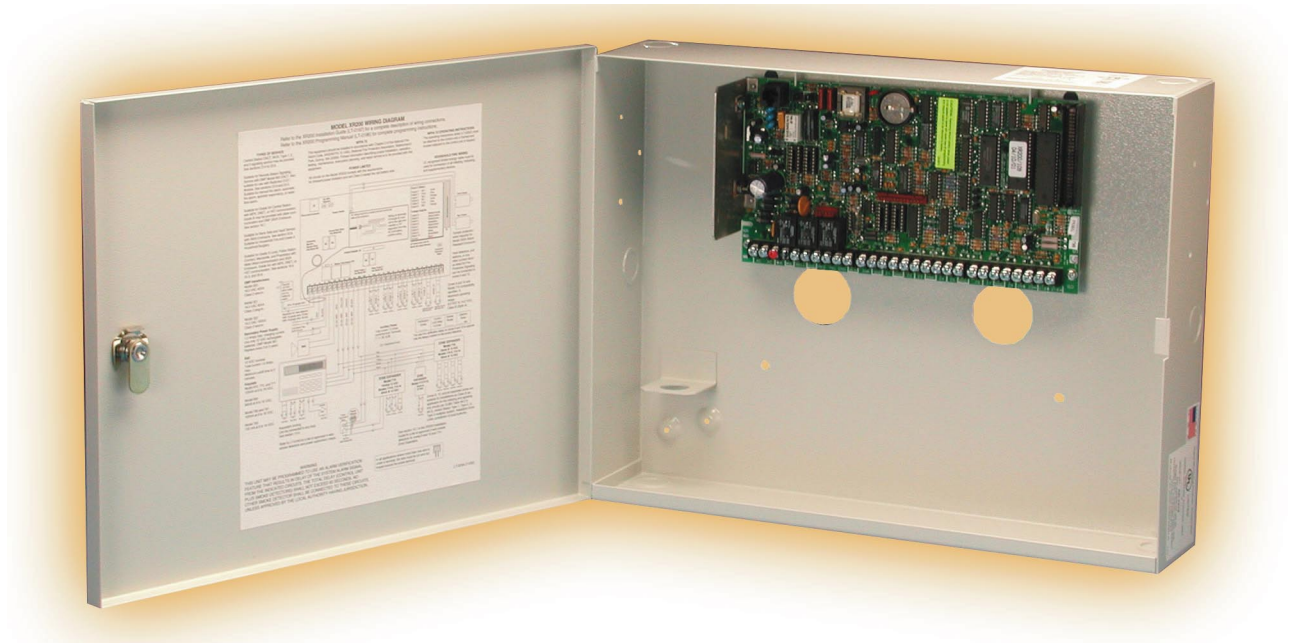


PROGRAMMING GUIDE



XR200 COMMAND PROCESSOR™ PANEL and XR2400F ADDRESSABLE FIRE ALARM CONTROL PANEL

MODEL XR200 COMMAND PROCESSOR PROGRAMMING GUIDE

FCC NOTICE

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

- Reorient the receiving antenna

- Relocate the computer with respect to the receiver

- Move the computer away from the receiver

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

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

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

This booklet is available from the U.S. Government Printing Office, Washington D.C. 20402

Stock No. 004-000-00345-4

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Revisions to This Document

This section explains the changes that were made to this document during this revision. This section lists the date and the change that was made, the section number and section heading, and a quick summary of the change.

Date	Section Number and Heading	Quick Explanation of Changes
3/02	3.2.4 UL AA	Check-in Time and Fail Time defaults changed to 1 (one).
1/02	3 Communication	DNET programming type removed.
1/02	12 Host Log Reports	Section added for Host Log Reports feature. Note: All subsequent section numbers adjusted.
1/02	17.9 462N Examples	Section added to explain how to use the 462N card with Host Log Reports, Host Communication, and Host Backup.
12/01	3.2.1 Retry Time	Section added for new programming operation.
12/01	3.2.2 Host Backup	Section added for new programming operation.
12/01	3.2.3 Modem Setup	Section expanded for new programming operation.
12/01	3.2.4 UL AA	Section added for new programming operation.
12/01	16 Appendix	Entire section rearranged for clarity.
21/01	16.3 Using the Walk Test	Clarification added regarding bells.
12/01	16.5 Pager Direct Specifications	Information added about Pager Direct.
12/01	16.6 Cross Zoning	Clarification added about method of reporting tripped cross zones.
12/01	16.8 Modem Setup Information	Information added regarding modem setup strings.
12/02	16.9 Host Backup Examples	Scenarios for Host Backup added for clarity.
12/01	16.12 Common Keypad Examples	Section added to help troubleshoot some common keypad messages that may appear on the keypad display.
12/01	Entire Document	New Layout.

1.1 Before you begin

This guide provides programming information for the DMP XR200 Command Processor™ Panel and the XR2400F Addressable Fire Alarm Control 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 you read through the contents of this guide. The information contained here allows you to quickly learn the programming options and operational capabilities of the panel.

In addition to this guide, you should also read and be familiar with the following XR200 documents:

- XR200 Installation Guide (LT-0197)
- XR200 Product Specification (LT-0198)
- XR200 Security Command® User's Guide (LT-0287)

If you are using the XR2400F Addressable Fire Alarm Control Panel, you should also read and be familiar with these documents:

- XR2400F Installation Guide (LT-0554)
- XR2400F Product Specification (LT-0517)
- XR2400F User's Guide (LT-0560)

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 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 while entering data helps prevent errors and can shorten the time you spend programming. Completed sheets also provide you with an accurate record of the panel's program 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 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 XR200 Installation Guide (LT-0197) and the XR2400F Installation Guide (LT-0554).

Accessing the Programmer

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

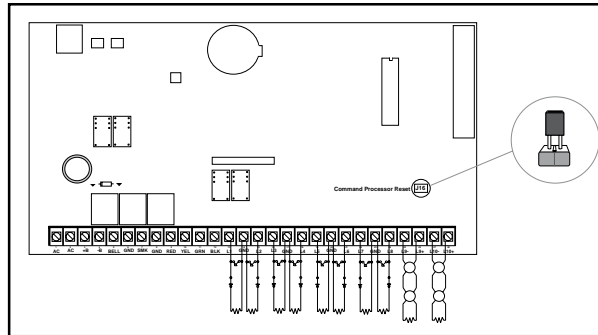


Figure 1: J16 Reset Jumper

You are now ready to start programming the panel. Pressing the COMMAND key scrolls you through the programming functions listed in the programmer. Each of these functions are described in detail in sections 2 to 15.

Initializing the Panel

After installing the panel, use the **Initialization** function to set to defaults the panel's programming. **Note:** The default user code is 99. This should be changed by the owner as soon as the system is operational.

1.3 Programmer Operation

There are 14 programming sections to choose from:

Menu Item	Section	Menu Item	Section
Initialization	2	Menu Display	9
Communication	3	Status List	10
Device Setup	4	Printer Reports	11
Remote Options	5	Area Information	12
System Reports	6	Zone Information	13
System Options	7	Stop	14
Output Options	8	Set Lockout Code	15

To select a section for programming, press any one of the Select keys when the name of that section is displayed on the keypad. The detailed instructions for each programming step are found in sections 2 to 15.

1.4 Programmer Lockout Codes

The panel allows you to enter the programming function without entering a lockout code using the 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. Use this new Lockout Code to restrict any unauthorized programming of the panel.

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** is displayed (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. The new code number must now be entered before the programmer function can be accessed.

The Lockout Code should be written down and kept in a secure place with access limited to only those persons authorized by your company to program the panel.

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 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 saved in the panel's memory.

1.6 Special Keys

COMMAND Key

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's memory. If the information is not to be changed, 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 you have entered the information and it is being displayed 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 a Select key is to be used, the keypad displays the function or options above the key. Displaying choices above the 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 the panel's memory by pressing the appropriate Select key under the display then entering the new information through the keypad.

When there are more than four response options available, pressing the **COMMAND** key brings up the next 1 to 4 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 selecting a section from the programming menu by pressing any one of the Select keys when the name of the programming section you want is displayed.

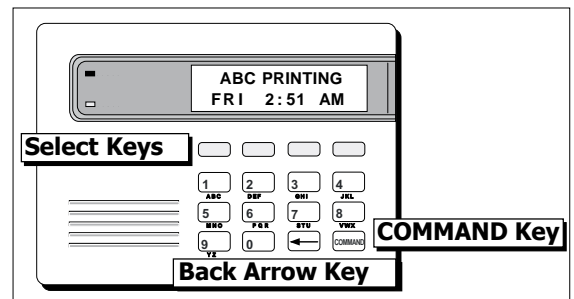


Figure 2: Keypad Function keys

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 is started over.

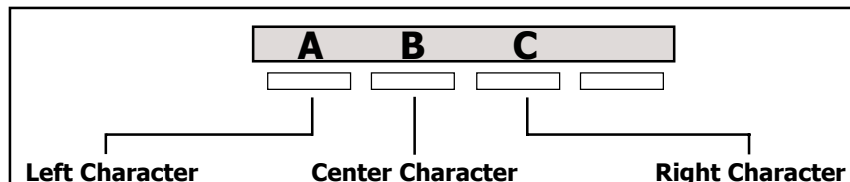


Figure 3: Keypad display and Select keys

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.

1.9 Keypad Prompts Display Current Programming

Each programming prompt displayed at the keypad shows the currently selected option in the panel's 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.

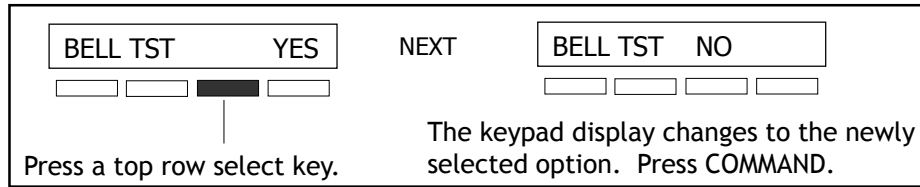


Figure 4: Changing the current option selected.

