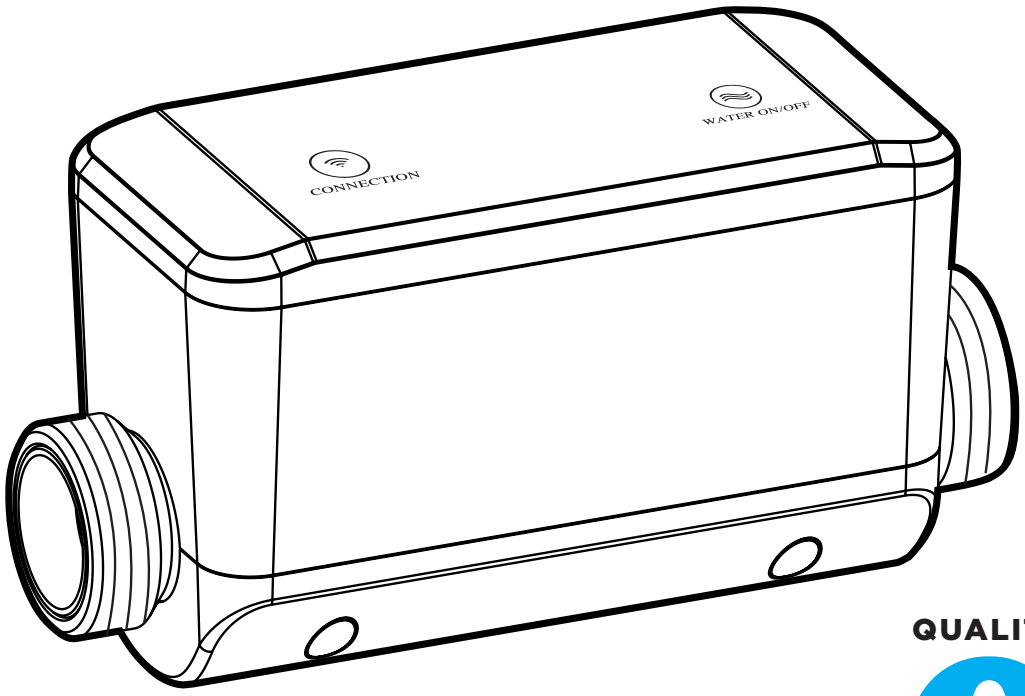
AWTOS

Auto Water Turn-Off System

Smart Water Shut-Off Valve

USER MANUAL



QUALITY

GUARANTEED

Model Numbers:
AW100WV02, AW075WV02
Version & Date: N2503001

Table of Contents

Introduction

Water damage is one of the most common and costly issues homeowners face. Leaks can go unnoticed until they cause serious damage—but with the AWTOS Water Shut-Off Valve, you can take action before that happens.

The AWTOS Water Shut-Off Valve automatically detects leaks and shuts off your water supply, helping prevent costly repairs and unexpected damage. Adding the Water Sensor Kit enhances protection by detecting moisture in vulnerable areas, such as near appliances, pipes, and basements. Together, they provide an extra layer of security against water damage.

Both devices connect to your home's Wi-Fi, allowing you to monitor and control your water system from anywhere using the "AWTOS" app.

This manual will guide you through installation, setup, and operation to help you get the most out of your system.

Safety Warning & Precautions

READ BEFORE INSTALLING

Installation

The smart water valve needs to be connected to the household main water pipe to achieve leak monitoring and automatic water shut-off function. If installed improperly, it may cause system misjudgment or water leakage detection failure. It is recommended to contact professionals for installation. For complex scenarios such as large pipelines or reservoirs, it is also recommended to contact professionals for operation to avoid self installation errors.

Installation precautions

1. Installation environmental conditions

Avoid direct sunlight, high temperatures, or humid areas (such as areas prone to flooding) to prevent electronic components from aging or short circuiting. Stay away from dust, steam, and corrosive gases (such as kitchens and industrial workshops) to prevent equipment contamination and false alarms.

2. The direction of water flow should be consistent with the equipment arrow direction

Ensure that the direction of water flow is consistent with the arrow direction marked on the equipment casing to avoid measurement errors or damage caused by reverse installation.

3. Horizontal installation and stability

The equipment should be installed horizontally with the surface facing upwards to avoid tilting. Simultaneously select a location that is vibration free and not easily impacted by external forces to ensure long-term stability.

4. Water pipe size matching

The size of the water pipe needs to match the size of the equipment's pipeline (3/4 inch pipeline with 3/4 inch equipment, 1-inch, 1.25-inch, and 1.5-inch pipelines can all be equipped with 1-inch equipment). If the diameter difference is too large, it may affect the monitoring accuracy and flow rate. Before installation, it is necessary to confirm whether the specifications of the household pipes match.

Installation process

Step 1. Close the main water gate

Before installing or disassembling the water valve, be sure to close the main water supply valve to prevent danger caused by water spraying.

Step 2. Check valves and pipelines

Confirm that the water valve is not damaged, defective, or leaking, and check whether the sealing surface and connection parts are intact. Clean the pipeline interface and valve connection parts, remove impurities, oil stains, and rust.

Step 3. Choose appropriate tools and materials

Prepare installation tools of qualified quality and size, such as wrenches, as well as sealing gaskets, sealants, and other materials.

Step 4. Correctly connect the valve

Align the valve with the pipeline to avoid stress or distortion. Tighten the connecting components in the appropriate torque and tightening sequence to prevent leakage and loosening.

Installation requirements for external sensors

If paired with external water leakage detection sensor, attention should be paid to the installation position, and it is recommended to place them in areas where water leakage often occurs.

External sensor should be placed in areas with good wireless signal coverage to avoid shielded interference areas and ensure stable signal transmission.

User precautions for use

1. Linkage function test

The smart water valve supports linkage alarm systems, and emergency response functions (such as automatic valve closing or push alarm) need to be tested after installation.

2. Network connection risk

Devices connected via Wi-Fi may face network security threats, and it is necessary to ensure home network encryption and regularly change passwords to prevent unauthorized access.

3. Power supply precautions

The device requires continuous power support. If the home loses power, it may cause the automatic water cut-off function to fail. Suggest pairing with a backup power source (such as UPS) to cope with sudden power outages.

4. Regular firmware updates

By updating the firmware prompts through the accompanying app, keep the device firmware at the latest version to ensure optimal device operation.

5. Regular system testing

It is recommended to start manual pipeline leakage detection through the app every month (when the entire house completely stops using water) and verify whether the external leakage sensor and valve linkage response are normal.

6. Extreme environmental impact

The working environment temperature of the equipment should be within the range of 1 ° C-65 ° C, and exposure to high or low temperatures may cause component damage.

7. Regular maintenance

Avoid long-term use in strong acid, strong alkali, or highly polluted environments to shorten equipment life.

8. Regular inspection

Regularly inspect the sealing gasket, connection parts, etc. of the water valve to check for any damage, looseness, or leakage issues, and replace damaged parts in a timely manner.

9. Pay attention to the operating condition

During use, pay attention to whether there are any abnormal sounds, leaks, or other issues with the water valve. If there are any problems, promptly close the water valve, and inspect and repair it.

10. Cleaning and maintenance

Regularly clean the dirt inside the water valve to prevent impurities from accumulating and affecting performance.

11. Winter protection

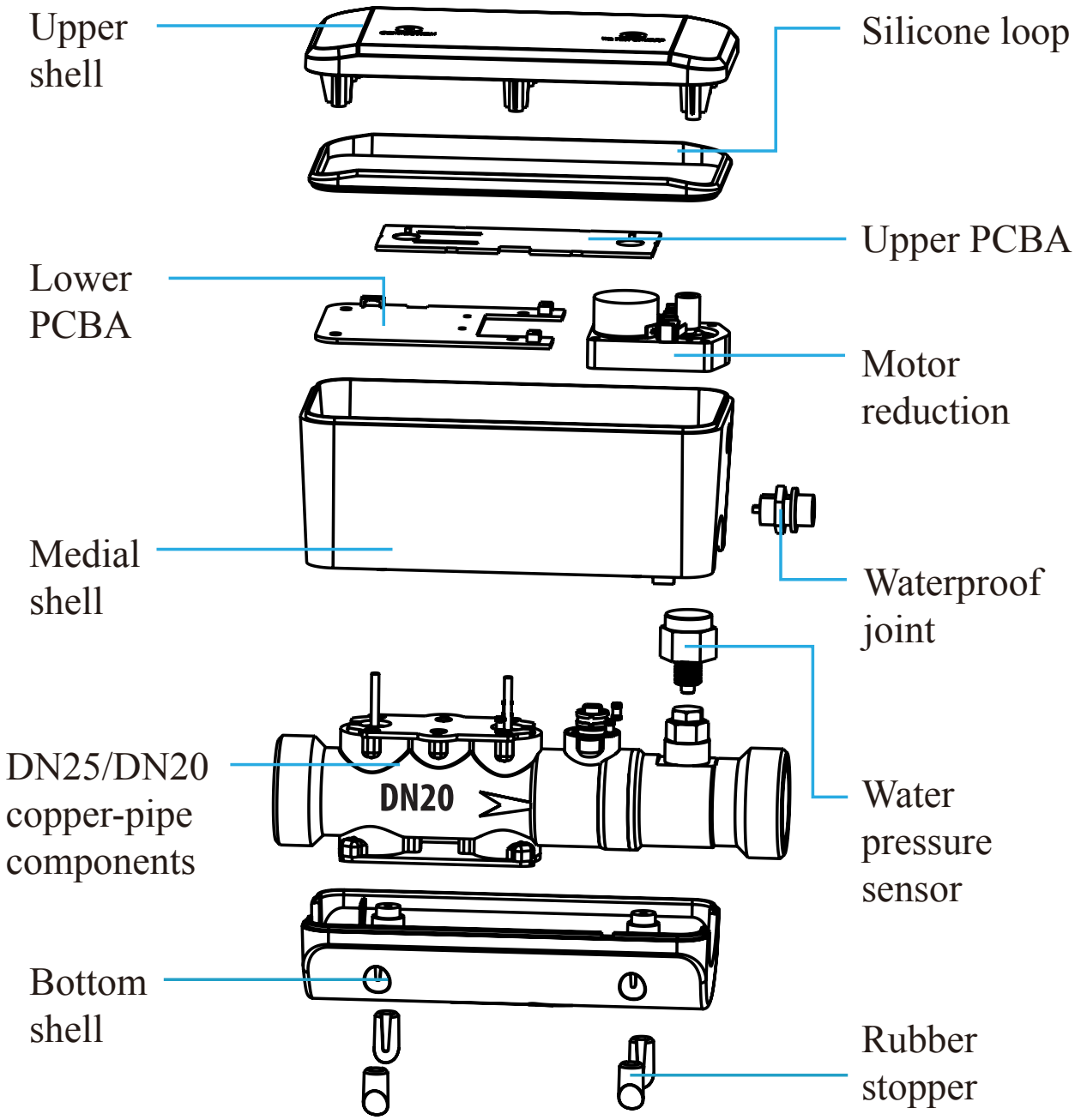
In cold regions during winter, take measures to keep the water valve warm and prevent freezing and cracking; After a long period of inactivity, reactivate and conduct a sealing performance test.

12. Regularly clean the external water leakage detection sensor

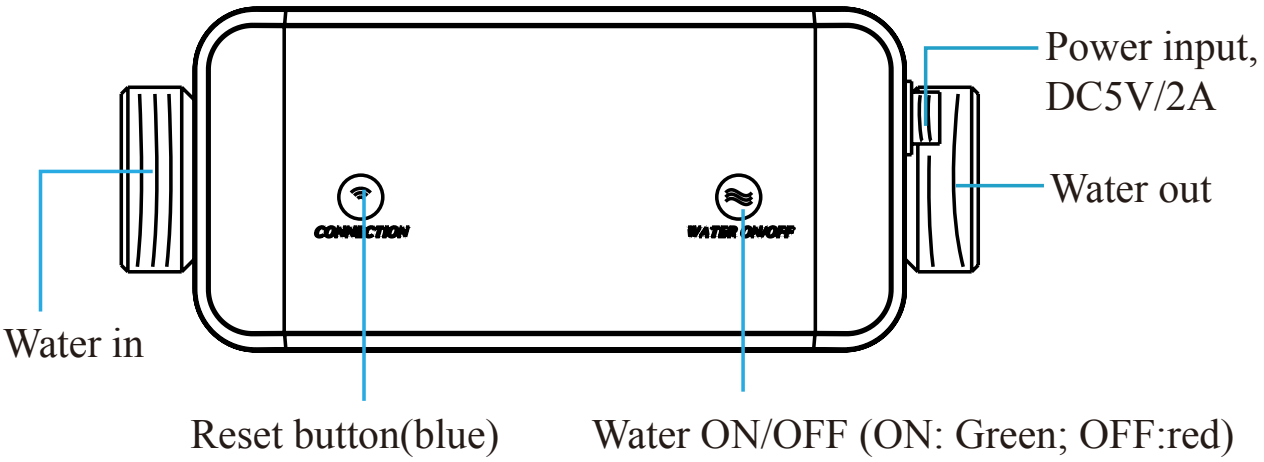
It is recommended to wipe with pure water or a soft cloth, to avoid scale or impurities affecting monitoring accuracy.

