

User Instruction

Wi-Fi Smart Water Valve Core



1.Product Overview

The Wi-Fi Smart Water Valve is designed to help protect properties from water damage and provide remote control of the water supply. Through the MysmarH mobile app, users can monitor and control the valve from anywhere.

When used with compatible leak sensors, the valve can automatically shut off the water supply when a leak is detected, helping minimize the risk of costly water damage.

Typical applications include:

- Single-family homes
- Condominiums and apartments
- Vacation and seasonal properties
- Rental properties
- Small commercial buildings

2. Main Features

- Remote water shut-off and restoration through the MysmarH App
- Real-time valve status monitoring
- Wi-Fi communication (2.4GHz)
- Automatic leak protection when paired with leak sensors
- Local manual operation using the valve buttons
- Valve status indication through LED indicators
- Compact design for easy installation
- Corrosion-resistant brass valve body
- IP68 waterproof actuator enclosure

3.Safety Information / WARNINGS

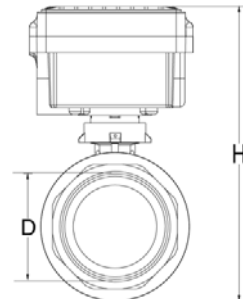
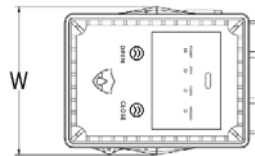
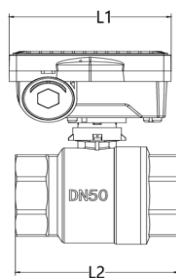
- This valve is intended for potable water systems only.
- Disconnect power before servicing.
- Do not install near open flames or heat sources.
- Do not disassemble the actuator.
- Indoor use only unless otherwise specified.

□ **Installation should be performed by qualified personnel and in accordance with local plumbing and electrical codes.**

4. Package Contents

- Smart Water Valve x 1
- Power Adapter 5V DC x 1
- User Manual x1

5. Product Dimensions



Model	Overall Length L1 (mm)	Valve Body Length L2 (mm)	Width W(mm)	Height H(mm)	Connection Size D(inch)
WVC-3/4	109.85	68.5	87.25	129.5	NPT 3/4"
WVC-1	109.85	74.5	87.25	134.5	NPT 1"
WVC-1.5	109.85	94.2	87.25	147.5	NPT 1-1/2"
WVC-2	109.85	111	87.25	158.5	NPT 2"

6. Product Components



No.	Name	Function
1	Power Indicator	Display power status
2	Open Indicator	Display the status of the valve switch
3	Close Indicator	Display the status of the valve switch
4	Wireless Indicator	Display wireless status
5	Open Button	Open valve
6	Close Button	Close valve
7	Infrared Port	Optical data communication
8	Power Socket	Connect external 5V DC power

7.LED Indicators

LED Indicator	Status	Description
Power	Solid On	Power connected
Open	Solid On	Valve fully open
Open	Flashing	Valve opening
Close	Solid On	Valve fully closed
Close	Flashing	Valve closing
Open + Close	Solid On	Valve fault
Wi-Fi	Solid On	Connected to Wi-Fi
Wi-Fi	Flashing	Pairing mode
Wi-Fi	Off	Not connected

