

The FRM Series leverages LED technology to provide a flush, recessed, ceiling mount emergency lighting unit. Two adjustable, low-profile optical assemblies utilize high powered LEDs to provide bright, uniform illumination at various mounting heights along the path of egress. The architectural FRM Series includes both rectangular and oval trim plates to complement any design aesthetic.

FEATURES & BENEFITS

- Architectural flush recessed ceiling mount
- Includes rectangular and oval trim plates
- UL 924 Damp Location Listed
- Adjustable optics with a total range of 0-15° (1.7° each click) providing up to 55' spacing
- Optional Self-test/Self-diagnostics
- Meets City of New York Emergency Code requirements

SPECIFICATIONS

Illumination: Each optical assembly contain (2) 1W long-life, high-intensity LEDs (4W total)

Construction: Injection molded, 5VA flame retardant, impact resistant, thermoplastic trim plates cover a steel housing; hanger bars included

Input: 120-277VAC Primary, 60Hz

Battery: Maintenance-free 4.8V NiMH battery

Operating Temp: 10°C to 50°C (50°F to 122°F)

Run Time: UL Listed 90 minute emergency run time, 24 hour recharge time

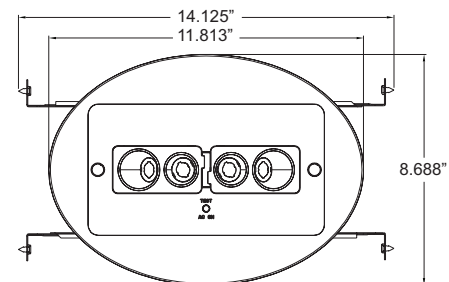
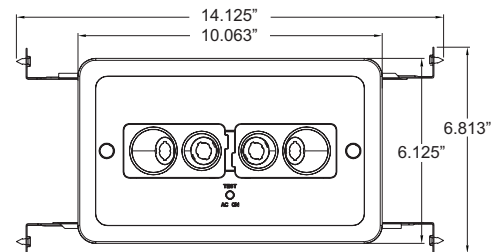
Mounting: Bar hangers included are compatible with drywall or drop ceiling mount installations

Finishes: Black or White

Certifications: UL 924 Listed for Damp Locations, meets or exceeds NFPA 101 Life Safety Code, NEC, OSHA requirements; California Energy Commission (CEC) Title 20 Compliant, Meets City of New York Emergency Code requirements

Warranty: Any component that fails due to a manufacturing defect is guaranteed for five years with a separate five year prorated warranty on the battery. The warranty does not cover physical damage, abuse or instances of uncontrollable natural forces. See the full Exitronix warranty document for detailed information and product registration instructions. (Terms and Conditions apply)

Model: _____ Date: _____
 Accessories: _____
 Job Name: _____ Type: _____



Overall depth: 2-7/8" Back box depth: 2-3/4"

ORDERING INFORMATION Example: FRM-WH-G2

Series	Finish	Options (Factory Installed)	Accessories ¹ (Field Installed)
FRM	BL = Black WH = White	G2 = Self-test/Self-diagnostics	WG-S = Wire Guard (Back Mount) XG-1 = Poly Guard (Back Mount)
Notes			
¹ Order as separate line item			

CONSTRUCTION

The FRM Series emergency unit enclosure is made of fabricated steel and includes hanger bars compatible with drywall or drop ceiling mount installations. The FRM includes both an oval and a rectangular injection molded, engineering grade, 5VA flame retardant, impact resistant thermoplastic trim plate.

ILLUMINATION

Illumination of the FRM Series is accomplished by utilizing (4) high-intensity long-life LEDs exceeding UL 924 requirements for brightness and uniformity. (2) LEDs in each adjustable optical assembly provide excellent illumination at various mounting heights while maximizing energy efficiency (88 lumens per watt). Center to center spacing of up to 51' between fixtures is possible along the path of egress. LEDs are a maintenance-free solution, providing up to 100,000 hours of use without failure.

ELECTRICAL**Input**

Universal voltage input 120-277VAC @ 60Hz

Nickel Metal Hydride Battery - NiMH

Exitronix NiMH batteries are maintenance-free.

Emergency

The FRM Series emergency unit will operate for a minimum of 90 minutes during a loss of power with a 24 hour maximum recharge time for the battery. Fully automatic solid-state, two rate charger initiates battery charging to recharge a discharged battery within 24 hours. The internal solid-state transfer switch automatically connects the internal battery to power the LED optical assemblies for a minimum of 90 minutes of illumination during the loss of utility power. A bi-color LED indicator light alerts occupant on battery condition (Green-normal, Red check battery).

Solid State Transfer

The circuit features solid-state switching for emergency backup, eliminating concerns of damaged contact or mechanical failures associated with relays. The switching circuit detects a loss of line voltage and automatically switches to emergency mode.