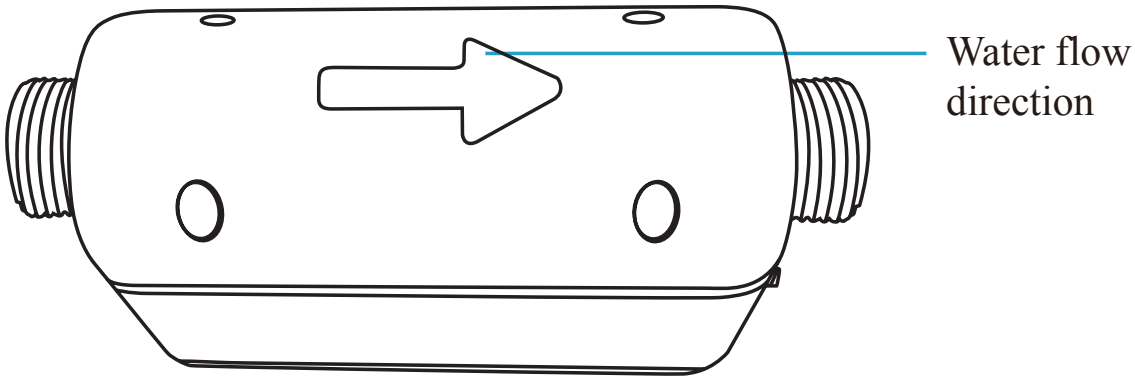
Product Configuration

1. Product Structure



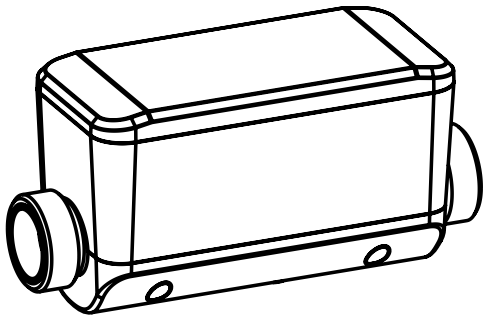
2. Appearance Description



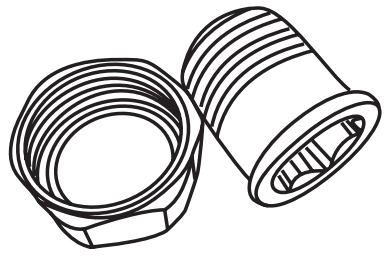


3.Packaging accessories

① Water valve x 1

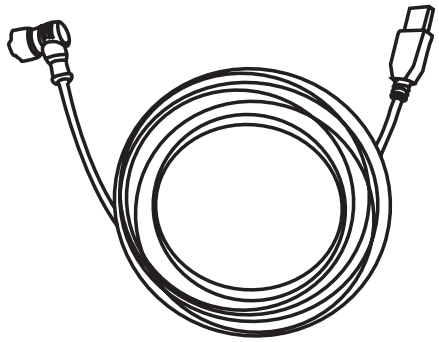


② Connector x 2

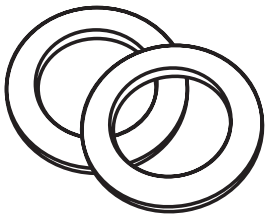


③ Sealing tape (3M) x 1

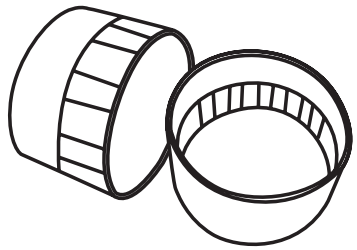
④ Power cable (5M) x 1



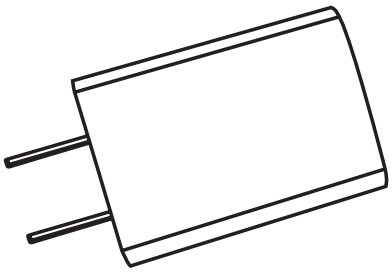
⑤ Spacers x 2



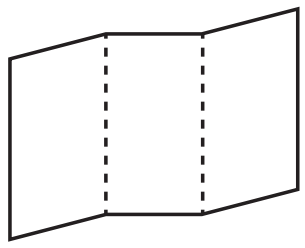
⑥ Threaded protection cover (pre-install) x 2



⑦ Power supply adapter (5V/2A) x 1



⑧ User manual x 1

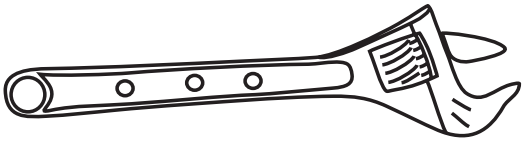


Installation

1. Water Pipe Installation

>>> Prepare tools

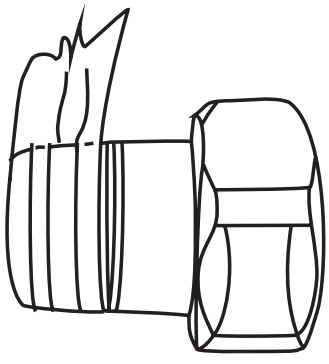
Adjustable wrench



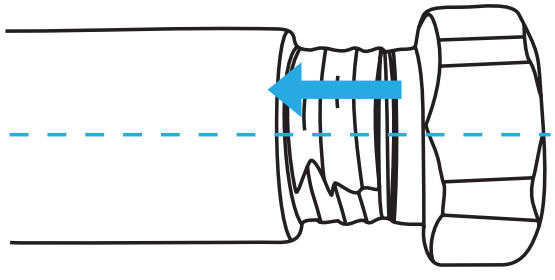
Hex keys

>>> Installation steps

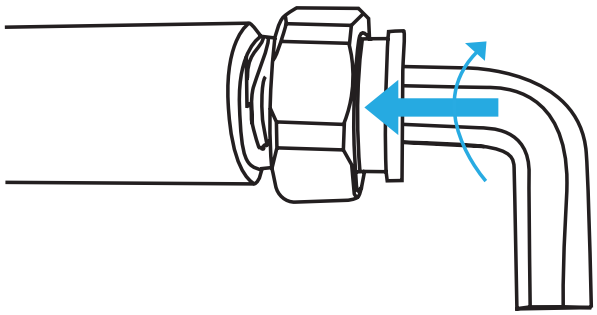
① Wrap the connector with sealing tape



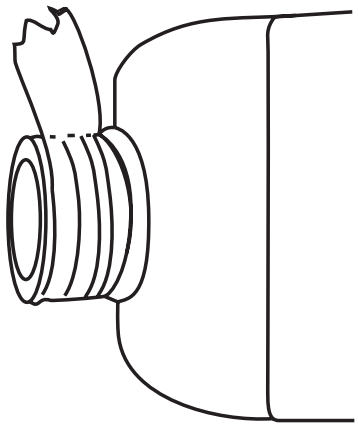
② Connect the connector to the main water supply line



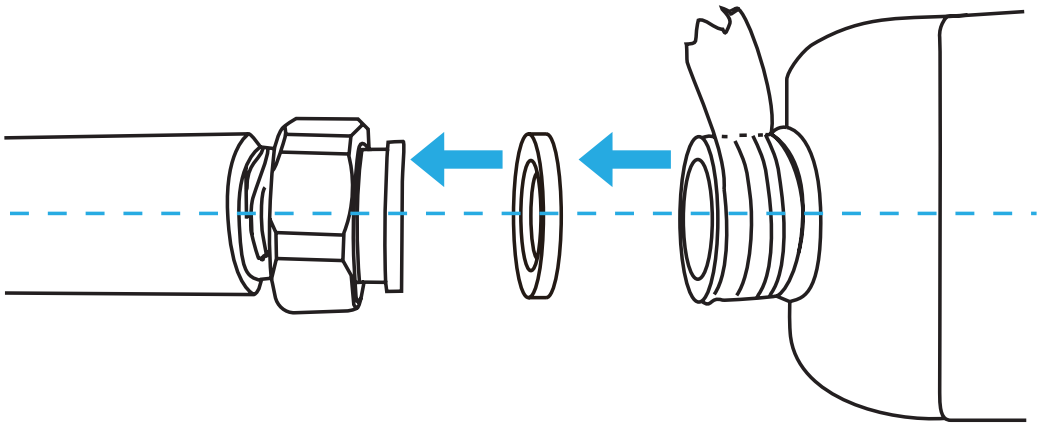
③ Tighten the connector with the hex keys



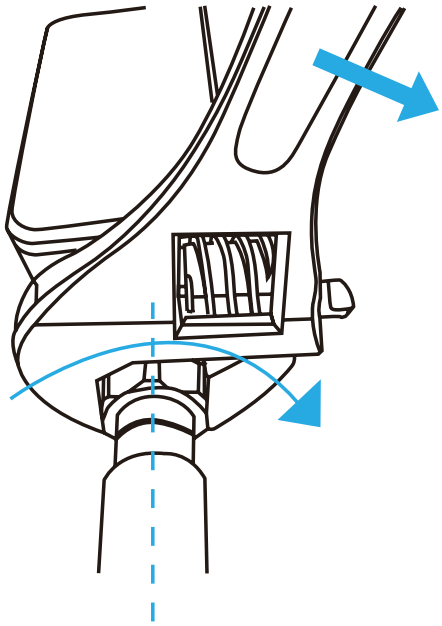
④ Wrap water valve copper pipe with sealing tape



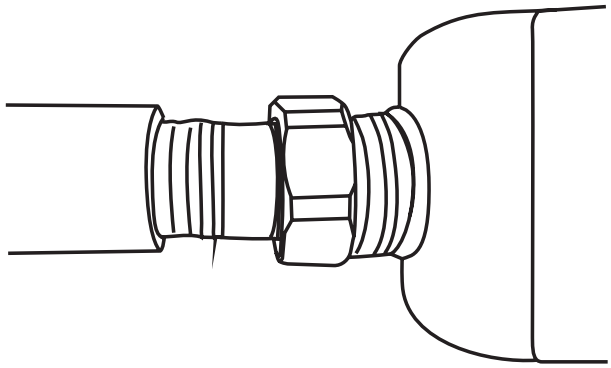
⑤ Put the spacer into the connector, and then dock the water valve copper pipe



⑥ Tighten the adapter nuts with the wrench



⑦ Single-sided installation completed

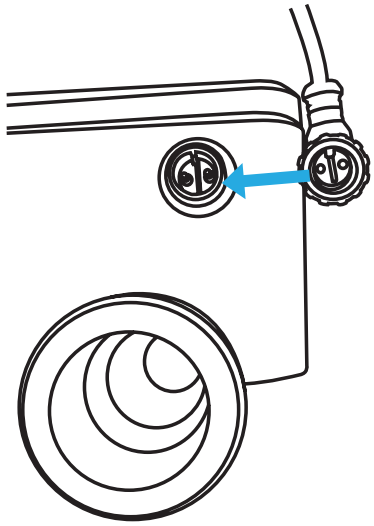


⑧ Install the other side of the water valve using the same method

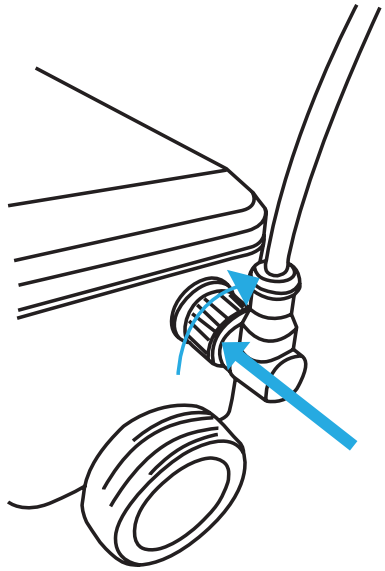
2. Power Installation

① Pay attention to the power concave-convex groove during connecting to the power.
② Align the interface, press the power supply firmly and rotate the nut clockwise.
③ Turn on the power supply, installation finished.

Step 1. Check the power supply interface slot



Step 2. Align at the interface and press firmly



Step 3. Turn the nut clockwise

Notes:

(1) The lowest detection temperature of water temperature is-10°C. When the water temperature is lower than 0°C, the water valve cannot be shut on/off.

(2) When installing the water valve, be sure to wrap the waterproof tape to prevent water leakage.

(3) Suggested installation location: the indoor main water inlet.

Specifications

Power supply: DC 5V/2A

Maximum working current: 800mA

Standby power consumption: 0.3W

Valve on / off time: 12 seconds

Valve diameter: DN25 1 inch pipe, DN20 3/4 inch pipe

Water temperature detection range: -10~65°C (14-149 °F)

Water temperature detection accuracy: ± 0.5°C (0.9 °F)

Water pressure range: 0~200 PSI

Water pressure detection accuracy: ±1KPa

Accuracy of water flow detection: 0.1gal

Wireless frequency: 2.412~2.483GHz / 5.18~5.85GHz

Wireless standard: IEEE 802.11a/b/g/n; IEEE 802.11a/11n/11ac

Bluetooth version: Bluetooth 5.0

Wi-Fi distance: 45M

Spiral pitch: 14 NPS

Waterproof level: IPX7

Size: 195mm x 78mm x 102mm

Working temperature: 1 ~ 65°C (34-149 °F)

Working humidity: 1 ~ 95% RH

LED State

Device state	Indicator status
Bluetooth mode / Smart Wi-Fi / AP compatible mode	The indicator light flashes once every 2 seconds
Water valve switch status	Water valve switch indicator light is flashing (Green:on / red: off)
Reset	Press the reset button for 6s, the reset button indicator will flash slowly (device is waiting for configuration)

Tip: The device can be powered by the power bank.

