

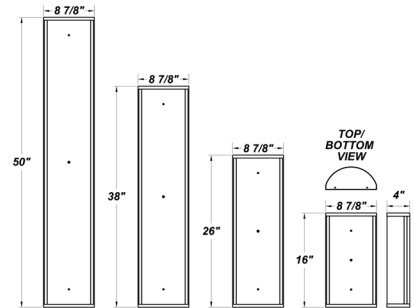
GUARDIAN W



PROJECT :
TYPE :
ORDERING # :
COMMENTS :

FEATURES

- Extruded Aluminum Housing w/ Matte Silver Polyester Powder Coat Finish
- Die Cast Aluminum End Caps w/ Matte Silver Polyester Powder Coat Finish
- High Impact White Acrylic Diffuser (50% DR Acrylic)
- Steel Reflector w/ Hi-Reflectance White Powder Coat Finish
- Recessed Steel Screws
- Fixture Mounts Directly to Surface w/ Two Wall Anchors (Not Included)
- Integral EM Battery Available (2', 3', & 4' Fixtures Only)
- Lamps Included w/ 16" Fixture
- CSA Listed Wet Location For Wall / Ceiling Mount, Vertical or Horizontal Mounting
- ADA Compliant
- Motion Sensor
- See Pages 4 & 5 For Watt-Stopper & Steinel Motion Sensor Specifications



ORDERING INFORMATION

Example : (GRDW - F24217E - 120E - SN)

Matte Silver is Standard Finish

PRODUCT	SOURCE/WATTAGE	VOLTAGE	DIFFUSER	FINISH	OPTIONS
GRDW					
Guardian W 16"	F213E - (2) 13W 4-Pin Biax F218Q - (2) 18W QE F226Q - (2) 26W QE	120E - Electronic 277E - Electronic 347E - Electronic	Not Applicable	SM - Matte Silver TB - Textured Black AC - Antique Copper AS - Antique Silver BT - Bronze Mist CP - Copper SN - Sand SW - Swedish Steel BZ - Textured Bronze TW - Textured White	41K - 4100K Color Temp.** (Standard) 35K - 3500K Color Temp.** (Not Available for F213E) 30K - 3000K Color Temp.** 27K - 2700K Color Temp.** F - Fused (Not Available For 347V) DIM - Dimming Ballast (Electronic QE Only) EBR - Remote Mount Battery (Field Installed) (See Below) EBW - Integral Emergency Battery (2', 3', & 4' Only) (See Below) MSE - Watt-Stopper FS505 External Motion Sensor (2' Only) (Requires Back Plate, Which Will Add 5/16" to Fixture Length & 1 11/16" to Fixture Depth) MSI - Steinel HFLUM2-WR Internal Motion Sensor (2' Only) MSI For Use With The Following: - All 2 Lamp Wattages TP - Tamper Resistant Screws W2L - Wire 2 Lamps to Integral Emergency Battery (T8 Lamping Only) MSP - Program Start Ballast (Recommended for Motion Sensor)*** ** Compact Fluorescent Lamps Only OEL - Single End Window TEL - Twin End Windows (Both Ends)
Guardian W 26"	F24117E - (1) 17W T8 F24217E - (2) 17W T8 F24214E - (2) 14W T5 F24224E - HO* - (2) 24W T5 (HO* - High Output)	120E - Electronic 277E - Electronic 347E - Electronic		RAL Colors or Custom Match - Consult Factory	

REPLACEMENT PARTS

PART NO.

16" White Acrylic Diffuser	3024960
26" White Acrylic Diffuser	3025960
Frosted Polycarbonate End Diffuser (For OEL / TEL)	3410862

We reserve the right to revise the design or components of any product due to parts availability or change in UL standards, without assuming any obligation or liability to modify any products previously manufactured, and without notice.

NOTES

Emergency Battery Options

Initial light output in Emergency mode will last for a minimum of 90 minutes. 1 lamp wired unless ordered otherwise. The following are suitable for indoor and damp locations. Please refer to Bodine's specification sheet.
EBR (16 1/2" Fixture): Bodine's B94CG (Electronic) - Temperature Rating (Ambient) 32° F - 122° F
EBW (26 1/2" Fixture): Bodine's B50LP (T8 Electronic) - Temperature Rating (Ambient) 32° F - 122° F
 Bodine's LP550 (T5 Electronic) - Temperature Rating (Ambient) 32° F - 122° F

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VANDAL RESISTANT

C

US Compliant

*** For Electronic Wattage Fixtures Being Used in Conjunction With an Occupancy Sensor (Either Provided by us, or Your Own System), a Program Start Ballast is Recommended in Order to Maximize Lamp Life.

