

DIM800

Generation 6 MX Detector Input Module

Features

- // Compatible with MX Addressable Loop on SIMPLEX 4100ESi, VIGILANT MX1 and VIGILANT MX4428 panels
- // Interface up to 2 circuits of conventional detectors
- // Requires external 24Vdc supply
- // Common MX module footprint
- // Wide range of compatible detectors

Description

The DIM800 Addressable Detector Input Module interfaces two conventional detector circuits onto the MX addressable loop. Each circuit can support 3mA of detector quiescent current and requires a 4k7 Ohm EOL (End Of Line) resistor. The DIM800 requires a suitably rated external 24V supply to power the detector circuits. Each circuit may be mapped to different zones on the fire panel. Unused circuits must be terminated with an EOL. Do not connect the detection circuits to non-isolated electrical equipment.

Mounting

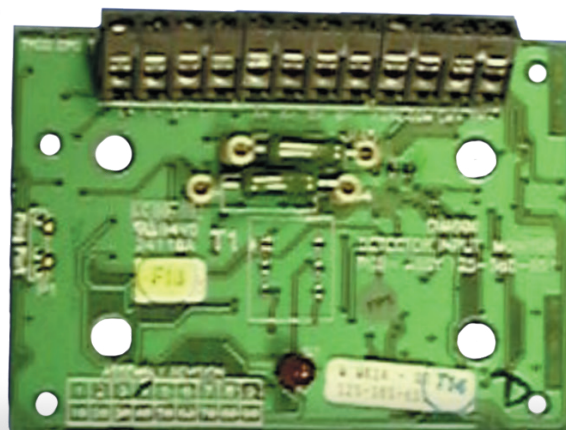
The DIM800 is supplied as an open circuit board (PCB) with mounting hardware and EOL resistors and must be fitted in a suitable enclosure. It may be mounted on a gear plate using plastic standoffs, to an M520 Ancillary Cover and K2142 back box, or into a D800 Ancillary Housing. The K2142 mounting box provides a convenient surface mounting enclosure and the M520 Cover is designed to accommodate the DIM800.

Power Supply

Note that the external power supply voltage rating is critical for compatibility with some detectors. This supply may be common to a number of DIM800s at the same location, but must be located with the DIM800 modules otherwise only one DIM800 and one circuit may be used on each PSU feed.

Address Setting

The DIM800 is shipped with a default (invalid) address of 255 and must be set to the correct loop address using the 850EMT or MX Service Tool.



Specifications

Loop Voltage ¹	20V to 40Vdc
Quiescent Current	280µA
Alarm State Current	280µA
Detector Load	3mA
Detector EOL	4k7 Ohm
External Supply ²	18 to 28.7Vdc
Current per Circuit	7.5mA
Alarm Current	30 to 50mA
Max. DIM800 per Loop ³	200/250
Ambient Temperature	-25°C to +70°C
Storage Temperature	-40°C to +80°C
Relative Humidity	10% to 95% (non cond.)
Indoor Applications Only	
Dimensions (HWD)	61 x 84 x 25 mm
Wire Size (maximum)	2.5sq. mm

