

MOTION-TRACKING

# LED Security Spotlight

User Manual



[www.jascoproducts.com](http://www.jascoproducts.com)

**1-800-654-8483**

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Thank you for purchasing the GE Motion-Tracking LED Security Spotlight Activation control. This economical, energy efficient outdoor LED light has been designed to allow easy installation, flexible mounting options and provide exceptional light output with minimum power consumption.

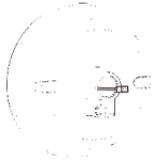
Please read all the Instructions carefully. Keep them for future reference.

## PARTS LIST

Before installing please ensure all the following items are included in the package:



Motion Tracking Light



Mounting Base



2 Mounting Screws



2 Wire Connectors



Gasket

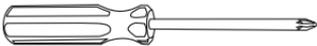


Horizontal Mount Extension Tube  
and Extension Tube Screws (4)



Remote Control

## TOOLS NEEDED:



Phillips head screwdriver #2



## Questions? Problems? Missing Parts?

If you have any questions regarding the installation or operation of the product, **Before returning to Retailer**, please contact Technical Support at 1-800-654-8483, option 4, Monday thru Friday 8am - 5pm, Central Standard Time Zone.

**WARNING: Turn power off at circuit breaker or fuse box. Do Not rely on a wall switch alone to turn off power.**

**Consult a local licensed electrician or electrical contractor if you are not sure about the installation. Always install wiring connections in accordance with local code, ordinances and National Electric Code.**

### **WARNING**

#### **Risk of electric shock**

- Turn power off before servicing—see instructions.
- Ensure that no bare wires are exposed outside the electrical connections.

#### **Risk of injury**

- LED light output is strong enough to injure human eyes. Precautions must be taken to prevent looking directly at the LEDs with unaided eyes for more than a few seconds.
- Some metal parts in the fixture may have sharp edges. To prevent cuts and scrapes, wear gloves when handling the parts.
- Account for small parts and destroy packing material, as these may be hazardous to children.

#### **Risk of fire**

- Minimum 90° C supply conductors

**No serviceable parts**

**Non-replaceable LEDs**

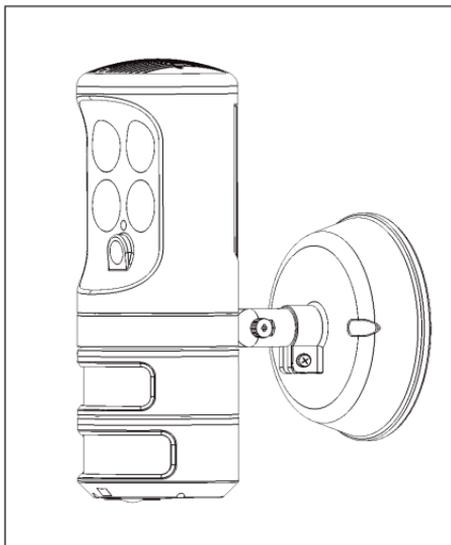
## INSTALLATION

Select an existing outdoor light fixture, either wall or eave mount for replacement. The fixture must be connected to 120v, 60hz power source.

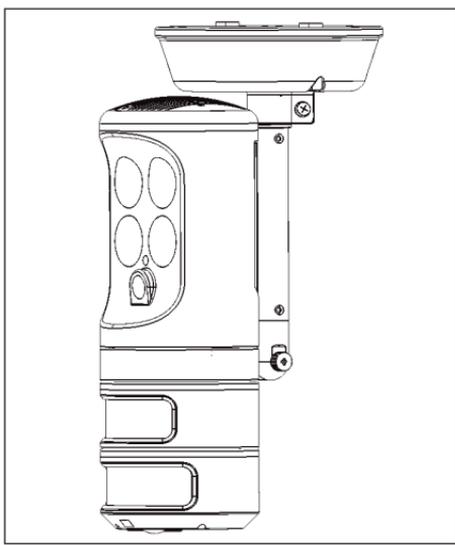
### MOUNTING PREPARATION FOR THE LED SPOT LIGHT FIXTURE

For maximum flexibility, the LED Security light can be mounted on a wall (vertical) or under the eave (horizontal).

