COMPLIANCE LISTING GUIDE

XR SERIES

DIGITAL MONITORING PRODUCTS, INC.

MODEL XR150/XR550 SERIES
COMPLIANCE GUIDE

FCC NOTICE

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

Reorient the receiving antenna

Relocate the computer with respect to the receiver

Move the computer away from the receiver

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

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

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

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

Stock No. 004-000-00345-4

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This information is subject to change without notice. This information is subject to change without notice.

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BEFORE YOU BEGIN

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

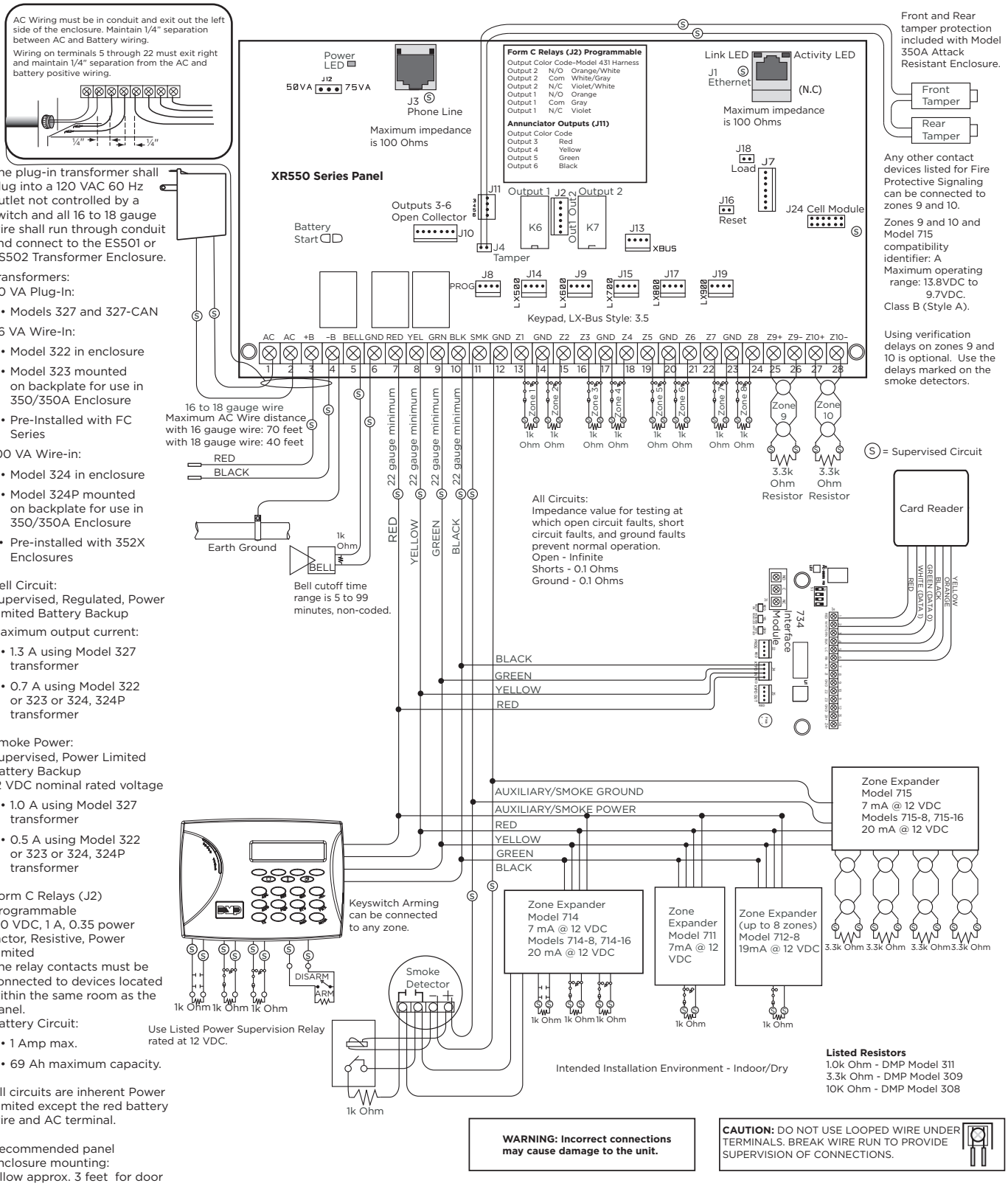
This guide covers all the requirements for the following panels:

- XR150 Series
- XR150FC Series
- XR550 Series
- XR550FC Series
- Statements regarding the XR150/XR550 Series also apply to the XR350 Series unless otherwise indicated.

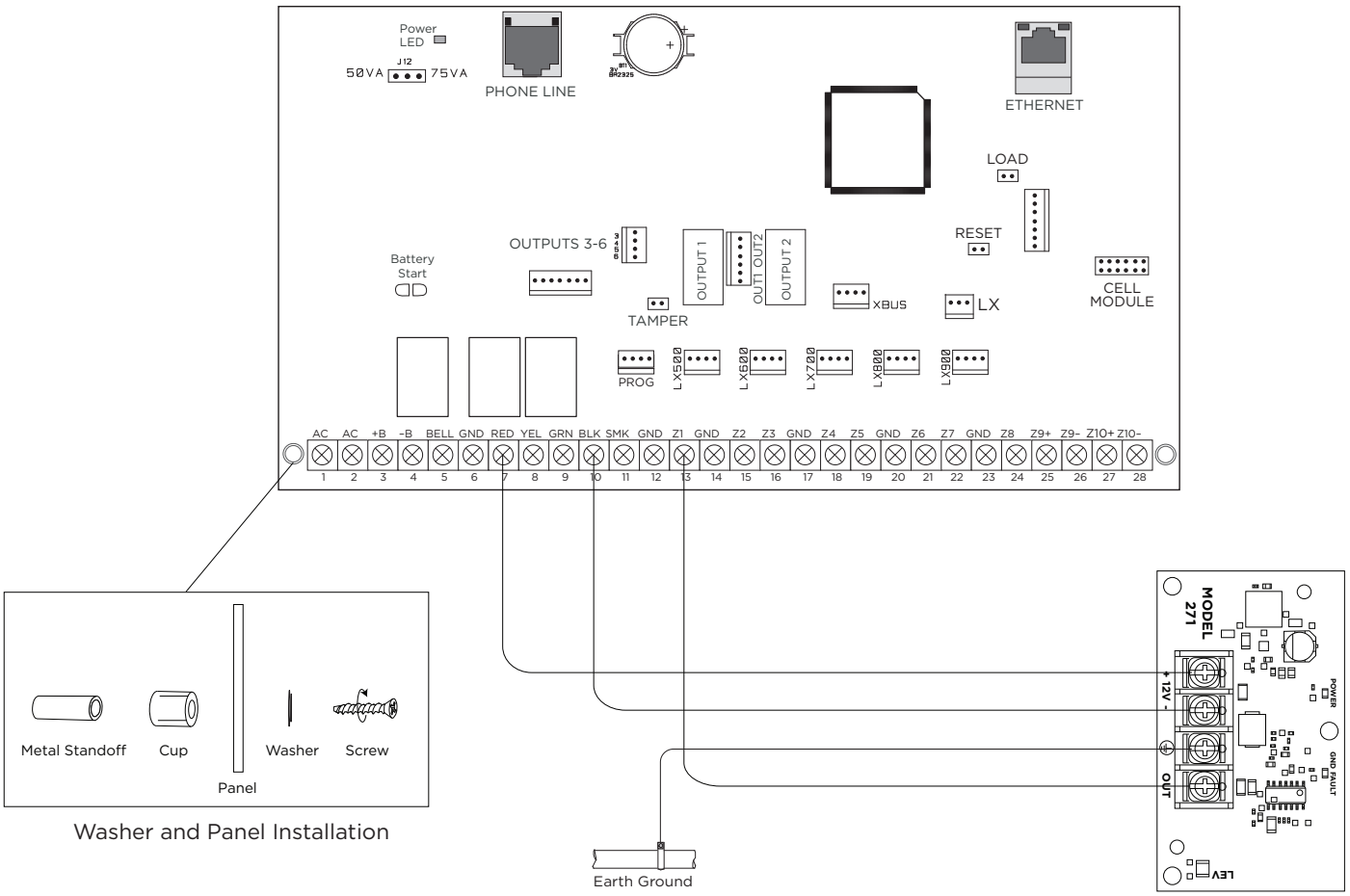
WIRING DIAGRAMS

System Diagrams

The following pages show examples for wiring requirements.



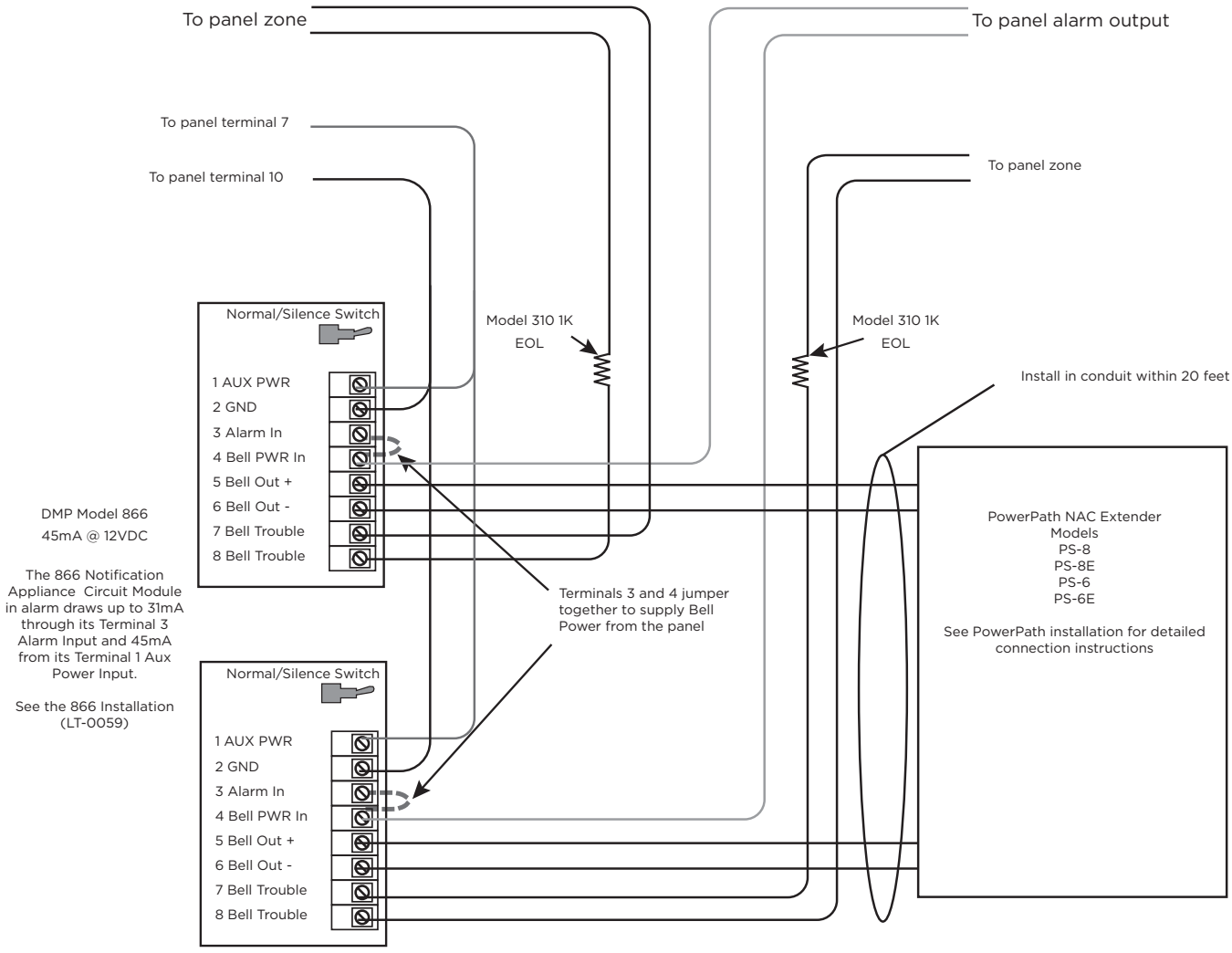
271 Ground Fault Detection Module



Washer and Panel Installation

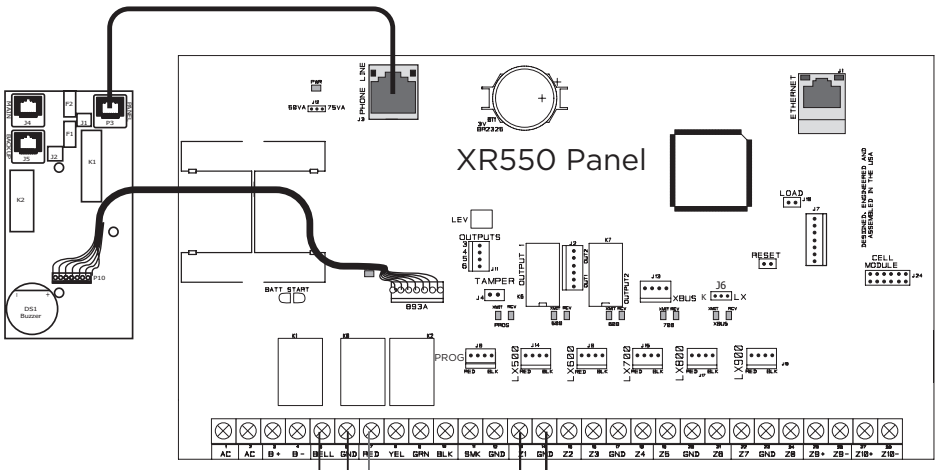
Note: Nylon washers are required for 271 installation to isolate the control panel from earth ground for proper operation

866 with NAC Extender



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

866 Class B Style W using Single Notification Appliance



Regulated 12 VDC

DMP Model 866
45mA @ 12VDC

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

Normal/Silence Switch

Model 310 1K EOL

1 AUX PWR
2 GND
3 Alarm In
4 Bell PWR In
5 Bell Out +
6 Bell Out -
7 Bell Trouble
8 Bell Trouble

Terminals 3 and 4 jumper together to supply Bell Power from the panel

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

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

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

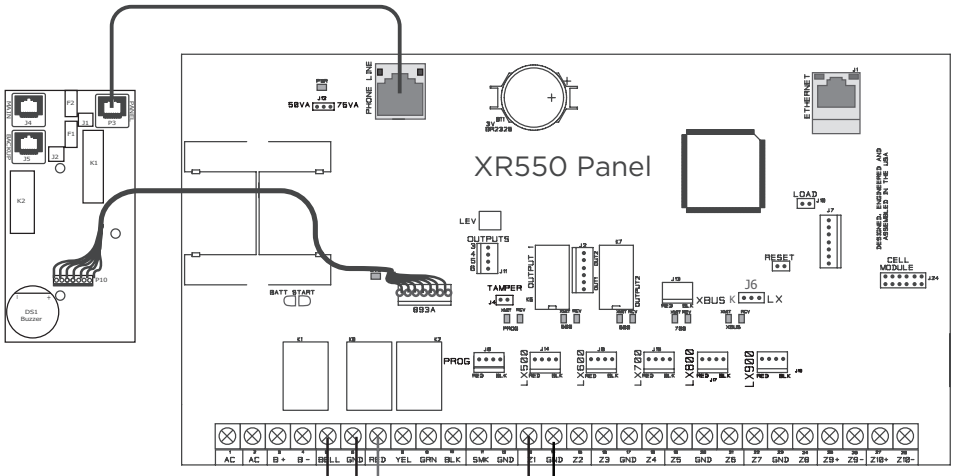
Model 308 10K EOL

Listed, Polarized Notification Appliance

See the Notification Appliance section for a list of appliances.

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

866 Class B Style W Multiple Notification Appliance Circuit



Regulated 12VDC

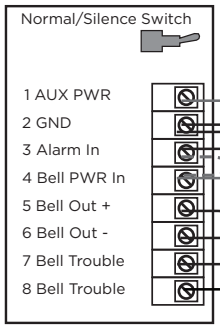
Auxiliary Power Supply must be regulated, power limited, and listed for Fire Protective Signaling Service. Power Supplies must have battery backup.

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

DMP Model 866

45mA @ 12VDC

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

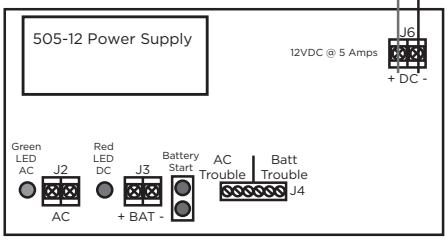


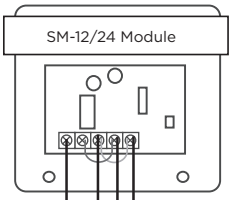
Model 310 1K EOL

Must be installed in conduit within 20 feet.

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

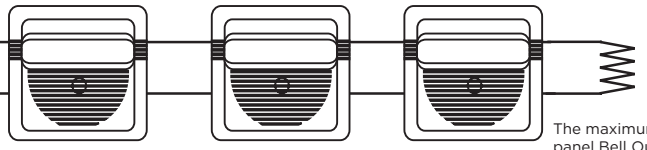
The Bell Output programming for Fire type zones must be set to Steady.





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

Sync module required when using multiple notification appliances



Model 308 10K EOL

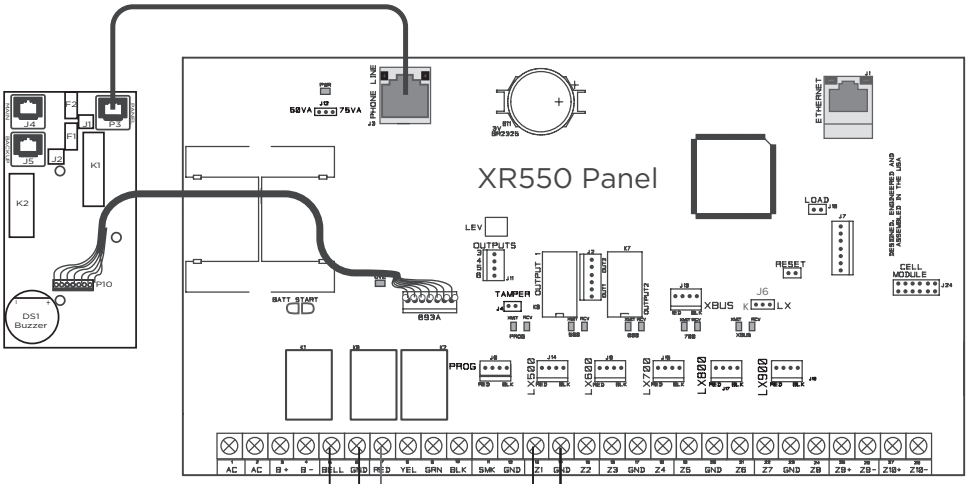
The maximum voltage drop between the panel Bell Output and the Model 308 is 1VDC when a separate power supply is not used.

Polarized Notification Appliances

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

See the Notification Appliance section for a list of appliances.

865 Class B Style W using Single Notification Appliance



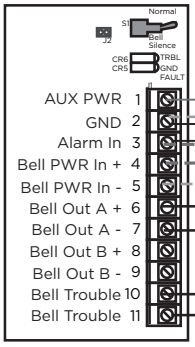
Regulated
12VDC

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

Model 310 1K EOL

DMP Model 865
26mA @ 12VDC

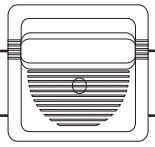
The Model 865 Notification Appliance Circuit Module in alarm draws up to 59mA through its Terminal 3 Alarm Input and 26mA from the Terminal 1 Aux Power Input.



Terminals 3 and 4 jumper together to supply Bell Power from the panel.

See the 865 Installation LT-0179

Model 308
10K EOL



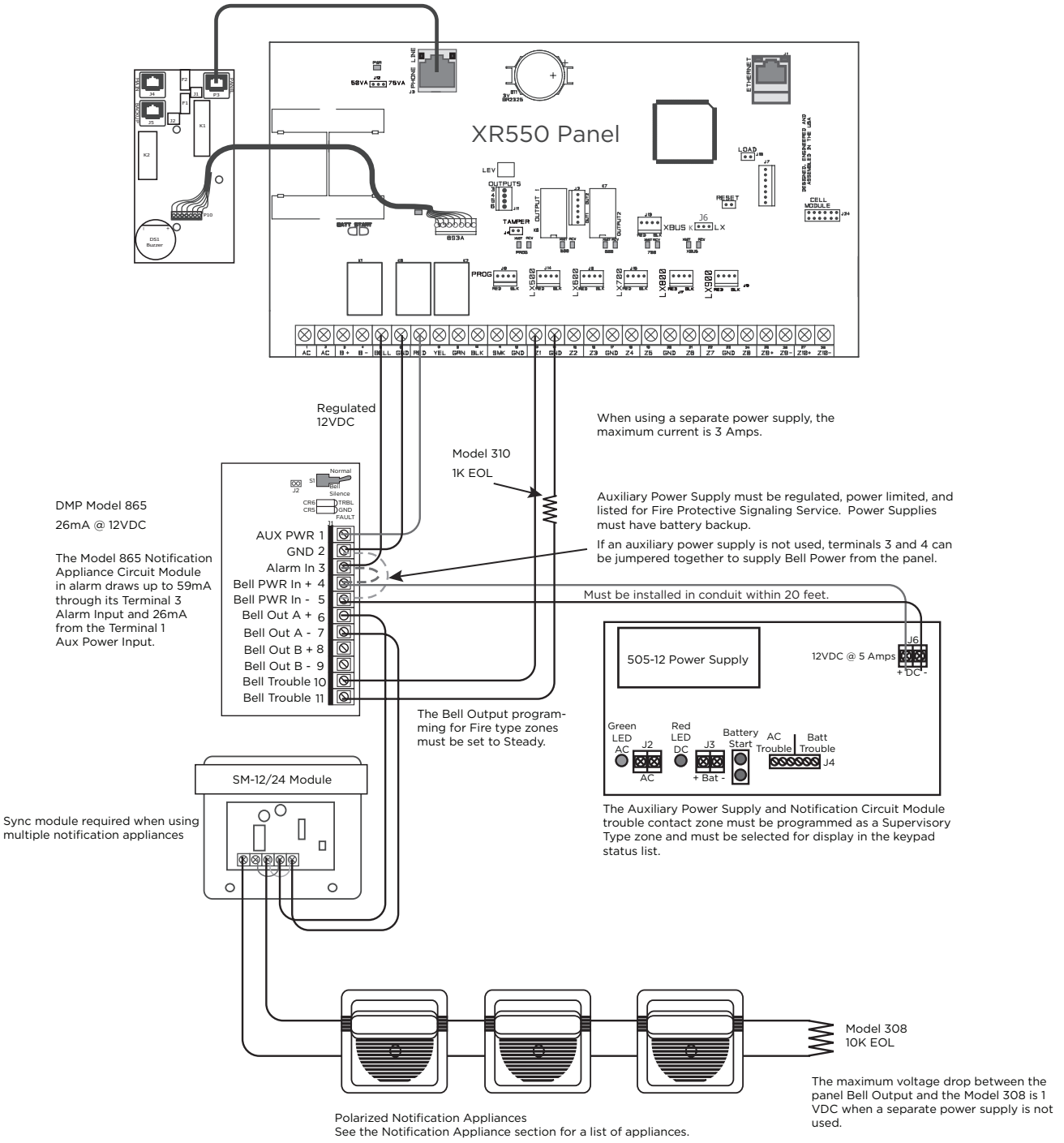
The maximum voltage drop between the panel Bell Output and the Model 308 is 1VDC when a separate power supply is not used.

Listed Polarized Notification Appliance

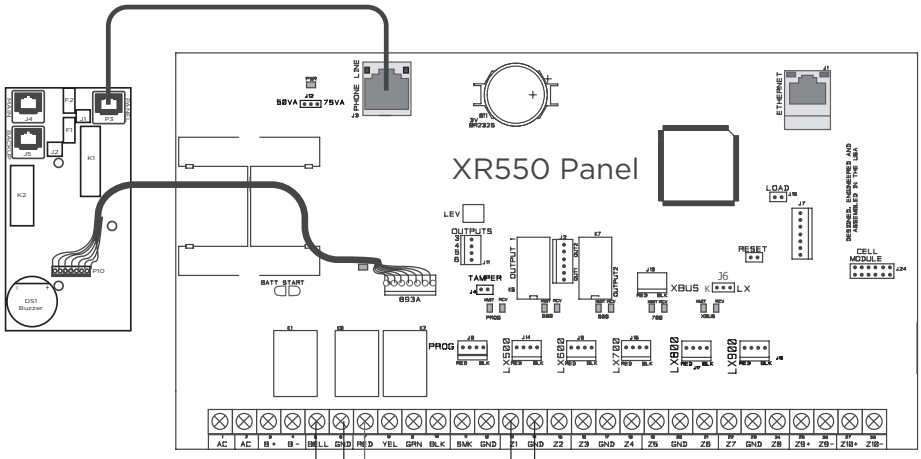
See the Notification Appliance section for a list of appliances.

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

865 Class B Style W Multiple Notification Appliance Circuit



865 Class A Style X using Single Notification Appliance

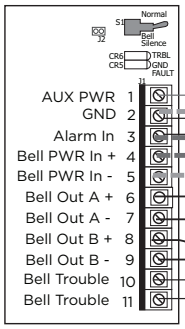


Regulated
12VDC

Model 310 1K EOL

DMP Model 865
26mA @ 12VDC

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



Terminals 3 and 4 jumper together to supply Bell Power from the panel

Terminals 2 and 5 jumper together to provide Ground from the panel

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

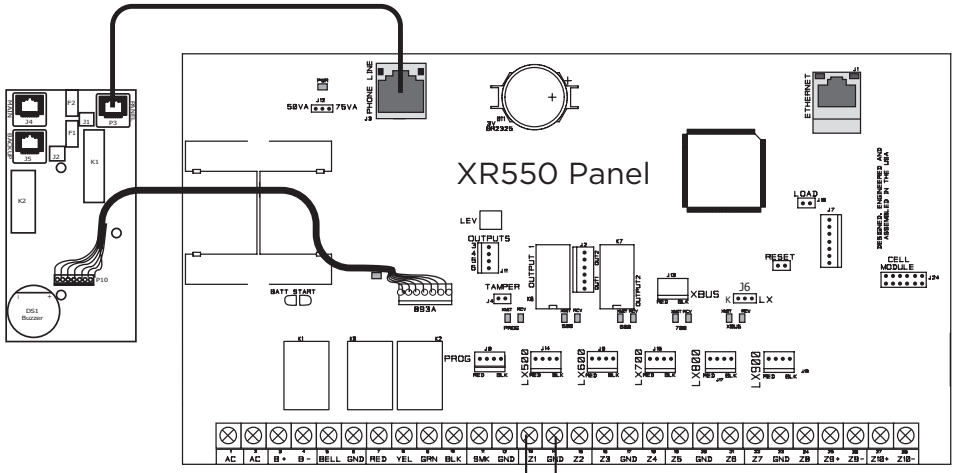
The Bell Output programming for Fire type zones must be set to Temporal

Listed, Polarized
Notification Appliance

See the Notification Appliance section for a list of appliances

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

867 Class B Style W using Single Notification Appliance



DMP Model 867
30mA @ 12VDC

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

Normal/Silence Switch
Ground Fault LED
Bell Trouble LED
Bell In + 1
Bell In - 2
Bell Out + 3
Bell Out - 4
Bell Trouble 5
Bell Trouble 6
PWR Mon. 7
Mon. RTN 8
Bell Relay Address
Supervisory Address
TENS ONES
→ Bell Ring Style (Temporal)
→ Power Supply Monitor LED
→ Data LED

LX-Bus Wiring

Model 310 1K EOL

See the 867 Installation LT-0178

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

Must be installed in conduit within 20 feet.

