

Specification

Product Name: DC Controller

Product Model: MC079D 99 C

Versions	Release/ change Date	Reason	Publishing
V1.0	2023.04.06		James Guo
V1.1	2023.04.20	Add Installation Instruction of the base	James Guo

【Product Feature】

- Low impedance planar antenna; High-gain
- International general Type -C interface
- 15 meters maximum installation height, suitable for most warehouses
- Mini Microwave motion detector for High Bay Lights.
- Junction box free design, IP65 waterproof
- Ultra-low RF power output, harmless to human health
- Sensor parameters can be adjusted by remote
- The sensing range is adjustable (high sense/low sense) , suitable for different installation environments
- Not affected by temperature, humidity, noise, airflow, dust, light etc.
- Automatic swing structure , easy to plug and play.



【Parameters】

Input				
Rated voltage	11-13VDC			
Working current	<30mA			
Ripple voltage	<100mVp-p			
output				
Output signal	☑0 -10VDC dimming signal			
Sensor parameters				
Working frequency	5.8GHz ±75MHz, ISM band			
Transmitting power	3mW Max.			
Daylight priority	Switch ON	5Lux/15Lux/30Lux/50Lux	100Lux	150Lux
	Switch OFF	150Lux	200Lux	300Lux
Dimming level	10%(1.4-1.6V) 20%(1.9-2.1V) 30%(2.9-3.1V) 50% (4.9-5.1V)			
Detection range (radius)	Ceiling installation 12m high: 0.3m/s≥4m, 1m/s≥3m;			
Installation height	12m (15m Max)			
3db beam angle	82°@XZ plane			
	95°@YZ plane			
Environment				
Working temperature	-35~60℃			
Storage temperature	-40℃~80℃, humidity ≤85% (non-condensing)			
Certification standards				
Certified	CE			
Environmental requirements	Comply with RoHS 2.0 , Reach requirements			
IP Rating	IP65			
Other				
Wiring	Tpye C			
Installation requirements	built-in installation			
Packaging requirements	Clapboard + Carton(K=A)			

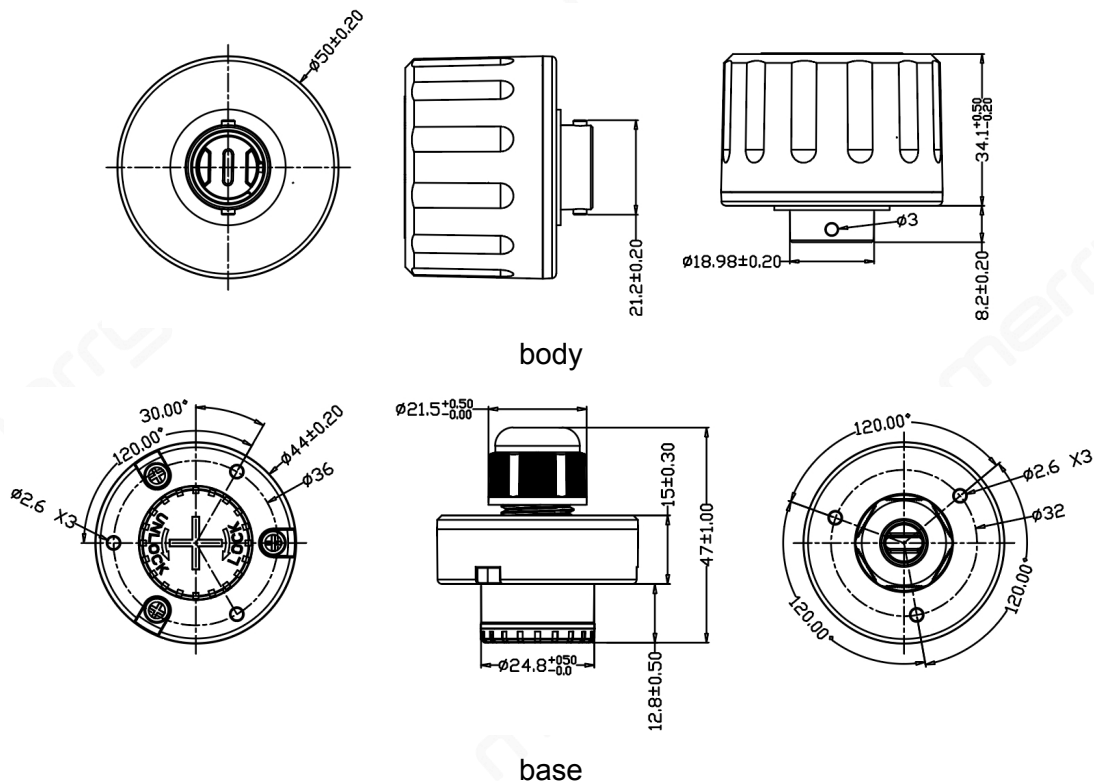
Net weight	Body: $40.6 \pm 3g$ Base: $26.6 \pm 3g$
Lifetime	5 years warranty @Ta