Reset button indicator:

When the device power on ,the default indicator is flashing blue slowly (pairing mode);

If the indicator is abnormal, please press the resetting button for 6 seconds to forcibly reset into pairing mode.

Get Started

Download APP

Download the "AWTOS" app from

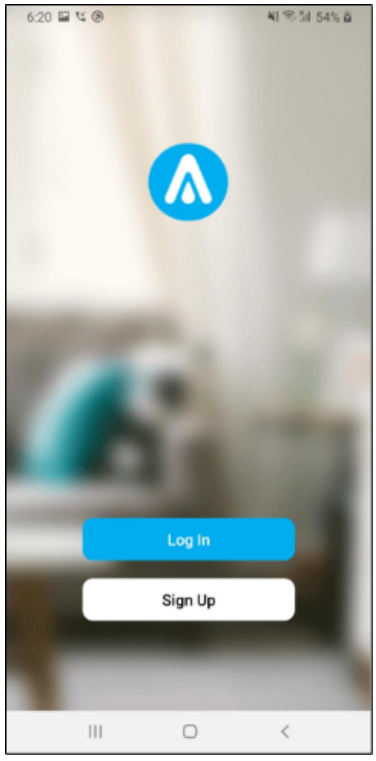
APP Store or Google Play to your mobile.

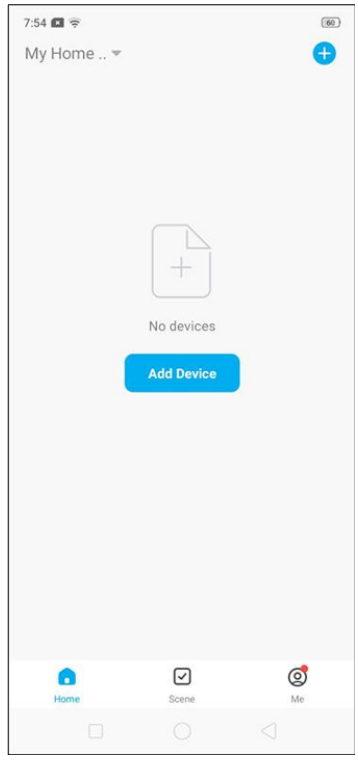
Available on the APP Store

Available on the Google Play

Register and Login

1. Run“AWTOS”application from your smartphone.
2. Register and login.

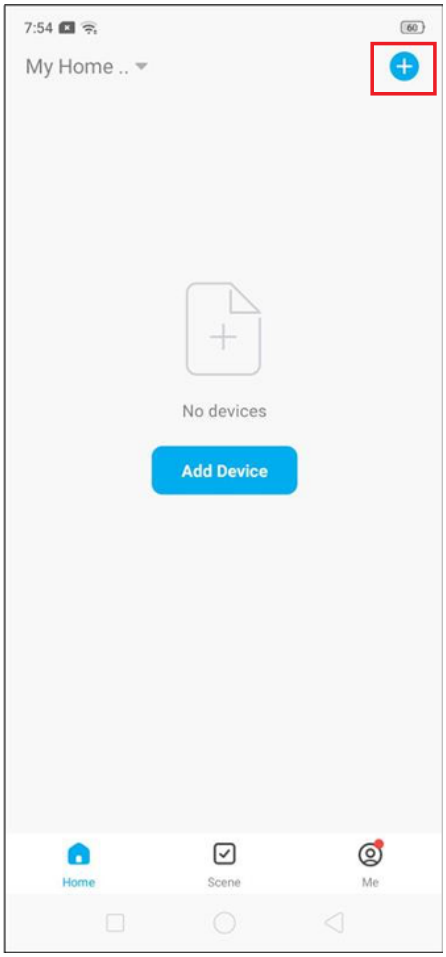


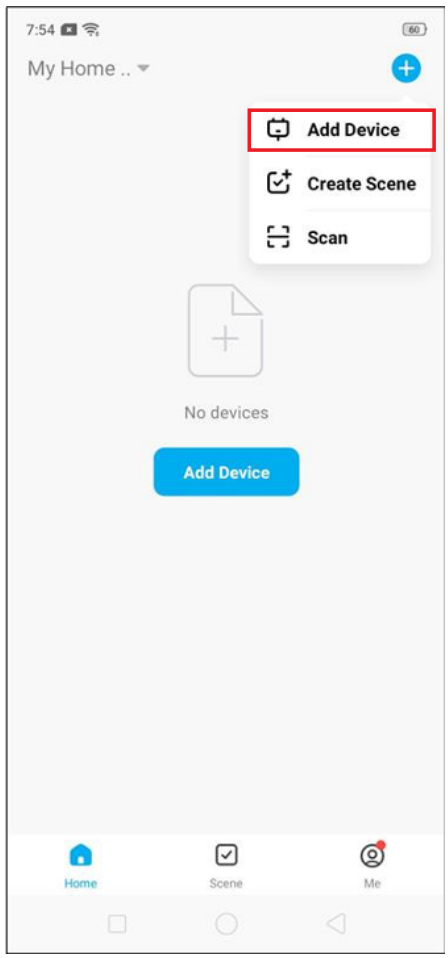


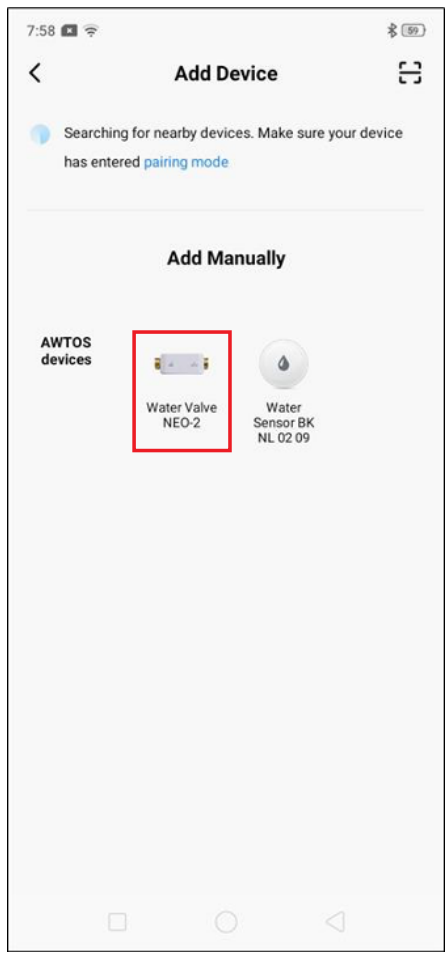
Add Device

By default, the device is in pairing mode (slow flash); if the reset button is not on, press the reset button for 6 seconds and then add the device.

1. Select the right device type to configure

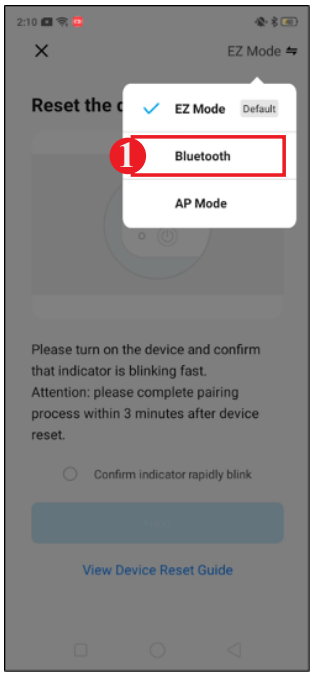


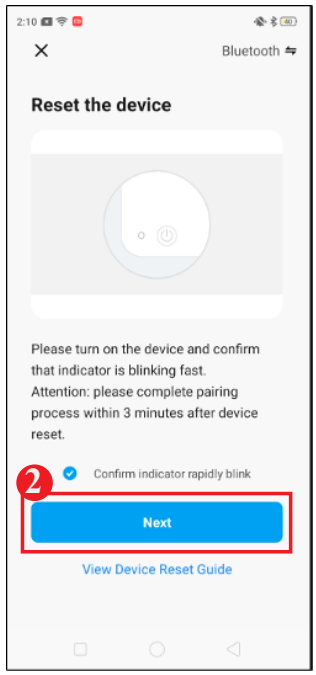


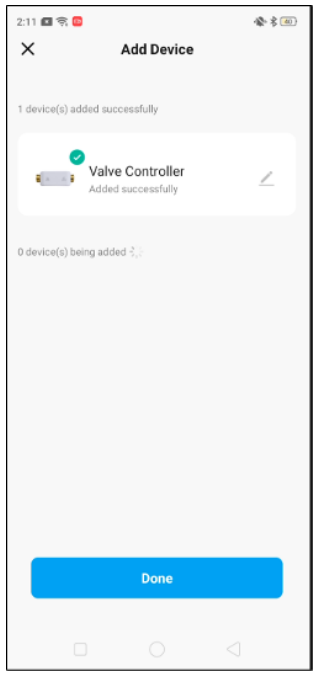


2. Bluetooth pairing(suggested)

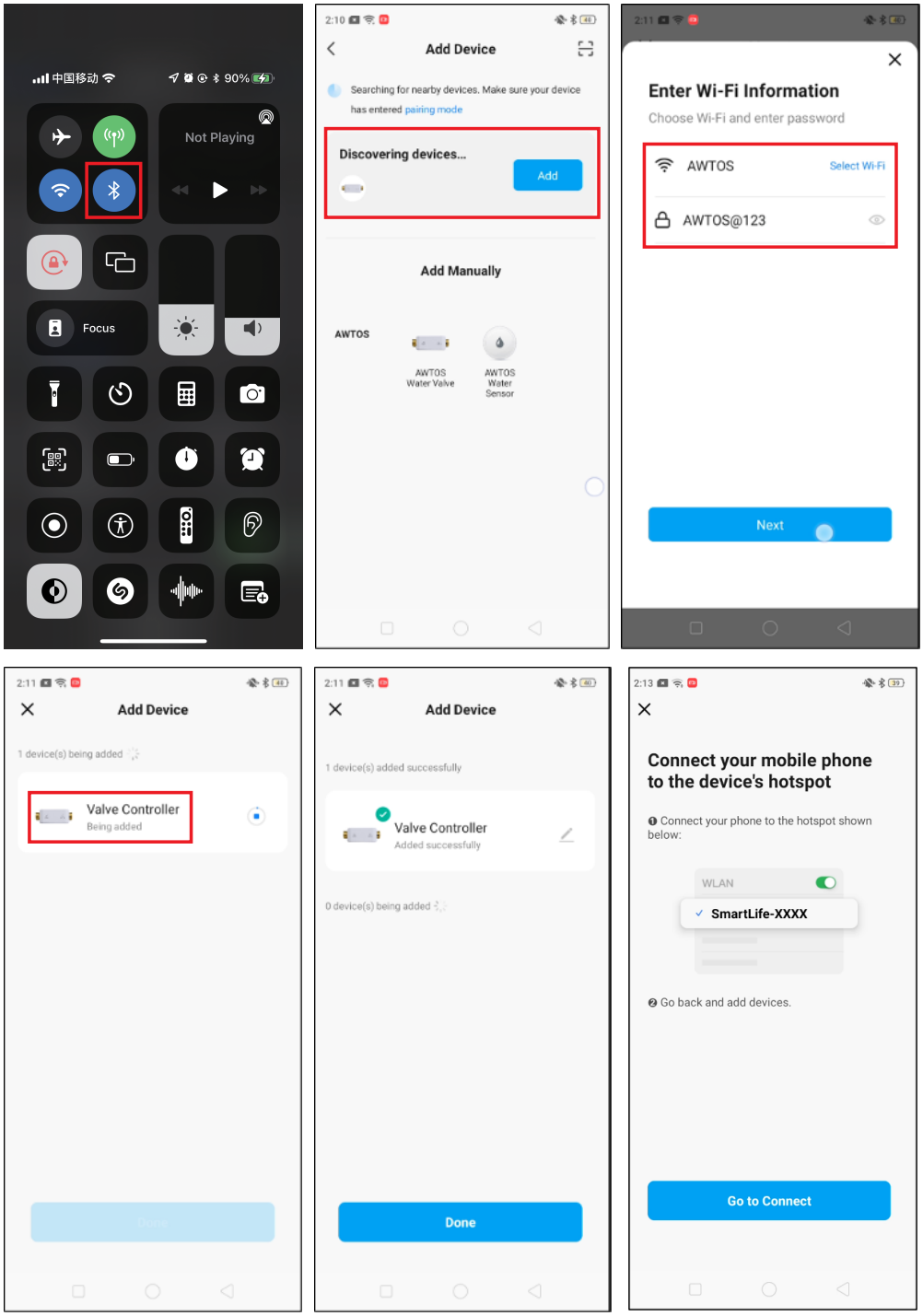
Method 1: Active Bluetooth in Mobile phone to add the device through Bluetooth mode (the standby mode can be added with Bluetooth)





