Mircom’s intelligent module products are designed to meet a wide range of applications. The monitor and control modules can be used to supervise and activate sounders, strobes, door closers, pull stations, waterflow switches, conventional smoke detectors and more. The modules are addressed with easy-to-use rotary code switches and mount in a standard 4” x 4” x 2 1/8” junction box.

**Intelligent Addressable Monitor Module (MIX-M500M)**
The Intelligent Addressable Monitor Module (MIX-M500M) provides an address for a group of UL/ULC Listed normally open (N.O.) initiating devices, such as heat detectors, beam smoke detectors, 4-wire smoke detectors, waterflow switches, manual pull stations, etc. wired in a Class A (Style D) or Class B (Style B) initiating circuit. The MIX-M500M has an activated red LED.

**Intelligent Addressable Interface Module (MIX-M502M)**
The MIX-M502M provides the same features as the MIX-M500M but also allows for the use of multiple, conventional 2-wire smoke detectors in the circuit. This module requires a resettable signal power source. The MIX-M502M internally supervises the separate power source. The red LED indicates when the module is activated. All two-wire detectors that are monitored must be UL/ULC compatible with the MIX-M502M module.

**Intelligent Addressable Dual Monitor Module (MIX-M500DM)**
The Intelligent Addressable Dual Monitor Module (MIX-M500DM) provides two independent 2-wire initiating device circuits at two separate, consecutive addresses. It is capable of monitoring two separate Class B (Style B) circuits simultaneously, making it ideal for water flow and tamper switch monitoring. The MIX-500DM has a single activated red LED that is common to either circuit.

**Intelligent Addressable Mini-Monitor Module (MIX-M501M)**
The Intelligent Addressable Mini Monitor Module provides an address for a group of UL/ULC Listed Normally Open (N.O.) initiating devices, such as heat detectors, projected beam smoke detectors, 4-wire smoke detectors, waterflow switches, manual pull stations, etc. wired in a Class B (Style B) initiating circuit.
Intelligent Addressable Supervised Control Module (MIX-M500S)
The MIX-M500S Control module provides supervised monitoring of wiring to signal devices that require an external power supply to operate, such as horns, strobes, bells or speaker isolators. Conventional signals will require a 24 VDC power source and speakers will require an audio input. The MIX-M500S does not supervise the power source. A UL/ULC EOL relay such as the A77-716B(A) is required. The red LED will illuminate when the module is activated. The module is capable of Class A (Style Z) or Class B (Style Y) supervision.

Intelligent Addressable Relay Module (MIX-M500R)
The Intelligent Addressable Relay Module connects to the same loop as the initiating devices and provides two isolated sets of Form-C contacts. The module allows the FX-2000 fire alarm control panel to switch these contacts on command. The MIX-M500R has an activated red LED which follows the state of the relay contacts.

Fault Isolator Module (M500X)
The M500X Fault Isolator Module is used to protect the system against wire-to-wire short circuits on the analog loop. The modules should be spaced between groups of sensors or modules in a loop to protect the rest of the loop. In the event of a short circuit between any two fault isolator modules, both modules immediately switch to an open circuit condition and isolate any group of sensors between them. The remaining units on the circuit will continue to operate in a normal fashion (must be wired in Class ‘A’ or Style 6). A maximum load of 25 devices can be connected to an isolator to insure that the isolator powers up correctly.

Typical Wiring Diagrams
MIX-M500M Typical 2-wire initiating circuit configuration, Class B (NFPA Style B)

NOT TO BE USED FOR INSTALLATION PURPOSES.
MIX-M502M Interface two-wire conventional detectors, Class B (NFPA Style B)

- Do not mix fire alarm initiating, supervisory, or security devices on the same module.
- Terminal wiring must be power limited.
- DO NOT LOOP WIRE UNDER TERMINALS. BREAK WIRE RUN TO PROVIDE SUPERVISION OF CONNECTIONS.
- MONITOR A (TERMINALS 6 & 7) RESPONDS AT ADDRESS SET ON CODE SWITCHES, MONITOR B (TERMINALS 8 & 9) Responds at next higher address.
- ANY NUMBER OF UL/ULC LISTED CONTACT CLOSURE DEVICES MAY BE USED. DO NOT MIX FIRE ALARM INITIATING, SUPERVISORY, OR SECURITY DEVICES ON THE SAME INITIATING DEVICE CIRCUIT.
- INSTALL CONTACT CLOSURE DEVICES PER MANUFACTURER’S INSTALLATION INSTRUCTIONS.

MIX-M500DM Typical 2-wire initiating circuit configuration, Class B (NFPA Style B)

- Two initiating device circuits (L & H) each power limited to 230uA @ 12VDC MAX.
- ANY NUMBER OF UL/ULC LISTED CONTACT CLOSURE DEVICES MAY BE USED. DO NOT MIX FIRE ALARM INITIATING, SUPERVISORY, OR SECURITY DEVICES ON THE SAME INITIATING DEVICE CIRCUIT.
- INSTALL CONTACT CLOSURE DEVICES PER MANUFACTURER’S INSTALLATION INSTRUCTIONS.

MIX-M500S Typical indicating circuit configuration, Class B (NFPA Style Y)

- DO NOT MIX FIRE ALARM INITIATING, SUPERVISORY, OR SECURITY DEVICES ON THE SAME INITIATING DEVICE CIRCUIT.
- CONNECTIONS MADE TO NEXT INTERFACE MODULE TO NEXT INTERFACE MODULE CAN BE USED TO SWITCH POWER FROM A STANDARD POWER SUPPLY.
- POWER TO THE INTERFACE MODULE MUST BE EXTERNALLY SWITCHED TO RELAY CONTROL MODULE.
### Ordering Information

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*Note: For Canadian models add suffix “A”.*

### General Specifications

**Operating Voltage**
15-32 VDC

**Communication Line Loop Impedance**
40 Ω max.

**Temperature Range**
32° to 120°F (0° to 49°C)

**Relative Humidity**
10% to 93%: noncondensing

**Shipping Weight**
- MIX-M501M: 1.2 oz (37g)
- Others: 6.3 oz (188g)

**Dimensions**
- MIX-M501M: 1.7”H x 2.7”W x 0.5”D
- Others: 4.65”H x 4.25”W x 1.1”D

**End-of-Line Resistance**
- MIX-M500M, MIX-M500S, MIX-M501M: 47 k (included)
- MIX-M502M: 47 k (included)
- MIX-500DM: 47 k (two included)

**M500X Specifications:**
- **Standby Current**: 450 µA max
- **Isolation Current**: 5 mA max
- **Fault Detection Delay**: 250 ms min.
- **Fault Detection Threshold**: 4 Volts
- **Line Restoration Threshold**: 7 Volts

*Note: Mounting modules outside of the specified temperature range may cause module failure and erratic panel operation.*

**NOT TO BE USED FOR INSTALLATION PURPOSES.**

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