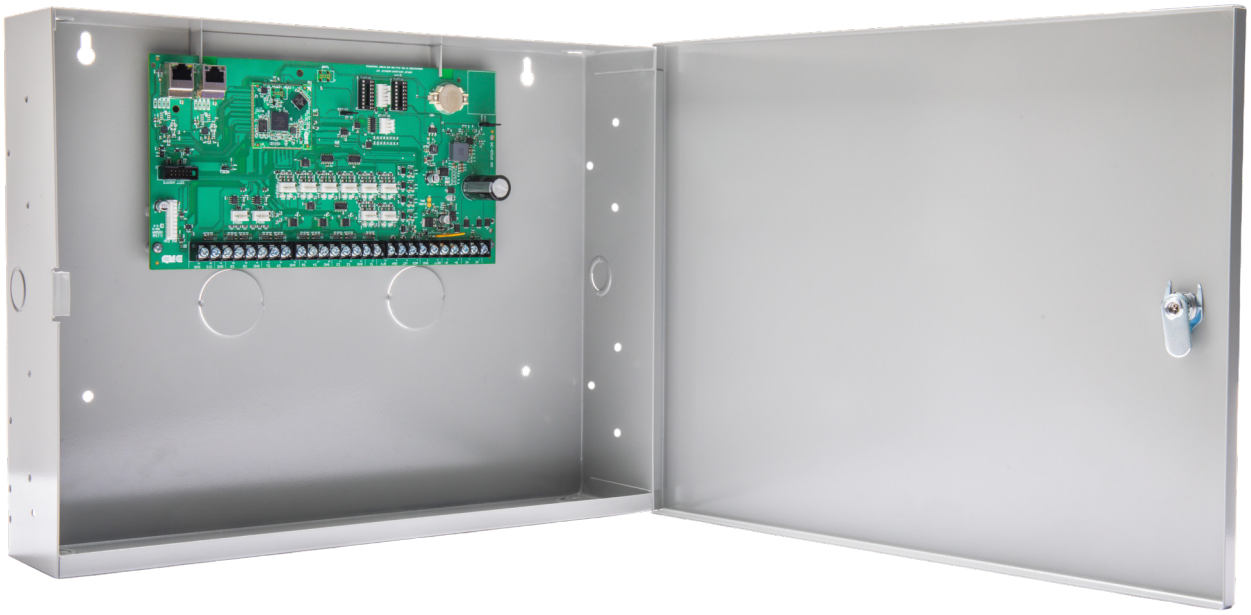


COMPLIANCE LISTING GUIDE

XR650 Control Panel

DIGITAL MONITORING PRODUCTS, INC.

MODEL XR650
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

© 2026 Digital Monitoring Products, Inc.

Information furnished by DMP is believed to be accurate and reliable.
This information is subject to change without notice. This information is subject to change without notice.

BEFORE YOU BEGIN 4

WIRING DIAGRAMS 5

System Diagrams 5

Interfacing D8122 to XR650 Panels 6

Rothenbuhler 5110 High Security Bell Wiring 6

LX-Bus Module Connection 7

Model 860 Relay Module Connection 7

Canadian Dual Zone Protection 8

UNDERWRITERS LABORATORIES SPECIFICATIONS 9

ANSI/UL 2610 - Commercial Premises Security Alarm Units 9

Access Control System Units ANSI/UL 294 9

ULC S304-06 - Specifications Signal Receiving Center and Premise Burglar Alarm Control Units 10

