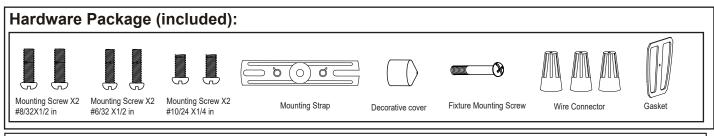
# ASSEMBLY AND INSTALLATION INSTRUCTIONS

T0784 / T0785

# 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.



# **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.
- 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.

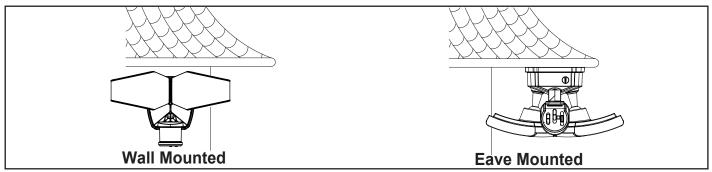
Maximum Wattage: 32 W

Working Temperature Range: - 13°F ~ 113°F

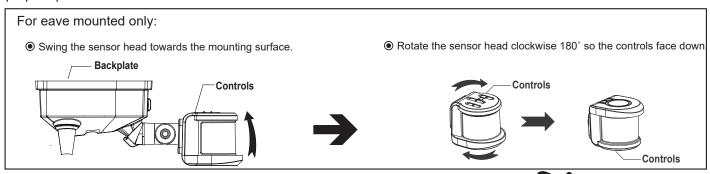
#### Features:

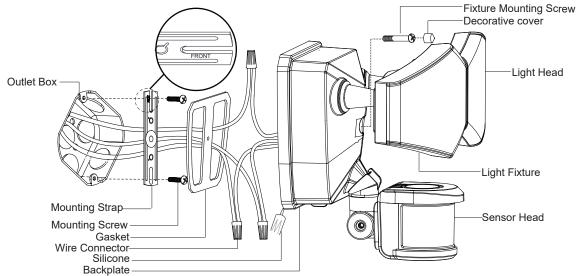
- 1. Energy saving LED fixture.
- 2. Motion sensor: turns light ON automatically when motion is detected and turns light OFF or remains in low-level brightness when motion stops.
- 3. Photocell keeps the light OFF during daylight hours.
- 4. When in manual override mode, use wall switch to keep the light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

Note: Fixture can be wall mounted or eave mounted.



Light fixture and sensor should be mounted as shown above when installed (depending upon type of installation). 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.





# **Installation Steps**

# Turn off the power at fuse or circuit box

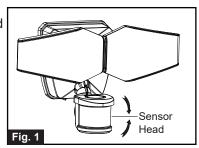
- 1. Install the mounting strap to the outlet box with the stamped word "FRONT" facing away from the outlet box, using two mounting screws that best fit the outlet box. (Choose one matching pair of suitable mounting screws from the 3 pairs provided)
- 2. Thread the fixture wires through gasket, and then attach the gasket on the backplate of the light fixture.
- 3. Connect the house grounding wire and the fixture grounding wire (green / yellow) using the wire connector. Connect the fixture black wire to the house black wire and the fixture white wire to the house white wire using wire connectors provided. Carefully tuck the wires back into the outlet box.
- 4. Attach the backplate of the light fixture to the mounting strap by securing it with the fixture mounting screw. Push the decorative cover firmly into the fixture mounting screw hole on the light fixture.
- 5. Using a silicone caulk compound (not included), caulk completely around where the backplate of the light fixture meets the wall surface.

CAUTION: Be sure to caulk completely where the backplate meets the wall surface to prevent water from seeping into the light fixture and outlet box.

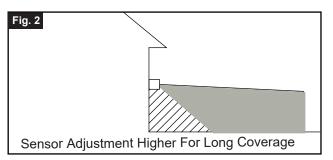
# Turn on the power at fuse or circuit box

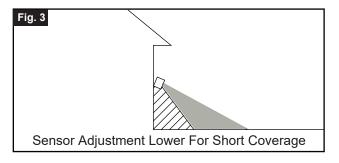
# **Adjusting the Sensor Head:**

- 1. a: 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 control knob facing towards the ground
  - b: You can rotate the sensor head up and down to change the coverage area. (See Fig.1)



