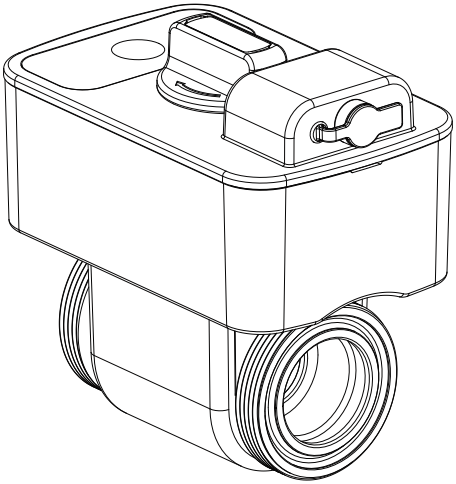
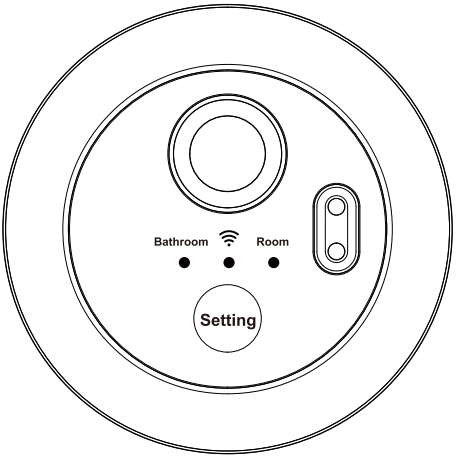
Smart Water Leak Detector

Model:Dr.safeX

waterfirst

Smart Monitor, Secure Your Home





Dr.safeX by waterfirst User Manual

Thank you for choosing waterfirst Dr.safeX water leak detector.
For any inquiries, please feel free to reach us via email: service@thewaterfirst.com
www.thewaterfirst.com

FCC WARNING

Dr.safeX Shutoff Device

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.
(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:

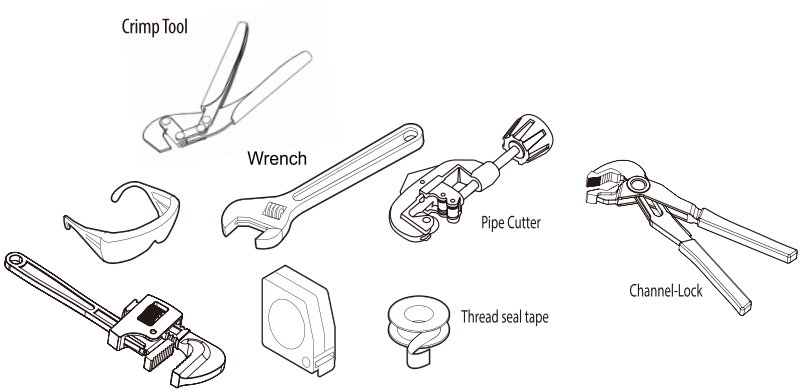
-- Reorient or relocate the receiving antenna.
-- Increase the separation between the equipment and receiver.
-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-- Consult the dealer or an experienced radio/TV technician for help.
To maintain compliance with FCC’s RF Exposure guidelines, This equipment should be installed and operated with minimum 20cm distance between the radiator and your body: Use only the supplied antenna.

HELPFUL TOOLS

For safety and ease of installation,
waterfirst recommends the use of these helpful tools.

Additional Pipe and Fittings(varies based on installation type - i.e., threaded, solder, quick Adapter, and crimp/press).

