sunlite®
INSTALLATION INSTRUCTIONS

LED Dual-Head Round Security Light | 88906,88907,88908,88909

Please read and understand this entire manual before attempting to assemble, operate or install the product.

WARNING: Avoid fire or electric shock. This product must be installed in accordance with the applicable installation code by a person familiar with the construction and operation of the product and the hazards involved. Before installing the fixture, ensure that all parts are present and same as the part list. If any part is missing or damaged, do not attempt to assemble, install, or operate this fixture. The fixture should be installed away from air conditioner, refrigerators, stoves and other sensitive to changes in air temperature, as well as windows and other strong hot air flow places. When the air temperature is close to a person's body heat, the detection sensitivity will reduce.

CAUTION: Turn off the power at fuse or circuit breaker box before installation and maintenance to avoid electric shock. This fixture requires a 120-Volt AC power source. Do not connect this fixture to a dimmer or timer. Install the height of the fixture not lower than 2M, to avoid disturbance from small animals on the ground within detection range. Try to install this fixture in the place without metal halide lamp or install the fixture 3M away from the irradiation scope of metal halide lamp.
Mounting Location: Wall or eave mounted.
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 inference, and (2) this device must accept any inference received, including that may cause undesired operation.
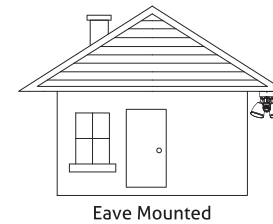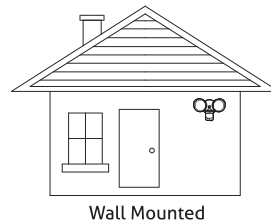*Retain these instructions for future maintenance reference.*
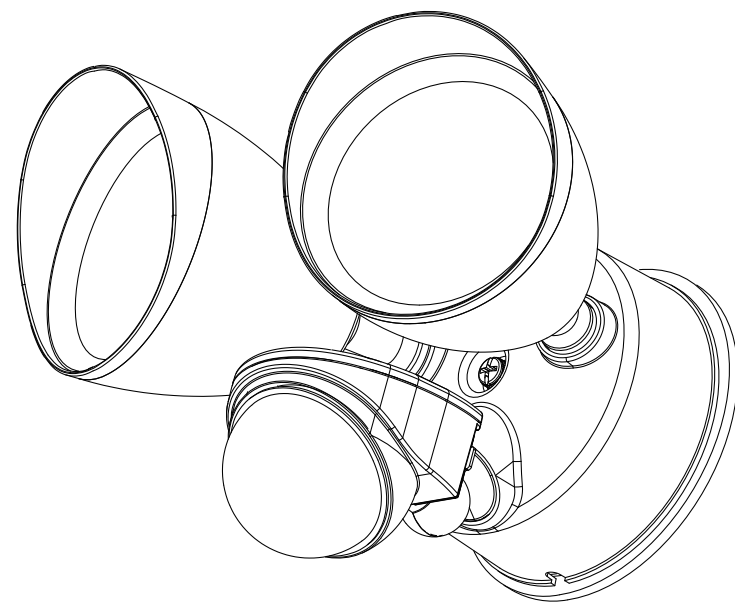
Rated Voltage	120V/60Hz
Rated Wattage	20 W
Max Detection Distance	15m
Max Detection Degree	150°(plane detection degree)
Rated Luminous Flux	1800 lm

Sunshine Lighting Company
744 Clinton Street Brooklyn, NY 11231, USA
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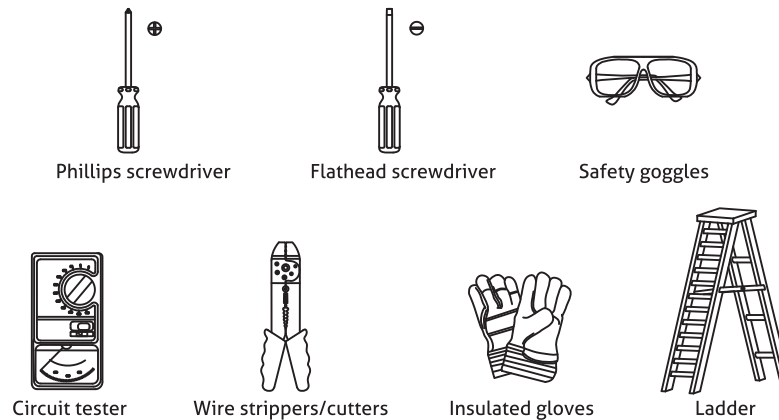**F.** 718.768.0970
www.sunlite com

