication</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Good Signal (Excellent for consistent operation)</td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Average Signal (Expect consistent operation)</td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Weak Signal (Will not operate reliably. Relocate Wi-Fi equipment or add a Wi-Fi extender for better reception.)</td>
</tr>
<tr>
<td>0</td>
<td>No Signal</td>
</tr>
</tbody>
</table>

Exiting the Diagnostics program
Press CMD until STOP displays. Press any select key or area. The keypad returns to the Status List display.

22.3 Using the 984 Command Function
This feature allows connection to connect to a service receiver, which is used primarily to bring a new account online and upload panel programming completed in Remote Link™.

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

NUMBER: Enter a phone number into the keypad for 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 CMD, while the panel is in the Status List. The keypad display changes to NBR TEST PICKUP. Press the select key or area 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 CMD to enter the final 16 characters. To enter a # (pound sign) press the ‘0’ then the fourth (far right) select key or area, and to enter an * (asterisk) press the third select key or area. 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 CMD 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.
22.4 Using the Walk Test

The 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 Display Areas features. When five minutes remain, TEST END WARNING displays.

The Walk Test only tests zones assigned to the areas programmed into the keypad in Display Areas. If any areas are armed the Walk Test does not start and SYSTEM ARMED displays.

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 CMD. The keypad display changes to NBR TEST PICKUP. Press the select key or area under TEST 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 the PICKUP option is 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 PICKUP option is used before all connect attempts are made, the keypad displays SYSTEM BUSY.

Walk Test

To conduct the Walk Test, reset the control panel by momentarily placing a jumper on RESET. From the keypad, enter the code 8144. 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.

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 or area again to deselect the zone type. When you have selected all the zone types you want for testing, press CMD to display the next Walk Test option. Pressing the Back Arrow key exits the Walk Test.

Note: For the Wireless Check-in Test, make sure no zone types are selected and press CMD. 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.

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. You do NOT have to hold the zones for 2 seconds in normal mode for PN type zones. 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.

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 1122, 1126, or 1127 operation. When enabled, the PIR 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 PULS**

**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.

**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.

**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**

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 Walk 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**.

**Failed Zones Display**

For each zone that did not trip (failed), except key fobs, at least once during the Walk Test, all keypads with matching Display Areas 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 **CMD** 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.
22.5 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.

<table>
<thead>
<tr>
<th>Event</th>
<th>On</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire</td>
<td>Fire zone alarm and Bell Output or Fire Bell Output is ON.</td>
<td>Alarm Silence.</td>
</tr>
<tr>
<td>Burglary</td>
<td>Burglary zone alarm and Bell Output or Burglary Bell Output is ON.</td>
<td>Alarm Silence.</td>
</tr>
<tr>
<td>Zone Monitor</td>
<td>One time only when a monitored zone is tripped.</td>
<td>After one tone.</td>
</tr>
<tr>
<td>CO</td>
<td>CO zone alarm and Bell Output are ON.</td>
<td>Using Sensor Reset option while no additional CO type zones are in alarm.</td>
</tr>
<tr>
<td>Prewarn</td>
<td>During Entry Delay.</td>
<td>When Entry Delay expires.</td>
</tr>
</tbody>
</table>

22.6 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 or SCS-VR 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.

22.7 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. The table lists the panel reports you can delay using the Events Manager option. See Figure 10.

22.8 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 XR150/XR550 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 User Profiles Record and the XR150/XR550 User's Guide (LT-1278).

Note: Profiles cannot be changed via keypad in an All/Perimeter or Home/Sleep/Away system. Use the default profiles 1 through 10.

- **Profile Number** - Each profile may be assigned a unique number from 1 to 99.
- **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 following User Profile Record. 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.
• **First Access/Second Access** - Each profile may be assigned two schedules to allow or restrict access and disarming times.

• **Inactive User Code Audit** - This option allows you to choose the number of days a user code can remain unused before the panel sends an Inactive User Code message to the receiver and changes the user code to inactive. The range is 0-425 days. The default is 0. This feature is only available for XR550 Series panels.

### 22.9 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.

|-----------|--------------|------------------|--------------|-----|--------|---------------|--------------|----------|----------------|------------|---------------|------------|-------------|-------------|-------------|---------------|-------------|----------------|-------------|------|----------------|----------------|-----------|-----------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|----------------|-----------------|----------------|
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.

CO (Carbon Monoxide) - This output turns on any time a Carbon Monoxide Zone (CO) is placed in alarm. The output is turned off using Sensor Reset option while no additional CO type zones are in alarm.

IN (Instant) - Controlled instant zone used for perimeter doors, windows, and interior devices such as PIRs and Glassbreak detectors. This will also cause an alarm if tripped during Entry/Exit delay.

DB (Doorbell) - This zone type is intended for use for zones that are assigned to doorbells.

### 22.12 Zone Type Specifications

The 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 LX-Bus Zone Information table on the next page reflects the zone types for LX-Bus Zones.

<table>
<thead>
<tr>
<th>Keypad Bus Zone Information</th>
<th>Type</th>
<th>Area</th>
<th>Fire Bell</th>
<th>Disarmed Open</th>
<th>Disarmed Short</th>
<th>Armed Open</th>
<th>Armed Short</th>
<th>Prearm</th>
<th>Entry Delay</th>
<th>Exit Delay</th>
<th>Panic</th>
<th>Emergency</th>
<th>Supervisory</th>
<th>Auxiliary 1</th>
<th>Auxiliary 2</th>
<th>Fire Verify</th>
<th>Arming</th>
<th>Carbon Monoxide (CO)</th>
<th>Instant</th>
<th>Doorbell</th>
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</thead>
<tbody>
<tr>
<td>Zone Type Defaults</td>
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</tbody>
</table>

*Output Options: 1 to 6, 450 to 474, 480 to 499, 500 to 999, D1 to D16, F1 to F20, G1 to G20. + = Set retard to YES before selecting presignal. DB = Zone functions not available.
22.12.1 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 or Home/Sleep/Away with Guest system this is 1 to 32. 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 999 off-board relay outputs, 450 to 474 and 480 to 499 wireless outputs, D1 to D16, F1 to F20, 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
22.12.2 LX-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 or Home/Sleep/Away with Guest system this is 1 to 32. For an All/Perimeter or Home/Sleep/Away system, this 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.

**Wireless** - This indicates wireless equipment is being used.

**DMP Wireless** - These options are for use with the DMP 1100X Wireless Receiver.

**Message** - A = alarm report, T = trouble report, L = local, no report, — (dash) = no report, D = door propped (When SV zone 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 999 off-board relay outputs, 450 to 474 and 480 to 499 wireless outputs, D1 to D16, F1-F20, 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 pwrarm 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 shorted zone. When used on an arming zone, the retard delay occurs when the zone is shorted before the armed state has changed. 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 zoned 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 = Maint

---

**Zone Type Defaults**

<table>
<thead>
<tr>
<th>Zone Type</th>
<th>Style</th>
<th>TGL</th>
<th>ARM</th>
<th>DIS</th>
<th>STEP</th>
<th>MNT</th>
<th>DB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Night</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auxiliary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbon Monoxide (CO)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doorbell</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Output Options**: 1 to 6, 450 to 474, 480 to 999, 101 to 116, 201 to 216, FI to 20, G1 to 20.

**Zone function not available.**
### 22.13 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.

<table>
<thead>
<tr>
<th>Message</th>
<th>Meaning</th>
<th>Possible Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>INVALID AREA</td>
<td>The user has attempted a door access for an area they are not assigned.</td>
<td>Change the user access areas if access to the area is needed. If access is not needed, the user cannot enter the area.</td>
</tr>
<tr>
<td>INVALID CODE</td>
<td>The user code you entered is not recognized by the system.</td>
<td>Check the user code and try again.</td>
</tr>
<tr>
<td>INVALID PROFILE</td>
<td>A user attempted a function that is outside of the assigned profile.</td>
<td>Check the user profile settings.</td>
</tr>
<tr>
<td>INVALID TIME</td>
<td>A user code assigned to a specific schedule has entered outside of the valid schedule.</td>
<td>See Schedules and User Codes.</td>
</tr>
<tr>
<td>ENTER 2ND CODE</td>
<td>The area you are attempting to disarm or access is a Two Man Area.</td>
<td>A second and different user code must be entered.</td>
</tr>
<tr>
<td>CLOSING TIME</td>
<td>The scheduled has expired but the area is not armed.</td>
<td>Users still on the premise should arm the system or extend the schedule to a later time.</td>
</tr>
<tr>
<td>LATE TO CLOSE</td>
<td>The system was not armed at its scheduled closing time.</td>
<td>Users still on the premise should arm the system or extend the schedule to a later time.</td>
</tr>
<tr>
<td>FAILED TO EXIT</td>
<td>A user assigned the anti-passback option has attempted to re-enter an area from which they did not exit properly.</td>
<td>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.</td>
</tr>
<tr>
<td>AC TROUBLE</td>
<td>The system AC is low or missing.</td>
<td>Check that all AC connections are good.</td>
</tr>
<tr>
<td>BATTERY TROUBLE</td>
<td>The System battery is either low or missing.</td>
<td>Check that the battery connections are good and the battery is still good.</td>
</tr>
<tr>
<td>PHONE LINE 1 TROUBLE</td>
<td>There is trouble with the phone line supervision.</td>
<td>Plug in the phone line.</td>
</tr>
<tr>
<td>SYSTEM TROUBLE or SERVICE REQUIRED</td>
<td>There is a problem with one or more components in the system.</td>
<td>Make sure the RESET 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.</td>
</tr>
<tr>
<td>SYSTEM BUSY</td>
<td>The system is performing another task with a higher priority.</td>
<td>Wait a few moments for the system to complete the task. Make sure the RESET jumper is not on the panel. If the message displays for a long period of time, the processor could be locked up.</td>
</tr>
<tr>
<td>4-WIRE BUS TROUBLE</td>
<td>There is not a supervised device on the bus.</td>
<td>Program a device to be supervised.</td>
</tr>
<tr>
<td></td>
<td>There is low voltage or an open yellow wire.</td>
<td>Make sure all wires are connected.</td>
</tr>
<tr>
<td></td>
<td>Two devices share the same address.</td>
<td>Program one of the devices to a unique address.</td>
</tr>
<tr>
<td>TRANSMIT FAIL</td>
<td>The panel has attempted to communicate with the central station 10 times and has not succeeded.</td>
<td>Verify your communication type, account number, and phone number. Make sure the telephone line is connected and working properly.</td>
</tr>
<tr>
<td>NON-POLLED ADDRESS</td>
<td>The device is not set to DOOR, KEYPAD or FIRE in Device Setup during programming.</td>
<td>Program the device as DOOR, KEYPAD or FIRE in Device Setup.</td>
</tr>
<tr>
<td>ENTER CODE (to enter Programming)</td>
<td>A lockout code has been programmed for the panel.</td>
<td>Enter the lockout code.</td>
</tr>
<tr>
<td>WIRELESS TROUBLE</td>
<td>The panel is unable to communicate with the wireless receiver.</td>
<td>Verify the receiver is properly connected to the panel. Verify the correct House Code is programmed in System Options. Satisfy the front and/or rear tamper.</td>
</tr>
<tr>
<td></td>
<td>The wireless receiver’s tamper may be faulted.</td>
<td></td>
</tr>
</tbody>
</table>
22.14 Area Account Number Messages

XR150/XR550 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 panel 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 panel 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 panel sends the following messages using the area account number based on the area number:

- Late to Arm for area schedules
Certifications

California State Fire Marshal (CSFM)
FCC Part 15
FCC Part 68 Registration ID CCKAL00BXR550
New York City (FDNY COA #6167)
NIST AES Algorithm Certificate #2350 128-bit
NIST AES Algorithm Certificate #2595 256-bit
SIA

Meets ANSI/SIA CP-01-2010 False Alarm Reduction

Underwriters Laboratory (UL) Listed
- ANSI/UL 294 Access Control System Units
- 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 9th Edition

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
- UL Standard Line Security
- UL Encrypted Standard Line Security

Export Control

The XR550 with encryption uses AES encryption and any export beyond the United States must be in accordance with Export Administration Regulations.
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 computer 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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Information furnished by DMP is believed to be accurate and reliable. This information is subject to change without notice.
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## Certifications
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### Product Specifications Summary

#### 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: 16V AC 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
- 12 VDC output at 325 mA 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.

* See section 5.3 50 VA-75 VA 3-Pin Header for Transformer Types for panel output 2 Amp or 3 Amp current limitations.

#### 1.2 Communication

- Built-in network communication to DMP Model SCS-1R Receivers (Panels with Network/Encryption only)
- Built-in 128-bit or 256-bit encrypted communication to DMP Model SCS-1R Receivers (XR550 with Encryption only)
- Built-in Contact ID communication to DMP Model SCS-1R Receivers
- Optional 893A Dual Phone Line Module with phone line supervision
- Can operate as a local panel

**Note:** 256-bit encrypted messages to SCS-1R receiver only communicate when using SCS-104 Receiver Line Cards with Version 102 or higher software.

#### 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 16 of the following supervised keypads and expansion modules to keypad bus:

- Alphanumeric keypads
- Four, Eight- and/or single-zone expansion modules
- Single-zone detectors
- Access control modules
- Wireless Keypads (maximum of 7)

#### 1.5 LX500-LX900 Bus™

You can connect the following devices to the LX-Bus™ connections provided on the panel. See Accessory Devices section 3.3.

- Four, eight, sixteen- and/or single-zone expansion modules
- Single-zone detectors
- Relay output expansion modules
- Graphic annunciator modules

#### 1.6 Outputs

The XR150/XR550 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 XR150/XR550 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.
# Panel Specifications

## 1.7 Enclosure Specifications

The XR150/XR550 Series panels are shipped in an enclosure with a transformer, End-of-Line resistors, battery leads, user’s guide, and programming sheets.

<table>
<thead>
<tr>
<th>Enclosure Model</th>
<th>Size</th>
<th>Color(s)</th>
<th>Construction (Cold Rolled Steel)</th>
</tr>
</thead>
<tbody>
<tr>
<td>350</td>
<td>17.5&quot;W x 13.5&quot;H x 3.5&quot;D</td>
<td>Gray (G) or Red (R)</td>
<td>18-Gauge</td>
</tr>
<tr>
<td>350A</td>
<td>17.5&quot;W x 13.5&quot;H x 3.75&quot;D</td>
<td>Gray (G)</td>
<td>18-Gauge with 16-Gauge door</td>
</tr>
<tr>
<td>341</td>
<td>13.22&quot;W x 7.0&quot;H x 3.5&quot;D</td>
<td>Gray (G)</td>
<td>20-Gauge</td>
</tr>
<tr>
<td>349</td>
<td>12.5&quot;W x 11.5&quot;H x 3.5&quot;D</td>
<td>Gray (G)</td>
<td>20-Gauge</td>
</tr>
<tr>
<td>352X</td>
<td>14.5&quot;W x 32.0&quot;H x 4.0&quot;D</td>
<td>Gray (G)</td>
<td>16-Gauge</td>
</tr>
</tbody>
</table>

## Panel Features

### 2.1 Description

The DMP XR150/XR550 Series system is made up of an alarm panel with a built-in communicator, an enclosure, battery, one transformer, and keypads. Each panel is a versatile 12VDC, combined access control, burglary, and fire communicator panel with battery backup. The panels provide eight on-board burglary zones and two on-board 12VDC Class B powered zones. The powered zones have a reset capability to provide for 2-wire smoke detectors, relays, or other latching devices. Combined current requirements of additional modules may require an auxiliary power supply. Refer to the Power Requirements section in this guide when calculating power requirements. The panels can communicate to DMP SCS-1R Receivers using digital dialer, cellular, network, or Contact ID communication. Panels using cellular, network, or encrypted communication can also communicate to DMP SCS-VR Receivers.

### 2.2 Zone Expansion

Each panel provides multiple options for zone expansion:

- 10 on-board zones
- Up to 64 programmable keypad zones
- Up to 500 LX-Bus zones

Using DMP LCD keypad remote zone capability and zone expansion modules, additional zones are available on each panel:

- XR550 provides up to 574 additional zones
- XR150 provides up to 142 additional zones

The panel keypad data bus supports up to 16 supervised device addresses with each address supporting up to four programmable expansion zones (64 total).

Using the on board LX-Bus connections, and any combination of single, four, eight, or sixteen-zone expansion modules and single-zone LX-Bus detectors, additional zones are available on each panel:

- XR550 provides up to 500 additional zones (LX500-LX900)
- XR150 provides up to 100 additional zones (LX500)

**Note:** Do not use shielded or twisted pair wiring for LX-Bus or Keypad Bus circuits.

### 2.3 Output Expansion

In addition to the two SPDT relays and four programmable open collector outputs on the XR150/XR550 Series, you can also connect up to 25 programmable Model 716 Output Expansion Modules to each LX-Bus. These modules can provide an additional 500 or 100 programmable SPDT relays.

The panels provide 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. To follow Keypad Bus addresses nine through 16, install multiple 716 modules. Refer to the 717 Installation Guide (LT-0235) and 716 Installation Guide (LT-0183).
2.4 Central Station Communication

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

2.5 Encrypted Communications (XR550 with Network & Encryption Only)

An XR550 panel can communicate using AES encryption. If you currently have an XR550 panel with network capability, you may contact DMP Customer Service with the panel serial number. The serial number(s) should be sent in writing via e-mail or fax. A separate feature key is sent for each panel to activate encrypted communications using the Feature Upgrade process. Encrypted communication cannot be enabled on a XR550 panel without network communication capabilities. For more information on the Feature Upgrade process see the XR150/XR550 Series Programming Guide (LT-1232).

Note: 256-bit encrypted messages to SCS-1R receiver only communicate when using SCS-104 Receiver Line Cards with Version 102 or higher software.

2.6 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 panel 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.

2.7 Compliance Instructions

For applications that must conform to a local authorities installation standard or a National Recognized Testing Laboratory certificated system, please see the Compliance Listing Guide LT-1330 for additional instructions.
3.1 Wiring Diagram

The XR150/XR550 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 3.3.

![XR150/XR550 Series Wiring Diagram](image)

- 3.1 Amp Max
- 13.8 VDC to 10.2 VDC
- 1.5 Amp Max
- 1.0k Ohm - DMP Model 311
- 3.3k Ohm - DMP Model 309
- 5k Ohm - DMP Model 308

### System Components

**3.2 Lightning Protection**

Metal Oxide Varistors and Transient Voltage Suppressors help protect against voltage surges on panel input and output circuits. Additional surge protection is available by installing the DMP 370 or 370RJ Lightning Suppressors or Model 270 Network Transient Suppression Module.
### 3.3 Accessory Devices

#### Cellular Communicator Cards
- **263LTE Cellular Communicator**: Allows you to connect the XR150/XR550 Series to the Verizon LTE network.
- **263H HSPA+ Cellular Communicator**: Allows you to connect the XR150/XR550 Series to any compatible HSPA/SMS network.

#### Accessory Modules
- **270 Network Transient Suppression Module**: Provides transient surge protection for the ETHERNET Connector.
- **277 Trouble Sounder**: Provides local sounder for monitoring of panel operations and loss of Keypad Bus.
- **370/370RJ Lightning Suppressor**: Provides protection against voltage surges on panel input and output circuits.
- **893A Dual Phone Line Module**: Allows you to supervise two standard phone lines connected to an XR150/XR550 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.

#### 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 12VDC 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 Modules**: Provides system codeless entry, arming and disarming using access control readers.

#### Wi-Fi™ Module
- **763 Module**: Allows you to add Wi-Fi alarm signal communication to XR150 Series with Version 112 or higher firmware and Level F hardware and XR550 Series panels with Version 112 or higher firmware.

#### DMP Two-Way Wireless Devices
- **1100X/1100XH Receiver**: Supports up to 500/100 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 wireless window transmitter.
- **1114 Four-Zone Expander**: Provides four wireless zones.
- **1115 Wireless Temperature Sensor and Flood Detector**: Temperature and flood detector with an internal temperature sensor. Can be paired with 470PB or T280R remote sensors.
- **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.
- **1122 PIR Motion Detector**: Provides motion detection with pet immunity.
- **1126R 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 Wireless Siren**: Provides a wireless siren.
<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1137</td>
<td>Wireless LED Emergency Light, provides path lighting in the event of an alarm or trouble such as Burglary Alarm Output or can be activated simultaneously by the panel via the Trip with Panel Bell feature.</td>
</tr>
<tr>
<td>1139</td>
<td>Bill Trap, provides a silent alarm option for retail and banking cash drawers.</td>
</tr>
<tr>
<td>1141</td>
<td>Wall Button, one button wall mounted wireless transmitter.</td>
</tr>
<tr>
<td>1142</td>
<td>Two-button Panic Transmitter, provides permanently mounted under-the-counter two-button panic operation.</td>
</tr>
<tr>
<td>1142BC</td>
<td>Two-button Panic Belt Clip Transmitter, provides portable two-button panic operation.</td>
</tr>
<tr>
<td>1144-4</td>
<td>Four-Button 1144 Series Key Fob transmitters designed to clip onto a key ring or lanyard.</td>
</tr>
<tr>
<td>1144-2</td>
<td>Two-Button 1144 Series Key Fob transmitters designed to clip onto a key ring or lanyard.</td>
</tr>
<tr>
<td>1144-2-P</td>
<td>Two-Button with Prox 1144 Series Key Fob transmitters designed to clip onto a key ring or lanyard.</td>
</tr>
<tr>
<td>1144-D</td>
<td>Two Button Panic 1144 Series Key Fob transmitters designed to clip onto a key ring or lanyard.</td>
</tr>
<tr>
<td>1144-1</td>
<td>One-Button 1144 Series Key Fob transmitters designed to clip onto a key ring or lanyard.</td>
</tr>
<tr>
<td>1144-1-P</td>
<td>One-Button with Prox 1144 Series Key Fob transmitters designed to clip onto a key ring or lanyard.</td>
</tr>
<tr>
<td>1148</td>
<td>Personal Pendant, a one-button, wireless emergency transmitter designed to be worn as a wristband or on a break-away lanyard. The 1148 may be used to activate an event at the receiver.</td>
</tr>
<tr>
<td>1154</td>
<td>4-Zone Takeover Module, converts up to four existing normally closed, hardwired zones into wireless zones.</td>
</tr>
<tr>
<td>1164</td>
<td>Wireless Synchronized Smoke Detector, commercial or residential, battery powered, wireless, low profile, photoelectric smoke detector, with synchronizing sounder.</td>
</tr>
<tr>
<td>1166</td>
<td>Wireless Smoke Ring, installs on any tradational AC-powered, three wire, interconnected smoke alarm system.</td>
</tr>
<tr>
<td>1183-135F</td>
<td>Heat Detector, fixed temperature heat detector.</td>
</tr>
<tr>
<td>1184</td>
<td>Carbon Monoxide Detector, carbon monoxide detector.</td>
</tr>
</tbody>
</table>

**Interface Modules**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>736P</td>
<td>Radionics™ Popit Interface, allows a Radionics™ POPIT System to interface with DMP XR150/XR550 Series panels while maintaining Radionics™ wiring.</td>
</tr>
<tr>
<td>738A</td>
<td>Ademco Interface, allows Ademco™ 5881 wireless receivers to interface with DMP XR150/XR550 Series panels.</td>
</tr>
<tr>
<td>738Zplus</td>
<td>Z-Wave Interface Module, provides connection for Z-Wave modules.</td>
</tr>
</tbody>
</table>

**Indicating and Initiating Devices**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>860</td>
<td>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 @ 30VDC. Sockets are provided to allow the addition of three Model 305 plug-in relays. These relays can be used for electrical isolation between the alarm panel and another system or switching 5, 12, or 24 Volts to control various functions within a building or around its perimeter.</td>
</tr>
<tr>
<td>865</td>
<td>Supervised Style W or X Notification Circuit Module, provides supervised alarm current when using the XR150/XR550 Series panel bell output and up to 5 Amps at 12 or 24VDC when using a listed auxiliary power supply. The 865 can supervise 2-wire or 4-wire style circuits for opens and shorts with individual LED annunciation.</td>
</tr>
<tr>
<td>866</td>
<td>Style W Notification Circuit Module, provides supervised alarm current using the XR150/XR550 Series panel bell output and up to 5 Amps at 12 or 24VDC when using a listed auxiliary power supply. The 866 can supervise 2-wire Style W circuits for opens and shorts.</td>
</tr>
<tr>
<td>867</td>
<td>Style W LX-Bus Notification Circuit Module, provides supervised alarm current using the XR150/XR550 Series panel bell output and up to 5 Amps at 12 or 24VDC when using a listed auxiliary power supply. The 867 connects to the XR150/XR550 Series panel LX-Bus and provides one 2-wire Style W notification circuit for open and short conditions. Individual Bell Relay addresses Bell Ring styles.</td>
</tr>
<tr>
<td>869</td>
<td>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.</td>
</tr>
</tbody>
</table>

**Keypads**

<table>
<thead>
<tr>
<th>Keadp Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCD</td>
<td>Allows you to control the panel from various remote locations. Connect up to sixteen Model 630F Remote Fire Command Center, Model 7060, 7063, 7070, 7073, 7160, 7163, 7170, 7173 Thinline™ keypads, or 7060A, 7063A, 7070A, 7073A Aqualite™ keypads to the keypad bus using terminals 7, 8, 9, and 10.</td>
</tr>
<tr>
<td>7800 Series Graphic Touchscreen keypads</td>
<td>Allows you to control the panel from various remote locations. Connect up to sixteen Model 7872 or 7873 Graphic Touchscreen keypads to the keypad bus using terminals 7, 8, 9, and 10.</td>
</tr>
<tr>
<td>9000 Series Wireless keypads</td>
<td>Allows you to control the panel from various remote locations. Connect up to seven 9060/9063 Wireless Keypads.</td>
</tr>
<tr>
<td>9862 Wireless Graphic Touchscreen Keypad</td>
<td>Allows you to control the panel from various remote locations. Associate up to seven 9862 Wireless Graphic Touchscreen Keypads.</td>
</tr>
</tbody>
</table>

**Addressable Smoke Detectors**

<table>
<thead>
<tr>
<th>Smoke Detector</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2W-BLX, 2WT-BLX</td>
<td>Single-zone, addressable conventional smoke, smoke/heat detectors that connect to the LX-Bus. Includes drift compensation.</td>
</tr>
</tbody>
</table>
**Installation**

### 4.1 Mounting the Enclosure

The metal enclosure for the XR150/XR550 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 panel PCB when installing the enclosure. Figure 2 shows the mounting hole locations for the Model 350/350A Enclosures. Figure 3 shows the Model 341 Kiosk Enclosure. Figure 4 shows the Model 352X panel cabinet and 352S shelf cabinet for multiple batteries. 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.

![Figure 2: XR550 Series in Model 350 or 350A Enclosure](image)

![Figure 3: XR550 Series in Model 341 Enclosure](image)
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. All DMP keypad housings are designed to easily install on any 4” square box, 3-gang switch box, DMP 695 and 696 backbox, or a flat surface.

The keypad housing is made up of two parts: the front, which contains the circuit board and keyboard components and the base. Use the following steps and figures to separate the keypad front and base.

1. Insert a flat screwdriver into one of the slots on the bottom of the keypad and gently lift the screwdriver handle toward you while pulling the halves apart. Repeat with the other slot.
2. Using your hands, gently separate the front from the base and set the front and components aside.
3. 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.

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.

Figure 4: XR550 Series in Model 352X Enclosure and Separate 352S Enclosure with Shelves
### 4.3 Connecting LX-Bus™, AX-Bus™ and Keypad Bus Devices

Connections for LX-Bus/AX-Bus and Keypads are provided through the PROG, LX500, LX600, LX700, LX800, and LX900 4-pin headers and the keypad bus. Several factors determine the DMP LX-Bus/AX-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/AX-Bus and keypad bus installation, keep in mind the following information:

1. **DMF recommends using 18 or 22-gauge unshielded wire** for all LX-Bus/AX-Bus and keypad circuits. Do not use twisted pair or shielded wire for LX-Bus/AX-Bus and keypad bus data circuits.

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 (12VDC nominal) with battery backup.

   **Note:** Each panel allows a specific number of supervised keypads. Add additional keypads in the unsupervised mode. Refer to the Keypad Bus section 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/AX-Bus devices on the first 2,500 foot circuit is 40 devices.

4. Maximum voltage drop between the panel (or auxiliary power supply) and any device is 2.0VDC. If the voltage at any device is less than the required level, add an auxiliary power supply at the end of the circuit. When voltage is too low, the devices cannot operate properly.

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

### 4.4 Wireless Keypad Association

Enable Wireless Keypad Association operation on the keypad and panel.

To enable wireless keypad association operation on a LCD Wireless keypad (Models 9060 and 9063), press and hold the Back Arrow key and CMD until SET BRIGHTNESS displays. Enter the code 3577 (INST) and press CMD. Press KPD RF to start the RF survey communication. The keypad displays its wireless serial number and RF SURVEY.

