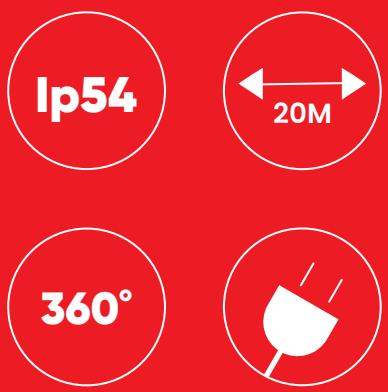
TECHNICAL
DATA SHEET

IRIS F20

(PIR Motion Sensor)



The IRIS F20 is a high-performance infrared presence sensor designed for precise motion detection and energy efficient automation. With 360° coverage and up to 20 meters of detection range, it ensures seamless monitoring in commercial spaces. Engineered with adjustable light sensitivity and smart time-delay functionality, the IRIS F20 adapts effortlessly to your environment—activating lights or appliances only when needed. Built for durability and reliability, it's the perfect solution for modern, automated living.

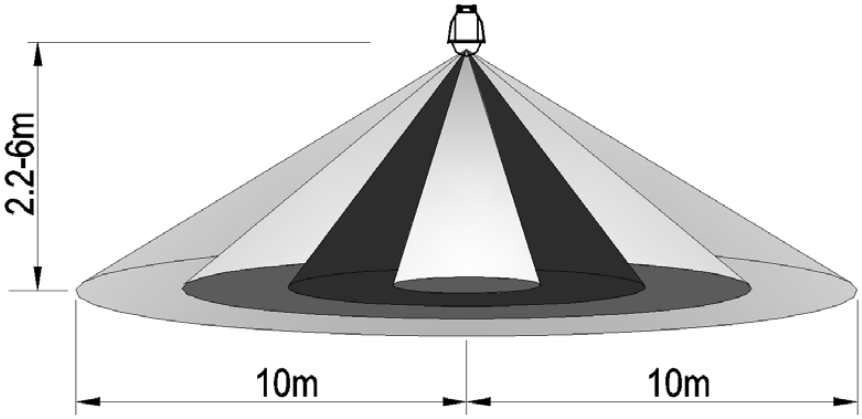
TECHNICAL SPECIFICATION

Voltage	220–240V/AC
Power Frequency	50/60Hz
Ambient Light	<3–2000 LUX (adjustable)
Time Delay	Min. 10 sec ±3 sec Max. 30 min ±2 min
Rated Load	Max. 1200W (600W for certain loads)
Detection Range	360°
Distance	Max. 20m (<24oC)
Working Temperature	-20°C ~ +40°C
Working Humidity	<93% RH
Power Consumption	approx. 0.6W
Installation Height	2.2–6m
IP Class	IP54

FUNCTION

- Day/Night Detection: Adjustable based on ambient light. Works all day when set to "sun" mode, and only in the dark (<3LUX) when set to "3" mode.
- Continuous Time-Delay: If another signal is detected before the previous one finishes, the timer resets from that moment.

SENSOR INFORMATION

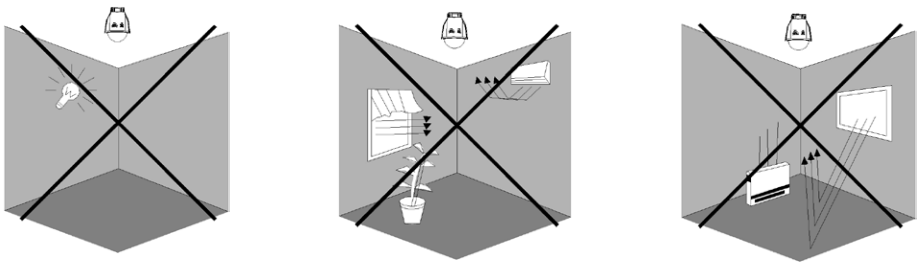


Height of installation: 2.2-6m

Detection Distance: Max.20m

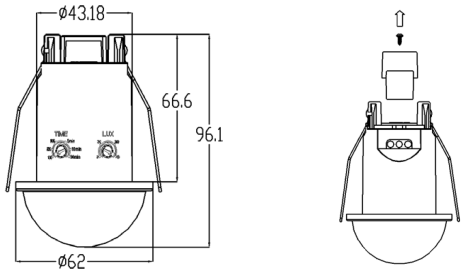
INSTALLATION ADVICE

- 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.



