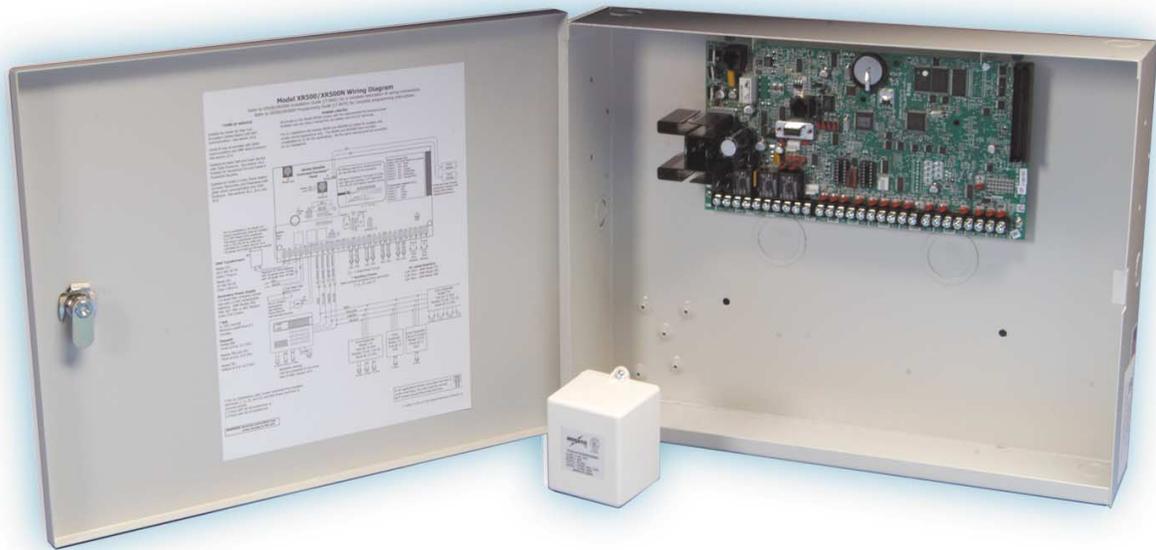


# PROGRAMMING GUIDE



## **XR500/XR500N ACCESS CONTROL COMMAND PROCESSOR™ PANEL**

# **MODEL XR500/XR500N ACCESS CONTROL COMMAND PROCESSOR™ PANEL PROGRAMMING GUIDE**

Contains programming

Instructions for use with the Model XR500/XR500N Access Control Command Processor™ Panel.

When using the XR500/XR500N panel for any UL, NFPA, CSFM, or other listing organization's approved methods, refer to this manual and the XR500/XR500N Installation Guide (LT-0681). These documents outline the installation and programming requirements of all applications for which the XR500/XR500N 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 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

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## Revisions to This Document

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

<b>Date</b>	<b>Section Number and Heading</b>	<b>Quick Explanation of Changes</b>
3/04	Section 3 Communications  Section 3.2.5 Sections 3.3 and 9.5.10 Section 4 Network Options  Section 16.14 Section 19.11	Added feature for Receiver 1 and 2 telephone number to include the letter "T" as first character to allow a switch to CID communications. Added text to clarify Modem Setup String text. Removed/replaced reference from 893 Module to 893A Module. Added TCP information for XR500N only and revised Local IP and Gateway address default values. Added valid group numbers to Output options. Added footnote to Keypad Bus Zone Information table to include output option information.
1/04	Sections 5.7, 12.5, 12.9, 12.10 Section 7.9	Added Display Areas information. Section 5 partially renumbered. Added Panic Test Communication information for XR500N only.

## Introduction

### 1.1 Before you Begin

This guide provides programming information for the DMP XR500/XR500N Command Processor™ Panel. After this Introduction, the remaining sections describe the functions of each programming menu item along with the available options. Before starting to program, we recommend that you read through the contents of this guide. The information contained here allows you to quickly learn the programming options and operational capabilities of the XR500/XR500N panel.

In addition to this guide, you should also read and be familiar with the following XR500/XR500N documents:

- XR500/XR500N Installation Guide (LT-0681)
- XR500/XR500N Programming Sheet (LT-0678)
- XR500/XR500N Security Command® User's Guide (LT-0683)

#### Internal Programmer

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

#### Programming Information Sheet

Included with each panel are the Programming Information Sheets. These list the various programming prompts and available options for programming the panel. Before starting to program, we recommend you completely fill out each sheet with the programming options you intend to enter into the panel.

Having completed programming sheets available before entering data helps prevent errors and can shorten the time you spend programming. Completed sheets also provide you with an accurate panel program record you can keep on file for future system service or expansion. The remainder of this Introduction provides instructions for starting and ending a programming session using the alphanumeric keypad.

### 1.2 Getting Started

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

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

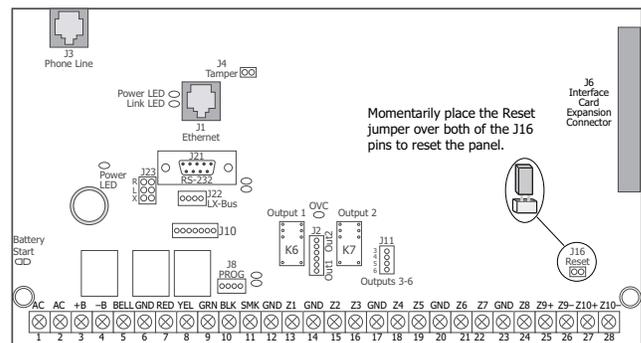


Before starting to program the XR500/XR500N panel, make sure the panel is properly grounded and AC and battery power is applied to the appropriate panel terminals. All wiring connections and grounding instructions are detailed in the XR500/XR500N Installation Guide (LT-0681).

#### Accessing the Programmer

1. Install the reset jumper across the two J16 reset pins for two seconds.
2. Remove the reset jumper and place it over just one pin for future use.
3. Enter the code 6653 (PROG) into a 32-character alphanumeric keypad set to address one, supervised mode. Press COMMAND.
4. The keypad displays PROGRAMMER.

You are now ready to start programming the panel.



**Figure 1: XR500/XR500N Panel Showing Reset**

# INTRODUCTION

## 1.3 Programmer Operation

There are 17 programming sections to choose from:

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

To choose a section for programming, press any top row Select key when the keypad displays the name of that section. Sections 2 through 18 contain detailed instructions for each programming step.

## 1.4 Programmer Lockout Codes

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

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

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

Before accessing programmer functions enter the new code number.

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

## 1.5 Reset Timeout

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

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

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

**1.6 Special Keys**  
**COMMAND Key**

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

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

**Back Arrow Key**

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

**Select Keys**

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

During programming, the Select keys also allow you to change information currently in panel memory by pressing the appropriate Select key under the display. You then enter the new information using the keypad keys.

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

The Select keys are also used for choosing a section from the programming menu. Press any top row Select key when the programming section name you want displays.

**1.7 Entering Alpha Characters**

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

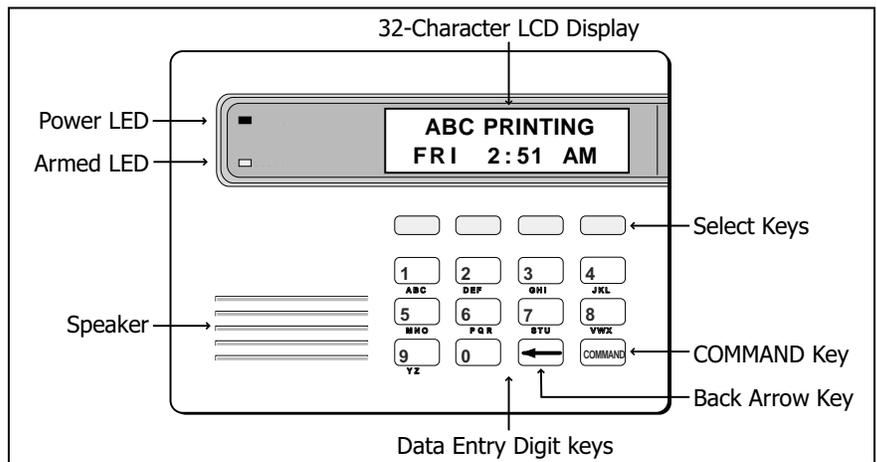


Figure 2: Keypad Function Keys

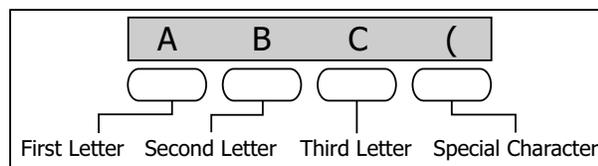


Figure 3: Entering Alpha Characters

# INTRODUCTION

## 1.8 Entering Non-Alpha Characters

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

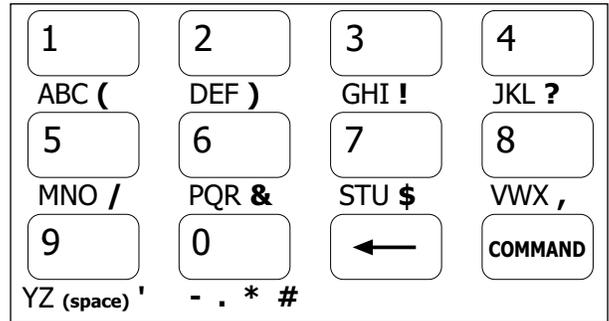


Figure 4: Special Characters

## 1.9 Keypad Displays Current Programming

Each programming prompt displayed at the keypad shows the currently selected option in the panel memory. These options are either shown as a number, a blank, or a NO or YES. To change a number or blank to a new number, press any top row Select key. 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 prompt.

It is not necessary to enter numbers with leading zeros. The panel automatically right justifies the number when you press the COMMAND key.

To change a programming prompt that requires a NO or YES response, press the top row Select key under the response not selected.

For example, if the current prompt is selected as YES and you want to change it to NO, press the third top row Select key as shown in Figure 5 below. The display changes to NO. Press the COMMAND key to display the next prompt.



