

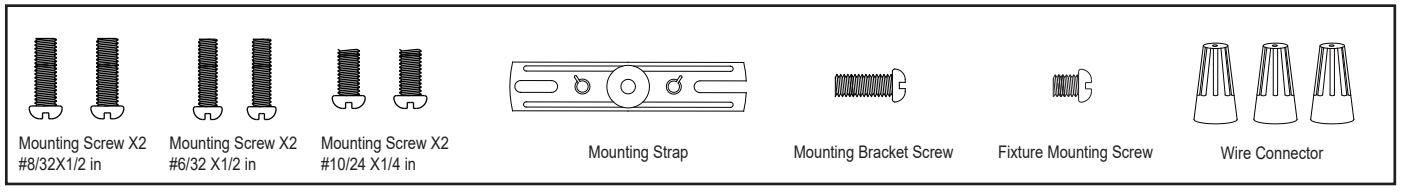
# ASSEMBLY AND INSTALLATION INSTRUCTIONS

T0783

**WARNING:** TO AVOID RISK OF ELECTRICAL SHOCK, BE SURE TO SHUT OFF POWER BEFORE INSTALLING OR SERVICING THIS FIXTURE.

**NOTES:** 1. Before installing, consult local electrical codes for wiring and grounding requirements.  
2. Read and save these instructions.

## Hardware Package (included):



## Tools Needed:



1. Phillips-head screwdriver for attaching mounting screws to mounting strap, mounting bracket and fixture to mounting bracket.
2. 1/8" wide flat-head screwdriver for connecting the source wires into the wiring terminal station on the mounting bracket.

## Important to Know:

1. This fixture requires a 120 VAC, 60 Hz power source.
2. For general safety and to avoid any possible damage to the sensor, be sure the power is switched "off" before adjustment.
3. Motion sensor: turns light ON automatically when motion is detected and turns light OFF automatically when motion stops.
4. Photocell keeps the light OFF during daylight hours.

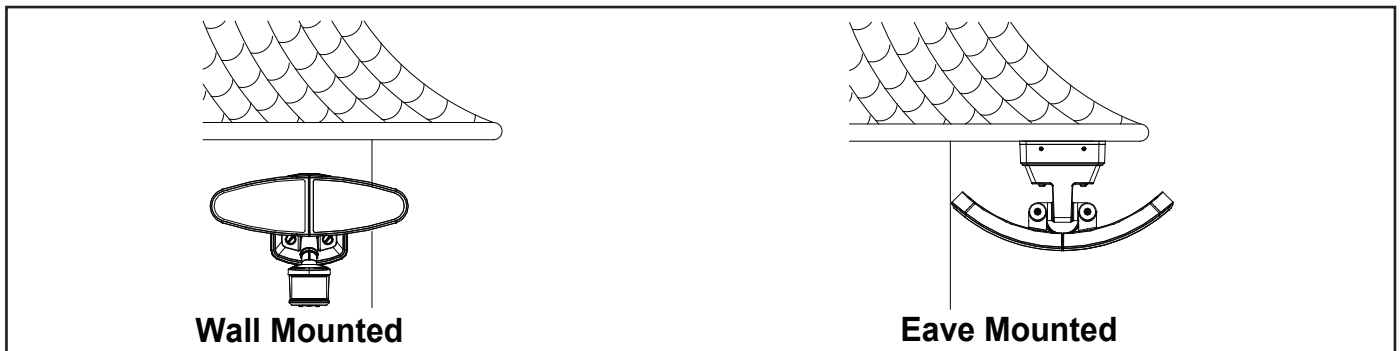
**Maximum Wattage: 35 W**

**Working Temperature Range: - 4°F ~ 113°F**

## Features:

1. Energy saving LED fixture.
2. Motion sensor: turns light ON automatically when motion is detected and turns light OFF or remains in low-level brightness when motion stops.
3. Photocell keeps the light OFF during daylight hours.
4. When in manual override mode, use wall switch to keep the light ON full brightness during the night.

