INSTALLATION AND MAINTENANCE INSTRUCTIONS

M500DMR MULTIPLE MODULE WITH TWO MONITOR INPUTS AND TWO RELAY OUTPUTS

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Specifications

Normal Operating Voltage:	15 to 32 VDC
Maximum Communication line series wiring resistance:	40 Ohms
Maximum Supervisory loop series wiring resistance (monitor input):	1500 Ohms
EOL Resistance (monitor input):	47K Ohms
Supervisory Voltage (monitor input):	8.8 VDC
Standby Current for complete product:	1000 μA
Relay Contact Rating:	2 Amps @ 30 VDC ; 1.5A @ 25VAC
Operating Temperature Range:	-5℃ to 50℃ (23℉ to 122℉)
Operating Humidity Range:	10% to 93% RH (non-condensing)
Dimensions:	108mm (L) x 94mm (W) x 24mm (D)
Addressing :	Module base address = Relay #1 (R1) Module base address +1 = Input #1 (I1) Module base address +2 = Relay #2 (R2)- Can be disabled by DIP switch (See figure 1A). Module base address +3 = Input #2 (I2)- Can be disabled by DIP switch (See figure 1A).

Principle

This information is included with the module as a quick reference installation guide. Refer to the control panel manufacturer's installation manual for more detailed system information. If this module will be connected to an existing operational fire detection system, inform the building occupant or owner and local authority that the system will be temporarily out of service. Disconnect power from the communications loop before installing this module.

General Description

The **M500DMR multi input-output module** is capable of replacing two Class B monitor modules and two individual relay control modules on an intelligent fire alarm loop. Each monitor input is intended to interface between a fire alarm control panel and one or more devices. Each relay output is intended for Form C switching applications which don't require wiring supervision for the load circuit.

Each monitored input has its own red LED, which can be controlled by the control panel. Each relay output has its own red LED, which can be controlled by the panel as well.

The module address is selected by means of rotary decade address switches (See **Figure 1**). These can be accessed either from the front or the top of the module. A screwdriver should be used to rotate the wheels to select the desired address.

Each module can use up to four (4) addresses. The base address selected via the rotary address switches will be assigned to relay output #1 (R1) from 01 to 96. The module will automatically assign the next three addresses as appropriate to monitored input #1 (I1), relay output #2 (R2) and monitored input #2 (I2).

If monitored relay output #2 (R2) and / or input #2 (I2) are not used, please switch the corresponding DIP switch to the 'OFF' position with a screwdriver (See **Figure 1A**). These two addresses will then be free to be used for other devices on the loop.

This module can be used as an automatic switch which open circuits the line if the communication line voltage drops below 4 volts. If the line voltage rises above 7 volts the product will detect the removal of the fault condition and restore power to the product automatically.

Installation

Note: Module M500DMR must only be connected to control panel using compatible proprietary analogue addressable communication protocols for monitoring and control.

The module can be mounted in two ways(**See Figure 3**).

Wiring

See **Figure 4** for wiring details.

Figure 1. Rotary Decade Address Switches:

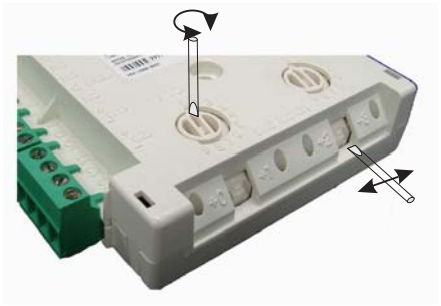


Figure 1A.

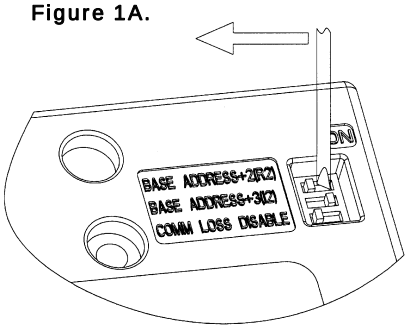


Figure 2. Module Dimensions:

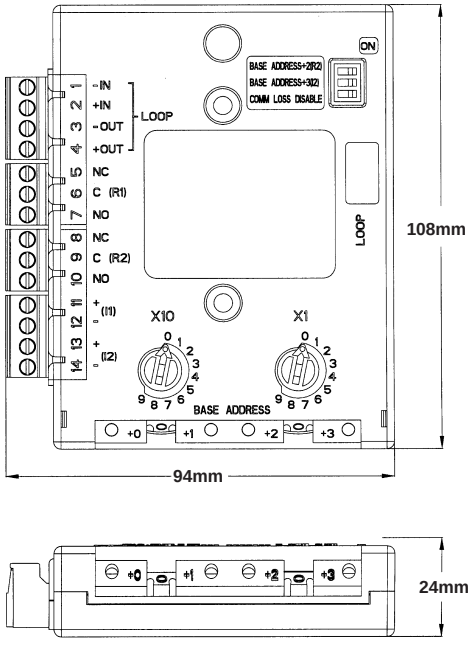
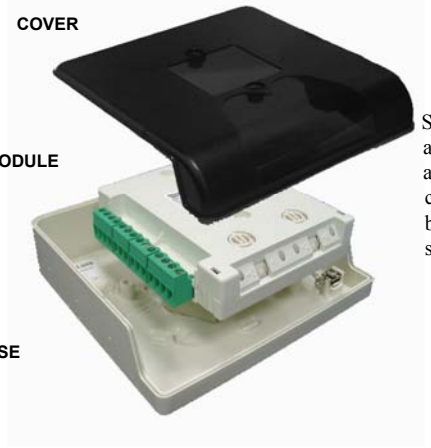


Figure 3. Module Mounting Methods:

Figure 3A



Surface Mount Box Base is affixed to mounting surface , and then the module and cover are screwed onto the base using the two screws supplied.

Surface Mounting Box Dimension:

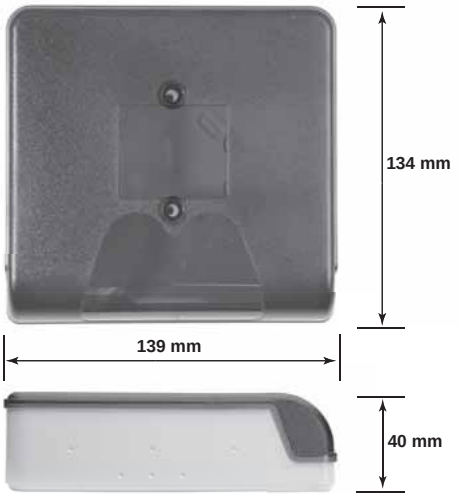


Figure 3B. DIN Rail Bracket:

Push Module into adaptor Bracket until it clips into place.
Locate top clip over DIN rail and rotate bottom down to clip into place.
To Remove, lift up, then rotate top away from the rail.

Figure 3C. Panel Mount Bracket:

Adaptor bracket is mounted directly into panel using 2 x M4 Pan head screws. Module is pushed into adaptor until it clips into place.

Figure 4. M500DMR Multiple Module Wiring Diagram: