

Ceiling Mounted Microwave Occupancy Detector

Issue Number: 7.1 Date of Issue: 01/05/2018

OC-C-M



Features & Benefits

- Switch live output
- Easy adjustment
- LED indication of output status

Technical Overview

The OC-C-M is an active motion detector, it emits high-frequency electro-magnetic wave (5.8GHz) and receives their echo. The detector detects the change in echo from even the slightest movement in its detection zone. A microprocessor then triggers the "switch light ON" command.

Detection is possible through doors, panes of glass or thin walls.

Product Codes

OC-C-M Ceiling Mounted Microwave Occupancy Detector

Specification

Occupancy Sensor Microwave

HF System 5.8GHz CW radar, ISM Band

Field of view 360°

Coverage (radius) 1 to 8 m (adjustable)
Off Delay Timer 8 seconds to 12 minutes
Supply Voltage 220-240Vac @ 50/60Hz

Rated load 1200W
Power consumption 0.9W approx.
Dimensions 95mm x 40mm
Ambient

Temperature -10 to +40°C

Humidity 90%RH non-condensing

Material Flame retardant ABS, polypropylene

Protection IP30 Country of Origin China





The products referred to in this data sheet meet the requirements of EU 2014/30/EU and 2014/35/EU



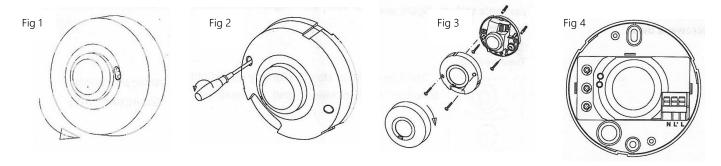
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Installation

- Avoid direct sunlight entering the sensor.
- Do not site within 1m of forced air heating or ventilation.
- Do not site within 1m of any lighting.
- Do not fix to a vibrating surface.
- 1. Remove the top cover by turning anti-clockwise (see fig1.), and then loosen of the two screws holding the middle cover (see fig 2.).
- 2. Using the base, mark and drill holes and fix detector to the surface using the screws provided (see fig 3.).
- 3. Terminate the wiring as required to the terminals, in the base (see fig 4.).
 - Connect N & L with power
 - Connect N & L' with load
- 4. Refit the middle cover (see fig 3.) and then refit the top cover and turn clockwise.



Reach (sensitivity), Time & Light-Control Settings

Reach Settings:

Reach is the term used to describe the radius of the more or less circular detection zone produced on the ground after mounting the detector at a height of 2.5m, turn the reach control fully anti-clockwise to select the minimum reach (approx. 1m radius), and fully anti-clockwise to select maximum reach (approx. 8m radius).

NOTE: the above detection distance is gained in the case of a person who is between 1.6-1.7m tall with a medium figure and moves at a speed of 1-1.5m/sec. If the person's stature, figure and moving speed change, the detection will also change.

Time Settings:

The light can be set to stay ON for any period of time between approx. 8 seconds (fully anti-clockwise) and a maximum of 12 minutes (fully clockwise). Any movement detected before this time elapse will re-start the timer. It is recommended to select the shortest time for adjusting the detection zone and for performing the walk test.

NOTE: after the light switches OFF it takes approx. 1 sec before it is able to start detecting movement again. The light will only switch on in response to movement once this period has elapsed.

Light-Control Settings:

The chosen light response threshold can be infinitely from approx. 2-2000lux. Turn it anti-clockwise to select duck-to-dawn operation at about 20ux. Turn fully clockwise to select daylight operation at about 2000lux. The knob must be turned fully clockwise when adjusting the detection zone and performing the walk test in daylight.

NOTE: do not over adjust the 3 functional potentiometers, there is a small stopper at each end of its travel excessive turns will damage the stopper. The adjustment range limit is 270°.



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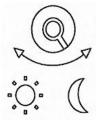




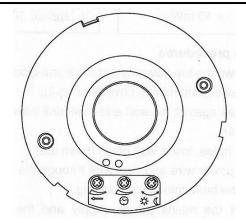
1 - 8m Radius



8 sec - 12 min



2 – 2000lux



Troubleshooting

Malfunction	Cause	Remedy
The load will not work	Wrong light-control setting selected	Adjust setting
	Load faulty	Change load
	Mains switch OFF	Switch ON
The load always works	Continuous movement in the detection	Check zone setting
	zone	
The load works without any	The sensor not mounted for detecting	Securely mount enclosure
identifiable movement	movement reliably	
	Movement occurred, but not identified	Check zone setting
	by the sensor (movement behind wall,	
	movement of a small object in immediate	
	lamp, vicinity etc.)	
The load will not work despite	Rapid movements are being suppressed	Check zone setting
movement	to minimize malfunctioning or the	
	detection zone you have set is too small	

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