

PIR Based Motion Sensor, SN-PR 05B (6Amp)



TECHNICAL SPECIFICATION

Power Source:	220-240V/AC
Power Frequency:	50Hz
Detection Range:	360°
Detection Distance:	12m max(<24°C)
Ambient Light:	<3-2000LUX (Adjustable)
Hold Time: Working	Min. 10Sec±3Sec, 15Min±2min
Working Temperature:	-20°C~+40°C
Humidity:	<93%RH
Power Consumption:	Approx 0.9 W
Rated Load:	1200W(Incandescent), 300W (LED Load)
Installation Height:	2.2-4m
Automatic Lighting Range:	2 ~ 2000LUX
Detection Moving Speed:	0.6 - 1.5m/s

PIR BASED MOTION SENSOR, SN-PR 05B (6Amp)

This PIR Sensor is a new energy-saving switch. It adopts a good sensitivity detector and an integrated circuit. This sensor provides automatic control, 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.

FUNCTIONS

Can easily identify day and night

- You can adjust the working state in different ambient lights. It can work in the daytime and at night when it is adjusted to the ☀“sun” position (max). It can work in less than 3 LUX ambient light when adjusted on the ☾ “moon” 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 signals within the first induction.

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, light, etc.
- (3) Avoid pointing the detector towards objects that may move in the wind, such as curtains, tall plants, etc.
- (4) Please move the upper cover with an anti-clockwise whirl as per the diagram on the right.
- (5) Connect the power and the load according to the connection-wire diagram.
- (6) Fix the bottom on the selected position with the inflated screw.
- (7) To switch on the power and test it, install back the upper cover on the sensor.

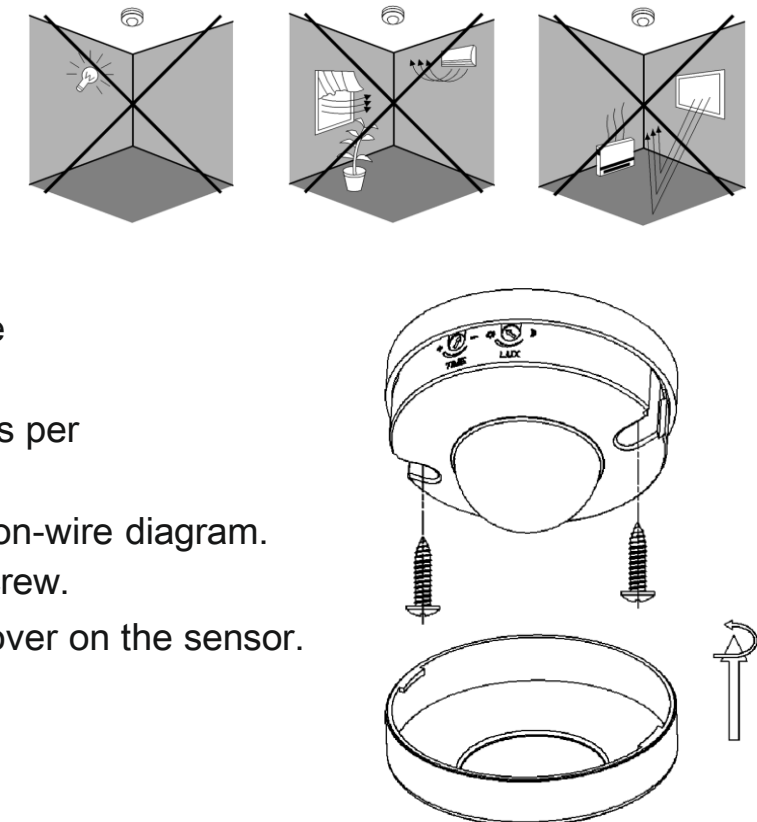


Fig 1



WARNING

Electric shock can be fatal and may lead to death.

- Must be installed by a professional electrician.
- Disconnect the power source
- Cover or shield any adjacent live components
- Ensure that the devices can't switch on
- Check that the power supply is disconnected

CONNECTION-WIRE DIAGRAM

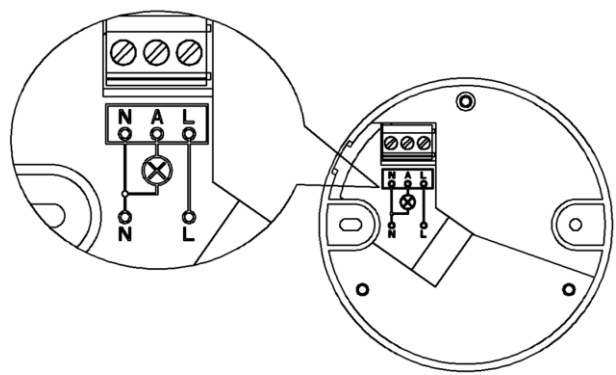


Fig 2

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

CALIBRATION

1)Time setting

The light can be set to stay ON for any time between approx 10 sec (turn fully anti-clockwise) and a maximum of 15 mins (turn fully clockwise). Any movement detected before this time-lapse will reset the timer. 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 <3-2000 LUX. To select the dusk-to-dawn operation at about ☾ 2 LUX, turn it fully anti-clockwise and turn it fully clockwise to select continuous daylight operation. The knob must be turned fully clockwise when adjusting the detection zone and performing the walk test in daylight, then adjust the setting according to the site requirement.

