

PIR Occupancy Sensor Switch (No Neutral Required)

Model #: BRT-315



Features:

BRT-315 is an occupancy sensor switch which utilizes passive infrared (PIR) sensor to detect the heat (in the form of infrared energy) from people moving within a space. It can determine when a space is occupied and turns on or turns off the loads automatically. It is designed for easy installation and retrofit, directly fit into standard wall box with no need for the neutral

- Ambient light override. Automatically measures the ambient light level, and there is no trigger on above a light level adjustable by users;
- Adjustable delay-off time from 10 seconds to 15 minutes;
- Good for all kinds of loads (An additional adaptor required for capacitive loads);
- ABS-V0 flame resistance material; and
- Classical 86 series design and high quality build.

Front View and Back View:

Fig. 1 and Fig. 2 show the front view and the back view of BRT-315 PIR occupancy sensor switch respectively.



Fig. 1 Front View



Fig. 2 Back View

Specification Parameters:

Input Voltage	220~240V(50Hz/60Hz)	Operation Environment	No-condensation 20-90% RH, -20℃ ~40℃
Wattage	Resistive: 150W	Working Range	Up to 5m in a cone of 120 degrees
Mounting Hole Spacing	60mm	Matching Box	75mm x 75mm x 50mm
Dimension	86mm x 86mm x 43mm	Weight	72g

Wiring Diagram and Installation Guide:

BRT-315 occupancy sensor switch only require hot wire for installation:

Hot wire (ACL): Coming from the power line with 220V;
Load wire: Going to the load.

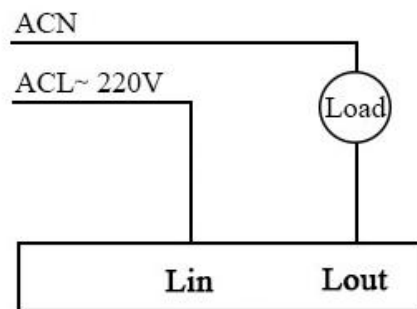


Fig. 3 BRT-315 Wiring Diagram

Warning: Please make sure power is turned off before starting installation!

Fig. 3 shows the wiring diagram and Fig. 4 shows the step-by-step installation instructions. There are three easy steps:

- Step one: Use a screwdriver to pry off the front plate in position A;
- Step two: Wiring according to the diagram and the labelled ports of the switch; and
- Step three: Install screws and front plate.

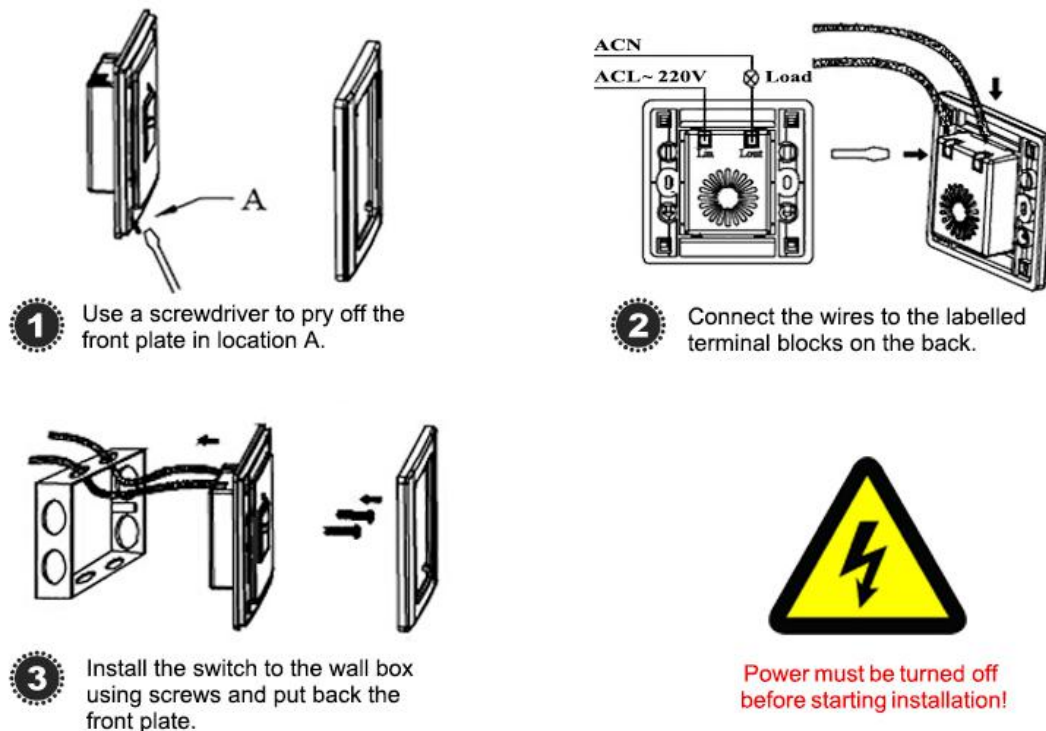


Fig. 4 BRT-315 Installation Guide

Cautions:

1. Avoid mounting the sensor switch close to air vents, as the vibration and air flow can reduce the effectiveness of the sensor switch;
2. Avoid installing the sensor switch in an electrical circuit which has other frequent on/off switch or appliance, as those on/off actions could cause false triggers.

There is a load selection switch on one side of BRT-315 PIR occupancy sensor switch, as shown in Fig. 5. For the loads of CFL or Fluorescent Lamp, please switch to the right side.

