TECHNICAL
DATA SHEET

sensinova ®
motion on

IRIS S20
(PIR Motion Sensor)

IP20

20m

360°

IRIS S 20 is a new energy-saving switch that adopts a good sensitivity detector and an integrated circuit. This sensor gathers automatism, convenience, safety, energy-saving, and practical functions. It utilizes the infrared energy from the human body as a control signal source, and it can start the load at once when one enters the detection field. It can automatically identify day and night and is easy to install and a widely used product.

TECHNICAL SPECIFICATION

Power Source	220-240 V AC
Power Frequency:	50 Hz
Rated Load:	2000W (Incandescent). 500W (LED LOAD)
Time Delay:	Min. 10 sec + 3 sec, Max. 30 Min + 2 min
Detection Range:	360°
Detection Distance:	20m (r) max (<24°C)
Ambient Light:	<3-2000LUX
Install Height:	2-6m
Detection Motion Speed:	0.6-1.5m/s
Working Temperature:	-20°C to +40°C
Working Humidity:	<93%RH
IP Rating:	IP20
Power Consumption:	Approx. 0.5W
No. Of Wires:	3

FUNCTION

➤ **Can easily identify day and night:** It can work during the daytime as well as the night when it is adjusted on the "sun or 2000 LUX " position (max). It can work in less than 3 LUX ambient light when adjusted on the "3" position (min).
As for the adjustment pattern, please refer to the testing pattern.

➤ **Time delay is added continually:** This sensor will restart to time from the moment it receives the second induction signal within the first induction.

➤ **Adjustable time delay:** The time delay can be set according to the customer's desire. The minimum time is 10 seconds, and the maximum is 30 minutes.
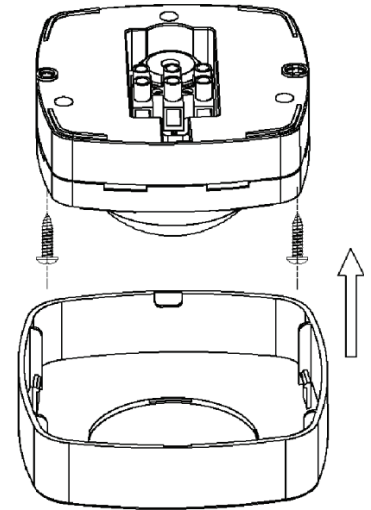
INSTALLATION

1)Avoid pointing the detector towards objects with highly reflective surfaces, such as mirrors, etc.

(2) Avoid mounting the detector near heat sources, such as heating vents, air conditioning units, lights, etc.

3) Avoid pointing the detector toward objects that may move in the wind, such as curtains, tall plants, etc

4) Unload the cover directly.

5) Connect the power wire into the connection-wire column of the sensor according to the connection-wire diagram.

6) Fix the sensor with an inflated screw on the selected position (refer to figure on the right).
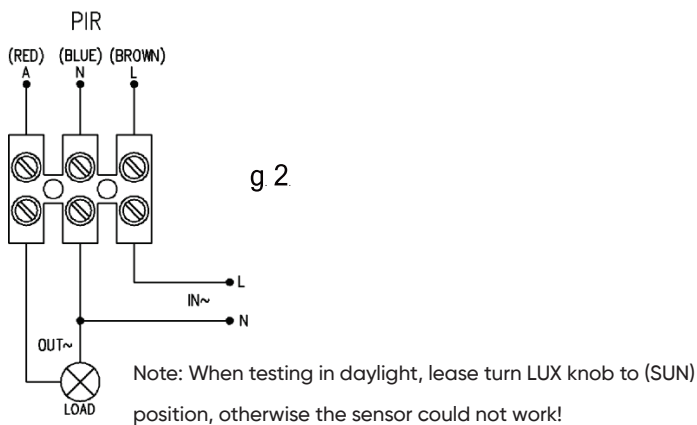
7) Install the cover back and test it.
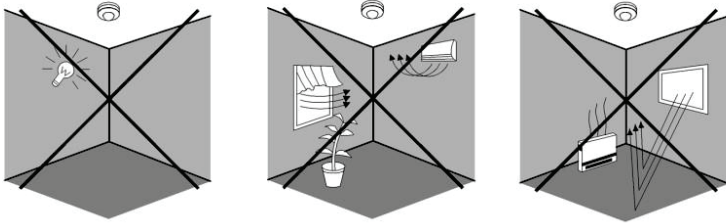
WARNING