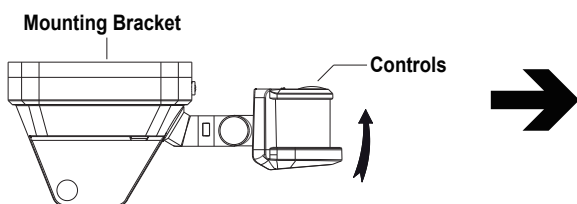
**Note: Fixture can be wall mounted or eave mounted.**



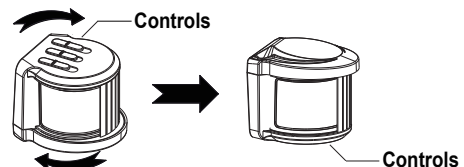
Before installing the light fixture under an eave, the sensor head must be rotated as shown in the next two steps for proper operation and to avoid the risk of electrical shock.

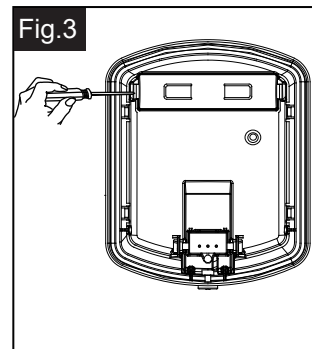
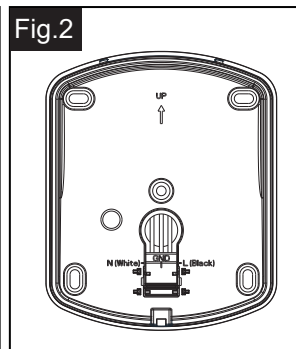
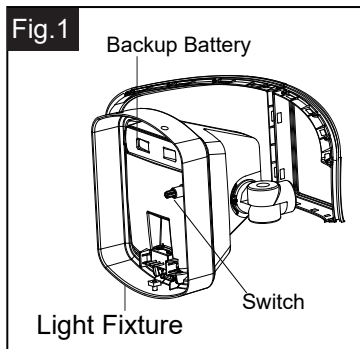
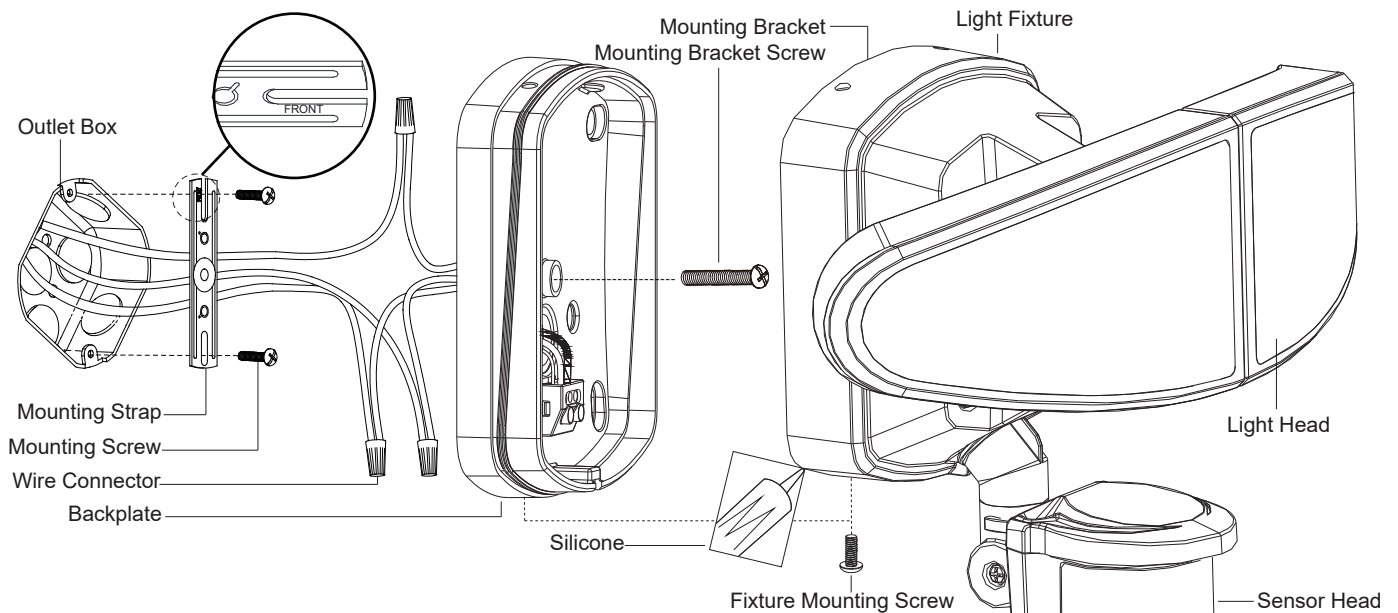
For eave mounted only:

- ⦿ Swing the sensor head towards the mounting bracket.



