

### FIRE PROTECTION EQUIPMENT

This certificate is issued for the following equipment:

Equipment Model Designations: FX-400, FX-401 Fire Alarm Control Panel

Approval Guide Listing Category:

- Electrical Signaling Systems (Fire) Central Station Signaling Systems

Electrical Signaling 
 Signaling Systems (Fire)
 Remote Station Signaling Systems

Mircom Technologies Ltd 25 Interchange Way Vaughan, ON L4K 5W3 Canada

This certifies that the equipment described has been found to comply with the applicable requirements, as stated in the Approval Report(s), of the following FM Approval Standards and other documents:

Approval Standards Class Number 3010

*Date* 2021 Other Standards Organization, Designation Date None

Original Approval Job Identification: PR461669

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Subsequent Revisions:

To verify the availability of the Approved product, please refer to www.approvalguide.com

Marguera

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3 January 2023

Date







- <u>Electrical Signaling</u> → Signaling Systems (Fire) → Local Protective Signaling → Local Protective Signaling → Signaling Systems (Fire) → Central Station Signaling Systems <u>Electrical Signaling</u> → Signaling Systems (Fire) → Remote Station Signaling Systems ÷
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#### Model FX-400 Fire Alarm Control Panel

Model	Description
FX-400	<ul> <li>Main Board, Power Supply and Backbox.</li> <li>Main Display with 4 x 20 LCD display.</li> <li>One Class A, Class X, or Class B SLC analog loop.</li> <li>Four Power Limited Class B or Class A NAC circuits (max 1.5 Amps each - 5.0 Amps total).</li> <li>Dedicated common alarm, supervisory, trouble, and auxiliary alarm relays.</li> <li>Additional outputs include connections for a RTI remote trouble indicator, PR-300 Reverse Polarity Module, an RS-485 bus for connection of up to seven RAX-LCD-LITE, RAM-3318-LCDs, SRM-312s and RA-1000 Series annunciators.</li> <li>Auxiliary power is available in the form of 24V FWR unfiltered and unsupervised, 24VDC filtered and regulated, and resettable auxiliary power supply</li> </ul>

#### **FX-400 System Components**

Model	Description
RAM-3318-LCD	provides remote annunciation through a 4 line by 20 character LCD display.
PR-300	Polarity Reversal/City Tie Module provides outputs for city box and polarity reversal applications
PCS-100	Power Supply Interface Board use for powering SLE-LTEV or SLE-LTEA Universal Wireless Alarm Communicator
SRM-312W	Smart Relay Module with White Enclosure. Can support up to 12 relays.
SRM-312R	Smart Relay Module with Red
RAM-1032TZDS	32 point Remote Annunciator with 32 Trouble LED
RAX-1048TZDS	Programmable LED Annunciator Module provides 48 programmable alarm/supervisory bi- colored LEDs and 48 trouble LEDs.







MGD-32	Crankia Annunaistar
MGD-32	Graphic Annunciator
RAX-LCD-Lite	provides a secondary FX-3500, FX-3318 or FX-3500RCU Fire Alarm Panel display at a remote location.
AGD-048	Graphic Annunciator Adder Driver Board.
RTI-1	Common Remote Trouble Indicator, Buzzer and LED.
BB-1001D	White Enclosure for one annunciator
BB-1001DR	Red Enclosure for one annunciator
BB-1001DS	Enclosure for one annunciator with stainless steel door
BB-1001WPA	White enclosure for one annunciator rated for outdoor environment, wet location.
BB-1001WPRA	Red enclosure for one annunciator rated for outdoor environment, wet location.
BB-1002D	White Enclosure for two annunciators.
BB-1002DR	Red Enclosure for two annunciators.
BB-1002DS	Enclosure for two annunciators with stainless steel door.
BB-1002DS	White enclosure for two annunciators rated for outdoor environment, wet location.
BB-1002WPA	White enclosure for two annunciators rated for outdoor environment, wet location.
BB-1002WPRA	Red enclosure for two annunciators rated for outdoor environment, wet location.





