

Specification

Product Name: AC Controller

Model No.: MC098S 99 series

Version	Date	Reasons	Publishing
V1.0	2023.11.01		James. Guo

【Product Features】

- Patented antithetical dipoles antenna design and Adaptive Algorithm, which effectively solves the problem of low installation height of columnar antenna sensors and false triggering caused by side-lobe radiation of the antenna when installed in a metal room.
- Widely used in parking lots and other places, it solves the problem that traditional sensor cannot detect vehicles or the vehicle cannot be detected until it passes directly under the sensor.
- Sensor parameters can be set by remote control and DIP switches, easy to configured.

【Parameters】

Input	
Rated Voltage	220-240Vac 50/60Hz
Stand-by Power	≤0.5W
Surge Test	1KV(L/N,EN61000-4-5)
Output	
Output Signal	ON/OFF
Type of Load	Inductive or Resistive
Load Capacity	400W@230Vac(Inductive) ; 800W@230Vac(Resistive)
Max. Surge Capacity	7A relay 20A (50% I _{peak} , twidth =200s, 230Vac full load, cold start);
Sensor Parameters	
Working Frequency	5.8 GHz ±75MHz, ISM wave band
Transmitting Power	1mW Max.
Detection Area(Radius)	Ceiling mounting height 3m: r≥4m@0.3m/s, r≥2.5m@1m/s; Wall mounting height 3m: r≥5m@0.3m/s, r≥4m@1m/s Test condition: Set 100% sensitivity, open 60 m ² indoor area.
Mounting Height	3m (6m Max)
Environment	
Working Environment Temperature	-25~60°C
Storage Temperature	-40~80°C Humidity: ≤85% non-condensing
Certificate Standards	
Certified	CE (Pending) , RED (Pending) , TUV (Pending)
Environmental Requirements	Comply with RoHS 2.0 Reach
IP Rating	IP20
Other	
Wiring	Press-in Type Terminals, wire diameter: 0.75-1.5mm ²
Installation	Built-in
Package	Bubble bag+Clapboard + Carton(K=A)
Net Weight	Pending
Lifetime	5 years warranty@Ta

【Model】

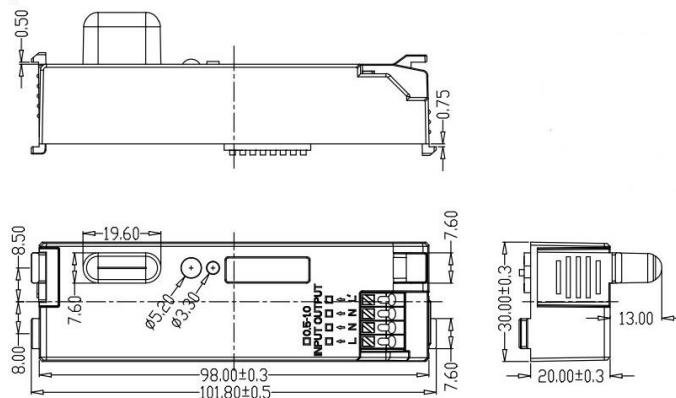
Model No.	MC098S 99	MC098S 99 1
Set mode	Top dip	Bottom dip
Mounting structure	Clasp structure	Clasp structure
Product picture		

【Function】

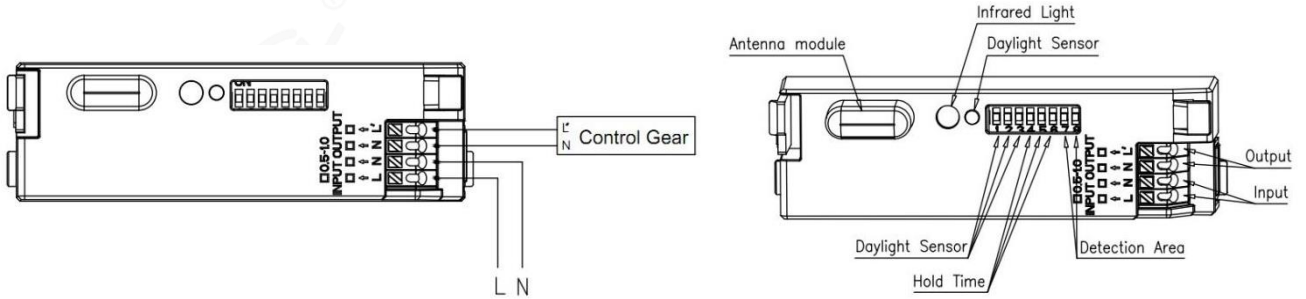
<input checked="" type="checkbox"/> ON/OFF function	Light control Disable or external brightness value is lower than the set value. When the microwave sensors detects the movement of an object, the sensor triggers and enters the light-on state. It maintains the light-on state after a delay and then enters the light-off state.
<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】