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. The display changes to **NO**. Press the **COMMAND** key to go to the next prompt. See Figure 4.

2.1

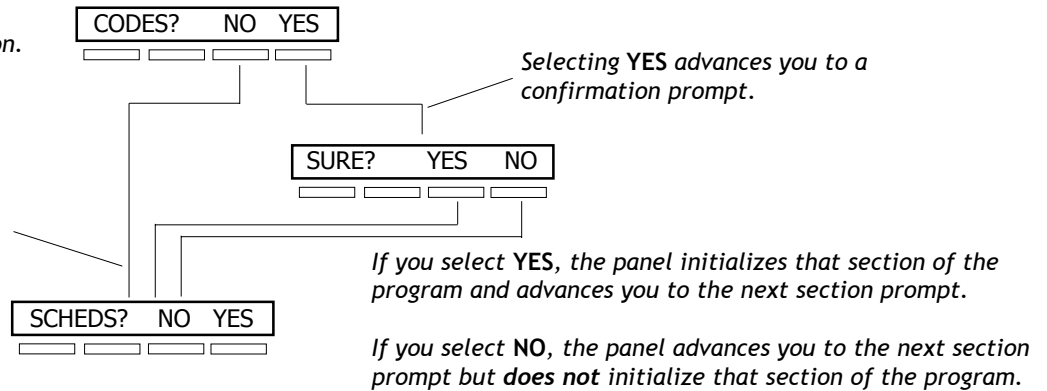
INITIALIZATION

Initialization

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

For each initialization section, the Programmer provides a NO or YES option.

Selecting NO advances you to the next section prompt and does not initialize that section of the program.



A description of each selection follows:

2.2

CODES? NO YES

Clear All Codes

NO - Leaves existing codes intact.

YES - Clears the user code memory and assigns the user code number 99 to the highest user position in each partition.

SURE? YES NO

2.3

SCHDS? NO YES

Clear All Schedules

NO - Leaves existing schedules intact.

YES - Clears all primary, secondary, permanent, temporary, and output schedules.

SURE? YES NO

2.4

EVENTS? NO YES

Clear Display Events Memory

NO - Leaves existing event memory intact.

YES - Clears the Security Command keypad display events memory.

SURE? YES NO

2.5

ZONES? NO YES

Clear Zone Information

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.

SURE? YES NO

2.6

AREAS? NO YES

Clear Area Information

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.

SURE? YES NO

2.7

OUTPUTS? NO YES

Clear Output Information

NO - Leaves existing output information intact.

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

SURE? YES NO

2.8

COM/RMT? NO YES

Clear Communication and Remote Options

NO - Leaves existing communication and remote options intact.

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

SURE? YES NO

2.9

DEFAULTS NO YES

Set to Factory Defaults

NO - Leaves existing panel programming intact.

YES - Sets the remainder of the panel's programming back to the factory default selections.

SURE? YES NO

- 3.1** COMMUNICATION **Communication**
This section of programming allows you to configure the communication options for the panel. The information you program varies with the Communication Type you select.
- 3.2** COMM TYPE: **NONE** **Communication Type**
Specifies the communication method the panel uses to report system events to DMP SCS-1 Receivers or non-DMP receivers. Press any Select key.
- NONE DD MPX M2E **NONE** - For local systems. Selecting this ends communication programming. When COMM TYPE = NONE and there is an unrestored System Trouble, then the keypad will sound daily at 10:00 AM.
- DD** - Digital Dialer communication to a DMP SCS-1 Receiver.
- MPX** - Multiplex communication to a DMP SCS-1 Receiver.
- M2E** - Modem IIe communication to non-DMP receivers. This format sends the report codes of the Radionics Modem IIe communication format to the receiver(s) programmed in Receiver 1 and 2 programming. Once the receiver has been contacted, the panel waits approximately 45 seconds for the Modem IIe handshake before hanging up and making another attempt.
- Note:** Do not use the M2E communication option if the system has over 255 zones and/or over 254 users. When using Modem IIe to communicate between a Radionics D6500 receiver and the XR200-485 panel, zone numbers 256 to 299 and user numbers 255 to 999 CANNOT be received by the D6500. Zone numbers greater than 255 will be reported as 255. User numbers greater than 254 will be reported as 000.
- CID HST **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 each receiver's ability to process the CID format. The panel determines whether the receiver can process the CID format by the acknowledgment 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 will be sent by the panel. This restriction prevents the panel from dialing the receiver for a report it cannot send.
- HST** (Host) - Asynchronous communication using the 462N Network Interface Card. The DMP Host/Output reporting format is transmitted over an asynchronous data network to the SCS-1 Receiver. If you need to send a duplicate signal to the central station and you have selected **HST**, use Receiver 2 programming to send the duplicate signal.
- Note:** When **HST** is selected, **2ND LINE** programming allows you to select **D2** for two line supervision when using a Model 893 or 893A Dual Phone Line Module.
- There are extra options available if you selected **HST** for the communication type. These options are explained in sections 3.2.1 through 3.2.4.
- 3.2.1** RETRY TIME: - **Retry Time**
After selecting **HST**, 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 will retry 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 will retry 4 times. The default **RETRY TIME** is 5 seconds.

3.2.2

HST BCKUP	NO	YES
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Host Backup

After displaying the **RETRY TIME** prompt, the keypad displays **HST BCKUP NO YES**. Select **YES** to enable Host Backup. Select **NO** to disable Host Backup.

There are two ways to use the Host Backup feature to send messages through the backup Host. You could have two 462N cards on the panel and assign the Modem Setup String to send the backup messages through a backup network device, such as a cellular radio, to the receiver. Alternatively, you can have one 462N card and assign the Modem Setup String to route the backup messages to the backup receiver. Refer to the **Appendix** for more information about using the Host Backup feature.

Note: When using two 462N cards, Host Backup must be set to **YES**.

Note: You can still program **2ND LINE** for a different communication type, such as **CELL** or **DD**.

3.2.3

MODEM SETUP:

—

—

Modem Setup

The keypad displays **MODEM SETUP:**. Press **COMMAND**. Enter up to two lines of 16 characters to equal 32 characters for the string that is sent to the device connected to the 462N Network Interface Card. If the network device is an iCOM and you are using Host Backup, refer below for the iCOM's setup string. If you are using a non-DMP network device such as a CDPD Modem, refer to the device's literature for the setup string.

If **HST BCKUP** is **NO** and the device connected to the 462N card is a DMP network device, do not enter a Modem Setup String in this field. If the device is not a DMP network device, enter the device's Modem Setup String in this field.

If **HST BCKUP** is selected as **YES** and you are using two 462N Cards, enter the Modem Setup String for the second network device. The Modem Setup String is sent to the second network device, such as a cellular radio, which sends the messages to the receiver. If the backup network device is a second iCOM, you do not need to enter a Modem Setup String.

If **HST BCKUP** is selected as **YES** and you are using one 462N Card, enter the Modem Setup String to send the message to a backup receiver. The panel will attempt to send messages to the receiver using the Remote IP Address programmed in the iCOM. If the first attempt fails, the panel uses the Modem Setup String to send the messages to the backup receiver.

Note: If you are using a non-DMP network device and an iCOM, use the non-DMP device as the backup device. If not, the Modem Setup String entered will override the IP Address of the iCOM and will not be used for the non-DMP network device.

The Modem Setup String for the iCOM should be entered as follows:

AT#UCXXX.XXX.XXX.XXX#PPPPP. To enter the #, press 0 and the far right top row Select key. To enter the . (periods), press 0 and the second from the left Select key. Enter the backup IP Address in place of the Xs. Also enter the UDP Port Number in place of the Ps. The default port number is 2001. You do not need to enter leading zeros.

Note: If you are using Host Backup and **UL AA** is set to **YES**, the panel will only send the **S72 (WARNING: NETWORK TROUBLE)** message after the first series of host message attempts fails. Refer to the **Appendix** for information about Host options.

3.2.4

UL AA	NO	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 panel's communication with the receiver. To be UL AA compliant, panels must check-in with the receiver every 6 minutes when armed.

The SCS-1 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 HST report is successfully sent, the panel sends a **NETWORK RESTORED (S73)** report over the **2ND LINE**.

UL AA	NO	YES
-------	----	------------

DISARM CHKIN	RND
--------------	------------

MINUTES: -	RND
------------	------------

If you select **YES** for **UL AA**, the **DISARM CHKIN** prompt displays. 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 failure of the primary host, send an **S72**, Network Trouble message, through the **DD** if it is programmed as the second line. When the primary host restores the panel will send an **S73**, Network Restored message.

UL AA	NO	YES
-------	-----------	-----

SUB CODE	NO	YES
----------	-----------	-----

CHECKIN: -

FAIL TIME: -

NET TRBL	NO	YES
----------	-----------	-----

If you select **NO** for **UL AA**, the **SUB CODE** prompt is displayed. Select **YES** if the panel will send 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.

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 **CHECKIN** is 1.

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

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. The maximum **FAIL TIME** is 240 minutes. The default **FAIL TIME** is 1 (one).

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 failure of primary host communication, the panel will send 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 host restores the panel will send an **S73**, Network Restored message, through the **DD** if it is programmed as the second line. The "NETWORK -TRBL" display will be removed from the keypad and the tone will automatically silence.

3.3

2ND LINE: **NONE**

2ND Phone Line

Allows you to use a second communication line to send reports to the SCS-1 Receiver should the first phone line fail. If **2ND LINE** is **DD** or **CELL** (and you are not using a 462N Network Interface Card), you will need to install a DMP 893 or 893A Dual Phone Line Module to connect both the main and secondary phone lines to the panel.

Both **DD** and **MPX** type systems can be backed up with a dialer or cellular line. Multiplex lines cannot be used as a secondary line.

NONE DD CELL HST

NONE - A second line is not used.

