INTELLIGENT FIRE ALARM AND AUDIO NETWORK SYSTEM

Features

Fire Alarm Control
- 1 SLC loop expandable up to 29
- Each SLC is capable of supporting 159 Analog Sensors and 159 Addressable Modules which can be wired in Style 6 or 7 (Class A) or Style 4 (Class B)
- Four Style Z/Y (Class A/B) Notification Appliance Circuits rated at 1.7 Amps each
- Supports both 80 character and 960 character back-lit LCD displays with user friendly menu
- English, French, Arabic* and Hebrew* language support (*supported by RAXN-LCDG Annunciator in place of main display)
- Correlatable Switch Inputs which allows for multi-functional outputs
- Four Alarm Queues with selector switches and LEDs for Alarm, Supervisory, Monitor and Trouble
- RS-232 output for remote system printer or CRT
- Two Event History Logs comprised of a 6000 Alarm History Log and a 6000 Event Log for all events
- Built-in BACnet support
- System can be configured without taking the panel offline
- Supports three configuration files (current, previous and next configuration) with “hot swap” support
- Real time 3D graphical monitoring and control using Mircom’s Open Graphic Navigator™
- Supports Boolean logic functions
- Built-in Ethernet port
- Remote diagnostics via a built-in web server
- UL listed for Smoke Control (UUKL)

Audio Control
- Multi-channel operation
- Distributed audio
- Compatible with 520Hz low frequency signal by Mircom
- 5 hard wire fire fighter telephone channels that can be expanded with intelligent fire phone modules
- 25 or 70 volt system
- Multiple amplifier sizes
- Max. of 180 watts per Integrated Fire & Audio panel
- Expansion to three 360 watts expansion cabinets for a total of 1260 watts of audio power per node

Network Features
- Up to 63 nodes
- Peer-to-peer network communications
- Fully integrated digital network audio and control over a single pair of copper wire or fiber optic cable
- Supports over 5,000 points per node
- Supports over 250,000 points on a single network
- Remote diagnostics via built in web server and standard Ethernet port in every node
- Style 4 (Class B) or Style 6 or 7 (Class A) wiring configuration
- Proprietary Arcnet Network Communications protocol

Description

Mircom’s FleX-Net Series is a powerful intelligent networkable fire alarm solution designed with many levels of flexibility to meet virtually any application of detection, control, notification and emergency communications. Features such as fire detection & alarm, audio/voice evacuation, BACnet, Boolean logic, networking and graphical work stations allow this modular solution to accommodate the simplest systems up to the most complex solutions.

With the addition of the Advance Protocol (AP), Fire/CO detection and 520 Hz support on both the addressable loop and through the audio/voice evacuation, Mircom’s FleX-Net is poised to take you even farther into the future with expanded capabilities.

Designed for peer-to-peer network communications, the FleX-Net Series allows for a maximum of 63 nodes, while providing reliability, flexibility and expandability.

Each base panel consists of one intelligent signaling line circuit (SLC) capable of supporting 159 analog Sensors and 159 addressable modules. In addition the base panel includes Four Style Z/Y (Class A/B) Notification Appliance Circuits and an easy to read and use, large 4 x 20 back-lit alphanumeric LCD display.

The audio control provides a multi-channel distributed audio system that allows for efficient emergency paging, evacuation signaling (compatible with 520Hz low frequency signal) and fire fighters’ telephone communication. Each audio card cage supports a maximum of 4 QAA style amplifiers for a maximum of 180 watts per cabinet.

The network configuration allows the FleX-Net Series control panel to be connected to a Mircom network to provide additional input circuits, visual zones, programmable notification appliance circuits, and relays. The network interface module allows the panels to communicate on a peer-to-peer network via a Proprietary Arcnet Network Communications protocol.
FleX-Net Integrated Fire and Audio Control Panels

ECX-0012 Expander Chassis
The ECX-0012 Expander Chassis for the FX-2009-12NDS supports up to 12 adder modules and has space for 2 internal annunciator modules. The ECX-0012 mounts in the BB-5000 series enclosures.