Crimp Tool
Pipe Cutter
Wrench
Thread seal tape
Channel-Lock



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PRODUCT FEATURES

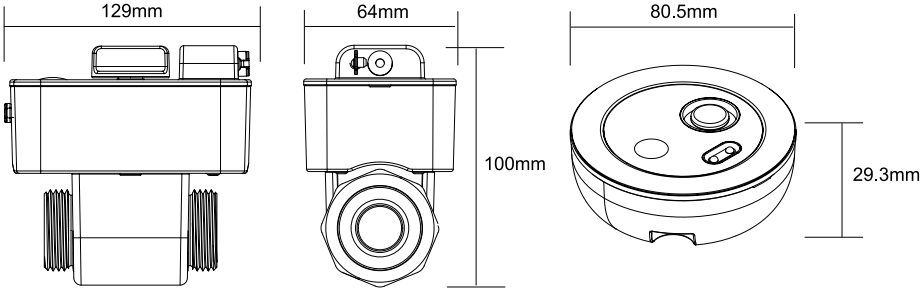
1.Product Features

● Equipped with a wired detector, place the wired detector in the detection area, and when water leak is detected, the device will close the valve and alarm;
● Equipped with wireless water leak detectors, which can be linked with the wireless water leak detectors. When the device receives the water leak status from the wireless water leak detectors, it will close the valve and alarm;
● The Dr.safeX smart shutoff device has a manual opening and closing function, and the valve can be opened or closed manually.

2.Product Parameters

Product name	Smart water leak detector
Product model	Dr.safeX
Working pressure	0.1-0.75MPa
Applicable water temperature	33-122°F
Applicable water quality	Tap water
Connector size	3/4inch/1inch
Power supply input	100-240V/60Hz
Power supply output	5V/1A

3.Product Size(images are for reference only)



4.Installation Requirements of the Dr.safeX Device

Parts List

A.Dr.safeX Shutoff Device

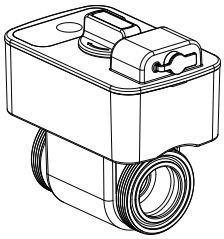
B.Threaded NPT Brass Quick Adapter (x2)

C.Packet of O-Rings(x2)

D.Wireless Water Leak Detector (x2)

E.Power Adapter

F.Wired Water Leak Detector



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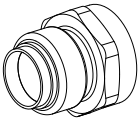

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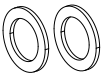

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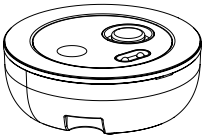

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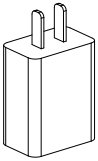

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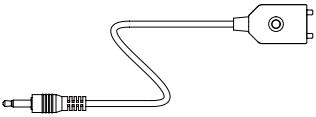
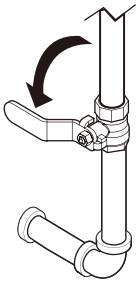


F

INSTALLATION

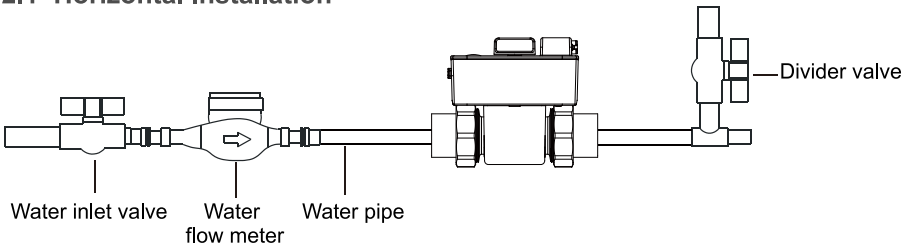
1.Cut Off The Water Supply

Shut off water main. Drain water from highest flow rate fixture at the highest point in the house.Open other fixtures to further reduce pressure.Leave these fixtures in the open position

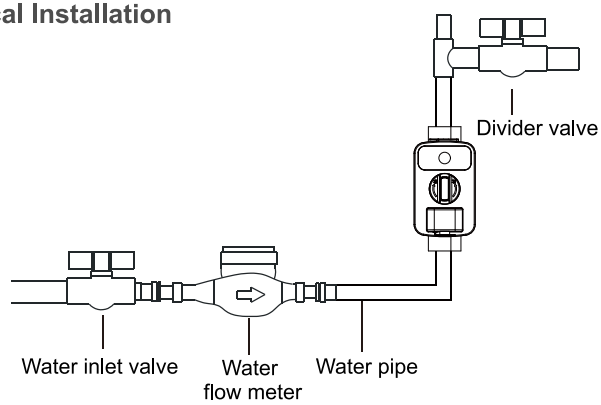


NOTE: If working with dry pipes, skip to the next step.

