



## Description

Mircom's FX-MNS-6000 Network Fire Alarm and Emergency Communication system offers modular components for network systems providing a wide variety of applications. This fire alarm and audio system provides zoned emergency multi-channel audio with emergency paging and fire evacuation.

- Based upon proven technology of FlexNet
- Utilizes many models of FlexNet
- Introduce digital amplifiers
- Compact design and light weight
- More powerful per amplifier module of up to 100W per amplifier module compared to 60W per amplifier module in Mircom's QX-5000 audio systems.
- Flexible modular system with more options of audio wattage combinations
- Distributed audio system for brand new systems as well as existing systems' expansion

## Features

### Fire Alarm Features

- Each main fire alarm board provides one intelligent analog loop supporting 159 Advanced Protocol (AP) analog sensors and 159 AP addressable modules (with a maximum of 99 CLIP sensors and 99 CLIP addressable modules).
- Quad Loop Adder module ALCN-792MISO for expanding addressable loops by 2; with daughter board ALCN-792D expanding addressable loops by a total of 4
- 4 Class A/B Indicating Circuits (NACs) rated at 1.7 amperes each
- Large System Capacity and Modular Design
- 27 Ampere Power Supply
- Fault isolators are present on all in-panel addressable loops.
- Three Level Password Protection with field settable definition.
- Four Alarm Queues with selector switches and LEDs for Alarm, Supervisory, Monitor and Trouble
- RS-232 Port for remote system printer or terminal
- RS-485 Interface for Remote Annunciators. Remote Annunciators do not occupy a node on the network. Up to seven annunciators can be connected per node.
- Two Event History Logs; one for Alarm related events and one for all events
- Large LCD displays
- The BBX-FXMNS-6000 enclosure is for the Integrated Fire and Audio consisting of a backbox, door and middle chassis.
- The ANC-6000 Audio Network Controller module includes ARCnet. ARCnet reduces the wiring for audio and telephone to the ARCnet only or fiber optics (if used)
- Configuration options are provided for grouping inputs.
- Panel supports previous, current and next configuration
- Ethernet port for OpenGN, BACNet and Webserver
- OPEN Graphic Navigator Software Package (OpenGN) allows 3D graphic display of premises and devices.
- Boolean logic functions are available within the configuration software
- Allows a choice of multiple configuration files to support site-specific requirements



NYC  
Fire Dept

## Features cont'd

### Audio Features

- Supervises signal circuits while in use.
- Control of fire management operations (e.g. all-call paging and total evacuation signaling).
- Indication of all required fault conditions.
- Microprocessor-based operations with hardware and software watchdog timer to ensure reliable system operation.
- The paging microphone and firefighters' telephone may be used together or independently, connected to a Central Alarm and Control Facility (CACF).
- Supervised tone generators.
- Up to 100 audio zones per node, 4788 audio amplifiers per Network system.
- Up to 5 (analog) firefighters' telephone zones per node and 315 (analog) telephone zones per Network system. 99 addressable telephone zones per loop, maximum of 29 addressable telephone loops per node, maximum of 144 addressable telephone zones per system.
- Operates from 24 VDC backup batteries in the event of a power failure.
- Speaker circuits integrated with amplifier circuits.
- Maximum of 100 Watts per amplifier.
- Maximum of 575 Watts per expansion cabinet.
- Supports up to 10 audio cabinets (1 main plus 9 expansion audio cabinets)
- Each expansion audio cabinet up to 2000 feet.
- Optional redundant backup amplifier per node.
- Multi-channel playback.
- Auxiliary Audio Input with amplifier supervision during non-fire use.
- Optional remote supervised splitters for separate corridor and room silencing.
- Each amplifier can play back on a separate audio channel.
- Each amplifier can be Class A and Class B field wired.

### Networking Features

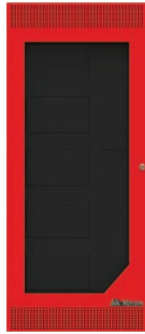
- Provides peer-to-peer network communications
- Supports up to 63 nodes (including lobby panel).
- Supports copper and/or fiber optic network cable.

### Specifications

Operating temperature range: 0 ~ 49°C (32 ~ 120°F)

Maximum humidity: 93% at a temperature of 32°C (89.6°F)

## FX-MNS-6000 Series System Components



### BBX-FXMNS-6000 Enclosure

BBX-FXMNS-6000 enclosure contains an audio portion QMB-6000 card cage that holds up to 4 amplifiers and a QCC-6000 Communications Card, a fire alarm portion FX-6000MNS-CH Main Chassis, which holds the main fire alarm control board, an ANC-6000 Audio Network Card, a TNC-5000 Telephone Network Card and a QPS-6650 power supply, and batteries.

Enclosure dimensions 45.85"H x 22.4"W x 9.125"D



### QBB-6001 Audio Expansion Enclosure

The QBB-6001 expansion audio cabinet (connected to an FX-MNS-6000 node) contains up to a maximum of two QMB-6000 card cages which holds up to 4 amplifiers each for a total of 8 amplifiers, one QCC-6000 Communications Card, a QPS-6650 power supply and batteries.