DD - Dialer communication to a DMP SCS-1 Receiver. When using **M2E** or **CID** as the main Communication Type, choose **DD** to communicate to an M2E or 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.

If 2ND LINE = DD	If 2ND LINE = CELL
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 893 or 893A Dual Phone Line Module. **D2** is only displayed if **HST** is the main Communication type.

M2E

M2E - Select **M2E** to allow 2nd line communication using the Modem IIe format when **HST** is the main communication type. **M2E** is only displayed if **HST** is the main communication type.

NONE DD CELL HST

HST (HOST) - DMP Asynchronous communication to a DMP SCS-1 Receiver or Host automation system. If **HST** is selected as the Communication Type, **HST** will not be displayed as an option in **2ND LINE**. If **HST** is selected for **2ND LINE**, all zone alarms and restorals are duplicated on the asynchronous channel in addition to the main communication method.

When **HST** 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 Receiver. This allows the Redisplay Non-Restored status list to work properly in receivers with SCS1/805 or higher firmware.

3.3.1

TEST FREQ: NONE

Test Frequency

Specifies the communication test interval for the second phone line. This is displayed if **2ND LINE** is programmed as **DD**, **CELL** or **HST**.

NONE REG 7 30

NONE - No communication test is made on the second line.

REG - A **2ND LINE** communication test is made each time the regular communication test is completed.

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.

3.4

ACCT NO: 1 2 3 4 5

Account Number

Enter the account number sent to the SCS-1 Receiver.

DD and **HST** - The range of valid account numbers for a panel using these Communication Types is 1 to 65,535. For accounts of four digits or less, do not enter leading zeros. The panel automatically right justifies the account number.

CID and **M2E** - Choose an account number between 1 to 9999.

MPX - A 5-digit account number is required for panels using these formats. The first digit is the receiver line number. The second digit is always zero. The last three digits are the panel's account number. This number must be between the range of 000 and 127. Individual area account numbers must be between the range of 128 to 999 on the same line. **Example:** 10128 to 10999.

3.5

XMIT DELAY: 0

Transmit Delay

Enter the length of time the panel waits before sending burglary reports to the receiver. The available range is 1 to 60 seconds. Alarm bells and relay outputs are not delayed during this period. Burglary Outputs in section 8 must be programmed for pulsed or steady. Set Abort Reports in section 6 to **YES** if Opening and Closing reports are not being sent.

Enter zero to disable Transmit Delay.

3.6

DTMF NO YES

DTMF

YES enables tone dialing by the panel. **NO** enables rotary dialing.

3.7

EVENT MGR: SEND

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**.

SND DLY KEEP

SND - If send is selected, all reports are sent to the receiver as they occur.

DLY - All non-alarm reports are held until the panel's memory buffer contains 133 events or until the panel's next communication with the receiver. Contact ID and Modem Ile do not delay reports but send them as they occur.

KEEP - All non-alarm reports are held in the panel's memory buffer until they are overwritten by new activity. You can view the contents of the memory buffer using the 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. Contact ID and Modem Ile do not delay reports but send them as they occur.

- 3.8**

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.
- 3.9**

Test Frequency
Allows you to set how often the panel sends a test report to the SCS-1 receiver. Enter from 1 to 60 days. This prompt is not displayed if Defer Test Time is **NO**.
- 3.10**

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 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.

- 3.11** **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.
- 3.12** **Alarm Reports**
YES sends Abort, Alarm, Alarm Restoral, Ambush, Exit Error, and System Recently Armed reports to this receiver.
- 3.13** **Supervisory/Trouble Reports**
YES sends Supervisory, Trouble, Trouble Restoral, Force Armed, Zone Fault reports, and Serviceman Messages to this receiver.
- 3.14** **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.
- 3.15** **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.
- 3.16** **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.
- 3.17**

First Telephone Number
 This is the first number the panel dials when sending reports to this receiver. Phone numbers can be up to two lines of 16 characters to equal 32 characters. You can program a three second pause in the dialing sequence by entering the letter P. You can program a dial tone detect by entering the letter D. These characters are counted as part of the 32 allowable characters.
Area code selection for cellular communication: You can also enter a letter "C" in the first or second phone 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 will only use the characters entered after the letter "C". The letter "C" is never dialed and is recognized by the panel as a marker only.
 If a dial tone detect "D" is entered it causes the panel to begin dialing as soon as a dial tone is detected. The panel waits a maximum of five seconds for a dial tone on the first attempt. If a dial tone is not detected, the panel hangs up and then picks up the line again. After waiting another five seconds without dial tone, the panel begins dialing on the second through tenth attempts.
- 3.18**

Second Telephone Number
 The panel dials the second number when two 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 ten dialing attempts are made using the first and second phone numbers.
 Each number can be up to 32 characters in length including any P or D characters entered for pause and dial tone detect.
 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. The report information that was not sent to the receiver is available from the Display Events feature of the User Menu and can be downloaded with DMP Remote Link™ software.

- 3.19** RECEIVER 2 PROG **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.
- 3.20** PAGER? **NONE** **Pager Type**
 This option allows the panel to send Alarm, Trouble, Opening, Closing, and Late to Close reports to a customer's numeric or alphanumeric pager. The panel uses DTMF tones for numeric pagers and Glenayre protocol for alphanumeric pagers to generate the account and report information sent over the pager terminal equipment. Selecting **NONE** allows you to use the Receiver 2 Programming to send panel reports to a second receiver.
NONE NUM ALPHA
NONE - The pager reporting option is not being used.
NUMERIC - Reports are sent to the customer's numeric only pager.
ALPHANUMERIC - Reports are sent to the customer's alphanumeric pager.
- 3.21** ALARM NO **YES** **Alarm Reports**
 See section Alarm Reports on previous page.
- 3.22** SPV/TRBL NO **YES** **Supervisory/Trouble Reports**
 See section Supervisory/Trouble Reports on previous page.
- 3.23** O/C USER NO **YES** **Opening/Closing and User Reports**
 See Opening/Closing and User Reports on previous page.
- 3.24** TEST RPT NO **YES** **Test Report**
 See Test Report on previous page.
- 3.25** BACKUP **NO** YES **Backup Reporting**
 See Backup Reporting on previous page.
- 3.26** FIRST PHONE NO. **First Telephone Number**
-
-
 Enter the phone number the panel will dial to send reports to the receiver or pager. Phone numbers can be up to two lines of 16 characters in length to equal 32 characters. You can program a three second pause in the dialing sequence by entering the letter P. You can program a dial tone detect by entering the letter D. These characters are counted as part of the 32 allowable characters.
- 3.27** SECOND PHONE NO. **Second Telephone Number**
-
-
 When **PAGER?** is **NONE**. The panel dials the second number when two 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 ten dialing attempts are made using the first and second phone numbers.
 Each number can be up to 32 characters in length including any P or D characters entered for pause and dial tone detect.
- 3.28** PAGER ID NUMBER **Pager Identification Number**
-
-
 Enter a pager identification number if your pager uses one. For numeric paging, the panel waits for nine seconds after having dialed the First Phone Number before sending the Pager ID. After the Pager ID has been transmitted, the panel waits another three seconds before sending the actual pager message containing the panel reports. You can program additional three second pauses by entering a letter P for each pause you want to add.

4 - DEVICE SETUP

4.1 DEVICE SETUP

Device Setup

This section allows you to define the physical configuration of the panel. Enter the number of partitions in the system and the types of devices installed at each address along with their assigned partition. You can install and address up to eight **supervised** devices on the keypad data bus. Zones are available only from addresses 1-8.

A description of each option follows:

4.2 MAX PARTITION: 1

Maximum Partitions

Maximum number of partitions you want in this system. You can choose from 1 to 4. To change the number displayed, press any Select key, enter the number of partitions you want to enable, and press COMMAND.

Changing the number of partitions resets user codes: Whenever you change the number of partitions on the panel, all programmed user codes are cleared. The only user code available after a partition change is the factory default of 99.

Partitions Enabled	Areas Available	User Codes Available XR200
1	1 to 8	1 to 200
2	Partition 1 - 1 to 8 Partition 2 - 1 to 4	Partition 1 - up to 100 Partition 2 - up to 100
3	Partition 1 - 1 to 8 Partition 2 - 1 to 4 Partition 3 - 1 to 4	Partition 1 - up to 50 Partition 2 - up to 50 Partition 3 - up to 50
4	Partition 1 - 1 to 8 Partition 2 - 1 to 4 Partition 3 - 1 to 4 Partition 4 - 1 to 4	Partition 1 - up to 50 Partition 2 - up to 50 Partition 3 - up to 50 Partition 4 - up to 50

4.3 DEVICE NO: -

Device Type

This prompt allows you to specify that a device is installed at a particular address on the keypad bus.

DEVICE 1: STNDRD

STANDARD - The device is either a Security Command keypad, a 711, 714, or 715 Zone Expander, a 6155LX PIR, 5845LX Glassbreak Detector, or a 733 Wiegand Interface Module.

STD FIRE NONE

FIRE - The device is an Addressable Fire Alarm Control panel or a Model 630F Remote Fire Command Center.

NONE - No device is set for this address.

If you entered 2, 3, or 4 in section 4.2 **MAX PARTITION**, the keypad displays the **PARTITION NO:** prompt. If there is only one partition programmed in section 4.2, the keypad does not display the partition assignment prompt.

4.4 PARTITION NO: 1

Partition Number

Enter the partition number where the current device being programmed is assigned. For systems with more than one partition, press any top row Select key then enter a 1, 2, 3, or 4. Press COMMAND to program the next device. The keypad can have up to eight devices.