BB-5008/BB-5014 Enclosures
The BB-5008 and BB-5014 enclosures support the FX-2009-12NDS and provide space for internal lobby control modules. The cabinets hold up to 24 AH batteries. The door and chassis hardware are ordered separately.

BB-5008 Dimensions: 36”H x 30”W x 7”D
BB-5014 Dimensions: 60”H x 30”W x 7”D

FX-2009-12NDS Large Network Main Control Unit
The FX-2009-12NDS Large Network Main Control Unit consists of a base fire alarm panel with one isolated intelligent Signaling Line Circuit (SLC) Style 4, 6 or 7, Four Style ZY (Class A/B) NAC circuits, a 4 line by 20 character LCD display and a 12 Amp power supply. The FX-2009-12NDS has space to mount the FNC-2000 Fire Network Controller Module, ANC-5000 Audio Network Controller Module, TNC-5000 Telephone Network Controller Module and provision to mount up to 4 adder modules. The FX-2009-12NDS mounts in a BB-5000 Series enclosure and supports Audio Lobby Control modules, Fire Fighter’s Lobby Control modules and FX-2000 Internal Annunciator / Programmable modules.

FX-2000MNS Main Network Board
The FX-2000MNS main network board includes one intelligent Signaling Line Circuit (SLC) and Four Style ZY (Class A/B) NAC circuits. The FX-2000MNS has provisions to mount up to 9 internal adder modules and mounts in the BBX-FXMNS enclosure.

QMB-5000N Integrated Audio Network Chassis
The QMB-5000N includes the audio and telephone control which consists of an audio card cage designed for mounting the ANC-5000 Audio Network Controller Module, TNC-5000 Telephone Network Controller Module and up to four QAA style audio amplifiers. The QMB-5000N connects to the FX-2000MNS main board and mounts in the BBX-FXMNS enclosures. The QMB-5000N supports audio expansion with connection to up to three QBB-5001 Audio Cabinets. Each QBB-5001 can support a maximum 360 watts.

Electrical Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Alarm Primary Input Power</td>
<td>120V 60Hz / 240V, 50Hz</td>
</tr>
<tr>
<td></td>
<td>4 Amps / 2 Amp (primary)</td>
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<tr>
<td>Power Supply Ratings</td>
<td>12 Amps. max. (secondary)</td>
</tr>
<tr>
<td>For NAC Circuits</td>
<td>24VDC unfiltered, 10Amps. max.</td>
</tr>
<tr>
<td>Battery Type</td>
<td>24VDC, Gel-Cell/Sealed Lead-Acid</td>
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<tr>
<td>Battery Charging Capability</td>
<td>17-65 AH batteries</td>
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<tr>
<td>Audio Primary Input Power (QPS-5000N)</td>
<td>120 VAC, 60Hz / 240 VAC, 50Hz</td>
</tr>
<tr>
<td></td>
<td>12 Amps</td>
</tr>
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</table>
DSPL-420 Main Display Module
The DSPL-420 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 Monitor. The DSPL-420 occupies one display position in the BBX-FXMNS enclosure.

DSPL-2440 Graphical Main Display Module
The DSPL-2440 Graphical Main Display Module provides 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-2440 occupies one display position in the BBX-FXMNS enclosure.

QMP-5101NV Network Master Paging Control Module
The QMP-5101NV Network Master Paging Control Module includes the paging microphone and common control indicators. The QMP-5101NV allows for all call paging or selective paging with the QAZT-5302DS Zoned Paging and Telephone Selector Modules. The QMP-5101NV is a vertical mount unit that mounts in the BBX-FXMNS enclosure.

QMT-5302NV Network Master Fire fighters’ Telephone Control Module
The QMT-5302NV includes the Master Telephone Handset and common control indicators. The QMT-5302NV supports the QAZT-5302DS Paging and Telephone selector modules. The QMT-5302NV is a vertical mount unit that mounts in the BBX-FXMNS enclosure.

BBX-FXMNS Enclosure
The BBX-FXMNS enclosure supports the FX-2000MNS Network main board, a DSPL-420, DSPL-420-16TZDS or DSPL-2440 Main LCD display, a QMB-5000N audio card cage, a QMP-5101NV Master Paging Microphone and a QMT-5302NV Master Telephone Handset. In addition the enclosure provides space for additional external modules and internal lobby control modules. The BBX-FXMNS holds up to 40 AH batteries and is available with a white (BBX-FXMNS) or red (BBX-FXMNSR) door.