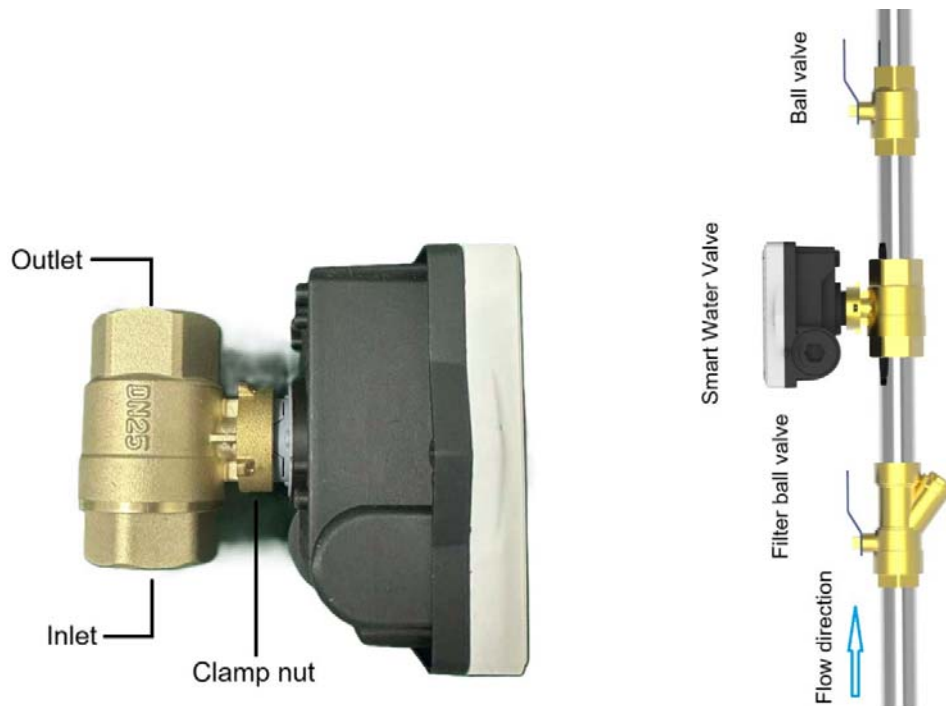
8. Installation Requirements

Before installation:

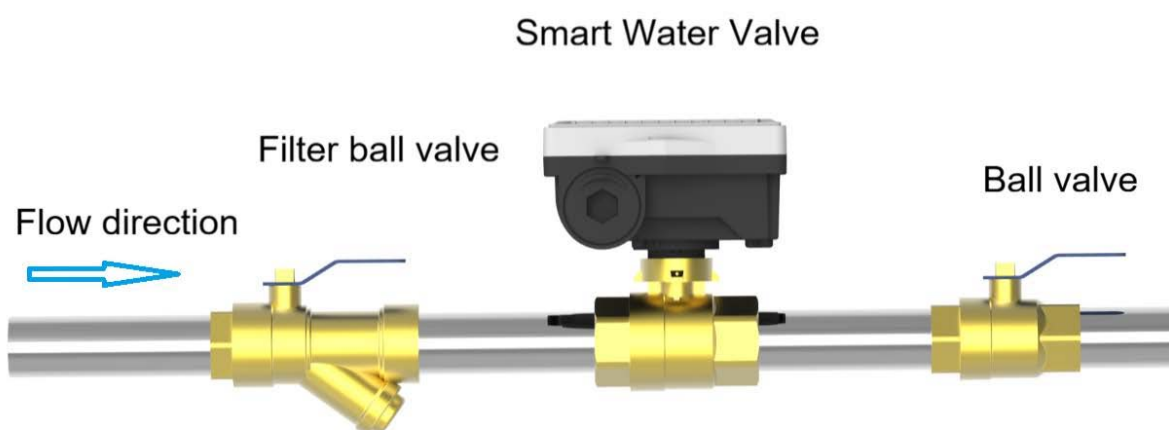
1. Install the Smart Water Valve in a dry, accessible location to allow for future inspection and maintenance.
2. Professional installation tools and appropriate fittings should be used during installation.
3. The Smart Water Valve may be installed on either the supply or return water line. Ensure that the water flow direction matches the arrow marked on the valve body.
4. The pipeline should be installed as level as possible, and sudden changes in pipe diameter should be avoided.
5. Horizontal installation is recommended for optimal performance.
6. Before installation, thoroughly flush the pipeline to remove debris and contaminants.
7. It is recommended to install a shut-off valve and sediment filter upstream of the Smart Water Valve to help prevent damage caused by debris and facilitate future maintenance.
8. After installation, perform a pressure test and inspect all connections for leaks.
9. An external 5V DC power supply is required for Wi-Fi operation. Installation should allow for proper power routing and access to a suitable power source.
10. Ensure adequate 2.4 GHz Wi-Fi signal coverage at the installation location. Avoid areas with excessive walls, metal obstructions, or sources of interference.
11. Ensure the piping is properly aligned and supported. Excessive pipe stress or misalignment may affect valve performance and service life.
12. Do not operate the Smart Water Valve or power adapter outside the specified operating temperature range.
13. For multi-story installations, adequate pipe supports and separation barriers should be provided where applicable to prevent damage caused by leaks, vibration, or falling debris.