2.1 Horizontal Installation

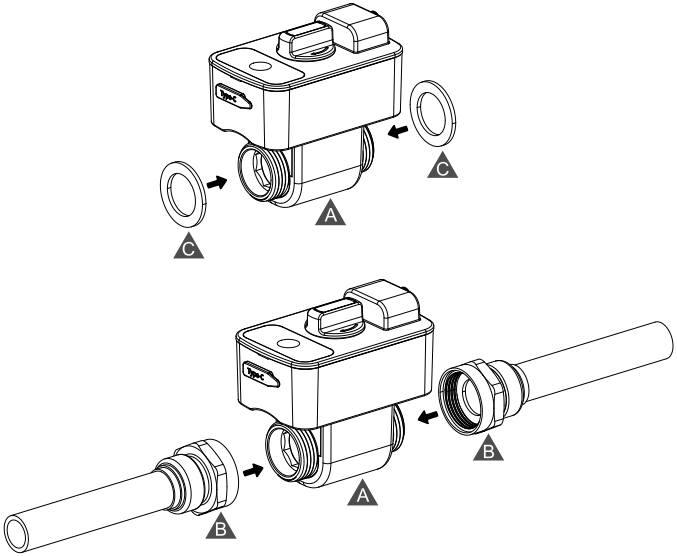


2.2 Vertical Installation



Measure using the shutoff module and tail pieces. Mark and cut the water main line using the pipe cutters. Allow space for
the shutoff module and both tailpieces. To reduce potential for pinching o-rings during installation, it is recommended to leave a clearance of 1/32" to 1/16"between the module and tailpieces.

3.Installation Step



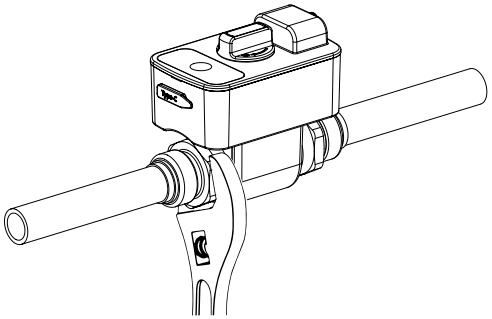
A: Apply grease and install O-Rings(C).

B: Next, place the Dr.safeX Shutoff Device(A) in line with brass quick adapter(B).

C: Connect the brass quick adapter end (B) to the device as shown in the picture and tighten it with a wrench to prevent leakage (you can install the silicone O-Ring together with it during the in.

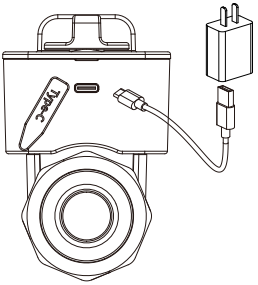
If attaching the brass quick adapter (B) is secured to the pipe as shown, make sure the pipe is inserted into the bottom of the quick adapter to prevent leakage.

INSTALLATION

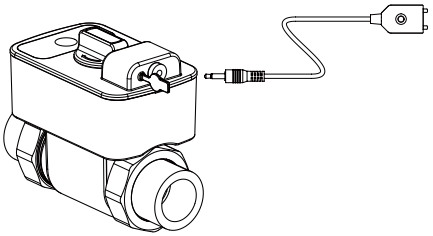


Tighten the two brass quick adapter (B) with a wrench.（Do not over-tighten.）

NOTE: Please be sure that the O-rings are seated properly to fit snugly into the grooves. For best practice, please use grease orsilicone to protect the O-ring from damage, abrasion, pinching or cutting.



Plug the power adapter into the outlet and mount off the ground using the included wall mount bracket. The power supply and device must not be buried or installed where the ambient temperature can exceed 104°F (40℃) or below 32°F (0℃).



A. Plug in the power supply.

B. The will turn on.

C.Connect the wired water leak detector

Slowly, open the main water shutoff partially and verify there are not drips or leaks coming from the installation connections there are none, slowly open the main water shutoff.

After the air in the line is flushed out, close all open fixtures in the dwelling, starting with the fixtures in the lowest point of the dwelling and ending with the fixtures in the highest point.