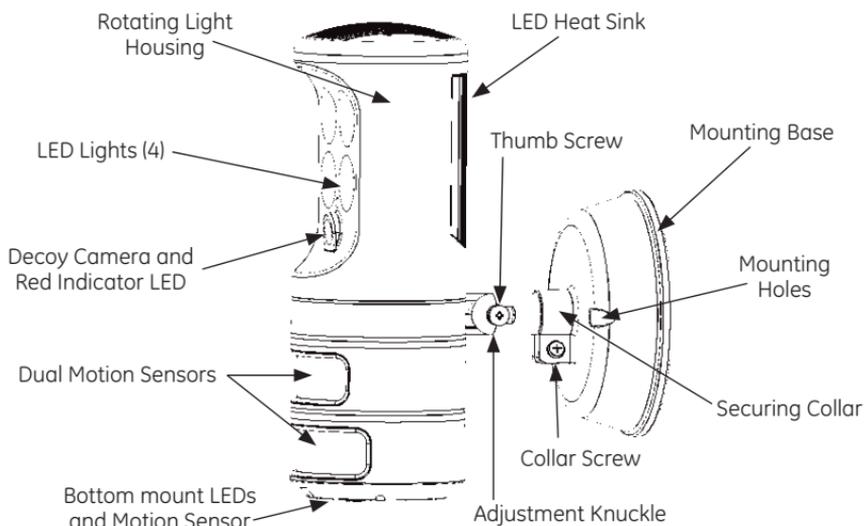
Wall Mount



Eave Mount



## LED Security Spotlight Features

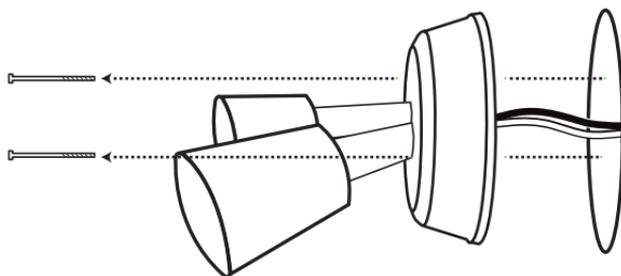


**WARNING: Turn power off at circuit breaker or fuse box. Do Not rely on a wall switch alone to turn off power.**

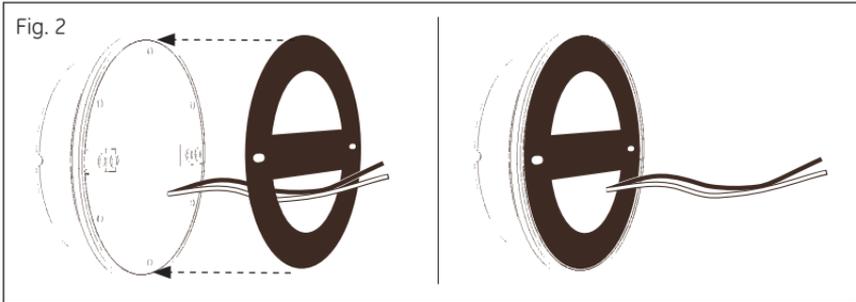
## VERTICAL (WALL) MOUNT AND WIRE CONNECTION

1. Remove the existing light fixture and disconnect house wires (black, white and ground)[See Fig. 1].

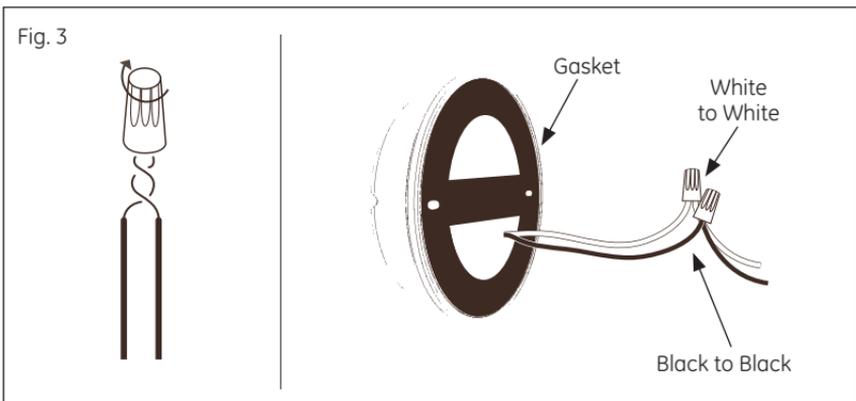
Fig. 1



2. Route black and white wires coming from back of mounting base through the bottom hole of the gasket [See Fig. 2]. Align the two mounting screw holes on the gasket to the two mounting screw holes on the mounting base and press the gasket flush to the mounting base.

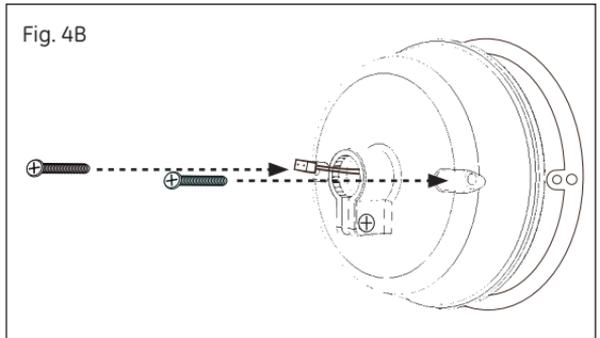
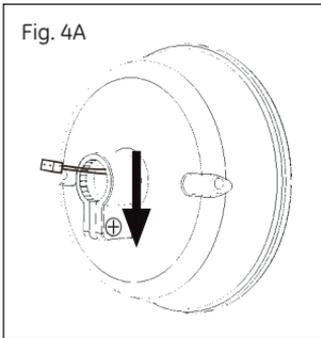


