INSTALLATION GUIDE

![DMP logo]

714/715
Zone Expansion Module

GET STARTED

714 and 715 zone expander modules allow you to increase the number of reporting zones available on DMP panels. The modules connect to the panel Keypad Bus or LX-Bus and are set to an address that determines the reporting zone number.

The 714 provides four 5 VDC Class B zones for use with burglary and non-powered fire devices.

The 715 provides four 12 VDC Class B zones for use with burglary, non-powered, or powered fire devices.

What's Included

► One 714 Zone Expansion Module or One 715 Zone Expansion Module

► (714) Four 1K Ohm Resistors

► (715) Four 3.3K Resistors

► 12-Wire Harness

► Hardware Pack

Compatibility

► XT30/XT50 Series Panels

► XR150/XR550 Series Panels

► XF6 Series Fire Control Panels

INSTALLATION

1 Program the Panel

Program the zones on 714 or 715 zone expander modules with any of the panel's burglary or fire zone types. You can also program zones as an Arming zone type when they are being used with key switches. For more information, refer to the appropriate panel programming guide.

2 Mount the Module

The 714/715 comes in a high-impact plastic housing that you can mount directly to a wall, backboard, or other flat surface. For easy installation, the housing base contains holes that allow you to mount the module on a single-gang switch box or ring.

1. Remove the housing fastener screws and separate the top housing from the base.

2. Insert screws through the desired mounting holes on the housing base. Refer to Figure 1 for mounting hole locations.

3. Tighten the screws into place.

4. After wiring and addressing the module, attach the housing top to the mounted base with the housing fastener screws. Refer to Figure 2.
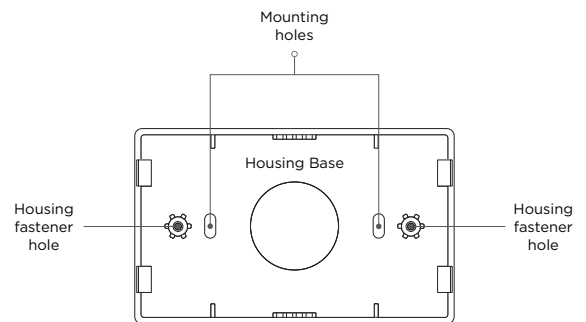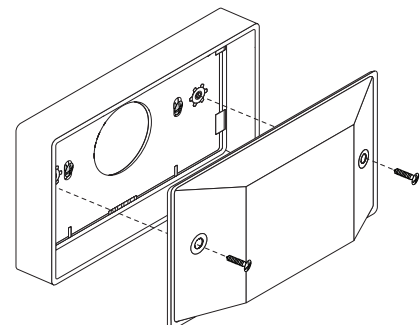

Figure 1: Mounting Hole Locations

Figure 2: Screw Locations

3 Wire the Module

Connect the 714 to the LX-Bus

To wire the 714, join the red, yellow, green, and black wires to a 4-wire harness and connect it to the LX-Bus.

Connect the 714 to the Keypad Bus

1. Connect the red, yellow, green, and black wires to panel Terminals 7, 8, 9, and 10 respectively.

2. Observe polarity and wire zones 1-4.

3. Install the included 1K Ohm EOL resistors.

SPECIFICATIONS	714 MODULE	715 MODULE
Normal Operating Range	650-2100 Ohms	1200-6000 Ohms
Zone Resistors	1k Ohm EOL	3.3k Ohm EOL
Max Line Impedence	100 Ohms	100 Ohms
Zone Supervision	All Zones	All Zones

Table 1: 714 and 715 Modules Specifications

Connect the 715 to the LX-Bus

To wire the 715, connect the red wire to panel Terminal 11 (Smoke power terminal). This allows Sensor Reset to drop power to the module and devices connected to its zones. Join the yellow, green, and black wires to a 4-wire harness and connect it to the LX-Bus.

