712-8 ZONE EXPANSION MODULE

Installation Guide

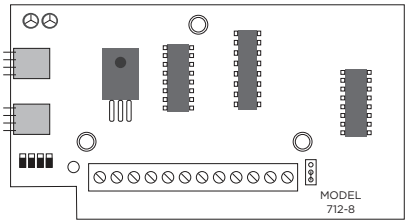


Figure 1: 712-8 Module

DESCRIPTION

The Model 712-8 Zone Expansion Module allows you to increase the number of protection zones available on a DMP panel. The 712-8 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 712-8 is listed for use in burglary applications only: No fire circuits shall be used on this device.

What is Included?

- One 712-8 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.

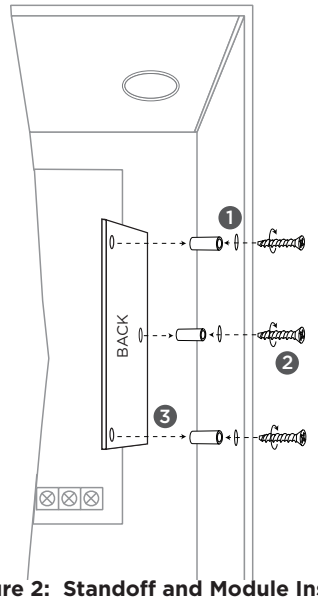


Figure 2: Standoff and Module Installation

2 WIRE THE MODULE

Use 18 to 22 gauge wire to connect the 712-8 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.

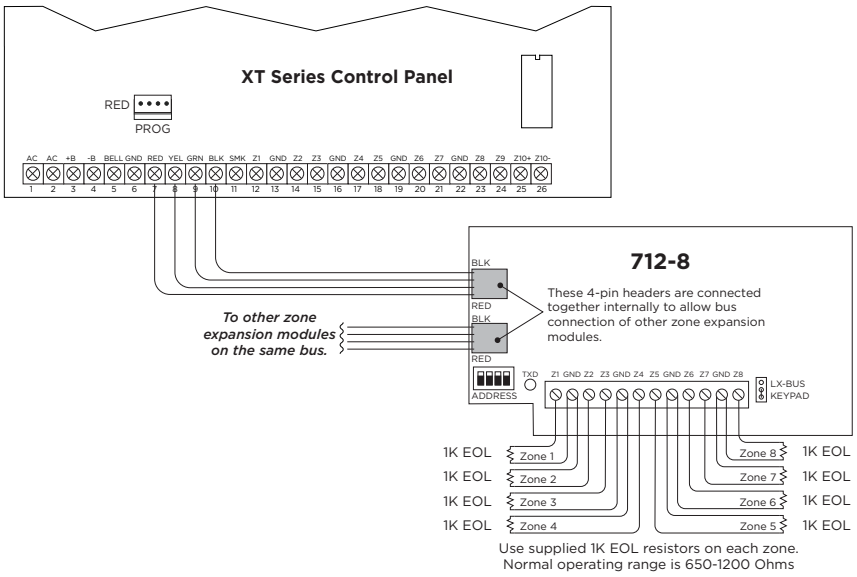


Figure 3: Wiring Diagram

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.

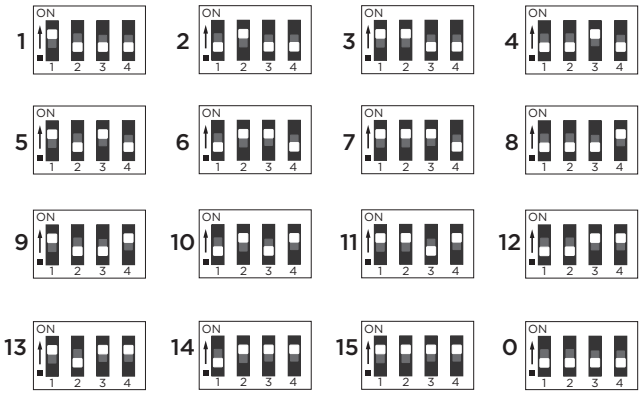


Figure 4: Addressing the Module

Keypad Bus Addressing

The module can be set to the following keypad addresses according to panel model: 1 through 8 for XT Series and XR150 Control Panels, or 1 through 15 for XR550 Control Panels. Additionally, the eight zones on the module occupy two keypad addresses.

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 712-8 is supervised, both addresses must be selected in Device Setup of the XR Series Control Panel 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 XR150 using LX500 or an XT75 using LX, if you set the module address to 8, the eight zones on the expander respond as zones 508 to 515. When connected to an XR550 panel using LX600, the zones respond as 608 to 615. For more information about LX-Bus addressing, refer to Table 2.

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

DMP PANEL KEYPAD BUS	712-8 ADDRESS	EXPANDER ZONES 1-4	5-8
		PANEL ZONES	
XT and XR Series Control Panels	1	11-14	21-24
	2	21-24	31-34
	3	31-34	41-44
	4	41-44	51-54
	5	51-54	61-64
	6	61-64	71-74
	7	71-74	81-84
	8	81-84	91-94*
XR550 Control Panels	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
		* Only with XR550	

Table 1: Keypad Bus Addresses

712-8 ADDRESS	PANEL ZONE RANGE				
	XR SERIES AND XT75	XR550 CONTROL PANELS			
	LX/LX500	LX600	LX700	LX800	LX900
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 1,000 feet. To increase the wiring distance, install an auxiliary power supply, such as a DMP Model 505-12. 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 500 feet. When using 18-gauge wire, do not exceed 1,000 feet. Maximum distance for any bus circuit is 2,500 feet regardless of wire gauge. Each 2,500 foot 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 712-8 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 712-8 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.

Compliance Listing Specifications

UL Commercial Burglary
The 712-8 Zone Expansion Module must be mounted inside the control unit enclosure or other Listed enclosure.

ULC Commercial Burglary (XR Series Control Panels)
If the 712-8 is installed in another enclosure, a DMP Model 307 Clip-on Tamper Switch programmed as a 24-Hour zone is required.

The 712-8 zones can only be used in Low Risk applications. Medium or High Risk applications must use panel zone inputs.

FCC INFORMATION

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

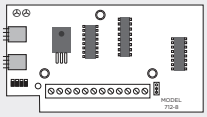
1. This device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

The antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm (7.874 in.) from all persons. It must not be located or operated in conjunction with any other antenna or transmitter.

Changes or modifications made by the user and not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user is required to correct the interference at their own expense.

712-8 ZONE EXPANSION MODULE



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	4.50" W x 2.50" H 11.43 cm W x 5.08 cm H
Weight	8.0 oz (23.0 kg)

Compatibility

XT Series Control Panels

XR Series Control Panels

Certifications

FCC Part 15

Underwriters Laboratory (UL) Listed

ANSI/UL 365	Police Station Connected Burglar
ANSI/UL 609	Local Burglar Alarm Unites and Systems
ANSI/UL 1023	Household Burglar Alarm System Units
ANSI/UL 1076	Proprietary Burglar Alarm Units
ANSI/UL 1610	Central Station Burglar Alarm Units
ULC Subject-C1023	Household Burglar
ULC/ORD-C1076	Proprietary Burglar
ULC S304	Central Station Burglar

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

LT-0687 1.03 24401

INTRUSION • FIRE • ACCESS • NETWORKS

2500 North Partnership Boulevard
Springfield, Missouri 65803-8877

800.641.4282 | DMP.com