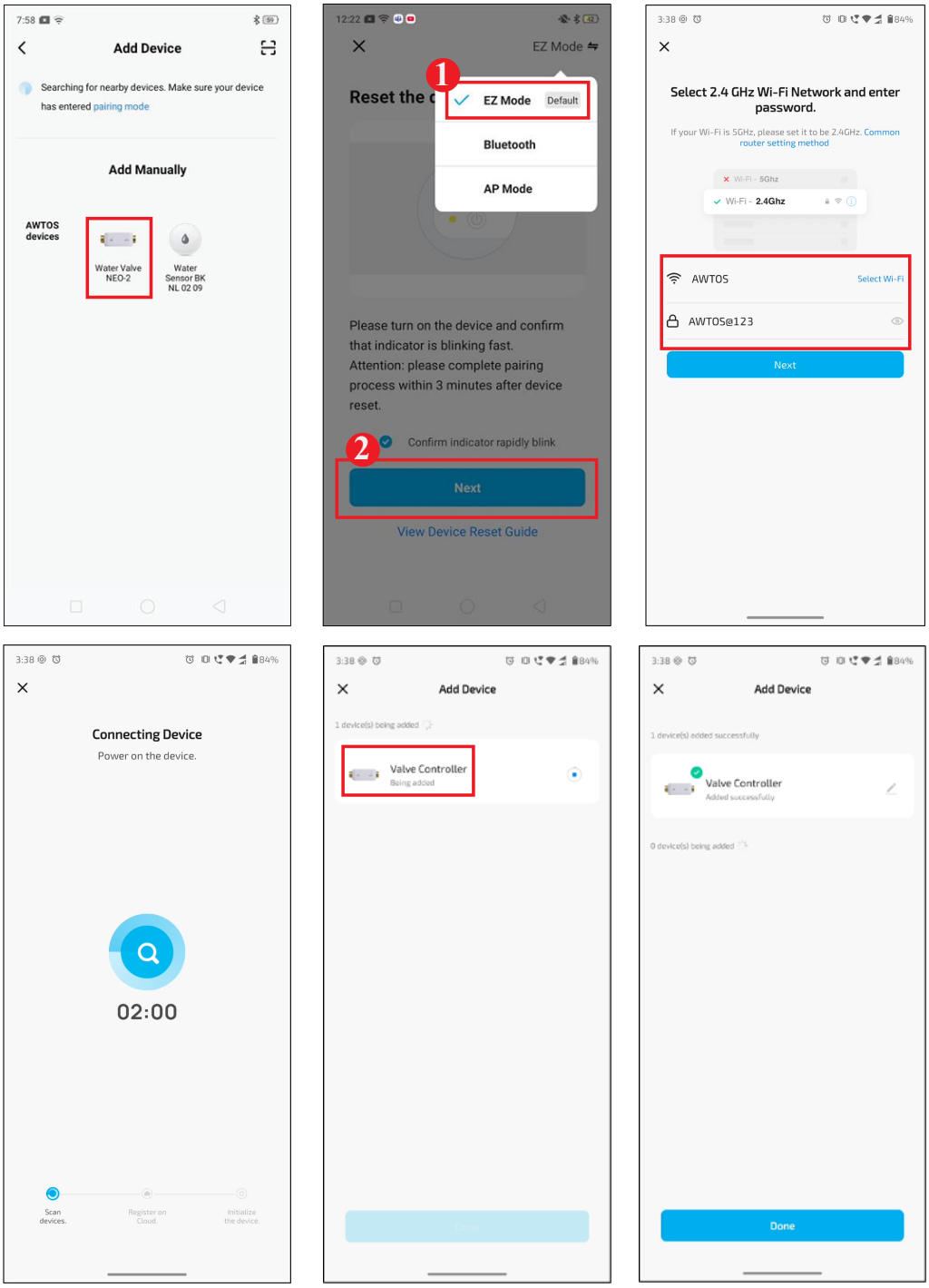


Method 2: After activating Bluetooth, enter the APP interface, the device will be automatically searched by Bluetooth, and then click “Add”.



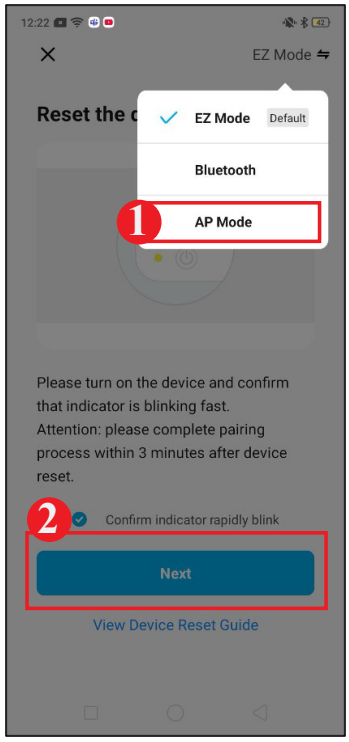
3. EZ Mode

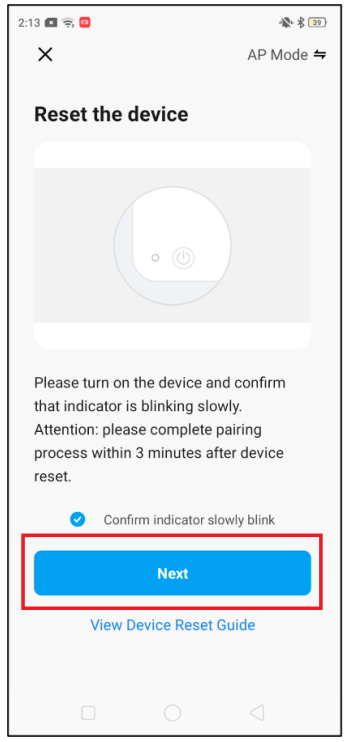
Press the reset button until the device flashes slowly (pairing mode) and add (follow the APP tips).

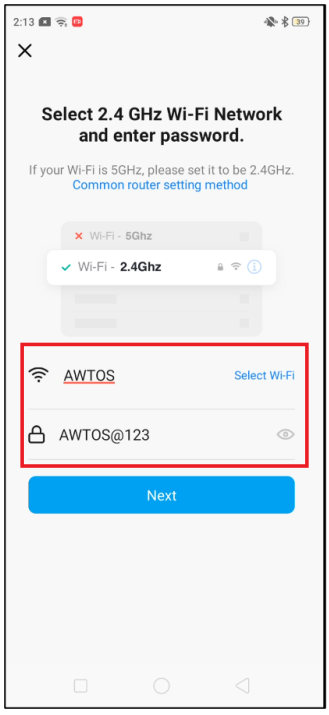


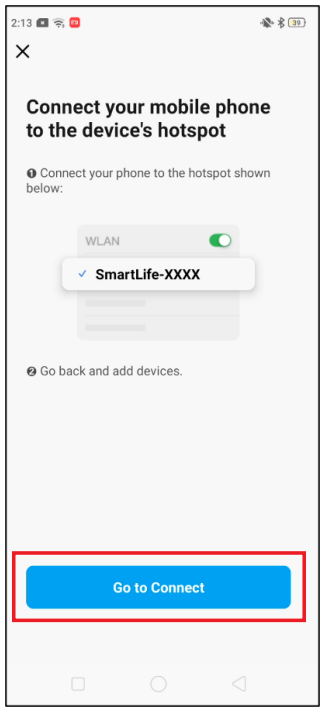
4. AP compatible mode pairing

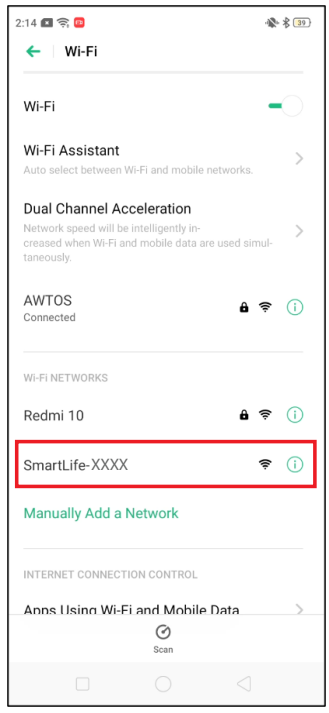
Press the reset key until the device flashes slowly (pairing mode) and add (follow the APP tips)

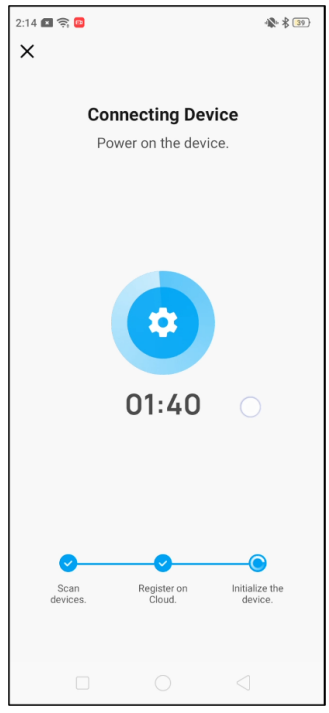












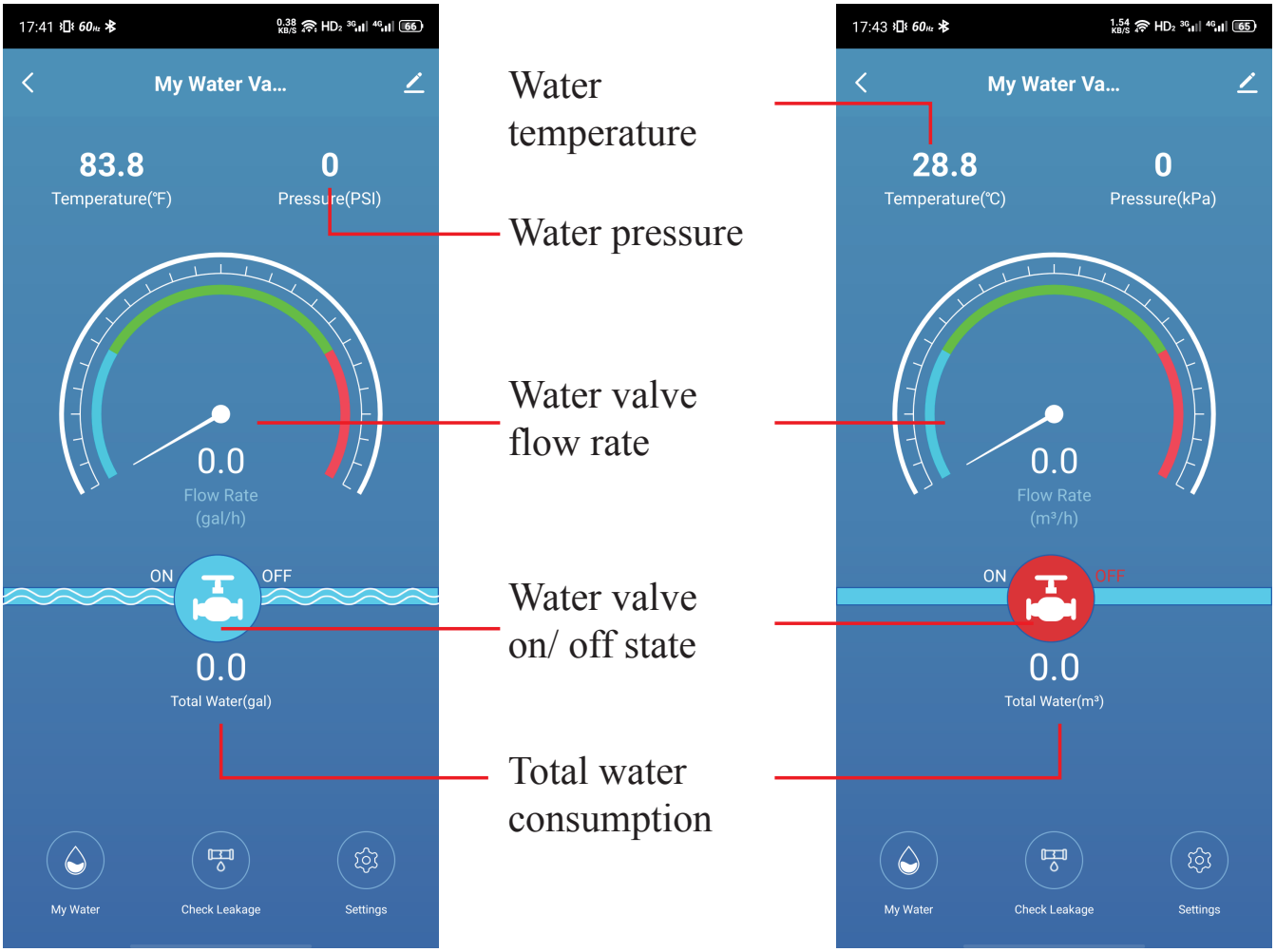
Functions and Settings

Main functions, working status and record Settings

1. APP main interface

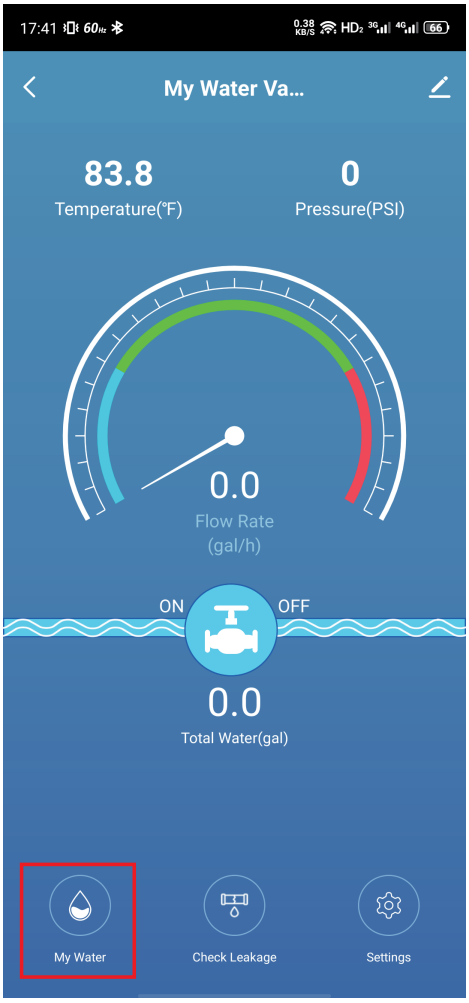
Water valve ON

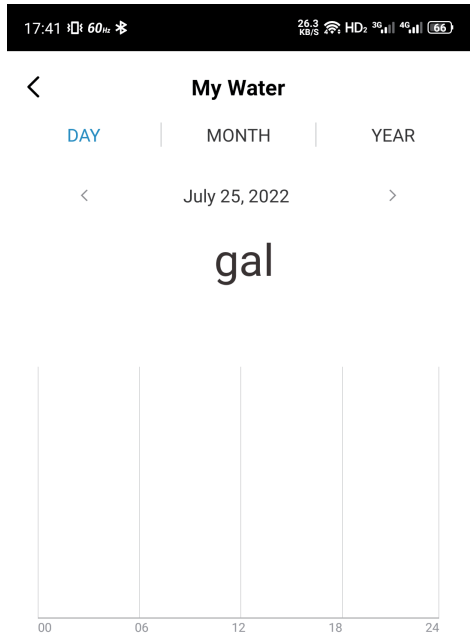
Water valve OFF



2. Historical record

You can check the records of water consumption, water pressure and water temperature of day, month and year; the water consumption is reported once per hour.