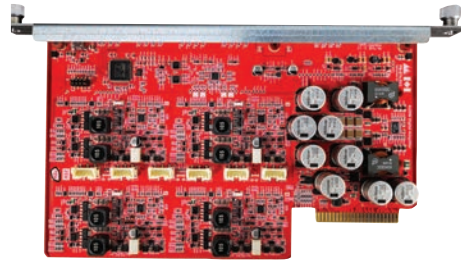
Enclosure dimensions 45.85"H x 22.4"W x 9.125"D



### FX-6000MNS-CH

Consists of a backplate which is mounted into the BBX-FXMNS-6000 backbox and a main Fire Alarm Control board. This backplate can accommodate up to 10 adder modules (including 3 controller modules). The Fire Alarm Control board includes one SLC and four Class A/B NACs.

## FX-MNS-6000 Series Audio Amplifiers



### QAD-6425-70

70V Amplifier, maximum four speaker zones.

### QAD-6425-25

25V Amplifier, maximum four speaker zones.

One amplifier QAD-6425-70/25 for the FX-MNS-6000 weighs 1.05 lbs. and has an Audio Output / Weight ratio = 100 watts / 1.05 lbs = 95.23 (watts per pound)

Each amplifier is field configurable with jumpers provided for the following options:

- 4X25W
- 2X50W
- 1X100W
- 1X75W + 1X25W

## QMB-6000 Amplifier Card Cage



This card cage mounts into the BBX-FXMNS-6000 Enclosure (backbox) which holds up to four amplifiers.

QMB-6000 Audio Card Cage space for four amplifiers, QAD-6425-70/-25 and one communication card QCC-6000.



### QPS-6650

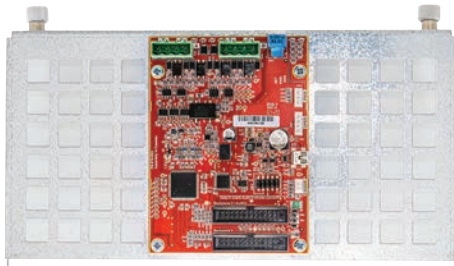
When QPS-6650 is placed in the main cabinet FX-MNS-6000, it provides power for the main board and for the QMB-6000 (4 amplifiers) and when placed in the expansion cabinet QBB-6001, it provides power for up to 2 QMB-6000 (8 amplifiers).

## Network Controller Modules



### ANC-6000

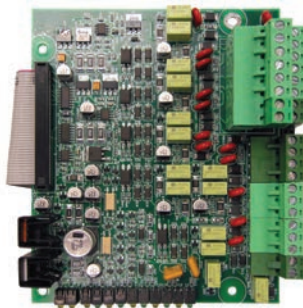
Audio Network Controller module. The ANC-6000 Audio Network Controller module is mounted in a FX-MNS-6000 backbox over the main fire alarm board.



### QCC-6000

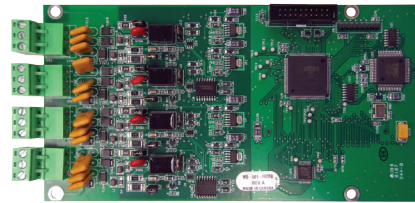
Communication Card that is required for audio system expansion (beyond 1 amplifier cage). One is required in each audio enclosure if there is more than one audio enclosure. It mounts on the right side of the QMB-6000 backplane.

It allows for remote audio cabinet expansion up to 2000 feet (suitable wire gauge is 18 AWG). It supports up to 9 expansion cabinets on each Flex-Net node.



### TNC-5000

Telephone Network Controller module. This module is mounted over the ANC-6000 module. The recommended mounting of the TNC-5000 is sideways with LEDs across the top.



### FNC-2000 Fire Network Controller Module

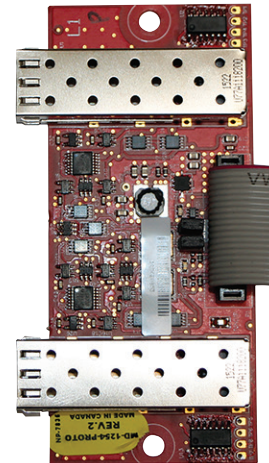
The FNC-2000 provides network capability to the system. One Fire Network Controller Module is required per network node panel. In addition the FNC-2000 provides an interface for adding an optional FOM-2000-UM Fiber Optic Network Adder Module. The FNC-2000 mounts in the FLEXNET-MNS.



FOM-CONN-MM



FOM-CONN-SM



FOM-2000-UM

### FOM-2000-UM Fiber Card Universal Mode

Allows for single-mode or multi-mode fibre optic communication on a Flex-Net network. Add FOM-CONN-SM and FOM-CONN-MM

### FOM-CONN-MM Fiber Optic Connector Multi-Mode

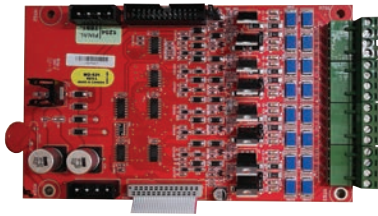
Fibre Optic Module Connector Multi-mode (pack of 2). Must use a FOM-2000-UM

### FOM-CONN-SM Fiber Optic Connector Single-Mode

Fibre Optic Connector Single Mode (pack of 2). Must use a FOM-2000-UM



## Adder Hardwire Modules



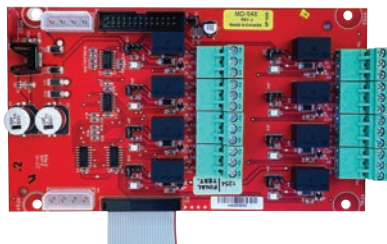
### DM-1008A Eight Initiating Circuit Module

The DM-1008A provides 8 Style B (Class B) or 4 Style D (Class A) Initiating Circuits configurable for Alarm, Supervisory or Trouble zones. The DM-1008A occupies one module slot.