- ⦿ Rotate the sensor head clockwise 180° so the controls face down.





1. Before installing, please ensure the backup battery is working and can turn the light on by press the switch on the light fixture.(See Fig.1)
2. Install the mounting strap to the outlet box with the stamped word "FRONT" facing away from the outlet box, using two mounting screws, that best fit the outlet box. Backplate should sit flush against wall surface when secured. (Choose one matching pair of suitable mounting screws from the 3 pairs provided)
3. Pull out the source wires from the outlet box. Make wire connections using wire connectors as follows:
  - Connect the black wire from the fixture to the "hot" wire from the power source (usually black).
  - Connect the white wire from the fixture to the neutral wire from the power source (usually white).
  - Connect the grounding wire from the fixture to the grounding wire from the power source (green / yellow insulation).
 Carefully tuck the wires back into the outlet box.
4. Place mounting bracket against the outlet box, insert the mounting bracket screw into the center hole of the mounting strap. Tighten the mounting bracket screw securely.
  - ▲ When mounting to a wall, the "UP" arrow must point upward.
  - ▲ When mounting to an eave, the "UP" arrow must point toward the building.(See Fig.2)
5. Attach the light fixture to the mounting bracket, secure it with the fixture mounting screw. The hole on the upper end should correspond to the scale and can be pressed down.
 

**NOTE: Three needles from fixture should be inserted into three holes on mounting bracket.**
6. With silicone caulk compound, caulk completely around where the mounting bracket meets the wall surface.
 

**CAUTION: Be sure to caulk completely where the mounting bracket meets the wall surface to prevent water from seeping into the outlet box.**

#### 7. Replacing Battery Steps

Remove the battery cover from the fixture by screwdriver and replace the old battery with a new battery 7182BB, then restore the battery cover back. (See Fig.3)

## Adjusting the Sensor Head:

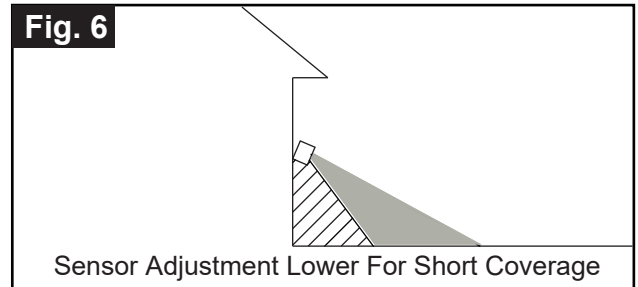
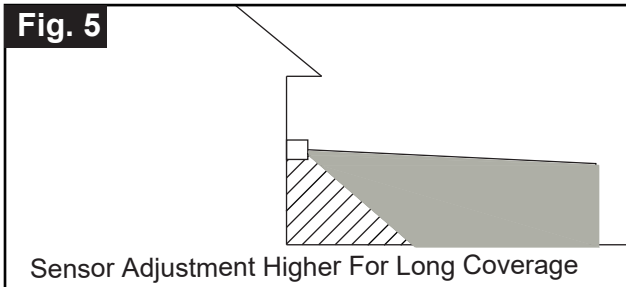
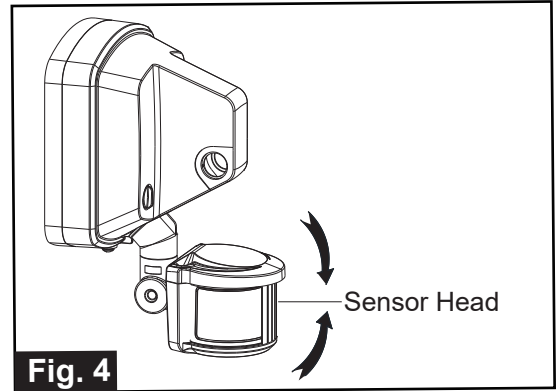
1. Aim sensor head toward desired detection area, maintaining a 5° - 40° downward angle to allow moisture to drain.

Note: Make sure sensor head is positioned with controls facing toward the ground.