Connect the 715 to the Keypad Bus

1. Connect the red wire to panel Terminal 11 (Smoke power terminal). This allows Sensor Reset to drop power to the module and devices connected to its zones. Alternately, connect red to a regulated, power limited power supply listed for Fire Protective Signaling through a Model 716 relay. Use the Sensor Reset Output programming to drop power to the 715 module.

2. Connect the yellow, green, and black wires to panel Terminals 8, 9, and 10 respectively.

3. Observe polarity and wire zones 1-4.

4. Install the included 3.3K Ohm EOL resistors.

A **714 Module:**
Connect Red to LX-Bus Wire or Panel Terminal 7

B **To Keypad Bus or LX-Bus**

715 Module:
Connect Red to Panel Terminal 11 or a regulated, power limited power supply listed for Fire Protective Signaling through a Model 716 relay
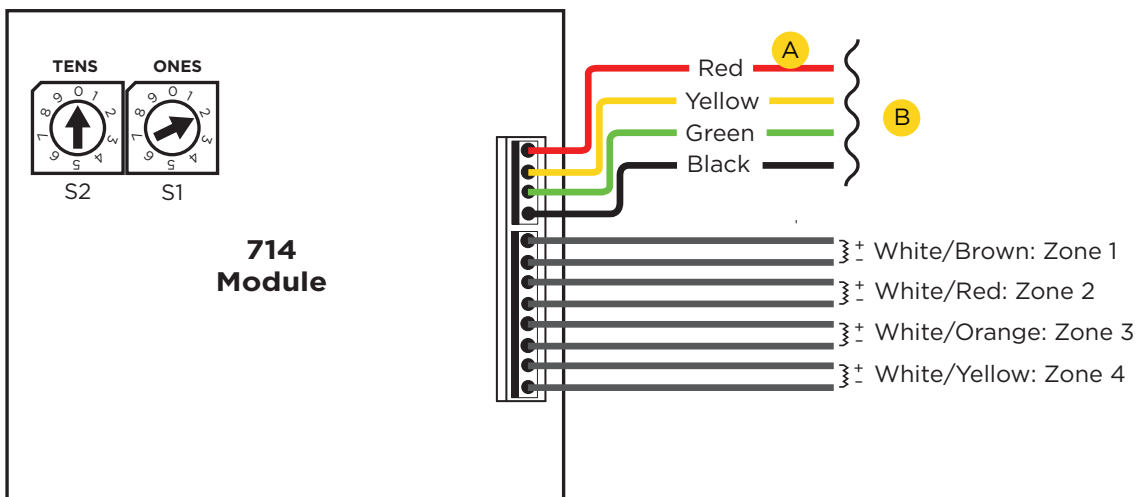

Figure 3: Module Wiring

4 Set the Module Address

714 and 715 Zone Expansion Modules use two rotary switches (TENS and ONES) to set the module address. For keypad bus addresses, set the switches to match the device address. For LX-Bus addresses, set the switches to match the last two digits of the addresses. For example, for address 02 set the switches to TENS 0 and ONES 2 as shown in Figure 4. For more information, refer to Table 2 and Table 3.

SWITCH		XR150 AND XF6-100 SERIES	XR550 AND XF6-500 SERIES				
TENS	ONES	LX500	LX500	LX600	LX700	LX800	LX900
0	0	500	500	600	700	800	900
0	1	501	501	601	701	801	901
0	2	502	502	602	702	802	902
0	3	503	503	603	703	803	903
0	4	504	504	604	704	804	904
...	...	...	...	...	...	...	...
9	5	595	595	695	795	895	995
9	6	596	596	696	796	896	996
9	7	597	597	697	797	897	997
9	8	598	598	698	798	898	998
9	9	599	599	699	799	899	999