BBX-FXMNS Dimensions: 61.5"H x 20"W x 9"D

Power Supply Expansion

INX-10AC Internal Booster Power Supply Module
Mircom’s INX-10AC is an Intelligent Booster Power Supply that extends the power capabilities of existing notification appliance circuits as well as provide power for other ancillary devices. The INX-10AC has 10 amps of power and mounts inside the BB-5014 enclosure.
Fire Network Controller Modules

**FNC-2000 Fire Network Controller Module**
The FNC-2000 provides network capability to the FX-2009-12NDS. 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-SP Fiber Optic Network Adder Module. The FNC-2000 mounts in the FX-2009-12NDS.

**FOM-2000-SP Fiber Optic Network Adder Module**
The FOM-2000-SP Fiber Optic Network Adder Module allows for the use of fiber optic cabling on the FX-2009-12NDS. It seamlessly connects to the interface on the FNC-2000 Fire Alarm Network Controller Module.

Adder Loop Controller Modules

**ALCN-792M Quad Loop Controller Module**
The ALCN-792M Quad Loop Controller Module provides two Signaling Line Circuits (SLC) to the FleX-Net system consisting of 159 Analog Sensors and 159 Addressable Modules per loop. The ALCN-792M can be expanded with the use of the ALCN-792D Daughter Board Module. The ALCN-792M occupies one module slot.

**ALCN-792D Daughter Board for Quad Loop Controller Module**
The ALCN-792D Daughter Board provides an additional two SLC loops when connected to the ALCN-792M Quad Loop Controller Module. The daughter board mounts on top of the ALCN-792M.

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-1004A Four Notification Appliance Circuit Module**
The SGM-1004A provides 4 Style Z/Y(Class A/B) Notification Appliance Circuits configurable as Silenceable or Non-Silenceable. Each NAC circuit is rated at 1.7 Amps and has individual signal silence inputs (jumper selectable). The SGM-1004A occupies one module slot.

**RM-1008A Eight Relay Circuit Module**
The RM-1008A provides the system 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 Polarity Reversal/City Tie Module provides the system with a supervised City Tie (24 VDC/200 mA max.) and Polarity Reversal connection (24 VDC (open circuit), 8 mA max. (shorted)). The PR-300 occupies one module slot.
Remote LCD 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 FleX-Net fire alarm control panel display. The RAXN-LCD occupies one display position in the BB-1000 or BB-5000 Series enclosures.

Remote LED Annunciators

**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.

**RAXN-LCDG Remote Graphic LCD Annunciator**
The RAXN-LCDG Remote Graphic LCD Annunciator is equipped with a 24 line x 40 character back-lit graphical LCD display that is used to display 9 events per page. Each event is displayed over 2 lines with 40 characters per line allowing emergency information to be displayed in an easy to read format. The RAXN-LCDG occupies one display position in the BB-1000 or BB-5000 Series enclosures.

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 Series enclosures.
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 main panel or the RAXN-LCD when mounted remotely. The IPS-2424DS occupies one display position in the BB-1000 or BB-5000 Series enclosures.

FDX-008 Fan Damper Control Module
The FDX-008 Fan Damper Control Module provides individually programmed circuits which can be used for fan or damper control. The FDX-008 connects to the main panel or the RAXN-LCD and occupies one display position in the BB-1000 or BB-5000 Series enclosures.

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 or smart phones located anywhere in the world. OpenGN displays monitored buildings and campuses in both 2D and 3D representations, and is highly customizable.

Dimensions for Annunciator Module Enclosures

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>BB-1001</td>
<td>9”H x 12.75”W x 1.2”D</td>
</tr>
<tr>
<td>BB-1002</td>
<td>18”H x 12.75”W x 1.2”D</td>
</tr>
<tr>
<td>BB-1003</td>
<td>26.4”H x 12.75”W x 1.2”D</td>
</tr>
<tr>
<td>BB-1008</td>
<td>33”H x 22.5”W x 1.25”D</td>
</tr>
<tr>
<td>BB-1012</td>
<td>45”H x 22.5”W x 1.25”D</td>
</tr>
</tbody>
</table>

Mounting Brackets

M500-BK9 Module Mounting Bracket
The M500-BK9 Module Mounting Bracket mounts inside the BB-5000 Series enclosures and provides space to mount up to nine M500 style intelligent modules.

