

# Specification

Product Name: AC ON/OFF sensor

Model No.: MC155S 99

Version	Date	Reasons	Publishing
V1.0	2024.03.15		James. Guo

## 【Product Features】

- The pioneered sensor without side-lobe, avoid false trigger caused by microwave through wall, work with flood light, wall light etc.
- Detection angle is up to 180°, no detecting blind zone.
- Innovative algorithms, no false trigger caused by flies or raining/breeze(\*).
- IP65 rating.
- 5 years warranty.



\* There is no false trigger with moderate rain. In actual use, anti-raining trigger capability is related to installation location and way of LED light.

## 【Parameters】

Input	
Rated Voltage	220-240Vac 50/60Hz
Stand-by Power	≤0.5W
Surge Test	L-N: 1kV
Output	
Output Signal	ON/OFF
Type of Load	Inductive or Resistive
Load Capacity	200W@230Vac(Inductive/LED) ;400W@230Vac(Resistive)
Max. Surge Capacity	20A(50% Ipeak, twidth =200uS, 230Vac full load, cold start);
Sensor Parameters	
Working Frequency	5.8 GHz ±75MHz, ISM wave band
Transmitting Power	1mW Max.
Hold time	5s to 5min
Detection Area	25% to100%
Daylight Sensor	5Lux to 50Lux/Disable (diffuse reflection status)
Detection Area	Wall mounting height 2m: d≥8m@0.3m/s, d≥6m@1m/s Test condition: Outdoor open space
Mounting Height	2m (3m Max)
Environment	
Operating Temperature	-25℃...+60℃
Storage Temperature	-40~80℃ Humidity: ≤85% non-condensing
Certificate Standards	
Certified	CE
Environmental Requirements	Comply with RoHS 2.0 Reach

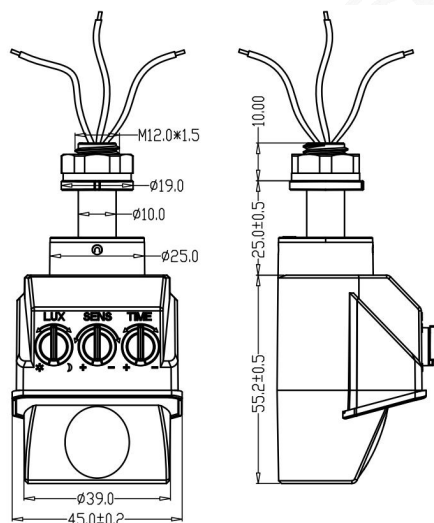
IP Rating	IP65
<b>Other</b>	
Wiring	Wire , wire diameter: 0.5mm <sup>2</sup>
Safety Grade	Class II
Installation	M12 screw mount
Package	Bubble bag+Clapboard + Carton(K=A)
Net Weight	55.5±5g
Lifetime	5 years warranty@Ta

## 【Function】

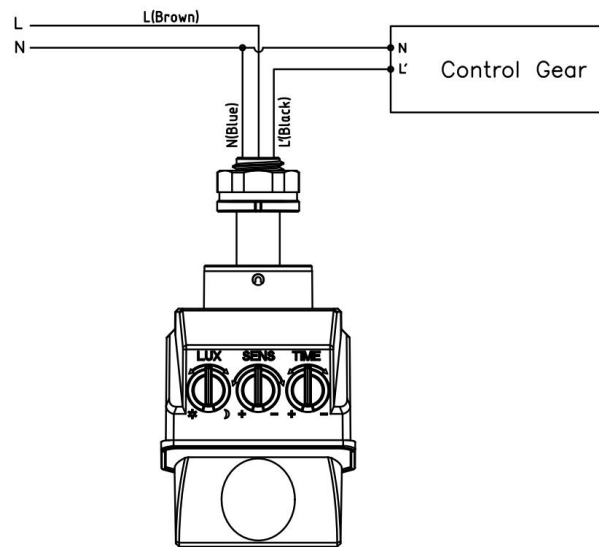
<input checked="" type="checkbox"/> ON/OFF function	When daylight sensor is in Disable mode or ambient brightness is lower than the set value, the sensor triggers and enters the light-on state if motion detected. It maintains the light-on state and then enters the light-off state after hold time elapses if with no motion trigger.
<input type="checkbox"/> Two-step dimming function	N/A
<input type="checkbox"/> Three-step dimming function	N/A
<input type="checkbox"/> Daylight harvesting	N/A
<input type="checkbox"/> Daylight priority	N/A