UNIVERSAL BURGLARY SPECIFICATIONS 12

Wiring 12

Power Supply Supervision 12

Listed Receivers 12

AREA INFORMATION 12

Annunciation 12

Local Bell Supervision 12

PROGRAMMING REQUIREMENTS 13

System Programming Option Requirements 13

TESTING/MAINTENANCE 14

System Maintenance 14

Weekly Test 14

Battery Replacement Period 14

COMPATIBILITY 15

Access Control Devices 15

Accessory Devices 15

SYSTEM POWER/SIZE 17

Transformer for Burglary Installations 17

Canadian Transformer for S304 17

Standby Batteries 17

Power Requirements 18

Standby Battery Selection 20

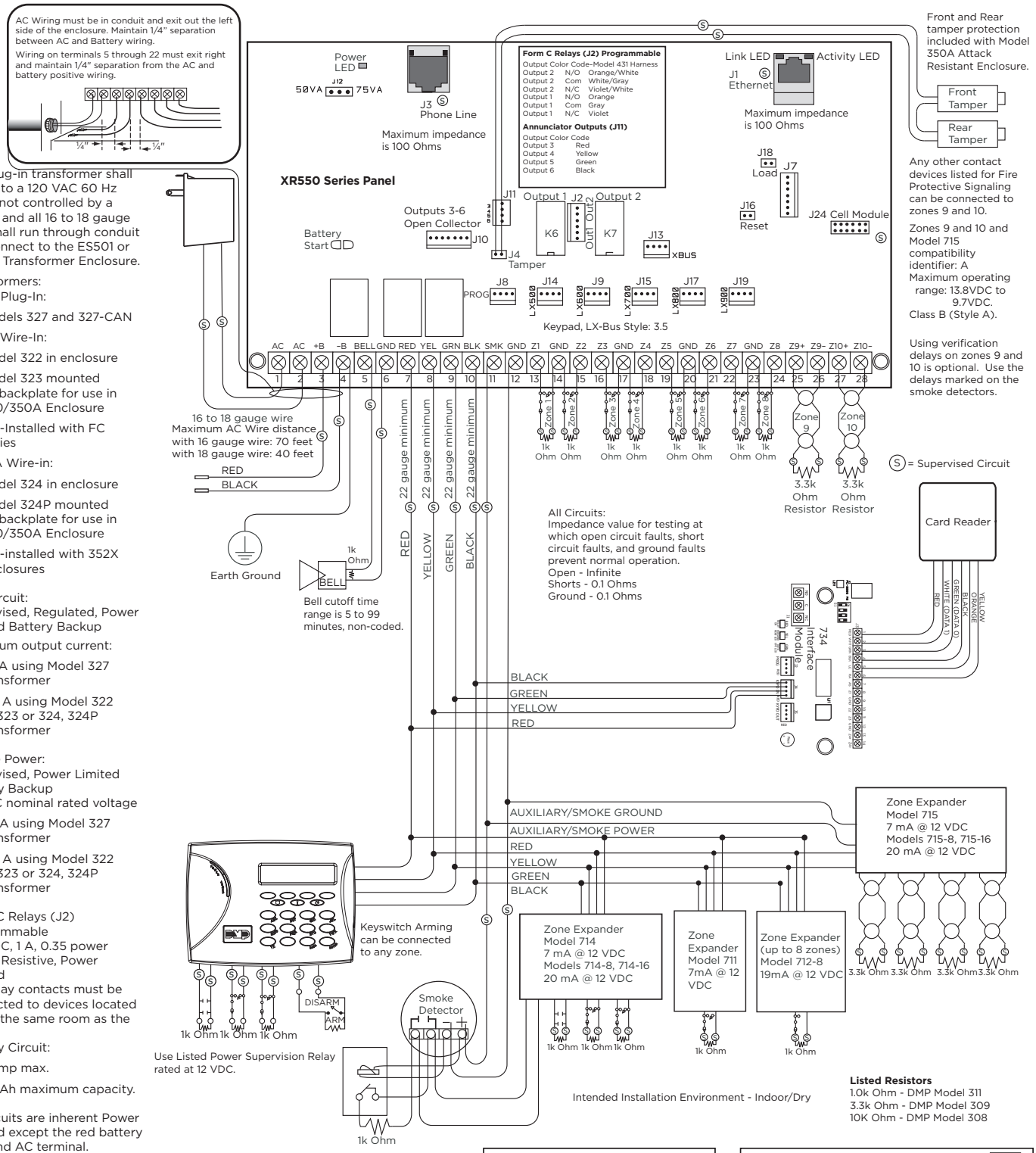
BEFORE YOU BEGIN

This guide provides compliance information for the DMP XR650 Control Panel. It's recommend to fully read through the contents of this guide to learn the operation, functionality, and programming options of the panel to meet specific applications.

WIRING DIAGRAMS

System Diagrams

The following pages show examples for wiring requirements.

