



## PIR MOTION SENSOR

Model: AU-XR20



Celling: 20m



IP20



Sensing  
area



Energy  
saving



3-2000 LUX

## INTRODUCTION

AutronX PIR Motion sensor 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, is easy to install, and is a widely used Product.

## TECHNICAL SPECIFICATIONS

Model	: AU-XR20
Power Source	: 220-240V/AC    50Hz
Detection Range	: 360°
Detection Distance	: 20m max(<24°C)
Ambient Light	: <3-2000LUX (Adjustable)
Rated Load	: 2000W (Incandescent), 1000W (LED Load)
Time Delay	: Min. 10Sec ±3Sec, Max. 30Min ±2Min
Installation Height	: Ceiling: (2.2-6m)
Power Consumption	: Approx. 0.9W
Working Temperature	: -20°C ~ +40°C
Working Humidity	: <93%RH
No. of Wires	: 4 Wires
Detection Motion Speed	: 0.6-1.5m/s

## FUNCTIONAL MODES

### 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

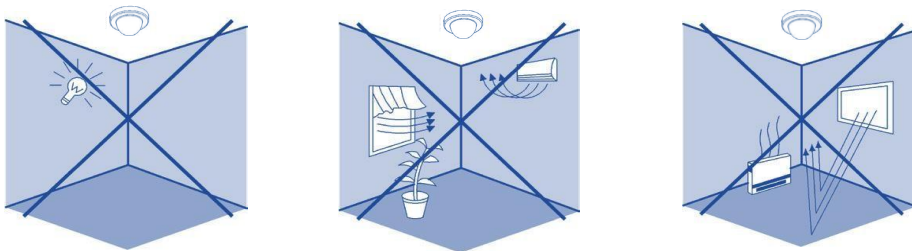
- When it receives the second induction signals within the first induction, it will restart to time from the moment.

### Adjustable time delay

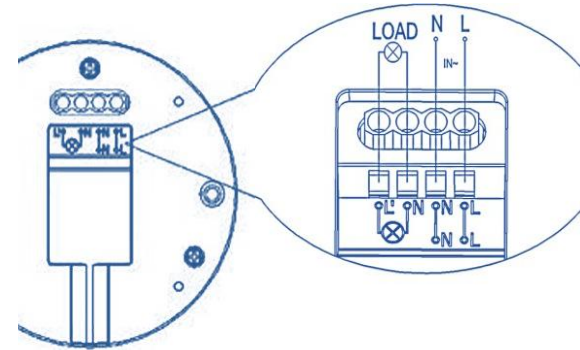
- The time delay can be set according to the customer’s desire. The minimum time is 10sec  $\pm$  3sec, and the maximum is 30min  $\pm$  2min.

## INSTALLATION INSTRUCTIONS

- 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, lights, etc.
- Avoid pointing the detector towards objects that may move in the wind, such as curtains, tall plants, etc.
- Unload the cover directly.
- Connect the power wire into the connection-wire column of the sensor according to the connection-wire diagram.
- Fix the sensor with an inflated screw on the selected position.
- Install the cover back and test it.



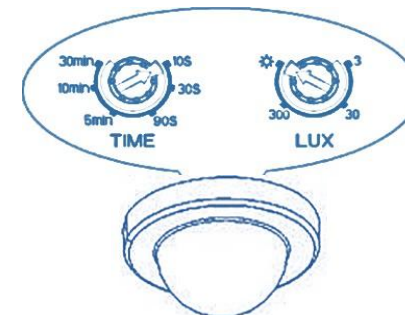
## CONNECTION – WIRING DIAGRAM



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

## TEST

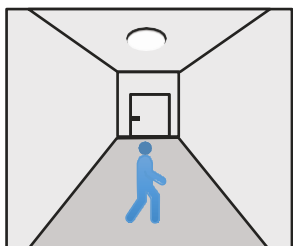
- Turn the TIME knob anticlockwise to the minimum (10s) and then turn the LUX knob clockwise to the maximum (sun).
- After the power switches on, the sensor and its connected lamp will have no signal at the beginning. After a warm up of 30 seconds, the sensor starts working, and the lamp will turn on if the sensor receives the induction signal. If there is no induction signal, the load should stop working within 10sec  $\pm$  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  $\pm$  3sec.



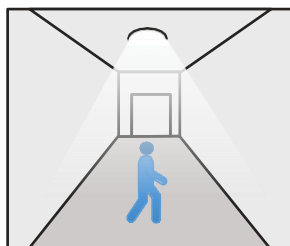
## LUX FUNCTION CHECK

### Daylight Function

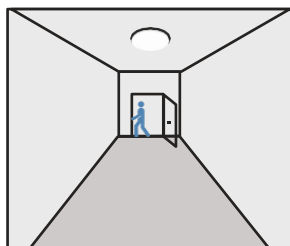
The hold time is set to 30 seconds, and LUX is set to 300. The light switches on when it detects movement, and it switches off after 30 seconds of no movement.



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




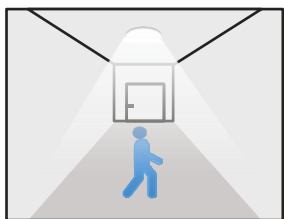
When the motion is detected with insufficient daylight (<300LUX), the light switches ON.



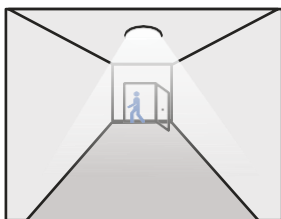
After the last detection and the Present hold time-lapse (30 seconds), the light switches OFF.

### No Daylight Function

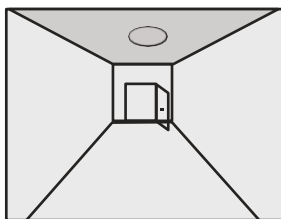
The hold time is set to 30 seconds, and LUX is set  or 2000. The light switches on when it detects movement, and when people leave, it switches off after the hold time is lapsed (30 seconds).



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.

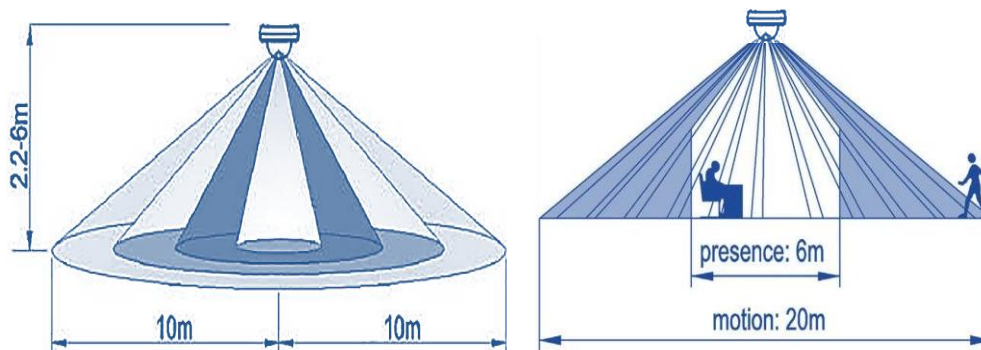


After the last detection and the Present hold time-lapse (30 seconds), the light switches OFF.

## SAFETY INSTRUCTIONS

- 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.

## DETECTION PATTEN



## APPLICATIONS



Conference



Lobby



Cabins



Manufacturing



Hotels

## 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