3. Installation

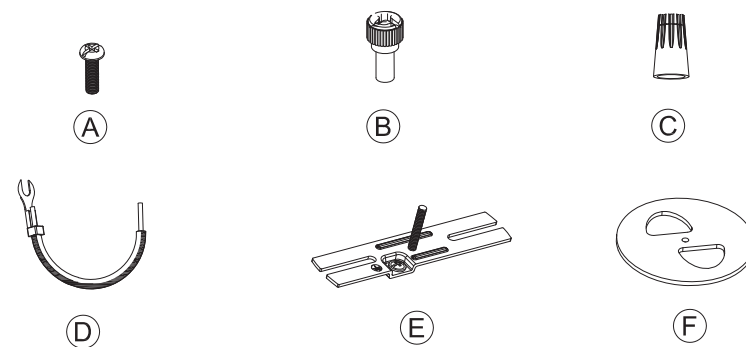**3.1 Mounting location:** wall or eave mounted.

3.2 Mounting Height: The light fixture should be mounted approximately 8ft (2.2-2.5 m) above the ground. If the light fixture is mounted higher or lower than recommended, the coverage area, distance or sensitivity of the sensor will be changed accordingly.
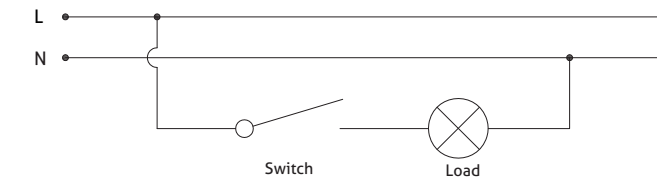
Wall Mounted   Eave Mounted

3.3 Tools Needed To Install

Phillips screwdriver   Flathead screwdriver   Safety goggles

Circuit tester   Wire strippers/cutters   Insulated gloves   Ladder

3.4 Part list

Ⓐ   Ⓑ   Ⓒ

Ⓓ   Ⓔ   Ⓕ

C/N	Part	Quantity	Specification	Function
1	Ⓐ	2	8#-32UNCx3/4" Screws	Fix mounting bracket or mounting universal board
2	Ⓑ	1	M4x13mm Hand Screw Nuts	Fix the light fixture onto the mounting bracket
3	Ⓒ	3	P3/Φ12.7x22mm Wire Nuts	Connect wall wires, ground wire and fixture wires accordingly
4	Ⓓ	1	18AWG Ground Wire with Terminal	Connect wall ground wire and fix the terminal onto the mounting bracket
5	Ⓔ	1	98x20x4.6mm Mounting Bracket	Connect junction box and light fixture
6	Ⓕ	1	Φ114x4mm Waterproof Rubber Gasket	Prevent water from entering the light fixture

3.5 Wiring Application

L
N
Switch   Load

3.6 Installation Steps

① With the stamped word "TO WALL" face to the wall

Junction box   Ⓔ   Ⓐ

(After the mounting bracket is installed)

② Ⓒ Ⓓ GND

③ Ⓔ Ⓓ Ground screws

④ Kraft paper   With adhesive surface   Without adhesive surface Ⓕ Ⓔ

(The adhesive surface is mounted towards the wall)

