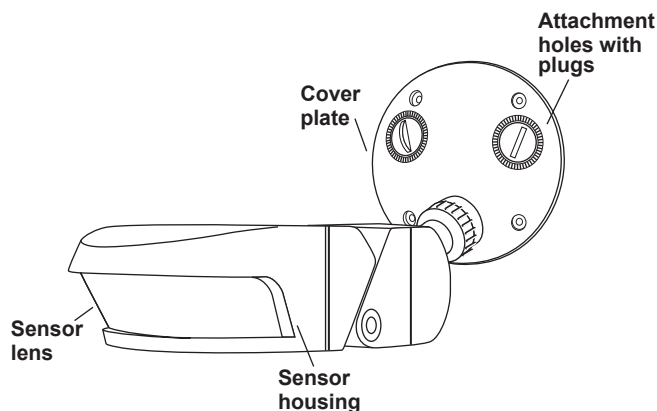


Catalog Numbers • Les Numéros de Catalogue • Los Números de Catálogo: EW-200-120, EW-200-277

Country of Origin: Made in China • Pays d'origine: Fabriqué en Chine • País de origen: Hecho en China



Box Contents

- One (1) EW-200-120, EW-200-277
- Accessory bag:
Cover plate for 4" round outdoor junction box, with two cover plate attachment hole plugs, cover plate gasket, cover plate screws & screw covers (4 ea), lens mask, wire nuts (3)
- Installation instructions

Please read all of the installation instructions before installing this product.

SPECIFICATIONS

Voltage:	
EW-200-120	120VAC, 60Hz
EW-200-277	277VAC, 60Hz
Mountable Locations	Wall, ceiling or under eaves
Operating Temperature	-40° to 130°F (-40° to 55°C)
Lens Coverage:	270°
Load Ratings	0–1000W ballast or tungsten @120VAC
	0–1000W ballast @277VAC
Motor Load:	1/6 HP @20VAC
	1/3 HP @277VAC
Current Consumption	
Without Isolated Relay	22 mA max.
With Isolated Relay	34 mA max.
Time Delay Adjustment	12sec.–16min.
Light Level Adjustment	0.5FC–200FC
Isolated Relay on EW-200 (both -120 & -277 models)	
Normally Open & Normally Closed contacts.	
Isolated Relay Rating:	1A @ 30VAC/DC
UL 773A Raintight Rated	
IEC-IP-55 RateD	

U.S. Patents: 4,787,722; 5,640,113



WARNING



THIS UNIT USES HIGH VOLTAGE. IT SHOULD ONLY BE INSTALLED BY QUALIFIED PERSONS THAT ARE THOROUGHLY FAMILIAR WITH PROPER SAFETY PROCEDURES AND ELECTRICAL AND BUILDING CODES FOR THE INSTALLATION LOCATION.

TO AVOID FIRE, SHOCK, ELECTROCUTION, OR DEATH. TURN OFF POWER AT THE CIRCUIT BREAKER OR FUSE BOX AND TEST TO ENSURE POWER IS OFF BEFORE WIRING.

UNIT DESCRIPTION

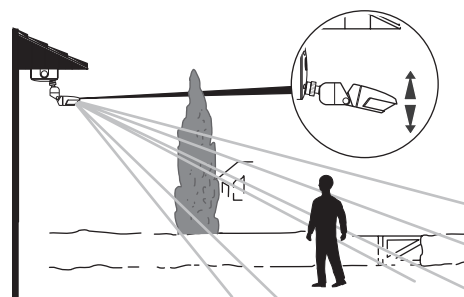
The EW sensors are outdoor passive infrared (PIR) motion sensors rated for wet conditions. They are preassembled with a junction box cover and are ready to install to standard round outdoor junction boxes.

The EW sensors utilize advanced PIR technology and a superior lens design to detect motion. PIR sensing is passive, and detects the difference between infrared energy in motion and the background space.