BB-1003D	White Enclosure for three annunciators
BB-1003D	Red Enclosure for three annunciators
BB-1003DR	Red Enclosure for three annunciators
BB-1003DS	Enclosure for three annunciators with stainless steel door
MP-300	2K0 ohmo white
WIF-300	3K9 ohms, white

#### FX-400 MGC Addressable Control Modules:

Model	Description
MIX-4040	Dual Input Module
MIX-4041	Mini Dual Input Module
MIX-4042	Conventional Zone Module
MIX-4045	Dual Relay Module
MIX-4046	Supervised Output Module
MIX-4070	Short Circuit Isolator Module

#### FX-400 MGC Addressable Bases:

Model Description





MIX-4001	6" Diameter Base
MIX-4002	4" Diameter Base

### FX-400 MGC Addressable Manual Stations:

Model	Description
MS-401MPU	Intelligent Single Stage Manual Station MP
MS-407MPU	Intelligent Single Stage Manual Station MP with additional N.C. switch
MS-710MPU	Intelligent Key-Resettable Single Stage Dual Action Manual Station MP (US)
MPS-810MPU	Intelligent Single Stage Dual Action Manual Station MP (US)

#### FX-400 MGC Conventional Manual Stations:

Model	Description
MPS-810U	Intelligent Single Stage Manual Station MP

### FX-400 Compatible with the following two-wire initiating devices:

Model	Description
Detection Systems Inc(Bosch)	DS250
Detection Systems Inc(Bosch)	DS250TH
Detection Systems Inc(Bosch)	DS282
Detection Systems Inc(Bosch)	DS282TH





Mircom	MIR-525U
Mircom	MIR-525TU
Mircom	SD-100-2WP
Mircom	SD-100-2WT
1100	System Sensor models (detector/base)
1151	System Sensor models (detector/base)
1400	System Sensor models (detector/base)
1451	System Sensor models (detector/base)
1451DH	System Sensor models (detector/base)
2100	System Sensor models (detector/base)
2100T	System Sensor models (detector/base)
2151	System Sensor models (detector/base)
2400	System Sensor models (detector/base)
2400HT	System Sensor models (detector/base)
2451	System Sensor models (detector/base)
2451TH	System Sensor models (detector/base)
5451	System Sensor models (detector/base)
2W-B	System Sensor models (detector/base)
2WT-B	System Sensor models (detector/base)
2WTA-B	System Sensor models (detector/base)

### FX-400 compatible with GE Security (ESL) models (detector/base)

Model	Description
429C	GE Security (ESL) models (detector/base)
429CT	GE Security (ESL) models (detector/base)
711U	GE Security (ESL) models (detector/base)
711UT	GE Security (ESL) models (detector/base)





713-5U	GE Security (ESL) models (detector/base)
713-6U	GE Security (ESL) models (detector/base)
721U	GE Security (ESL) models (detector/base)
721UT	GE Security (ESL) models (detector/base)
722U	GE Security (ESL) models (detector/base)
429CRT	GE Security (ESL) models (detector/base)
429CST	GE Security (ESL) models (detector/base)
731U	GE Security (ESL) models (detector/base)
732U	GE Security (ESL) models (detector/base)

### FX-400 compatible with ULI Horn/Strobes

Model	Description
Mircom	FH-400-RR, FH-400-WW, FHS-400-WW, FHS-400-RR, FHS-400C-RR, FHS-400C-WW, FS-400-RR, FS-400-WW, FS-400C-RR, FS-400C-WW
SpectrAlert	P2R
Wheelock	NS-24 MCW-FW
Gentex	GHSLF15R



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#### FX-400 compatible with System Sensor L Series Horn/Strobes