Figure 5: Changing the Current Programming Option

## 1.10 Multiple Displays Containing Programming

For many programming and user options, such as Area selections, Menu Displays, and Status Lists, there are several displays containing programming. For example, when programming Menu Displays, keypads 1 through 16 display on two separate displays. First, keypads 1 through 8 display. Press the COMMAND key to display keypads 9 through 16. This same scheme is used for areas 1 through 32.

## 1.11 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, keypads 3, 8, 9, 15, 19, 23, 25, and 31 are not selected. In both examples the keypad numbers with asterisks are selected.

Devices				Areas			
*1	*2	3	*4	9	*10	*11	*12
*5	*6	*7	8	*13	*14	15	*16
*17	*18	19	*20	*21	*22	23	*24
9	*10	*11	*12	25	*26	*27	*28
*13	*14	15	*16	*29	*30	31	*32

To select an option that is not already selected, simply enter the number using the digit keys on the keypad. To deselect an option, enter the number using the digit keys and the asterisk is removed.

This same scheme is used when viewing the panel armed status and other programming and operational functions. Remember to press the COMMAND key to display the rest of the device or area numbers.

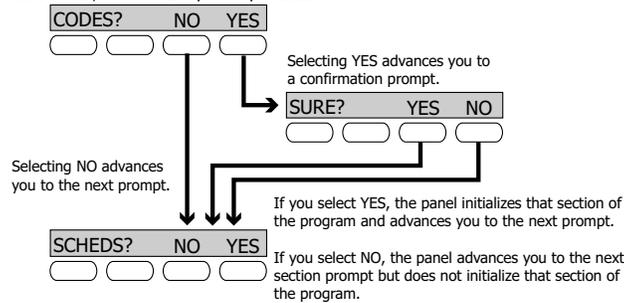
## Initialization

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

### 2.1 INITIALIZATION Initialization

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

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



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

SURE? YES NO

NO - Leaves existing programming intact.

YES - Clears all memory. The following prompts do not display. Reset the panel by shorting J16 and re-enter programming mode.

### 2.3 CODES? NO YES Clear All Codes

SURE? YES NO

NO - Leaves existing codes intact.

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

### 2.4 SCHEDULES? NO YES Clear All Schedules

SURE? YES NO

NO - Leaves existing schedules intact.

YES - Clears all shift, and output schedules.

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

SURE? YES NO

NO - Leaves existing event memory intact.

YES - Clears the events memory.

### 2.6 ZONES? NO YES Clear Zone Information

SURE? YES NO

NO - Leaves existing zone information intact.

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

### 2.7 AREAS? NO YES Clear Area Information

SURE? YES NO

NO - Leaves existing area information intact.

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

### 2.8 OUTPUTS? NO YES Clear Output Information

SURE? YES NO

NO - Leaves existing output information intact.

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

### 2.9 COM/RMT? NO YES Clear Communication and Remote Options

SURE? YES NO

NO - Leaves existing communication and remote options intact.

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

### 2.10 DEFAULTS NO YES Set to Factory Defaults

SURE? YES NO

NO - Leaves existing panel programming intact.

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

## Communication

- 3.1**  **Communication**  
Configure the communication options for the panel. The information you program varies with the Communication Type you select.
- 3.2**  **Communication Type**  
Specifies the communication method the panel uses to report system events to DMP SCS-1/SCS-1R Receivers or non-DMP receivers. Press any Select key.
- NONE** - For local systems. Selecting NONE ends communication programming. When COMM TYPE = NONE and there is an unrestored System Trouble, then the keypad sounds daily at 10:00 AM.
- DD** - Digital Dialer communications to a DMP SCS-1 or SCS-1R Receiver.
- CID** - This option allows the panel to communicate to non-DMP receivers using the Ademco Contact ID format. When selected, the panel sends all of its alarm, trouble, and supervisory reports to the receiver(s) programmed in Receiver 1 and 2 Programming. The panel sends reports to the receiver using either CID or standard DMP SDLC based on the ability of each receiver to process the CID format. The panel determines whether the receiver can process the CID format by the handshake tones the receiver transmits when first contacted. If the receiver can process the CID format, only those event reports for which there are CID definitions are sent by the panel. This restriction prevents the panel from dialing the receiver for a report it cannot send.
- Note:** To automatically switch from DD to a backup CID receiver see Section 3.19.
- NET (Network)** - Asynchronous communication using the panel onboard network connection or the 462N Network Interface Card. The DMP Network/Output reporting format is transmitted over an asynchronous data network to the SCS-1 or SCS-1R Receiver. If you need to send a duplicate signal to the central station and you have selected NET, use Receiver 2 programming to send a duplicate digital dialer signal.
- Note:** When NET is selected, 2ND LINE programming allows you to select D2 for two line supervision when using a Model 893A Dual Phone Line Module.
- There are extra options available if you selected NET for the communication type. These options are explained in sections 3.2.1 through 3.2.5.
- 3.2.1**  **Retry Time**  
After selecting NET, the keypad displays RETRY TIME: -. Enter the number of seconds (3 to 15 seconds) 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 5 seconds.
- 3.2.2**  **Network Backup**  
After displaying the Retry Time prompt, the keypad displays NET BCKUP NO YES. Select YES to enable Network Backup. Select NO to disable Network Backup. You can still program 2nd line for a different communication type, such as CELL or DD.

### 3.2.3 RMT IP ADDRESS: - **Remote IP Address**

Enter the receiver address where the panel sends messages. Be sure to enter all 12 digits and leave out the periods. For example, enter IP address 192.168.000.250 as 192168000250. The periods display automatically. The Remote IP Address must be unique and cannot be duplicated.

### 3.2.4 ALARM PORT: - **Alarm Port**

Enter the receiver port number. Default port number is 2001. If a different Port number is needed, enter the new number. Valid range is 1 to 65,535.

### 3.2.5 MODEM SETUP: **Modem Setup**

-
-

The keypad displays MODEM SETUP:. Press COMMAND. Enter up to two lines of 16 characters to equal up to 32 characters for the backup receiver string address.

If the network device is an iCOM/iCOM-E connected to a 462N Interface Card and you are using Network Backup, refer below for the iCOM/iCOM-E setup string.

**Note:** If the iCOM/iCOM-E or onboard network interface connection J1 (XR500N only) is **only** being used for the **main** network communication (Network Backup is NO), do NOT enter a Modem Setup String here.

There are two ways to use the Network Backup and Modem Setup features to send messages through the backup Network. You could have the onboard network interface connection J1 and a 462N interface card on the XR500N panel and assign the Modem Setup String to send the backup messages through a backup network device. Alternatively, you can use only the onboard network interface connection J1 on the XR500N and assign the Modem Setup String to route the backup messages through J1 to the backup receiver.

**Note:** If you are using a non-DMP network device and an iCOM/iCOM-E, use the non-DMP device as the backup device. If not, the Modem Setup String entered overrides the iCOM/iCOM-E IP Address.

The Modem Setup String for the iCOM/iCOM-E should be entered as follows: AT#UC XXX.XXX.XXX.XXX#PPPPP. Also enter the UDP Port Number in place of the Ps. The default port number is 2001. To enter the # (pound sign), press 0 and the far right top row Select key. To enter . (periods), press 0 and the second from the left Select key. Enter the backup IP Address in place of the Xs.

**Note:** When using Network Backup and UL AA is set to YES, the panel only sends the S72 (Warning: Network Trouble) message after the first series of network message attempts fails. Refer to the Appendix for information about Network options.

## 3.2.6 | | | | |-------|-----------|-----| | UL AA | <b>NO</b> | YES | |-------|-----------|-----| **UL AA**

At the UL AA prompt, select Yes to enable AA Mode or NO to disable AA Mode. NO is the default setting. UL AA involves check-in reports. Check-in reports are a method of supervising the communication between the panel and the receiver. To be UL AA compliant, panels must check-in with the receiver every 6 minutes when armed.

The SCS-1/SCS-1R Receiver verifies that the next Check-in report is received at the appropriate time. SCS-1/805 or higher firmware is required in the SCS-1 Receiver. When AA is selected and the check-in fails after one minute, the panel sends a WARNING: NETWORK TROUBLE (S72) report on the 2ND LINE. The next time the NET report is successfully sent, the panel sends a NETWORK RESTORED (S73) report over the 2ND LINE.

If you select YES for UL AA, the DISARM CHKIN prompt displays.

DISARM CHKIN	<b>RND</b>
MINUTES: -	<b>RND</b>

### Disarm Checkin

Press any Select key to display Minutes: - RND. Enter the number of minutes, from 1 to 6, between disarmed check-in reports. If any area is armed, the report is automatically sent every 6 minutes.

To select RND (Random), press the top right Select key. RND is the default setting. Selecting RND causes the panel to send the Check-in report at random times. When all areas are disarmed, the panel sends the report randomly but always between 5 to 60 minutes. If any area is armed, the panel sends the report every 6 minutes.

**Note:** NET TRBL, Network Fail Notification, is automatically enabled when UL AA is enabled. NET TRBL allows the panel to detect a primary network failure, send an S72, Network Trouble message, through the DD if it is programmed as the second line. When the primary network restores the panel sends an S73, Network Restored message.

If you select NO for UL AA, the SUB CODE prompt displays.

SUB CODE	<b>NO</b>	YES
----------	-----------	-----

### Substitution Code

Select YES if the panel sends a Panel Substitution Code when communicating with the receiver. 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. By default, SUB CODE is NO. When UL AA is YES, the substitution code is always sent.

CHECKIN:	<b>1</b>
----------	----------

### Check In

At the CHECKIN: - prompt, enter the number of minutes, from 0 to 240, between check-in reports when the panel is armed or disarmed. Check-in reports are a method of supervising the panel for communication with the receiver. Enter 0 (Zero) to disable the check-in. The default check-in is 1.

**Note:** When used for Fire Protective Signaling, the Check-in Time should not exceed 1 minute.

FAIL TIME:	<b>1</b>
------------	----------

### Fail Time

Entering a FAIL TIME allows the receiver to miss multiple check-ins before logging that the panel is missing. 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: If the CHECKIN is 10 minutes, the FAIL TIME must be 10 or more minute. The maximum FAIL TIME is 240 minutes. The default FAIL TIME is 1 (one) minute.

**NET TRBL NO YES**

**Net Trouble**

Select YES at the NET TRBL prompt to Enable Network Fail Notification. When UL AA is enabled, this feature is automatically enabled.

