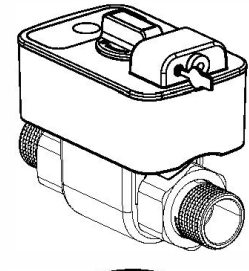


AIWSH

Whole House Electric Ball Valve with Wireless Leak Sensor



User Manual

Please read this user manual carefully before using the product.

Product Features

Smart Electric Valve

- Dual power supply of lithium battery and mains power, equipped with a rechargeable lithium battery, which can be used for half a year on a single full charge.
- Equipped with wired probes. Place the wired probes in the detection area. When electrode conduction is detected, the device will close the valve and alarm.
- Equipped with wireless electrode probes. When the device receives the leakage status reported by the wireless electrode probes, it will close the valve and alarm.
- The electric ball valve has a manual opening and closing function, allowing manual opening or closing of the valve.

Water Leakage Alarm

- Powered by two AAA dry batteries.
- A pair of electrodes at the top detect water leakage.
- Two pairs of electrodes at the bottom detect water leakage. One pair detects low water level, suitable for room and other places; the other pair detects high water level, suitable for bathrooms and other places. The bathroom and room modes are switchable.
- Low wireless communication, which can be linked with other devices.
- IP67 waterproof design.

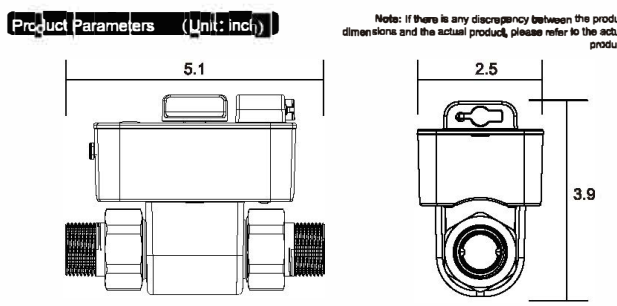
Precautions

1. This product contains batteries.
2. When replacing batteries, please select the battery model specified in the manual; otherwise, it may easily cause fire or other hazards.
3. Please place new and old batteries out of the reach of children. Old batteries should be recycled as hazardous waste in accordance with local waste classification regulations.
4. If the battery cover of the product cannot be completely closed, please stop using the product and place it out of the reach of children.
5. If you think the battery may have been swallowed or is in any part of the body, please seek medical attention immediately.
6. Do not throw the battery into fire or oven, or cut or mechanically crush the battery, otherwise it may cause fire, explosion and other dangers.
7. Do not place the battery under extremely high temperature or extremely low air pressure, which may cause explosion.

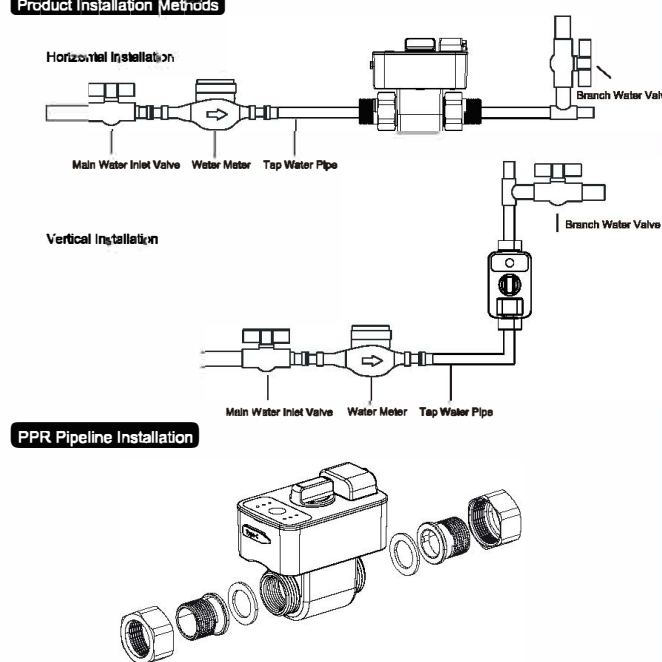
Product Parameters

Product Name	Whole House Electric Ball Valve with Wireless Leak Sensor
Model	AWS-Q20 Pro
Working Pressure	14.5-108.Bpsi
Applicable Water Temperature	33.8-122°F
Applicable Water Quality	Municipal Tap Water
Connector Size	1" MNPT + 3/4" FNPT
External Power Input	100-240V 50/60Hz, Output: 5V1A
Built-in Battery	Rechargeable Lithium Battery 3.7V

Product Name	Water Leakage Alarm
Operating Temperature	-41~131°F
Waterproof Rating	IP67
Battery Specification	Two AAA Dry Batteries
Wireless Connection	LoRa
Product Dimensions	3.17"x1.19"(inch)



