



Description

Mircom's Fire-Link3 offers a fast, clean and cost effective wireless fire alarm audible signaling solution for multi-residential buildings that are in need of a fire alarm audibility upgrade. In addition, Fire-Link III is a wireless upgrade solution that installs new fire alarm output devices (strobes, horns, etc.) without the need to add wiring to the building.

Inter-device communications is accomplished wirelessly using an extremely robust and secure mesh network technology. The two main system components are the Zone Controller (ZC) and the Wireless Input-Output unit (WIO). The Zone Controllers can be daisy chained, and installed one per floor in the building. Zone Controllers can be connected using either addressable loops or NAC (bell) circuits to the Fire Panel.

The Wireless Input/Output unit is a wireless base and is designed to be connected to Mircom's and other's third party notification appliances.

Features

- Compatible with the following Mircom fire alarm control panels FleX-Net, FX-2000, FX-3500, FX-3318, FX-4000N, FX-400/401 and Secutron MMX, MR-3500 and MR-3318 that have addressable SLC loops using addressable devices in CLIP mode only.
- Connects to any fire alarm panel with conventional contacts.
- Wireless connection to notification devices.
- Supports Single and Two stage notification.
- Battery backup.
- Configurable Trouble, AC Fail, and alarm relay outputs.
- UL 864 / ULC S527 Listed.



ZC-301W Zone Controller (ZC)

The Zone Controller (ZC) manages the wired connection with the FACP (Fire Alarm Control Panel) and the wireless connections with the Wireless Input/Output units. The ZC plugs into any 120/240 VAC receptacle or the one determined by the AHJ (Authority Having Jurisdiction).

The Zone Controller relays messages between the Wireless Input/Output unit and the Fire Alarm Control Panel. It plugs into any 120/240 VAC receptacle or the one determined by the AHJ (Authority Having Jurisdiction) and has a battery backup. Zone Controllers can be daisy chained, and installed one per zone. Connection to the fire panel is established through conventional or addressable (SLC) methods.

Operating Frequency: 2.4 GHz

Maximum number of Zone Controllers per system: 16

Included with the ZC-301W is:

- Black back box
- Main board
- Inner chassis
- Front door





WR-3001W (WIO)

Wireless Input/Output Unit (white)

The Wireless Input/output unit is a wireless device that connects the notification appliance to the Zone Controller's network.

The Wireless Input/Output unit communicates wirelessly with the Zone Controller and drives one notification appliance. Supported notification appliances are the following:

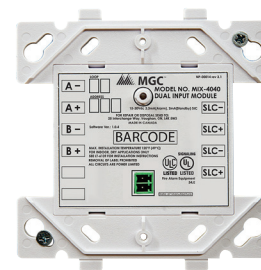
- 2 wire notification appliances manufactured by Mircom, Copper (two stage is not supported), System Sensor, and Gentex

The Wireless Input/output unit is powered by 120 or 240 VAC and has a backup battery.

Broadcast Frequency: 2.4 GHz

Maximum number of Wireless Input/output units per Zone Controller is 49

Maximum number of Wireless Input/output units per system is 784



MIX-4040

Intelligent Dual Input Module

The MIX-4040 Dual Input Module is an intelligent addressable device designed to be used with a MGC compatible control panel, providing a high rate of exchanged information with fast and secure responses.

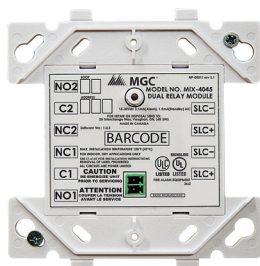
The module can be used for alarm, supervisory, or monitor type applications.

The MIX-4040 Dual Input module provides two (2) independent contact monitoring circuits only utilizing one (1) address on the SLC loop.

The module supports one (1) Class A or two (2) Class B inputs. When configured for Class A operation, the module provides an internal EOL resistor. When configured for Class B operation, the module monitors two (2) independent input circuits using only one (1) module address.

The address of each module is set using the MIX-4090 programmer tool.

The module has a panel controlled LED indicator. The LED flashes during normal operation and stays ON steadily when the device is in alarm condition.



MIX-4045

Intelligent Dual Relay Module

The MIX-4045 Dual Relay Module is an intelligent addressable device designed to be used with an MGC compatible control panel, providing high rates of information exchange and fast and secure responses.

The MIX-4045 Dual Relay Module controls two independent circuits while using only one module address.

The module provides two form C (SPDT) contacts rated at 2A @ 30VDC or 0.5A at 125VAC and the Fire panel can control each contact individually.

Contacts are electrically isolated from the Fire alarm panel at all times.

The contact position is verified by the module at all times. If a contact is not at the required position during standby or active conditions, a trouble will be reported by the panel.

The address of each module is set using the MIX-4090 programmer tool.

The module has a panel controlled LED indicator. The LED flashes during normal operation and stays ON steadily when the device is in alarm condition.



