TRONIX

guided by light

Infrared Motion Sensor

Instruction 214-050

Welcome to use 214-050 infrared motion sensor!

The product adopts good sensitivity detector, integrated circuit. It gathers automatism, convenient safe, saving-energy and practical functions. It utilizes the infrared energy from human as control-signal source, 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.

SPECIFICATION:

Power Source: 220-240V/AC

Time Delay : Min.10sec±3sec

Max.7min±2min

Rated Load:

Two wire line: Max.500W

200W

Three wire line: Max.500W

200W

Detection Moving Speed: 0.6-1.5m/s

Detection Range: 160°

Power Frequency: 50/60Hz

Detection Distance: 9m max (<24℃)

Ambient Light: <3-2000LUX (adjustable)

Working Temperature:-20~+40℃

Working Humidity :< 93%RH

Power Consumption: approx 0.5W

Installation Height: 1-1.8m

FUNCTIONS:

- 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 “moon” 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.
- The switch: “ON”、“OFF”、“PIR”.

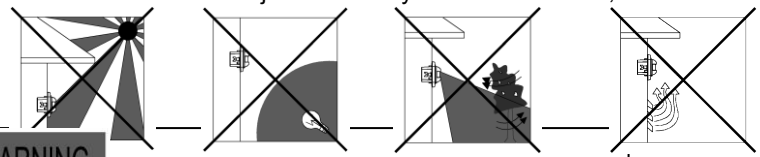
Good sensitivity

Poor sensitivity

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.



CONNECTION:

WARNING

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.

- Unload the faceplate of sensor and adjust the time and LUX knob.(refer to figure 1)
- Loose the screws in the connection terminal, and then connect the power to connection terminal of sensor according to connection-wire diagram. (according to your actual situation, here you can connect three wire or two wire)
- If you want to install it in circular hole, put the sensor into the hole and tighten the splay bolt on both sides. If you want to install in quadrate hole, put the sensor into the hole, fix the screw through the mounting hole .
- Install back the faceplate, switch on the power and then test it.

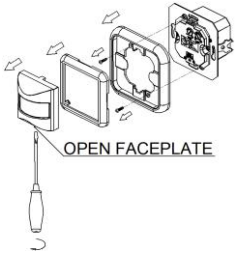
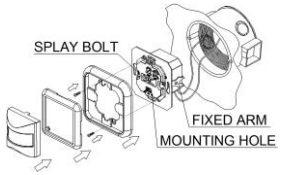
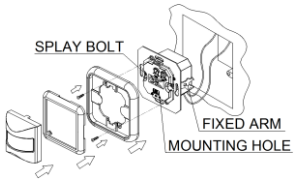


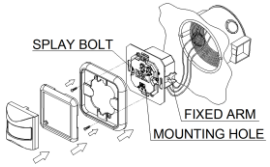
Figure1



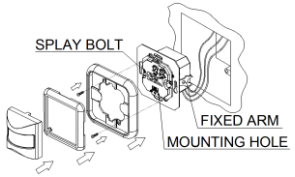
Two wire line



Two wire line

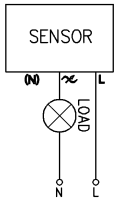


Three wire line



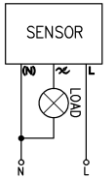
Three wire line

CONNECTION-WIRE DIAGRAM: (there are two ways .see the following)



Two wire line

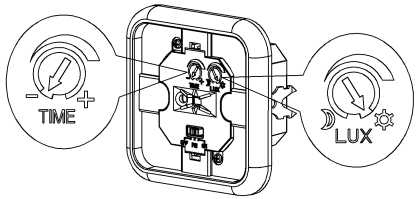
DO NOT PUT THE SENSOR INTO POWER DIRECTLY!!!



Three wire line

TEST:

- Set the function switch to “ON”, set “TIME” anti-clockwise to minimum, “LUX” clockwise to maximum.
- Switch on the power, the lamp should be on.
- Set the function switch to “OFF”, the lamp should be off immediately.
- Set the function switch to “PIR”, 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 (moon). 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 ☼ (SUN) position, otherwise the sensor lamp could not work! If the lamp is more than 60W, the distance between lamp and sensor should be 60cm at least.

SOME PROBLEM AND SOLVED WAY:

- The load does not work:
  - a. Please check if the connection of power source and load is correct.
  - b. Please check if the load is good.
  - c. Please check if the settings of working light correspond to ambient light.
- The sensitivity is poor:
  - a. Please check if there is any hindrance in front of the detector to affect it to receive the signals.
  - b. Please check if the ambient temperature is too high.
  - c. Please check if the induction signal source is in the detection field.
  - d. Please check if the installation height corresponds to the height required 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 set to the maximum position
  - c. Please check if the power corresponds to the instruction.