EN

MICROWAVE SENSOR FOR LED CEILING LAMPS
MODEL: MSP
INSTRUCTIONS FOR EXPLOITATION

Radar sensor uses frequency-modulated waves to detect moving and still objects. It detects the presence in its controlled area and turns on/off the electrical circuit accordingly.
The technology used in radar sensors has higher movement sensitivity and bigger detection range, compared to infrared sensors. The radar sensor signal can pass freely through wood, glass and thinner walls.

TECHNICAL SPECIFICATIONS

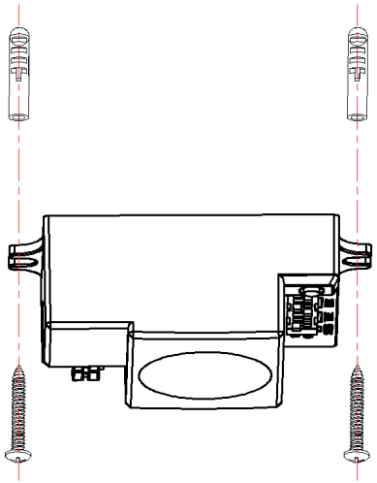
Voltage:	220-240 V AC / 50-60 Hz
Ambient Light:	5 lx, 30 lx, 150 lx, 2000 lx (adjustable)
Time Delay:	5 s, 30 s, 90 s, 3 min, 5 min, 10 min (adjustable)
Rated Load:	1200W (incandescent lamps)
	300W (energy-saving lamps)
Detection Range:	360°/ 180°
Detection Distance:	2 m, 5 m, 8 m (adjustable)
HF System:	5.8GHz CW radar, ISM band
Transmission Power:	<0.2mW
Installation Height:	1.5 m – 3.5 m (wall mounting)
	2 m – 8 m (ceiling mounting)
Power Consumption:	approx. 0.9W
Detection Motion Speed:	0.6 – 1.5m/s
Working Temperature:	-20°C to +40°C
Working Humidity:	<93%RH
IP rate:	IP20

FUNCTION

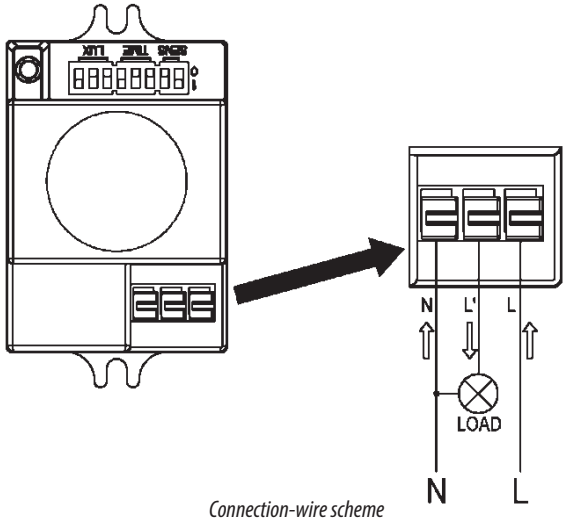
- **Identifying day and night (LUX):** When DIP switches for LUX are in position „000"(max. – 2000 lx) the sensor will work day and night. When DIP switches for LUX are in position „001"(5 lx), the sensor will work in ambient light less than 5 lx. As for the adjustment pattern, please refer to the testing pattern.
- **Adjusting detection distance (SENS):** It can be adjusted according to the location. The detection distance of low sensitivity could be 2m and high sensitivity could be 8m which fits for large room.
- **Adjusting TIME DELAY (TIME):** It can be set according to the consumer's desire. The minimum time is 5s. The maximum is 10min. When it receives the second induction signal within the first induction period, it will compute time once more on the basis of the first time-delay reset.

INSTALLATION

1. Turn off the power supply.
2. Fix the sensor with inflated screws on the selected position according to the installation scheme.
3. Connect the power and load wire according to the connection-wire scheme.
4. Turn on the power supply and test the sensor.



Installation scheme

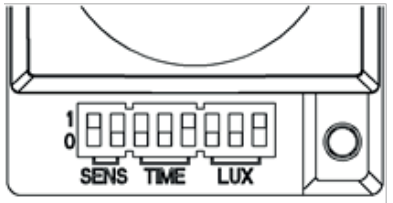


Connection-wire scheme

TEST

- How to adjust SENS: Slide the first DIP switch in position „1", and the second in position „0" (max. detection distance - 8 m).
- How to adjust TIME: Slide the first and the second DIP switch into position „0", and the third into position „1" (min. time delay 5 s).
- How to adjust LUX: Slide the first, the second and the third DIP switch into position „0" (max. ambient light 2000 lx).
- When you switch on the power, the light will be on at once. If there is a movement within the detection area of the sensor, the light will be on.
- When it receives the second induction signal within the first induction period, it will compute time once more on the basic of the first time-delay reset.
- Slide the first and the second DIP switch of LUX into position „0", and the third in position „1". If the ambient light is less than 5 lx, the light will be on when there is a movement in the detection area.

Note:
When testing in daylight, slide all LUX switches in position „0" (2000 lx), otherwise the sensor will not work.



00 : 2 m	001 : 5S	001 : 5 Lux
01 : 5 m	010 : 30S	010 : 30 Lux
10 : 8 m	011 : 90S	100 : 150 Lux
	110 : 3min	000 : 2000 Lux
	100 : 5min	
	111 : 10min	

NOTES

1. **Must be installed by a technically qualified person.**
2. **Cannot be installed on the uneven or shaky surface.**
3. **In front of the sensor there shouldn't be obstructive object affecting detection.**
4. **Avoid installing it near the metal and glass which may affect the sensor.**
5. **For your safety, please don't open the case before switching off the power supply, if you find a problem after installation.**
6. **In order to avoid the unexpected damage of product, please add a safe device of current 6A when installing microwave sensor, for example, fuse, safe tube etc.**

PROBLEMS AND TROUBLESHOOTING

1. THE LOAD DOES NOT WORK
a. Check the power and the load.
b. Whether the indicator light is turned on after sensing? If yes, please check load.
c. If the indicator light is not on after sensing, please check if the working light corresponds to the ambient light.
d. Please check if the working voltage corresponds to the power source.

2. THE SENSITIVITY IS POOR
a. Please check if in front of the sensor there is an obstructive object that can affect the receiving of the signals.
b. Please check if the signal source is in the detection fields.
c. Please check the installation height.

3. THE SENSOR CAN'T SHUT AUTOMATICALLY THE LOAD
a. If there are continual signals in the detection fields.
b. If the time delay is set to the longest.
c. If the power corresponds to the instruction.

TAKING CARE OF THE NATURAL ENVIRONMENT CLEANLINESS

- The product and its components are not harmful to the environment
- Please dispose the package elements separately in containers for the corresponding material.
- Please dispose the broken product separately in containers for out of usage electrical equipment.