Indoor use passive infrared intrusion detector

The zigbee infrared intrusion detector is an indoor passive infrared intrusion detector, by detecting the infrared to identify the invaders, and send the alarm signal to the Zigbee gateway through the alarm signal by the zigbee communication protocol,carry out the on-site alarm at the same time, so as to prevent illegal intrusion, protect the personnel and property safety of banks, hospitals, factories, schools and houses, product appearance as showed in Figure 1.

◉ Features

- Ceiling/ wall mounting / horizontal placement magnetic suction installation, small and beautiful One key-to-code configuration, reset and test features .
- Zigbee 2.4GHz wireless two-way communication .
- Dynamic threshold technique, enhance resistance-interference .
- Battery under pressure alarm .
- Positive and negative electrode Battery interface is fool-proofing.

figure 1

◉ Technical parameters

Product Model：ED678 Series
Product No：PB0678BZ00/01/02/03/XX
Product Size：φ44mm*45mm
Working Voltage：DC 3V
Working Current：Standby Current≤18μA；Alarm Current≤25mA
Communication Method：Zigbee 2.4GHz
Transmission distance：≤130m (open visual distance)
Sensor element：Dual-element pyroelectric infrared sensor
Detection Distance：8m
Detection Angle：90°
Installation Height：2.4～3.6m
Alarm Output：Push the Zigbee gateway
Installation Method：Ceiling/ wall mounting / horizontal placement
Battery type：Button battery CR2450*2
working temperature：-10℃～55℃
Working humidity：≤95%(No condensation)

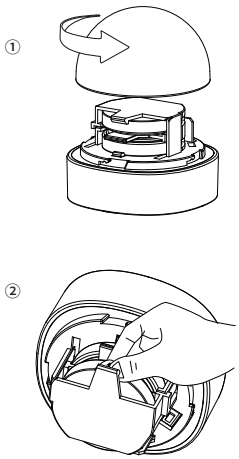


figure 2

◉ Installation Instructions

1.Select the area of monitoring human movement;
2.Open the rear cover counterclockwise in the direction showed in the drawing, pull out the insulation gear plate and the product can be energized (as showed in Figure 2)

◉ Usage Instruction

Reference before install the detector：

1. The detection range needs to take into account the area where illegal intrusion is most likely to occur;
2. Avoid placing the detector at the outlet of cold or hot air;
3. Avoid installing in direct sunlight or locations with strong electromagnetic interference;
4. Avoid large airflow in the detection area;
5. Avoid blind spots in the protection area (the detection range is shown in Figure 3).

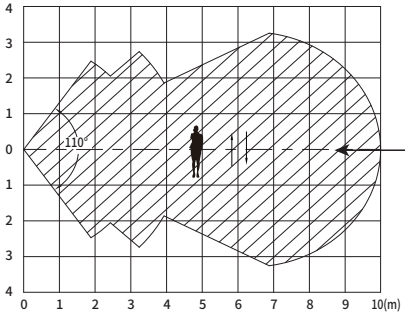
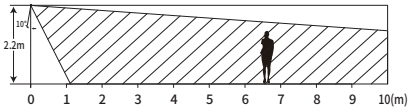


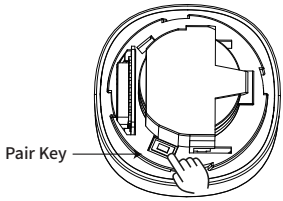
figure 3

The shaded area is the effective distance for horizontal crossing.



◉ Operation and adjustment

1. Initialization state:
   After the battery is installed and powered on, the blue indicator light is always on, and the product enters the initialization state; if the Zigbee module is successfully initialized, the blue indicator light is off, and the product enters the normal working state.
2. Pair the Zigbee gateway:
   Open the APP, select the Zigbee gateway, click to add a sub-device, and then press and hold the device pairing key for 5 seconds (as shown in Figure 4), the blue LED indicator flashes continuously, the device is reset, and the network access request is automatically sent to the Zigbee gateway. After confirmation of the Zigbee gateway, you can complete the network access, and the APP will prompt the device added successfully.
   The longest configuration time is 2 minutes. If overtime, it will automatically exit the pairing mode.
3. Detection:
   After the self-inspection is completed, it will directly enter the working mode, the tester will pass through the detection area, the red LED indicator will be on for 1 second, and the detector will send an intrusion alarm signal to the Zigbee gateway. After each alarm signal is sent, the product will enter the sleep state for one minute. , and then enter the working mode.
4. Low-voltage alarm:
   When the battery voltage is lower than the set value, the detector will send an low-voltage alarm signal to the Zigbee gateway to remind the battery to be replaced in time.



◉ Notice

1. The detection distance of the passive infrared detector will be affected by the outside temperature.
2. Anti-theft products can increase the safety factor, but cannot guarantee 100% safety. Users need to improve their safety awareness to avoid losses.
3. The induction effect of this product is affected by factors such as ambient temperature, clothing, walking speed and direction. When the ambient temperature is 15°C or lower, the sensing distance is normal or far, but in summer or the ambient temperature is 30°C or higher , the sensing distance will be shortened.
4. This series of products are not waterproof and cannot be directly exposed to unprotected open air during use.

FCC Warning Statement

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

RF Exposure Statement

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance of 20cm the radiator your body. This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.