



Description

The FR-320NETK is a combination panel kit that adds releasing capability to the Flex-Net system without the need for a separate external cabinet. Based upon Mircom's already UL listed FR-320 Releasing panel and Flex-Net systems, this system permits pre-release, abort, manual release, and reset control. The FR-320NETK includes all necessary items pre-connected to integrate the FR-320 releasing panel to the Mircom's Flex-Net system. The Flex-Net and FR-320 panels have independent power arrangements each with its own AC supply and battery setup. The connection between the FR-320 and the Flex-Net panels is by isolated relays. The FR-320 uses the FR-320 pre-programmed mode #2 to enable activation features via the Flex-Net initiating device circuits.

Note: In this particular configuration, the Mass Notification System (MNS) capability is not available for use at this panel node.

Note: The releasing devices used must be wired locally to this panel.

Features

- Adds releasing capability to Flex-Net™ system
- Built-in Addressable loop which supports Classic Loop Interface Protocol (CLIP) and Advanced Protocol (AP) addressable devices
- Each SLC is capable of supporting 99 CLIP/159 AP Analog Sensors and 99 CLIP/159 AP Addressable Modules which can be wired in Style 6 or 7 (Class A) or Style 4 (Class B)
- Tamper resistant enclosures)
- Base system is equipped with one Intelligent Signaling Line Circuit (SLC/DCL). Expandable to 21 SLCs
- Password protected features for enhanced access control
- Local and remote placement of controls and indicators
- Visible notification and strobes support
- Large LCD displays
- Fire Alarm Control Panel Interface (FACI)
- Building Management System Interface (BMSI)
- Fire Alarm Control:
 - Four Style Z/Y (Class A/B) Notification Appliance Circuits rated at 1.7 Amps each
- Built-in Ethernet port
- Remote diagnostics via a built-in web server

Network Features

- Up to 63 nodes
- Fully integrated digital network audio and control over a single pair of copper wire or fibre optic cable
- Supports over 5,000 points per node
- Supports over 250,000 points on a single network
- Peer-to-peer network communications

Releasing Features

- Each initiating circuit is pre-configured as: Alarm, Supervisory (Latching or nonlatching), Water-Flow, Manual Release Switch, Abort Switch, or Manual Release/Abort combination, depending upon the selected pre-programmed configuration. There are two LEDs per circuit, one for Trouble (amber), and one dual color (amber/red) LED for Supervisory (amber) and Alarm (red)
- Basic unit has 4 power limited class B (style Y) output circuits. Output circuits 1 & 2 are indicating circuits while output circuits 3 & 4 are releasing circuits (circuit 4 can work as an indicating circuit in some situations.) Each indicating circuit process type is preconfigured and can be silenceable
- The signal rates depend on the selected pre-programmed configuration.
- A pushbutton associated with each initiating, indicating, and releasing circuit can individually bypass the circuit
- Configurable Signal Silence Inhibit and Auto Signal Silence Timers
- Subsequent Alarm, Supervisory, and Trouble operation
- Relay Contacts for Common Alarm, Common Supervisory, Common Trouble, and Auxiliary Alarm Relay (disconnectable)
- RS-485 Interface for RA-1000 Series Remote Multiplex Annunciators and Smart relay Module
- Optional Modules for additional Relay Circuits, City Tie and Polarity Reversal Signaling.
- Extensive transient protection
- Easy configuration of the panel using LCD service tool (CFG-300)
- Releasing circuit protection from false alarm by disconnecting the battery if the voltage falls below 19V



NYC
Fire Dept

S7010

Adder Hardware Modules



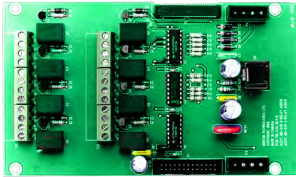
DM-1008A Eight Initiating Circuit Module

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 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 Loop Controller Modules



ALCN-792M Quad Loop Controller Module

The ALCN-792M Quad Loop Controller Module provides two Signaling Line Circuits (SLC) to the 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

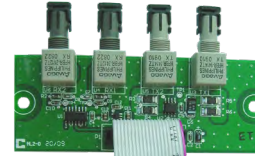
The ALCN-792D Daughter Board provides an additional two SLC loops when connected to the ALCN-792M Quad Loop Controller Module. The daughter board mounts on top of the ALCN-792M.

Fire Network Controller Modules



FNC-2000 Fire Network Controller Module

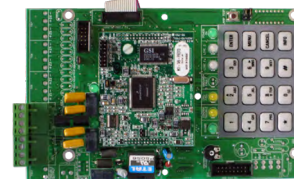
The FNC-2000 provides network capability to the system. One Fire Network Controller Module is required per network node panel. In addition the FNC-2000 provides an interface for adding an optional FOM-2000-SP Fiber Optic Network Adder Module. The FNC-2000 mounts in the FX-MNS.



