

# FireWatcher

by  Maple Armor



## SAFER THAN EVER

Fire Solutions





ALARM

SUPERVISORY

TROUBLE

OTHER S...

- POWER ON
- SIGNAL SILENCE
- GROUND FAULT
- BY-PASS
- CPU FAULT

Archive Buzzer Silenced

Total:5373

1	12-28-2018 03:17:54, AMI_Conf.Mismatch, Panel#2-AMI
2	12-28-2018 03:17:00, Equation_Missing, Panel#2-AMI
3	12-28-2018 03:17:00, ROU_Output, Trouble Relay
4	12-28-2018 03:17:00, Equation_Missing, AMI
5	12-28-2018 03:16:55, Unit_Illegal, XNU#2
6	12-28-2018 03:16:54, ControlPanel_Reset
7	12-28-2018 03:16:13, ControlPanel_Program
8	12-28-2018 03:15:40, AMI_Conf.Mismatch, Panel#2-AMI

Menu First Buzzer ReSound PgUp PgDn Exit

Maple Armor

- F1
- F2
- F3
- F4
- F5
- F6

EN CAS DE FEU

THE COVER SOULEVER



MAPLE ARMOR, SAFER THAN EVER

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Founded in Montreal, Quebec in 2011, Maple Armor designs and manufactures addressable fire alarm systems. We're excited to provide high quality and cost-effective options, with the reliability of Canadian engineering.

In 2017, we opened our brand new 80,000 square foot facility in Brossard, Quebec, on Montreal's south shore. It houses our Research & Development team and quality control labs for multiple product lines.

**With a warm welcome from Investissement Quebec, the company gravitated towards vibrant and multilingual Montreal for its skilled workforce.**

With an expected six production lines coming to our facility in 2019, we'll be able to ensure the highest quality products while remaining competitive in the global marketplace.

“ We take pride in knowing our product is saving lives somewhere in the world ”



# Maple Armor



We work closely with our clients to develop our products because we know how important it is to meet their individual needs. Our industry leading Research & Development teams are focused on developing products that are built to innovate and last.

We understand that the benefits of our venture go beyond job creation, capital investment, and new exports. It is an opportunity for commercial clients around the world to benefit from market leading design, performance, and quality, produced in accordance with the latest UL/ULC standards.

We're very proud that the work we do protects lives every day, and that passion for our industry is what drives us to maintain the highest level of quality and reliability. Our products go through rigorous testing and quality checks. This means we can ensure our products are reliable.







We have developed a complete line of high quality and reliable fire alarm products. Our team is always available to assist you with your upcoming projects.







## FIREWATCHER CONTROL PANELS

FireWatcher FW106 is an addressable Fire Alarm Control Panel designed for small to medium-scale facilities. It is ideally suited for both new and retrofit commercial, institutional, and industrial fire detection and notification applications.

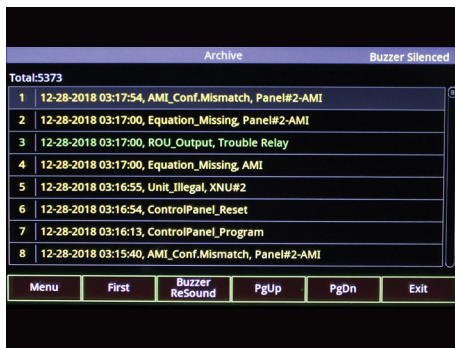
FireWatcher FW106 is a state-of-the-art addressable fire control system that meets the requirements of UL864 10th edition and ULC S527. It can support 4 addressable Loop Signaling Line Circuits and 1,008 addressable devices/points, with 4 Notification Appliance Circuits and 5 form C dry relay contacts.

The FW106 has a 7" LCD display with 800 X 480 resolution, 6 auxiliary function keys and 9 LED indicators making it a highly intuitive fire alarm user interface. It can also be connected to 4 remote annunciators via an external network to form a fire emergency detection and notification network system.



FireWatcher 106

# CONTROL PANELS



The LCD screen can display up to 8 events simultaneously. Users can browse more events by pressing the up/down buttons until the first or last event message is reached.

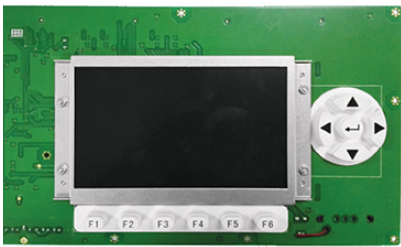
It is ideally suited for both new and retrofit commercial, institutional, residential and industrial fire detection and notification applications.

- PAS (Positive Alarm Sequence)
- Two-Stage Alarm (ULC)
- Alarm Verification
- Silence Inhibitor
- Trouble/Supervisory Resound
- Boolean logic programming with device virtual addressing
- Simultaneous display of multiple active events on large graphic LCD
- Fully programmable from the front panel or via laptop