3. Locate black and white wires coming from back of mounting base. Strip wires 3/8" (9.5mm) if not previously stripped. Hold BLACK house wire and BLACK fixture wire together with ends even. Align any frayed strands or conductors. Push wires into wire nut and screw Clockwise until two twists are visible in the wires [See Fig. 3]. Repeat above procedure for both the WHITE house wire and the WHITE fixture wire.



Note: The Motion Tracking Spot Light does not utilize a house ground wire because of the plastic material of the mounting base. The house ground wire does not attach to the mounting base. If a house ground wire is present, position inside junction box.

4. If mounting to a wall (in vertical position) ensure the mounting base is correctly oriented with the collar screw positioned downward [See Figure 4A].



Position mounting base and gasket over the junction box. **Ensure wires and wire nuts are positioned inside the junction box.** Align holes of mounting base with mounting holes in junction box. Insert mounting screws as shown [See Fig. 4B]. Ensure that gasket is evenly positioned around mounting base. Using screwdriver, screw mounting screws into junction box until mounting base is snug; do not over-tighten.

Note: If a wet location junction box was not used, caulk edge of mounting base with silicone weather resistant sealant (not included).

5. Plug the wire connector from the base into the wire connector from the LED Motion Tracking fixture [See Fig. 5A]. Next, insert adjustment knuckle into mounting base collar opening. Position connectors and wire inside adjustment knuckle, take care not to pinch the wire. When properly inserted, adjustment knuckle will snap into place. Tighten collar screw of securing collar until snug [See Fig. 5B]. **Do not over tighten.**

Fig. 5A

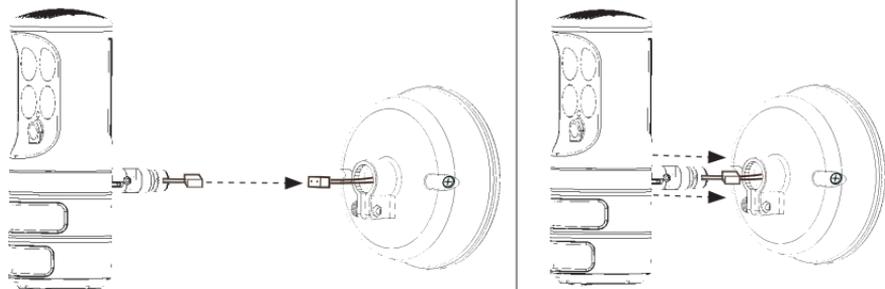
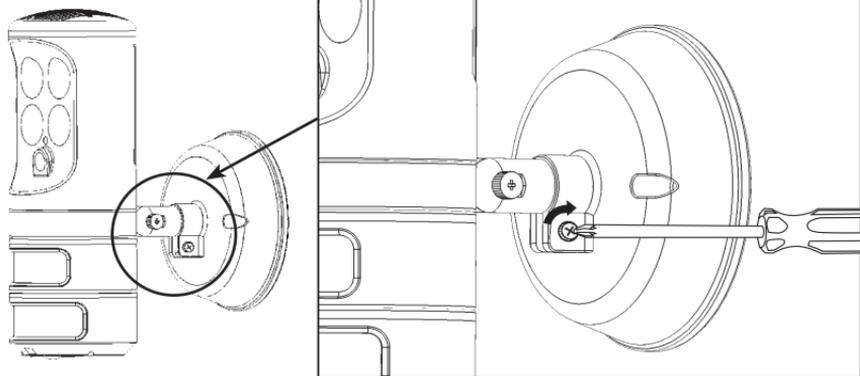
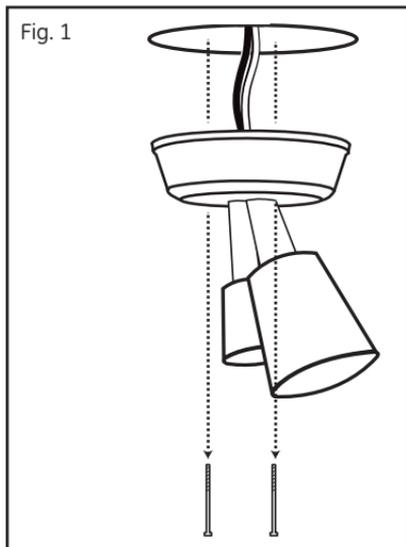