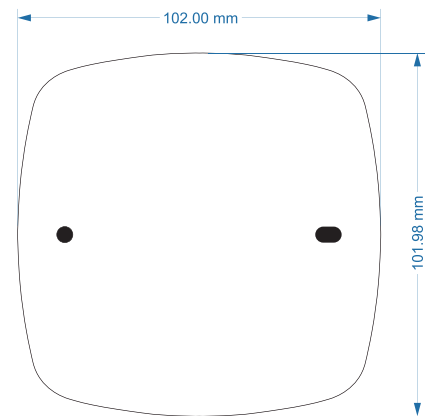**Warning. Danger of death through electric shock!**

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

CONNECTION WIRE DIAGRAM APPLICATION

PIR

(RED) (BLUE) (BROWN)
A   N   L

g.2

Note: When testing in daylight, lease turn LUX knob to (SUN) position, otherwise the sensor could not work!

PRODUCT SIZE DIAGRAM

102.00 mm

101.98 mm

CALIBRATION

1)**Time setting**: The light can be set to stay ON for any time between approximately 10 seconds(turn TIME knob fully anti-clockwise) and a maximum of 30 minutes(turn TIME knob fully clockwise). Any movement detected before this time elapses will reset the timer. You can adjust it according to locations and site requirements. It is recommended to select the shortest time to adjust the detection zone and perform the walk test.

2)**Light control setting:** The chosen light response threshold can be adjusted from approximately 3-2000LUX.Turn it fully anti-clockwise to select the dusk-to-dawn operation and turn it fully clockwise to select continuous daylight operation. You can adjust it according to locations and site requirements. The knob must be turned fully clockwise when adjusting the detection zone and performing the walk test in daylight.

➤ Turn the TIME knob anti-clockwise to the minimum (10s), and then turn the LUX knob clockwise to the maximum (sun).

➤ After the power switches on, the sensor and its connected lam will have no signal at the beginning. After a warmup of 30 sec the sensor starts working, and the lamp will turn on if the sensor receives the induction signal. If there is no induction signal, the load should stop working within 10sec ± 3sec, and the lamp would turn off.

➤ Turn the LUX knob anti-clockwise on the minimum (3). If the ambient light is more than 3LUX, the sensor will not work, and the lamp would stop working too. The sensor will work if the ambient light is less than 3 LUX (darkness). Under no induction signal condition, the sensor should stop working within 10sec ± 3sec.
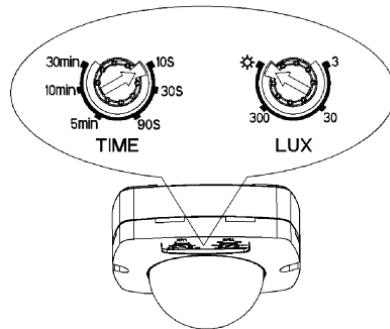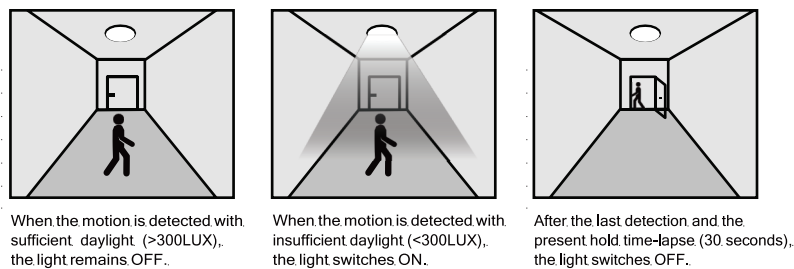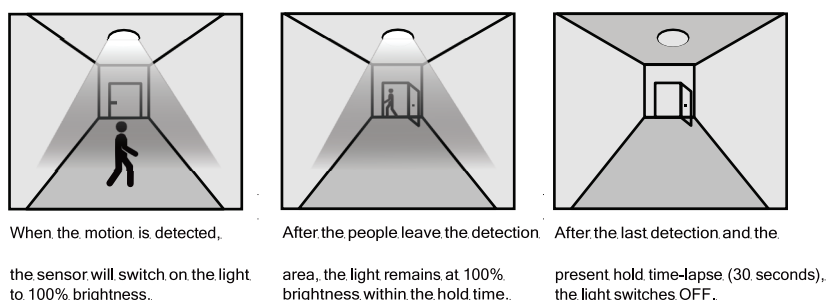