2. Note: Range set too high may increase false triggering. (See Fig.2, Fig.3)

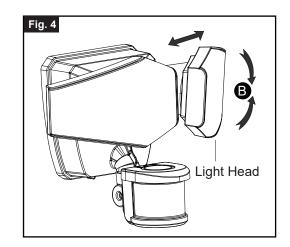






# **Adjusting the Light Head:**

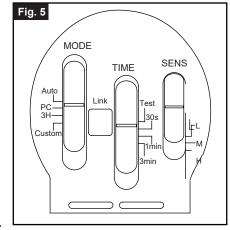
- Gently grasp the light heads and tilt them up or down, left or right to adjust the light coverage area.
   Keep the light heads at least 1" (25mm) away from the sensor. (See Fig. 4)
- 2. Keep the light heads 30° below horizontal to avoid water damage and electrical shock.



# **Function And Operation:**

# **Sensitivity of Motion Sensor:**

- 1. You can adjust the sensitivity of the motion sensor by using the "SENS" selector located on the bottom surface of the sensor. (See Fig.5)
- 2. Adjust motion sensor sensitivity to HIGH (H), MEDIUM (M), or LOW (L) to achieve desired performance.
- 3. Approximate range for each setting: 30 ft. (L), 50 ft. (M), 70 ft. (H).

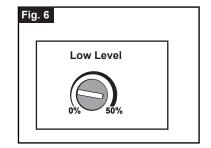


Choose a mode by sliding the switch on the bottom of the sensor. (See Fig.5) Note: When power is first applied, the light will turn on to 100% brightness. The sensor will take 30 seconds to warm up.

- 1. TEST MODE (daytime and nighttime operation.)
  - Slide the Time switch to the "Test" position.
  - The light turns to high-level brightness (5000K) when motion is detected, and stays on as long as the motion continues.

Then it reverts back to 2700K CCT (Correlated Colour Temperature) Color and the low-level brightness (0~50%) as per setting about 5 seconds after motion is no longer detected.

- 2. AUTO MODE (nighttime operation only)
  - To "AUTO" mode, slide the Time switch to the desired time setting (30s/1min/3min). At dusk, the light turns on to pre-selected low-level brightness (2700K). When motion is detected, the light turns to high-level brightness (5000K) and stays on as long as motion continues. When the motion is no longer detected, the light at high-level brightness (5000K) remains on for the predetermined time you set (30s/1min/3min), then switches back to pre-selected low-level brightness (2700K) automatically.
  - The light turns off automatically at dawn.



Note: You can adjust the low-level brightness(0~50%) by using the low-level brightness(0~50%) knob on the backplate (See Fig.6).

- 3. PC MODE (nighttime operation only)
  - In "PC" mode, the light will turn on at full brightness (5000K) at dusk and remains on until dawn.
- 4. 3 HOURS (3H) MODE (nighttime operation only)
  - In "3H" mode, the light turns to high-level brightness (5000K) at dusk, and stays "ON" for 3 hours, then it turns to pre-selected low-level brightness (2700K). It turns to high-level brightness (5000K) 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 (30s/1min/3min), then returns to the pre-selected low-level brightness (2700K) automatically.
  - The light turns off automatically at dawn.

Note: You can adjust the low-level brightness  $(0\sim50\%)$  by using the low-level brightness  $(0\sim50\%)$  knob on the backplate (See Fig.6).



# **Function And Operation (Continued)**

- 5. CUSTOM MODE (nighttime operation only):
  - In "CUSTOM" mode, the light turns on full brightness (2700K) at dusk and off at dawn automatically.
  - Set motion sensor operation to go on at a specific time.
     Turn the wall switch "OFF", and turn it "ON" twice within 3 seconds. The light will go into motion-sensor operation at the specified time every night. The light turns off automatically at dawn.

For example, a homeowner wants to have the light stay on high-level brightness from dusk to 8pm, and would like the light to go into "AUTO" motion sensor mode. To achieve this, the light homeowner will turn the wall switch "OFF", and turns it "ON" twice within 3 seconds. This sets the time the light goes

into "AUTO" mode every day, the light will behave the same way.

To revert back to Default, turn the wall switch "OFF" and then turn it "ON" after 5 seconds.

Note: You can adjust the low-level brightness( $0\sim50\%$ ) by using the low-level brightness( $0\sim50\%$ ) knob on the backplate (See Fig.6).