Model	Description
P2RL	HORN STROBE 2W RED WALL





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P2WL	HORN STROBE 2W WHITE WALL
P2GRL	HORN STROBE 2W RED WALL, COMPACT
P2GWL	HORN STROBE 2W WHITE WALL, COMPACT
P2RL-P	HORN STROBE 2W RED WALL, PLAIN
P2WL-P	HORN STROBE 2W WHITE WALL, PLAIN
P2RL-SP	HORN STROBE 2W RED WALL, FUEGO
P2WL-SP	HORN STROBE 2W WHITE WALL, FUEGO
PC2RL	HORN STROBE 2W RED CEILING
PC2WL	HORN STROBE 2W WHITE CEILING
SRL	STROBE RED WALL
SWL	STROBE WHITE WALL
SGRL	STROBE RED WALL, COMPACT
SGWL	STROBE WHITE WALL, COMPACT
SRL-P	STROBE RED WALL, PLAIN
SWL-P	STROBE WHITE WALL, PLAIN
SRL-SP	STROBE RED WALL, FUEGO
SWL-CLR-ALERT	STROBE WHITE WALL, CLEAR LENS
P2RL	HORN STROBE 2W RED WALL
SWL-ALERT	STROBE WHITE WALL, AMBER LENS
SCRL	STROBE RED CEILING
SCWL	STROBE WHITE CEILING
SCWL-CLR-ALERT	STROBE WHITE CEILING CLEAR LENSALERT
HWL	HORN WHITE WALL
HRL	HORN RED WALL
HGRL	HORN RED WALL, COMPACT
HGWL	HORN WHITE WALL, COMPACT
CHWL	CHIME WHITE WALL



CHRL	CHIME RED WALL
CHSRL	CHIME STROBE RED WALL
CHSWL	CHIME STROBE WHITE WALL
CHSCRL	CHIME STROBE RED CEILING
CHSCWL	CHIME STROBE WHITE CEILING
SPSRL	SPEAKER STROBE RED WALL
SPSWL	SPEAKER STROBE WHITE WALL
SPSRL-P	SPEAKER STROBE RED WALL, PLAIN
SPSWL-P	SPEAKER STROBE WHITE WALL, PLAIN
SPSRL-SP	SPEAKER STROBE RED WALL, FUEGO
SPSWL-ALERT	SPEAKER STROBE WHITE WALL, ALERT
SPSWL-CLR-ALERT	SPEAKER STROBE WHITE WALL, CLEARLENS ALERT

### <u>Electrical Signaling</u> → Signaling Systems (Fire) → Local Protective Signaling → Local Protective Signaling → Signaling Systems (Fire) → Central Station Signaling Systems <u>Electrical Signaling</u> → Signaling Systems (Fire) → Remote Station Signaling Systems $\rightarrow$

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#### Model 401 Fire Alarm, Control Panel

Model	Description
FX-401	<ul> <li>Main Board, Power Supply and Backbox.</li> <li>Multi-zone fire alarm control panel</li> <li>MAM-3500 Main Display with 4 x 20 LCD display.</li> <li>Class A (DCLA), Class X (DCLC), or Class B (DCLB) analog loop(s).</li> <li>Four Power Limited Class B, Class A NAC circuits (max 1.5 Amps each - 6.0 Amps total).</li> <li>Dedicated common alarm, supervisory, trouble, and auxiliary alarm relays.</li> </ul>







Additional RAX-1048TZDS Display Adder Module can be added to provide 48 annunciation points per Adder. Two modules required for 96 annunciation points.
Additional outputs include connections for a RTI remote trouble indicator, PR-300 Reverse Polarity Module, an RS-485 bus for connection of up to seven RAX-LCD-LITE, RAM-3500-LCDs, SRM-312s and RA-1000 Series annunciators.
Auxiliary power is available in the form of 24V FWR unfiltered and unsupervised, 24VDC filtered and regulated, and resettable auxiliary power supply

#### The FX-401 Components:

Model	Description
MAM-3500	Main Display
DOX-1024DS	White enclosure door
DOX-1024DSR	Red enclosure door
ALC-480	480 Point Dual Loop Adder
RAM-3500-LCD	Remote Annunciator with 4-line LCD Display.
PR-300	Polarity Reversal and City Tie Module.
PCS-100	Power Supply Interface Board use for powering 3G4010 or 3G4010CF Universal Wireless Alarm Communicator.
SRM-312W	Smart Relay Module with White Enclosure. Can support up to 12 relays.
SRM-312R	Smart Relay Module with Red Enclosure. Can support up to 12 relays.
RAM-1032TZDS	32 point Remote Annunciator with 32 Trouble LEDs.
RAX-1048TZDS	48 Point adder annunciator display with 48 Trouble LEDs.
MGD-32	Graphic Annunciator.
RAX-LCD-LITE	Remote Annunciator with 4-line LCD Display.
AGD-048	Graphic Annunciator Adder Driver Board.