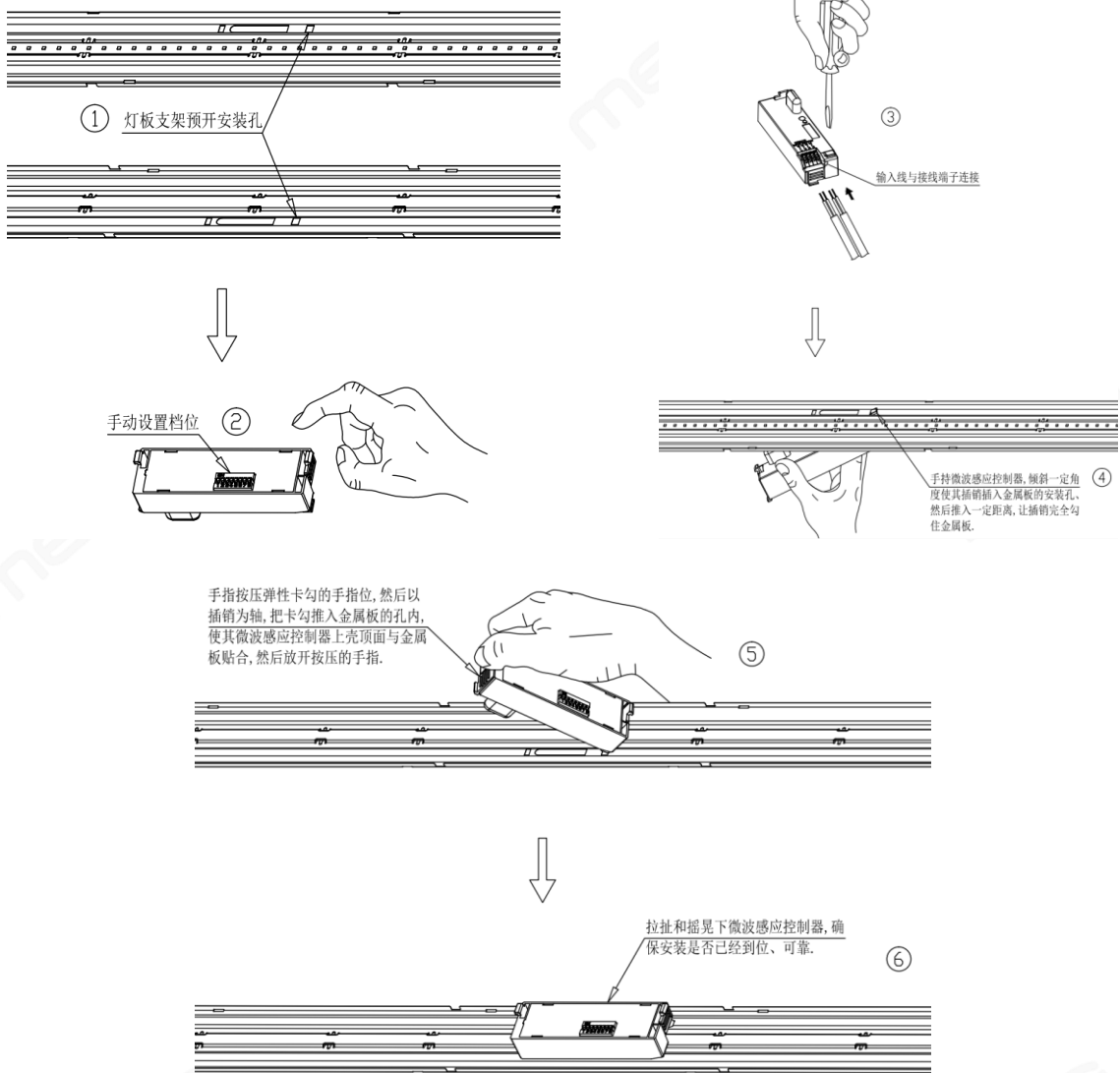
- Dimension(units: mm)



● Function & Wiring



● Installation



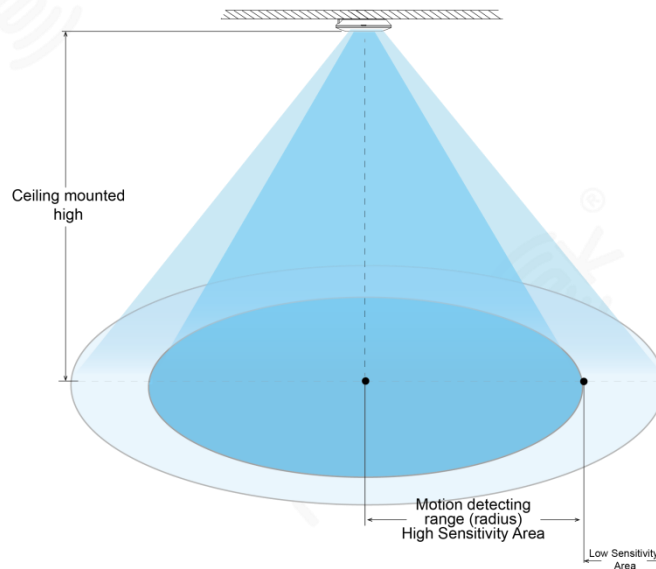
Note:

Note: The distance between microwave antenna and the metal plate and lamp housing must be greater than 3.2mm, and the metal plate step should not be higher than 2mm, otherwise it will affect the operation of the microwave antenna.

【DIP Switch Setting】

Function	Detection Area			Hold Time				Daylight Sensor			
	Dial code	1	2	Detection area	3	4	5	Hold time	6	7	8
I	ON	ON	100%	ON	ON	ON	5s	ON	ON	ON	2Lux
II	-	ON	75%	-	ON	ON	30s	ON	ON	-	10Lux
III	ON	-	50%	ON	-	ON	90s	-	ON	-	30Lux
IV	-	-	25%	-	-	ON	5min	ON	-	-	50Lux
V				ON	ON	-	20min	-	-	-	Disable*
VI				-	-	-	30min				

● Radiation Pattern



【Remote Control】

Pending

【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.