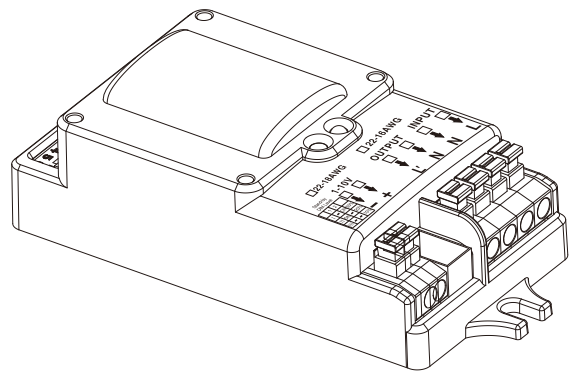


MC083V RC



HIGH INSTALLATION SENSOR USER'S MANUAL

Model No.: MC083V RC



Instruction
MI190605A0

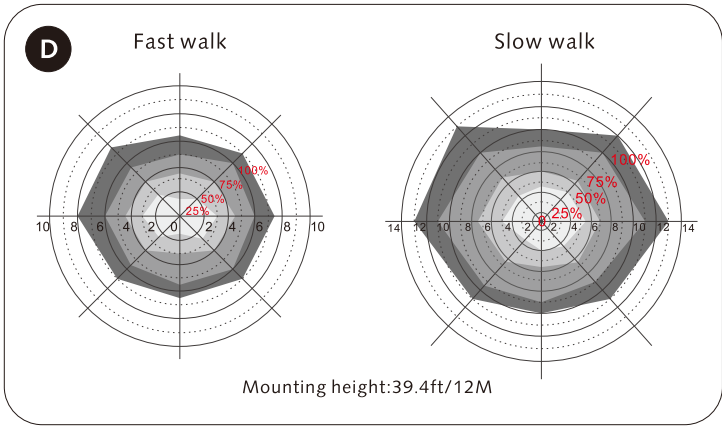
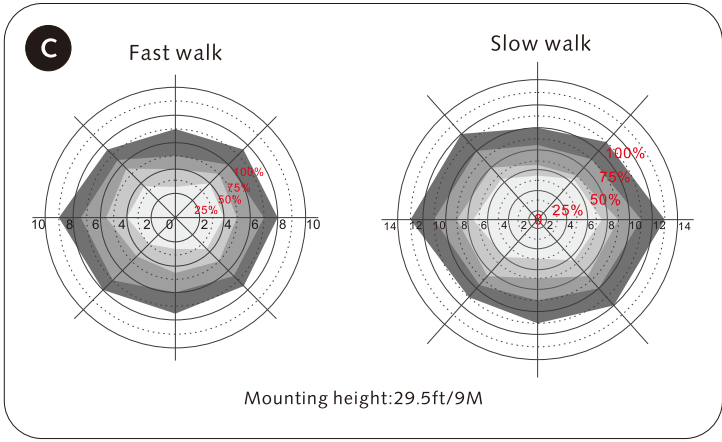
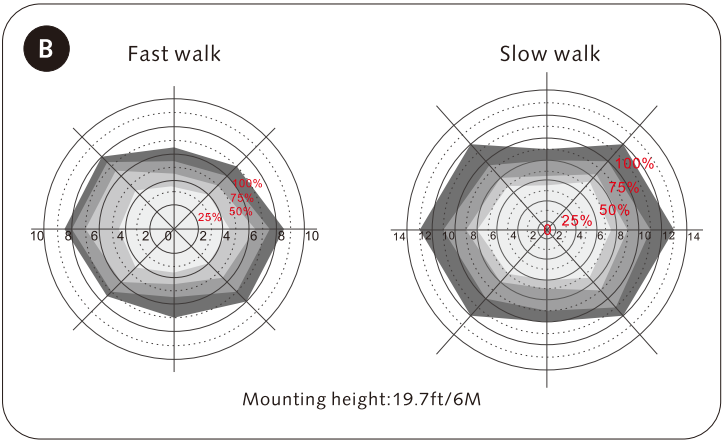
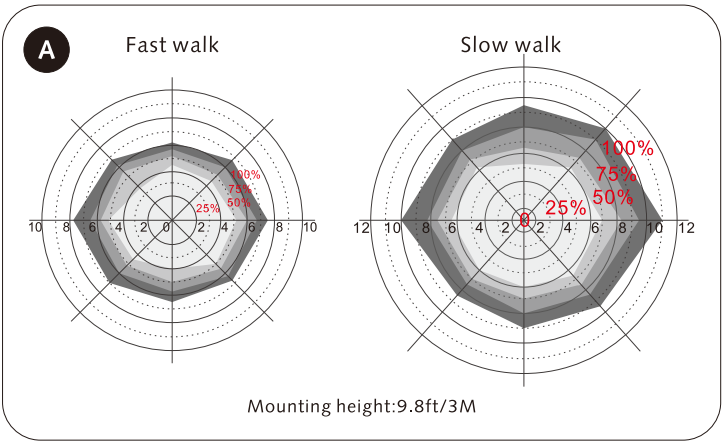
APPLICATION NOTICE