To enable association operation on a Wireless Graphics Touchscreen keypad (Model 9862), access the Options menu through the carousel menu. While in the Options display, press the Installer Options icon. Enter the code 3577 (INST) and press CMD. Press KPD RF to start the RF survey communication. The keypad displays its wireless serial number and RF SURVEY.

The keypad Power/Armed LED turns Red, indicating communication has not yet been established with the panel receiver. When successful communication has been established, the Power/Armed LED turns Blue on Graphics keypads or Green on LCD keypads.

To enable wireless keypad association operation on the XR150/XR550 panel reset the panel three times allowing the keypad bus transmit light to begin flashing between each reset.

For 60 seconds the panel listens for wireless keypads that are in RF Survey mode and have not been programmed or associated into another panel. When the keypad associates with the panel the keypad logo LED turns from Red to Green.

Wireless keypads are assigned to the first open device position in Device Setup automatically based upon the order in which they are detected.

---

![Transmit/Receive LEDs](image-url)
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 panel.

⚠️ Always ground the panel before applying power to any devices: The XR150/XR550 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 the Earth ground section.

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 50VA-75VA 3-Pin Header for Transformer Types
Place the jumper on the left two pins labeled 50VA for a Maximum 2 Amp (Bell+Aux+Smoke+XBUS+LX500-LX900) 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+XBUS+LX500-LX900) when using the Model 324/324P 100 VA wire-in transformer.
### 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 XR150/XR550 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. See Figure 6.

*Use sealed lead-acid batteries only:* Use the DMP Model 364 (12VDC 1.3Ah), Model 365 (12VDC 9 Ah), Model 366 (12VDC 18 Ah), Model 368 (12VDC 5.0 Ah), or Model 369 (12VDC 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 XR150/XR550 SERIES PANEL.

#### 6.2 Earth Ground (GND)
The XR150/XR550 Series panel terminal 4 can be connected to earth ground using 14 gauge or larger wire. Connect to a cold water pipe, ground rod, or building ground when available. Connection to an electrical ground or conduit can also be used. Gas pipes or sprinkler pipes should not be used. A ground connection is not required to provide normal system operation.

#### 6.3 Battery Only Restart
When powering up the XR150/XR550 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 XR150/XR550 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 XR150/XR550 Series battery charging circuit float charges at 13.8 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 XR150/XR550 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 11.9VDC 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.
### 6.8 Power Requirements

During AC power failure, the XR150/XR550 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 XR150/XR550 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.

<table>
<thead>
<tr>
<th>Standby Battery Power Calculations</th>
<th>Standby Current</th>
<th>Alarm Current</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>XR150/XR550 Series Control Panel</strong></td>
<td>Qty 1 x 174mA</td>
<td>Qty 1 x 217mA</td>
</tr>
<tr>
<td>Relay Outputs 1-2 (ON)</td>
<td>Qty __________ x 30mA</td>
<td>Qty __________ x 30mA</td>
</tr>
<tr>
<td>Switch Grounds 3-6 (ON)</td>
<td>Qty __________ x 5mA</td>
<td>Qty __________ x 5mA</td>
</tr>
<tr>
<td>Active Zones 1-8</td>
<td>Qty __________ x 1.6mA</td>
<td>Qty __________ x 2mA*</td>
</tr>
<tr>
<td>Active Zones 9-10</td>
<td>Qty __________ x 4mA</td>
<td>Qty __________ x 30mA</td>
</tr>
<tr>
<td>2-Wire Smoke Detectors</td>
<td>Qty __________ x 0.1mA</td>
<td>Qty __________ x 0.1mA</td>
</tr>
<tr>
<td>Panel Bell Output</td>
<td>Qty __________ x 1500mA</td>
<td>Qty __________ x 1500mA</td>
</tr>
<tr>
<td>893A Dual Phone Line Module</td>
<td>Qty __________ x 12mA</td>
<td>Qty __________ x 50mA</td>
</tr>
<tr>
<td>263LTE Cellular Communicator</td>
<td>Qty __________ x 13mA</td>
<td>Qty __________ x 13mA</td>
</tr>
<tr>
<td>263H HSPA+ Cellular Communicator</td>
<td>Qty __________ x 24mA</td>
<td>Qty __________ x 28mA</td>
</tr>
<tr>
<td>277 Buzzer Module</td>
<td>Qty __________ x 5mA</td>
<td>Qty __________ x 5mA</td>
</tr>
<tr>
<td>1100X Wireless Receiver</td>
<td>Qty __________ x 46mA</td>
<td>Qty __________ x 46mA</td>
</tr>
<tr>
<td>1100XH Wireless High Power Receiver</td>
<td>Qty __________ x 160mA</td>
<td>Qty __________ x 160mA</td>
</tr>
<tr>
<td>860 Relay Output Module (one relay active)</td>
<td>Qty __________ x 138mA</td>
<td>Qty __________ x 138mA</td>
</tr>
<tr>
<td>All four relays active</td>
<td>Qty __________ x 138mA</td>
<td>Qty __________ x 138mA</td>
</tr>
<tr>
<td>865 Style Y or Z Notification Module</td>
<td>Qty __________ x 26mA</td>
<td>Qty __________ x 85mA</td>
</tr>
<tr>
<td>866 Style W Notification Module</td>
<td>Qty __________ x 45mA</td>
<td>Qty __________ x 76mA</td>
</tr>
<tr>
<td>867 LX-Bus Style W Notification Module</td>
<td>Qty __________ x 30mA</td>
<td>Qty __________ x 86mA</td>
</tr>
<tr>
<td>869 Dual Style D Initiating Module</td>
<td>Qty __________ x 25mA</td>
<td>Qty __________ x 75mA</td>
</tr>
<tr>
<td>630F Remote Fire Command Center</td>
<td>Qty __________ x 63mA</td>
<td>Qty __________ x 92mA</td>
</tr>
<tr>
<td>7060/7160 Thinline/7060A Aqualite Keypad</td>
<td>Qty __________ x 72mA</td>
<td>Qty __________ x 80mA</td>
</tr>
<tr>
<td>7063/7163 Thinline/7063A Aqualite Keypad</td>
<td>Qty __________ x 85mA</td>
<td>Qty __________ x 100mA</td>
</tr>
<tr>
<td>7070/7170 Thinline/7070A Aqualite Keypad</td>
<td>Qty __________ x 87mA</td>
<td>Qty __________ x 10mA*</td>
</tr>
<tr>
<td>Active Zones (EOL Installed)</td>
<td>Qty __________ x 1.6mA</td>
<td>Qty __________ x 1.6mA</td>
</tr>
<tr>
<td>7073/7173 Thinline/7073A Aqualite Keypad</td>
<td>Qty __________ x 100mA</td>
<td>Qty __________ x 100mA*</td>
</tr>
<tr>
<td>Active Zones (EOL Installed)</td>
<td>Qty __________ x 2mA</td>
<td>Qty __________ x 2mA</td>
</tr>
<tr>
<td>7760 Clear Touch Keypad</td>
<td>Qty __________ x 65mA</td>
<td>Qty __________ x 115mA</td>
</tr>
<tr>
<td>7872 Graphic Touchscreen Keypad</td>
<td>Qty __________ x 130mA</td>
<td>Qty __________ x 188mA</td>
</tr>
<tr>
<td>Active Zones (EOL Installed)</td>
<td>Qty __________ x 1.6mA</td>
<td>Qty __________ x 2mA*</td>
</tr>
<tr>
<td>7873 Graphic Touchscreen Keypad</td>
<td>Qty __________ x 130mA</td>
<td>Qty __________ x 188mA</td>
</tr>
<tr>
<td>Active Zones (EOL Installed)</td>
<td>Qty __________ x 1.6mA</td>
<td>Qty __________ x 2mA*</td>
</tr>
<tr>
<td>734 Wiegand Interface Module</td>
<td>Qty __________ x 15mA</td>
<td>Qty __________ x 15mA</td>
</tr>
<tr>
<td>Active Zones (EOL Installed)</td>
<td>Qty __________ x 1.6mA</td>
<td>Qty __________ x 2mA*</td>
</tr>
<tr>
<td>Annunciator (ON)</td>
<td>Qty __________ x 20mA</td>
<td>Qty __________ x 20mA</td>
</tr>
<tr>
<td>734N Wiegand Interface Module</td>
<td>Qty __________ x 146mA</td>
<td>Qty __________ x 148mA</td>
</tr>
<tr>
<td>Active Zones (EOL Installed)</td>
<td>Qty __________ x 2mA*</td>
<td>Qty __________ x 2mA*</td>
</tr>
<tr>
<td>Annunciator (ON)</td>
<td>Qty __________ x 20mA</td>
<td>Qty __________ x 20mA</td>
</tr>
<tr>
<td>Wiegand Reader</td>
<td>Qty __________ x 200mA</td>
<td>Qty __________ x 200mA</td>
</tr>
<tr>
<td>734N-WiFi Wiegand Interface Module</td>
<td>Qty __________ x 146mA</td>
<td>Qty __________ x 148mA</td>
</tr>
<tr>
<td>Active Zones (EOL Installed)</td>
<td>Qty __________ x 2mA*</td>
<td>Qty __________ x 2mA*</td>
</tr>
<tr>
<td>Annunciator (ON)</td>
<td>Qty __________ x 20mA</td>
<td>Qty __________ x 20mA</td>
</tr>
<tr>
<td>Wiegand Reader</td>
<td>Qty __________ x 200mA</td>
<td>Qty __________ x 200mA</td>
</tr>
</tbody>
</table>

*Copy Sub-Totals to next page*

<table>
<thead>
<tr>
<th>Sub-Total Standby</th>
<th>Sub-Total Alarm</th>
</tr>
</thead>
<tbody>
<tr>
<td>______mA</td>
<td>______mA</td>
</tr>
</tbody>
</table>

*Based on 10% of active zones in alarm.*
### INSTALLATION

#### Standby Battery Power Calculations

<table>
<thead>
<tr>
<th>Standby Battery Type</th>
<th>Qty</th>
<th>Current</th>
<th>Alarm Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>736P POPIT Interface Module</td>
<td>Qty</td>
<td>x 25mA</td>
<td>Qty</td>
</tr>
<tr>
<td>Radionics Popex, POPITs, OctoPOPITs</td>
<td>Qty</td>
<td>x ___mA</td>
<td>Qty</td>
</tr>
<tr>
<td>738A Ademco Wireless Interface Module</td>
<td>Qty</td>
<td>x 75mA</td>
<td>Qty</td>
</tr>
<tr>
<td>738Z Z-Wave Interface Module</td>
<td>Qty</td>
<td>x 35mA</td>
<td>Qty</td>
</tr>
<tr>
<td>763 Wi-Fi Module</td>
<td>Qty</td>
<td>x 31mA</td>
<td>Qty</td>
</tr>
<tr>
<td>710 Bus Splitter/Repeater Module</td>
<td>Qty</td>
<td>x 32mA</td>
<td>Qty</td>
</tr>
<tr>
<td>711 Zone Expansion Module</td>
<td>Qty</td>
<td>x 11mA</td>
<td>Qty</td>
</tr>
<tr>
<td>Active Zone (EOL Installed)</td>
<td>Qty</td>
<td>x 1.6mA</td>
<td>Qty</td>
</tr>
<tr>
<td>714 Zone Expansion Module</td>
<td>Qty</td>
<td>x 7mA</td>
<td>Qty</td>
</tr>
<tr>
<td>Active Zones (EOL Installed)</td>
<td>Qty</td>
<td>x 1.6mA</td>
<td>Qty</td>
</tr>
<tr>
<td>712-8 Zone Expansion Module</td>
<td>Qty</td>
<td>x 17mA</td>
<td>Qty</td>
</tr>
<tr>
<td>Active Zones (EOL Installed)</td>
<td>Qty</td>
<td>x 1.6mA</td>
<td>Qty</td>
</tr>
<tr>
<td>714-8, 714-16 Zone Expansion Module</td>
<td>Qty</td>
<td>x 20mA</td>
<td>Qty</td>
</tr>
<tr>
<td>Active Zones (EOL Installed)</td>
<td>Qty</td>
<td>x 1.6mA</td>
<td>Qty</td>
</tr>
<tr>
<td>715 Zone Expansion Module</td>
<td>Qty</td>
<td>x 7mA</td>
<td>Qty</td>
</tr>
<tr>
<td>2-Wire Smokes</td>
<td>Qty</td>
<td>x 4mA</td>
<td>Qty</td>
</tr>
<tr>
<td>Qty</td>
<td>x .1mA</td>
<td>Qty</td>
<td>x .1mA</td>
</tr>
<tr>
<td>715-8, 715-16 Zone Expansion Modules</td>
<td>Qty</td>
<td>x 20mA</td>
<td>Qty</td>
</tr>
<tr>
<td>Active Zones (EOL Installed)</td>
<td>Qty</td>
<td>x 4mA</td>
<td>Qty</td>
</tr>
<tr>
<td>Qty</td>
<td>x .1mA</td>
<td>Qty</td>
<td>x .1mA</td>
</tr>
<tr>
<td>716 Output Expansion Module</td>
<td>Qty</td>
<td>x 13mA</td>
<td>Qty</td>
</tr>
<tr>
<td>Active Form C Relays</td>
<td>Qty</td>
<td>x 12mA</td>
<td></td>
</tr>
<tr>
<td>717 Graphic Annunciator Module</td>
<td>Qty</td>
<td>x 10mA</td>
<td>Qty</td>
</tr>
<tr>
<td>Annunciator Outputs</td>
<td>Qty</td>
<td>x 1mA</td>
<td></td>
</tr>
<tr>
<td>2W-BLX, 2WT-BLX Smoke Detectors</td>
<td>Qty</td>
<td>x 11mA</td>
<td>Qty</td>
</tr>
<tr>
<td>COSMOD2W Module</td>
<td>Qty</td>
<td>x 45mA</td>
<td>Qty</td>
</tr>
<tr>
<td>COSMO-2W Smoke and CO Detectors</td>
<td>Qty</td>
<td>x 1mA</td>
<td>Qty</td>
</tr>
<tr>
<td>572 Indicator LED</td>
<td>Qty</td>
<td>x 20mA</td>
<td>Qty</td>
</tr>
<tr>
<td>Aux. Powered Devices on Terminals 7 and 11</td>
<td>______mA</td>
<td>______mA</td>
<td></td>
</tr>
<tr>
<td>Other than Keypads and LX-Bus Modules</td>
<td>______mA</td>
<td>______mA</td>
<td></td>
</tr>
</tbody>
</table>

#### Sub-Totals this page

Sub-Total Standby ______mA |
Sub-Total Alarm ______mA

#### Sub-Totals from previous page

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.

Total Standby ______mA x number of Standby Hours needed ______ = ______mA-hours

Total Alarm ______mA + ______mA-hours

Total ______mA-hours

X .001

= ______Amp-hrs Required

Refer to section 6.9 for standby battery selection.
### 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 XR150/XR550 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 1.3 Ah) when used in 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 5.0 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, batteries can be installed in a DMP Model 349, 350 or 352S enclosure and all wiring shall run through conduit. The enclosure shall be installed to the left of the XR150/XR550 Series enclosure to ensure Battery and AC wire separation.

#### 24 hours of standby power

<table>
<thead>
<tr>
<th>5.0 Ah Batteries</th>
<th>7 Ah Batteries</th>
<th>7.7 Ah Batteries</th>
<th>9 Ah Batteries</th>
<th>18 Ah Batteries</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Batteries</td>
<td>No. of Batteries</td>
<td>No. of Batteries</td>
<td>No. of Batteries</td>
<td>No. of Batteries</td>
</tr>
<tr>
<td>8 2</td>
<td>12 3</td>
<td>22 3</td>
<td>29 4</td>
<td>37 5</td>
</tr>
<tr>
<td>8 2</td>
<td>12 3</td>
<td>22 3</td>
<td>29 4</td>
<td>37 5</td>
</tr>
<tr>
<td>13 2</td>
<td>20 3</td>
<td>27 4</td>
<td>33 5</td>
<td>40 6</td>
</tr>
<tr>
<td>13 2</td>
<td>20 3</td>
<td>27 4</td>
<td>33 5</td>
<td>40 6</td>
</tr>
</tbody>
</table>
| 16 2  | 25 3  | 33 4  | 42 5  | 50 6  | 59 7  | 67 8  | 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

<table>
<thead>
<tr>
<th>7 Ah Batteries</th>
<th>7.7 Ah Batteries</th>
<th>9 Ah Batteries</th>
<th>18 Ah Batteries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Ah Available</td>
<td>Max. Ah Available</td>
<td>Max. Ah Available</td>
<td>Max. Ah Available</td>
</tr>
<tr>
<td>No. of Batteries</td>
<td>No. of Batteries</td>
<td>No. of Batteries</td>
<td>No. of Batteries</td>
</tr>
<tr>
<td>13 2</td>
<td>14 2</td>
<td>17 2</td>
<td>17 1</td>
</tr>
<tr>
<td>20 3</td>
<td>22 3</td>
<td>26 3</td>
<td>34 2</td>
</tr>
<tr>
<td>27 4</td>
<td>29 4</td>
<td>34 4</td>
<td>43 4</td>
</tr>
<tr>
<td>33 5</td>
<td>37 5</td>
<td>43 5</td>
<td>52 6</td>
</tr>
<tr>
<td>40 6</td>
<td>44 6</td>
<td>52 6</td>
<td>61 7</td>
</tr>
<tr>
<td>47 7</td>
<td>52 7</td>
<td>61 7</td>
<td>69 8</td>
</tr>
</tbody>
</table>
| 54 8  | 59 8  | 69 8  | 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

<table>
<thead>
<tr>
<th>9 Ah Batteries</th>
<th>18 Ah Batteries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Ah Available</td>
<td>Max. Ah Available</td>
</tr>
<tr>
<td>No. of Batteries</td>
<td>No. of Batteries</td>
</tr>
<tr>
<td>16 2</td>
<td>16 1</td>
</tr>
<tr>
<td>25 3</td>
<td>33 2</td>
</tr>
<tr>
<td>33 4</td>
<td>50 3</td>
</tr>
<tr>
<td>42 5</td>
<td>67 4</td>
</tr>
<tr>
<td>50 6</td>
<td>59 7</td>
</tr>
</tbody>
</table>
| 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 Bell 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
XR150/XR550 Series panel terminals 7, 8, 9, and 10 are for the keypad bus. You can connect up to 16 supervised keypads to the XR550 Series and 8 supervised keypads to the XR150 Series as well as multiple unsupervised keypads. In addition to DMP LCD keypads, you can also connect any combination of zone expansion modules to the data bus up to a total of 16 devices.

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 Programming (PROG) Connection
A 4-pin header PROG 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 PROG Header to connect Keypad Bus devices. This is an alternative to connecting keypad bus devices to terminals 7, 8, 9, and 10.

Note: The programming keypad must be set to address 1.

8.7 Keypad Bus LEDs
The two LEDs, located above the PROG connector, indicate data transmission and receipt. The left LED flashes green to indicate the panel is transmitting keypad bus data. The right LED flashes yellow to indicate the panel is receiving keypad bus data. See Figure 5.

8.8 OVC LED(s)
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 LED(s) turn a steady Red when lit. When the OVC LED(s) light Red, the appropriate LX-Bus(es) and Keypad bus are shut down.

- The OVC LED located to the left of the 893A connector indicates overcurrent for the Keypad Bus (Terminals 7-10 and PROG header), XBUS, and LX500-LX700.
- The OVC LED to the right of the CELL MODULE connector indicates overcurrent for LX800-LX900.
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, 27, and LX500-LX900.

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 XR150/XR550 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.

<table>
<thead>
<tr>
<th>Terminal</th>
<th>Function</th>
<th>Terminal</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Zone 1 voltage sensing</td>
<td>19</td>
<td>Zone 5 voltage sensing</td>
</tr>
<tr>
<td>14</td>
<td>Ground for Zones 1 and 2</td>
<td>20</td>
<td>Ground for Zones 5 and 6</td>
</tr>
<tr>
<td>15</td>
<td>Zone 2 voltage sensing</td>
<td>21</td>
<td>Zone 6 voltage sensing</td>
</tr>
<tr>
<td>16</td>
<td>Zone 3 voltage sensing</td>
<td>22</td>
<td>Zone 7 voltage sensing</td>
</tr>
<tr>
<td>17</td>
<td>Ground for Zones 3 and 4</td>
<td>23</td>
<td>Ground for Zones 7 and 8</td>
</tr>
<tr>
<td>18</td>
<td>Zone 4 voltage sensing</td>
<td>24</td>
<td>Zone 8 voltage sensing</td>
</tr>
</tbody>
</table>

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.

10.2 Operational Parameters
Each protection zone detects three conditions: Open, Normal, and Short. Listed below are voltage and resistance parameters for each condition:

<table>
<thead>
<tr>
<th>Condition</th>
<th>Resistance on zone</th>
<th>Voltage on positive terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open</td>
<td>over 1300 ohms</td>
<td>over 2.0 VDC</td>
</tr>
<tr>
<td>Normal</td>
<td>600 to 1300 ohms</td>
<td>1.2 to 2.0 VDC</td>
</tr>
<tr>
<td>Short</td>
<td>under 600 ohms</td>
<td>under 1.2 VDC</td>
</tr>
</tbody>
</table>

10.3 Zone Response Time
A condition must be present on a zone for 500 milliseconds before it is detected by the XR150/XR550 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.
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 13.8 VDC and the maximum normal standby current is 1.25 mA DC. The maximum line impedance is 100 Ohms. The maximum short circuit current is 56mA. When using zone expansion modules, use Model 309 EOL resistors. The 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 Zones 9 and 10. The panel views these zones (9 and 10) as “Open” while the power is absent.

**Note:** Refer to the Compliance Listing Guide LT-1330 for list of Compliance 2-wire smoke detectors.

12.1 Description

The XR150/XR550 Series panel provides two programmable auxiliary SPDT relays when equipped with two DMP Model 305 relays in sockets OUTPUT 1 and OUTPUT 2 and a Model 431 Output Harness on the OUT1-OUT2 6-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
5. Armed area annunciation
6. Fire Alarm, Fire Trouble or Supervisory
7. Ambush Alarm
8. Exit and Entry timers
9. System Ready
10. Late to Close
11. Panic Alarm
12. Ready
13. Armed
14. Disarmed
15. Burglary
16. Phone Trouble
17. Device Fail
18. Sensor Reset
19. Closing Wait

Refer to the XR150/XR550 Series Programming Guide (LT-1232) 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 6-pin OUT1-OUT2 header. OUTPUT 2 uses the top three prongs, and OUTPUT 1 uses the bottom three prongs. The wire harness and contact locations are shown below:

<table>
<thead>
<tr>
<th>Contact</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output 1 normally closed</td>
<td>Violet</td>
</tr>
<tr>
<td>Output 1 common</td>
<td>Gray</td>
</tr>
<tr>
<td>Output 1 normally open</td>
<td>Orange</td>
</tr>
<tr>
<td>Output 2 normally closed</td>
<td>Violet with white stripe</td>
</tr>
<tr>
<td>Output 2 common</td>
<td>White with gray stripe</td>
</tr>
<tr>
<td>Output 2 normally open</td>
<td>Orange with white stripe</td>
</tr>
</tbody>
</table>

The relay contacts must be connected to devices located within the same room as the XR150/XR550 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 at 50mA.

13.2 Model 300 Harness Wiring
Access the open collector outputs by installing DMP 300 Harness on the 4-pin OUTPUTS header. The output locations are shown below. For listed applications, devices connected to the outputs must be located within the same room as the panel.

<table>
<thead>
<tr>
<th>Output</th>
<th>Color</th>
<th>Wire</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Red</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Yellow</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Green</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>Black</td>
<td>4</td>
</tr>
</tbody>
</table>

13.3 Model 860 Relay Module
Connect a Model 860 Relay Module to the OUTPUTS header on the XR150/XR550 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)

Wireless Bus Expansion

14.1 Description
The XBUS Wireless Bus header provides connection for the 1100X or 1100XH Wireless Receiver. The XBUS provides up to 500 wireless zones numbered 500-999. Refer to the 1100X Wireless Receiver Install Guide (LT-0708) or the 1100XH Wireless Receiver Install Guide (LT-0970) for complete information.

- XR550 provides up to 500 zones
- XR150 provides up to 100 zones

14.2 Wireless Bus LEDs
The two LEDs, located above the XBus header, indicate data transmission and receipt. The left LED flashes green to indicate the panel is transmitting data. The right LED flashes yellow to indicate the panel is receiving data.
### 15.1 LX-Bus/AX-Bus Headers

XR Series control panels are capable of providing zone, output, and access control expansion by connecting hardware modules to the AX/LX-Bus headers on the control panel. XR150 panels are manufactured with one LX-Bus header labeled LX500. AX-Bus operation does not apply to XR150 panels. XR550 panels are manufactured with five AX/LX-Bus headers labeled LX500-LX900. Application determines if a header works in AX-Bus or LX-Bus operation.

#### LX-Bus (XR150/XR550)

LX-Bus operation is compatible with hardwired zone and output expanders. Each LX-Bus represents 100 addresses. An LX-Bus address provides one zone and one output of expansion.

- LX500, provides zones/outputs 500-599 (XR150, XR550).
- LX600, provides zones/outputs 600-699 (XR550 only).
- LX700, provides zones/outputs 700-799 (XR550 only).
- LX800, provides zones/outputs 800-899 (XR550 only).
- LX900, provides zones/outputs 900-999 (XR550 only).

#### AX-Bus (XR550):

AX-Bus operation is compatible only with XR550 control panels and DMP Model 734, 734N, and 734N-WIFI Wiegand Interface door access modules. All three door access modules provide one Form-C relay output and expansion zones. AX-Bus operation is not compatible with addressable zone and output expanders. Each AX-Bus represents predetermined addresses for 734, 734N, and 734N-WIFI operation: 16 addresses for door relay outputs, and 64 addresses for expansion zones.

#### Device Addresses and 734, 734N, and 734N-WIFI Zone Numbers

<table>
<thead>
<tr>
<th>Keypad Bus</th>
<th>LX/AX Bus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Device/Door</td>
<td>Zones</td>
</tr>
<tr>
<td>Device/Door</td>
<td>Zones</td>
</tr>
<tr>
<td>2</td>
<td>21-24</td>
</tr>
<tr>
<td>3</td>
<td>31-34</td>
</tr>
<tr>
<td>4</td>
<td>41-44</td>
</tr>
<tr>
<td>5</td>
<td>51-54</td>
</tr>
<tr>
<td>6</td>
<td>61-64</td>
</tr>
<tr>
<td>7</td>
<td>71-74</td>
</tr>
<tr>
<td>8</td>
<td>81-84</td>
</tr>
<tr>
<td>9</td>
<td>91-94</td>
</tr>
<tr>
<td>10</td>
<td>101-104</td>
</tr>
<tr>
<td>11</td>
<td>111-114</td>
</tr>
<tr>
<td>12</td>
<td>121-124</td>
</tr>
<tr>
<td>13</td>
<td>131-134</td>
</tr>
<tr>
<td>14</td>
<td>141-144</td>
</tr>
<tr>
<td>16</td>
<td>161-164</td>
</tr>
</tbody>
</table>

### 15.2 Device Addressing

Addressable expanders and door controllers identify themselves to the control panel by their programmed address, which allows the panel to uniquely identify devices. An addressable device’s address determines which numbers the zones, outputs and door controllers will be assigned in programming. Refer to the device’s installation guide for addressing information.
15.3 LX-Bus/AX-Bus LEDs
The two LEDs, located above each LX-Bus/AX-Bus header, indicate data transmission and receipt. The left LED flashes green to indicate the panel is transmitting LX-Bus/AX-Bus data. The right LED flashes yellow to indicate the panel is receiving LX-Bus/AX-Bus data.

15.4 OVC LEDs
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 LED(s) turn a steady Red when lit. When the OVC LED(s) light Red, the appropriate LX-Bus(es) and Keypad bus are shut down.
- The OVC LED located to the left of the 893A connector indicates overcurrent for the Keypad Bus (Terminals 7-10 and PROG header), XBUS, and LX500-LX700.
- The OVC LED to the right of the CELL MODULE connector indicates overcurrent for LX800-LX900.

ETHERNET Connector (Panels with Network/Encryption only)

16.1 Description
The ETHERNET Connector is available on the XR150/XR550 with network or encryption to connect directly to an Ethernet network using a standard patch cable. The ETHERNET Connector supports 100MB/s full duplex operation and the maximum impedance is 100 Ohms.

16.2 Ethernet LEDs
The two LEDs, located on the top edge of the ETHERNET Connector, indicate network connection. The left, Link LED lights up yellow when connected to a 100 Mb network and is off when connected to a 10Mb network. The right, Activity LED lights up green to indicate a valid receive connection from the host network.