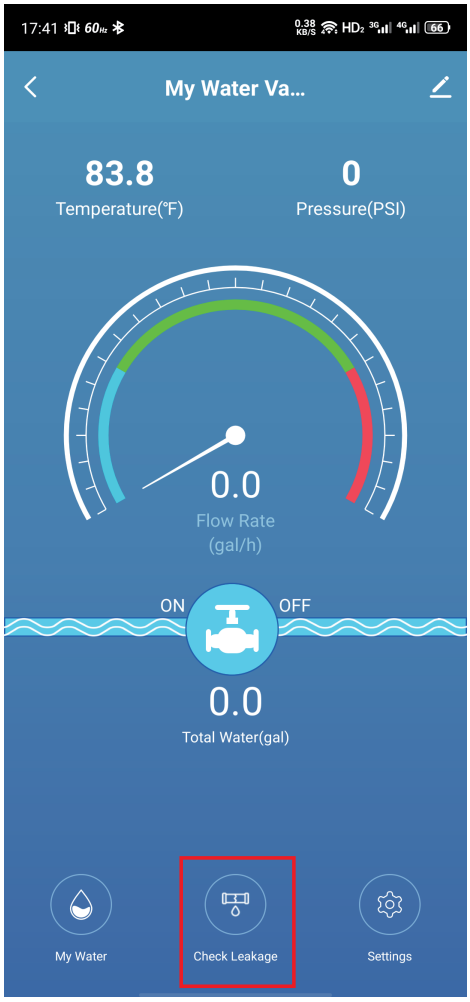


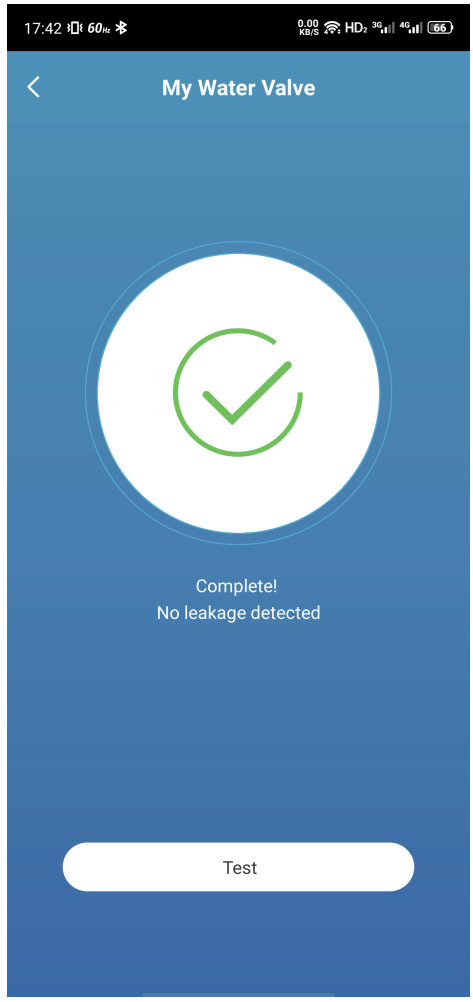


3. Water leakage self-inspection

One key to check the leakage ,if detected the leakage, it will be reported immediately;

Water leakage detection can only be used when the valve is opened without flow rate.

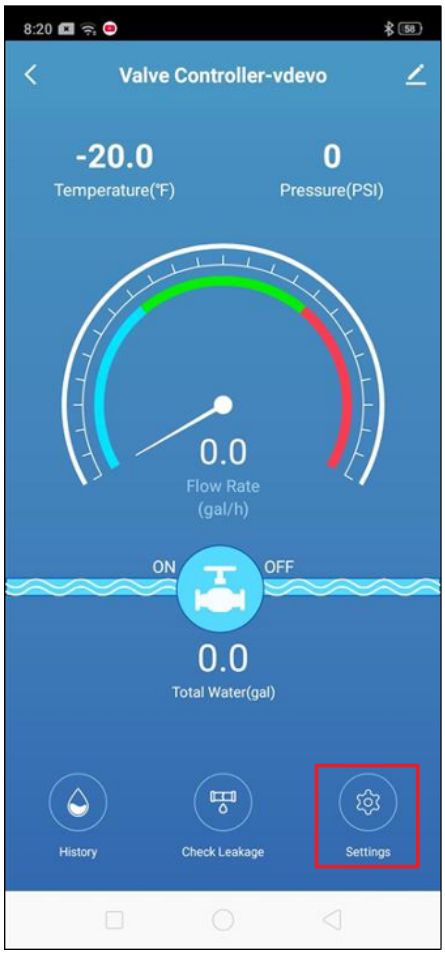


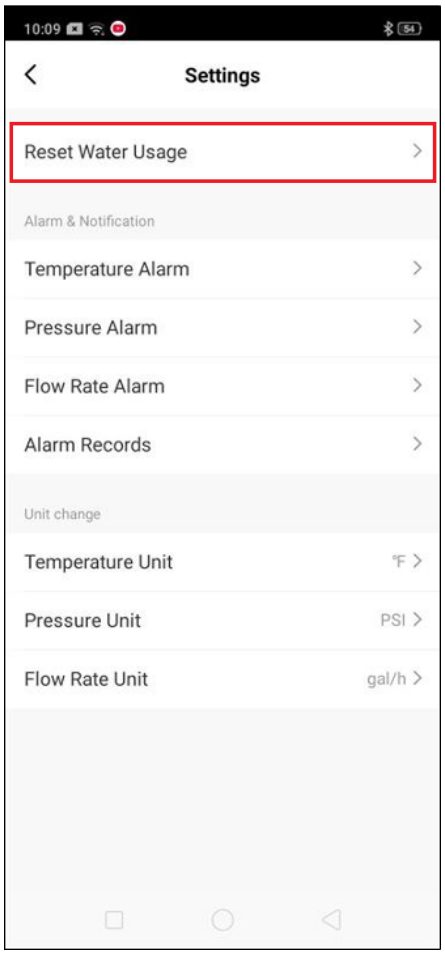


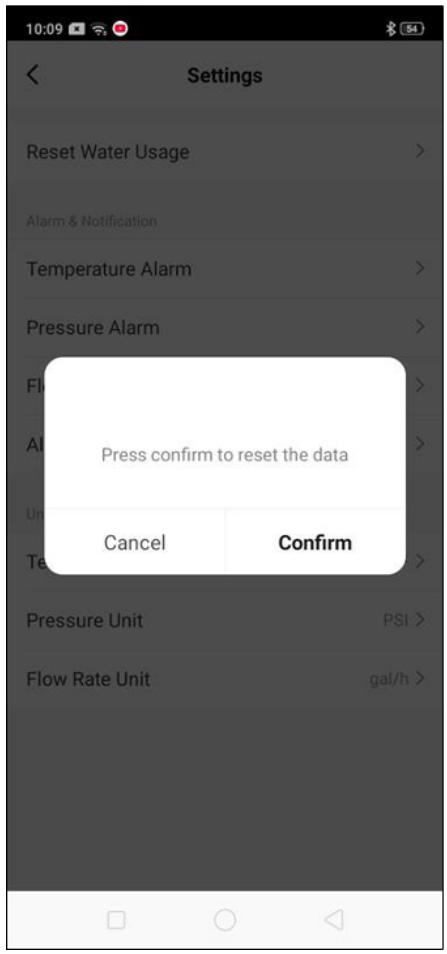
4. Alarm/display settings

(1) Water consumption reset switch

clear the total water consumption

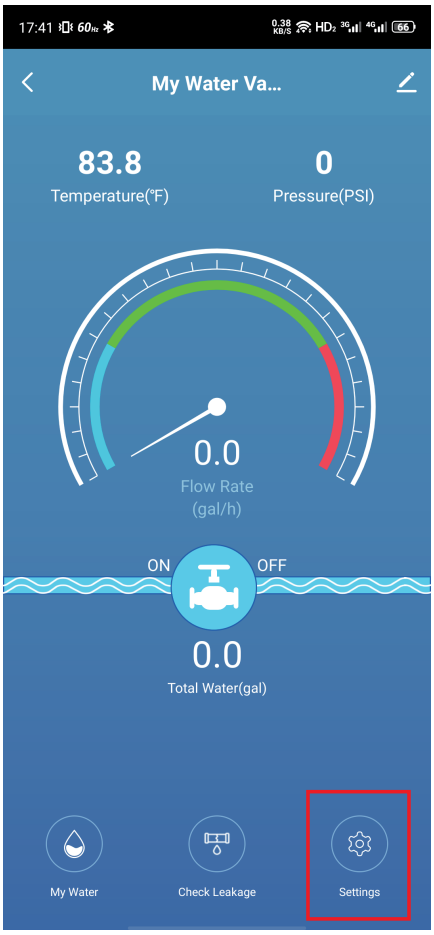


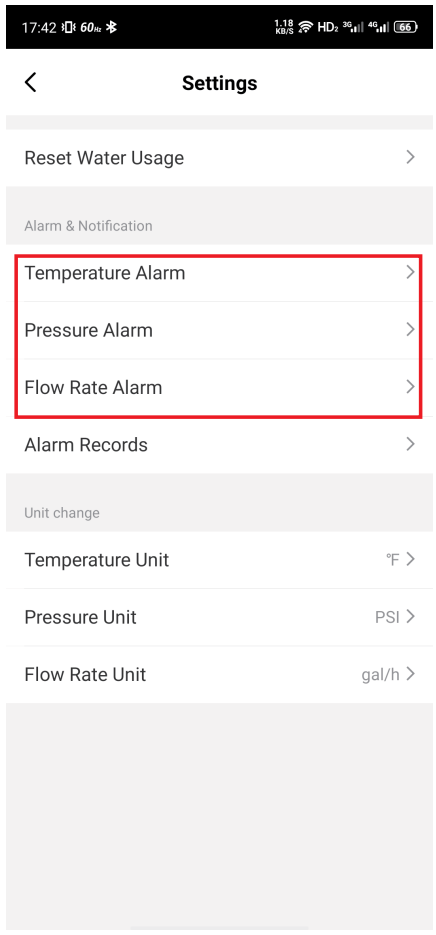




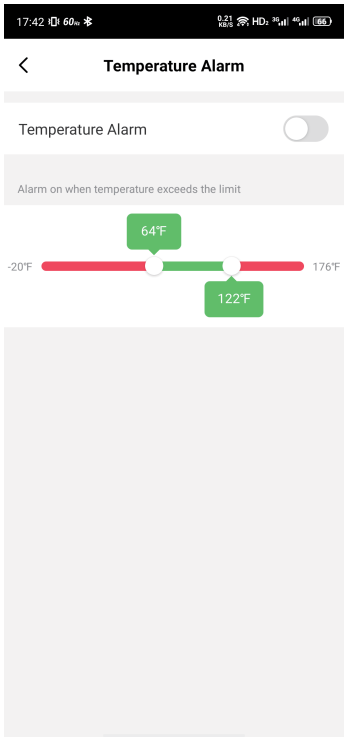
(2) Water temperature alarm, pressure alarm and flow rate alarm