Fig. 5B

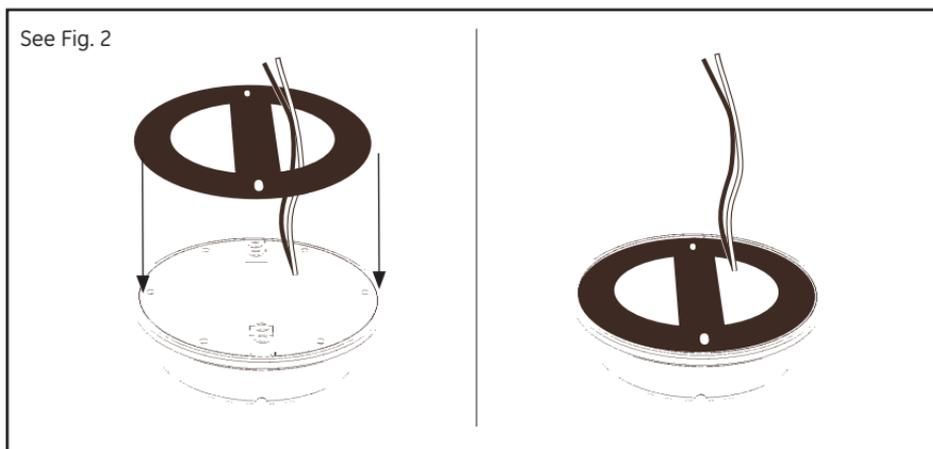




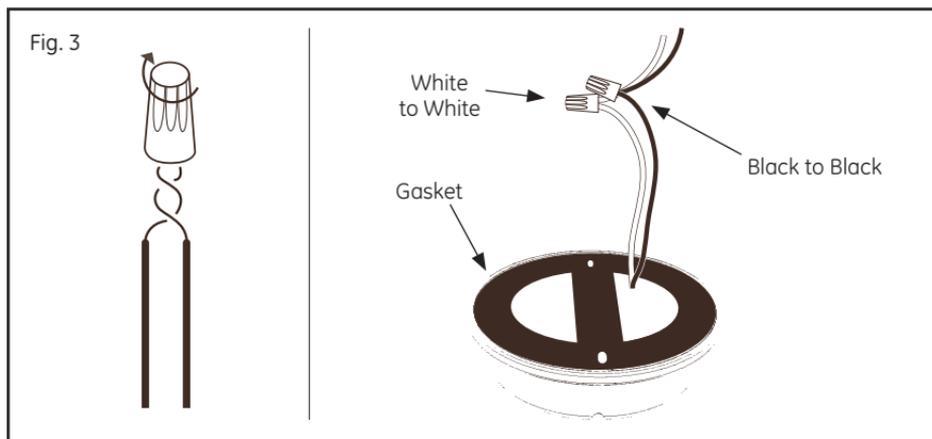
### HORIZONTAL (EAVE) MOUNT AND WIRE CONNECTION

1. Remove the existing light fixture and disconnect house wires (black, white and ground if present)[See Fig. 1].

2. Route the black and white wires coming from the back of the mounting base through the basket [See Fig. 2]. Align the two mounting screw holes on the gasket to the two mounting screw holes on the mounting base and press the gasket flush to the mounting base.

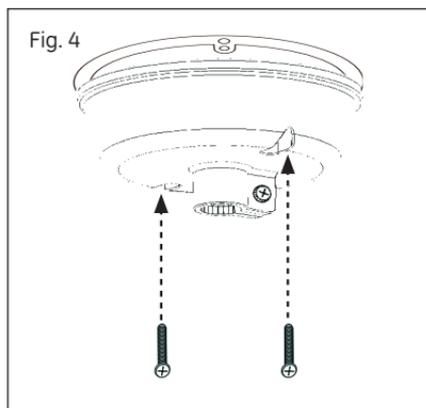


3. Locate black and white wires coming from LED light fixture. Strip wires 3/8" (9.5mm) if not previously stripped. Hold BLACK house wire and BLACK fixture wire together with ends even. Align any frayed strands or conductors. Push wires into wire nut and screw Clockwise until two twists are visible in the wires. Repeat above procedure for both the WHITE house wire and the WHITE fixture wire.