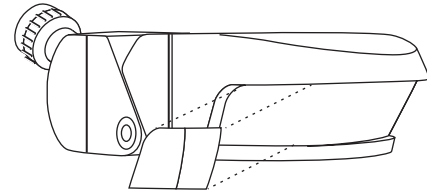
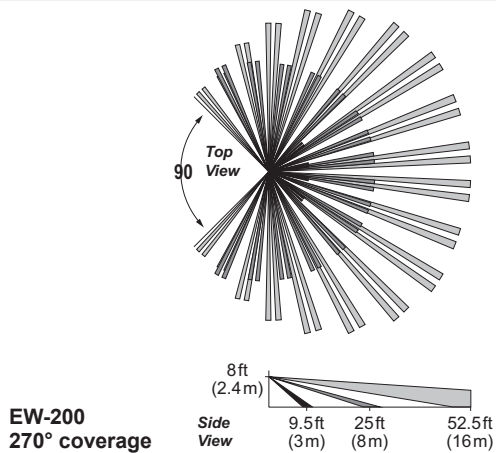
COVERAGE PATTERN

Coverage is shown as tested in a controlled setting with the unit mounted at 8 ft at a 10° tilt from the horizontal surface. The actual outside coverage pattern may vary substantially at the specific installation site and is dependent on several factors including weather conditions, external light sources, mounting height and sensor tilt.

Coverage adjustment:
The front of the sensor housing can be moved up and down for easy coverage adjustment.



COVERAGE PATTERN (CONT'D)



Masking:
Opaque adhesive tape is supplied so that sections of the sensor's lens can be masked to restrict coverage in unwanted areas.

MOTION SENSOR PLACEMENT

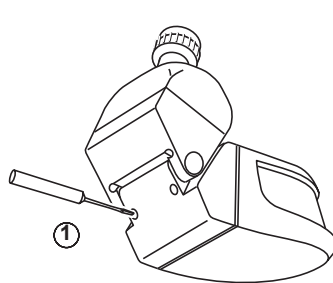
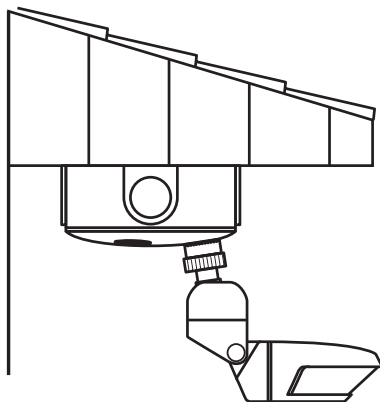
Mounting Options

- Install onto a standard 4" round outdoor junction box.
- Mount to a flat, stable, vibration-free surface.
- Mount vertically or horizontally, usually to a wall, ceiling or under an eave.

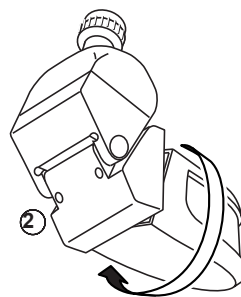
Careful consideration must be given to sensor placement. PIR sensors detect the difference between infrared energy in motion and the background space. To be detected, a person or vehicle must be within the sensor's coverage pattern and have an unobstructed view of the sensor.

Horizontally Mounted:

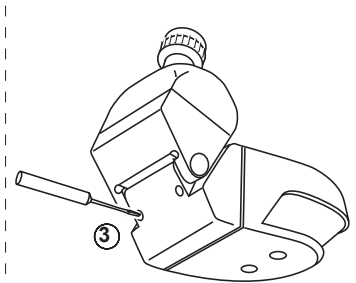
For horizontal mounting, such as under eaves, **rotate the sensor housing** as shown in the diagrams below. **Make sure that the gasket is seated properly.**



Loosen the two screws at the back of the sensor.



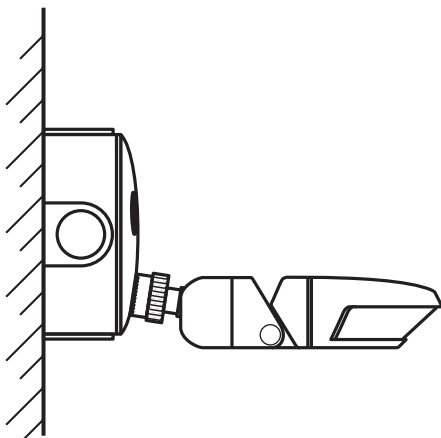
Rotate the sensor housing 180°.