When NET TRBL is YES and the panel detects a primary network failure communication, the panel sends an S72, Network Trouble message, through the DD if it is programmed as the second line. Also, the trouble keypads will sound a continuous tone and display "NETWORK -TRBL." Press any key to silence the tone.

When the primary network restores the panel sends an S73, Network Restored message, through the DD if it is programmed as the second line. The "NETWORK -TRBL" display is removed from the keypad and the tone automatically silences.

**3.3**

**2ND LINE: NONE**

**Second Telephone Line**

Allows you to use a second communication line to send reports to the SCS-1/SCS-1R Receiver should the first phone line fail. The default 2nd Phone Line is NONE.

If 2ND LINE is DD or CELL and you are not using a 462N Network Interface Card, you need to install a DMP 839A Dual Phone Line Module to connect both the main and secondary phone lines to the panel.

DD type systems can be backed up with a dialer or cellular line.

**NONE DD CELL NET**

**NONE** - A second line is not used.

**DD** - Dialer communication to a DMP SCS-1/SCS-1R Receiver. When using CID as the main Communication Type, choose DD to communicate to a CID receiver on the 2ND LINE.

**CELL** - Cellular dialer communication with Cell-Miser™ restrictions. When Cell-Miser is selected, the following call restrictions apply to the panel.

1. Only zone alarms, Ambush, Line 1 Trouble, Abort, Recall Test, and Delayed Events are sent over the cellular system. Delayed Events are only sent if the cellular call was made for one of the other allowed reports.
2. Line 1 Trouble is sent only once during each armed period.
3. The dialing sequence uses the first phone number on line 1 only and the second phone number on line 2 only. This allows the panel to use the cellular phone number for cellular calls only without needing prefixes or area codes for land line dialing.

<b>If 2ND LINE = DD</b>	<b>If 2ND LINE = CELL</b>
Panel dials the 1st ph # twice on Line 1	Panel dials the 1st ph # twice on Line 1
Panel dials the 1st ph # twice on Line 2	Panel dials the 2nd ph # twice on Line 2
Panel dials the 2nd ph # twice on Line 1	Panel dials the 1st ph # twice on Line 1
Panel dials the 2nd ph # twice on Line 2	Panel dials the 2nd ph # twice on Line 2
Panel dials the 1st ph # twice on Line 1	Panel dials the 1st ph # twice on Line 1

**NONE DD CELL D2**

**D2** - Select D2 to allow supervision of a second telephone line connected to a Model 893A Dual Phone Line Module. D2 only displays if NET is the main Communication type.

**NONE DD CELL NET**

**NET (NETWORK)** - DMP Asynchronous communication to a DMP SCS-1/SCS-1R Receiver or Network automation system. If NET is selected as the main Communication Type, NET does not display as an option in 2ND LINE. If NET is selected for 2ND LINE, all zone alarms and restorals are duplicated on the asynchronous channel in addition to the main communication method.

When NET is used as the main or 2ND LINE communication method, the account number must not begin with a number that matches a line number being used for multiplex service on the same SCS-1/SCS-1R Receiver. This allows the Redisplay Non-Restored status list to work properly in receivers with SCS-1/805 or higher firmware.

- 3.4**  **Test Frequency**  
Specifies the communication test interval for the second phone line. This is displayed if 2ND LINE is programmed as DD, CELL or NET.
- NONE** - No communication test is made on the second line. NONE is selected by default.
- REG** - A 2ND LINE communication test is made each time the regular communication test completes.
- 7** - A communication test is made every 7 days at the test time programmed for the regular communication test. Test time deferrals are disregarded.
- 30** - A communication test is made every 30 days at the test time programmed for the regular communication test. Test time deferrals are disregarded.
- If the 2ND LINE test fails to communicate after 10 attempts, the regular communication channel sends a WARNING: PANEL BACKUP COMMUNICATION FAIL (S12) report. The next time the panel sends a report over the 2ND LINE, the regular communication channel sends a BACKUP COMMUNICATION LINE RESTORED (S04) report.
- 3.5**  **Account Number**  
Enter the account number sent to the SCS-1/SCS-1R Receiver.
- DD and NET** - The range of valid account numbers for a panel using DD or NET is 1 to 65535. For accounts of four digits or less, do not enter leading zeros.
- CID** - Choose an account number between 1 to 9999.
- 3.6**  **Transmit Delay**  
Enter the number of seconds (1 to 60 ) the panel waits before sending burglary, 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 zero to disable. The default Transmit Delay is 0 (zero).
- 3.7**  **DTMF**  
YES enables tone dialing by the panel. NO enables rotary dialing.
- 3.8**  **Events Manager**  
Specifies when non-alarm reports are sent to the receiver. This selection does not affect zone alarm, zone trouble, zone restoral, supervisory, or serviceman messages. Closing reports are not delayed if the Closing Wait option is YES. Contact ID does not delay reports but send them as they occur.
- SND** - All reports are sent to the receiver as they occur.
- DLY** - All non-alarm reports are held until the panel memory buffer contains 50 events or until the next panel communication with the receiver.
- KEEP** - All non-alarm reports are held in the panel memory buffer until they are overwritten by new activity. You can view the contents of the memory buffer using DMP Remote Link™ or System Link™. You can also use the display events feature in the User Menu. Refer to the Appendix for a table listing the delayed report types.
- 3.9**  **Defer Test Time**  
Select YES to allow the programmed test report to be deferred if the panel communicates with a receiver within the time set in Test Frequency. Select NO to send the test report as programmed regardless of previous panel communication.

- 3.10** TEST FREQ: 0 **Test Frequency**  
 Allows you to set how often the panel sends a test report to the SCS-1/SCS-1R Receiver. Enter from 1 to 60 days. This prompt does not display if Defer Test Time is NO.
- 3.11** TEST TIME  
0:00 AM PM  
TEST DAY: ALL **Test Time**  
 Press COMMAND to show the enter test time display. Enter the time of day the panel sends the test report to the SCS-1/SCS-1R Receiver. Use entries between 12:00 to 11:59 and then choose AM or PM. When Defer Test Time is set to NO, this option allows you to program the day of the week the test report is sent. Choose one day of the week or all days.
- 3.12** RECEIVER 1 PROG **Receiver One Programming**  
 Allows you to set the options for the first receiver the panel attempts to contact when sending reports. The panel supports communication to two receivers.
- 3.13** ALARM NO YES **Alarm Reports**  
 YES sends Abort, Alarm, Alarm Restoral, Ambush, Exit Error, and System Recently Armed reports to this receiver.
- 3.14** SPV/TRBL NO YES **Supervisory/Trouble Reports**  
 YES sends Supervisory, Trouble, Trouble Restoral, Force Armed, Zone Fault reports, and Serviceman Messages to this receiver.
- 3.15** O/C USER NO YES **Opening/Closing and User Reports**  
 YES sends Opening, Closing, Door Access, Late to Close, Unauthorized Entry, Schedule and Code changes, Zone Reset, and Zone Bypass reports by user to this receiver.
- 3.16** TEST RPT NO YES **Test Report**  
 Enter YES to enable the system test report to be sent to this receiver. Reports are sent according to the programming in Test Frequency and Test Time.
- 3.17** DOOR ACS NO YES **Door Access Report**  
 YES enables Door Access Granted 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.  
  
**Note:** The following three prompts and Receiver 2 programming prompts do not display if **COMM TYPE** is **NET**, **NET BACKUP** is **NO**, and **2ND LINE** is **NONE**.
- 3.18** BACKUP NO YES **Backup Reporting**  
 Enter YES to enable this receiver to be a backup to the other receiver in the event the other receiver cannot be contacted.

## 3.19

FIRST PHONE NO:
-
-

### First Telephone Number

This is the first number the panel dials when sending reports to this receiver. Phone numbers can have two lines of 16 characters each to equal up to 32 characters. Enter a P to program a two second pause in the dialing sequence.

**Area code selection for cellular communication:** You can also enter a letter "C" in the first or second telephone number. When entered, the characters before the "C" are only used when a 2nd LINE Cellular call is being made. All other calls made on the main phone line only uses the characters entered after the letter "C". The letter "C" is never dialed and is recognized by the panel as a marker only.

The P and C characters count as part of the 32 allowable characters. No dial tone detect "D" is required. Dial tone detect is an automatic panel function.

**Automatic CID communication:** You can place a letter "T" in the telephone number first position to allow a message to be sent to the receiver using CID communications. Once the CID message is sent, subsequent messages are sent using the communications method selected under Communication Type until another telephone number with a "T" in the first position is encountered. This option allows capture by AES radio or CID backup communication to a CID receiver using a specific telephone number.

The automatic backup CID communication feature allows for the following communication options:

- DD with CID second number
- NET with DD second line
- NET with CID second line
- NET with DD/CID second line

For example, program NET with second line DD and phone number T555-1212, and you have NET with CID second line.

## 3.20

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, C, or T characters entered for pause, area code for cellular connections, or CID communication option.

Should all ten attempts 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.

## 3.21

RECEIVER 2 PROG
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### Receiver Two Programming

Allows you to set the options for the second receiver the panel attempts to contact when sending reports. If you select YES for any of the second receiver options, you must have at least one phone number programmed in Receiver 2 programming. RECEIVER 2 PROG and the following prompts are not displayed if COMM TYPE is NET and 2ND LINE is NONE.

**3.22**     ALARM     NO     YES

**Alarm Reports**

See section Alarm Reports on previous page.

**3.23**     SPV/TRBL     NO     YES

**Supervisory/Trouble Reports**

See section Supervisory/Trouble Reports on previous page.

**3.24**     O/C USER     NO     YES

**Opening/Closing and User Reports**

See Opening/Closing and User Reports on previous page.

**3.25**     TEST RPT     NO     YES

**Test Report**

See Test Report on previous page.

**3.26**     DOOR ACS     NO     YES

**Door Access Report**

See Door Access Report on previous page.

**3.27**     BACKUP     NO     YES

**Backup Reporting**

See Backup Reporting on previous page.

**3.28**   

**First Telephone Number**

Enter the phone number the panel dials to send reports to the receiver or pager.

When communicating to an Alphanumeric pager, the Paging Service provider's Paging Terminal is usually used to actually send the messages to the pager. First Phone number **MUST** be programmed with the Paging Terminal's telephone number.