Low Voltage Disconnect

When the battery's terminal voltage falls below predetermined levels, a low voltage circuit disconnects the emergency lighting load. The disconnect remains in effect until normal power is restored, preventing deep battery discharge and improving the life of the battery. The disconnect will also automatically reconnect the load circuit once the battery voltage returns to a normal value after charging.

Test Button

The test button is easy to locate and provides manual verification of the transfer circuit and emergency lamps.

INSTALLATION

The IC Rated FRM Series includes an oval or rectangular trim plate with a rough-in template for back-box installation. Hanger bars extending up to 24" are included for mounting within a T-grid ceiling. Conduit entry available at multiple locations from top or sides. Pre-stripped AC input leads provided. Unit is designed for ceiling mount only.

OPTIONS**Guardian Self-test/Self-diagnostics (Option: G2)**

The Guardian circuit continuously monitors the operating condition of the AC power, battery supply voltage, emergency lamp continuity and charging circuit.

The purpose of this option is to provide visual signaling in response to a fault at the emergency battery and/or battery charger. If a failure is detected, visual status will occur immediately via the CHARGER LED and/or the BATTERY FAULT LED. The LEDs will stay illuminated until the fault is corrected.

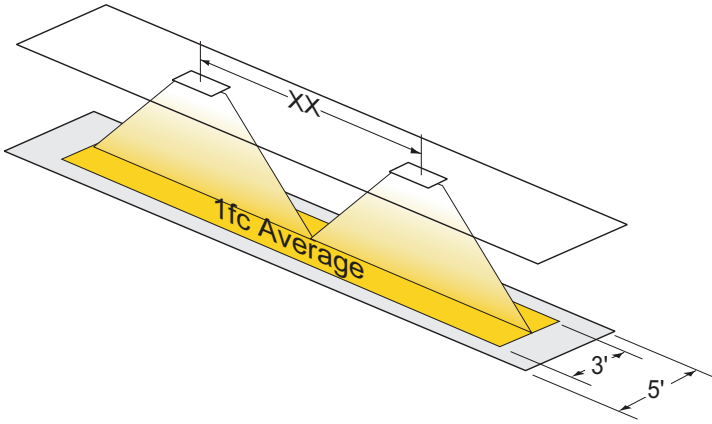
The Guardian circuit also monitors the transfer circuit as well as performing automatic code compliant testing. The Guardian self-diagnostics function is factory preset and performs the following after AC power has been supplied for a minimum of 24 hours: self-testing and a 30-second or longer discharge once every 30 days, self-testing and a 30-minute or longer discharge once every 180 days and self-testing and a 90-minute or longer discharge once every 365 days.

CONFORMANCE TO CODES & STANDARDS

The FRM Series is UL 924 Damp location Listed and meets or exceeds the following: NFPA 101 Life Safety Code, NEC, and OSHA requirements. California Energy Commission (CEC) Title 20 Compliant. Meets City of New York Emergency Code requirements.

FRM SAMPLE PHOTOMETRICS - 3' PATH OF EGRESS

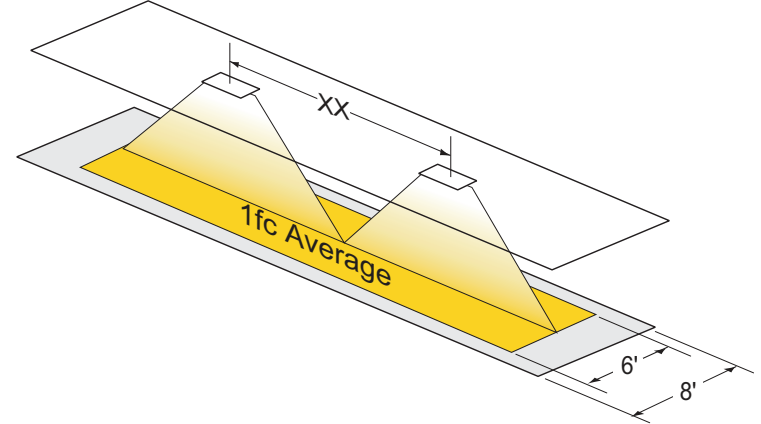
Multiple FRM units mounted at a typical 10' height with a 3' wide path of egress using 80/50/20 reflectances.



Lamp Adjustment Angle (Per Click)	Fixture Spacing
0°	37'
1.7°	41'
3.4°	43'
5.1°	47'
6.8°	50'
8.5°	52'
10.2°	54'
11.9°	55'

FRM SAMPLE PHOTOMETRICS - 6' PATH OF EGRESS

Multiple FRM units mounted at a typical 10' height with a 6' wide path of egress using 80/50/20 reflectances.



Lamp Adjustment Angle (Per Click)	Fixture Spacing
0°	36'
1.7°	40'
3.4°	42'
5.1°	46'
6.8°	49'
8.5°	n/a
10.2°	n/a
11.9°	n/a