712-8INT ZONE EXPANSION MODULE
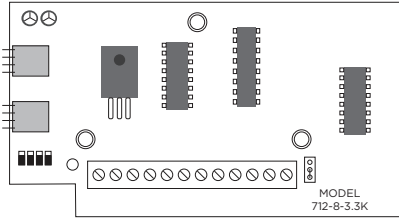## *Installation Guide*

Figure 1: 712-8INT Module

DESCRIPTION

The Model 712-8INT Zone Expansion Module allows you to increase the number of protection zones available on a DMP panel. The 712-8INT provides a total of eight grounded zones.

The zone expansion module provides a terminal strip for zone inputs, two 4-pin headers for Keypad Bus or LX-Bus connections, a jumper for LX-Bus or Keypad Bus operation, and a transmit data LED to indicate panel communication.

Note: The 712-8INT is listed for use in burglary applications only: No fire circuits shall be used on this device.

Compatibility

• XT30INT panels
• XR150INT/XR550INT Series panels

What is Included?

• One 712-8INT Zone Expansion Module
• Eight 1K Ohm EOL resistors

1 **MOUNT THE MODULE**

The module can be mounted in a DMP enclosure using the standard 3-hole mounting pattern. Refer to Figure 2 as needed during installation.

1. Hold the plastic standoffs against the inside of the enclosure side wall.
2. Insert the included Phillips head screws from the outside of the enclosure into the standoffs. Tighten the screws.
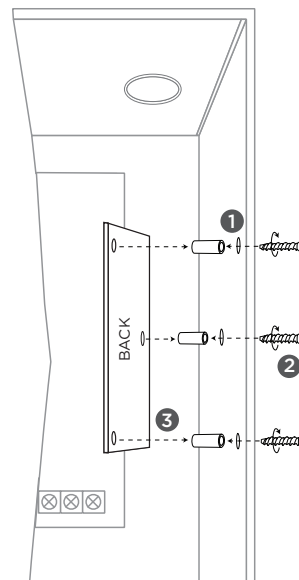3. Carefully snap the module onto the standoffs.

Figure 2: Standoff and Module Installation

2 **WIRE THE MODULE**

Use 18 to 22 gauge wire to connect the 712-8INT directly to the Keypad Bus or use a dual-ended 4-wire harness to connect directly to the LX-Bus. This connection allows the module to communicate with the panel and receive 12 VDC power. For more information about wiring, refer to Wiring Specifications. Refer to Figure 3 when wiring the module.

Connect to the LX-Bus

1. Place a jumper across the top two KEYPAD/LX-BUS pins.
2. Connect one end of a 4-wire harness to the top header on the module.
3. At the panel, connect the other end of the 4-wire harness to the LX-Bus.

Connect to the Keypad Bus

1. Place a jumper across the bottom two KEYPAD/LX-BUS pins.
2. Connect a 4-wire harness to the top header on the module.
3. At the panel, connect the wires to the corresponding Keypad Bus terminals.
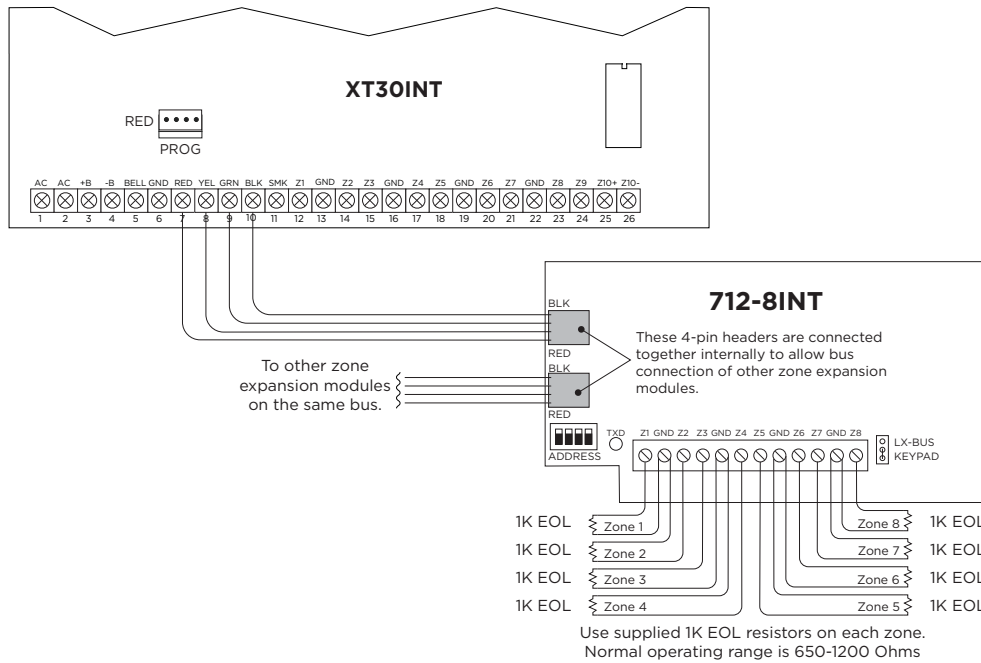
Figure 3: Wiring Diagram