**Note:** All phone numbers can be up to 32 characters. Enter the letter P to program a two second pause in the dialing sequence. Enter the letter C to program a cellular area code detect. Enter the letter T as the string first character to enable the CID message communication format option. These characters count as part of the 32 allowable characters. No dial tone detect D is required. Dial tone detect is an automatic panel function.

**3.29**   

**Second Telephone Number**

The panel dials the second number when 2 successive tries using the first number have failed. 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 10 dialing attempts are made using the first and second phone numbers.

**Note:** All phone numbers can be up to 32 characters. Enter the letter P to program a two second pause in the dialing sequence. Enter the letter C to program a cellular area code detect. Enter the letter T as the string first character to enable the CID message communication format option. These characters count as part of the 32 allowable characters. No dial tone detect D is required. Dial tone detect is an automatic panel function.

## Network Options

**Note:** Contact your system administrator or central monitoring station to obtain IP address(es).

- 4.1**  DHCP  NO  YES **DHCP Mode Enabled**  
If the panel uses a dynamic IP address press the Select key below YES. When set to YES the panel must operate in DHCP and must not use the **Local IP Address** number. When the DHCP option is set to NO, the panel must use the IP address entered in **Local IP Address**. The default value for DHCP mode is YES.
- 4.2**  **Local IP Address**  
 Enter the local IP address. Be sure to enter all 12 digits and leave out the periods. For example, enter IP address 192.168.000.250 as 192168000250. The periods display automatically. The Local IP Address must be unique and cannot be duplicated. The default value is 192.168.0.250.
- 4.3**  **Gateway Address**  
 Enter the local gateway address. Be sure to enter all 12 digits and leave out the periods. For example, the gateway address 192.168.1.99 is entered as 192168001099. The default gateway address is 192.168.0.125.
- 4.4**  **Subnet Mask**  
 Enter the local subnet mask assigned to the panel. Use the protocol described for entering the IP address. For example, if the subnet mask to be assigned is 255.255.255.0, enter the address as 255255255000. The periods display automatically. The default value is 255.255.255.000.
- 4.5**  **Programming Port**  
 The default Programming Port setting is 2001. If your system administrator indicates you need to change this setting, type the new setting and press Enter.
- 4.6**  TCP COMM  NO  YES **TCP Comm Enabled (XR500N only)**  
When this option is set to NO, the panel communicates over the network using standard UDP protocol. When this option is set to YES, the panel communicates using TCP protocol. The TCP communications default value is NO.

**Device Setup**

- 5.1**    DEVICE SETUP    **Device Setup**  
 This section allows you to define the XR500/XR500N panel physical configuration. You can install and address up to sixteen **supervised** devices on the keypad data bus.
- 5.2**    DEVICE NO:-    **Device Number**  
DEVICE 1: STNDRD Enter the device number on the keypad bus you are programming. The keypad bus can have up to 16 devices.  
**Note:** After you program each option for the first device, repeat these programming steps for each additional devices.
- 5.3**    STD   FIRE   NONE    **Device Type**  
**STANDARD** - The device is either a Security Command keypad, a zone expander device, or a 733 Wiegand Interface Module.  
**FIRE** - The device is a Model 630F Remote Fire Command Center.  
**NONE** - No device is set for this address.
- 5.4**    DOOR NAME 1    **Door Name**  
 The door name displays. To change the name, press any top row Select key then enter up to 16 characters for the door name. Press **COMMAND** to continue device setup programming.
- 5.5**    ACCESS AREAS:    **Access Areas**  
 Press the **COMMAND** key to program Access Areas. To select an area, enter the area number using the digit keys on the keypad. When an area is selected, an asterisk appears next to the area number. Enter the number again to deselect the area. Press **COMMAND** to display the next set of areas. See section 1.11 in 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.
- 5.6**    EGRESS AREAS:    **Egress Areas**  
 Press the **COMMAND** key to program Egress Areas. To select an area, enter the area number using the digit keys on the keypad. When an area is selected, an asterisk appears next to the area number. Enter the number again to deselect the area. Press **COMMAND** to display the next set of areas. See section 1.11 in this document.  
**Note:** If an area is programmed as an access area, it cannot be programmed as an egress area and therefore does not display during Egress Areas programming.  
 Use this option to detect Anti-passback violations. Anti-passback requires a user to properly exit (egress) an area they have previously accessed. If users fail to exit through the proper card reader location they are not granted access on their next attempt. Users must have matching access area numbers assigned to their profile, to receive a door access at this device. If the user is programmed for Anti-Pass YES, then the user is logged out of all matching areas. This allows the user to again access the area. See **Access Areas** section.  
 If you do not enter any area numbers, all users with Door Access authority receives a door access without regard to schedules. If you are not using the Anti-Pass feature leave **Egress Areas** blank.

### Display Areas

Press the COMMAND key to program Display Areas. To select an area between 1 and 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 COMMAND to display the next set of areas. See section 1.11 in this document.

Display Areas allows the XR500/XR500N 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 devices, as well as annunciation of zones (by type) assigned to those area(s). Display Areas default selects all area numbers. 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.

#### User Action Allowed

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

- Arming/Disarming of the area(s) selected from the ARM DISARM menu
- 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)
- ALL SYSTEM ON when all selected area(s) are armed
- 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.

- Alarm Silence
- System Status Menu
- Forgive Anti-Passback
- Service Request
- Sensor Reset Menu
- System Test/Panic Test
- Set System Time and Date
- Fire Drill
- Outputs On/Off Menu
- User Profiles
- 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.

**5.8**    STRIKE TIME: 5

**Strike Time**

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

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

**5.9**    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.

**5.10**    OUT GROUP NO YES

**Output Group**

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

**5.11**    OVERRIDE NO YES

**Schedule Override**

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

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

## Remote Options

- 6.1**  REMOTE OPTIONS **Remote Options**  
This section allows you to enter the information needed for Remote Command/Remote Programming operation.
- 6.2**  **Remote Key**  
This option allows you to enter a code of up to eight digits for use in verifying the authority of an alarm or service receiver to perform a remote command/programming session. The Remote Link™ program must give the correct key to the panel before being allowed any remote functions. All panels are shipped from the factory with the key preset as blank.  
  
To enter a remote key or change the current one, press a top row Select key and enter any combination of up to eight digits. Press COMMAND. The current key never displays.
- 6.3**  MFG AUTH  NO  YES **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.
- 6.4**  **Armed Rings**  
Enter the number of rings the panel counts before answering the phone line when all system areas are armed. Any number from 1 to 15 can be entered. If zero is entered, the panel does not answer the phone when all system areas are armed. The default Armed Rings is 0 (zero).
- 6.5**  **Disarmed Rings**  
Enter the number of rings the panel counts before answering the phone line while any system areas are disarmed. Any number from 1 to 15 can be entered. If zero is entered, the panel does not answer the phone when any system area is disarmed. The default number of Disarmed Rings is 0 (zero).
- 6.6**  ALR REC  NO  YES **Alarm Receiver Authorization**  
Select YES to enable remote commands and programming to be accepted from the alarm SCS-1/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-1/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-1/SCS-1R Receiver.

**6.7** SVC REC   NO   YES

**Service Receiver Authorization**

YES enables remote commands and programming to be accepted from a secondary service receiver other than the alarm SCS-1/SCS-1R Receiver. The Remote Key option can also be required.

With YES selected, the panel requests the service receiver key the first time it is contacted by the service receiver. The panel retains this service receiver key in memory and accepts remote commands from the service receiver.

If an alarm occurs during a remote connect, the panel disconnects from the service receiver and calls the alarm receiver. Alarm reports are only sent to the alarm receiver. It is important that the alarm receiver key and the service receiver key programmed at the central station are NOT the same so the panel can determine the difference between receivers.

When NO is selected remote commands and programming are not accepted from a secondary service receiver.

This option must be YES to allow programming from a directly connected computer or an iCOM/iCOM-E.

**6.8** PC MODEM   NO   YES

**PC Modem**

YES allows the panel to answer the telco link and connect with Remote Link through the PC Modem at 2400 baud. NO disables PC Modem communication.

**6.9** REMOTE PHONE NO

-
-

**Remote Telephone Number**

Press COMMAND to enter the phone number the panel dials when requesting remote programming. After entering a phone number, the panel allows remote commands and programming only after it has first been called by the authorized receiver, disconnected itself, and redialed the remote phone number.

If a Remote Phone Number is NOT entered, and Alarm Receiver and Service Receiver is YES the panel allows remote commands and programming without disconnecting and redialing. 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. No dial tone detect "D" is required. Dial tone detect is an automatic panel function.

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

NBR   RMT   PICKUP

**NUMBER** - The panel allows you to enter into the keypad a phone number you want the panel to dial. Enter any required prefixes and area codes.

**REMOTE** - The panel dials the phone number programmed in Remote Phone Number.

**PICKUP** - The panel picks up the phone line when Remote Link™ calls in. The phone must be ringing before selecting PICKUP.

See the Appendix for more information about the 984 + COMMAND feature.

**6.10** DISARM   NO   YES

**Remote Disarm**

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

## System Reports

- 7.1**  SYSTEM REPORTS **System Reports**  
Select specific system reports the panel sends to the receiver.
- 7.2**  ABORT  NO  YES **Abort Report**  
YES allows the panel to send an alarm abort report to the receiver any time an area is disarmed after an alarm report is sent and the Bell Cutoff Time has not expired. No alarmed zones can still be armed. If the communication type is set to **DD**, a **Warning: Alarm Bell Silenced** report is also sent if the alarm bell is silenced.  
Abort reports are also sent when the system is disarmed during Transmit Delay and the Bell Output Timer is active. See the **Communication - Transmit Delay** section.  
**Note:** Abort Reports will not be sent for Fire, Fire Verify, or Supervisory type zones.
- 7.3**  RESTORAL:  YES **Restoral Reports**  
This option allows you to control when and if a zone restoral report is sent to the central station receiver. Press a Select key to display the following options:  
 NO  YES  DISARM  
**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.
- 7.4**  BYPASS  NO  YES **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 will only be sent if O/C User in Communications is set YES for Receiver 1 or Receiver 2.
- 7.5**  SCHD CHG  NO  YES **Schedule Change Reports**  
YES allows the panel to send all schedule changes to the receiver. The report includes the day, opening time, closing 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.
- 7.6**  CODE CHG  NO  YES **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.
- 7.7**  ACCESS KEYPADS: **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.  
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.

