INSTALLATION GUIDE

DMP

711
Zone Expander Module

GET STARTED

Zone expander modules allow you to increase the number of reporting zones available on DMP panels. Refer to the panel installation guide for more information about zone expansion modules and the maximum number allowed per panel. The modules connect to the panel 4-wire Keypad Bus or LX-Bus™ and are set to an address that determines the reporting zone number. The 711 provides one Type A Class B zone.

The 711 housing mounts to any flat surface using the mounting holes provided in the base. Snap on the cover to complete the installation.
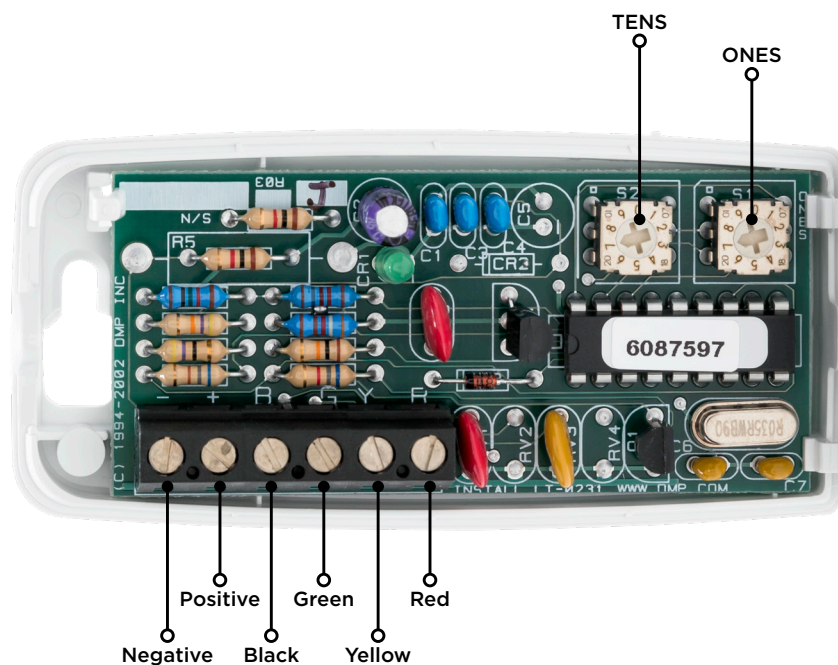
What's Included

► 711 Expander Module

► 1k Ohm Resistor

Compatibility

► XT30/XT50 and XR150/XR550 Series Panels

PCB Layout

INSTALLATION

1 Address the Module

The 711 Zone Expander uses two rotary switches identified as TENS and ONES to set the module address. See *LX-Bus Zone Numbers* below for LX-Bus addresses and set the switches to match the last two digits of the address. For example, for address **502** on an XR550 Series panel set the **TENS** switch to zero and the **ONES** switch to two.
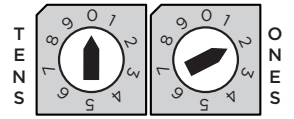
Keypad Bus Zone Numbers

The 711 module uses zone 1 only. The last three zone numbers cannot be used for other devices. For example, turn the 711 switches to address 02 (TENS = 0, ONES = 2) to set the module zone number to zone 21. Zones 22, 23, and 24 cannot be used.

| KEYPAD ADDRESS | SWITCHES | | ZONE NUMBER | | |
	TENS	ONES	XT30/50	XR150	XR550
1	0	1	11	11	11
2	0	2	21	21	21
3	0	3	31	31	31
4	0	4	41	41	41
5	0	5	51	51	51
6	0	6	61	61	61
7	0	7	71	71	71
8	0	8	81	81	81
9	0	9	N/A	N/A	91
10	1	0	N/A	N/A	101
11	1	1	N/A	N/A	111
12	1	2	N/A	N/A	121
13	1	3	N/A	N/A	131
14	1	4	N/A	N/A	141
15	1	5	N/A	N/A	151
16	1	6	N/A	N/A	161

Table 1: Keypad Bus Zone Numbers

LX-Bus Zone Numbers

Refer to Table 1 for a partial list of XR550 Series panel LX-Bus zone numbers. XR150 Series panels only use LX-Bus 1 (LX500).

LX-BUS ADDRESS	LX-BUS NUMBER	SWITCHES		ZONE NUMBER
		TENS	ONES	
501	1 (LX500)	0	1	501
506	1 (LX500)	0	6	506
623	2 (LX600)	2	3	623
654	2 (LX600)	5	4	654
742	3 (LX700)	4	2	742
768	3 (LX700)	6	8	768
833	4 (LX800)	3	3	833
877	4 (LX800)	7	7	877
919	5 (LX900)	1	9	919
994	5 (LX900)	9	4	994

Table 1: LX-Bus Zones Numbers

2 Install the Module

Wiring the 711 Module

Connect the Red, Green, Yellow, and Black wires from the panel Keypad Bus or LX-Bus™ to the matching terminals or harness wires on the zone expander.