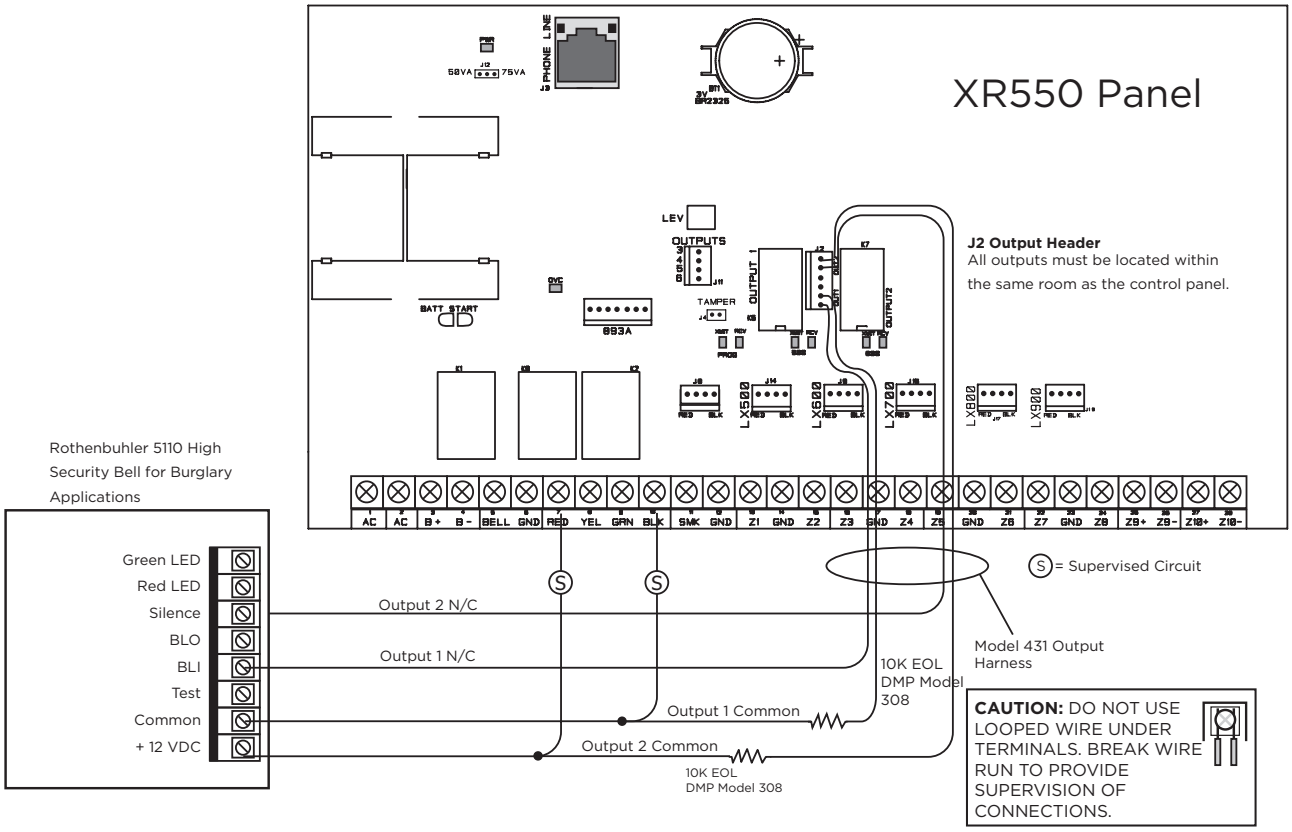


Interfacing D8122 to XR650 Panels

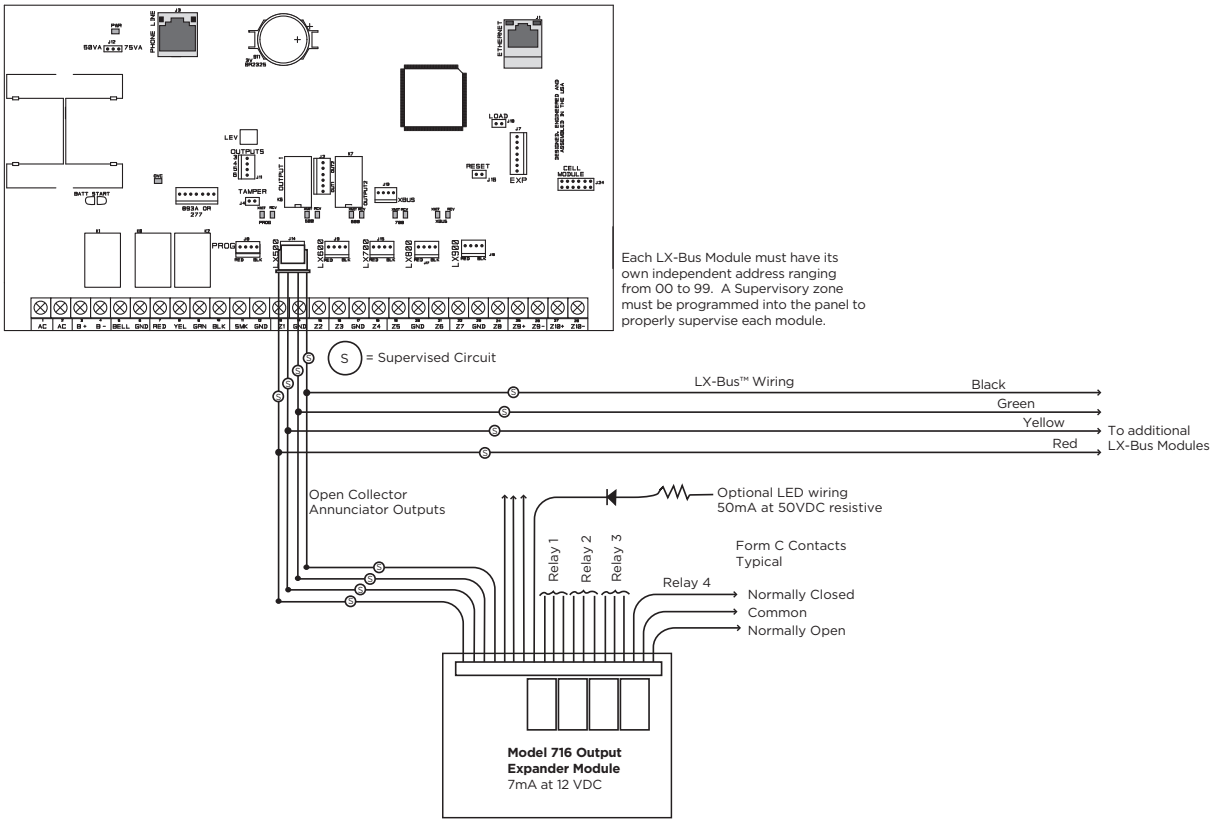
The D8122 may only be used in conjunction with telephone systems that support Derived Channel network. For installation instructions, see the Derived Channel STUD8121A/D8122 Operation and Installation Guide. The module is intended for Burglary only applications.