16.3 Network Transient Suppression
The Model 270 Transient Suppression Module provides surge suppression from the Ethernet network for the protection of DMP Panels. Refer to the Model 270 Installation Sheet (LT-1316) for complete information.
PHONE LINE RJ Connector

17.1 Description
Connect the panel to the public telephone network by installing a DMP 356 RJ Cable between the panel PHONE LINE connector and the RJ31X or RJ38X phone block. The maximum 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 893A or 277 Connector
Connect an 893A Dual Phone Line Module or Model 277 Trouble Sounder to the 893A OR 277 connector on the panel. Refer to the 893A Installation Sheet (LT-0135) or 277 Installation Sheet (LT-1304) 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:
1. The particular line(s) where the service is connected
2. The FCC registration number as listed in Section 17.5
3. The ringer equivalence
4. The device make, model, and serial number

17.4 Phone Line Monitor
The XR150/XR550 Series panel has a built-in telephone monitor that monitors the phone line voltage to verify the connection to the central office. Figure 11 and the table below identify the phone block pin layout, wire numbers, and colors.

<table>
<thead>
<tr>
<th>Wire Number</th>
<th>Wire Color</th>
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<tr>
<td>1</td>
<td>Gray</td>
</tr>
<tr>
<td>2</td>
<td>Orange</td>
</tr>
<tr>
<td>3</td>
<td>Black</td>
</tr>
<tr>
<td>4</td>
<td>Red</td>
</tr>
<tr>
<td>5</td>
<td>Green</td>
</tr>
<tr>
<td>6</td>
<td>Yellow</td>
</tr>
<tr>
<td>7</td>
<td>Blue</td>
</tr>
<tr>
<td>8</td>
<td>Brown</td>
</tr>
</tbody>
</table>

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:
1. Unplug phone cord from RJ31X
2. Place butt-set on pins 4 and 5
3. Listen for dial tone. With dial tone present, lift either wire from pins 1 or 8
4. 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 XR150/XR550 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:CKAL00BXR550. 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 XR150/XR550 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 XR150/XR550 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 have specially wired alarm equipment connected to the telephone line, ensure the installation of the panel 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 XR150/XR550 Series Programming Guide (LT-1232). 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 RESET Header

The RESET header is located to the left of the EXP Expansion Header on the right side of the circuit board and is used to reset the XR150/XR550 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 TAMPER Header

The TAMPER 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.
Cellular Modules

19.1 CELL MODULE Header
The CELL MODULE header is located to the right of the EXP Expansion Module on the right side of the circuit board and is used to connect the DMP Model 263LTE or 263H HSPA+ Cellular Communicators. This provides a fully supervised alarm communication path for the XR150/XR550 panel. Refer to the 263LTE (LT-1592), or 263H (LT-1270) Installation Sheet for complete information.

19.2 Module Installation
1. Insert the PCB standoff end with flanges into the standoff hole in the panel PCB.
2. Align the PCB standoff with the standoff hole in the module PCB.
3. Press the module PCB card 12 pin connector onto the CELL MODULE connector on the panel while applying even pressure to both sides of the board to fully seat the module. See Figure 13.

Note: DO NOT MISALIGN THE CELL MODULE 12 PIN CONNECTOR ONTO THE CELL MODULE HEADER. If needed, the PCB can be removed from the enclosure to allow placement of the cell module.

19.3 Connecting the Antenna
1. Attach a 381 cable to the SMA connector on the cell module.
2. Position one of the supplied washers onto the other end of the 381 SMA connector and push the threaded end through an enclosure knockout.
3. Position the second washer onto the threaded end extending through the knockout and secure the nut.
4. Attach the included 383 Antenna to the SMA connector. See Figure 13.

Note: As an alternative, an antenna coax can be connected directly to the cell module SMA connector when the coax enters the enclosure via conduit.

Figure 13: Cellular Module Installation
Wi-Fi Connection

20.1 763 Module to EXP Header

The 763 Wi-Fi Module allows you to add Wi-Fi alarm signal communication to XR150/XR550 Series panels. The 763 connects to the 7-pin EXP header on compatible panels using the included cable and operates at 12 VDC from the panel power supply. The 763 Wi-Fi Module is compatible with all DMP XR150 Series Version 112 or higher firmware with Level F hardware and XR550 Series control panels Version 112 or higher firmware. Refer to the 763 Wi-Fi Module Installation Guide (LT-1421) for complete information.

20.2 Connecting the 763

NOTE: POWER MUST BE REMOVED FROM THE PANEL PRIOR TO CONNECTING THE 763 TO THE XR150/XR550 Series EXP HEADER. DAMAGE TO PANEL MAY OCCUR.

1. The included cable connects to the 763 6-pin header. See Figure 14.
2. Connect the opposite end of the cable to the panel EXP header provided on the XR150/XR550 Series panel.

20.3 Status LED

The 763 provides a Green link LED that displays constant to indicate network communication. See Figure 14 for LED location.

20.4 Mounting the 763

Install the 763 away from metal objects. DO NOT MOUNT THE 763 INSIDE OR ON A CONTROL PANEL METAL ENCLOSURE.

Mounting the module on or near metal surfaces impairs performance. The enclosure for the module should be mounted using the supplied screw in the mounting hole. Mount the enclosure in a secure, dry place to protect the communicator from damage due to tampering or the elements. It is not necessary to remove the PCB when installing the enclosure.

1. Remove the cover.
2. Connect the included cable to the 763 6-pin header.
3. Hold the transmitter base in its mounting location.
4. Place the supplied screw into the mounting hole location to secure the housing to the surface.

Figure 14: 763 to XR150/XR550 Series
Certifications

California State Fire Marshal (CSFM)
FCC Part 15
FCC Part 68 Registration ID CCKAL00BXR550
New York City (FDNY COA #6167)
XR550 with Encryption Only
NIST AES Algorithm Certificate #2350 128-bit
NIST AES Algorithm Certificate #2595 256-bit
SIA
Meets ANSI/SIA CP-01-2010 False Alarm Reduction

Underwriters Laboratory (UL) Listed

ANSI/UL 294 Access Control System Units
ANSI/UL 365 Police Sta. Connected Burg Alarm Units & Systems
ANSI/UL 609 Local Burg Alarm Units & Systems
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 9th Edition
ANSI/UL 2017 General-Purpose Signaling Devices and Systems

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
UL Standard Line Security
UL Encrypted Standard Line Security

Export Control

The XR550 with encryption uses AES encryption and any export beyond the United States must be in accordance with Export Administration Regulations.
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 computer 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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Before You Begin

This guide provides compliance information for the DMP XR150/XR550 Series Control Panels. After this Introduction, the remaining sections describe the functions along with the available options. Before starting, we recommend that you read through the contents of this guide. The information contained here allows you to quickly learn the operation, functionality, and programming options of the panel to meet specific applications.

This guide covers all the requirements for the following panels:

- XR150 Series
- XR150FC Series
- XR550 Series
- XR550FC Series
- Statements regarding the XR150/XR550 Series also apply to the XR350 Series unless otherwise indicated.
The following pages show examples for wiring requirements.

AC Wiring must be in conduit and exit out the left side of the enclosure. Maintain 1/4" separation between AC and Battery wiring. Wiring on terminals 5 through 22 must exit right and maintain 1/4" separation from the AC and battery positive wiring.

The plug-in transformer shall plug into a 120VAC 60 Hz outlet not controlled by a switch and all 16 to 18 gauge wire shall run through conduit and connect to the ES501 or ES502 Transformer Enclosure.

Transformers:
- 50VA Plug-in: Models 327 and 327-CAN
- 56VA Wire-in: Model 322 in enclosure
- Model 322 mounted on backplate for use in 350/350A Enclosure
- Pre-installed with FC Series Enclosures

Bell Circuit:
- Supervised, Regulated, Power limited
- Battery Backup
- Maximum output current: 0.7 A using Model 322 or 323 or 324, 324P transformer

Battery Power:
- Supervised, Power limited
- Battery Backup
- 12VDC nominal rated voltage:
  - 1.0 A using Model 327 transformer (Note 1)
  - 0.5 A using Model 322 or 323 or 324, 324P transformer

Form C Relays (J2) Programmable
- 30VDC, 1 A, 0.35 power factor, Resistive, Power Limited
- Supervised Circuit

Any other contact devices listed for Fire Protective Signaling can be connected to zones 9 and 10. Zones 9 and 10 and Model 715 compatibility identifier: A

Maximum operation range: 13.8VDC to 9.7VDC.

Class B (Style A):
- Using verification delays on zones 9 and 10 is optional. Use the delays marked on the smoke detectors.

Battery Circuit:
- 1 Amp max.
- 69Ah maximum Capacity

All circuits are inherent

Power Limited except the red battery wire and AC terminal.

Recommended panel enclosure mounting:
- Allow approximately 3 feet for door clearance.
- Top of panel enclosure should be a minimum of 5 feet from floor.

Listed Resistors
- 10k Ohm - DMP Model 311
- 3.3k Ohm - DMP Model 309
- 10k Ohm - DMP Model 308

Listed Resistors
- 10k Ohm - DMP Model 311
- 3.3k Ohm - DMP Model 309
- 10k Ohm - DMP Model 308

Intended Installation Environment - Indoor/Dry

WARNING: Incorrect connections may cause damage to the unit.

CAUTION: DO NOT USE LOOPED WIRE UNDER TERMINALS. BREAK WIRE RUN TO PROVIDE SUPERVISION OF CONNECTIONS.
1.2 866 with NAC Extender

The 866 Notification Appliance Circuit Module in alarm draws up to 31mA through its Terminal 3 Alarm Input and 45mA from its Terminal 1 Aux Power Input.

See the 866 Installation (LT-0059)

DMP Model 866 45mA @ 12VDC

The Bell Output programming for Fire type zones must be set to Steady.
The 866 Notification Appliance Circuit Module in alarm draws up to 31mA through its Terminal 3 Alarm Input and 45mA from its Terminal 1 Aux Power Input.

The maximum voltage drop between the panel Bell Output and the Model 308 EOL is 1 VDC when a separate power supply is not used.

DMP Model 866 45mA @ 12VDC

The 866 Notification Appliance Circuit Module in alarm draws up to 31mA through its Terminal 3 Alarm Input and 45mA from its Terminal 1 Aux Power Input.

The maximum voltage drop between the panel Bell Output and the Model 308 EOL is 1 VDC when a separate power supply is not used.

DMP Model 866 45mA @ 12VDC

The 866 Notification Appliance Circuit Module in alarm draws up to 31mA through its Terminal 3 Alarm Input and 45mA from its Terminal 1 Aux Power Input.

The maximum voltage drop between the panel Bell Output and the Model 308 EOL is 1 VDC when a separate power supply is not used.

DMP Model 866 45mA @ 12VDC

The 866 Notification Appliance Circuit Module in alarm draws up to 31mA through its Terminal 3 Alarm Input and 45mA from its Terminal 1 Aux Power Input.

The maximum voltage drop between the panel Bell Output and the Model 308 EOL is 1 VDC when a separate power supply is not used.

DMP Model 866 45mA @ 12VDC

The 866 Notification Appliance Circuit Module in alarm draws up to 31mA through its Terminal 3 Alarm Input and 45mA from its Terminal 1 Aux Power Input.

The maximum voltage drop between the panel Bell Output and the Model 308 EOL is 1 VDC when a separate power supply is not used.

DMP Model 866 45mA @ 12VDC

The 866 Notification Appliance Circuit Module in alarm draws up to 31mA through its Terminal 3 Alarm Input and 45mA from its Terminal 1 Aux Power Input.

The maximum voltage drop between the panel Bell Output and the Model 308 EOL is 1 VDC when a separate power supply is not used.

DMP Model 866 45mA @ 12VDC

The 866 Notification Appliance Circuit Module in alarm draws up to 31mA through its Terminal 3 Alarm Input and 45mA from its Terminal 1 Aux Power Input.

The maximum voltage drop between the panel Bell Output and the Model 308 EOL is 1 VDC when a separate power supply is not used.

DMP Model 866 45mA @ 12VDC

The 866 Notification Appliance Circuit Module in alarm draws up to 31mA through its Terminal 3 Alarm Input and 45mA from its Terminal 1 Aux Power Input.

The maximum voltage drop between the panel Bell Output and the Model 308 EOL is 1 VDC when a separate power supply is not used.

DMP Model 866 45mA @ 12VDC

The 866 Notification Appliance Circuit Module in alarm draws up to 31mA through its Terminal 3 Alarm Input and 45mA from its Terminal 1 Aux Power Input.

The maximum voltage drop between the panel Bell Output and the Model 308 EOL is 1 VDC when a separate power supply is not used.

DMP Model 866 45mA @ 12VDC

The 866 Notification Appliance Circuit Module in alarm draws up to 31mA through its Terminal 3 Alarm Input and 45mA from its Terminal 1 Aux Power Input.

The maximum voltage drop between the panel Bell Output and the Model 308 EOL is 1 VDC when a separate power supply is not used.

DMP Model 866 45mA @ 12VDC

The 866 Notification Appliance Circuit Module in alarm draws up to 31mA through its Terminal 3 Alarm Input and 45mA from its Terminal 1 Aux Power Input.

The maximum voltage drop between the panel Bell Output and the Model 308 EOL is 1 VDC when a separate power supply is not used.

DMP Model 866 45mA @ 12VDC

The 866 Notification Appliance Circuit Module in alarm draws up to 31mA through its Terminal 3 Alarm Input and 45mA from its Terminal 1 Aux Power Input.

The maximum voltage drop between the panel Bell Output and the Model 308 EOL is 1 VDC when a separate power supply is not used.

DMP Model 866 45mA @ 12VDC

The 866 Notification Appliance Circuit Module in alarm draws up to 31mA through its Terminal 3 Alarm Input and 45mA from its Terminal 1 Aux Power Input.

The maximum voltage drop between the panel Bell Output and the Model 308 EOL is 1 VDC when a separate power supply is not used.

DMP Model 866 45mA @ 12VDC

The 866 Notification Appliance Circuit Module in alarm draws up to 31mA through its Terminal 3 Alarm Input and 45mA from its Terminal 1 Aux Power Input.

The maximum voltage drop between the panel Bell Output and the Model 308 EOL is 1 VDC when a separate power supply is not used.

DMP Model 866 45mA @ 12VDC

The 866 Notification Appliance Circuit Module in alarm draws up to 31mA through its Terminal 3 Alarm Input and 45mA from its Terminal 1 Aux Power Input.

The maximum voltage drop between the panel Bell Output and the Model 308 EOL is 1 VDC when a separate power supply is not used.

DMP Model 866 45mA @ 12VDC

The 866 Notification Appliance Circuit Module in alarm draws up to 31mA through its Terminal 3 Alarm Input and 45mA from its Terminal 1 Aux Power Input.

The maximum voltage drop between the panel Bell Output and the Model 308 EOL is 1 VDC when a separate power supply is not used.

DMP Model 866 45mA @ 12VDC

The 866 Notification Appliance Circuit Module in alarm draws up to 31mA through its Terminal 3 Alarm Input and 45mA from its Terminal 1 Aux Power Input.

The maximum voltage drop between the panel Bell Output and the Model 308 EOL is 1 VDC when a separate power supply is not used.

DMP Model 866 45mA @ 12VDC

The 866 Notification Appliance Circuit Module in alarm draws up to 31mA through its Terminal 3 Alarm Input and 45mA from its Terminal 1 Aux Power Input.

The maximum voltage drop between the panel Bell Output and the Model 308 EOL is 1 VDC when a separate power supply is not used.

DMP Model 866 45mA @ 12VDC

The 866 Notification Appliance Circuit Module in alarm draws up to 31mA through its Terminal 3 Alarm Input and 45mA from its Terminal 1 Aux Power Input.

The maximum voltage drop between the panel Bell Output and the Model 308 EOL is 1 VDC when a separate power supply is not used.

DMP Model 866 45mA @ 12VDC

The 866 Notification Appliance Circuit Module in alarm draws up to 31mA through its Terminal 3 Alarm Input and 45mA from its Terminal 1 Aux Power Input.

The maximum voltage drop between the panel Bell Output and the Model 308 EOL is 1 VDC when a separate power supply is not used.

DMP Model 866 45mA @ 12VDC

The 866 Notification Appliance Circuit Module in alarm draws up to 31mA through its Terminal 3 Alarm Input and 45mA from its Terminal 1 Aux Power Input.

The maximum voltage drop between the panel Bell Output and the Model 308 EOL is 1 VDC when a separate power supply is not used.

DMP Model 866 45mA @ 12VDC

The 866 Notification Appliance Circuit Module in alarm draws up to 31mA through its Terminal 3 Alarm Input and 45mA from its Terminal 1 Aux Power Input.

The maximum voltage drop between the panel Bell Output and the Model 308 EOL is 1 VDC when a separate power supply is not used.

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The 866 Notification Appliance Circuit Module in alarm draws up to 31mA through its Terminal 3 Alarm Input and 45mA from its Terminal 1 Aux Power Input.

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The 866 Notification Appliance Circuit Module in alarm draws up to 31mA through its Terminal 3 Alarm Input and 45mA from its Terminal 1 Aux Power Input.

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The maximum voltage drop between the panel Bell Output and the Model 308 EOL is 1 VDC when a separate power supply is not used.

DMP Model 866 45mA @ 12VDC

The 866 Notification Appliance Circuit Module in alarm draws up to 31mA through its Terminal 3 Alarm Input and 45mA from its Terminal 1 Aux Power Input.

The maximum voltage drop between the panel Bell Output and the Model 308 EOL is 1 VDC when a separate power supply is not used.

DMP Model 866 45mA @ 12VDC

The 866 Notification Appliance Circuit Module in alarm draws up to 31mA through its Terminal 3 Alarm Input and 45mA from its Terminal 1 Aux Power Input.

The maximum voltage drop between the panel Bell Output and the Model 308 EOL is 1 VDC when a separate power supply is not used.
1.4 866 Class B Style W Multiple Notification Appliance Circuit

The Model 866 Notification Appliance Circuit Module in alarm draws up to 31mA through Terminal 3 Alarm Input and 45mA from Terminal 1 Aux Power Input.

Auxiliary Power Supply must be regulated, power limited, and listed for Fire Protective Signaling Service. Power Supplies must have battery backup. **Note:** If an auxiliary power supply is not used, terminals 3 and 4 can be jumpered together to supply Bell Power from the panel.

The Auxiliary Power Supply and Notification Circuit Module trouble contact zone must be programmed as a Supervisory Type zone and must be selected for display in the keypad status list.

The maximum voltage drop between the panel Bell Output and the Model 308 is 1VDC when a separate power supply is not used.

**CAUTION:** DO NOT USE LOOPED WIRE UNDER TERMINALS. BREAK WIRE RUN TO PROVIDE SUPERVISION OF CONNECTIONS.
WIRING DIAGRAMS

1.5 865 Class B Style W using Single Notification Appliance

The Model 865 Notification Appliance Circuit Module in alarm draws up to 59mA through its Terminal 3 Alarm Input and 26mA from the Terminal 1 Aux Power Input.

DMP Model 865
26mA @ 12VDC

The maximum voltage drop between the panel Bell Output and the Model 308 is 1VDC when a separate power supply is not used.

Model 308
10K EOL

Listed Polarized Notification Appliance
See the Notification Appliance section for a list of appliances.

CAUTION: DO NOT USE LOOPED WIRE UNDER TERMINALS. BREAK WIRE RUN TO PROVIDE SUPERVISION OF CONNECTIONS.
1.6 865 Class B Style W Multiple Notification Appliance Circuit

**XR550 Panel**

- The Model 865 Notification Appliance Circuit Module in alarm draws up to 59mA through its Terminal 3 Alarm Input and 26mA from the Terminal 1 Aux Power Input.

- The Bell Output programming for Fire type zones must be set to Steady.

- The Auxiliary Power Supply and Notification Circuit Module trouble contact zone must be programmed as a Supervisory Type zone and must be selected for display in the keypad status list.

- When using a separate power supply, the maximum current is 3 Amps.

- Auxiliary Power Supply must be regulated, power limited, and listed for Fire Protective Signaling Service. Power Supplies must have battery backup.

**Note:** If an auxiliary power supply is not used, terminals 3 and 4 can be jumpered together to supply Bell Power from the panel.

- Sync module required when using multiple notification appliances.

- Polarized Notification Appliances
  - See the Notification Appliance section for a list of appliances.

- The maximum voltage drop between the panel Bell Output and the Model 308 is 1VDC when a separate power supply is not used.

- Auxiliary Power Supply must be regulated, power limited, and listed for Fire Protective Signaling Service. Power Supplies must have battery backup.

- Note: If an auxiliary power supply is not used, terminals 3 and 4 can be jumpered together to supply Bell Power from the panel.

- The maximum voltage drop between the panel Bell Output and the Model 308 is 1VDC when a separate power supply is not used.

- Polarized Notification Appliances
  - See the Notification Appliance section for a list of appliances.
WIRING DIAGRAMS

1.7 865 Class A Style X using Single Notification Appliance

The 865 Notification Appliance Circuit Module in alarm draws up to 59mA through its Terminal 3 Alarm Input and 26mA from the Terminal 1 Aux Power Input.

Only one notification appliance may be used when not using a sync module.

The Bell Output programming for Fire type zones must be set to Temporal.

CAUTION: DO NOT USE LOOPED WIRE UNDER TERMINALS. BREAK WIRE RUN TO PROVIDE SUPERVISION OF CONNECTIONS.
1.8 867 Class B Style W using Single Notification Appliance

DMP Model 867
30mA @ 12VDC

The 867 must have its own independent address ranging from 500 to 999. A Supervisory zone must be programmed into the panel to properly supervise each module.

Auxiliary Power Supply must be Listed for Fire Protective Signaling Service. Power Supplies must have battery backup.

Must be installed in conduit within 20 feet.

Only one notification appliance may be used when not using a sync module.

See the Notification Appliance section for a list of appliances. Only one notification appliance may be used when not using a sync module.

See the 867 Installation LT-0178

The Auxiliary Power Supply and Notification Circuit Module trouble contact zone must be programmed as a Supervisory Type zone and must be selected for display in the keypad status list.
**WIRING DIAGRAMS**

1.9 867 Class B Style W Multiple Notification Appliance Circuit

---

**XR550 Panel**

- **PANEL**
- **MAINBACKUP**
- **P3J4**
- **J5 K1**
- **J1**
- **F2**
- **F1**
- **J2**
- **K2**
- **P10**
- **DS1**
- **Buzzer**
- **+**
- **–**

**Model 310 1K EOL**

- **Normal/Silence Switch**
- **Ground Fault LED**
- **Bell Trouble LED**
- **Bell In + 1**
- **Bell In - 2**
- **Bell Out + 3**
- **Bell Out - 4**
- **Bell Trouble 5**
- **Bell Trouble 6**
- **PWR Mon. 7**
- **Mon. RTN 8**

**DMP Model 867 30mA @ 12VDC**

The 867 must have its own independent address ranging from 500 to 999. A Supervisory zone must be programmed into the panel to properly supervise each module.

**Auxiliary Power Supply**

Auxiliary Power Supply must be Listed for Fire Protective Signaling Service. Power Supplies must have battery backup.

- Must be installed in conduit within 20 feet.
- When using an SM Sync Module, the maximum current is 3 Amps.

**505-12 Power Supply**

- **Green LED**
- **Red LED**
- **Battery**
- **Batt Trouble**

The Auxiliary Power Supply and Notification Circuit Module trouble contact zone must be programmed as a Supervisory Type zone and must be selected for display in the keypad status list.

**SM-12/24 Module**

Sync module required when using multiple notification appliances

**Model 308 10K EOL**

- **Listed, Polarized Notification Appliances**
- **See the Notification Appliance section for a list of appliances.**

---

**LX-Bus Wiring**

**SM-12/24 Module**

**DMP Model 867**

30mA @ 12VDC

The 867 must have its own independent address ranging from 500 to 999. A Supervisory zone must be programmed into the panel to properly supervise each module.

**Model 310 1K EOL**

- **Normal/Silence Switch**
- **Ground Fault LED**
- **Bell Trouble LED**
- **Bell In + 1**
- **Bell In - 2**
- **Bell Out + 3**
- **Bell Out - 4**
- **Bell Trouble 5**
- **Bell Trouble 6**
- **PWR Mon. 7**
- **Mon. RTN 8**

**DMP Model 867 30mA @ 12VDC**

The 867 must have its own independent address ranging from 500 to 999. A Supervisory zone must be programmed into the panel to properly supervise each module.

**Auxiliary Power Supply**

Auxiliary Power Supply must be Listed for Fire Protective Signaling Service. Power Supplies must have battery backup.

- Must be installed in conduit within 20 feet.
- When using an SM Sync Module, the maximum current is 3 Amps.

**505-12 Power Supply**

- **Green LED**
- **Red LED**
- **Battery**
- **Batt Trouble**

The Auxiliary Power Supply and Notification Circuit Module trouble contact zone must be programmed as a Supervisory Type zone and must be selected for display in the keypad status list.

**SM-12/24 Module**

Sync module required when using multiple notification appliances

**Model 308 10K EOL**

- **Listed, Polarized Notification Appliances**
- **See the Notification Appliance section for a list of appliances.**
1.10 Panel Slave Communicator for FACP using 630F Annunciator

**Main Fire Alarm Control Panel (FACP)**

- **Fire Alarm**: Form C alarm contacts activate short on General Fire Alarm.
- **General Trouble**: Form C trouble contacts activate open on General Trouble. General Trouble must not be used to indicate AC power fail unless it can be delayed at least 1 hour.
- **Supervisory**: Form C contacts activate short on Supervisory condition.
- **AC Power Fail**: AC power fail trouble indication must delay at least 1 hour.

**WIRING DIAGRAMS**

*XR550 Panel*

Program for Fire Protective Signaling communication to the Central Station.

Program Fire Alarm zone as type FI and set Fire Panel Slave Input option as YES.

Program General Trouble zone as type FI.

Program Supervisory zone as type SV and set the Latch Supervisory option in System Options as NO.

*630F Annunciator*

Program Bell Options fire type as None.

Must be installed in conduit and located within 20 feet.

Standby Batteries

To 322/323/324/324P transformer Must be connected to same circuit as FACP

Keypad must be mounted on door or in conduit and located within 20 feet.

Use Model 311 1K EOL Resistors
1.11 Panel Slave Communicator for FACP using Outputs

**Communication Fail**
Output 1 must be programmed as a Comm Fail output in Output Options.

**Fire Trouble**
Output 2 must be programmed as a Fire Trouble output in Output Options.

To 322/323/324/324P transformer
Must be connected to same circuit as FACP
Standby Batteries
Program Bell Options fire type as None.
Program for Fire Protective Signaling communication to the Central Station.
Program FireAlarm zone as type FI and set Fire Panel Slave Input option as YES.
Program General Trouble zone as type FI.
Program Supervisory zone as type SV and set the Latch Supervisory option in System Options as NO.

**Main Fire Alarm Control Panel (FACP)**

**Fire Alarm**
Form C alarm contacts activate short on General Fire Alarm.

**General Trouble**
Form C trouble contacts activate open on General Trouble. General Trouble must not be used to indicate AC power fail unless it can be delayed at least 1 hour.

**Supervisory**
Form C contacts activate short on Supervisory condition.

**AC Power Fail**
AC power fail trouble indication must delay at least 1 hour.

**Communication Fail**
Program FACP Zone Input to indicate a communication trouble locally.

**Fire Trouble**
Program FACP Zone Input to indicate a trouble locally.

Keypad must be mounted on door or in conduit and located within 20 feet.

Must be installed in conduit and located within 20 feet.
1.12 Panel Slave Communicator for FACP using Wireless Transmitters

Program for Fire Protective Signaling communication to the Central Station.
Program Fire Alarm zone as type FI and set Fire Panel Slave Input option as YES.
Program General Trouble zone as type FI.
Program Supervisory zone as type SV and set the Latch Supervisory option in System Options as NO.

**Fire Alarm**
Form C alarm contacts activate short on General Fire Alarm.

**General Trouble**
Form C trouble contacts activate open on General Trouble.
General Trouble must not be used to indicate AC power fail unless it can be delayed at least 1 hour.

**Supervisory**
Form C contacts activate short on Supervisory condition.

**AC Power Fail**
AC power fail trouble indication must delay at least 1 hour.

The 1103 internal contact (magnet) cannot be used in this installation
The 1103 transmitters must be programmed for 3-minute supervision time.
The 1103 must be installed within 3' of the initiating device when not visible after installation, such as above a ceiling or within a wall. When the 1103 is visible after installation and is seven feet or lower from the floor, it must be installed next to the initiating device. All wiring must be inside the wall.
1.13 Dual Style D Zone Module Installation

**MODEL 869**
- GND
- Fault A
- Zone A
- A1
- A2
- Zone A
- GND
- Aux Power
- Zone B
- B1
- B2
- Zone B
- GND
- Fault B

Dual Style D Initiating Module
DMP Model 869
25mA Standby, 75mA Alarm
@ 12 VDC

Heat Detectors, manual pull stations, or any other listed shorting device. Unlimited number of units.

