ENERGYLUX
传感器智能化技术
sensor intelligent technology

ES-M19

5.8Ghz Microwave Sensor

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Welcome to use ES-M19 5.8Ghz Microwave Sensor!

The product is a new saving-energy switch; it adopts microwave sensor mould with high-frequency electro-magnetic wave (5.8GHz), integrated circuit. It gathers automatism, convenience, safety, saving-energy and practicality functions. The wide detection field is consisting of detectors. It works by receiving human motion When one enters the detection field, it can start the load at once and identify automatically day and night. Its installation is very convenient and its using is very wide. Detection is possible through doors, panes of glass or thin walls.
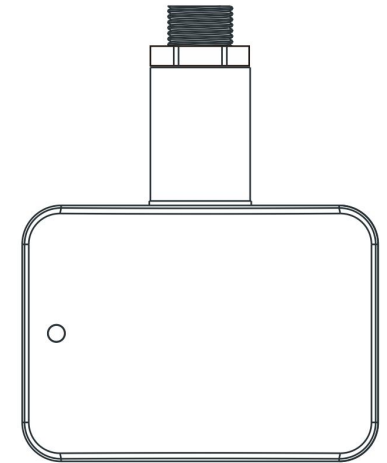
SPECIFICATION:

Power Sourcing: 220V/AC-240V/AC	Detection Range: 180°
Power Frequency: 50Hz	Detection Distance: 2-12m (radius) adjustable
Ambient Light: 3-2000LUX (Adjustable)	HF System: 5.8GHz CW radar, ISM band
Time-Delay: min.:10sec±3sec	Transmission Power: <10mW
Max.:15min±2min	Installing Height: 1.5m~3.5m
Rated Load: 1200W (incandescent lamp)	Power Consumption: 0.9W
300W (energy-saving lamp)	Detection Motion Speed: 0.6~1.5m/s

FUNCTION :

➢ Can identify day and night: The consumer can adjust work ambient light. It 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 "moon" position (min). As for the adjustment pattern, please refer to the testing pattern.

➢ SENS adjustable: It can be adjusted according to using location; low sensitivity with 2m for detection distance; high sensitivity with 12m, it fits for large room.

➢ Time-delay is added continually: When it receives the second induction signals after the first induction, it will compute time once more on the rest of the first time-delay basic (set time).

➢ Time-delay adjustment: It can be set according to the consumer's desire. The minimum time is 10sec±3sec. The maximum is 15min±2min.
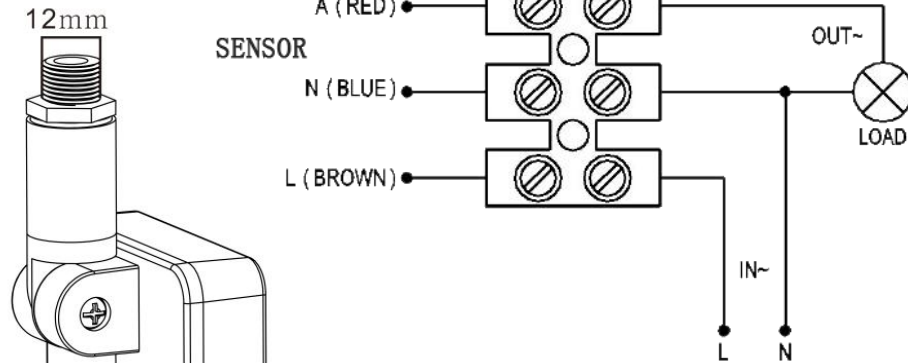
NOTE: the high-frequency output of this sensor is <10Mw- that is just one 100th of the transmission power of a mobile phone or the output of a microwave oven.

INSTALLATIION: (see the diagram)

➢ Switch off the power.

➢ Connecting the power and the load to sensor as per the connection-wire sketch diagram.

➢ Switch on the power and test it.

CONNECTION SKETCH FIGURE :

(see right figure)

TEST :

➢ Turn the SENS knob clockwise on the maximum, turn the TIME knob anti-clockwise on the minimum, turn the LUX knob clockwise on the maximum(SUN).

➢ When you switch on the power, the controlled load is not working. Preheat 30 seconds later, when the sensor gets the induction signal, the load will be turned on. After the load is turned off, it will be turned on again when the sensor gets induction signal within 5~15 sec.

➢ After the first is out, make it sense again after 5~10sec. The load should work. When there is no induction signals in the sensor, the load should be stopped working.

➢ Turn LUX knob anti-clockwise on the minimum. If it is adjusted in the less than 3LUX(dark), the load and sensor should not work when testing in daylight. If you cover the detection window with the opaque objects (towel etc), the load work. Under no induction signal condition, the load should stop working within 5-15sec.
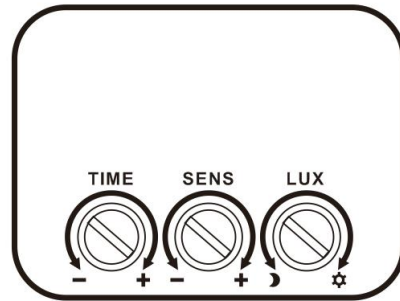
Note: when testing in daylight, please turn LUX knob to ☼ (SUN) position, otherwise the sensor lamp could not work!

NOTE :

➢ Should be installed by electrician or experienced person.

➢ Avoid installing it on the unrest object.

➢ There should be no hindrance and moving objects in front of the detection windows to effect detection.

➢ Avoid installing it near air temperature alteration zones such as air condition, central heating, etc.

➢ Considering your safety, please do not open the cover when you find the hitch after installation.

➢ If there is difference between instruction and the function the product has, please give priority to product and sorry not to inform you additionally.

SOME PROBLEM AND SOLVED WAY :

➢ The load do not work:

    a. please check if the connection-wiring of power and load is correct.

    b. please check if the load is good.

    c. please check if the working light set correspond to ambient light.

➢ The sensitivity is poor:

    a. Please check if there has hinder in front of the detection window to effect to receive the signal.

    b. Please check if the ambient temperature is too high.

    c. Please check if the induction signal source is in the detection fields.

    d. Please check if the installation height corresponds to the height showed in the instruction.

    e. Please check if the moving orientation is correct.

➢ The sensor can not shut off the load automatically:

    a. Please check if there is continual signal in the detection field.

    b. Please check if the time delay is the longest.

    c. Please check if the power corresponds to the instruction.

    d. Please check if the temperature near the sensor changes obviously, such as air condition or central heating etc.