505-12 Power Supply
J6
12VDC @ 5 Amps
+ DC -
Green LED AC
J2
AC
Red LED DC
J3
+ BAT -
Battery Start
AC Trouble
Batt Trouble
J4

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

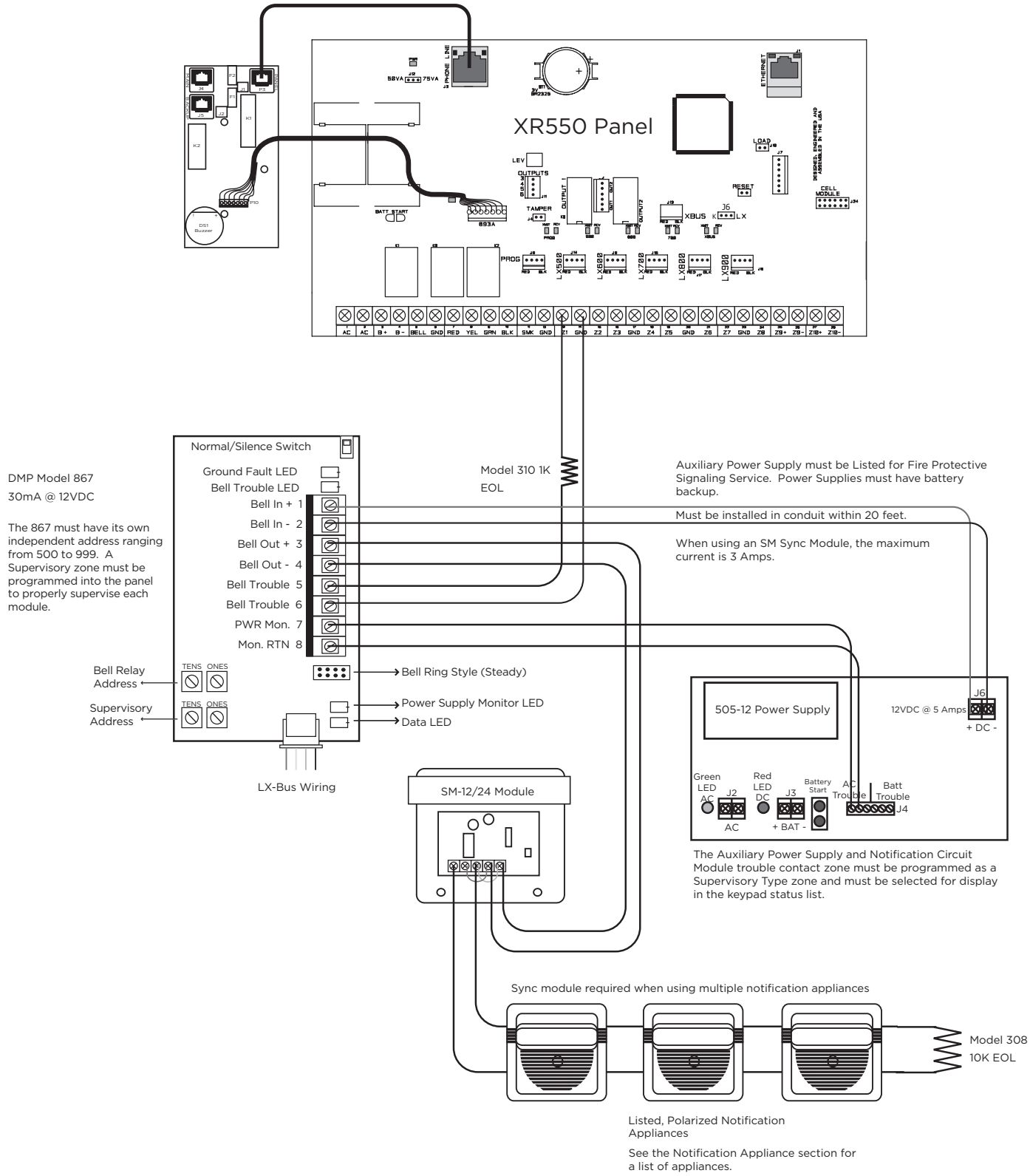
Model 308
10K EOL

Listed, Polarized Notification Appliances

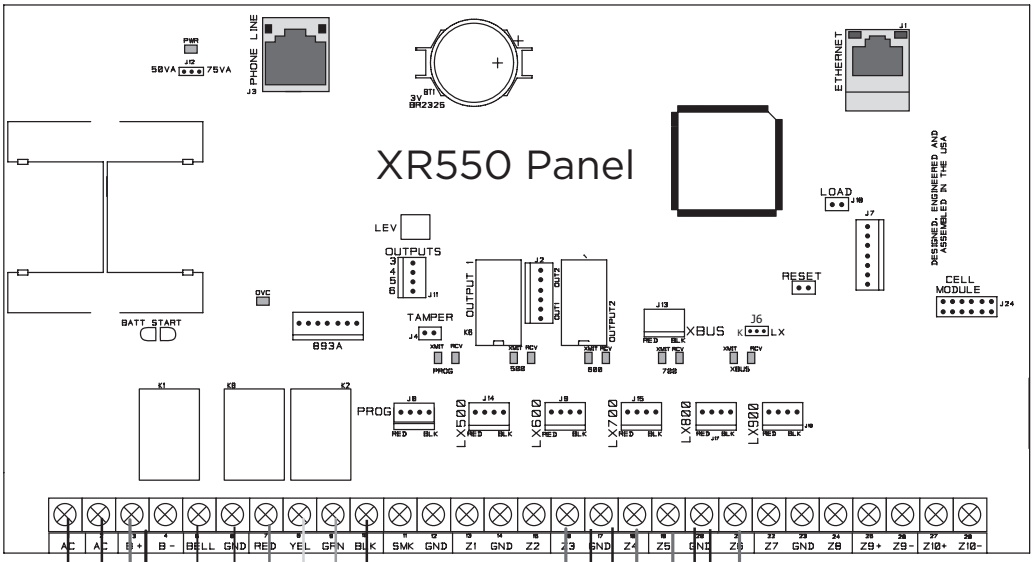
See the Notification Appliance section for a list of appliances.

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

867 Class B Style W Multiple Notification Appliance Circuit



Panel Slave Communicator for FACP using 630F Annunciator



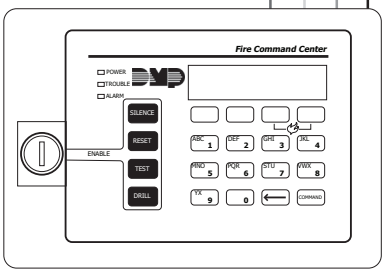
To 322/323/324/324P transformer Must be connected to same circuit as FACP

Standby Batteries

Model 311 1K EOL

Program Bell Options fire type as None.

Must be installed in conduit and located within 20 feet.



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

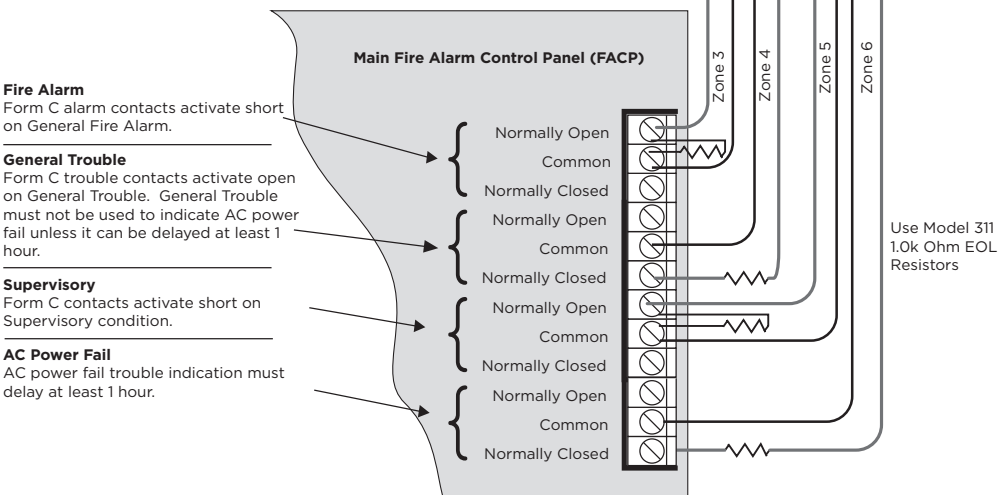
630F Annunciator

Program for Fire Protective Signaling communication to the Central Station.

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

Program General Trouble zone as type FI.

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



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

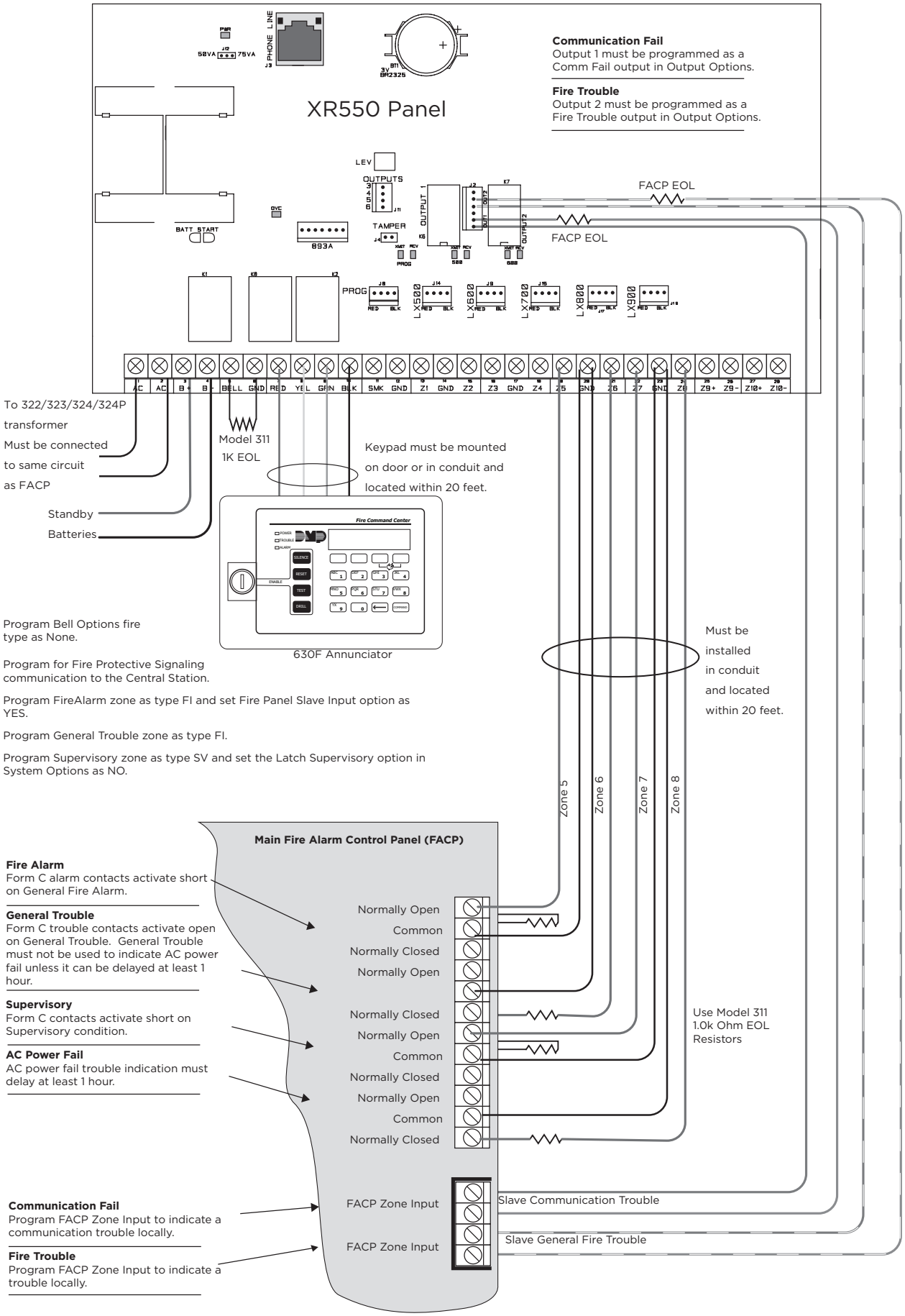
General Trouble
Form C trouble contacts activate open on General Trouble. General Trouble must not be used to indicate AC power fail unless it can be delayed at least 1 hour.

Supervisory
Form C contacts activate short on Supervisory condition.

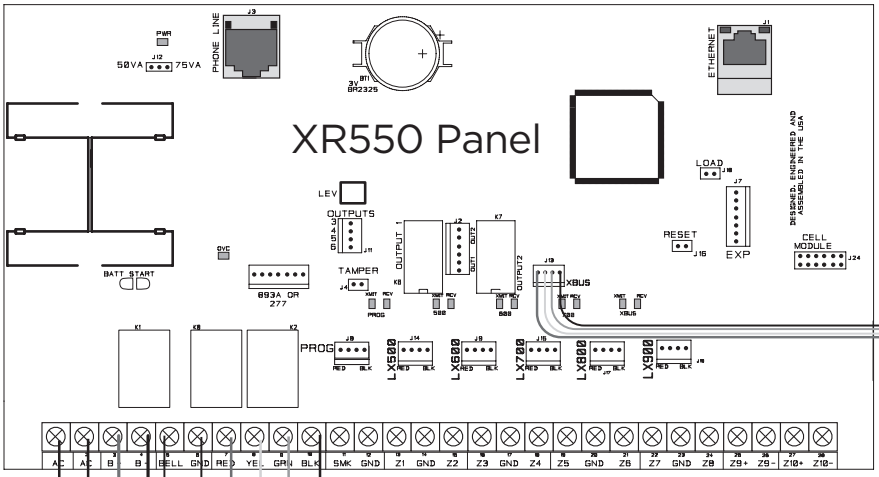
AC Power Fail
AC power fail trouble indication must delay at least 1 hour.

Use Model 311 1.0k Ohm EOL Resistors

Panel Slave Communicator for FACP using Outputs



Panel Slave Communicator for FACP using Wireless Transmitters



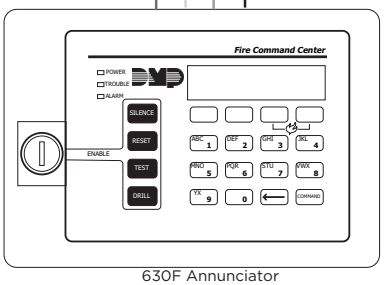
Program Bell Options fire type as None.

Model 311
1K EOL

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

Standby Batteries

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



630F Annunciator

1100X or 1100XH Wireless Receiver

Optional 1100R Wireless Repeater

The 1103 internal contact (magnet) cannot be used in this installation

The 1103 transmitters must be programmed for 3-minute supervision time.

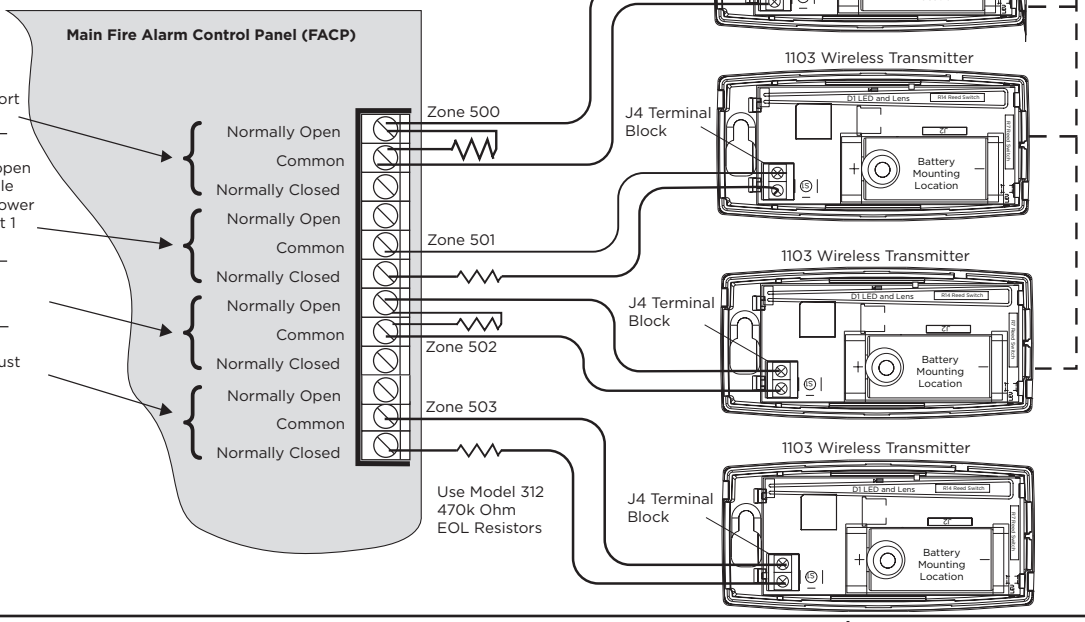
The 1103 must be installed within 3' of the initiating device when not visible after installation, such as above a ceiling or within a wall. When the 1103 is visible after installation and is seven feet or lower from the floor, it must be installed next to the initiating device. All wiring must be inside the wall.

Program for Fire Protective Signaling communication to the Central Station.

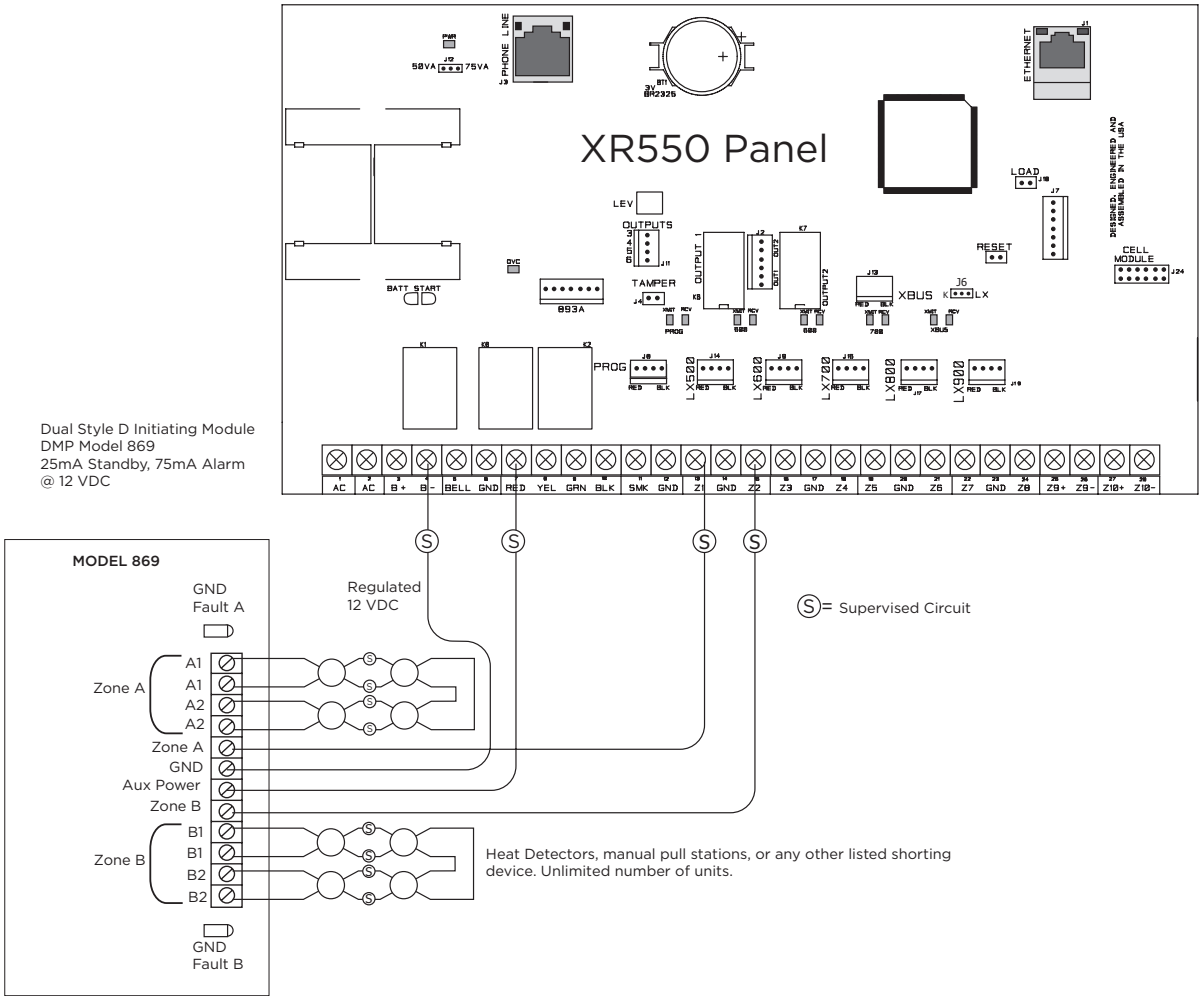
Program Fire Alarm zone as type FI and set Fire Panel Slave Input option as YES.

Program General Trouble zone as type FI.

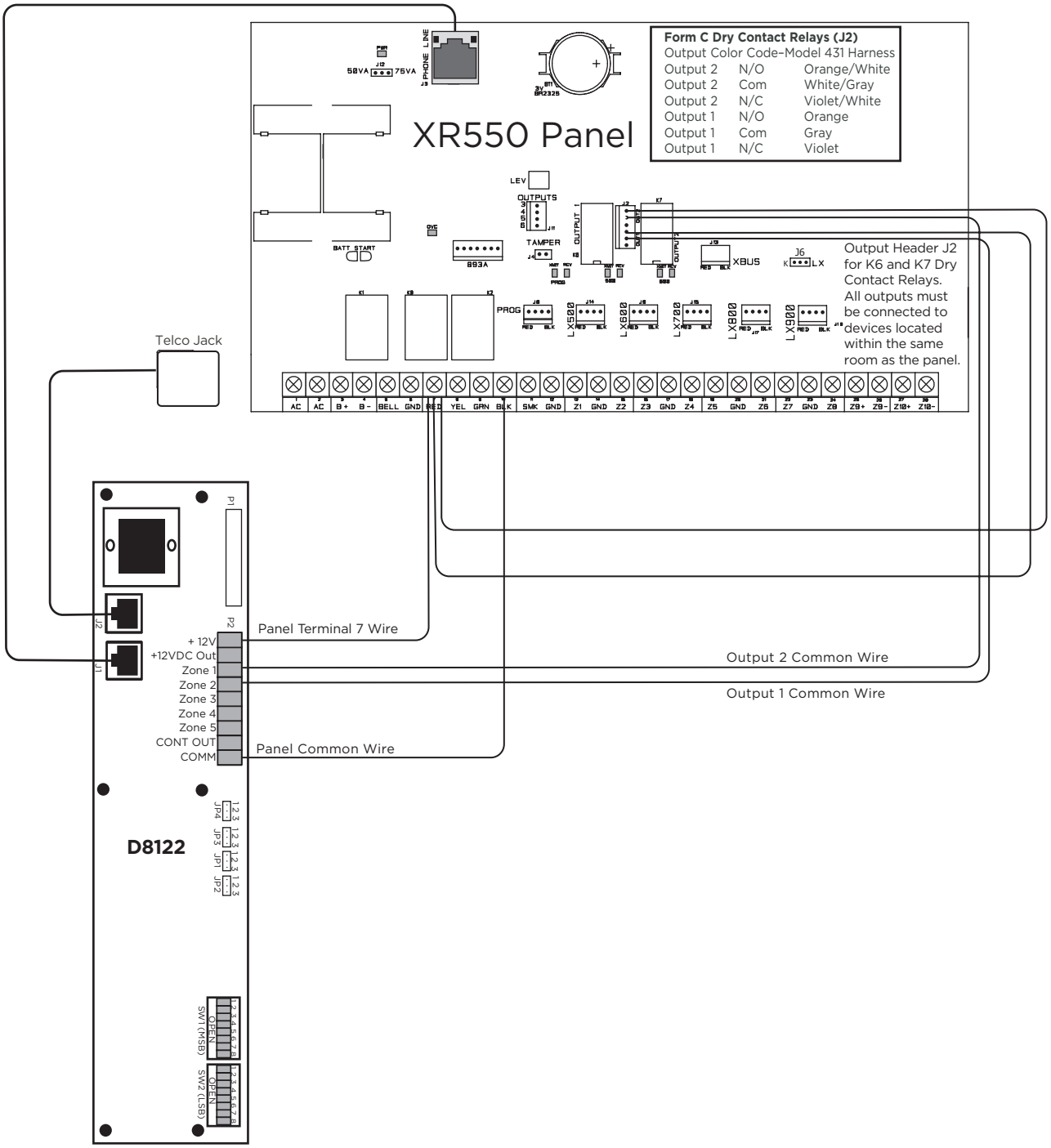
Program Supervisory zone as type SV and set the Latch Supervisory option in System Options as NO.



Dual Style D Zone Module Installation



Derived Channel Installation Using Bosch D8122

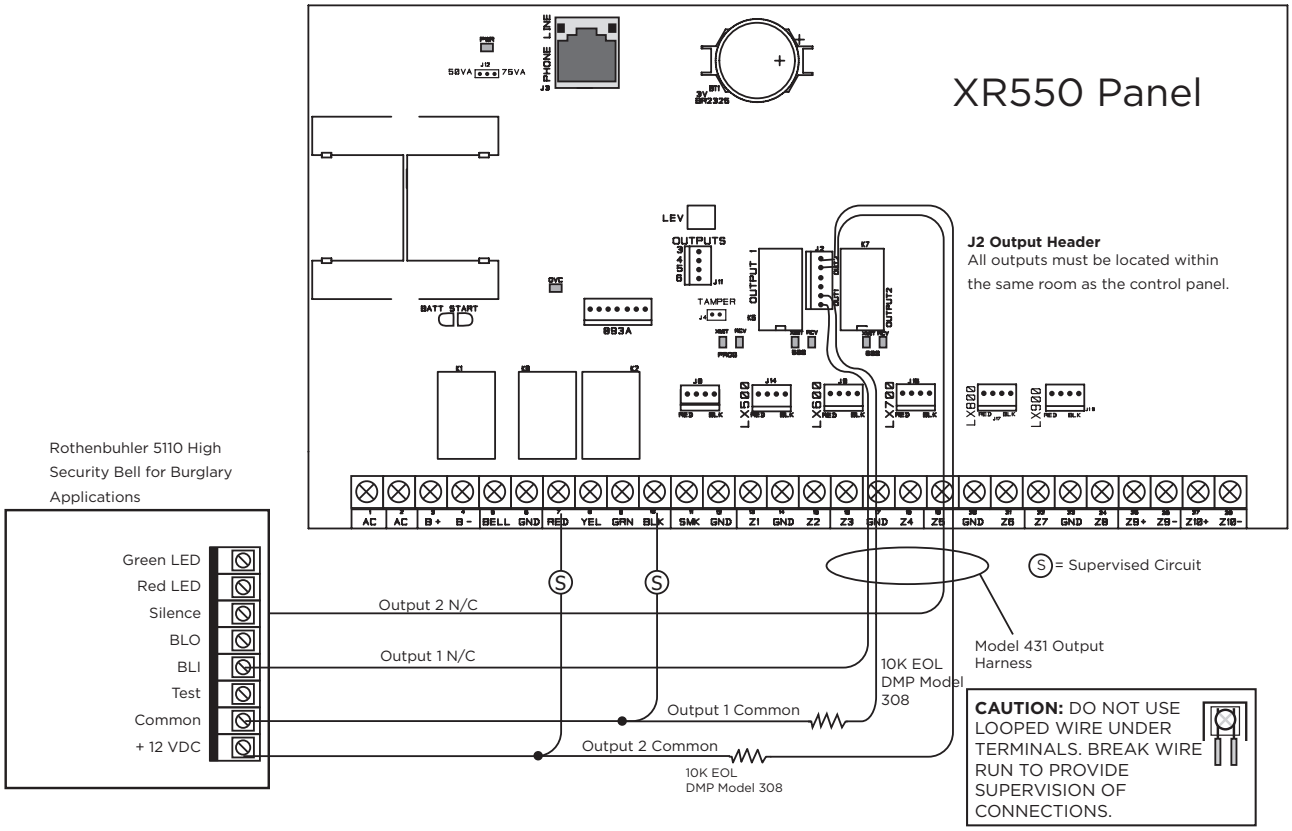


Interfacing D8122 to the XR150/XR550 Series Panels

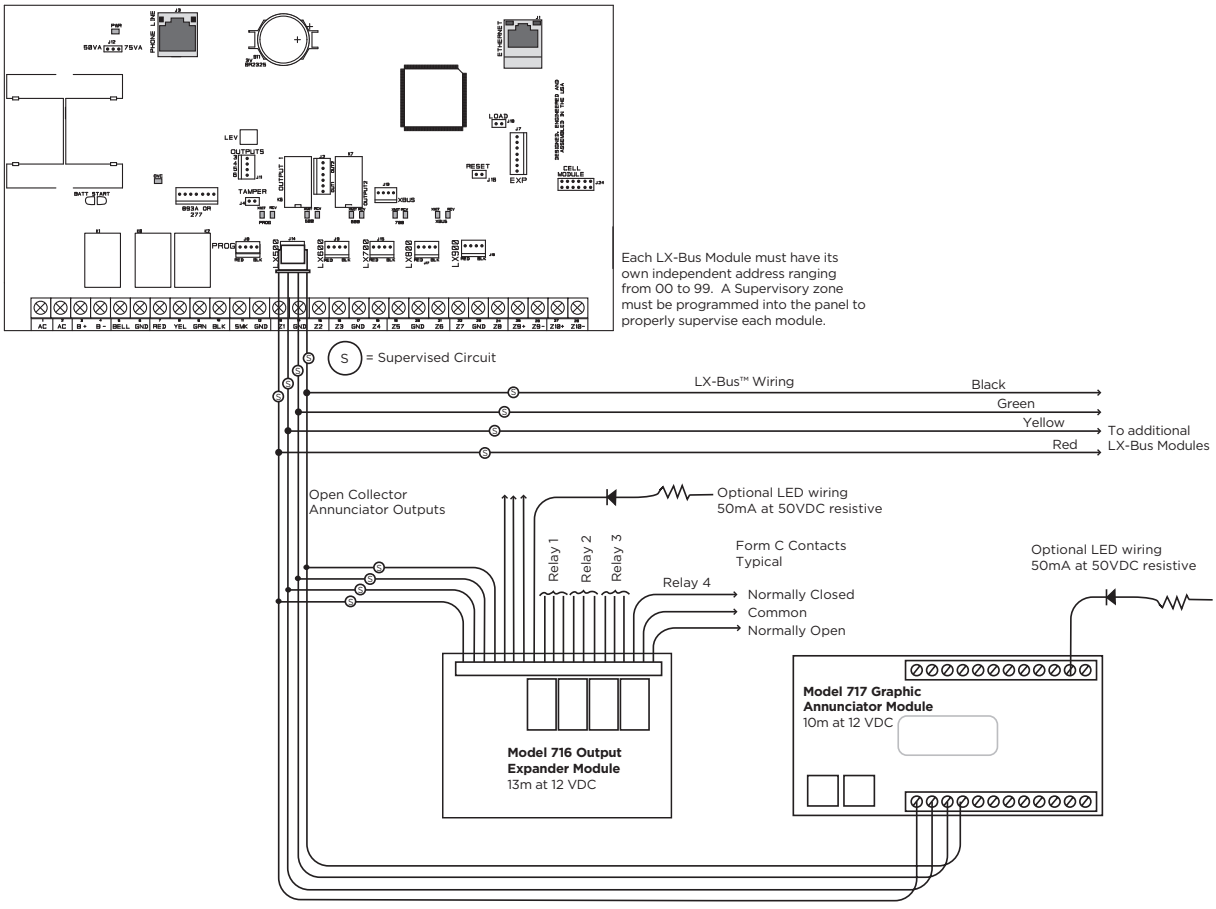
The D8122 may only be used in conjunction with telephone systems that support Derived Channel network. For installation instructions, see the Derived Channel STUD8121A/D8122 Operation and Installation Guide. The module is intended for Burglary only applications.