GUARDIAN W

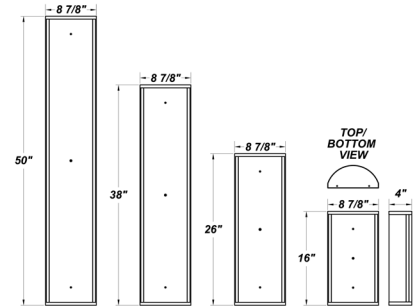


LINEAR FLUORESCENT

PROJECT :
TYPE :
ORDERING # :
COMMENTS :

FEATURES

- Extruded Aluminum Housing w/ Matte Silver Polyester Powder Coat Finish
- Die Cast Aluminum End Caps w/ Matte Silver Polyester Powder Coat Finish
- High Impact White Acrylic Diffuser (50% DR Acrylic)
- Steel Reflector w/ Hi-Reflectance White Powder Coat Finish
- Recessed Steel Screws
- Fixture Mounts Directly to Surface w/ Two Wall Anchors (Not Included)
- Integral EM Battery Available (2', 3', & 4' Fixtures Only)
- Lamps Not Included
- CSA Listed Wet Location For Wall / Ceiling Mount, Vertical or Horizontal Mounting
- ADA Compliant
- Motion Sensor
- See Pages 4 & 5 For Watt-Stopper & Steinel Motion Sensor Specifications



ORDERING INFORMATION

Example : (GRDW - F36225E - 120E - TB)

Matte Silver is Standard Finish

PRODUCT	SOURCE/WATTAGE	VOLTAGE	DIFFUSER	FINISH	OPTIONS
GRDW					
Guardian W 38"	F36125E - (1) 25W T8 F36225E - (2) 25W T8 F36221E - (2) 21W T5 F36239E - HO* - (2) 39W T5	120E - Electronic 277E - Electronic 347E - Electronic	Not Applicable	SM - Matte Silver TB - Textured Black AC - Antique Copper AS - Antique Silver BT - Bronze Mist CP - Copper SN - Sand SW - Swedish Steel BZ - Textured Bronze TW - Textured White	F - Fused (Not Available For 347V) EBW - Integral Emergency Battery (2', 3', & 4' Only) (See Below) MSE - Watt-Stopper FS505 External Motion Sensor (Requires Back Plate, Which Will Add 5/16" to Fixture Length & 1 11/16" to Fixture Depth) MSI - Steinel HFLUM2-WR Internal Motion Sensor MSI is For Use With The Following: - All 2 Lamp Wattages TP - Tamper Resistant Screws W2L - Wire 2 Lamps to Integral Emergency Battery (T8 Lamping Only) MSP - Program Start Ballast (Recommended for Motion Sensor) *** OEL - Single End Window TEL - Twin End Windows (Both Ends)
Guardian W 50"	F48132E - (1) 32W T8 F48232E - (2) 32W T8 F48228E - (2) 28W T5 F48254E - HO* - (2) 54W T5 (HO* - High Output)	120E - Electronic 277E - Electronic 347E - Electronic		RAL Colors or Custom Match - Consult Factory	

REPLACEMENT PARTS

PART NO.

38" White Acrylic Diffuser	3026060
50" White Acrylic Diffuser	3026160
Frosted Polycarbonate End Diffuser (For OEL / TEL)	3410862

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NOTES

Emergency Battery Options

Initial light output in Emergency mode will last for a minimum of 90 minutes. 1 lamp wired unless ordered otherwise. The following are suitable for indoor and damp locations. Please refer to Bodine's specification sheet.