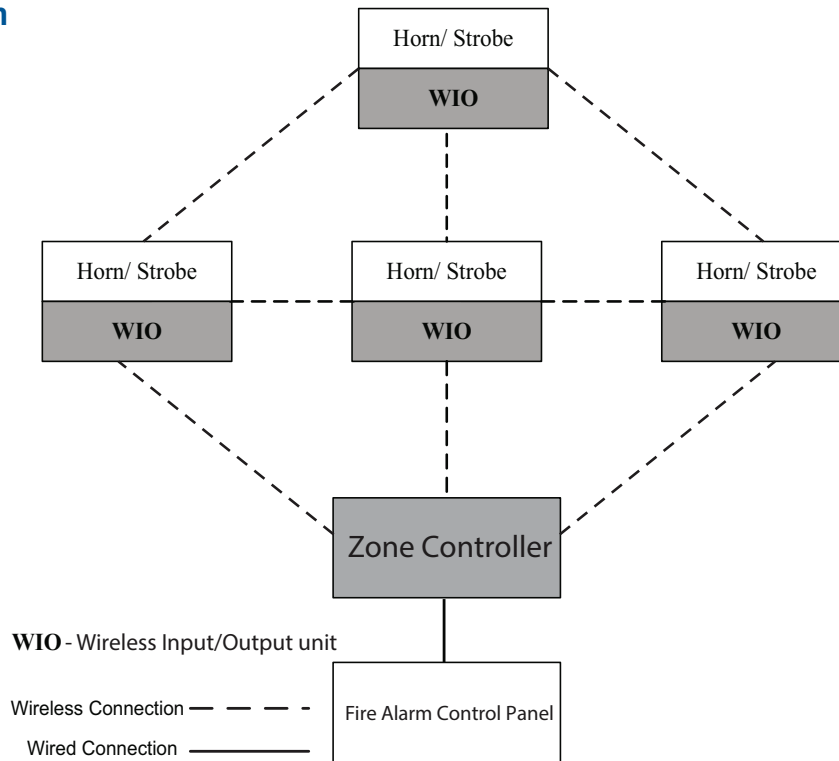
MIX-M500MAP/A
MIX-M500RAP/A

Intelligent Modules

Mircom's intelligent monitor modules are designed to meet a wide range of applications. The monitor modules provide an interface to contact devices, such as, manual stations, conventional smoke or heat detectors, waterflow switches, and more. The monitor modules are addressed with easy-to-use rotary code switches.

Mircom's Advanced Protocol (AP) devices use a high speed communication protocol that greatly increases the speed of communication between the intelligent devices. Mircom's Advanced Protocol uses a superior group polling method as well as an interrupt feature that provide for a faster response to an alarm condition. In addition, the Advanced Protocol allows for greater system capacity with support for up to 318 devices per SLC circuit. The AP devices are backwards compatible to operate in CLIP mode for legacy system applications.

Wiring Diagram



Specifications

GENERAL - ALL EXTENDED CIRCUITS ARE SUPERVISED

NOTE: The Minimum Signal Strength, measured by LQI (Link Quality Indicator which is the quality of the received signal strength in the presence of ambient noise) for each WIO and ZC-301W link, must be 60. A 60 LQI or higher is acceptable. This measurement can be viewed via the LCD menu display at each Zone Controller.

WR-3001W Wireless Input/Output unit (WIO)		
Operating: Temperature Humidity	-20°C to 49°C (-4°F to 120°F) Max. 93% @ 32°C non-condensing	
Electrical ratings	AC line voltage	120 VAC 60 Hz, 193mA /240 VAC 50 Hz, 124mA SUPERVISED
Wireless characteristics	Broadcast Frequency	2.4 GHz
	Transmit power	15 dBm
	Receive sensitivity	-100 dBm
Battery	Type Model BT-026	3.7 nominal voltage, SUPERVISED, 9000mAH Lithium Ion Pack with Protection Circuit, Transfer to battery voltage when there is no AC power
	Battery Standby Time	24 hours Minimum 2 hours of operation (based on the connected notification appliance's candela setting, 29 hours and 5 minutes of alarm at 30mA)
	Charging capability	9 AH batteries
	Maximum charging current	1.8 A
Maximum Load on NAC circuit	200mA at 24VDC REGULATED	
Compliance	Applicable Standards	UL864 and ULC S527 Control Units and Accessories
	Environmental	Use in indoor and dry environment only

Specifications continued

ZC-301W Zone Controller (ZC)		
Operating: Temperature Humidity	-20°C to 49°C (-4°F to 120°F) Max. 93% @ 32°C non-condensing	
Electrical ratings	AC line voltage	120 VAC 60 Hz, 121mA / 240 VAC 50 Hz, 75mA SUPERVISED
	Input Circuits	Maximum line impedance for SLC loop is 40 ohms and for a conventional detection zone 100 ohms. SLC: Maximum current is 2mA Input 1: Maximum current is 29mA
Wireless characteristics	Broadcast Frequency	2.4 GHz
	Transmit power	15 dBm
	Receive sensitivity	-100 dBm
Battery	Type Model BT-026	3.7 nominal voltage, SUPERVISED, 9000mAh Lithium Ion Pack With Protection Circuit, Transfer to battery voltage when there is no AC power
	Battery Standby Time	24 hours
	Charging capability	9 AH batteries
	Maximum charging current	1.8 A
Compliance	Applicable Standards	UL-864 and ULC S527 Control Units and Accessories
	Environmental	Use in indoor and dry environment only

Ordering Information

Model	Description
ZC-301W	Zone Controller
WR-3001W	Wireless Input/Output Unit (WHITE)
MIX-4040	Description: 4000 Series Dual Input Module
MIX-4045	Description: 4000 Series Dual Relay Module
MIX-4090	Description: 4000 Series Address Programmer
MIX-M500MAPA	Advanced Protocol Addressable Monitor Input Module
MIX-M500MAP	Advanced Protocol Addressable Monitor Input Module
MIX-M500RAPA	Advanced Protocol Addressable Relay Output Module
MIX-M500RAP	Advanced Protocol Addressable Relay Output Module



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