When light units are linked, the Set motion sensor operation to go at a specific time is also linked when MODE settings are in Custom.

#### 6. RF Linking Network Setup

From all the light units, select one as the main unit and the others as the sub-units;

First to setup all the sub-units, press the Link button twice within 3 seconds, the sub-units will flash once every 1 second meaning it's waiting to receive a matching signal from the main light.

Then to setup the main unit, press and hold the Link button for 5 seconds, the main unit will flash slowly (once every 3 seconds), and when the sub-units have paired with the signal, the sub-units will stop flashing confirming they have paired with the main unit. (If pairing is not successful, the sub-unit will keep flashing).

When all the sub-units have stopped flashing, pres the Link button on the main unit once to complete the pairing process. (The main unit will stop flashing.)

After completing the pairing process, any light within the Link group range can send of receive the photo sensor or motion sensor signal from the other light and response accordingly.

Note: Maximum link up to 10 units per link group, each light can link within 120ft apart.

### **RF Linking**

#### a. Photo Sensor Linking

When the Photo Sensor detects that the ambient brightness is less than the LUX set value.

- In "Auto" mode, the light turns on to Low-Level brightness (2700K) and send out a comprehensive signal.
  - 1) Linking other lamps set in "Auto" mode to enter Low-Level brightness
- 2) Linking other lamps set in "3H", "PC", or "Custom" mode to enter High-Level brightness.
- In "PC", "3H", or "Custom" mode, the light turns on to High level brightness and send out a comprehensive signal.
- 1) Linking other lamps set in "Auto" mode to enter Low-Level brightness (2700K).
- 2) Linking other lamps set in "PC", or "3H" mode to enter High-Level brightness (5000K).
- 3) Linking other lamps set in "Custom" mode to enter High-Level brightness (2700K).

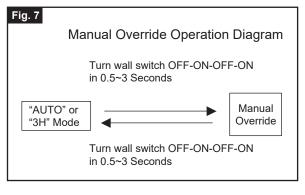
When the Photo Sensor detects that the ambient brightness is greater than the LUX set value,

• A comprehensive signal from the initial detector unit will inform all the Linking lamps to turn off automatically.

#### b. Motion Detect Linking

When the Motion Sensor detects

- In "Auto" mode, the lamp sends out a comprehensive signal to all the linked lamps to automatically switch to High-Level brightness (5000K) and remains on for the predetermined time you set (30s/1min/3min).
- In "3H" or "Custom" mode,
  - 1) During the start of "3H" or "Custom" mode, the lamp will remain on High-Level brightness and turn off the motion sensor after 3 hours or the custom set time is up.
  - 2) Once the "3H" or "Custom" set time is up, the lamp will turn on motion sensor and switch to "Auto" mode where the lamp sends out a comprehensive signal to all the linked lamps to automatically switch to High-Level brightness (5000K) and remains on for the predetermined time you set (30s/1min/3min).





# **FUNCTION AND OPERATION (continued)**

Unlink the unit from the Link Group

Press and hold the Link button on the sensor head for 3 seconds, the light will flash 3 times to confirm reset and remove from the Link Group.

All lights will need to be reset before setup the Link Group.

Strongly recommended to set all the linked lights to the same MODE to avoid any confusion of function error.

- 7. Manual Override (nighttime operation only)
  - To temporarily override the settings in "AUTO" or "3H" mode for on-demand continuous high-level 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" or "3H" mode, turn the wall switch "OFF" then turn it "ON" twice within 3 seconds again. (See Fig.7)
  - The light turns off automatically at dawn.

Note: When light units are linked, the Manual Override action is also linked when MODE settings are in Auto or 3H.

# **Customization Options:**

Shut-off Delay

- The shut-off delay is the length of time the light will stay at brightness after motion is detected.
- You can set the shut-off delay by pushing the switch so that it points to the desired time setting (30s/1min/3min).

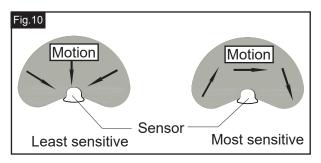
#### Notes:

- 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.8)
- 3. The sensor detects movement across a detection range of 240 degrees. (See Fig.9)

Where you install your fixture is important:
Be sure the light is mounted straight on the wall or eave; otherwise, the detection distance may be limited.