EBW (38" & 50" Fixtures):

Bodine's B50LP (T8 Electronic) - Temperature Rating (Ambient) 32° F - 122° F
Bodine's LP550 (T5 Electronic) - Temperature Rating (Ambient) 32° F - 122° F

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GUARDIAN W

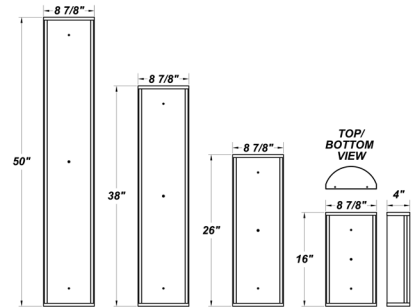


LINEAR FLUORESCENT

PROJECT :
TYPE :
ORDERING # :
COMMENTS :

FEATURES

- Extruded Aluminum Housing w/ Matte Silver Polyester Powder Coat Finish
- Die Cast Aluminum End Caps w/ Matte Silver Polyester Powder Coat Finish
- High Impact White Acrylic Diffuser (50% DR Acrylic)
- Steel Reflector w/ Hi-Reflectance White Powder Coat Finish
- Recessed Steel Screws
- Fixture Mounts Directly to Surface w/ Two Wall Anchors (Not Included)
- Integral EM Battery Available (2', 3', & 4' Fixtures Only)
- CSA Listed Wet Location For Wall / Ceiling Mount, Vertical or Horizontal Mounting
- ADA Compliant
- Motion Sensor
- See Pages 4 & 5 For Watt-Stopper & Steinel Motion Sensor Specifications



ORDERING INFORMATION

Example : (GRDW - F36221E / 114E - 120E - SN - MSI) Matte Silver is Standard Finish

PRODUCT	SOURCE/WATTAGE	VOLTAGE	DIFFUSER	FINISH	OPTIONS
Guardian W 26"	F24317E - (3) 17W T8 F24314E - (3) 14W T5	120E - Electronic 277E - Electronic 347E - Electronic	Not Applicable	SM - Matte Silver TB - Textured Black AC - Antique Copper AS - Antique Silver BT - Bronze Mist CP - Copper SN - Sand SW - Swedish Steel BZ - Textured Bronze TW - Textured White	F - Fused (Not Available For 347V) EBW - Integral Emergency Battery (2', 3', & 4' Only) (See Below) MSE - Watt-Stopper FS505 External Motion Sensor (Requires Back Plate, Which Will Add 5/16" to Fixture Length & 1 11/16" to Fixture Depth) MSI - Steinel HFLUM2-WR Internal Motion Sensor -MSI is For Use With The Following: - (3) 2' Lamps - (2) 3' or 4' Lamps w/ (1) 2' Lamp TP - Tamper Resistant Screws W2L - Wire 2 Lamps to Integral Emergency Battery (T8 Lamping Only) MSP - Program Start Ballast (Recommended for Motion Sensor) *** OEL - Single End Window TEL - Twin End Windows (Both Ends)
Guardian W 38"	F36225E/117E - (2) 25W T8 & (1) 17W T8 F36325E - (3) 25W T8 F36221E/114E - (2) 21W T5 & (1) 14W T5 F36221E/124E - (2) 21W T5 & (1) 24W T5 HO F36239E/114E - (2) 39W T5 HO & (1) 14W T5 F36239E/124E - HO - (2) 39W T5 HO & (1) 24W T5 HO	120E - Electronic 277E - Electronic 347E - Electronic			
Guardian W 50"	F48232E/117E - (2) 32W T8 & (1) 17W T8 F48332E - (3) 32W T8 F48228E/114E - (2) 28W T5 & (1) 14W T5 F48228E/124E - HO - (2) 28W T5 & (1) 24W T5 HO F48254E/114E - (2) 54W T5 HO & (1) 14W T5 F48254E/124E - HO - (2) 54W T5 HO & (1) 24W T5 HO (HO* - High Output)	120E - Electronic 277E - Electronic 347E - Electronic		RAL Colors or Custom Match - Consult Factory	

REPLACEMENT PARTS PART NO.

26" White Acrylic Diffuser	3025960
38" White Acrylic Diffuser	3026060
50" White Acrylic Diffuser	3026160
Frosted Polycarbonate End Diffuser (For OEL / TEL)	3410862

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NOTES

Emergency Battery Options
Initial light output in Emergency mode will last for a minimum of 90 minutes. 1 lamp wired unless ordered otherwise. The following are suitable for indoor and damp locations. Please refer to Bodine's specification sheet.

