

## PIR Occupancy Sensor Switch (No Neutral Required)

**Model #:** BRT-318



### **Features:**

BRT-318 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.

- Three touch pads to control up to 3 loads;
- Manual override; manually turn off any load instantly;
- Adjustable delay-off time from 1 minute to 20 minutes
- Good for all kinds of loads (an additional adapter required for capacitive lights such as CFL);
- 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-318 PIR occupancy sensor switch respectively.



**Fig. 1** Front View**Fig. 2** Back View

Besides the PIR lens, BRT-318 PIR occupancy sensor switch has an LED power indicator and three touch pads on its front., and terminal blocks on its back.

### Specification Parameters:

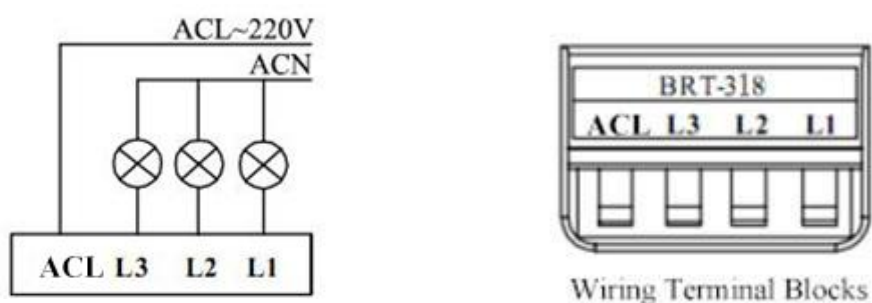
Input Voltage	220~240V(50Hz/60Hz)	Operation Environment	No-condensation 20-90% RH, -20℃~40℃
Wattage	Resistive: 500W/Load Capacitive: 250W/Load Inductive: 250W/Load	Working Distance	5m
Mounting Hole Spacing	60mm	Matching Box	75mm x 75mm x 50mm
Dimension	86mm x 86mm x 43mm	Weight	95g

### Wiring Diagram and Installation Guide:

BRT-318 occupancy sensor switch only requires hot wire for installation:

Hot wire (ACL): Coming from the power line with 220V; and

Load wires: Going to the load.

**Fig. 3** BRT-318 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

Product Description of BRT-318

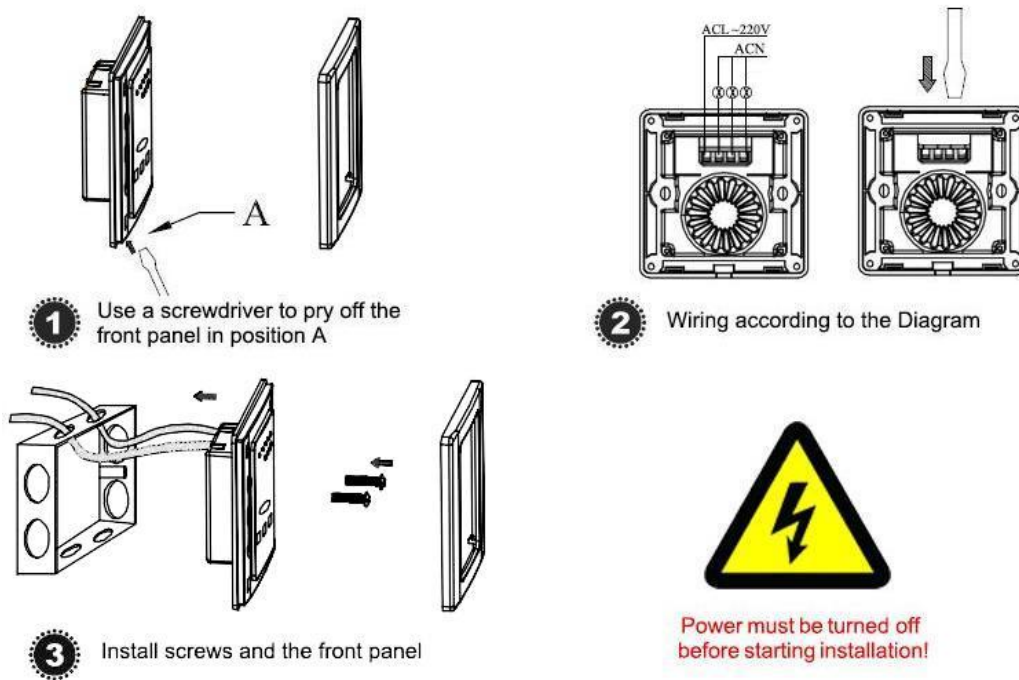
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Step three: Install screws and front plate.



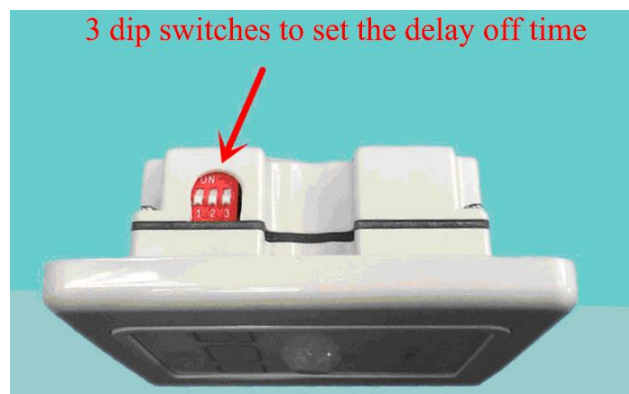
**Fig. 4** BRT-318 Installation Guide

***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.

***BRT-318 Operation Guide:***

BRT-318 PIR occupancy sensor switch needs a warm-up time about two minutes before it can operate properly. For the first time operation, the user can set the delay-off time by using 3 dip switches on its top side, as shown in Fig. 5.

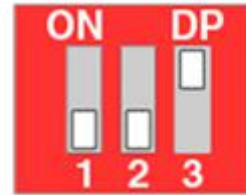


**Fig. 5** Dip Switches for Setting up Delay-off Time

### Adjust the delay off time

The 3 dip switches are used to set the delay off time to 4 settings based on different combinations. Fig. 6 shows all the dip switches are in “off” positions. Each combination corresponds to a delay off setting.

001	delay-off time = 1 minutes
101	delay-off time = 5 minutes
011	delay-off time = 10 minutes
111	delay off time = 20 minutes



**Fig. 6** Dip Switches in 000 Positions

0 = off and 1 = on

(Other factory settings are available. Please talk to our sales representatives).

BRT-318 PIR occupancy sensor switch automatically turns on the loads instantly or turn off the loads with a delay-off time when it determines whether or not a space is occupied. Also, pressing each touch pad (LAMP 1, LAMP 2, or LAMP 3) will turn off the load without any delay.

### Applications:

BRT-318 PIR occupancy sensor switch can be used for automatically turning off various loads such as lights, fans, appliances, or other kinds of electrical equipment. They are perfect for saving energy and bringing convenience and safety to our daily life and work.

They have wide applications at various locations such as stairwells, corridors, washrooms, offices, conference rooms in homes, schools, laboratories, hospitals, offices, etc.

### How to Order:

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