Table 2: LX-Bus Addresses and Corresponding Zone Numbers

KEYPAD BUS ADDRESS	SWITCH		ZONE NUMBERS	
	TENS	ONES	XT30/XT50, XR150, AND XF6-100 SERIES	XR550 AND XF6-500 SERIES
1	0	1	11 to 14	11 to 14
2	0	2	21 to 24	21 to 24
3	0	3	31 to 34	31 to 34
4	0	4	41 to 44	41 to 44
5	0	5	51 to 54	51 to 54
6	0	6	61 to 64	61 to 64
7	0	7	71 to 74	71 to 74
8	0	8	81 to 84	81 to 84
9	0	9	N/A	91 to 94
10	1	0	N/A	101 to 104
11	1	1	N/A	111 to 114
12	1	2	N/A	121 to 124
13	1	3	N/A	131 to 134
14	1	4	N/A	141 to 144
15	1	5	N/A	151 to 154
16	1	6	N/A	161 to 164

Table 3: Keypad Bus Addresses and Corresponding Zone Numbers

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 following documents:

- ► LX-Bus/Keypad Bus Wiring Application Note (LT-2031)
- ► 710 Bus Splitter/Repeater Module Installation Guide (LT-0310)

Optional Accessories

You can replace the standard wiring harness with the optional 718T Plug-in Screw Terminal. The enclosure base can also accommodate the 719T Terminal Boards for the 714 or the 720T Terminal Boards for the 715, both of which pass through panel LX-Bus wiring. The 719T includes 1k EOL resistors. The 720T includes 3.3k EOL resistors.

LED Operation

The LED on the zone expanders flashes each time the module responds to a poll from the panel. If there is a problem with the hardware, panel programming, or the green data wire between the panel and the zone expander module, the LED stops flashing and System Trouble appears in the keypad display.

COMPLIANCE INFORMATION

UL Commercial Burglary

To comply with ANSI/UL 365 Police-Connected Burglary System or ANSI/UL 609 Local Burglary Alarm Systems, the module and housing must be mounted in the UL listed enclosure with a tamper. The control panel enclosure may be used.

UL Commercial Fire

For 715 2-wire compatibility, refer to the panel guide. Any auxiliary power supply used must be regulated, power limited and listed for Fire Protective Signaling.

Panel	
XR150/XR550	Compatibility ID = A
XF6-100/XF6-500	Compatibility ID = A

ULC Commercial Burglary (XR150/XR550 Series Panels)

Place the zone expander module in a listed enclosure and connect a DMP Model 307 Clip-on Tamper Switch to the enclosure programmed as a 24-hour zone.

The 714/715 zones can be installed in medium or high risk applications when two zones are used as shown in the Dual Zone Protection diagram in the XR150/XR550 Canadian Installation Guide. Otherwise, 714/715 zones can only be used in low risk applications.

ULC Residential Fire (XR150/XR550 Series Panels)

Refer to the appropriate panel compliance listing guide for the complete list of UL approved smoke detectors.

SPECIFICATIONS

Operating Voltage	12 VDC
714 Operating Current	7 mA + 1.6 mA per zone
714 Zone Voltage	5 VDC, max 2 mA
715 Operating Current	7 mA + 4 mA per active zone + 30 mA per smoke in alarm + 58 mA per zone shorted
715 Zone Voltage	12 VDC, max 34 mA per test results
Zone Operating Range	9.7 to 14 VDC
Dimensions	4.50 W x 2.75 H x 1.75 D in 11.43 W x 6.99 H x 4.45 D cm
Zones	4 Supervised Class B Power Limited

CERTIFICATIONS

► California State Fire Marshal (CSFM)

Underwriters Laboratory (UL) Listed

ANSI/UL 365	Police Station Connect Burglar Alarm Systems
ANSI/UL 609	Local Burglar Alarm Units & Systems
ANSI/UL 864	Fire Protective Signaling Systems
ANSI/UL 985	Household Fire Warning System Units
ANSI/UL 1023	Household Burglar Alarm System Units
ANSI/UL 1076	Proprietary Burglar Alarm Units & Systems
ANSI/UL 1610	Central Station Burglar Alarm Units
ANSI/UL 1635	Digital Alarm Communication System Units
ULC Subject-C1023	Household Burglar
ULC/ORD-C1076	Proprietary Burglar
ULC S304	Central Station Burglar
ULC S545	Household Fire