M500-BK2 Module Mounting Bracket
The M500-BK2 Module Mounting Bracket mounts inside the BBX-FXMNS enclosure and provides space to mount up to two M500 style intelligent modules.
FleX-Net Audio and Telephone Network Controller Modules

ANC-5000 Audio Network Controller Module
The ANC-5000 provides audio microphone control on the network system. The ANC-5000 mounts on a plate in the FX-2009-12NDS or QMB-5000N.

Paging & Telephone Control Modules

TNC-5000 Telephone Network Controller Module
The TNC-5000 provides five hardwired telephone circuits for the local floor panel with the first circuit configurable for the master telephone handset. The TNC-5000 mounts in the FX-2009-12NDS or QMB-5000N.

Audio Expansion

QMP-5101N Network Master Paging Control Module
The QMP-5101N Network Master Paging Control Module includes the paging microphone and common control indicators. The QMP-5101N allows for all call paging or selective paging with the QAZT-5302DS Zoned Paging and Telephone Selector Modules. The QMP-5101N occupies one module space in the BB-5000 Series enclosures.

QBB-5001 Audio Backbox
The QBB-5001 holds one QMB-5000B Audio Motherboard and Card Cage, one QPS-5000N Audio Power Supply, one QBC-5000N Audio Battery Charger and up to 40 Ah batteries.

QAZT-5302DS Zoned Paging/Telephone Selector Module
The QAZT-5302DS Zoned Paging and Telephone Selector Module includes 24 zone selector switches and LEDs. The QAZT-5302DS is used with the QMP-5101N Network Master Paging Control module or QMT-5302 Network Master Firefighters’ Telephone module. Slide-in labels are provided to label the selector zones. The QAZT-5302DS occupies one module space in the BB-1000 or BB-5000 Series enclosures.

QMT-5302N Network Master Firefighters’ Telephone Control Module
The QMT-5302N includes the Master Telephone Handset and common control indicators. The QMT-5302N supports the QAZT-5302DS Paging and Telephone selector modules. The QMT-5302N occupies one module space in the BB-5000 Series enclosures.

QMB-5000B Audio Motherboard and Card Cage
The QMB-5000B supports 7 QAA style audio amplifiers. The QMB-5000B requires one QPS-5000N Audio Power Supply and one QBC-5000N Audio Battery Charger and mounts in the QBB-5001 backbox.

QPS-5000N Audio Power Supply
The QPS-5000N supports up to 360 watts and mounts in the QBB-5001 Audio backbox.

QBC-5000N Audio Battery Charger
The QBC-5000N will charge up to 65 Ah batteries and mounts in QBB-5001 Audio Backbox.

Note: The QBB-5001 Audio Backbox will hold up to 40 Ah batteries. Larger batteries will require a BC-160 Battery Cabinet.
Audio Amplifiers

QAA-5415-70 and QAA-5415-25 Quad 15 Watt Amplifiers  
The QAA-5415-70 and QAA-5415-25 consist of four 15 watt supervised paging/speaker circuits which can be wired in Class 'B' (Style 'Y') only. The QAA-5415-70 is a 70 Volt amplifier and the QAA-5415-25 is a 25 Volt amplifier. Both models mount in either the QMB-5000N or QMB-5000B card cage and occupy one amplifier slot.

QAA-5230S-70/25 Dual 30 Watt Amplifier 
The QAA-5230S-70/25 consists of two 25 or 70 Volt 30 watt amplifiers. Each amplifier has two 15 watt supervised speaker outputs which are used for 'A' 'B' speakers per floor and are wired in Class 'B' (Style 'Y') only. The QAA-5230S-70/25 mounts in either the QMB-5000N or QMB-5000B card cage and occupies one amplifier slot.

