

**FERO-TERM**  
**S451180**  
**Infrared**  
**Motion**  
**Sensor**



# FERO-TERM S451180 Infrared Motion Sensor Instruction Manual

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**FERO-TERM**

## FERO-TERM S451180 Infrared Motion Sensor



## Product Information

Welcome to use the S451180 Infrared motion sensor! This product features a high-sensitivity detector and integrated circuit, providing automatism, convenience, safety, energy-saving, and practical functions. It operates by detecting infrared energy emitted by humans as a control signal source, activating the load immediately upon detecting motion within its detection field. Additionally, it has an automatic day and night identification feature, making it versatile and user-friendly.

## Specifications

- **Voltage:** 220-240V/AC
- **Power Frequency:** 50/60Hz
- **Detection Distance:** Up to 12m

## Product Usage Instructions

### Installation:

1. Locate a suitable mounting position for the motion sensor, ensuring it has a clear line of sight to the area you want to monitor.
2. Securely mount the sensor using the provided hardware or appropriate mounting accessories.
3. Connect the sensor to a power source following the specified voltage requirements.

### Operation:

Once installed, the motion sensor will automatically detect motion within its range. It will trigger the connected load to turn on when motion is detected and can differentiate between day and night conditions for added convenience.

### Usage Tips:

- Ensure the detection field is not obstructed by objects or obstacles that may interfere with its operation.
- Regularly check and clean the sensor lens to maintain optimal sensitivity.
- Adjust the detection distance and sensitivity settings if needed to suit your specific requirements.

## CONNECTION

### Warning.

Danger of death through electric shock!

- Must be installed by professional electrician.
- Disconnect power source.
- Cover or shield any adjacent live components.
- Ensure device cannot be switched on.
- Check power supply is disconnected.
- Loosen the screw in the back and unload the bottom (refer to figure 1).
- Find the wire hole with gasket in the downside of the sensor and pass the power wire through the hole. Connect the power wire to the connection wire column according to the connection wire diagram.
- Fix the bottom with an inflated screw on the selected position. (refer to figure

- Install back the sensor on the bottom, tighten the screw, and then test it.



Figure1

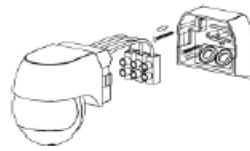
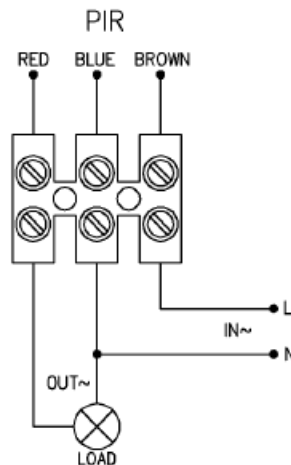


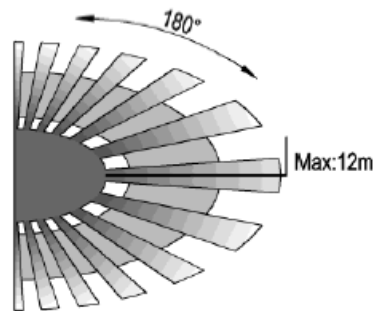
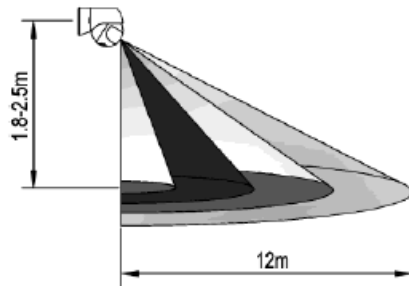
Figure2

## CONNECTION W IRE DIAGRAM



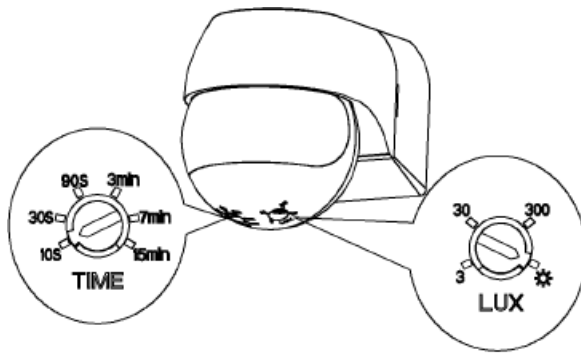
## SENSOR INFORMATION

- Height of Installation: 1.8-2.5m
- Detection Distance : Max.12m



## TEST

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



- Note: when testing in daylight, please turn the LUX knob to the (SUN) position, otherwise the sensor lamp could not work!

#### **SOME PROBLEM AND SOLVED WAY:**

- The load does not work:
  - a.Please check if the connection of the power source and load is correct
  - b.Please check if the load is good
  - c.Please check if the settings of the 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 the signals also.
  - 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 a 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

#### **Welcome to use S451180 Infrared motion sensor!**

The product adopts good sensitivity detector and integrated circuit. It gathers automatism, convenience, safety, saving-energy and practical functions. It utilizes 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.

#### **SPECIFICATION**

Voltage: 220-240V/AC

Power Frequency: 50/60Hz

Ambient Light: <3-2000LUX (adjustable)

Time Delay: Min. 10sec  $\pm$  3sec

Max. 15min  $\pm$  2min

Rated Load: Max. 800W

400W



Detection Range: 180°

Detection Distance: 12m max (<24°C)

Working Temperature: -20~+40°C

Working Humidity: <93%RH

Power Consumption: approx 0.5W

Installation Height: 1.8-2.5m

Detection Moving Speed: 0.6-1.5m/s

#### **FUNCTION**

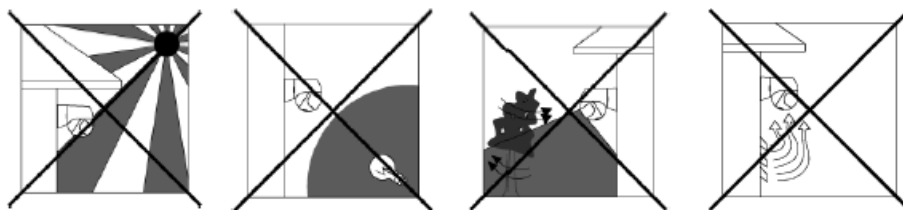
- Can identify day and night: The consumer can adjust working state in different ambient light. It can work in the daytime and at night when it is adjusted on the “sun” position (max). It can work in the ambient light less than 3LUX when it is adjusted on the “3” position (min). As for the adjustment 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.



## Frequently Asked Questions


- **Q: How can I adjust the detection range of the motion sensor?**

A: You can typically adjust the detection range by following the instructions provided in the user manual. Look for sensitivity or distance adjustment controls on the sensor itself.

- **Q: Does the motion sensor work in both daylight and nighttime?**

A: Yes, the motion sensor is equipped to differentiate between day and night conditions automatically, allowing it to function effectively at all times.

## Documents / Resources

	<p><a href="#">FERRO-TERM S451180 Infrared Motion Sensor</a> [pdf] Instruction Manual</p> <p>S451180, S451180 Infrared Motion Sensor, Infrared Motion Sensor, Motion Sensor, Sensor</p>
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## References

- [User Manual](#)

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