EBW: Bodine's B50LP (T8 Electronic) - Temperature Rating (Ambient) 32° F - 122° F
Bodine's LP550 (T5 Electronic) - Temperature Rating (Ambient) 32° F - 122° F

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FS-505



DESCRIPTION AND OPERATION

The FS-505 and FS-505C occupancy sensors turn lighting on and off based on occupancy. The sensors use ultrasonic sensing technology. Once the space is vacant and the time delay elapses (adjustable from 5 to 30 minutes), lights will turn off.

The FS-505 and FS-505C operate at 24VDC. They are designed for installation in a light fixture within 2 feet of an associated power supply. The power supply for the sensors is a FS-PP power pack mounted inside a light fixture. Each Watt Stopper FS-PP power pack can supply power for one FS-505 or FS-505C.

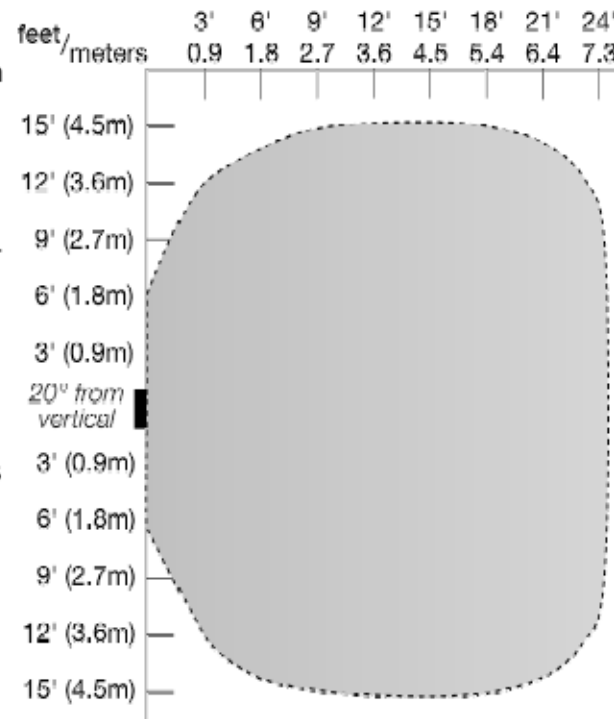
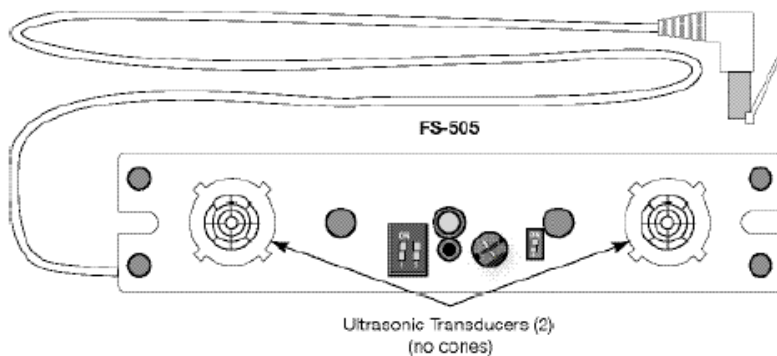
The sensors are equipped with a 2' long cable fitted with a shielded male RJ45 plug. The FS-PP has a corresponding female RJ45 receptacle. This cable carries power to the sensor and the 24VDC maintained output to the power pack to signal that lights should be on. Optional cables and connectors are available for alternate configurations.

Important, there is an initial warm-up period:

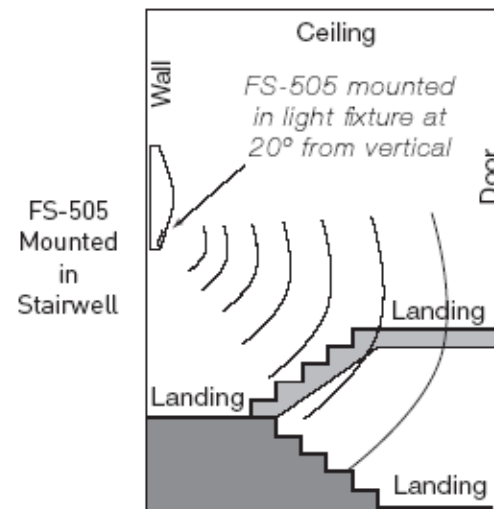
It may take up to a minute before the lights turn on due to a sensor warm-up period required during initial power-up. This occurs during installation or after a lengthy power failure only.