### SGM-1004S Four Notification Appliance Circuit Output Module with Built-in Synchronization

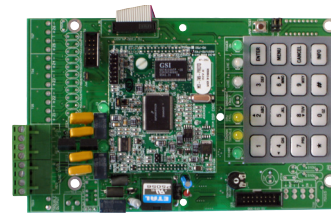
The SGM-1004S provides up to four indicating circuits each rated at regulated 24 VDC/FWR 1.7 Amps (5 Amps maximum per SGM-1004S) to signal devices such as strobes, bells, horns, etc., and for special applications it is rated at 33 VDC/FWR 2.1 Amps (5 Amps maximum per SGM-1004S). Each of the indicating circuits can be configured as non-silenceable (steady) or silenceable. SGM-1004S enables the compatible fire alarm control panels to have synchronized NAC circuits.



### RM-1008A Eight Relay Circuit Module

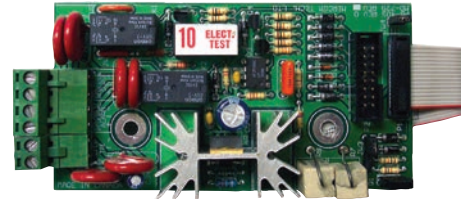
The RM-1008A provides the FX-2003-12NDS with eight individual configurable relays per module. Each relay provides one Form C contact rated at 28 VDC @1 Amp (resistive load) as well as a Green LED to indicate that the relay is active. The RM-1008A occupies one module slot.

## Adder Auxiliary Modules



### UDACT-300A Digital Alarm Communicator Module

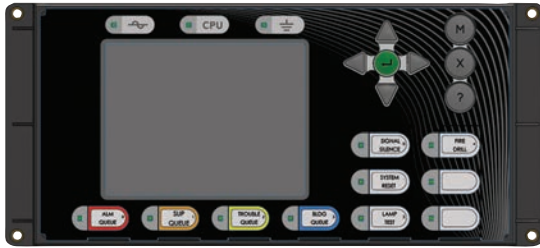
The UDACT-300A Digital Communicator allows the system to transmit addressable point information to a central station. The UDACT-300A occupies one module slot.



### PR-300 Polarity Reversal/City Tie Module

The PR-300 provides outputs for city box and polarity reversal applications. As a city tie module, the PR300 provides an interface between the control panel indicating circuits and a master box. It provides off-premises signal transmission for systems that must comply with NFPA requirements for Auxiliary Protective Systems. As a polarity reversal module, the PR-300 provides an interface between the control panel and a reverse polarity receiver.

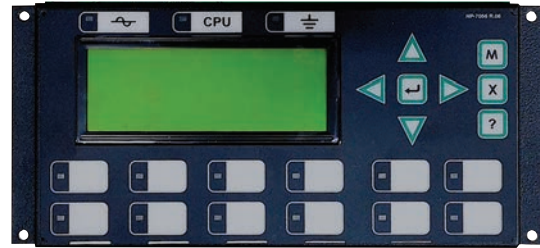
## Displays



### The DSPL-2440DS Graphical Main Display Module

The DSPL-2440DS Graphical Main Display Module provides the FX-MNS-6000 a 24-line x 40-character backlit LCD display, Common Controls buttons and Four Status Queues with selector switches and LEDs for Alarm, Supervisory, Trouble and Monitor.

The DSPL-2440DS occupies one display position in the inner door of the BBX-FXMNS-6000 enclosure. The DSPL-2440DS buttons have tactile feedback and the display has high resolution and contrast to enable reading in different lighting conditions.



### DSPL-420DS Main Display Module

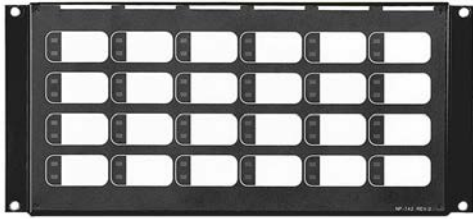
The DSPL-420DS Main Display Module provides the FX-MNS-6000 with a 4-line by 20-character backlit LCD display, Common Controls buttons and Four Status Queues with selector switches and LEDs for Alarm, Supervisory, Trouble and Monitor. The DSPL-420DS occupies one display position in the inner door of the BBX-FXMNS-6000 enclosure.



### DSPL-420-16TZDS Main Display Module

The DSPL-420-16TZDS Main Display Module provides a 4-line by 20-character backlit LCD display, Common Control buttons and Four Status Queues with selector switches and LEDs for Alarm, Supervisory, Trouble and Monitoring with an additional 16 LED points of annunciation. The DSPL420-16TZDS occupies one display position in the inner door of the BBX-FXMNS-6000 enclosure

## Programmable Modules



### IPS-2424DS Programmable Input Switches Module

The IPS-2424DS provides 24 programmable switches that can be configured for ancillary functions such as zone bypass or added common control functions. The IPS-2424DS connects to the main panel or the RAXN-LCD when mounted remotely. The IPS-2424DS occupies one display position in the inner door of BBX-FXMNS-6000, BB-1000 or BB-5000 Series enclosures.



