

XR500 Series Feature Update February 2008

Enhanced Communication

XR500 Series Communication has been enhanced to provide additional programming options and support for the new 463G Digital Cellular Communicator.

- Program Up to 8 Communication Paths
- Paths can be programmed for Primary or Backup
- Adaptive™ technology for Check-in messages
- Supports Cell Communication for 463G Digital Cellular Communicator
- And more!

Software Availability

When purchasing the 463G Digital Cellular Communicator, a CD with links to download the XR500 Series and Remote Link support software is included.

XR500 Software

This XR500 Series Version 200 (2/14/08) is available via a website link when purchasing the 463G Digital Cellular Communicator.

The XR500 Series Command Processor™ panels will continue to be manufactured with Software Version 121 available for download free of charge on the DMP Dealer Direct Website at <http://dmp.com/dealer>.

Remote Link Software

Remote Link Version 1.41 or higher is required to support the XR500 Series Version 200 software and is available via a website link when purchasing the 463G Digital Cellular Communicator. See the Remote Link Feature Update [TU-0461](#) for additional information.

IMPORTANT NOTE: When updating an existing Version 111 or later XR100/XR500 Series panel to Version 200, the communication programming will be converted from the previous communication options to the new Version 200 options. The communication programming options should be reviewed after the update to confirm the conversion matches the desired operation.

For existing panels Version 110 or earlier, the communication programming is not converted and the communication options will be initialized to default settings. For this case, properly program the communication options after the conversion to Version 200 is complete.

SCS-1R Firmware

The SCS-1R Central Station Receiver Version 905 firmware now supports the printout of new communication messages including the Data Overage Suppression feature provided for Cellular communication paths. The 463G will communicate with existing SCS-101 Network Line Cards and process all messages to your host system. This Version 905 update is only needed for printout of selected messages. See the SCS-1R Feature Update

[TU-0463](#) for additional information.

SCS-1R Version 905 firmware PROMs may be obtained from buy.dmp.com or by calling DMP Customer Service at 1-800-641-4282 and ordering the SCS1R/UPDATE.

Programming Options

Following are the selected pages from the XR500 Series Programming guide containing the new programming options. If a page contains a single new option, the new option is shown with an outline box.

The first page of the XR500 Series Programming sheet has also been included for your convenience.

Communication

- 3.1** COMMUNICATION **Communication**
Configure the communication options for the panel. The information you program varies with the Communication Type you select.
- 3.2** ACCOUNT NO: 12345 **Account Number**
The Account Number is a 1 to 5 digit number used to identify which panel is sending a message. Enter the account number sent to the SCS-1R Receiver. Messages may be sent to a central station or via PC Log Reports to a PC. The default is 12345.
NET, CELL, 232 and DD - The range of valid account numbers for a panel is 1 to 65535. For accounts of four digits or less, do not enter leading zeros.
CID - Choose an account number between 1 and 9999.
- 3.3** XMIT DELAY: 30 **Transmit Delay**
Enter the number of seconds (15 to 45) the panel waits before sending burglary zones (Night, Day, or Exit) reports to the receiver. Other zone type reports are sent immediately. Alarm bells and relay outputs are not delayed during this period. Program Burglary Outputs for pulsed or steady, and set Abort Reports to YES if Opening and Closing reports are not being sent. Enter 0 (zero) to disable this function. The default is 30.

If the area where the alarm occurred is disarmed during the Transmit Delay time, only an Abort Report (S45) message is sent to the receiver. If the area where the alarm occurred is disarmed after the alarm message is sent to the receiver but before the Bell Cutoff time expires even if the alarm was silenced, an Alarm Cancelled (S49) message is sent. Otherwise the alarm is sent at the end of the delay. The Alarm Cancelled report cannot be disabled.
Note: For Commercial Burglary Installations, the combined Transmit Delay (Abort Window) and Entry Delay must not exceed one (1) minute.
- 3.4** PATH: - **Communication Path**
Up to eight communication paths may be programmed. Each path is designated as a primary or backup communication route. Path 1 is always Primary but other paths may be programmed as additional primary or backup.