Replace and tighten the screws.

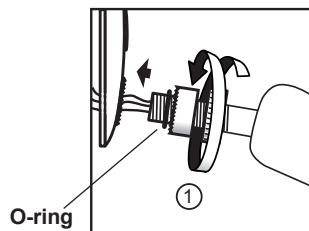
Vertically Mounted:

The sensor comes assembled and ready for vertical cover plate mounting, as shown in the illustration below.

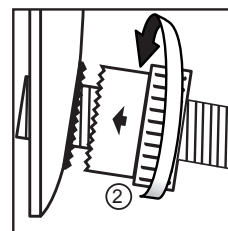


Attach mounting post to the cover plate:

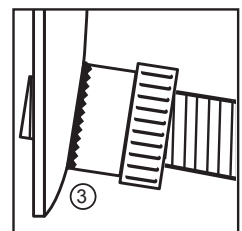
Make sure that the O-ring is on the threaded end of the mounting post before installing.



Lightly screw the mounting post into the cover plate by rotating the sensor.



Adjust the sensor to the desired angle, then tighten the locking ring.

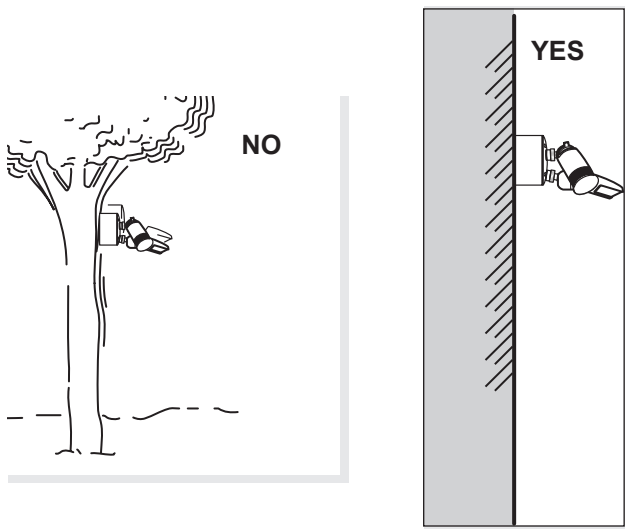


Locking ring and collar must be securely seated against the cover plate locking ring.

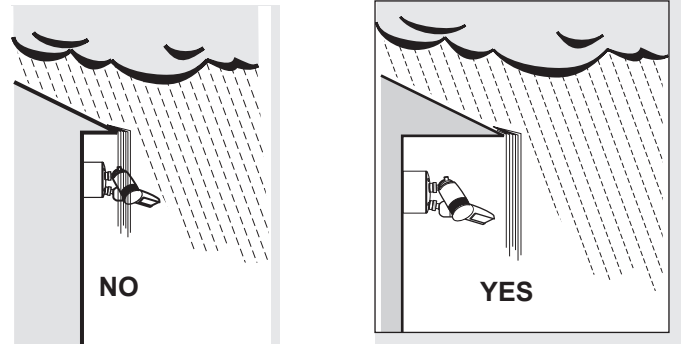
MOUNTING AND SENSOR POSITIONING GUIDELINES

WARNING: LAMP BULB MUST BE 1/2 INCH OR MORE FROM SENSOR HOUSING

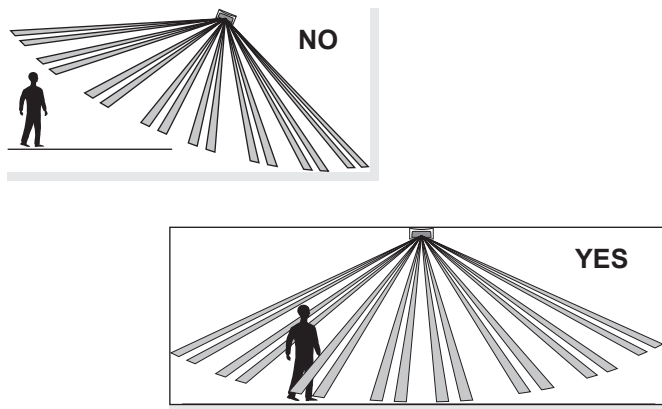
Mount to flat, stable, vibration-free surface