9. Installation Instructions

Vertical Placement



Horizontal Placement



- Turn off the main water supply.
- Drain the remaining water from the pipeline.
- Cut or disconnect the pipe section where the valve will be installed.
- Install the Smart Water Valve according to the flow direction indicated on the valve body.
- Tighten all fittings and connections.
- Connect the external power supply.
- Turn on the water supply.
- Check for leaks.
- Verify valve operation.
- Complete Wi-Fi pairing.

10. Device Controls

Open the Valve

- Press and hold the **OPEN** button for more than 4 seconds until the valve begins to open.

Close the Valve

- Press and hold the **CLOSE** button for more than 4 seconds until the valve begins to close.

Enter Wi-Fi Pairing Mode

- Press and hold both the **OPEN** and **CLOSE** buttons simultaneously for more than 4 seconds.

The Wi-Fi LED will start flashing, indicating that the device has entered pairing mode.

Note:

If the valve has not been paired previously, it will automatically enter pairing mode after power-up.

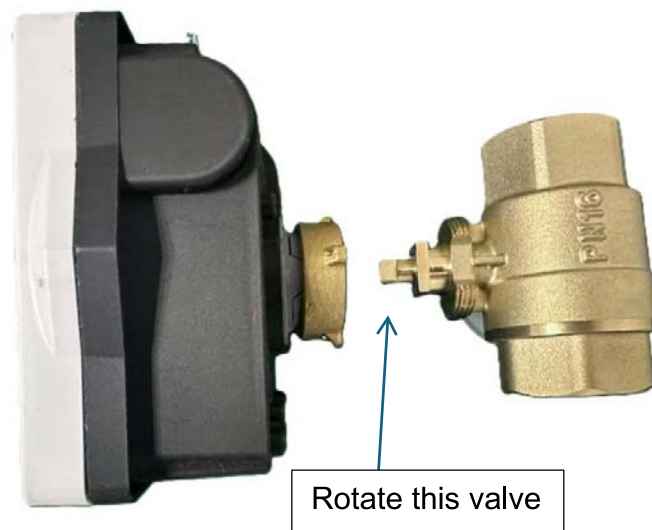
Manual Override

In the event of a power outage, the Smart Water Valve can be operated manually.

To manually operate the valve:

1. Rotate the metal clamp nut to separate the actuator housing from the valve body.
2. Remove the actuator assembly from the valve body.
3. Using a wrench or other suitable tool, rotate the valve stem on the valve body to the desired position.
4. Turn the valve stem clockwise or counterclockwise to fully open or close the valve.

Important: Manual operation should only be performed when power is disconnected. After manual operation, reinstall the actuator securely before restoring power.