XR550 Panel

Supervised Circuit

Regulated 12 VDC
1.14 Derived Channel Installation Using Bosch D8122

Interfacing D8122 to the XR150/XR550 Series Panels
The D8122 may only be used in conjunction with telephone systems that support Derived Channel network. For installation instructions, see the Derived Channel STUD8121A/D8122 Operation and Installation Guide. The module is intended for Burglary only applications.

- For 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 XR150/XR550 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.
1.15 Rothenbuhler 5110 High Security Bell Wiring

Rothenbuhler 5110 High Security Bell for Burglary Applications

Green LED
Red LED
Silence
BLO
BLI
Test
Common
+ 12 VDC

Output 2 N/C
Output 1 N/C
Output 1 Common
Output 2 Common

10K EOL DMP Model 308

CAUTION: DO NOT USE LOOPED WIRE UNDER TERMINALS. BREAK WIRE RUN TO PROVIDE SUPERVISION OF CONNECTIONS.

1.16 LX-Bus™ Module Connection

Each LX-Bus Module must have its own independent address ranging from 00 to 99. A Supervisory zone must be programmed into the panel to properly supervise each module.

Model 716 Output Expander Module
13m at 12 VDC

Model 717 Graphic Annunciator Module
10m at 12 VDC

CAUTION: DO NOT USE LOOPED WIRE UNDER TERMINALS. BREAK WIRE RUN TO PROVIDE SUPERVISION OF CONNECTIONS.
1.17 Model 860 Relay Module Connection

```
12 VDC
+12 VDC
Relay 4
Relay 3
Relay 2
Relay 1 Common
J2
J1
Model 860 Relay Module

Programmable
Relay contact rating:
1 Amp @ 30VDC, Resistive, Power Limited
```

1.18 Combination Systems using Powered Burglary Devices

```
7070 Keypad for Buglary Display
630F Keypad for Fire Display
712-8
XR550 Panel
Connect Zone Expander to Keypad or LX500-LX700 Bus
Zone Expander

PIR or Glassbreak
12 VDC
+ +
505-12 Power Supply

Do not install Fire Devices

EZ1 E2 E3 E4 E5 E6 E7 E8 GND GND GND GND J3 J4 Keypad LX-Bus TXD Address
Z1 Z2 Z3 Z4 Z5 Z6 Z7 Z8
BLK BLK RED RED J2 J1 712-8
```

7070 Keypad for Buglary Display
630F Keypad for Fire Display
712-8
1.19 System Sensor 2-Wire Smoke Detectors

**XR550 Panel**

**CAUTION:** DO NOT USE LOOPED WIRE UNDER TERMINALS. BREAK WIRE RUN TO PROVIDE SUPERVISION OF CONNECTIONS.

Model 312
470 Ohm or (2) Model 311 in Parallel

RSS-MOD Wiring Harness (Flying Leads)

**SYSTEM SENSOR 2WTA-B or 2WTR-B SMOKE DETECTORS**

**CAUTION:**

- Red
- Black
- Purple
- TEMPORAL

**Model 312**

- 470 Ohm
- (2) Model 311 in Parallel

**Wiring Harness (Flying Leads)**

**2W-MOD2**

- SYSTEM SENSOR LOOP TEST & MAINTENANCE MODULE

- Model 312
- 470 Ohm
- (2) Model 311 in Parallel

**System Sensor 2-Wire Smoke Detectors**

- **RED**
- **BLACK**
- **PURPLE**
- **TEMPORAL**

- Model 312
- 470 Ohm
- (2) Model 311 in Parallel

**RSS-MOD Wiring Harness (Flying Leads)**

**CAUTION:** DO NOT USE LOOPED WIRE UNDER TERMINALS. BREAK WIRE RUN TO PROVIDE SUPERVISION OF CONNECTIONS.
1.20 Canadian Dual Zone Protection

Zone 2 Programming
- Night Type Zone (NT)
  - Disarmed Open (DO): T
  - Disarmed Short (DS): T
  - Armed Open (AO): A
  - Armed Short (AS): A

Note: Zone Names must be same or equivalent
1.21 Canadian Fire Communicator for FACP

Program Zone 1 Fire Alarm Zone as type FI and set Fire Panel Slave Input option as YES.
Program Zone 2 Fire Zone trouble as type FI.
Program Zone 3 AC Trouble zone as type SV and set the Latch Supervisory option in System Options as NO.
Program Zone 4 Supervisory zone as type SV and set the Latch Supervisory option in System Options as NO.

Program Bell Options fire type as None. Do not use Bell Output.

Must be installed in conduit and located in the same room within 18 meters.

Auxiliary power terminal max 500 mA.

See the ULC S559-13 Specification

Main Fire Alarm Control Panel (FACP)

- Zone Alarm
  Form C alarm contacts activate short on Zone Alarm.

- Zone Trouble
  Form C trouble contacts activate open on Trouble condition.

- AC Trouble
  Form C contacts activate open on AC Trouble condition.

- Supervisory
  Form C contacts activate short on Supervisory condition.
Program Bell Options fire type as None.
Do not use Bell Output.
Auxiliary power terminal max 500 mA.

Must be installed in conduit and located in the same room within 18 meters.

Program Zone 1 Fire Alarm Zone as type FI and set Fire Panel Slave Input option as YES.
Program Zone 2 Fire Zone trouble as type FI.
Program Zone 3 AC Trouble zone as type SV and set the Latch Supervisory option in System Options as NO.
Program Zone 4 Supervisory zone as type SV and set the Latch Supervisory option in System Options as NO.
1.23 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.

** Program Smoke zone as type Fire (FI)

** Program Maintenance zone as type Auxiliary (AUX)**

** Program CO zone as type Emergency (EM) and include CO in Zone name.

** The COSMOD2W sends a smoke maintenance inquiry to the smoke detectors every 24 hours. If a response indicating a maintenance condition is received, such as the detector needs cleaning, the maintenance zone will indicate a trouble condition.

The CO detector reports any maintenance conditions on the Emergency zone.

- Install 3.9K EOL Resistor at last detector (supplied with COSMOD2W)
- To silence detectors perform a Sensor Reset

If using optional Power supply, program Output Options Fire Output for the 716 relay to provide Sensor Reset capability.

*** Listed for Fire Applications, output limited power, regulated Loop Style D wiring
1.24 System Sensor i4 Series Smoke and CO Detectors Using Multiple COSMOD2W Module

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 terminal in parallel with a all COSMOD2W Interface Modules.

Connect the Bell In terminal in parallel with a all COSMOD2W Interface Modules.
2.1 **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.

2.2 **Police Station Phone Numbers**
The digital dialer telephone number programmed for communication must not be a police station phone number.

2.3 **Ownership**
The control unit system shall be under one ownership.

### Central-Station and Proprietary Burglar-Alarm Units
**ANSI/UL 1610 AND ANSI/UL 1076**

3.1 **Proprietary Dialer**
The Model XR150/XR550 Series provides proprietary service when configured as a digital dialer.

3.2 **DACT Central Station**
DACT Central Station service can be provided under by adding an Ademco AB12M bell and bell housing and placing the Model XR150/XR550 Series panel into Model 350A or 350H Attack Resistant Housing.

3.3 **Standard or Encrypted Line Security**
The XR150/XR550 Series Protected Premises Control Unit is suitable for Standard Line Security service when configured for NET communication with SCS-VR or SCS-1R receiving system. This configuration is approved for the following:
- AMCX: Central Station Alarm Units
- APOU: Proprietary Alarm Units
To provide Encrypted Line security, install an XR550 panel with encryption.
For Encrypted Line security operation, communication between the Premise and Supervising Station provides 128 bit encryption when using an XR550 panel with encryption.

3.4 **Network Only, Standard or Encrypted Line Security**
Standard or Encrypted Line Security is provided when programmed using NET with no backup. Network communication is used as primary with a 3 minute check-in when armed or disarmed.

**Note:** When the check-in time is set to a number less than 200 seconds, an attack resistant enclosure is not required.

<table>
<thead>
<tr>
<th>Path 1 Programming</th>
<th>Path 2 Programming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comm Type: = NET</td>
<td>Comm Type: = DD</td>
</tr>
<tr>
<td>Path Type: = Primary</td>
<td>Path Type: = Backup</td>
</tr>
<tr>
<td>Encrypt: = NO or YES*</td>
<td>Daily Test: = YES</td>
</tr>
<tr>
<td>Sub Code: = NO**</td>
<td>Duplicate Alarms: = NO</td>
</tr>
<tr>
<td>Checkin: = 3 minute</td>
<td>Checkin: = 6 minute or RND</td>
</tr>
<tr>
<td>Fail Time: = 3 minute</td>
<td>Fail Time: = 6 minute</td>
</tr>
</tbody>
</table>

*For Encrypted Line Security, program a Passphrase in Network Options.
**YES can be selected if panel substitution detection is desired.

3.5 **Network with Dialer Backup, Standard or Encrypted Line Security**
When a backup dialer is required for 06 minute check-in time, an attack resistant enclosure (DMP Model 350A or 350H) is required.

**Note:** When the check-in time is set to a number less than 200 seconds, an attack resistant enclosure is not required.

<table>
<thead>
<tr>
<th>Path 1 programming</th>
<th>Path 2 programming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comm Type: = NET</td>
<td>Comm Type: = DD</td>
</tr>
<tr>
<td>Path Type: = Primary</td>
<td>Path Type: = Backup</td>
</tr>
<tr>
<td>Encrypt: = NO or YES*</td>
<td>Daily Test: = YES</td>
</tr>
<tr>
<td>Sub Code: = NO**</td>
<td>Duplicate Alarms: = NO</td>
</tr>
<tr>
<td>Checkin: = 6 minute or RND</td>
<td>Checkin: = 6 minute</td>
</tr>
<tr>
<td>Fail Time: = 6 minute</td>
<td>Fail Time: = 6 minute</td>
</tr>
</tbody>
</table>

*For Encrypted Line Security, program a Passphrase in Network Options.
**YES can be selected if panel substitution detection is desired.
3.6 CELL Only, Standard or Encrypted Line Security
Standard or Encrypted Line Security is provided when programmed using CELL with no backup. XR150/XR550 cellular communication is used as primary with a 3 minute check-in when armed or disarmed.

Note: When the check-in time is set to a number less than 200 seconds, an attack resistant enclosure is not required.

<table>
<thead>
<tr>
<th>Path 1 programming</th>
<th>Path 2 programming</th>
<th>Path 3 programming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comm Type: = CELL</td>
<td>Comm Type: = CELL</td>
<td>Comm Type: = DD</td>
</tr>
<tr>
<td>Path Type: = Primary</td>
<td>Path Type: = Backup (operates as alternate primary)</td>
<td>Path Type: = Backup (operates as second method)</td>
</tr>
<tr>
<td>Test Rpt: = NO</td>
<td>Test Rpt: = YES</td>
<td>Test Rpt: = YES</td>
</tr>
<tr>
<td>Checkin: = 6 minute, or RND (random)</td>
<td>Test Freq: = Daily</td>
<td>Test Freq: = Daily</td>
</tr>
<tr>
<td>Fail Time: = 6 minute, or RND (random)</td>
<td>Checkin: = ADAPT</td>
<td>Duplicate Alarms: = YES</td>
</tr>
<tr>
<td>Encrypt: = NO or YES*</td>
<td>Encrypt: = NO or YES*</td>
<td>Duplicate Alarms: = YES</td>
</tr>
<tr>
<td>Sub Code: = NO**</td>
<td>Sub Code: = NO** or Shared if Path 1 is YES</td>
<td>Sub Code: = NO** or Shared if Path 1 is YES</td>
</tr>
</tbody>
</table>

*For Encrypted Line Security, program a Passphrase in Network Options.

**YES can be selected if panel substitution detection is desired.

3.7 NET with CELL as Alternate Primary and Dialer Backup, Standard or Encrypted Line Security
Standard or Encrypted Line Security is provided using NET communication with CELL as an alternate primary and with digital dialer as a backup. XR150/XR550 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.

<table>
<thead>
<tr>
<th>Path 1 programming</th>
<th>Path 2 programming</th>
<th>Path 3 programming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comm Type: = NET</td>
<td>Comm Type: = CELL</td>
<td>Comm Type: = DD</td>
</tr>
<tr>
<td>Path Type: = Primary</td>
<td>Path Type: = Backup (operates as alternate primary)</td>
<td>Path Type: = Backup (operates as second method)</td>
</tr>
<tr>
<td>Test Rpt: = NO</td>
<td>Test Rpt: = YES</td>
<td>Test Rpt: = YES</td>
</tr>
<tr>
<td>Checkin: = 6 minute, or RND (random)</td>
<td>Test Freq: = Daily</td>
<td>Test Freq: = Daily</td>
</tr>
<tr>
<td>Fail Time: = 6 minute, or RND (random)</td>
<td>Checkin: = ADAPT</td>
<td>Duplicate Alarms: = YES</td>
</tr>
<tr>
<td>Encrypt: = NO or YES*</td>
<td>Encrypt: = NO or YES*</td>
<td>Duplicate Alarms: = YES</td>
</tr>
<tr>
<td>Sub Code: = NO**</td>
<td>Sub Code: = NO** or Shared if Path 1 is YES</td>
<td>Sub Code: = NO** or Shared if Path 1 is YES</td>
</tr>
</tbody>
</table>

*For Encrypted Line Security, program a Passphrase in Network Options.

**YES can be selected if panel substitution detection is desired.

3.8 NET with CELL as Backup and Adaptive Primary, Standard or Encrypted Line Security
Standard or Encrypted Line Security is provided when programmed using NET communication and CELL as backup and as needed adapts and takes over as primary. XR150/XR550 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.

<table>
<thead>
<tr>
<th>Path 1 programming</th>
<th>Path 2 programming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comm Type: = NET</td>
<td>Comm Type: = CELL</td>
</tr>
<tr>
<td>Path Type: = Primary</td>
<td>Path Type: = Backup (operates as second method)</td>
</tr>
<tr>
<td>Test Rpt: = NO</td>
<td>Test Rpt: = YES</td>
</tr>
<tr>
<td>Checkin: = 6 minute, or RND (random)</td>
<td>Test Freq: = Daily</td>
</tr>
<tr>
<td>Fail Time: = 6 minute, or RND (random)</td>
<td>Checkin: = ADAPT</td>
</tr>
<tr>
<td>Encrypt: = NO or YES*</td>
<td>Encrypt: = NO or YES*</td>
</tr>
<tr>
<td>Sub Code: = NO**</td>
<td>Sub Code: = NO** or Shared if Path 1 is YES</td>
</tr>
</tbody>
</table>

*For Encrypted Line Security, program a Passphrase in Network Options.

**YES can be selected if panel substitution detection is desired.
3.9  **System Trouble Display**  
The Status List Display must include at least one keypad that displays system monitor troubles.

### Holdup Alarm Units  
**ANSI/UL 636**

4.1  **1100X Wireless Receiver**  
The Model 1100X or 1100XH Wireless Receiver in conjunction with the Model 1142 Holdup Alarm Transmitter must be installed in the system.

### Police Station Connected and Local Burglar Alarm Units  
**ANSI/UL 365**

5.1  **System Trouble Display**  
The Status List Display must include at least one keypad that displays system monitor troubles.

5.2  **Entry Delay**  
The maximum entry delay used must not be more than 60 seconds when using Model 350A or 350H Attack housing.

5.3  **Exit Delay**  
The maximum exit delay used must not be more than 60 seconds.

5.4  **Bell Cutoff**  
The Bell Cutoff time cannot be less than 15 minutes.

5.5  **Automatic Bell Test**  
The Automatic Bell Test option must be programmed as YES.

5.6  **Standard or Encrypted Line Security**  
Standard Line Security is provided when configured as a Path 1 NET system using an XR550 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) is required. When the check-in time is set to a number less than 200 seconds, an attack resistant enclosure is not required. To provide Encrypted Line security, install an XR550E panel or an XR550 panel. For Encrypted Line security operation, communication between the Premise and Supervising Station provides 128 bit encryption when using an XR550E panel.

5.7  **Wireless Audible Annunciation Option**  
The Wireless Audible option must be selected as ANY for commercial applications.

5.8  **CELL Only, Standard or Encrypted Line Security**  
Standard or Encrypted Line Security is provided when programmed using CELL with no backup. XR550 cellular communication is used as primary with a 3 minute check-in when armed or disarmed.

<table>
<thead>
<tr>
<th>Path 1 programming</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Comm Type: = CELL</td>
<td>Checkin: = 3 minute</td>
</tr>
<tr>
<td>Path Type: = Primary</td>
<td>Fail Time: = 3 minute</td>
</tr>
<tr>
<td>Encrypt: = NO or YES*</td>
<td>Test Rpt: = NO</td>
</tr>
<tr>
<td>Sub Code: = NO or YES</td>
<td></td>
</tr>
</tbody>
</table>

*For Encrypted Line Security, program a Passphrase in Network Options.
5.9 NET with CELL as Alternate Primary and Dialer Backup, Standard or Encrypted Line Security

Standard or Encrypted Line Security is provided using NET communication with CELL as an alternate primary and with digital dialer as a backup. XR550 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.

<table>
<thead>
<tr>
<th>Path 1 programming</th>
<th>Path 2 programming</th>
<th>Path 3 programming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comm Type: = NET</td>
<td>Comm Type: = CELL</td>
<td>Comm Type: = DD</td>
</tr>
<tr>
<td>Path Type: = Primary</td>
<td>Path Type: = Backup (operates as alternate primary)</td>
<td>Path Type: = Backup (operates as second method)</td>
</tr>
<tr>
<td>Test Rpt: = NO</td>
<td>Test Rpt: = YES</td>
<td>Test Rpt: = YES</td>
</tr>
<tr>
<td>Checkin: = 6 minute, or RND (random)</td>
<td>Test Freq: = Daily</td>
<td>Test Freq: = Daily</td>
</tr>
<tr>
<td>Fail Time: = 6 minute, or RND (random)</td>
<td>Checkin: = ADAPT</td>
<td>Duplicate Alarms: = YES</td>
</tr>
<tr>
<td>Encrypt: = NO or YES*</td>
<td>Encrypt: = NO or YES*</td>
<td></td>
</tr>
<tr>
<td>Sub Code: = YES</td>
<td>Sub Code: = Shared</td>
<td>Sub Code: = Shared</td>
</tr>
</tbody>
</table>

*For Encrypted Line Security, program a Passphrase in Network Options.

5.10 NET with CELL as Backup and Adaptive Primary, Standard or Encrypted Line Security

Standard or Encrypted Line Security is provided when programmed using NET communication and CELL as backup and as needed adapts and takes over as primary. XR550 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.

<table>
<thead>
<tr>
<th>Path 1 programming</th>
<th>Path 2 programming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comm Type: = NET</td>
<td>Comm Type: = CELL</td>
</tr>
<tr>
<td>Path Type: = Primary</td>
<td>Path Type: = Backup (operates as second method)</td>
</tr>
<tr>
<td>Test Rpt: = NO</td>
<td>Test Rpt: = YES</td>
</tr>
<tr>
<td>Checkin: = 6 minute, or RND (random)</td>
<td>Test Freq: = Daily</td>
</tr>
<tr>
<td>Fail Time: = 6 minute, or RND (random)</td>
<td>Checkin: = ADAPT3</td>
</tr>
<tr>
<td>Encrypt: = NO or YES*</td>
<td>Encrypt: = NO or YES*</td>
</tr>
<tr>
<td>Sub Code: = YES</td>
<td>Duplicate Alarms: = YES</td>
</tr>
<tr>
<td>Sub Code: = Shared</td>
<td>Sub Code: = Shared</td>
</tr>
</tbody>
</table>

*For Encrypted Line Security, program a Passphrase in Network Options.
6.1 Mercantile
For Mercantile and Police Station Connect operation the Model XR550 Series must be mounted in an Attack Resistant Housing, (DMP Model 350A or 350H).

6.2 Entry Delay
The maximum entry delay used must not be more than 60 seconds when using the Model 350A or 350H housing.

6.3 Exit Delay
The maximum exit delay used must not be more than 60 seconds.

6.4 Mercantile Safe and Vault
When the DMP Model 350A or 350H Attack housing is used, the XR550 Series provides operation as a mercantile safe and vault alarm. Bell Supervision and wiring must be in accordance with ANSI/UL 681. When the XR550 Series is mounted outside the safe or vault, tamper protection and the Sentrol Model 5402 or Potter EVD listed vibration detectors should be used.

6.5 Bank Safe and Vault (XR550N/XR550E only)
The Bank Safe and Vault option must be programmed as YES. The 72 hour battery standby must be provided. A Rothenbuhler Model 5110 High Security Bell must be used.

6.6 Wireless Audible Annunciation Option
The Wireless Audible option must be selected as ANY for commercial applications.
7.1 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.

7.2 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.

<table>
<thead>
<tr>
<th>Path 1 Programming</th>
<th>Path 2 Programming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comm Type = DD</td>
<td>Comm Type = DD</td>
</tr>
<tr>
<td>Path Type = Primary</td>
<td>Path Type = Backup</td>
</tr>
<tr>
<td>Test Rpt = Yes</td>
<td>Test Rpt = Yes</td>
</tr>
<tr>
<td>Test Freq = 1 Dy</td>
<td>Test Freq = 1 Dy</td>
</tr>
<tr>
<td>893A = Yes</td>
<td></td>
</tr>
</tbody>
</table>

**Path 1 Type DD Primary and Path 2 Type CELL Backup**
When using a telephone line and cellular as backup:

<table>
<thead>
<tr>
<th>Path 1 Programming</th>
<th>Path 2 Programming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comm Type = DD</td>
<td>Comm Type = CELL</td>
</tr>
<tr>
<td>Path Type = Primary</td>
<td>Path Type = Backup</td>
</tr>
<tr>
<td>Test Rpt = Yes</td>
<td>Test Rpt = Yes</td>
</tr>
<tr>
<td>Test Freq = 1 Dy</td>
<td>Test Freq = 1 Dy</td>
</tr>
<tr>
<td>Receiver IP Address</td>
<td></td>
</tr>
<tr>
<td>First GPRS APN</td>
<td></td>
</tr>
</tbody>
</table>

**Path 1 Type DD Primary and Path 2 Type NET Backup**
When using a telephone line and a Network IP as backup:

<table>
<thead>
<tr>
<th>Path 1 Programming</th>
<th>Path 2 Programming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comm Type = DD</td>
<td>Comm Type = NET</td>
</tr>
<tr>
<td>Path Type = Primary</td>
<td>Path Type = Backup</td>
</tr>
<tr>
<td>Test Rpt = Yes</td>
<td>Test Rpt = Yes</td>
</tr>
<tr>
<td>Test Freq = 1 Dy</td>
<td>Test Freq = 1 Dy</td>
</tr>
<tr>
<td>Receiver IP Address</td>
<td></td>
</tr>
</tbody>
</table>

7.3 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 or 277 is required.

7.4 Remote Station Protective Signaling Systems
You must provide 60 hours of standby battery. Two Radionics Model D127 Reversing Relay Modules provide two reversing polarity telephone connections. A DMP Model 893A is used to provide two line dialer communication.
7.5  Fire Protective Signaling Systems using Internet/Intranet/Cell Networks
An Other Transmission Technologies system as defined in UL 864 9th Edition may be configured as NET Primary using a hardwire IP network or CELL Primary using a Model 263LTE Cellular Communicator or Model 263H HSPA+ 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*

<table>
<thead>
<tr>
<th>Path 1 Programming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comm Type = NET or CELL</td>
</tr>
<tr>
<td>Path Type = Primary</td>
</tr>
<tr>
<td>Test Rpt = No</td>
</tr>
<tr>
<td>Checkin = Yes</td>
</tr>
<tr>
<td>Sub Code = Yes</td>
</tr>
<tr>
<td>Failtime Min = 60</td>
</tr>
<tr>
<td>Send Comm Trbl = Yes</td>
</tr>
<tr>
<td>Comm Path Trbl = Yes (Status List Programming)</td>
</tr>
</tbody>
</table>

*Device Setup must have a Fire Device

Path 1 Type NET Primary and Path 2 Type DD Backup

<table>
<thead>
<tr>
<th>Path 1 Programming</th>
<th>Path 2 Programming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comm Type = NET</td>
<td>Comm Type = DD</td>
</tr>
<tr>
<td>Path Type = Primary</td>
<td>Path Type = Backup</td>
</tr>
<tr>
<td>Test Rpt = Yes</td>
<td>Test Rpt = Yes</td>
</tr>
<tr>
<td>Test Freq = 1 Dy</td>
<td>Test Freq = 1 Dy</td>
</tr>
<tr>
<td>Send Comm Trbl = Yes</td>
<td>Send Comm Trbl = Yes</td>
</tr>
<tr>
<td>Comm Path Trbl = Yes (Status List Programming)</td>
<td></td>
</tr>
</tbody>
</table>

Path 1 Type NET Primary and Path 2 Type CELL Backup

<table>
<thead>
<tr>
<th>Path 1 Programming</th>
<th>Path 2 Programming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comm Type = NET</td>
<td>Comm Type = CELL</td>
</tr>
<tr>
<td>Path Type = Primary</td>
<td>Path Type = Backup</td>
</tr>
<tr>
<td>Test Rpt = Yes</td>
<td>Test Rpt = Yes</td>
</tr>
<tr>
<td>Test Freq = 1 Dy</td>
<td>Test Freq = 1 Dy</td>
</tr>
<tr>
<td>Send Comm Trbl = Yes</td>
<td>Send Comm Trbl = Yes</td>
</tr>
<tr>
<td>Comm Path Trbl = Yes (Status List Programming)</td>
<td></td>
</tr>
</tbody>
</table>

Path 1 Type CELL Primary and Path 2 Type NET Backup

<table>
<thead>
<tr>
<th>Path 1 Programming</th>
<th>Path 2 Programming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comm Type = CELL</td>
<td>Comm Type = NET</td>
</tr>
<tr>
<td>Path Type = Primary</td>
<td>Path Type = Backup</td>
</tr>
<tr>
<td>Test Rpt = Yes</td>
<td>Test Rpt = Yes</td>
</tr>
<tr>
<td>Test Freq = 1 Dy</td>
<td>Test Freq = 1 Dy</td>
</tr>
<tr>
<td>Send Comm Trbl = Yes</td>
<td>Send Comm Trbl = Yes</td>
</tr>
<tr>
<td>Comm Path Trbl = Yes (Status List Programming)</td>
<td></td>
</tr>
</tbody>
</table>

7.6  Remote Annunciators
At least one Model 630F Remote Annunciator must be used on the system and programmed as a FIRE type device. 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.

7.7  Cellular Communication Failure Test Procedure
For commercial fire systems configured with cell only communication, the following test procedure can be used to demonstrate local annunciation of a communication path failure where required by the AHJ.

1. For system configuration, refer to sections 7.5 (CELL Primary with No Backup) and 7.6 Remote Annunciators. Ensure panel firmware is updated to Version 193 or higher.
2. Program the appropriate settings for the central station receiver and allow the panel to check in with the receiver.
3. Enter the programming menu and change the receiver port number to an invalid (closed) port.
4. Exit panel programming and allow the panel to return to the default screen.
5. The panel will unsuccessfully attempt to communicate and the keypad will display COMM PATH - TRBL in approximately 200 seconds.
6. After successfully demonstrating local annunciation, return to the programming menu and change the receiver port back to the correct (open) port to verify communication.
7.8 Remote Programming
When a FIRE type device, such as a 630F Remote Annunciator is programmed, remote programming of the panel requires a lockout code to be entered at any keypad while the Status List is displayed. The panel will not allow remote programming without entering the lockout code.
After entering the lockout code, remote programming must start within 30 minutes.

7.9 Combination Systems
For combination fire and burglary systems installed in commercial or residential applications, powered burglary devices such as PIRs, Glassbreaks, Bosch D8122, and Rothenbuhler 5110 Bell etc. must be powered from a separate 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 that are listed for commercial or residential fire. Refer to the Combination Systems using Powered Burglary Devices diagram in this document.
When used in a combination system, the Model 712-8 must only be connected to the LX800 or LX900 bus. No Commercial Fire listed devices can be connected to the LX800 or LX900 bus when the 712-8 is used in the system.
Combination systems may only use the following keypads for burglary zone annunciations:
- 7070/7070A
- 7073/7073A
- 7170/7170A
- 7173/7173A
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.

7.10 Network Transient Suppression
The Model 270 Network Transient Suppression Module provides transient surge protection for the Ethernet Connector.

7.11 Connecting Devices
Connections for On-board Zones 1-8, LX-Bus and Keypad Bus are provided through Terminals 13-24, PROG, LX500, LX600, LX700, LX800, LX900, and XBUS 4-pin headers. 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.
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 Keypad Bus section 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 on the first 2,500 foot circuit is 40 devices.
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 at the end of the circuit. When voltage is too low, the devices cannot operate properly.