## 【Product Information】

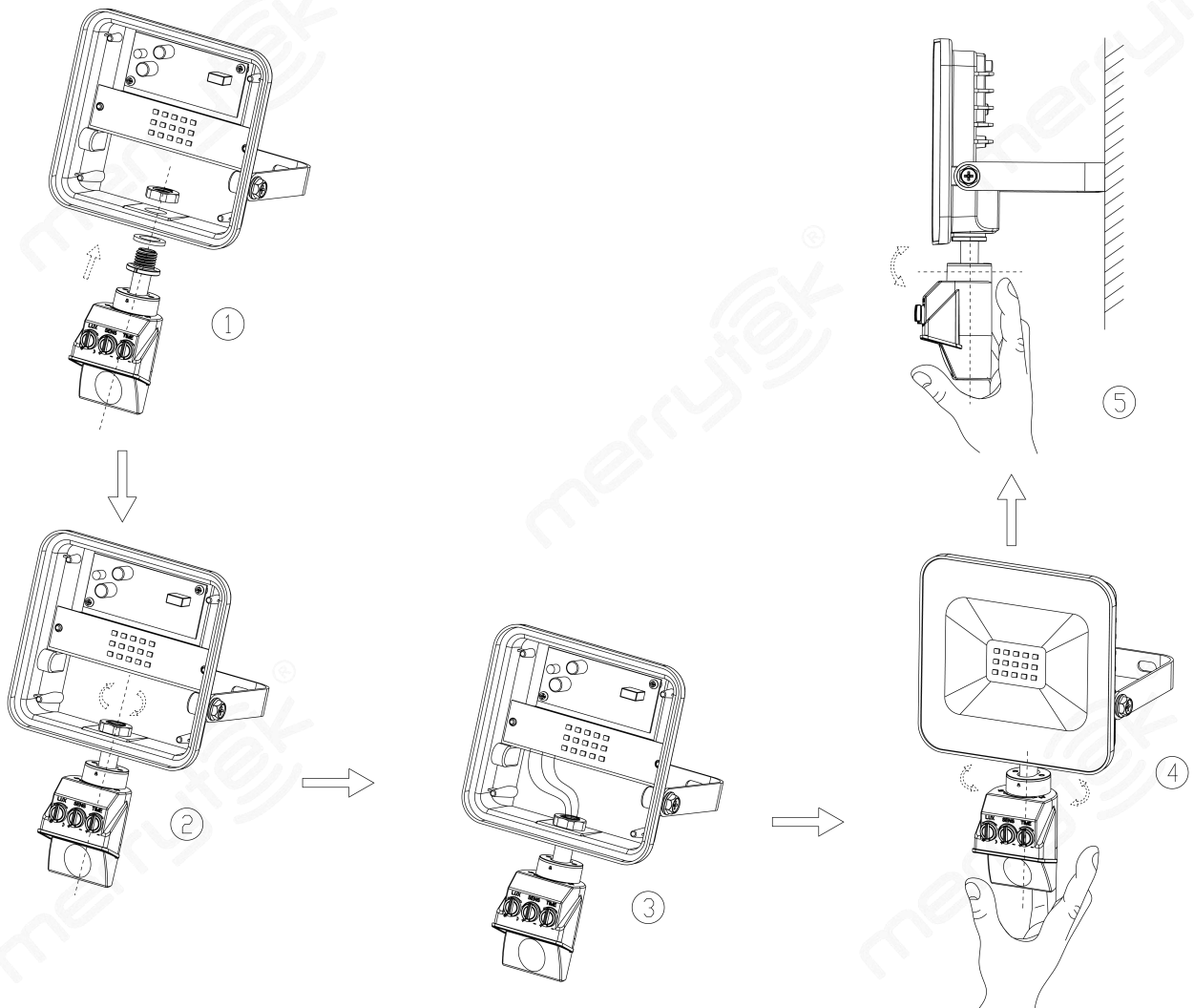
- Dimension(units: mm)