Each primary path establishes a new path group. A path group is made up of the primary path and its subsequent backup paths. Typical communication takes place on the primary path with backup paths being used only when the primary path fails or when the backup path is programmed to duplicate messages. There is no option to backup path 8.
- 3.5** COMM TYPE: DD **Communication Type**
Specifies the communication method the panel will use on this path to report system events to DMP SCS-1R Receivers or non-DMP receivers. Default is DD for Path 1, and NONE for Path 2-8.

NONE DD NET CID **NONE** - For local systems. Selecting NONE ends communication programming.
DD - Digital Dialer communications to a DMP SCS-1R Receiver.
NET - Network communication using the panel onboard network connection or the 462N Network Interface Card. The DMP Network/Output reporting format is transmitted over a data network to the SCS-1R Receiver. If you need to send a duplicate signal to the central station, program the next path as primary with a different receiver IP.
CID - This option allows the panel to communicate to non-DMP receivers using the Contact ID format.
CELL - This option allows communication over the GPRS network using digital cellular technology with the 463G Digital Cellular Communicator.

CELL 232

232 - This option sends serial data and can be used for radio backup or other communication options, and uses the on-board serial port.

Select 232 when using DB-9 backup communications by directly connecting to the RS-232 port on the panel. Set the XR500 Series panel J23 jumper to R and briefly reset the panel using the J16 jumper to activate RS-232 operation. Refer to the XR500 Series Installation Guide (LT-0681) or the XR2500F Installation Guide (LT-0759).

3.6

PATH TYPE: **BACKUP**

Path Type

PRIMARY BACKUP

The Path Type defines if the path is Primary or Backup. Because Path 1 is Primary, this prompt only displays for paths 2-8. Default is Backup.

3.7

TEST RPT: **YES**

Test Report

Test Report determines if test reports are sent on this path. Reports are sent according to the programming in Test Frequency and Test Time. Default is Yes.

NO YES DEFER

Select YES to allow the programmed test report to be sent on the path currently being programmed.

Select DEFER to not send a test report if the panel communicates any message to the receiver within the time set in Test Frequency. Select NO to not send test reports on this path.

3.8

TEST FREQ: **1 DY**

Test Frequency

Test Frequency determines the frequency of the test report. Enter a number from 1 to 60 and select DY (Day) or HR (Hour) by pressing the far right select key. Default is 1 Day.

3.9

TEST DAY: **SUN**

Test Day

Use this option to set the day of the Test Report. This prompt appears only when Test Report is Yes, Test Frequency is Day and a multiple of seven. Press the COMMAND key to display the first four days of the week. Press the COMMAND key to display the last three days. Select the day of the week to send the test report. Default is Sunday.

3.10

TEST TIME:
0:00 AM

Test Time

Use this option to select the time of day for Test Reports. Select the hour, minute and AM/PM. Default is 0:00 AM.

3.11

CHECKIN: NO YES

Check In

This option displays if the COMM TYPE is NET, 232 or CELL. Check-in reports are a method of supervising the panel for communication with the receiver. For NET the default is YES. For CELL or 232 the default is NO.

CHECKIN:
NO YES RND ADPT

Select RND (Random) for the panel to check-in at random times from 6 to 60 minutes when all areas are disarmed. If any area is armed a check-in is sent every 6 minutes.

Select ADPT (Adaptive) for a backup path to adapt to the check-in programming from this groups primary path if the primary path becomes unavailable. Check-in programming includes Check-in and Fail Time.

CHECKIN MINS: **200**

When YES is selected, enter the number of minutes between check-in reports, from 2 to 240 for NET and 232 or 4 to 240 for CELL, when the panel is armed or disarmed. For CELL or 232 the default is 0. For NET the default is 200.


3.12

FAIL TIME: **240**

Fail Time

This option displays if CHECKIN is set to YES. Entering a FAIL TIME allows the receiver to miss multiple check-ins before logging that the panel is missing. The maximum fail time is 240 minutes. For example, if CHECKIN is 10 and FAIL TIME is 30, the receiver only indicates a Panel Not Responding after 30 minutes. The FAIL TIME must be equal to or greater than the CHECKIN time. Default is 0 for CELL and 232. Default is 240 for NET.