3   ADDRESS THE MODULE

To communicate the status of the eight zones, the module responds to two addresses on the Keypad Bus and eight addresses on the LX-Bus. You can set the module starting address to any bus address from 0 to 15. The module automatically responds to this address, the next address on the Keypad Bus, and the next seven addresses on the LX-Bus.

To change the current address, move the slide switches to the appropriate address positions according to Figure 4.
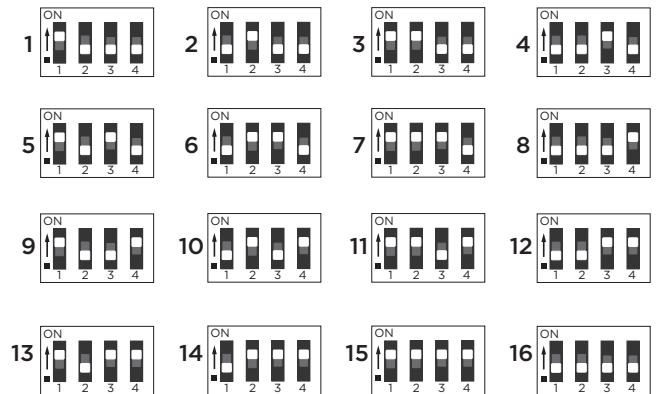
Keypad Bus Addressing

The module can be set to the following keypad addresses according to panel model: 1 through 8 for XT30INT and XR150INT Series panels, or 1 through 15 for XR550INT Series panels. Additionally, the eight zones on the module occupy two keypad addresses.

Figure 4: Addressing the Module

For example, if the module is set to address 2, the first four expansion zones occupy address 2 and respond as zones 21-24. The last four expansion zones occupy address 3 and respond to the panel as zones 31-34. For more information about Keypad Bus addressing, refer to Table 1.

📓 **Note:** Because the 712-8INT is supervised, both addresses must be selected in Device Setup of the XR150INT/XR550INT Series programming when used on the Keypad Bus.

LX-Bus Addressing

When connecting to the LX-Bus, the module must be addressed to match the last two digits of the first zone being used. The next seven zone addresses are automatically used to communicate expander zones 2 through 8 status.

For example, on an XR150INT panel using LX-Bus 1 if you set the module address to 8, the eight zones on the expander respond as zones 508 to 515. When connected to an XR550INT panel using LX-Bus 2, the zones respond as 608 to 615. For more information about LX-Bus addressing, refer to Table 2.

Note: Only two 712-8INT Modules can be connected to each LX-Bus.