⑤ Ⓒ

⑥ arrow up   Ⓑ   push

⑦ **Installation renderings**
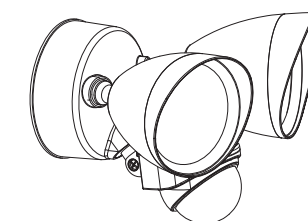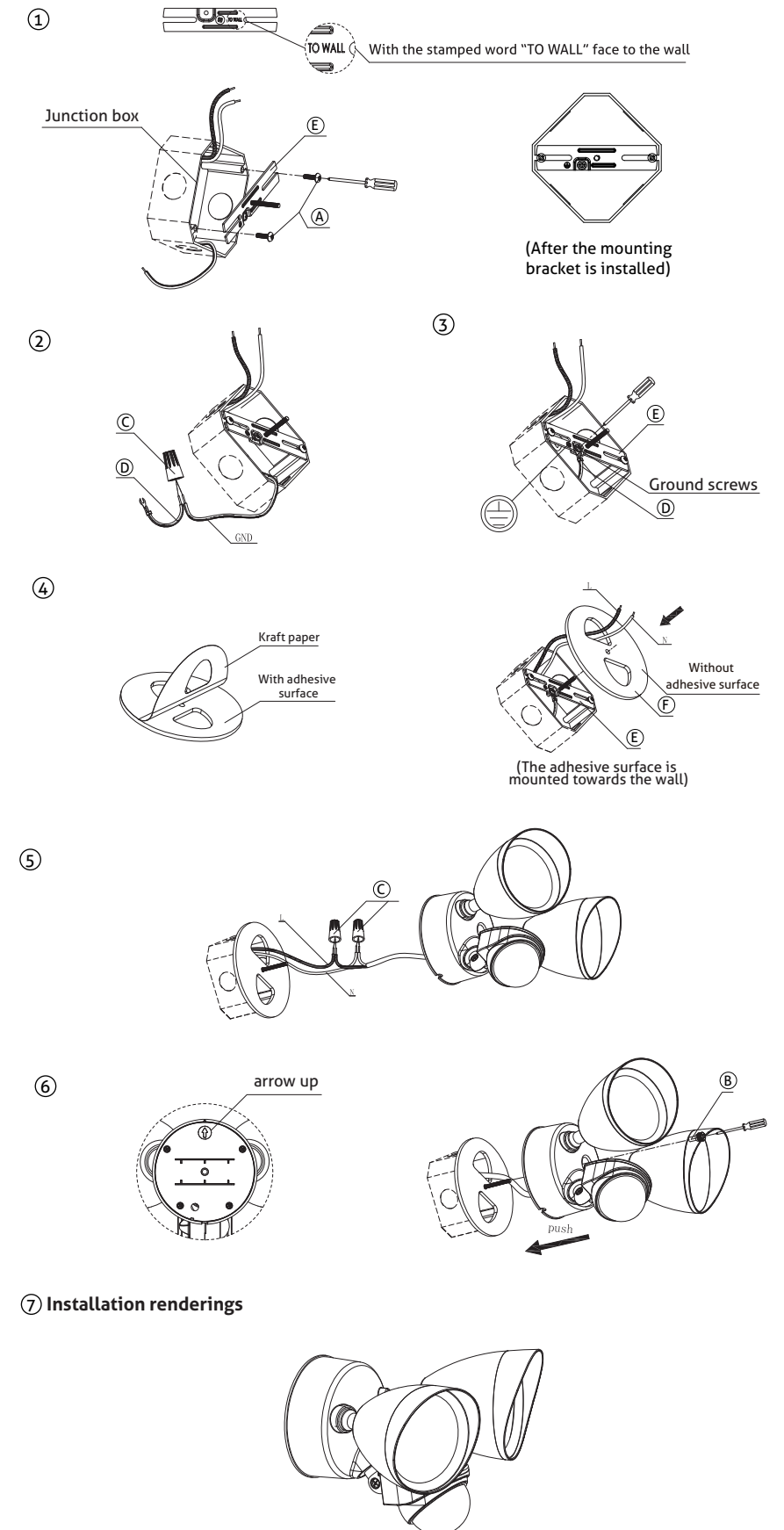
4. Operation