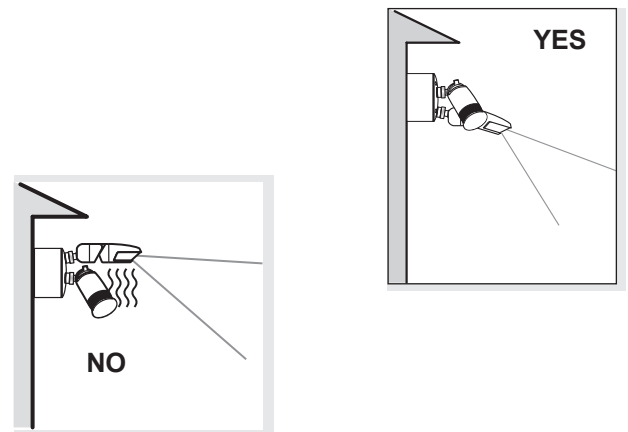
Avoid runoff; sheltered locations preferred



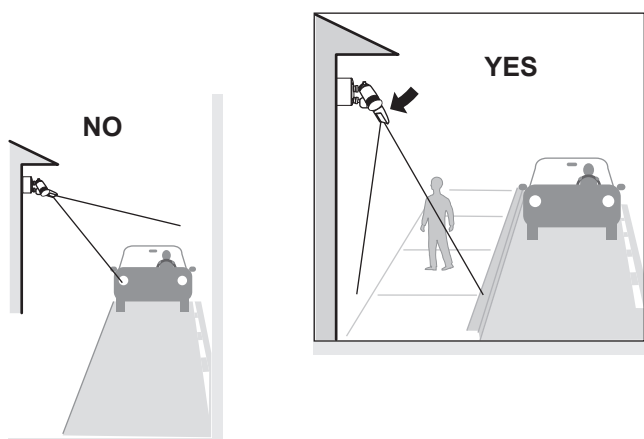
Mount motion sensor level



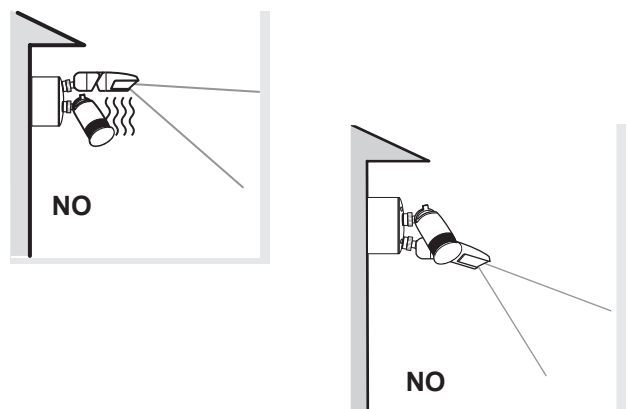
Mount sensor below lamps to avoid heat effects