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 system. It seamlessly connects to the interface on the FNC-2000 Fire Alarm Network Controller Module.

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.

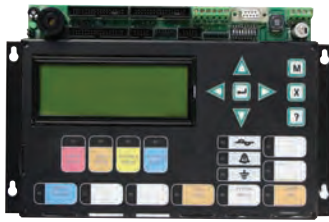
Graphics Software



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.

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.

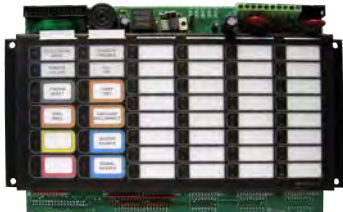
Programmable Modules



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.

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.



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.

Graphic Annunciator Driver Modules



RAX-1048TZDS Programmable LED Annunciator Module

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 BB-1000 or BB-5000 Series enclosures.



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	Standby (Amps)	Alarm (Amps)
FX-2000MNS	Main Network Board	0.310	0.733
ALCN-792M	Dual Analog Loops	0.130	0.145
ALCN-792M/D	Quad Analog Loops	0.130	0.145
FNC-2000	Fire Network Controller Module	0.190	0.190
FOM-2000-SP	Fiber Optics Module	0.015	0.015
DM-1008A	8 Initiating Circuit Module	0.080	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 Notification Appliance Circuit Module	0.031	0.096
RM-1008A	8 Relay Circuit Module	0.025	0.150
FDX-008/KI	Fan Damper Control Module	0.015	0.035
RM-306	FA-300 Series Relay Adder Module (6)	0.0	0.08
DSPL-420	Narrow Display	0.024	0.025
UDACT-300A	Dialer Module	0.045	0.120
PR-300	City Tie Module	0.035	0.300
RAX-1048TZDS	Adder Annunciator Chassis	0.022	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
RAM-1016TZDS	Main Remote LED Annunciator	0.050	0.150
RAM-1032TZDS	Adder Annunciator Chassis	0.050	32 zone active: 0.300
MGD-32	Main Graphic Driver Module	0.035	1.6
AGD-048	Adder Graphic Driver Module	0.035	# of LEDs x 4mA
IPS-2424DS	Programmable Input Switches Module	0.010	0.015

Electrical Specifications

FleX-Net

AC line voltage	120 VAC 60Hz / 240 VAC 50Hz, 4 Amps / 2 Amps (primary)
Power supply rating	12 Amps max. (Secondary)
For indicating circuits	24VDC Unfiltered 10 Amps. Max.
Battery	24VDC Gel Cell/Sealed lead acid
Battery Charging Capability	17AH-65AH

FR-320NETK

AC line voltage	120 VAC 60Hz 1.2A / 240 VAC 50Hz 0.6A
Power supply rating	6.5A AC max. (Secondary)
Max power allowed	4A 1.7A (aux power in filtered if used) 0.5A (aux power filtered if used) 0.3A (resettable auxiliary power if used) 1.7A (for releasing circuit)
Battery	24VDC Gel Cell/Sealed lead acid
Battery Charging Capability	10AH-26AH

If no auxiliaries are used the max power is 4A for the indicating and the releasing circuit.

Ordering Information

Model	Description
Network Controller Modules	
FNC-2000	Fire Network Controller Module
FOM-2000-SP	Fiber Optic Network Adder Module
Adder Loop Controller Modules	
ALCN-792M	Network Quad Loop Controller Module
ALCN-792D	Daughter board for ALC-792M Quad Loop Controller Module
Adder Hardwire Modules	
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	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
Remote Annunciators	
RAXN-LCD	Remote Network LCD Annunciator c/w 4 x 20 LCD display
RAM-1016TZDS	main Remote LED Annunciator
RAM-1032TZDS	Main Remote LED Annunciator c/w 32 Bi-Colored LEDs
RAX-1048TZDS	Programmable LED Annunciator Module c/w 48 Bi-Coloured LEDs and 48 Trouble LEDs
Programmable Modules	
IPS-2424DS	Programmable Input Switches Module c/w 24 selector switches and 24 bi-coloured LEDs
FDX-008	Fan Damper Control Module
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
Graphics Software	
CONNECT-1	License for single node/panel, comes with XML Adapter software, up to 10,000 devices/objects
CONNECT-5	License for up to (5) nodes/panels, comes with XML Adapter software, up to 50,000 devices/
CONNECT-10	License for up to (10) nodes/panels, comes with XML Adapter software, up to 100,000 devices/objects
ENTERPRISE-120	License for up to (120) nodes/panels, comes with XML Adapter software, unlimited devices/objects
Accessories	
MGC NTWK SRVC KIT	New installation or service kit comprised of common cables, inserts and hardware



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