4.1 Setting for the light coverage area

① Tilt the light head left or right to adjust the light coverage area, see the arrow indication direction 1 and 2 to adjust the light head.
② Tilt the light head up or down to adjust the light coverage area, see the arrow indication direction 3 and 4 to adjust the light head.
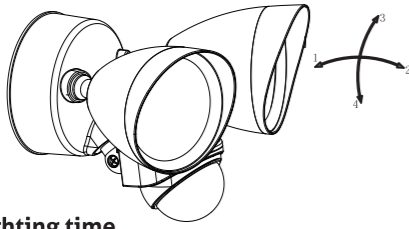

4.2 Setting for the lighting time

① Adjust the switch of "Lighting Time" can set the duration of lighting time when the sensor detect an object movement, then it will turn the light on (The duration time when the objects stop movement), it can be set to 15min,5min,1min and 5s(test).
② When set on 5s(test) position, it is used to test for installation, which is not controlled by ambient lux, and the light will stay on for 5 seconds.
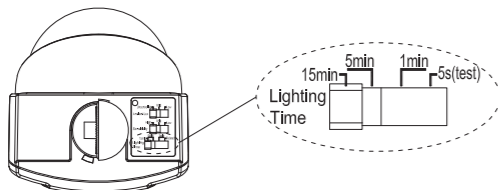
4.3 Setting for the ambient lux of the sensor

① Adjust the "Ambient lux" switch can set the ambient brightness of the sensor by position the switch to uncontrolled (not affected by ambient brightness) ,Mid(the ambient brightness is brighter) or Low (the ambient brightness is darker)position.
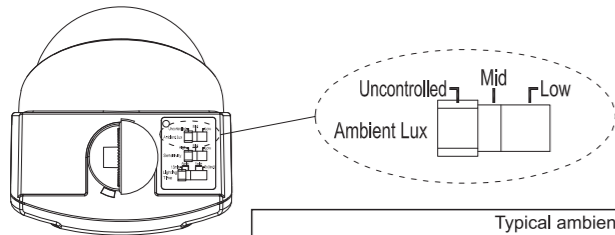

| Typical ambient lux		
Uncontrolled	Mid	Low
not affected by ambient brightness	40~60(lx)	10~30(lx)

4.4 Setting for the motion sensor detection scope

4.4.1 Adjustment for the detection scope

① The sensor can be adjusted clockwise or counterclockwise per requirement, the maximum can reach 45 degree, for the purpose of changing the detection scope.


45°   45°

The sensor can clockwise rotate max 45°

The sensor can counter-clockwise rotate max 45°
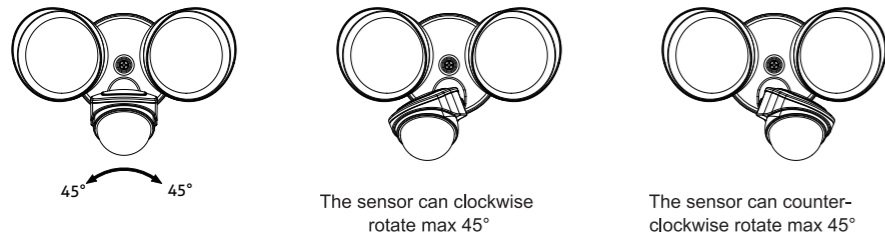
4.4.2 Adjustment and setting for the detection distance

