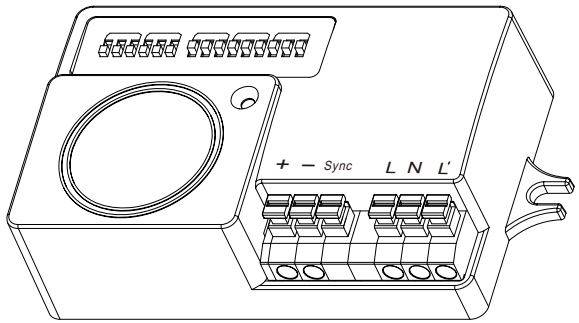
MICROWAVE MOTION SENSOR USER'S MANUAL

Model No.: MC003V/C



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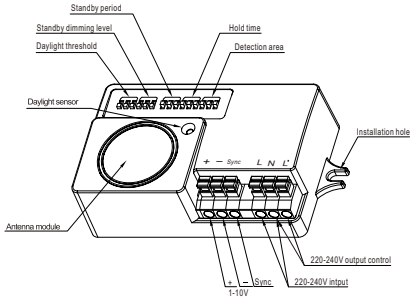

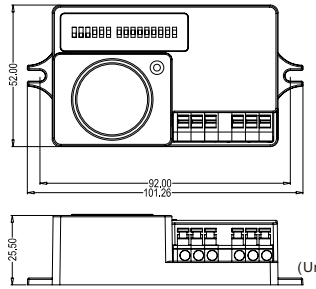

Technical Specifications

Input voltage	220/240Vac 50Hz
Rated load	800W(inductive load), 1200W(resistive load)
Detection area	0.5~8m, adjustable.
Hold time	10s / 30s / 90s / 3min / 20min / 30min
Daylight sensor	5lux / 10lux / 30lux / 50lux / Disable
Stand-by period	5s / 5min / 10min / 30min / 1h / Disable
Stand-by dimming level	10% / 20% / 30% / 40% / 50%
Sensor principle	Microwave motion detector
Microwave frequency	5.8GHz±75MHz, ISM wave band
Transmitting power	<0.5mW (1% of transmitting power for cell phone)
Detection range	Max. (Φ x h): 16m x 10m
Detection angle	150°(wall installation), 360°(ceiling installation)
Motion detection	0.5~3m/s
Operating temperature	-35℃~70℃
IP rating	IP20

CE 0700

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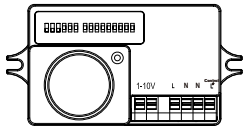
General Guidelines for Installation

1, The sensor should be installed by a qualified electrician. And ensure that the electricity supply is switched off before installing or servicing the product.
2, The sensor should not be modified in any way. Any modifications mode to this product will immediately invalidate any warranties issued.
3, The company does not accept responsibility for any consequences resulting from unauthorized modification of the product.
4, The sensor should be connected to a stable power supply of 220/240Vac 50Hz.
5, Microwaves cannot pass through metal or brick walls if thicker than 20cm. They will pass through thinner walls but there will be some attenuation.
6, Installation inside a glass or plastic housing will result in a reduction of detection sensitivity. Expect a reduction of approximately 20% for every 3mm of thickness.

Installation & Wiring



Pic 1

The sensor has 6-position terminal block as Pic 1:
L(Phase) N(Neutral) L′ (Switched phase / control)
1-10V (Connected to 1-10V interface) SYNC(Synchronization)

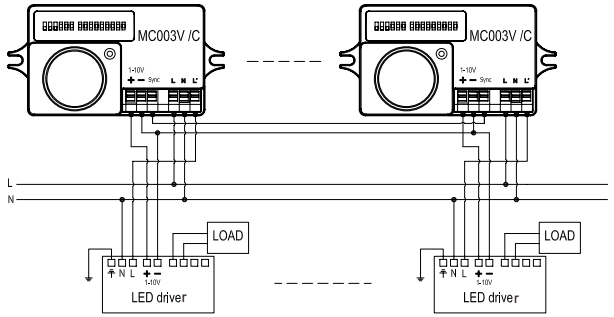
The sensor is designed for installation at 1~10m in height.
Suggested mounting height: 1~1.8m (Wall mounting), 2.5~10m (Ceiling mounting).
In many lighting areas, for example in warehouse and corridor, several sensors are connected to a group of lamps.

