

# **INSTALLATION GUIDE**



711S Zone Expansion Module

# **GET STARTED**

The 711S is a flying lead style, single-zone, addressable expansion module that allows 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<sup>™</sup> and are set to an address that determines the reporting zone number. The 711S provides one Class B zone.

### What's Included

- 711S Expansion Module
- ▶ 1k Ohm Resistor

## Compatibility

- XT30/XT50 Series Panels
- XR150/XR550 Series Panels
- ► XF6 Series Fire Control Panels

## INSTALLATION

### Install the Module

The 711S addressable zone expansion module is for use in smaller applications, such as installing in a pull station back-box or even in a recessed contact hole behind the contact.

#### Wire the Module

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

**Caution:** Do not use looped wire under terminals. Break wire run to provide supervision of connections

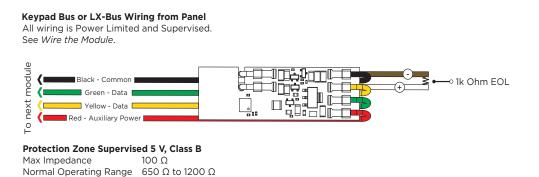
#### Wiring Specifications for Keypad and LX-Bus

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 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.

Maximum number of devices per 2,500 feet circuit is 40.

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 <u>LX-Bus/Keypad</u> Bus Wiring Application Note (LT-2031).



#### Zone Expander Data LED

The 711S 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.

**Note:** You can program the 711S zone with any panel Burglary or Fire zone type or as an Arming zone type when used with keyswitches.

## **2 PROGRAM THE PANEL**

The 711S has two different versions that can be programmed in two different ways. One version features programmable rotary switches and the other version features a serial number. The following sections will show you how to program each version.

#### **Serial Number Programming**

Available with 711S Zone Expanders with Hardware Level 102, Firmware Level 101 or higher and panel firmware Version 213 or higher.

The 711S with serial number is programmed into the panel using the 10-digit serial number on the unit. This is done by navigating to **Zone Information** and entering the serial number at the **Expander Serial Number** prompt.

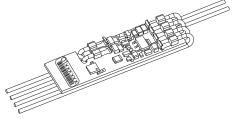


Figure 1: Serial Number PCB

#### **Rotary Switch Programming**

Available with 711S Zone Expanders with Hardware Level 101, Firmware Level 100 or lower and all panel firmware versions.

The 711S with rotary switches is programmed into the panel using two rotary switches identified as **TENS** and **ONES** to set the module address. Use a small screwdriver to set the address accordingly for Keypad Bus or LX-bus.



Figure 2: Rotary Switch PCB

#### **Zone Numbers**

#### Keypad Bus Zone Numbers

The 711S module only uses the first zone number on a keypad bus. The last three zone numbers cannot be used for other devices. Refer to Table 1 for Keypad Bus zone numbers and the panels where they operate.

| KEYPAD ADDRESS | SWIT | CHES<br>ONES | хтзо/хт5о | ZONE NUMBER<br>XR150 AND XF6-100 | XR550 AND XF6-500 |
|----------------|------|--------------|-----------|----------------------------------|-------------------|
| 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 2 for a partial list of XR550 Series and XF6 Series panel LX-Bus zone numbers. Available addresses on XR150 Series and XF6-100 panels are 500-599. Available addresses XR550 Series and XF6-500 panels are 500-999.

| 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 2: LX-Bus Zones Numbers

# **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.

## ULC Commercial Burglary (XR150/XR550 Series panels)

Place the 711S 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 711S 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           | 4.2 mA              |
| Alarm             | 4.7 mA              |
| Zone Voltage      | 5 VDC, max 2 mA     |
| EOL Value         | 1k Ohm              |
| Dimensions        | 1.25 W x 2.75 H in. |

## CERTIFICATIONS

- New York City (FDNY)
- ► 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                               |



Designed, engineered, and manufactured in Springfield, MO using U.S. and global components. **LT-1875 1.02 23505** © 2023

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