

DIM800

Generation 6 *MX* Detection Range 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

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. On the MX4428 Control and Indicating Equipment (CIE) the two circuits are treated as a single addressable point; either circuit in alarm will put the point into alarm. Unused circuits must be terminated with an EOL.

Mounting

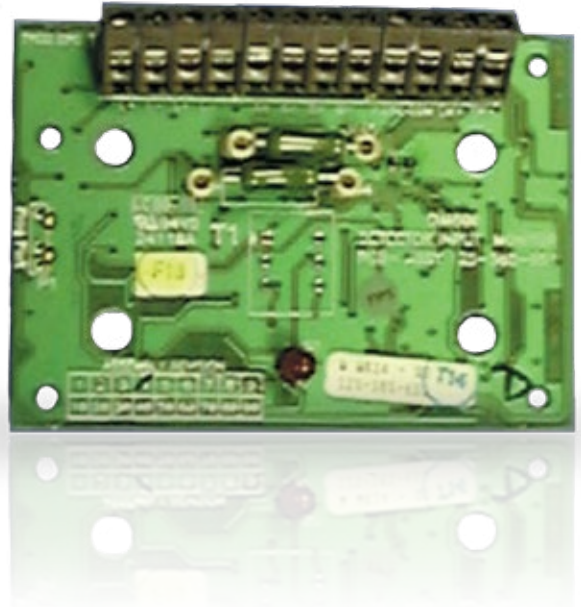
The DIM800 is supplied as an open circuit board (PCB) with mounting hardware and EOL resistors and must be fitted in a suitable enclosure. It may be mounted on a gear plate using plastic standoffs, to an M520 Ancillary Cover and K2142 back box, or into a D800 Ancillary Housing. The K2142 mounting box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

Power Supply

Note that the external 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 do not connect the circuit wiring to any other circuit or non-isolated equipment.

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 and programming lead.



Specifications

Loop Voltage ¹	20V to 40Vdc
Quiescent Current	280µA
Alarm State Current	280µA
Detector Load	3mA (max. per input)
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.)
<i>Indoor Applications Only</i>	
Dimensions (HWD)	61 x 84 x 25 mm
Wire Size (maximum)	2.5sq. mm
ActivFire Listed	afp-3179
FPANZ Listed	VF/643

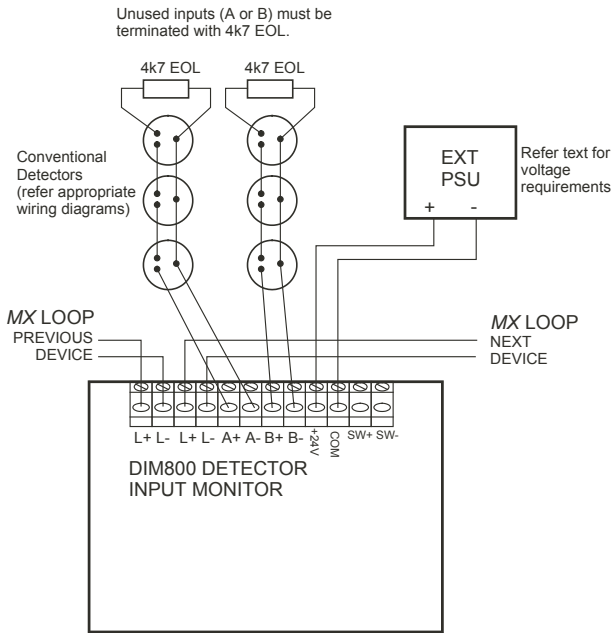
Part Numbers

DIM800	DIM800 PCB
517.035.007	M520 Ancillary Cover
517.035.010	K2142 Back Box
547.004.002	DIN Rail Mounting Brkt
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. Refer to appropriate manual: LT0273 (MXP), LT0360 (MX1-NZ), LT0441 (MX1-Au) for design specifications.

Wiring

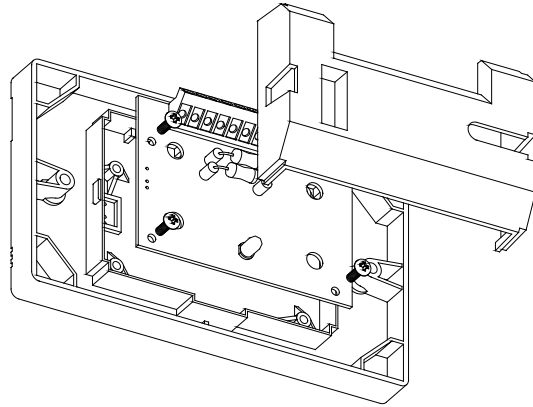
DIM800 wiring:



Conventional Detector Interface

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
	Minerva	MD614 Heat	40		20.7V-28.7V	T56B Heat	40
MR614 Photoelectric		22	20.7V-28.7V	FW81B	1km	18.0V-28.7V	
MR614T HPO		21	20.7V-28.7V	Hard Contact Devices	40	18.0V-28.7V	
MU614 CO		40	20.7V-28.7V	System Sensor	885WP-B	40	20.0V-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	Hard contact devices must be rated for at least 30V and currents up to 50mA.			
	4098-9601EA Photo	24	18.0V-28.7V	* Although detector is Ex rated, this is a direct connection without I.S. barrier.			
	4098-9618EA Heat	24	18.0V-28.7V				
	4098-9619EA Heat	24	18.0V-28.7V				
	4098-9621EA Heat	24	18.0V-28.7V				

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VIGILANT, a respected regional brand of Johnson Controls, is a technology leader in the Australian and New Zealand fire detection markets with AS and NZS product approvals. The VIGILANT product line includes a comprehensive range of MX TECHNOLOGY fire detection products and the market-leading QE90 voice evacuation systems. VIGILANT product is widely supported throughout Australia and New Zealand by a network of installation companies, service companies and distributors.

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