- 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 XR650 using the supplied mounting hardware. Refer to the STUD8121A/D8122 Operation and Installation Guide.
- Derived Channel Communication is not applicable for ULC Canadian Installations.

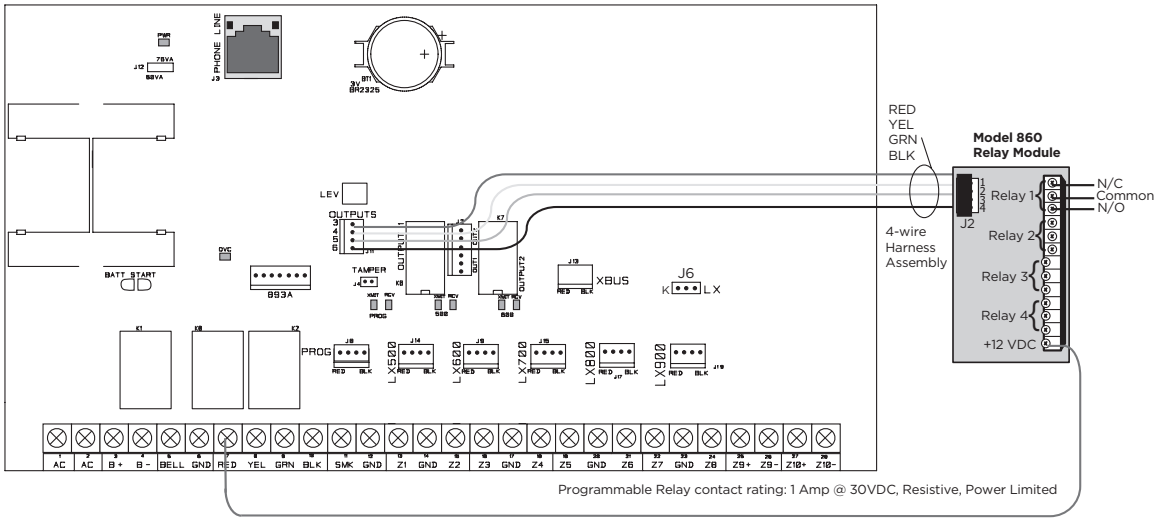
Rothenbuhler 5110 High Security Bell Wiring