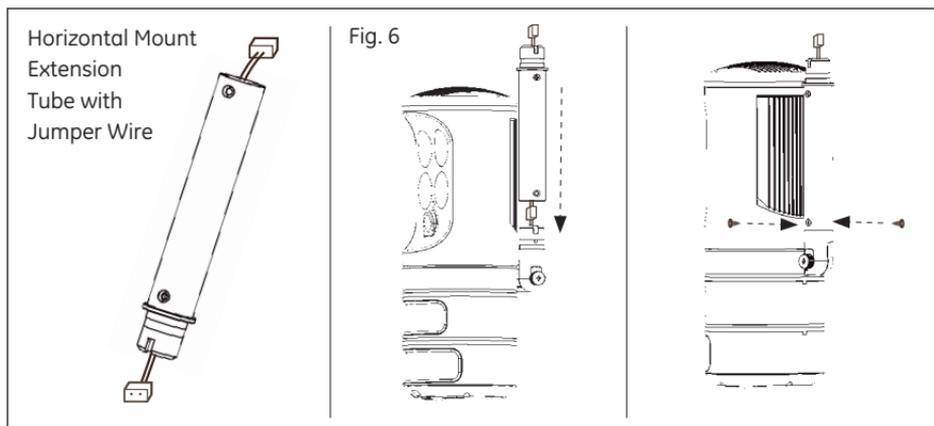
Note: The Motion Tracking Spot Light does not utilize a house ground wire because of the plastic material of the mounting base. The house ground wire does not attached to the mounting base. Position house ground wire inside junction box.

4. Position mounting base and gasket over the junction box. Ensure wires and wire nuts are positioned inside the junction box. Align holes of mounting base with holes in junction box. Insert mounting screws as shown [See Fig. 4]. Ensure that gasket is evenly positioned around mounting base. Using a screwdriver, screw mounting screws into junction box until mounting base is snug; do not over-tighten.



Note: If a wet location junction box was not used, caulk edge of mounting base with silicone weather resistant sealant (not included).

5. Locate Horizontal Mount Extension Tube with extension jumper wire



6. Connect jumper wire to wire coming from LED Motion Tracking fixture. Insert extension tube onto fixture knuckle. Secure with extension tube screws provided [See Fig. 6].

7. Connect wire coming from mounting base to wire coming from extension tube. Insert extension tube into mounting base, taking care to not pinch extension wire. When properly inserted, the extension tube will snap into place [See Fig. 7A]. Tighten screw on securing collar until snug [See Fig. 7B]. **Do not over tighten.**

Fig. 7A

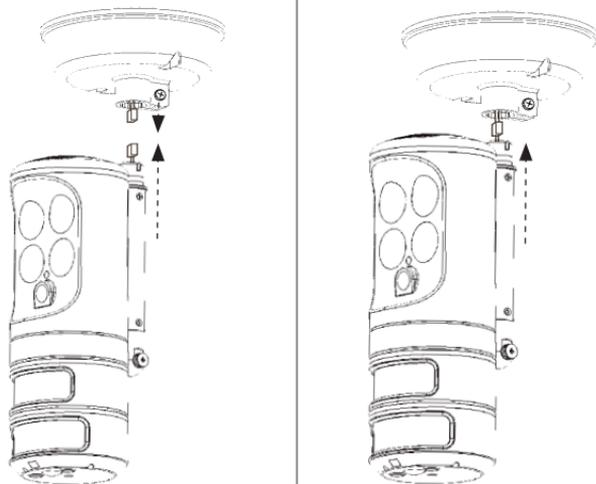
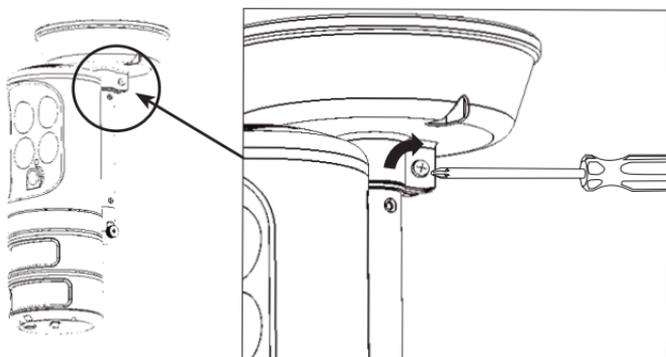


Fig. 7B



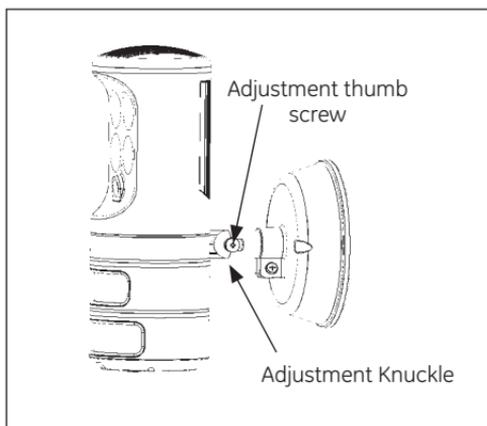
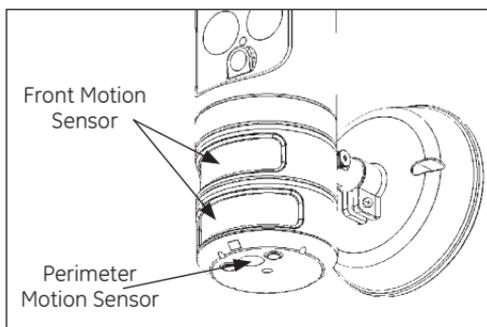
## POWER UP