- 1, The sensor should be installed by a professional electrician. Please turn off the power before installing, wiring, changing the setting of the DIP switch.
- 2, The sensor which installed in the plastic and glass lampshade will reduce the sensitivity. For every 3mm increase in thickness, the sensitivity will be reduced by 20%.
- 3, The dimming performance could be different from different 1-10v drivers.
- 4, The light sensitivity threshold is in a sunny environment, no shadow and ambient light diffuse reflection. Ambient lux level could be different in different environment, weather, climate, time-of-day and season.
- 5, The parameters of the sensor may need to be reconfigured in different installation environments. Please refer to the following instructions or contact the manufacturer.
- 6, This sensor is for indoor use only. It will affect the waterproof effect for outdoor use. Wind, rain, and moving objects around will cause false triggering.
- 7, The distance between any inductive sensors should be greater than 3m.
- 8, Do not place the sensor close to high-density objects such as metal, glass, concrete walls, etc, false triggering could happen. When the sensor is installed in a metal lamp, metal reflective surface, or a narrow enclosed environment, the microwave will be reflected repeatedly and cause false triggering. Please reduce the sensitivity or contact the manufacturer for technical support.
- 9, Please ensure that there are no moving signals around the sensor, such as fan, DC motor, sewer pipe, air outlet, etc., the sensor may generate false trigger.
- 10, You are advised to test 5 samples before mass application of sensor in a new lighting project.
- 11, Due to continuous improvement, the contents of this instruction could be changed without prior notice.

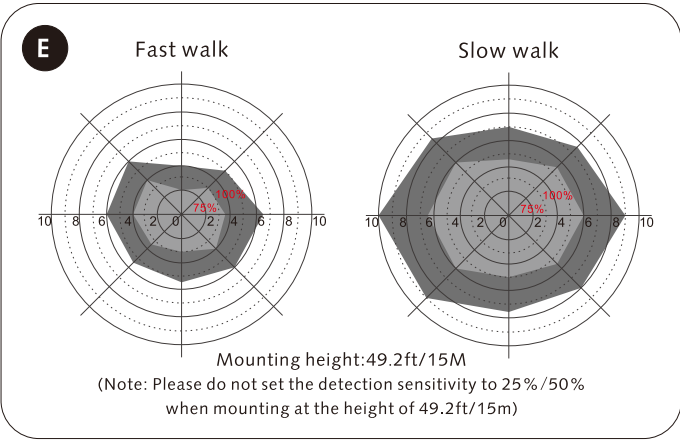
INITIALIZATION

- 1, On/Off function /3-step dimming function:
After power on, the sensor automatically turns on light at 100% brightness. After 10sec, it turns off the light. During. the initialization, the sensor is not able to detect movement.
- 2, 2-step dimming function:
After power on, the sensor automatically turns on light at 100% brightness. After 10sec, it dims the light to a low. light level (set by stand-by dim level). During the initialization, the sensor is not able to detect movement.

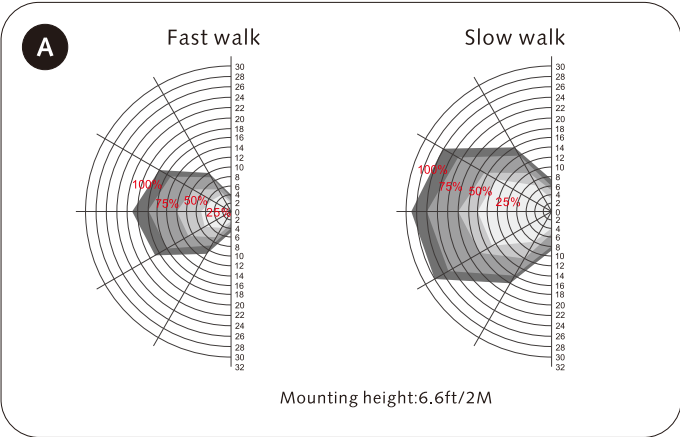
DETECTION PATTERN(Ceiling mounting)



The detection range will be affected by the height of the sensor installation, the size of the object being detected, the speed of movement and installation environment.the data here is only for reference.



