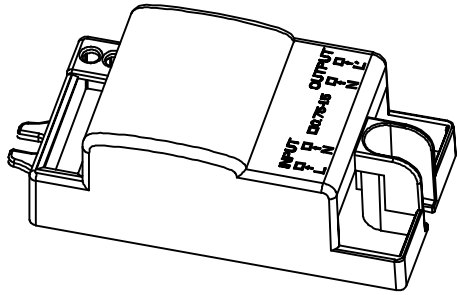




MICROWAVE MOTION SENSOR USER'S MANUAL

Model No.: MC030S



EN

Instruction



FEATURES

- Automatic switching based on motion and light level.
- Zero-crossing point operation helps protect the sensor against in-rush current.
- Super Compact size makes it suitable to fix within most luminaires.
- 4-pole press-in terminal (L, N, N, L'), easy assembly.
- Detection area, time delay and daylight threshold can be precisely set via DIP switch.
- Wide detection area, range up to 12m in diameter.

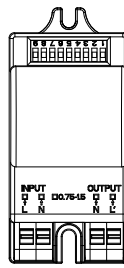
SPECIFICATIONS

Operating voltage	220~240Vac, 50Hz
Rated load	400W(inductive), 800W (resistive)
HF system	5.8GHz±75MHz, ISM wave band
Transmitting power	1mW Max
Power consumption	≤0.5W(standby)
Detection zone	Max.(D x H): 12m x 6m
Detection sensitivity	10% / 25% / 50% / 75% / 100%
Hold time	5s / 30s / 90s / 3min / 20min / 30min
Daylight sensor	2lux / 10lux / 25lux / 50lux / Disable
Mounting height	6m Max.
Motion detection	0.5~3m/s
Detection angle	150°(wall installation) 360°(ceiling installation)
Operating temperature	-20℃~60℃
IP rating	IP20

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 made for 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/60Hz.
- 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 4-position terminal block as Pic 1:

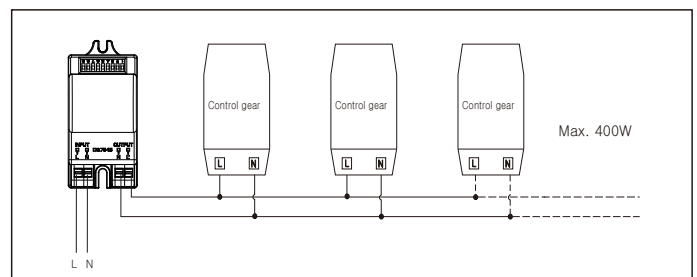
L(Phase) N(Neutral) L' (Switched phase / control)

The sensor is designed for installation at 3-12m in height.

WIRING SCHEME

FOR ON/OFF FUNCTION :

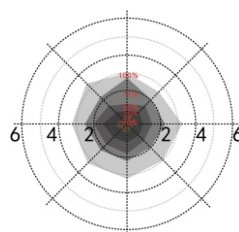
Connect to normal control gears (normal LED drivers or ballasts), the wiring as following:



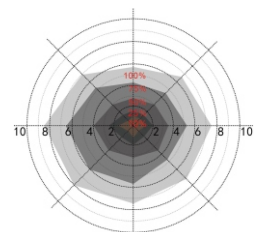
DETECTION PATTERN

Ceiling mounted height: 3m

Sensitivity: 100%/75%/50%/25%/10%

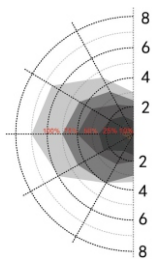


Normal moving (Speed:1m/s)

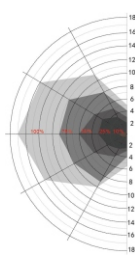


Slow moving (Speed 0.3m/s)

Wall mounted height: 2m
Sensitivity: 100%/75%/50%/25%/10%



Normal moving (Speed: 1m/s)



Slow moving (Speed 0.3m/s)

SETTINGS

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

1, Detection area

I: up to 100%
II: up to 75%
III: up to 50%
IV: up to 25%
V: up to 10%

	1	2	3	
ON	I	ON	ON	100%
	II	—	ON	75%
	III	ON	—	50%
	IV	—	—	25%
	V	—	—	10%

2, Hold time

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

I: 5s
II: 30s
III: 90s
IV: 3min
V: 20min
VI: 30min

	4	5	6	
ON	I	ON	ON	5s
	II	—	ON	30s
	III	ON	—	90s
	IV	—	—	3min
	V	ON	ON	20min
	VI	—	—	30min

3, 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: 2lux, darkness operation only
II: 10lux, darkness operation only
III: 25lux, twilight operation
IV: 50lux, twilight operation
V: Disable

	7	8	9	
ON	I	ON	ON	2lux
	II	ON	ON	10lux
	III	—	ON	25lux
	IV	ON	—	50lux
	V	—	—	Disable

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

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.