Fig.8

| 12.0| | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240° | 240°



- 4. The sensor will be more sensitive to motion across its detection path than motion directly towards it. (See Fig.10)
- 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.

# **Troubleshooting**

| Problem                     | Possible Cause  | Solution  |
|-----------------------------|---|---|
| The light will not come on. | ☐ The light switch is turned off.   | ☐ Turn the light switch on.                           |
|                             | ☐ The fuse is blown or the circuit breaker is turned off.                   | ☐ Replace the fuse or turn the circuit breaker on.    |
|                             | ☐ Daylight turn-off (photocell) is in effect.                               | ☐ Recheck after dark.                                 |
|                             | ☐ The circuit wiring is incorrect (if this is a new installation).          | ☐ Verify the wiring is correct.                       |
|                             | ☐ The motion sensor is aimed in the wrong direction.                        | ☐ Re-aim the motion sensor to cover the desired area. |
|                             | ☐ The outside air temperature is close to the same as a person's body heat. | ☐ Increase the "SENS" setting.                        |

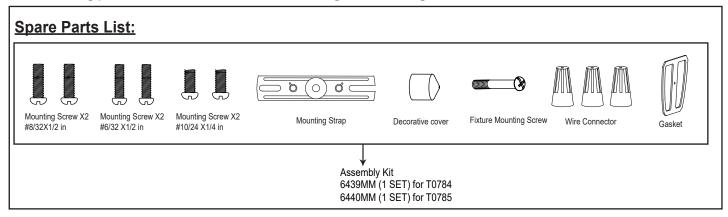


# **Troubleshooting (Continued):**

| Problem   | Possible Cause  | Solution   |
|---|---|--|
| The light comes on during the day.                  | ☐ The motion sensor may be installed in a relatively dark location. ☐ The "TIME" switch is in the "TEST" position.  | ☐ The light fixture is operating normally under these circumstances☐ Set the "TIME" switch to the 30s, 1min or 3min setting.                   |
| The light comes on for no apparent reason.          | The motion sensor may be sensing small animals or automobile traffic.  ☐ The "SENS" switch is set too high.  ☐ The outside temperature is much warmer or cooler than a person's body                    | □ Decrease the "SENS" setting or reposition the motion sensor. □ Decrease the "SENS" setting. □ Decrease the "SENS" setting.                   |
|   | heat (summer or winter).  The light fixture is wired through a dimmer or timer.   | ☐ Do not use a dimmer or timer to control the light fixture. Replace the dimmer or timer with a standard on/off wall switch.                   |
| The lights turns off too late in the PC setting.    | ☐ The light fixture may be installed in a relatively dark location.   | Relocate the light fixture or use the 3 hour setting.  |
| The lights stay on continuously.                    | <ul> <li>□ The motion sensor may be picking up a heat source, such as an air vent, dryer vent, or brightly painted, heat-reflective surface.</li> <li>□ The motion sensor is in manual mode.</li> </ul> | <ul><li>□ Decrease the "SENS" setting or reposition the motion sensor.</li><li>□ Switch the motion sensor to auto. See Page 5 Fig.7.</li></ul> |
|   | ☐ The light fixture is wired through a dimmer or timer.   | ☐ Do not use a dimmer or timer to control the light fixture. Replace the dimmer or timer with a standard on/off wall switch.                   |
|   | ☐ The light fixture is on the same circuit as a motor, transformer, or fluorescent bulb.  | ☐ Install the light fixture on a circuit without motors, transformers, or fluorescent bulbs.   |
| The lights flash on and off.                        | ☐ Heat or light from the lamp heads may be turning the motion sensor on and off.  | ☐ Reposition the lamp heads away from the motion sensor.   |
|   | Heat is being reflected from other objects and may be turning the motion sensor on and off.   |  |
|   | ☐ The motion sensor is in "TEST" mode and warming up.   | ☐ While in "TEST" mode, the light only stays on for 30 seconds. Set the "TIME" switch to 30s,1min or 3min.                                     |
| The lights flash once then stay off in manual mode. | ☐ The motion sensor is detecting light from the lamp heads.   | ☐ Reposition the lamp heads to keep the area below the motion sensor relatively dark.  |



#### The following parts are available for reorder if damaged or missing.



# 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