- For Standard Line Security applications, the panel must be installed and programmed to meet burglary alarm system requirements.
- The panel must be installed and programmed for reporting all alarm conditions through the integral DACT or network connection to the same central station that monitors the D8122.
- The D8122 must be installed in the same enclosure as the XR150/XR550 Series panel using the supplied mounting hardware. Refer to the STUD8121A/D8122 Operation and Installation Guide.
- Derived Channel Communication is not applicable for ULC Canadian Installations.

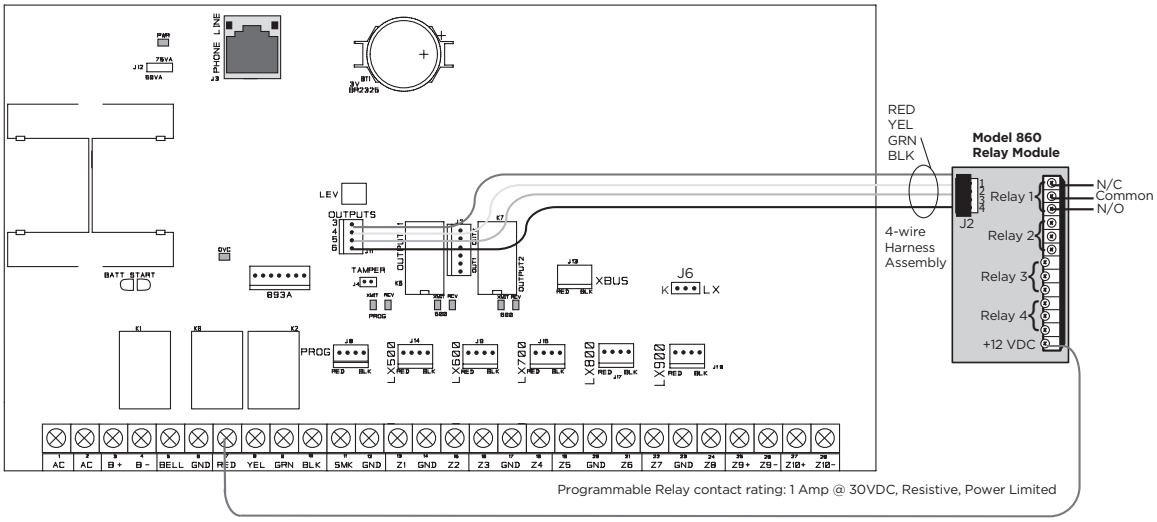
Rothenbuhler 5110 High Security Bell Wiring



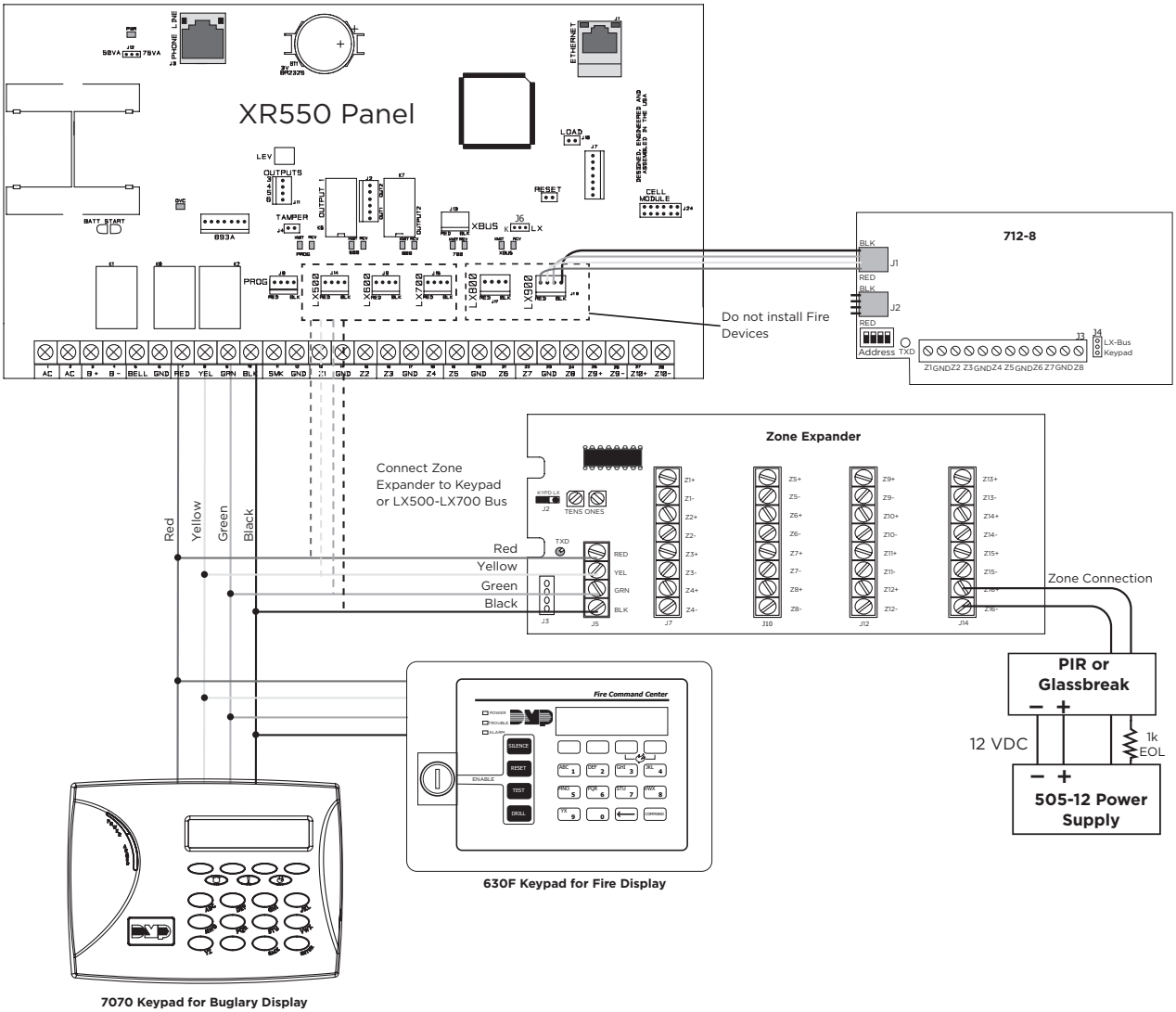
LX-Bus™ Module Connection



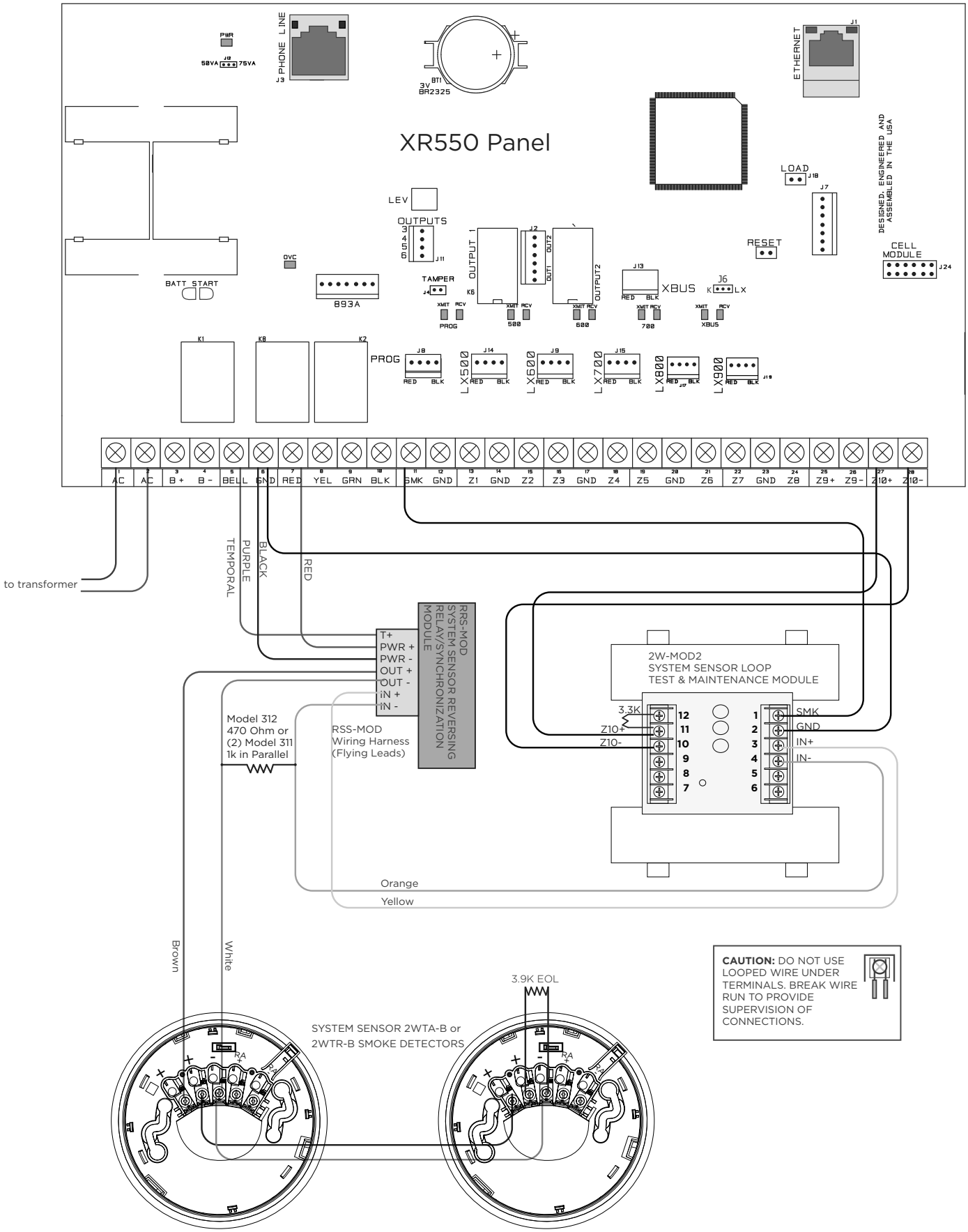
Model 860 Relay Module Connection



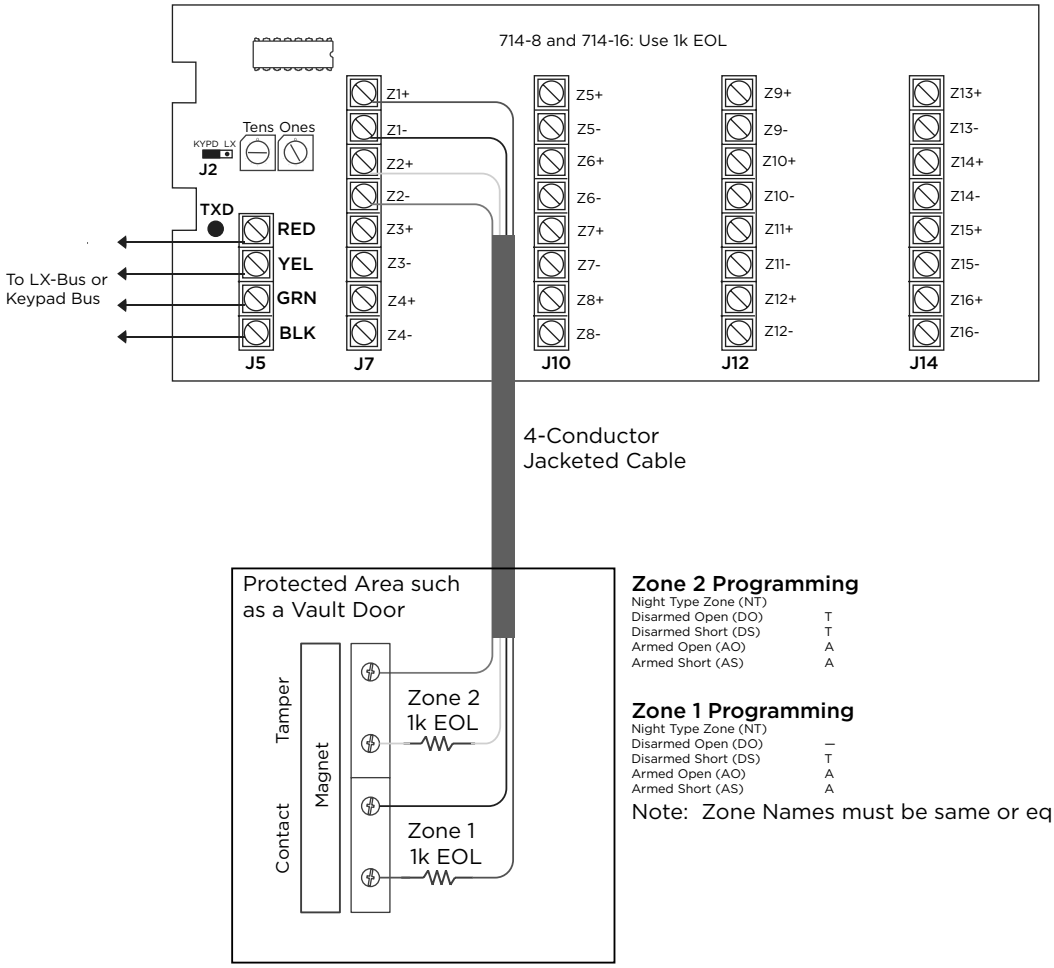
Combination Systems using Powered Burglary Devices



System Sensor 2-Wire Smoke Detectors



Canadian Dual Zone Protection



Zone 2 Programming

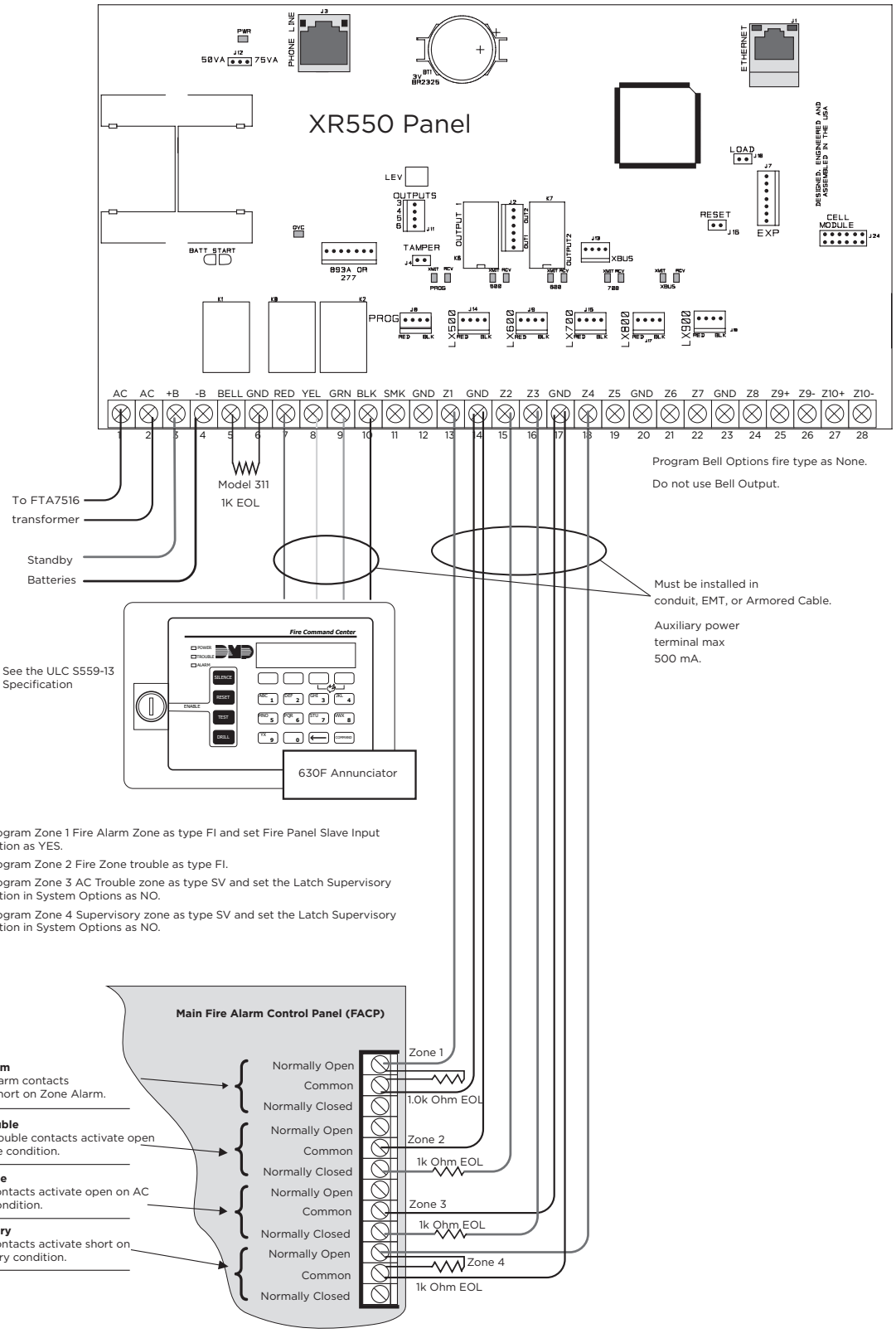
Night Type Zone (NT)	
Disarmed Open (DO)	T
Disarmed Short (DS)	T
Armed Open (AO)	A
Armed Short (AS)	A

Zone 1 Programming

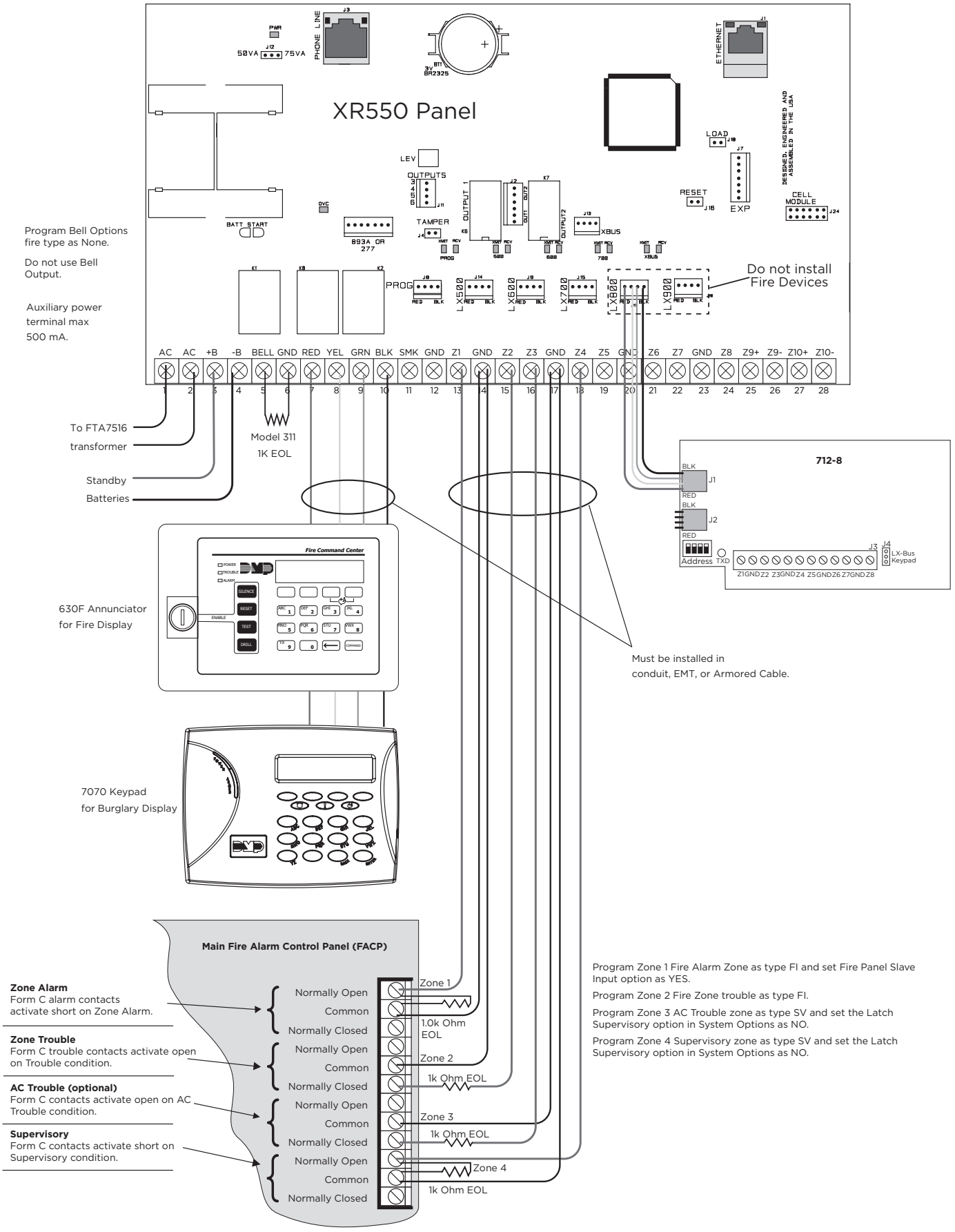
Night Type Zone (NT)	
Disarmed Open (DO)	–
Disarmed Short (DS)	T
Armed Open (AO)	A
Armed Short (AS)	A

Note: Zone Names must be same or equivalent

Canadian Fire Communicator for FACP



Combination S304 and S559 System



Program Zone 1 Fire Alarm Zone as type FI and set Fire Panel Slave Input option as YES.

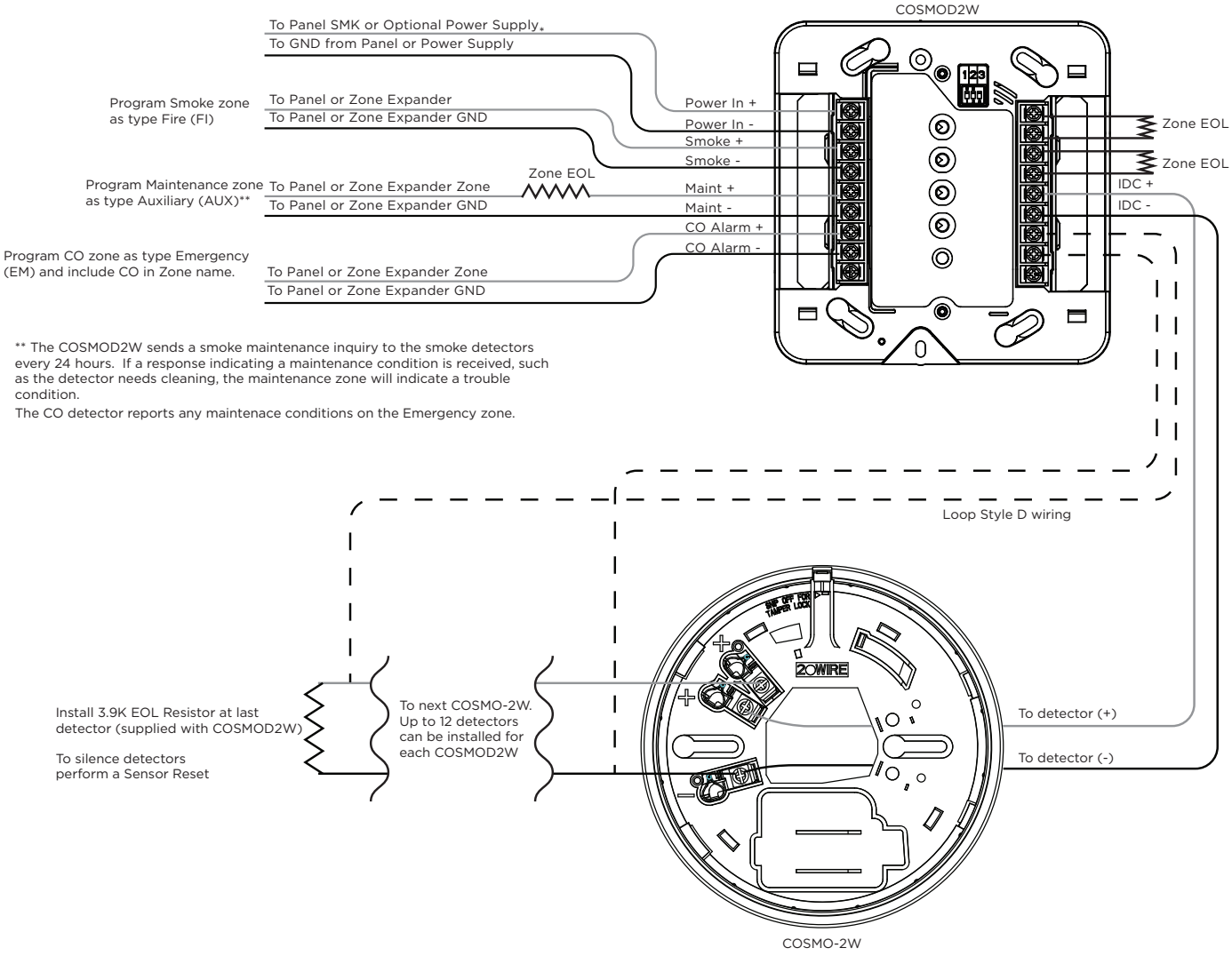
Program Zone 2 Fire Zone trouble as type FI.

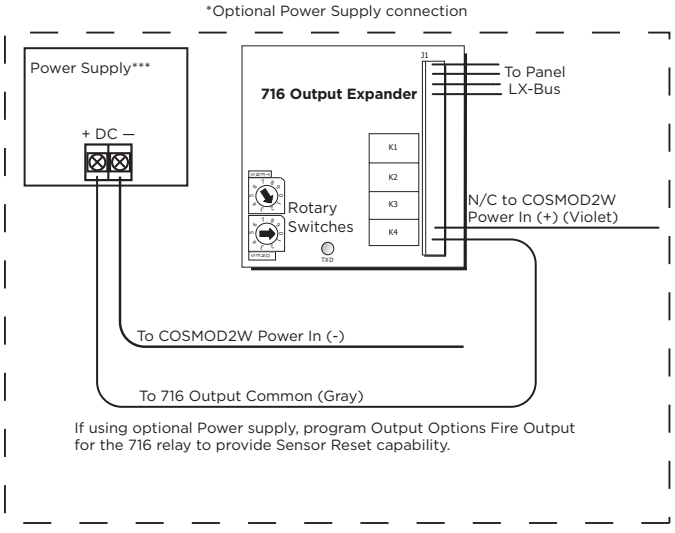
Program Zone 3 AC Trouble zone as type SV and set the Latch Supervisory option in System Options as NO.

Program Zone 4 Supervisory zone as type SV and set the Latch Supervisory option in System Options as NO.

System Sensor i4 Series Smoke and CO Detectors Using A Single COSMOD2W Module

See i4 Series Interface Module Installation and Maintenance Instructions for additional information.