General	Digital signal processor-based design, fully configurable from front panel with password protection
Environmental	Operating temperature - 32 - 120°F (0-49°C) Relative humidity - 0% to 93% RH To be installed in normal dry indoor environment only
Primary Supply	110 - 120 VAC 50Hz/60Hz (3A), or 220 - 240 VAC 50Hz/60H (1.5A)
Secondary Power Supply	Charging capacity: 42AH
Power Outputs	Internal power supply for - AMI User interface / display; - ALUs Addressable Loop Circuits; - NOUs Notification Appliance Circuits; - XNUs External Network Circuits; - ROUs Relay Output Circuit; One auxiliary power supply - Resettable Power Output / Non-Resettable Power Output (configurable); - Power limited; - 24 VDC; 1.2 amps - Output current: 500 mA in normal standby, 1200 mA in alarm.
Relay Outputs	One programmable relay 4 non-programmable status relays Status: Alarm, Supervisory, Trouble, Monitor Form C contact Contact rating: 2A 30 VDC.
Remote Com Circuits	Supports 4 annunciators Supervised wiring
Notification Appliance Circuits	Class A/ Class B circuit      Bell code: ANSI (3-3-3 temporal) 4 circuits per panel 2 Amp per NAC Supervised wiring Synchronized Outputs
Addressable Loop Circuits	Maximum Current (Short): 0.4A Class A/ Class B circuit 252 addresses: detectors and modules max Output voltage range: 20.4V - 28V Normal standby current: 100mA / Alarm current: 220mA Up to 4 loops per panel



## COMPONENTS



### AMI - Advanced Machine Interface

The AMI integrates a CPU board, a 7" LCD, 4 signal status LEDs, 5 system status LEDs, 5 navigation and enter buttons, 6 functionality buttons, and a buzzer. It meets the UL864 10th Edition Listed standard and the ULC-S527 3rd Edition Listed standard.

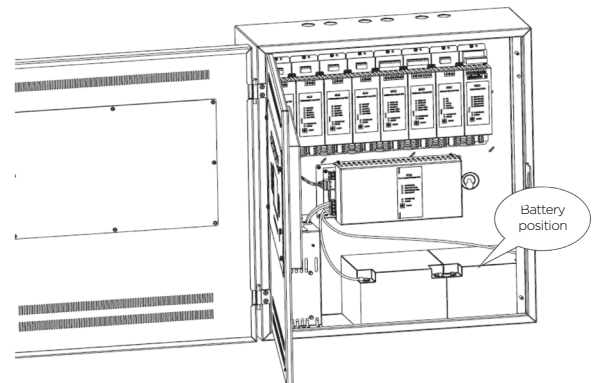
Nominal Voltage	24 VDC
Voltage Range	20.4 to 26.4 VDC
Standby Current	143 mA
Alarm Current	146 mA
Operating Temperature	32°F to 120°F (0°C to 49°C).
Operating Humidity	0% to 93% RH
Dimension	482mm (L) x 266mm (W) x 43.8mm (H)



### PCU - Power Supply & Charger Unit

The PCU provides power supply output to the system (AMI, ALU, NOU, ROU, XNU) with regulated 24 VDC. The FW397 uses a microprocessor-controlled transfer circuit to switch power supply for the system to stand-by batteries when AC power is off.

AC Input Rating	24 VDC, 12 A max.
Battery Rating	2 x 12 VDC lead-acid battery in series
Battery Charge Voltage	27.8 VDC
Battery Charge Current	3A
Output Electrical Rating	24 VDC, 12 A max.
Standby Current	65mA
Alarm Current	65mA
Operating Temperature	32°F to 120°F (0°C to 49°C)
Operating Humidity	0% to 93% RH
Dimension	293mm (L) x 120.5mm (W) x 63.5mm (H)
Power Outputs	One auxiliary power supply: – Resettable power output/non resettable power output (configurable); – Power limited; – 24 VDC; 1.2 amps
Weight	60oz (1.7kg)





## ROU - Relay Output Unit

One ROU card can support five dry contacts relays: Alarm Relay, Supervisory Relay, Trouble Relay, Other Signal Relay, and Programmable Relay. The Relay contacts are in the C Form Style. The address is set by the rotary switch on the board. Valid address is 1. It meets the UL864 10th Edition Listed standard and the ULC-S527 3rd Edition Listed standard.

Nominal Voltage	24 VDC
Voltage Range	20.4 to 26.4 VDC
Standby Current	35 mA
Alarm Current	35 mA
Operating Temperature	32°F to 120°F (0°C to 49°C)
Operating Humidity	0% to 93% RH
Dimension	215mm (L) x 55mm (W) x 50.3mm (H)



## NOU - Notification Output Unit

One NOU can support two independent notification appliance circuits with synchronization. The circuit topology supports Class A or Class B wiring. The maximum current is 2A per NAC, for a maximum of 4A total per NOU.

Nominal Voltage	24 VDC
Voltage Range	20.4 to 26.4 VDC
Standby Current	36 mA
Alarm Current	54 mA
Operating Temperature	32°F to 120°F (0°C to 49°C)
Operating Humidity	0% to 93% RH
Dimension	215mm (L) x 55mm (W) x 50.3mm (H)



## XNU

The XNU allows the FW106 Control Panel to communicate with up to four FW121 or FW122 annunciators. The circuit topology supports Class B wiring. The address is set by the rotary switch on the board.