APPLICATION

The FS-505 (no cones) is designed for use in wall-mounted lighting fixtures where the transducers face away from the wall at an angle of approximately 20° from vertical. It is particularly well suited for use in stairwell applications as well as in other wall mount applications.



Top view, FS-505 coverage pattern, sensor mounted 20° from vertical



COVERAGE PATTERN

The coverage pattern is determined by sensor model, mounting height and the angle of the sensor, relative to the coverage area floor.

The coverage shown represents full-step walking motion in a carpeted area, with no barriers or obstacles at a mounting height of 8 to 10 feet. Mounting above or below this range significantly affects coverage patterns.

Obstacles such as furniture or partitions, wall, ceiling and floor treatments can cause the coverage area to be less or more than the sensing distances shown in the coverage pattern. This must be considered when planning the number of sensors and their placement.

Place sensors at least 4 feet away from air supply ducts.

For complete coverage in open areas, install multiple sensors to provide a 20% overlap with each adjacent sensor's coverage area.

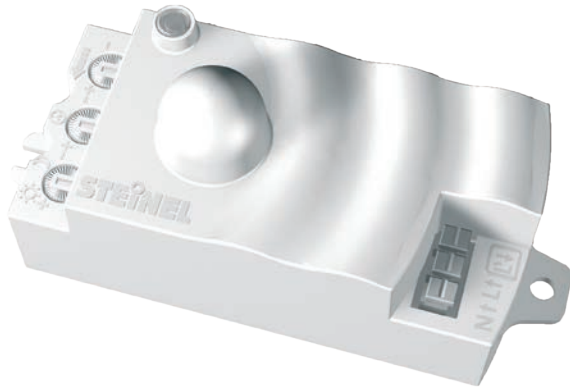


Call 800.879.8585 or 972.578.1699
for Technical Support

HFLUM2-WR

Fixture Integrated Sensor Module

STEINEL[®]
PROFESSIONAL



Project Name:

Location:



HF LUM2-WR Specifications

Item No.	65122
Voltage	120/230/277 VAC, 50/60 Hz
Load Rating	0-800 watts @ 120 VAC, 50/60 Hz incandescent, magnetic or electronic ballasts - 1/4 HP 0-1200 watts @ 230/277 VAC, 50/60 Hz magnetic or electronic ballasts 0-650 watts @ 120/230/277 VAC, 50/60 Hz LED
Transmitter Power	1 mW
Power Consumption	< 0.5 W
Time Delay Setting	30 seconds to 30 minutes
Light Level Setting	0.2-200 footcandles 2-2000 lux
HF System	5.8 GHz
Coverage	360° adjustable 3.3 to 26 ft reach (1 to 8 m)
Environment	requires enclosure temperature -4° F - 185° F, -20° C - 85° C
Dimensions (LxWxD)	4.2 x 1.7 x 1.8 in 107 x 42 x 44.5 mm
Warranty	5 years
Certifications	C-UL-US Listed, RoHS Compliant, Contains: FCC ID - W8J-SIR13, IC - 8529A-SIR13

The HFLUM2-WR is a line voltage occupancy sensor module that installs in a fixture, adding energy saving lighting control in each fixture location.

The HFLUM2-WR uses STEINEL's High Frequency (HF) technology to turn lights on and off based on occupancy. It works by emitting high frequency electromagnetic waves (5.8 GHz) into the controlled area. Movement in the area causes a change in the waves' echo, resulting in occupancy detection. The sensor can detect motion through many materials including glass and the lens of a fixture, enabling the sensor to be hidden from view.

Applications

Mounted in either a ceiling or wall lighting fixture, the sensor module is suited to a wide variety of interior spaces including offices, conference rooms and damp or wet locations when mounted inside sealed and gasketed fluorescent IP65 type fixtures.