DMP PANEL KEYPAD BUS	712-8INT ADDRESS	EXPANDER ZONES 1-4	5-8
		PANEL ZONES	
XT30INT, XR150INT/ XR550INT Series	1	11-14	21-24
	2	21-24	31-34
	3	31-34	41-44
	4	41-44	51-54
XT30INT, XR150INT/ XR550INT Series	5	51-54	61-64
	6	61-64	71-74
	7	71-74	81-84
	8	81-84	91-94
XR550INT Series	9	91-94	101-104
	10	101-104	111-114
	11	111-114	121-124
	12	121-124	131-134
	13	131-134	141-144
	14	141-144	151-154
	15	151-154	161-164

Table 1: Keypad Bus Addresses

712-8INT ADDRESS	XR150/XR550 SERIES LX-BUS				
	PANEL ZONE RANGE				
	LX-BUS 1	LX-BUS 2	LX-BUS 3	LX-BUS 4	LX-BUS 5
0	500-507	600-607	700-707	800-807	900-907
1	501-508	601-608	701-708	801-808	901-908
2	502-509	602-609	702-709	802-809	902-909
...	...	...	...	...	...
7	507-514	607-614	707-714	807-814	907-914
8	508-515	608-615	708-715	808-815	908-915
9	509-516	609-616	709-716	809-816	909-916
...	...	...	...	...	...
12	512-519	612-619	712-719	812-819	912-919
13	513-520	613-620	713-720	813-820	913-920
14	514-521	614-621	714-721	814-821	914-921
15	515-522	615-622	715-722	815-822	915-922

Table 2: LX-Bus Addresses

ADDITIONAL INFORMATION

Wiring Specifications

DMP recommends using 18 or 22 AWG for all LX-Bus and Keypad Bus connections. The maximum wire distance between any module and the DMP Keypad Bus or LX-Bus circuit is 304.8 meters. To increase the wiring distance, install an auxiliary power supply, such as a DMP Model 503INT. Maximum voltage drop between a 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.

To maintain auxiliary power integrity when using 22-gauge wire on Keypad Bus circuits, do not exceed 152.4 meters. When using 18-gauge wire, do not exceed 304.8 meters. Maximum distance for any bus circuit is 762 meter regardless of wire gauge. Each 762 meter bus circuit supports a maximum of 40 LX-Bus devices.

For additional information refer to the LX-Bus/Keypad Bus Wiring Application Note (LT-2031) and the 710 Bus Splitter/ Repeater Module Installation Guide (LT-0310).

Connecting to Other Modules

Using a 4-wire connector as an extension of the Keypad Bus or LX-Bus, you can easily connect the 712-8INT to multiple modules on the same bus. Observe wire colors when making connections. For more information about wiring connections, refer to Figure 3.

Data LED

The LED on the 712-8INT flashes each time the module responds to a poll from the panel. If there is a problem with the panel, system programming, or the connection between the panel and module, the LED stops flashing and a system trouble message displays on the keypad.

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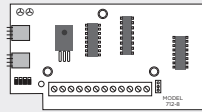
Specifications

Operating Voltage	8.0 to 14.5 VDC
Current Draw	
Normal	17 mA + 1.6 mA per active zone
Alarm	17 mA + 2.0 mA per active zone
Dimensions	11.43 cm W x 5.08 cm H
Weight	23 kg (8.0 oz)

Compatibility

XT30INT panels
XR150INT/XR550INT Series panels

Certifications

Security Grade:	3
Environmental Class:	II

Intertek (ETL) Listed

EN 50130-4:2011+A1:2014	Alarm systems. Electromagnetic compatibility. Product family standard: Immunity requirements for components of fire, intruder, hold up, CCTV, access control and social alarm systems.
EN 50130-5:2011	Alarm systems. Environmental test methods.
EN 50131-1:2006+A1:2009	Alarm systems. Intrusion and hold-up systems. System requirements.
EN 50131-3:2009	Alarm systems. Intrusion and hold-up systems. Control and indicating equipment.
EN 61000-3-2:2006+A1+A2	Electromagnetic compatibility (EMC) — Part 3 – 2: Limits — Limits for harmonic current emissions.
EN 61000-3-3:2013	Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤16 A per phase and not subject to conditional connection.
EN 61000-6-4:2007	Emission standard for industrial environments.

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2500 North Partnership Boulevard
Springfield, Missouri 65803-8877
417.831.9362 | DMP.com