- 7.8**

AMBUSH	<b>NO</b>	YES
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**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.
- 7.9**

PANIC TST	<b>NO</b>	YES
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**Panic Test Communication (XR500N 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 section 19.3 Using the Walk Test.

## System Options

- 8.1**  **System Options**  
This section allows you to select system-wide parameters.
- 8.2**    **Closing Wait**  
When YES is selected, the keypad displays ONE MOMENT.. while waiting for an acknowledge 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.
- 8.3**   
  
  
 **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 and ENTER CODE:- displays on all keypads programmed to prewarn for that zone. The area must be disarmed before the delay expires or an alarm report is sent to the receiver. All zones in that area are delayed along with the Exit zone. Entry Delay times can be from 1 to 250 seconds. Repeat the above for each entry delay being used in the system.
- 8.4**  **Cross Zone Time**  
Enter the time allowed between zone faults. When zones are cross zoned, a second cross-zoned zone must fault within this time in order for an alarm report from the first zone 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 zero disables this function. See the Appendix.
- 8.5**  **Zone Retard Delay**  
Enter the retard time assigned to Fire, Supervisory, Auxiliary 1, Auxiliary 2, and Arming 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 zero disables this function.  
**Note:** For UL installations, Zone Retard Delay shall not be used for burglary zones.
- 8.6**  **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 zero sends the power failure report after a 15-second delay. The default setting is 1.  
**Note:** For UL burglary installations Power Fail Delay shall be programmed to zero.  
**Note:** For UL fire installations, Power Fail Delay shall be programmed as required by the service of the panel. For Central Station service: 6-12, for Remote Station service: 12-15.
- 8.7**  **Swinger Bypass Trips**  
Enter the number of times a zone can go into an alarm or trouble condition within one hour before being automatically bypassed. You can select from one to seven trips. Bypassed zones are automatically reset when the area they are assigned to is disarmed. All 24-hour zones are reset when any area of the system is disarmed. Entering a zero disables this function.  
**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 zero. If the trip counter is exceeded before the hour expires, the zone is automatically bypassed by the panel. A Bypass Report is sent to the receiver if Bypass Reports is YES.  
**Note:** Not investigated by UL.

**8.8**    RST SBYP   NO   YES

**Reset Swinger Bypass**

When YES is selected, an automatically bypassed zone is reset if it remains in a normal condition for one complete hour after being bypassed. A report of the automatic reset is sent to the receiver if Bypass Reports has been selected as YES.

**Note:** Not investigated by UL.

**8.9**    VIDEO   NO   YES

**Video/Alarm Verification**

Selecting YES forces the panel to wait for 60 seconds after a successful communication with a central station receiver before making any additional communication attempts. This 60-second period can be used to allow video transmission or alarm verification (such as 2-way voice) equipment to use the phone line. After the 60-second timer, the panel can once again seize the phone line and send any reports being buffered.

The Video option must be set to NO if any fire protection is connected to the panel.

**Note:** Not investigated by UL.

**8.10**    TIME CHG   NO   YES

**Time Zone Changes**

This function allows the panel to request automatic time changes from the DMP SCS-1/SCS-1R Receiver. 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.

HRS FROM GMT:   6

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

GMT	City/Time Zone
0	London, Monrovia, Lisbon, Dublin, Casablanca, Edinburgh
1	Cape Verde Island, Azores
2	Mid-Atlantic, Fernando de Noronha
3	Buenos Aires, Georgetown, Brasilia, Rio de Janeiro
4	Atlantic Time (Canada), Caracas, La Paz, Santiago
5	Eastern Time (US, Canada) Bogota, Lima, Arequipa
6	Central Time (US, Canada), Mexico City, Saskatchewan
7	Mountain Time (US, Canada), Edmonton
8	Pacific Time (US, Canada), Tijuana
9	Alaska
10	Hawaii
11	Midway Island, Samoa
12	Fiji, Marshall Island, Wellington, Auckland, Kwajalein, Kamchatka
13	New Cadelonia
14	Guam, Sydney
15	Tokyo, Seoul
16	Hong Kong, Singapore
17	Bangkok, Hanoi
18	Dhaka, Almaty
19	Islamabad, Karachi
20	Abu Dhabi, Kazan
21	Moscow, Bagdad
22	Eastern Europe
23	Rome, Paris, Berlin

## Output Options

- 9.1**  **Output Options**  
This function allows you to program the panel Bell Output functions and certain Relay Output options. Dry contact relays and voltage outputs are available using the output harness on the XR500/XR500N board. Refer to the XR500/XR500N Installation Guide (LT-0681) for complete information.  
Any Output Option can be used with output numbers 1 to 6, 500 to 999, D1 to D16, and G1 to G20.
- 9.2**  **Bell Cutoff Time**  
Enter the maximum time from 1 to 99 minutes the Bell Output remains on. If the Bell Output is silenced or the area is disarmed, the cutoff time resets. Enter 0 to provide continuous bell output. The default is 15 minutes.
- 9.3**  **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 selected). 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.
- 9.4**  **Bell Action**  
This section defines the type of Bell Output for zone alarms. Press COMMAND to display the default Bell Output for each zone type. Press any Select key and enter S for a Steady Bell Output, P for a Pulsed output, T for a Temporal Code 3 output, and N for no Bell Output.  
**Note:** Trouble conditions do not activate the Bell Output.
- 9.4.1**  **Fire Bell Action**  
Defines Bell Action for Fire Type zones. The default is P.
- 9.4.2**  **Burglary Bell Action**  
Defines Bell Action for Burglary Type zones and Exit Error output. The default is set at S.
- 9.4.3**  **Supervisory Bell Action**  
Defines Bell Action for Supervisory Type zones. The default is set at N.
- 9.4.4**  **Panic Bell Action**  
Defines Bell Action for Panic Type zones. The default is set at N.
- 9.4.5**  **Emergency Bell Action**  
Defines Bell Action for Emergency Type zones. The default is set at N.
- 9.4.6**  **Auxiliary 1 Bell Action**  
Defines Bell Action for Auxiliary 1 Type zones. The default is set at N.
- 9.4.7**  **Auxiliary 2 Bell Action**  
Defines Bell Action for Auxiliary 2 Type zones. The default is set at N.
- 9.5**  **Output Action**  
This option allows you to define the XR500/XR500N relay outputs operation. The panel provides two Form C relays (1 and 2) and four open collector outputs numbered 3 to 6. Expand the system up to 500 additional relay outputs (numbered 500 to 999) using J22 LX-Bus on the panel, multiple 716 Output Expander Modules and up to five interface cards. Program keypad door strike relays by entering D1 to D16 for addresses 1 to 16. Program output groups by entering G1 to G20.

- 9.5.1**  **Cutoff Output**  
Outputs 1 to 6 can be entered here to turn off after a time specified in CUTOFF TIME. To disable this option, press any Select key to clear the display then press COMMAND. The Cutoff Output displays NONE when no outputs are selected.
- 9.5.2**  **Output Cutoff Time**  
If a Cutoff Output is assigned, enter a Cutoff Time of 1 to 99 minutes for the output to remain on. Enter zero for continuous output.
- 9.5.3**  **Communication Fail Output**  
Enter the output number to turn on when a DD system fails to communicate on three successive dial attempts or if the backup communication line transmits a report.  
To clear the output, disarm any area or select Off for the output number in the User Menu's Outputs On/Off section. Enter zero to disable this output.
- 9.5.4**  **Fire Alarm Output**  
Enter the output number to turn on when a fire type zone is placed in alarm. The output is turned off using the Sensor Reset option while no additional fire type zones are in alarm. Enter zero to disable. This output is not compatible with Cutoff Outputs.
- 9.5.5**  **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 alarm or 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 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.
- 9.5.6**  **Ambush Output**  
Enter the output number to turn on when an Ambush code is entered at a keypad. The output is turned off using the Sensor Reset option. Enter zero to disable this output.
- 9.5.7**  **Entry Output**  
Enter the output number to turn on at the start of the entry delay time. The output turns off when the area is disarmed or the entry delay time expires. Enter zero to disable this output.
- 9.5.8**  **Exit Output**  
Enter the output number to turn on when an exit delay time starts in any area of the system. The output is turned off when the area arms or when the arming has been stopped. Enter zero to disable this output.
- 9.5.9**  **Ready Output**  
Enter the output number to turn on when all disarmed burglary zones are in a normal state. The output is turned off when any disarmed burglary type zone is in a bad state. Enter zero to disable. This output is not compatible with Cutoff Outputs.
- 9.5.10**  **Telephone Trouble Output**  
Enter the output number to turn on when the phone line monitor in the DMP 893A detects a voltage below 3 VDC or when the short across pins 2 and 7 on the phone block is lost. The output is turned off when phone voltage rises above 3 VDC. Enter zero to disable this output. This output can be connected to a lamp, LED, or buzzer using the DMP Model 716 Output Expansion Module.

# OUTPUT OPTIONS

9.5.11

## Late To Close Output

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

9.5.12

## Device Fail Output

Enter the output number to turn on when an addressed device fails to respond to polling from the panel. A Missing Device report is sent to the receiver. The output is turned off when the device responds to polling or is removed from the system. Enter 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.

9.5.13

## Sensor Reset Output

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

9.6

## Output Names

This section allows you to define a 16 character alphanumeric name for any or all 506 output numbers. The name can display on the keypad when a user performs the browser feature at Outputs On/Off. See the XR500 User's Guide Appendix for browser operation.

9.6.1

## Output Number

Enter an output number (1 to 6, 500 to 999).

9.6.2

## Output Name

The output name displays. To change the default name, press any top row Select key then enter up to 16 characters for the output name. Press COMMAND to enter the next output number.

## Output Groups

- 10.1** OUTPUT GROUPS **Output Groups**  
 This function allows you to assign outputs to groups. Output groups can be assigned to other areas of programming such as Output Options or Alarm Action of Zone Information, just like single outputs are assigned. This allows the entire group of outputs to turn on and off as required by the programming option.
- 10.2** GROUP NO: - **Group Number**  
 Enter a group number from 1 to 20. Up to 20 different groups may be assigned.
- 10.3** GROUP NAME X X **Group Name**  
 The group name displays. To change the default name, press any top row Select key then enter up to 16 characters for the group name. Press COMMAND to enter the outputs to be assigned to the group.
- 10.4** OUTPUT NO 1: - **Output Number**  
OUTPUT NO 2: -  
OUTPUT NO 3: -  
OUTPUT NO 4: -  
OUTPUT NO 5: -  
OUTPUT NO 6: -  
OUTPUT NO 7: -  
OUTPUT NO 8: -  
 Enter the Output number. Entry range is 1 to 6, 500 to 999 (outputs), D1 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 XR500/XR500N User's Guide 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

- 11.1**  **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 COMMAND key to display the next set of keypads (9 through 16). See Section 1.11 in this document.
- 11.2**  **Armed Status**  
Enter the keypad addresses that show the armed areas. Each armed area is displayed with its area number. The User Menu Armed Areas function also displays the custom area name you enter in Area Information.
- 11.3**  **Time**  
Enter the keypad addresses that can display the time and day of the week.
- 11.4**  **Arm/Disarm**  
Enter the keypad addresses from which users can arm and disarm areas.

**Status List**

**12.1** STATUS LIST

**Status List**

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

The keypad stays in the Status List until the user arms or disarms or selects a menu option. Status List alternates with the Armed Status on keypad addresses selected in the **Menu Display - Armed Status** section. You can choose to have System Monitor troubles placed in the list, the different zone types placed in the list, and at which keypad addresses they will 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 the COMMAND key to display the next set of keypads (9 through 16). See section 1.11 in this document.

**12.2** DISPLAY KEYPADS:

**Display Keypads**

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

**12.3** SYSTEM TROUBLES:

**System Monitor Troubles**

Specifies the addresses 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)

The name of the System Monitor is placed in the Status List and the keypad steady trouble buzzer sounds. The buzzer remains on until any keypad top row Select key is pressed. The name remains in the list until the condition is restored.

**12.4** FIRE ZONES:

**Fire Zones**

Specifies the addresses 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. The name remains in the list until the user clears it with the Sensor Reset function.

When using the 690, 790, 791, or 793 Security Command LCD Keypads or the 630F Remote Fire Command Center, 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

## 12.5 BURGLARY ZONES: **Burglary Zones**

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

For zone alarms, only the last burglary zone tripped remains in the list. The alarm remains in the list until another burglary zone goes into alarm, any area of the system is disarmed, 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 the 690, 790, 791, or 793 Security Command LCD Keypads or the 630F Remote Fire Command Center, 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.

## 12.6 SUPERVISORY ZONES: **Supervisory Zones**

Specifies the addresses 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.

## 12.7 PANIC ZONES: **Panic Zones**

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

## 12.8 EMERGENCY ZONES: **Emergency Zones**

Specifies the addresses 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.

## 12.9 AUX 1 ZONES: **Auxiliary 1 Zones**

Specifies the addresses 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.

## 12.10 AUX 2 ZONES: **Auxiliary 2 Zones**

Specifies the addresses 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.

## Printer Reports

- 13.1**  PRINTER REPORTS  **Printer Reports**  
This section allows you to define the operation of a local printer connected to the panel through the use of a DMP 462P Printer Interface Card. The 462P allows you to connect the DMP SCS-PTR or other compatible 40-character or 80-character serial printer to the panel.  
**Printing the panel's event buffer**  
The Display Events option in the User Menu contains a PRINT command that allows the user to send the contents of the panel event buffer to a local printer. The PRINT option is visible whether or not a 462P Printer Interface Card is attached to the panel.
- 13.2**  ARM/DIS  NO  YES **Arm and Disarm Reports**  
Prints arming, disarming, and Late to Close reports. Includes the area number, name, and action (armed, disarmed, or late), the user number, user name, and time and date.
- 13.3**  ZONE  NO  YES **Zone Reports**  
Prints changes in the active zones status. Includes the zone number, name, and type as well as the action (alarm, trouble, bypass, etc.) user number (if applicable) and area name. When the Walk Test or Panic Zone Test is performed, Verify and Fail messages also print for each zone.
- 13.4**  USR CMDS  NO  YES **User Command Reports**  
Prints user code changes, outputs turned ON or OFF (if operated by a schedule, SCH is shown in Display Events in place of the user number), schedule changes, and User Menu functions.
- 13.5**  DOOR ACS  NO  YES **Door Access Reports**  
Prints door access activity. Includes the door number, first and second user number, first and second user name, and the time and date of the door access.
- 13.6**  SUPV MSG  NO  YES **Supervisory Reports**  
Prints System Monitor Troubles and system events. See Status List - System Monitor Troubles.

## Host Log Reports

### 14.1 HOST LOG REPORTS

#### Host Log Reports

This section allows you to program the types of logging reports the panel sends through the 462N Network Interface Card or through J21 Serial Connector directly on the XR500/XR500N panel. The reports include information such as the type of activity, time and date of the activity, and user name and number. These data logging reports can be accessed using the Advanced Reporting Module. See the Installation Guide (LT-0681) for detailed J21 setup information or the User's Guide (LT-0683) for more information.

**Note:** The network connection that sends Network Log Reports is not monitored for network trouble: The Network 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 Network 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. The Network Log Reports have the lowest priority of panel reports sent.

For information about the 462N card capabilities with Network Log Reports and Network Communication method, see 462N Card Examples in the Appendix.

### 14.2 MODEM SETUP:

-
-

#### Modem Setup

The keypad displays MODEM SETUP:. Press COMMAND. Enter up to two lines of 16 characters to equal up to 32 characters for the string that is sent to the network device.

If you are using a direct connection through the 462N card to a Remote Link computer, do not enter a Modem Setup String here. If you are using J21 Serial Connector on an XR500N panel for Host Log Reporting, do not enter a Modem Setup string here.

If your XR500 panel network device is an iCOM/iCOM-E, enter the following setup string: AT#UCXXX.XXX.XXX.XXX#PPPPP. The Xs represent the iCOM/iCOM-E target IP Address, and the Ps represent the port number. The default port number is 2001. An example of a modem setup string is: AT#UC192.168.001.099#2001.

**Note:** If the iCOM/iCOM-E is **only** being used to send Network Log Reports, do NOT enter a Modem Setup String here. The Modem Setup String entered CANNOT be the same as that entered in Communication.

### 14.3 ARM/DIS NO YES

#### Arm and Disarm Reports

Sends arming, disarming and Late to Close events. Includes the area number, name and action, the user number and name, and the time and date.

### 14.4 ZONE NO YES

#### Zone Reports

Sends changes in the status of active zones. Includes the zone number, name, type, the action (alarm, trouble, bypass, etc.), user number (if applicable), and area name. For a Walk Test, Verify and Fail messages are sent for each zone.

### 14.5 USR CMDS NO YES

#### User Command Reports

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

### 14.6 DOOR ACS NO YES

#### Door Access Reports

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

## 14.7

SUPV MSG	NO	YES
----------	----	-----

### Supervisory Reports

Sends system monitor reports, such as AC and battery, and system event reports.

Supervisory Reports also sends the following reports:

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

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

**Note:** To send these reports through the network logger, you must enable SUPV MSG.

## Area Information

### 15.1 AREA INFORMATION

#### Area Information

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

You activate an area by assigning it a name. See Area Name. A name is given to each active area in place of a number to assist the user during arming and disarming.

### 15.2 EXIT DELAY: 45

#### 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 are ignored until the exit delay expires. The keypad displays the countdown.

If an Exit zone is in a bad condition at the end of the exit delay:

- the alarm bell sounds for 2 seconds
- an Exit Error report is sent to the central station receiver
- the bad Exit zone is force armed

If any other zone type is placed in a bad condition at the end of the exit delay an alarm is indicated. The exit delay can be from 1 to 250 seconds. Enter zero to disable the Exit Delay feature.

### 15.3 BURG BELL OUT: 0

#### Burglary Bell Output

Enter the output number (0 to 6, 500 to 999, G1 to G20, or D1 to D16) that is turned on any time a Burglary type zone in this area is placed in alarm. The output is turned off when you disarm the area in which the alarm occurred 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 prompt. 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.

### 15.4 O/C RPTS NO YES

#### Opening/Closing Reports

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

### 15.5 CLS CHK NO YES

#### Closing Check

Select **YES** to enable the panel to verify that all areas in the system have been armed after temporary or permanent schedules have expired. 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.

If you select **YES** in the Area Schedules section, the appropriate area name displays followed by - LATE. The keypad steady beep is silenced by pressing any top row Select key. If the system is not armed or a temporary schedule not entered to extend the closing within ten minutes, a Late to Close report is sent to the SCS-1/SCS-1R Receiver if **AUTO ARM** is **NO**. See Automatic Arming section. If the area has been disarmed outside of any schedule, the closing check sequence occurs one hour after the area is disarmed and continues each hour until the area is armed or the schedule is extended.

### 15.6 CLS CODE NO YES

#### Closing Code

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

### 15.7 ANY BYPS NO YES

#### Any Bypass

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

- 15.8**  AREA SCH  NO  YES **Area Schedules**  
Select YES to allow each area to set its own shift schedules 1 to 4. Enter NO to provide one set of schedules for this system.
- 15.9**  **Early Morning Ambush (XR500N only)**  
Enter the number of minutes (1 to 15) before a silent alarm (Ambush S15) is sent to the central station using the area 1 account number. Enter zero to disable this option.  
  
When a user code is entered to disarm 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 must have authority to disarm area 1 and must be entered at the same keypad or reader.  
  
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.
- 15.10**  **Area Number**  
Enter the number of the area to programming. After entering the area number, press COMMAND to enter the area name.
- 15.11**  **Area Name**  
The area name can be up to 16 alphanumeric characters. To add an area name to the system, press any Select key and then enter up to 16 characters for the new area name. Press COMMAND to continue. For instructions on entering alphanumeric characters see section 1.7 Entering Alpha Characters. Inactive areas are marked \* UNUSED \*.  
  
