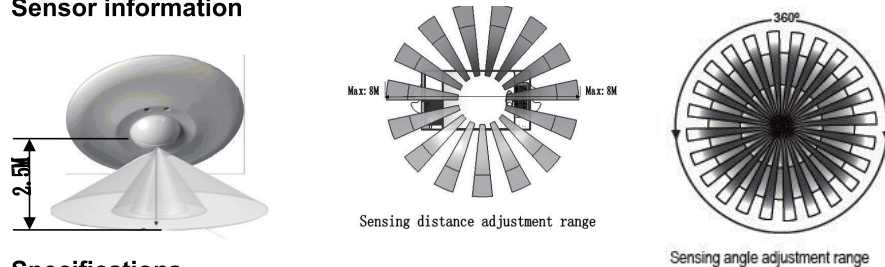


# PCMR Microwave sensor Instruction

The sensor is an active motion detector, it emits high-frequency electro-magnetic wave (5.8GHz) and receives their echo. The sensor 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.

**Important: persons or objects moving towards the sensor are detected best!**

## Sensor information



## Specifications

Power supply: 220-240VAC

Installation sit: Indoors, ceiling mounting

HF system: 5.8GHz CW radar. ISM band  
reach: 2-16m (dia), adjustable

time setting: 10sec to 30min

Power consumption: approx. 0.9W

Power frequency: 50/60Hz

Transmission power: <10mW

Detection angle: 360°

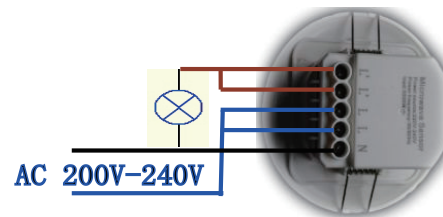
Rated load: 2000W

light control: 2~2000LUX

## Connection illumination

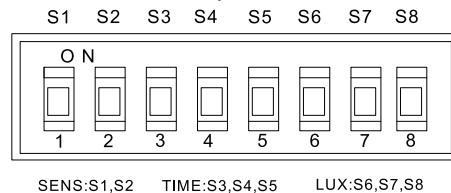
Connect N, L with power;

Connect N, L' with load.



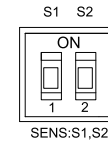
## Specifications setting

Consider the picture. S1, S2 set sensitivity, S3, S4, S5 set the lux, S6, S7, S8 set the lux.



## Reach setting (sensitivity)

Reach is the term used to describe the radii of the more or less circular detection zone produced on the ground after mounting the sensor light at a height of 10m, switch to the on is “1”, switch to the off is “0”; The corresponding file of switch location and detection distance as follow:

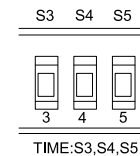


S1	S2	distance	S1	S2	distance
0	0	2m	1	0	8m
0	1	5m	1	1	10m

**NOTE: The above detection distance is measured using a person who is between 1.6m~1.7m tall with an average build, moving at a speed of 1.0~1.5m/sec. if any of these variables are changed, the detection distance will also resultantly change.**

## Time setting

Time can be set 10s to 30min. 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. Switch to the on is “1”, switch to the off is “0”; the corresponding file of switch location and detection distance as follow:

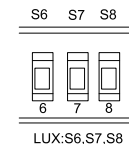


S3	S4	S5	time	S3	S4	S5	time
0	0	0	10S	1	0	0	10min
0	0	1	30S	1	0	1	15min
0	1	0	1min	1	1	0	20min
0	1	1	5min	1	1	1	30min

**NOTE:** after the light switches OFF, it takes approx. 1sec 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 setting

The chosen light response threshold can be infinitely from approx. 10lux-2000lux. switch to the on is “1”, switch to the off is “0”; the corresponding file of switch location and detection distance as follow:



S6	S7	S8	LUX	S6	S7	S8	LUX
0	0	0	24H	1	0	0	100 LUX
0	0	1	10 LUX	1	0	1	200 LUX
0	1	0	20 LUX	1	1	0	300 LUX
0	1	1	50 LUX	1	1	1	500 LUX

## 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 work always	• continuous movement in the detection zone	• check zone setting
The load work without any identifiable movement	• the sensor not mounted for detecting movement reliably	• securely mount enclosure
	• movement occurred, but not identified by the sensor (movement behind wall, movement of a small object in immediate lamp vicinity etc.)	• Check zone setting
The load will not work despite movement	• rapid movements are being suppressed to minimize malfunctioning or the detection zone you have set is too small	• Check zone setting