【Function description】

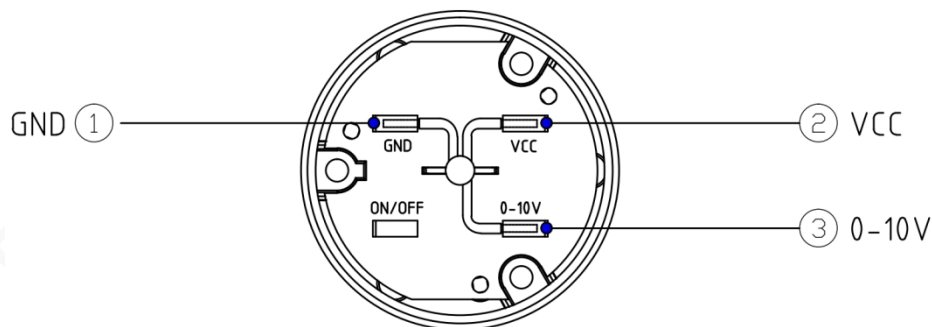
- ☑ ON-OFF function Stand-by Period be set to “0s”
- ☑ 2-step dimming Stand-by Period be set to “+∞”
- ☑ 3-step dimming Stand-by Period be set to “10s/1min/3min/5min/10min/30min”
- ☑ Daylight priority Remote press DH Mode and Daylight Sensor be set to
“5Lux/15Lux/30Lux/50Lux/100Lux/150Lux”
- Daylight harvesting N/A

【Product Information】

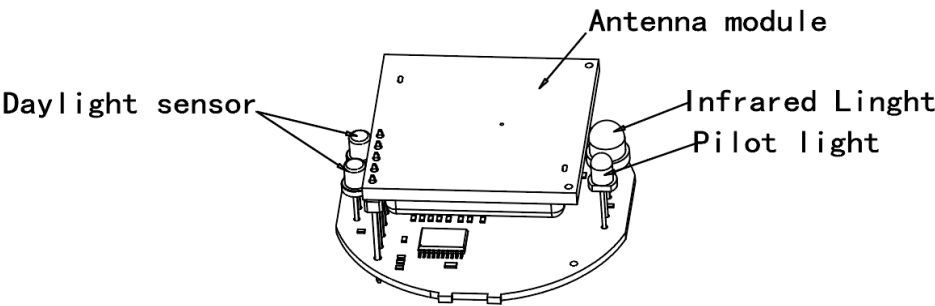
- Dimension (Unit: mm)