RTI-1	Common Remote Trouble Indicator, Buzzer and LED.
BB-1001D	White Enclosure for one annunciator.
BB-1001DR	Red Enclosure for one annunciator.
BB-1001DS	Enclosure for one annunciator with stainless steel door.
BB-1001WPA	White enclosure for one annunciator rated for outdoor environment, wet location.
BB-1001WPRA	Red enclosure for one annunciator rated for outdoor environment, wet location.
BB-1002D	White Enclosure for two annunciators.
BB-1002DR	Red Enclosure for two annunciators.
BB-1002DS	Enclosure for two annunciators with stainless steel door.
BB-1002WPA	White enclosure for two annunciators rated for outdoor environment, wet location.
BB-1002WPRA	Red enclosure for two annunciators rated for outdoor environment, wet location.
BB-1003D	White Enclosure for three annunciators.
BB-1003DR	Red Enclosure for three annunciators.
BB-1003DS	Enclosure for three annunciators with stainless steel door.
BB-1008D	White Enclosure for eight annunciators.
BB-1008DR	Red Enclosure for eight annunciators.
BB-1012D	White Enclosure for twelve annunciators.
BB-1012DR	Red Enclosure for twelve annunciators.
MP-300	End of line resistor plate. 3K9.

FX-401 MGC Addressable Control Modules:





Model	Description
MIX-4040	Dual Input Module
MIX-4041	Mini Dual Input Module
MIX-4042	Conventional Zone Module
MIX-4045	Dual Relay Module
MIX-4046	Supervised Output Module
MIX-4070	Short Circuit Isolator Module

#### FX-401 MGC Addressable Bases:

Model	Description
MIX-4001	6" Diameter Base
MIX-4002	4" Diameter Base

#### FX-401 MGC Addressable Manual Stations:

Model	Description
MS-401MP	Intelligent Single Stage Manual Station MP
MS-401MPU	Intelligent Single Stage Manual Station MP (US)
MS-402MP	Intelligent Two Stage Manual Station MP
MS-407MP	Intelligent Single Stage Manual Station MP with additional N.C. switch





MS-407MPU	Intelligent Single Stage Manual Station MP with additional N.C. switch (US)
MS-702MP	Intelligent Key-Resettable Two Stage Manual Station MP
MS-710MP	Intelligent Key-Resettable Single Stage Dual Action Manual Station MP
MS-710MPU	Intelligent Key-Resettable Single Stage Dual Action Manual Station MP (US)
MPS-810MPU	Intelligent Single Stage Dual Action Manual Station MP (US)

#### FX-401 MGC Conventional Manual Stations:

Model	Description
MPS-810U	Intelligent Single Stage Manual Station MP

#### FX-401 Compatible with the following two-wire initiating devices:

Model	Description
Detection Systems Inc(Bosch)	DS250
Detection Systems Inc(Bosch)	DS250TH
Detection Systems Inc(Bosch)	DS282
Detection Systems Inc(Bosch)	DS282TH
Mircom	MIR-525U
Mircom	MIR-525TU
Mircom	SD-100-2WP
Mircom	SD-100-2WT
1100	System Sensor models (detector/base)





1151	System Sensor models (detector/base)
1400	System Sensor models (detector/base)
1451	System Sensor models (detector/base)
1451DH	System Sensor models (detector/base)
2100	System Sensor models (detector/base)
2100T	System Sensor models (detector/base)
2151	System Sensor models (detector/base)
2400	System Sensor models (detector/base)
2400HT	System Sensor models (detector/base)
2451	System Sensor models (detector/base)
2451TH	System Sensor models (detector/base)
5451	System Sensor models (detector/base)
2W-B	System Sensor models (detector/base)
2WT-B	System Sensor models (detector/base)
2WTA-B	System Sensor models (detector/base)

