

## **Product Descriptions**

# PIR Dimmer Switch (Neutral Required)

**Model #:** BRT-371

(Please visit our website <a href="www.a-brt.com">www.a-brt.com</a> for more info)



#### **Features:**

BRT-371 is a smart dimmer switch combined with passive infrared (PIR) technology. It not only can dim the light brightness, but also can 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 where both "hot" wire and neutral wire are present.

- Three operation modes: manual, occupancy and vacancy;
- Adjustable ambient light override level;
- Adjustable PIR sensitivity;
- Adjustable delay-off time;
- 7 dimming levels;
- Good for dimmable CFLs, LEDs, incandescent bulbs, and halogen bulbs;
- Nightlights;
- High quality flame resistance ABS material and
- ETL approved.

#### Front View and Back View:

Fig. 1 and Fig. 2 show the front view and the back view of the BRT-371 PIR Dimmer Switch respectively.





As shown in Fig. 1, the BRT-371 PIR Dimmer Switch has a PIR sensor for auto control and three buttons for manual control.

## Specification Parameters:

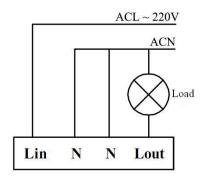
Input Voltage	108V to 240V (45Hz to 60Hz)	Operation Environment	No-condensation 20 to 90% RH, -20°C to 40°C
Wattage	400W Max for Incandescent Bulb, 100W Max for LED	Working Range	Up to 8m (@25℃) in a cone of 120 degrees
Mounting Hole Spacing	83.5mm	Dimension	119*75*49.5mm

### Wiring Diagram and Installation Guide:

BRT-371 PIR Dimmer switch requires both hot wire and neutral wire for installation:

Hot wire (ACL): Coming from the power line with 220V; Neutral wire (ACN): Usually coming with the hot wire; and

Load wires: Going to the load.



**Fig. 3** BRT-371 Wiring Diagram

Fig. 3 shows the wiring diagram. Wiring must be done according to the diagram and the labeled ports of the switch.

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

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;

Step two: Wiring according to the diagram and the labelled ports of the switch; and

Step three: Install screws and front plate.

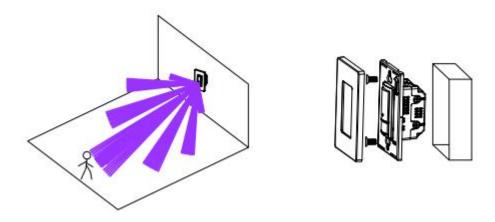


Fig. 4 BRT-371 Installation Guide

#### Cautions:

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

#### **BRT-371 Operation Guide:**

The blue indicator will flicker 3 times after being powered on and BRT-371 PIR switch needs a warm-up time for about 30s before it can operate properly. User can adjust the ambient light override threshold and delay-off time with the front button.

#### 1. Manual and Auto Control

When movement detected, the load will be turned on automatically. When there is no movements, the load will be turned off automatically after a preset delay-off time. Press the on/off button on the switch will turn on/off the loads manually. Press the up button and/or down button will increase and/or decrease the light brightness. The LED indicator lights beside the buttons will indicate the brightness level. When there is only one LED indicator light on, it means the light is at the lowest brightness. When all the LED indicator lights are on, it means the light is at the highest brightness.

#### 2. Adjust PIR Sensitivity

Press the on/off button four times to enter the PIR sensitivity setting mode, and the power indicator light will normally on in blue. Press the up button and/or down button will increase and/or decrease the PIR sensitivity level. The LED indicator lights beside the buttons will indicate the PIR sensitivity level. When there is only one LED indicator light on, it means the PIR sensitivity is at the lowest level. When all the LED indicator lights are on, it means the PIR sensitivity is at the highest level. Press the on/off button to save the settings.

#### 3. Adjust the Ambient Light Override Threshold

Press the on/off button five times to enter the ambient light override threshold setting mode, and the power indicator light will flash in blue slowly. Press the up button and/or down button will increase and/or decrease the ambient light override threshold. The LED indicator lights beside the buttons will indicate the ambient light override threshold level. When there is only one LED indicator light on, it means the ambient light override threshold is at the lowest level. When all the LED indicator lights are on, it means the ambient light override threshold is at the highest level. Press the on/off button to save the settings.

#### 4. Adjust the delay-off time

Press the on/off button six times quickly to enter the delay off time setting mode, and the power indicator light will flash in blue quickly. Press the up button and/or down button will increase and/or decrease the delay-off time. The LED indicator lights beside the buttons will indicate the delay-off time. Please refer to the following table for delay off time vs. # of indicator lights on. Pess the on/off button to save the settings.

Delay-off Time	# of Inicator Lights on	
30s	One	
1 minute	Two	
5 minutes	Three	
15 minutes	Four	
30 minutes	Five	
60 minutes	Six	
120 minutes	Seven	

## Applications:

BRT-371 PIR Dimmer Switch can be used both for auto control and manually turning on/ off and dimming. BRT-371 PIR Dimmer 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, offices, homes, schools, laboratories, hospitals, offices, etc.

## How to Order:

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