- Wiring



● Function

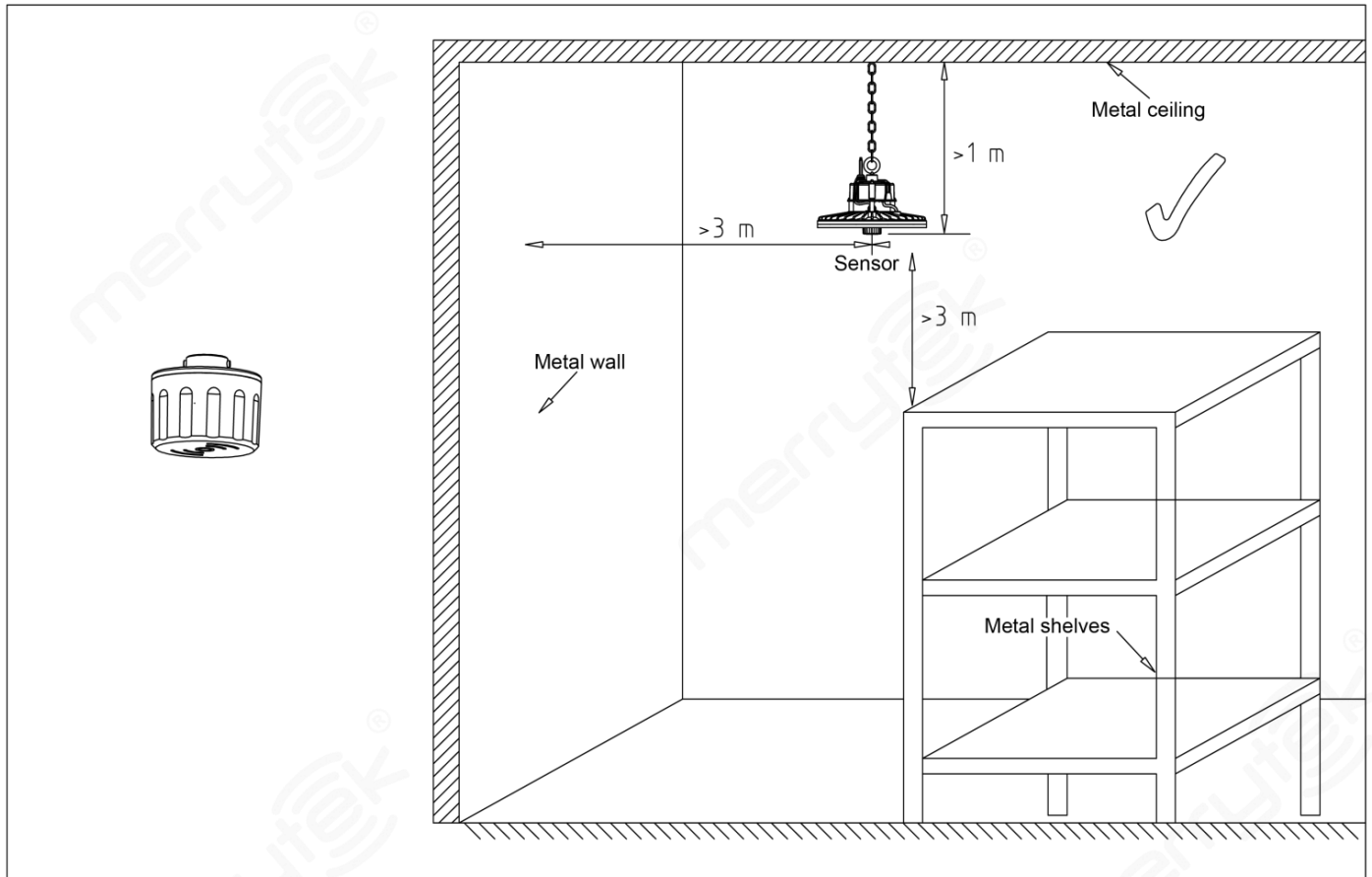


【Installation Instruction】

Base mounting

Step 1	A diagram showing a cable with a multi-pin connector being inserted into a matching socket on a larger component.
Step 2	A diagram showing a circular base with a central hole being attached to the cable connector from the previous step.
Step 3	A diagram showing the circular base being aligned with a larger mounting plate that has several screws.
Step 4	A diagram showing the mounting plate being secured with screws. The cable and base are visible protruding from the center.
Step 5	A diagram showing the final assembly. A label '① O-type Washer' points to a small ring being placed around the base. Another label '② Plug' points to a small plug being inserted into the center of the base. The final image shows the completed unit.