7.12 Terminal 13-24
Each protection zone detects three conditions: Open, Normal, and Short. Listed below are voltage and resistance parameters for each condition:

<table>
<thead>
<tr>
<th>Condition</th>
<th>Resistance on zone</th>
<th>Voltage on positive terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open</td>
<td>over 1300 ohms</td>
<td>over 2.0 VDC</td>
</tr>
<tr>
<td>Normal</td>
<td>600 to 1300 ohms</td>
<td>1.2 to 2.0 VDC</td>
</tr>
<tr>
<td>Short</td>
<td>under 600 ohms</td>
<td>under 1.2 VDC</td>
</tr>
</tbody>
</table>
ULC S304-06 Specifications
Signal Receiving Center and Premise Burglar Alarm Control Units

8.1 For Medium or High Risk Applications: Level A3 Communication
Level A3 communication channel security is provided for Internet, Intranet, LAN or WAN networks when configured as a NET or CELL communicating system using the XR150/XR550E. The following options must be programmed in XR150/XR550E Canadian panel Communication:

<table>
<thead>
<tr>
<th>NET PRIMARY</th>
<th>CELL PRIMARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUB CODE:</td>
<td>YES</td>
</tr>
<tr>
<td>CHECKIN TIME:</td>
<td>2 MINUTES</td>
</tr>
<tr>
<td>FAIL TIME:</td>
<td>3 MINUTES</td>
</tr>
<tr>
<td>SEND COMM TRBL:</td>
<td>YES</td>
</tr>
<tr>
<td>TCP COMM:</td>
<td>YES</td>
</tr>
<tr>
<td>ENCRYPTION:</td>
<td>ENABLED</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SUB CODE:</td>
<td>YES</td>
</tr>
<tr>
<td>CHECKIN TIME:</td>
<td>3 MINUTES</td>
</tr>
<tr>
<td>FAIL TIME:</td>
<td>3 MINUTES</td>
</tr>
<tr>
<td>SEND COMM TRBL:</td>
<td>YES</td>
</tr>
<tr>
<td>ENCRYPTION:</td>
<td>ENABLED</td>
</tr>
</tbody>
</table>

8.2 For Very High Risk Applications: Level A3 Plus P1 Communication
Additionally, XR150/XR550E communicating system may use two channels (NET plus Dialer, CELL plus Dialer, or NET plus CELL) to send signals simultaneously. The following options must be programmed in XR150/XR550E Canadian panel Communication:

<table>
<thead>
<tr>
<th>NET PRIMARY</th>
<th>DIALER PRIMARY:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>USE DAILY TEST</td>
</tr>
<tr>
<td>SUB CODE:</td>
<td>YES</td>
</tr>
<tr>
<td>CHECKIN TIME:</td>
<td>2 MINUTES</td>
</tr>
<tr>
<td>FAIL TIME:</td>
<td>3 MINUTES</td>
</tr>
<tr>
<td>SEND COMM TRBL:</td>
<td>YES</td>
</tr>
<tr>
<td>TCP COMM:</td>
<td>YES</td>
</tr>
<tr>
<td>ENCRYPTION:</td>
<td>ENABLED</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CELL PRIMARY</th>
<th>DIALER PRIMARY:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>USE DAILY TEST</td>
</tr>
<tr>
<td>SUB CODE:</td>
<td>YES</td>
</tr>
<tr>
<td>CHECKIN TIME:</td>
<td>3 MINUTES</td>
</tr>
<tr>
<td>FAIL TIME:</td>
<td>3 MINUTES</td>
</tr>
<tr>
<td>SEND COMM TRBL:</td>
<td>YES</td>
</tr>
<tr>
<td>ENCRYPTION:</td>
<td>ENABLED</td>
</tr>
</tbody>
</table>

In addition, the SCS-104 Network Line Card installed in the SCS-1R Receiver must have the ACK Substitution Message programmed as NO.

8.3 For Low Risk Applications: Level A1
Level A1 communication channel security is provided for Internet, Intranet, LAN or WAN networks when configured as a NET communicating system using the XR150/XR550 with Network.

8.4 For Low Risk Applications: Level P1
Level P1 communication channel security is provided when configured as a DD communicating system and a daily test message using the XR150/XR550.
### 9.1 For Fire Communicator Applications

For fire communicator applications, communication to the fire signal receiving center is provided for Internet, Intranet, LAN or WAN networks when configured as a NET or CELL communicating system using the XR150/XR550 Series panel. Program one of the following options in panel Communication:

<table>
<thead>
<tr>
<th>Path 1 Type NET or CELL Primary with no Backup</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Path 1 Programming</strong></td>
</tr>
<tr>
<td>Comm Type = NET or CELL</td>
</tr>
<tr>
<td>Path Type = Primary</td>
</tr>
<tr>
<td>Sub Code = No</td>
</tr>
<tr>
<td>Comm Path Trbl = Yes (Status List Programming)</td>
</tr>
<tr>
<td>Checkin Min = 3</td>
</tr>
<tr>
<td>Failtime Min = 3</td>
</tr>
<tr>
<td>Send Comm Trbl = Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Path 1 Type NET Primary and Path 2 Type CELL Backup</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Path 1 Programming</strong> Path 2 Programming</td>
</tr>
<tr>
<td>Comm Type = NET</td>
</tr>
<tr>
<td>Path Type = Primary</td>
</tr>
<tr>
<td>Test Rpt = Yes</td>
</tr>
<tr>
<td>Test Freq = 1 Dy</td>
</tr>
<tr>
<td>Send Comm Trbl = Yes</td>
</tr>
<tr>
<td>Comm Path Trbl = Yes (Status List Programming)</td>
</tr>
<tr>
<td>Checkin Min = 3</td>
</tr>
<tr>
<td>Failtime Min = 3</td>
</tr>
<tr>
<td>Send Comm Trbl = Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Path 1 Type Cell Primary and Path 2 Type NET Backup</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Path 1 Programming</strong> Path 2 Programming</td>
</tr>
<tr>
<td>Comm Type = CELL</td>
</tr>
<tr>
<td>Path Type = Primary</td>
</tr>
<tr>
<td>Test Rpt = Yes</td>
</tr>
<tr>
<td>Test Freq = 1 Dy</td>
</tr>
<tr>
<td>Send Comm Trbl = Yes</td>
</tr>
<tr>
<td>Comm Path Trbl = Yes (Status List Programming)</td>
</tr>
<tr>
<td>Checkin Min = 3</td>
</tr>
<tr>
<td>Failtime Min = 3</td>
</tr>
<tr>
<td>Send Comm Trbl = Yes</td>
</tr>
</tbody>
</table>

### 9.2 Central Station Host Automation

The fire signal receiving center’s host automation system must recognize the following signals:
- Zone 1 Alarm = Fire Alarm,
- Zone 2 Trouble = Fire Zone Trouble
- Zone 3 Trouble = AC Trouble
- Zone 4 Trouble = Battery Trouble
- Zone 5 Trouble = Ground Fault Trouble.

### 9.3 Combination Systems

For combination fire and burglary systems, powered burglary devices such as PIRs, Glassbreaks, etc. must be powered from a separate listed power supply. 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 that are listed for Commercial Fire. Refer to the Combination S304 and S559 Systems diagram in this document.

When used in a combination system, the Model 712-8 must only be connected to the LX800 or LX900 bus. No Commercial Fire listed devices can be connected to the LX800 or LX900 bus when the 712-8 is used in the system.

Combination systems may only use the following keypads for burglary zone annunciations:
- 7070/7070A
- 7073/7073A
- 7170/7170A
- 7173/7173A
California State Fire Marshal Specifications

10.1 Bell Output Definition
The Model XR150/XR550 Series panel Bell Output must be programmed to operate steady on burglary alarms and pulsed, temporal, or California School Code on fire alarms.

False Alarm Reduction Options
ANSI/SIA CP-01-2010

11.1 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.

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

11.2 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.

11.3 Entry Delay
Only use Entry Delay 1. Do not use Entry Delay 2, 3, or 4.

11.4 Minimum Installation Requirements
SIA CP-01-2010 minimum system installation requirements include an XR150/XR550 control panel, a 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
New York City (FDNY) Specifications

12.1 Introduction
The programming specifications contained in section 10.2 or 10.3 must be completed when installing the XR150/XR550 Series control panel for New York City (FDNY) fire alarm installations for IP communication applications. Refer to the FDNY Certificate of Approval #6167 for the complete conditions of approval.

Note: Fire alarm installations that use two digital dialer telephone lines do not need to comply with these two sections.

12.2 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 the primary channel of communication to the Central Station and a 263LTE-V or 263H Cellular Communicator shall be used as the secondary channel of communication or in reverse order: 263LTE-V or 263H Cellular Communicator as primary and Network connection as the secondary channel.

Path 1 Type NET Primary and Path 2 Type CELL Backup Programming

<table>
<thead>
<tr>
<th>Path 1 Programming</th>
<th>Path 2 Programming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comm Type = NET</td>
<td>Comm Type = CELL</td>
</tr>
<tr>
<td>Path Type = Primary</td>
<td>Path Type = Backup</td>
</tr>
<tr>
<td>Checkin Min = 5</td>
<td>Checkin Min = 5</td>
</tr>
<tr>
<td>Failtime Min = 5</td>
<td>Failtime Min = 5</td>
</tr>
<tr>
<td>Test Rpt = Yes</td>
<td>Test Rpt = Yes</td>
</tr>
<tr>
<td>Test Freq = 1 Dy</td>
<td>Test Freq = 1 Dy</td>
</tr>
<tr>
<td>Send Comm Trbl = Yes</td>
<td>Send Comm Trbl = Yes</td>
</tr>
<tr>
<td>Comm Path Trbl = Yes (Status List Programming)</td>
<td></td>
</tr>
</tbody>
</table>

Path 1 Type CELL Primary and Path 2 Type NET Backup Programming

<table>
<thead>
<tr>
<th>Path 1 Programming</th>
<th>Path 2 Programming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comm Type = CELL</td>
<td>Comm Type = NET</td>
</tr>
<tr>
<td>Path Type = Primary</td>
<td>Path Type = Backup</td>
</tr>
<tr>
<td>Checkin Min = 5</td>
<td>Checkin Min = 5</td>
</tr>
<tr>
<td>Failtime Min = 5</td>
<td>Failtime Min = 5</td>
</tr>
<tr>
<td>Test Rpt = Yes</td>
<td>Test Rpt = Yes</td>
</tr>
<tr>
<td>Test Freq = 1 Dy</td>
<td>Test Freq = 1 Dy</td>
</tr>
<tr>
<td>Send Comm Trbl = Yes</td>
<td>Send Comm Trbl = Yes</td>
</tr>
<tr>
<td>Comm Path Trbl = Yes (Status List Programming)</td>
<td></td>
</tr>
</tbody>
</table>

12.3 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.

12.3.1 Communication Programming
For digital dialer communication with $R = \text{Central Station Receiver Phone Number}$

BACKUP COMM TYPE = NET
RECEIVER
ALARMS = YES

12.4 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.

12.5 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 Specifications in this document.
FUNCTIONALITY

Universal Burglary Specifications

13.1  Wiring
All wiring must be in accordance with NEC, ANSI/NFPA 70, ANSI/UL 681, and ANSI/UL 827 for all burglary installations. All transformer wires must be installed in conduit.

13.2  Power Supply Supervision
For commercial burglary applications the power supply for all local bells shall be under 24-hour protection.

13.3  Listed Receivers
Operation has been verified with the DMP SCS-VR and SCS-1R receivers and any Central Station Receiver that accepts industry standard SIA 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.

Area Information

14.1  Annunciation
The system shall be installed so that when arming any area from any keypad, the local bell shall annunciate.

14.2  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.

Access Control System Units
ANSI/UL 294

15.1  Tamper Protection
For listed Access Control installations, a tamper switch must be used.

Police Station Connected and Local Burglar Alarm Units
ANSI/UL 365

16.1  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.
17.1 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.

18.1 Audible Devices
For ANSI/UL 1023, at least one listed audible device rated to operate over the voltage rate of 11.7 VDC to 12.8 VDC and rated at 85dB minimum must be used.

18.2 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.
For combination systems, powered burglary devices such as PIRs or sounding devices must be powered from a separate power supply so that a fault does not affect the fire system.

19.1 Wiring
All wiring must be in accordance with NEC, ANSI/NFPA 70 for fire installations.

19.2 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 XR150/XR550 Series.

19.3 Standby Batteries for Fire Installations
The panel must have 24 hour battery standby operation. The Model 364 battery should not be used for fire installations.

19.4 End-of-Line Resistor
The DMP Model 310 1k Ohm EOL resistor should be used on all 1k Ohm EOL fire zones.

19.5 Listed Receivers
Operation has been verified with the DMP SCS-VR and SCS-1R receivers and any Central Station Receiver that accepts industry standard SIA 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.
Control Units for Fire-Protective Signaling Systems
ANSI/UL 864, NFPA 72

20.1 Cross Zoning
When using cross zoning, there must be a minimum of two detectors installed in each protected space and the detector installation spacing must be 0.7 times the linear spacing in accordance with National Fire Alarm Code, NFPA 72.

20.2 Ground Fault
For supervised circuits, ground fault is detected at 0 (zero) Ohms.

ULC S304-06 Specifications
Signal Receiving Center and Premise Burglar Alarm Control Units

21.1 Dual Protection
For Medium or High Risk ULC Listed Applications: Use only zones 1-8 on the control panel and program Dual EOL as Yes in panel programming. Program the Disarmed Short Message in Alarm Action of Zone Information programming as a Trouble message.

If using a 714, 714-8, or 714-16 for dual protection, program two zones as the same name or equivalent and connect to the contact in the protected area as show in the Dual Zone Protection diagram in this guide.

21.2 Canadian Zone Expansion
Use of the following zone expanders are permitted for connection of burglary devices:

<table>
<thead>
<tr>
<th>Zone Expander</th>
<th>Number of Zones</th>
</tr>
</thead>
<tbody>
<tr>
<td>710 Bus Splitter Module</td>
<td>4 zones</td>
</tr>
<tr>
<td>711 Zone Expander, Single</td>
<td>8 zones</td>
</tr>
<tr>
<td>712-8 Zone Expander, 8</td>
<td>16 zones</td>
</tr>
<tr>
<td>714 Zone Expander, 4 zones</td>
<td></td>
</tr>
<tr>
<td>714-8 Zone Expander, 8 zones</td>
<td></td>
</tr>
<tr>
<td>714-16 Zone Expander, 16 zones</td>
<td></td>
</tr>
<tr>
<td>715 Zone Expander, 4 zones</td>
<td></td>
</tr>
<tr>
<td>715-8 Zone Expander, 8 zones</td>
<td></td>
</tr>
<tr>
<td>715-16 Zone Expander, 16 zones</td>
<td></td>
</tr>
</tbody>
</table>

21.3 Devices
For ULC Listed applications, only one device is permitted per zone.

21.4 Audible Device
At least one listed audible signaling device rated at 75dB minimum must be used.

21.5 ULC Burglary Installation Recommendations
1. In order to give the digital alarm communicator transmitter the ability to disconnect an incoming call to the protected premises, telephone service should be of the type that provides for timed release disconnect.
2. Network access and domain access policies shall be set to restrict unauthorized network access and “spoofing” or “denial of service” attacks.
3. Select Internet Service Providers that have redundant servers/systems, Back-up power, Routers with Firewall enabled and Methods to identify and protect against “Denial of Service” attacks (i.e. via “spoofing”).
4. Power for network equipment as hubs, switches, routers, servers, modems, etc., shall be backed up or powered by an uninterrupted power supply (UPS), stand-by battery or the control unit, capable of facilitating 24 hour standby, compliant with Clauses 16.1.2 and 16.4.1 of CAN/ULC-S304-06.
5. Where such cannot be facilitated, the control unit shall support back-up communications for a secondary communications path, subject to the following:
   - Low Risk and Medium Risk shall use a dialer as a minimum;
   - High Risk shall use cellular control channel or long range radio as a minimum; and
   - Very High Risk shall be equipped with 24 hour standby power.
   **Note:** Refer to Table 11 of CAN/ULC-S304-06 for the risk levels.
6. Refer to CAN/ULC-S302, Installation and Classification of Burglar Alarm Systems for Financial and Commercial Premises, Safes and Vaults, for requirements for a secondary communications path, where 24 hour standby cannot be facilitated for all communications interface components as routers, hubs, switches and other network components.
7. Products or components of products used in communication channels, which perform communications functions only, shall comply with the requirements applicable to communications equipment as specified in CAN/CSA-C22.2 No. 60950-1, Information Technology Equipment-Safety - Part 1: General Requirements. Such products or components include, but are not limited to:
   A Hubs;
   B Routers;
   C Network interface devices;
   D Third party communications service providers;
   E Digital subscriber line (DSL) modems; and
   F Cable modems

**ULC S545 Specifications**

**Residential Fire Warning System Control Units**

22.1 **Canadian Wiring**
All wiring must be in accordance with S540 Standard for the Installation of Residential Fire Alarm Systems.

22.2 **Canadian Modules/Expanders**
The following module/expander must not be installed on the same Keypad Bus or LX-Bus circuit with initiating devices. If these modules/expanders are required for the application, reserve the LX800 or LX900 Bus for these modules. The Models 716 was evaluated for ULC-S545 installations.
   - 716 Output Expansion Module

22.3 **End-of-Line Resistor**
The DMP Model 310 1k Ohm EOL resistor should be used on all 1k Ohm EOL fire zones.

**ULC S559 Specifications**

**Fire Signal Receiving Centres and Systems**

23.1 **Canadian Wiring**
All wiring must be in accordance with CSA C22.1, Safety Standard for Electrical Installations, and Canadian Electrical Code, Part I, Section 32.

23.2 **Normal Standby / Alarm Loading**
Maximum total loading from the panel and all connected devices for Normal Standby and Alarm is 0.7 Amps.

23.3 **Battery Capacity**
Maximum battery capacity is 36 Amp hours.
# Programming Requirements

## 24.1 System Programming Option Requirements

NOTICE TO USERS, INSTALLERS, AUTHORITIES HAVING JURISDICTION, AND OTHER INVOLVED PARTIES

This product incorporates field-programmable software. In order for the product to comply with the requirements of a certificated installation, certain programming features or options must be limited to specific values or not used at all as indicated below.

<table>
<thead>
<tr>
<th>Program feature or option</th>
<th>Standard</th>
<th>Permitted?</th>
<th>Possible settings</th>
<th>Settings permitted</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Reports, RESTORAL</td>
<td>ANSI/UL 864</td>
<td>Y</td>
<td>NO, YES, DISARM</td>
<td>YES, DISARM</td>
</tr>
<tr>
<td>System Options, PWR FAIL HRS</td>
<td>ANSI/UL 864</td>
<td>Y</td>
<td>0, 1-15</td>
<td>1-3</td>
</tr>
<tr>
<td>System Options, RETARD DELAY for Waterflow Applications</td>
<td>ANSI/UL 864</td>
<td>Y</td>
<td>0, 1-250</td>
<td>1-90</td>
</tr>
<tr>
<td>Bell Options, FIRE TYPE</td>
<td>ANSI/UL 864 &amp; ULC 5545</td>
<td>Y</td>
<td>STEADY, PULSED, TEMPORAL, NONE</td>
<td>PULSED OR TEMPORAL</td>
</tr>
<tr>
<td>Status List, SYSTEM TROUBLES</td>
<td>ANSI/UL 864</td>
<td>Y</td>
<td>Addresses 1 - 16</td>
<td>Any combination Addresses 1 - 16</td>
</tr>
<tr>
<td>Status List, FIRE TYPE</td>
<td>ANSI/UL 864</td>
<td>Y</td>
<td>Addresses 1 - 16</td>
<td>Any combination Addresses 1 - 16</td>
</tr>
<tr>
<td>Zone Information, ZONE TYPE for Zones 1-8</td>
<td>ANSI/UL 864</td>
<td>Y</td>
<td>NT DY EX FI PN EM SV A1 A2 FV AR</td>
<td>FIRE (In accordance with diagrams 1.10-1.11 &amp; 1.21-1.22)</td>
</tr>
<tr>
<td>Zone Information, TRANSMITTER SUPERVISION TIME for Model 1103</td>
<td>ANSI/UL 864</td>
<td>Y</td>
<td>0, 3, 60, 240 minutes</td>
<td>3 minutes</td>
</tr>
<tr>
<td>Zone Information, RETARD for Smoke Detectors</td>
<td>ANSI/UL 864</td>
<td>N</td>
<td>NO, YES</td>
<td>NO</td>
</tr>
<tr>
<td>SET LOCKOUT CODE for Remote Programming</td>
<td>ANSI/UL 864</td>
<td>Y</td>
<td>000000 (DISABLED); 00001-65535</td>
<td>00001-65535</td>
</tr>
<tr>
<td>Communication, CHECKIN MINUTES</td>
<td>ANSI/UL 864</td>
<td>Y</td>
<td>3-250</td>
<td>3-58</td>
</tr>
<tr>
<td>Zone Information, Wireless, TRANSMITTER SUPRVSN TIME</td>
<td>ANSI/UL 985</td>
<td>Y</td>
<td>0, 3, 60, 240</td>
<td>240</td>
</tr>
<tr>
<td>System Options, DETECT WIRELESS JAMMING</td>
<td>ANSI/UL 985 &amp; BURGLARY</td>
<td>Y</td>
<td>NO, YES</td>
<td>YES</td>
</tr>
<tr>
<td>Bell Options, BELL CUTOFF</td>
<td>ANSI/UL 985 &amp; ANSI/UL 1023</td>
<td>Y</td>
<td>0-99</td>
<td>5-99</td>
</tr>
<tr>
<td>Bell Options, BURGLARY TYPE</td>
<td>ANSI/UL 985 &amp; ULC 5545</td>
<td>Y</td>
<td>STEADY, PULSED, TEMPORAL, NONE</td>
<td>STEADY</td>
</tr>
<tr>
<td>System Options, BYPASS REPORTS</td>
<td>BURGLARY</td>
<td>Y</td>
<td>NO, YES</td>
<td>YES</td>
</tr>
<tr>
<td>Zone Information, DISARMED OPEN</td>
<td>BURGLARY</td>
<td>Y</td>
<td>A, T, L, S, C, and - (dash)</td>
<td>T (Trouble)</td>
</tr>
<tr>
<td>Zone Information, NORM OPN for External Contacts</td>
<td>BURGLARY</td>
<td>Y</td>
<td>NO, YES</td>
<td>NO (Normally Closed)</td>
</tr>
<tr>
<td>Zone Information, Wireless, TRANSMITTER SUPRVSN TIME</td>
<td>BURGLARY</td>
<td>Y</td>
<td>0, 3, 60, 240</td>
<td>3, 60, 240</td>
</tr>
<tr>
<td>Remote Options, APP KEY</td>
<td>BURGLARY</td>
<td>N</td>
<td>8-digit app key</td>
<td>None</td>
</tr>
<tr>
<td>System Options, CLOSING WAIT</td>
<td>BURGLARY</td>
<td>Y</td>
<td>NO, YES</td>
<td>YES</td>
</tr>
<tr>
<td>Zone Information, LED OPERATION</td>
<td>ANSI/UL 636</td>
<td>Y</td>
<td>NO, YES</td>
<td>NO</td>
</tr>
<tr>
<td>Bell Options, PANIC TYPE</td>
<td>ANSI/UL 636</td>
<td>N</td>
<td>S, P, T, N</td>
<td>N (None)</td>
</tr>
<tr>
<td>System Option, ENTRY DELAY</td>
<td>ANSI/UL 1023</td>
<td>Y</td>
<td>30-250</td>
<td>30-45</td>
</tr>
<tr>
<td>Area Information, EXIT DELAY</td>
<td>ANSI/UL 1023</td>
<td>Y</td>
<td>30-250</td>
<td>30-60</td>
</tr>
<tr>
<td>System Options, WLS AUDIBLE</td>
<td>ANSI/UL 1023</td>
<td>Y</td>
<td>ANY, DAY, MIN</td>
<td>DAY</td>
</tr>
<tr>
<td>Bell Options, BELL CUTOFF</td>
<td>ANSI/UL 1610</td>
<td>Y</td>
<td>0-99</td>
<td>15-99</td>
</tr>
<tr>
<td>System Option, ENTRY DELAY</td>
<td>ANSI/UL 1610</td>
<td>Y</td>
<td>30-250</td>
<td>30-60 (Using 350A or 350H)</td>
</tr>
<tr>
<td>System Options, WLS AUDIBLE</td>
<td>ANSI/UL 1610</td>
<td>Y</td>
<td>ANY, DAY, MIN</td>
<td>ANY</td>
</tr>
<tr>
<td>Area Information, O/C RPTS</td>
<td>ANSI/UL 1610</td>
<td>Y</td>
<td>NO, YES</td>
<td>YES</td>
</tr>
<tr>
<td>Communication, TEST FREQ</td>
<td>ANSI/UL 1635</td>
<td>Y</td>
<td>1-60, DY, HR</td>
<td>1 DY</td>
</tr>
<tr>
<td>Communication, FIRST/SECOND PHONE NO.</td>
<td>ANSI/UL 1635</td>
<td>Y</td>
<td>32-characters</td>
<td>P (Pause)+phone number</td>
</tr>
</tbody>
</table>
### 24.2 Shipping Defaults and Recommended Programming for ANSI/SIA CP-01-2010

<table>
<thead>
<tr>
<th>SIA CP-01 FEATURE PARAGRAPH # AND DESCRIPTION</th>
<th>DMP XR550 PROGRAMMING GUIDE LT-1232 SECTION #</th>
<th>REQUIREMENT</th>
<th>RANGE</th>
<th>SHIPPING DEFAULT</th>
<th>RECOMMENDED PROGRAMMING*</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2.2.1 Exit Time</td>
<td>17.2 Exit Delay</td>
<td>Required (Programmable)</td>
<td>45 sec. - 250 sec.</td>
<td>60 Seconds</td>
<td>60 Seconds</td>
</tr>
<tr>
<td>4.2.2.2 Progress Annunciation</td>
<td>17.2 Exit Delay</td>
<td>Allowed</td>
<td>Individual keypads may be disabled per zone</td>
<td>All keypads enabled</td>
<td>All keypads enabled</td>
</tr>
<tr>
<td>4.2.2.3 Exit Time Restart</td>
<td>17.2 Exit Delay</td>
<td>Required Option</td>
<td>For re-entry during exit time</td>
<td>Enabled</td>
<td>Enabled</td>
</tr>
<tr>
<td>4.2.2.5 Auto Stay Arm on Unoccupied Premises</td>
<td>9.20 Occupied Premise</td>
<td>Required Option (except for remote arming)</td>
<td>Area 1 = Perimeter Area 2 = Interior</td>
<td>Enabled</td>
<td>Enabled for Residential Applications</td>
</tr>
<tr>
<td>4.2.4.4 Exit Time and Progress Annunciation/ Disable - for Remote Arm</td>
<td>Not Available on Remote Arming</td>
<td>Allowed Option</td>
<td>Progress Annunciation Always disabled for Remote Arming</td>
<td>Not Available</td>
<td>Remote Arming not allowed for CP-01 installations.</td>
</tr>
<tr>
<td>4.2.3.1 Entry Delay(s)</td>
<td>18.19 Entry Delay</td>
<td>Required (Programmable)</td>
<td>30 sec. - 240 Sec. **</td>
<td>30 Seconds</td>
<td>At least 30 Seconds **</td>
</tr>
<tr>
<td>4.2.5.1 Abort Window - for Non-Fire Zones</td>
<td>3.3 Transmit Delay</td>
<td>Required Option</td>
<td>Disable by zone or zone type</td>
<td>Enabled NT DY EX Zone</td>
<td>Enabled</td>
</tr>
<tr>
<td>4.2.5.1 Abort Window Time - for Non-Fire Zones</td>
<td>3.3 Transmit Delay</td>
<td>Required (Programmable)</td>
<td>15 sec. - 45 sec. **</td>
<td>30 Seconds</td>
<td>At least 15 Seconds **</td>
</tr>
<tr>
<td>4.2.5.1.2 Abort Annunciation</td>
<td>3.3 Transmit Delay</td>
<td>Required Option</td>
<td>Annunciate that no alarm was transmitted (S45)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>4.2.5.4.1 Cancel Annunciation</td>
<td>Always Enabled - Not Programmable</td>
<td>Required Option</td>
<td>Annunciate that a Cancel was transmitted (S49)</td>
<td>Always Enabled</td>
<td>Yes</td>
</tr>
<tr>
<td>4.2.6.1 &amp; 4.2.6.2 Duress Feature</td>
<td>User Code + 1 = Ambush Code Not Available</td>
<td>Allowed Option</td>
<td>No 1 + derivative of another user code/no duplicates with other user codes</td>
<td>Code +1 Always Disabled</td>
<td>Not Programmable</td>
</tr>
<tr>
<td>4.3.1 Cross Zoning</td>
<td>16.23 Cross Zone</td>
<td>Required Option</td>
<td>Yes/No Zone Programming</td>
<td>No</td>
<td>Enabled using two or more programmed zones</td>
</tr>
<tr>
<td>4.3.1 Programmable Cross Zoning Time</td>
<td>9.6 Cross Zone Time</td>
<td>Allowed</td>
<td>4 sec. - 250 sec.</td>
<td>4 Seconds</td>
<td>Per walk path in protected premises</td>
</tr>
<tr>
<td>4.3.2 Swinger Shutdown</td>
<td>9.9 Swinger Bypass Trips</td>
<td>Required (Programmable)</td>
<td>1-6 trips</td>
<td>2 trips</td>
<td>2 trips</td>
</tr>
<tr>
<td>4.3.3 Fire Alarm Verification</td>
<td>18.4 Zone Type</td>
<td>Required Option</td>
<td>FV Type Zone</td>
<td>No</td>
<td>Yes as required (unless sensors can self verify)</td>
</tr>
<tr>
<td>4.5 Call Waiting Cancel</td>
<td>3.16 Telephone Number</td>
<td>Required Option</td>
<td>Include *70P in Telephone Number</td>
<td>Disabled</td>
<td>Enabled if user has call waiting</td>
</tr>
<tr>
<td>4.6.3 System Test</td>
<td>22.4 Walk Test</td>
<td>Allowed</td>
<td>Test all protection devices</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>4.6.5 Communications</td>
<td>22.4 Walk Test</td>
<td>Not Allowed</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