- 5.1** **Remote Options**
This section allows you to enter the information needed for Remote Command/ Remote Programming operation.
- 5.2** **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 is never displayed.
- 5.3** **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 the installing company's service personnel.
- 5.4** **Armed Rings**
Enter the number of rings the panel counts before answering the phone line when all areas of the system are armed. Any number from 1 to 15 can be entered. If zero is entered, the panel does not answer the phone when all areas of the system are armed.
- 5.5** **Disarmed Rings**
Enter the number of rings the panel counts before answering the phone line while any areas of the system are disarmed. Any number from 1 to 15 can be entered. If zero is entered, the panel does not answer the phone when any area of the system is disarmed.
- 5.6** **Alarm Receiver Authorization**
Select **YES** to enable remote commands and programming to be accepted from the alarm SCS-1 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 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 Receiver.

5.7

SVC RCVR NO YES

Service Receiver Authorization

YES enables remote commands and programming to be accepted from a secondary service receiver other than the alarm SCS-1 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 Ether-Com.

5.8

REMOTE PHONE NO

-

-

Remote Phone Number

Press **COMMAND** to enter the phone number the panel dials whenever remote programming is requested. 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 has 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 be up to two lines of 16 characters to equal 32. Enter a **D** for dial tone detect and a **P** for a 3 second pause.

NBR RMT PICKUP

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

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

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

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

5.9

DISARM NO YES

Remote Disarm

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

6.1 SYSTEM REPORTS

System Reports

This section allows you to select specific system reports the panel sends to the receiver.

6.2 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 has been 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 by a user.

Abort reports are also sent when the system is disarmed during Transmit Delay and the Bell Output Timer is active.

Note: Abort reports will not be sent for Fire zones, Fire Verify, or Supervisory type zones.

6.3 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 - This option 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.

6.4 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.

6.5 SCHED CHG NO YES

Schedule Change Reports

YES allows the panel to send all permanent and temporary, primary and secondary 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. Reports will only be sent if **O/C User** in Communications is set **YES** for Receiver 1 or Receiver 2.

6.6 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 will only be sent if **O/C User** in Communications is set **YES** for Receiver 1 or Receiver 2.

6.7 ACS KEY: - - - - -

Access Keypads

Enter the keypad addresses that send door access reports to the receiver. A report is sent with each door access made from the selected keypads. Keypads at addresses not selected still operate the door strike relay but do not send door access reports. The report includes the user name and number and the keypad address used.

6.8 AMBUSH NO YES

Ambush

YES allows an ambush report to be sent anytime user code number 1 is entered at a keypad. **NO** disables the ambush report and allows user number one to operate the same as all other codes. If **YES**, you can program one Ambush code for each partition in the system.

- 7.1**

SYSTEM OPTIONS

System Options
This section allows you to select system wide parameters used in the operation of the system. A description of each System Option follows:
- 7.2**

CLS WAIT	NO	YES
----------	-----------	-----

Closing Wait
When **YES**, the keypad displays **ONE MOMENT...** while the system waits for an acknowledge from the receiver before arming the selected area(s) and performing a Bell Test (if selected). The acknowledge must be received within 90 seconds. Exit delays begin after this period. Opening/Closing reports must be **YES** to enable Closing Wait.
- 7.3**

ENTRY DLY 1:	30
--------------	----

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.
- | | |
|--------------|----|
| ENTRY DLY 2: | 60 |
|--------------|----|

ENTRY DLY 3:	90
--------------	----

ENTRY DLY 4:	120
--------------	-----
- 7.4**

CRS ZONE TM:	5
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Cross Zone Time
Enter the time allowed between zone faults. When zones are cross zoned, a second cross zoned zone in the same partition 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.
- 7.5**

RETARD DLY:	10
-------------	----

Zone Retard Delay
Enter the retard time assigned to Fire, Supervisory, Auxiliary 1, and Auxiliary 2 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.
- 7.6**

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

Power Fail Delay
This option tracks the duration of an AC power failure. When the AC power is off for the length of the programmed delay time, an AC power failure report is sent to the receiver. The delay time can be from 1 to 9 hours. Entering a zero sends the AC power failure report after a 15 second delay.
- 7.7**

SWGRBYPS TRIPS:	3
-----------------	---

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 1 to 7 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's 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 report of the automatic bypass is sent to the receiver if Bypass Reports has been selected as **YES**.
- 7.8**

RST SBYP	NO	YES
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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**.

7.9 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.

7.10 TIME CHG **NO** YES

Time Zone Changes

This function allows the panel to request automatic time changes from the DMP SCS-1 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 host 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. See table below for GMT values.

GMT	City
0	London, Monrovia, Lisbon, Dublin, Casablanca, Edinburgh
1	Cape Verde Island, Azores
2	Mid-Atlantic
3	Buenos Aires, Georgetown, Brasilia
4	Atlantic Time (Canada), Caracas, La Paz
5	Eastern Time (US, Canada), Bogota, Lima
6	Central Time (US, Canada), Mexico City, Saskatchewan
7	Mountain Time (US, Canada), Arizona
8	Pacific Time (US, Canada), Tijuana
9	Alaska
10	Hawaii
11	Midway Islands, Samoa
12	Fiji, Marshall Islands, Wellington, Auckland, Kwajalein
13	New Caledonia
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, Baghdad
22	Eastern Europe
23	Rome, Paris, Berlin

7.11 AC CYCLES: **60 Hz**

AC Cycles

50Hz 60Hz

This function allows you to select either a 60 Hz or 50 Hz electrical AC cycle. When 60HZ is selected, the XR200 will operate on a 60 Hz cycle used in the U.S.A. Select 50HZ for the XR200 to operate on a 50 Hz cycle used in countries other than the U.S.A. The default value is 60 Hz.

8 - OUTPUT OPTIONS

- 8.1** OUTPUT OPTIONS **Output Options**
This function allows you to program the panel's Bell Output functions and certain Relay Output options. Dry contact relays and voltage outputs are available using the output harness on the panel. Refer to the Installation Guide for complete information. A description of each output option follows.
- 8.2** BELL CUTOFF: 15 **Bell Cutoff Time**
Enter the maximum time from 1 to 99 minutes the Bell Output remains on. If the Bell Output is manually silenced or the area is disarmed, the cutoff time is reset. Enter zero to provide continuous bell output.
- 8.3** BELL TST NO YES **Automatic Bell Test**
When YES is selected, the Bell Output is turned on for 2 seconds each time a partition 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 will not occur. The Bell Test only occurs when the areas are armed from a keypad. Arming performed from an Arming zone or from Remote Link™ does not activate the Bell Test.
- 8.4** BELL ACTION **Bell Action**
This section allows you to define the type of Bell Output for zone alarms. (Trouble conditions do not activate the Bell Output.) Press COMMAND to display the default Bell Output for each zone type. To change the output, press any Select key and enter S to provide a Steady Bell Output, P for a Pulsed output. T for a Temporal Code 3 output, and N for no Bell Output.
- 8.4.1** FIRE TYPE: P **Fire Bell Action**
Defines Bell Action for Fire Type zones. The XR200 factory default is set at P. The XR2400F factory default is set at S.
- 8.4.2** BURGLARY TYPE: S **Burglary Bell Action**
Defines Bell Action for Burglary Type zones and Exit Error output. The XR200 factory default is set at S. The XR2400F factory default is set at N.
- 8.4.3** SUPRVSRY TYPE: N **Supervisory Bell Action**
Defines Bell Action for Supervisory Type zones. The default is set at N.
- 8.4.4** PANIC TYPE: N **Panic Bell Action**
Defines Bell Action for Panic Type zones. The default is set at N.
- 8.4.5** EMERGENCY TYPE: N **Emergency Bell Action**
Defines Bell Action for Emergency Type zones. The default is set at N.
- 8.4.6** AUXLRY 1 TYPE: N **Auxiliary 1 Bell Action**
Defines Bell Action for Auxiliary 1 Type zones. The default is set at N.
- 8.4.7** AUXLRY 2 TYPE: N **Auxiliary 2 Bell Action**
Defines Bell Action for Auxiliary 2 Type zones. The default is set at N.
- 8.5** OUTPUT ACTION . . . **Output Action**
This option allows you to define the operation of the XR200 and XR2400F relay outputs. The panel provides two Form C relays (1 and 2) and eight 12 VDC voltage outputs (3 to 10) rated at 50mA each. You can expand the system to 200 additional relay outputs (numbered 100 to 299) using multiple 716 Output Expander Modules and at least two expansion interface cards.
- 8.5.1** CO OUTS: - - - - - **Cutoff Output**
Outputs 1 to 8 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.
- 8.5.2** CUTOFF TIME: 0 **Output Cutoff Time**
If a Cutoff Output is assigned, you can enter a Cutoff Time of 1 to 99 minutes for the output to remain on. Enter zero for continuous output.

- 8.5.3**

COM FAIL OUT:	0
---------------	---

Communication Fail Output
Enter output number to turn on when any of the following conditions occur:
- a DD system fails to communicate on three successive dial attempts
 - a MPX system does not communicate with the receiver for 150 seconds or if the backup communication line transmits a report
- To clear the output, disarm any area. *Enter zero to disable this output.*
- 8.5.4**

FIRE ALR OUT:	0
---------------	---

Fire Alarm Output
Enter 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.* This output is not compatible with Cutoff Outputs.
- 8.5.5**

FIRE TRB OUT:	0
---------------	---

Fire Trouble Output
Enter output number to turn on when a fire type zone is placed in trouble or when a supervisory type zone is placed in alarm or trouble. The output is turned off when all fire and supervisory type zones are restored to normal. *Enter zero to disable this output.* This output is not compatible with Cutoff Outputs.
- 8.5.6**

AMBUSH OUT:	0
-------------	---

Ambush Output
Enter 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.*
- 8.5.7**

ENTRY OUT:	0
------------	---

Entry Output
Enter output number to turn on at the start of the entry delay time. The output is turned off when the area is disarmed or the entry delay time expires. Enter zero to disable this output.
- 8.5.8**

EXIT OUT:	0
-----------	---

Exit Output
Enter 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.
- 8.5.9**

READY OUT:	0
------------	---

Ready Output
Enter 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.
- 8.5.10**

PH TRBL OUT:	0
--------------	---

Phone Trouble Output
Enter output number to turn on when the phone line monitor in the DMP 893 or 893A Dual Phone Line Module detects a voltage below 3 VDC. The output is turned off when phone voltage rises above 3 VDC. Enter zero to disable this output.
- 8.5.11**

LATE CLS OUT:	0
---------------	---

Late To Close Output
Enter the output number to turn on at the expiration of a Closing schedule. The output activates simultaneously with the **CLOSING TIME!** keypad display. The output is turned off when the area is armed, the Closing is extended, or the schedule is changed.
- 8.5.12**

DVC FAIL OUT:	0
---------------	---

Device Fail Output
Enter output number to turn on when an addressed device fails to respond to polling from the panel. A Missing Device report is also 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 keypad addressed device is unsupervised, then this output option cannot be used.
- 8.5.13**

SNSR RST OUT:	0
---------------	---

Sensor Reset Output
Enter an 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.

