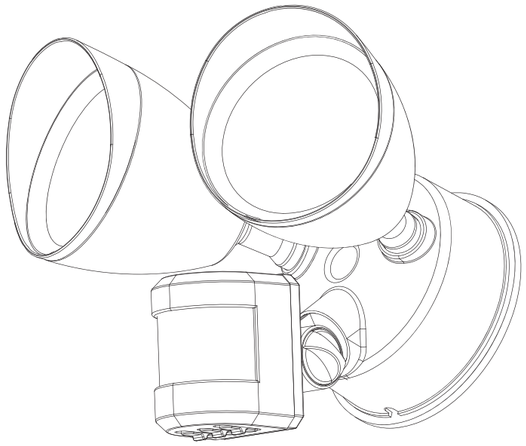
sunlite®

USE AND CARE GUIDE
L3MSA1W MOTION SECURITY LIGHT



1.Specification

Model No.	T-L3MSA1W-20W
Rated Voltage	120VAC,60Hz
Rated Wattage	20 Watts
Max Detection Distance	16m
Max Detection Degree	150°(plane detection degree)
Rated Luminous Flux	1800 lm

2. ⚠Safety information

2.1 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.
2.2 This light fixture requires a 120-Volt AC power source.
2.3 Before installing the light 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 light fixture.
2.4 Turn power off and test that power is off before installing the light fixture.
2.5 This light fixture is a non-dimmable product, do not connect this light fixture to a dimmer or timer.
2.6 When using the light fixture, do not cover combustible materials to avoid fire.
2.7 Burn hazard. Allow the light fixture to be cool before touching.
2.8 This device complies with the FCC Rules.
2.9 Install the height of the light fixture not lower than 2m, to avoid disturbance from small animals on the ground within detection range.
2.10 Try to install this light fixture in the place without metal halide lamp, if can't avoid, install the light fixture 3m away from the irradiation scope of metal halide lamp.
2.11 The light fixture should be installed away from air conditioning, refrigerators,stoves and other sensitive to changes in air temperature, as well as windows and other strong hot air flow places, so as not to cause wrong action.
2.12 When the air temperature is close to a person's body heat, the detection sensitivity will reduce.

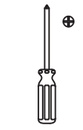
3. Installation

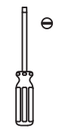
3.1 Mounting location: wall or eave mounted.
3.2 Mounting Height: The light fixture should be mounted approximately 8ft (2.2-2.5 m) above the ground. If the light fixture is mounted higher or lower than recommended, the coverage area, distance or sensitivity of the sensor will be changed accordingly.


Wall Mounted


Eave Mounted

3.3 Tools needed to install


Phillips screwdriver


Flathead screwdriver


Safety goggles

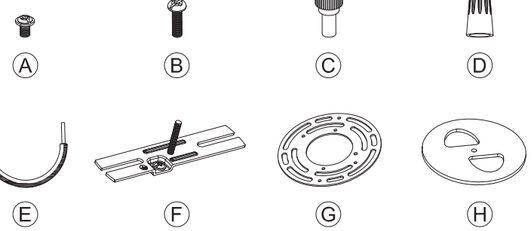

Circuit tester


Wire strippers/cutters


Insulated gloves


Ladder

3.4 Part list



C/N	Part	Quantity	Description	Specification	Function
1	Ⓐ	2	Screws	M4x6 (mm)	Secure the mounting bracket to the universal mounting plate
2	Ⓑ	2	Screws	8#-32UNC×3/4 (in)	Fix mounting bracket or mounting universal board
3	Ⓒ	1	Hand Screw nuts	M4x13 (mm)	Fix the light fixture onto the mounting bracket
4	Ⓓ	3	Wire nuts	P4/Φ14x24.6 (mm)	Connect wall wires, ground wire and fixture wires accordingly
5	Ⓔ	1	Ground wire with terminal	18AWG	Connect wall ground wire and fix the terminal onto the mounting bracket
6	Ⓕ	1	Mounting bracket	98x20x4.6 (mm)	Connect junction box and light fixture
7	Ⓖ	1	Universal mounting plate	Φ102x1.5 (mm)	Adjust the installation angle of the mounting bracket so that the whole fixture is horizontal after installation
8	Ⓗ	1	Waterproof rubber gasket	Φ114x4 (mm)	Prevent water from entering the light fixture

3.5 Installation steps

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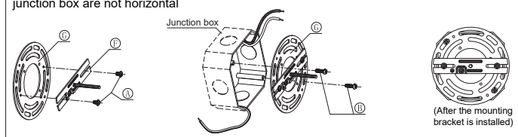
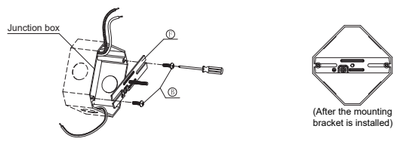
Mounting bracket installation option 1: when the two mounting screw holes in the wall junction box are not horizontal



Mounting bracket installation option 2: when the two mounting screw holes in the wall junction box are horizontal



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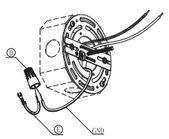

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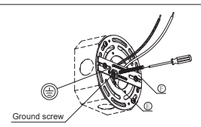

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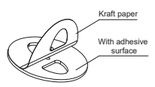

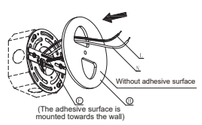

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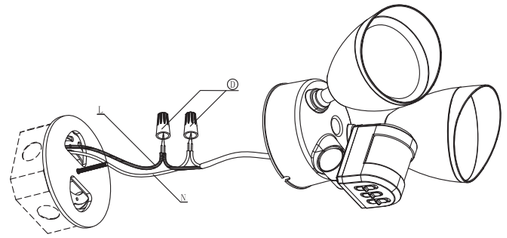

