



sales@tlwglobal.com www.tlwglobal.com +44 (0) 1302 741941

# Infrared motion sensor - installation and operation manual

# **Kit Contents**



# **Specification** - Part Code U12-4440

Power Source: 220-240V/AC Detection Range: 360°

Power Frequency: 50/60Hz Detection Distance: 8m max(<24)

Time Delay: Min.10sec±3sec Ambient Light: <3-2000LUX (adjustable)

Max.15min±2min Working Temperature: -20~+40
Rated Load: Max.1200W Working Humidity: <93%RH

600W Power Consumption: approx 0.5W

Installation Height: 2.2-4m Detection Moving Speed: 0.6-1.5m/s

# IP65 360° PIR sensor single channel

The product adopts good sensitivity detector and integrated circuit. It gathers automatism, convenience, safety, saving-energy and practical functions. It utilises the infrared energy from human as control-signal source and it can start the load at once when one enters detection field. It can identify day and night automatically. It is easy to install and used widely.

#### Function.

- Can identify day and night: The consumer can adjust working state in different 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 "3" position (min). As for the adjustment pattern, please refer to the testing pattern.
- Time-Delay is added continually: When it receives the second induction signals within the first induction, it will restart to time from the moment.

# Installation Advice

As the detector responds to changes in temperature, avoid the following situations:

- 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, light etc.
- Avoid pointing the detector towards objects that may move in the wind, such as curtains, tall plants etc.
- Unload the transparent vinyl cover which is at the bottom of the sensor.
- Loose the screws in the connection terminal, and then connect the power to connection terminal of sensor according to connection-wire diagram.
- Install back the transparent vinyl cover into the original location.



- Fold the metal spring of the sensor upwards, until they are in "I" position with 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 installing, turn on the power and then test it.

#### **Connection**

### Warning. Danger of death through electric shock!

- Must be installed by professional electrician.
- Disconnect power source.
- Cover or shied any adjacent live components.
- Ensure device cannot be switched on.
- Check power supply is disconnected.



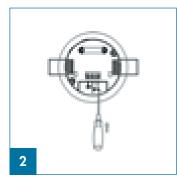


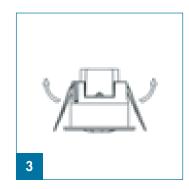


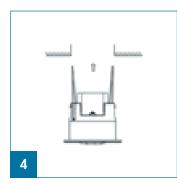
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# Installation





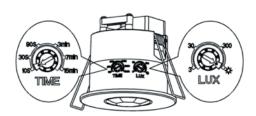




# **Sensor Information Test**

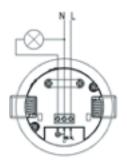
- Turn the TIME knob anti-clockwise on the minimum (10s). Turn the LUX knob clockwise on the maximum (sun).
- Switch on the power; the sensor and its connected lamp will have no signal at the beginning. After Warm-up 30sec, the sensor can start work. If the sensor receives the induction signal, the lamp will turn on. While there is no another induction signal any more, the load should stop working within 10sec±3sec and the lamp would turn off.
- Turn LUX knob anti-clockwise on the minimum (3). If the ambient light is more than 3LUX, the sensor would not work and the lamp stop working too. If the ambient light is less than 3LUX (darkness), the sensor would work. Under no induction signal condition, the sensor should stop working within 10sec±3sec.

Note: when testing in daylight, please turn LUX knob to -X-(SUN) position.





Height of installation: 2.2-4m Detection Distance: Max.8m



# **Problem Solving**

# No activation

- Please check the connections to the PIR sensor
- Please check the power and load connection is live
- Please check the light fitting is in good working order

# Sensitivity is poor

- Make sure nothing is blocking the PIR sensor's detection view
- Please check that the ambient temperature is within acceptable operation range
- Please check that the signal/activation source is within the detection range of the PIR sensor
- Please check the installation height does not exceed the permitted range

#### The PIR sensor does not turn off as expected

- Please check the TIMER is set to the correct desired delay
- Please check the LUX setting is set to the correct desired level
- Please check that an activation source is not present in the room, causing the PIR sensor to remain active