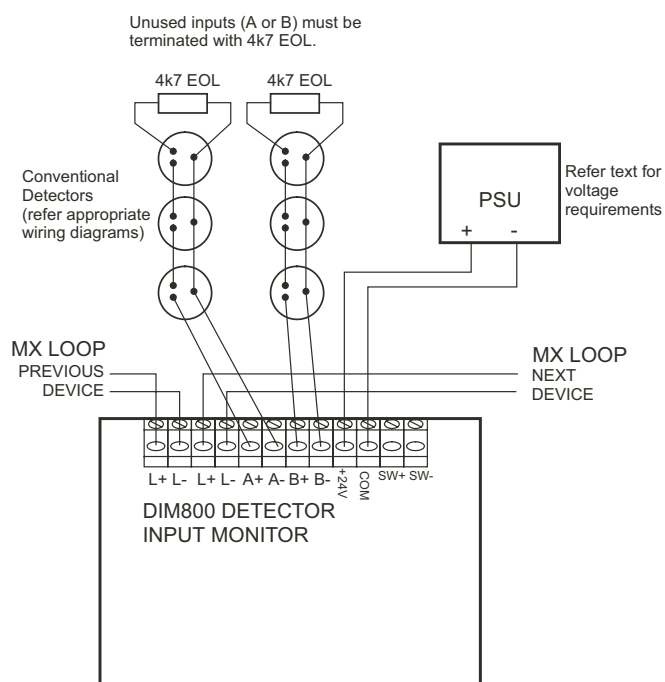
Part Numbers

DIM800	DIM800 PCB
M520	Ancillary Cover
K2142	Back box
557.201.401	D800 Ancillary Housing

1. Addressable loop voltage provided by MX CIE.
2. Refer to table on page 2 for specific detectors
3. MX4428/MX1 or 4100ESi. Refer to appropriate manual: LT0273 (MXP), LT0360 (MX1-NZ), LT0441 (MX1-Au), LT0638 (4100ESi) for design specifications.

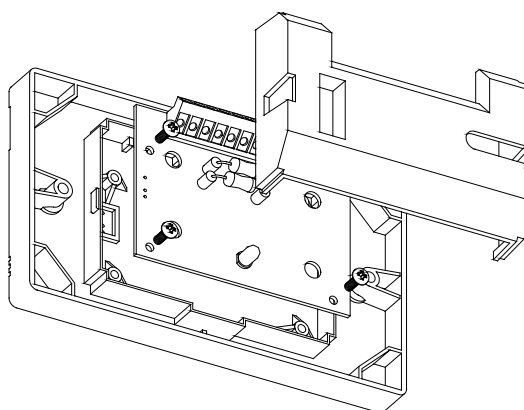
Wiring

DIM800 wiring:



Mounting

DIM800 fitted to M520 Cover.



M520 Ancillary Cover, DIM800 PCB and cover

DIM800 Detector Compatibility

Series	Detector	Qty	Ext. Supply Voltage	Series	Detector	Qty	Ext. Supply Voltage
Tyco	614P Photoelectric	25	20.0V-28.7V	Olsen	P24B Photoelectric	24	20.7V-24.7V
	614I Ionisation	38	20.0V-28.7V		P29B Photoelectric	20	20.7V-26.7V
	614CH CO/Heat	32	20.0V-28.7V		C24B Ionisation	40	20.7V-26.7V
	614T Heat	23	20.0V-28.7V		C29B Ionisation	40	20.7V-26.7V
	601FEx* Flame	4	20.0V-28.7V		R23B Flame	0	20.7V-24.7V
	S231f+ IR Flame	7	21.0V-28.7V		R24B Flame	3	22.7V-24.7V
	FV411f IR Flame Det	3	23.0V-28.7V		DO1101 Photoelectric	16	22.7V-27.7V
	FV412f IR Flame Det	3	23.0V-28.7V		DLO1191 Beam	1	22.7V-28.7V
	FV413f IR Flame Det	3	23.0V-28.7V		P136 DSU	5	19.0V-28.7V
					T56B Heat	40	18.0V-28.7V
Minerva	MD614 Heat	40	20.7V-28.7V	System Sensor	FW81B	1km	18.0V-28.7V
	MR614 Photoelectric	22	20.7V-28.7V		Hard Contact Devices	40	18.0V-28.7V
	MR614T HPO	21	20.7V-28.7V		885WP-B	40	20.0V-28.7V
	MU614 CO	40	20.7V-28.7V				
	MF614 Ionisation	30	20.7V-28.7V				
	T614 Heat	23	20.7V-28.7V				
Simplex	4098-9603EA Ion	24	18.0V-28.7V				
	4098-9601EA Photo	24	18.0V-28.7V				
	4098-9618EA Heat	24	18.0V-28.7V				
	4098-9619EA Heat	24	18.0V-28.7V				
	4098-9621EA Heat	24	18.0V-28.7V				

Hard contact devices must be rated for at least 30V and currents up to 50mA.

* Although detector is Ex rated, this is a direct (non I.S.) connection without I.S. barrier.

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