① As shown in the picture 1(schematic diagram of the max detection scope). The sensor can be adjusted up 45°or down 130°. When fixture installed on the vertical wall, adjust the sensor to different degree can change the detection distance. Normally, when installation at 5° depression angle for sensor, the detection distance is the largest. The detection distance and sensitivity will be changed if mounting height is different.
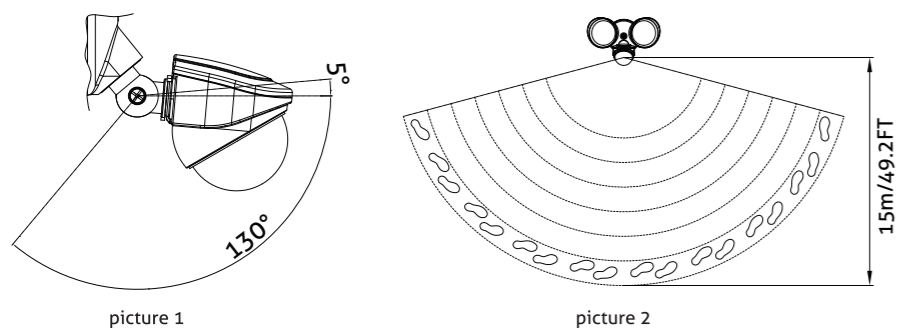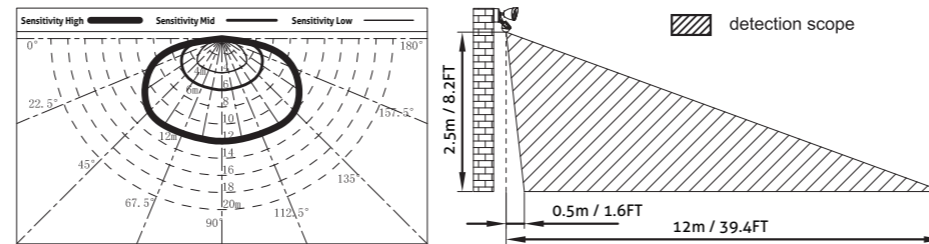

picture 1   picture 2

② Typical schematic diagram of the detection scope for sensor different mounting angles.

a. When installation at 5°depression angle for sensor, the detection distance is the largest, see below picture .

detection scope
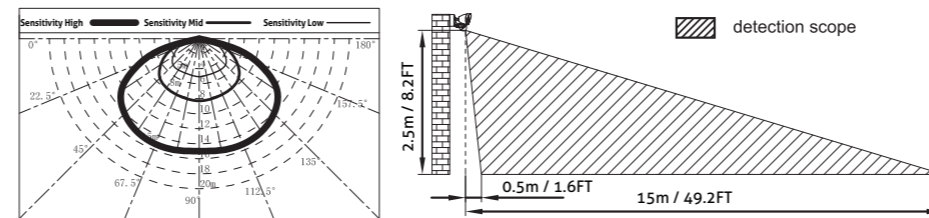
b. When mounting at 45°depression angle will shorten the detection distance, see below picture.


detection scope

c. Setting for the detection distance means the setting of sensitivity
· Adjust the "Sensitivity " switch can set the sensitivity of the sensor means changing the sensor's detection distance, it can be positioned to high,mid and low.
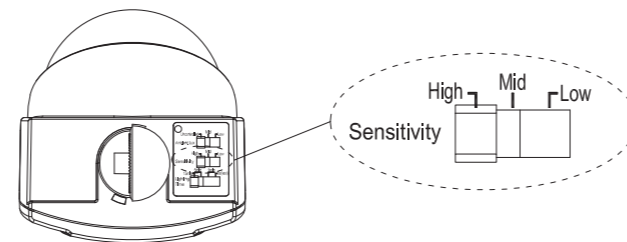
Typical detection distance when fixture is installed on the vertical wall(lateral movement)			
Mounting Angle	High	Mid	Low
5°depression Angle	15m / 49.2ft	8m / 26.25ft	5m / 16.4ft
45°depression Angle	12m / 39.4ft	6m / 19.7ft	4m / 13.12ft

③ Instruction about the setting of motion sensor detection scope

a.To determine the detection scope of motion sensor need to perform a simulation test: walking in an arc across the front of the motion sensor.
b.The motion sensor is less sensitive if in a radial movement. As shown below (picture 1).
c.The motion sensor is more sensitive if in a lateral movement. As shown below (picture 2).
d.Watch the light, if the light come on indicate motion has been detected and give out lighting signal.
e.Stop walking and wait for the light to turn off and then begin walking again.

picture 1   picture 2

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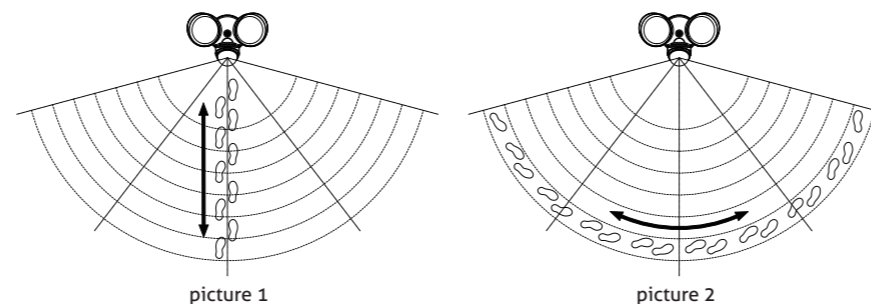
5. Working Mode