### IPS-4848DS Programmable Input Switches Module

The IPS-4848DS provides 48 programmable switches that can be configured for ancillary functions such as zone bypass or added common control functions. The IPS-4848DS connects to the main panel or the RAXN-LCD when mounted remotely. The IPS-4848DS occupies one display position in the inner door of the BBX-FXMNS-6000, BB-1000 or BB-5000 Series enclosures.

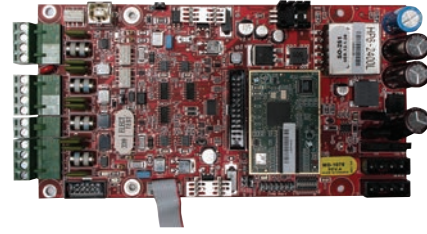


### FDX-008W/KI Fan Damper Module

Fan Damper Module with white LEDs for AUTO switch position indication. FDX-008W provides switch operation of 8 fan damper zones and the FDX-008WKI provides switch operation of 7 fan damper zones and one keyswitch operation of the 8th fan damper zone.

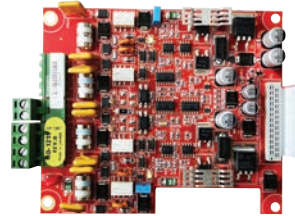
The FDX-008W/FDX-008WKI connects to the main panel or the RAXN-LCD and occupies one display position in the BBX-FXMNS, BB-1000 or BB-5000 Series enclosures.

## Adder Loop Controller Modules



### ALCN-792MISO Isolated Quad Loop Adder

Module The ALCN-792MISO Isolated Quad Loop Adder Module provides two Signaling Line Circuits (SLC) with ground fault detection to the system consisting of 159 Analog Sensors and 159 Addressable Modules per loop. The ALCN-792MISO can be expanded with the use of the ALCN-792D Daughter Board Module. The ALCN-792MISO occupies one module slot.



### ALCN-792D Daughter board for ALCN-792MISO

The ALCN-792D Daughter Board provides an additional two SLC loops when connected to the ALCN-792MISO Isolated Quad Loop Adder Module. The daughter board mounts on top of the ALCN-792MISO.

## Paging Control Modules



### QAZT-5302DS

Addressable Telephone and Paging Selector Panel mounts in the BBX-FXMNS-6000 backbox.

Each QAZT-5302DS annunciates and controls up to 24 audio zones. There is one button and two LEDs per zone. The lower amber LED indicates Zone trouble. The upper green LED indicates whether that zone is selected for voice paging via the master microphone. Paging zone selection buttons toggle ON and OFF voice paging for that zone.



### QAZT-5348DS

Addressable Telephone and Paging Selector Panel mounts in the BBX-FXMNS-6000 backbox.

Each QAZT-5348DS annunciates and controls up to 48 audio zones. There is one button and two LEDs per zone. The lower amber LED indicates Zone trouble. The upper green LED indicates whether that zone is selected for voice paging via the master microphone. Paging zone selection buttons toggle ON and OFF voice paging for that zone.

## Network Paging Control Panel



### QMP-6101NV

Network Master Paging Control Panel (Vertical Mount) mounts in the BBX-FXMNS-6000 backbox.

The QMP-6101NV Network Master Paging Control Module includes the paging microphone and common control indicators. The QMP-6101NV Network Master Paging Control Module connects via a ribbon cable to the first QAZT-5348DS or QAZT-5302DS Zoned Selector Panel and to the previous display module.

## Network Telephone Control Panel



### QMT-5302NV

Network Master Telephone Control Panel (Vertical Mount) mounts in the BBX-FXMNS-6000 backbox.

The QMT-5302NV includes the Master Telephone Handset and common control indicators. The QMT-5302NV supports the QAZT-5302DS and QAZT-5348DS Paging and Telephone selector modules.



## Power Supply Expansion



### INX-10A Intelligent Booster Power Supply

Mircom's INX-10A is an Intelligent NAC expander/ power supply that works with listed compatible Intelligent fire alarm control panels. Available in a 10 Amp configuration, the INX-10A can extend the power capabilities of existing notification appliance circuits as well as provide power for other ancillary devices. In addition, the INX-10A has the ability to operate with any UL/ULC Listed 24 VDC fire alarm control panel to provide Notification Appliance Circuit expansion.

## Batteries



### BAT-12V18/26/33/42/55/75/80A

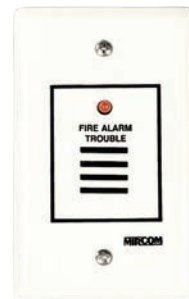
Batteries available from 18 to 80 AH. Batteries larger than 55AH will fit into a BC-160(R) battery cabinet.

## Accessories



### UIMA4 Interface for Configuring MGC Fire Panels

The UIMA4 is an interface for configuring Flex-Net FA-300, FX-401, FX-2000, FX-3500, FX-3318, FX-4000, QX-5000, and UDACT-300. The UIMA4's ribbon cable can be disconnected and replaced – the replacement part number is RPL-WC-25022 (it comes with 3 replacement cables). The UIMA4 interface has 3 connectors: 9 pin male serial connector, USB B female connector, and 10 pin female connector.