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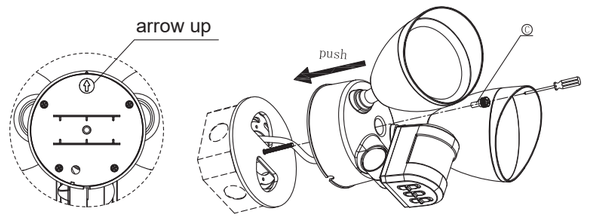

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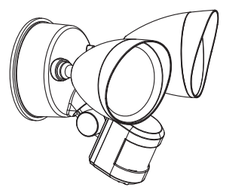
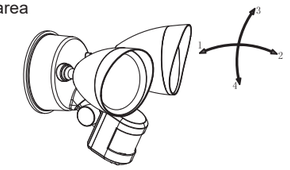


Installation effect diagram

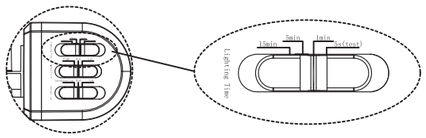
4. Operation

4.1 Setting for the light coverage area



4.1.1 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.
4.1.2 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.

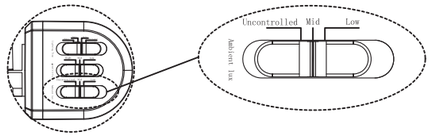
4.2 Setting for the lighting time



4.2.1 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).
4.2.2 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

4.3.1 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.

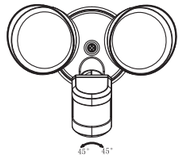


Typical ambient lux		
Uncontrolled	Mid	Low
not affected by ambient brightness	40~60(lx)	10~30(lx)

4.4 Setting for the motion sensor detection scope

4.4.1 Adjustment for the detection scope

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

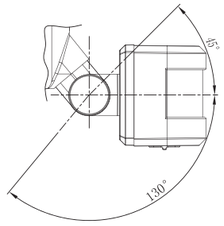


The sensor can clockwise rotate max 45°

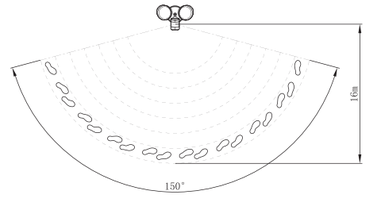
The sensor can counter-clockwise rotate max 45°

4.4.2 Adjustment and setting for the detection distance

4.4.2.1 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.



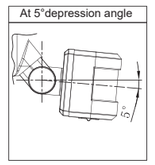
picture 1

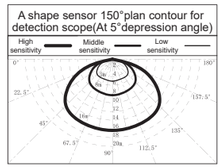


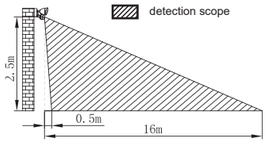
picture 2

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

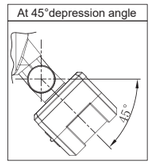
4.4.2.2.1 when installation at 5°depression angle for sensor, the detection distance is the largest, see below picture .

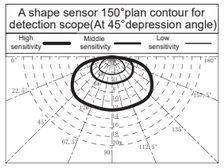


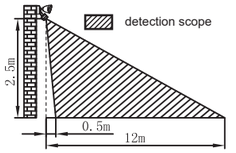




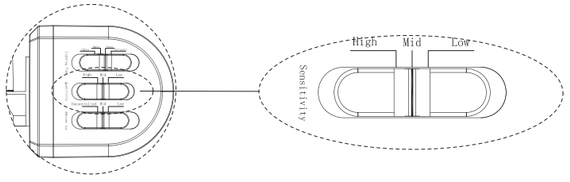
4.4.2.2.2 When mounting at 45°depression angle will shorten the detection distance, see below picture.







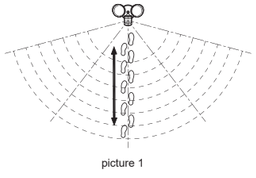
4.4.2.3 Setting for the detection distance means the setting of sensitivity
4.4.2.3.1 Adjust the “Sensitivity ” switch can set the sensitivity of the sensor means changing the sensor’s detection distance, it can be positioned to high,mid and low.



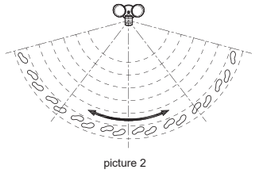
Typical detection distance when fixture is installed on the vertical wall(lateral movement)			
Mounting angle	High	Mid	Low
5°depression angle	16m	8m	5m
45°depression angle	12m	6m	4m

4.4.3 Instruction about the setting of motion sensor detection scope

4.4.3.1 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.
4.4.3.2 The motion sensor is less sensitive if in a radial movement. As shown below (picture 1).
4.4.3.3 The motion sensor is more sensitive if in a lateral movement. As shown below (picture 2).
4.4.3.4 Watch the light, if the light come on indicate motion has been detected and give out lighting signal.
4.4.3.5 Stop walking and wait for the light to turn off and then begin walking again.



picture 1



picture 2

5. Maintenance

5.1 Care and Cleaning

5.1.1 To prolong the original appearance, suggest to clean the light fixture with clear water and a soft, damp cloth.
5.1.2 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.
5.1.3 Do not spray the light fixture with a hose or power washer.

5.2 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.

Problem	Possible Cause	Solution
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 transformer.	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.