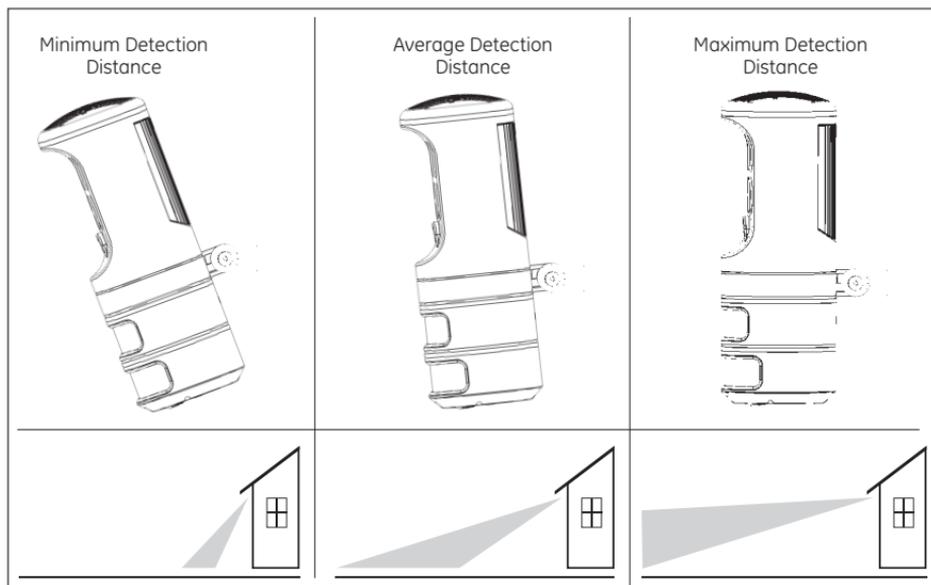
When the power is turned on to the fixture, the front lights will turn on and the light housing will rotate to the far left and then to the far right. It will then rest at the center position. The bottom 'Perimeter' LEDs will begin blinking. This indicates the fixture is in a warm-up period; this allows the motion sensors time begin detecting the surrounding area. During the warm-up period the fixture will not detect movement or respond to any commands from the remote control. When the bottom LEDs stop blinking the fixture will be set into AUTO (security) Mode and start operating.

## SET-UP AND OPERATION

The LED Motion Tracking Spot Light has three individual motion sensors: two adjustable sensors located on the front, and one perimeter motion sensor located on the bottom. The dual adjustable sensors are used to detect and track motion in front of the LED light fixture. The perimeter motion sensor on the bottom is used to detect motion underneath the LED light fixture.

Locate the adjustment thumb screw on the side of the adjustment knuckle. Loosen the thumb screw slightly to allow adjustment of the light fixture angle. Depending on the mounting height, you may need to angle the light fixture at a slight downward angle so the motion sensors are able to detect motion near the light fixture. The front adjustable motion sensors have a fixed detection range up to 45ft. By adjusting the angle of the fixture, you will adjust the motion detection range. [See Fig. 8]





## MOTION DETECTION RANGE SET-UP

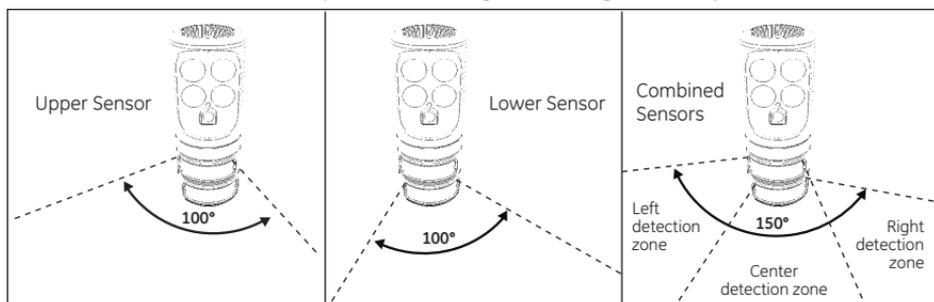
Each adjustable motion sensor can detect motion (in front of the light fixture) up to 100°.

The upper sensor is sensitive to motion on the left side of the light fixture; the lower sensor is sensitive to motion on the right side of the light fixture. The overlap area from the two sensors creates a Center detection area in front of the light fixture.