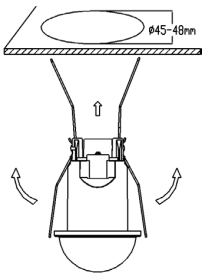
CONNECTION

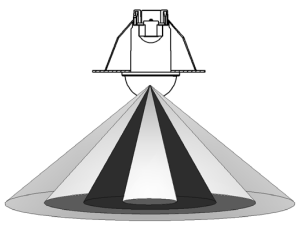
- Switch off power and remove the transparent cover
- Connect wires according to the wiring diagram
- Fold the metal spring upwards and place the sensor in the desired hole or box
- Release the spring to secure the sensor
- Turn on power and test



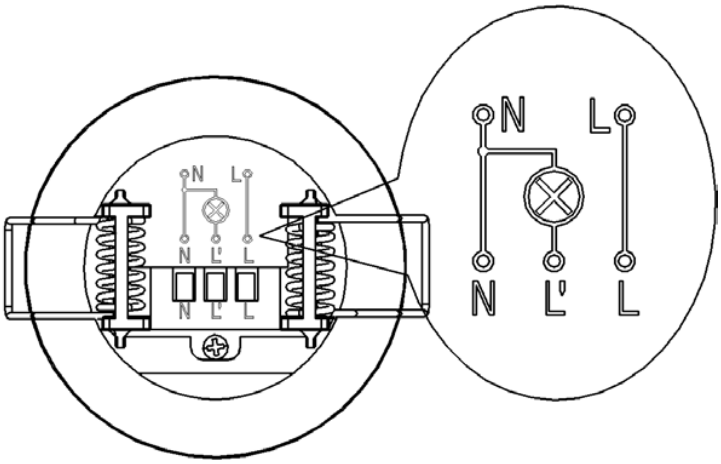
Warning: Risk of Electric Shock!

- Installation must be done by a professional electrician
- Disconnect the power supply before beginning
- Shield adjacent live components
- Ensure the device cannot be switched on accidentally



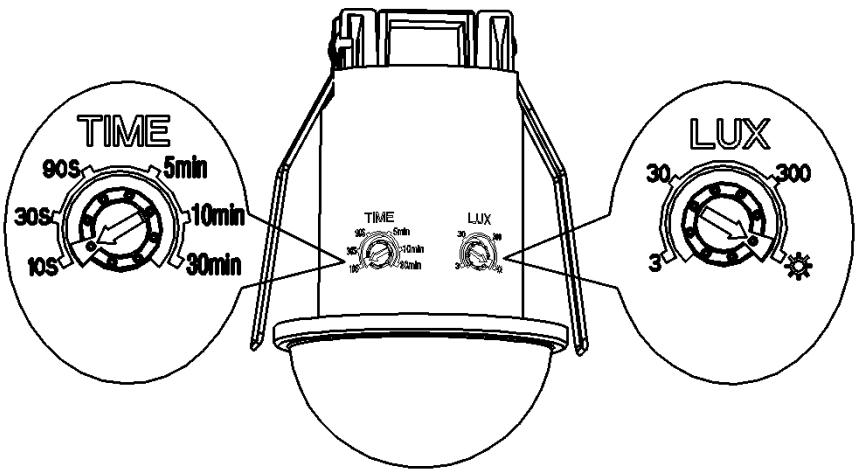


CONNECTION WIRING DIAGRAM



TEST

- Turn the TIME knob all the way to the left (minimum 10 seconds). Turn the LUX knob all the way to the right (maximum, marked as “sun”).
- Switch on the power. At first, the sensor and the connected load won’t respond. After a 30-second warm-up, the sensor will be ready. When it detects motion, the load will turn on. If no further motion is detected, the load will turn off automatically after about 10 seconds.
- Now, turn the LUX knob all the way to the left (minimum, marked as “3”). If the ambient light is more than 3 LUX (bright), the sensor won’t work and the load will stay off. If the light is less than 3 LUX (dark), the sensor will activate when it detects motion. If no motion is detected, the load will turn off after about 10 seconds.



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.

TROUBLESHOOTING GUIDE

- The load do not work:
  a. Please check if the connection-wiring of power and load is correct.
  b. Please check if the load is good.
  c. Please check if the working light sets correspond to ambient light.

- The sensitivity is poor:
  a. Please check if there has any hindrance in front of the detection window to affect to receive the signal.
  b. Please check if the ambient temperature is too high.
  c. Please check if the induction signal source is in the detection fields.
  d. Please check if the installation height corresponds to the height showed 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 the longest.
  c. Please check if the power corresponds to the instruction.

C K Patel Estate, Survey Number 372, Opp Tata Motors Service Centre, Near Rama Kaka Deri, Chhani, Vadodara – 391740

+91 9586884885 +91 9979764665

info@sensinova.in www.sensinova.in