People need the functions that trigger one of sensors to make the group of lamps to switch on/off or dim simultaneously. This is called cluster-control. MC003V/C is an innovative and active motion detector designed for this function.

1, 3-step dimming function (Corridor function)
This sensor supplies 3 light levels: 100% low light level (10%, 20%, 30%, 40% or 50%)→off, for some areas that require a light change notice before switch off.

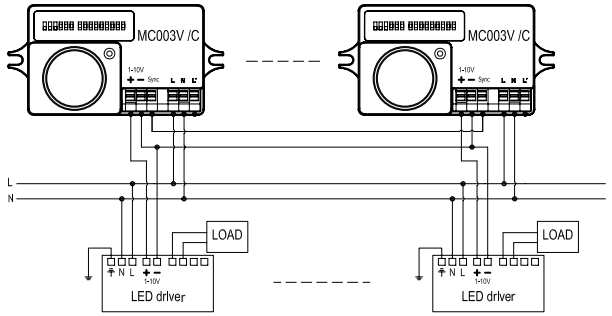
Connect to dimmable control gears (1-10v dimmable LED drivers or ballasts), the wiring as following:

Wiring diagram



2, 2-step dimming function
It means that the lamps will remains on at a low light level all the time if no motion detected in its detection zone. Connect to dimmable control gears (1-10v dimmable LED drivers or ballasts), the wiring as following:

Wiring diagram

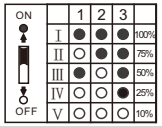


Settings

Sensor data can be set using DIP switches on the sensor. Note that reducing the detection area will also reduce the sensitivity.

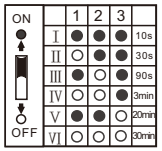
1, Detection area

I: up to 8m
II: up to 6m
III: up to 4m
IV: up to 3m
V: up to 2m



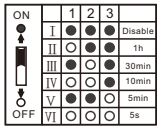
2, Hold time

Refers to the time period the lamp remains at 100% illumination after no motion detected.
I: 10s
II: 30s
III: 90s
IV: 3min
V: 20min
VI: 30min



3, Stand-by period

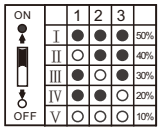
Refers to the time period the lamp remains at a low light level before it completely switches off in the long absence of people.
I: Disable*
II: 1h
III: 30min
IV: 10min
V: 5min
VI: 5s



*When set to Disable, the lamp will remain at 100% illumination if with motion detected or a pre-setting dimming level if without motion detected regardless ambient brightness threshold.

4,Stand-by dimming level

This is the low light level you would like to have after the hold time in the long absence of people.
I: 50%
II: 40%
III: 30%
IV: 20%
V: 10%

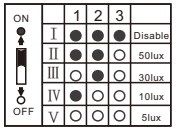


5, Daylight sensor

The sensor can be set to only allow the lamp to illuminate below a defined ambient brightness threshold. The settings are as follows:

I: Disable*
II: 50lux, twilight operation
III: 30lux, twilight operation
IV: 10lux, darkness operation only
V: 5lux, darkness operation only

* When set to Disable mode, the sensor will switch on the lamp when motion is detected regardless of ambient light levels.
Daylight sensor is active only when light totally switch off. That means, if set stand-by period on 'Disable' mode, the daylight sensor function will be not available.



Daylight sensor is active only when light totally switch off. That means, if set stand-by period on

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 30cm space between 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.

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