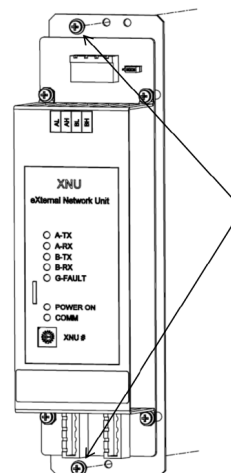
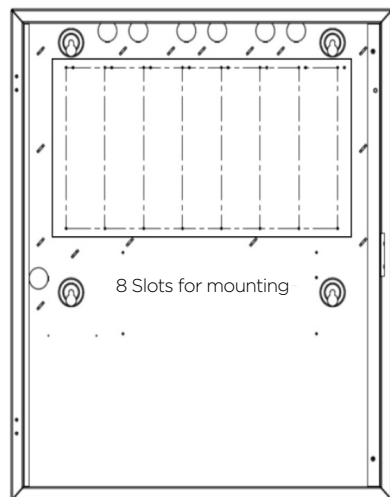
Nominal Voltage	24 VDC
Voltage Range	20.4 to 26.4 VDC
Standby Current	27 mA
Alarm Current	27 mA
Operating Temperature	32°F to 120°F (0°C to 49°C)
Operating Humidity	0% to 93% RH
Dimension	215mm (L) x 55mm (W) x 50.3mm (H)
Weight	10.2oz (289g)



## ALU - Addressable Loop Unit

One ALU can support one addressable loop circuit, which supports up to 252 points of addressable devices. It can initialize and operate all devices residing on the loop and it communicates all relevant devices and event information, such as alarms and troubles, to the System Central Processing Unit. (CPU).

Nominal Voltage	24 VDC
Voltage Range	20.4 to 26.4 VDC
Standby Current	27 mA
Alarm Current	27 mA
Operating Temperature	32°F to 100°F (0°C to 38°C)
Dimension	215mm (L) x 55mm (W) x 50.3mm (H)
Operating Humidity	0% to 93% RH



#4-40 screws (2)



## PTU - Power Supply Transformer Unit

The PTU contains an internal transformer which converts 110-120VAC or 220-240VAC input to 24VAC output. It meets the UL864 10th Edition Listed standard and the ULC-S527 3rd Edition Listed standard.

Input Electrical Rating	110 - 120 VAC, 50Hz/60Hz, 3.86A 220-240 VAC, 50Hz/60Hz, 1.96A
Output Electrical Rating	24 VAC, 12 A max
Operating Temperature	32°F to 120°F (0°C to 49°C)
Operating Humidity	0% to 93% RH
Dimension	227mm (L) x 140mm (W) x 106mm (H)

## REMOTE LCD ANNUNCIATOR

The FW121/FW122 FireWatcher is an intelligent remote annunciator designed to be used with the FW106 FireWatcher control panel.

The FW121/FW122 is connected to the FW106 via the external network to form a fire emergency detection and notification network system. Up to four FW121/FW122 can be addressed by the communication circuit. FW121/FW122 can be powered from the panel or a 24 VDC auxiliary power supply.

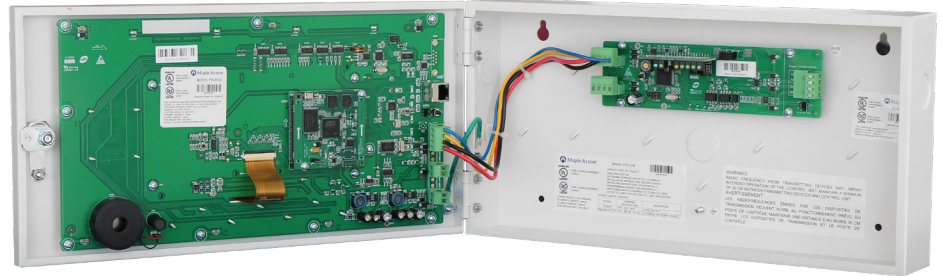
- Large 7" display
- Annunciates system-wide events
- Allows system wide programming
- Intuitive UI
- Displays multiple active events
- FW121-Lockable door
- FW122-Compact design / Password protected



FW122 Compact Annunciator



# ANNUNCIATOR



The LCD can display up to 8 events simultaneously. Users can browse more events by pressing the up/down buttons until the first or last event message is reached. Events are displayed according to the following rules:

1. Events priority:
  1. Alarm
  2. Supervisory
  3. Trouble
  4. Other Signal
  5. Output

2. Within events of the same priority, all events are displayed in order of occurrence, the latest being displayed first.

However, the sequence of alarm events is configurable.

## Features:

- 6 auxiliary function keys
- 7" color LCD and a resolution of 800 X 480
- 4 annunciators supported in the system
- Standby current: 96mA, Alarm current: 160mA
- Operating temperature - 32 - 120F (0C - 49C)
- Relative humidity - 0% to 93% RH
- To be installed in normal indoor environment only
- 9 LED indicators making it the most intuitive fire-alarm user interface
- Available with lockable door(FW121) or compact design(FW122)

XNU address is set by the rotary switch on the board. The FW106 control panel communicates with up to four FW121/FW122 annunciators. Circuit topology support is Class B.

The AMI is the main control unit of FW121 and FW122 annunciators, which integrates the following components:

- Graphic LCD display
- CPU board
- 4 Signal status LEDs
- 5 system status LEDs
- 4 navigation buttons
- 1 enter button
- 6 functionality buttons
- 1 buzzer



FW121 Lockable door annunciator

## PHOTO ELECTRIC SMOKE DETECTOR

The FW511 is an intelligent Smoke Detector used with the FW500/FW501 Detector Base, UL listed, according to UL 268 and ULC-S529, for Fire Protective Signaling Systems and indoor use. It features a slim design which combines visual appeal with a high standard of reliability. It responds quickly and dependably to a broad range of fires. The detector has a Microcontroller Unit (MCU) performing comprehensive self-diagnostic tests and result analysis. The FW511 is intelligent, addressable, and takes one address on the addressable loop (ALU) of the fire alarm control panel.

