MAJOR TECH

MS360

Microwave Motion Sensor

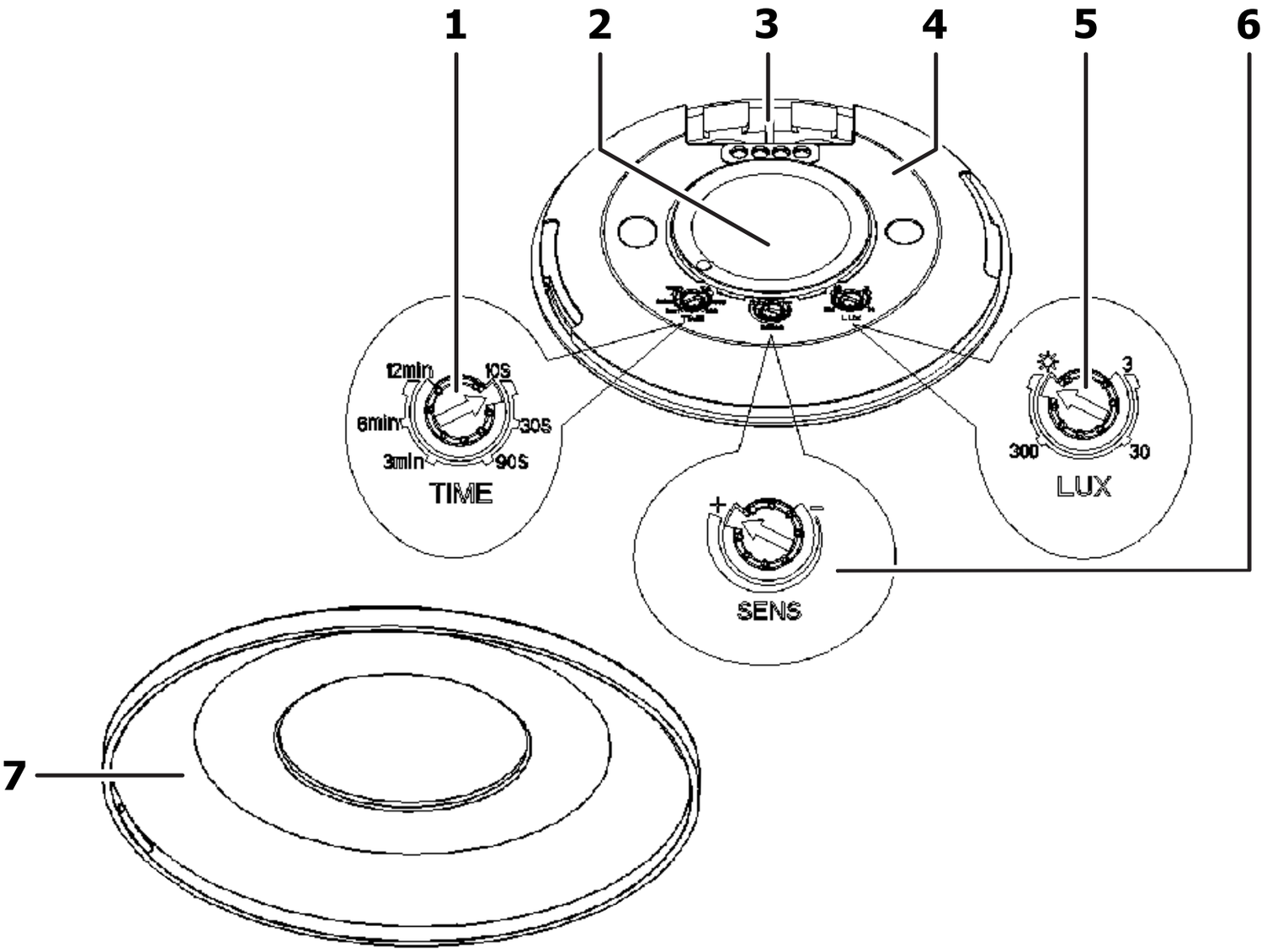
INTRODUCTION

The new energy saving MS360 uses Microwave technology (5.8GHz) for the sensor thus detecting even the slightest movement in its detection zone to turn lighting on and off based on occupancy. The MS360 should be installed indoors and mounted on the ceiling at a height of between 2~6m, the detection distance is 1~8m (radius) can be adjusted to a minimum of 2m and a maximum of 16m. The light can be set to a specific time delay of 10s, 30s, 90s, 3m 6m or 12 minutes, and the light control setting can be set on 3, 30, 300 or ☼(SUN) LUX. The MS360 can be connected to an existing light fitting or with new lights.