### RTI-1 Trouble Remote Indicator

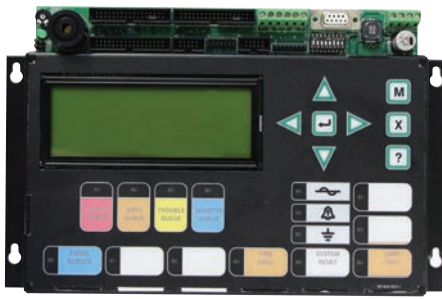
Mircom's Remote Trouble Indicator provides remote annunciation of fire alarm troubles. The RTI-1 mounts onto a standard single gang electrical box. The RTI-1 can be used with any of Mircom's fire alarm control panels.



### MP-300 End of Line Plates

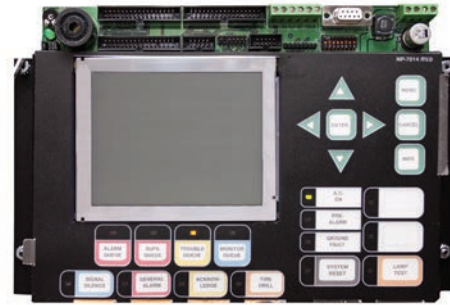
Mircom's MP-300 is a 3.9K End Of Line resistor for use with Mircom conventional panels and detection circuits.

## Remote Annunciators



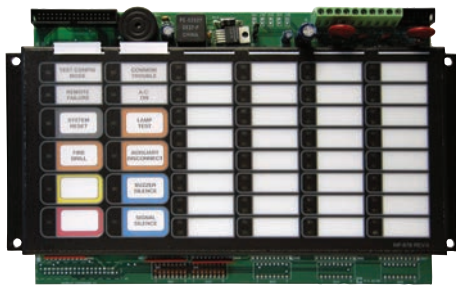
### RAXN-LCD Remote LCD Annunciator

The RAXN-LCD Remote LCD Annunciator is equipped with a 4 line x 20 character back-lit alphanumeric LCD display that provides an exact replica of the main panel display. The RAXN-LCD occupies one display position in the inner door of the BBX-FXMNS-6000, BB-1000 or BB-5000 Series enclosures.



### RAXN-LCDG Remote Graphic LCD Annunciator

The RAXN-LCD Remote LCD Annunciator is equipped with a 4-line x 20-character back-lit alphanumeric LCD display that provides an exact replica of the main panel display. The RAXN-LCD occupies one display position in the inner door of the BBX-FXMNS-6000, BB-1000 or BB-5000 Series enclosures.



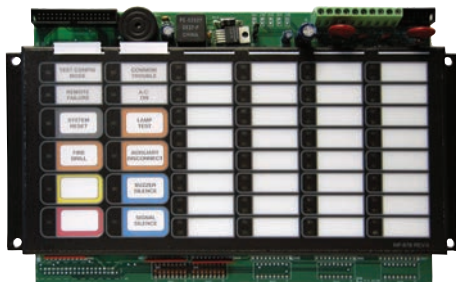
### RAM-1032TZDS-CC Conformal Coated Main Remote LED Annunciator

The RAM-1032TZDS-CC Conformal Coated Main Remote LED Annunciator provides common annunciator functions and 32 points of LED annunciation. The RAM-1032TZDS-CC has indicators for A.C. On, Common Trouble and Signal Silence and controls for System Reset, Lamp Test, Fire Drill, Buzzer Silence and Signal Silence. The RAM-1032TZDS-CC occupies one display position in the BB-1001WP(R)A or BB-1002WP(R)A enclosures.



### RAX-1048TZDS-CC Conformal Coated Programmable LED Annunciator Module

The RAX-1048TZDS-CC Conformal Coated Programmable LED Annunciator Module provides 48 programmable bi-colored LEDs. The RAX-1048TZDSCC connects to the main panel or either the RAXN-4000LCD or RAM-1032TZDS when mounted remotely. The RAX-1048TZDS-CC occupies one display position in the BB-1002WP(R)A Series enclosures.



### RAM-1032TZDS Main Remote LED Annunciator

The RAM-1032TZDS Main Remote LED Annunciator provides common annunciator functions and 32 points of LED annunciation. The RAM-1032TZDS has indicators for A.C. On, Common Trouble and Signal Silence and controls for System Reset, Lamp Test, Fire Drill, Buzzer Silence and Signal Silence. The RAM-1032TZDS occupies one display position in the BB-1000 or BB-5000 enclosures.



### RAX-1048TZDS Programmable LED Annunciator Module

Model RAX-1048TZDS Adder Annunciator Chassis with 48 Bi-coloured LEDs and 48 trouble LEDs.

The RAX-1048TZDS Programmable LED Annunciator Module provides 48 programmable bi-colored LEDs. The RAX-1048TZDS connects to the main panel or either the RAXN-LCD or RAM-1032TZDS when mounted remotely. The RAX-1048TZDS occupies one display position in the inner door of the BBX-FXMNS-6000, BB-1000 or BB-5000 Series enclosures.