The FW511 addressable detector is not only cost-effective, but is designed by the industry's top engineers, and is one of the most reliable detectors on the market. Although effectiveness is our top priority, the FW511 has also been designed with style in mind. Its slim and pleasing design is easy to blend into any interior setting.



FW511 with FW501 wide base





# DETECTORS

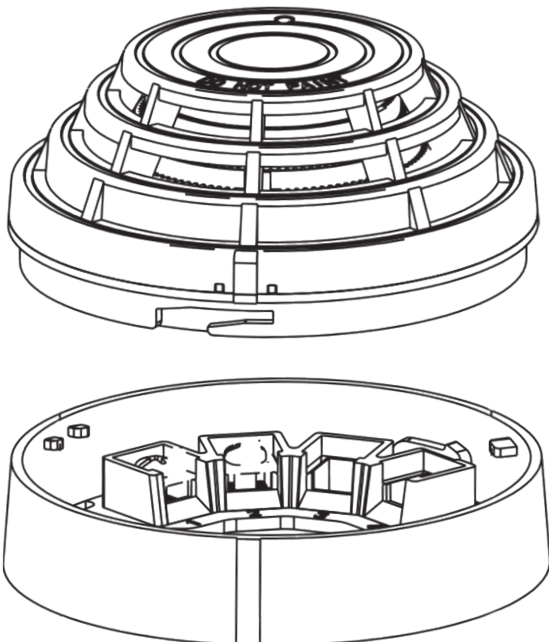


Our detectors are manufactured with state-of-the-art production technology. Precision, accuracy and rigorous quality control ensure our devices are reliable and built to last.

Intelligent smoke detectors are the front line of detection in your building or facility. It is vital that they perform accurately and reliably.

Mountable on walls or ceilings, our smoke detector's thin design allows it to blend into its surroundings.

Nominal Voltage	24 VDC
Voltage Range	15 to 28 VDC
Standby Current	0.14 mA
Alarm Current	1 mA
Smoke Sensitivity	1.6% / ft to 2.3% / ft
Operating Temperature	32°F to 100°F (0°C to 38°C)
Operating Humidity	0% to 93% RH
Diameter	4.13 in. (105mm)
Height (with base)	1.87 in. (47.5mm)
Weight (with base)	4.6 oz (132g)
Mounting	FW500/FW501 base
Mounting Orientation	Ceiling, wall



FW511

## HEAT DETECTOR

The FW521 is an intelligent Heat Detector UL listed device according to UL 521 and ULC-S530 for Fire Protective Signaling Systems for indoor use with both fixed-temperature alarm and rate-of-rise alarm characteristics. It features a slim design which combines visual appeal with a high standard of reliability. The detector has a Microcontroller Unit (MCU) performing comprehensive self-diagnostic tests, and result analysis. The FW521 is intelligent, addressable, and takes one address on the addressable loop (ALU) of the fire alarm control panel.

The FW521 heat detector is not only cost-effective, but is designed by the industry's top engineers, and is one of the most reliable detectors on the market. Although effectiveness is our top priority, the FW521 has also been designed with style in mind. Its slim and pleasing design is easy to blend into any interior setting.



FW521 with FW501 wide base



# DETECTORS



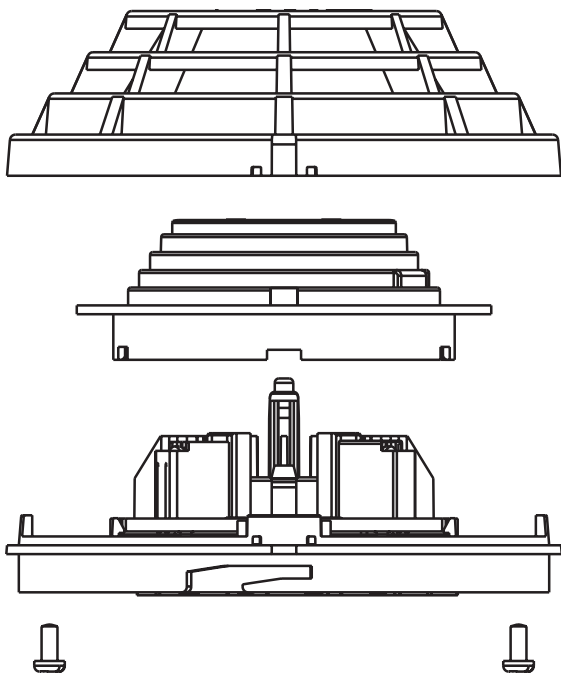
The FW521 addressable detector is not only designed by the industry's top engineers to be one of the most reliable and versatile on the market, is it also very cost-effective.

The FW521 has a rate-of-rise feature to quickly detect fast flaming fires, along with a fixed-temperature function that detects fire when the temperature reaches 135F.

Mountable on ceilings, its thin design allows it to blend into its surroundings.