QAA-5230-70/25 Dual 30 Watt Amplifier  
The QAA-5230-70/25 consists of two 25 or 70 Volt 30 watt supervised paging/speaker circuits which can be wired in Class 'A' (Style 'Z') or Class 'B' (Style 'Y'). The QAA-5230-70/25 mounts in either the QMB-5000N or QMB-5000B card cage and occupies one amplifier slot.

QAA-5160-70/25 60 Watt Amplifier  
The QAA-5160-70/25 consists of one 25 or 70 Volt 60 watt supervised paging/speaker circuit which can be wired in Class 'A' (Style 'Z') or Class 'B' (Style 'Y'). The QAA-5160-70/25 mounts in either the QMB-5000N or QMB-5000B card cage and occupies one amplifier slot.

QAA-4CLA Class 'A' (Style 'Y') Converter Module  
The QAA-4CLA converts each of the four Class 'B' (Style 'Y') outputs on a QAA-5415-70 or QAA-5415-25 Amplifiers to Class 'A' (Style 'Z'). The module attaches to the bottom of the amplifier. One QAA-4CLA is required for each amplifier.

QAA-4CLAS Class 'A' (Style 'Z') Converter Module  
The QAA-4CLAS converts each of the four Class 'B' (Style 'Y') outputs on a QAA-5230S-70/25 or QAA-5230S-525-70/25 Amplifier to Class 'A' (Style 'Z'). The module attaches to the bottom of the amplifier. One QAA-4CLAS is required for each amplifier.
NOT TO BE USED FOR INSTALLATION PURPOSES.

Typical FleX-Net Networked System Configuration with Audio

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Node 1 - Central Alarm & Control Facility

- Central Alarm and Control Facility can house the following:
  - Addressable fire alarm control
  - Master paging microphone
  - Master telephone handset
  - Paging & telephone zone selector modules
  - Bypass switch modules
  - Fan damper control modules
  - LED annunciator modules

Node 2 - Floor Panel

- FX-2000MNS & QMB-5000N in a BBX-FXMNSR
- RS-485
- Telephone Audio Circuits
- Audio Channels for paging, pre-recorded messages and tones (number of circuits vary by application)
- Addressable SLC

Node 3 - Floor Panel

- FX-2000MNS & QMB-5000N in a BBX-FXMNSR
- QBB-5001
- Telephone Audio Circuits
- Audio Channels for paging, pre-recorded messages and tones (number of circuits vary by application)
- Addressable SLC

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FLOOR PANEL

- Up to 7 LCD Annunciators per node

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BMS

- Building Management System
- OpenGN Graphics Software
- Ethernet
- RS-485
- RS-232
- PTR-2000-1 Printer
- RAXN-LCDG in a B1-1001R
- Up to 7 LCD Annunciators per node

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One pair for Arcnet Network or two fiber optic cables for Fire Control, Paging Audio and Telephone Audio