9.1

MENU DISPLAY

Menu Display

Menu Display allows you to select at which keypad addresses the user can access the following functions.

A description of each menu option follows.

9.2

ARM STAT 12345678

Armed Status

Enter the keypad addresses that show the armed areas for their partitions. For example, if address 1 is enabled here, it can display the armed areas within its partition. Each armed area is displayed with its area number. The User Menu Armed Areas function also displays the custom area name you enter in the Area Information section of the Programmer.

9.3

TIME DSP 12345678

Time

Enter the keypad addresses that can display the time and day of the week.

9.4

ARM/DIS 12345678

Arm/Disarm

Enter the keypad addresses from which users can arm and disarm areas in a partition.

10.1

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 chooses to go to system arming/disarming or a menu option. Status List alternates with the Armed Status on keypad addresses selected in Armed Status Menu Display. 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.

A description of how each is displayed in the Status List follows.

10.2

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.

10.3

SYS TRB 12345678

System Monitor Troubles

Specifies the addresses where any trouble on a System Monitor is displayed. The System Monitors include the following:

AC Power

Battery Power

Closing Check

Panel Box Tamper

Phone Line 1

Phone Line 2 (requires the 893 or 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 top row Select key is pressed on the keypad. The name remains in the list until the condition is restored.

10.4

FIRE 12345678

Fire Zones

Specifies the addresses where all fire zone alarms and troubles are displayed. The zone name is displayed 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. 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. See below.

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

Off - Alarm Silence.

- 10.5** BURGLRY 12345678 **Burglary Zones**
 Specifies the addresses where all burglary zone alarms and troubles are displayed. Burglary zones include Night, Day, and Exit type zones. Burglary zone troubles remain in the list until the zone restores.
 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 elapses without an alarm. This ensures that if a burglary is in progress the last zone tripped remains in the list even if the zone has been 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. See below.
On - Burglary zone alarm and Bell Output or Burglary Bell Output is ON.
Off - Alarm Silence.
- 10.6** SPRVSRY 12345678 **Supervisory Zones**
 Specifies the addresses where all supervisory zone alarms and troubles are displayed. Supervisory zones are entered in the status list and sound the keypad buzzer until a valid user code is entered at any keypad address.
- 10.7** PANIC ----- **Panic Zones**
 Specifies the addresses where all panic zone alarms and troubles are displayed. The name of the zone remains in the list until the zone restores. The keypad buzzer does not sound for panic alarms or troubles.
- 10.8** EMERGCY ----- **Emergency Zones**
 Specifies the addresses where all emergency zone alarms and troubles are displayed. The name of the zone remains in the list until the zone restores. The keypad buzzer does not sound for emergency alarms or troubles.
- 10.9** AUX 1 ----- **Auxiliary 1 Zones**
 Specifies the addresses where all Auxiliary 1 zone alarms and troubles are displayed. 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.
- 10.10** AUX 2 ----- **Auxiliary 2 Zones**
 Specifies the addresses where all Auxiliary 2 zone alarms and troubles are displayed. 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.

- 11.1** 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's event buffer to a local printer. The **PRINT** option is visible whether or not a 462P Printer Interface Card is attached to the panel.
- 11.2** 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.
- 11.3** ZONE NO YES **Zone Reports**
 Prints changes in the status of active zones. Includes the zone number, name, and type as well as the action (alarm, trouble, bypass, etc.) user number (if applicable) and area name.
- 11.4** 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.
- 11.5** DOOR ACS NO YES **Door Access Reports**
 Prints door access activity. Includes the door number, user number and name, and the time and date of the door access.
- 11.6** SUPV MSG NO YES **Supervisory Reports**
 Prints System Monitor Troubles and system events. See Status List - System Monitor Troubles.

12.1 HOST LOG REPORTS

Host Log Reports

This section allows you to program the types of logging reports the panel will send through the 462N Network Interface Card. 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 **Advanced Reporting Module User's Guide, LT-0645**.

Note: The network connection that the Host Log Reports are sent through is not monitored for network trouble. Therefore, the **Host Log Reports** option should **NOT** replace the primary communication method.

If there is trouble with the network connection, the panel will continue to attempt to send the **Host Log Reports** until the connection is reestablished. The panel will then send the reports. A Network Trouble message will not be sent if the connection is lost. The **Host Log Reports** have the lowest priority of panel reports sent.

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

12.2 MODEM SETUP:

-

-

Modem Setup

The keypad displays **MODEM SETUP:**. Press **COMMAND**. Enter up to two lines of 16 characters to equal 32 characters for the string that is sent to the network device connected to the 462N Network Interface Card.

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 your network device is an iCOM, enter the following setup string: **AT#UCXXX.XXX.XXX.XXX#PPPPP**. The Xs represent the target IP Address of the iCOM, and the Ps represent the port number. The default port number is 2001. An example of a modem setup is: **AT#UC192.168.001.099#2001**. To enter the #, press 0 and then the far right Select key. To enter the . (period), press 0 and then the second Select key from the left.

Note: The **Modem Setup String** entered CANNOT be the same as that entered in **Communication**.

12.3 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.

12.4 ZONE NO YES

Zone Reports

Sends changes in the status of active zones. 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 (485B only) is performed, Verify and Fail messages are also sent for each zone.

12.5 USR CMDS NO YES

User Command Reports

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

12.6 DOOR ACS NO YES

Door Access Reports

Sends door access activity. Includes the door number, first and second (485B only) user number, first and second (485B only) user name, and the time and date.

12.7 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
- Ambush
- Alarm Bell Silenced
- Late to Close (only sent as a Supervisory Report if **Area Schedules** is not enabled, **Closing Check** is enabled, and an opening/closing schedule has been programmed.)
- Exit Error
- System Recently Armed
- Unauthorized Entry

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

- 13.1** AREA INFORMATION **Area Information**
Allows you to assign functions to the different areas within a partition. 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.
- 13.2** PARTITION NO: 1 **Partition Number**
Enter the partition number to program. Partition 1 using area arming can have up to eight areas on the panel. Partitions 2, 3, and 4 using area arming can each have up to four independent areas.
This prompt is not displayed if you only entered one partition in Device Setup.
- 13.3** MODE: AREA SYS **Arming Mode**
This option allows you to program how the areas in this partition operate. The options you can choose are listed below:
AREA A / P H / A **AREA ARMING**— all areas of the partition can be programmed and operated independently. Partition 1 provides up to eight areas and partitions 2 to 4 each provide up to four areas.
ALL/PERIMETER—only areas 1 and 2 are activated and operate as a perimeter and interior system only.
HOME/AWAY—three areas can be used: Perimeter, Interior, and Bedrooms. If you assign zones to the Bedrooms area, the keypad display shows **HOME SLEEP AWAY** when the user arms the system. If you do not assign zones to the Bedrooms area, the keypad only displays **HOME AWAY** to the end user.
With the **HOME SLEEP AWAY** option, the user can:
1. Select **HOME** to arm just the perimeter.
 2. Select **SLEEP** to arm the perimeter and interior (non bedroom areas).
 3. Select **AWAY** to arm all three areas.
- 13.4** EXIT DELAY: 45 **Exit Delay**
Enter the exit delay time for all Exit type zones in this partition. 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. This delay countdown is displayed on the keypad.
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.
- 13.5** BURG BEL OUT: 0 **Burglary Bell Output**
Enter the output number (0 to 10, 100 to 299) that is turned on any time a Burglary type zone in this partition 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 section Output Options - Bell Cutoff. If Bell Test is **YES**, the Burglary Bell Output entered here is turned on for two seconds each time the system is armed.

- 13.6** 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 partition is disarmed. A Closing report is also sent to the receiver when any area within this partition is armed.
- 13.7** CLS CHK NO YES **Closing Check**
 Select YES to enable the panel to verify that all areas in this partition 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 emits a steady beep and displays **CLOSING TIME!**
 If you select Area Schedules, the appropriate area name is displayed followed by - **LATE**. The keypad's 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 no closing report is sent to the SCS-1 Receiver if **AUTO ARM** is **NO**. See Automatic Arming. 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 and continues each hour until the area is armed or the schedule is extended.
- 13.8** 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.
- 13.9** 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.
- 13.10** AREA SCH NO YES **Area Schedules**
 Select YES to allow each area in this partition to set its own permanent and temporary, or primary and secondary user disarming schedules. If Yes is selected, you must program a schedule for each area in each partition. Enter NO to provide one set of user disarming schedules for each partition.
- 13.11** PRI/SEC NO YES **Primary/Secondary Schedules**
 Select YES to provide primary and secondary schedules for this partition or each area within this partition depending on the Area Schedules option selected. Enter NO to use permanent and temporary schedules.
Choosing Schedules
 Primary and Secondary schedules are ideal for auto arming and disarming of individual areas and for creating Opening/Closing windows during which users with a level 1 or 2 authority can disarm the system. Having two separate schedules allows you to create two Opening/Closing windows for each day. One could be for normal business activity and the other could be for cleaning crews or a second shift. Once programmed, these schedules operate continually until changed.
 Permanent schedules are identical to Primary and Secondary schedules and can be used for the same purposes. Temporary schedules however, once programmed, expire at the end of their closing time and must be programmed again. This feature allows you to create a temporary schedule that lets a delivery or repairman disarm and occupy an area for a specified time without the schedule occurring again.
- 13.12** AREA NO: - **Area Number**
 Enter the number of the area in this partition you are programming. In an area system, partition 1 can have up to 8 areas. Partitions 2 to 4 can each have up to 4 areas. After entering the area number, press COMMAND to enter the area name.