Aim motion sensor downward to limit sensing



Do not mount by vents or above lamps



WIRING AND INSTALLATION



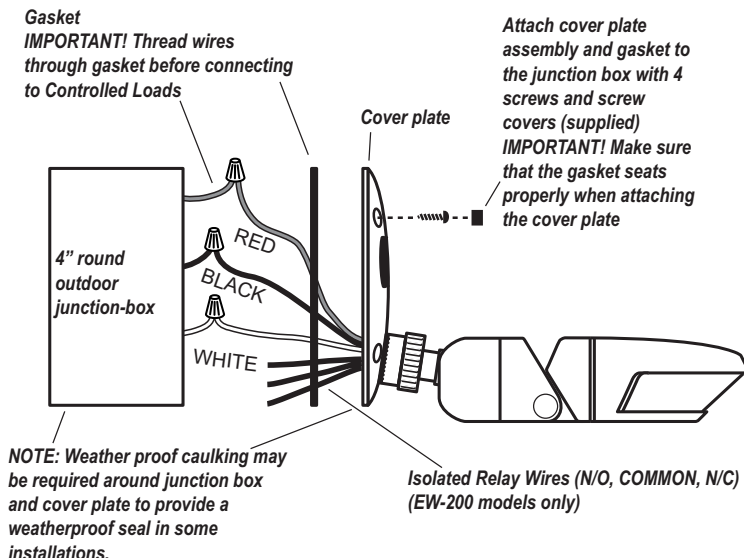
WARNING:
WHEN USED WITH LAMP HOLDERS
THE LAMPS NEED TO BE 1/2"
OR GREATER FROM THE SENSOR.



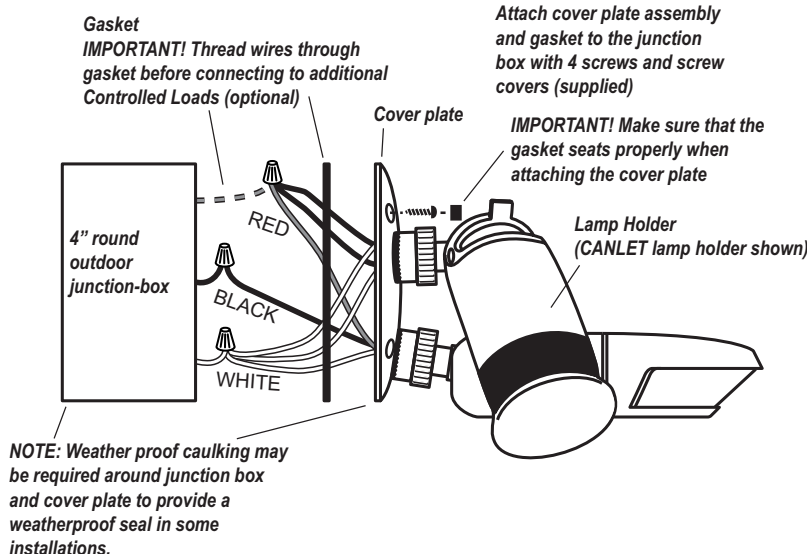
**CAUTION: TURN POWER OFF AT THE
CIRCUIT BREAKER BEFORE INSTALLING
SENSOR. SENSOR MUST BE INSTALLED
BY QUALIFIED PERSONNEL ONLY.**



Wire connections for sensor



Wire connections when attaching lamp holders (Isolated relay wires not shown)



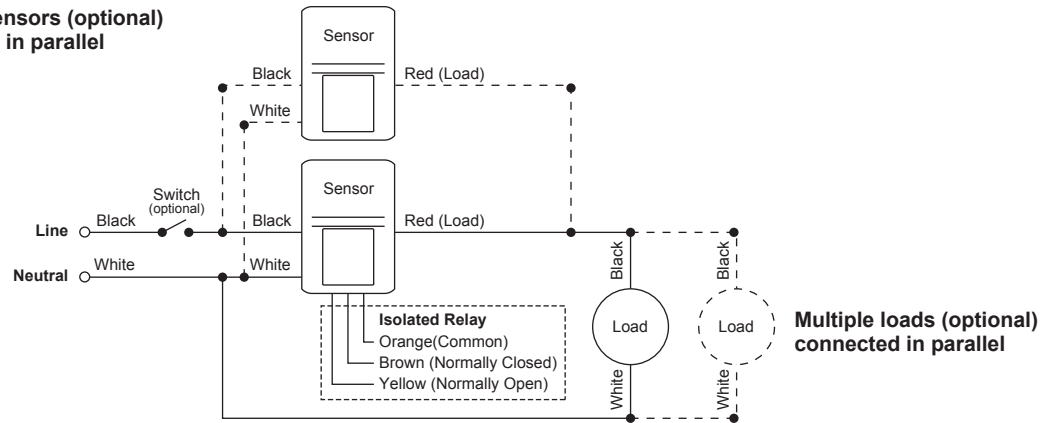
WIRING AND INSTALLATION

Wire the sensor as shown:

- **BLACK** wire from sensor to line voltage.
- **WHITE** wire from sensor to Neutral.
- **RED** wire is connected to lighting loads, if used, as shown (see diagram above and below), **not to exceed load rating** (see Specifications, front cover).
- Isolated Relay (See Specifications, front cover, for rating).
Connect the wires necessary to the application that requires this output.
 - ▶ **ORANGE** (Common) (must be used for proper operation).
 - ▶ **BROWN** (Normally Closed) (Open when occupancy is detected).
 - ▶ **YELLOW** (Normally Open) (Closed when occupancy is detected).

NOTE: When power is restored to the sensor, the lights will turn on. If no motion is detected by the sensor, the lights will remain on for approximately one minute and then turn off. (See **Security Override**).

**Multiple sensors (optional)
connected in parallel**



NOTE: When power is restored to the sensor, the lights will turn on. If no motion is detected by the sensor, the lights will remain on for approximately one minute and then turn off. (See **Security Override**).

TESTING AFTER INSTALLATION

To facilitate coverage testing, the factory setting for Time Delay is 12 seconds, and the Light Level is at Maximum.

If you want to test a sensor for intended detection or operation:

1. Make sure that the time delay is set to 12 seconds and the light level is set to maximum (clockwise to the sun icon. The dials are located on the bottom of the sensor.)
2. Adjust sensor and lamp holders to the desired position.
3. Ensure that power has been restored to the sensor.
4. Move into the location to be tested; lights should turn on. Stand still. In about 12 seconds the lights should turn off. Move or walk and the lights should turn on. Repeat this process to test other locations. Make sensor coverage adjustments as needed (see **Sensor Positioning**).

NOTE: When power is restored to the sensor, the lights will turn on for approximately one minute. (See **Security Override**.)

NOTE: If the lights do not turn on with movement in the area after they have turned off in step 4, the level of daylight may be too high and the sensor's light level adjustment is keeping the sensor inactive. Wait until daylight levels have reduced before testing again.

5. See **Dial Adjustments**, for guidelines to adjust the time delay and light level to the desired settings for operation.

DIAL ADJUSTMENTS

Time Delay and **Light Level** control dials are located on the bottom of the sensor.

1. Adjust Time Delay:

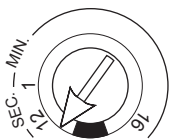
The time delay is the amount of time that elapses before lights turn off since the sensor last detected motion. This can be set from 12 seconds to 16 minutes. For normal operation, the time delay should be set to 1 minute or more.

- In areas where there is mostly walk through movement, the time delay amount can be low.
- In areas where people may stop and remain for periods of time, the time delay should be set to a higher amount, preferably 16 minutes.

2. Adjust Light Level:

Turning the light level adjustment dial raises or lowers a **daylight level** in the sensor. When the light of the day rises above this set level, the sensor becomes inactive; this keeps the lights off when there is enough daylight present.

We suggest initially setting the light level adjustment to **half way** between minimum and maximum. If a different setting is desired after installation, then follow the **Making Changes** procedures.



TIME DELAY DIAL

Minimum: 12 seconds
Maximum: 16 minutes



LIGHT LEVEL DIAL

Minimum = ☾
Maximum = ☀

MAKING CHANGES

If you want the lights to turn on/high sooner—turn the light level dial toward the sun ☀ icon, as desired; this raises the light level setting. (Remember, the sensor must detect motion for lights to turn on.)

- The lights **turn on sooner** in the **evening**.
- The lights **stay on longer** in the **morning**.

If you want the lights to turn on later—turn the light level dial toward the moon ☾ icon, as desired; this lowers the light level setting. (Remember, the sensor must detect motion for lights to turn on.)

- The lights **turn on later** in the **evening**.
- The lights **turn off sooner** in the **morning**.

Additional Notes:

- When testing adjustments, make sure not to block any of the light that is reaching the sensor or reflect any light into the sensor's lens.
- The sensor requires about 5 seconds for light level adjustments to take effect. This feature prevents the lights from turning on/high and off/low with quick light reflections, from car windows for example.
- The sensor will not turn lights off/low until no motion is detected and the time delay elapses.