11. App Setup and Wi-Fi Pairing

Step 1 – Install the Mysmarth App

Download the Mysmarth App from:

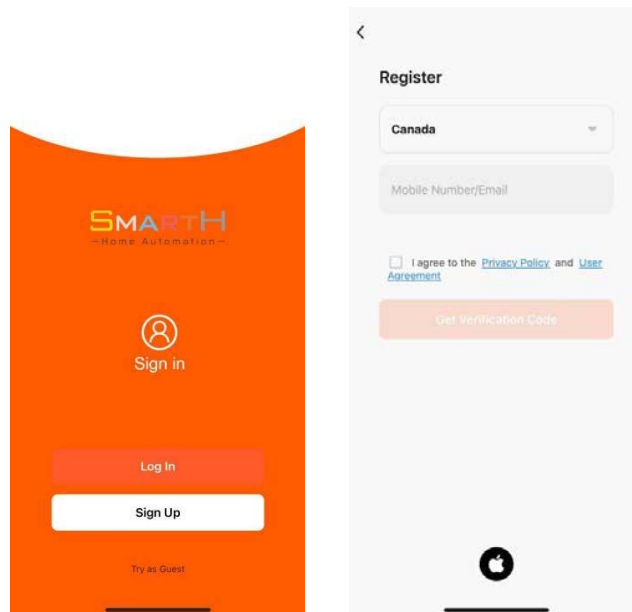
- Apple App Store
- Google Play Store

Or scan the QR code below.



Step 2 – Register an Account

1. Open the MysmarthH App.
2. Tap **Sign Up**.
3. Follow the on-screen instructions to register an account using your email address.
4. Verify your email if required.



Note: Ensure your country and region information are correct during setup. You may be prompted to allow location access. This allows the app to display local weather information. The app can still function normally even if location access is disabled.

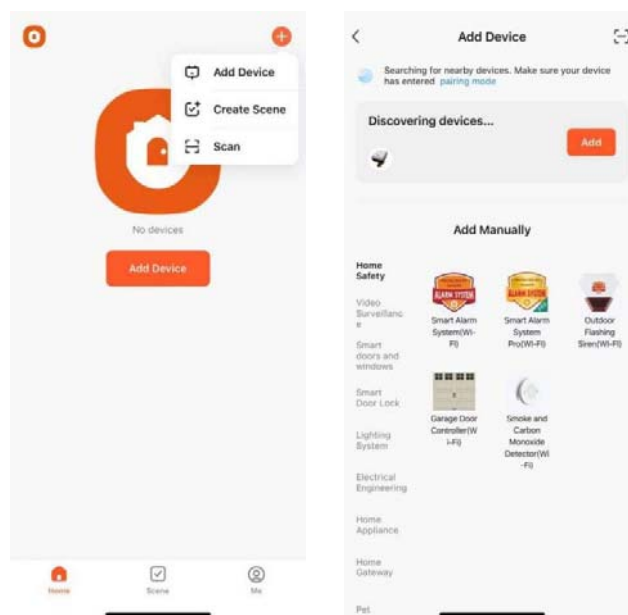
Step 3 – Put the Valve into Pairing Mode

Press and hold the OPEN and CLOSE buttons simultaneously for 4 seconds.
The Wi-Fi indicator will flash rapidly.



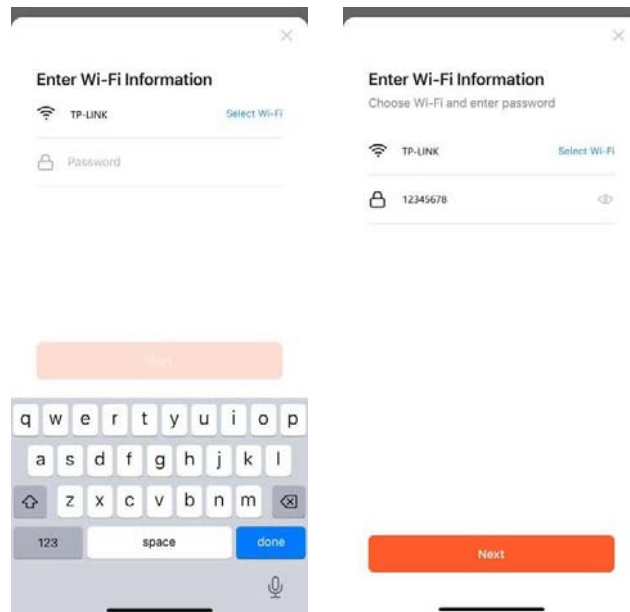
Step 4 – Add Device

1. Tap the "+" icon in the upper-right corner.
2. Select **Add Device**.
3. Choose **Smart Water Valve**.
4. Follow the on-screen instructions.