The alarm switch can be turned on or off





Temperature alarm

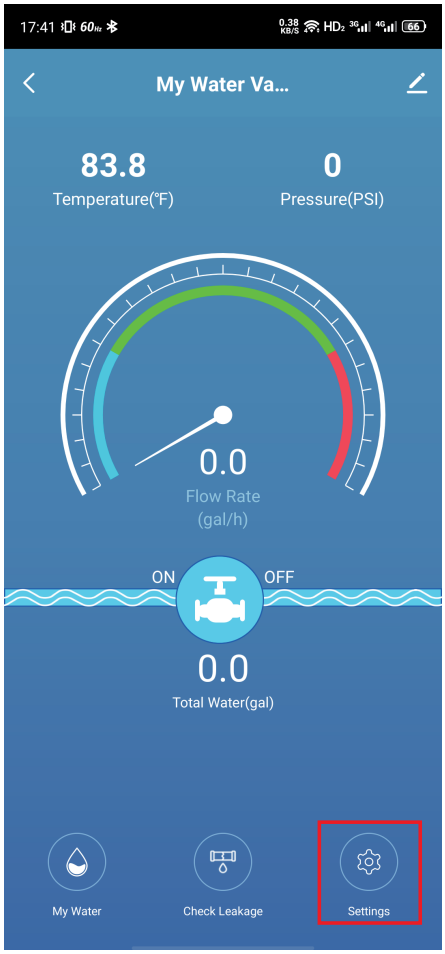


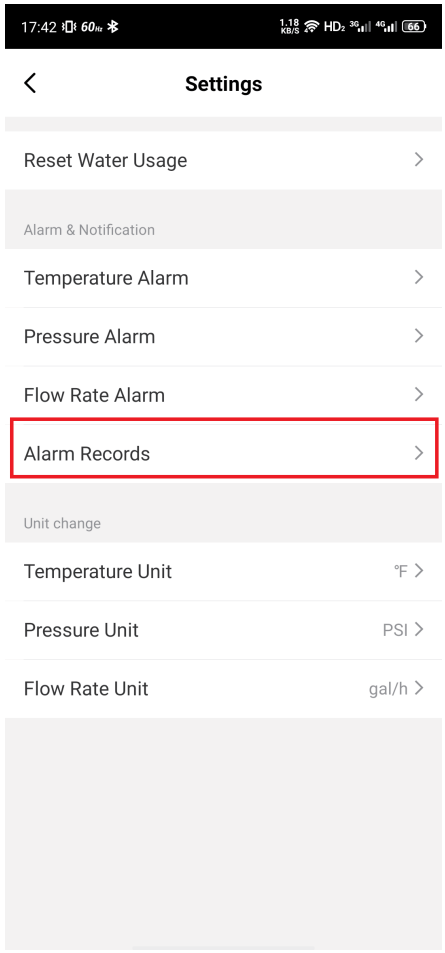
Water pressure alarm

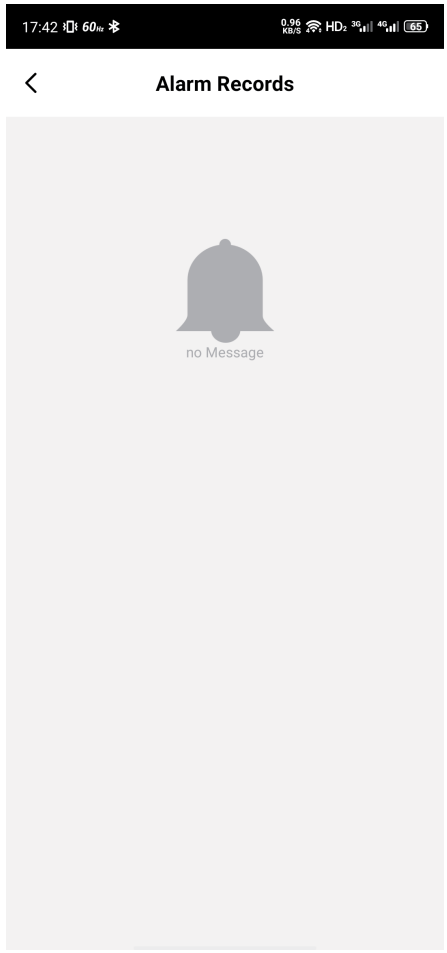
Flow rate alarm

(3) Alarm record

Water temperature, pressure, water consumption and water leakage alarm.

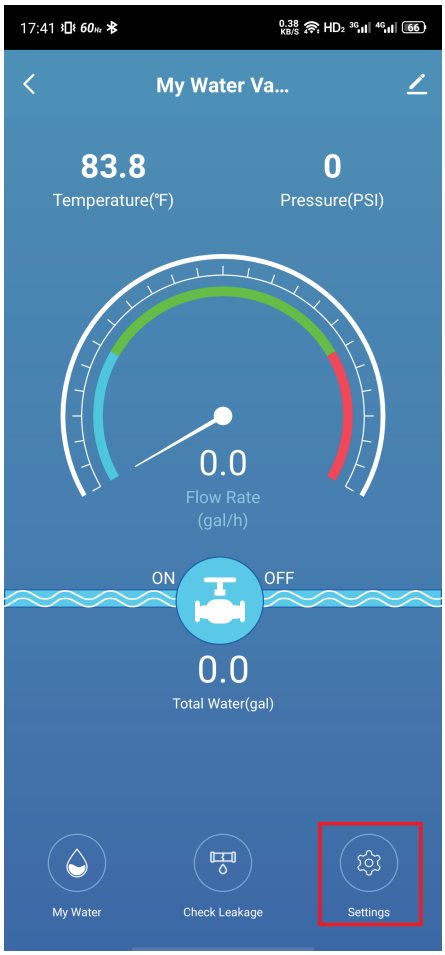


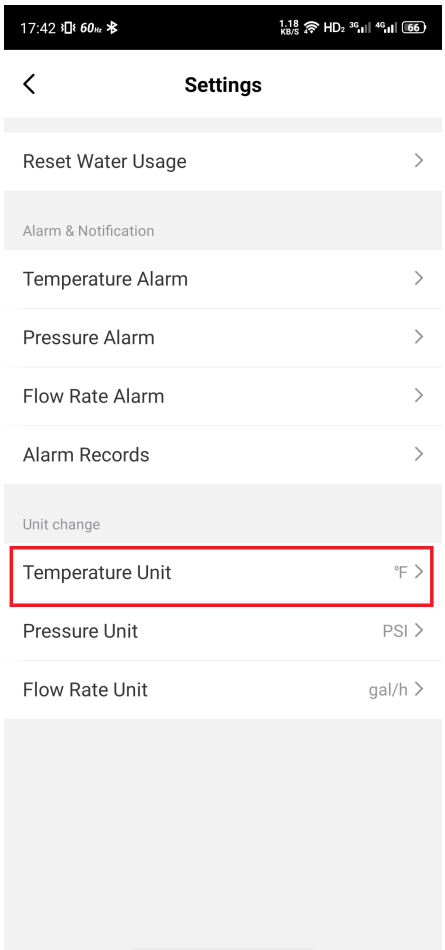


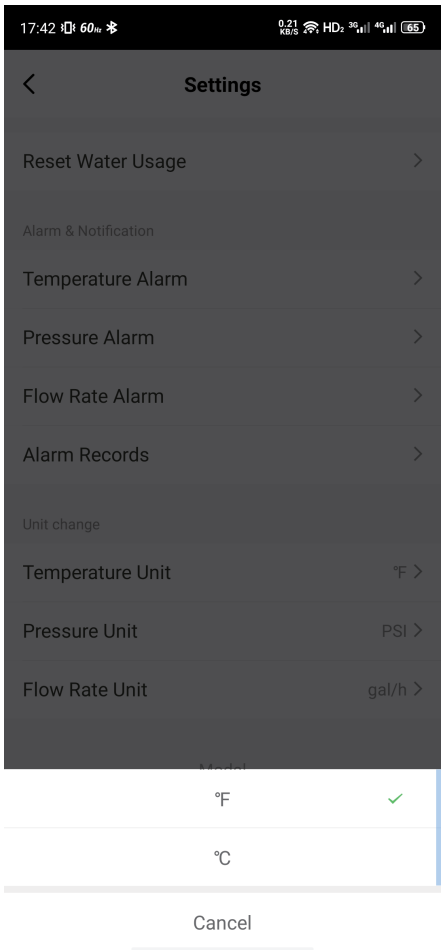


5. Temperature, pressure, flow unit setting

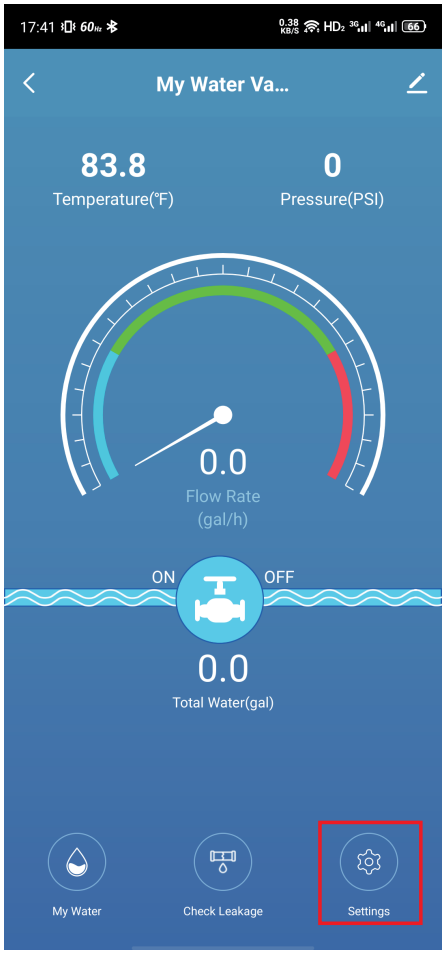
(1) Temperature unit settings ("°C" and "°F")

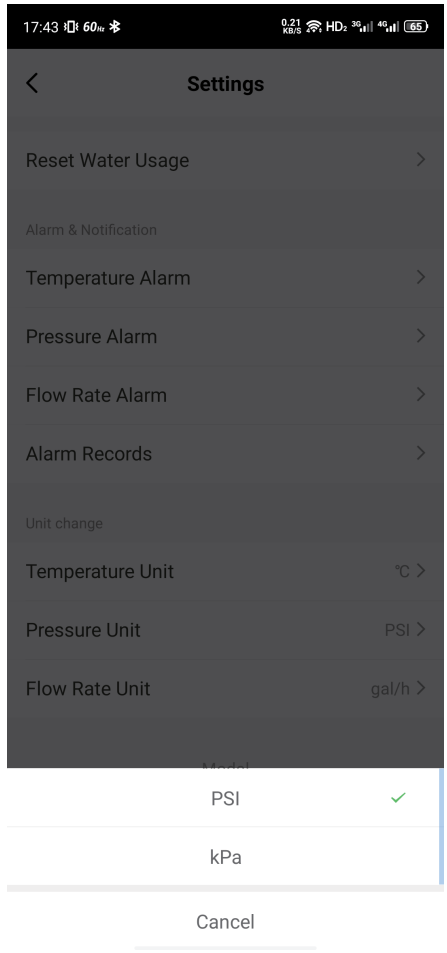




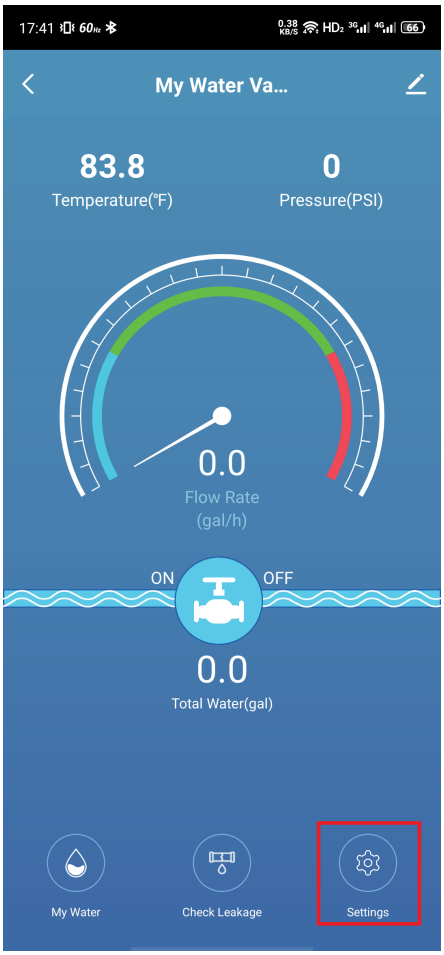


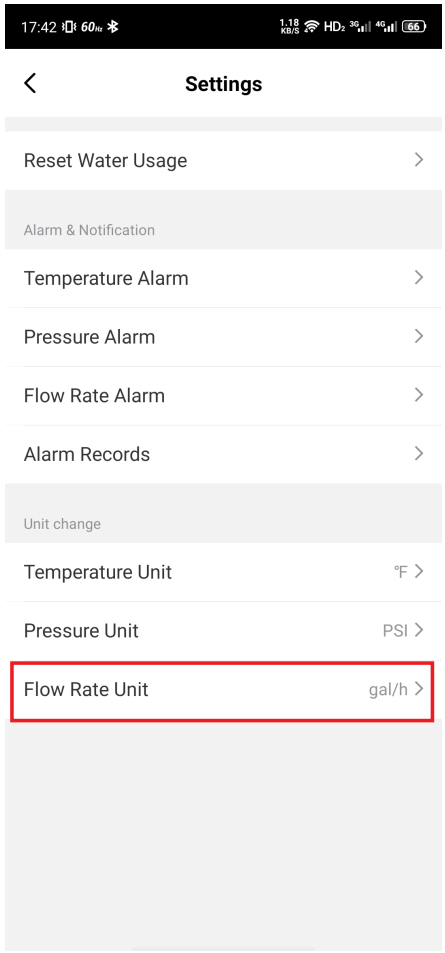
(2) Pressure unit setting ("PSI" and "kPa")

