

# ELMARK<sup>®</sup>

## ST10A

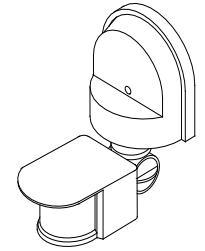
### Infrared Motion Sensor



### Instruction

#### Welcome to use ST10A 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

Power Frequency: 50Hz

Ambient Light: 3-2000LUX (adjustable)

Time-Delay: min: 10sec±3sec

max: 7min±2min

Rated Load: 1200W (incandescent lamp)

300W(energy-saving lamp)

Detection Range: 180°

Working Temperature: -20~+40 °C

Working Humidity: <93%RH

Installation Height: 1.8m~2.5m

Power Consumption: 0.45W (work)

0.1W (static)

Detection Motion Speed: 0.6~1.5m/s

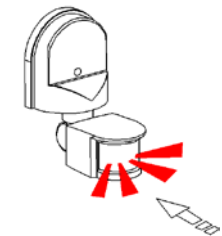
Detection Distance: 5-12m (<24°C)(adjustable)

#### **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 5m 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 7min±2min.



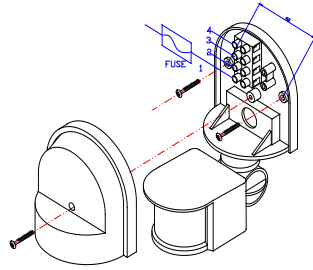
Good sensitivity



Poor sensitivity

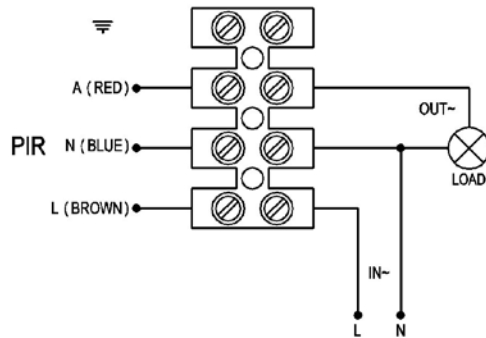
### INSTALLATION :

- Switch off the power.
- Screw off the nail on the front cover. Open the wire hole. The power wire and the load wire are bored in the bottom.
- Fix the bottom on the selected position with the inflated screw.
- Connect the power and the load with the connection-wire column according to the connect-wire figure as following part.
- Fix the front cover of sensor, please screw the nail and switch on the power. So you can test it.



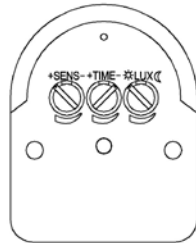
### CONNECTION SKETCH FIGURE :

(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:
  - Please check if the connection-wiring of power and load is correct.
  - Please check if the load is good.
  - Please check if the working light sets correspond to ambient light.
- The sensitivity is poor:
  - Please check if there has hindered in front of the detection window to effect to receive the signal.
  - Please check if the ambient temperature is too high.
  - Please check if the induction signal source is in the detection fields.
  - Please check if the installation height corresponds to the height showed in the instruction.
  - Please check if the moving orientation is correct.
- The sensor can not shut off the load automatically:
  - Please check if there is continual signal in the detection field.
  - Please check if the time delay is the longest.
  - Please check if the power corresponds to the instruction.
  - Please check if the temperature near the sensor changes obviously, such as air condition or central heating etc.