

# **Product Descriptions**

### **Smart Ceiling Mount PIR Remote Control**

Model #: BRT-K310S

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

#### **Features**:

BRT-K310S is a ceiling mount remote control 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 unoccupied and turns off the large loads such as air-conditioners, etc., automatically by sending out IR control signals.

- Capable of learning and memorizing infrared control codes of all kinds of appliances;
- Adjustable delay-off time from 1 minutes to 30 minutes;
- Good for all kinds of appliances that have infrared control, such as air-conditioners, TVs, fans, audios, etc.
- Easy installation onto ceiling with or without a holder;
- ABS-V0 flame resistance material; and
- High quality build.

### **Front View and Back View:**

Fig. 1 and Fig. 2 show the front view and the back view of BRT-K310S PIR remote control respectively.



Fig. 1 Front View



Fig. 2 Back View

Product Description of BRT-K310S Shenzhen Asia Bright Co., Ltd. Floor 2<sup>nd</sup>~3<sup>rd</sup>, Building E, North Area No.2 of Shangxue Science Park, Bantian, Shenzhen, China <u>www.a-brt.com</u>. <u>sales@a-brt.com</u>. © 2022 All rights reserved. Subject to change without notices. Page 1 of 7

### **Specification Parameters:**

| Input Voltage         | 220~240V(50Hz/60Hz)                                | Operation<br>Environment  | No-condensation 20-90% RH, $-20^{\circ}C \sim 40^{\circ}C$ |
|-----------------------|--|---------------------------|--|
| Control Mode          | IR   | Control<br>Distance       | 7m   |
| PIR Coverage<br>Range | 5m in diameter when<br>mounted at a height of 2.4m | Mounting Hole<br>Diameter | 68mm   |
| Dimension<br>(max)    | Oval faceplate: 105mm<br>Circular faceplate: 77mm  | Weight                    | 110g   |

### **Wiring Diagram:**

BRT-K310S PIR remote control 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

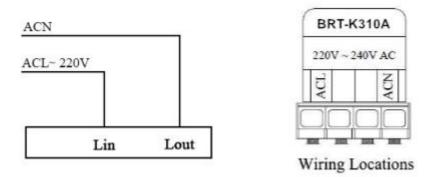


Fig. 3 BRT-K310S Wiring Diagram

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

#### **Installation Guide:**

There are two ways to install BRT-K310S PIR remote control to the ceiling. Fig. 4 and Fig. 5 show the step-by-step installation instructions, respectively.

#### Cautions:

1. Avoid mounting the control close to air vents, as the vibration and air flow can reduce its

effectiveness; Product Description of BRT-K310S Shenzhen Asia Bright Co., Ltd. Floor 2<sup>nd</sup>~3<sup>rd</sup>, Building E, North Area No.2 of Shangxue Science Park, Bantian, Shenzhen, China <u>www.a-brt.com</u>. <u>sales@a-brt.com</u>. © 2022 All rights reserved. Subject to change without notices. 2. Avoid installing the control in an electrical circuit which has other frequent on/off switch or appliance, as those on/off actions could cause false triggers.

### 1. Installation using a holder

As shown in Fig. 4, a holder is attached to the ceiling using screws first. Then, the PIR remote control can be easily snapped into the holder.

The holder is specially designed for BRT-K310S PIR remote control. Please talk to our sales representative when placing orders.



**Fig. 4** Installation with a Holder

### 2. Installation without a holder

As shown in Fig. 5, without a holder, an opening in the ceiling needs to be made first. There are four steps:

#### Step one: Open a hole of 68mm in diameter in the ceiling;

(Attach the electrical wires as shown in the Wiring Diagram Fig. 3).

- Step two: Open the two flexible clamps on the side surface of the remote control;
- Step three: Insert the remote control into the hole; and
- Step four: The clamps will hold the remote control onto the ceiling tight and steady.



Fig. 5 Installation without a Holder

### **Operation Guide:**

BRT-K310S PIR remote control needs a warm-up time about two minutes before it can operate properly. It has dip switches for adjusting the delay-off time, as shown in Fib. 6. For the first time operation, BRT-K310S PIR remote control also needs to learn and memorize the IR remote control

codes from regular remote control set. BRT-K310S PIR remote control has a button for this task as shown in Fig. 6 as well.

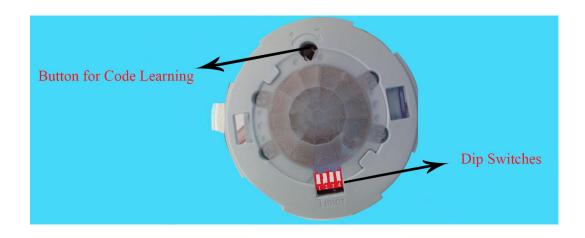


Fig. 6 Dip Switches and Button for Code Learning

As shown in Fig. 7, please rotate the front cover counter-clockwise to remove it so that the dip switches and the button for code learning are exposed.



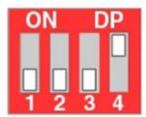
Fig. 7 Removing the Front Cover

### 1. Adjust the delay off time

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The 4 dip switches are used to set the delay off time to 8 settings based on different combinations. Fig. 8 shows all the dip switches are in "off" positions. Each combination corresponds to a delay off setting.

| 0001 | delay off time = 1 minutes  |
|------|-----------------------------|
| 1000 | delay off time = 2 minutes  |
| 0100 | delay off time = 5 minutes  |
| 1100 | delay off time = 10 minutes |



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| 0010               | delay off time = 15 minutes |  |
|--------------------|-----------------------------|--|
| 1010               | delay off time = 20 minutes |  |
| 0110               | delay off time = 25 minutes |  |
| 1110               | delay off time = 30 minutes |  |
| 0 = off and 1 = on |                             |  |

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

### 2. Learn the IR remote control codes

Please refer to Fig. 9 and follow the following steps to have BRT-K310S PIR remote control learn



#### Fig. 9 Learn IR Remote Codes

- a. Turn on power to BRT-K310S PIR remote control, and set dip switch 4 to ON position. There is an LED flashing behind the PIR lens;
- b. Press and hold the button for code learning until the LED is constantly on;
- c. Point the regular IR remote control of appliance to the PIR lens, and start to send OFF

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control signals;

- d. If the LED quickly flashes a few times, code learning has been successfully completed;
- e. To verify if code learning is successful, press the button for code learning to have BRT-K310S PIR remote control send out the control signals it just learned. The appliance should be turned off accordingly; and
- f. Return dip switch 4 to OFF position.

Now, BRT-K310S PIR remote control is ready to control the appliance automatically.

### Applications:

BRT-K310S PIR remote control can be used for automatically turning off various loads which use IR remote controls, 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:

Please contact us:Shenzhen Asia Bright Co., Ltd.<br/>Floor 2<sup>nd</sup>~3<sup>rd</sup>, Building E, North Area No.2 of Shangxue<br/>Science Park, Bantian, Shenzhen, China<br/>Tel: +86-755-89748200 +86-755-89748211<br/>Email: <a href="mailto:sales@a-brt.com">sales@a-brt.com</a>