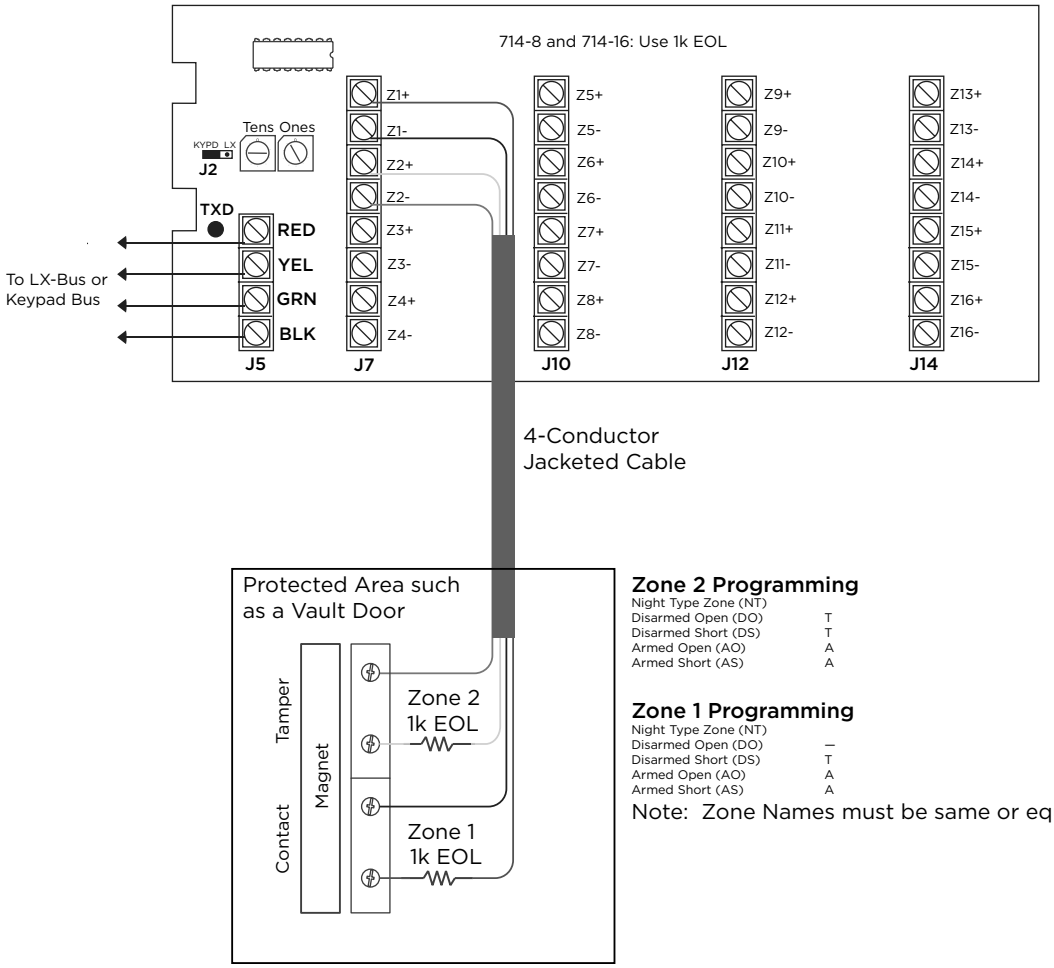
LX-Bus Module Connection



Model 860 Relay Module Connection



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

UNDERWRITERS LABORATORIES SPECIFICATIONS

ANSI/UL 2610 - Commercial Premises Security Alarm Units

1. Closing Wait – The Closing Wait option must be programmed.
2. Entry Delay – The maximum entry delay used must not exceed 60 seconds.
3. Exit Delay – The maximum exit delay used must not exceed 60 seconds.
4. Bell Cutoff – The bell cutoff time cannot be less than 15 min.
5. The Model XR650 Series must be mounted in an attack resistant enclosure (Model 350A,350H). Exception: See Items 6 and 7 below.
6. Standard Line Security Service – Standard Line Security service is provided when configured as a NET system using an XR650 panel. The NET Check-In time must be set from '03' to '06' minutes or 'RND'. When the check-in time is set to a number less than 200 s, an attack resistant enclosure is not required. To provide encrypted line security, encryption must be used.
7. Standard or Encrypted Line Security is provided when configured as a CELL system using the 263LTE Series Digital Cellular Communicators with no backup. XR650 cellular communication must be set to 3 minute check-in when armed or disarmed. When the check-in time is set to a number less than 200 s, an attack resistant enclosure is not required. To provide encrypted line security, an XR650 with encryption must be used.
8. Standard or Encrypted Line Security is provided when configured as a NET system with CELL backup and as needed adapts and takes over as primary. XR650 NET communication must be set to a 6 minute check-in when armed, and a random check-in over a 60 minute period when disarmed. CELL check-in must be set to ADPT3 and 24 hour daily test. This configuration allows the CELL backup to adapt to a 3 minute check-in rate when the NET primary is unavailable becoming a standalone primary without the need for a backup.
9. A UL Listed local audible signal appliance must be used (Ademco AB12M bell and bell housing)
10. When using the model 1100XH RF Receiver for Holdup Alarm applications, the model 1142 or 1142HD holdup alarm transmitter must be installed in the system.
11. When the model 1142 or 1142HD are used for Holdup Alarm applications, the supervision time shall be at maximum 60 minutes.
12. When the model 1142 or 1142HD are used for Holdup Alarm applications, the LED Display option for Holdup Alarm Zones must be disabled.