SECURITY OVERRIDE

The EW sensors have an override-on feature which allows lights to be turned on for the set time delay period.

- If there is an installed switch—turning the switch off then on, turns the lights on. If no motion is detected by the sensor, the lights will remain on for approximately one minute and then turn off.

This will also happen when power is restored after a power outage.

NOTE: If the lights do not turn on, the sensor may be inactive due to the daylight level. Turn the switch off for 5 seconds, then turn it on. The lights should turn on as described above.

TROUBLESHOOTING


Lights do not turn off:

1. The sensor may be detecting movement outside the desired coverage area. The sensor's lens may need to be masked to block unwanted coverage (see Masking). If this does not solve the problem, see step 2.
 2. Test to see that the sensor is operating properly. Set the time delay to minimum (12 seconds). Remain still, or move out of range of the sensor. If there is no movement in the coverage area, the sensor should turn lights off/low in 12 seconds. Reset the time delay to the desired value.
 3. If the lights do not turn off/low, have a person qualified to check high voltage connections verify that the sensor and lighting are wired correctly (see **Wiring and Installation**).
- CAUTION:** Make sure power is turned off at the circuit breaker before checking wiring.
4. If the sensor is wired correctly, call our Technical Support number.

Lights turn on/high when there is sufficient daylight:

Decrease the light level setting, as desired (counterclockwise toward the moon  icon, see **Dial Adjustments**).

Lights do not turn on/high:

1. If there is a controlling switch installed, make sure that it is turned on.
 2. If the lights do not turn on/high when lights are needed—increase the light level setting, as desired (clockwise toward the sun  icon, see **Dial Adjustments**).
 3. Have a person qualified to check high voltage connections verify that the sensor and lighting are wired correctly (see **Wiring and Installation**).
- CAUTION:** Make sure power is turned off at the circuit breaker before checking wiring.
4. If the sensor is wired correctly, call our Technical Support number.

ORDERING INFORMATION

Catalog #	Description
EW-200-120	120VAC, 60Hz, 270° Outdoor/Indoor PIR Motion Sensor with Isolated Relay, includes cover plate
EW-200-277	277VAC, 60Hz, 270° Outdoor/Indoor PIR Motion Sensor with Isolated Relay, includes cover plate

When ordering, add (-W) for Arctic White or (-G) for Architectural Gray to catalog numbers.

THIRD-PARTY ORDERING INFORMATION

Additional color-matched lamp holder accessories (Outdoor incandescent lamp holders , Shrouds for PAR 20 & PAR 38 lamps , and Round outdoor junction boxes & cover plates) are available through your local distributor, or for further assistance call CANLET at 1-888-461-5307

WARRANTY INFORMATION

Wattstopper warrants its products to be free of defects in materials and workmanship for a period of five (5) years. There are no obligations or liabilities on the part of Wattstopper for consequential damages arising out of, or in connection with, the use or performance of this product or other indirect damages with respect to loss of property, revenue or profit, or cost of removal, installation or reinstallation.

INFORMATIONS RELATIVES À LA GARANTIE

Wattstopper garantit que ses produits sont exempts de défauts de matériaux et de fabrication pour une période de cinq (5) ans. Wattstopper ne peut être tenu responsable de tout dommage consécutif causé par ou lié à l'utilisation ou à la performance de ce produit ou tout autre dommage indirect lié à la perte de propriété, de revenus, ou de profits, ou aux coûts d'enlèvement, d'installation ou de réinstallation.

INFORMACIÓN DE LA GARANTÍA

Wattstopper garantiza que sus productos están libres de defectos en materiales y mano de obra por un período de cinco (5) años. No existen obligaciones ni responsabilidades por parte de Wattstopper por daños consecuentes que se deriven o estén relacionados con el uso o el rendimiento de este producto u otros daños indirectos con respecto a la pérdida de propiedad, renta o ganancias, o al costo de extracción, instalación o reinstalación.