714-D22 Zone Expander Module

Description

The 714-D22 zone expander module allows you to increase the number of reporting zones available on DMP panels. Refer to the panel installation guide for more information about the maximum number and type allowed per panel. The modules connect to the panel's 4-wire keypad bus or LX-Bus™ and are set to an address that determines the reporting zone number. The 714-D22 provides four Class B, Style A zones for use with burglary devices.

Zone Programming

Program the zones on the zone expander module with any of the panel burglary zone types or as an Arming type zone when used with keyswitches.

Zone Expander Data LED

The LED on the zone expander 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.

Installing the 714-D22 Module

Mount the module outside the panel enclosure in the housing on a flat surface such as a wall or single-gang box.

714-D22 Zone Wiring

This module uses a wire harness for wiring connections. Figure 1 shows the zone colors and polarity. You may use an optional 718T Plug-in Screw Terminal that plugs into the 714-D22 to provide a screw type terminal connector for 14 to 22 gauge device wiring.

Wiring the 714-D22 Module

Connect the **Red**, **Green**, **Yellow**, and **Black** wires from the panel keypad bus or LX-Bus™ to the matching harness wires on the 714-D22 Zone Expander.
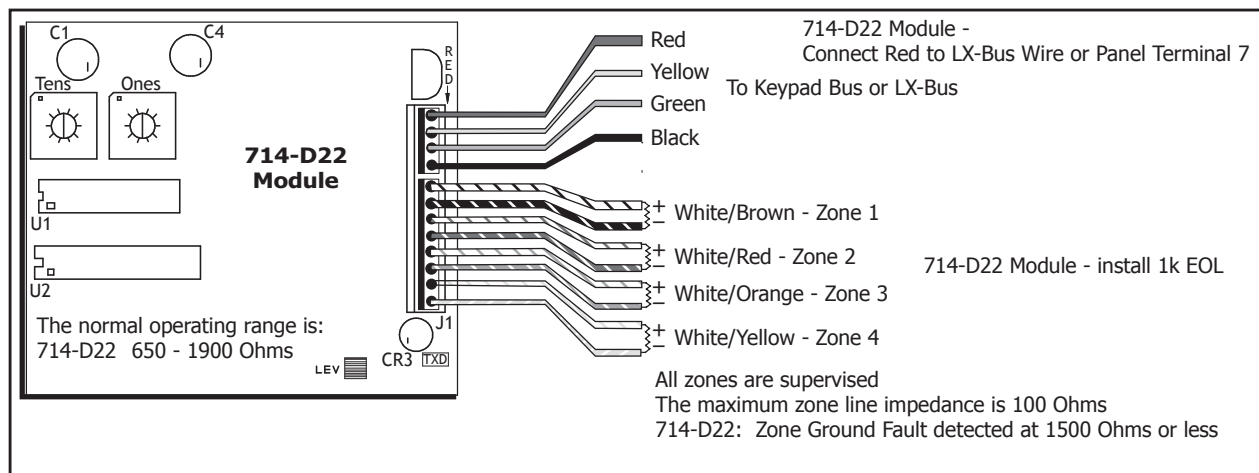

Figure 1: 714-D22 Wiring Diagram

Setting Address Switches

714-D22 Zone Expanders 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 2.
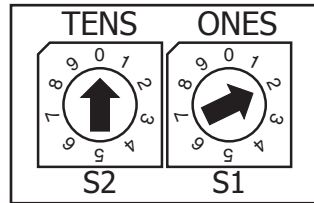

Figure 2: Switches

Keypad Bus Zone Numbers

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

Keypad Bus Address	Switches Tens	Ones	XT30/XT50	XR100 Series	XR500 Series
1	0	1	11 to 14	11 to 14	11 to 14
2	0	2	21 to 24	21 to 24	21 to 24
3	0	3	31 to 34	31 to 34	31 to 34
4	0	4	41 to 44	41 to 44	41 to 44
5	0	5	51 to 54	51 to 54	51 to 54
6	0	6	61 to 64	61 to 64	61 to 64
7	0	7	71 to 74	71 to 74	71 to 74
8	0	8	81 to 84	81 to 84	81 to 84
9	0	9	N/A	N/A	91 to 94
10	1	0	N/A	N/A	101 to 104
11	1	1	N/A	N/A	111 to 114
12	1	2	N/A	N/A	121 to 124
13	1	3	N/A	N/A	131 to 134
14	1	4	N/A	N/A	141 to 144
15	1	5	N/A	N/A	151 to 154
16	1	6	N/A	N/A	161 to 164

Table 1: Keypad Bus Zone Numbers

LX-Bus Zone Numbers

The 714-D22 module provides 4 zones. When set to an address, the module uses four zone numbers. For example, setting the module to the LX-Bus address 502 (**TENS** = 0, **ONES** = 2) sets the module zone numbers to 502, 503, 504, and 505.

Refer to Table 2 for a partial listing of XR100/XR500 Series panel LX-Bus zone numbers.

Note: XR100 Series panels only use LX-Bus number one.

LX-Bus Address	LX-Bus Number	Switches Tens	Ones	Zone Numbers
501	1	0	1	501 to 504
506	1	0	6	506 to 509
623	2	2	3	623 to 626
654	2	5	4	654 to 657
742	3	4	2	742 to 745
768	3	6	8	768 to 771
833	4	3	3	833 to 836
877	4	7	7	877 to 880
919	5	1	9	919 to 922
994	5	9	4	994 to 997

Table 2: LX-Bus Zone Numbers

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-D22, which passes through the panel LX-Bus wiring. The 719T includes 1k EOL resistors.

Wiring Specifications for Keypad and LX-Bus

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.

For additional information refer to the panel installation guide and LX-Bus/Keypad Bus Wiring Application Note (LT-2031) or the 710 Installation Guide (LT-0310).

Specifications

Operating Voltage 12 VDC

Operating Current
    714-D22   7mA + 1.6mA per zone
    Zone Voltage   5 VDC, max 2mA

Dimensions   4.5" H x 2.75" W x 1.75" D

Zones   Four Supervised Class B
                 Style A Power Limited

Accessories

718T   Plug-in Screw Terminal
719T   Terminal Boards

Compatibility

The 714-D22 is compatible with the following panels:
    XR100/XR500 Series and XT30/XT50 Series

800-641-4282

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