* Programming at installation may be subordinate to other listed requirements for the intended application.
** For listed installations, combined Entry Delay and Transmit Delay should not exceed 1 minute.
## 24.3 Panel Programming Options

### Initialization

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLEAR ALL MEMORY</td>
<td>NO - Leaves existing programming intact.</td>
</tr>
<tr>
<td></td>
<td>YES - Clears all memory then displays Reset Panel.</td>
</tr>
<tr>
<td>CLEAR ALL CODES</td>
<td>NO - Leaves existing codes intact.</td>
</tr>
<tr>
<td></td>
<td>YES - Clears the user code and user profile memory and assigns user code number 99 to the highest user position.</td>
</tr>
<tr>
<td>CLEAR ALL SCHEDULES</td>
<td>NO - Leaves existing schedules intact.</td>
</tr>
<tr>
<td></td>
<td>YES - Clears all shift, and output schedules.</td>
</tr>
<tr>
<td>CLEAR DISPLAY EVENTS MEMORY</td>
<td>NO - Leaves existing event memory intact.</td>
</tr>
<tr>
<td></td>
<td>YES - Clears the events memory.</td>
</tr>
<tr>
<td>CLEAR ZONE INFORMATION</td>
<td>NO - Leaves existing zone information intact.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>CLEAR AREA INFORMATION</td>
<td>NO - Leaves existing area information intact.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>CLEAR OUTPUT INFORMATION</td>
<td>NO - Leaves existing output information intact.</td>
</tr>
<tr>
<td></td>
<td>YES - Clears all programmed Output names and any output cutoff assignment.</td>
</tr>
<tr>
<td>CLEAR COMMUNICATION AND REMOTE OPTIONS</td>
<td>NO - Leaves existing communication and remote options intact.</td>
</tr>
<tr>
<td></td>
<td>YES - Returns communication and remote options to factory defaults.</td>
</tr>
<tr>
<td>SET TO FACTORY DEFAULTS</td>
<td>NO - Leaves existing panel programming intact.</td>
</tr>
<tr>
<td></td>
<td>YES - Sets the panel’s programming back to factory default selections and clears all Z-Wave device programming and Favorites from the panel. Selecting YES does not clear the panel’s event memory, zone, user code information, or schedules. It also sets Programming and User Language to English.</td>
</tr>
</tbody>
</table>

### Communication

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCOUNT NUMBER</td>
<td>The Account Number is a 1-5 digit number. The range of valid account numbers for a panel is 1 to 65535. Do not enter leading zeros.</td>
</tr>
<tr>
<td>TRANSMIT DELAY</td>
<td>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. The default is 30.</td>
</tr>
<tr>
<td>COMMUNICATION PATH</td>
<td>Program up to eight paths designated as a primary or backup communication route. Each primary path establishes a new path group. A path group is made up of the primary path and its subsequent backup paths.</td>
</tr>
<tr>
<td>COMMUNICATION TYPE</td>
<td>Specify the communication method on this path to report system events. Default is DD for Path 1, and NONE for Path 2-8. NONE - For local systems. DD - Digital Dialer communications NET - Network communication using the onboard network connection. CID - SIA Contact ID format. CELL - 263LTE-V or 263H Cellular Communicators WIFI - Wi-Fi Module</td>
</tr>
<tr>
<td>PATH TYPE</td>
<td>Primary or Backup. Because Path 1 is Primary, this prompt only displays for paths 2-8. Default is Backup.</td>
</tr>
<tr>
<td>TEST REPORT</td>
<td>Reports are sent according to the programming in Test Frequency and Test Time. Default is Yes. Select YES to send the test report 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.</td>
</tr>
<tr>
<td>TEST FREQUENCY</td>
<td>Enter 1-60 and select DY (Day) or HR (Hour) for test frequency. Default is 1 Day.</td>
</tr>
<tr>
<td>TEST DAY</td>
<td>This prompt appears only when Test Report is Yes, Test Frequency is Day and a multiple of seven. Press the CMD key to display the days of the week.</td>
</tr>
<tr>
<td>TEST TIME</td>
<td>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.</td>
</tr>
<tr>
<td><strong>PROGRAMMING OPTIONS</strong></td>
<td><strong>DESCRIPTION</strong></td>
</tr>
<tr>
<td>-------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td><strong>CHECK IN</strong></td>
<td>This option displays if the COMM TYPE is NET or CELL. For NET the default is YES. For CELL the default is NO. 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. 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. Select YES to enter the number of minutes between check-in reports, from 2-240 for NET or 3-240 for CELL, when the panel is armed or disarmed.</td>
</tr>
<tr>
<td><strong>FAIL TIME</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>ENCRYPTION (XR550 WITH ENCRYPTION)</strong></td>
<td>Select Yes to enable encryption for the path currently being programmed.</td>
</tr>
<tr>
<td><strong>RECEIVER IP</strong></td>
<td>This option displays if the COMM TYPE is NET or CELL. Enter the Receiver IP address where the panel sends network messages.</td>
</tr>
<tr>
<td><strong>RECEIVER PORT</strong></td>
<td>Enter the receiver port number. Valid range is 1 to 65,535. Default is 2001.</td>
</tr>
<tr>
<td><strong>FIRST TELEPHONE NUMBER</strong></td>
<td>This option displays only if the COMM TYPE is DD or CID. Enter 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 R as the first character for rotary (pulse) phone function. Call Waiting: You can place the “* 7 0 P” (Star, Seven, Zero, Pause) in the telephone number first position to cancel Call Waiting. Caution: A call waiting cancel programmed on a non-call waiting telephone line would prevent communication to the central station.</td>
</tr>
<tr>
<td><strong>SECOND TELEPHONE NUMBER</strong></td>
<td>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. 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.</td>
</tr>
<tr>
<td><strong>ADVANCED PROGRAMMING</strong></td>
<td>Select Yes to enter the Advanced Programming menu for the communication path currently being programmed.</td>
</tr>
<tr>
<td><strong>FIRST/SECOND GPRS APN</strong></td>
<td>Enter the first and second (backup) APN (Access Point Name) for cellular communication. The APN may contain two lines of 16 characters to equal 32 characters. Note: This option is not used when a 263C CDMA Cellular Communicator is used for communication.</td>
</tr>
<tr>
<td><strong>FAIL TEST HOURS</strong></td>
<td>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. Range is 0 to 24 hours.</td>
</tr>
<tr>
<td><strong>PROTOCOL</strong></td>
<td>This option displays when COMM TYPE is NET. Select TCP or UDP protocol for communication.</td>
</tr>
<tr>
<td><strong>RETRY SECONDS</strong></td>
<td>This option displays when COMM TYPE is NET. Enter 6-15 seconds for the panel to wait before retrying to send a message to the receiver if an acknowledgment was not received. Note: If TCP is enabled, the minimum Retry Time programmed is 6 seconds.</td>
</tr>
<tr>
<td><strong>SUBSTITUTION CODE</strong></td>
<td>This option displays when the COMM TYPE is NET or CELL. Select YES to send a substitution code with every message. Select SHARED (SHR) to use the same code as the previous path.</td>
</tr>
<tr>
<td><strong>893A</strong></td>
<td>This option displays when the COMM 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. If the 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.</td>
</tr>
</tbody>
</table>
### PROGRAMMING OPTIONS

<table>
<thead>
<tr>
<th><strong>ALARM SWITCH</strong></th>
<th>This option displays when the COMM TYPE is DD or CID. Enter the number of attempts (1-10) to send an alarm message before switching to the next path. All non-alarm messages are 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.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DUPLICATE ALARMS</strong></td>
<td>This prompt displays for BACKUP paths. If Yes is selected, the current backup path duplicates all alarms occurring on its group primary path.</td>
</tr>
</tbody>
</table>
| **ALARM REPORTS** | This prompt displays for PRIMARY paths. Select YES to send the following reports for all zone types:  
  - Alarm  
  - Bypass  
  - Reset  
  - Restore  
Select FIRE to send the following reports for Fire, Fire Verify, and Supervisory Zones:  
  - Alarm  
  - Bypass  
  - Reset  
  - Restore |
| **SUPERVISORY/TROUBLE REPORTS** | This prompt displays for PRIMARY paths. Select YES to send the following reports for all zone types:  
  - Trouble  
  - Low Battery  
  - Missing  
  - Fault  
Select FIRE to send the following reports for Fire, Fire Verify, and Supervisory Zones:  
  - Trouble  
  - Low Battery  
  - Missing  
  - Fault  |
| **OPENING/CLOSING AND USER REPORTS** | This prompt displays for PRIMARY paths. Select YES to send the following reports by user:  
  - Opening  
  - Code changes (including adding, deleting, changing)  
  - Closing  
  - Schedule changes (temporary, permanent, shift)  
  - Bypass  
  - Holiday date changes  
  - Reset |
| **DOOR ACCESS REPORT** | This prompt displays for PRIMARY paths. 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. |
| **PANIC TEST** | This option displays when the COMM TYPE is NET. Select YES to allow the panic zone test verification and failure results to be sent to the central station receiver. Select NO to disable the panic test report. |
| **SEND COMMUNICATION TROUBLE** | This prompt displays for each path and determines if and how communication trouble on the path is sent to the receiver. |
| **SEND PATH INFORMATION** | This prompt displays for each path and if YES, each panel message includes path information such as path number, communication type, and path type. |

### Network Options

| **WIFI SETUP** | This option is for connecting to the desired Wi-Fi network and will display only when Comm Type is set to Wi-Fi. Press any select key or area to select.  
  - WPS - To automatically connect to a WPS enabled router.  
  - LIST - To display the name and signal strength of any Wi-Fi routers in range.  
  - MANUAL - To enter the name of the Wi-Fi router you wish to connect to.  
  - TEST - To verify connection of your system to the Wi-Fi network. |
| **SSID** | When MANUAL is selected, enter the SSID (Wi-Fi Network Name) and search for the desired network. |
| **WIRELESS SECURITY TYPE** | Select the security type based on the wireless router programming. The default is WE6. |
| **WIRELESS NETWORK KEY** | Enter the key provided from the wireless router’s programming. WE6 (WE64) and WE1 (WE128) require a wireless password of 10 characters (WEP64) or 26 characters (WEP128), using a combination of the number 0-9 and the letters A-F. WPA (WPA-PSK) and WPA2 (WPA-PSK2) use a custom key that allows 8 to 32 characters. |
| **DHCP** | Select YES for the panel to use a dynamic IP address. The panel operates using DHCP and does not use the Local IP Address number. Select NO for the panel to use the IP address entered in Local IP Address. |
| **LOCAL IP ADDRESS** | Enter the local IP address. |
| **GATEWAY ADDRESS** | Enter the local gateway address to exit your local network. |
| **SUBNET MASK** | Enter the local subnet mask assigned to the panel. |
| **DNS SERVER** | Enter the IP address of the DNS (Domain Name System) used by the panel to resolve domain names into IP addresses. |
**PASSPHRASE (XR550 WITH ENCRYPTION)**
Enter an 8 to 16-character Passphrase using alphanumeric characters. If the Passphrase is left blank, the data is not encrypted. The panel with encryption communicates to an SCS-104 line card installed at the receiver. The panel and the receiver SCS-104 line card must have the same Passphrase.

**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/734N-WiFi Communication programming menu.

**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.

*Note:* A passphrase is required for operation.

### Messaging Setup

**ENABLE MESSAGING**
Select YES to allow the panel to send the following messages to three programmed destinations.
- 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

**SYSTEM NAME**
Enter a unique name for the panel. The panel name is used as the sender of the message. If this field is left blank, the panel account number is sent.

**DESTINATION 1-3**
Enter the 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 cell phone number is entered. If Destination 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. The user number entered must have the authority to perform the commands as if it occurred at the keypad.

**O/C SMS**
Select YES to allow the panel to send Opening and Closing messages to a cell phone via SMS protocol.

**MONTHLY LIMIT**
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 is counted towards the panel’s monthly limit.

### Device Setup

**DEVICE NUMBER**
Enter an address of 1-16 for the device being programming. If using a wireless keypad, program the device number in the Status List Auxiliary 1 Zones programming option to display wireless keypad troubles.

**DEVICE NAME**
A device name must be given to each device in the system. Press CMD to accept the default name or enter a new name up to 32 alphanumeric characters.

**DEVICE TYPE**
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.

**DEVICE COMMUNICATION TYPE**
For a Device Type of DOOR, select KPD-BUS or NETWORK. For a Device Type of KEYPAD, select KPD-BUS or WIRELESS.

**SERIAL NUMBER**
*Note:* This option only displays if Device Type is KEYPAD and Device Comm Type is WIRELESS.
Enter the eight-digit serial number found on the wireless keypad.

**SUPERVISION TIME**
*Note:* This option only displays if Device Type is KEYPAD and Device Comm Type is WIRELESS.
Press CMD to accept the default supervision time or select the supervision time for the device. Zero (0) indicates an unsupervised wireless keypad.

**ACCESS AREAS**
To select an area, enter the area number using the digit keys on the keypad. 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 receive a door access without regard to schedules. If the user code is programmed for AntiPass 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.
When all areas accessed by a door are armed, the door is locked by the panel.
## PROGRAMMING OPTIONS

### EGRESS AREAS
To select an area, enter the area number using the digit keys on the keypad.
**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. 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.

### DISPLAY AREAS
Select any areas between 1 up to 32. Display Areas allows the panels burglary activities to be segmented so that only specific area(s) and their associated operation appear at a particular keypad. 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.
**Note:** A common area and its operations cannot be assigned to a specific keypad.

### STRIKE TIME
Enter a door access time, between 1 and 250 seconds, during which a keypad or access control device relay is activated. Enter 0 (zero) to activate the device relay with a toggle action.
**Note:** The Request to Exit door access time of a keypad or Model 734/734N Wiegand Interface Module is not affected by this selection. It remains at 5 seconds.

### STRIKE DELAY
Enter the number of minutes, 0 to 9, to delay a door strike after a valid code is entered or a card read occurs.

### 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. Select NO to not allow the door access relay at this address to be released.

### PUBLIC DOOR
Select YES to allow the door access relay at this address to be released whenever the Lockdown command is issued from the keypad User Menu or remote command. Select NO to not allow the door access relay at this address to be released.

### 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.

### SCHEDULE OVERRIDE
Select YES to causes the on time for a door schedule to be ignored when all areas assigned to Access Areas for this device are armed. Select NO to allow door schedules to operate independent of system armed status.

### 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.
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.

### DOOR REAL-TIME STATUS?
Select YES to have real-time door status messages sent to PC Log and Entré reporting for this device.

### SEND DOOR FORCED MESSAGE?
Select YES to have the panel send a real-time door status message of Forced Open (FO) to PC Log and Entré reporting when the door relay is off, but the door zone has transitioned from its normal state.

### 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 734N are the same.
To program the 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.

### ACTIVATE ZONE 2 BYPASS
Select YES to activate the Bypass option. Selecting NO allows standard zone operation on Zone 2.

### ZONE 2 BYPASS TIME
Enter 20-250 seconds for the Bypass timer expires. If the door remains open when the timer expires a zone open/short is sent to the panel for Zone 2.

### RELOCK ON ZONE 2 CHANGE?
Selecting NO leaves the relay on for the door access time when Zone 2 restores. Selecting YES turns the 734/734N/734N-WiFi relay off and relocks the door when Zone 2 changes state.

### 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.
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 Bypass entry/exit timer number of seconds.

### ZONE 3 REX STRIKE TIME
Enter the number of REX seconds to elapse. Range is from 5 to 250 seconds.

### ACTIVATE ONBOARD SPEAKER
Select YES to enable the onboard piezo speaker for local annunciation. Select NO to turn the piezo off for all operations.
<table>
<thead>
<tr>
<th>CARD OPTIONS</th>
<th>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. Select CUSTOM if using a non-DMP card or user code length of 6 to 12 digits. 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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUSTOM CARD DEFINITIONS - WIEGAND CODE LENGTH</td>
<td>When using a custom credential, enter the total number of bits (1-255) to be received in Wiegand code including parity bits.</td>
</tr>
<tr>
<td>734 SITE CODE - SITE CODE POSITION</td>
<td>Enter the site code start position (0-255) in the data string.</td>
</tr>
<tr>
<td>SITE CODE LENGTH</td>
<td>Enter the number of characters (1-16) the site code contains.</td>
</tr>
<tr>
<td>USER CODE POSITION</td>
<td>Define the User Code start bit position (0-255).</td>
</tr>
<tr>
<td>USER CODE LENGTH</td>
<td>Define the number of User Code bits. On a 734 module, custom numbers can only be between 16-40. On a 734N/734N-WiFi module, custom numbers can be between 1-255.</td>
</tr>
<tr>
<td>REQUIRE SITE CODE</td>
<td>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.</td>
</tr>
<tr>
<td>SITE CODE DISPLAY</td>
<td>734 Module: Program up to 8 three-digit site codes between 0-999. 734N/734N-WiFi Module: Program up to 8 five-digit site codes between 1-65535.</td>
</tr>
<tr>
<td>NUMBER OF USER CODE DIGITS</td>
<td>734 module recognizes user codes from 4-12 digits in length. 734N/734N-WiFi module recognizes user codes from 1-12 digits in length.</td>
</tr>
<tr>
<td>NO COMMUNICATION WITH PANEL</td>
<td>This option defines the relay action when communication with the panel has not occurred for approximately ten seconds. OFF (Relay Always Off) — The relay does not turn on when any Wiegand string is received. Off does not affect any REX operation. SITE (Accept Site Code) — Door access is granted when the Wiegand site code string received matches any site code programmed at SITE CODE ENTRY. ANY (Any Wiegand Read) — Door access is granted when any Wiegand string is received. ON (Relay Always On) — The relay is always on. LAST (Keep Last State) — The relay remains in the same state and does not change when communication is lost.</td>
</tr>
</tbody>
</table>

**Remote Options**

| REMOTE KEY | This option allows you to enter a code of up to 16 characters. All panels are shipped from the factory with the key preset as blank. |
| REMOTE DISARM | YES allows the panel to be disarmed remotely. NO disables remote disarming. |
| ARMED ANSWER RINGS | Enter the number of rings (0-15) the panel counts before answering the phone line when all system areas are armed. If 0 (zero) is entered, the panel does not answer the phone. |
| DISARMED ANSWER RINGS | Enter the number of rings the panel counts (0-15) before answering the phone line while any system areas are disarmed. If 0 (zero) is entered, the panel does not answer the phone. |
| 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. |
| 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. When NO is selected, remote commands and programming are not accepted from the alarm SCS-1R Receiver. |
| 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. |
| MANUFACTURER AUTHORIZATION | Select YES to allow DMP Technical Support to access the panel during system service or troubleshooting. This authorization automatically expires within one hour. |
| ALLOW NETWORK REMOTE | This option displays only if the panel has NET capability. YES allows remote programming over the network. |
| NETWORK PROGRAMMING PORT | Enter the programming port number. The programming port identifies the port used to communicate messages from the panel. |
| ENCRYPT NETWORK REMOTE | YES encrypts data sent over network. Default is NO. |
| ALLOW CELLULAR REMOTE | YES allows remote programming using cellular connection. Default is YES. |
### PROGRAMMING OPTIONS

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST/SECOND GPRS APN</strong></td>
<td>Enter the first and second APN (Access Point Name) for cellular communication to connect to a DNS network. The APN may contain two lines of 16 characters to equal 32 characters.</td>
</tr>
<tr>
<td><strong>ENCRYPT CELLULAR REMOTE</strong></td>
<td>YES encrypts data sent over a cellular connection. Default is NO.</td>
</tr>
<tr>
<td><strong>ENTRÉ CONNECTION</strong></td>
<td>This option displays only if the panel has network capability. Select NET to allow a dedicated network connection with Entré.</td>
</tr>
<tr>
<td><strong>ENTRÉ INCOMING TCP PORT</strong></td>
<td>This option displays only if NET is chosen for the Entré connection. Enter the programming port number for the incoming Entré connection.</td>
</tr>
<tr>
<td><strong>ENTRÉ IP ADDRESS</strong></td>
<td>This option displays only if NET is chosen for the Entré connection. Enter the Entré IP address where the panel sends network messages.</td>
</tr>
<tr>
<td><strong>ENTRÉ OUTBOUND TCP PORT</strong></td>
<td>This option displays only if NET is chosen for the Entré connection. Enter the programming port number for the outbound Entré connection.</td>
</tr>
<tr>
<td><strong>ENTRÉ BACKUP IP ADDRESS</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>ENTRÉ BACKUP TCP PORT</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>ENTRÉ CHECKIN</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>ENTRÉ PASSPHRASE</strong></td>
<td>Enter an 8 to 16-character Passphrase using alphanumeric characters. If you leave the Passphrase blank, the data is not encrypted.</td>
</tr>
<tr>
<td><strong>SEND LOCAL CHANGES</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>REMOTE CHANGE IP</strong></td>
<td>This option displays when NET is selected for Send Local Changes. Enter the IP address containing up to 12 digits.</td>
</tr>
<tr>
<td><strong>REMOTE CHANGE PORT</strong></td>
<td>This option displays when NET is selected for Send Local Changes. Enter the Port number. Valid numbers are from 0 to 65535.</td>
</tr>
<tr>
<td><strong>REMOTE TELEPHONE NUMBER</strong></td>
<td>This option displays when DD is selected for Send Local Changes. Enter the phone number the panel dials when sending programming changes.</td>
</tr>
<tr>
<td><strong>APP KEY</strong></td>
<td>Enter the 8-digit App Key obtained in your Dealer Settings tab at vk.securecomwireless.com. This option is a security feature of the Virtual Keypad iPhone/Android App used only when your Dealer Settings at vk.securecomwireless.com have “EasyNet” set as the Communication Type.</td>
</tr>
</tbody>
</table>

### System Reports

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ABORT REPORT</strong></td>
<td>Select YES to allow the panel to send an alarm abort report to the receiver if 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. Note: Abort Reports are not sent for Fire, Fire Verify, or Supervisory type zones.</td>
</tr>
<tr>
<td><strong>RESTORAL REPORTS</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>BYPASS REPORTS</strong></td>
<td>YES allows the panel to send all zone bypasses, resets, and force arm reports to the receiver. Reports are only sent if O/C User in Communications is set YES for Receiver 1 or Receiver 2.</td>
</tr>
<tr>
<td><strong>SCHEDULE CHANGE REPORTS</strong></td>
<td>YES allows the panel to send all schedule changes to the receiver.</td>
</tr>
<tr>
<td><strong>CODE CHANGE REPORTS</strong></td>
<td>YES allows the panel to send all code additions, changes, and deletions to the receiver.</td>
</tr>
<tr>
<td><strong>ACCESS KEYPADS</strong></td>
<td>Select the keypad addresses (1 through 16) that send door access reports to the receiver.</td>
</tr>
<tr>
<td><strong>AMBUSH (XR550 ONLY)</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>System Options</strong></td>
<td><strong>Description</strong></td>
</tr>
<tr>
<td>--------------------</td>
<td>----------------</td>
</tr>
<tr>
<td><strong>SYSTEM</strong></td>
<td>This option allows you to program how the areas operate for arming and disarming. AREA - All 32 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.</td>
</tr>
<tr>
<td><strong>INSTANT ARMING</strong></td>
<td>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. When NO is selected, INSTANT does not display during arming.</td>
</tr>
<tr>
<td><strong>CLOSING WAIT</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>ENTRY DELAY 1</strong></td>
<td>Enter the Entry Delay time (30 to 250 seconds) for all Exit type zones programmed to use Entry Delay 1. Repeat for each entry delay being used in the system. Note: For UL installations, the combined Transmit Delay (Abort Window) and Entry Delay must not exceed one (1) minute.</td>
</tr>
<tr>
<td><strong>CROSS ZONE TIME</strong></td>
<td>Enter the time allowed (4-250 seconds) 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.</td>
</tr>
<tr>
<td><strong>ZONE RETARD DELAY</strong></td>
<td>Enter the retard time (1-250 seconds) 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.</td>
</tr>
<tr>
<td><strong>POWER FAIL DELAY</strong></td>
<td>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. Note: For UL burglary installations Power Fail Delay shall be programmed to 0 (zero). For UL fire installations, Power Fail Delay shall be programmed as required by the service of the panel. For ULC S559 installations, Power Fail Delay should be programing to 3 or less.</td>
</tr>
<tr>
<td><strong>SWINGER BYPASS TRIPS</strong></td>
<td>Enter the number of times (1-6) a zone can go into an alarm or trouble condition within one hour before being automatically bypassed. Bypassed zones are automatically reset when the area they are assigned to is disarmed.</td>
</tr>
<tr>
<td><strong>RESET SWINGER BYPASS</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>TIME ZONE CHANGES</strong></td>
<td>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. When time zone is programmed YES, enter the number (0-23) that indicates the difference between the Greenwich Time zone (GMT) and where the panel is located.</td>
</tr>
<tr>
<td><strong>LATCH SUPERVISORY ZONES</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>PROGRAMMING MENU LANGUAGE</strong></td>
<td>Select to change the primary programming language. ENG = English (ENGLISH) SPN = Spanish (ESPAÑOL) FRN = French (FRANÇAIS)</td>
</tr>
<tr>
<td><strong>USER MENU AND STATUS LIST LANGUAGE</strong></td>
<td>Select the primary user language. ENG = English (ENGLISH) SPN = Spanish (ESPAÑOL) FRN = French (FRANÇAIS) Selecting a secondary user language allows the user to view the User Menu and Status List text in English, Spanish, or French. If SEC LANG: is set to NONE, the option to choose a language does not display.</td>
</tr>
<tr>
<td><strong>BYPASS LIMIT</strong></td>
<td>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.</td>
</tr>
<tr>
<td>PROGRAMMING OPTIONS</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>CARD PLUS PIN</td>
<td>Select YES to require all users to present a proximity credential and enter a PIN number wherever user code entry is required for system functions accessed from a keypad. Select NO to disable Card Plus PIN operation.</td>
</tr>
<tr>
<td>HOUSE CODE</td>
<td>When using a DMP wireless system, enter a house code between 1 and 50.</td>
</tr>
<tr>
<td>DETECT WIRELESS JAMMING</td>
<td>This option displays when the House Code entered is for a DMP 1100 Series Wireless system (1-50). Select YES to enable jamming messages to display in the Status List. Select NO to disable jamming messages.</td>
</tr>
<tr>
<td>WIRELESS AUDIBLE ANNUNCIATION</td>
<td>This option displays when the House Code entered is for a DMP 1100 Series Wireless system (1-50). 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).</td>
</tr>
<tr>
<td>ENABLE KEYPAD PANIC KEYS</td>
<td>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.</td>
</tr>
<tr>
<td>OCCUPIED PREMISES</td>
<td>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 not automatically disarm interior area(s).</td>
</tr>
</tbody>
</table>
| ENHANCED ZONE TEST  | Select YES to allow enhanced zone test operation. 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. |
| DUAL EOL             | Select YES to enable the use of dual 1K EOL resistors on panel zones one to eight. |
| 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. |
| KEYPAD ARMED LED     | This option displays only when using an Area system. 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. |
| 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/PREM and HOME/SLEEP/AWAY arming systems. |
| 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. |
| PANIC SUPERVISION    | Select YES to enable a 30 day supervision of the Model 1145-1-B-PSV key fob. 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. |
| INACTIVE USER CODE AUDIT | This option allows users to choose 0-365 days a user code can remain unused before the panel sends an Inactive User Code message to the receiver. |
| WEATHER ZIP CODE     | Enter the zip code of the user at this prompt. When no number is entered weather conditions are not displayed. |

**Bell Options**

| 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. |
### PROGRAMMING OPTIONS

#### 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.

#### BELL OUTPUT
Enter the output/Favorite 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.

#### BELL ACTION
This section defines the type of Bell Output for zone alarms.

- Enter S for a Steady Bell Output
- P for a Pulsed output
- T for a Temporal Code 3 output
- N for no Bell Output.