2. You can rotate the sensor head up and down to change the coverage area. (See Fig. 4)

**Note: Range set too high may increase false triggering.**

(See Fig. 5 and Fig. 6)



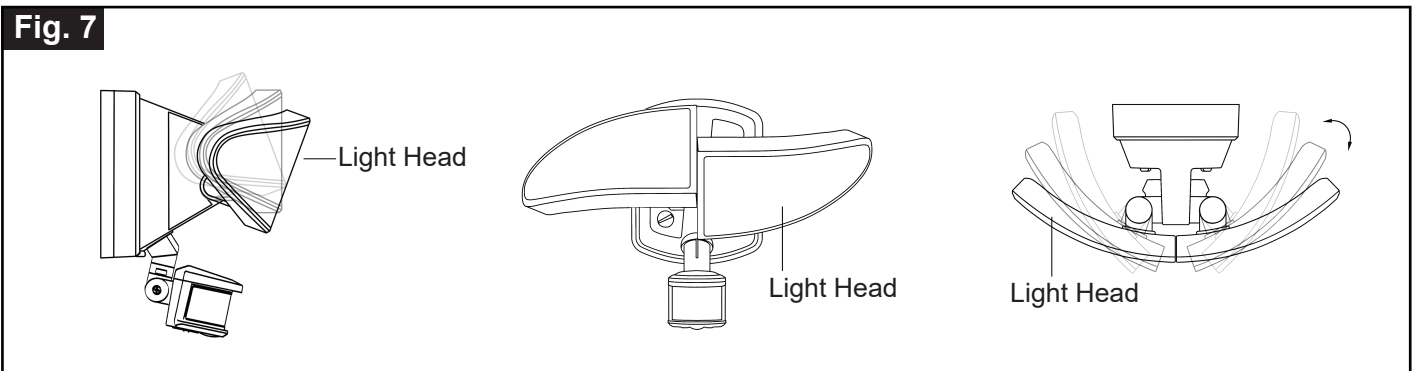
## Sensitivity of Motion Sensor

- You can adjust the sensitivity of the motion sensor by using the “SENSITIVITY” selector located on the middle of the bottom surface of the sensor. (See Fig. 7)
- Adjust motion sensor sensitivity to HIGH (H), MEDIUM (M), or LOW (L) to achieve desired performance.
- Approximate range for each setting: 70 ft. (H), 45 ft. (M), 20 ft. (L).

## Adjusting the Light Head (C):

1. Adjust the light head up or down, left or right for desired area. Keep the light heads at least 1" (25mm) away from the sensor. (See Fig. 7)

2. Keep the light heads (C) 30° below the horizon to avoid water damage and electrical shock.



## Function And Operation:

Choose a mode by sliding the switch on the bottom of the sensor. (See Fig.7)

**Note: When power is first applied, the light will turn on and warm up lasts 30 seconds.**

1. Test mode (daytime or nighttime operation )

- Set the time switch to the “TEST” position. (See Fig.8)
- With the power on, the light turns to low-level brightness automatically.
- The light turns to high-level brightness when motion is detected, and stays on as long as the motion continues. Then it reverts back to low-level brightness about 5 seconds after motion is no longer detected.

**Note: You can adjust the low-level (0~50%) and high-level (50~100%) brightness by using the brightness switch on the backplate. (See Fig. 9)**

## FUNCTION AND OPERATION (continued):

### 2. AUTO MODE (nighttime operation only)

- To shift to "AUTO" mode, slide the Time Delay switch to the desired time setting (1min, 2min,3 min). At dusk, the light turns on to pre-selected low level brightness. When motion is detected, the light turns to full brightness and stays on as long as motion continues. When the motion is no longer detected, the light at full brightness remains on for the predetermined time you set (1min, 2min,3 min), and then switches back to low level automatically.
- The light turns off automatically at dawn.

**Note: You can adjust the low-level (0~50%) and high-level (50~100%) brightness by using the low-level (0~50%) and high-level (50~100%) brightness knob. (See Fig. 9)**

### 3 HOURS (3H) MODE (nighttime operation only)

- The light turns to high-level brightness (100%) at dusk, and stays "ON" for 3 hours. Then it turns to low-level brightness. It turns to high-level brightness (100%) when motion is detected, and stays on as long as motion continues. When motion is no longer detected, it remains on for the predetermined shut-off delay time you set (1min, 2min,3 min), and then returns to the predetermined low-level brightness automatically.
- The light turns off automatically at dawn.