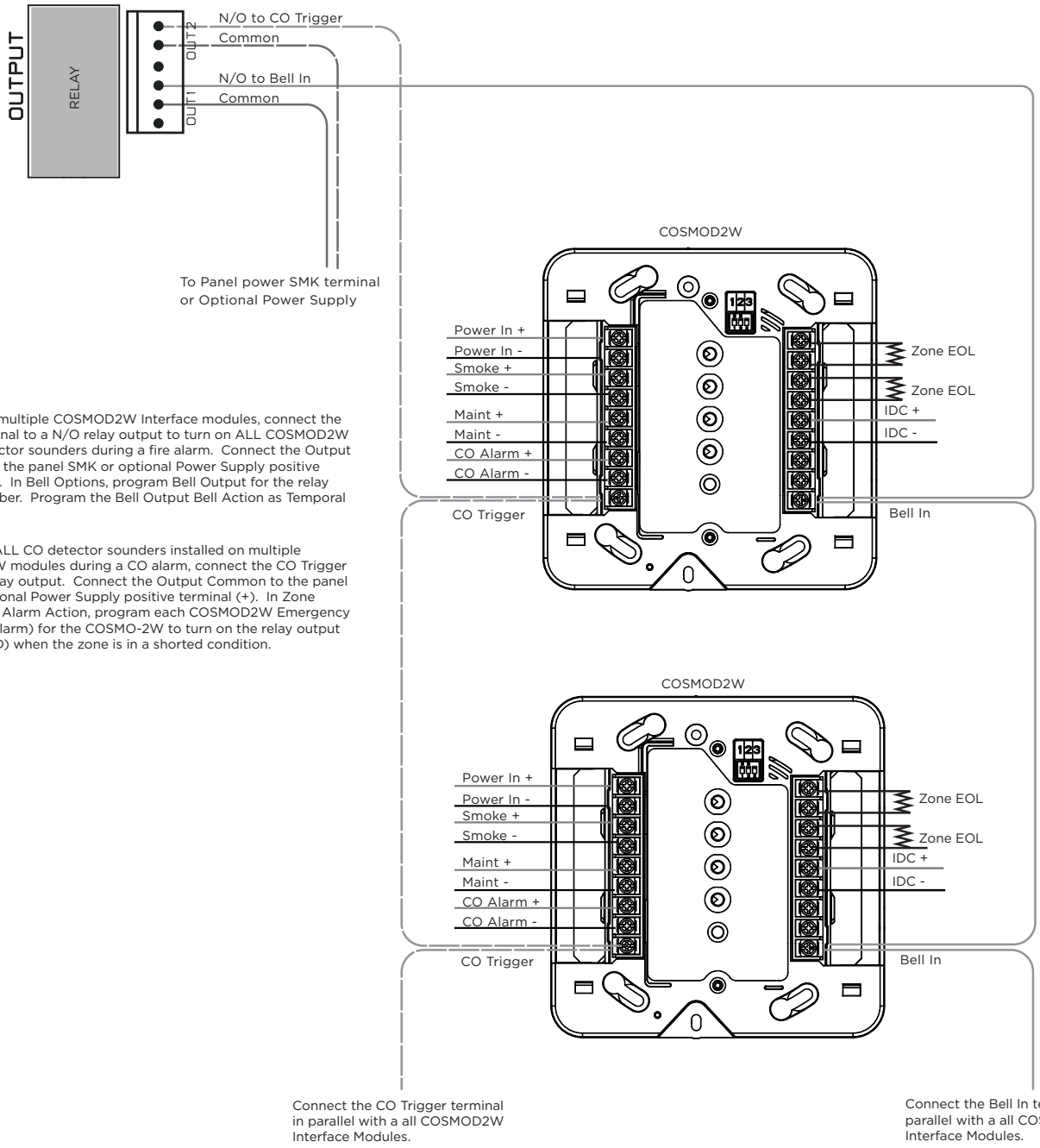




*** Listed for Fire Applications, output limited power, regulated

System Sensor i4 Series Smoke and CO Detectors Using Multiple COSMOD2W Module

See i4 Series Interface Module Installation and Maintenance Instructions for additional information.



If installing multiple COSMOD2W Interface modules, connect the Bell In terminal to a N/O relay output to turn on ALL COSMOD2W smoke detector sounders during a fire alarm. Connect the Output Common to the panel SMK or optional Power Supply positive terminal (+). In Bell Options, program Bell Output for the relay output number. Program the Bell Output Bell Action as Temporal (T).

To turn on ALL CO detector sounders installed on multiple COSMOD2W modules during a CO alarm, connect the CO Trigger to a N/O relay output. Connect the Output Common to the panel SMK or optional Power Supply positive terminal (+). In Zone Information Alarm Action, program each COSMOD2W Emergency Zone (CO Alarm) for the COSMO-2W to turn on the relay output Steady (STD) when the zone is in a shorted condition.

UNDERWRITERS LABORATORIES SPECIFICATIONS

CONTROL OUTSIDE OF PROTECTED AREA

A Potter EVD or Sentrol 5402 should be used in place of a lined cabinet when the panel is installed outside of the protected area. Front and rear tamper switches are required. Refer to the system wiring diagram.

POLICE STATION PHONE NUMBERS

The digital dialer telephone number programmed for communication must not be a police station phone number.

OWNERSHIP

The control unit system shall be under one ownership.

CENTRAL-STATION AND PROPRIETARY BURGLAR-ALARM UNITS ANSI/UL 1610 AND ANSI/UL 1076

PROPRIETARY DIALER

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

DACT CENTRAL STATION

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

STANDARD OR ENCRYPTED LINE SECURITY

The XR150/XR550 Series Protected Premises Control Unit is suitable for Standard Line Security service when configured for NET communication with SCS-VR or SCS-1R receiving system. This configuration is approved for the following:

AMCX - Central Station Alarm Units
APOU - Proprietary Alarm Units

To provide Encrypted Line security, install an XR550 panel with encryption.

For Encrypted Line security operation, communication between the Premise and Supervising Station provides 128 bit encryption when using an XR550 panel with encryption.

NETWORK ONLY, STANDARD OR ENCRYPTED LINE SECURITY

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

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

Path 1 Programming	
Comm Type: = NET	Checkin: = 3 minute
Path Type: = Primary	Fail Time: = 3 minute
Encrypt: = NO or YES*	Sub Code: NO**

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

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

NETWORK WITH DIALER BACKUP, STANDARD OR ENCRYPTED LINE SECURITY

When a backup dialer is required for 06 minute check-in time, an attack resistant enclosure (DMP Model 350A or 350H) is required.
When the check-in time is set to a number less than 200 seconds, an attack resistant enclosure is not required.

Path 1 programming	Path 2 programming
Comm Type: = NET	Comm Type: = DD
Path Type: = Primary	Path Type: = Backup
Encrypt: = NO or YES*	Daily Test: = YES
Sub Code: = NO**	Duplicate Alarms: = NO
Checkin: = 6 minute or RND	
Fail Time: = 6 minute	

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

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

CELL Only, Standard or Encrypted Line Security

Standard or Encrypted Line Security is provided when programmed using CELL with no backup. XR150/XR550 cellular communication is used as primary with a 3 minute check-in when armed or disarmed.

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

Path 1 programming	
Comm Type: = CELL	Checkin: = 3 minute
Path Type: = Primary	Fail Time: = 3 minute
Encrypt: = NO or YES*	Sub Code: = NO**

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

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

NET WITH CELL AS ALTERNATE PRIMARY AND DIALER BACKUP, STANDARD OR ENCRYPTED LINE SECURITY

Standard or Encrypted Line Security is provided using NET communication with CELL as an alternate primary and with digital dialer as a backup. XR150/XR550 network communication is used as primary with a 6 minute check-in when armed, and a random check-in over a 60 minute period when disarmed. CELL is the backup path and set to daily test. Should the NET primary path become disabled, CELL adapts the same check-in time programmed for the primary communication and becomes an alternate primary path. The dialer path is used as the backup if both NET and CELL fail to receive acknowledgement from the receiver.

This method of operation causes the CELL alternate primary to adapt to the 6 minute NET primary check-in rate when the NET primary is unavailable maintaining line supervision and precludes the need for a central station runner to respond to the NET primary failure.

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

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

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

NET WITH CELL AS BACKUP AND ADAPTIVE PRIMARY, STANDARD OR ENCRYPTED LINE SECURITY

Standard or Encrypted Line Security is provided when programmed using NET communication and CELL as backup and as needed adapts and takes over as primary. XR150/XR550 network communication is used as primary with a 6 minute check-in when armed, and a random check-in over a 60 minute period when disarmed. CELL is the backup path and set to daily test. Should the primary path become disabled, the CELL adapts to a special 3 minute check-in time and because of that check-in rate becomes the primary without the requirement of an additional backup. This method of operation causes the CELL backup to adapt to the 3 minute check-in rate when the NET primary is unavailable becoming a standalone primary without the need for a backup. This maintains line supervision and precludes the need for a central station runner to respond to the NET primary failure.

Path 1 programming	**Path 2 programming**
Comm Type: = NET	Comm Type: = CELL
Path Type: = Primary	Path Type: = Backup (operates as second method)
Test Rpt: = NO	Test Rpt: = YES
Checkin: = 6 minute, or RND (random)	Test Freq: = Daily
Fail Time: = 6 minute, or RND (random)	Checkin: = ADAPT3
Encrypt: = NO or YES*	Encrypt: = NO or YES*
Sub Code: = NO**	Duplicate Alarms: = YES
	Sub Code: = NO** or Shared if Path 1 is YES

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

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

SYSTEM TROUBLE DISPLAY

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

HOLDUP ALARM UNITS ANSI/UL 636

1100X Wireless Receiver

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

POLICE STATION CONNECTED AND LOCAL BURGLAR ALARM UNITS ANSI/UL 365

SYSTEM TROUBLE DISPLAY

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

ENTRY DELAY

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

EXIT DELAY

The maximum exit delay used must not be more than 60 seconds.

BELL CUTOFF

The Bell Cutoff time cannot be less than 15 minutes.

AUTOMATIC BELL TEST

The Automatic Bell Test option must be programmed as YES.

STANDARD OR ENCRYPTED LINE SECURITY

Standard Line Security is provided when configured as a Path 1 NET system using an XR550 panel. The NET Check-in time must be set to 06 minutes or RND When programmed for Standard Line Security, Exit Time Restart is disabled. When a dialer is required for 06 minute check-in time, an attack resistant enclosure (DMP Model 350A) is required. When the check-in time is set to a number less than 200 seconds, an attack resistant enclosure is not required.

To provide Encrypted Line security, install an XR550E panel or an XR550 panel.

For Encrypted Line security operation, communication between the Premise and Supervising Station provides 128 bit encryption when using an XR550E panel.

WIRELESS AUDIBLE ANNUNCIATION OPTION

The Wireless Audible option must be selected as ANY for commercial applications.

CELL ONLY, STANDARD OR ENCRYPTED LINE SECURITY

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

Path 1 Programming	
Comm Type: = CELL	Checkin: = 3 minute
Path Type: = Primary	Fail Time: = 3 minute
Encrypt: = NO or YES*	Test Rpt: = NO
Sub Code: = NO or YES	

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

NET WITH CELL AS ALTERNATE PRIMARY AND DIALER BACKUP, STANDARD OR ENCRYPTED LINE SECURITY

Standard or Encrypted Line Security is provided using NET communication with CELL as an alternate primary and with digital dialer as a backup. XR550 network communication is used as primary with a 6 minute check-in when armed, and a random check-in over a 60 minute period when disarmed. CELL is the backup path and set to daily test. Should the NET primary path become disabled, CELL adapts the same check-in time programmed for the primary communication and becomes an alternate primary path. The dialer path is used as the backup if both NET and CELL fail to receive acknowledgement from the receiver.

This method of operation causes the CELL alternate primary to adapt to the 6 minute NET primary check-in rate when the NET primary is unavailable maintaining line supervision and precludes the need for a central station runner to respond to the NET primary failure.

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

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

NET WITH CELL AS BACKUP AND ADAPTIVE PRIMARY, STANDARD OR ENCRYPTED LINE SECURITY

Standard or Encrypted Line Security is provided when programmed using NET communication and CELL as backup and as needed adapts and takes over as primary. XR550 network communication is used as primary with a 6 minute check-in when armed, and a random check-in over a 60 minute period when disarmed. CELL is the backup path and set to daily test. Should the primary path become disabled, the CELL adapts to a special 3 minute check-in time and because of that check-in rate becomes the primary without the requirement of an additional backup. This method of operation causes the CELL backup to adapt to the 3 minute check-in rate when the NET primary is unavailable becoming a standalone primary without the need for a backup. This maintains line supervision and precludes the need for a central station runner to respond to the NET primary failure.

Path 1 programming	**Path 2 programming**
Comm Type: = NET	Comm Type: = CELL
Path Type: = Primary	Path Type: = Backup (operates as second method)
Test Rpt: = NO	Test Rpt: = YES
Checkin: = 6 minute, or RND (random)	Test Freq: = Daily
Fail Time: = 6 minute, or RND (random)	Checkin: = ADAPT3
Encrypt: = NO or YES*	Encrypt: = NO or YES*
Sub Code: = YES	Duplicate Alarms: = YES
	Sub Code: = Shared

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

POLICE STATION CONNECTED AND LOCAL BURGLAR ALARM UNITS ANSI/UL 609

MERCANTILE

For Mercantile and Police Station Connect operation the Model XR550 Series must be mounted in an Attack Resistant Housing, (DMP Model 350A or 350H).

ENTRY DELAY

The maximum entry delay used must not be more than 60 seconds when using the Model 350A or 350H housing.

EXIT DELAY

The maximum exit delay used must not be more than 60 seconds.

MERCANTILE SAFE AND VAULT

When the DMP Model 350A or 350H Attack housing is used, the XR550 Series provides operation as a mercantile safe and vault alarm. Bell Supervision and wiring must be in accordance with ANSI/UL 681. When the XR550 Series is mounted outside the safe or vault, tamper protection and the Sentrol Model 5402 or Potter EVD listed vibration detectors should be used.

BANK SAFE AND VAULT (XR550N/XR550E ONLY)

The Bank Safe and Vault option must be programmed as YES. The 72 hour battery standby must be provided. A Rothenbuhler Model 5110 High Security Bell must be used.

WIRELESS AUDIBLE ANNUNCIATION OPTION

The Wireless Audible option must be selected as ANY for commercial applications.

CONTROL UNITS FOR FIRE-PROTECTIVE SIGNALING SYSTEMS ANSI/UL 864, NFPA 72

SPRINKLER SUPERVISORY

Any zone used for sprinkler supervisory must be programmed with “SPRINKLR XXX” as the zone name. The last three characters in the zone name may be assigned a number to identify the zone. The Model 893A Dual Phone Line Module must be used on all sprinkler supervisory systems.

DACT SYSTEMS

A DACT system may be configured as one of the following:

Path 1 Type DD Primary and Path 2 Type DD Backup

Path 1 Type DD Primary and Path 2 Type CELL Backup

Path 1 Type DD Primary and Path 2 Type NET Backup

PATH 1 TYPE DD PRIMARY AND PATH 2 TYPE DD BACKUP

Use two telephone lines and the Model 893A Dual Phone Line Module to provide two phone line connections to the system. Two different telephone numbers must be programmed for digital communication. Do not connect to ground start or party lines.

Path 1 Programming	Path 2 Programming
Comm Type = DD	Comm Type = DD
Path Type = Primary	Path Type = Backup
Test Rpt = Yes	Test Rpt = Yes
Test Freq = 1 Dy	Test Freq = 1 Dy
893A = Yes	

PATH 1 TYPE DD PRIMARY AND PATH 2 TYPE CELL BACKUP

When using a telephone line and cellular as backup:

Path 1 Programming	Path 2 Programming
Comm Type = DD	Comm Type = CELL
Path Type = Primary	Path Type = Backup
Test Rpt = Yes	Test Rpt = Yes
Test Freq = 1 Dy	Test Freq = 1 Dy
	Receiver IP Address
	First GPRS APN

PATH 1 TYPE DD PRIMARY AND PATH 2 TYPE NET BACKUP

When using a telephone line and a Network IP as backup:

Path 1 Programming	Path 2 Programming
Comm Type = DD	Comm Type = NET
Path Type = Primary	Path Type = Backup
Test Rpt = Yes	Test Rpt = Yes
Test Freq = 1 Dy	Test Freq = 1 Dy
	Receiver IP Address

LOCAL PROTECTIVE SIGNALING SYSTEMS

The DMP Model 865, 866, or 867 Notification Circuit Module must be used on the bell circuit for detection of shorts and grounds. Any burglary or other off premises communication must be done with the Model 893A Dual Phone Line Module. For local commercial fire installations, the 893A or 277 is required.

REMOTE STATION PROTECTIVE SIGNALING SYSTEMS

You must provide 60 hours of standby battery. Two Radionics Model D127 Reversing Relay Modules provide two reversing polarity telephone connections. A DMP Model 893A is used to provide two line dialer communication.

FIRE PROTECTIVE SIGNALING SYSTEMS USING INTERNET/INTRANET/CELL NETWORKS

An Other Transmission Technologies system as defined in UL 864 9th Edition may be configured as NET Primary using a hardwire IP network or CELL Primary using a Model 263LTE Cellular Communicator with or without a backup path. The system may be configured as one of the following:

PATH 1 TYPE NET OR CELL PRIMARY WITH NO BACKUP*

Path 1 Programming	
Comm Type = NET or CELL	Checkin Min = 58
Path Type = Primary	Failtime Min = 60
Test Rpt = No	Sub Code = Yes
Checkin = Yes	Send Comm Trbl = Yes
Comm Path Trbl = Yes (Status List Programming) *Device Setup must have a Fire Device	

PATH 1 TYPE NET PRIMARY AND PATH 2 TYPE DD BACKUP

Path 1 Programming	Path 2 Programming
Comm Type = NET	Comm Type = DD
Path Type = Primary	Path Type = Backup
Test Rpt = Yes	Test Rpt = Yes
Test Freq = 1 Dy	Test Freq = 1 Dy
Send Comm Trbl = Yes	Send Comm Trbl = Yes
Comm Path Trbl = Yes (Status List Programming)	

PATH 1 TYPE NET PRIMARY AND PATH 2 TYPE CELL BACKUP

Path 1 Programming	Path 2 Programming
Comm Type = NET	Comm Type = CELL
Path Type = Primary	Path Type = Backup
Test Rpt = Yes	Test Rpt = Yes
Test Freq = 1 Dy	Test Freq = 1 Dy
Send Comm Trbl = Yes	Send Comm Trbl = Yes
Comm Path Trbl = Yes (Status List Programming)	

PATH 1 TYPE CELL PRIMARY AND PATH 2 TYPE NET BACKUP

Path 1 Programming	Path 2 Programming
Comm Type = CELL	Comm Type = NET
Path Type = Primary	Path Type = Backup
Test Rpt = Yes	Test Rpt = Yes
Test Freq = 1 Dy	Test Freq = 1 Dy
Send Comm Trbl = Yes	Send Comm Trbl = Yes
Comm Path Trbl = Yes (Status List Programming)	

REMOTE ANNUNCIATORS

At least one Model 630F Remote Annunciator must be used on the system and programmed as a FIRE type device. All fire alarms, fire troubles and supervisory alarms or troubles must be annunciated only on the 630F. All burglary alarms or troubles must only be annunciated on non-fire keypads.

CELLULAR COMMUNICATION FAILURE TEST PROCEDURE

For commercial fire systems configured with cell only communication, the following test procedure can be used to demonstrate local annunciation of a communication path failure where required by the AHJ.

1. For system configuration, refer to sections 7.5 (CELL Primary with No Backup) and 7.6 Remote Annunciators. Ensure panel firmware is updated to Version 193 or higher.
2. Program the appropriate settings for the central station receiver and allow the panel to check in with the receiver.
3. Enter the programming menu and change the receiver port number to an invalid (closed) port.
4. Exit panel programming and allow the panel to return to the default screen.
5. The panel will unsuccessfully attempt to communicate and the keypad will display COMM PATH - TRBL in approximately 200 seconds.
6. After successfully demonstrating local annunciation, return to the programming menu and change the receiver port back to the correct (open) port to verify communication.

REMOTE PROGRAMMING

When a FIRE type device, such as a 630F Remote Annunciator is programmed, remote programming of the panel requires a lockout code to be entered at any keypad while the Status List is displayed. The panel will not allow remote programming without entering the lockout code.

See LT-1232 XR150/XR550 Series Programming Guide, Set Lockout Code for instructions.
After entering the lockout code, remote programming must start within 30 minutes.

COMBINATION SYSTEMS

For combination fire and burglary systems installed in commercial or residential applications, powered burglary devices such as PIRs, Glassbreaks, Bosch D8122, and Rothenbuhler 5110 Bell etc. must be powered from a separate listed power supply (DMP Model 505-12). This requirement is not needed for non-powered burglary devices (door contacts, etc.) which only connect to the zone input of zone expanders or keypads that are listed for commercial or residental fire. Refer to the Combination Systems using Powered Burglary Devices diagram in this document.

When used in a combination system, the Model 712-8 must only be connected to the LX800 or LX900 bus. No Commercial Fire listed devices can be connected to the LX800 or LX900 bus when the 712-8 is used in the system.

Combination systems may only use the following keypads for burglary zone annunciations:

- 7070/7070A
- 7073/7073A
- 7170/7170A
- 7173/7173A

For combination fire and burglary systems, burglary sounding devices such as sirens and bells must be energized using panel relays, 860 relays, or 716 relays. Programming the output to activate the relay must occur using the Burglary Bell Output option in Area Information or by the Alarm Action output option of Zone Information. The Burglary Bell Action option of the panel Bell Options must be programmed as None.

NETWORK TRANSIENT SUPPRESSION

The Model 270 Network Transient Suppression Module provides transient surge protection for the Ethernet Connector.

CONNECTING DEVICES

Connections for On-board Zones 1-8, LX-Bus and Keypad Bus are provided through Terminals 13-24, PROG, LX500, LX600, LX700, LX800, LX900, and XBUS 4-pin headers. Several factors determine the DMP LX-Bus™ and keypad bus performance characteristics: the wire length and gauge used, the number of devices connected, and the voltage at each device. When planning an LX-Bus™ and keypad bus installation, keep in mind the following information:

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

TERMINAL 13-24

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

Condition	Resistance on zone	Voltage on positive terminal
Open	over 1300 ohms	over 2.0 VDC
Normal	600 to 1300 ohms	1.2 to 2.0 VDC
Short	under 600 ohms	under 1.2 VDC

ULC S304-06 SPECIFICATIONS SIGNAL RECEIVING CENTER AND PREMISE BURGLAR ALARM CONTROL UNITS

FOR MEDIUM OR HIGH RISK APPLICATIONS: LEVEL A3 COMMUNICATION

Level A3 communication channel security is provided for Internet, Intranet, LAN or WAN networks when configured as a NET or CELL communicating system using the XR150/XR550E. The following options must be programmed in XR150/XR550E Canadian panel Communication:

NET PRIMARY	
SUB CODE:	YES
CHECKIN TIME:	2 MINUTES
FAIL TIME:	3 MINUTES
SEND COMM TRBL:	YES
TCP COMM:	YES
ENCRYPTION:	ENABLED

CELL PRIMARY:	
SUB CODE:	YES
CHECKIN TIME:	3 MINUTES
FAIL TIME:	3 MINUTES
SEND COMM TRBL:	YES
ENCRYPTION:	ENABLED

FOR VERY HIGH RISK APPLICATIONS: LEVEL A3 PLUS P1 COMMUNICATION

Additionally, XR150/XR550E communicating system may use two channels (NET plus Dialer, CELL plus Dialer, or NET plus CELL) to send signals simultaneously. The following options must be programmed in XR150/XR550E Canadian panel Communication:

NET PRIMARY		DIALER PRIMARY:
SUB CODE:	YES	USE DAILY TEST
CHECKIN TIME:	2 MINUTES	
FAIL TIME:	3 MINUTES	
SEND COMM TRBL:	YES	
TCP COMM:	YES	
ENCRYPTION:	ENABLED	

CELL PRIMARY		DIALER PRIMARY:
SUB CODE:	YES	USE DAILY TEST
CHECKIN TIME:	3 MINUTES	
FAIL TIME:	3 MINUTES	
SEND COMM TRBL:	YES	
ENCRYPTION:	ENABLED	

In addition, the SCS-104 Network Line Card installed in the SCS-1R Receiver must have the ACK Substitution Message programmed as NO.

FOR LOW RISK APPLICATIONS: LEVEL A1

Level A1 communication channel security is provided for Internet, Intranet, LAN or WAN networks when configured as a NET communicating system using the XR150/XR550 with Network.

FOR LOW RISK APPLICATIONS: LEVEL P1

Level P1 communication channel security is provided when configured as a DD communicating system and a daily test message using the XR150/XR550.

ULC S559-13 SPECIFICATIONS EQUIPMENT FOR FIRE SIGNAL RECEIVING CENTERS AND SYSTEMS

FOR FIRE COMMUNICATOR APPLICATIONS

For fire communicator applications, communication to the fire signal receiving center is provided for Internet, Intranet, LAN or WAN networks when configured as a NET or CELL communicating system using the XR150/XR550 Series panel. Program one of the following options in panel Communication:

PATH 1 TYPE NET OR CELL PRIMARY WITH NO BACKUP

Path 1 Programming	
Comm Type = NET or CELL	Checkin Min = 3
Path Type = Primary	Failtime Min = 3
Sub Code = No	Send Comm Trbl = Yes
Comm Path Trbl = Yes (Status List Programming)	

PATH 1 TYPE NET PRIMARY AND PATH 2 TYPE CELL BACKUP

Path 1 Programming	Path 2 Programming
Comm Type = NET	Comm Type = CELL
Path Type = Primary	Path Type = Backup
Test Rpt = Yes	Test Rpt = Yes
Test Freq = 1 Dy	Test Freq = 1 Dy
Send Comm Trbl = Yes	Send Comm Trbl = Yes
Comm Path Trbl = Yes (Status List Programming)	

PATH 1 TYPE CELL PRIMARY AND PATH 2 TYPE NET BACKUP

Path 1 Programming	Path 2 Programming
Comm Type = CELL	Comm Type = NET
Path Type = Primary	Path Type = Backup
Test Rpt = Yes	Test Rpt = Yes
Test Freq = 1 Dy	Test Freq = 1 Dy
Send Comm Trbl = Yes	Send Comm Trbl = Yes
Comm Path Trbl = Yes (Status List Programming)	

CENTRAL STATION HOST AUTOMATION

The fire signal receiving center's host automation system must recognize the following signals:

- Zone 1 Alarm = Fire Alarm,
- Zone 2 Trouble = Fire Zone Trouble
- Zone 3 Trouble = AC Trouble
- Zone 4 Trouble = Battery Trouble
- Zone 5 Trouble = Ground Fault Trouble.

COMBINATION SYSTEMS

For combination fire and burglary systems, powered burglary devices such as PIRs, Glassbreaks, etc. must be powered from a separate listed power supply. This requirement is not needed for non-powered burglary devices (door contacts, etc.) which only connect to the zone input of zone expanders or keypads that are listed for Commercial Fire. Refer to the Combination S304 and S559 Systems diagram in this document. When used in a combination system, the Model 712-8 must only be connected to the LX800 or LX900 bus. No Commercial Fire listed devices can be connected to the LX800 or LX900 bus when the 712-8 is used in the system.

Combination systems may only use 7070/7070A, 7073/7073A, 7170/7170A, and 7173/7173A keypads for burglary zone annunciations.

CALIFORNIA STATE FIRE MARSHAL SPECIFICATIONS

BELL OUTPUT DEFINITION

The Model XR150/XR550 Series panel Bell Output must be programmed to operate steady on burglary alarms and pulsed, temporal, or California School Code on fire alarms.

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

CALL WAITING

The Call Waiting default setting is disabled. To cancel the Call Waiting feature, program * (star) 7 0 P (pause), the standard telephone code prefix that cancels call waiting, into the telephone number string. Cancel Call Waiting for telephone lines that have Call Waiting operational on the telephone line.

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

OCCUPIED PREMISE

When only two areas are used, and area one is named Perimeter, and area two is named Interior, and no exit type zone transition occurs during the exit delay because the premise continues to be occupied, the Interior area will automatically disarm at the end of the exit delay.

ENTRY DELAY

Only use Entry Delay 1. Do not use Entry Delay 2, 3, or 4.

MINIMUM INSTALLATION REQUIREMENTS

SIA CP-01-2010 minimum system installation requirements include an XR150/XR550 control panel, a listed local Bell, and off premise DACT communication to an SCS-1R receiver plus one of the following compatible keypads.

630F Fire Command™ Center
7060, 7063, 7070, or 7073 Thinline™ keypads
7060A, 7063A, 7070A, or 7073A Aqualite™ keypads
7160, 7163, 7170, or 7173 Thinline™ keypads

NEW YORK CITY (FDNY) SPECIFICATIONS

INTRODUCTION

The programming specifications contained in section 10.2 or 10.3 must be completed when installing the XR150/XR550 Series control panel for New York City (FDNY) fire alarm installations for IP communication applications. Refer to the FDNY Certificate of Approval for the complete conditions of approval.

Fire alarm installations that use two digital dialer telephone lines do not need to comply with these two sections.

NETWORK AND CELLULAR COMMUNICATION, PRIMARY AND SECONDARY

When installed as a central station Internet (Network) communicator or slave transmitter, both primary and secondary channels of communication shall be required and shall meet the conditions below. Network communication shall be used as the primary channel of communication to the Central Station and a 263LTE Cellular Communicator shall be used as the secondary channel of communication or in reverse order: 263LTE Cellular Communicator as primary and Network connection as the secondary channel.