## RATE-OF-RISE AND FIXED TEMPERATURE DETECTION

Nominal Voltage	24 VDC
Voltage Range	17.6 to 28 VDC
Standby Current	0.1 mA
Alarm Current	1 mA
Fixed Temperature Rating	135°F (57.5°C)
Rate-of-Rise Detection	15°F/min. (8.3°C/min.)
Installation Temperature	32°F to 100°F (0°C to 38°C)
Operating Humidity	0% to 93% RH
Diameter	4.13 in. (105mm)
Height (with base)	1.87 in. (47.5mm)
Weight (with base)	4.3 oz (121g)
Mounting	FW500/FW501 Base
Mounting Orientation	Ceiling only



FW521

## MANUAL STATION

The FW721 and FW721C addressable manual stations are UL listed devices, according to UL 38 and ULC-S528 for Fire Protective Signaling Systems, for indoor use. The FW721 and FW721C occupy a single address on the ALU and transmit alarm event status to the panel when activated. FW721C provides English and French languages.

The FW721 has a simple double action that prevents accidental alarm activation, while providing a simple operation during emergency situations. In place of a pull handle, the FW721 (FW721 - English, FW721C - English and French) is activated with a very easy to press push plate. We designed the FW721 to not only function well under pressure, but its sleek and minimalist appearance will give a more modern look to your building.

Manual stations are also available in conventional versions (FW751 - English, FW751C - English and French).

In case of fire, an alarm signal is generated by lifting the cover and pushing the plate. A red LED is visible on the station when the fire alarm signal is activated. A very simple to use switch key (included) can reset the station without the use of any tools.



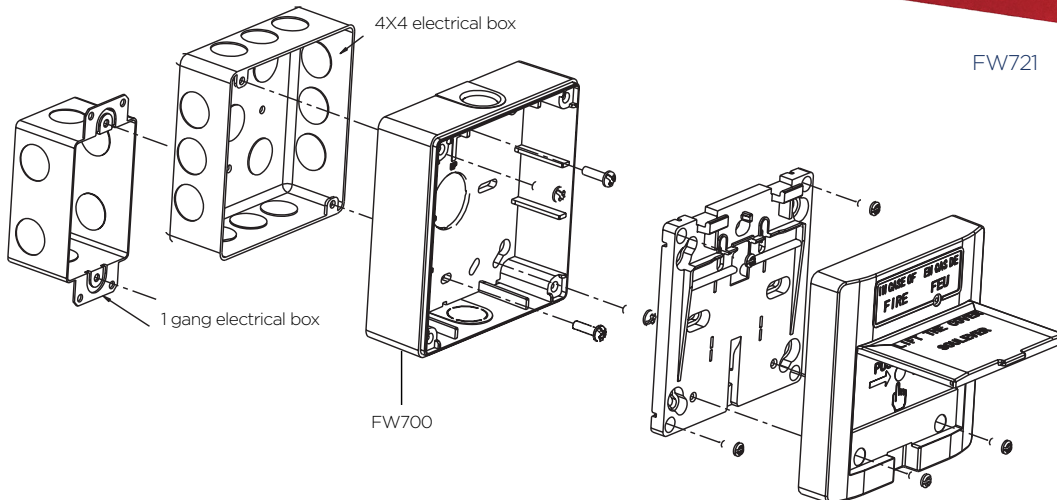
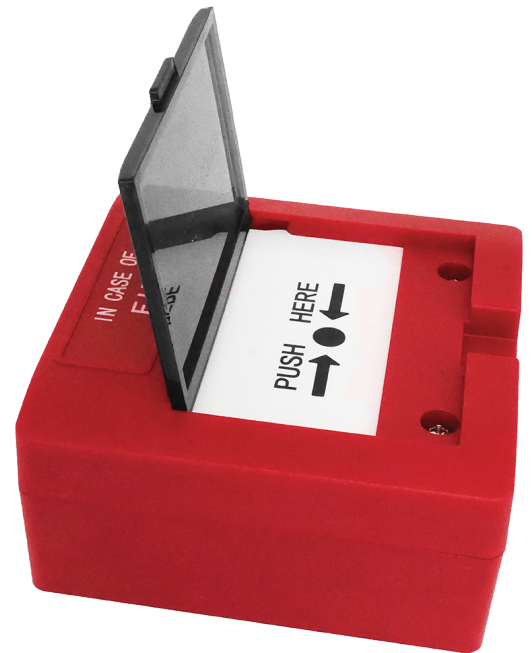
FW721C

# INITIATION



Nominal Voltage	24 VDC
Voltage Range	15 to 28 VDC
Standby Current	0.1 mA
Alarm Current	1 mA
Operating Temperature	32°F to 120°F (0°C to 49°C).
Operating Humidity	0% to 93% RH
Housing Color	Red with a window cover
Dimension (with base)	120mm (L) x 120mm (W) x 54mm (H)
Weight (with base)	8.4 oz (237g)
Mounting	FW700 Base
Wiring Gauge	12 to 18 AWG
Supplementary dry contact	30 VDC

- UL38 /ULC S528
- Addressable
- Double-Action
- LED Indicator when activated
- Key reset
- Simple push plate activation
- Yellow indicator line shows the push plate is activated
- Include a dry contact for supplementary function



## STROBE / HORN NOTIFICATION

The FW962 Horn Strobe, FW971 Horn and FW982 Strobe are a family of multi-candela visual and/or audible signal appliances with light sources generated from white Light Emitting Diodes (LEDs), listed according to UL 1971, UL 1638, UL 464, ULC-S525, and ULC-S526 for Fire Protective Signaling Systems for indoor use. The LED light source offers a superior performance, at low power consumption for long operating life. Six levels of light output are selectable. Figure 1, on page 21, shows relative light 360° light output dispersion from strobes mounted on walls.

