

# Water Leak Detector

This product realizes the detection of water immersion, realizes local alarm and alarm uploading function when the alarm requirements are met. It is widely used in projects such as smart home, public places, communication rooms, shopping malls, buildings, warehouses and the military. An example of product appearance is shown in Figure 1.

## ● Features

- Horizontal installation.
- Automatic alarm when the detected water volume reaches the alarm.
- With automatic reset function of alarm elimination.
- Local indication alarm and platform push alarm function.
- With low voltage alarm function, can upload battery status synchronously.
- Low power consumption design, high quality button battery, long standby time, stable operation.
- It has the function of preventing reverse connection of the positive and negative electrodes of the battery to avoid operation errors.
- With LED light display status function.



figure 1

## ● Technical parameters

Product Model: ED781 Series  
Product number: PB0781BZ00/01/02/03/XX  
Product size: 76mm\*31mm\*20mm  
Working voltage: DC 3V  
Working current: Standby current $\leq 5\mu\text{A}$ ; Alarm current $\leq 20\text{mA}$   
Communication method: Zigbee 2.4GHz  
Transmission distance:  $\leq 130\text{m}$  (open visual distance)  
Reset method: Automatic reset  
Battery type: Button cell CR2450  
Installation method: Horizontal placement  
Waterproof and dustproof: IP67  
Working temperature:  $-10^{\circ}\text{C} \sim 55^{\circ}\text{C}$   
Working humidity:  $\leq 95\%$  (non-condensing)

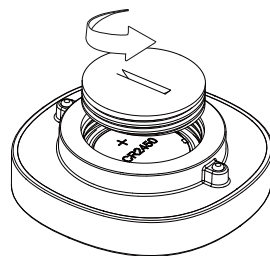


figure 2

## ● Installation Notes

1. Please install the device in an area that is prone to water leakage, and can be placed and installed as needed.
2. Power on at work: Unscrew the back cover (as shown in Figure 2), install the button battery, and the product is ready to use.

## ● Usage Instructions

1. System check:  
Although the inspection product is used everyday, they must be regularly maintained and inspected to ensure the stable, reliable and safe operation of the system; usually, the entire system is inspected every three months.
2. Detector detection:
  - a) Whether the alarm data can be reported normally and the indicator light is flashing.
  - b) Whether the battery level can be detected normally.

## ● 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. Normal work:

When the product is working normally, it is in the monitoring state, and the indicator lights are not on;

When the detected water level exceeds a certain height, the red indicator light of the device will flash, and the alarm information will be uploaded.

### 3. Network function operation:

#### (1) Pair Zigbee gateway:

Open the APP, select the Zigbee gateway, click to add a sub-device, then long press the device pairing key for 5 seconds, the blue LED indicator flashes continuously, the device resets, and automatically sends a network access request to the Zigbee gateway. After the Zigbee gateway confirms, it can be completed. Access the network, and the APP will prompt the device to be added successfully.

The longest configuration time is 2 minutes. If overtime it will automatically exit the code matching mode.

#### (2) Test function

When the detector is monitoring normally, short-circuit the two-pole probe. If the network alarm information is received, it means that the communication between the water leakage and the network platform is normal. The same operation, but does not match the above phenomenon, the test fails. Indicates that the product has not been paired (needs to be paired again) or the network communication has failed.

### 4. Low pressure alarm:

After the initialization is successful, the battery will be uploaded every 4 hours. When the battery voltage of the product is lower than the set value, the power will be uploaded every 1 hour; platform alarm: at least 1 low-voltage alarm prompt everyday; until the battery voltage can meet the normal operation of the product.

## ● Notice

1. Do not install the detector in a place where water is already submerged.
2. When the equipment has a low voltage alarm, please replace the button battery of the same type in time.

#### 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.