



# **MICROWAVE MOTION SENSOR**

Model: AU-X4T









Wall: 15m Celling: 8m

IP20

Sensing area

Energy saving

### **INTRODUCTION**

AU-X4T Microwave Motion Sensor, a new energy-saving switch, adopts a microwave sensor with high-frequency electromagnetic waves (5.8 GHz) and an integrated circuit. It gathers automatism, convenience, safety, energy-saving, and practical functions. The wide/detection field depends upon the detectors. When one enters the detection field, it can start the load at once and automatically identifies day and night. The installation of this product is very convenient, and it can be used for a wide range of applications. It can be detected easily through doors, glass panes, or even thin walls, making it ultra-reliable as there are no gaps in the detection zone.

### **TECHNICAL SPECIFICATIONS**

Model : AU-X4T

| Power Source              | : 220-240VAC   50Hz  |  |
|---------------------------|--|--|
| HF System                 | : 5.8Ghz CW Radar, ISM Band  |  |
| Transmission Power        | :<0.2mW  |  |
| Time Delay                | : Min. 10Sec±3Sec, Max. 12Min±1Min                                 |  |
| Rated Load                | : 1200W (Incandescent), 300W (LED Load)                            |  |
| Detection Range           | : 360°/180°  |  |
| <b>Detection Distance</b> | : Ceiling: 1-8m (radius), adjustable. Wall: 5-<br>15m (Adjustable) |  |
| Ambient Light             | : <3-2000LUX   |  |
| Installation Height       | : Wall: (1.5-3.5m), Ceiling: (2-8m)                                |  |
| Power Consumption         | : Approx. 0.9W   |  |
| No. of Wires              | : 4 Wires  |  |
| Detection Motion Speed    | : 0.6-1.5m/s   |  |

### **FUNCTIONAL MODES**

#### Can identify day and night

It can work during the daytime and the night when adjusted to the "sun" position (max). It can work in less than 3 LUX ambient light when adjusted on the "3" position (min). As for the adjustment pattern, please refer to the testing pattern.

#### **Adjustable sensitivity**

This sensor can be easily adjusted depending on the location. The detection distance of low sensitivity could be only 1m, and high sensitivity could be 8m which fits for a larger room.

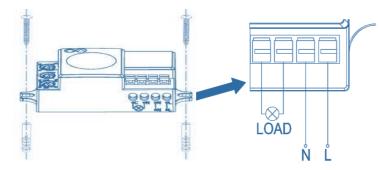
#### Adjustable time delay

■ The time delay can be set according to the customer's desire. The minimum time is 10sec ± 3sec, and the maximum is 12min ± 1min.

### **INSTALLATION INSTRUCTIONS**

- Only experienced, suitable, and registered electricians should carry out all electrical installations.
- Always isolate main power prior to installation.
- Mark drill holes on the mounting surface by using a base.
- Drill holes and insert wall plugs, if required.
- Connect the power and load wire to the connection with push type terminal. Do not exceed the max-rated load.

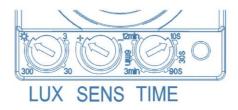
### **CONNECTION – WIRING DIAGRAM**



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

#### **TEST**

- On the LUX knob clockwise to the maximum (sun). Turn the sensitivity knob clockwise to the maximum (+) and then turn the TIME knob anticlockwise to the minimum (10s).
- As soon as you switch on the power, the light will be on at Once, and 10sec ±
  3sec later, the light will automatically turn off. Then if the sensor receives the
  induction signal again, it can start working normally.
- When the sensor receives the second induction signal within the first induction, it will restart from that moment itself.
- Turn the LUX knob anti-clockwise on the minimum (3) if the ambient light is less than 3LUX (darkness); the inductor load will work when it receives the induction signal.



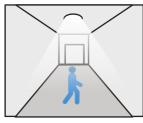
## **LUX FUNCTION CHECK**

### **Daylight Function**

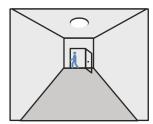
The hold time is set to 30 seconds, and LUX is set to 300. The light switches on when it detects movement, and it switches off after 30 seconds of no movement.



When the motion is detected with sufficient daylight (>300LUX), the light remains OFF.



When the motion is detected with insufficient daylight (<300LUX), the light switches ON.



After the last detection and the present hold time-lapse (30 seconds), the light switches OFF.

### **No Daylight Function**

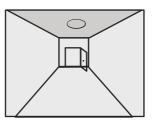
The hold time is set to 30 seconds, and LUX is set to or 2000. The light switches on when it detects movement, and when people leave, it switches off after the hold time is lapsed (30 seconds).



When the motion is detected, the sensor will switch on the light to 100% brightness



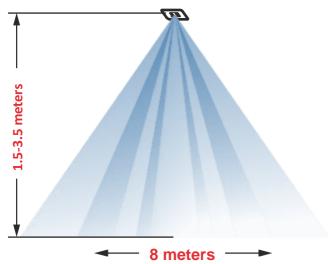
After the people leave the detection area, the light remains at 100% brightness within the hold time.



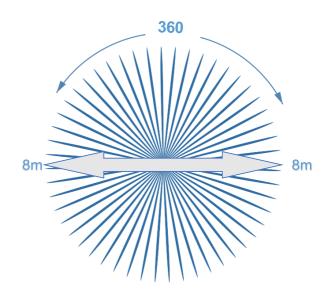
After the last detection and the present hold timelapse (30 seconds), the light switches OFF.

### **SAFETY INSTRUCTIONS**

- Only an electrician or an experienced human can install it.
- Do not install it on an uneven and shaky surface.
- No obstructive objects should be in front of the sensor as it affects the detection.
- Do not install it near metal and glass as they may affect the sensor.
- For your safety, please don't open the case if you find a hitch after the installation



#### **Detection area**



# **TROUBLESHOOTING**

| Malfunction                                      | Cause  | Remedy  |
|--|--|---|
| The load will not work                           | Wrong light control is selected Faulty load faulty main switch is switched OFF   | Adjust the setting<br>Change load Turn the<br>switch ON |
| The load is always on                            | There is a continuous movement in the detection zone   | Check the zone setting                                  |
| The load is ON without any identifiable movement | The sensor is not mounted for detecting the movement reliably  The movement has occurred behind a poorby thin wall or glass. | Securely mount the enclosure Check zone setting         |
| The load will not work despite the movement      | a nearby thin wall or glass.  Rapid movements are being suppressed to minimize the malfunctioning                            | Turn the "SENS" knob<br>fully clockwise.                |
|  | The "SENS" knob may not be fully clockwise.  |   |