Wall mounting



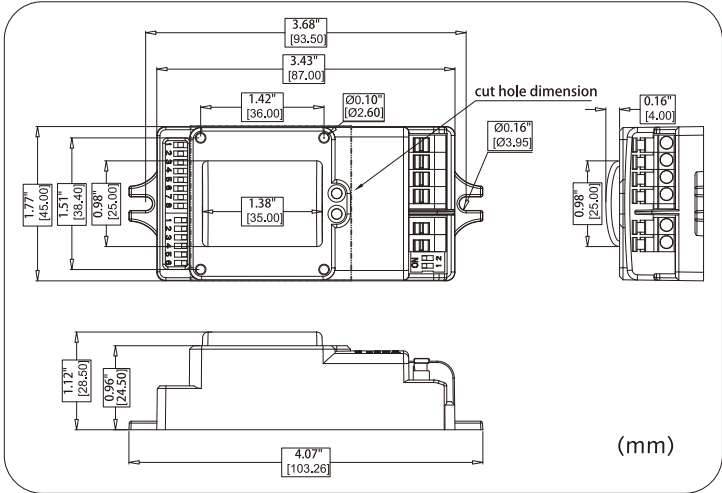
FEATURES

- High installation, can support 39.4ft(12m) mounting
- 1-10V dimming interface, two-step / three-stepdimming function with 1-10V driver.
- Infrared remote control design, users can configure each scene parameter according to needs.
- Support high-sensitivity and low-sensitivity mode (for metal ceiling, metal reflective surface installation environment)
- New patented remote control to adjust the launch angle to avoid mis-operation.
- Override function

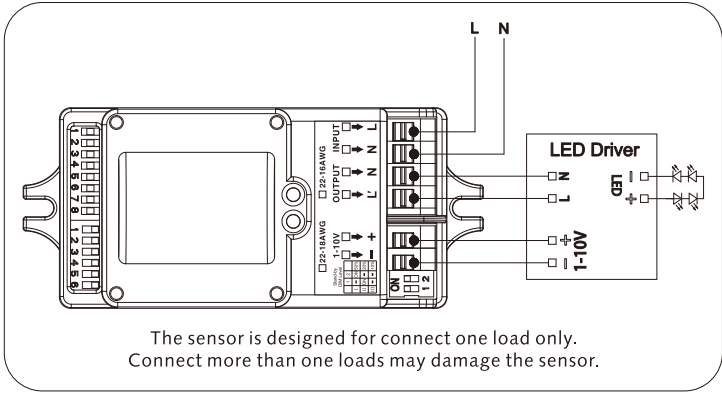
SPECIFICATIONS

Input voltage	120/277Vac, 50/60Hz(220-240Vac,50/60Hz)
Rated load	120Vac 2A ballast (800W-fluorescent 1E4) 277Vac 2A ballast(1000W-incandescent 1E4)
Max. Surge Capacity	30A (50% Ipeak twidth=500uS, 230Vac full load, cold start) 60A (50% Ipeak twidth=200uS, 230Vac full load, cold start)
Detection area	100% /75% /50% /25%
Hold time	5S/30S/1min/3min/20min/30min
Daylight sensor	5Lux/15Lux/30Lux/50Lux/100Lux/150Lux/Disable
Stand-by period	0S/5S/5min/10min/30min/1h/+∞
Stand-by dimming level	10%/20%/50%
HF Radiated Power	0.5mW Max
Microwave frequency	5.8GHz±75MHz, ISM wave band
Mounting height	39.4ft (12 m) Max.
Detection angle	150°
Motion detection	1.6~9.8 ft/s(0.5~3 m/s)
Operating temperature	-25°C~60°C
IP rating	IP20 (INDOOR USE ONLY)
Factory settings	Detection area: 100%, Hold time:5s, Stand-by Period: 0s, Stand-by dim level: 10%, Daylight Sensor: Disable, Mode:high sensitive