Congratulations, your job is finished!

If you have any question, please contact
Email: service@thewaterfirst.com
WhatsApp: (202) 270-5196

KIND REMINDER

Before getting started, be sure you meet all code and installation requirements for Dr.safeX device.
Also, check to make sure that the owner's dwelling is compatible with the Dr.safeX device.
. Must be installed on accessible main water supply line (cold water line)
. Must be installed after water meter, water shut-off, and reducing valve (if applicable).
a.The intent is for the device to monitor and control all the dwelling's water usage. The device should go before water heaters, water softeners, whole house filters, or irrigation lines if they are to be monitored by the system.
b. The power supply and device must not be buried or installed wherethe ambient temperature can exceed 104 deg F (40 deg C) or below32 deg F(O deg C). The power supply must be installed off the ground.

The installation of the Dr.safeX Device will require an electrical outlet [100-240VAC-50/60Hz] with continuous power within 10'of the installation.
a. A GFCl outlet is recommended. If power is further than 10 feet away, do not use high voltage extension cords.
For outdoor installations, a weatherproof receptacle enclosure located a minimum of 12 inches (305mm) above the ground MUST be used.

Recommendation: purchasing and using 15ft, low-voltage extension cords can connect to four extension cords, giving you the ability to find power up to 100 feet away!

Smart Device Operation

Power On or Reset Self Test

Power on, the ball valve closes and opens once; after the reset self-test, it enters the standby state.

Valve On/Off Function

Press the “On/Off Valve” to operate the valve open or close function. During the valve open process, the “ON” indicator flash; after the valve open is completed, the “ON” indicator is always on; during the valve close process, the “OFF” indicator flash; after the valve close is completed, the “OFF” indicator is always on.

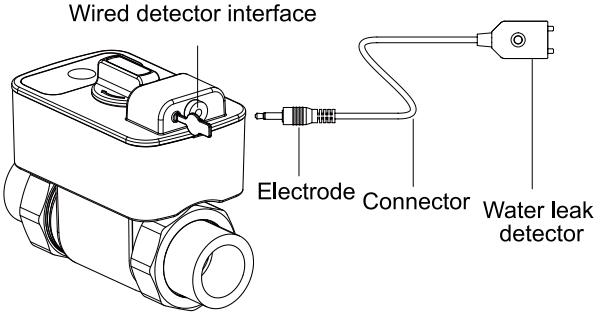
Charging Function

After connecting the adapter, the indicator lights up.

Two Ways To Use

1. Wired detector Function

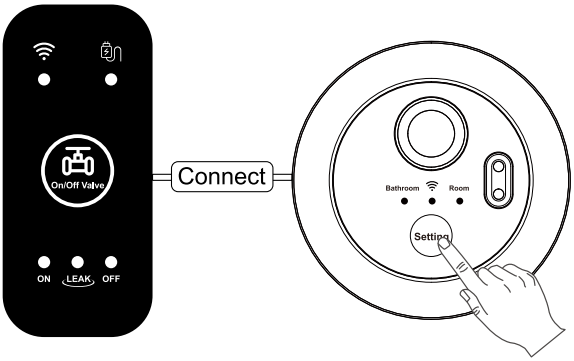
When the wired detector detects water leak, the "LEAK" indicator on, the "OFF" indicator flash the device automatically closes the valve and alarms.



(1) Open the wired detector interface;
(2) Connect wired detector (make sure the connector is inserted in place);
(3) Place the connector with two electrodes at the bottom of the device that may leak. When water connects the two electrodes, a signal is sent to the device, and the program determines that it is a leak state alarm and closes the device valve.

2. Wireless Detector Connection Function

When the adapter is connected, the indicator flashes and the device is in a connecting state within 3 minutes after power on; Long Press the wireless detector "Setting" button for 6S to connecting the device, when the connecting is successful, there is a beeping sound(Note: Press the top electrode of the wireless detector with your finger to see if the device will sound alarm. If there is an alarm, the connection is successful.); after the connecting timeout, the indicator goes out. After the connection is successful, the device records the connected wireless detector information. After the timeout, the adapter can be unplugged and re-entered into the connecting state.