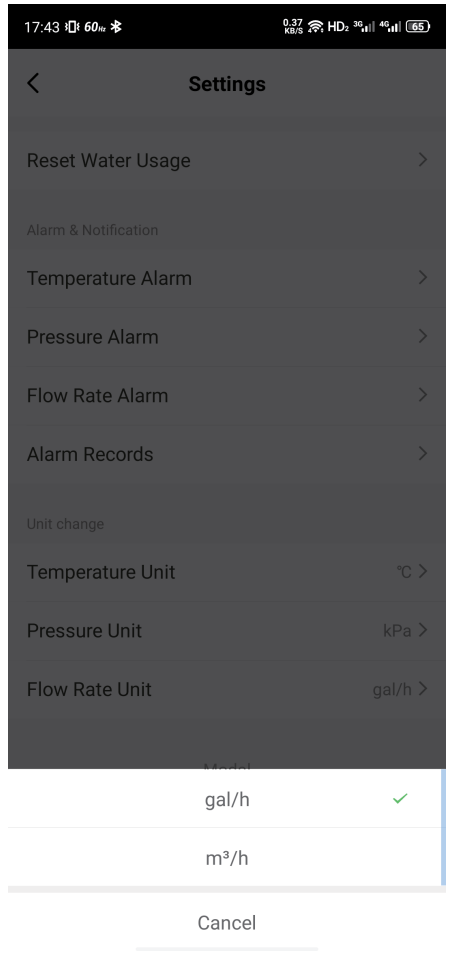




(3) Flow unit setting ("gal / h" and "m³ / h")



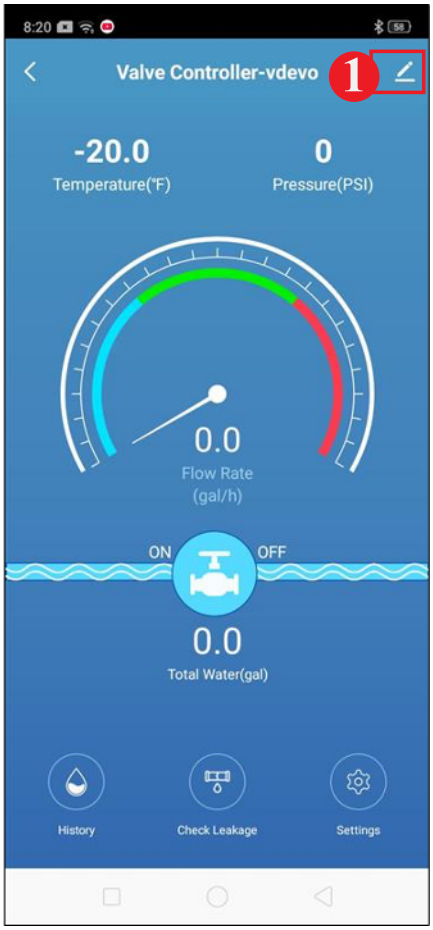


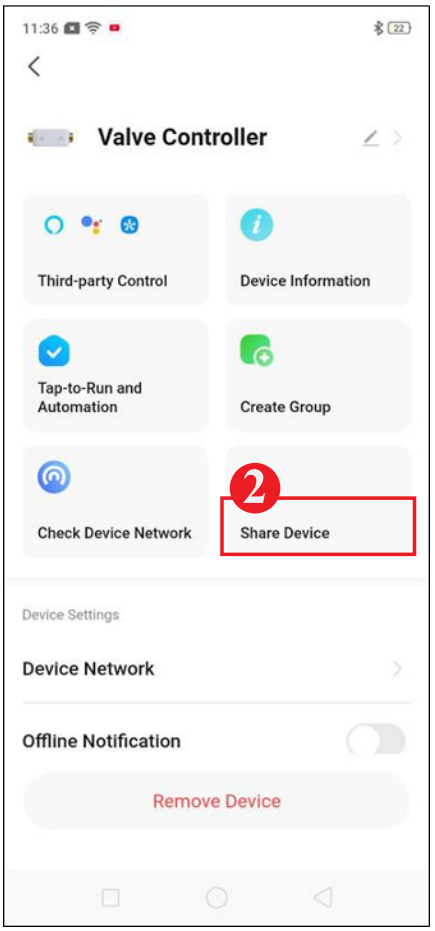


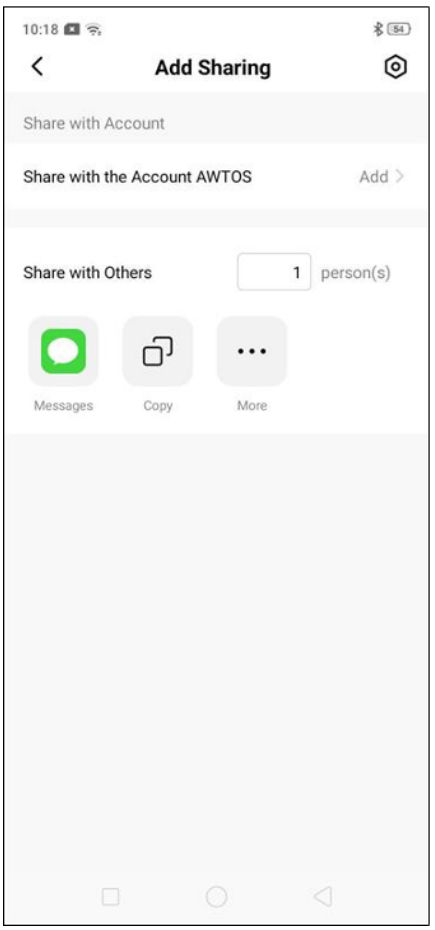
Other Function

1. Share device

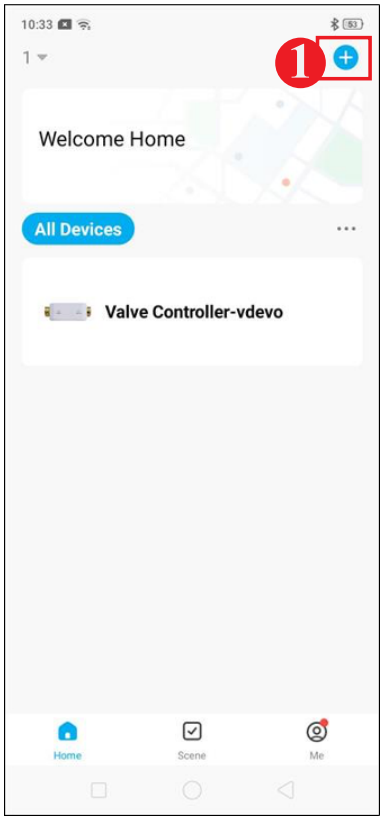
(1) Single device sharing.