Step 5 – Connect to Wi-Fi

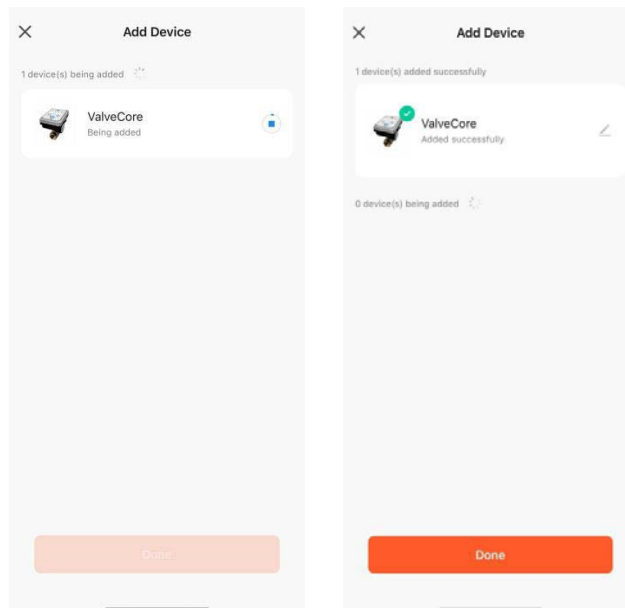
1. Select a 2.4GHz Wi-Fi network.
2. Enter the Wi-Fi password.
3. Tap **Next**.



Step 6 – Complete Pairing

Wait for the device to be added successfully.

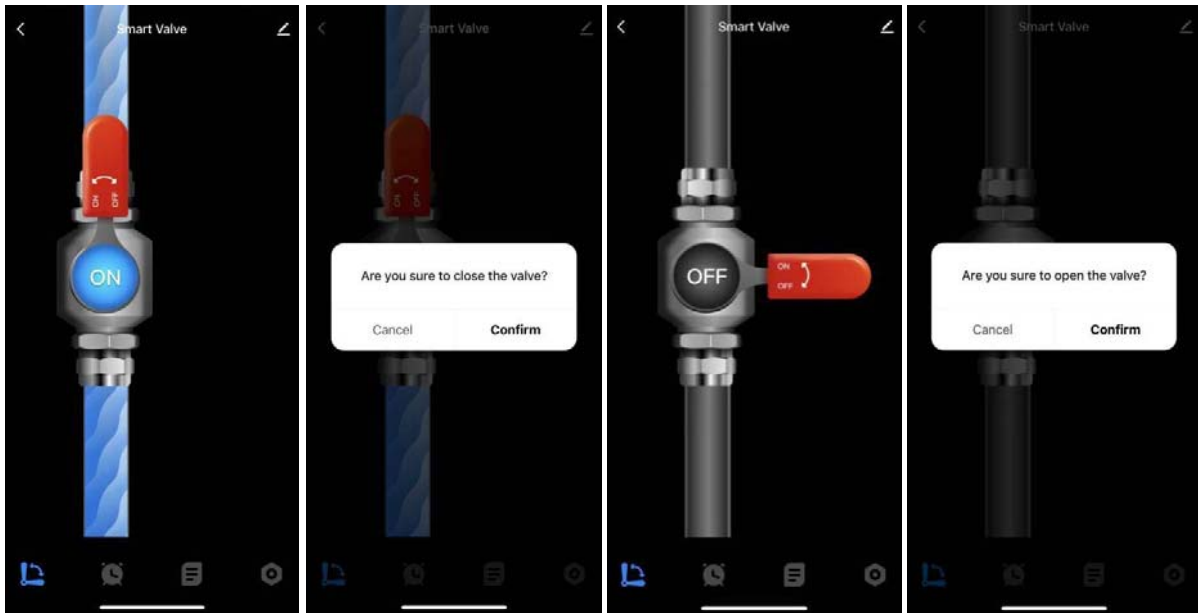
The Wi-Fi indicator will remain solid when pairing is complete.