Product Installation Methods

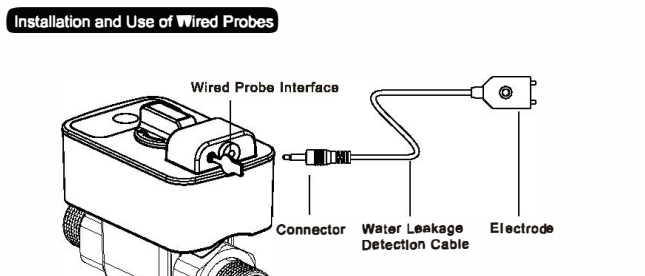


- (1) Installation must be performed by professionals. Before installation, confirm that all parts are complete.
- (2) PPR Pipeline Installation:
 1. Before using, ensure the pipe is clean.
 2. Cut the pipe to the required length according to the width of the product.
 3. Insert the PPR pipe into the PPR nut, then the PPR nut and the PPR pipe into the PPR plug as shown in Figure (2).
 4. Push the PPR plug into the PPR nut, then the PPR nut and the PPR pipe into the PPR plug as shown in Figure (2).
- (3) For replacement pipe installation, a fitting or primer should be added according to the actual situation.
- (4) This product is not suitable for outdoor installation. Please install it away from direct sunlight, heat sources, and other factors that may affect its performance.
- (5) After installation, carefully check each connection for water leakage.

Charging Precautions

- For first use, please fully charge the device.
- Built-in rechargeable battery, comes with a standard Type-C charging cable, and can be charged with a power bank or charger.
- The product can be used for about 6 months when fully charged.
- When the battery is low, the battery icon flashes, the buzzer beeps, and the valve closes automatically.

Installation and Use of Wired Probes



- (1) Open the hole plug of the side electrode probe interface.
- (2) Insert the water leakage detection cable connector into the interface (ensure the connector is fully inserted).
- (3) Place the two-electrode connector at the location where water leakage may occur when water connects the two electrodes. A signal is transmitted to the product, which will determine it as a water leakage status, alarm, and close the main valve.

FCC Warning

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.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: 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.

*RF warning for Mobile device:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Certificate of Conformity

Quality Inspector
Date of Manufacture

Hangzhou Tingyu Environmental Technology Co., LTD
Service Email : service@aiwsh.com
Address: No. 8105, Building 2, No. 450, 8th Street, Baiyang Sub-district, Qiantang District, Hangzhou City, Zhejiang Province

Operation Interface and Button Operation Instructions



Power-on or Reset Ball-Check
After the display ends, the ball valve performs one valve-closing and valve-opening action. After the self-check ends, it enters the standby state.

Valve-Closing and Closing Function
Tap the Open/Close button to perform the valve opening or closing function.

During the valve opening process, the valve-closing indicator flashes slowly; when the valve is fully open, the valve opening indicator stays on.

During the valve closing process, the valve-closing indicator flashes slowly; when the valve is fully closed, the valve-closing indicator stays on.

Wireless Probe Detection Function
When the electrode conduction of the wired probe is detected, the leakage indicator lights up, and the device automatically closes the valve and triggers an alarm.

Ball Valve Self-Check Function
To prevent the ball valve from jamming due to long-term inactivity, if the ball valve remains in the open state without any action for a continuous 15 days, it will automatically close and open once.

Sleep Mode
After standby or alarm ends, all indicators turn off, and the device enters sleep mode. In sleep mode, you can wake up the device by pressing the Open/Close button.

System Reset
In the awake state, long press the Open/Close button for 10 seconds to reset the system. This will clear all current wireless probe information and release all alarms.

Charging Function
After connecting the adapter, the "Q" indicator lights up. During charging, the "Q" indicator flashes when charging is complete, the "Q" indicator stays on.

Note: The "Q" indicator always shows full battery power. When the battery is low, the "Q" indicator flashes.

Alarm and Alarm

Valve Closing Fault Alarm
The system alarms, and the valve closing indicator flashes rapidly. You can resolve the alarm by tapping the Open/Close Valve button to close the valve, or long-pressing the Open/Close Valve button for 3 seconds to perform valve deenergizing or system reset.

Valve Opening Fault Alarm
The system alarms, and the valve opening indicator flashes rapidly. You can resolve the alarm by tapping the Open/Close Valve button to open the valve, or long-pressing the Open/Close Valve button for 3 seconds to perform valve deenergizing or system reset.

Low Battery Alarm
The system alarms, and the "Q" indicator flashes. When the battery is low, the ball valve closes. If the low battery state is not resolved, the ball valve will open and then close again after 48 hours (to prevent the user to charge it). The alarm can be resolved by changing the battery.