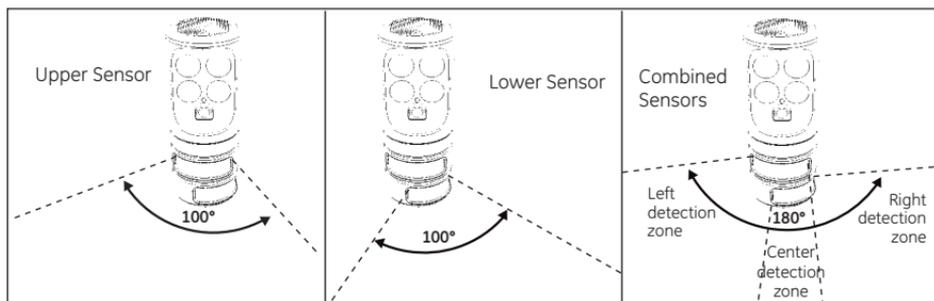
When the adjustable sensors are set to the **Narrow** position, equal emphasis is given to the left, right and center detection zones. The center detection zone is equal in size to the left and right detection zones. The total detection range with the both sensors in the **Narrow** position is up to 150°.

When the adjustable sensors are set to the **Wide** position, more emphasis is given to the far left and far right detection zones. The center zone becomes smaller. The Motion tracking light will continue to track movement across the center zone, **but there will be a slight delay before light moves to the center position.** The total detection range with both sensors in the **Narrow** position is up to 180°.

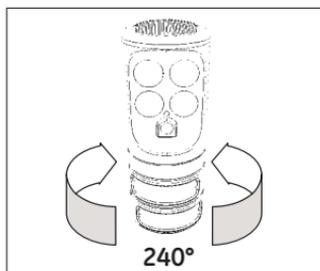
### Narrow Position (sensors positioned together, large overlap)



### Wide Position (sensors positioned apart, small overlap)



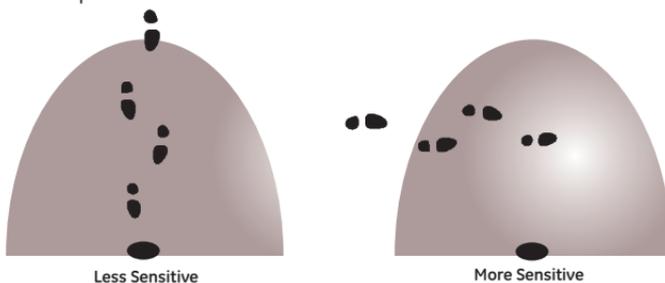
### FIELD OF VIEW



Both motion sensors can be adjusted together within a 240° range. This field of view allows the maximum adjustment for the distance the light housing will rotate. Within this field of view the motion sensors can be set to the narrow or wide positions. The light housing will rotate only as far as the outside edge of each sensor.

## HOW DOES MOTION DETECTION WORK?

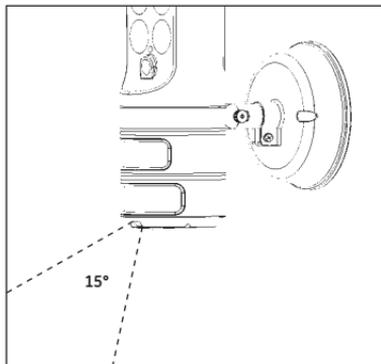
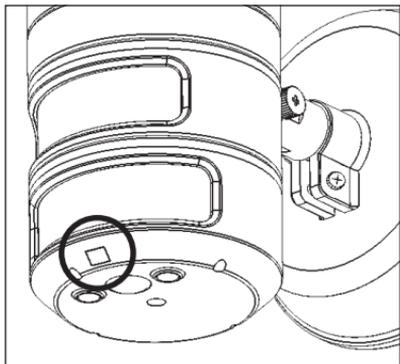
Motion sensors are actually heat sensors. Motion Sensors detect motion by monitoring changes in heat within the detection area. As a person enters the detection area, the sensor compares the outside temperature with the body temperature of the person within the detection area. As the person moves within the detection area, the heat measurements change. Motion Sensors determine these changes to be 'movement'. All motion sensors are more sensitive to movement across the detection area, and less sensitive to movement toward the sensor. The Motion Sensor on the GE LED Motion Tracking Security Light is designed to detect motion up to 180°, and outward from the fixture up to 40ft.



## TEST MODE

### TEST MODE 1

Once the fixture is mounted and positioned, you can test the detection range for each adjustable sensor by placing the fixture into 'TEST Mode 1'. Locate the infrared remote control. Point the remote at the infrared window located in front of the fixture and press and release the TEST button once. (Note: you





must be in front of the fixture within a 15° angle and within 15 ft.) When the fixture receives the command, the lights will turn on and the light housing will automatically rotate to the far left and then to the far right. It will then rest at the center position. The red indicator light on the front will blink rapidly. You may now walk around the fixture testing the motion detection angles. When either or both sensors detect motion, the lights will turn on for 3 seconds, and then turn off. This will allow you to ensure the sensors are set to detect motion in the desired areas. **In this test mode, the light housing will not move.**



### TEST MODE 2

After you have completed the sensor angle set-up, point the remote at the IR window located in front of the fixture. Press and hold the TEST button until the light housing begins to rotate and release the button. The light housing will rotate to the far left, then to the far right and rest in the center position. The red indicator light will blink slowly. In TEST Mode 2, the fixture will begin motion tracking with the lights on, regardless of daylight levels. This will allow you to make minor adjustments to the sensors as well as the angle of the fixture.