- 3.13** ☐ ENCRYPT ☒ NO YES **Encryption (XR500E only)**
Select Yes to enable encryption for the path currently being programmed. Default is NO.
- 3.14**
 Receiver IP
This option displays only if the Communication Type is NET or CELL. Enter the Receiver IP address where the panel sends network messages. The Receiver IP Address must be unique and cannot be duplicated on the network. Enter all 12 digits and leave out the periods. For example, enter IP address 192.168.0.250 as 192168000250. The periods display automatically.
- 3.15**
 Receiver Port
Enter the receiver port number. Valid range is 1 to 65,535. Default is 2001.
- 3.16**

 First Telephone Number
This option displays only if the Communication Type is DD or CID.
This is the first number the panel dials when sending reports to the receiver. Phone numbers can have two lines of 16 characters each to equal up to 32 characters.
Enter P to program a three-second pause in the dialing sequence. The P character counts as part of the 32 allowable characters.
Enter R for rotary phone function. The R character counts as part of the 32 allowable characters.
Call Waiting: You can place the “* 7 0 P” (Star, Seven, Zero, Pause) in the telephone number first position to cancel Call Waiting. For example, program NET with second line DD and phone number *70P555-1212, and you have NET with Call Waiting cancelled on the second line.
-  **Caution:** A call waiting cancel programmed on a non-call waiting telephone line would prevent communication to the central station.
- 3.17**

 Second Telephone Number
The panel dials the second number when two successive tries using the first number fail. If the panel cannot reach the receiver after two attempts using the second number, it returns to the first number and makes two additional attempts. A total of ten dialing attempts are made using the first and second phone numbers.
Each number can be up to 32 characters in length including any P or R characters entered for pause or rotary connections or call waiting cancel option.
Should all ten attempts fail, the panel continues to attempt sending the message using the next programmed path. If all programmed communication paths fail, the panel clears the communication buffer and makes one communication attempt each hour to send a TRANSMIT FAILED (S87) report to the receiver. Access the User Menu Display Events feature to view the report information not sent to the receiver or download the report with DMP Remote Link™ software.
- 3.18** ☐ ADVANCED? ☒ NO YES **Advanced Programming**
Select Yes to enter the Advanced Programming menu for the communication path currently being programmed.
- 3.19**
 GPRS APN
This option displays when CELL is selected as the Communication Type.
APN (Access Point Name) is the alphanumeric name of the GPRS wireless access point for CELL communication. Default is SECURECOM.

 Selecting a top row key allows entry of a non-SecureCom APN. The APN may have 2 lines of 16 characters each to equal up to 32 characters.

3.20 **Fail Test Hours**

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

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

3.21 **Protocol**

This option displays only when Communication Type is NET.

Select TCP to communicate over the network using TCP protocol. Select UDP to communicate using UDP protocol. Default is TCP.

3.22 **Retry Seconds**

This option displays for NET or 232 Communication Types.

Enter the number of seconds (between 6 and 15) the panel should wait before retrying to send a message to the receiver if an acknowledgment was not received. The panel retries as many times as possible for a period of one minute before sending a network trouble message. For example, if retry time is set to 15, the panel retries four times. The default Retry Time is 6 seconds.

Note: If TCP is enabled, the minimum Retry Time programmed is 6 seconds.

3.23 **Substitution Code**

This option displays when the Communication Type is NET, CELL or 232. The Panel Substitution Code increases the level of security by helping to ensure that the panel sending the message to the receiver has not been substituted by another panel. The default is NO.

Select YES to send a substitution code with every message.

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

3.24 **232 Communication Port**

This option displays when Communication Type is 232.

O	A	B	C
D	E		

This option sets the physical RS-232 port to the on-board connector or one of the DMP Model 461 Interface Adaptor Card slots labeled A, B, C, D, or E. Use slot A if using a 462N Network Interface Card with or without the 461 card.

Enter O to use the on-board connector. Set the XR500 Series panel J23 jumper to R and briefly reset the panel using the J16 jumper to activate RS-232 operation. Default is O (On-board).

3.25 **232 Setup String**

-
-

This option displays when the Communication Type is 232. Enter up to two lines of 16 characters to equal up to 32 characters for the destination address that may include an IP address. Example: AT#UCXXX.XXX.XXX.XXX#PPPPP where X is the IP address and P is the port number.

3.26 **893A**

This option displays when the Communication Type is DD or CID.

The 893A option allows reports to be sent to the receiver on a second DD line using the 893A module. Default is No.