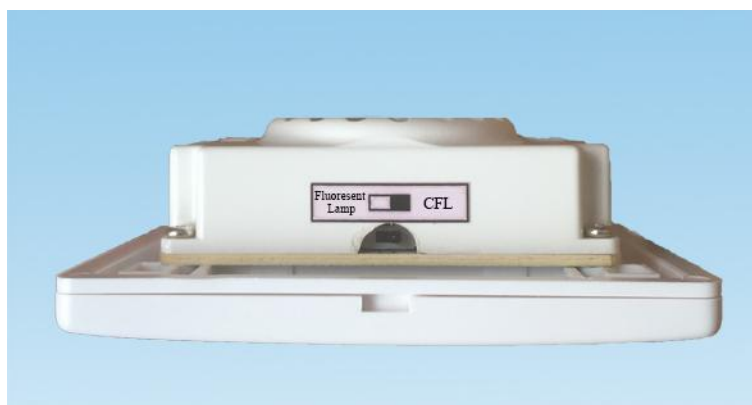


Fig. 5 Load Selection Switch

BRT-315 Operation Guide:

BRT-315 PIR sensor switch needs a warm-up time about two minutes before it can operate properly. It has a precision tuning screw to adjust the ambient light override threshold as shown in Fib. 6, and another precision tuning screw to adjust the delay off time as shown in Fib. 7.

1. Adjust the ambient light override threshold

Please refer to Fig. 6. The fine tuning screw is used to set the ambient light override threshold. Use a screw driver to tune the screw gently.

Caution: The tuning screw can not make a full turn. To avoid possible damage to the screw, please do not use strong force to tune it.

- a. Counter-clockwise to “+”: increase the threshold, so that the PIR triggers will be overridden in bright lighting condition; and
- b. Clockwise to “-”: decrease the threshold, so that the PIR triggers will not be overridden in dark lighting condition.

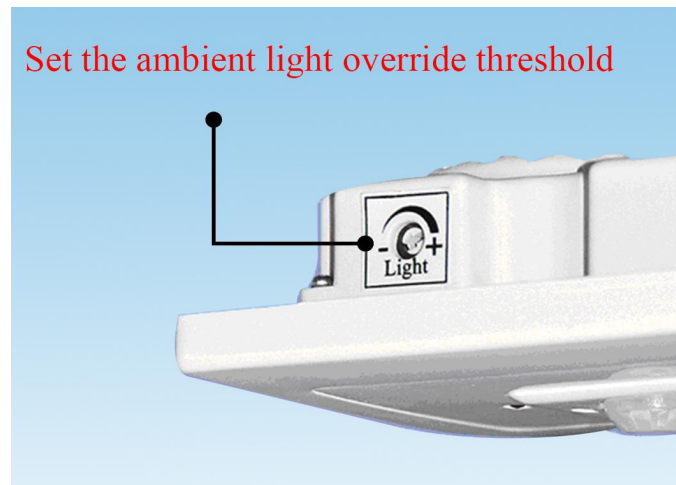


Fig. 6 Adjustment of Ambient Light Override Threshold

2. Adjust the delay-off time

There is another tuning screw on another side of BRT-315 PIR sensor switch. Use a screw driver to tune this screw to adjust the delay-off time, as shown in Fig. 7. The delay-off time can be set from 10s to 15 minutes.

Caution: The tuning screw can not make a full turn. To avoid possible damage to the screw, please do not use strong force to tune it.

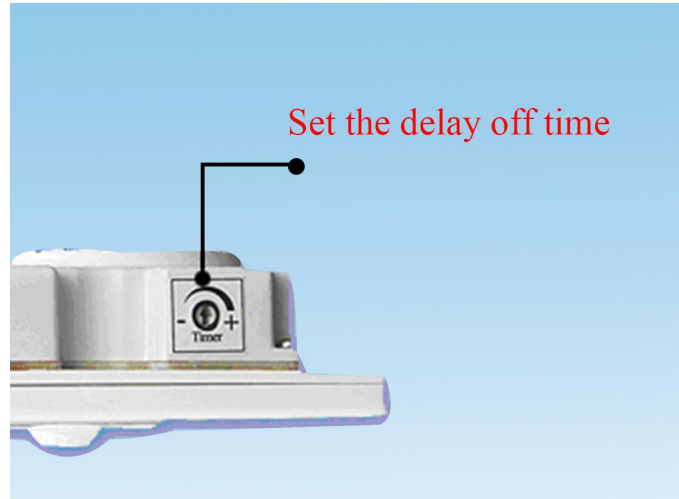


Fig. 7 Adjustment of Delay-off Time

Applications:

BRT-315 PIR occupancy sensor switch can be used for automatically turning on and/or turning off various loads such as lights, fans, appliances, or other kinds of electrical equipment, especially good for high power loads.

BRT-315 PIR occupancy sensor switch is perfect for saving energy and bringing convenience and safety to our daily life and work. It has wide applications at various locations such as stairwells, corridors, washrooms, offices, conference rooms in homes, schools, laboratories, hospitals, offices, etc.

How to Order:

Please contact us: Shenzhen Asia Bright Co., Ltd.
Floor 2nd~3rd, Building E, North Area No.2 of Shangxue
Science Park, Bantian, Shenzhen, China
Tel: +86-755-89748200 +86-755-89748211
Email: sales@a-brt.com Website: www.a-brt.com