TEST

- Turn the TIME knob anti-clockwise on the minimum (-) and turn the LUX knob clockwise on the maximum ☀ (sun).
- After power is switched on, the sensor and its connected lamp will have no signal at the beginning. After a warmup of 30 seconds, the sensor can start working. The lamp will turn on if the sensor receives the induction signal. And if there is no induction signal anymore, then the load should stop working within 10sec ± 3sec and the lamp would turn off.
- Turn the LUX knob anti-clockwise on the minimum☾ (moon). The sensor would work if the ambient light is less than 3 LUX☾ (darkness). Under no induction signal condition, the sensor should stop working within 10sec ± 3sec.

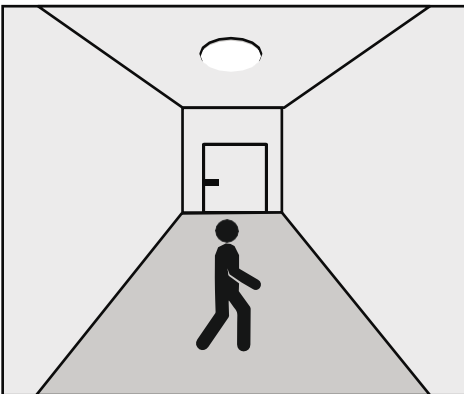


Fig 3

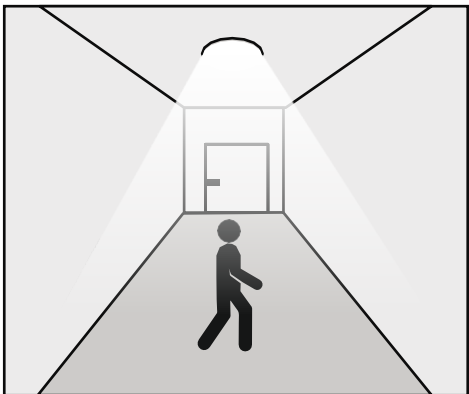
APPLICATION

Daylight Function

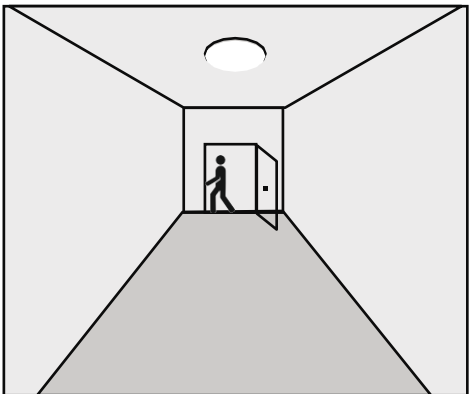
The hold time is set to 30 seconds, and LUX is set to 300
The light switches on when it detects movement, and it switches off after people leave at night
Applications: corridor, staircase



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.



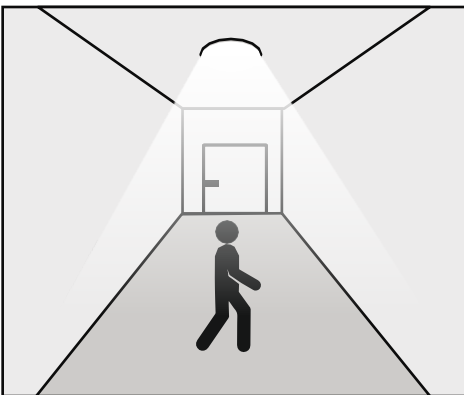
After the last detection and the present hold time-lapse (30 seconds), switch the light OFF.

No Daylight Function

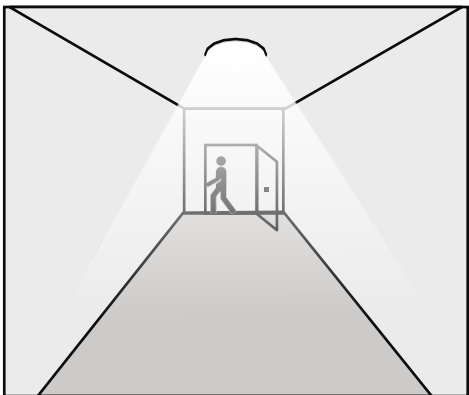
The daylight threshold is set to ☾ or 2000 disable

The light switches on when it detects movement, and when people leave, it switches off after the hold time is lapsed (30 seconds).