12. Parameter Settings and Operation

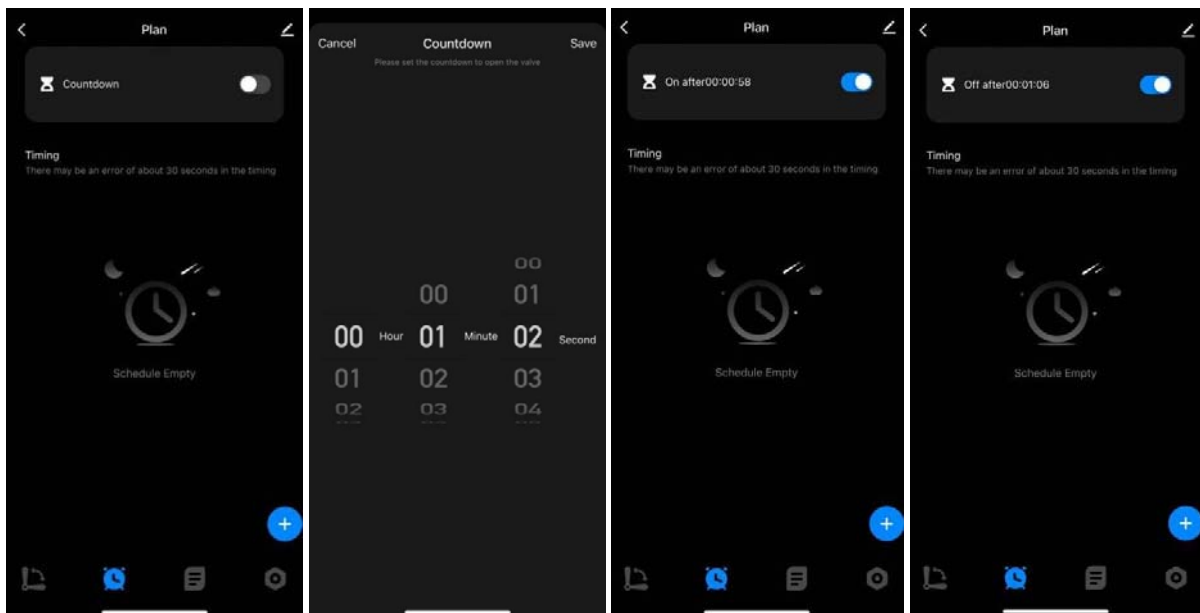
(1) Valve Control

Tap button to open/close valve.



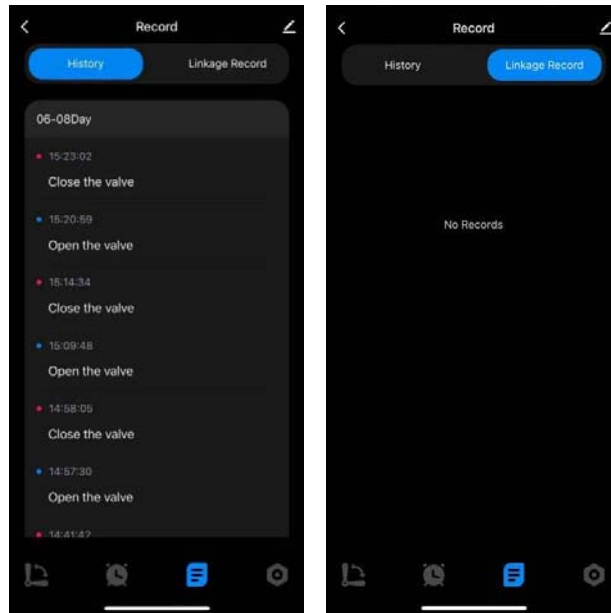
(2) Plan

Tap button to open countdown function,then set the countdown time.