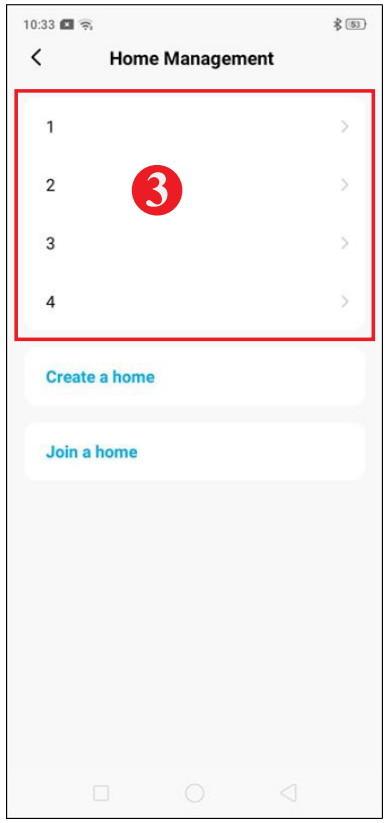


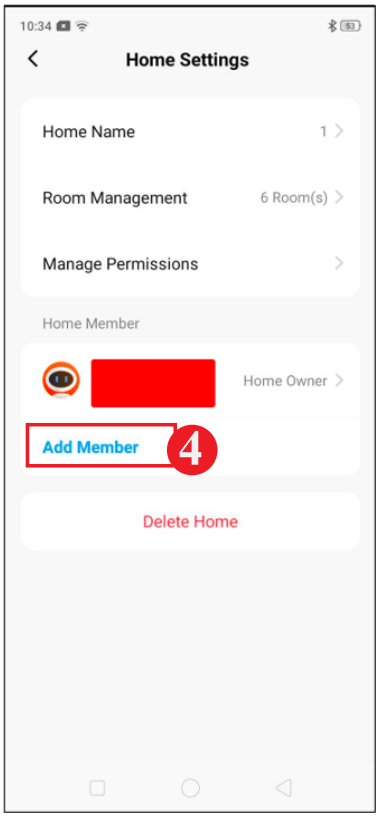


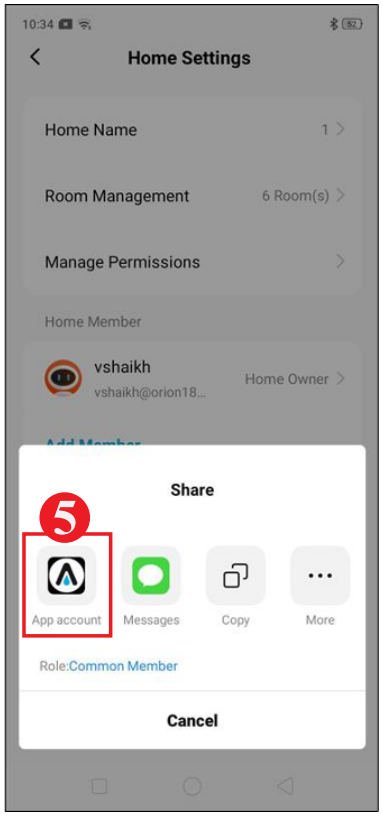


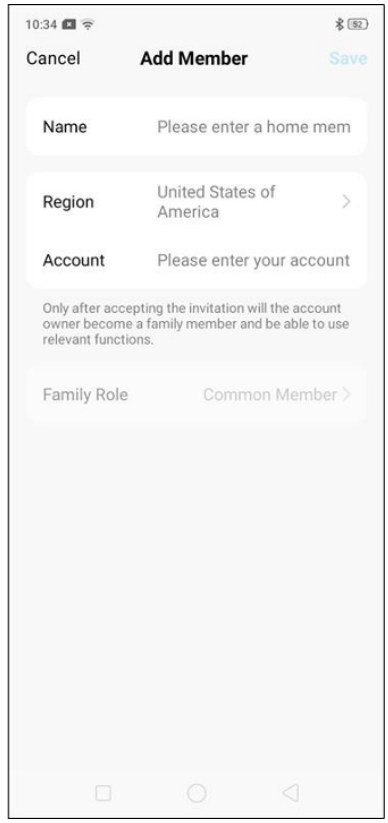
(2) Family group sharing





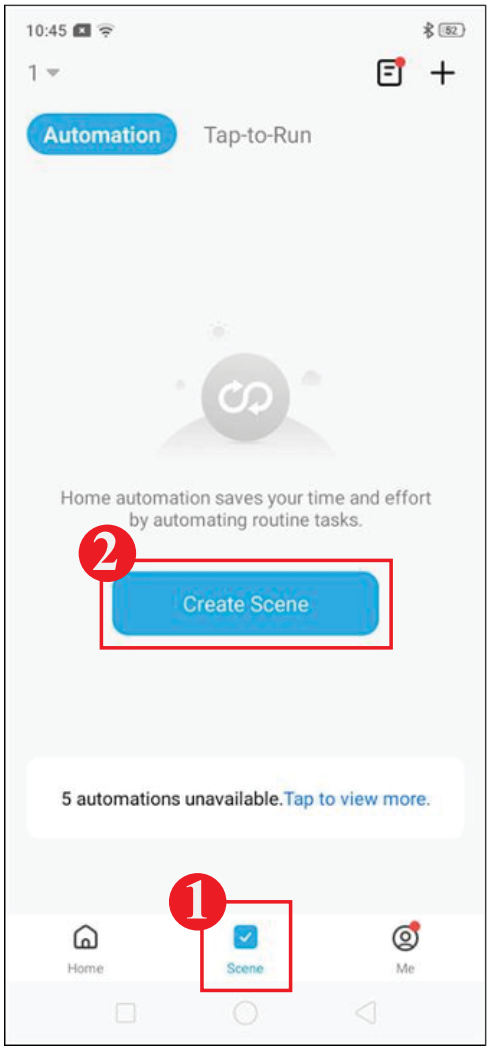


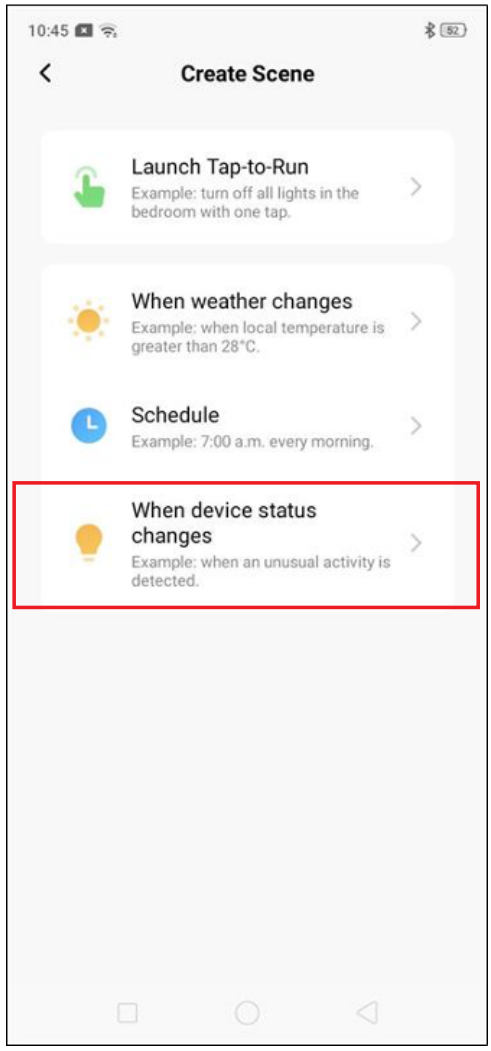


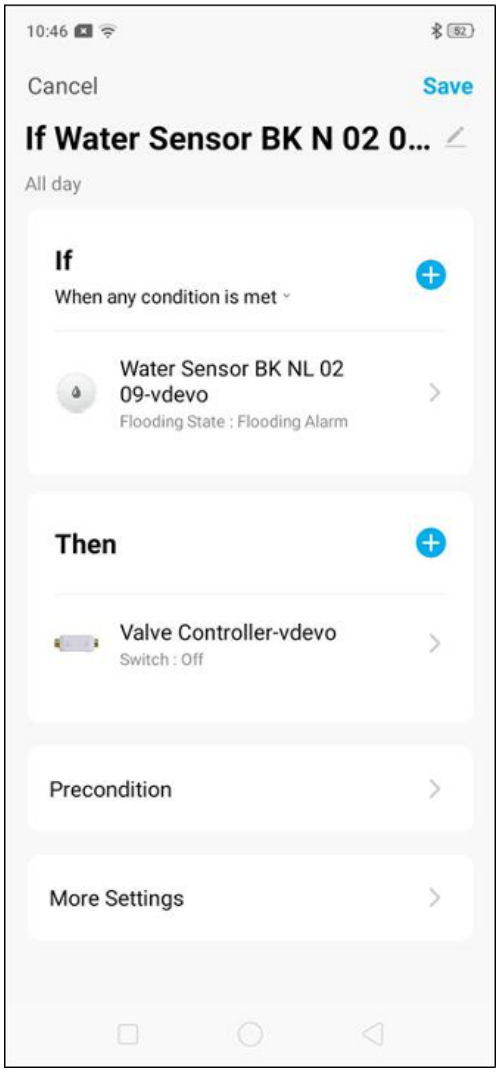


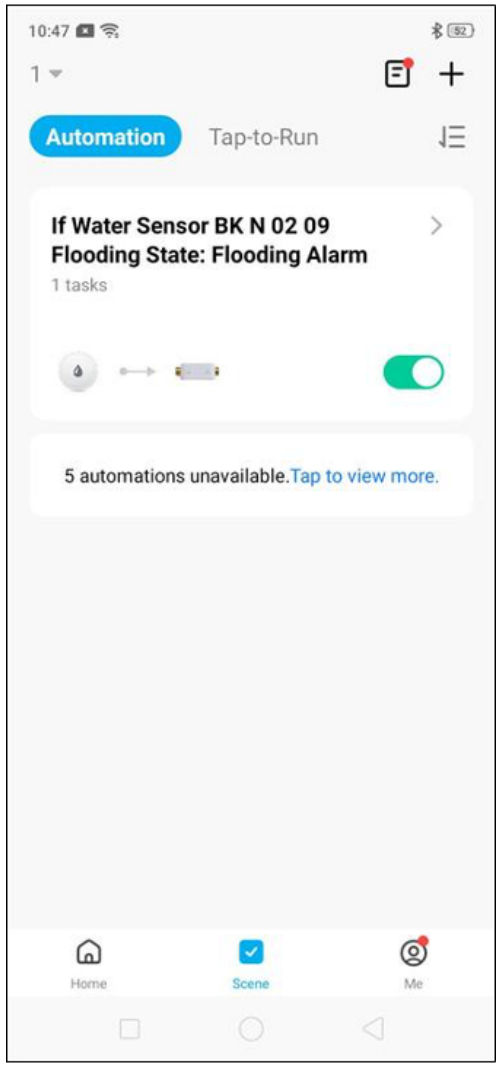
2. Product Linkage

For example: linkage setting with water sensor,when the water sensor detects water leakage,water valve will be shut off automatically.



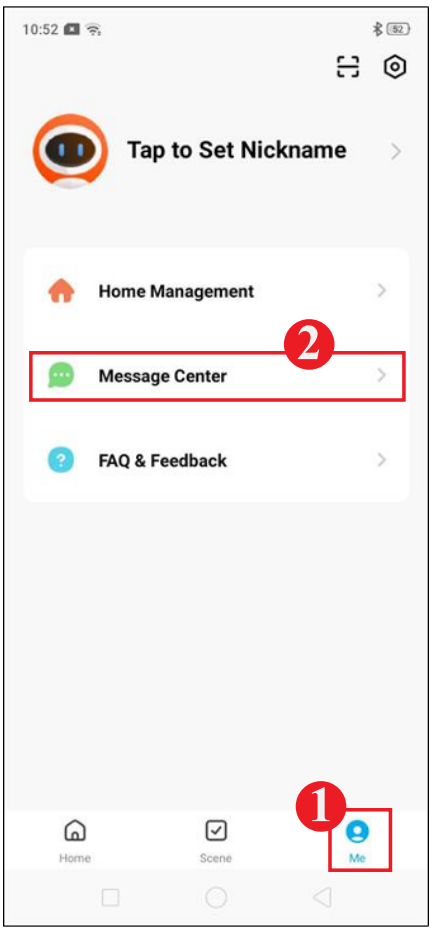


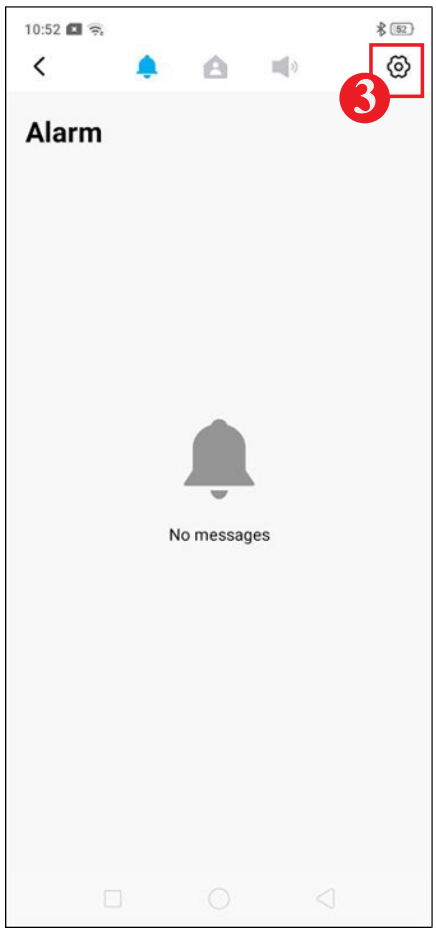

10:46
Cancel
Save
If Water Sensor BK N 02 0...
All day
If
When any condition is met
Water Sensor BK NL 02 09-vdevo
Flooding State : Flooding Alarm
Then
Valve Controller-vdevo
Switch : Off
Precondition
More Settings

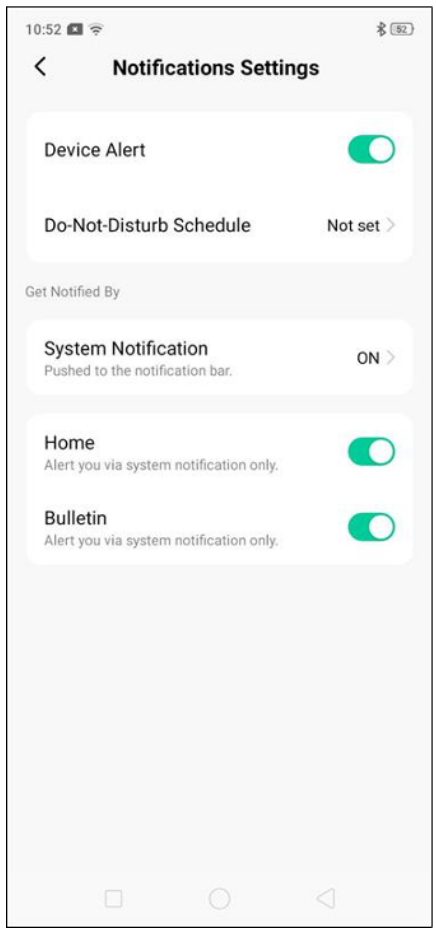

10:47
1
Automation
Tap-to-Run
If Water Sensor BK N 02 09 Flooding State: Flooding Alarm
1 tasks
5 automations unavailable.Tap to view more.
Home
Scene
Me

3. Push notification management

APP push notification:Turn off the switch, all devices in APP can not receive the push notification, but all alarm messages still can be checked in the message center.

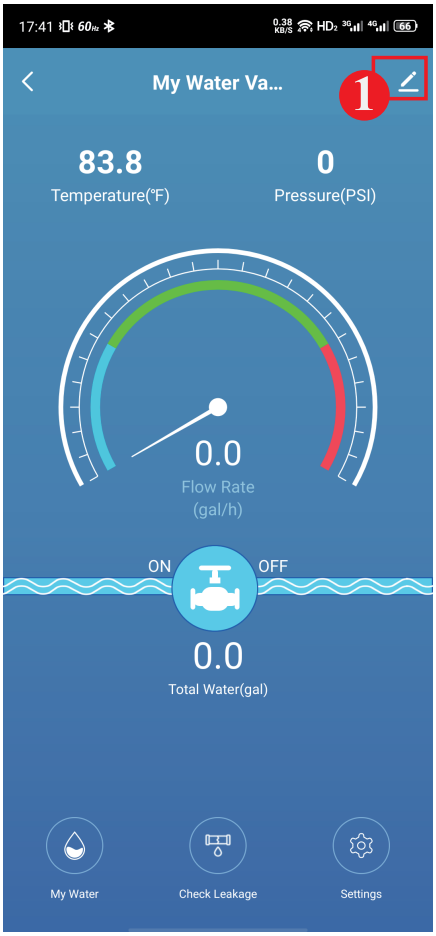


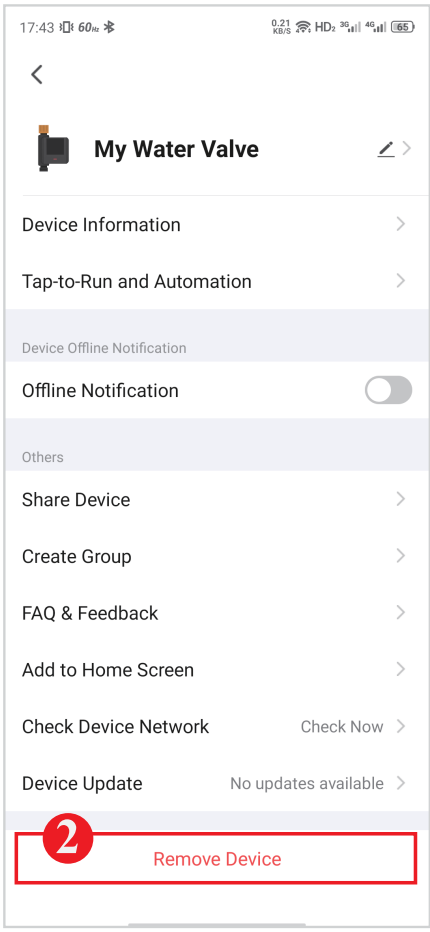


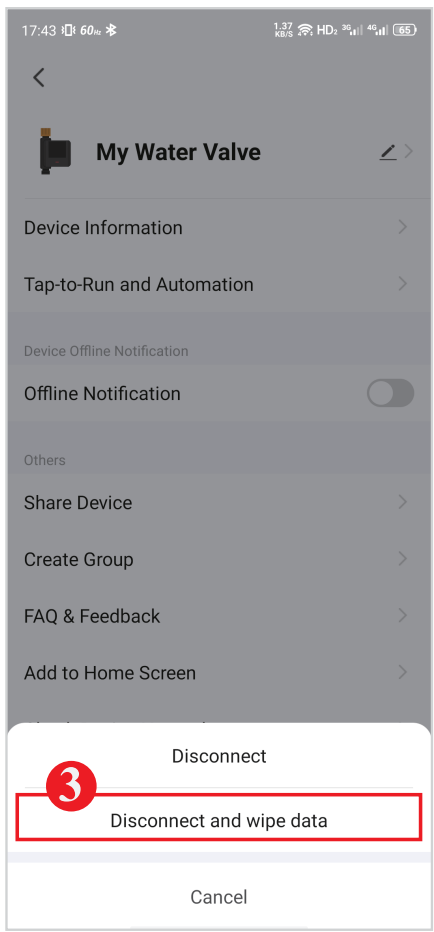


4. Clear the records

Remove Device from app. Disconnect and wipe date.







Due to the app update, the above interface is for reference only

Protecting Your Home, One Drop at a Time

Certified to NSF/ANSI 61-G & 372