DIMENSION

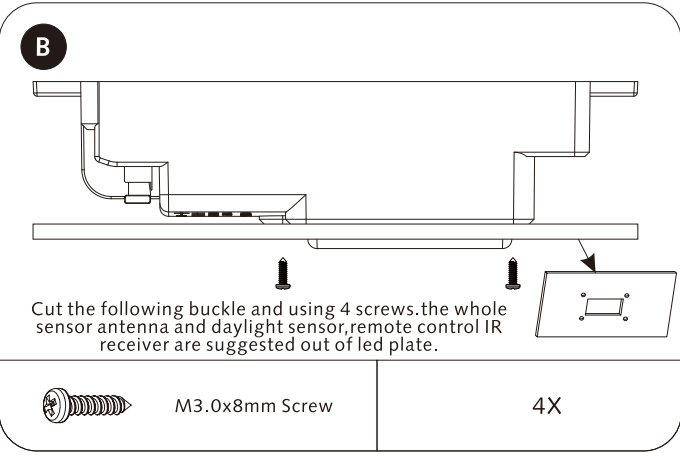
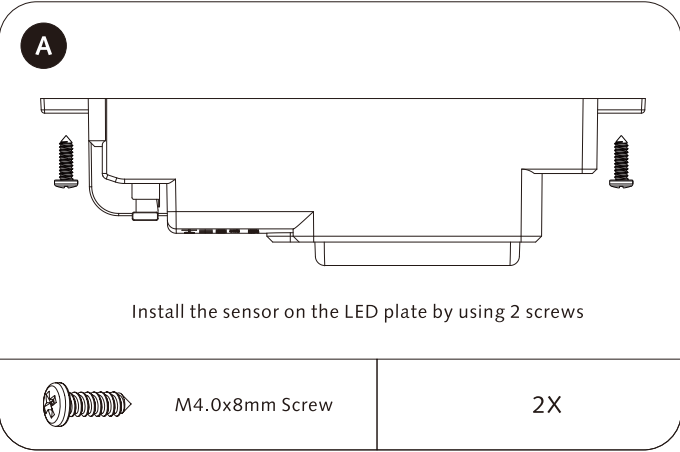


WIRING

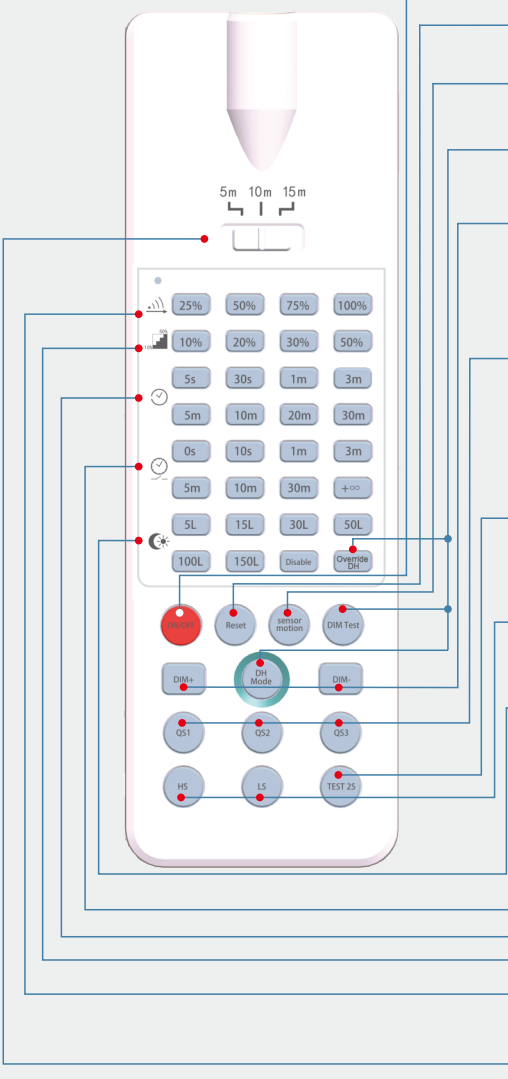


The sensor is designed for connect one load only.
Connect more than one loads may damage the sensor.