The strobe appliances produce a flash rate of one flash per second over the Regulated Voltage Range. The temporal tone generated by the horn portion is designed as per ANSI and NFPA72 for standard emergency evacuation signaling requirements. The FireWatcher system supports full synchronization of multiple horns and/or strobes in a complete fire alarm system.



FW962 Horn Strobe



# NOTIFICATION



High-end LED technology means our devices not only last longer, but function at lower power consumption.

The FW106 NAC circuits support full synchronization of multiple horns and/or strobes in a complete fire alarm system.

- Multi-Candela LED Strobe: 20, 35, 50, 85, 105, 130 cd
- UL / ULC Listed
- One flash per second
- Designed for NFPA72 and ANSI evacuation signaling
- Built-in synchronization
- LED light source for low power consumption & long life
- FW951 Sync module is used for synchronizing Maple Armor devices on a conventional NAC circuit
- FW900 / FW901 / Base Required
- Available in red and white



FW982 Strobe



FW971 Horn

Operating Voltage	16 to 33 VDC/FWR						
	130 cd	105 cd	85 cd	50 cd	35 cd	20 cd	
RMS Operating Current @ 16 VDC (mA)	FW962R FW962W	164	126	85	55	47	30
	FW982R FW982W	156	119	80	49	43	88
RMS Operating Current @ 16 Vfwr (mA)	FW962R FW962W	187	158	102	66	58	38
	FW982R FW982W	154	150	97	61	53	35
Sound Level (dBA)	Voltage	16V dc/fwr 2	24 V dc/fwr	33 V dc/fwr			
	UL Reverberant	77	81	85			
	ULC Anechoic	85	88	91			

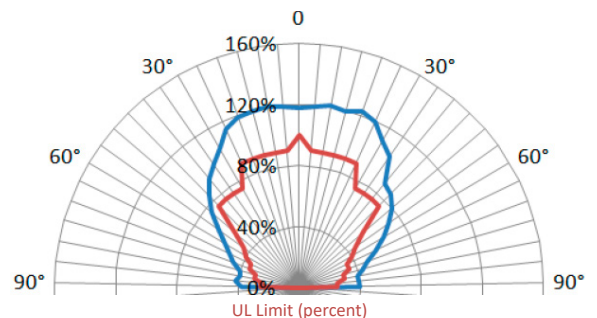
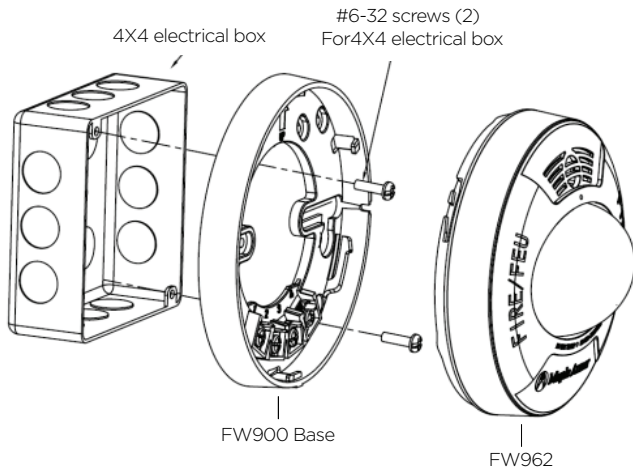


Figure 1. Horizontal and Vertical Light Outputs

## MODULES:

INPUT, I/O, RELAY, SYNC, SLC ISOLATION

Maple Armor has a full range of intelligent addressable modules designed to meet a wide variety of field applications. Our modules are designed with low power state-of-the-art microprocessor controlled technology, and communicate with the FW106 control panel via the module ALU.

Our intelligent addressable modules include the FW811 Input module for monitoring dry contact devices, FW831 Relay module for controlling fire doors, elevator recall, rolling shutters, and various other applications, FW821 I/O module for controlling fans and dampers with positive feedback input, and FW851 Isolation module for Class A / Style 7 fault isolation. All of our modules use a housing that is designed to mount in common electrical utility boxes as well as our FW800 surface mounting box.

