

## Microwave Based Motion Sensor, SN-MW 753



Instruction Manual

This sensor is a new energy saving device; it adopts microwave sensor with high-frequency electro- magnetic wave (5.8GHz) and integrated circuit. It provides automatic control, convenience, safety, energy saving and practical functions. The wide detection field of microwave sensor depends on detectors. Induction Signal works by detecting human motion. When one enters the detection field, it can switch ON the load at once and can identify day and night automatically. Its installation is easy and is convenient to use. The detection is possible through doors, panes of glass or thin walls.

### SPECIFICATION:

- Power Source: 220 -240V AC
- Power Frequency: 50Hz
- Ambient Light: <3-2000LUX (Adjustable)
- Time Delay: Min. 10sec±3sec Max. 12min±1min
- Rated Load: Resistive Max. 1200W, CFL Max. 300W
- Detection Range: 360°
- Detection Distance: 1-8m (radial)
- HF System: 5.8GHz CW radar, ISM band
- Transmission Power: <0.2mW
- Installing Height: 1.5 - 3.5m
- Power Consumption: Approx 0.9W
- Detection Motion Speed: 0.6 - 1.5m/s

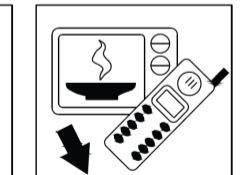
### FUNCTION:

Can identify day and night:

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 3 Lux when it is adjusted on the "3" position (min). As for the Adjustment pattern, please refer to the testing pattern.

### NOTE:

The high-frequency output of the HF sensor is <0.2Mw- that is just one 5000<sup>th</sup> of the transmission power of a mobile phone or the output of a microwave oven.



### INSTALLATION:

(see the diagram)

Switch off the power.

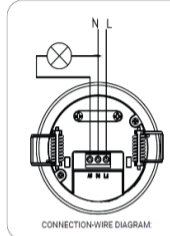
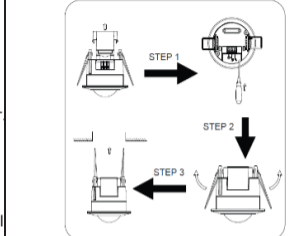
Open the transparent cover which is at the bottom of the sensor

Loose the screws in the connection terminal, and then connect the power and load to a connection terminal of the sensor according to the connection diagram.

Tighten the screw and put the transparent cover into the original location

Fold the metal spring of the sensor upwards, until they are in "I" position with the sensor, and then put the sensor into the hole or installation box which is on the ceiling and has the similar size with the sensor. Releasing the spring, the sensor will be set in this installation position.

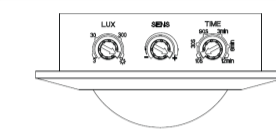
After finishing installation, the sensor could be powered and tested.



### NOTES :

- Electrician or experienced human can install it.
- SENS adjustable: It can be adjusted according to using location. The detection distance of low sensitivity could be only 2m and high sensitivity could be 16m which fits for a large room.
- Time-Delay is added continually: When it receives the second induction signals within the first induction, it will restart to time from the moment.
- Time-Delay is adjustable: It can be set according to the consumer's desire. The minimum time is 10sec ± 3sec. The maximum is 12min ± 1min.

### TEST:



Turn the LUX knob clockwise on the maximum (sun). Turn the SENS knob clockwise on the maximum (+). Turn the TIME knob anti-clockwise on the minimum (10s).

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 an induction signal again, it can work normally.

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 (darkness), the load can work when it receives an induction signal.

### NOTES:

When testing in daylight, please turn LUX knob to (SUN) position, otherwise the sensor could not work!

- Electrician or experienced human can install it.
- Can not be installed on the uneven and shaky surface
- In front of the sensor there shouldn't be obstructive object affecting detection.
- Avoid installing it near the metal and glass which may affect the sensor.
- For your safety, please don't open the case if you find hitch after installation.

### SOME PROBLEM AND SOLVED WAY:

The load don't work:

- Check the power and the load.
- Whether the indicator light is turned on after sensing? If yes, please check load.
- If the indicator light does not turn on after sensing, please check if the working light corresponds to the ambient light.
- Please check if the working voltage corresponds to the power source.

The sensitivity is poor:

- Please check the ambient temperature.
- Please check if the source of the signal is in the detection range.
- Please check the installation height.
- Please check if the signal source is small to emit the signal and located at maximum distance from the product detection range.

The sensor can't shut automatically the load:

- If there are continual signals in the detection fields.
- If the time delay is set to the longest.
- If the power corresponds to the instruction