



## 715 LOOP EXPANDER

### Description

The 715 Loop Expander allows you to increase the number of 12 VDC ungrounded loops available on DMP command processor panels. The 715 provides an additional four Class B powered loops for connecting fire alarm initiating and burglary type devices to the panel.

You can install the 715 on individual wire runs up to 500' from the panel using 22 gauge wire or up to 1000' using 18 gauge wire.

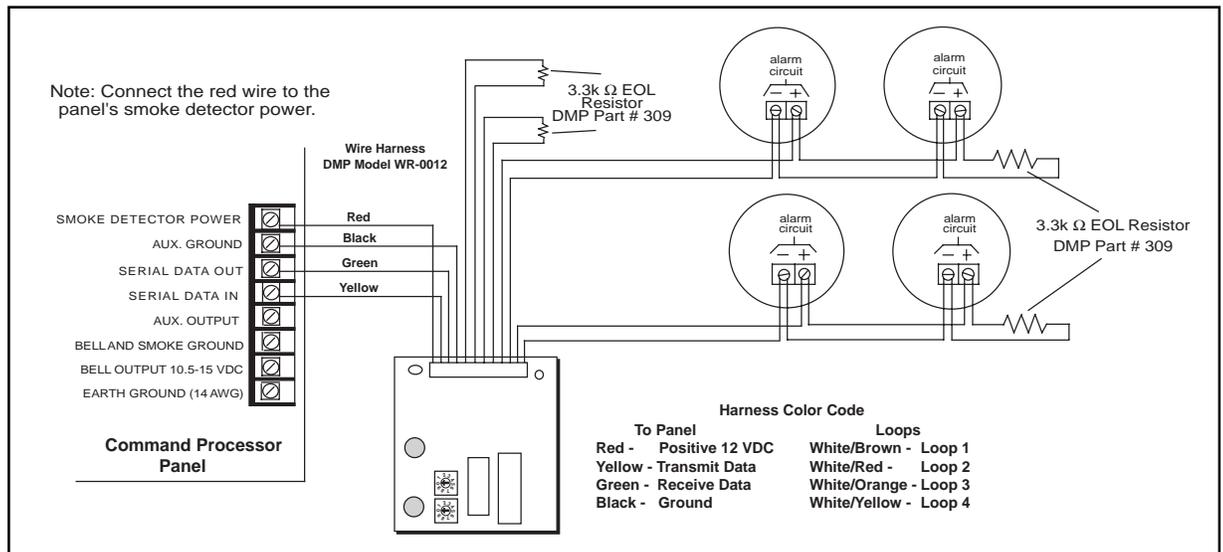


Figure 1: Panel and device connections to the 715 Loop Expander

### Address Setting

The 715 Loop Expander uses two rotary switches labeled S1 and S2 to set the module's address. If you're connecting the 715 to the panel's keypad data bus, use only the switch labeled S1.

To set the address, use a small slotted screwdriver and gently turn the center arrow on the switch clockwise to the number that matches the keypad address. See Figure 2.

Each loop on the 715 Loop Expander can be individually assigned to any active area in the system.

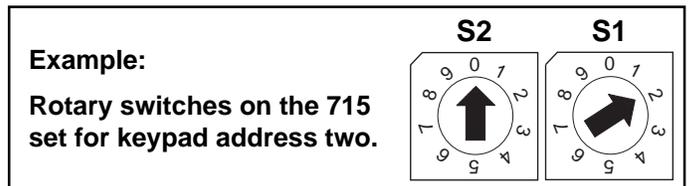


Figure 2: Set switches to match device address

**Loop numbers restricted to device addresses:** All loop numbers are preassigned to the device address and cannot be changed. If device loops show open, verify the loops are correctly programmed.

## 715 Loop Expander Specifications

The 715 Loop Expander module operates on power supplied by the command processor panel.

Heat detectors, 4-wire smoke detectors, manual pull stations and other fire initiating devices that do not require compatibility listing by UL can be connected to the 715 Loop Expander in most applications.

All fire device installations must be in accordance with the manufacturer's instructions, NFPA standards, and the requirements of the Authority Having Jurisdiction.

Operating Voltage	8.87 to 15.0 VDC
Operating Current	25mA idle
Initiating Loop Voltage	8.87 to 12.52 VDC
Maximum Current: Smoke Detectors Shorting Devices	25mA + 30mA per loop in alarm 25mA + 58mA per loop in alarm
Maximum Detector Current Per Loop	1.3mA at 12 VDC
EOL Resistor	3.3k (4 each included)

**Figure 3: Loop expander electrical specifications**

## Rotary Switch Settings

Use the tables below when addressing the 715 module:

Device Address	Switch Settings		Loop Numbers by Panel Type			
	S2	S1	1512	1712/1812	1912	1912XR
1	0	1	11 to 14	17 to 20	11 to 14	11 to 14
2	0	2	21 to 24	21 to 24	21 to 24	21 to 24
3	0	3	31 to 34	25 to 28	31 to 34	31 to 34
4	0	4	41 to 44	29 to 32	41 to 44	41 to 44
5	0	5	N/A	33 to 36	N/A	51 to 54
6	0	6	N/A	37 to 40	N/A	61 to 64
7	0	7	N/A	41 to 44	N/A	71 to 74
8	0	8	N/A	45 to 48	N/A	81 to 84

**Figure 4: Keypad bus rotary switch settings**

J9 Loop Expansion Card								
Loops	S2	S1	Loops	S2	S1	Loops	S2	S1
100 to 103	0	0	136 to 139	3	6	172 to 175	7	2
104 to 107	0	4	140 to 143	4	0	176 to 179	7	6
108 to 111	0	8	144 to 147	4	4	180 to 183	8	0
112 to 115	1	2	148 to 151	4	8	184 to 187	8	4
116 to 119	1	6	152 to 155	5	2	188 to 191	8	8
120 to 123	2	0	156 to 159	5	6	192 to 195	9	2
124 to 127	2	4	160 to 163	6	0	196 to 199	9	6
128 to 131	2	8	164 to 167	6	4			
132 to 135	3	2	168 to 171	6	8			

**Figure 5: 881 Loop expansion bus rotary switch settings**

## Switch settings match expansion bus loop numbers

The rotary switch settings on the module are easy to verify as they match the last two digits of the first loop. For example, if you set the S2 switch to 3 and the S1 switch to 2 (so it looks like 32) on an expansion module connected to J9 on the panel, the four loops on the expander respond as 132 to 135. The 1912XR system automatically adds the 1 prefix.

## Digital Monitoring Products