

## 711/711E Zone Expansion Module

### Description

Zone expander modules allow you to increase the number of reporting zones available on DMP XRSuper6, XR20, XR40, XR200, XR2400F, XR200-485(B), or XR500 Series Command Processor™ 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 and 711E each provide one Type A Class B zone.

### Installing the 711/711E Module

The 711 and 711E housing easily mounts to any flat surface using the mounting holes provided in the base. Snap on the cover to complete the installation.

**Note:** To comply with UL 365 Police-Connected Burglary System or UL 609 Local Burglary Alarm Systems, the module must be mounted in a UL Listed enclosure with a tamper installed.

### 711/711E Fit in POPIT Case

The 711 and 711E modules can be easily installed in the same plastic case used by the Radionics D8127 POPIT. Included with the modules is a small piece of insulating material that must be placed between the plastic base and the module circuit board.

### Wiring the 711/711E 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.

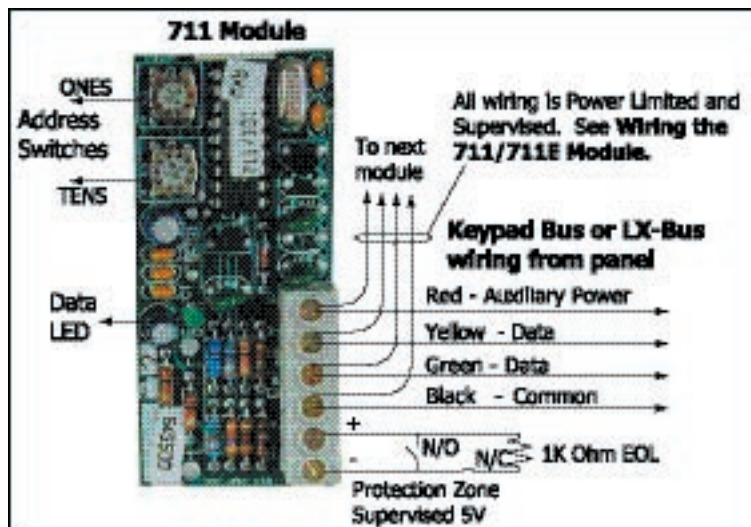


Figure 1: 711 Module Wiring

## Wiring Specifications

1. 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.
2. Maximum distance for any one circuit (length of wire) is 2,500 feet regardless of the wire gauge. This distance can be in the form of one long wire run or multiple branches with all wiring totaling no more than 2,500 feet. As wire distance from the panel increases, DC voltage on the wire decreases.
3. 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.
4. 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 710/710F Module Installation Sheet (LT-0310) for more information. Also see the LX-Bus/Keypad Bus Wiring Application Note (LT-2031).

## Setting Address Switches

711 Zone Expanders use two rotary switches identified as TENS and ONES to set the module address. For keypad bus addresses, set the **TENS** switch to zero and the **ONES** switch to address 1 to 8. For LX-Bus addresses, set the switches to match the last two digits of the address. For example, for address **102** set the TENS switch to zero and the **ONES** switch to two as shown in Figure 2.

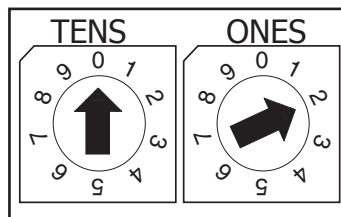


Figure 2: Switches

## 711E Addressing

Press and hold the **Address button** for two seconds until the Data LED flashes. Release the button then begin pressing it the number of times needed to equal the address first digit. After two seconds the Data LED flashes **once** indicating the first digit was accepted.

Immediately begin pressing the button the number of times necessary to equal the address second digit. Wait two seconds, the Data LED flashes **twice** indicating the second digit was accepted. The new address is now set and the 711E is ready for normal operation.

## Checking the 711E Address

Press and release the **Address button**. The LED flashes the first address digit, waits one second, then flashes the second address digit. A single 1.5-second flash indicates a **zero** digit in the address.

## Zone Programming

You can program the zone expander module zones with any panel Burglary or Fire zone types 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.

## Zone Numbers

### Keypad Bus

The 711 and 711E modules use zone 1 only. The last three zone numbers cannot be used for other devices. For example setting the module to the Keypad Bus address 02 (TENS = 0, ONES = 2) sets the module zone number to 21. Zones 22, 23, and 24 cannot be used.

Refer to Table 1 for keypad bus zone numbers and the panels where they operate.

Keypad Address	Switches		Zone Numbers			
	Tens	Ones	XRSuper6	XR20	XR40, XR200, XR2400F, XR200-485	XR500 Series
1	0	1	7 to 10	11	11	11
2	0	2	21	21	21	21
3	0	3	31	31	31	31
4	0	4	41	441	41	41
5	0	5	N/A	N/A	51	51
6	0	6	N/A	N/A	61	61
7	0	7	N/A	N/A	71	71
8	0	8	N/A	N/A	81	81
9	0	9	N/A	N/A	N/A	91
10	1	0	N/A	N/A	N/A	101
11	1	1	N/A	N/A	N/A	111
12	1	2	N/A	N/A	N/A	121
13	1	3	N/A	N/A	N/A	131
14	1	4	N/A	N/A	N/A	141
15	1	5	N/A	N/A	N/A	151
16	1	6	N/A	N/A	N/A	161

Table 1: Keypad Bus Zone Numbers

### LX-Bus

Refer to Table 2 for XR200, XR2400F, and XR200-485(B) panel LX-Bus zone numbers and Table 3 for XR500 Series panel LX-Bus zone numbers.

LX-Bus Address	LX-Bus 1 or 2	Switches		Zone Numbers
		Tens	Ones	
101	1	0	1	101
102	1	0	2	102
103	1	0	3	103
104	1	0	4	104
211	2	1	1	211
212	2	1	2	212
213	2	1	3	213
214	2	1	4	214

Table 2: LX-Bus Zone Numbers

LX-Bus Address	LX-Bus Number	Switches		Zone Numbers
		Tens	Ones	
501	1	0	1	501
506	1	0	6	506
623	2	2	3	623
654	2	5	4	654
742	3	4	2	742
768	3	6	8	768
833	4	3	3	833
877	4	7	7	877
919	5	1	9	919
994	5	9	4	994

Table 3: LX-Bus Zone Numbers

## Specifications

Operating Voltage	8.8 to 15.0 VDC
Operating Current Standby	7mA + 1.6mA per active zone
Alarm	7mA + 2mA per active zone
Zone Voltage	5 VDC
EOL Value	1k Ohm
Dimensions	1.25" W x 2.75" H

## Compatibility

The 711/711E zone expansion modules are compatible with all DMP Command Processor™ panels with zone expansion capability.



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