INSTALLATION



Remote Control Setting



The remote control features a variety of buttons for configuring the sensor. At the top, there are buttons for detection area (25%, 50%, 75%, 100%), hold time (5s, 30s, 1m, 3m), and sensitivity (5L, 15L, 30L, 50L, 100L, 150L, Disable). Below these are buttons for 'ON/OFF', 'Reset', 'Sensor motion', 'DIM Test', 'Override DH', 'DH Mode', 'DIM+', 'DIM-', 'Q1', 'Q2', 'Q3', 'TEST 2S', 'HS', 'LS', and a 'Toggle' button for remote distance. A diagram shows the remote's range from 5m to 15m.

Button









































Remarks

Press the “ON/OFF” button, the light goes to constant on/off mode, sensor is disabled. Press “Reset” “Auto mode” button to quit from this mode and the sensor starts to work. No memory for ON-OFF setting after power off. Sensor mode will auto recover after restart power supply.

Press “Reset” button, all parameters are same as setting of DIP switch.

Press “Sensor motion” button, the light quits from the constant on/ off mode, and the sensor starts to work (The latest setting stays in validity)

N/A

N/A

Scene Options	Detection Area	Hold Time	Stand-by period	Daylight Sensor	Induction model
Q51	100%	5min	10min	30Lux	HS
Q52	100%	10min	30min	Disable	HS
Q53	100%	20min	30min	Disable	HS

Note: Detection area / Hold time /Stand-by period /Daylight sensor can be adjusted by pressing the corresponding button. The latest setting will stay valid.

Press the “TEST 2S” button can enter the test mode any time. At the mode, the sensor parameters as below: Detection Area is 100%, Hold Time is 5s, Stand-by Dim Level is 10%, Stand-by Period is 0s, daylight sensor disable. This function only for testing. Quit the mode by pressing “RESET” or any other function buttons.

Press“HS”button to set the detection area to be high sensitive. Press“LS” button to set the detection area to be low sensitive. The adjustment bases on the “Detection Area” parameter you set.

Daylight Sensor
Set up daylight threshold:
5Lux/15Lux/30Lux/50Lux/100Lux/150Lux/ Disable.

Stand-by period
Set up stand-by time: 0S/10S/1min/3min/5min/10min/30min/+∞

Hold time
Set up hold time: 5S/30S/1min/3min/5min/10min/20min/30min

N/A

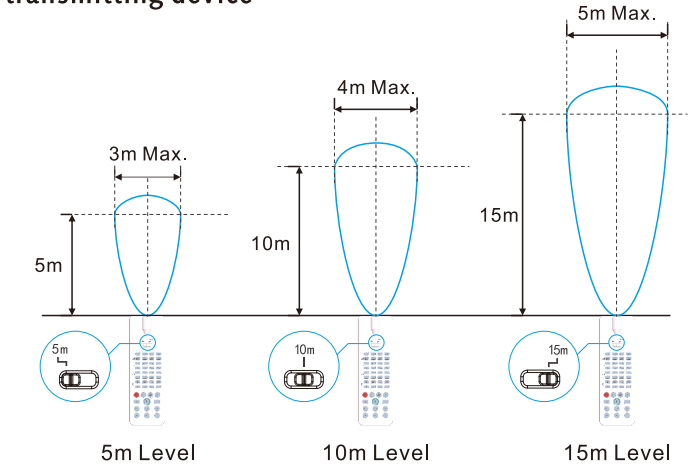
Detection Area
Set up detection area: 25%/50%/75%/100%

Remote Distance
Toggle button can set the remote distance of remote control and sensor.

Remote control and code setting conversion

- DIP switch setting convert to remote control Press any botton except “RESET” on the remote control, and the sensor settings convert to the function currently selected by the remote control. (No function button settings invalid)
- remote control convert to DIP switch setting
 - Press the "RESET" button on the remote control, and all settings return to the DIP switch settings of the sensor.
 - Turn off the power, toggle any DIP switch, connect to the power, and all settings return to the DIP switch settings when supply power again.

Unique design of infrared transmitting device



SETTINGS (DIP SWITCH)

Detection area, hold time, stand-by period, stand-by DIM level and daylight sensor can be set by using DIP switches on the sensor. Note that reducing the detection area will also reduce the sensitivity.