**Note: You can adjust the low-level (0~50%) and high-level (50~100%) brightness by using the low-level (0~50%) and high-level (50~100%) brightness knob. (See Fig. 9)**

### 4. 6 HOURS (6H) MODE (nighttime operation only)

- The light turns to high-level brightness (100%) at dusk, and stays "ON" for 6 hours. Then it turns to low-level brightness. It turns to high-level brightness (100%) when motion is detected, and stays on as long as motion continues. When motion is no longer detected, it remains on for the predetermined shut-off delay time you set (1min, 2min,3 min), and then returns to the predetermined low-level brightness automatically.
- The light turns off automatically at dawn.

**Note: You can adjust the low-level (0~50%) and high-level (50~100%) brightness by using the low-level (0~50%) and high-level (50~100%) brightness knob. (See Fig. 9)**

### 5. PHOTOCELL (PC) MODE (nighttime operation only)

- The light turns on at full brightness at dusk and remains on until dawn.

**Note: You can adjust the high level brightness (50%~100%) by using the high level brightness knob. (See Fig. 9)**

### 6. Manual Override (nighttime operation only)

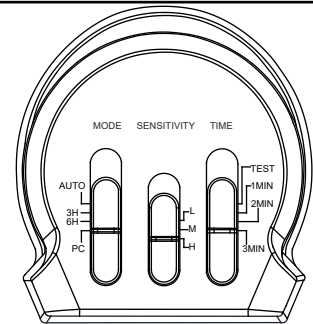
- To temporarily override the settings in "AUTO", "3H" or "6H" modes for on-demand continuous full-brightness at night, turn the wall switch "OFF" then turn it "ON" twice within 3 seconds. The light remains on all night long. To shift back to "AUTO", "3H" or "6H" mode, turn the wall switch "OFF" then turn it "ON" twice within 3 seconds again.
- The light turns off automatically at dawn.

### 7. Emergency Backup (nighttime operation only)

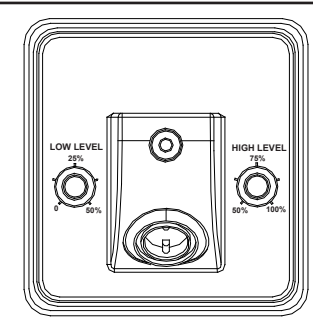
- Emergency backup works when there is an AC power failure, the light stays on 30 seconds and then enters the AUTO mode. When motion is detected, the light turns on at 400lm brightness, the light remains on for the predetermined shut-off delay time you set (1min, 2min, 3min), and then turns off. When the AC power supply is restored, the light warms up 30 seconds and then is restored to the previous functions you set.

**Note: To make sure the above functions operate properly, always keep the wall switch in the "ON" position (including the daytime).**

**Fig. 8**

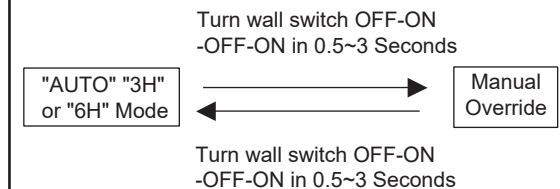


**Fig. 9**



**Fig. 10**

#### Manual Override Operation Diagram



## FUNCTION AND OPERATION (continued):

### Customization Options

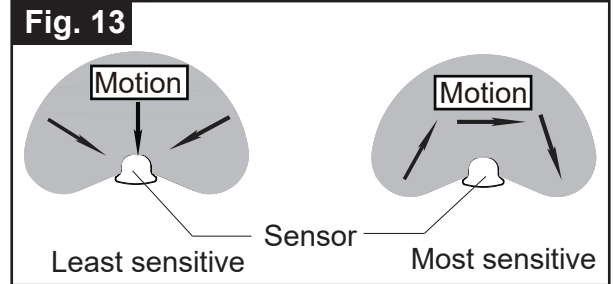
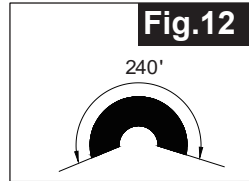
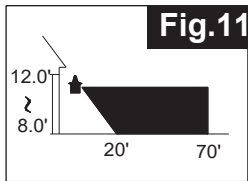
#### Shut-off Delay

- The shut-off delay is the length of time the light will stay at full brightness after motion is detected.
- You can set the shut-off delay time: "1min", "2min", "3min".

