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## INSTALLATION AND MAINTENANCE INSTRUCTIONS MIX-4042 ANALOG INTERFACE

### ABOUT THIS MANUAL

This manual is included as a quick reference for installation. For further information on the use of this device with a FACP, please refer to the panel's manual.

Note: This manual should be left with the owner or operator of this equipment.

### MODULE DESCRIPTION

The MIX-4042 Analog interface module is designed to operate with a listed compatible intelligent fire system control panel. It can be configured to work with conventional two wires or 4-20mA devices. An external listed power supply can be connected to several MIX-4042 to provide power to the devices while remaining electrically isolated from the FACP. Each MIX-4042 will monitor the current used by the devices and will report alarms and troubles accordingly. The operational mode of the MIX-4042 is set through the panel configuration tool. This tool will also set other parameters of the device such as reset time for conventional devices or alarm levels for the 4-20mA operation. When set for conventional devices, the module will automatically handle Class A or Class B lines. The MIX-4042 has an internal EOL resistor for Class A lines. A MP-300 end of line resistor must be used for Class B wiring. The address the MIX-4042 is set using the MIX-4090 programmer tool and up to 240 units may be installed on a single loop. The module has a panel controlled LED indicator that will blink during normal standby operation and will be steady ON when the devices has detected an off-normal condition.

Conventional two wires fire-alarm devices that are compatible with the MIX-4042 are listed at the end of this document. 4-20mA devices will generate monitor events on the FACP; the MIX-4042 can be used with most two wires 4-20mA non-fire use application devices.

### SPECIFICATIONS

#### SLC SIDE

Normal Operating Voltage: 15 to 30VDC  
Alarm Current: 3mA  
Standby Current: 1.6mA

#### DEVICES SIDE

EOL Resistance (conventional zone): 3900 Ohms  
Max Wiring Resistance (4-20mA): 200 Ohms  
Max Wire Resistance (conventional zone): 100 Ohms total  
External Power Supply: 24VDC nominal (18 to 30 V)  
External Supply Current: 23mA maximum at 30 VDC (E.O.L. only)  
EOL Current (conventional Only): 5mA maximum  
Connected devices current: 3mA total or less  
Max Short Circuit Current: 70mA(55mA on devices line)

#### GENERAL

Temperature Range: 32F to 120F (0c to 49C)  
Humidity: 10% to 93% Non-condensing  
Dimensions: 4 5/8"H x 4 1/4" W x 1 1/8" D  
Mounting: 4" square by 2 1/8" deep box  
Accessories: MIX-4090 Programmer  
BB-400 Electrical Box  
MP-300 EOL on mounting plate

Wiring range on all terminals:

22 to 12 AWG

### MOUNTING

Notice: You must disconnect power from the system before installing the module. If this unit is being installed in a system that is currently operational, it is necessary to inform the operator and the local authority that the system will be temporarily out of service.

The MIX-4042 module is intended to be mounted in a standard 4" square back-box (see Figure 2A). The box must have a minimum depth of 2 1/8 inches. Surface mounted electrical boxes (BB-400) are available from Mircom.

### WIRING:

Note: This device should be installed as per applicable requirements of the authorities having jurisdiction. This device shall be connected to power limited circuits only.

1. Install the module wiring as indicated by the job drawings and appropriate wiring diagrams.
2. Use the programmer tool to set the address on the module as indicated on the job drawings.
3. Mount the module in the electrical box as shown in figure 2B.

Note: The external power source shall be Listed for used in fire alarm system, and that has ground fault detection capability.

FIGURE 1 CONTROLS and INDICATORS:

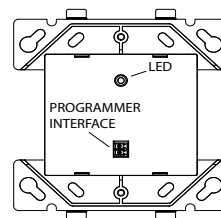


FIGURE 2B:

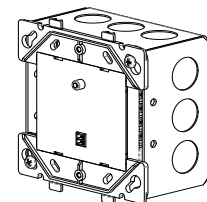
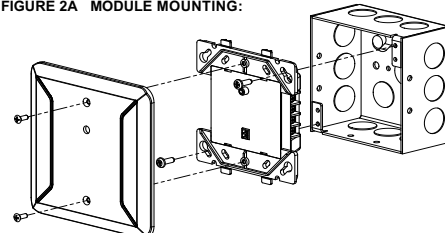
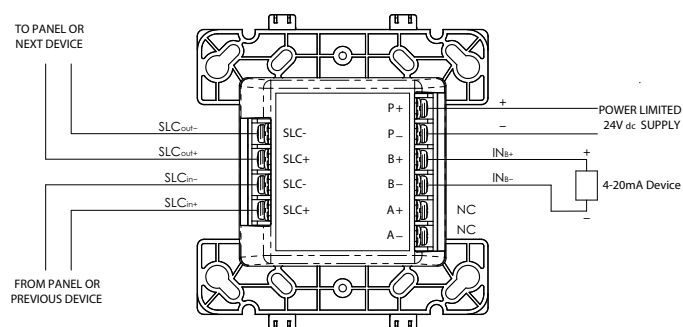


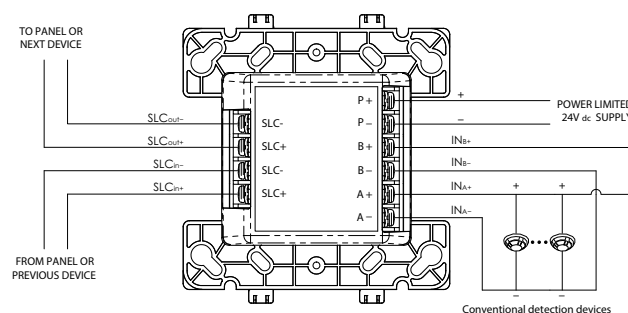
FIGURE 2A MODULE MOUNTING:



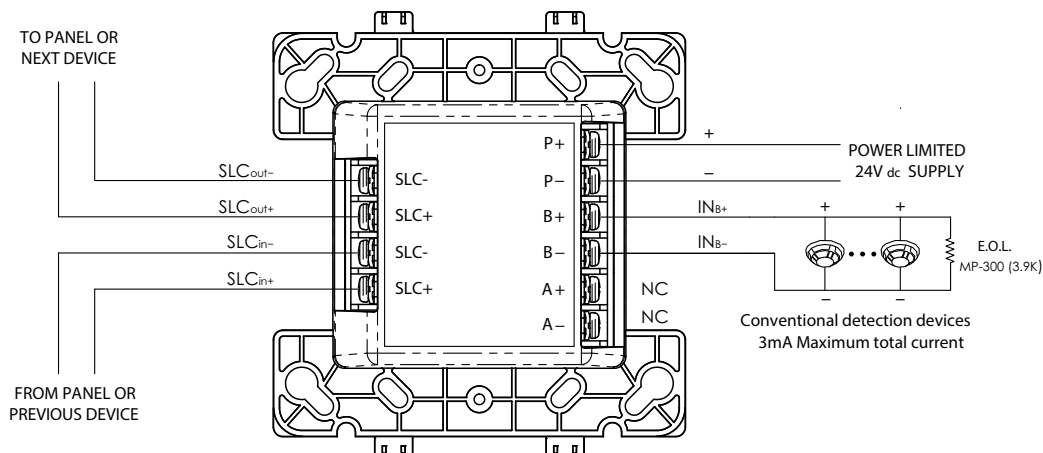
**FIGURE 3 SAMPLE 4-20mA WIRING:**



**FIGURE 4 SAMPLE CLASS A ZONE WIRING:**



**FIGURE 5 SAMPLE CLASS B ZONE**



See Mircom document LT-1023 for compatible two wire devices

**Important note:**

When using the MIX-4042 as a conventional Zone module with alarm verification, the following section of the FACP panel door label must be completed with the relevant delay information.

1) Enter Detector Data here; the delay (power-up) (start-up) time marked on the installed Smoke Detector(s), or on their installation wiring diagram(s) is to be used.

Circuit (Zone)	Control Unit Delay Seconds	Smoke Detector	
		Model	Delay, Seconds (1)
<b>(MIX-4042 Zone #)</b>	<b>25</b>	<b>( MFG + Model)</b>	<b>(Device delay)</b>

Control Unit Alarm Delay is 25 seconds for the MIX-4042. Delay for smoke detectors can be found in the installation instructions supplied with the devices.