To mark an active area unused, press any top row Select key to delete the old name, then press the COMMAND key. The programmer automatically programs the name as \*UNUSED\*. If you have already cleared Area Information during Initialization, all areas are marked \* UNUSED \*. See Initialization section.
- 15.12**  **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.
- 15.13**  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-1/SCS-1R Receiver. NO disables automatic arming for this area.

# AREA INFORMATION

15.14  BAD ZONES:  **BYP**

## Bad Zones

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

**BYP**  **FORC**  **REF**

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

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

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

15.15  **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.

15.16  **ARMED OUTPUT:**

## 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 will turn 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.

15.17  **LATE OUTPUT:**

## 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 is displayed 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.

15.18  **BANK/SAF**  **NO**  **YES**

## Bank Safe & Vault (XR500N 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.

15.19  **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.

15.20  **TWO MAN**  **NO**  **YES**

## Two Man Rule (XR500N 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 different user code must be entered within 30 seconds or an alarm activates.

NO disables the Two Man Rule for this area.

## Zone Information

### 16.1 ZONE INFORMATION

#### **Zone Information**

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

### 16.2 ZONE NO: -

#### **Zone Number**

Enter the number of the zone you intend to program. Available zone numbers are shown in the table below. The keypad zone numbers begin with the keypad address and are followed by the particular zone from that keypad. For example, a 793 at keypad address 7 would provide zones 71, 72, 73, and 74.

Press COMMAND to enter a zone name.

Address	Programming Zone Number
Panel	1-10
1	11-14
2	21-24
3	31-34
4	41-44
5	51-54
6	61-64
7	71-74
8	81-84
9	91-94
10	101-104
11	111-114
12	121-124
13	131-134
14	141-144
15	151-154
16	161-164
LX-Bus 1 (A)	500-599
LX-Bus 2 (B)	600-699
LX-Bus 3 (C)	700-799
LX-Bus 4 (D)	800-899
LX-Bus 5 (E)	900-999

### 16.3 \* UNUSED \*

#### **Zone Name**

Zone names can have up to 16 alphanumeric characters. A name must be given to each zone in the system. The name can display at the keypads during arming and disarming so the user does not have to memorize zone numbers. Users can associate a zone name with a particular protection point. A zone that is not part of the system must be marked unused.

To add a zone name to the system, press any Select key and then enter up to 16 characters for the new zone name. Press COMMAND to continue.

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

## 16.4 ZONE TYPE: BLANK

### Zone Type

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

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

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

-- NT DY EX

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

FI PN EM SV

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

A1 A2 FV AR

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

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

### Zone Type Specifications

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

Refer to the Appendix for complete zone type descriptions.

## 16.5 FIRE BELL OUT: 0

### Fire Bell Output

This output (1 to 6, 500 to 999, 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 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.

## 16.6 AREA NO: -

### Area Number

Enter the area number where this zone is being assigned. Area number 1-32 can be assigned for Night, Day, Emergency, Auxiliary 1 and Auxiliary 2 zones.

## 16.7

**ARM/DIS AREAS:**

### Arming Zone Area Assignment

If the zone has been programmed as an Arming Type (AR), the only information to enter is the areas that the zone controls.

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 is opened from a normal (disarmed) state, a trouble is reported. When opened from a shorted (armed) state, an alarm is reported and the zone is disabled until you disarm the area(s) from either a keypad or Remote Link™ computer.

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

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

## 16.8

**STYLE:**

### Style

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

**TGL ARM DIS STEP**

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

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

**DIS (Disarm)** - When programmed as an AREA system, a short disarms the programmed areas. When programmed as a ALL/PERIM or HOME/AWAY system, a short disarms ALL 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 will cause no action. An open condition will disarm the programmed areas and beep the keypads for one second.

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

**MNT**

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

# ZONE INFORMATION

## 16.9 NEXT ZN? NO YES **Next Zone**

When YES is selected, the zone programming terminates and the display returns to Zone Number, allowing you to enter a new zone number. To make any alterations to the Alarm Action for a zone, answer the Next Zone prompt with NO. The Alarm Action is then defined beginning with section 16.10.

Zones 500 through 699 have wireless capability when using the FA400-DMP Remote Wireless Receiver: To programming zones 500 to 699, select NO at the NEXT ZONE - NO YES prompt. The WIRELESS NO prompt displays. This display is not visible unless you are programming zones in this range. If the zone you are programming is intended for wireless devices, select YES at the Wireless prompt. Select NO to continue programming non-wireless zones in the 500 to 699 range.

**Note:** The prompts listed in section 16.10 are for use with an FA400-DMP Remote Wireless Receiver.

## 16.10 WIRELESS NO YES **Wireless**

Select YES to program a wireless zone connected to an FA400-DMP Remote Wireless Receiver. Press the COMMAND key to continue with wireless programming.

### CHECK IN TM: 60 **Check-in Time**

You can set wireless transmitters to check in automatically every 10, 30, or 60 seconds or not at all. To change the 60 second default, press any top row Select key to display NONE 10 30 60. Press the top row Select key under the check-in time you want for this zone.

### INT CONT NO YES **Internal Contact**

Select YES to use an internal contact on the wireless transmitter. Select NO to use an external contact. When you select NO, the following two prompts display.

### EOL NO YES **End-of-Line**

Select YES to supervise an external contact connected to the wireless transmitter. At the contact, install a 2.2k Ohm End-of-Line resistor in parallel for Normally Open contacts and in series for Normally Closed contacts.

### NRM OPEN NO YES **Normally Open**

Select NO if the contact connected to the wireless transmitter is Normally Closed.

## 16.11 ALARM ACTION . . . . **Alarm Action**

This option allows you to change any Zone Time 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.

**16.12** DISARMED OPEN

**Disarmed Open**

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

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

**16.13** MSG: TROUBLE

**Report to Transmit**

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

A    T    L    -

**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. You can also select L for a zone to send alarm reports to the user's pager only and not to the central station. PAGER in Receiver 2 programming must be enabled.

D    S

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

**SILENCE/RESET** - 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.

- **(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.

**16.14** OUTPUT NO: 0

**Output Number**

You can specify any of the Relay Outputs on the XR500/XR500N panel to be activated by a zone condition (1 to 6, 500 to 999 if Model 716 used, D1 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 a top row Select key followed by the output number. Press the COMMAND key.

# ZONE INFORMATION

## 16.15 **Output Action**

Entering an Output Number displays this prompt. This prompt allows you to 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. **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.

After you make the three selections in the sections above, the display prompts you for the same three selections for Disarmed Short, Armed Open, and Armed Short conditions. If the zone is a 24-hour type, only the Armed Open and Armed Short conditions display. When you have programmed all of the zone conditions, the Swinger Bypass selection then displays.

## 16.16 **Swinger Bypass**

YES allows the zone to be swinger bypassed by the panel according to the specifications programmed in Swinger Bypass Trips and Reset Swinger Bypass. The Bypass condition displays in the keypad Status List. Selecting NO disables swinger bypassing for this zone.

### How it works

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 zero and the process must be repeated.

A report of the swinger bypass is sent to the receiver if Bypass Reports is YES.

**Note: Not investigated by UL.**

## 16.17 **Prewarn 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 key to clear the addresses shown. Press the COMMAND key when the address selection is complete.

## 16.18 **Entry Delay**

Select the entry timer for this zone. Entry timers 1 to 4 are programmed in System Options.

## 16.19 **Zone Retard Delay**

When you select YES, the zone operates with the zone retard delay. The retard functions only in zone short conditions.

The zone must remain shorted for the full length of the retard delay before the panel recognizes its condition. If you select NO, the zone operates without a retard delay.

**Note: For UL installations, Zone Retard Delay shall not be used for burglary zones.**

16.20

## Presignal Addresses

You can enable any combination of keypad addresses to sound a presignal tone during the time a zone is in retard delay. The presignal tone silences when the zone restores or the retard delay expires.

To enable a presignal address, press any top row Select key followed by the number of the keypad address. You can enable the presignal for all eight keypad addresses. To disable a presignal address press the matching number digit again. Press the COMMAND key when the address selection is complete. The Presignal prompt is only displayed when Retard is selected as YES.

16.21

## 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 of 200ms and do not display this prompt.

16.22

## 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 a cross zoned zone trips, the bell action assigned to the zone activates. The cross zone time specified in System Options begins to count down. If another cross zoned zone faults, or if the first zone restores and faults again before a Sensor Reset is done, the panel sends an alarm report.

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 cannot enable cross zoning for Fire verify zones or for any Fire zones that have Retard Delay enabled.

**Note: Not investigated by UL.**

16.23

## 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.

**ZONE NUMBER** - Enter the zone number to program next. Follow the descriptions of each programming prompt. If all zones are programmed, press the Back Arrow key at the ZONE NO: - display to continue.

## Stop

### 17.1 STOP

#### Stop

Save Programming

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

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

The STOP routine causes the following conditions to occur:

- All areas are DISARMED
- All zones are DISARMED
- The panel Status List displays 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.

#### 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. For example, if you enabled any wireless options and have not yet installed a 462P Printer Interface Card, after the STOP routine completes, the panel displays NO PRINTER CARD. This is a helpful reminder to install the card. This feature can also be a troubleshooting tool that could indicate a problem if you installed the card and still see this message displayed. The following list shows the different messages and their associated LX-Bus cards.

Keypad Display	Missing Card
NO LXBUS # CARD	481 LX-Bus™ Expansion Card
NO PRINTER CARD	462P Printer Interface Card
NO NET CARD (with NETWORK communication selected)	462N Network Interface Card

The above messages clear automatically from the keypad after a few moments.

## SET LOCKOUT CODE

### Set Lockout Code

#### 18.1 SET LOCKOUT CODE Set Lockout Code

Pressing COMMAND at the STOP prompt displays SET LOCKOUT CODE. This allows you to program a code that will then be required to gain access to the panel's 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 will not clear a Lockout Code. Lockout Codes can be changed through Remote Link.

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

#### Lockout Code restriction

Do not set a Lockout Code higher than 65535.

## Appendix

### 19.1 Diagnostics function

The XR500/XR500N 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. To use Diagnostics, reset the panel, enter the Diagnostics code 2313 (DIAG), and press COMMAND.

