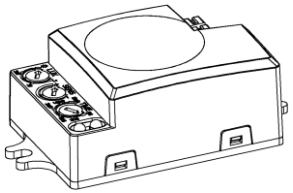
**MS361**

# *Microwave Motion Sensor*

## Instruction Manual

**Thank you for purchasing the Major Tech MS361 Microwave Motion Sensor**



The MS361 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 MS361 can be installed into existing light fittings or in new lights. If installed and mounted on the ceiling at a height of around 2.5m, the detection range (radius) can be adjusted to a minimum of 3m and a maximum of 12m. The light can be set to stay on for any period of time from approximately 10 seconds to a maximum of 12 minutes. Detection is possible to go through doors, panes of glass or thin walls. Major Tech Microwave Sensor is ideal for home use and also in educational and commercial properties.

***SPECIFICATION:***

Power Sourcing: 220 -240V/AC

Power Frequency: 50Hz

Ambient Light: <3-2000LUX (adjustable)

HF System: 5.8GHz CW radar, ISM band

Time Delay: Min. 10sec ± 3sec

Max.12min ± 1min

Rated Load: 500W

200W

Detection Range: 360°/180°

Detection Distance: wall::5-15m(adjustable)

Celling:2-8m(radius),adjustable

Transmission Power: <0.2mW

Installation Height: wall:1.5-3.5m

celling:2-10m

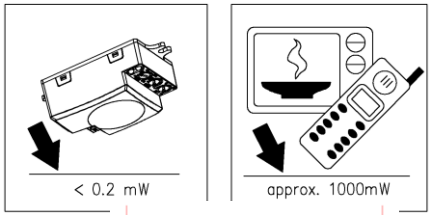
Power Consumption: approx 0.9W

Detection Motion Speed: 0.6-1.5m/s

***FUNCTION:***

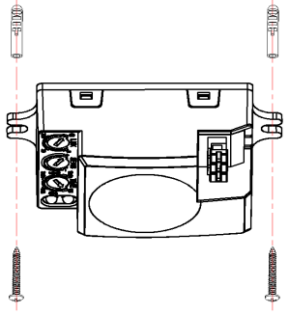
- **Can identify day and night:** The sensor works in the day and at night when it is adjusted to the “sun” position (max). The sensor works in ambient light in less than 3LUX when it is adjusted to the “moon” position (min). As for the adjustment pattern, please refer to the testing pattern.
- **SENS adjustable:** The sensor can be adjusted according to the location. The detection distance of low sensitivity can be only 2m and for high sensitivity 16m which will be suitable for a large room.
- **Time-Delay is added continually:** When it receives the second induction signals within the first induction, it will restart timing.
- **Time–Delay is adjustable.** It can be set according to the consumer’s requirements. The minimum time is 10sec ± 3sec. The maximum is 12min ±1min.

**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. Children safe.**

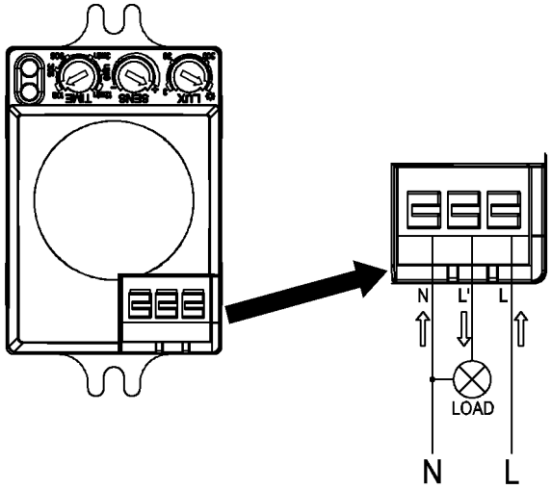



***INSTALLATION:*** (see diagram)

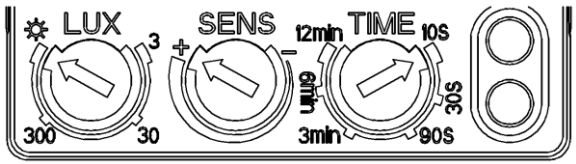
- Switch off the power.
- Fix the bottom on the selected position with the inflated screw through the screw holes at the side of the sensor.
- Connect the power and the load to the sensor as per the connection-wire sketch diagram.
- Switch on the power and test.



***CONNECTION-WIRE DIAGRAM:***




***TEST:***




- Turn the LUX knob clockwise on maximum. Turn the TIME knob anti-clockwise on minimum.
- Turn the SENS knob clockwise on max.
- When you switch on power, the light will switch on automatically and 10sec ± sec later the light will be switch off automatically. If the sensor receives induction signals again, it will work normally.
- When the sensor receives the second induction signal within the first induction period, it will compute time once more on the basis of the first time-delay rest.
- Turn LUX knob anti-clockwise on minimum. If the ambient light is less than 3LUX, the inductor load will work when it receives induction signals.

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

***NOTES：***

- Electrician or experienced person must install it.
- Can't be installed on an uneven and shaky surface
- In front of the sensor there shouldn't be obstructive objects affecting detection.
- Avoid installing it near metal and thick glass which may affect the sensor.
- For your safety, please don't open the casing if you find problems after installation.
- In order to avoid unexpected damage of the product, please add a safety device of 6A current when installing the microwave sensor, for example, circuit breaker..

***SOME PROBLEM AND SOLVED WAY:***

- **The load doesn't 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.
- **The sensitivity is poor:**
  a. Please check if the front of the sensor doesn't have an obstructive object that affects the receiver of signals.
  b. Please check if the signal source is in the detection fields.
  c. Please check the installation height.
- **The sensor can't switch off the load automatically:**
  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 instructions.


## *MAJOR TECH (PTY LTD*

**Head Office:**

**T9 Industrial Village, Sam Green Road, Tunney Ext. 9,**

**Elandsfontein, South Africa**

**P.O. Box 888, Isando 1600, South Africa**

**Telephone: +27 11 872 5500 • National Contact Number: 08 61 62 5678**

**Sales Facsimile: +27 11 822 2806 • Admin Facsimile: +27 11 822 1411**

**E-mail: sales@major-tech.com • Website: www.major-tech.com**