Key Features:

- 360° coverage; reach is adjustable from 3.3 to 26 ft
- High frequency technology emits 5.8 GHz electromagnetic waves
- Built-in surge protection with auto-reset
- Lamp seasoning feature provides a simple and convenient 4 day burn in as recommended by lamp manufacturers
- Adjustable time delay and light level settings
- Light level feature allows lighting to remain off during daylight, regardless of occupancy (hold off)
- Wiring is streamlined with three terminals

120/230/
277V

Line Voltage

HF
5.8 GHz

High Frequency Technology



360° of Coverage



Fixture Integrated



0.2 - 200 fc



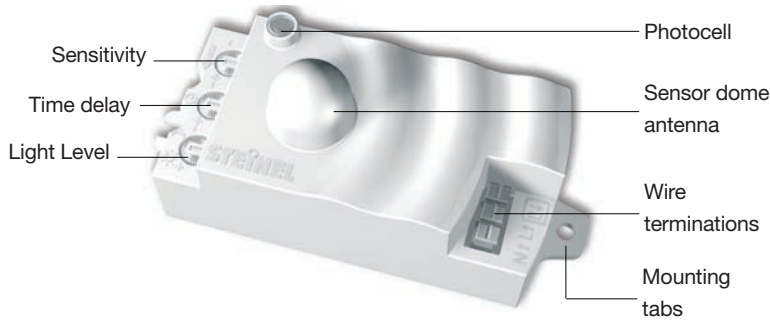
www.steinell.net

HF LUM2-WR

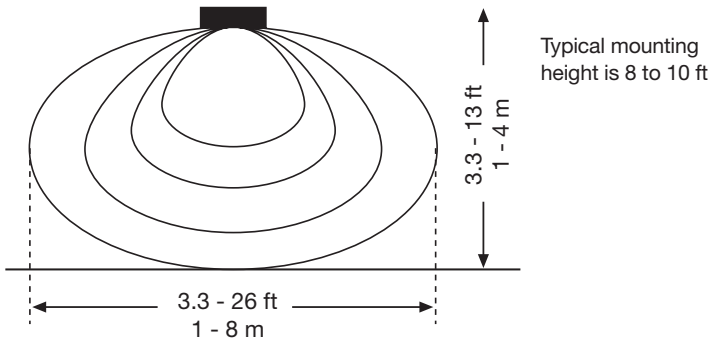
Fixture Integrated Sensor Module



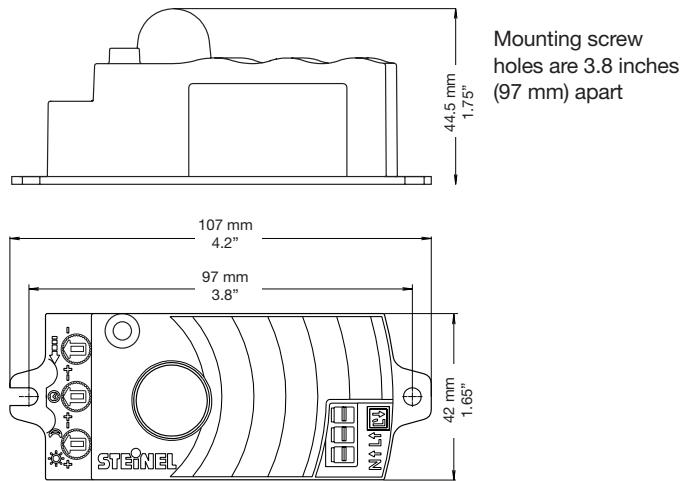
Controls



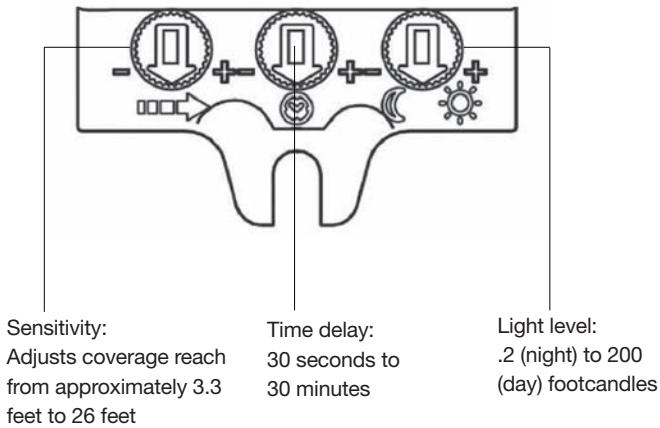
Coverage



Mounting



Coverage Adjustments



Wiring