13.13 * UNUSED *

Area Name

The area name can be up to 16 alphanumeric characters. All others are marked unused. For instructions on entering alphanumeric characters see section 1.7 **Entering Alpha 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.

To mark an active area 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 Area Information during Initialization, all areas will be marked ***UNUSED***. See Initialization section.

13.14 ACCOUNT NO: 12345

Account Number

Enter the account number to be sent to the receiver for this area. Choose an account number compatible with the Communication Type selected in Communications. The default account number is the one previously entered. If the Communication Type selected multiplex, you must choose an account number between 128 and 999.

Below illustrates proper assignment of multiplex account numbers to DMP SCS-1 Receivers:

Receiver Line	Main Account #	Area Account #
1	10000 to 10127	10128 to 10999
2	20000 to 20127	20128 to 20999
3	30000 to 30127	30128 to 30999
4	40000 to 40127	40128 to 40999
5	50000 to 50127	50128 to 50999

13.15 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 will auto arm 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 Receiver. **NO** disables automatic arming for this area.

13.16 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's response to these bad zones. This option is not displayed 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 report of the forced zone 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.

13.17 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.

13 - AREA INFORMATION

- 13.18**

OUTPUT NO:	0
------------	---

Armed Output Number
Enter the output to turn on when this area is armed. The output is turned off when this area is disarmed. The output cannot be turned on from the Outputs On/Off option of the User Menu.
- 13.19**

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 partition is armed and is disarmed when the first area in the partition is disarmed. You can have multiple common areas in each partition. For the common area to work properly, do not assign any user codes to the common area. A user's code can be programmed to arm and disarm the common area from a keypad at any time, but the common area will not function as a common area.

14.1 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.

The first three zones of the XR2400F have been preset by the factory. NAC 1 Trouble has been programmed to Zone 1 and NAC 2 Trouble has been programmed for Zone 2. Power Supply Trouble has been programmed to Zone 3.

A description of each specification follows.

14.2 ZONE NO: -

Zone Number

Enter the number of the zone you intend to program. Press COMMAND to enter a zone name. For instructions on entering alphanumeric characters, see the Introduction section.

14.3 * 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** *.

14.4 ZONE TYPE: BLANK

Zone Type

The Zone Type defines the panel's 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, responses are made automatically for the zone. There are 12 Zone Types to choose from. Application descriptions for each zone type can be found in the Appendix section of this manual.

-- NT DY EX

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

F I PN EM SV

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

A1 A2 FV AR

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

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 is displayed, 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.

14.5 FIRE BEL OUT: 0

Fire Bell Output

This output (1 to 10, 100 to 299) 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 XR2400F or the 630F Remote Fire Command Center.
- Using the Outputs On/Off function in the User Menu.
- The expiration of the Bell Cutoff time.

NOTE: When programming XR2400F fire zones, assign output number 1 to Fire Bell Output to turn on NAC 1 and output number 2 to turn on NAC 2. This causes a NAC to turn on when a fire zone is in alarm.

14.6 PARTITION NO: 1

Partition Number

Enter the partition number where this zone is being assigned.

14.6.1 AREA NO: -

Area Number

For an Area system, enter the area number where this zone is being assigned.

14.6.2 AREA : PERIMETER

Area Assignment

For an All/Perimeter system, choose INT. (interior) or PERIM (perimeter). For a Home/Away system, choose INT (interior), BDRM (bedroom), or PERIM (perimeter). Press the Select key under your selection.

14.6.3 AREAS:1 _ _ _ _ _

Arming Zone Area Assignment

If the zone has been programmed as an Arming Type (AR), the only information to enter is the areas the zone controls. If the Arming zone is in a partition programmed as an Area system, enter the area numbers to be armed and disarmed.

PERIM ALL

HOME SLEEP AWAY

If the partition is in an All/Perimeter system, select either **PERIM** (perimeter) or **ALL**.

If the partition is in a Home/Away system, select **HOME** (for the perimeter area), **SLEEP** (for perimeter and interior areas), or **AWAY** (for perimeter, interior, and bedrooms areas).

If the Arming zone is opened while any areas it controls are armed, a burglary alarm occurs. If the zone is restored to normal, the areas cannot be disarmed using the Arming zone until at least one other area within the same partition is disarmed remotely, from a keypad, or from another Arming zone.

If the Arming zone is opened while all areas assigned to it are disarmed, a burglary trouble occurs. If the zone restores to normal, a burglary restoral occurs.

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 five seconds. If during the five second delay the Arming zone is shorted again, no arming takes place. To force arm bad zones, the Any Bypass option must be set to **YES**. A priority zone cannot be force armed.

14.6.4

STYLE:

Style

This option specifies the style for the arming/disarming operation. The default for **STYLE:** is **TGL** (toggle). Pressing any top row select key will display the **STYLE** options. To view more style options press the command key. The following is a description of the action for each option.

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 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.

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 will disarm the programmed areas. When programmed as a **ALL/PERIM** or **HOME/AWAY** system, a short will disarm **ALL** areas. When restored to normal, no action occurs. When the zone is opened from a normal (disarmed) state, a trouble is reported.

STEP

When programmed as an **AREA** system, a short will arm the areas and beep the keypads once. When programmed as **ALL/PERIM** or **HOME/AWAY**, on the first short **HOME** (PERIMETER) will arm and beep the keypads once. On the second short, **SLEEP** will arm for **HOME/AWAY** systems and beep the keypads twice. When programmed as **ALL/PERIM**, the **INTERIOR** will arm and beep the keypads twice. On the third short, **AWAY** will arm and beep the keypads three times. 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 (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.

14.7

NEXT ZN? NO YES

Next Zone

When **YES** is selected, the programming for the zone 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 in the following sections.

NOTE: The following five prompts are for use with an **FA400 Remote Wireless Receiver**.

Zones 100 through 299 have wireless capability when using the FA400 Remote Wireless Receiver: If you are programming zones 100 to 299, selecting **NO** to **NEXT ZONE - NO YES** displays the prompt **WIRELESS NO**. 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** and refer to the programming instructions below. Select **NO** to continue programming non-wireless zones in the 100 to 299 range.

14 - ZONE INFORMATION

- 14.7.1** WIRELESS **NO** YES **Wireless**
Select **YES** if you are programming a wireless zone. Press the COMMAND key to continue with wireless programming.
- 14.7.2** CHECK IN TM: 60 **Check-in Time**
You can set transmitters to check in automatically every 10, 30, or 60 seconds or not at all. To change the default of 60 seconds, press any Select key to display the default display of **NONE 10 30 60**. Press the Select key under the check-in time you want for this zone.
- 14.7.3** 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 **NO**, the following two prompts are displayed.
- 14.7.4** E O L **NO** YES **End-of-Line**
Select **YES** to supervise an external contact connected to the 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.
- 14.7.5** NRM OPEN **YES** **Normally Open**
Select **NO** if the contact connected to the transmitter is a Normally Closed type.
- 14.8** ALARM ACTION . . . **Alarm Action**
This option allows you to change the standard definitions of any Zone Type. 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.
- 14.9** 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	Relay
Output action		

You must also make these selections for the Disarmed Short, Armed Open, and Armed Short zone conditions. Press COMMAND to continue. A description of each selection is found on the following page.

14.9.1

MSG: TROUBLE

Report to Transmit

You can send two report types to the SCS-1 Receiver: Alarm (A) and Trouble (T). Press any Select key to display the following report options.

A T L -

ALARM - Selecting A, allows an alarm report to be sent to the receiver and the bell output to activate according to zone type. See Bell Action. The zone name appears in the panel's alarmed zones and status lists.

TROUBLE - Selecting T allows a trouble report to be sent to the receiver and the zone name to appear in the panel's alarmed zones and status lists.

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

LOCAL - When you select L, an alarm report is NOT sent to the receiver. The bell output still activates according to zone type. The zone name appears in the panel's alarmed zones and status lists. **NOTE:** You can also select L for a zone to send alarm reports to the subscriber's personal pager only and not to the central station. The **PAGER** option in the Communication section must be enabled.

A T S -

SILENCE/RESET - When a programmed SV zone is connected to the 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. For Supervisory type zones an S message replaces the L message in alarm action programming of the zone. A report is NOT sent to the receiver except for the bell silence report.

- - 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's alarmed zones or status list. Only the relay output selected in the next section operates.

14.9.2

OUTPUT NO: 0

Output Number

You can specify any of the Relay Outputs on the panel to be activated by a zone condition (1 to 10, 100 to 299 if Model 716 used). 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's 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.

It is important to note that the polling cycle for the LX-Bus is 1.6 seconds. Therefore, any zone conditions detected on the LX-Bus may take up to 1.6 seconds to be indicated at the panel. Any Model 716 relay actions on the LX-Bus may take up to 1.6 seconds to activate after the zone condition is indicated at the panel.

14.9.3

OUTPUT: NONE

Output Action

Entering an Output Number displays this prompt. This prompt allows you to assign an output action to the relay. A description of the output actions is below:

STD PLS MOM FOLW

STEADY - The output is turned on and remains on until the area is disarmed, an output cutoff time expires, or the output is reset from the keypad menu.

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

MOMENTARY - The output is turned on only once for one second.

FOLLOW - The output is turned on and remains on while the zone is in an off normal, or bad condition. When the zone restores, the output is turned off.