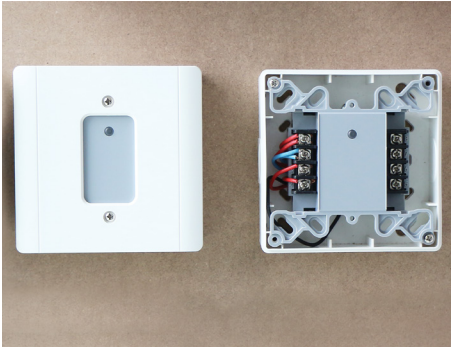


Module





# MODULES

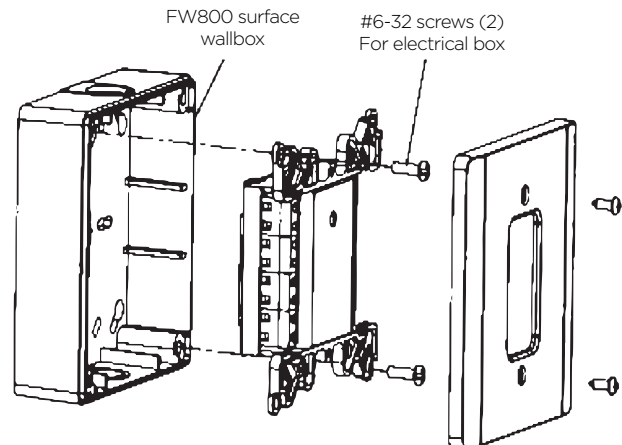
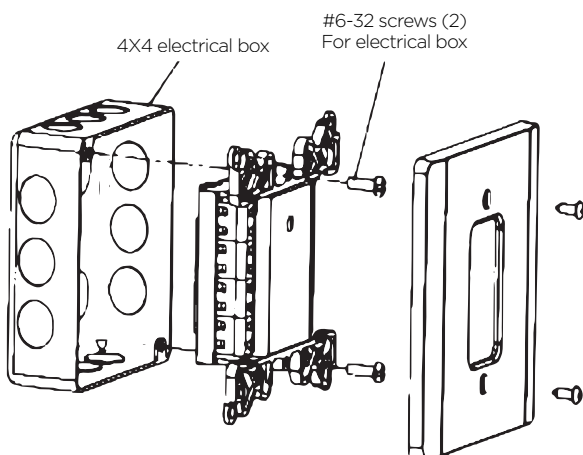


Nominal Voltage	24 VDC
Voltage Range	15 to 28 VDC
Standby Current	0.17mA
Alarm Current	0.79mA
Max. Line Impedance	25 Ohms
Max. Impedance for Grounding	6.6 K Ohms
Compatible EOLR	FW421 (10K Ohms)
Operating Temperature	32°F to 120°F (0°C to 49°C)
Operating Humidity	0% to 93% RH
Mounting	FW800 base
Dimension	120 mm (L) x 120 mm (W) x 45 mm (H)
Weight (with backbox)	8.7 oz (247 g)
Wiring Gauge	12 to 18 AWG

## Input Module - FW811

The FW811 input module monitors a single contact. The input circuit is monitored for open line and ground faults. It is an intelligent addressable module and takes one address on the addressable loop (ALU) of the fire alarm control panel. The FW811 is a UL listed device according to UL864 and ULC-S527 for Fire Protective Signaling Systems, for indoor use. The type of input contact is configurable.

- **Alarm Causing:** An alarm causing input will produce an alarm event. The device LED will indicate the alarm condition by red steady on. A return to normal condition will be ignored and the device LED indicator will remain latched in the red alarm condition until a reset command has been received.
- **Supervisory/Trouble/Monitor Causing:** By changing the FW811 input module functions from its attribute interface on FACP, it can be configured to be a supervisory, trouble, or monitor signal, which will produce a SUPERVISORY, TROUBLE, or MONITOR event. The device LED will indicate the event condition by red steady on.



## MODULES:

### INPUT, I/O, RELAY, SYNC, SLC ISOLATION

#### Isolator Module-FW851

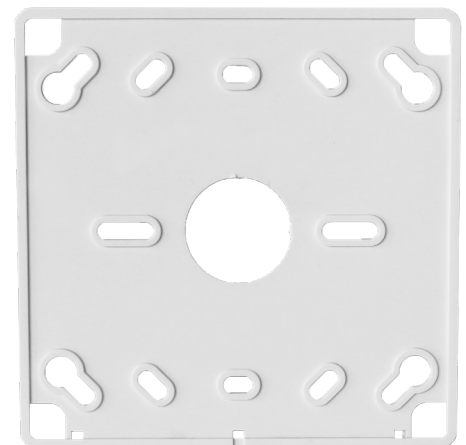
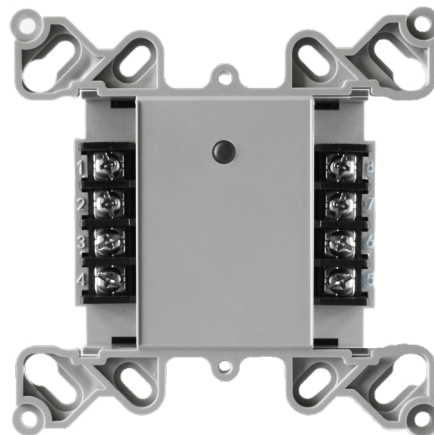
The FW851 isolator module isolates the short circuit point on the addressable loop (ALU). The internal relay will be triggered to cut down the line power where the short trouble is detected. The device LED will indicate the trouble condition by yellow steady on. A return to normal condition will cause the internal relay to normal position to restore the power line and the device LED indicator will return to the idle condition. The FW851 does not occupy an address on the Fire Alarm Control Panel's ALU. The FW851 is a UL listed product according to UL864 and ULC-S527 for Fire Protective Signaling Systems for indoor use.

Nominal Voltage	24 VDC
Voltage Range	15 to 28 VDC
Standby Current	1.6mA
Active Current	10.8mA
Operating Temperature	32°F to 120°F (0°C to 49°C)
Operating Humidity	0% to 93% RH
Dimension	120 mm (L) x 120 mm (W) x 45 mm (H)
Weight (with backbox)	8.8 oz (249 g)
Mounting	FW800 Base
Mounting Location	Indoor Wall
Wiring Gauge	12 to 18 AWG

#### Relay Module-FW831

The FW831 relay module provides two control relay outputs which will be activated simultaneously. When the outputs are activated, the device LED will indicate the event condition by red blinking. A return to normal condition will cause the event to disappear and the device LED indicator will return to the red idle condition. The FW831 is an intelligent addressable module and takes one address on the addressable loop (ALU) of the fire alarm control panel. It is a UL listed product according to UL864 and ULC-S527 for Fire Protective Signaling Systems for indoor use. Relays are form-C with all contacts accessible.