PATH 1 TYPE NET PRIMARY AND PATH 2 TYPE CELL BACKUP PROGRAMMING

Path 1 Programming	**Path 2 Programming**
Comm Type = NET	Comm Type = CELL
Path Type = Primary	Path Type = Backup
Checkin Min = 5	Checkin Min = 5
Failtime Min = 5	Failtime Min = 5
Test Rpt = Yes	Test Rpt = Yes
Test Freq = 1 Dy	Test Freq = 1 Dy
Send Comm Trbl = Yes	Send Comm Trbl = Yes
Comm Path Trbl = Yes (Status List Programming)	

PATH 1 TYPE CELL PRIMARY AND PATH 2 TYPE NET BACKUP PROGRAMMING

Path 1 Programming	**Path 2 Programming**
Comm Type = CELL	Comm Type = NET
Path Type = Primary	Path Type = Backup
Checkin Min = 5	Checkin Min = 5
Failtime Min = 5	Failtime Min = 5
Test Rpt = Yes	Test Rpt = Yes
Test Freq = 1 Dy	Test Freq = 1 Dy
Send Comm Trbl = Yes	Send Comm Trbl = Yes
Comm Path Trbl = Yes (Status List Programming)	

DIGITAL DIALER PRIMARY AND NETWORK SECONDARY COMMUNICATION

When used with a central office communicator or a transmitter, the installation and operation of the equipment and devices shall comply with 3RCNY 17-01. The installation shall employ the digital dialer as the primary communicator (using telephone line) with network IP communication as backup or secondary means of communication. It shall have the capability of transmitting separate and distinct signals to indicate manual pull station alarm, automatic detection alarm, sprinkler waterflow alarm, supervisory signal indications and trouble indications.

COMMUNICATION PROGRAMMING

For digital dialer communication with R = Central Station Receiver Phone Number
BACKUP COMM TYPE = NET
RECEIVER
ALARMS = YES

WIRING

All wiring must be in accordance with NEC, ANSI, and NFPA 70. All network cabling must be installed in accordance with NFPA 70 for communication circuits.

ADDITIONAL REQUIREMENTS

Program and install the equipment to comply with NFPA basic fire requirements. Refer to the Universal Fire Alarm Specifications and ANSI/UL 864 Specifications in this document.

UNIVERSAL BURGLARY SPECIFICATIONS

WIRING

All wiring must be in accordance with NEC, ANSI/NFPA 70, ANSI/UL 681, and ANSI/UL 827 for all burglary installations. All transformer wires must be installed in conduit.

POWER SUPPLY SUPERVISION

For commercial burglary applications the power supply for all local bells shall be under 24-hour protection.

LISTED RECEIVERS

Operation has been verified with the DMP SCS-VR and SCS-1R receivers and any Central Station Receiver that accepts industry standard SIA Contact ID (DTMF) format. It is the installer's responsibility to verify compatibility between the panel and the receiver used during installation. The installer shall verify the compatibility of the receiver and the system on a yearly basis.

AREA INFORMATION

ANNUNCIATION

The system shall be installed so that when arming any area from any keypad, the local bell shall annunciate.

LOCAL BELL SUPERVISION

When a local bell is employed, the power supply for the bell shall be under 24-hour protection. Proper personnel for maintenance or security of the system shall be able to disarm that area.

ACCESS CONTROL SYSTEM UNITS ANSI/UL 294

TAMPER PROTECTION

For listed Access Control installations, a tamper switch must be used.

POLICE STATION CONNECTED AND LOCAL BURGLAR ALARM UNITS ANSI/UL 365

BELL

A local audible signal appliance must be used such as Ademco AB12M bell and bell housing.

The alarm housing for a mercantile alarm system without a remote alarm transmission connection shall be mounted on the outside of the building, visible from a public street or highway. It shall be accessible for examination and repair. It shall also be located not more than four stories above the street level unless:

a) A second alarm sounding device and housing, intended for outside service, is mounted adjacent to the premises or area of the building in which the alarm system is installed or

b) A second alarm sounding device, intended for inside service, is mounted within the premises.
In either case, the outside alarm sounding device and housing may be mounted as high as the seventh floor.

POLICE STATION CONNECTED AND LOCAL BURGLAR ALARM UNITS ANSI/UL 609

BELL

A local audible signal appliance must be used such as Ademco AB12M bell and bell housing.

In a mercantile burglar alarm system, a mercantile alarm sounding device located within a building but outside the protected area, is acceptable, provided it is rated for outside service and alarm conditions are transmitted to:

a) The dispatch location of the law enforcement agency having jurisdiction over the protected property or
b) A central station or residential monitoring station complying with the Standard for Central Station Alarm Services, UL 827.

In a mercantile burglar alarm system, an alarm sounding device located within the area of greatest protection, or outside the area of greatest protection but within an area protected by an alarm system and that shares a common control unit with the system installed in the area of greatest protection, is acceptable provided it is rated for inside service and alarm conditions are transmitted to:

a) The dispatch location of the law enforcement agency having jurisdiction over the protected property or
b) A central station or residential monitoring station complying with the Standard for Central Station Alarm Services, UL 827.

An inside sounding device shall be mounted at least 10 feet (3.05 m) above the floor or at the surface of the ceiling. When there is fixed construction within the area that could provide access for an intruder, the alarm sounding device shall also be mounted at least 4 feet (1.2 m), as measured horizontally, away from the edges of the fixed construction or at least 10 feet (3.05 m) above it so as to minimize access by an intruder.

HOUSEHOLD BURGLAR-ALARM SYSTEM UNITS ANSI/UL 1023
HOUSEHOLD FIRE WARNING SYSTEM UNITS ANSI/UL 985

AUDIBLE DEVICES

For ANSI/UL 1023, at least one listed audible device rated to operate over the voltage rate of 11.7 VDC to 12.8 VDC and rated at 85dB minimum must be used.

AUXILIARY CIRCUITS

At least one fire alarm initiating device shall be used on the system. If the voltage for the device is applied by the control unit the fire alarm initiating device shall be rated to operate over the range of 11.5 VDC to 12.7 VDC.

For combination systems, powered burglary devices such as PIRs or sounding devices must be powered from a separate power supply so that a fault does not affect the fire system.

UNIVERSAL FIRE ALARM SPECIFICATIONS

WIRING

All wiring must be in accordance with NEC, ANSI/NFPA 70 for fire installations.

CLASS A STYLE D ZONES

If required, the DMP 869 Dual Style D Initiating Module provides for connection of two Class A Style D zones to the Model XR150/XR550 Series.

STANDBY BATTERIES FOR FIRE INSTALLATIONS

The panel must have 24 hour battery standby operation. The Model 364 battery should not be used for fire installations.

END-OF-LINE RESISTOR

The DMP Model 310 1k Ohm EOL resistor should be used on all 1k Ohm EOL fire zones.

LISTED RECEIVERS

Operation has been verified with the DMP SCS-VR and SCS-1R receivers and any Central Station Receiver that accepts industry standard SIA Contact ID (DTMF) format. It is the installer's responsibility to verify compatibility between the panel and the receiver used during installation. The installer shall verify the compatibility of the receiver and the system on a yearly basis.

CONTROL UNITS FOR FIRE-PROTECTIVE SIGNALING SYSTEMS ANSI/UL 864, NFPA 72

CROSS ZONING

When using cross zoning, there must be a minimum of two detectors installed in each protected space and the detector installation spacing must be 0.7 times the linear spacing in accordance with National Fire Alarm Code, NFPA 72.

GROUND FAULT

For supervised circuits, ground fault is detected at 0 (zero) Ohms.

ULC S304-06 SPECIFICATIONS SIGNAL RECEIVING CENTER AND PREMISE BURGLAR ALARM CONTROL UNITS

Dual Protection

For Medium or High Risk ULC Listed Applications: Use only zones 1-8 on the control panel and program Dual EOL as Yes in panel programming. Program the Disarmed Short Message in Alarm Action of Zone Information programming as a Trouble message.

If using a 714, 714-8, or 714-16 for dual protection, program two zones as the same name or equivalent and connect to the contact in the protected area as show in the Dual Zone Protection diagram in this guide.

CANADIAN ZONE EXPANSION

Use of the following zone expanders are permitted for connection of burglary devices:

710 Bus Splitter Module	714 Zone Expander, 4 zones	715 Zone Expander, 4 zones
711 Zone Expander, Single	714-8 Zone Expander, 8 zones	715-8 Zone Expander, 8 zones
712-8 Zone Expander, 8	714-16 Zone Expander, 16 zones	715-16 Zone Expander, 16 zones

DEVICES

For ULC Listed applications, only one device is permitted per zone.

AUDIBLE DEVICE

At least one listed audible signaling device rated at 75dB minimum must be used.

ULC BURGLARY INSTALLATION RECOMMENDATIONS

1. In order to give the digital alarm communicator transmitter the ability to disconnect an incoming call to the protected premises, telephone service should be of the type that provides for timed release disconnect.
2. Network access and domain access policies shall be set to restrict unauthorized network access and “spoofing” or “denial of service” attacks.
3. Select Internet Service Providers that have redundant servers/systems, Back-up power, Routers with Firewall enabled and Methods to identify and protect against “Denial of Service” attacks (i.e. via “spoofing”).
4. Power for network equipment as hubs, switches, routers, servers, modems, etc., shall be backed up or powered by an uninterrupted power supply (UPS), stand-by battery or the control unit, capable of facilitating 24 hour standby, compliant with Clauses 16.1.2 and 16.4.1 of CAN/ULC-S304-06.
5. Where such cannot be facilitated, the control unit shall support back-up communications for a secondary communications path, subject to the following:
   Low Risk and Medium Risk shall use a dialer as a minimum;
   High Risk shall use cellular control channel or long range radio as a minimum; and
   Very High Risk shall be equipped with 24 hour standby power.
   Refer to Table 11 of CAN/ULC-S304-06 for the risk levels.
6. Refer to CAN/ULC-S302, Installation and Classification of Burglar Alarm Systems for Financial and Commercial Premises, Safes and Vaults, for requirements for a secondary communications path, where 24 hour standby cannot be facilitated for all communications interface components as routers, hubs, switches and other network components.
7. Products or components of products used in communication channels, which perform communications functions only, shall comply with the requirements applicable to communications equipment as specified in CAN/CSA-C22.2 No. 60950-1, Information Technology Equipment-Safety - Part 1: General Requirements. Such products or components include, but are not limited to:
   Hubs;
   Routers;
   Network interface devices;
   Third party communications service providers;
   Digital subscriber line (DSL) modems; and
   Cable modems

ULC S545 SPECIFICATIONS RESIDENTIAL FIRE WARNING SYSTEM CONTROL UNITS

Canadian Wiring

All wiring must be in accordance with S540 Standard for the Installation of Residential Fire Alarm Systems.

CANADIAN MODULES/EXPANDERS

The following module/expander must not be installed on the same Keypad Bus or LX-Bus circuit with initiating devices. If these modules/expanders are required for the application, reserve the LX800 or LX900 Bus for these modules. The Models 716 was evaluated for ULC-S545 installations.

- 716 Output Expansion Module

END-OF-LINE RESISTOR

The DMP Model 310 1k Ohm EOL resistor should be used on all 1k Ohm EOL fire zones.

ULC S559 SPECIFICATIONS FIRE SIGNAL RECEIVING CENTRES AND SYSTEMS

CANADIAN WIRING

All wiring must be in accordance with with CSA C22.1, Safety Standard for Electrical Installations, and Canadian Electrical Code, Part I, Section 32.

NORMAL STANDBY / ALARM LOADING

Maximum total loading from the panel and all connected devices for Normal Standby and Alarm is 0.7 Amps.

BATTERY CAPACITY

Maximum battery capacity is 36 Amp hours.

PROGRAMMING REQUIREMENTS

SYSTEM PROGRAMMING OPTION REQUIREMENTS

NOTICE TO USERS, INSTALLERS, AUTHORITIES HAVING JURISDICTION, AND OTHER INVOLVED PARTIES
This product incorporates field-programmable software. In order for the product to comply with the requirements of a certificated installation, certain programming features or options must be limited to specific values or not used at all as indicated below.

Program feature or option	Standard	Permitted?	Possible settings	Settings permitted
System Reports, RESTORAL	ANSI/UL 864	Y	NO, YES, DISARM	YES, DISARM
System Options, PWR FAIL HRS	ANSI/UL 864	Y	0, 1-15	1-3
System Options, RETARD DELAY for Waterflow Applications	ANSI/UL 864	Y	0, 1-250	1-90
Bell Options, FIRE TYPE	ANSI/UL 864 & ULC S545	Y	STEADY, PULSED, TEMPORAL, NONE	PULSED OR TEMPORAL
Status List, SYSTEM TROUBLES	ANSI/UL 864	Y	Addresses 1 – 16	Any combination Addresses 1 – 16
Status List, FIRE TYPE	ANSI/UL 864	Y	Addresses 1 – 16	Any combination Addresses 1 – 16
Zone Information, ZONE TYPE for Zones 1-8	ANSI/UL 864	Y	NT DY EX FI PN EM SV A1 A2 FV AR	FIRE (In accordance with diagrams 1.10-1.11 & 1.21-1.22)
Zone Information, TRANSMITTER SUPERVISION TIME for Model 1103	ANSI/UL 864	Y	0, 3, 60, 240 minutes	3 minutes
Zone Information, RETARD for Smoke Detectors	ANSI/UL 864	N	NO, YES	NO
SET LOCKOUT CODE for Remote Programming	ANSI/UL 864	Y	00000 (DISABLED); 00001-65535	00001-65535
Communication, CHECKIN MINUTES	ANSI/UL 864	Y	3-250	3-58
Zone Information, Wireless, TRANSMITTER SUPRVSN TIME	ANSI/UL 985	Y	0, 3, 60, 240	240
System Options, DETECT WIRELESS JAMMING	ANSI/UL 985 & BURGLARY	Y	NO, YES	YES
Bell Options, BELL CUTOFF	ANSI/UL 985 & ANSI/UL 1023	Y	0-99	5-99
Bell Options, BURGLARY TYPE	ANSI/UL 985 & ULC S545	Y	STEADY, PULSED, TEMPORAL, NONE	STEADY
System Reports, BYPASS REPORTS	BURGLARY	Y	NO, YES	YES
Zone Information, DISARMED OPEN	BURGLARY	Y	A, T, L, S, C, and - (dash)	T (Trouble)
Zone Information, NORM OPN for External Contacts	BURGLARY	Y	NO, YES	NO (Normally Closed)
Zone Information, Wireless, TRANSMITTER SUPRVSN TIME	BURGLARY	Y	0, 3, 60, 240	3, 60, 240
Remote Options, APP KEY	BURGLARY	N	8-digit app key	None
System Options, CLOSING WAIT	BURGLARY	Y	NO, YES	YES
Zone Information, LED OPERATION	ANSI/UL 636	Y	NO, YES	NO
Bell Options, PANIC TYPE	ANSI/UL 636	N	S, P, T, N	N (None)
Zone Information, ARMED OPEN/ SHORT	ANSI/UL 636	Y	A, T, L, S, C, and - (dash)	A (Alarm)
System Option, ENTRY DELAY	ANSI/UL 1023	Y	30-250	30-45
Area Information, EXIT DELAY	ANSI/UL 1023	Y	30-250	30-60
System Options, WLS AUDIBLE	ANSI/UL 1023	Y	ANY, DAY, MIN	DAY
Bell Options, BELL CUTOFF	ANSI/UL 1610	Y	0-99	15-99
System Option, ENTRY DELAY	ANSI/UL 1610	Y	30-250	30-60 (Using 350A or 350H)
System Options, WLS AUDIBLE	ANSI/UL 1610	Y	ANY, DAY, MIN	ANY
Area Information, O/C RPTS	ANSI/UL 1610	Y	NO, YES	YES
Communication, TEST FREQ	ANSI/UL 1635	Y	1-60, DY, HR	1 DY
Communication,FIRST/SECOND PHONE NO.	ANSI/UL 1635	Y	32-characters	P (Pause)+phone number

SHIPPING DEFAULTS AND RECOMMENDED PROGRAMMING FOR ANSI/SIA CP-01-2010

SIA CP-01 FEATURE PARAGRAPH # AND DESCRIPTION	DMP XR550 PROGRAMMING GUIDE LT-1232 SECTION #	REQUIREMENT	RANGE	SHIPPING DEFAULT	RECOMMENDED PROGRAMMING*
4.2.2.1 Exit Time	17.2 Exit Delay	Required (Programmable)	45 sec. - 250 sec.	60 Seconds	60 Seconds
4.2.2.2 Progress Annunciation	17.2 Exit Delay	Allowed	Individual keypads may be disabled per zone	All keypads enabled	All keypads enabled
4.2.2.3 Exit Time Restart	17.2 Exit Delay	Required Option	For re-entry during exit time	Enabled	Enabled
4.2.2.5 Auto Stay Arm on Unvacated Premises	9.20 Occupied Premise	Required Option (except for remote arming)	Area 1 = Perimeter Area 2 = Interior	Enabled	Enabled for Residential Applications
4.2.4.4 Exit Time and Progress Annunciation/ Disable - for Remote Arm	Not Available on Remote Arming	Allowed Option	Progress Annunciation Always disabled for Remote Arming	Not Available	Remote Arming not allowed for CP-01 installations.
4.2.3.1 Entry Delay(s)	18.19 Entry Delay	Required (Programmable)	30 sec. – 240 Sec. **	30 Seconds	At least 30 Seconds **
4.2.5.1 Abort Window – for Non-Fire Zones	3.3 Transmit Delay	Required Option	Disable by zone or zone type	Enabled NT DY EX Zone	Enabled
4.2.5.1 Abort Window Time – for Non-Fire Zones	3.3 Transmit Delay	Required (Programmable	15 sec. - 45 sec. **	30 Seconds	At least 15 Seconds **
4.2.5.1.2 Abort Annunciation	3.3 Transmit Delay	Required Option	Annunciate that no alarm was transmitted (S45)	Yes	Yes
4.2.5.4.1 Cancel Annunciation	Always Enabled - Not Programmable	Required Option	Annunciate that a Cancel was transmitted (S49)	Always Enabled	Yes
4.2.6.1 & 4.2.6.2 Duress Feature	User Code + 1 = Ambush Code Not Available	Allowed Option	No 1 + derivative of another user code/no duplicates with other user codes	Code +1 Always Disabled	Not Programmable
4.3.1 Cross Zoning	16.23 Cross Zone	Required Option	Yes/No Zone Programming	No	Enabled using two or more programmed zones
4.3.1 Programmable Cross Zoning Time	9.6 Cross Zone Time	Allowed	4 sec. - 250 sec.	4 Seconds	Per walk path in protected premises
4.3.2 Swinger Shutdown	9.9 Swinger Bypass Trips	Required (Programmable)	1-6 trips	2 trips	2 trips
4.3.2 Swinger Shutdown Disable	18.17 Swinger Bypass	Allowed	For non-police response zones	Yes	Enabled (all zones)
4.3.3 Fire Alarm Verification	18.4 Zone Type	Required Option	FV Type Zone	No	Yes as required (unless sensors can self verify)
4.5 Call Waiting Cancel	3.16 Telephone Number	Required Option	Include *70P in Telephone Number	Disabled	Enabled if user has call waiting
4.6.3 System Test	22.4 Walk Test	Allowed	Test all protection devices	N/A	N/A
4.6.5 Communications	22.4 Walk Test	Not Allowed	N/A	N/A	N/a

* Programming at installation may be subordinate to other listed requirements for the intended application.
** For listed Installations, combined Entry Delay and Transmit Delay should not exceed 1 minute.

PANEL PROGRAMMING OPTIONS

Initialization	
CLEAR ALL MEMORY	NO - Leaves existing programming intact. YES - Clears all memory then displays Reset Panel.
CLEAR ALL CODES	NO - Leaves existing codes intact. YES - Clears the user code and user profile memory and assigns user code number 99 to the highest user position.
CLEAR ALL SCHEDULES	NO - Leaves existing schedules intact. YES - Clears all shift, and output schedules.
CLEAR DISPLAY EVENTS MEMORY	NO - Leaves existing event memory intact. YES - Clears the events memory.
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.
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.
CLEAR OUTPUT INFORMATION	NO - Leaves existing output information intact. YES - Clears all programmed Output names and any output cutoff assignment.
CLEAR COMMUNICATION AND REMOTE OPTIONS	NO - Leaves existing communication and remote options intact. YES - Returns communication and remote options to factory defaults.
SET TO FACTORY DEFAULTS	NO - Leaves existing panel programming intact. YES - Sets the panel's programming back to factory default selections and clears all Z-Wave device programming and Favorites from the panel. Selecting YES does not clear the panel's event memory, zone, user code information, or schedules. It also sets Programming and User Language to English.
Communication	
ACCOUNT NUMBER	The Account Number is a 1- 5 digit number. The range of valid account numbers for a panel is 1 to 65535. Do not enter leading zeros.
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. The default is 30.
COMMUNICATION PATH	Program up to eight paths designated as a primary or backup communication route. Each primary path establishes a new path group. A path group is made up of the primary path and its subsequent backup paths.
COMMUNICATION TYPE	Specify the communication method on this path to report system events. Default is DD for Path 1, and NONE for Path 2-8. NONE - For local systems. DD - Digital Dialer communications NET - Network communication using the onboard network connection. CID - SIA Contact ID format. CELL - 263LTE Cellular Communicators WIFI - Wi-Fi Module
PATH TYPE	Primary or Backup. Because Path 1 is Primary, this prompt only displays for paths 2-8. Default is Backup.
TEST REPORT	Reports are sent according to the programming in Test Frequency and Test Time. Default is Yes. Select YES to send the test report on the path currently being programmed. Select DEFER to not send a test report if the panel communicates any message to the receiver within the time set in Test Frequency. Select NO to not send test reports on this path.
TEST FREQUENCY	Enter 1-60 and select DY (Day) or HR (Hour) for test frequency. Default is 1 Day.
TEST DAY	This prompt appears only when Test Report is Yes, Test Frequency is Day and a multiple of seven. Press the CMD key to display the days of the week.
TEST TIME	Use this option to select the time of day for Test Reports. Select the hour, minute and AM/PM. Enter 0:00 AM to disable this feature.

CHECK IN	This option displays if the COMM TYPE is NET or CELL. For NET the default is YES. For CELL the default is NO. Select RND (Random) for the panel to check-in at random times from 6 to 60 minutes when all areas are disarmed. If any area is armed a check-in is sent every 6 minutes. Select ADPT (Adaptive) for a backup path to adapt to the check-in programming from this groups primary path if the primary path becomes unavailable. Check-in programming includes Check-in and Fail Time. Select ADP3 (Adaptive 3) for a backup path to adapt using a 3 minute Check-in and Fail Time if the primary path becomes unavailable. Select YES to enter the number of minutes between check-in reports, from 2-240 for NET or 3-240 for CELL, when the panel is armed or disarmed.
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.
ENCRYPTION (XR550 WITH ENCRYPTION)	Select Yes to enable encryption for the path currently being programmed.
RECEIVER IP	This option displays if the COMM TYPE is NET or CELL. Enter the Receiver IP address where the panel sends network messages.
RECEIVER PORT	Enter the receiver port number. Valid range is 1 to 65,535. Default is 2001.
FIRST TELEPHONE NUMBER	This option displays only if the COMM TYPE is DD or CID. Enter the first number the panel dials when sending reports to the receiver. Phone numbers can have two lines of 16 characters each to equal up to 32 characters. Enter P to program a three-second pause in the dialing sequence. Enter R as the first character for rotary (pulse) phone function. Call Waiting: You can place the "* 7 0 P" (Star, Seven, Zero, Pause) in the telephone number first position to cancel Call Waiting. Caution: A call waiting cancel programmed on a non-call waiting telephone line would prevent communication to the central station.
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. 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.
ADVANCED PROGRAMMING	Select Yes to enter the Advanced Programming menu for the communication path currently being programmed.
FIRST/SECOND GPRS APN	Enter the first and second (backup) APN (Access Point Name) for cellular communication. The APN may contain two lines of 16 characters to equal 32 characters. This option is not used when a 263C CDMA Cellular Communicator is used for communication.
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. Range is 0 to 24 hours.
PROTOCOL	This option displays when COMM TYPE is NET. Select TCP or UDP protocol for communication.
RETRY SECONDS	This option displays when COMM TYPE is NET. Enter 6-15 seconds for the panel to wait before retrying to send a message to the receiver if an acknowledgment was not received. If TCP is enabled, the minimum Retry Time programmed is 6 seconds.
SUBSTITUTION CODE	This option displays when the COMM TYPE is NET or CELL. Select YES to send a substitution code with every message. Select SHARED (SHR) to use the same code as the previous path.
893A	This option displays when the COMM TYPE is DD or CID. The 893A option allows reports to be sent to the receiver on a second DD line using the 893A module. Default is No. If the 893A option is set to YES, enter up to a 3-digit prefix to be dialed before the second phone number. If no prefix is entered, the second phone number is dialed as originally entered.

ALARM SWITCH	This option displays when the COMM TYPE is DD or CID. Enter the number of attempts (1-10) to send an alarm message before switching to the next path. All non-alarm messages are sent for 10 attempts on the dialer before a switch is initiated. If the path immediately following this channel is not a backup path, this option has no effect.
DUPLICATE ALARMS	This prompt displays for BACKUP paths. If Yes is selected, the current backup path duplicates all alarms occurring on its group primary path.
ALARM REPORTS	This prompt displays for PRIMARY paths. Select YES to send the following reports for all zone types: • Alarm • Bypass • Reset • Restore Select FIRE to send the following reports for Fire, Fire Verify, and Supervisory Zones: • Alarm • Bypass • Reset • Restore
SUPERVISORY/TROUBLE REPORTS	This prompt displays for PRIMARY paths. Select YES to send the following reports for all zone types: • Trouble • Low Battery • Missing • Fault • Restorals • System Troubles • System Restoral Select FIRE to send the following reports for Fire, Fire Verify, and Supervisory Zones: • Trouble • Low Battery • Missing • Fault • Restorals • System Troubles • System Restoral
OPENING/CLOSING AND USER REPORTS	This prompt displays for PRIMARY paths. Select YES to send the following reports by user: • Opening • Code changes (including adding, deleting, changing) • Closing • Schedule changes (temporary, permanent, shift) • Bypass • Holiday date changes • Reset
DOOR ACCESS REPORT	This prompt displays for PRIMARY paths. Select YES to enable Door Access Granted and Denied reports to this receiver whenever a door access is granted to a user. The Door Access Granted report is only sent if the keypad number has also been selected in Access Keypads under the SYSTEM REPORTS programming. Select DENY to enable Door Access Denied reports only to this receiver when a door access is denied to a user.
PANIC TEST	This option displays when the COMM TYPE is NET. Select YES to allow the panic zone test verification and failure results to be sent to the central station receiver. Select NO to disable the panic test report.
SEND COMMUNICATION TROUBLE	This prompt displays for each path and determines if and how communication trouble on the path is sent to the receiver.
SEND PATH INFORMATION	This prompt displays for each path and if YES, each panel message includes path information such as path number, communication type, and path type.
Network Options	
WIFI SETUP	This option is for connecting to the desired Wi-Fi network and will display only when Comm Type is set to Wi-Fi. Press any select key or area to select. WPS - To automatically connect to a WPS enabled router. LIST - To display the name and signal strength of any Wi-Fi routers in range. MANUAL - To enter the name of the Wi-Fi router you wish to connect to. TEST - To verify connection of your system to the Wi-Fi network.
SSID	When MANUAL is selected, enter the SSID (Wi-Fi Network Name) and search for the desired network.
WIRELESS SECURITY TYPE	Select the security type based on the wireless router programming. The default is WE6.
WIRELESS NETWORK KEY	Enter the key provided from the wireless router's programming. WE6 (WE64) and WE1 (WE128) require a wireless password of 10 characters (WEP64) or 26 characters (WEP128), using a combination of the number 0-9 and the letters A-F. WPA (WPA-PSK) and WPA2 (WPA-PSK2) use a custom key that allows 8 to 32 characters.
DHCP	Select YES for the panel to use a dynamic IP address. The panel operates using DHCP and does not use the Local IP Address number. Select NO for the panel to use the IP address entered in Local IP Address.
LOCAL IP ADDRESS	Enter the local IP address.
GATEWAY ADDRESS	Enter the local gateway address to exit your local network.
SUBNET MASK	Enter the local subnet mask assigned to the panel.
DNS SERVER	Enter the IP address of the DNS (Domain Name System) used by the panel to resolve domain names into IP addresses.