13. The system must be programmed not to signal holdup alarms at the premise either audibly or visually.
14. For Local Burglar Alarm Applications, the Models XR650 Series must be mounted in an attack resistant enclosure (Model 350A,350H). All standby batteries need to be enclosed in the attack resistant enclosure
15. Mercantile Safe and Vault – When the DMP Model 350A or 350H Attack housing is used, the XR650 Series provides operation as a mercantile safe and vault alarm. Bell Supervision and wiring must be in accordance with ANSI/UL 681. When the XR650 Series is mounted outside the safe or vault, tamper protection and the Sentrol Model 5402 or Potter EVD listed vibration detectors should be used.
16. Bank Safe and Vault – 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.

Access Control System Units ANSI/UL 294

Tamper Protection

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

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 XR650. The following options must be programmed in XR650 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, XR650 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 XR650 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

DIALER PRIMARY:
USE DAILY TEST

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

DIALER PRIMARY:
USE DAILY TEST

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 XR650 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 XR650.

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
711/711S 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

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.

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

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.

Battery Replacement Period

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

COMPATIBILITY

Access Control Devices

The following devices are compatible with the XR650:

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.
263LTE-FN Cellular Communicator	Allows you to connect the panel to AT&T FirstNet network.
263LTE-2 Cellular Communicator	Allows you to connect the panel to both Verizon and AT&T LTE networks.
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.
EXPANSION MODULES	
710 Bus Splitter/Repeater	Allows you to increase keypad or LX-Bus™ wiring distance to 2500 feet.
711/711S 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.
734, 734N Access Control Modules	Provides system codeless entry, and arming and disarming using access control readers.