Detection area

- I: up to 100 %
II: up to 75 %
III: up to 50 %
iv: up to 10 %

		1	2	
I	ON	ON	ON	100%
II	ON	—	—	75%
III	—	ON	—	50%
IV	—	—	—	10%

Hold time

Refers to the time period the lamp remains at 100 % illumination after no motion detected.

- I: 5s
II: 30s
III: 1min
IV: 3min
V: 20min
VI: 30min

		3	4	5	
I	ON	ON	ON	ON	5s
II	—	ON	ON	ON	30s
III	ON	—	ON	—	1min
IV	—	—	ON	—	3min
V	ON	ON	—	—	20min
VI	—	—	—	—	30min

Stand-by period

Refers to the time period the lamp remains at a pre-setting dimming level before it completely switches off in the long absence of people.

- I: 0s
II: 5s
III: 5min
IV: 10min
V: 30min
VI: 60min
VII: +∞

		6	7	8	
I	ON	ON	ON	ON	0s
II	—	ON	ON	ON	5s
III	ON	—	ON	—	5min
IV	—	—	ON	—	10min
V	ON	ON	—	—	30min
VI	—	ON	—	—	60min
VII	—	—	—	—	+∞

*When set to 0s, the lamp will work as on/off function

*When set daylight sensor to “Disable” and stand-by period to “+ ∞ ” . the lamp will work as 2-step dimming control (Motion detected, 100% lumens, no motion, remains at pre-setting level lumens)

Daylight sensor

The sensor can be set to only allow the lamp to illuminate below a defined ambient brightness threshold. The settings are as follows:
I: 5lux, darkness operation only
II: 15lux, darkness operation only
III: 30lux, twilight operation
IV: 50lux, twilight operation
V: 100lux, twilight operation
VI: 150lux, twilight operation
VII: Disable *

		1	2	3	4	5	
I	ON	ON	ON	ON	ON	ON	5Lux
II	—	ON	ON	ON	ON	ON	15Lux
III	ON	—	ON	ON	ON	ON	30Lux
IV	ON	ON	—	ON	ON	ON	50Lux
V	ON	ON	ON	—	ON	ON	100Lux
VI	ON	ON	ON	ON	—	ON	150Lux
VII	—	—	—	—	—	—	Disable

*When set to Disable Mode, the sensor will switch on the lamp when motion is detected regardless of ambient light levels.

Mode

- I: HS (high sensitive)
II: LS (low sensitive)

		6	
I	ON	HS	
II	—	LS	

Stand-by dimming level

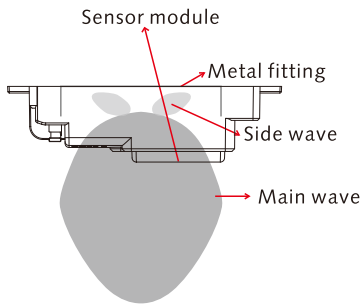
This is the pre-setting dimming level you would like to have after the hold time in the long absence of people.

- I: 50 %
II: 20 %
III: 10 %

		1	2	
I	ON	ON	50%	
II	ON	—	20%	
III	—	—	10%	

FAQ		
Question	Cause	Remedy
The load will not illuminate	Incorrect daylight sensor setting selected.	Adjust setting.
	Load has failed.	Replace load.
	Power is switched off.	Switch on.
The load is permanently illuminated.	Continuous movement in the detection area.	Check detection area setting.
	The lamp (containing sensor) is installed in an area too close to reflective surfaces, i.e. metal, glass or concrete walls.	1, Make sure installation area suitable with at least 100cm spacebetween lamp and surrounding reflective surfaces. 2, Reduce sensitivity (detection area).
The load will not illuminate despite movement.	Speed of moving object is not in the range of 0.5-3m/s or the detection radius is too small.	Check detection area setting.
The remote control is not working.	The battery on the remote control is run out.	Change the battery.
	The remote control is not aligned with sensor.	Change the remote angle.

NOTE1



Microwave detection includes two parts called main wave and side wave. Main wave normally detects the motion signal. Side wave does not effect motion detection but might disturb main wave if the microwave motion sensor is built-in a sealed metal luminaire as microwave can not pass through metal.

When the microwave module is built into a metal lighting luminaire or installed in a sensor near a wall, the side wave will be reflected by the metal base or the wall. It can disturb the main wave. As the result of this, the microwave motion senor might not perform optimally. Reducing the detection sensitivity or the side wave will help to solve such problems.