## Enclosures

BB-1001D	9" H x 12.75" W x 1.85" D
BB-1002D	18" H x 12.75" W x 1.85" D
BB-1003D	26.4" H x 12.75" W x 1.85" D
BB-1008D	33" x 22.5" W x 1.85" D
BB-10012D	45" H x 22.5" W x 1.85" D
BB-1001WP(R)A	11-5/32" H x 12-15/16" W x 3-1/2" D
BB-1002WP(R)A	17-15/16" H x 12-15/16" W x 3-1/2" D



### BB-1001WP(R)A Outdoor Weather Protected Enclosure

The BB-1001WP(R)A is a complete enclosure that comes with either a RED or WHITE door, a black back-box, two keys and a durable lock at the top of the door. The door comes hinged to the bottom side of the box for added weather protection. The box is capable of handling one RAM-1032TZDS-CC Main Annunciator Chassis which provides up to 32 points of annunciation. RAM-1032TZDS-CC is ordered separately conform with the UL, ULC installation requirements.

**Note: there is no need for thermostat or heater. RAM-1032TZDS-CC must be ordered separately to match UL, ULC installation requirements.**

Dimensions	11-5/32" H x 12-15/16" W x 3-1/2" D (283mm x 329mm x 89mm)
Rated for Outdoor Environment	+50°C to -40°C (-122°F to -40°F)
Wet Location	95% R.H. @60°C



### BB-1002WP(R)A Outdoor Weather Protected Enclosure

The BB-1002WP(R)A is a complete enclosure that comes with either a RED or WHITE door, a black back-box, two keys and a durable lock at the top of the door. The door comes hinged to the bottom side of the box for added weather protection. The box is capable of handling one RAM-1032TZDS-CC Main Annunciator Chassis which provides up to 32 points of annunciation and one RAX1048TZDS-CC Adder Annunciator, which provides up to 48 points of annunciation. RAM-1032TZDS-CC and RAX1048TZDS-CC are ordered separately to match the UL, ULC installation requirements.

**Note: there is no need for thermostat or heater. RAM-1032TZDS-CC and RAX-1048TZDS-CC must be ordered separately to match UL, ULC installation requirements.**

Dimensions	17-15/16" H x 12-15/16" W x 3-1/2" D (456mm x 329mm x 89mm)
Rated for Outdoor Environment	+50°C to -40°C (-122°F to -40°F)
Wet Location	95% R.H. @60°C

## Graphics Software

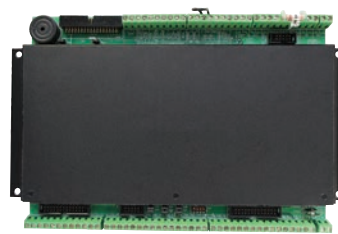


### Open Graphic Navigator (OpenGN)

Open Graphic Navigator (OpenGN) is a centralized fire alarm management system that provides building or campus monitoring. As a powerful integration tool, OpenGN allows operators to monitor remote sites from multiple workstations located anywhere in the world. OpenGN displays monitored buildings and campuses in both 2D and 3D representations, and is highly customizable.

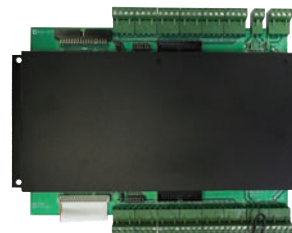
Model	Description
OGN-FLSLIC-ONE	Single Fire Alarm Control Panel License Requires: OGN-KEY (sold separately)
OGN-FLSLIC-EXP	Fire Alarm Control Panel License for 2-9 Connections Requires: OGN-KEY(sold separately)
OGN-FLSLIC-STD	Fire Alarm Control Panel License for 10-99 Connections Requires: OGN-KEY (sold separately)
OGN-FLSLIC-ENT	Fire Alarm Control Panel License for 100+ Connections Requires: OGN-KEY (sold separately)
OGN-KEY	OGN License Key Stick

## Graphic Annunciator Driver Modules



### MGD-32 Master Graphic Driver Module

The MGD-32 Master Graphic Driver Module provides common control inputs for the common control switches such as System Reset, Signal Silence, Auxiliary Disconnect, Fire Drill, Lamp Test, Acknowledge and General Alarm. The MGD-32 can also drive up to 32 supervised outputs. These output points are capable of driving LEDs or incandescent lamps. The MGD-32 mounts in a graphic annunciator wallbox or in the BB-5000 enclosures. An external power supply is required for incandescent lamps and lamp test.



### AGD-048 Adder Graphic Driver Module

The AGD-048 Adder Graphic Driver Module can be used with the MGD-32 to support an additional 48 supervised outputs. The AGD-048 mounts in a graphic annunciator wallbox or in the BB-5000 enclosures.