When using this option, Test Report messages (S07 Automatic Recall Test or S88 Unrestored System Recall Test) will be sent to the receiver at the frequency programmed in Test Frequency, alternating between the first and second phone line. For example, a DD path with an 893A module set for daily test report frequency will send a test report through phone line 1 one day and phone line 2 the next day.

3.27 ALARM SWITCH: 1 **Alarm Switch**

This prompt displays for DD or CID Communication Types.

Enter the number of attempts to send an alarm message before switching to the next path. Range is from 1 to 10. All non-alarm messages will be sent for 10 attempts on the dialer before a switch is initiated. If the path immediately following this channel is not a backup path, this option has no effect. Default is 1.

3.28 DUPLICATE ALARMS **Duplicate Alarms**

NO YES

This prompt displays for BACKUP paths. If Yes is selected, the current backup path duplicates all alarms occurring on its group primary path. Default is No.

3.29 ALARM YES **Alarm Reports**

NO YES FIRE

This prompt displays when the Path Type is Primary. All backup paths within the group follow the same programming for Alarm Reports. Default is Yes.

When YES is selected, Zone Alarm, Bypass, Reset and Restore reports are sent to the receiver for all zone types.

When FIRE is selected, Zone Alarm, Bypass, Reset and Restore reports are sent for Fire, Fire Verify and Supervisory Zones.

3.30 SPV/TRBL YES **Supervisory/Trouble Reports**

NO YES FIRE

This prompt displays when the Path Type is Primary. All backup paths within the group follow the same programming for Supervisory/Trouble Reports. Default is Yes.

When YES is selected, Zone Trouble, Low Battery, Missing, Fault, Restorals from trouble, System Troubles (A/C, Phone Line, Panel Battery) and System Restoral reports are sent for all zone types.

When FIRE is selected, Zone Trouble, Low Battery, Missing, Fault, Restorals from trouble, System Troubles (A/C, Phone Line, Panel Battery) and System Restoral reports are sent for Fire, Fire Verify, and Supervisory Zones.

Serviceman reports are sent regardless of the selection made for Supervisory/Trouble reports.

3.31 O/C USER NO YES **Opening/Closing and User Reports**

This prompt displays when the Path Type is Primary. All backup paths within the group follow the same programming for Opening/Closing and User Reports. Default is Yes.

When YES is selected, the following reports by user are sent to this receiver.

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

3.32 DOOR ACS YES **Door Access Report**

NO YES DENY

This prompt displays when the Path Type is Primary. All backup paths within the group follow the same programming for Door Access Reports. Default is Yes.

Select YES to enable Door Access Granted and Denied reports to this receiver whenever a door access is granted to a user. The Door Access Granted report is only sent if the keypad number has also been selected in Access Keypads under the **SYSTEM REPORTS** programming.

Note: To minimize cellular data, Door Access Granted reports are not sent on a CELL path type.

Select DENY to enable Door Access Denied reports to this receiver when a door access denied to a user.

3.33 SEND COMM TRBL: NO YES **Send Communication Trouble**

This prompt displays for each path and determines if and how communication trouble on the path is sent to the receiver. A trouble message indicates both the path number and communication type that failed. Default is Yes.