PASSPHRASE (XR550 WITH ENCRYPTION)	Enter an 8 to 16-character Passphrase using alphanumeric characters. If the Passphrase is left blank, the data is not encrypted. The panel with encryption communicates to an SCS-104 line card installed at the receiver. The panel and the receiver SCS-104 line card must have the same Passphrase.
734N LISTEN PORT	Enter the port number that the 734N/734N-WiFi will use to send communication to the panel. This must be the same port that is programmed in Panel IP Port within the 734N/734N-WiFi Communication programming menu.
734N PASSPHRASE	Enter an 8 to 16-character Passphrase to encrypt communication with the 734N/734N-WiFi module. The 734N Passphrase must match the 734N Passphrase entered in Communication programming of the 734N. A passphrase is required for operation.
Messaging Setup	
ENABLE MESSAGING	Select YES to allow the panel to send the following messages to three programmed destinations. • Zone Alarms by Zone Name • Zone Troubles by Zone Name • Zone Bypass by User • Arming (Closings) by User| • Disarming (Openings) by User • Late to Close • AC Power Trouble and Restoral • System Low Battery • Ambush • Abort, Cancel and Alarm Verified by User
SYSTEM NAME	Enter a unique name for the panel. The panel name is used as the sender of the message. If this field is left blank, the panel account number is sent.
DESTINATION 1-3	Enter the cell phone number where messages will be sent. The message can be sent to any device (computer, cell phone, PDA) as long as a valid cell phone number is entered. If Destination is a 10-digit cellular number, enter a user's user number from this account. This option is used when sending commands such as arming or disarming back to the panel. The user number entered must have the authority to perform the commands as if it occurred at the keypad.
O/C SMS	Select YES to allow the panel to send Opening and Closing messages to a cell phone via SMS protocol.
MONTHLY LIMIT	This number limits the monthly incoming and outgoing SMS messages allowed to be sent or received by the panel. A panel event that causes messages to be sent to destination cell phone numbers is counted towards the panel's monthly limit.
Device Setup	
DEVICE NUMBER	Enter an address of 1-16 for the device being programming. If using a wireless keypad, program the device number in the Status List Auxiliary 1 Zones programming option to display wireless keypad troubles.
DEVICE NAME	A device name must be given to each device in the system. Press CMD to accept the default name or enter a new name up to 32 alphanumeric characters.
DEVICE TYPE	Select a device type for the selected device number. DOOR - The device is an access control device and is either a keypad using door strike functions or a Wiegand Interface Module. KEYPAD - The device is a keypad. FIRE - The device is a 630F Remote Annunciator. EXPANDER - The device is a Zone Expansion Module.
DEVICE COMMUNICATION TYPE	For a Device Type of DOOR, select KPD-BUS or NETWORK. For a Device Type of KEYPAD, select KPD-BUS or WIRELESS.
SERIAL NUMBER	This option only displays if Device Type is KEYPAD and Device Comm Type is WIRELESS. Enter the eight-digit serial number found on the wireless keypad.
SUPERVISION TIME	This option only displays if Device Type is KEYPAD and Device Comm Type is WIRELESS. Press CMD to accept the default supervision time or select the supervision time for the device. Zero (0) indicates an unsupervised wireless keypad.
ACCESS AREAS	To select an area, enter the area number using the digit keys on the keypad. Users must have matching access area numbers assigned to their code to receive a door access at this device. If you do not enter any area numbers, all users with Door Access authority receive a door access without regard to schedules. If the user code is programmed for AntiPass YES, then the user is logged into all matching areas. This user is not allowed to access these areas again until they have egressed the area. When all areas accessed by a door are armed, the door is locked by the panel.

EGRESS AREAS	To select an area, enter the area number using the digit keys on the keypad. If an area is programmed as an access area, it cannot be programmed as an egress area and therefore does not display during Egress Areas programming. Use this option to detect Anti-passback violations. If you do not enter any area numbers, all users with Door Access authority receives a door access without regard to schedules. If you are not using the Anti-Pass feature leave Egress Areas blank.
DISPLAY AREAS	Select any areas between 1 up to 32. Display Areas allows the panels burglary activities to be segmented so that only specific area(s) and their associated operation appear at a particular keypad. When Display Areas is left defaulted (all areas selected), Menu Display and Status List items determine whether zone alarms and troubles display at this device, regardless of area assignment. A common area and its operations cannot be assigned to a specific keypad.
STRIKE TIME	Enter a door access time, between 1 and 250 seconds, during which a keypad or access control device relay is activated. Enter 0 (zero) to activate the device relay with a toggle action. The Request to Exit door access time of a keypad or Model 734/734N Wiegand Interface Module is not affected by this selection. It remains at 5 seconds.
STRIKE DELAY	Enter the number of minutes, 0 to 9, to delay a door strike after a valid code is entered or a card read occurs.
FIRE EXIT RELEASE	Select YES to allow the door access relay at this address to be released whenever Fire panic keys are pressed or a Fire or Fire Verify zone alarm is in the Status List. Select NO to not allow the door access relay at this address to be released.
PUBLIC DOOR	Select YES to allow the door access relay at this address to be released whenever the Lockdown command is issued from the keypad User Menu or remote command. Select NO to not allow the door access relay at this address to be released.
OUTPUT GROUP	Select YES to allow the output group (relays) assigned to the user profile to turn ON when the device relay is activated for the programmed strike time.
SCHEDULE OVERRIDE	Select YES to causes the on time for a door schedule to be ignored when all areas assigned to Access Areas for this device are armed. Select NO to allow door schedules to operate independent of system armed status.
AUTO FORCE ARM DEVICE?	Select YES to have all Display Areas assigned to this keypad automatically arm and force arm faulted zones at arming. The user is not prompted to select areas to arm or force arm faulted zones after choosing ARM at the keypad. If Closing Code is programmed as YES, only the matching areas between the Display Areas and the User Code's authorized areas arm. When NO is selected, the user is prompted to select areas (ALL NO YES) and choose to force arm or bypass at arming and disarming.
DOOR REAL-TIME STATUS?	Select YES to have real-time door status messages sent to PC Log and Entré reporting for this device.
SEND DOOR FORCED MESSAGE?	Select YES to have the panel send a real-time door status message of Forced Open (FO) to PC Log and Entré reporting when the door relay is off, but the door zone has transitioned from its normal state.
PROGRAM 734/734N OPTIONS	Select YES to program a 734 or a 734N/734N-WiFi Wiegand Interface Module. The options displayed for a 734 or 734N are the same. To program the 734, the Device Type must be set to DOOR and the Device Communication Type must be set to KPD-BUS. To program the 734N/734N-WiFi, the Device Type must be set to DOOR and the Device Communication Type must be set to NETWORK.
ACTIVATE ZONE 2 BYPASS	Select YES to activate the Bypass option. Selecting NO allows standard zone operation on Zone 2.
ZONE 2 BYPASS TIME	Enter 20-250 seconds for the Bypass timer expires. If the door remains open when the timer expires a zone open/short is sent to the panel for Zone 2.
RELOCK ON ZONE 2 CHANGE?	Selecting NO leaves the relay on for the door access time when Zone 2 restores. Selecting YES turns the 734/734N/734N-WiFi relay off and relocks the door when Zone 2 changes state.
ACTIVATE ZONE 3 REQUEST TO EXIT	Selecting YES activates the Zone 3 Request to Exit (REX) option. Selecting NO allows standard zone operation on Zone 3. Optionally connect a PIR (or other motion sensing device) or a mechanical switch to Zone 3 to provide REX capability to the system. When Zone 3 shorts, the on-board Form C relay activates for the programmed Bypass entry/exit timer number of seconds.
ZONE 3 REX STRIKE TIME	Enter the number of REX seconds to elapse. Range is from 5 to 250 seconds.
ACTIVATE ONBOARD SPEAKER	Select YES to enable the onboard piezo speaker for local annunciation. Select NO to turn the piezo off for all operations.

CARD OPTIONS	Press the select key under DMP, CUSTOM, or ANY to select that option. Select DMP to indicate the reader sends a 26-bit DMP data string. Select CUSTOM if using a non-DMP card or user code length of 6 to 12 digits. Select ANY to allow all card reads to activate the door strike relay. The door strike relay is activated for the length of time programmed in ZN 3 REX STRIKE TIME. No user code information is sent to the panel.
CUSTOM CARD DEFINITIONS - WIEGAND CODE LENGTH	When using a custom credential, enter the total number of bits (1-255) to be received in Wiegand code including parity bits.
734 SITE CODE - SITE CODE POSITION	Enter the site code start position (0-255) in the data string.
SITE CODE LENGTH	Enter the number of characters (1-16) the site code contains.
USER CODE POSITION	Define the User Code start bit position (0-255).
USER CODE LENGTH	Define the number of User Code bits. On a 734 module, custom numbers can only be between 16-40. On a 734N/734N-WiFi module, custom numbers can be between 1-255.
REQUIRE SITE CODE	Press the top row Select key under YES to use a site code. In addition to User Code verification, door access is only granted when any one site code programmed at the SITE CODE ENTRY option matches the site code received in the Wiegand string.
SITE CODE DISPLAY	734 Module: Program up to 8 three-digit site codes between 0-999. 734N/734N-WiFi Module: Program up to 8 five-digit site codes between 1-65535.
NUMBER OF USER CODE DIGITS	734 module recognizes user codes from 4-12 digits in length. 734N/734N-WiFi module recognizes user codes from 1-12 digits in length.
NO COMMUNICATION WITH PANEL	This option defines the relay action when communication with the panel has not occurred for approximately ten seconds. OFF (Relay Always Off) — The relay does not turn on when any Wiegand string is received. Off does not affect any REX operation. SITE (Accept Site Code) — Door access is granted when the Wiegand site code string received matches any site code programmed at SITE CODE ENTRY. ANY (Any Wiegand Read) — Door access is granted when any Wiegand string is received. ON (Relay Always On) — The relay is always on. LAST (Keep Last State) — The relay remains in the same state and does not change when communication is lost.
Remote Options	
REMOTE KEY	This option allows you to enter a code of up to 16 characters. All panels are shipped from the factory with the key preset as blank.
REMOTE DISARM	YES allows the panel to be disarmed remotely. NO disables remote disarming.
ARMED ANSWER RINGS	Enter the number of rings (0-15) the panel counts before answering the phone line when all system areas are armed. If 0 (zero) is entered, the panel does not answer the phone.
DISARMED ANSWER RINGS	Enter the number of rings the panel counts (0-15) before answering the phone line while any system areas are disarmed. If 0 (zero) is entered, the panel does not answer the phone.
PC MODEM	YES allows the panel to answer the telco link and connect with Remote Link through the PC Modem at 2400 baud. NO disables PC Modem communication.
ALARM RECEIVER AUTHORIZATION	Select YES to enable remote commands and programming to be accepted from the alarm SCS-1R Receiver. The Remote Key option can also be required. With YES selected, the panel requests the receiver key during its first communication with the first SCS-1R Receiver. The panel retains this alarm receiver key in memory. When NO is selected, remote commands and programming are not accepted from the alarm SCS-1R Receiver.
SERVICE RECEIVER AUTHORIZATION	YES enables remote commands and programming to be accepted from a secondary service receiver other than the alarm SCS-1R Receiver. The Remote Key option can also be required. With YES selected, the panel requests the service receiver key the first time it is contacted by the service receiver. The panel retains this service receiver key in memory.
MANUFACTURER AUTHORIZATION	Select YES to allow DMP Technical Support to access the panel during system service or troubleshooting. This authorization automatically expires within one hour.
ALLOW NETWORK REMOTE	This option displays only if the panel has NET capability. YES allows remote programming over the network.
NETWORK PROGRAMMING PORT	Enter the programming port number. The programming port identifies the port used to communicate messages from the panel.
ENCRYPT NETWORK REMOTE	YES encrypts data sent over network. Default is NO.
ALLOW CELLULAR REMOTE	YES allows remote programming using cellular connection. Default is YES.

FIRST/SECOND GPRS APN	Enter the first and second APN (Access Point Name) for cellular communication to connect to a DNS network. The APN may contain two lines of 16 characters to equal 32 characters.
ENCRYPT CELLULAR REMOTE	YES encrypts data sent over a cellular connection. Default is NO.
ENTRÉ CONNECTION	This option displays only if the panel has network capability. Select NET to allow a dedicated network connection with Entré.
ENTRÉ INCOMING TCP PORT	This option displays only if NET is chosen for the Entré connection. Enter the programming port number for the incoming Entré connection.
ENTRÉ IP ADDRESS	This option displays only if NET is chosen for the Entré connection. Enter the Entré IP address where the panel sends network messages.
ENTRÉ OUTBOUND TCP PORT	This option displays only if NET is chosen for the Entré connection. Enter the programming port number for the outbound Entré connection.
ENTRÉ BACKUP IP ADDRESS	This option displays only if NET is chosen for the Entré connection. Enter the IP backup address where the panel sends network messages if the first Entré IP Address fails.
ENTRÉ BACKUP TCP PORT	This option displays only if NET is chosen for the Entré connection. Enter the backup programming port number for the outbound Entré connection in case the connection to the primary IP fails.
ENTRÉ CHECKIN	Select the rate at which check-in messages are sent over the Entré connection. Select 0 (zero) to disable check in messages. Range is 0, 3-240 minutes.
ENTRÉ PASSPHRASE	Enter an 8 to 16-character Passphrase using alphanumeric characters. If you leave the Passphrase blank, the data is not encrypted.
SEND LOCAL CHANGES	Select NET or DD to send local programming changes or User Menu changes to user codes, user profiles, schedules, or holiday dates to Remote Link after exiting the programming or User Menu.
REMOTE CHANGE IP	This option displays when NET is selected for Send Local Changes. Enter the IP address containing up to 12 digits.
REMOTE CHANGE PORT	This option displays when NET is selected for Send Local Changes. Enter the Port number. Valid numbers are from 0 to 65535.
REMOTE TELEPHONE NUMBER	This option displays when DD is selected for Send Local Changes. Enter the phone number the panel dials when sending programming changes.
APP KEY	Enter the 8-digit App Key obtained in your Dealer Settings tab at vk.securecomwireless.com. This option is a security feature of the Virtual Keypad iPhone/Android App used only when your Dealer Settings at vk.securecomwireless.com have “EasyNet” set as the Communication Type.
System Reports	
ABORT REPORT	Select YES to allow the panel to send an alarm abort report to the receiver if an area is disarmed during Transmit Delay before an alarm report is sent and the Bell Cutoff Time has not expired. After disarming an area, if any other area remains armed and has zone(s) in alarm, the alarm abort report is not sent. Abort Reports are not sent for Fire, Fire Verify, or Supervisory type zones.
RESTORAL REPORTS	NO - Disables the zone restoral report option. Zones continue to operate normally but do not send restoral reports to the receiver. YES - Enables the zone restoral report option. Zone restorals are sent whenever a zone restores from a trouble or alarm condition. DISARM - Causes the panel to send restoral reports for a non-24-hour zone whenever a zone that has restored from a trouble or alarm condition is disarmed. All 24-hour zones send restoral reports as they restore. For UL applications, Restoral Reports must be set to YES.
BYPASS REPORTS	YES allows the panel to send all zone bypasses, resets, and force arm reports to the receiver. Reports are only sent if O/C User in Communications is set YES for Receiver 1 or Receiver 2.
SCHEDULE CHANGE REPORTS	YES allows the panel to send all schedule changes to the receiver.
CODE CHANGE REPORTS	YES allows the panel to send all code additions, changes, and deletions to the receiver.
ACCESS KEYPADS	Select the keypad addresses (1 through 16) that send door access reports to the receiver.
AMBUSH (XR550 ONLY)	YES allows an ambush report to be sent anytime user code number 1 is entered at a keypad. NO disables the ambush report and allows user number 1 to operate the same as all other codes.
System Options	
SYSTEM	This option allows you to program how the areas operate for arming and disarming. AREA - All 32 areas can be programmed and operated independently. ALL/PERIMETER - Area 1 is the Perimeter and Area 2 is the Interior. HOME/SLEEP/AWAY - Area 1 is the Perimeter, Area 2 is the Interior, and Area 3 is the Bedrooms.

INSTANT ARMING	When YES is selected, the arming keypad displays INSTANT for selection during the exit countdown delay when arming fewer than all areas of the system. At the time instant arming is selected, any entry and exit delays programmed for the areas being armed are ignored. When NO is selected, INSTANT does not display during arming.
CLOSING WAIT	When YES is selected, the keypad displays ONE MOMENT... while waiting for an acknowledgement from the receiver before arming the selected area(s) and performing a Bell Test (if selected). Exit delays begin after the Closing Wait. Opening/Closing reports must be YES to enable Closing Wait.
ENTRY DELAY 1	Enter the Entry Delay time (30 to 250 seconds) for all Exit type zones programmed to use Entry Delay 1. Repeat for each entry delay being used in the system. For UL Installations, the combined Transmit Delay (Abort Window) and Entry Delay must not exceed one (1) minute.
CROSS ZONE TIME	Enter the time allowed (4-250 seconds) between zone faults. When zones are cross zoned, the same zone or a second cross zoned zone must fault within this time in order for an alarm report for both zones to be sent to the receiver. If the cross zone time expires without the second zone faulting, only a zone fault from the first zone is reported.
ZONE RETARD DELAY	Enter the retard time (1-250 seconds) assigned to Fire, Supervisory, Auxiliary 1, Auxiliary 2, Arming, and Panic type zones. The retard delay only functions when the zone is shorted. The zone must remain shorted for the entire length of the Retard Delay before being recognized by the panel.
POWER FAIL DELAY	This option tracks the duration of an AC power failure. When the AC power is off for the length of the programmed delay time, an AC power failure report is sent to the receiver. The delay time can be from 1 to 15 hours. For UL burglary installations Power Fail Delay shall be programmed to 0 (zero). For UL fire installations, Power Fail Delay shall be programmed as required by the service of the panel. For ULC S559 installations, Power Fail Delay should be programing to 3 or less.
SWINGER BYPASS TRIPS	Enter the number of times (1-6) a zone can go into an alarm or trouble condition within one hour before being automatically bypassed. Bypassed zones are automatically reset when the area they are assigned to is disarmed.
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.
TIME ZONE CHANGES	This function allows the panel to request automatic time changes from the DMP SCS-1R Receiver on Path 1. For the receiver to send time changes, it must be programmed to send time changes and must be receiving time change updates from the network automation computer at least every 24 hours. When time zone is programmed YES, enter the number (0-23) that indicates the difference between the Greenwich Time zone (GMT) and where the panel is located.
LATCH SUPERVISORY ZONES	Selecting YES latches supervisory zone alarms on the keypad display until the sensor reset operation is performed. Selecting NO automatically clears the alarm from the keypad display when the supervisory zone restores to a normal condition.
PROGRAMMING MENU LANGUAGE	Select to change the primary programming language. ENG = English (ENGLISH) SPN = Spanish (ESPANOL) FRN = French (FRANCAIS)
USER MENU AND STATUS LIST LANGUAGE	Select the primary user language. ENG = English (ENGLISH) SPN = Spanish (ESPANOL) FRN = French (FRANCAIS) Selecting a secondary user language allows the user to view the User Menu and Status List text in English, Spanish, or French. If SEC LANG: is set to NONE, the option to choose a language does not display.
BYPASS LIMIT	Enter the maximum number of zones (0 to 8) that can be bypassed in any single area when that area is being armed at a keypad.
CARD PLUS PIN	Select YES to require all users to present a proximity credential and enter a PIN number wherever user code entry is required for system functions accessed from a keypad. Select NO to disable Card Plus PIN operation.
HOUSE CODE	When using a DMP wireless system, enter a house code between 1 and 50.
DETECT WIRELESS JAMMING	This option displays when the House Code entered is for a DMP 1100 Series Wireless system (1-50). Select YES to enable jamming messages to display in the Status List. Select NO to disable jamming messages.

WIRELESS AUDIBLE ANNUNCIATION	This option displays when the House Code entered is for a DMP 1100 Series Wireless system (1-50). Select the keypad buzzer annunciation method for wireless low battery and missing messages. Select ANY to enable annunciation anytime. Select DAY to enable annunciation except during sleeping hours (9 PM to 9 AM). Select MIN (minimum) to annunciate only Fire and Fire Verify zones during daytime hours (9 AM to 9 PM).
ENABLE KEYPAD PANIC KEYS	This option allows the two-button panic key operation selected at the keypad to send the Panic, Emergency, or Fire message to the central station receiver.
OCCUPIED PREMISES	For All/Perimeter or Home/Sleep/Away systems, select YES to allow the panel to automatically disarm the interior area(s) when arming all areas and a perimeter zone is not tripped during the exit delay. Select NO to not automatically disarm interior area(s).
ENHANCED ZONE TEST	Select YES to allow enhanced zone test operation. Enhanced operation allows: • Panic Test and Walk Test functions can be restricted to operate only during an Area 32, Shift 4 schedule if programmed. If no schedule is entered, the walk test always operates. • A Verify message is sent each time a zone is tested. If a zone is tripped multiple times, a Verify message is sent for each trip. This allows the Central Station to record the number of devices per zone. • The Verify message for each zone test is sent at the time the trip occurs instead of at the end of Walk Test. • The System Test Begin and System Test End Central Station messages indicate the type of zone being tested. The System Test Begin message also includes the user name and number.
DUAL EOL	Select YES to enable the use of dual 1K EOL resistors on panel zones one to eight.
SEND 16 CHARACTER NAMES	This option allows central stations to select being sent either the first 16 characters of the name field or the entire programmed name, up to 32 characters, for user name, user profile, zone name, area name, output name, and group name. Select YES to have the first 16 characters of the name field sent to the central station. Select NO to send the exact number of characters entered in the name field
KEYPAD ARMED LED	This option displays only when using an Area system. Select ALL to require all keypad display areas to be armed before the keypad Armed LED turns on. Select ANY to turn on the keypad Armed LED when any keypad display area is armed.
USE FALSE ALARM QUESTION	Select YES to display IS THIS A FALSE ALARM? NO YES at the keypad in place of CANCEL VERIFY when a burglar alarm occurs. This operates for ALL/PERIM and HOME/SLEEP/AWAY arming systems.
ALLOW OWN USER CODE CHANGE	This option allows users without user code authority to change their own user code. When YES is selected,the User Code menu displays USER CODE: ***** at the keypad to allow that user to change their own code. If NO is selected, the user cannot change their personal user code.
PANIC SUPERVISION	Select YES to enable a 30 day supervision of the Model 1145-1-B-PSV key fob. This option allows a key fob that is lost or has a dead battery to be identified at the Central Station host automation system as a missing transmitter, without the need to apply a supervision time in zone information programming. SCS-VR Version 1.3.6 or higher is required
INACTIVE USER CODE AUDIT	This option allows users to choose 0-365 days a user code can remain unused before the panel sends an Inactive User Code message to the receiver.
WEATHER ZIP CODE	Enter the zip code of the user at this prompt. When no number is entered weather conditions are not displayed.
Bell Options	
BELL CUTOFF TIME	Enter the maximum time from 1 to 99 minutes the Bell Output remains on. If the area is disarmed, the cutoff time resets. Enter 0 (zero) to provide continuous bell output. The default is 15 minutes.
AUTOMATIC BELL TEST	Select YES to turn on the Bell Output for 2 seconds each time the system is completely armed from a keypad. This test is delayed until the Closing Wait acknowledge is received (if programmed). If the Closing Wait acknowledge is not received within 90 seconds, the bell test does not occur.
BELL OUTPUT	Enter the output/Favorite number when needed to follow the panel Bell Output operation for all action and off conditions. Enter 0 (zero) to disable. When BELL ACTION is set to T for Temporal Code 3, the Bell Output action for an LX-Bus output is pulse. Bell Output should not be programmed for a Model 1135 Wireless Siren when programmed in Output Information to Trip with Panel Bell.

BELL ACTION	This section defines the type of Bell Output for zone alarms. Enter S for a Steady Bell Output P for a Pulsed output T for a Temporal Code 3 output N for no Bell Output. Trouble conditions do not activate the Bell Output. Fire Bell Action Fire Type zones default is T. Burglary Bell Action for Burglary Type zones and Exit Error output default is S. Supervisory Bell Action for Supervisory Type zone default is N. Panic Bell Action for Panic Type zones default is N. Emergency Bell Action for Emergency Type zones default is N. Auxiliary Bell Action for Auxiliary Type zones default is N.
Output Options	
OUTPUT OPTIONS	The panel provides two Form C relays (1 and 2) and four switched ground (open collector) outputs numbered 3 to 6. Expand the system up to 500 additional relay outputs using any LX-Bus on the panel, or multiple 716 Output Expander Modules. In addition, 45 wireless outputs are available when using the 1100X Series wireless receiver. Select from the following output numbers: • 1 to 6 • 450 to 474 — Slow response time* wireless outputs (within 15 seconds) • 480 to 499 — Fast response time* wireless outputs (within 1 second) • 500 to 999 — LX-Bus output, Relay output, Zone expansion output • D1 to D16 — Keypad door strike relay for addresses 1-16 • F1 to F20 — To activate Z-Wave Favorites • G1 to G20 — Output group
CUTOFF OUTPUT	Outputs 1 to 6 can be entered here to turn off after a time specified in CUTOFF TIME. To disable this option, clear the display then press CMD.
OUTPUT CUTOFF TIME	If a Cutoff Output (1-6) is assigned, enter a Cutoff Time of 1 to 99 minutes for the output to remain on. Enter 0 (zero) for continuous output.
COMMUNICATION TROUBLE OUTPUT	Enter the output/Favorite number to turn on when a DD system fails to communicate on three successive dial attempts or if the backup communication line transmits a report. The Communication Trouble Output also turns on when NET is selected as the primary communication method and NET communication fails after one minute.
FIRE ALARM OUTPUT	Enter the output/Favorite number to turn on when a fire type zone is placed in alarm. The output is turned off using the Sensor Reset option while no additional fire type zones are in alarm.
FIRE TROUBLE OUTPUT	Enter the output number to turn on when a fire type zone is placed in trouble, when a supervisory type zone is placed in trouble, or when any system monitor (AC, Battery, Phone Line 1 or Phone Line 2) is placed in trouble. The output turns off when all fire and supervisory type zones, or system monitors are restored to normal.
PANIC ALARM OUTPUT	Enter the output/Favorite number to turn on when any Panic type zone is placed in an alarm condition. The output is turned off after all Panic zones are restored from an alarm condition and a Sensor Reset is performed. Wireless Outputs • The Panic Alarm is compatible with the Model 1118 Wireless Remote Indicator Light and the Model 1116 Wireless Relay Output connected to a Model 572 Indicator LED. • When a Panic Alarm occurs, the LED turns on steady for five minutes and then turns off. • When a Panic Test is initiated from the keypad, the LED flashes quickly for five minutes. • For a Panic Alarm, a fast response wireless output number is recommended.
AMBUSH OUTPUT (XR550 ONLY)	Enter the output/Favorite number to turn on when an Ambush code is entered at a keypad. The output is turned off using the Sensor Reset option.
ENTRY OUTPUT	Enter the output/Favorite number to turn on at the start of the entry delay time. The output turns off when the area is disarmed or the entry delay time expires.
BEGIN EXIT OUTPUT	This output/Favorite turns on any time an exit delay time starts. The output turns off when the system arms or when the arming has been stopped.
END EXIT OUTPUT	This output/Favorite turns on any time an exit delay time ends. The output turns off when the system disarms.
READY OUTPUT	Enter the output/Favorite number to turn on when all disarmed burglary zones are in a normal state. The output is turned off when any disarmed burglary type zone is in a bad state.
DISARMED OUTPUT	This output/Favorite turns on when all areas of the panel are disarmed. The output turns off when an area is armed.
TELEPHONE TROUBLE OUTPUT	Enter the output/Favorite number to turn on when the phone line monitor on the panel phone line is lost.

LATE TO CLOSE OUTPUT	Enter the output/Favorite number to turn on at the expiration of a Closing schedule. The output activates simultaneously with the CLOSING TIME! keypad display. The output is turned off when the area is armed, the Closing is extended, or the schedule is changed.
DEVICE FAIL OUTPUT	Enter the output/Favorite number to turn on when an addressed device fails to respond to polling from the panel. A Missing Device report is sent to the receiver. The output is turned off when the device responds to polling or is removed from programming in the system.
SENSOR RESET OUTPUT	Enter the output/Favorite number to turn on when a Sensor Reset is performed at a keypad. The output turns off automatically 5 seconds later. This function can be used to reset smoke detectors that are operated by an external power supply through a Model 716 Output Expander Module.
CLOSING WAIT OUTPUT	Enter the output/Favorite number to turn on for approximately four (4) seconds when Closing Wait is programmed as YES and the panel successfully communicates the closing message at arming. If the closing message does not communicate successfully, this output does not turn on.
ARM-ALARM OUTPUT	Enter the output/Favorite number to turn on steady when any area of the system is armed. If an alarm occurs causing the keypads to turn Red, this output pulses and continues to pulse for approximately five (5) minutes after the panel is disarmed. Enter 0 (zero) to disable. Wireless Outputs • The Arm-Alarm Output is compatible with the Model 1117 Wireless LED Annunciator and the Model 1116 Wireless Relay Output connected to a Model 572 Indicator LED. • When the Model 1117 is battery operated, the LED is off when the system is armed to conserve battery life. If an alarm occurs, the output flashes quickly. • When using the Model 1116 connected to a Model 572, the LED is on when the system is armed. If an alarm occurs, the output pulses. • To operate the Arm-Alarm output within one second, program a fast response number from 480 to 499. Fast response operation reduces overall wireless output battery life. • To operate the Arm-Alarm output within 15 seconds, program a slow response number from 450 to 474. Slow response operation increases overall wireless output battery life.
SUPERVISORY ALARM OUTPUT	Enter the output/Favorite number to turn on when a supervisory zone type is placed into an alarm. The output turns off when all supervisory type zones are restored to normal.
HEAT SAVER TEMPERATURE	Enter the desired temperature setting for all Z-Wave thermostats when the system is armed ALL or AWAY. When the system is disarmed the thermostats return to their previous settings. The range is 55-95 degrees.
COOL SAVER TEMPERATURE	Enter the desired temperature setting for all Z-Wave thermostats when the system is armed ALL or AWAY. When the system is disarmed the thermostats return to their previous settings. The range is 55-95 degrees.
Output Information	
OUTPUT NUMBER	Enter an output number. Entry range is 1 to 6, 450 to 474, 480 to 499, 500 to 999. In order for wireless output troubles to display at a keypad, the keypad address must be specified at the Auxiliary 1 Zones prompt in the Status List programming.
OUTPUT NAME	Enter up to a 32-character alphanumeric name for any output numbers.
OUTPUT REAL-TIME STATUS	Selecting YES allows Real-Time Status reports of a hardwire device, such as Output ON, OFF, PULSE, or TEMPORAL to be sent using PC Log reports. Selecting NO disables Real-Time Status for this output device.
SERIAL NUMBER	This option displays when the output number entered is for a wireless output. Enter the eight-digit serial number found on the wireless device.
SUPERVISION TIME	Select the supervision time required for the wireless output. Zero (0) indicates an unsupervised transmitter. The 3 minute supervision time is only available if using an 1135 Wireless Siren.
TRIP WITH PANEL BELL OPTION	This option displays for an 1135 wireless siren. Select YES to have the 1135 wireless siren follow the panel's bell output cadence for the zone type and bell cutoff time up to 15 minutes.
Output Groups	
OUTPUT GROUPS	This function allows you to assign outputs to groups. Output groups can be assigned to other areas of programming such as Output Options or Alarm Action of Zone Information.
GROUP NUMBER	Enter a group number from 1 to 20. Up to 20 different groups may be assigned.
GROUP NAME	Enter up to 32 characters for the group name.
OUTPUT NUMBER	Enter the Output number. Entry range is 1 to 6, 450 to 474, 480 to 499, 500 to 999 (outputs), F1 to F20 (Favorites), D1 to D16 (doors), and G1 to G20 (groups). The maximum number that can be assigned to a specific group is eight.