## Current Consumption

Model Number	Description	Qty		Standby	Total Standby	Alarm	Total Alarm
FX-6000MNS-CH	Main Chassis (12 Amp)		X	0.357	=	0.506	=
ALCN-792MISO	Dual Analog Loops		X	0.130	=	0.145	=
ALCN-792MISO and ALCN-792D	Quad Analog Loops		X		=	0.145	=
FNC-2000	Fire Network Controller Module		X	0.190	=	0.190	=
ANC-6000	Audio Network Controller Module		X	0.082	=	0.087	=
TNC-5000	Telephone Network Controller Module		X	0.195	=	0.215	=
FOM-2000-UM	Fiber Optics Module - single		X	0.016	=	0.016	=
FOM-2000-UM	Fiber Optics Module - multi		X	0.042	=	0.042	=
QMP-6101NV	Vertical Master Paging Module		X	0.0205	=	0.0205	=
QCC-6000	Communication Card		X	0.0714	=	0.077	=
QAD-6425-70	100W Amplifier		X			5.97	=
QAD-6425-25	100W Amplifier		X	0.314	=	5.62	=
DM-1008A	8 Initiating Circuit Module				=	1 zone active: 0.125 2 zone active: 0.170 4 zone active: 0.275 6 zone active: 0.370 8 zone active: 0.465	=
SGM-1004S	4 Indicating Circuit Module		X	0.031	=	0.096	=
RM-1008A	8 Relay Circuit Module		X			0.150	=
FDX-008W/KI	Fan Damper Control Module		X	0.015	=	0.035	=
DSPL-420	Narrow Display		X			0.025	=
DSPL-2440	Graphic Display		X	0.029	=	0.035	=
UDACT-300A	Dialer Module						
PR-300	City Tie Module		X	0.035	=	0.300	=
RAX-1048TZDS	Adder Annunciator Chassis				=	1 zone active: 0.026 2 zone active: 0.030 3 zone active: 0.035 4 zone active: 0.039 8 zone active: 0.262	=
RAM-1032TZDS	Adder Annunciator Chassis		X	0.050	=	32 zone active: 0.300	=
AGD-048	Adder Graphic Driver Board				=	__ (#of LEDs) x 4mA (Refer to LT-847 if using lamps)	=
IPS-4848DS/ IPS-2424DS	Programmable Input Switches Module		X	0.010/0.005	=	0.022/0.022	=
Two-Wire Smoke Detectors				♦ 0.00005	=	*0.39	= 0.39
MIX-1251B/BA	Analog Ion Smoke Detector		X	0.0003	=	0.0065	=
MIX-2251B/BA	Analog Photo Smoke Detector				=		
MIX-2251TMB/TMBA	Analog Thermal Sensor		X	0.0003	=	0.0065	=
MIX-M500MB/MA, MIX-M501MB/MA	Monitor		X		=	0.0051/0.0055	=
MIX-M500R(A)/MIX-M500S(A)	Addressable Control Module		X	0.0003	=	0.0051	=
MIX-M500X(A)	Fault Isolator Module		X		=	450µA	=
B224BI(A)	Analog Base with Isolator		X	0.00045	=	0.005	=
Four-Wire Smoke Detectors			X		=		=
Signal Load (bells, horns, strobes, and etc.)			X				=
Auxiliary Power Supply for Remote Annunciators					=	ALARM	
Total currents (Add above currents)					STANDBY (A)		(B)

**Legend:** \* Assuming three initiating circuits in alarm.

\*Using the **2W-B** or **C2W-BA** 2-wire smoke detector. See LT-1023 Compatibility List for other compatible smoke detectors.

### To Calculate Battery Size:

Add all the alarm currents in column (B), and use this value to determine the battery capacity requirement.

**Total Current Requirement:** ALARM (total from column B) \_\_\_\_\_ Amps.

Use the total from column (A) as the standby current required. Multiply this value by 24 hours or 60 hours depending on AHJ.

Add this total to the total of column (B) multiplied by the time in hours to sustain alarm.

\* Use 0.084 for five minutes of alarm or 0.5 for thirty minutes of alarm as a multiplier figure.

### Battery Capacity Requirement:

[(STANDBY (A) \_\_\_\_\_] X [(24 or 60 Hours) \_\_\_\_]] + [(ALARM (B) \_\_\_\_\_] X [\*Alarm in Hr.] \_\_\_\_\_] = (C) \_\_\_\_\_ AH

**Battery Selection:** Multiply (total from column C) by 1.25 to derate battery.

**Batteries:** BA-12V55 (55AH) will fit in the BBX-FXMNS-6000 and QBB-6001.

Batteries larger than 55AH will fit into a BC-160(R) Battery Cabinet.