5.1 Working mode selection

Working Mode	Operation To Select Mode	Succeed The Mode
PIR Control	Repeat 'OFF-ON' 2 times	Light flash **1** times
Photosensor Control	Repeat 'OFF-ON' 2 times	Light flash 2 times
Power Switch Control	Repeat 'OFF-ON' 2 times	Light flash 3 times

Note 1: Each light OFF state or ON state within 1-3 seconds

Note 2: Working mode illustration

Working Mode	Illustration
PIR Control	1. The factory default mode. 2. Function setting details see step 4. 3. When light is powered on again after power off, light will self check for one minute, light will keep on in this process.
Photosensor Control	1. Function setting details see step 4.3 2. When it is detected that the ambient illumination is lower than the set value, the light will be turn on. 3. When it is detected that the ambient illumination is more than the set value, the light will be turn off. 4.the ambient illumination is detected once every 30 seconds.
Power Switch Control	1. Turn on/off the light by ON/OFF switch.

Note 3: The light has power-off memory function and will recover to the working mode before power-off when power on.

6. Maintenance

6.1 Care and Cleaning

a. To prolong the original appearance, suggest to clean the light fixture with clear water and a soft, damp cloth.
b. Do not use paints, solvents, or other chemicals on this light fixture. They could cause a premature deterioration and damage to the finish. This is not a defect in the finish and will not be covered by the warranty.
c. Do not spray the light fixture with a hose or power washer.

6.2 Troubleshooting

Problem	Possible Cause	Solution
The light will not come on.	1. The light switch is turned off.	Turn the light switch on.
	2. The power source fuse is blown.	Replace the fuse.
	3. Daylight photocell is in effect.	Recheck after dark, or reset "Ambient lux" to the appropriate position.
	4. The circuit wiring is incorrect.	Verify the wiring is correct.
	5. The motion sensor is aimed in the wrong direction.	Re-aim the motion sensor or adjust the install location to cover the desired area.
	6. The outside air temperature is close to the same as a person's body heat.	Reset the "Sensitivity" switch to the appropriate position or relocate the light fixture.
The light comes on during the day.	1. The motion sensor may be installed in a relatively dark location.	Set the "Ambient lux" switch to the appropriate position or reposition the motion sensor.
	2.The "Lighting Time" switch is in the "Test" position.	For the convenience of user testing, we close "Test" switch's light function of "Lighting Time" specifically, just set to other position, the light function will restore.
	3.Power on self-test(when first turn on the fixture, it will have 1 min self-test, and keep light on).	Come to normal when self-test is over.
The lights turn off too late in the Dusk-to-Dawn setting.	1. The light fixture may be installed in a relatively dark location, so do not sensitive to outside light change.	Relocate the light fixture.
	2. Do not set the "Ambient lux" to the appropriate position.	Reset "Ambient lux" to the appropriate position.
The light comes on for no apparent reason.	1. The motion sensor may be sensing small animals or automobile traffic come by.	Adjust the "Sensitivity" setting to appropriate position or reposition the motion sensor.
	2. The outside temperature is much warmer than a person's body heat.	Decrease the "Sensitivity" setting or relocate the light fixture.
The lights stay on continuously.	1. The motion sensor may be picking up a heat source	Reposition the motion sensor.
	2. The light fixture is on the same circuit as a motor or transformers.	Install the light fixture on a circuit without high power motors and transformers.
The lights flash on and off.	1. Heat or light from other bulbs may be turning the motion sensor on and off.	Reposition other bulbs to keep away from the motion sensor or adjust motion sensor direction or relocate the light fixture.
	2. Heat is being reflected from other objects and may be turning the motion sensor on and off.	Decrease the " Sensitivity "setting or reposition the motion sensor.