Menu Display	
MENU DISPLAY	Menu Display allows you to select at which keypad addresses the user can access the following functions. To select a keypad, enter the device number (keypad address) using the digit keys on the keypad.
ARMED STATUS	Enter the keypad addresses (1 through 16) that show the armed areas. The User Menu Armed Areas function also displays the custom area name you enter in Area Information.
TIME	Enter the keypad addresses that can display the time and day of the week.
ARM/DISARM	Enter the keypad addresses from which users can arm and disarm areas.
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. To select a keypad, enter the device number (keypad address) using the digit keys on the keypad.
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.
SYSTEM MONITOR TROUBLES	Specifies the keypad addresses (1 through 16) where any trouble on a System Monitor displays. The System Monitors include the following: • AC Power • Battery Power • Closing Check • Panel Box Tamper • Phone Line 1 • Phone Line 2 (requires the 893A Dual Phone Line Module) • Wireless Receiver Trouble • Wireless Jamming Trouble or Alarm The buzzer sounds at 10:00am daily until the system trouble clears from the Status List.
FIRE ZONES	Specifies the keypad addresses (1 through 16) where all fire zone alarms and troubles display. The zone name displays and, if it is a trouble condition, the keypad steady trouble buzzer sounds. The buzzer remains on until any top row Select key is pressed and a user code is entered. If a trouble condition remains in the display, the buzzer sounds at 10:00 am daily until the trouble is cleared from the Status List. The panel provides distinct speaker tones from the keypad for Fire: On - Fire zone alarm and Bell Output or Fire Bell Output is ON. Off - Alarm Silence
BURGLARY ZONES	Specify the keypad addresses (1 through 16) where all burglary zone alarms and troubles display. Burglary zones include Night, Day, and Exit type zones. Burglary zone troubles remain in the list until the zone restores. The keypad buzzer sounds for one second on burglary alarms. When using LCD Keypads, the panel provides distinct speaker tones from the keypad for Burglary: 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.
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.
PANIC ZONES	Specifies the keypad addresses (1 through 16) where all panic zone alarms and troubles display. The name of the zone remains in the list until a Sensor Reset is performed. The keypad will sound if a Bell Action is enabled in Bell Options.
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.
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.

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.
COMMUNICATION TROUBLE	Select YES to display communication trouble if any communication path fails. Select ALL to display communication trouble only when all paths have failed.
PC Log Reports	
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.
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.
ARM AND DISARM REPORTS	Sends arming, disarming and Late to Close events. Includes the area number, name and action, the user number and name, and the time and date.
ZONE REPORTS	Sends changes in the status of active zones. Includes the zone number, name, type, the action (alarm, trouble, bypass, etc.), user number (if applicable), and area name. For a Walk Test, Verify and Fail messages are sent for each zone.
USER COMMAND REPORTS	Sends user code changes, schedule changes, and door access denied events.
DOOR ACCESS REPORTS	Sends door access activity: door number, user number and name, time and date.
SUPERVISORY REPORTS	Sends system monitor reports, such as AC and battery, and system event reports. Supervisory Reports also sends the following reports: • Abort• Exit Error • Ambush • System Recently Armed • Alarm Bell Silenced • Unauthorized Entry • Late to Close * * Only sent as a Supervisory Report if Area Schedules is not enabled, Closing Check is enabled, and an opening/closing schedule has been programmed. To send these reports to the PC Log, you must enable SUPV MSG.
PC LOG REAL-TIME STATUS	Select YES to send Real-Time Status reports for zones, doors, and outputs. The specific reports must also be selected by individual zone or output. The Real-Time Status messages are sent to a PC running a graphic display software. Default is NO. The messages that can be sent are: Door Open/Closed with zone number Door Open/Closed with door number Output On/Off Output Pulse/Temporal
Area Information	
AREA INFORMATION	Assign functions to the different areas in the system. All non-24-hour zones must be assigned to an active area. Activate an area by assigning it a name. A name is given to each active area in place of a number to assist the user during arming and disarming.
EXIT DELAY	Enter the exit delay time (30-250 seconds) for all Exit type zones in this area. When the exit delay time starts, all activity on that zone and other non-24-hour zone types in the area is ignored until the exit delay expires. During Exit Delay, if an exit zone trips, then restores, and trips again, the Exit Delay timer restarts. This restart can occur only once. Exit Error Operation: At arming, when an entry/exit zone (EX) is faulted at the end of the exit delay then one of two sequences occur: For Entry Delay 1 EX type zones: • the bell sounds for the length of time set in Bell Cutoff programming. • the Entry Delay operation starts requiring code entry to disarm • if not disarmed, a zone alarm and an exit error are sent to the receiver. For Entry Delay 2-4 EX type zones: • the zone is force armed and a zone force arm message is sent to the receiver • an Exit Error is sent to the receiver • the bell sounds for the length of time set in Bell Cutoff programming
BURGLARY BELL OUTPUT	Enter the output number (0 to 6, 500 to 999, G1 to G20, D1 to D16, or F1 to F20) that is turned on any time a Burglary type zone is placed in alarm. The output is turned off when you disarm any area and no other Burglary type zones are in alarm.

CLOSING CHECK	Select YES to enable the panel to verify that all areas in the system are armed after permanent or extended schedules expire. If the Closing Check finds any areas disarmed past the scheduled time, the keypads selected to display System Trouble Status displays CLOSING TIME! and emits a steady beep. When Area Schedules is set to YES in Area Information, the specific area and name display followed by — LATE. When Auto Arm is NO, if within ten minutes the system is not armed or if the schedule is not extended, a Late to Close report is sent to the SCS-1R Receiver. When Auto Arm is YES, the area arms. If the area becomes disarmed outside of any schedule, the Closing Check sequence occurs after the Late Arm Delay time. When Closing Check is NO and Auto Arm is YES, the system immediately arms when the schedule expires. No warning tone occurs. In addition, when Closing Check is NO, the option to extend a schedule does not display when the schedule expires.
CLOSING CODE	When YES is selected, a code number is required for system arming. If NO is selected, a code number is not required for system arming.
ANY BYPASS	When YES is selected, zones can be bypassed without a code number during the arming sequence. A code is always required to use the Bypass Zones option from the menu.
AREA SCHEDULES	Select YES to allow each area to follow individual sets of area schedules. Select NO for all areas to follow only one set of schedules.
EARLY MORNING AMBUSH (XR550 WITH NETWORK OR ENCRYPTION ONLY)	Enter the number of minutes (1 to 15) before a silent alarm (Early Morning Ambush S33) is sent to the central station using the area 1 account number. Enter 0 (zero) to disable this option. When a user code is entered to disarm area 1 at a keypad or reader with Access Areas assigned to area 1, the same or different user code must be entered within the programmed number of minutes to prevent an ambush message from being sent to the receiver. The second user code also must have authority to disarm area 1. In addition, a zone activation with Alarm Action Message C also cancels the Early Morning Ambush timer and stops an Ambush message from being sent to the receiver.
AREA NUMBER	Enter the number of the area to program. After entering the area number, press CMD to enter the area name. Only Area systems allow the area name to be changed.
ALL/PERIMETER PROGRAMMING	For All/Perimeter systems, program the Interior and Perimeter areas.
HOME/SLEEP/AWAY PROGRAMMING	For Home/Sleep/Away systems, program the Interior, Bedroom, and Perimeter areas.
AREA NAME	The area name can be up to 32 alphanumeric characters. Home/Sleep/Away with Guest systems display the area name, but the names cannot be changed. The following are the display names that appear on the keypad: Area Display — Area Display — Area Display 1 Perimeter — 4 Guest1 Perimeter — 7 Guest2 Perimeter 2 Interior — 5 Guest1 Interior — 8 Guest2 Interior 3 Bedrooms — 6 Guest1 Bedrooms — 9 Guest2 Bedrooms
ACCOUNT NUMBER	Enter the account number to be sent to the receiver for this area. Choose an account number compatible with the Communication Type selected in Communications.
OPENING/CLOSING REPORTS	This option allows an Opening report to be sent to the receiver whenever any area is disarmed. A Closing report is also sent the receiver when any area is armed.
AUTOMATIC ARMING	Select YES to allow this area to arm automatically according to permanent, temporary, or extended schedules. If no schedules are programmed, the area auto arms every hour. If closing check is selected as YES, the automatic arming function does not take place until the expiration of a ten minute Closing Check delay. See Closing Check. If the area has been disarmed outside of any permanent or temporary schedule, the closing check sequence occurs one hour after the area is disarmed. At arming, bad zones are handled according to the option selected in section Bad Zones. If a closing report is sent, the user number is indicated as SCH on the SCS-1R Receiver. NO disables automatic arming for this area.
BAD ZONES	At the time of automatic arming, some zones in the area may not be in a normal condition. This option allows you to program the panel response to these bad zones. This option does not display if AUTO ARM is NO. BYP - All bad zones are bypassed. A report of the bypass is sent to the receiver if Bypass Reports is YES. The report indicates SCH as the user number. FORC - All bad zones are force armed. Zones force armed in a bad condition are capable of restoring and reporting an alarm if tripped. A forced zone report is transmitted if Bypass Reports is YES. The report indicates SCH as the user number. REF - The automatic arming is refused and no arming takes place. A No Closing report is sent to the receiver regardless of the Closing Check selection.
AUTOMATIC DISARMING	NO disables automatic disarming by schedule for this area. When YES is selected, the area automatically disarms according to permanent or temporary schedules. If an opening report is sent to the receiver, the user number is indicated as SCH.

ARMED OUTPUT NUMBER	Enter the output to turn on when this area is armed. If an exit delay is used for this area, the Armed Output turns on at the start of the exit delay. The output is turned off when this area is disarmed.
LATE OUTPUT NUMBER	Enter the output to turn on when this area is not armed by its scheduled time and Area Late or Closing Time displays at a keypad and the keypad buzzer is on. The output is turned off when the keypad buzzer is silenced by pressing any key.
LATE ARM DELAY	Enter 4 to 250 minutes to delay before automatic re-arming occurs after the area becomes disarmed outside of schedules.
BANK SAFE & VAULT (XR550 WITH NETWORK OR ENCRYPTION ONLY)	NO disables the Bank Safe & Vault feature for this area. When selected as YES, schedules set for this area and the time of day cannot be changed while the area is armed. Program schedules before arming: A Bank Safe & Vault area can only be disarmed during scheduled times. If the area becomes armed before programming a schedule, the panel must be reset before the area can be disarmed from a keypad or the Bank Safe & Vault option in Area Information must be set to NO. Zones assigned to Bank Safe & Vault areas cannot be bypassed or force armed. Do not assign Bank Safe & Vault area to an Arming zone. Arming zones can disarm Bank Safe & Vault areas outside of a schedule.
COMMON AREA	Select YES to enable this area to operate as a common area. This area is armed when the last area in the system is armed and is disarmed when the first area in the system is disarmed. You can have multiple common areas in each system. For the common area to work properly, do not assign the common area to any user code. When a user code can arm and disarm the common area from a keypad at any time, the common area does not function as a common area.
ARM FIRST AREA	Select YES to enable this area to operate as an Arm First area. This area is automatically arm when any non-Arm First area assigned to the same keypad is armed but does not disarm when other areas become disarmed. You can have multiple Arm First areas in a system and divide them among keypads if needed. If an Arm First area has faulted zones that cannot be bypassed, arming stops and the areas are not armed. Correct the problem with the Arm First area and then begin the arming process again.
TWO MAN RULE (XR550 WITH NETWORK OR ENCRYPTION ONLY)	Select YES to require two user code entries to disarm and/or allow door access to this area. When a user presents a code to a keypad or reader requesting a door access or disarm, 2ND CODE displays and requires the entry of a different user code with at least the same authority. The second user code must be entered within 30 seconds. NO disables the Two Man Rule for this area.
Zone Information	
ZONE NUMBER	Enter the number of the zone you intend to program. The available LX-Bus connections for the panels are: XR150-LX500 XR350-LX500 through LX700 XR550-LX500 through LX900 For 1100 Series Key Fob zones (400-449), programming continues at the 1100 Series Key Fobs Section.
ZONE NAME	Zone names can have up to 32 alphanumeric characters. A name must be given to each zone in the system.
ZONE TYPE	When you assign a Zone Type to a zone, automatic zone responses are made. There are 12 Zone Types to choose from: Blank, Night, Day, Exit, Fire, Panic, Emergency, Supervisory, Auxiliary 1, Auxiliary 2, Fire Verify, or Arming (keyswitch) If you select Blank, Night, Day, Exit, Auxiliary 1/2, or Arming as the Zone Type, the zone must be assigned to an active area. If you select Fire, Fire Verify, Panic, Emergency, or Supervisory as the Zone Type, it is a 24-hour zone that is always armed and no area assignment is needed. Zone Type Specifications The panel contains 12 default zone types for use in configuring the system. These zone types provide the most commonly selected functions for their applications. All zone types except the Arming zone type can be customized by changing the options listed below. Arming zone type programming continues at Arming Zone Area Assignment.
AREA ASSIGNMENT	Enter the area number where the Night, Day, Exit, Auxiliary 1, or Auxiliary 2 zone is being assigned. For an Area system, area numbers 1-32 can be assigned. For a Home/Sleep/Away with Guest system, area numbers 1-9 can be assigned. In an All/Perimeter or Home/Sleep/Away system, the currently selected area, Perimeter, Interior, Bedroom displays. On an All/Perimeter system, select INT to program zones for the interior area and select PERIM to program zones for the perimeter area. On a Home/Sleep/Away system, select INT to program zones for the interior area, select BDRM to program zones for the bedroom area, and select PERIM to program zones for the perimeter area.

FIRE BELL OUTPUT	This output (1 to 6, 500 to 999, F1 to F20, G1 to G20, or D1 to D16) is turned on any time a Fire, Fire Verify, or Supervisory zone is placed in alarm. The output is turned off by any the following actions: • When the User Menu Alarm Silence function is performed. • When a valid user code is entered to silence the bell. • When the Silence key is pressed on the 630F Remote Fire Command Center. • Using the Outputs On/Off function in the User Menu. • The expiration of the Bell Cutoff time. This output can be connected to a lamp, LED, or buzzer using the DMP Model 716 Output Expansion Module.
ARMING ZONE AREA ASSIGNMENT	In an Area or Home/Sleep/Away with Guest system, if the zone has been programmed as an Arming Type (AR), enter the areas that the zone controls. Perimeter/All - Specify whether the arming zone arms just the Perimeter (PERIM) or the Perimeter and Interior areas (ALL) for All/Perimeter systems. When disarming, all areas are disarmed. Home/Sleep/Away - Specify whether the arming zone arms the Perimeter (HOME), the Perimeter and Interior (SLEEP), or all three areas (AWAY). When disarming, all areas are disarmed.
STYLE	This option specifies the style for the arming/disarming operation. TGL (Toggle) - When the zone changes from normal to shorted, the programmed areas toggle between the armed or disarmed condition. When restored to normal, no action occurs. When the zone opens from a normal (disarmed) state, a trouble is reported. When opened from a shorted (armed) state, an alarm is reported and the zone is disabled until you disarm the area(s) from either a keypad or Remote Link. ARM - When the zone is shorted, the programmed areas are armed. When restored to normal, no action occurs. When the zone is opened from a normal (disarmed) state, a trouble is reported. When opened from a shorted (armed) state, an alarm is reported. DIS (Disarm) - When programmed, a short disarms the programmed areas. When restored to normal, no action occurs. When the zone is opened from a normal (disarmed) state, a trouble is reported. STEP - A short arms the areas and beeps the keypads once. A normal condition causes no action. An open condition disarms the programmed areas and beep the keypads for one second. This arming style is designed for wireless arming pendants. When using an arming/disarming keyswitch locate the keyswitch within the protected area. MNT (Maintain) - When the zone is shorted, the programmed areas are armed. When restored to normal, the programmed areas are disarmed and any alarm bells are silenced. When the zone is opened from a normal (disarmed) state, a trouble is reported. If opened from a shorted (armed) state, an alarm is reported and the zone is disabled until you disarm the area(s) from either a keypad or Remote Link.
NEXT ZONE	Select YES to terminate zone programming. The display returns to Zone Number, allowing you to enter a new zone number. Select NO to make alterations to the Alarm Action for a zone. To program zones for wireless operation, select NO at the NEXT ZONE.
DMP WIRELESS	For a DMP 1100X Series Wireless Receiver set the House Code from 1 to 50 in System Options. Zones 500 through 999 can be programmed as Wireless zones.
WIRELESS	Select YES to program this zone as a DMP wireless zone.
SERIAL NUMBER ENTRY	Enter the eight-digit serial number found on the wireless device.
CONTACT	This option displays if the serial number entered is for an 1101, 1103, or 1105 Universal Transmitter or 1114 Wireless Four-Zone Expander. Select INT to use the internal reed switch contacts. Select EXT to connect an external device to the 1101, 1103, or 1105 terminal block.
SUPERVISION TIME	Press any top row key to select the supervision time required for the wireless zone.
LED OPERATION	Select YES to turn on a Hold-up transmitter LED during Panic or Emergency operation. Select NO to turn the LED off during Panic or Emergency operation.
DISARM/DISABLE	Select YES to disable the zone tripped message (short) to the 1100X Series Receiver from an 1126 or 1127 PIR transmitter during the disarmed period. When disabled, the PIR only sends supervision, tamper and low battery messages during the disarmed period to extend transmitter battery life. Select NO to always send zone tripped messages in addition to supervision, tamper and low battery.
PIR PULSE COUNT	Select the number of infrared pulses (2 or 4) the 1126 or 1127 PIR should sense before sending a short message to the 1100X Series Receiver.
PIR SENSITIVITY	Select the sensitivity setting for an 1126 or 1127 PIR. Selecting LOW sets the PIR to operate at 75% sensitivity for installations in harsh environments. Selecting HIGH sets the PIR to maximum sensitivity.
PET IMMUNITY	This option displays for the 1122 Wireless PIR Motion Detector. Select whether or not to enable pet immunity. Selecting YES allows pet immunity for animals up to 55 pounds. Default is NO.

NEXT ZONE	Select YES to return to the ZONE NO: - prompt to program a new zone. Select NO to display the Alarm Action option.
1100 SERIES KEY FOBS	Only zones 400 to 449 can be programmed as 1100 Series Key Fob zones. To operate arming and disarming properly, the Key Fob should be assigned to a User Number with appropriate area assignments, however, the User Number does not have to exist at the time the Key Fob is programmed. The Key Fob User Number can be added later by the User.
KEY FOB USER NUMBER	Enter the User Number (1-9999) used to identify the key fob user and their arming and disarming authority.
KEY FOB SERIAL NUMBER	Enter the eight-digit serial number found on the wireless device.
KEY FOB SUPERVISION TIME	Select the supervision time required for the key fob zone.
NUMBER OF KEY FOB BUTTONS	Enter the number of buttons (1, 2, or 4) on the key fob being programmed.
KEY FOB BUTTON SELECTION (FOUR BUTTONS)	Press the Select key under the key fob button to program. The following list identifies the default button assignments: TOP Arming with no areas assigned BTM Disarming with no areas assigned LFT Panic Alarm (PN) with no output assigned RGT Arming with Area 1 assigned
KEY FOB BUTTON SELECTION (TWO BUTTONS)	Press the Select key under the key fob button to program. The following list identifies the default button assignments: TOP Arming with no areas assigned BTM Disarming with no areas assigned
BUTTON ACTION	This option specifies the Button Action for an individual key fob button. The default action for the button selected is displayed. Press any Select key to display the Button Action options. To view more options press CMD. yyy = the name of the button being programmed (TOP, BTM, LFT, RGT). ARM (Arm) - Arms selected areas and force arms bad zones. DIS (Disarm) - Disarms selected areas. TGL (Toggle Arm) - Toggles arm/disarm for selected areas and force arms bad zones. STA (Status) - Causes the key fob LED to indicate the arm/disarm status of the system. PN (Panic) - Triggers a Panic zone type alarm with no restoral. PN2 (Panic 2) - Triggers a Panic zone type alarm with no restoral when pressed simultaneously with any other Panic 2 button. No action occurs when pressed alone. EM (Emerg) - Triggers an Emergency zone type alarm with no restoral. EM2 (Emerg 2) - Triggers an Emergency zone type alarm with no restoral when pressed simultaneously with any other Emergency 2 button. No action occurs when pressed alone. OUT (Output) - Causes an output to turn on steady, pulse, momentary, toggle or off. RST (Sensor Reset) - Causes the panel to perform a standard Sensor Reset. UN (Unused) - The button is not used and performs no action.
BUTTON PRESS TIME	This option specifies the amount of time (SHORT or LONG) the user must press the button before the key fob sends a message to the wireless receiver. Set the Button Press Time for Arm, Disarm, Toggle, Status, Output, and Sensor Reset. The Button Press Time is not programmable on Panic (PN or PN2), Emergency (EM or EM2) or Unused (UN) zones. For those zones the button press time is always two (2) seconds. SHORT - Press the button for one-half (1/2) second to send the message to the wireless receiver. LONG - Press the button for two (2) seconds to send the message to the wireless receiver.
ARM/DISARM AREA SELECTION	In an Area system or Home/Sleep/Away with Guest system, this specifies the areas to be armed/disarmed by the Key Fob button being programmed. To select an area between 1 and 32, enter the area number using the keypad digit keys.
OUTPUT NUMBER	You can specify any relay output/Favorite to operate when OUT (Output), PN (Panic), PN2 (Panic 2), EM (Emergency), or EM2 (Emergency 2) is selected for a key fob Button Action and the button is pressed. Valid range is 1 to 6, 500 to 999, D1 to D16, F1 to F20, or G1 to G20. For an output turned on by a PN, PN2, EM, or EM2 button action, the output turns off when any area is disarmed. To enter an output/Favorite number, press a top row Select key followed by the output/Favorite number. Press the CMD key.

OUTPUT ACTION	This option allows you to define the output action (STD, PLS, MOM, TGL, OFF) for the selected output number. yyy = the name of the button being programmed (TOP, BTM, LFT, RGT). xxxxxxxx = the currently defined output action. STD (Steady) - The output is turned on and remains on. PLS (Pulse) - The output alternates one second on and one second off. The pulsing rate for a Model 716 relay attached to the LX-Bus is 1.6 seconds. Pulse is not available for key fob button output programmed D1-D16 or G1-G20. MOM (Momentary) - The output is turned on only once for one second. TGL (Toggle) - The output alternates between the on state and off state. Toggle is not available for key fob button output programmed G1-G20. OFF (Off) - The output is turned off. If programmed, the output was turned on by some other means such as another button press, a zone action, or a schedule. When the output is assigned to PN/PN2 or EM/EM2 button action and is turned on, the output turns off when any area is disarmed. When the output action is steady, pulse or toggle and the output is turned on, the output remains on until: — the output cutoff time expires — the output is reset from the keypad menu — toggled off
NEXT ZONE	Select YES to return to the ZONE NO: - prompt to program a new zone. Select NO to display the Alarm Action option.
ALARM ACTION	This option allows you to change any Zone Type standard definitions. When the Zone Type is specified, the Alarm Action for that zone is stored in memory. If the Zone Type is Blank, Night, Day, Exit, Auxiliary 1, or Auxiliary 2 it is a non 24 hour zone and the Alarm Action programing begins with Disarmed Open. If the Zone Type is Fire, Panic, Emergency, or Supervisory it is a 24-hour zone that is always armed and the Alarm Action programming begins with Armed Open. The Fire Verify Zone Type functions the same as Fire Type, with the following exceptions: When a Fire Verify zone initiates an alarm, the panel performs a Sensor Reset. If any Fire Verify zone initiates an alarm within 120 seconds after the reset, an alarm is indicated. If an alarm is initiated after 120 seconds, the cycle is repeated and a zone fault report is sent to the receiver. Do NOT program Fire Verify Zone Types for Zone Retard.
DISARMED OPEN	Defines the action taken by the panel when the zone is opened while the area is disarmed. There are three actions to define: Report to transmit, Relay Output to activate, and Relay Output action.
REPORT TO TRANSMIT	Select the following report options: A, T, L, S, C, and - (dash). ALARM - Select A to send an alarm report to the receiver and activate the bell output according to zone type. TROUBLE - Select T to send a trouble report to the receiver. LOCAL - When you select L, an alarm report is NOT sent to the receiver. The bell output activates. - (Dash) - When you select a – (dash), reports are NOT sent to the receiver. The bell output does not activate and there is no display in the panel alarmed zones or status list. Only the relay output selected in the next section operates. DOOR PROPPED - Selecting D allows the following operation: The time programmed into ENTRY DLY 4 in the System Option section begins to count without displaying on keypad. If the time expires and the zone has not returned to normal, the keypad trouble buzzer starts and CLOSE THE DOOR appears on the keypads programmed into the PREWARN ADDRESS section. The time programmed into ENTRY DLY 4 begins to count down again internally. If the time expires a second time and the zone has not returned to normal, a fault report is sent to the receiver and the zone name - OPEN message displays on the keypads until a code is entered. The bell output does not activate for the Door Propped operation. SILENCE/RESET - Select S when the zone (not FI, SV, or FV) is connected to a DMP Model 303 Silence/Reset switch, the zone can be used to silence the alarm bell and perform a sensor reset without using a keypad. A report is NOT sent to the receiver except for the bell silence report. CANCEL AMBUSH - Select C for the zone to cancel the Early Morning Ambush timer and stop an Ambush message from being sent to the receiver. Faulting the zone takes the place of a second user code being entered at the keypad and is only available for non-fire type zones. Area assignment for the zone does not affect this option. See Early Morning Ambush in Area Information programming.
OUTPUT NUMBER	Specify any of the Relay Outputs on the panel to be activated by a zone condition (1 to 6, 500 to 999 if Model 716 used, D1-D16, G1-G20).

OUTPUT ACTION	Assign an output action to the relay: Steady, Pulse, Momentary, or Follow. Some wireless devices whether powered using an AC adaptor or a battery, ignore some output action programming. 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. 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. For Day Zone types, when an output is turned on, a user code with silence authority can turn the output off.
SWINGER BYPASS	Selecting YES allows the zone to be swinger bypassed by the panel according to the specifications programmed in Swinger Bypass Trips and Reset Swinger Bypass. The Bypass condition displays in the keypad Status List. Selecting NO disables swinger bypassing for this zone.
PREWARN KEYPAD ADDRESSES	At the entry delay start, all keypad addresses selected here display ENTER CODE:-. If you want the prewarn to sound at all 16 addresses, leave the default setting. To delete an address, press the matching number on the keypad. To disable prewarning at all keypads, press a top row Select key to clear the addresses shown.
CHIME	This option is only shown for Night and Exit zones. Select either NONE, DB(doorbell), ASC (ascend), DSC (descend) to assign that tone to a zone. Default is DB for Exit zones and NONE for night zones.
ENTRY DELAY	Select the entry timer for this zone. Entry timers 1 to 4 are programmed in System Options.
ZONE RETARD DELAY	When you select YES, the zone operates with the zone retard delay. The retard functions only in zone short conditions. The zone must remain shorted for the full length of the retard delay before the panel recognizes its condition. If you select NO, the zone operates without a retard delay.
PRESIGNAL KEYPAD ADDRESSES	Enable any combination of keypad addresses to sound a presignal tone during the time a zone is in retard delay. The presignal tone silences when the zone restores or the retard delay expires.
FAST RESPONSE	Select YES to provide a zone response time of 167ms. Select NO to provide a normal zone response time of 500ms. Zones 500 to 999 have a fixed response time and do not display this prompt.
CROSS ZONE	Select YES to enable cross zoning for this zone. Cross zoning requires one or more armed zones to fault within a programmed time before an alarm report is sent to the receiver.
PRIORITY	Select YES to provide additional protection for the premises by requiring this zone to be in a normal condition before its assigned area can be armed.
18.25 FIRE PANEL SLAVE INPUT	This option is available on Fire Zones (FI) only and allows a fire zone the ability to provide slave communication operation for a separate fire alarm control panel. If YES, this zone will transmit a restoral immediately when restored by the fire panel being monitored. A sensor reset is not required to generate the restoral message. If NO, this zone will operate as a standard fire type zone and a sensor reset is required before the zone will return to normal. Default is NO.
AREA FOLLOWER	Allows Night, Day, Aux 1, or Aux 2 burglary zones to be delayed by following any exit or entry delay that is currently running in the area that is specified.
ZONE REAL-TIME STATUS	Selecting YES allows Real-Time Status reports, such as Door Open/Closed with zone number, to be sent using PC Log reporting. Selecting NO disables Real-Time Status for this zone.
ZONE AUDIT DAYS	Enter the number of days (0 to 365) allowed to elapse without the zone being tripped before a fault message is sent. The message is sent to the receiver(s) programmed to receive Supervisory/Trouble Reports at 10:00 am following the expiration of the timer.
REPORT WITH ACCOUNT NUMBER FOR AREA	This option is only available for 24-hour zone types (Fire, Fire Verify, Panic, Emergency, or Supervisory). Enter the area number (1-32) to assign as a 24-hour zone type.