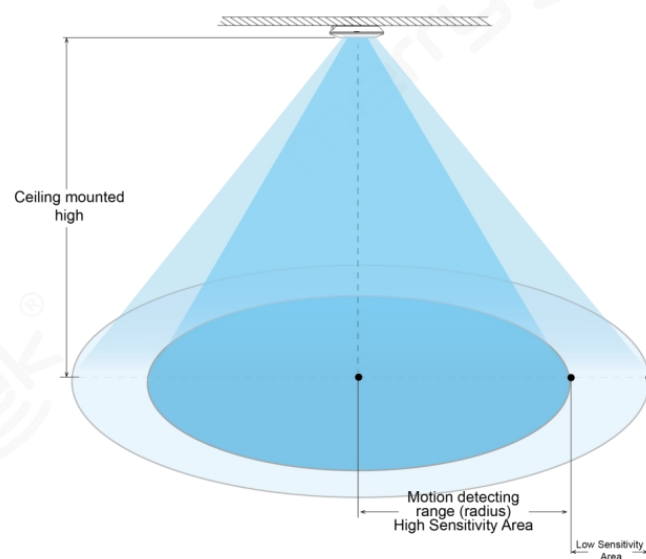
Installation environment



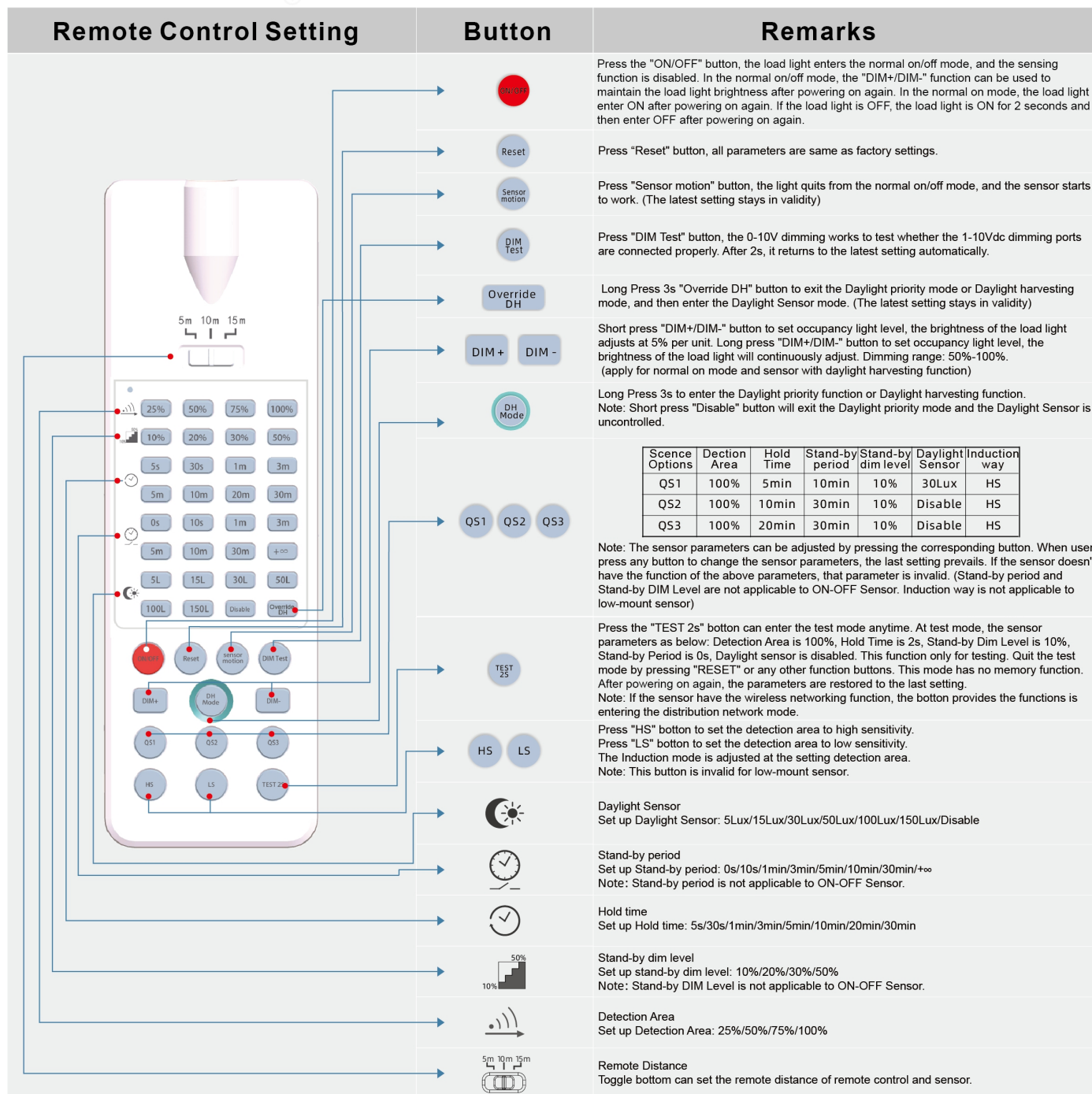
Note

When installing, please pay attention to the distance between the microwave antenna and the metal frame.

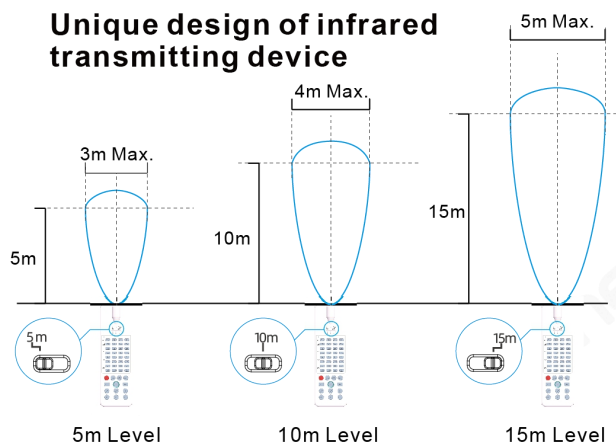
【Detection Range】



【Retome】



Unique design of infrared transmitting device



【Initialization】

- On/Off function / 3-Step dimming function: the sensor turns on the light at 100% brightness, and will be turned off after 10 seconds. During initialization, the sensor is not able to detect movement.
- 2-Step dimming function: the sensor turns on the light at 100% brightness. After 10 seconds, it dims the light to low light level (the brightness set by stand-by dim level). During initialization, the sensor is not able to detect the movement.

【Default setting】

Sensitivity: 100%, Hold time: 5s, Daylight sensor: Disable, Stand by period: 0s, Stand by DIM level: 10%

【Application Notice】

- Sensor should be installed by a professional electrician. Please turn off power before installing, wiring.
- The distance is related to factors such as the moving speed of the moving object, the size of the moving object, the installation height, the installation angle, whether the installation environment is open, and the material of the reflector. The detection distance given in the specification is a typical value, it is 165cm/65kg people who walks in an open indoor environment
- The daylight threshold is in a sunny environment, no shadows, and ambient light diffuse reflection conditions. In different periods, climates, and environments, the daylight value detected by the light sensor may be different.
- Sensor parameters may need to be reconfigured in different installation environments, please refer to the following instructions or contact the manufacturer
- This sensor is only for indoor use, outdoor use may be false triggered by wind and rain, and surrounding moving objects.
- The installation height of the sensor product cannot exceed 15 meters, and the suitable height is 12 meters; the distance between the two sensors should be greater than 3 meters
- When the sensor is installed in a metal lamp, on a metal reflective surface, or in a narrow closed environment, the microwaves will be reflected multiple times and cause false triggering. Please reduce the sensor sensitivity or contact the manufacturer for technical support.
- Sensor is compatible with different 0-10V driver but dimming effect will be different.
- DC regulated power supply with stable output voltage and low ripple coefficient must be used. The ripple of the power supply should be less than 100mV ; the load current should be greater than 50 mA
- For the new installation environment, it is recommended to test 5pcs samples before installation.