### FX-401 compatible with GE Security (ESL) models

Model	Description
429C	GE Security (ESL) models (detector/base)
429CT	GE Security (ESL) models (detector/base)
711U	GE Security (ESL) models (detector/base)
711UT	GE Security (ESL) models (detector/base)
713-5U	GE Security (ESL) models (detector/base)
713-6U	GE Security (ESL) models (detector/base)
721U	GE Security (ESL) models (detector/base)



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721UT	GE Security (ESL) models (detector/base)
722U	GE Security (ESL) models (detector/base)
429CRT	GE Security (ESL) models (detector/base)
429CST	GE Security (ESL) models (detector/base)
731U	GE Security (ESL) models (detector/base)
732U	GE Security (ESL) models (detector/base)

#### FX-401 compatible with ULI Horn/Strobes

Model	Description
Mircom	FH-400-RR, FH-400-WW, FHS-400-WW, FHS-400-RR, FHS-400C-RR, FHS-400C-WW, FS-400-RR, FS-400-WW, FS-400C-RR, FS-400C-WW
SpectrAlert	P2R
Wheelock	NS-24 MCW-FW
Gentex	GHSLF15R

### FX-401 compatible with System Sensor L Series Horn/Strobes

Model	Description
P2RL	HORN STROBE 2W RED WALL
P2WL	HORN STROBE 2W WHITE WALL
P2GRL	HORN STROBE 2W RED WALL, COMPACT
P2GWL	HORN STROBE 2W WHITE WALL, COMPACT







P2RL-P	HORN STROBE 2W RED WALL, PLAIN
P2WL-P	HORN STROBE 2W WHITE WALL, PLAIN
P2RL-SP	HORN STROBE 2W RED WALL, FUEGO
P2WL-SP	HORN STROBE 2W WHITE WALL, FUEGO
PC2RL	HORN STROBE 2W RED CEILING
PC2WL	HORN STROBE 2W WHITE CEILING
SRL	STROBE RED WALL
SWL	STROBE WHITE WALL
SGRL	STROBE RED WALL, COMPACT
SGWL	STROBE WHITE WALL, COMPACT
SRL-P	STROBE RED WALL, PLAIN
SWL-P	STROBE WHITE WALL, PLAIN
SRL-SP	STROBE RED WALL, FUEGO
SWL-CLR-ALERT	STROBE WHITE WALL, CLEAR LENS
P2RL	HORN STROBE 2W RED WALL
SWL-ALERT	STROBE WHITE WALL, AMBER LENS
SCRL	STROBE RED CEILING
SCWL	STROBE WHITE CEILING
SCWL-CLR-ALERT	STROBE WHITE CEILING CLEAR LENSALERT
HWL	HORN WHITE WALL
HRL	HORN RED WALL
HGRL	HORN RED WALL, COMPACT
HGWL	HORN WHITE WALL, COMPACT
CHWL	CHIME WHITE WALL
CHRL	CHIME RED WALL
CHSRL	CHIME STROBE RED WALL
CHSWL	CHIME STROBE WHITE WALL
CHSCRL	CHIME STROBE RED CEILING





CHSCWL	CHIME STROBE WHITE CEILING
SPSRL	SPEAKER STROBE RED WALL
SPSWL	SPEAKER STROBE WHITE WALL
SPSRL-P	SPEAKER STROBE RED WALL, PLAIN
SPSWL-P	SPEAKER STROBE WHITE WALL, PLAIN
SPSRL-SP	SPEAKER STROBE RED WALL, FUEGO
SPSWL-ALERT	SPEAKER STROBE WHITE WALL, ALERT
SPSWL-CLR-ALERT	SPEAKER STROBE WHITE WALL, CLEARLENS ALERT