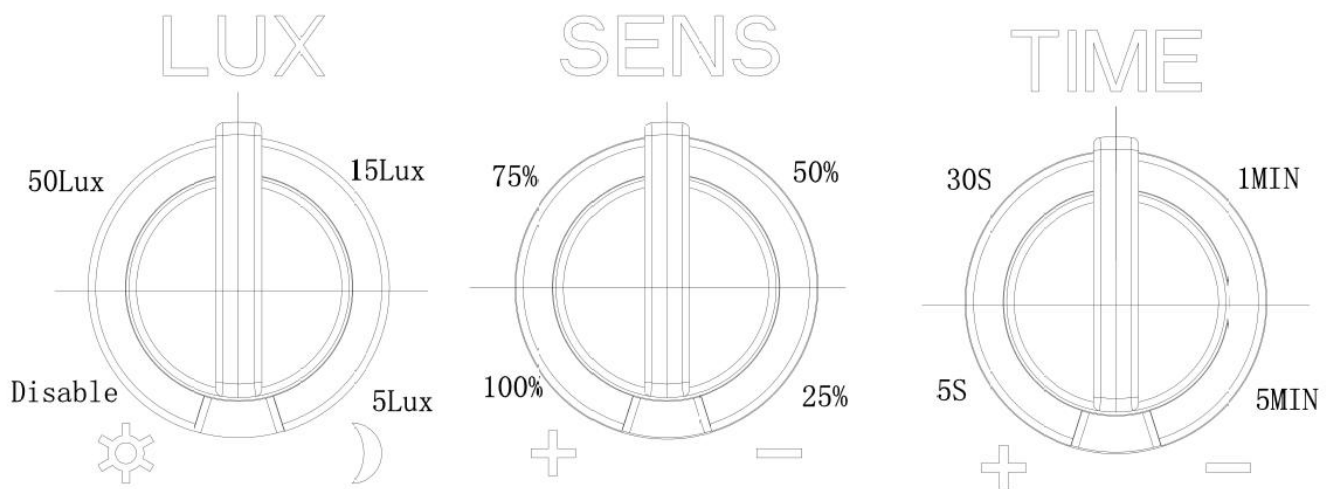
## ● Function & Wiring



## ● Installation



## 【Rotary Switch Setting】



- Radiation Pattern

## 【Initialization】

The light will be turned on 100% brightness after power on, and will be turned off after 10 seconds. During initialization, no external motion sensing signal will be detected.

## 【Default Setting】

Sensitivity: 100%    Hold time: 5s    Daylight sensor: Disable

## 【Application Notice】

- The sensor should be installed by a professional electrician. Please turn off the power before installing, wiring, changing the setting of the DIP switch.
- Sensitivity area is related to moving speed of objects, size of moving objects, mounting height, mounting angle, working environment, reflecting materials and etc.. Given detecting area is typical value that was measured by 165cm/65kg testers in an indoor open environment.
- The detection area of the microwave sensor when installed on the wall will be greatly increased compared to when installed on the ceiling. If adopts wall ceiling, please reduce the sensitivity or contact our company to confirm the usage settings. The daylight thresholds are measured on a sunny day without shadow and in an ambient light diffuse reflection status. Different environment and climate cause different brightness values that daylight sensor measures.
- Sensor parameters may need to be reconfigured in different installation environments, please refer to the following instructions or contact the manufacturer.

- Sensor is for indoor use only. The waterproof effect for outdoor or half-outdoor use will be affected. Wind, rain, and moving objects may cause false triggering.
- The installation height of the sensor product cannot exceed 6 meters, and the optimal height is 3 meters. The distance between the two sensors should be greater than 3m.
- When the sensor is installed in a metal lamp, on a metal reflective surface, or in a small closed environment, the microwave will be reflected multiple times and cause false triggering. Please reduce the sensitivity of the sensor or contact the manufacturer for technical support.
- Please make sure that there are no moving signals such as fans, DC motors, sewer pipes, air outlets, etc. around the sensor, otherwise the sensor may cause false triggering.
- Microwaves cannot penetrate metal. Do not place product in a closed or a half-closed metal lamp. Neither metal nor glass is not allowed to cover above the product.