⚡ **Caution:** Do not use looped wire under terminals. Break wire run to provide supervision of connections.
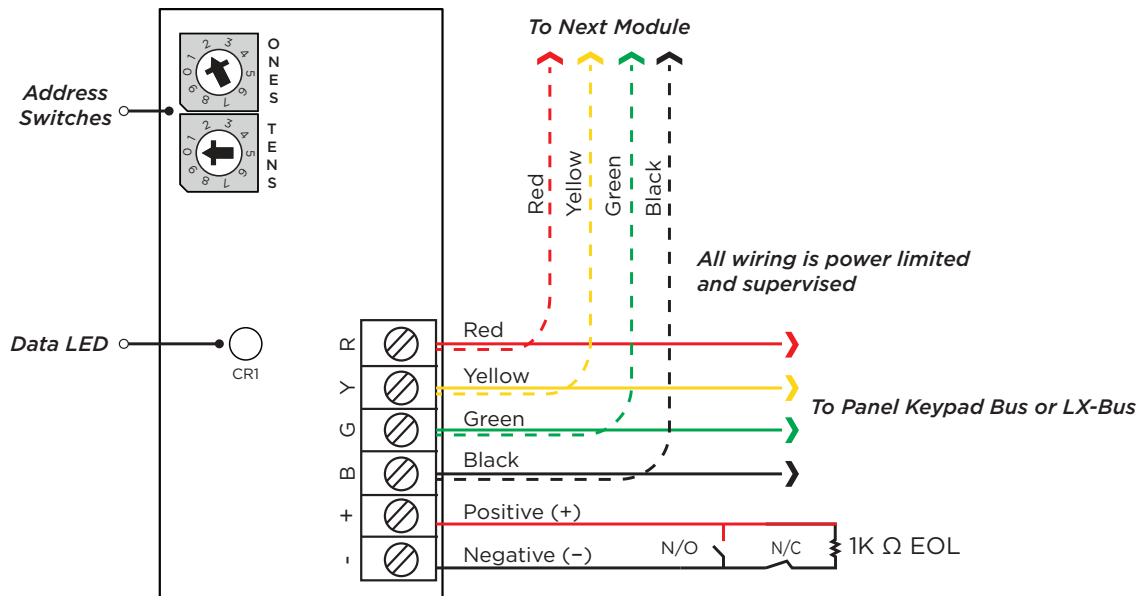
Wiring Specifications for Keypad and LX-Bus

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. 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. Install an additional power supply to increase the wire length or add devices.

Maximum distance for any one circuit (length of wire) is 2,500 feet despite the wire gauge or number of branches. Increased wire distance from the panel decreases DC voltage on the wire. Maximum number of devices per 2,500 feet circuit is 40.

📝 **Note:** Each panel allows a specific number of supervised keypads. Add additional keypads in the unsupervised mode. Refer to the panel installation guide for the specific number of supervised keypads allowed.

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.

Refer to the panel installation guide and LX-Bus/Keypad Bus Wiring Application Note (LT-2031). Also see the 710 Module Installation Sheet (LT-0310) for more information.

Address Switches

ONES
TENS

To Next Module

Red
Yellow
Green
Black

All wiring is power limited and supervised

Data LED

CR1

R — Red
Y — Yellow
G — Green
B — Black
+ — Positive (+)
- — Negative (−)

To Panel Keypad Bus or LX-Bus

N/O   N/C   1K Ω EOL

Protection Zone Supervised 5 V, Class B, Style A
Max Impedance   100 Ω
Ground Fault Detected   < 1200 Ω
Normal Operating Range   650 Ω to 1200 Ω

3 Program the Module

You can program the zone expander module zone with any panel Burglary or Fire zone type or as an Arming type zone when used with keyswitches.

Zone Expander Data LED

The zone expander LED flashes each time the module responds to a poll from the panel. If there is a problem with the panel, 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

To comply with ANSI/UL 365 Police-Connected Burglary System or ANSI/UL 609 Local Burglary Alarm Systems, the module must be mounted in a listed enclosure with a tamper installed. The keypad and LX-Bus are rated Class B, Style 3.5.

ULC Commercial Burglary

XR100/XR500 & XR150/XR350/XR550 Series panels

Place the 711 and other zone expander modules in a listed enclosure and connect a DMP Model 307 Clip-on Tamper Switch to the enclosure programmed as a 24-Hour zone.

The 711 zone can only be used in Low Risk applications. Medium or High Risk applications must use panel zone inputs.

SPECIFICATIONS

Operating Voltage	8.8 to 15.0 VDC
Operating Current	
Standby	11 mA (+ 1.6 mA per active zone)
Alarm	11 mA (+ 2 mA per active zone)
Zone Voltage	5 VDC, max 2 mA
EOL Value	1k Ohm
Dimensions	1.25 W x 2.75 H in. 3.18 W x 6.99 H cm.
Wire Specification	Accepts 12 to 22 AWG wire

CERTIFICATIONS

- ► California State Fire Marshal (CSFM)
- ► New York City (FDNY COA #6167)
- ► Commercial Burglar and Fire Accessory Zone Expander
- ► Signaling Device

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