Features

- 360° Wide Angle
- Automatically turn lights on when motion & body heat is detected
- Time delay of 10s, 30s, 90s, 3min & 6min up to 12 minutes (±1min)
- Ceiling mounted
- Eco-Friendly when used with energy saving bulb
- 3LUX module detects daylight and darkness and can be set to 3, 30, 300 or ☼(SUN) LUX
- Sensitivity can be adjusted between a low 2m and a high sensitivity of 16m for a large room

Description



1. Time setting knob
2. 3LUX Sensor
3. Wire connection points
4. Sensor body
5. LUX setting knob
6. SENS setting knob
7. Upper cover

Function

Can identify day and night:

The consumer can adjust the work ambient light. The sensor can work in the daytime and at night when it is adjusted on the “sun” position (max). It can work in the ambient light less than 3LUX when it is adjusted on the “3” position (min). The light control setting can be set to 3, 30, 300 or ☼(SUN) LUX

SENS can be adjusted:

It can be adjusted according to using location. The detection distance of low sensitivity could be only 2m and high sensitivity could be 16m for large room.

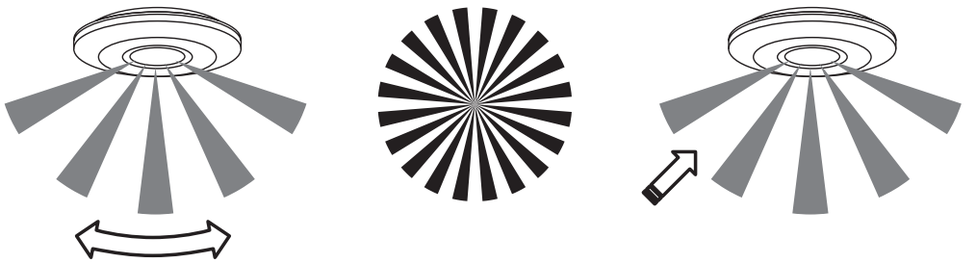
Time-Delay is added continually:

When the sensor receives a second induction signal within the first induction signal time-delay, the sensor will restart the time-delay from receiving the second induction signal.

Time–Delay is adjustable.

The sensor can be set according to a time delay of 10s, 30s, 90s, 3min & 6min up to 12 minutes (±1min)

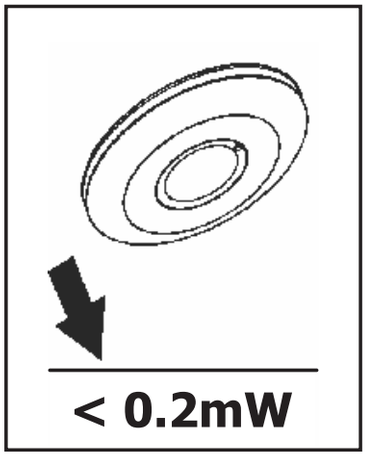
Testing Pattern

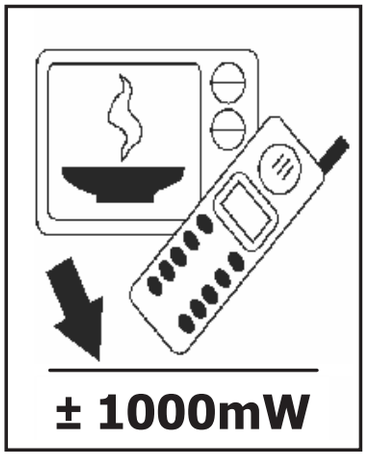


Good sensitivity **Poor sensitivity**

Note

The high-frequency output of the HF sensor is <0.2Mw- that is just one 5000th of the transmission power of a mobile phone or the output of a microwave oven, the baby can't touch it.