After you have made the three previous selections, the display prompts you again 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 are displayed. When you have programmed all of the zone conditions, the Swinger Bypass selection is then displayed.

- 14.10** SWGR BYP NO YES **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 will be displayed 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**.
- 14.11** PREWARN: 12345678 **Prewarn Addresses**
 At the start of the entry delay, all keypad addresses selected here display **ENTER CODE:-**. If you want the prewarn to sound at all eight addresses, leave the default as shown.
 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.
- 14.12** ENTRY DELAY: 1 **Entry Delay**
 Select the entry timer for this zone. Entry timers 1 to 4 are programmed in System Options.
- 14.13** RETARD NO YES **Zone Retard**
 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.
- 14.14** PRESGNL: NONE **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**.
- 14.15** FAST RSP NO YES **Fast Response**
 Select **YES** to provide a zone response time of 167ms. Select **NO** to provide a normal zone response time of 500ms. Zones 100 to 299 have a fixed response time of 200ms and do not display this prompt.

14.16 CRS ZONE **NO** YES

Cross Zone

Select **YES** to enable cross zoning for this zone. Cross zoning requires one or more armed zones to fault within a programmed time before an alarm report is sent to the receiver.

When 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 in the same area 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 in the same area 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.

14.17 PRIORITY **NO** YES

Priority

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

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.

Note: If you programmed any wireless zones, press the Back Arrow key for the following wireless programming. **The next three prompts are for use with the FA400 Remote Wireless Receiver.**

14.17.1 PRG XMTR? **NO** YES

Program Transmitter

Select **YES** to program wireless transmitters. Select **NO** to return to **Zone Information**.

14.17.2

Connect Transmitter

Connect the transmitter, whose zone number is displayed, to the Programming Connector on the 472 Inovonics 900MHz Card using the 620 Programming Cable. **RESET THE TRANSMITTER.** The keypad display prompts you for transmitters starting from the lowest zone number to the highest.

At the **CONNECT XMTR:** prompt, you can also press a Select key and enter in any wireless zone number (100 to 299 or 000 for the C100 and FA100 transmitters). After programming all transmitters, press the **COMMAND** key.

14.17.3

Connect Command Transmitter

Connect the FA100 or FA113 you want assigned to the partition shown (P1 = Partition 1) to the 472 Card. Press the Alert button on the transmitter to initiate programming. Repeat the programming for each partition. To use the Alert button on the transmitter as a panic, program **AMBUSH** as **YES** in System Reports.

Additional Zone Programming

The remaining Zone Information you need to specify varies with the different Zone Types. Below is a list of the remaining information needed:

If Zone Type	Remaining Information
Exit	Prewarn addresses/Entry Delay
Fire, Supervisory, Auxiliary 1 and 2	Retard and Presignal addresses

15 - STOP

15.1

STOP

Stop

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 in all partitions are DISARMED
- All zones in all partitions are DISARMED
- The panel's Status List is CLEARED

During the reset, all keypad displays are momentarily blank for two seconds. After the reset, the programming function is terminated 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 had enabled any of the wireless options and not yet installed a 472 Inovonics 900MHz Card, after the STOP routine the panel would display **NO WIRELESS 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 *had* installed the card and still saw 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 WIRELESS CARD	472 Inovonics 900MHz Card
NO PRINTER CARD	462P Printer Interface Card
NO HOST CARD	462N Network Interface Card (with HOST communication selected)

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

16 - SET LOCKOUT CODE

16.1

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 3 to 5 digits long. Leading zeros do not have to be entered 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.

17.1 Diagnostics function

The panel contains a Diagnostics function that allows 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 will see displayed is **TEST LX-BUS**. This function allows you to test the ability of the 462N, 462P, 472, and 481 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 1 2**. Press the Select key under **1** to test LX-Bus™ circuit number 1. Press the Select key under **2** to test LX-Bus circuit number 2. The keypad now displays **ADDRESS: -**. Enter a 2-digit LX-Bus address to which you have assigned a device and press COMMAND.

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 or 715 on the LX-Bus™, it recognizes them as four zone devices and skips polling the remaining three zones (these are polled internally by the module, which then transmits any status changes to the panel). This polling of addresses greatly reduces the amount of time it takes the panel to poll all devices on the LX-Bus™.

When testing LX-Bus™ devices, enter only the addresses to which the modules have been set.

The keypad next displays **TESTING . . . STOP** during the testing of the device. At any time, you can press the Select key under **STOP** to end the polling. The panel now records the number of no responses from the device. If all polls are received back by the panel correctly, the keypad displays **00000/65535 FAIL**. The **0** (zero) represents the number of failed polling responses.

If one or more polling attempts fail, the keypad displays *******/65535 FAIL**. (The ********* represents the number of polling attempts that failed.) 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** option.

Zone Finder

The second Diagnostic function is the Zone Finder. Press the 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

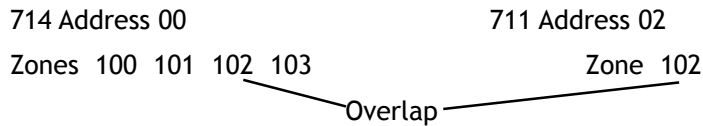
Press the COMMAND to display the third Diagnostic function: **ZONE STATE**. This function allows you to enter any zone number and check its current electrical state (Normal, Open, or Shorted). Press any Select key. The display changes to **ZONE NUMBER: _**. Enter in the number of the zone you want to check and press COMMAND. The panel then displays the current state of the zone as either **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 a device's address is the same as any of the last three zones on another 714 or 715.

Example:



The overlap feature cannot determine when two devices have the same address.

Missing - A missing occurs when a zone between 100 and 299 has been programmed in **ZONE INFORMATION** and no device with that zone's address has been installed on the LX-Bus™. For example, if zone 110 has been programmed but the device has not been installed or has been set to another address, the zone cannot be found by the panel and a **MISSING** is displayed here in **LX-BUS STATUS**. To correct the problem, check your zone programming and addressing of zone expansion modules.

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

Exiting the Diagnostics program

To exit the Diagnostics function, press the Back Arrow key until you see the display **STOP** then press any top row Select key. The keypad returns to the Status List display.

17.2 Using the 984 Command Function

The 984 Command function allows you to connect the panel with a service receiver at a remote location for the purpose of remote programming, retrieving the Event Buffer, or checking one or more elements of the current program. To use the function, enter the numbers 9, 8, and 4 (984) and press **COMMAND**. The keypad display changes to **NBR RMT PICKUP**.

NBR (number) - Select **NBR** if you want to enter a number for the panel to dial to reach the service receiver. Phone numbers can be up to 32 characters in length. You can program a three second pause in the dialing sequence by inserting the letter P before the number. You can program a dial tone detect by inserting the letter D. These characters are counted as part of the allowable 32 characters.

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

PICKUP - Select this option if the person attempting the remote programming is currently ringing the phone line onto which the panel is connected. Once the panel picks up the line, a verification process occurs and, if successful, the panel grants remote access to its programming and Event Buffer.

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**.

17.3 Using the Walk Test

The panel provides a walk test feature that allows a single technician to test the protection devices connected to zones on the system.

WALK TEST

Walk Test

To conduct the Walk Test, reset 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 HST, the system sends a **System Test Begin** report to the central station. After four seconds, the keypad displays the zone type choices for testing.

Once in the Walk Test, you can go around and trip each protective device. As each device is tripped, the panel sounds the alarm bells as programmed in **BELL ACTION** (described on the following page) and then performs an automatic Sensor Reset. Continue tripping devices until the entire system has been tested. The trip counter on the keypad display increments by one each time a device is opened or shorted.

To end the test, press the Select key under **END**. The panel sends a System Test End to the central station and performs a final Sensor Reset. At the end of the test, the keypad displays any zones that fail to trip. Below is an example.

Keypad display: **SOUTH LOBBY**
 ZONE: 10 -FAIL

*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 for the next Walk Test option to be displayed. Pressing the Back Arrow key exits the One Man Walk Test.

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

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

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

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

BELL NO **YES**

Bell Action

This option selects the bell output action when a zone under test is faulted. 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.

TRIPS: xxx **END**

Trip Counter

Displays the number of zone trips during the Walk Test.

- Each time a selected zone is tripped, the keypad buzzes for two seconds.
- Each time a FI, FV, or SV zone is tripped, 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 are then displayed on the keypad.

SOUTH LOBBY

ZONE: 10 - FAIL

Failed Zones Display

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 is printed to the local printer. You must have a 462P Interface card to print Walk Tests. Select YES for Zone under Printer Reports to enable the XR200 to print the Walk Test.

17.4 690 Series Keypads 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.

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

17.5 Pager Direct Specifications

The XR200 communicates in a full-duplex mode with a Glenayre alphanumeric pager terminal. The terminal modem must accept the following parameters:

- 300 bps Bell 103 protocol
- Carrier detect response time = 300ms
- Delay between lost carrier and hang-up = 12.0 seconds

The following alphanumeric pager specifications must also be met in order for the pager to receive Pager Direct reports:

Glenayre Electronics GL3000 protocol:

- 300 Baud
- 7 Bits Data
- 1 Stop Bit
- Even Parity

17.6 Cross Zoning

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

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

17.7 Events Manager

The Events Manager function allows you to delay sending certain reports to the central station receiver. Reports can be kept in the panel's memory until overwritten by new activity or held until the memory buffer reaches 133 events. When the buffer is filled, the panel automatically sends the stored reports to the central station receiver. Below is a list of panel reports that can be delayed using the Events Manager option.

Immediately	Delayed	Report Type
Y		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 Loop

17.8 Modem Setup Information

When a report is to be sent, the panel first sends "+++ATH_r^c (carriage return)", waits one second then sends the dial string characters entered in **MODEM SETUP**. This is followed with a space and a "_r^c." The modem must respond to the panel with "CONNECT_r^c".

If "CONNECT_r^c" is properly received from the modem, the standard HST report/response sequences occur. After a report is sent and acknowledged, or a report is sent and not acknowledged for a period of one minute, the panel sends "+++ATH_r^c" to the modem.