Wired Probe Leakage Fault
When electrode conduction of the wired probe is detected, the device closes the valve and alarms, and the leakage indicator lights up. Long press the Open/Close Valve button for 3 seconds if the electrode of the wired probe is still conducting. The ball valve opens, and the leakage indicator flashes. If the electrode of the wired probe disconnects within 24 hours, the leakage fault is resolved; otherwise, the ball valve closes after 24 hours, and the leakage indicator stays on.

Wireless Probe Leakage Fault
After the device receives the leakage fault information reported by the wireless probe, it automatically closes the valve and alarms (the leakage indicator lights up, and the "Q" indicator flashes intermittently). Long press the Open/Close Valve button for 3 seconds to resolve the wireless probe low battery fault and open the ball valve at the same time. Within 24 hours, the device will ignore the low battery fault status information reported by the wireless probe. After 24 hours or after the battery is recharged and returns to the device's function of monitoring and preventing the wireless probe's low battery fault information will be re-enabled.

Wireless Probe Low Battery Fault
After the device receives the low battery fault information reported by the wireless probe, it automatically closes the valve and alarms (the "Q" indicator flashes intermittently). Long press the Open/Close Valve button for 3 seconds to resolve the wireless probe low battery fault and open the ball valve at the same time. Within 24 hours, the device will ignore the low battery fault status information reported by the wireless probe. After 24 hours or after the battery is recharged and returns to the device's function of monitoring and preventing the wireless probe's low battery fault information will be re-enabled.

Precautions
Please fully charge the device before first use.
After manually turning the valve open/close knob, the actual state of the ball valve may be out of sync with the display state. In this case, tap the Open/Close Valve button to make the ball valve and console... this will synchronize the ball valve's actual state and display state.
When manually turning the valve operation knob, pay attention to the valve's operation state and the direction of manual rotation. Do not apply excessive force to turn the knob after it is in place, otherwise the internal structural components of the knob may be damaged.

System Power-On

All indicators light up when powered on; after the display ends, the device enters standby mode.

Mode Switching
In standby mode, tap the Settings button to switch the display between "Bathroom" mode and "Room" mode. Sleep Mode:
After standby or alarm ends, all indicators turn off, and the device enters sleep mode. In sleep mode, you can wake up the device by pressing the Settings button.

Battery Replacement
Use a tool (such as a screwdriver) to open the bottom battery cover via the Battery Cover Tab, as shown in the diagram. Insert two new AAA dry batteries into the battery compartment, paying attention to the positive and negative poles of the batteries.
Close the battery cover, ensuring it is pressed into place and sits flush with the bottom (no warping).

Water Immersion Alarm

In "Room" mode, the "Room" indicator flashes when the bottom low-level electrode or NP electrode conducts.

In "Bathroom" mode, the "Bathroom" indicator flashes when the bottom high-level electrode or NP electrode conducts.

An alarm tone sounds, and a water immersion alarm message is sent to the main unit.

The device alarms periodically in the immersion state; the alarm state is cleared once the device is dried.

Low Battery Alarm
When the battery is low:
The "Room" indicator and "Bathroom" indicator flash alternately, accompanied by an alarm tone.

The alarm state can be cleared by replacing the batteries.

Note:
After each alarm, wipe off any water before continuing to use the device.

Correct Installation (Please When Water Leakage Detection is Required)
Place the water immersion alarm device at the location where water leakage detection is required. Do not place it on a metal surface—this will affect normal operation.

Pairing Function

When the device is connected, the "Q" indicator flashes, and the device enters the pairing state; long press the Settings button for 3 seconds to connect the device. A prompt tone will sound when pairing is successful. If pairing times out, the "Q" indicator turns off. After a request for connection, the device records the information of the paired wireless probe. If pairing times out, you can stop and re-charge the adapter to re-enter the pairing state. When the device receives leakage or low-battery information reported by a paired wireless probe, the "Q" indicator flashes intermittently, and the device automatically closes the valve and triggers an alarm when the device receives leakage information; the leakage indicator lights up.

Note:
The maximum number of wireless probes that can be connected to this device is 8. If the connection limit is exceeded, the first connected wireless probe will be removed first.

Packing List

No	Name	Quantity
1	Smart Water Monitor and Shut-off	1
2	Water Immersion Alarm	2
3	Nuts	2
4	1" MNPT Male Connector + 3/4" FNPT Female Adapter	2
5	Gaskets	2
6	Type-C Charging Cable	1
7	Water Leakage Detection Cable	1
8	AAA Dry Batteries	3
9	User Manual	1

技术要求：风琴折
1、80g双胶纸纸双面单色印刷。
2、成品尺寸95*140mm
3、红线为参考切割线印刷时去除

材料标记

海宁倍瑞环保科技有限公司

名称:水智盾 (Q20pro+TD20) 说明书

型号:

物料号: 91053583

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