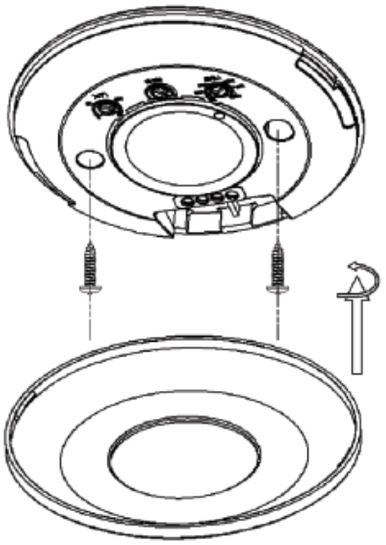
Installation Advice

The detector responds to changes in temperature, therefor the following situations should be avoided:

- Avoid pointing the detector towards objects with highly reflective surfaces, such as mirrors etc.
- Avoid mounting the detector near heat sources, such as heating vents, air conditioning units, lights etc.
- Avoid pointing the detector towards objects that may move in the wind, such as curtains, tall plants etc.

Connection

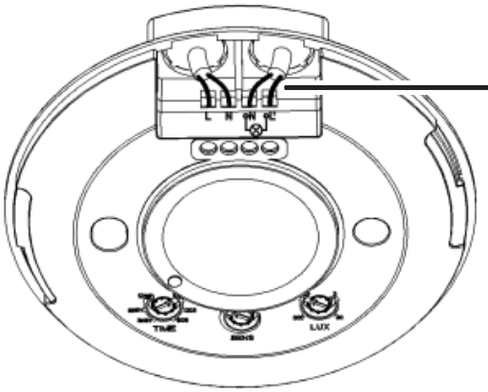
- Turn the cover anti-clockwise as per the diagram on the right.
- Connect the wiring according to the wiring diagram.
- Fix the bottom to the selected area with the screws.
- Replace the cover of the sensor, then switch on the power to test.



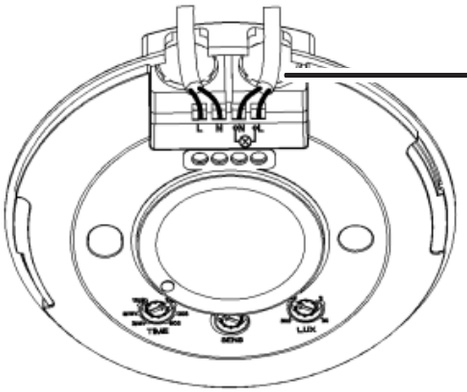
Warning

- Danger of electric shock!
- Must be installed by professional electrician.
- Cover or shied any adjacent live components.
- Ensure device cannot be switched on.
- Ensure power supply is disconnected.