- 14.5** **BURGLARY ZONES:** **Burglary Zones**
 Specifies the keypad addresses (1 through 16) where all burglary zone alarms and troubles display. Burglary zones include Night, Day, and Exit type zones. Burglary zone troubles remain in the list until the zone restores. All keypads are selected by default.
 For zone alarms, only the last burglary zone tripped remains in the list. The alarm remains in the list until another burglary zone goes into alarm, any area of the system is disarmed, or 10 minutes elapse without an alarm. This ensures that if a burglary is in progress the last zone tripped remains in the list even if the zone is restored.
 The keypad buzzer sounds for one second on burglary alarms.
 When using LCD Keypads, the panel provides distinct speaker tones from the keypad for Burglary:
On - Burglary zone alarm and Bell Output or Burglary Bell Output is ON.
Off - Alarm Silence.
 You can further define which keypad address shows a Burglary Zone event by entering that area number in the Display Areas menu during Device Setup.
- 14.6** **SPRVISORY ZONES:** **Supervisory Zones**
 Specifies the keypad addresses (1 through 16) where all supervisory zone alarms and troubles display. Supervisory zones are entered in the status list and sound the keypad buzzer until a valid user code is entered at any keypad address. If a trouble condition remains in the display, the buzzer sounds at 10:00 am daily until the supervisory trouble is cleared from the Status List.
- 14.7** **PANIC ZONES:** **Panic Zones**
 Specifies the keypad addresses (1 through 16) where all panic zone alarms and troubles display. The name of the zone remains in the list until the zone restores. The keypad buzzer does not sound for panic alarms or troubles.
- 14.8** **EMERGENCY ZONES:** **Emergency Zones**
 Specifies the keypad addresses (1 through 16) where all emergency zone alarms and troubles display. The name of the zone remains in the list until the zone restores. The keypad buzzer does not sound for emergency alarms or troubles.
- 14.9** **AUX 1 ZONES:** **Auxiliary 1 Zones**
 Specifies the keypad addresses (1 through 16) where all Auxiliary 1 zone alarms and troubles display. The name of the zone remains in the list until the zone restores. The keypad buzzer does not sound for Auxiliary 1 alarms or troubles.
 You can further define which keypad address shows an Auxiliary 1 Zone event by entering that area number in the Display Areas menu during Device Setup.
- 14.10** **AUX 2 ZONES:** **Auxiliary 2 Zones**
 Specifies the keypad addresses (1 through 16) where all Auxiliary 2 zone alarms and troubles display. The name of the zone remains in the list until the zone restores. The keypad buzzer does not sound for Auxiliary 2 alarms or troubles.
 You can further define which keypad address shows an Auxiliary 2 Zone event by entering that area number in the Display Areas menu during Device Setup.
- 14.11** **COMM PATH TRBL:** **Communication Trouble**
 ALL **NO** YES
 Specifies when communication troubles are displayed on keypads that are programmed to display System Monitor Troubles. Default is NO.
 Select YES to display communication trouble when any communication path fails.
 Select ALL to display communication trouble only when all paths have failed.

PC Log Reports

16.1

PC LOG REPORTS

PC Log Reports

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

Note: The network connection that sends PC Log Reports is not monitored for network trouble. The PC Log Reports option should NOT replace the primary communication method or act as a backup communication method.

If there is trouble with the network connection, the panel continues to attempt to send the PC Log Reports until the connection is reestablished. The panel then sends the reports. A Network Trouble message is **NOT** sent if the connection is lost since this report tool is not designed to be monitored by a receiver. The PC Log Reports have the lowest priority of panel reports sent.

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

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

16.2

COMM TYPE: NONE

Communication Type

NONE NET 232

Select the Communication Type to send the PC Log Reports. Default is NONE.

16.3

NET IP ADDRESS

Net IP Address

This option displays when the Communication Type for PC Log Reports is NET. Enter the IP address containing up to 16 characters. The Net IP Address must be unique and cannot be duplicated on the network. Enter all 12 digits and leave out the periods. For example, enter IP address 192.168.0.250 as 192168000250. The periods display automatically.

16.4

NET PORT 2001

Net Port

This option displays when Communication Type for PC Log Reports is Net. Enter the Port number. Valid numbers are from 0 to 65535. Default is 2001.

16.5

232 COMM PORT: 0

232 Communication Port

This option displays when Communication Type for PC Log Reports is 232. To enable PC Log Reports, select either the on-board connector (O) or select A, B, C, D or E for the corresponding slot in use on the DMP Model 462N Network Interface card. The slots are labeled from left to right, beginning with A. Default is O.

Set the XR500 Series panel J23 jumper to R and briefly reset the panel using the J16 jumper to activate RS-232 operation.

16.6

232 SETUP:

232 Setup

This option displays when Communication Type for PC Log Reports is 232. Enter up to 32 characters.

16.7

ARM/DIS NO YES

Arm and Disarm Reports

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

16.8

ZONE NO YES

Zone Reports

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

16.9

USR CMDS NO YES

User Command Reports

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

COMMUNICATION

Transmission Delay _ _ (0, 15 to 45 seconds, default = 30)

Name _____ Account Number _____ Date _____
Address _____ City _____ State _____ Zip _____

ADVANCED COMMUNICATION

[illegible]