If no response is received from the modem after 60 seconds, the cycle is repeated. Any string other than "CONNECT_r^c" that is returned by the modem and ends with a "_r^c" is ignored. After three cycles and no connection is made, a **NETWORK TROUBLE** message is sent to the central station if **UL AA** is selected as **YES**.

If the Host channel fails to receive a proper acknowledgment within 60 seconds, the panel sends a **WARNING: NETWORK TROUBLE (S72)** report on the **2ND LINE**. The next time a report is sent by the panel over the Host channel, the panel sends a **NETWORK RESTORED (S73)** report over the **2ND LINE**.

17.9 462N Network Interface Card Examples

Several options are available when configuring the panel for Host communication, Host backup communication, and Host Log Reports. All options use a 462N card and an iCOM Internet Alarm Router (an iCOM is not required for the Host Log Reports when a direct connection is used).

The chart below outlines the different ways you can configure the panel for these three options. As shown in the chart below, it is possible to use only one 462N card and one iCOM to meet all three of these needs. The chart also explains when a Modem Setup is required.

When using a direct connection to a Advanced Reporting Module computer for the Host Log Reports, the 462N card can only be used for logging: A separate card will be needed for Host Communication and Host Backup. Also, a Modem Setup is not required when using a direct connection for the logger.

Refer to the Communication section and Host Log Reports section for more information. Also refer to **Modem Setup Information** and **Host Backup Examples** in the **Appendix**.

1 Card	2 Cards	
Card 1	Card 1	Card 2
Host	Host	Backup
Logging	Host	Logging
Host, Backup (Modem Setup for Backup)	Host, Backup (Modem Setup for Backup)	Logging
Host, Logging (Modem Setup for Logging)	Host, Logging (Modem Setup for Logging)	Backup (Modem Setup for Backup)
Host, Backup, and Logging (Modem Setup for Backup and Logging)		

17.10 Host Backup Examples

Several examples follow to explain scenarios in which you would use Host Backup and how to program the panel for Host Backup.

When using Host Backup with Host Log Reports, refer to the next section, 462N Network Interface Card Examples.

Example 1: Two 462N Cards

This example describes the configuration and programming needed when you are using two 462N Cards and two iCOMs to enable the Host Backup.

Hardware:

- XR200 version 110 or above
- Two iCOM Internet Alarm Port Routers
- Two 462N Network Interface Cards
- One SCS-1 Receiver
- One 460 Adaptor Card

Installation:

Install the primary 462N Card into slot 1 of the 460 Card, then connect the primary iCOM to the 462N card.

Install the backup 462N Card into slot 2 of the 460 Card, then connect the backup iCOM to the 462N.

Programming:

Select **Host** for Communication type. Enter AT#UCXXX.XXX.XXX.XXX#PPPPPP for the Modem Setup.

Note: Enter the Target IP Address for the backup iCOM connected to the 462N card in slot 2 in place of XXX.XXX.XXX.XXX. Enter the port number in place of PPPPPP. The default port number is 2001.

Select **YES** for **Host Backup**. Enter the retry and check-in times.

Explanation:

Messages will be sent through the 462N card in slot 1 to the iCOM then to the SCS-1 Receiver. If the messages cannot be sent that route, the panel will send them using the backup: The messages will be sent through the 462N Card in slot 2 to the iCOM to the SCS-1 Receiver (the IP Address entered for the Modem Setup). If the panel cannot send the messages through the backup 462N Card, the panel will then use the communication type selected for the 2nd Line.

Example 2: One 462N Card

This example describes the configuration and programming needed when using one 462N and one iCOM to enable the Host Backup.

Hardware:

- XR200 version 110 or above
- One iCOM Internet Alarm Router
- One 462N Network Interface Card
- Two SCS-1 Receivers

Programming:

Select **Host** for Communication type. Enter AT#UCXXX.XXX.XXX.XXX#PPPPPP for the Modem Setup.

Note: Enter the Target IP Address for the backup SCS-1 Receiver in place of XXX.XXX.XXX.XXX. Enter the port number in place of PPPPPP. The default port number is 2001.

Select **YES** for **Host Backup**. Enter the retry and check-in times.

Explanation:

Messages will be sent through the 462N card to the iCOM, then to the Main SCS-1 Receiver. If the messages cannot be sent using that route, the panel will send them to the backup SCS-1 Receiver. The Modem Setup will then be used to direct the messages to the backup receiver. If the panel cannot send the messages to the backup receiver, the panel will then use the communication type selected for 2nd Line.

Example 3: Other Network Devices

It is also possible to use other network devices for the backup. You may use a cellular radio to route message to the receiver. If you are using a network device other than an iCOM, you will need to obtain the Modem Setup String for the network device. Generally the Setup String can be found in the literature provided with the device.

You may use the examples above as a guide when programming your network device. The major difference between programming an iCOM for backup and another network device is the Modem Setup.

17.11 Zone Type Descriptions

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

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 will send alarm reports to the receiver during the system's 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 has started.

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 pre-signal 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 is repeated.

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 on a zone and use it to arm and disarm one or more areas within a partition.

17.12 Zone Type Specifications

XR200 ZONE INFORMATION	Type	Partition Number	Area	Fire	Disarmed Open			Disarmed Short			Armed Open			Armed Short			Swinger	Prewarn	Entry Delay	Retard Delay	Presignal	Fast Response	Cross Zone	Priority	Style
	NT		INT	Bell	Message	Output	Action	Message	Output	Action	Message	Output	Action	Message	Output	Action									
Assign area and disarm condition for NT, DY, EX, A1, A2, and AR only	DY	1	PERIM	Output	A	S	A	S	A	S	A	A	S	A	N	1	1	N	1	N	N	N	TGL		
Assign Prewarn and Entry Delay for EX only	EX	4			T	P	T	P	T	P	T	A	P	A	Y	8	4				N	N	N		
Assign Retard and Presignal for FI, SV, A1, A2, and FV only	FI											T	P	A	N			N	+	N	N	N			
	PN											T	P	A	N					N	N	N			
	EM											T	P	A	N					N	N	N			
	SV											T	P	A	N			N	+	N	N	N			
	A1				T		A		T		A				N			N	+	N	N	N			
	A2				T		A		T		A				N			N	+	N	N	N			
	FV								T		A				N					N		N			
	AR																						TGL		

- = This function is not enabled for this zone type.
- = These zone functions are not available for this zone type.
- + = Retard must be YES before Presignal can be selected.
- * = When SV zone is connected to 303 Silence/Reset Switch

Description of the programmable zone options

Below is a description of the various zone options shown on the table above. For additional information, read through the Zone Information section of this manual.

Zone Type Defaults - These are complete spellings of the abbreviations used for the zone types.

Type - These are the abbreviations used for the zone types.

Area - For a ALL/PERIM or HOME/SLEEP/AWAY system, this is either Interior, Bedroom, or Perimeter. For an AREA system, 1 to 8.

Wireless - This zone is connected to a wireless transmitter. For use with the FA400 Remote Wireless Receiver.

Message - A = alarm report, T = trouble report, L = local with no report, - (dash) = no report, S = Sensor Reset and alarm silence.

Output - These are the ten on-board and 200 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 is initiated from a shorted zone.

Presignal - Provides a keypad tone for zones in retard delay.

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

Cross Zone - Provides cross zoning with any of the 242 available zones.

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

Style - These are the abbreviations you will see on the keypad for arming zone style:
 TGL = Toggle, ARM = Arm only, DIS = Disarm only, STEP = Wireless arming, MNT = Maintain

17.13 Common Keypad Messages

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

Message	Meaning	Possible Solutions
Invalid Area	The user has attempted a door access for an area they are not assigned.	Change the user's 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 have entered is not recognized by the system.	Check the user code and try again.
Invalid Level	The code you have used does not have the authority level to access the desired option.	Check the user level to see if you have the correct level set for the code. Remember that you can only grant a user authority if you have the same authority or greater: You can't give what you don't have.
Invalid Time	A user code assigned to a specific schedule has entered outside of the valid schedule.	See Schedules and User Codes.
Closing Time	The schedule has expired but the area has not been armed.	Users still on the premises are reminded to 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 premises are reminded to arm the system or extend the schedule to a later time.
AC Trouble	The system is not getting proper power.	Check to be sure the AC connections are good.
Battery Trouble	Battery is either low or missing.	Check to be sure the battery connections are good and the battery is still good.
Phone Line 1 Trouble	The panel is looking for phone jack supervision.	Install a jumper wire between terminals 2 and 7 on the phone jack.
System Trouble or Service Required	There is a problem with one or more of the components in the system.	Make sure the J16 jumper is removed. Make sure there is not an open or short on the green data wire to the keypad. You could also have a bad keypad or zone expander.
System Busy	The system is performing another task with a higher priority.	Wait a few moments for the system to finish the task. Also make sure that the J16 jumper is not installed. If System Busy appears on the display for a long period of time, the processor could be locked up.
4-Wire Bus Trouble	No supervised device on bus	Program a device to be supervised.
	Low Voltage or an open yellow wire	Make sure all wires are connected.
	Two devices on same address	Program second device on address to an address of its own.
Transmit Trouble	The panel has attempted to communicate with the central station 3 times and has not succeeded.	Verify your communication type, account number, and phone number. Make sure the telephone line is connected and working properly.
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.
Wireless Trouble	The wireless receiver is not communicating with the 472 Hard-Wire-Less Card.	Check both devices and the wiring between those devices.
Non-Polled Address	This means the device is not set to STD (standard) or FIRE in Device Setup of programming.	Make sure that STD or FIRE is selected in Device Setup for each device attached to the keypad bus.
Enter Code (when entering programming)	A lockout code has been programmed for the panel.	Enter the lockout code.
Man Number	A serviceman number has been assigned using Remote Link.	Enter your Service Man Code to obtain access to the panel.



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