#### Test LX-Bus

The first Diagnostic function you displayed is: **TEST LX-BUS**. This function allows you to test the ability of the 481, 462N, 462P, 462FM, and 472 Interface Cards to communicate with zone and output expander modules connected to their LX-Bus circuits.

To continue, press any top row Select key. 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 COMMAND. When testing LX-Bus devices, enter only the addresses to which the modules have been set.

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

The keypad next displays **TESTING . . . STOP** during the device testing. At any time, you can press the Select key under **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 COMMAND to exit the **TEST LX-BUS**.

#### Zone Finder

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

#### Zone State

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

#### LX-Bus Status

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

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

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

**Missing** - A missing occurs when a zone between 500 and 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.

## MAC Address

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

## Serial Number

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

## Current Flash

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

## Send Test Message

To Send a Test Message press the Back Arrow key until **STOP** displays. Press the COMMAND key to send a Device Missing message for the first available LX-Bus zone to the central station.

**Note:** A Restoral message is NOT sent.

## Exiting the Diagnostics program

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

## 19.2 Using the 984 Command Function

This feature allows you to connect to a service receiver, is used primarily to bring a new account on-line and upload panel programming completed in Remote Link™. There are three options to allow manual phone line seizure: Number, Remote, and Pickup.

### NBR

After completing panel programming in Remote Link, set a trap to seize the panel when it calls. Traps are set by selecting Panel > Trap. Refer to the Remote Link User's Guide (LT-0565), or the Remote Link Help File.

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

You can enter up to 32 characters for the phone number. Once you have entered 16 characters the LCD display is full: Press the COMMAND key to enter the final 16 characters. To enter a # (pound sign) press the fourth (far right) Select key, and to enter an \* (asterisk) press the third Select key. Program a pause by entering the letter P. Program a dial tone detect by entering the letter D. These characters are counted as part of the allowable 32 characters. Press COMMAND after you enter the phone number.

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

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

### RMT

Select **RMT** if you want the panel to immediately seize the phone line and dial the remote phone number programmed into the panel programming Remote Options section. The Remote Options phone number connects to the modem used by the DMP Remote Link™ software program.

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 Remote Link Help File for complete information about setting traps.

While the panel displays in the Status List, enter 984 and press the COMMAND key. The keypad display changes to **NBR RMT PICKUP**. Press the Select key under **RMT**. The panel automatically 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.

**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 Remote Link Help File for complete information about connecting to panels.

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

After the panel has seized the line, send the file from Remote Link by selecting Panel > Send. Remote Link then uploads the new programming into the panel. You may also Request Events by selecting Panel > Request Events in Remote Link.

**Keypad Displays**

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

**19.3 Using the Walk Test**

The XR500/XR500N 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.

**WALK TEST**

**Walk Test**

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

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

**Zone Types**

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

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

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

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

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

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

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

BELL NO YES

## Bell Action

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

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

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

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

Once in the Walk Test, walk around and trip each protective device. As each device trips, the panel sounds the alarm bells as programmed in Bell Action and then performs an automatic Sensor Reset. Continue tripping devices until the entire system is tested. The trip counter on the keypad display increments by one each time a device is opened or shorted.

TRIPS: XXX END

## Trip Counter

Displays the number of zone trips during the Walk Test.

- Each time a selected zone trips, the keypad buzzes for two seconds.
- Each time a FI, FV, or SV zone trips, a Sensor Reset occurs.

**END** - Press the Select key directly below 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 displays on the keypad.

SOUTH LOBBY

## Failed Zones Display

ZONE: 10 -FAIL

For each zone that did not trip (failed) at least once during the Walk Test, the keypad displays the zone name and number and buzzes for one second. Press the COMMAND key to display the next failed zone.

### Local Printer for Walk Test

When the Walk Test is completed, a Verify or Fail message for each zone tested prints to the local printer. The Walk Test messages printing is enabled through Printer Reports programming.

## 19.4 Keypad Speaker Operation

When using the 690, 790, 791, or 793 Security Command LCD Keypads or the 630F Remote Fire Command Center, 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.

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

## 19.5 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-1/SCS-1R Receiver. When two Cross Zoned zones trip within the Cross Zone Time, both zones send ALARM signals to the receiver. For example, if zones 1 and 2 are Cross Zoned zones, and only zone 1 trips, a FAULT report is sent to the receiver for zone 1. If zone 1 trips and zone 2 trips within the Cross Zone Time, an ALARM report is sent to the receiver for zone 1 and zone 2.

**19.6 Events Manager**

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

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

**19.7 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 XR500/XR500N system, you must understand the interrelationship between profiles, devices, output groups, and areas. Below is a brief explanation of the User Profile elements. For more information about user profiles, refer to the XR500 User’s Guide, LT-0364.

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

**Profile Name** - Each profile may be assigned a 16-character name. The Profile Number is the default name.

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

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

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

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

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



## 19.10 Zone Type Descriptions

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

### -- (Blank Zone)

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

### NT (Night Zone)

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

### DY (Day zone)

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

### EX (Exit zone)

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

### PN (Panic zone)

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

### EM (Emergency zone)

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

### SV (Supervisory zone)

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

### FI (Fire zone)

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

### FV (Fire Verify zone)

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

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

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

### AR (Arming zone)

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

## 19.11 Zone Type Specifications

Keypad Bus Zone Information	Type	Area	Fire Bell	Disarmed Open			Disarmed Short			Armed Open			Armed Short			Swinger	Prewarn	Entry Delay	Retard Delay	Presignal	Fast Response	Cross Zone	Priority	Style
				Output *	Message	Action	Output *	Message	Action	Output *	Message	Action	Output *	Message	Action									
Assign Disarm condition of NT, DY, EX, A1, and A2 only	-- NT	1 to 32																						
Assign Prewarn and Entry Delay for EX only	DY EX	NT DY EX A1 A2																						
Assign Retard and Presignal for FI, SV, A1, and A2 only	FI PN	EX A1 A2																						
Zone Type Defaults	EM SV A1 A2 FV AR																						TGL ARM DIS STEP MNT	
Night	NT			-	0	-	-	0	-	A	0	-	A	0	-	Y					N	N	N	
Day	DY			T	0	-	T	0	-	A	0	-	A	0	-	Y					N	N	N	
Exit	EX			-	0	-	-	0	-	A	0	-	A	0	-	Y	1-16	1			N	N	N	
Fire	FI		0							T	0	-	A	0	-	N			N	+	N	N	N	
Panic	PN									T	0	-	A	0	-	N					N	N	N	
Emergency	EM									T	0	-	A	0	-	N					N	N	N	
Supervisory	SV		0							T	0	-	A	0	-	N			N	+	N	N	N	
Auxiliary 1	A1			T	0	-	A	0	-	T	0	-	A	0	-	N			N	+	N	N	N	
Auxiliary 2	A2			T	0	-	A	0	-	T	0	-	A	0	-	N			N	+	N	N	N	
Fire Verify	FV		0							T	0	-	A	0	-	N					N		N	
Arming	AR																						TGL	

\* Output Options: 1 to 6, 500 to 599, D1 to D20, G1 to G20

- = This function is not enabled for this zone type.

+ = Retard must be YES before presignal can be selected.

= These functions are not available for this zone type.

### 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** - 1 to 32 for NT, DY, EX, A1, and A2.

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

**Message** - A = alarm report, T = trouble report, L = local, no report, - (dash) = no report, S = sensor reset/alarm silence, D = Door Propped (When SV zone is connected to 303 Silence/Reset Switch.)

**Output** - These are the 6 on-board and 500 off-board relay outputs.

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

**Swinger** - The zone can be automatically shunted 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

### 19.12 Common Keypad Messages

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

Message	Meaning	Possible Solutions
Invalid Area	The user has attempted a door access for an area they are not assigned.	Change the user access areas if access to the area is needed. If access is not needed, the user cannot enter the area.
Invalid Code	The user code you entered is not recognized by the system.	Check the user code and try again.
Invalid Level	The code you used does not have the authority level required to perform the task you are attempting.	Be sure the correct level is set for the code. Remember that you can only grant a user authority if you have the same authority level or greater: You can't give what you don't have.
Invalid Profile	A user attempted a function that is outside of the assigned profile.	Check the user profile settings.
Invalid Time	A user code assigned to a specific schedule has entered outside of the valid schedule.	See Schedules and User Codes.
Enter 2nd Code	The area you are attempting to disarm or access is a Two Man Area.	A second and different user code must be entered.
Closing Time	The scheduled has expired but the area is not armed.	Users still on the premise should arm the system or extend the schedule to a later time.
Late to Close	The system was not armed at its scheduled closing time.	Users still on the premise should arm the system or extend the schedule to a later time.
Failed to Exit	A user assigned the anti-passback option has attempted to re-enter an area from which they did not exit properly.	The user must exit the area through the proper door. If not possible, your system administrator should select the Forgive option in the User Codes menu.
AC Trouble	The system is not getting proper power.	Check that all AC connections are good.
Battery Trouble	The battery is either low or missing.	Check that the battery connections are good and the battery is still good.
Phone Line 1 Trouble	There is trouble with the phone line supervision.	Plug in the phone line.
System Trouble or Service Required	There is a problem with one or more components in the system.	Make sure the J16 jumper is removed from the panel. Make sure there is not a short or open condition on the green data wire to the keypad. You may also need to check that all of the keypads and expansion modules on the bus are good.
System Busy	The system is performing another task with a higher priority.	Wait a few moments for the system to complete the task. Make sure the J16 jumper is not on the panel. If the message displays for a long period of time, the processor could be locked up.
4-Wire Bus Trouble	There is not a supervised device on the bus.	Program a device to be supervised.
	There is low voltage or an open yellow wire.	Make sure all wires are connected.
	Two devices share the same address.	Program one of the devices to a unique address.
Transmit Fail	The panel has attempted to communicate with the central station 10 times and has not succeeded.	Verify your communication type, account number, and phone number. Make sure the telephone line is connected and working properly.
Non-Polled Address	The device is not set to STD or FIRE in Device Setup during programming.	Program the device as STD or FIRE in Device Setup.
Enter Code (entering Programming)	A lockout code has is programmed for the panel.	Enter the lockout code.

**Access Control Devices**

733 Wiegand Interface Module  
791 and 793 Easy Entry™ Keypads  
570/575 Easy Entry™ Wireless Receiver and Transmitter  
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