TESTING/MAINTENANCE

SYSTEM MAINTENANCE

To ensure continuous satisfactory operation of any alarm system, proper installation and regular maintenance by the installing alarm company and frequent testing by the end user is essential. Offering a maintenance program and acquainting the user with the correct procedures for system use and testing is also the responsibility of the installing alarm company.

WEEKLY TEST

As required by ANSI/UL 1023, the system should be tested weekly.

MONTHLY TEST

As required by S545, the system shall be tested monthly with the primary power deactivated.

WIRELESS TESTING

When using the 1100X or 1100XH Wireless Receiver for Fire Protective Signaling, after all transmitters are in position, the WLS option of the panel's Walk Test must be operated and all transmitters programmed for Fire (FI) or Supervisory (SV) must show that their checkin message was received.

BATTERY REPLACEMENT PERIOD

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

COMPATIBILITY

COMPATIBLE 2-WIRE SMOKE DETECTORS

Panel terminals 25 through 28 provide two resettable Class B, Style A, 2-wire powered zones. For programming purposes the zone numbers are 9 and 10.

The maximum wire length for either zone 9 or zone 10 is 3000 feet using 18 AWG or 1000 feet using 22 AWG. The maximum voltage is 13.8 VDC and the maximum normal standby current is 1.25mA DC. The maximum line impedance is 100 Ohms. The maximum short circuit current is 56mA. When using zone expansion modules, use Model 309 EOL resistors. The compatibility identifier for the zones is A.

Do not mix detectors from different manufacturers on the same zone.

Performing a Sensor Reset momentarily drops power to the devices on Terminal 11 (SMK), Zones 9 and 10. The panel views these zones (9 and 10) as "Open" while the power is absent.

Manufacturer	Model	Detector ID	Base	Base ID	DC Voltage Range	# of Detectors (12V/24V)	Zone Expansion Modules	Panel Zones
Hochiki	SLR-835B-2 SLR-835BH-2	HD-6	N/A		8-35	14	715, 715-8, 715-16	9 & 10
EST	521B, 521BXT, 521NB, 521NBXT	S09A			6.5-20	12	715, 715-8, 715-16	9 & 10
System Sensor	2W-B, 2WT-B	A			8.5-35	10	715, 715-8, 715-16	9 & 10
System Sensor	1151, 2151	A	B110PL, B401		8.5-35	10	715, 715-8, 715-16	9 & 10
System Sensor	COSMO-2W (using COSMOD2W)	A			8.5-35	12	714, 714-8, 714-16, 715, 715-8, 715-16	1-10

(*) = Must be used in conjunction with System Sensor Polarity Reversal Module model RRS-M0D. See 1.19 for Installation Diagram

NOTIFICATION APPLIANCES

The following table indicates the approved notification appliances that can be used with the XR550 Series system.

Wheelock Model No.	Description	Max No. of Appliances using 56 VA/100 VA
MT-12/24	Multi-tone Horn	8
MB-G6-12	Bell, 6 inch	16
MB-G10-12	Bell, 10 inch	16
ST Series	Strobe, 15/75 candela	5
HS Series	Horn Strobe, 15/75 candela	5
SM-12/24-R	Sync Module, Single circuit	

ACCESS CONTROL DEVICES

The following devices are compatible with the XR150/XR550 Series panels.

Access Control	
734/734N Wiegand Interface Module	Proximity reader connector
OP-08CB Motion Detector	Infrared sensor
PP-6005B Proxpoint Plus® Reader	Proximity reader
MP-5365 Miniprox® Reader	Slimline proximity reader
PR-5355-AGK14	Long range reader with keypad and sounder
PR-5455 ProxPro® II Reader	Long range reader with sounder
MX-5375 Maxi-Prox™ Reader	Long range reader compatible with 1351 Prox Pass

ACCESSORY DEVICES

Cellular Communicator Modules	
263LTE Cellular Communicator	Allows you to connect the panel to the Verizon or AT&T LTE network.
Accessory Modules	
270 Network Transient Suppression Module	Provides transient surge protection for the Ethernet Connector.
271 Ground Fault Module	Allows you to detect ground faults without harming the control panel by connecting to a zone and the earth ground to determine if there is a fault.
277 Trouble Sounder	Provides local sounder for monitoring of panel operations and loss of Keypad Bus.
893A Dual Phone Line Module	Allows you to supervise two standard phone lines connected to an XR150/XR550 Series panel. The 893A module monitors the main and backup phone lines for a sustained voltage drop and alerts users when the phone line is bad.
Expansion Modules	
710 Bus Splitter/Repeater	Allows you to increase keypad or LX-Bus™ wiring distance to 2500 feet.
711 Single Point Zone Expanders	Provides one Class B zone for connecting burglary devices.
714, 714-8, 714-16 Zone Expanders	Provides Class B zones for connecting burglary and non-powered fire devices.
712-8 Zone Expander	Provides Class B zones for connecting burglary devices.
715, 715-8, 715-16 Zone Expanders	Provides 12 VDC Class B powered zones for connecting smoke detectors, glassbreak detectors, and other 2- or 4-wire devices.
716 Output Expander	Provides four Form C relays (SPDT) and four switched grounds (open collector) for use in a variety of remote annunciation and control applications for use on the LX-Bus only.
717 Graphic Annunciator Module	Provides 20 zone following annunciator outputs (open collector) for use in a variety of remote annunciation and control applications for use on the LX-Bus only.
734, 734N, Wiegand Interface Modules	Provides system codeless entry, and arming and disarming using access control readers.
DMP Two-Way Wireless Devices	
1100X/1100XH Receiver	Supports up to 500/300/100 devices in residential or commercial wireless operation.
1100R Repeater	Provides additional range for wireless devices.
1101 Universal Transmitter	Provides both internal and external contacts that may be used at the same time to yield two individual reporting zones from one wireless transmitter.
1102 Universal Transmitter	Provides an external contact.
1103 Universal Transmitter	Provides both and internal and external contacts that may be used at the same time to yield two individual reporting zones from one wireless transmitter. Requires EOL resistor for external contact.
1122 Wireless PIR Motion Detector	Motion detector will programmable sensitivity, Disarm/Disable functionality, and pet immunity.
1127C/1127W PIR Motion Detector	Wall mount motion detector with panel programmable sensitivity and Disarm/Disable functionality.
1135 Wireless Siren	Provides a wireless siren.
1142BC Two-button Hold-up Belt Clip Transmitter	Provides two-button hold-up operation with a belt clip.
1142 Two-button Hold-up Transmitter	Provides permanently mounted under-the-counter two-button hold-up operation.
1164/1164NS Wireless Commercial Smoke	Battery powered, wireless, low profile, photoelectric smoke detector. The 1164 also offers a synchronized sounder.
1166 Wireless Smoke Ring	Installed with any traditional AC-powered interconnected smoke detector system and provides an audible alert in the event of a fire.
1183-135F Heat Detector	Fixed temperature heat detector.
1183-135R Heat Detector	Fixed temperature and rate-of-rise heat detector.
1184 Carbon Monoxide Detector	Carbon monoxide detector.
Interface Modules	
736P Radionics™ Popit Interface	Allows a Radionics™ POPIT System to interface with DMP XR150/XR550 Series panels while maintaining Radionics™ wiring.
Indicating and Initiating Devices	

860 Relay Module	Provides dry relay contacts that are programmable and controlled from DMP panel annunciator outputs. This module includes one Form C (SPDT) relay rated for 1 Amp @ 30 VDC. Sockets are provided to allow the addition of three Model 305 plug-in relays. These relays can be used for electrical isolation between the alarm panel and another system or switching 5, 12, or 24 Volts to control various functions within a building or around its perimeter. Installs inside the panel enclosure.
865 Supervised Style W or X Notification Circuit Module	Provides supervised alarm current when using the XR150/XR550 Series panel bell output and up to 5 Amps at 12 or 24 VDC when using a listed auxiliary power supply. The 865 can supervise 2-wire or 4-wire style circuits for opens and shorts with individual LED annunciation.
866 Style W Notification Circuit Module	Provides supervised alarm current using the XR150/XR550 Series panel bell output and up to 5 Amps at 12 or 24 VDC when using a listed auxiliary power supply. The 866 can supervise 2-wire Style W circuits for opens and shorts.
867 Style W LX-Bus Notification Circuit Module	Provides supervised alarm current using the XR150/XR550 Series panel bell output and up to 5 Amps at 12 or 24 VDC when using a listed auxiliary power supply. The 867 connects to the XR150/XR550 Series panel LX-Bus™ and provides one 2-wire Style W notification circuit for open and short conditions. Individual Bell Relay addresses Bell Ring styles.
869 Dual Class A Style D Initiating Module	Provides two Class A, Style D, 4-wire initiating zones for connecting waterflow switches and other non-powered fire and burglary devices.
Keypads	
LCD keypads	Allows you to control the panel from various remote locations. Connect up to sixteen Model 630F Remote Fire Command, Model 7060, 7063, 7070, 7073, 7160, 7163, 7170, 7173 Thinline™ keypads, or 7060A, 7063A, 7070A, 7073A Aqualite™ keypads to the keypad bus using terminals 7, 8, 9, and 10.
7800 Series Graphic Touchscreen keypads	Allows you to control the panel from various remote locations. Connect up to sixteen Model 7872 or 7873 Graphic Touchscreen keypads to the keypad bus using terminals 7, 8, 9, and 10.
9000 Series Wireless keypads	Allows you to control the panel from various remote locations. Connect up to four 9060/9063 Wireless keypads.
9862 Wireless Graphic Touchscreen keypad	Allows you to control the panel from various remote locations. Associate up to four 9862 Wireless Graphic Touchscreen keypads.
Addressable Smoke Detectors	
2W-BLX, 2WT-BLX	Single-zone, addressable conventional smoke, smoke/heat detectors that connect to the LX-Bus. Includes drift compensation.

SYSTEM CONFIGURATIONS

MINIMUM SYSTEM CONFIGURATION FOR COMMERCIAL FIRE APPLICATIONS

The following is the minimum configuration to meet UL requirements:

Y - Yes N - No O – Optional

Model No.	Description	Local	Remote Station (PPU)	Proprietary (PPU)	Proprietary Alarm Unit (Security)	Central Station (PPU)
XR550 XR350 XR150	Main Board (-)	Y	Y	Y	Y	Y
349	Control Panel Enclosure (-)	Y	Y	Y	Y	Y
350		Y	Y	Y	Y	Y
350A, 350H		Y	Y	Y	Y	Y
341		Y	Y	Y	Y	Y
352P, 352X		Y	Y	Y	Y	Y
FC Series		Y	Y	Y	Y	Y
349, 350, 352S	Battery Enclosure	O	O	O	O	O
325	Transformer Bracket	O	O	O	O	O
327	Transformer	N	N	N	N	N
322(A), 323, 324, 324P	Transformer (-)	Y	Y	Y	Y	Y
263LTE	Cellular Communicator	O	O	O	O	O
270	Network Transient Suppressor	O	O	O	O	O
277	Trouble Annunciator	O	O	O	O	O
521LX, 521LXT	2-Wire Smoke	O	O	O	O	O
2W-BLX, 2WT-BLX	2-Wire Smoke	O	O	O	O	O
712-8	Zone Expander	N	N	N	N	N
714, 715,711, 714-8, 714-16, 715-8, 715-16, 736P	Zone Expander	O	O	O	O	O
716	Output Expander	O	O	O	O	O
717	Annunciator Module	O	O	O	O	O
630F (-), 7070, 7073, 7070A, 7073A, 7170, 7173, 7170A, 7173A, 7570, 7573, 7570A, 7573A,	Supervised LCD Keypads	Y	Y	Y	Y	Y
7060, 7061, 7063, 7060A, 7063A, 7160, 7163, 7160A, 7163A, 7560, 7563, 7560A, 7563A, 7760, 7872, 7873, 9060, 9063, 9862	Supervised LCD Keypads	N	N	N	N	N
865, 866, 867	Indicating (Notification) Modules	O	O	O	O	O
869	Initiating Module	O	O	O	O	O
893A	Dual Phone Line Module	N	Y	O	O	Y
734, 734N	Wiegand Interface	O	O	O	O	O
303	Reset/Silence Switch	O	O	O	O	O
860	Relay Module	O	O	O	O	O
1100X	Wireless Receiver	O	O	O	O	O

Model No.	Description	Local	Remote Station (PPU)	Proprietary (PPU)	Proprietary Alarm Unit (Security)	Central Station (PPU)
1100XH	Wireless Receiver	O	O	O	O	O
1100R	Wireless Receiver	O	O	O	O	O
1101/1102/1105	Wireless Transmitter	N	N	N	N	N
1103	Wireless Transmitter	O	O	O	O	O
1125/1127C/1127W	Wireless PIR	O	O	O	O	O
1135	Wireless Siren	O	O	O	O	O
1142/1142BC	Wireless Holdup Transmitter	O	O	O	O	O
1161/1162	Wireless Residential Smoke	O	O	O	O	O
1164	Wireless Commercial Smoke	O	O	O	O	O
1165/1165H/1165HS	Wireless Commercial Smoke	O	O	O	O	O
1181/1182	Wireless PIV/OS&Y	O	O	O	O	O
1183-135F/1183/135R	Wireless Heat Detector	O	O	O	O	O
1184	Wireless CO	O	O	O	O	O

(-) - At least one model required

SYSTEM POWER/SIZE

TRANSFORMER FOR BURGLARY INSTALLATIONS

The total combined Auxiliary and Bell outputs cannot exceed 1.3 Amps with a 50VA Transformer.

The total combined Auxiliary and Bell outputs cannot exceed 1.7 Amps with a 56VA or 100VA Transformer. Bell maximum of 1.5A, Auxiliary power maximum of 1.0A.

When using a Model 341 Kiosk enclosure, total combined Auxiliary and Bell output current cannot exceed 1.3 Amps.

TRANSFORMER FOR FIRE INSTALLATIONS

Commercial Fire

For listed Commercial Fire installations, the 50VA Plug-in transformer cannot be used.

The total current combined from Terminals 7, 11, 25, 27, XBUS and LX500-LX900 cannot exceed: 1.7 Amps with a 56VA or 100VA transformer. Bell maximum of 1.5A, Auxiliary power maximum of 1.0A.

Residential Fire

Use the Model 327 16.5VAC 50VA plug-in, Model 322/323 wire-in 16VAC 56VA or Model 324/324P wire-in 16VAC 100VA transformer mounted within 20 feet of the panel and connected by conduit.

The total combined Auxiliary and Bell outputs cannot exceed 1.3 Amps with a 50VA Transformer.

The total current combined from Auxiliary and Bell Power cannot exceed: 1.7 Amps with a 56VA or 100VA transformer. Bell maximum of 1.5A, Auxiliary power maximum of 1.0A.

The 341 Kiosk enclosure must not be used for fire applications.

CANADIAN TRANSFORMER FOR S304

The total combined Auxiliary and Bell outputs cannot exceed 1.5 Amps with a 50VA or 75VA Transformer. Use Model 327CAN (16.5VAC 50VA) plug-in or Model FTA7516 (16.5VAC 75 VA) wire in from ATC Frost.

When using a Model 341 Kiosk enclosure, the total combined Auxiliary and Bell output current cannot exceed 1.3 Amps.

CANADIAN TRANSFORMER FOR S545

The total combined Auxiliary and Bell outputs cannot exceed 1.5 Amps with a 50 VA or 75 VA Transformer. Use Model 327CAN (16.5VAC 50 VA) plug-in or Model FTA7516 (16.5VAC 75VA) wire-in from ATC Frost.

Bell maximum of 1.5A, Auxiliary power maximum of 1.0A.

The 341 Kiosk enclosure must not be used for fire applications.

STANDBY BATTERIES

Use battery Models 365 (12 VDC 9 Ah), 366 (12 VDC 18 Ah), 368 (12 VDC 5.0 Ah), and 369 (12 VDC 7 Ah) with the XR150/XR550 panel when installed in the 341, 350, 350A, or 352 enclosures. The Model 364 (12 VDC 1.3 Ah) battery is for use with the XR150/XR550 panel when using the 341 enclosure with the optional 341B Battery Bracket. The Model 364 battery is rated for 4 hours of standby time.

POWER REQUIREMENTS

During AC power failure, the XR150/XR550 Series panel and all connected auxiliary devices draw their power from the battery. All devices must be taken into consideration when calculating the battery standby capacity. The following table lists the XR150/XR550 Series panel power requirements. You must add the additional current draw of keypads, zone expansion modules, smoke detector output, and any other auxiliary devices used in the system for the total current required. The total is then multiplied by the number of standby hours required to calculate the total ampere-hours required.

Standby Battery Power Calculations	Standby Current				Alarm Current			
XR150/XR550 Series Control Panel	Qty 1	x	174mA	174 mA	Qty 1	x	217mA	217 mA
Relay Outputs 1-2 (ON)	Qty _____		30mA	_____	Qty _____		30mA	_____
Switch Grounds 3-6 (ON)	Qty _____		5mA	_____	Qty _____		5mA	_____
Active Zones 1-8	Qty _____		1.6mA	_____	Qty _____		2mA*	_____
Active Zones 9-10	Qty _____		4mA	_____	Qty _____		30mA	_____
2-Wire Smoke Detectors	Qty _____		0.1mA	_____	Qty _____		0.1mA	_____
Panel Bell Output							1500mA	_____mA
893A Dual Phone Line Module	Qty _____	x	12mA	_____	Qty _____	x	50mA	_____
263LTE Cellular Communicator	Qty _____	x	13mA	_____	Qty _____	x	13mA	_____
277 Buzzer Module	Qty _____	x	5mA	_____	Qty _____	x	5mA	_____
1100X Wireless Receiver	Qty _____	x	46mA	_____	Qty _____	x	46mA	_____
1100XH Wireless High Power Receiver	Qty _____	x	160mA	_____	Qty _____	x	160mA	_____
860 Relay Output Module (one relay active)	Qty _____	x	34mA	_____	Qty _____	x	34mA	_____
All four relays active			138mA	_____			138mA	_____
865 Style Y or Z Notification Module	Qty _____	x	26mA	_____	Qty _____	x	85mA	_____
866 Style W Notification Module	Qty _____	x	45mA	_____	Qty _____	x	76mA	_____
867 LX-Bus Style W Notification Module	Qty _____	x	30mA	_____	Qty _____	x	86mA	_____
869 Dual Style D Initiating Module	Qty _____	x	25mA	_____	Qty _____	x	75mA	_____
630F Remote Fire Command Center	Qty _____	x	63mA	_____	Qty _____	x	92mA	_____
7060/7160 Thinline/7060A Aqualite Keypad	Qty _____	x	72mA	_____	Qty _____	x	80mA	_____
7063/7163 Thinline/7063A Aqualite Keypad	Qty _____	x	85mA	_____	Qty _____	x	100mA	_____
7070/7170 Thinline/7070A Aqualite Keypad	Qty _____	x	72mA	_____	Qty _____	x	87mA	_____
Active Zones (EOL Installed)			1.6mA	_____	Qty _____	x	2mA*	_____
7073/7173 Thinline/7073A Aqualite Keypad	Qty _____	x	85mA	_____	Qty _____	x	100mA	_____
Active Zones (EOL Installed)			1.6mA	_____	Qty _____	x	2mA*	_____
7760 Clear Touch Keypad	Qty _____	x	65mA	_____	Qty _____	x	115mA	_____
7872 Graphic Touchscreen Keypad	Qty _____	x	145mA	_____	Qty _____	x	215mA	_____
Active Zones (EOL Installed)			1.6mA	_____	Qty _____	x	2mA*	_____
7873 Graphic Touchscreen Keypad	Qty _____	x	143mA	_____	Qty _____	x	243mA	_____
Active Zones (EOL Installed)			1.6mA	_____	Qty _____	x	2mA*	_____
734 Wiegand Interface Module	Qty _____	x	15mA	_____	Qty _____	x	15mA	_____
Active Zones (EOL Installed)	Qty _____	x	1.6mA	_____	Qty _____	x	2mA*	_____
Annunciator (ON)					Qty _____	x	20mA	_____
734N Wiegand Interface Module	Qty _____	x	146mA	_____	Qty _____	x	148mA	_____
Active Zones (EOL Installed)	Qty _____	x	1.6mA	_____	Qty _____	x	2mA*	_____
Annunciator (ON)					Qty _____	x	20mA	_____
Wiegand Reader	Qty _____	x	200mA	_____	Qty _____	x	200mA	_____
Copy Sub-Totals to next page _____ mA			Sub-Total Standby _____ mA				Sub-Total Alarm	

*Based on 10% of active zones in alarm.

Standby Battery Power Calculations	Standby Current	Alarm Current
736P POPIT Interface Module Radionics Popex, POPITs, OctoPOPITs	Qty _____ x 25 mA _____ Qty _____ x ___mA _____	Qty _____ x 25 mA _____ Qty _____ x ___mA _____
710 Bus Splitter/Repeater Module	Qty _____ x 32 mA _____	Qty _____ x 32 mA _____
711 Zone Expansion Module Active Zone (EOL Installed)	Qty _____ x 11 mA _____ Qty _____ x 1.6 mA _____	Qty _____ x 11 mA _____ Qty _____ x 2 mA* _____
714 Zone Expansion Module Active Zones (EOL Installed)	Qty _____ x 7 mA _____ Qty _____ x 1.6 mA _____	Qty _____ x 7 mA _____ Qty _____ x 2 mA* _____
712-8 Zone Expansion Module Active Zones (EOL Installed)	Qty _____ x 17 mA _____ Qty _____ x 1.6mA _____	Qty _____ x 17 mA _____ Qty _____ x 2 mA* _____
714-8, 714-16 Zone Expansion Module Active Zones (EOL Installed)	Qty _____ x 20 mA _____ Qty _____ x 1.6mA _____	Qty _____ x 20 mA _____ Qty _____ x 2 mA* _____
715 Zone Expansion Module Active Zones (EOL Installed) 2-Wire Smokes	Qty _____ x 7 mA _____ Qty _____ x 4 mA _____ Qty _____ x .1 mA _____	Qty _____ x 7 mA _____ Qty _____ x 30 mA* _____ Qty _____ x .1 mA _____
715-8, 715-16 Zone Expansion Modules Active Zones (EOL Installed) 2-Wire Smokes	Qty _____ x 20 mA _____ Qty _____ x 4 mA _____ Qty _____ x .1 mA _____	Qty _____ x 20 mA _____ Qty _____ x 30 mA* _____ Qty _____ x .1 mA _____
716 Output Expansion Module Active Form C Relays	Qty _____ x 13 mA _____	Qty _____ x 13 mA _____ Qty _____ x 12 mA _____
717 Graphic Annunciator Module Annunciator Outputs	Qty _____ x 10 mA _____	Qty _____ x 10 mA _____ Qty _____ x 1 mA* _____
2W-BLX, 2WT-BLX Smoke Detectors	Qty _____ x 11 mA _____	Qty _____ x 31 mA* _____
COSMOD2W Module	Qty _____ x 45 mA _____	Qty _____ x 174mA*# _____
COSMO-2W Smoke and CO Detectors	Qty _____ x 1 mA _____	Qty _____ x 50 mA*# _____
572 Indicator LED	Qty _____ x 20 mA _____	Qty _____ x 20 mA _____
Aux. Powered Devices on Terminals 7 and 11 Other than Keypads and LX-Bus Modules	_____mA	_____mA
Sub-Totals this page	Sub-Total Standby _____ mA	Sub-Total Alarm _____mA
Sub-Totals from previous page	Sub-Total Standby _____ mA	Sub-Total Alarm _____mA
*Based on 10% of active zones in alarm	Total Standby _____ mA	Total Alarm _____mA
# For systems that are not Central Station monitored, multiply alarm current by 12.		

Total Standby _____ mA x number of Standby Hours needed _____= _____ mA-hours

ULC S559 requires 24 hours of standby.

Total Alarm _____ mA x number of Alarm Hours needed _____ = _____ mA-hours

UL 864 requires 5 minutes (.0833 hours) in Alarm Total _____ mA-hours

ULC S559 requires 30 minutes (.5 hours) in Alarm X .001

Add 10% for battery derating = _____ Amp-hrs Required

Refer to section 23.7 for standby battery selection.

Standby Battery Selection

To choose the type and number of batteries needed for 24, 60, or 72 hours of standby power based on the Amp Hours Required calculation from section 22.6 XR150/XR550 Series Power Requirements, perform the following:

1. Select the desired standby hours required from the table below: 24, 60, or 72 hours
2. Select the desired battery size: Model 368 (12 VDC 5.0 Ah), Model 369 (12 VDC 7 Ah), Model 365 (12 VDC 9 Ah), Model 366 (12 VDC 18 Ah), or Model 364 (12 VDC 1.3 Ah) when used in the Model 341 enclosure.
3. Select a Max. Ah Available number that is just greater than the number calculated in Amp Hours Required.
4. Install the number of batteries shown in the corresponding No. of Batteries required column.

You can use either a Model 327 Plug-in 50 VA or Model 322/323 Wire-in 56 VA with up to 36 Ah of batteries. The Model 324/324P Wire-in 100 VA Transformer may be used with any of the battery choices listed below.

For listed installations, batteries can be installed in a DMP Model 349, 350 or 352S enclosure and all wiring shall run through conduit. The enclosure shall be installed to the left of the XR150/XR550 Series enclosure to ensure Battery and AC wire separation.

24 HOURS OF STANDBY POWER

5.0 Ah Batteries	
Max. Ah Available	No. of Batteries
8	2
12	3
16	4
20	5
24	6
28	7
32	8
36	9
40	10

7 Ah Batteries	
Max. Ah Available	No. of Batteries
6	1
12	2
18	3
24	4
31	5
37	6
43	7

7.7 Ah Batteries	
Max. Ah Available	No. of Batteries
6	1
13	2
20	3
27	4
34	5
41	6

9 Ah Batteries	
Max. Ah Available	No. of Batteries
8	1
16	2
24	3
32	4
40	5

18 Ah Batteries	
Max. Ah Available	No. of Batteries
16	1
32	2
48	3

48 hours is the typical battery recharge time for any of the Number of Batteries shown in this section.

60 HOURS OF STANDBY POWER

7 Ah Batteries	
Max. Ah Available	No. of Batteries
13	2
20	3
27	4
33	5
40	6
47	7
54	8
60	9
67	10

7.7 Ah Batteries	
Max. Ah Available	No. of Batteries
14	2
22	3
29	4
37	5
44	6
52	7
59	8
67	9

9 Ah Batteries	
Max. Ah Available	No. of Batteries
17	2
26	3
34	4
43	5
52	6
61	7
69	8

18 Ah Batteries	
Max. Ah Available	No. of Batteries
17	1
34	2
52	3
69	4

48 hours is the typical battery recharge time for any of the Number of Batteries shown in this section.

72 HOURS OF STANDBY POWER

9 Ah Batteries	
Max. Ah Available	No. of Batteries
16	2
25	3
33	4
42	5
50	6
59	7
67	8

18 Ah Batteries	
Max. Ah Available	No. of Batteries
16	1
33	2
50	3
67	4

72 hours is the typical battery recharge time required for any of the Number of Batteries shown in this section.

If the Amp Hours Required calculation is greater than any Max. Ah Available number shown on a table, then add power supply(s) to power some system devices allowing the Amp Hours Required calculation to be reduced. See the 710 Bus Splitter/Repeater Installation Guide (LT-0310).

Certifications

California State Fire Marshal (CSFM)
FCC Part 15
FCC Part 68 Registration ID CCKAL00BXR550

This Class A digital apparatus complies with Canadian ICES-003

New York City (FDNY)
NIST AES Algorithm Certificate #2350 128-bit
NIST AES Algorithm Certificate #2595 256-bit
SIA

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

Underwriters Laboratory (UL) Listed

ANSI/UL 294	Access Control System Units
Level I	Destructive Attack and Line Security
Level IV	Endurance and Standby Power
ANSI/UL 365	Police Connected Burglar
ANSI/UL 609	Local Burglar
ANSI/UL 1023	Household Burglar
ANSI/UL 1076	Proprietary Burglar
ANSI/UL 1610	Central Station Burglar
ANSI/UL 1635	Digital Burglar
ANSI/UL 2017	General Purpose Signaling Devices and Systems
ANSI/UL 985	Household Fire Warning
ANSI/UL 864	Fire Protective Signaling Systems

Underwriters Laboratory of Canada (ULC) Listed

ULC-S559-13	Equipment for Fire Signal Receiving Centers and Systems
ULC S545	Household Fire
ULC C1023	Household Burglar
ULC/ORD-C1076	Proprietary Burglar
ULC S304	Central Station Burglar

Compatible with Devices listed for:

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

UL Bank, Safe, and Vault

UL Standard Line Security

UL Encrypted Line Security

Export Control

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

Designed, engineered, and manufactured using U.S. and global components in Springfield, MO.
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