## Ordering Information

Model	Description
<b>FlexNet FX-MNS-6000 Network Fire Alarm and Emergency Communication System</b>	
QMB-6000	Amplifier Card Cage
QPS-6650	FX-MNS-6000 Network Fire Alarm and Audio Power Supply (120/240V)
<b>Displays</b>	
DSPL-420DS	4 x 20 Main LCD Display for FX-MNS-6000
DSPL-420-16TZDS	4 x 20 Main LCD Display for FX-MNS-6000 w/ Additional 16 LED Zones
DSPL-2440DS	Graphical Main Display for FX-MNS-6000
<b>Enclosures</b>	
BBX-FXMNS-6000	FX-MNS-6000 Enclosure includes backbox (black), inner door (black) and front door (red)
QBB-6001	Audio Expansion Enclosure, backbox (black) and front door (red)
FX-6000MNS-CH	Main Chassis, This backplate can accommodate up to 10 adder modules (including 3 controller modules).
QMB-6000	Audio Card Cage space for four amplifiers, QAD-6425-70/-25 and one communication card QCC-6000.
BB-1001D/DR/DS/DB	Remote Annunciator Enclosure Houses one module. "D" White, "DR" Red, "DS" Stainless Steel, or "DB" for Black Door
BB-1002D/DR/DS/DB	Remote Annunciator Enclosure Houses two module. "D" White, "DR" Red, "DS" Stainless Steel, or "DB" for Black Door.
BB-1003D/DR/DS/DB	Remote Annunciator Enclosure Houses three module. "D" White, "DR" Red, "DS" Stainless Steel, or "DB" for Black Door
BB-1008D/DR/DB	Remote Annunciator Enclosure Houses eight modules. "D" White, "DR" Red or "DB" for Black Door.
BB-1012D/DR/DB	Remote Annunciator Enclosure Houses twelve modules. "D" White, "DR" Red or "DB" for Black Door.
BB-1001WP(R)A	Weather Protected Enclosure Enclosure Houses one module. White. BB-1001WPRA for red.
BB-1002WP(R)A	Weather Protected Enclosure Enclosure Houses two module. White. BB-1002WPRA for red
<b>FX-MNS-6000 Series Audio Amplifiers</b>	
QAD-6425-25	25V Amplifier, maximum four speaker zones
QAD-6425-70	70V Amplifier, maximum four speaker zones
<b>Paging/Telephone Modules</b>	
QMP-6101NV	Network Master Paging Control Panel for FX-MNS-6000, Vertical Mount, for use in BBX-FXMNS-6000
QMT-5302NV	Network Master Telephone Control Panel for FX-MNS-6000, Vertical Mount, for use in BBX-FXMNS-6000
QAZT-5348DS	Paging and Telephone Selector Panel, 48 Switches
QAZT-5302DS	Paging and Telephone Selector Panel, 24 Switches
<b>Network Control Module</b>	
FNC-2000	Fire Network Controller Module
ANC-6000	Audio Network Controller Module
TNC-5000	Telephone Network Controller Module
FOM-2000-UM	Fiber Optic Network Adder Module
<b>Adder Loop Controller Modules</b>	
ALCN-792MISO	Isolated Quad Loop Controller Module (for Mircom CLIP and Select Series Devices)
ALCN-792D	Daughter board for ALC-792MISO Quad Loop Controller Module with Isolator
<b>Adder Hardwire Modules</b>	
DM-1008A	Eight Class B (Style B) or 4 Class A (Style D) Initiating Circuit Module
SGM-1004S	Four Class A/B (Style Z/Y) Notification Appliance Circuit Module (Rated at 1.7 Amps per circuit)
RM-1008A	Four Class A/B (Style Z/Y) Notification Appliance Circuit Module (Rated at 1.7 Amps per circuit)
<b>Adder Auxiliary Modules</b>	
UDACT-300A	Digital Alarm Communicator Transmitter/Dialer Module
PR-300	Polarity Reversal and City Tie Module
<b>Programmable Modules</b>	
IPS-2424DS	Programmable Input Switches Module c/w 24 selector switches and 24 bi-coloured LEDs
IPS-4848DS	Programmable Input Switches Module c/w 48 selector switches and 48 bi-coloured LEDs
FDX-008W	Fan Damper Control Module c/w 8 programmable switches
FDX-008WKI	Fan Damper Control Module

Power Supply Expansion	
INX-10A	Intelligent Booster Power Supply
Remote Annunciators	
RAXN-LCD	Remote LCD Annunciator
RAXN-LCDG	Remote Graphic LCD Annunciator
RAM-1032TZDS	Main Remote LED Annunciator c/w 32 Bi-Colored LEDs
RAM-1032TZDS-CC	Conformal coated 32 zone remote LED annunciator with trouble LEDs
RAX-1048TZDS	Adder Annunciator Chassis c/w 48 Bi-Colored LEDs
RAX-1048TZDS-CC	Conformal coated Adder Annunciator Chassis c/w 48 Bi-Colored LEDs
MGD-32	Graphic Annunciator
AGD-048	Graphic Annunciator Adder Driver Board
Graphic Annunciator Driver Modules	
OGN-FLSLIC-ONE	Single Fire Alarm Control Panel License (Price per connection) Requires: OGN-KEY (sold separately) Contact us for non-Mircom panel connections
OGN-FLSLIC-EXP	Fire Alarm Control Panel License for 2-9 Connections (Price per connection) Requires: OGN-KEY(sold separately) Contact us for non-Mircom panel connections
OGN-FLSLIC-STD	Fire Alarm Control Panel License for 10-99 Connections (Price per connection) Requires: OGN-KEY (sold separately) Contact us for non-Mircom panel connections
OGN-FLSLIC-ENT	Fire Alarm Control Panel License for 100+ Connections (Price per connection) Requires: OGN-KEY (sold separately) Contact us for non-Mircom panel connections
OGN-KEY	OGN License Key Stick
Fire Alarm Network BACnet Single User License	
MGC-LIC-BACNET	Fire Alarm Network BACnet Single User License
Fire Alarm Network WEBSERVER Single User License	
MGC-LIC-WEBSEVER	Unlocks WEBSERVER port on one network node per license
Network Controller Modules	
FNC-2000	Fire Network Controller Module
FOM-2000-UM	Allows for single-mode or multi-mode fibre optic communication on a Flex-Net FX-4000 Series network. Add FOMCONN-SM and FOM-CONN-MM
FOM-CONN-MM	Fibre Optic Module Connector Multi-mode (pack of 2). Must use a FOM-2000-UM
FOM-CONN-SM	Fibre Optic Connector Single Mode (pack of 2). Must use a FOM-2000-UM
Accessories	
UIMA4	Interface for Configuring MGC Fire Panels
MGC-CONFIG-KIT4	Fire Panel Configuration KIT with UIMA4
RTI-1	Trouble Remote Indicator
MP-300	End of Line Plates



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