Notes:

1. The sensitivity of the motion sensor will increase as the environmental temperature gets cooler. For best performance, gently clean the lens with a soft cloth every 1 or 2 months to ensure maximum sensitivity.
2. For best performance, install fixture at least 8 feet above the ground. At such a height, the fixture will provide a detection distance of up to 70 feet at 77 degrees Fahrenheit. (See Fig.11)
3. The sensor detects movement across a detection range of 240 degrees. (See Fig.12)
4. The sensor will be more sensitive to motion across its detection path than motion directly towards it. (See Fig.13)
5. To reduce possible nuisances, do not mount the fixture near a heat source like an air conditioner, vent or furnace exhaust, or in a direction facing any reflective object or other nearby light source.

Be sure the light is mounted straight on the wall or eave; otherwise, the detection distance may be limited.



#### Troubleshooting:

| Problem                                    | Possible Cause   | Solution   |
|--|--|--|
| The light will not come on.                | <input type="checkbox"/> The light switch is turned off.<br><input type="checkbox"/> The fuse is blown or the circuit breaker is turned off.<br><input type="checkbox"/> Daylight turn-off (photocell) is in effect.<br><input type="checkbox"/> The circuit wiring is incorrect (if this is a new installation).<br><input type="checkbox"/> The motion sensor is aimed in the wrong direction.<br><input type="checkbox"/> The outside air temperature is close to the same as a person's body heat. | <input type="checkbox"/> Turn the light switch on.<br><input type="checkbox"/> Replace the fuse or turn the circuit breaker on.<br><input type="checkbox"/> Recheck after dark.<br><input type="checkbox"/> Verify the wiring is correct.<br><input type="checkbox"/> Re-aim the motion sensor to cover the desired area.<br><input type="checkbox"/> Increase the "SENSITIVITY" setting.  |
| The light comes on during the day.         | <input type="checkbox"/> The motion sensor may be installed in a relatively dark location.<br><input type="checkbox"/> The "TIME" switch is in the "TEST" position.  | <input type="checkbox"/> The light fixture is operating normally under these circumstances<br><input type="checkbox"/> Set the "TIME" switch to the 1min, 2min or 3min setting.  |
| The light comes on for no apparent reason. | <input type="checkbox"/> The motion sensor may be sensing small animals or automobile traffic.<br><input type="checkbox"/> The "SENSITIVITY" switch is set too high.<br><input type="checkbox"/> The "MODE" switch is in the 3 hour, 6 hour or PC setting.<br><input type="checkbox"/> The outside temperature is much warmer or cooler than a person's body heat (summer or winter).<br><input type="checkbox"/> The light fixture is wired through a dimmer or timer.                                | <input type="checkbox"/> Decrease the "SENSITIVITY" setting or reposition the motion sensor.<br><input type="checkbox"/> Decrease the "SENSITIVITY" setting.<br><input type="checkbox"/> The light fixture is operating normally under these circumstances.<br><input type="checkbox"/> Decrease the "SENSITIVITY" setting.<br><input type="checkbox"/> Do not use a dimmer or timer to control the light fixture. Replace the dimmer or timer with a standard on/off wall switch. |

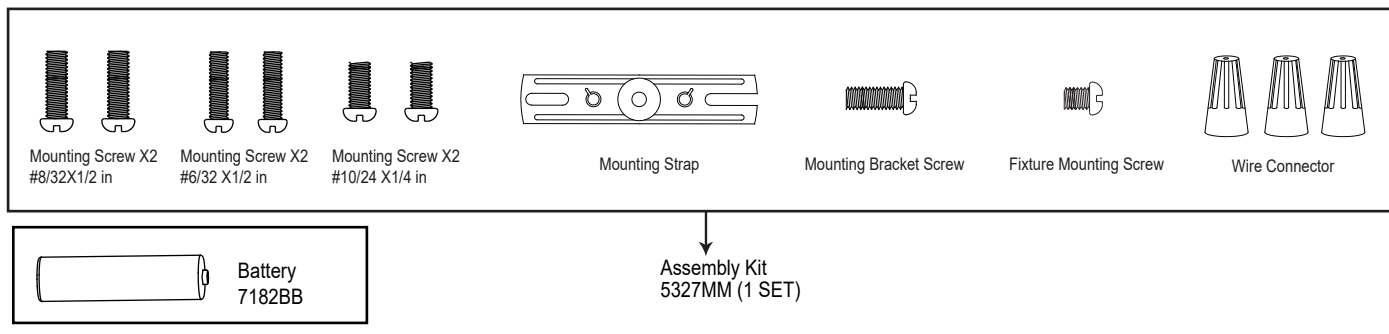
## Troubleshooting (Continued):