DMP TWO-WAY WIRELESS DEVICES	
1100XH/1100XHE Receiver	Supports up to 500 wireless zones for XR650 panels. Features 128-bit AES encryption.
1100R/1100RE Repeater	Provides additional range for wireless devices.
1100T/1100TF Wireless Translator	Allows upgrades of non-DMP systems with one-way, low-frequency, wireless transmitters.
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. Features built-in optional 128-bit AES encryption.
1102 Universal Transmitter	Provides an external contact and built-in optional 128-bit AES encryption.
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. Features built-in optional 128-bit AES encryption.
1106 Universal Transmitter	Provides both internal and external contacts that may be used at the same time to yield two individual reporting zones from one wireless transmitter. Features built-in optional 128-bit AES encryption.
1127C/1127W PIR Motion Detector	Wall mount motion detector with panel programmable sensitivity and Disarm/Disable functionality.
1135 Wireless Siren	Provides a wireless siren and features 128-bit AES encryption.
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 and features built-in optional 128-bit AES encryption.
INTERFACE MODULES	
736P Radionics™ Popit Interface	Allows a Radionics™ POPIT System to interface with XR650 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.
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.

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.

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.

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 XR650 when installed in the 341, 350, 350A, or 352 enclosures. The Model 364 (12 VDC 1.3 Ah) battery is for use with the XR650 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 XR650 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 XR650 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
XR650 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
263LTE Series Cellular Communicator	Qty _____ x 20mA _____	Qty _____ x 20mA _____
277 Buzzer Module	Qty _____ x 5mA _____	Qty _____ x 5mA _____
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 _____
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* _____
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	Sub-Total Standby _____ mA	Sub-Total Alarm _____ mA

*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* _____
711S Zone Expansion Module Active Zone (EOL Installed)	Qty _____ x 4.2 mA _____	Qty _____ x 4.7 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* _____
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 XR650 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 XR650 enclosure to ensure Battery and AC wire separation.

24 Hours of Standby Power*

5.0 Ah Batteries		7 Ah Batteries		7.7 Ah Batteries		9 Ah Batteries		18 Ah Batteries	
Max. Ah Available	No. of Batteries	Max. Ah Available	No. of Batteries	Max. Ah Available	No. of Batteries	Max. Ah Available	No. of Batteries	Max. Ah Available	No. of Batteries
8	2	6	1	6	1	8	1	16	1
12	3	12	2	13	2	16	2	32	2
16	4	18	3	20	3	24	3	48	3
20	5	24	4	27	4	32	4		
24	6	31	5	34	5	40	5		
28	7	37	6	41	6				
32	8	43	7						
36	9								
40	10								

*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		7.7 Ah Batteries		9 Ah Batteries		18 Ah Batteries	
Max. Ah Available	No. of Batteries	Max. Ah Available	No. of Batteries	Max. Ah Available	No. of Batteries	Max. Ah Available	No. of Batteries
13	2	14	1	17	1	17	1
20	3	22	2	26	2	34	2
27	4	29	3	34	3	52	3
33	5	37	4	43	4	69	4
40	6	44	5	52	5		
47	7	52	6	61	6		
54	8	59	7	69			
60	9	67					
67	10						

*60 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		18 Ah Batteries	
Max. Ah Available	No. of Batteries	Max. Ah Available	No. of Batteries
16	2	16	1
25	3	33	2
33	4	50	3
42	5	67	4
50	6		
59	7		
67	8		

*72 hours is the typical battery recharge time 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 reduce the Amp Hours Required calculation. See the 710 Bus Splitter/Repeater Installation Guide.

CERTIFICATIONS

FCC Part 15

FCC Part 68 Registration ID CCKAL00BXR550

This Class A digital apparatus complies with Canadian ICES-003

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 2610	Commerical Premises Security Alarm Units

Underwriters Laboratory of Canada (ULC) Listed

ULC S304	Central Station Burglar

Compatible with Devices listed for:

Accessory

- UL Bank, Safe, and Vault
- UL Standard Line Security
- UL Encrypted Line Security

EXPORT CONTROL

The XR650 with encryption uses AES encryption and any export beyond the United States must be in accordance with Export Administration Regulations.

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

LT-1330 1.10 26193

© 2025

INTRUSION • FIRE • ACCESS • NETWORK

2500 North Partnership Boulevard
Springfield, Missouri 65803-8877

888.436.7832 | DMP.com