**Note:** Trouble conditions do not activate the Bell Output.

- Fire Bell Action Fire Type zones default is T.
- Burglary Bell Action for Burglary Type zones and Exit Error output default is S.
- Supervisory Bell Action for Supervisory Type zone default is N.
- Panic Bell Action for Panic Type zones default is N.
- Emergency Bell Action for Emergency Type zones default is N.
- Auxiliary Bell Action for Auxiliary Type zones default is N.

### Output Options

#### OUTPUT OPTIONS
The panel provides two Form C relays (1 and 2) and four switched ground (open collector) outputs numbered 3 to 6. Expand the system up to 500 additional relay outputs using any LX-Bus on the panel, or multiple 716 Output Expander Modules. In addition, 45 wireless outputs are available when using the 1100X Series wireless receiver.

Select from the following output numbers:
- 1 to 6
- 450 to 474 — Slow response time* wireless outputs (within 15 seconds)
- 480 to 499 — Fast response time* wireless outputs (within 1 second)
- 500 to 999 — LX-Bus output, Relay output, Zone expansion output
- D1 to D16 — Keypad door strike relay for addresses 1-16
- F1 to F20 — To activate Z-Wave Favorites
- G1 to G20 — Output group

#### CUTOFF OUTPUT
Outputs 1 to 6 can be entered here to turn off after a time specified in CUTOFF TIME. To disable this option, clear the display then press CMD.

#### 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.

#### COMMUNICATION TROUBLE OUTPUT
Enter the output/Favorite 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.

#### FIRE ALARM OUTPUT
Enter the output/Favorite 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.

#### 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.

#### PANIC ALARM OUTPUT
Enter the output/Favorite 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.

**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.

#### AMBUSH OUTPUT (XR550 ONLY)
Enter the output/Favorite number to turn on when an Ambush code is entered at a keypad. The output is turned off using the Sensor Reset option.

#### ENTRY OUTPUT
Enter the output/Favorite 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.
<table>
<thead>
<tr>
<th><strong>PROGRAMMING OPTIONS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BEGIN EXIT OUTPUT</strong></td>
</tr>
<tr>
<td><strong>END EXIT OUTPUT</strong></td>
</tr>
<tr>
<td><strong>READY OUTPUT</strong></td>
</tr>
<tr>
<td><strong>DISARMED OUTPUT</strong></td>
</tr>
<tr>
<td><strong>TELEPHONE TROUBLE OUTPUT</strong></td>
</tr>
<tr>
<td><strong>LATE TO CLOSE OUTPUT</strong></td>
</tr>
<tr>
<td><strong>DEVICE FAIL OUTPUT</strong></td>
</tr>
<tr>
<td><strong>SENSOR RESET OUTPUT</strong></td>
</tr>
<tr>
<td><strong>CLOSING WAIT OUTPUT</strong></td>
</tr>
<tr>
<td><strong>ARM-ALARM OUTPUT</strong></td>
</tr>
<tr>
<td><strong>SUPERVISORY ALARM OUTPUT</strong></td>
</tr>
<tr>
<td><strong>HEAT SAVER TEMPERATURE</strong></td>
</tr>
<tr>
<td><strong>COOL SAVER TEMPERATURE</strong></td>
</tr>
</tbody>
</table>

**Output Information**

| **OUTPUT NUMBER** | Enter an output number. Entry range is 1 to 6, 450 to 474, 480 to 499, 500 to 999. In order for wireless output troubles to display at a keypad, the keypad address must be specified at the Auxiliary 1 Zones prompt in the Status List programming. |
| **OUTPUT NAME** | Enter up to a 32-character alphanumeric name for any output numbers. |
| **OUTPUT REAL-TIME STATUS** | Selecting YES allows Real-Time Status reports of a hardwire device, 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. |
| **SERIAL NUMBER** | This option displays when the output number entered is for a wireless output. Enter the eight-digit serial number found on the wireless device. |
### PROGRAMMING OPTIONS

<table>
<thead>
<tr>
<th>SUPERVISION TIME</th>
<th>Select the supervision time required for the wireless output. Zero (0) indicates an unsupervised transmitter. The 3 minute supervision time is only available if using an 1135 Wireless Siren.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRIP WITH PANEL BELL OPTION</td>
<td>This option displays for 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.</td>
</tr>
</tbody>
</table>

#### Output Groups

<table>
<thead>
<tr>
<th>OUTPUT GROUPS</th>
<th>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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GROUP NUMBER</td>
<td>Enter a group number from 1 to 20. Up to 20 different groups may be assigned.</td>
</tr>
<tr>
<td>GROUP NAME</td>
<td>Enter up to 32 characters for the group name.</td>
</tr>
<tr>
<td>OUTPUT NUMBER</td>
<td>Enter the Output number. Entry range is 1 to 6, 450 to 474, 480 to 499, 500 to 999 (outputs), F1 to F20 (Favorites), D1 to D16 (doors), and G1 to G20 (groups). The maximum number that can be assigned to a specific group is eight.</td>
</tr>
</tbody>
</table>

#### Menu Display

<table>
<thead>
<tr>
<th>MENU DISPLAY</th>
<th>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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARMED STATUS</td>
<td>Enter the keypad addresses (1 through 16) that show the armed areas. The User Menu Armed Areas function also displays the custom area name you enter in Area Information.</td>
</tr>
<tr>
<td>TIME</td>
<td>Enter the keypad addresses that can display the time and day of the week.</td>
</tr>
<tr>
<td>ARM/DISARM</td>
<td>Enter the keypad addresses from which users can arm and disarm areas.</td>
</tr>
</tbody>
</table>

#### Status List

<table>
<thead>
<tr>
<th>STATUS LIST</th>
<th>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. To select a keypad, enter the device number (keypad address) using the digit keys on the keypad.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISPLAY KEYPADS</td>
<td>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.</td>
</tr>
<tr>
<td>SYSTEM MONITOR TROUBLES</td>
<td>Specifies the keypad addresses (1 through 16) where any trouble on a System Monitor displays. The System Monitors include the following:</td>
</tr>
<tr>
<td></td>
<td>AC Power</td>
</tr>
<tr>
<td></td>
<td>Battery Power</td>
</tr>
<tr>
<td></td>
<td>Closing Check</td>
</tr>
<tr>
<td></td>
<td>Panel Box Tamper</td>
</tr>
<tr>
<td></td>
<td>Phone Line 1</td>
</tr>
<tr>
<td></td>
<td>Phone Line 2 (requires the 893A Dual Phone Line Module)</td>
</tr>
<tr>
<td></td>
<td>Wireless Receiver Trouble</td>
</tr>
<tr>
<td></td>
<td>Wireless Jamming Trouble or Alarm</td>
</tr>
<tr>
<td></td>
<td>The buzzer sounds at 10:00am daily until the system trouble clears from the Status List.</td>
</tr>
</tbody>
</table>

#### FIRE ZONES

<table>
<thead>
<tr>
<th>FIRE ZONES</th>
<th>Specifies the keypad addresses (1 through 16) 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.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The panel provides distinct speaker tones from the keypad for Fire:</td>
</tr>
<tr>
<td></td>
<td>On - Fire zone alarm and Bell Output or Fire Bell Output is ON.</td>
</tr>
<tr>
<td></td>
<td>Off - Alarm Silence</td>
</tr>
</tbody>
</table>

#### BURGLARY ZONES

<table>
<thead>
<tr>
<th>BURGLARY ZONES</th>
<th>Specify the keypad addresses (1 through 16) 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. 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:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>On - Burglary zone alarm and Bell Output or Burglary Bell Output is ON.</td>
</tr>
<tr>
<td></td>
<td>Off - Alarm Silence.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
</tbody>
</table>
### PROGRAMMING OPTIONS

<table>
<thead>
<tr>
<th>Zone Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUPERVISORY ZONES</td>
<td>Specifies the keypad addresses (1 through 16) 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.</td>
</tr>
<tr>
<td>PANIC ZONES</td>
<td>Specifies the keypad addresses (1 through 16) where all panic zone alarms and troubles display. The name of the zone remains in the list until a Sensor Reset is performed. The keypad will sound if a Bell Action is enabled in Bell Options.</td>
</tr>
<tr>
<td>EMERGENCY ZONES</td>
<td>Specifies the keypad addresses (1 through 16) 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.</td>
</tr>
<tr>
<td>AUXILIARY 1 ZONES</td>
<td>Specifies the keypad addresses (1 through 16) 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.</td>
</tr>
<tr>
<td>AUXILIARY 2 ZONES</td>
<td>Specifies the keypad addresses (1 through 16) 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.</td>
</tr>
<tr>
<td>COMMUNICATION TROUBLE</td>
<td>Select YES to display communication trouble if any communication path fails. Select ALL to display communication trouble only when all paths have failed.</td>
</tr>
</tbody>
</table>

### PC Log Reports

<table>
<thead>
<tr>
<th>Report Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NET IP ADDRESS</td>
<td>This option displays when the Communication Type for PC Log Reports is NET. Enter the IP address containing up to 16 characters.</td>
</tr>
<tr>
<td>NET PORT</td>
<td>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.</td>
</tr>
<tr>
<td>ARM AND DISARM REPORTS</td>
<td>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.</td>
</tr>
<tr>
<td>ZONE REPORTS</td>
<td>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.</td>
</tr>
<tr>
<td>USER COMMAND REPORTS</td>
<td>Sends user code changes, schedule changes, and door access denied events.</td>
</tr>
<tr>
<td>DOOR ACCESS REPORTS</td>
<td>Sends door access activity: door number, user number and name, time and date.</td>
</tr>
<tr>
<td>SUPERVISORY REPORTS</td>
<td>Sends system monitor reports, such as AC and battery, and system event reports. Supervisory Reports also sends the following reports: Abort, Exit Error, Ambush, Alarm Bell Silenced, Unauthorized Entry, System Recently Armed, Late to Close * 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.</td>
</tr>
<tr>
<td>PC LOG REAL-TIME STATUS</td>
<td>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/Closed with zone number, Door Open/Closed with door number, Output On/Off, Output Pulse/Temporal.</td>
</tr>
</tbody>
</table>

### Area Information

<table>
<thead>
<tr>
<th>Area Information</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AREA INFORMATION</td>
<td>Assign functions to the different areas in the system. All non-24-hour zones must be assigned to an active area. Activate an area by assigning it a name. A name is given to each active area in place of a number to assist the user during arming and disarming.</td>
</tr>
</tbody>
</table>
## PROGRAMMING OPTIONS

### EXIT DELAY
Enter the exit delay time (30-250 seconds) 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. During Exit Delay, if an exit zone trips, then restores, and trips again, the Exit Delay timer restarts. This restart can occur only once.

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

### BURGLARY BELL OUTPUT
Enter the output number (0 to 6, 500 to 999, G1 to G20, D1 to D16, or F1 to F20) 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.

### 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 keypad 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-1R Receiver. When Auto Arm is YES, the area arms. If the area becomes disarmed outside of any schedule, the Closing Check sequence occurs after the Late Arm Delay time.

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.

### 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.

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

### AREA SCHEDULES
Select YES to allow each area to follow individual sets of area schedules. Select NO for all areas to follow only one set of schedules.

### EARLY MORNING AMBUSH (XR550 WITH NETWORK OR ENCRYPTION ONLY)
Enter the number of minutes (1 to 15) before a silent alarm (Early Morning Ambush S33) is sent to the central station using the area 1 account number. Enter 0 (zero) to disable this option.

When a user code is entered to disarm area 1 at a keypad or reader with Access Areas assigned to area 1, the same or different user code must be entered within the programmed number of minutes to prevent an ambush message from being sent to the receiver. The second user code also must have authority to disarm area 1.

In addition, a zone activation with Alarm Action Message C also cancels the Early Morning Ambush timer and stops an Ambush message from being sent to the receiver.

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

### ALL/PERIMETER PROGRAMMING
For All/Perimeter systems, program the Interior and Perimeter areas.

### HOME/SLEEP/AWAY PROGRAMMING
For Home/Sleep/Away systems, program the Interior, Bedroom, and Perimeter areas.

### AREA NAME
The area name can be up to 32 alphanumeric characters. 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:

<table>
<thead>
<tr>
<th>Area</th>
<th>Display</th>
<th>Area</th>
<th>Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Perimeter</td>
<td>4 Guest1 Perimeter</td>
<td>7 Guest2 Perimeter</td>
<td></td>
</tr>
<tr>
<td>2 Interior</td>
<td>5 Guest1 Interior</td>
<td>8 Guest2 Interior</td>
<td></td>
</tr>
<tr>
<td>3 Bedrooms</td>
<td>6 Guest1 Bedrooms</td>
<td>9 Guest2 Bedrooms</td>
<td></td>
</tr>
</tbody>
</table>

### 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.

### 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.
## Programming Options

| 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. |
| 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 - 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. |
| 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. |
| 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. |
| 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. |
| LATE ARM DELAY | Enter 4 to 250 minutes to delay before automatic re-arming occurs after the area becomes disarmed outside of schedules. |
| BANK SAFE & VAULT (XR550 WITH NETWORK OR ENCRYPTION ONLY) | NO disables the Bank Safe & Vault feature for this area. When selected as YES, schedules set for this area and the time of day cannot be changed while the area is armed. Program schedules before arming: A Bank Safe & Vault area can only be disarmed during scheduled times. If the area becomes armed before programming a schedule, the panel must be reset before the area can be disarmed from a keypad or the Bank Safe & Vault option in Area Information must be set to NO. Zones assigned to Bank Safe & Vault areas cannot be bypassed or force armed. Do not assign Bank Safe & Vault area to an Arming zone. Arming zones can disarm Bank Safe & Vault areas outside of a schedule. |
| 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. |
| ARM FIRST AREA | Select YES to enable this area to operate as an Arm First area. This area is automatically arm when any non-Arm First area assigned to the same keypad is armed but does not disarm when other areas become disarmed. 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. |
| TWO MAN RULE (XR550 WITH NETWORK OR ENCRYPTION ONLY) | Select YES to require two user code entries to disarm and/or allow door access to this area. When a user presents a code to a keypad or reader requesting a door access or disarm, 2ND CODE displays and requires the entry of a different user code with at least the same authority. The second user code must be entered within 30 seconds. NO disables the Two Man Rule for this area. |

### Zone Information

| ZONE NUMBER | Enter the number of the zone you intend to program. **Note**: the available LX-Bus connections for the panels are: XR150-LX500 XR350-LX500 through LX700 XR550-LX500 through LX900 **Note**: For 1100 Series Key Fob zones (400-449), programming continues at the 1100 Series Key Fobs Section. |
| ZONE NAME | Zone names can have up to 32 alphanumeric characters. A name must be given to each zone in the system. |
### ZONE TYPE
When you assign a Zone Type to a zone, automatic zone responses are made. There are 12 Zone Types to choose from:
- Blank, Night, Day, Exit, Fire, Panic, Emergency, Supervisory, Auxiliary 1, Auxiliary 2, Fire Verify, or Arming (keyswitch)

If you select Blank, Night, Day, Exit, Auxiliary 1/2, 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. Arming zone type programming continues at Arming Zone Area Assignment.

### 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 1-32 can be assigned. For a Home/Sleep/Away with Guest system, area numbers 1-9 can be assigned.

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

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

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.

### FIRE BELL OUTPUT
This output (1 to 6, 500 to 999, F1 to F20, G1 to G20, or D1 to D16) is turned on any time a Fire, Fire Verify, or Supervisory zone is placed in alarm. The output is turned off by any of 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.

### 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.

**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** - 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.

### STYLE
This option specifies the style for the arming/disarming operation.

**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. 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.

**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. When the zone is 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.

**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 beeps the keypads for one second.

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

**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.

### 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. To program zones for wireless operation, select NO at the NEXT ZONE.
## PROGRAMMING OPTIONS

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DMP WIRELESS</strong></td>
<td>For a DMP 1100X Series Wireless Receiver set the House Code from 1 to 50 in System Options. Zones 500 through 999 can be programmed as Wireless zones.</td>
</tr>
<tr>
<td><strong>WIRELESS</strong></td>
<td>Select YES to program this zone as a DMP wireless zone.</td>
</tr>
<tr>
<td><strong>SERIAL NUMBER ENTRY</strong></td>
<td>Enter the eight-digit serial number found on the wireless device.</td>
</tr>
<tr>
<td><strong>CONTACT</strong></td>
<td>This option displays if the serial number entered is for an 1101, 1103, or 1105 Universal Transmitter or 1114 Wireless Four-Zone Expander. Select INT to use the internal reed switch contacts. Select EXT to connect an external device to the 1101, 1103, or 1105 terminal block.</td>
</tr>
<tr>
<td><strong>SUPERVISION TIME</strong></td>
<td>Press any top row key to select the supervision time required for the wireless zone.</td>
</tr>
<tr>
<td><strong>LED OPERATION</strong></td>
<td>Select YES to turn on a Hold-up transmitter LED during Panic or Emergency operation. Select NO to turn the LED off during Panic or Emergency operation.</td>
</tr>
<tr>
<td><strong>DISARM/DISABLE</strong></td>
<td>Select YES to disable the zone tripped message (short) to the 1100X Series Receiver from an 1126 or 1127 PIR transmitter during the disarmed period. When disabled, the PIR only sends supervision, tamper and low battery messages during the disarmed period to extend transmitter battery life. Select NO to always send zone tripped messages in addition to supervision, tamper and low battery.</td>
</tr>
<tr>
<td><strong>PIR PULSE COUNT</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>PIR SENSITIVITY</strong></td>
<td>Select the sensitivity setting for an 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.</td>
</tr>
<tr>
<td><strong>PET IMMUNITY</strong></td>
<td>This option displays for the 1122 Wireless PIR Motion Detector. Select whether or not to enable pet immunity. Selecting YES allows pet immunity for animals up to 55 pounds. Default is NO.</td>
</tr>
<tr>
<td><strong>NEXT ZONE</strong></td>
<td>Select YES to return to the ZONE NO: - prompt to program a new zone. Select NO to display the Alarm Action option.</td>
</tr>
<tr>
<td><strong>1100 SERIES KEY FOBS</strong></td>
<td>Only zones 400 to 449 can be programmed as 1100 Series Key Fob zones. 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.</td>
</tr>
<tr>
<td><strong>KEY FOB USER NUMBER</strong></td>
<td>Enter the User Number (1-9999) used to identify the key fob user and their arming and disarming authority.</td>
</tr>
<tr>
<td><strong>KEY FOB SERIAL NUMBER</strong></td>
<td>Enter the eight-digit serial number found on the wireless device.</td>
</tr>
<tr>
<td><strong>KEY FOB SUPERVISION TIME</strong></td>
<td>Select the supervision time required for the key fob zone.</td>
</tr>
<tr>
<td><strong>NUMBER OF KEY FOB BUTTONS</strong></td>
<td>Enter the number of buttons (1, 2, or 4) on the key fob being programmed.</td>
</tr>
<tr>
<td><strong>KEY FOB BUTTON SELECTION (FOUR BUTTONS)</strong></td>
<td>Press the Select key under the key fob button to program. The following list identifies the default button assignments:</td>
</tr>
<tr>
<td></td>
<td>TOP Arming with no areas assigned</td>
</tr>
<tr>
<td></td>
<td>BTM Disarming with no areas assigned</td>
</tr>
<tr>
<td></td>
<td>LFT Panic Alarm (PN) with no output assigned</td>
</tr>
<tr>
<td></td>
<td>RGT Arming with Area 1 assigned</td>
</tr>
<tr>
<td><strong>KEY FOB BUTTON SELECTION (TWO BUTTONS)</strong></td>
<td>Press the Select key under the key fob button to program. The following list identifies the default button assignments:</td>
</tr>
<tr>
<td></td>
<td>TOP Arming with no areas assigned</td>
</tr>
<tr>
<td></td>
<td>BTM Disarming with no areas assigned</td>
</tr>
<tr>
<td><strong>BUTTON ACTION</strong></td>
<td>This option specifies the Button Action for an individual key fob button. The default action for the button selected is displayed. Press any Select key to display the Button Action options. To view more options press CMD.</td>
</tr>
<tr>
<td></td>
<td><strong>yyy</strong> = the name of the button being programmed (TOP, BHM, LFT, RGT).</td>
</tr>
<tr>
<td></td>
<td>ARM (Arm) - Arms selected areas and force arms bad zones.</td>
</tr>
<tr>
<td></td>
<td>DIS (Disarm) - Disarms selected areas.</td>
</tr>
<tr>
<td></td>
<td>TGL (Toggle Arm) - Toggles arm/disarm for selected areas and force arms bad zones.</td>
</tr>
<tr>
<td></td>
<td>STA (Status) - Causes the key fob LED to indicate the arm/disarm status of the system.</td>
</tr>
<tr>
<td></td>
<td>PN (Panic) - Triggers a Panic zone type alarm with no restoral.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>EM (Emerg) - Triggers an Emergency zone type alarm with no restoral.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>OUT (Output) - Causes an output to turn on steady, pulse, momentary, toggle or off.</td>
</tr>
<tr>
<td></td>
<td>RST (Sensor Reset) - Causes the panel to perform a standard Sensor Reset.</td>
</tr>
<tr>
<td></td>
<td>UN (Unused) - The button is not used and performs no action.</td>
</tr>
</tbody>
</table>
| **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. 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. |
| **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 32, enter the area number using the keypad digit keys. |
| **OUTPUT NUMBER** | You can specify any relay output/Favorite 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 999, D1 to D16, F1 to F20, 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/Favorite number, press a top row Select key followed by the output/Favorite number. Press the CMD key. |
| **OUTPUT ACTION** | This option allows you to define the output action (STD, PLS, MOM, TGL, OFF) for the selected output number.  
yyy = the name of the button being programmed (TOP, BTM, LFT, RGT).  
xxxxxxxx = the currently defined output action.  
STD (Steady) - The output is turned on and remains on.  
The pulsing rate for a Model 716 relay attached to the LX-Bus is 1.6 seconds.  
**Note:** Pulse is not available for key fob button output programmed D1-D16 or G1-G20.  
MOM (Momentary) - The output is turned on only once for one second.  
TGL (Toggle) - The output alternates between the on state and off state.  
**Note:** Toggle is not available for key fob button output programmed G1-G20.  
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.  
**Note:** When the output is assigned to PN/PN2 or EM/EM2 button action and is turned on, the output turns off when any area is disarmed.  
When the output action is steady, pulse or toggle and the output is turned on, the output remains on until:  
– the output cutoff time expires  
– the output is reset from the keypad menu  
– toggled off |
| **NEXT ZONE** | Select YES to return to the ZONE NO: - prompt to program a new zone. Select NO to display the Alarm Action option. |
| **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. |
| **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. |
## PROGRAMMING OPTIONS

### REPORT TO TRANSMIT
Select the following report options: A, T, L, S, C, and - (dash).
- **ALARM** - Select A to send an alarm report to the receiver and activate the bell output according to zone type.
- **TROUBLE** - Select T to send a trouble report to the receiver.
- **LOCAL** - When you select L, an alarm report is NOT sent to the receiver. The bell output activates.
- **- (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.

**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.

**CANCEL AMBUSH** - Select C for the zone to cancel the Early Morning Ambush timer and stop an Ambush message from being sent to the receiver. Faulting the zone takes the place of a second user code being entered at the keypad and is only available for non-fire type zones. Area assignment for the zone does not affect this option. See Early Morning Ambush in Area Information programming.

### OUTPUT NUMBER
Specify any of the Relay Outputs on the panel to be activated by a zone condition (1 to 6, 500 to 999 if Model 716 used, D1-D16, G1-G20).

### OUTPUT ACTION
Assign an output action to the relay: Steady, Pulse, Momentary, or Follow.

- **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.
- **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:** Some wireless devices whether powered using an AC adaptor or a battery, ignore some output action programming. For Day Zone types, when an output is turned on, a user code with silence authority can turn the output off.

### 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.

### 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 16 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.

### CHIME
This option is only shown for Night and Exit zones. Select either NONE, DB (doorbell), ASC (ascend), DSC (descend) to assign that tone to a zone. Default is DB for Exit zones and NONE for Night zones.

### ENTRY DELAY
Select the entry timer for this zone. Entry timers 1 to 4 are programmed in System Options.

### ZONE RETARD DELAY
When you select YES, the zone operates with the zone retard delay. The retard functions only in zone short conditions.

**Note:** 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.

### PRESIGNAL KEYPAD ADDRESSES
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.

### 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 999 have a fixed response time and do not display this prompt.

### 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.
### PROGRAMMING OPTIONS

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIORITY</td>
<td>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.</td>
</tr>
<tr>
<td>18.25 FIRE PANEL SLAVE INPUT</td>
<td>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.</td>
</tr>
<tr>
<td>AREA FOLLOWER</td>
<td>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.</td>
</tr>
<tr>
<td>ZONE REAL-TIME STATUS</td>
<td>Selecting YES allows Real-Time Status reports, such as Door Open/Closed with zone number, to be sent using PC Log reporting. Selecting NO disables Real-Time Status for this zone.</td>
</tr>
<tr>
<td>ZONE AUDIT DAYS</td>
<td>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.</td>
</tr>
<tr>
<td>REPORT WITH ACCOUNT NUMBER FOR AREA</td>
<td>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.</td>
</tr>
</tbody>
</table>
25.1 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.

25.2 Weekly Test
As required by ANSI/UL 1023, the system should be tested weekly.

25.3 Monthly Test
As required by S545, the system shall be tested monthly with the primary power deactivated.

25.4 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.

25.5 Battery Replacement Period
DMP recommends replacing the battery every 3 to 5 years under normal use.
**Compatibility**

### 26.1 Compatible 2-Wire Smoke Detectors

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 13.8 VDC and the maximum normal standby current is 1.25mA DC. The maximum line impedance is 100 Ohms. The maximum short circuit current is 56mA. When using zone expansion modules, use Model 309 EOL resistors. The 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.

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Model</th>
<th>Detector ID</th>
<th>Base</th>
<th>Base ID</th>
<th>DC Voltage Range</th>
<th># of Detectors (12V/24V)</th>
<th>Zone Expansion Modules</th>
<th>Panel Zones</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hochiki</td>
<td>SLR-835B-2</td>
<td>HD-6</td>
<td>N/A</td>
<td>8-35</td>
<td>14</td>
<td>715, 715-8, 715-16</td>
<td>9 &amp; 10</td>
<td></td>
</tr>
<tr>
<td>Hochiki</td>
<td>SLR-835BH-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EST</td>
<td>521B, 521BXT, 521NB, 521NBXT</td>
<td>S09A</td>
<td></td>
<td>6.5-20</td>
<td>12</td>
<td>715, 715-8, 715-16</td>
<td>9 &amp; 10</td>
<td></td>
</tr>
<tr>
<td>System Sensor</td>
<td>2W-B, 2WT-B</td>
<td>A</td>
<td></td>
<td>8.5-35</td>
<td>10</td>
<td>715, 715-8, 715-16</td>
<td>9 &amp; 10</td>
<td></td>
</tr>
<tr>
<td>System Sensor</td>
<td>2WTA-B</td>
<td>A</td>
<td>(*)</td>
<td>8.5-35</td>
<td>12</td>
<td>715, 715-8, 715-16</td>
<td>9 &amp; 10</td>
<td></td>
</tr>
<tr>
<td>System Sensor</td>
<td>2WTR-B</td>
<td>A</td>
<td>(*)</td>
<td>8.5-35</td>
<td>1</td>
<td>715, 715-8, 715-16</td>
<td>9 &amp; 10</td>
<td></td>
</tr>
<tr>
<td>System Sensor</td>
<td>1151, 2151</td>
<td>A</td>
<td>B110PL, B401</td>
<td>8.5-35</td>
<td>10</td>
<td>714, 714-8, 714-16, 715-8, 715-16</td>
<td>9 &amp; 10</td>
<td></td>
</tr>
<tr>
<td>System Sensor</td>
<td>COSMO-2W (using COSMOD2W)</td>
<td>A</td>
<td></td>
<td>8.5-35</td>
<td>12</td>
<td>714, 714-8, 714-16, 715-8, 715-16</td>
<td>1-10</td>
<td></td>
</tr>
</tbody>
</table>

(*) = Must be used in conjunction with System Sensor Polarity Reversal Module model RRS-M0D. See 1.19 for Installation Diagram

### 26.2 Notification Appliances

The following table indicates the approved notification appliances that can be used with the XR550 Series system.