Nominal Voltage	24 VDC
Voltage Range	15 to 28 VDC
Standby Current	0.15mA
Active Current	0.26mA
Contact Rating	30 VDC 2A
Operating Temperature	32°F to 120°F (0°C to 49°C)
Operating Humidity	0% to 93% RH
Dimension	120 mm (L) x 120 mm (W) x 45 mm (H)
Weight (with backbox)	9.0 oz (255 g)
Mounting	FW800 Base
Wiring Gauge	12 to 18 AWG



# MODULES

## Input/Output Module-FW821

The Input-Output module FW821 is a UL listed device according to UL864 and ULC-S527 for Fire Protective Signaling Systems for indoor use. FW821 provides one 24 VDC output and in addition one feedback input. The input and output lines are monitored for open line and ground faults.

When the output is activated or the feedback is switched, the device LED will indicate the event condition by fast blinking.

A return to normal condition will cause the event to disappear and the device LED indicator will return to the red idle condition.

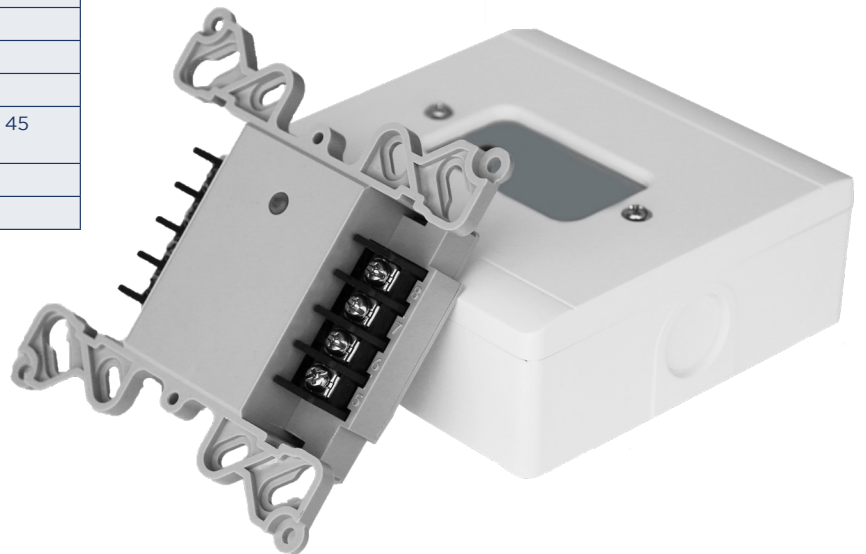
The FW821 is intelligent, addressable and takes one address on the addressable loop (ALU) of the fire alarm control panel.

SLC/DCL Nominal Voltage	24 VDC
SLC/DCL Voltage Range	15 to 28 VDC
Standby Current	0.15mA
Active Current (SLC/DCL)	0.26mA
External Input Power Supply	24 VDC (nominal)
External Input Power Supply	15.4 to 24.4 VDC (range)
Active Current (Output)	80 mA, 0.35pf
Output Range	15.0 to 24.0 VDC
(Special Application)	(Supplied by Model FW106 Auxiliary power output);
	20.0 to 25.9 VDC
	(Supplied by Listed 24 VDC Regulated power supply).
Max. Line Impedance (Input)	25 Ohms
Max. Line Impedance (Output)	1 Ohms
Max. Impedance for Grounding	6.6 K Ohms
Compatible EOLR	FW421 (10K Ohms)
Operating Temperature	32°F to 120°F (0°C to 49°C)
Operating Humidity	0% to 93% RH
Mounting	FW800 base
Dimension	120 mm (L) x 120 mm (W) x 45 mm (H)
Weight (with backbox)	9.2 oz (261 g)
Wiring Gauge	12 to 18 AWG

## Sync Module-FW951

The FW951 Sync Module is a device designed to provide synchronization for FW962/FW971/FW982 Horn and/or Strobe devices when these devices are used with a conventional non-synchronized 24 VDC NAC circuit. The FW951 has a built-in synchronization circuit to synchronize multiple FW962/FW971/FW982 devices in a complete fire alarm system. Each FW951 supports one notification circuit and allows Maple Armor devices to be easily used in retrofit applications.

Operating Voltage	Regulated 16 - 33 VDC/FWR
Maximum Load	3A on loop
Quiescent Current	0mA
Wire Size	12 to 18AWG
Operating Temperature	0° to 49°C (32° to 120°F)
Operating Humidity	0 to 93% RH
Compliance	UL 1971, UL 1638, UL 464
	ULC-S525, ULC-S526



## HANDHELD PROGRAMMER

The FW411 ReadWriter is part of the FireWatcher series product line. It is used to set address numbers on detectors and other field devices. The primary function of the service tool is to allow the system installers to preprogram devices address, read device address, and read device unique ID, Production Serial Number (PSN).

The keypad consists of 5 keys. In programming mode, the following functions are available:

“←” and “→”	Used to move the cursor in the address entry screen
“↑” and “↓”	Used to select different functions: F0 Power Off F1 Write address F2 Read address F3 Read PSN. F4 Power Voltage
“⏎”	Used to execute the operation



## CONFIGURATOR

Configurator is a PC-based configuration software that is used to configure FireWatcher series product line.