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Typical FleX-Net Networked System Configuration with Audio
<table>
<thead>
<tr>
<th>Model Number</th>
<th>Description</th>
<th>Standby (Amps)</th>
<th>Alarm (Amps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FX-2000MNS</td>
<td>Main Network Control Unit on a Chassis (12 Amp)</td>
<td>0.310</td>
<td>0.733</td>
</tr>
<tr>
<td>FX-2003-12NDS</td>
<td>Compact Main Network Control Unit (12 Amp)</td>
<td>0.310</td>
<td>0.733</td>
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<tr>
<td>FX-2017-12NDS</td>
<td>Mid-Size Main Network Control Unit (12 Amp)</td>
<td>0.310</td>
<td>0.733</td>
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<tr>
<td>FX-2009-12NDS</td>
<td>Large Main Network Control Unit (12 Amp)</td>
<td>0.310</td>
<td>0.733</td>
</tr>
<tr>
<td>ALCN-792M</td>
<td>Quad Loop Controller Module</td>
<td>0.130</td>
<td>0.145</td>
</tr>
<tr>
<td>ALCN-792M /w ALCN-792D</td>
<td>Quad Loop Controller Module with Daughter Module</td>
<td>0.130</td>
<td>0.145</td>
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<tr>
<td>FNC-2000</td>
<td>Fire Network Controller Module</td>
<td>0.190</td>
<td>0.0190</td>
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<tr>
<td>ANC-5000</td>
<td>Audio Network Controller Module</td>
<td>0.255</td>
<td>0.265</td>
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<tr>
<td>TNC-5000</td>
<td>Telephone Network Controller Module</td>
<td>0.195</td>
<td>0.215</td>
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<tr>
<td>FOM-2000-SP</td>
<td>Fiber Optics Module</td>
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<td>0.015</td>
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<tr>
<td>DM-1008A</td>
<td>8 Initiating Circuit Module</td>
<td>0.080</td>
<td>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</td>
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<tr>
<td>SGM-1004A</td>
<td>4 Notification Appliance Circuit Module</td>
<td>0.060</td>
<td>0.258</td>
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<tr>
<td>RM-1008A</td>
<td>8 Relay Circuit Module</td>
<td>0.025</td>
<td>0.150</td>
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<tr>
<td>FDX-008</td>
<td>Fan Damper Control Module</td>
<td>0.015</td>
<td>0.035</td>
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<tr>
<td>DSPL-420</td>
<td>Narrow Display</td>
<td>0.024</td>
<td>0.025</td>
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<tr>
<td>DSPL-420-16TZDS</td>
<td>Narrow Display w/ additional 16 LED Zones</td>
<td>0.010</td>
<td>0.046</td>
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<tr>
<td>DSPL-2440</td>
<td>Graphic Display</td>
<td>0.029</td>
<td>0.035</td>
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<tr>
<td>UDACT-300A</td>
<td>Dialer Module</td>
<td>0.045</td>
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<tr>
<td>PR-300</td>
<td>City Tie Module</td>
<td>0.035</td>
<td>0.300</td>
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<tr>
<td>FDS-008</td>
<td>Selection Control Panel for MNS</td>
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<td>0.112</td>
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<tr>
<td>RAX-1048TZDS</td>
<td>Adder Annunciator Chassis</td>
<td>0.022</td>
<td>1 zone active: 0.026 2 zone active: 0.030 3 zone active: 0.035 4 zone active: 0.039 48 zone active: 0.262</td>
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<tr>
<td>RAM-1032TZDS</td>
<td>Adder Annunciator Chassis</td>
<td>0.050</td>
<td>32 zone active: 0.300</td>
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<tr>
<td>MGD-32</td>
<td>Main Graphic Driver Module</td>
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<tr>
<td>AGD-048</td>
<td>Adder Graphic Driver Module</td>
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<td># of LEDs x 4mA</td>
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<td>IPS-2424DS</td>
<td>Programmable Input Switches Module</td>
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<td>0.015</td>
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<tr>
<td>ANC-5000</td>
<td>Audio Network Controller Module</td>
<td>0.255</td>
<td>0.265</td>
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<tr>
<td>TNC-5000</td>
<td>Telephone Network Controller Module</td>
<td>0.195</td>
<td>0.215</td>
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<tr>
<td>QAA-5160-70/25</td>
<td>1 Zone 60W Amplifier</td>
<td>0.055</td>
<td>0.350</td>
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<tr>
<td>QAA-5230-70/25</td>
<td>2 Zone 30W Amplifier</td>
<td>0.055</td>
<td>0.350</td>
</tr>
<tr>
<td>QAA-5230S-70/25</td>
<td>2 Zone 30W Amplifier (split)</td>
<td>0.055</td>
<td>0.350</td>
</tr>
<tr>
<td>QAA-5415-70</td>
<td>4 Zone 15W Amplifier, 70V</td>
<td>0.055</td>
<td>0.350</td>
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<tr>
<td>QAA-5415-25</td>
<td>4 Zone 15W Amplifier, 25V</td>
<td>0.055</td>
<td>0.350</td>
</tr>
<tr>
<td>QMP-5101N</td>
<td>Master Paging Module</td>
<td>0.004</td>
<td>0.012</td>
</tr>
<tr>
<td>QMP-5101NV</td>
<td>Vertical Master Paging Module</td>
<td>0.004</td>
<td>0.012</td>
</tr>
<tr>
<td>QMT-5302N</td>
<td>Master Telephone Module</td>
<td>0.003</td>
<td>0.013</td>
</tr>
<tr>
<td>QMT-5302NV</td>
<td>Vertical Master Telephone Module</td>
<td>0.003</td>
<td>0.013</td>
</tr>
<tr>
<td>QAZT-5302DS</td>
<td>Paging/Telephone Zone Module</td>
<td>0.010</td>
<td>0.015</td>
</tr>
</tbody>
</table>
### Model Description

