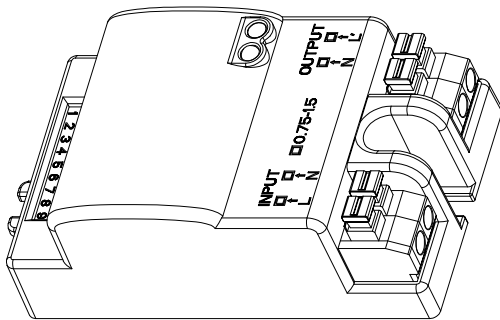




MICROWAVE MOTION SENSOR USER'S MANUAL

Model No.: MC603S



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.

SPECIFICATIONS

Operating voltage	120/277Vac, 50/60Hz
Rated load	200W@120Vac 400W@277Vac-Ballast 400W@120Vac 800W@ 277Vac-Resistive
HF system	5.8GHz±75MHz, ISM wave band
Transmitting power	<0.5mW
Power consumption	<0.5W(standby)
Detection zone	Max.(D x H): 10m x 6m
Detection sensitivity	10% / 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	-25°C ~60°C
IP rating	IP20

FCC Warning:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

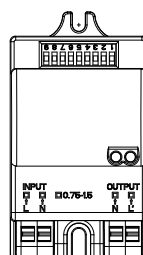
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

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



The sensor has 7-position terminal block as Pic 1:  
L(Phase) N(Neutral) L (Switched phase / control)  
1-10V (Connected to 1-10V interface) Sync  
(synchronization)

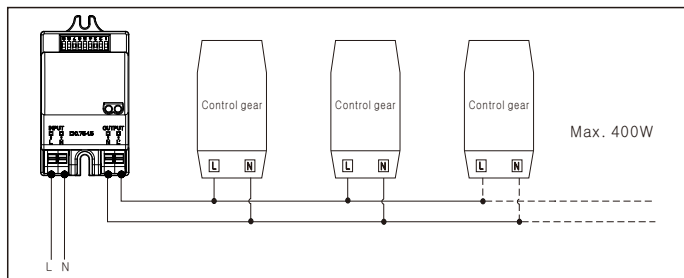
The sensor is designed for installation at 2.5-12m in height.

Pic 1

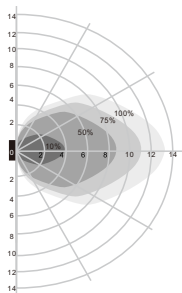
## WIRING SCHEME

### FOR ON/OFF FUNCTION :

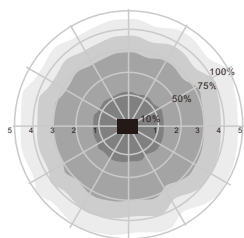
Connect to normal control gears (normal LED drivers or ballasts), the wiring as following:



## DETECTION PATTERN



Wall mounting pattern (Unit: m)  
Suggested installation height: 1-1.8m



Ceiling mounting pattern (Unit: m)  
Suggested installation height: 2.5-6m

## 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 10%

		1	2	
ON ↑ [Switch]	I	ON	ON	100%
	II	-	ON	75%
	III	ON	-	50%
	IV	-	-	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

		3	4	5	
ON ↑ [Switch]	I	ON	ON	ON	5s
	II	-	ON	ON	30s
	III	ON	-	ON	90s
	IV	-	-	ON	3min
	V	ON	ON	-	20min
	VI	-	-	-	30min

When set to 30min, The sensor function will be inactive, the light will go back to normal one.

### 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

		6	7	8	
ON ↑ [Switch]	I	ON	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.

\*It should be set to Disable mode if the motion sensor is connected to stand-alone daylight sensors.

## 4, Stand-by dimming level

When set to "Const-ant ON", the microwave sensor function is inactive, lights turns on or off by switch.

When set to Sensor, the microwave sensor function is active.

		9	
ON ↑ [Switch]	I	ON	Const-ant ON
	II	-	Sensor

## 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.