Long Pree “Setting” button for 6S

Within 3 minutes of powering on the device, press and hold the wireless detector “Setting” for 6S to complete the pairing connection.

After the device receives the wireless detector to detect water leakage, the “OFF” indicator light flash, and the device automatically closes the valve and alarms. When the device receives the water leakage, the "LEAK" indicator lights on.

NOTE: The upper limit of the number of wireless detector that can be connected with the device is 8. After the upper limit of the connecting number is exceeded, the first connected wireless detector will be eliminated first.

Ball Valve Self Start Function

To prevent the ball valve from getting stuck due to long-term inactivity, the ball valve will automatically close and open once when it is open and inactive for 15 days.

Sleep Mode

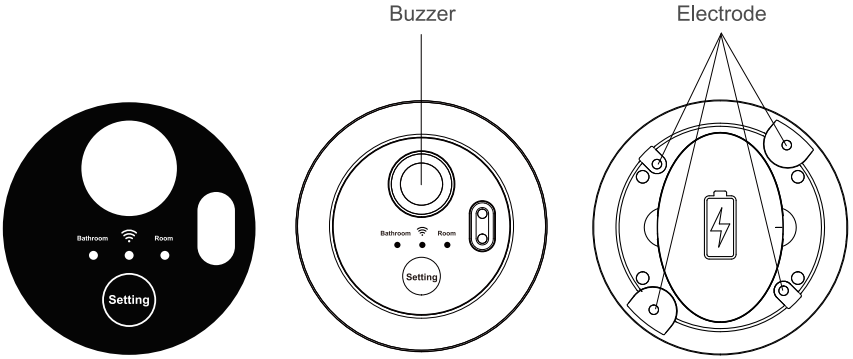
After standby or alarm, all indicators go out and the device enters sleep mode. In sleep mode, you can wake up the device by pressing the "On/Off Valve" button.

Device Reset

In wake-up mode, press the "On/Off Valve" for 10 seconds to reset the system, clear all connected wireless detector information, and release all alarms.

NOTE:

1. When the switch valve knob is manually turned, the actual state of the ball valve and the displayed state may be out of sync. At this time, you need to press the "On/Off Valve" button to make the ball valve work once, so as to synchronize the actual state of the ball valve and the displayed state.
2. When manually turning the switch valve knob, please pay attention to the switch valve state and manual rotation direction. Do not turn the knob excessively after it is in place, otherwise it will cause damage to the internal structure of the knob.



Product Introduction

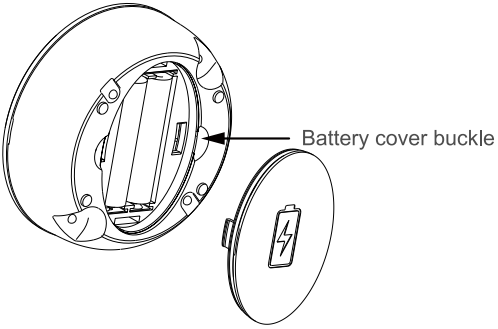
- A pair of electrodes on the top detects water leakage.
- Two pairs of electrodes on the bottom detect water leakage. One pair of electrodes detects low water level, suitable for living rooms and other places; the other pair of electrodes detects high water level, suitable for bathrooms and other places. Bathroom and living room modes can be switched.
- 433 wireless communication, can be connected to other devices.

IP67 waterproof design.

- Requires two AAA batteries for power supply（Not Include）

Part Parameters

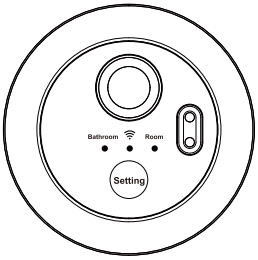
Wireless connection	433 wireless
Product size	80.5×29.3(mm)
Battery specification	AAA battery
Waterproof level	IP67



Replace the battery

1. Use a tool such as a screwdriver to open the bottom battery cover, as shown in the figure.
2. Put two new AAA batteries into the battery compartment, paying attention to the positive and negative poles of the batteries.
3. Cover the battery cover and make sure that the battery cover is pressed in place and is flat with the bottom surface.