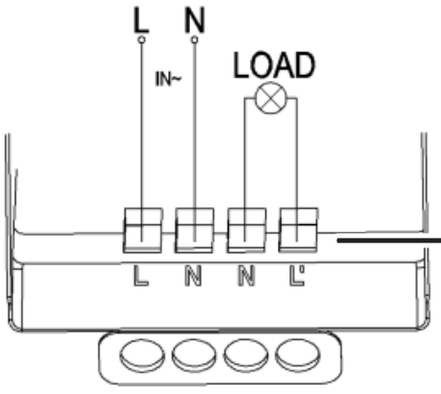
Wiring Diagrams



The wires come in and out from the bottom

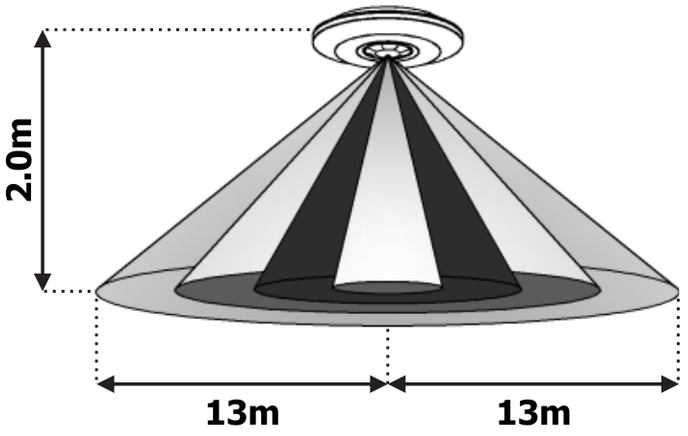


The wires come in and out from the side

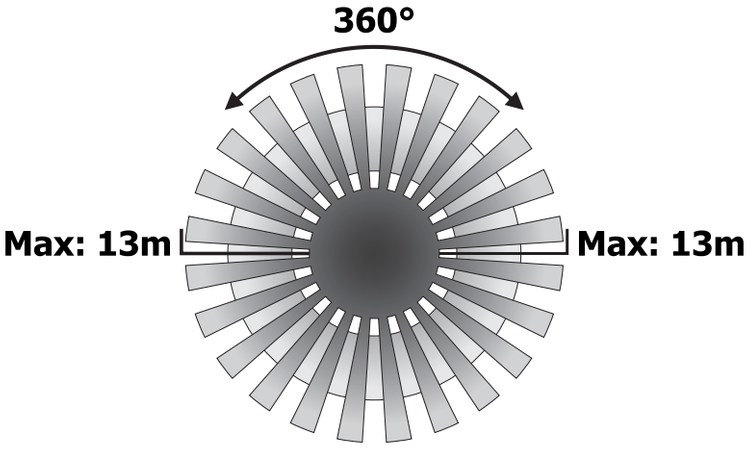


Connector points

Sensor Information



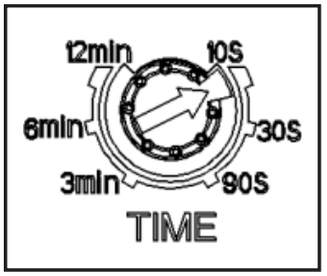
Height of Installation:
2 - 6m

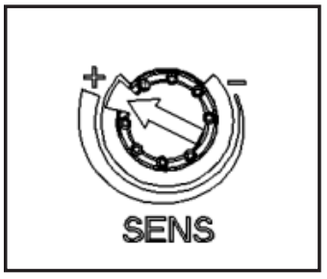


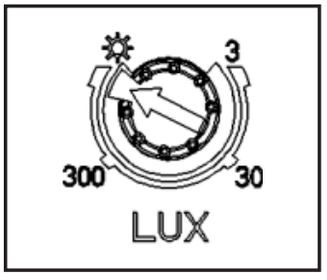
Detection Distance:
Max 16m

Testing the Sensor

- Turn the **TIME** knob anti-clockwise on the minimum (**10s**). Turn the **SENS** knob clockwise on the maximum (**+**). Turn the **LUX** knob clockwise on the maximum (**sun**).
- When you switch on the power, the light will be on at once. And 10sec ±3sec later the light will be off automatically. Then if the sensor receives induction signal again, it can work normally.







Testing the Sensor continued

- When the sensor receives the second induction signals within the first induction, it will restart to time from the moment.

- Turn **LUX** knob anti-clockwise on the minimum (**3**). If the ambient light is less than **3LUX** (**night**), the inductor load could work when it receives induction signal.

Note
When testing in daylight, please turn **LUX** knob to ☼ (**SUN**) position, otherwise the sensor lamp will not work!

Errors and Corrections

The load does not work:

a. Check if the connection of the power source and the load is correct.
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.

The sensitivity is poor:

a. Please check if in front of the sensor there shouldn't be obstructive object that affect to receive the signals.
b. Please check if the signal source is in the detection fields.
c. Please check the installation height.

The sensor can not shut off the load automatically:

a. Check if there is continual signal in the detection field.
b. Check if the time delay is set to the maximum (12min) position.
c. Please check if the power corresponds to the instruction.

Specifications

Power source	220V/AC ~ 240V/AC
Power Frequency	50Hz ~ 60Hz
Ambient Light	< 3 ~ 2000 LUX (adjustable)
Time delay	min: 10 sec (±3sec)
	max: 12 min (±1min)
Rated Load	min: 2000 Watts (incandescent lamps)
	max: 1000 Watts (energy-saving lamps)
Detection Distance	8m Max Radius (Adjustable)
Detection Range	360°
HF System	5.8GHz CW Radar, ISM Band
Installation Height	2m ~ 6m
Power Consumption	±0.9W
Detection Motion Speed	0.6 ~ 1.5m/s

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