**FleX-Net Network Lobby Control and Floor Panels - Integrated Fire and Audio Systems**

- **FX-2009-12NDS** Large Network Main Control Unit. Mounts in the BB-5000 series enclosures.
- **ECX-0012** Expander Chassis for the FX-2009-12NDS. Mounts in the BB-5000 series enclosures.
- **FX-2000MNS** Main Network Board with one SLC loop. Mounts in the BBX-FXMNS enclosure.
- **DSPL-420** 4 x 20 Main LCD Display for FX-2000MNS
- **DSPL-420-16TZDS** 4 x 20 Main LCD Display for FX-2000MNS w/16 LEDs
- **DSPL-2440** Graphical Main Display for FX-2000MNS
- **QMB-5000N** Integrated Audio Network Control Chassis
- **PS-2040** Network Fire Alarm and Audio Power Supply

### Enclosures

- **BB-5008** Lobby Control Wallbox Enclosure. Supports 8 Module Footprints.
- **DOX-5008M** White Metal Door for BB-5008. Add suffix 'R' for red enclosure.
- **CCH-5008** Custom Mounting Kit for BB-5008. One required per BB-5008.
- **CCH-5008G** Custom Mounting Kit for BB-5008, Required when using RAXN-LCDG as Main Display
- **BB-5014** Lobby Control Wallbox Enclosure. Supports 14 Module Footprints.
- **DOX-5014M** White Metal Door for BB-5014. Add suffix 'R' for red enclosure.
- **CCH-5014** Custom Mounting Kit for BB-5014. One required per BB-5014.
- **BBX-FXMNS** Black backbox enclosure with white doors for FX-2000MNS. Add suffix ‘R’ for red doors.
- **BBX-MNSXP** Extension Audio Signaling Cabinet, white door. Add suffix ‘R’ for red doors.

### Adder Loop Controller Modules

- **ALC-792M** Network Quad Loop Controller Module
- **ALC-792D** Daughter board for ALC-792M Quad Loop Controller Module

### Adder Hardware Modules

- **DM-1008A** Eight Class B (Style B) or 4 Class A (Style D) Initiating Circuit Module
- **SGM-1004A** Four Class A/B (Style Z/Y) Notification Appliance Circuit Module (Rated at 1.7 Amps per circuit)
- **RM-1008A** Eight Relay Circuit Module c/w eight form C relays (Rated for 28 VDC @ 1 Amp max. per relay)

### Adder Auxiliary Modules

- **UDACT-300A** Digital Alarm Communicator Transmitter/Dialer Module
- **PR-300** Polarity Reversal and City Tie Module

### Programmable Modules

- **IPS-2424DS** Programmable Input Switches Module c/w 24 selector switches and 24 bi-coloured LEDs
- **FDX-008** Fan Damper Control Module c/w 8 programmable switches

### Power Module

- **INX-10AC** Internal Booster Power Supply Module

### 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
- **RAX-1048TZDS** Adder Annunciator Chassis c/w 48 Bi-Colored LEDs

### Graphic Annunciator Driver Modules

- **MGD-32** Main Graphic Driver Module c/w 32 Supervised Outputs
- **AGD-048** Adder Graphic Driver Module c/w 48 Supervised Outputs

### Network Controller Modules

- **FNC-2000** Fire Network Controller Module
- **FOM-2000-SP** Fiber Optic Network Adder Module
- **ANC-5000** Audio Network Controller Module
- **TNC-5000** Telephone Network Controller Module
## Paging and Telephone Control Modules

