

25 Interchange way, Vaughan Ontario. L4K 5W3 Phone: 905.660.4655; Fax: 905.660.4113

Web: www.mircom.com

# **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** 

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

**DEVICES SIDE** 

EOL Resistance (conventional zone): 3900 Ohms 200 Ohms Max Wiring Resistance (4-20mA):

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

22 to 12 AWG

Wiring range on all terminals:

#### **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.

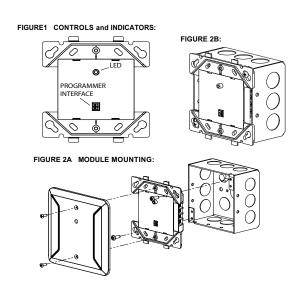
The MIX-4042 module is intended to be mounted in a standard 4" square back-box (see Figure 2A). The box must have a minimum depth of 2 1/8 inches. Surface mounted electrical boxes (BB-400) are available from Mircom.

#### 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 3 SAMPLE 4-20mA WIRING:

## FIGURE 4 SAMPLE CLASS A ZONE WIRING:

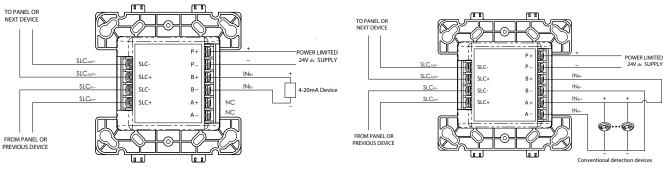
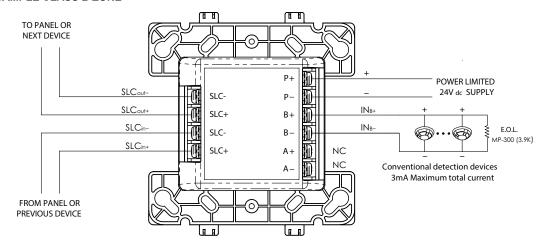


FIGURE 5 SAMPLE CLASS B ZONE



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

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

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.