### PLACING FIXTURE IN AUTOMATIC SECURITY MODE

Point the remote at the IR window located in front of the fixture. Press and hold the AUTO button until the light housing begins to rotate and release the button. The fixture is now in Automatic Security Mode. In this mode, the sensors are active and the light housing will track motion, **but the lights will not turn on during daylight hours.** However the fixture will continue to detect for motion and the light housing will continue to rotate in the direction of the movement. The red indicator on the front will begin blinking at a medium rate to indicate the motion tracking light is operating.



## MANUAL (Recreational) MODE

After dusk, the light fixture can be taken out of AUTO (security/motion tracking) mode and placed into temporary manual mode. This will allow you to point the light housing in a specific direction and the lights will remain on until daylight or if returned to AUTO mode. To place fixture into Manual mode, point the remote at the IR window in front of the fixture. Press and hold either the left arrow (◀) or the right arrow (▶) to move the light housing to the desired position. The fixture will return to AUTO mode when daylight is detected.



## AUTO (Security/Motion tracking) MODE

The light fixture can be placed into AUTO mode at any time (except during initial power up). When the fixture is set in Auto mode, it will detect motion in front of the fixture provided it is within range of either adjustable sensor. Once motion is detected, it will begin tracking movement. To place fixture into AUTO mode, point the remote at the IR window in front of the fixture. Press the AUTO button. After the fixture receives the command, the light housing will rotate to the far left and then to the far right. Release the button, and the fixture will pause at the center position and wait for movement to be detected. The red LED in front will continue to blink at a medium rate when the fixture is in Auto Mode. This helps focus attention to the operation of the fixture.

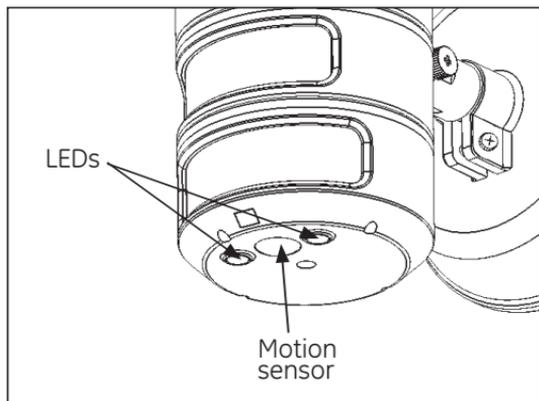


You can also adjust the light levels of the LEDs by pressing the (💡) button. The levels will be adjusted in the following cycle:



## PERIMETER MOTION TRACKING DETECTION (Underneath Fixture)

The Light fixture has a separate motion detection sensor and down-firing LEDs located on the bottom . When movement is detected underneath the fixture, the down-firing Perimeter LEDs will turn on and illuminate the area directly underneath the fixture. They will remain on for 90 seconds, unless motion continues to be detected. In addition, the main LED's on the front of the fixture will also turn on for 90 seconds.



## WARNING

### **Risk of electric shock**

- Turn power off before servicing—see instructions.
- Ensure that no bare wires are exposed outside the electrical connections.

### **Risk of injury**

- LED light output is strong enough to injure human eyes. Precautions must be taken to prevent looking directly at the LEDs with unaided eyes for more than a few seconds.
- Some metal parts in the fixture may have sharp edges. To prevent cuts and scrapes, wear gloves when handling the parts.
- Account for small parts and destroy packing material, as these may be hazardous to children.

### **Risk of fire**

- Minimum 90° C supply conductors

### **No serviceable parts**

### **Non-replaceable LEDs**

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**FCC Note:** The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to the equipment. Such modifications could void the user's authority to operate the equipment.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interfer-

ence in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

## **FIVE YEAR LIMITED WARRANTY**

Jasco Products Company warrants this product to be free from manufacturing defects for a period of five years from the original date of consumer purchase. This warranty is limited to the repair or replacement of this product only and does not extend to consequential or incidental damage to other products that may be used with this unit. This warranty is in lieu of all other warranties express or implied. Some states do not allow limitations on how long an implied warranty lasts or permit the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you. This warranty gives you specific rights, and you may also have other rights which vary from state to state. If unit should prove defective within the warranty period, return prepaid with dated proof of purchase to:

Jasco Products Company  
10 E. Memorial Road,  
Oklahoma City, OK 73114





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