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>QMP-5101NV</td>
<td>Master Network Paging Control Module for FXMNS, Vertical Mount. For use in BBX-FXMNS.</td>
<td></td>
</tr>
<tr>
<td>QMT-5302NV</td>
<td>Master Network Telephone Module for FXMNS, Vertical Mount. For use in BBX-FXMNS.</td>
<td></td>
</tr>
<tr>
<td>QMP-5101N</td>
<td>Master Network Paging Control Module</td>
<td></td>
</tr>
<tr>
<td>QMT-5302N</td>
<td>Master Network Telephone Control Module</td>
<td></td>
</tr>
<tr>
<td>QAZT-5302DS</td>
<td>Paging and Telephone Selector Panel</td>
<td></td>
</tr>
</tbody>
</table>

## Audio Amplifiers

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>QAA-5415-70</td>
<td>70 Volt Quad 15 Watt Amplifier</td>
</tr>
<tr>
<td>QAA-5415-25</td>
<td>25 Volt Quad 15 Watt Amplifier</td>
</tr>
<tr>
<td>QAA-4CLA</td>
<td>Class ‘A’ (Style ‘Z’) Converter Module for QAA-5415-25 and QAA-5415-70 Amplifiers</td>
</tr>
<tr>
<td>QAA-5230S-7025</td>
<td>25 or 70 Volt Dual 30 Watt Amplifier split ‘A ’B’ circuits per floor</td>
</tr>
<tr>
<td>QAA-4CLAS</td>
<td>Class ‘A’ (Style ‘Z’) Converter Module for QAA-5230S-70/25 and QAA-5230S-525-70/25</td>
</tr>
<tr>
<td>QAA-5230-70/25</td>
<td>25 or 70 Volt Dual 30 Watt Amplifier</td>
</tr>
<tr>
<td>QAA-5160-70/25</td>
<td>25 or 70 Volt 60 Watt Amplifier</td>
</tr>
</tbody>
</table>

## Enclosures for Remote Annunciators / Programmable Modules

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>BB-1001</td>
<td>Remote Annunciator/Programmable Module Enclosure Houses one module. Add suffix “R” for red door.</td>
</tr>
<tr>
<td>BB-1002</td>
<td>Remote Annunciator/Programmable Module Enclosure Houses two modules. Add suffix “R” for red door.</td>
</tr>
<tr>
<td>BB-1003</td>
<td>Remote Annunciator/Programmable Module Enclosure Houses three modules. Add suffix “R” for red door.</td>
</tr>
<tr>
<td>BB-1008</td>
<td>Remote Annunciator/Programmable Module Enclosure Houses eight modules. Add suffix “R” for red door.</td>
</tr>
<tr>
<td>BB-1012</td>
<td>Remote Annunciator/Programmable Module Enclosure Houses twelve modules. Add suffix “R” for red door.</td>
</tr>
</tbody>
</table>

## Audio Expansion Components

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>QMB-5000B</td>
<td>Audio Motherboard and Card Cage</td>
</tr>
<tr>
<td>QPS-5000N</td>
<td>Audio Power Supply</td>
</tr>
<tr>
<td>QBC-5000N</td>
<td>Audio Battery Charger</td>
</tr>
<tr>
<td>QBB-5001</td>
<td>Audio Backbox</td>
</tr>
</tbody>
</table>

## Graphics Software

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONNECT-1</td>
<td>License for single node/panel, comes with XML Adapter software, up to 10,000 devices/objects</td>
</tr>
<tr>
<td>CONNECT-5</td>
<td>License for up to (5) nodes/panels, comes with XML Adapter software, up to 50,000 devices/objects</td>
</tr>
<tr>
<td>CONNECT-10</td>
<td>License for up to (10) nodes/panels, comes with XML Adapter software, up to 100,000 devices/objects</td>
</tr>
<tr>
<td>ENTERPRISE-120</td>
<td>License for up to (120) nodes/panels, comes with XML Adapter software, unlimited devices/objects</td>
</tr>
</tbody>
</table>

## Accessories

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGC NTWK SRVC KIT</td>
<td>New installation or service kit comprised of common cables, inserts and hardware</td>
</tr>
<tr>
<td>MGC-FACP-CFG-KIT1</td>
<td>Fire Alarm Control Panel Configuration Kit 1</td>
</tr>
</tbody>
</table>

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NOT TO BE USED FOR INSTALLATION PURPOSES.