Fig 3

APPLICATION

➤ **Daylight Function**

The hold time is set to 30 seconds, and LUX is set to 300 The light switches on when it detects movement, and it switches off after 30 seconds of no movement. Applications: corridor, staircase


When the motion is detected with sufficient daylight (>300LUX), the light remains OFF.

When the motion is detected with insufficient daylight (<300LUX), the light switches ON.

After the last detection and the present hold time-lapse (30 seconds), the light switches OFF.

➤ **No Daylight Function**

The hold time is set to 30 seconds, and LUX is set to or 2000. The light switches on when it detects movement, and when people leave, it switches off after the hold time is lapsed (30 seconds). Applications: dim places such as basement parking, underpass

When the motion is detected, the sensor will switch on the light to 100% brightness.

After the people leave the detection area, the light remains at 100% brightness within the hold time.

After the last detection and the present hold time-lapse (30 seconds), the light switches OFF.

NOTE

- ➤ Only an electrician or an experienced human can install it.
- ➤ Do not install it on an uneven and shaky surface.
- ➤ No obstructive objects should be in front of the sensor as it affects the detection.
- ➤ Do not install it near metal and glass as they may affect the sensor.
- ➤ For your safety, please don't open the case if you find a hitch after the installation.
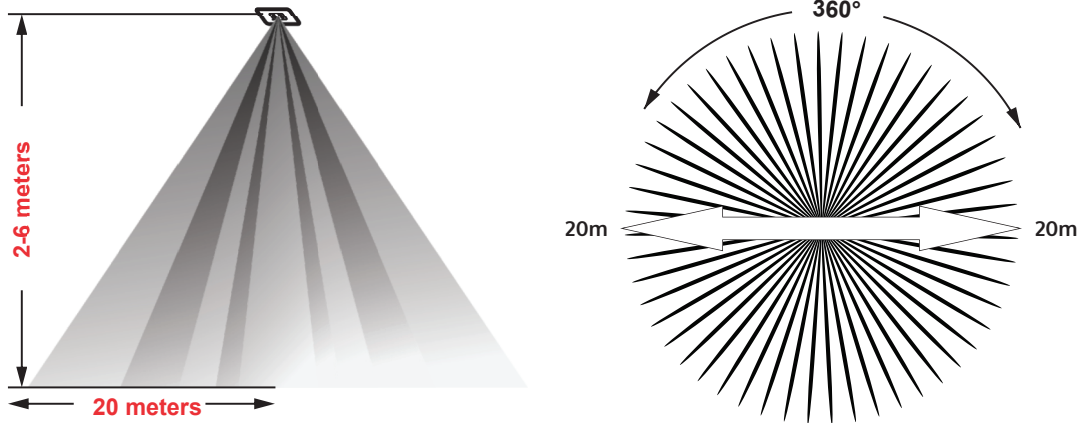
TROUBLESHOOTING

Malfunction	Cause	Remedy
The load will not work	Wrong light control selected Load faulty Mains is switched OFF	Adjust Setting Change Load Switch ON
The load is always on	Continuous movement in detection zone	Check zone setting
The load is ON without any identifiable movement	The sensor not mounted for detecting movement reliably Movement occurred, but not identified by the sensor(movement behind wall, movement of a small object in immediate lamp vicinity etc)	Securely mount enclosure Check zone setting
The load will not work despite movement	Rapid movements are being suppressed to minimize malfunctioning or the detection zone you have set is too small	Check zone setting.