| Problem  | Possible Cause   | Solution  |
|--|--|---|
| The light turns off too late in the PC setting.                      | <input type="checkbox"/> The light fixture may be installed in a relatively dark location.   | <input type="checkbox"/> Relocate the light fixture setting.  |
| The light stays on continuously.                                     | <input type="checkbox"/> The motion sensor may be picking up a heat source, such as an air vent, dryer vent, or brightly painted, heat-reflective surface.<br><input type="checkbox"/> The motion sensor is in manual mode.<br><input type="checkbox"/> The light fixture is wired through a dimmer or timer.<br><input type="checkbox"/> The light fixture is on the same circuit as a motor, transformer, or fluorescent bulb. | <input type="checkbox"/> Decrease the "SENSITIVITY" setting or reposition the motion sensor.<br><input type="checkbox"/> Switch the motion sensor to auto. See Using manual mode on page 5.<br><input type="checkbox"/> Do not use a dimmer or timer to control the light fixture. Replace the dimmer or timer with a standard on/off wall switch.<br><input type="checkbox"/> Install the light fixture on a circuit without motors, transformers, or fluorescent bulbs.           |
| The light flashes on and off.  | <input type="checkbox"/> Heat or light from the lamp heads may be turning the motion sensor on and off.<br><input type="checkbox"/> Heat is being reflected from other objects and may be turning the motion sensor on and off.<br><input type="checkbox"/> The motion sensor is in "TEST" mode and warming up.  | <input type="checkbox"/> Reposition the lamp heads away from the motion sensor.<br><input type="checkbox"/> Decrease the "SENSITIVITY" setting or reposition the motion sensor.<br><input type="checkbox"/> While in "TEST" mode, the light only stays on for 5 seconds. Set the "TIME" switch to 1min, 2min or 3min.   |
| The light flashes once then stays off in manual mode.                | <input type="checkbox"/> The motion sensor is detecting light from the lamp heads.   | <input type="checkbox"/> Reposition the lamp heads to keep the area below the motion sensor relatively dark.  |
| The light is very dim and goes off quickly after motion has stopped. | <input type="checkbox"/> The light is in battery backup mode.  | <input type="checkbox"/> Ensure power is turned on at the light switch. Light will operate normally once the power is back on.  |
| Light will not come on when power is turned off.                     | <input type="checkbox"/> The outside temperature is either too hot or cold for the lithium battery to operate safely.<br><input type="checkbox"/> The lithium battery charge is too low.<br><input type="checkbox"/> The lithium battery is no longer able to hold a charge.   | <input type="checkbox"/> When the outside temperature is in a safe range the lithium battery will work correctly. power is back on.<br><input type="checkbox"/> When the lithium battery has been charged to a safe level, the light will work correctly.<br><input type="checkbox"/> If the battery will not charge after 7 days (with the light switch in the ON position), then replace the battery with a Li-ion, 18650-2000mAh, 3.7V 7.4wh battery with the correct connector. |



The following parts are available for re-order if damaged or missing.

### Spare Parts List:



### 5 Year Limited Warranty

Vaxcel warrants all of our products against defects in workmanship and finishes for one year following the date of shipment.

In addition:

- Any product with an integrated motion sensor or dusk-to-dawn photocell is supported by a 5-year warranty for the functionality of the product.
- Any product with integrated LED modules is covered by a 5-year warranty on the LED functionality.

*Exclusions: This warranty does not include the failure of products from extreme acts of nature; environmental conditions not suited for the products intended use; operation in temperatures outside of the range specified in the instruction manual; usage with improper power supply, power surges or dips. For coastal locations, some corrosion is considered normal for the environment.*

*Vaxcel reserves the right to repair, replace or issue a credit for any properly installed product, provided it is returned per RMA instruction. This warranty is limited to the cost of the product only and does not extend to transportation, installation or replacement costs.*

How can warranty service be obtained?

info@vaxcel.com

1-800-482-9235