<table>
<thead>
<tr>
<th>Wheelock Model No.</th>
<th>Description</th>
<th>Max No. of Appliances using 56 VA/100 VA</th>
</tr>
</thead>
<tbody>
<tr>
<td>MT-12/24</td>
<td>Multi-tone Horn</td>
<td>8</td>
</tr>
<tr>
<td>MB-G6-12</td>
<td>Bell, 6 inch</td>
<td>16</td>
</tr>
<tr>
<td>MB-G10-12</td>
<td>Bell, 10 inch</td>
<td>16</td>
</tr>
<tr>
<td>ST Series</td>
<td>Strobe, 15/75 candela</td>
<td>5</td>
</tr>
<tr>
<td>HS Series</td>
<td>Horn Strobe, 15/75 candela</td>
<td>5</td>
</tr>
<tr>
<td>SM-12/24-R</td>
<td>Sync Module, Single circuit</td>
<td></td>
</tr>
</tbody>
</table>

### 26.3 Access Control Devices

The following devices are compatible with the XR150/XR550 Series panels.

#### Access Control

<table>
<thead>
<tr>
<th>Access Control</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>734/734N Wiegand Interface Module</td>
<td>Proximity reader connector</td>
</tr>
<tr>
<td>OP-08CB Motion Detector</td>
<td>Infrared sensor</td>
</tr>
<tr>
<td>PP-6005B Proxpoint Plus® Reader</td>
<td>Proximity reader</td>
</tr>
<tr>
<td>MP-5365 Miniprox® Reader</td>
<td>Slimline proximity reader</td>
</tr>
<tr>
<td>PR-5355-AGK14</td>
<td>Long range reader with keypad and sounder</td>
</tr>
<tr>
<td>PR-5455 ProxPro® II Reader</td>
<td>Long range reader with sounder</td>
</tr>
<tr>
<td>MX-5375 Maxi-Prox™ Reader</td>
<td>Long range reader compatible with 1351 Prox Pass</td>
</tr>
</tbody>
</table>
### 26.4 Accessory Devices

<table>
<thead>
<tr>
<th><strong>Cellular Communicator Modules</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>263LTE-V Cellular Communicator</td>
<td>Allows you to connect the panel to the Verizon LTE network.</td>
</tr>
<tr>
<td>263H HSPA+ Cellular Communicator</td>
<td>Allows you to connect the panel to any compatible HSPA/SMS network.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Accessory Modules</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>270 Network Transient Suppression Module</td>
<td>Provides transient surge protection for the Ethernet Connector.</td>
</tr>
<tr>
<td>277 Trouble Sounder</td>
<td>Provides local sounder for monitoring of panel operations and loss of Keypad Bus.</td>
</tr>
<tr>
<td>893A Dual Phone Line Module</td>
<td>Allows you to supervise two standard phone lines connected to an XR150/XR550 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.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Expansion Modules</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>710 Bus Splitter/Repeater</td>
<td>Allows you to increase keypad or LX-Bus™ wiring distance to 2500 feet.</td>
</tr>
<tr>
<td>711 Single Point Zone Expanders</td>
<td>Provides one Class B zone for connecting burglary devices.</td>
</tr>
<tr>
<td>714, 714-8, 714-16 Zone Expanders</td>
<td>Provides Class B zones for connecting burglary and non-powered fire devices.</td>
</tr>
<tr>
<td>712-8 Zone Expander</td>
<td>Provides Class B zones for connecting burglary devices.</td>
</tr>
<tr>
<td>715, 715-8, 715-16 Zone Expanders</td>
<td>Provides 12 VDC Class B powered zones for connecting smoke detectors, glassbreak detectors, and other 2- or 4-wire devices.</td>
</tr>
<tr>
<td>716 Output Expander</td>
<td>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.</td>
</tr>
<tr>
<td>717 Graphic Annunciator Module</td>
<td>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.</td>
</tr>
<tr>
<td>734, 734N, Wiegand Interface Modules</td>
<td>Provides system codeless entry, and arming and disarming using access control readers.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>DMP Two-Way Wireless Devices</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1100X/1100XH Receiver</td>
<td>Supports up to 500/300/100 devices in residential or commercial wireless operation.</td>
</tr>
<tr>
<td>1100R Repeater</td>
<td>Provides additional range for wireless devices.</td>
</tr>
<tr>
<td>1101 Universal Transmitter</td>
<td>Provides both internal and external contacts that may be used at the same time to yield two individual reporting zones from one wireless transmitter.</td>
</tr>
<tr>
<td>1102 Universal Transmitter</td>
<td>Provides an external contact.</td>
</tr>
<tr>
<td>1103 Universal Transmitter</td>
<td>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.</td>
</tr>
<tr>
<td>1122 Wireless PIR Motion Detector</td>
<td>Motion detector will programmable sensitivity, Disarm/Disable functionality, and pet immunity.</td>
</tr>
<tr>
<td>1127C/1127W PIR Motion Detector</td>
<td>Wall mount motion detector with panel programmable sensitivity and Disarm/Disable functionality.</td>
</tr>
<tr>
<td>1135 Wireless Siren</td>
<td>Provides a wireless siren.</td>
</tr>
<tr>
<td>1142BC Two-button Hold-up Belt Clip Transmitter</td>
<td>Provides two-button hold-up operation with a belt clip.</td>
</tr>
<tr>
<td>1142 Two-button Hold-up Transmitter</td>
<td>Provides permanently mounted under-the-counter two-button hold-up operation.</td>
</tr>
<tr>
<td>1164/1164NS Wireless Commercial Smoke</td>
<td>Battery powered, wireless, low profile, photoelectric smoke detector. The 1164 also offers a synchronized sounder.</td>
</tr>
<tr>
<td>1166 Wireless Smoke Ring</td>
<td>Installed with any traditional AC-powered interconnected smoke detector system and provides an audible alert in the event of a fire.</td>
</tr>
<tr>
<td>1184 Carbon Monoxide Detector</td>
<td>Carbon monoxide detector.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Interface Modules</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>736P Radionics™ Popit Interface</td>
<td>Allows a Radionics™ POPIT System to interface with DMP XR150/XR550 Series panels while maintaining Radionics™ wiring.</td>
</tr>
</tbody>
</table>
### Indicating and Initiating Devices

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>860 Relay Module</strong></td>
<td>Provides dry relay contacts that are programmable and controlled from DMP panel annunciator outputs. This module includes one Form C (SPDT) relay rated for 1 Amp @ 30 VDC. Sockets are provided to allow the addition of three Model 305 plug-in relays. These relays can be used for electrical isolation between the alarm panel and another system or switching 5, 12, or 24 Volts to control various functions within a building or around its perimeter. Installs inside the panel enclosure.</td>
</tr>
<tr>
<td><strong>865 Supervised Style W or X Notification Circuit Module</strong></td>
<td>Provides supervised alarm current when using the XR150/XR550 Series panel bell output and up to 5 Amps at 12 or 24 VDC when using a listed auxiliary power supply. The 865 can supervise 2-wire or 4-wire style circuits for opens and shorts with individual LED annunciation.</td>
</tr>
<tr>
<td><strong>866 Style W Notification Circuit Module</strong></td>
<td>Provides supervised alarm current using the XR150/XR550 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.</td>
</tr>
<tr>
<td><strong>867 Style W LX-Bus Notification Circuit Module</strong></td>
<td>Provides supervised alarm current using the XR150/XR550 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 XR150/XR550 Series panel LX-Bus™ and provides one 2-wire Style W notification circuit for open and short conditions. Individual Bell Relay addresses Bell Ring styles.</td>
</tr>
<tr>
<td><strong>869 Dual Class A Style D Initiating Module</strong></td>
<td>Provides two Class A, Style D, 4-wire initiating zones for connecting waterflow switches and other non-powered fire and burglary devices.</td>
</tr>
</tbody>
</table>

### Keypads

<table>
<thead>
<tr>
<th>Keypad Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LCD keypads</strong></td>
<td>Allows you to control the panel from various remote locations. Connect up to sixteen Model 630F Remote Fire Command, Model 7060, 7063, 7070, 7160, 7163, 7170, 7173 Thinline™ keypads, or 7060A, 7063A, 7070A, 7073A Aqualite™ keypads to the keypad bus using terminals 7, 8, 9, and 10.</td>
</tr>
<tr>
<td><strong>7800 Series Graphic Touchscreen keypads</strong></td>
<td>Allows you to control the panel from various remote locations. Connect up to sixteen Model 7872 or 7873 Graphic Touchscreen keypads to the keypad bus using terminals 7, 8, 9, and 10.</td>
</tr>
<tr>
<td><strong>9000 Series Wireless keypads</strong></td>
<td>Allows you to control the panel from various remote locations. Connect up to four 9060/9063 Wireless keypads.</td>
</tr>
<tr>
<td><strong>9862 Wireless Graphic Touchscreen keypad</strong></td>
<td>Allows you to control the panel from various remote locations. Associate up to four 9862 Wireless Graphic Touchscreen keypads.</td>
</tr>
</tbody>
</table>

### Addressable Smoke Detectors

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2W-BLX, 2WT-BLX</strong></td>
<td>Single-zone, addressable conventional smoke, smoke/heat detectors that connect to the LX-Bus. Includes drift compensation.</td>
</tr>
</tbody>
</table>
# System Configurations

## 27.1 Minimum System Configuration for Commercial Fire Applications

The following is the minimum configuration to meet UL requirements:

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
<th>Local</th>
<th>Remote Station (PPU)</th>
<th>Proprietary (PPU)</th>
<th>Proprietary Alarm Unit (Security)</th>
<th>Central Station (PPU)</th>
</tr>
</thead>
<tbody>
<tr>
<td>XR550</td>
<td>Main Board (-)</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>XR350</td>
<td></td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>XR150</td>
<td></td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>349</td>
<td>Control Panel Enclosure (-)</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>350</td>
<td></td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>350A, 350H</td>
<td></td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>341</td>
<td></td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>352P, 352X</td>
<td></td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>FC Series</td>
<td></td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>349, 350, 352S</td>
<td>Battery Enclosure</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>325</td>
<td>Transformer Bracket</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>327</td>
<td>Transformer</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>322(A), 323, 324, 324P</td>
<td>Transformer (-)</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>263LTE-V, 263H</td>
<td>Cellular Communicator</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>270</td>
<td>Network Transient Suppressor</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
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<tr>
<td>277</td>
<td>Trouble Annunciator</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>521LX, 521LXT</td>
<td>2-Wire Smoke</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>2W-BLX, 2WT-BLX</td>
<td>2-Wire Smoke</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>712-8</td>
<td>Zone Expander</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>714, 715,711, 714-8, 714-16, 715-8, 715-16, 736P</td>
<td>Zone Expander</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>716</td>
<td>Output Expander</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>717</td>
<td>Annunciator Module</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>630F (-), 7070, 7073, 7070A, 7073A, 7170, 7173, 7170A, 7173A, 7570, 7573, 7570A, 7573A, 7563A, 7760, 7872, 7873, 9060, 9063, 9862</td>
<td>Supervised LCD Keypads</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>7060, 7061, 7063, 7060A, 7063A, 7160, 7163, 7160A, 7163A, 7560, 7563, 7560A, 7563A, 7760, 7872, 7873, 9060, 9063, 9862</td>
<td>Supervised LCD Keypads</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>865, 866, 867</td>
<td>Indicating (Notification) Modules</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>869</td>
<td>Initiating Module</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>893A</td>
<td>Dual Phone Line Module</td>
<td>N</td>
<td>Y</td>
<td>O</td>
<td>O</td>
<td>Y</td>
</tr>
<tr>
<td>734, 734N</td>
<td>Wiegand Interface</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>303</td>
<td>Reset/Silence Switch</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>860</td>
<td>Relay Module</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>1100X</td>
<td>Wireless Receiver</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>1100XH</td>
<td>Wireless Receiver</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Model No.</td>
<td>Description</td>
<td>Local</td>
<td>Remote Station (PPU)</td>
<td>Proprietary (PPU)</td>
<td>Proprietary Alarm Unit (Security)</td>
<td>Central Station (PPU)</td>
</tr>
<tr>
<td>----------</td>
<td>----------------------------------</td>
<td>-------</td>
<td>----------------------</td>
<td>-------------------</td>
<td>-----------------------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>1100R</td>
<td>Wireless Receiver</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1101/1102/1105</td>
<td>Wireless Transmitter</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>1103</td>
<td>Wireless Transmitter</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1125/1127C/1127W</td>
<td>Wireless PIR</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1135</td>
<td>Wireless Siren</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1142/1142BC</td>
<td>Wireless Holdup Transmitter</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1161/1162</td>
<td>Wireless Residential Smoke</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1164</td>
<td>Wireless Commercial Smoke</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1165/1165H/1165HS</td>
<td>Wireless Commercial Smoke</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1181/1182</td>
<td>Wireless PIV/OS&amp;Y</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1183-135F/1183/135R</td>
<td>Wireless Heat Detector</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1184</td>
<td>Wireless CO</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

(·) - At least one model required
System Power/Size

28.1 Transformer for Burglary Installations
The total combined Auxiliary and Bell outputs cannot exceed 1.3 Amps with a 50VA Transformer.
The total combined Auxiliary and Bell outputs cannot exceed 1.7 Amps with a 56VA or 100VA Transformer. Bell maximum of 1.5A, Auxiliary power maximum of 1.0A.

Note: When using a Model 341 Kiosk enclosure, total combined Auxiliary and Bell output current cannot exceed 1.3 Amps.

28.2 Transformer for Fire Installations

Commercial Fire
For listed Commercial Fire installations, the 50VA Plug-in transformer cannot be used.
The total current combined from Terminals 7, 11, 25, 27, XBUS and LX500-LX900 cannot exceed: 1.7 Amps with a 56VA or 100VA transformer. Bell maximum of 1.5A, Auxiliary power maximum of 1.0A.

Residential Fire
Use the Model 327 16.5VAC 50VA plug-in, Model 322/323 wire-in 16VAC 56VA or Model 324/324P wire-in 16VAC 100VA transformer mounted within 20 feet of the panel and connected by conduit.
The total combined Auxiliary and Bell outputs cannot exceed 1.3 Amps with a 50VA Transformer.
The total current combined from Auxiliary and Bell Power cannot exceed: 1.7 Amps with a 56VA or 100VA transformer. Bell maximum of 1.5A, Auxiliary power maximum of 1.0A.

Note: The 341 Kiosk enclosure must not be used for fire applications.

28.3 Canadian Transformer for S304
The total combined Auxiliary and Bell outputs cannot exceed 1.5 Amps with a 50VA or 75VA Transformer. Use Model 327CAN (16.5VAC 50VA) plug-in or Model FTA7516 (16.5VAC 75 VA) wire-in from ATC Frost.
When using a Model 341 Kiosk enclosure, the total combined Auxiliary and Bell output current cannot exceed 1.3 Amps.

28.4 Canadian Transformer for S545
The total combined Auxiliary and Bell outputs cannot exceed 1.5 Amps with a 50 VA or 75 VA Transformer. Use Model 327CAN (16.5VAC 50 VA) plug-in or Model FTA7516 (16.5VAC 75VA) wire-in from ATC Frost.
Bell maximum of 1.5A, Auxiliary power maximum of 1.0A.

Note: The 341 Kiosk enclosure must not be used for fire applications.

28.5 Standby Batteries
Use battery Models 365 (12 VDC 9 Ah), 366 (12 VDC 18 Ah), 368 (12 VDC 5.0 Ah), and 369 (12 VDC 7 Ah) with the XR150/XR550 panel when installed in the 341, 350, 350A, or 352 enclosures. The Model 364 (12 VDC 1.3 Ah) battery is for use with the XR150/XR550 panel when using the 341 enclosure with the optional 341B Battery Bracket. The Model 364 battery is rated for 4 hours of standby time.
28.6 Power Requirements

During AC power failure, the XR150/XR550 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 XR150/XR550 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.

<table>
<thead>
<tr>
<th>Standby Battery Power Calculations</th>
<th>Standby Current</th>
<th>Alarm Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>XR150/XR550 Series Control Panel</td>
<td>Qty 1 x 174mA</td>
<td>Qty 1 x 217mA</td>
</tr>
<tr>
<td>Relay Outputs 1-2 (ON)</td>
<td>Qty 30mA</td>
<td>Qty 5mA</td>
</tr>
<tr>
<td>Switch Grounds 3-6 (ON)</td>
<td>Qty 5mA</td>
<td>Qty 5mA</td>
</tr>
<tr>
<td>Active Zones 1-8</td>
<td>Qty 1.6mA</td>
<td>Qty 2mA*</td>
</tr>
<tr>
<td>Active Zones 9-10</td>
<td>Qty 4mA</td>
<td>Qty 30mA</td>
</tr>
<tr>
<td>2-Wire Smoke Detectors</td>
<td>Qty 0.1mA</td>
<td>Qty 0.1mA</td>
</tr>
<tr>
<td>Panel Bell Output</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>893A Dual Phone Line Module</td>
<td>Qty x 12mA</td>
<td>Qty x 50mA</td>
</tr>
<tr>
<td>263LTE-V Cellular Communicator</td>
<td>Qty x 13mA</td>
<td>Qty x 13mA</td>
</tr>
<tr>
<td>263H HSPA+ Cellular Communicator</td>
<td>Qty x 24mA</td>
<td>Qty x 28mA</td>
</tr>
<tr>
<td>277 Buzzer Module</td>
<td>Qty x 5mA</td>
<td>Qty x 5mA</td>
</tr>
<tr>
<td>1100X Wireless Receiver</td>
<td>Qty x 46mA</td>
<td>Qty x 46mA</td>
</tr>
<tr>
<td>1100XH Wireless High Power Receiver</td>
<td>Qty x 160mA</td>
<td>Qty x 160mA</td>
</tr>
<tr>
<td>860 Relay Output Module (one relay active)</td>
<td>Qty x 34mA</td>
<td>Qty x 34mA</td>
</tr>
<tr>
<td>All four relays active</td>
<td>Qty 138mA</td>
<td>Qty 138mA</td>
</tr>
<tr>
<td>865 Style Y or Z Notification Module</td>
<td>Qty x 26mA</td>
<td>Qty x 85mA</td>
</tr>
<tr>
<td>866 Style W Notification Module</td>
<td>Qty x 45mA</td>
<td>Qty x 76mA</td>
</tr>
<tr>
<td>867 LX-Bus Style W Notification Module</td>
<td>Qty x 30mA</td>
<td>Qty x 86mA</td>
</tr>
<tr>
<td>869 Dual Style D Initiating Module</td>
<td>Qty x 25mA</td>
<td>Qty x 75mA</td>
</tr>
<tr>
<td>630F Remote Fire Command Center</td>
<td>Qty x 63mA</td>
<td>Qty x 92mA</td>
</tr>
<tr>
<td>7060/7160 Thinline/7060A Aqualite Keypad</td>
<td>Qty x 72mA</td>
<td>Qty x 80mA</td>
</tr>
<tr>
<td>7063/7163 Thinline/7063A Aqualite Keypad</td>
<td>Qty x 85mA</td>
<td>Qty x 100mA</td>
</tr>
<tr>
<td>7070/7170 Thinline/7070A Aqualite Keypad Active Zones (EOL Installed)</td>
<td>Qty x 72mA</td>
<td>Qty x 87mA</td>
</tr>
<tr>
<td>7071/7173 Thinline/7073A Aqualite Keypad Active Zones (EOL Installed)</td>
<td>Qty x 85mA</td>
<td>Qty x 100mA</td>
</tr>
<tr>
<td>7760 Clear Touch Keypad</td>
<td>Qty x 65mA</td>
<td>Qty x 115mA</td>
</tr>
<tr>
<td>7872 Graphic Touchscreen Keypad Active Zones (EOL Installed)</td>
<td>Qty x 145mA</td>
<td>Qty x 215mA</td>
</tr>
<tr>
<td>7873 Graphic Touchscreen Keypad Active Zones (EOL Installed)</td>
<td>Qty x 143mA</td>
<td>Qty x 243mA</td>
</tr>
<tr>
<td>734 Wiegand Interface Module Active Zones (EOL Installed) Annunciator (ON)</td>
<td>Qty x 15mA</td>
<td>Qty x 15mA</td>
</tr>
<tr>
<td>734N Wiegand Interface Module Active Zones (EOL Installed) Annunciator (ON) Wiegand Reader</td>
<td>Qty x 146mA</td>
<td>Qty x 148mA</td>
</tr>
</tbody>
</table>

*Based on 10% of active zones in alarm.

Copy Sub-Total to next page

Sub-Total Standby ______ mA
Sub-Total Alarm ______ mA
## SYSTEM POWER

### Standby Battery Power Calculations

<table>
<thead>
<tr>
<th>Module Description</th>
<th>Qty</th>
<th>Standby Current</th>
<th>Alarm Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>736P POPIT Interface Module, Radionics Popex, POPITs, OctoPOPITs</td>
<td>Qty</td>
<td>25 mA</td>
<td>Qty</td>
</tr>
<tr>
<td>710 Bus Splitter/Repeater Module</td>
<td>Qty</td>
<td>32 mA</td>
<td>Qty</td>
</tr>
<tr>
<td>711 Zone Expansion Module, Active Zone (EOL Installed)</td>
<td>Qty</td>
<td>11 mA</td>
<td>Qty</td>
</tr>
<tr>
<td>714 Zone Expansion Module, Active Zones (EOL Installed)</td>
<td>Qty</td>
<td>7 mA</td>
<td>Qty</td>
</tr>
<tr>
<td>712-8 Zone Expansion Module, Active Zones (EOL Installed)</td>
<td>Qty</td>
<td>17 mA</td>
<td>Qty</td>
</tr>
<tr>
<td>714-8, 714-16 Zone Expansion Module, Active Zones (EOL Installed)</td>
<td>Qty</td>
<td>20 mA</td>
<td>Qty</td>
</tr>
<tr>
<td>715 Zone Expansion Module, Active Zones (EOL Installed)</td>
<td>Qty</td>
<td>7 mA</td>
<td>Qty</td>
</tr>
<tr>
<td>715-8, 715-16 Zone Expansion Modules, Active Zones (EOL Installed)</td>
<td>Qty</td>
<td>20 mA</td>
<td>Qty</td>
</tr>
<tr>
<td>716 Output Expansion Module, Active Form C Relays</td>
<td>Qty</td>
<td>13 mA</td>
<td>Qty</td>
</tr>
<tr>
<td>717 Graphic Annunciator Module, Annunciator Outputs</td>
<td>Qty</td>
<td>10 mA</td>
<td>Qty</td>
</tr>
<tr>
<td>2W-BLX, 2WT-BLX Smoke Detectors</td>
<td>Qty</td>
<td>11 mA</td>
<td>Qty</td>
</tr>
<tr>
<td>COSMOD2W Module</td>
<td>Qty</td>
<td>45 mA</td>
<td>Qty</td>
</tr>
<tr>
<td>COSMO-2W Smoke and CO Detectors</td>
<td>Qty</td>
<td>1 mA</td>
<td>Qty</td>
</tr>
<tr>
<td>572 Indicator LED</td>
<td>Qty</td>
<td>20 mA</td>
<td>Qty</td>
</tr>
<tr>
<td>Aux. Powered Devices on Terminals 7 and 11, Other than Keypads and LX-Bus Modules</td>
<td>Qty</td>
<td>mA</td>
<td>Qty</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sub-Totals this page</th>
<th>Sub-Total Standby mA</th>
<th>Sub-Total Alarm mA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Totals from previous page</td>
<td>Sub-Total Standby mA</td>
<td>Sub-Total Alarm mA</td>
</tr>
<tr>
<td>*Based on 10% of active zones in alarm</td>
<td>Total Standby mA</td>
<td>Total Alarm mA</td>
</tr>
</tbody>
</table>

# For systems that are not Central Station monitored, multiply alarm current by 12.

Total Standby ______ mA x number of Standby Hours needed _____ = _____ mA-hours

**Note:** ULC S559 requires 24 hours of standby.

Total Alarm ______ mA x number of Alarm Hours needed _____ = _____ mA-hours

**Note:** UL 864 requires 5 minutes (.0833 hours) in Alarm

Total ______ mAhours

ULC S559 requires 30 minutes (.5 hours) in Alarm

\[
\text{Total} \times .001
\]

Add 10% for battery derating

\[
\text{Total} \times .1 = \text{Amp-hrs Required}
\]

Refer to section 23.7 for standby battery selection.
28.7 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 22.6 XR150/XR550 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 1.3 Ah) when used in 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, batteries can be installed in a DMP Model 349, 350 or 352S enclosure and all wiring shall run through conduit. The enclosure shall be installed to the left of the XR150/XR550 Series enclosure to ensure Battery and AC wire separation.

### 24 hours of standby power

<table>
<thead>
<tr>
<th>5.0 Ah Batteries</th>
<th>7 Ah Batteries</th>
<th>7.7 Ah Batteries</th>
<th>9 Ah Batteries</th>
<th>18 Ah Batteries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Ah Available</td>
<td>No. of Batteries</td>
<td>Max. Ah Available</td>
<td>No. of Batteries</td>
<td>Max. Ah Available</td>
</tr>
<tr>
<td>8</td>
<td>2</td>
<td>6</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>12</td>
<td>3</td>
<td>12</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>16</td>
<td>4</td>
<td>18</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>20</td>
<td>5</td>
<td>24</td>
<td>4</td>
<td>27</td>
</tr>
<tr>
<td>24</td>
<td>6</td>
<td>31</td>
<td>5</td>
<td>34</td>
</tr>
<tr>
<td>28</td>
<td>7</td>
<td>37</td>
<td>6</td>
<td>41</td>
</tr>
<tr>
<td>32</td>
<td>8</td>
<td>43</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**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

<table>
<thead>
<tr>
<th>7 Ah Batteries</th>
<th>7.7 Ah Batteries</th>
<th>9 Ah Batteries</th>
<th>18 Ah Batteries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Ah Available</td>
<td>No. of Batteries</td>
<td>Max. Ah Available</td>
<td>No. of Batteries</td>
</tr>
<tr>
<td>13</td>
<td>2</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>20</td>
<td>3</td>
<td>22</td>
<td>3</td>
</tr>
<tr>
<td>27</td>
<td>4</td>
<td>29</td>
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<td>33</td>
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<td>37</td>
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<td>47</td>
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<td>54</td>
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<td>59</td>
<td>8</td>
</tr>
<tr>
<td>60</td>
<td>9</td>
<td>67</td>
<td>9</td>
</tr>
<tr>
<td>67</td>
<td>10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**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

<table>
<thead>
<tr>
<th>9 Ah Batteries</th>
<th>18 Ah Batteries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Ah Available</td>
<td>No. of Batteries</td>
</tr>
<tr>
<td>16</td>
<td>2</td>
</tr>
<tr>
<td>25</td>
<td>3</td>
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<tr>
<td>33</td>
<td>4</td>
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<tr>
<td>42</td>
<td>5</td>
</tr>
<tr>
<td>50</td>
<td>6</td>
</tr>
<tr>
<td>59</td>
<td>7</td>
</tr>
<tr>
<td>67</td>
<td>8</td>
</tr>
</tbody>
</table>

**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).
## Certifications

- **California State Fire Marshal (CSFM)**
- **FCC Part 15**
- **FCC Part 68 Registration ID CCKAL008XR550**
- New York City (FDNY COA #6167)
- NIST AES Algorithm Certificate #2350 128-bit
- NIST AES Algorithm Certificate #2595 256-bit
- Meets ANSI/SIA CP-01-2010 False Alarm Reduction

### Underwriters Laboratory (UL) Listed

<table>
<thead>
<tr>
<th>ANSI/UL Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSI/UL 294</td>
<td>Access Control System Units</td>
</tr>
<tr>
<td>Level I</td>
<td>Destructive Attack and Line Security</td>
</tr>
<tr>
<td>Level IV</td>
<td>Endurance and Standby Power</td>
</tr>
<tr>
<td>ANSI/UL 365</td>
<td>Police Connected Burglar</td>
</tr>
<tr>
<td>ANSI/UL 609</td>
<td>Local Burglar</td>
</tr>
<tr>
<td>ANSI/UL 1023</td>
<td>Household Burglar</td>
</tr>
<tr>
<td>ANSI/UL 1076</td>
<td>Proprietary Burglar</td>
</tr>
<tr>
<td>ANSI/UL 1610</td>
<td>Central Station Burglar</td>
</tr>
<tr>
<td>ANSI/UL 1635</td>
<td>Digital Burglar</td>
</tr>
<tr>
<td>ANSI/UL 2017</td>
<td>General Purpose Signaling Devices and Systems</td>
</tr>
<tr>
<td>ANSI/UL 985</td>
<td>Household Fire Warning</td>
</tr>
<tr>
<td>ANSI/UL 864</td>
<td>Fire Protective Signaling Systems</td>
</tr>
</tbody>
</table>

### Underwriters Laboratory of Canada (ULC) Listed

- ULC-S559-13  | Equipment for Fire Signal Receiving Centers and Systems |
- ULC S545     | Household Fire |
- ULC C1023    | Household Burglar |
- ULC/ORD-C1076 | Proprietary Burglar |
- ULC S304     | Central Station Burglar |

### Compatible with Devices listed for:

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

### Export Control

The XR550 with encryption uses AES encryption and any export beyond the United States must be in accordance with Export Administration Regulations.