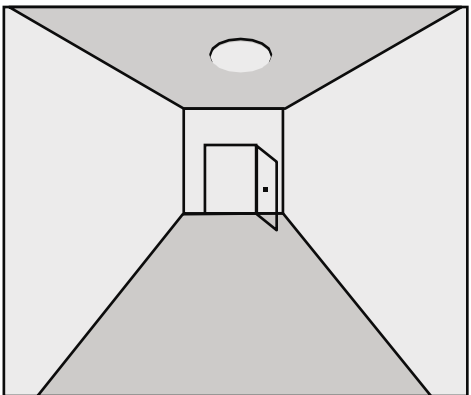
Applications: basement parking, underpass



When the motion is detected, the sensor will switch ON the light.



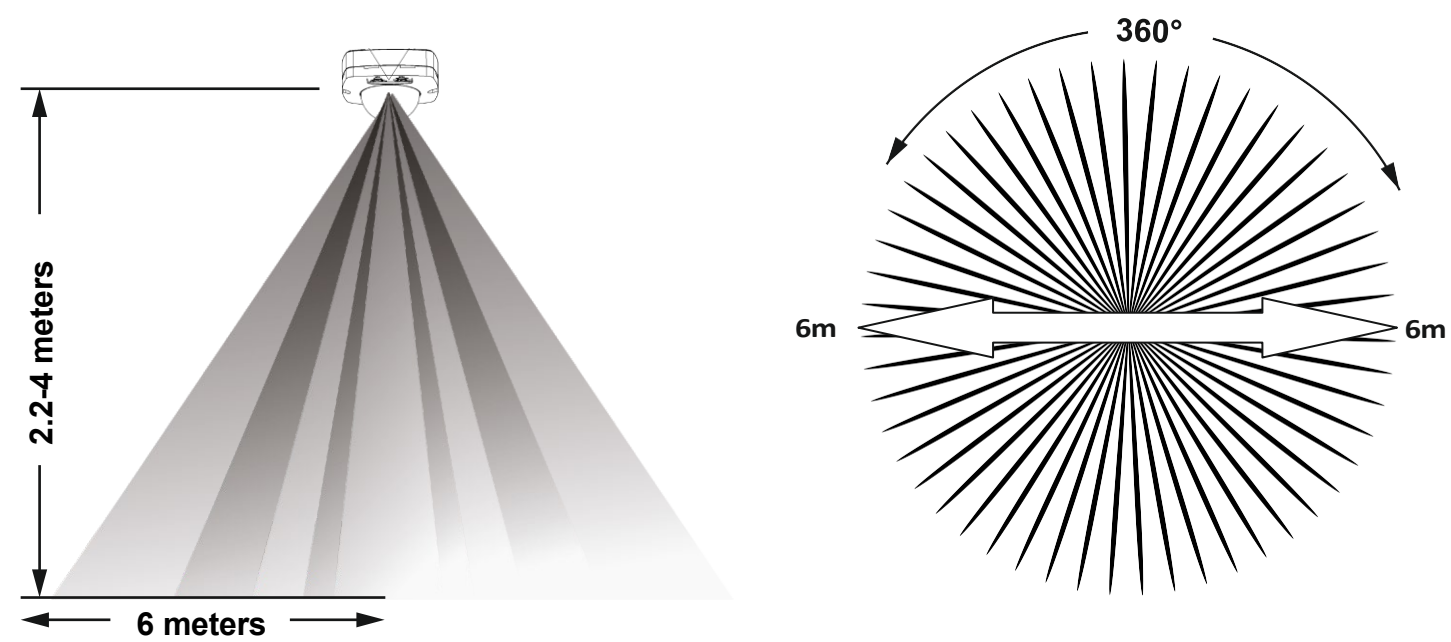
After the people leave the detection area, the light remains ON within the hold time.



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

NOTE

- An electrician or an experienced human can install it
- It cannot be installed on an uneven and shaky surface
- There shouldn't be any obstructive objects in front of the sensor that affect its detection
- Avoid installing it near the metal and glass as they may affect the sensor
- Please don't open the case if you find a hitch after the installation for your safety



TROUBLESHOOTING

Malfunction	Cause	Remedy
The load will not work	Wrong light control is selected Faulty load The main switch is switched OFF	Adjust the setting change load Turn the switch ON
The load is always on	There is a continuous movement in the detection zone	Check the zone setting
The load will not work despite movement	The sensor is not mounted for detecting the movement reliably The movement has occurred, but the sensor does not identify it (for instance, the movement behind the wall, movement of a small object in immediate lamp vicinity, etc.)	Securely mount the enclosure Check zone setting
The load will not work despite the movement	Rapid movements are being suppressed to minimize the malfunctioning or the detection The zone that you have set is too small	Check the zone setting