Water Leak Detector Operation



System Power On

Power on full display, after the display ends, enter standby mode.

Mode Switch

In standby mode, press the "Setting" button to switch the display between "Bathroom" mode and "Room" mode.

Connecting Function

In standby mode, long press "Setting" button, the current mode light flashes, and send the connecting prompt. After the connecting is successful, it can be linked with the host.

Sleep mode

After standby or alarm ends, all indicators go out and the device enters sleep mode. In sleep mode, you can wake up the device by pressing "Setting" button.

Soaking Alarm

In "Room" mode, the "Room" indicator flashes after the bottom low electrode is turned on or the top electrode is turned on; in "Bathroom" mode, the "Bathroom" indicator flashes after the bottom high electrode is turned on or the top electrode is turned on. After the soaking alarm occurs, it is accompanied by an alarm prompt sound, and the soaking alarm information is sent to the host. In the soaking alarm state, it will alarm periodically; When the device is dry, the soaking alarm state is released.

Battery Low Power Alarm

In the battery low power state, the "Room" indicator and the "bathroom" indicator flash alternately, accompanied by an alarm prompt sound. The alarm state can be released by replacing the battery.

NOTE:

1. When replacing batteries, please use the specified battery type, otherwise it is easy to cause fire or other dangers.
2. Please place new and old batteries out of the reach of children, and recycle old batteries according to the garbage classification of hazardous waste.
3. 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.
4. If you think the battery may have been swallowed or is in any part of the body, please seek medical attention immediately.
5. Do not put the battery into the fire or oven, or cut and mechanically crush the battery, otherwise it may cause fire and explosion.
6. Do not expose the battery to extremely high temperature or extremely low pressure, which may cause explosion.

TROUBLESHOOTING

Valve Close Fault:

System alarm, valve "OFF" indicator flashes, you can press the "On/Off Valve" button to close the valve, press and hold the "On/Off Valve" button for 3 seconds to close or open the valve, or reset the system to cancel the alarm.

Valve Open Fault:

System alarm, valve "ON" indicator flashes, you can press the "On/Off Valve" button to open the valve, press and hold the "On/Off Valve" button for 3 seconds to close or open the valve, or reset the system to cancel the alarm.

Wired Detector Leakage Fault:

When the wired detector electrode is detected to be conductive, the device closes the valve and alarms, and the "LEAK" indicator light is on. Press and hold the ”On/Off Valve“ button for 3 seconds. If the wired detector electrode is adaptered, open the ball valve and eliminate the leakage fault;

If the wired detector electrode is conductive, open the ball valve and the "LEAK" indicator light flash. Within 24 hours, when the wired detector electrode becomes Disconnected, the leakage fault is eliminated. Otherwise, after 24 hours, close the ball valve and the "LEAK" indicator light is always on.

Wireless Detector Water Leak Fault:

After the device receives the leakage fault information reported by the wireless detector, it automatically closes the valve and alarms, the "LEAK" indicator light is on, and the " " indicator light flash intermittently. Press and hold the ”On/Off Valve“ button for 3 seconds to eliminate the wireless detector leakage fault and open the ball valve at the same time.

Wireless Detector Low Power Fault:

After the device receives the low power fault information reported by the wireless detector, it automatically closes the valve and alarms, and the " " indicator light flashes intermittently. Press and hold the ”On/Off Valve“ button for 3 seconds to clear the low battery fault of the wireless detector point and open the ball valve at the same time. Within 24 hours, ignore the low battery fault status information reported by the wireless detector.

After 24 hours or connecting the adapter, the device receives and processes the low battery fault reported by the wireless detector.

waterfirst

Dr.SafeX Operation Guide

service@thewaterfirst.com

WaterFirst

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WhatsApp:(202) 270-5196

Wireless Water Leak Detector - FCC Warning Statement:
Changes or modifications to this unit 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.

FCC Radiation Exposure Statement
The device has been evaluated to meet general RF exposure requirement.
The device can be used in portable exposure condition without restriction.