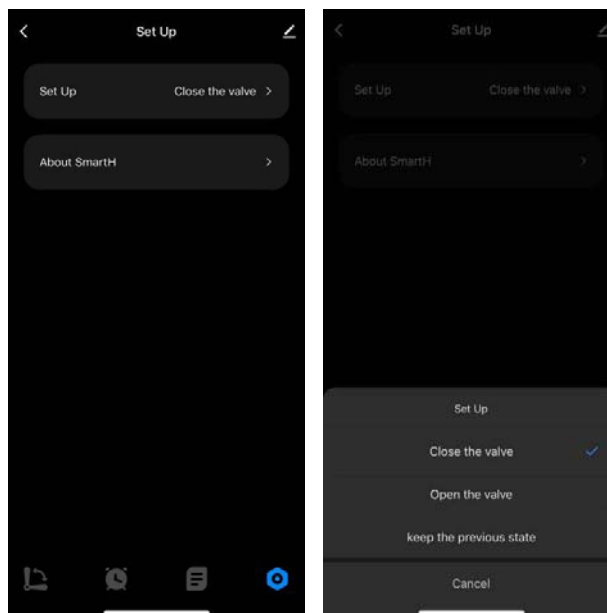
(3) Record

Valve open/close history state record and linkage record



(4) Power Recovery Behavior

You can set Valve open/close status when water valve power off to power on.



In the event of a power outage, the Smart Water Valve will retain its last operating status.

When power is restored, the valve will respond according to the selected power recovery setting:

- **Open Valve** – The valve will automatically open.
- **Close Valve** – The valve will automatically close.

- **Keep Previous State** – The valve will automatically return to the same position (Open or Closed) that it was in before the power interruption.

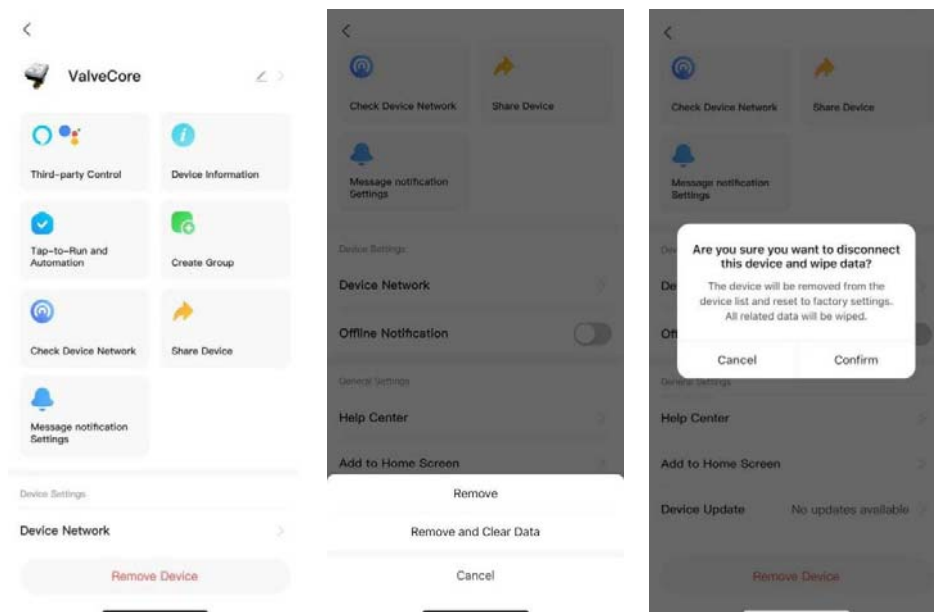
Note: The power recovery setting can be configured through the MysmartH App.

(5) Factory Reset

To restore the device to factory settings:

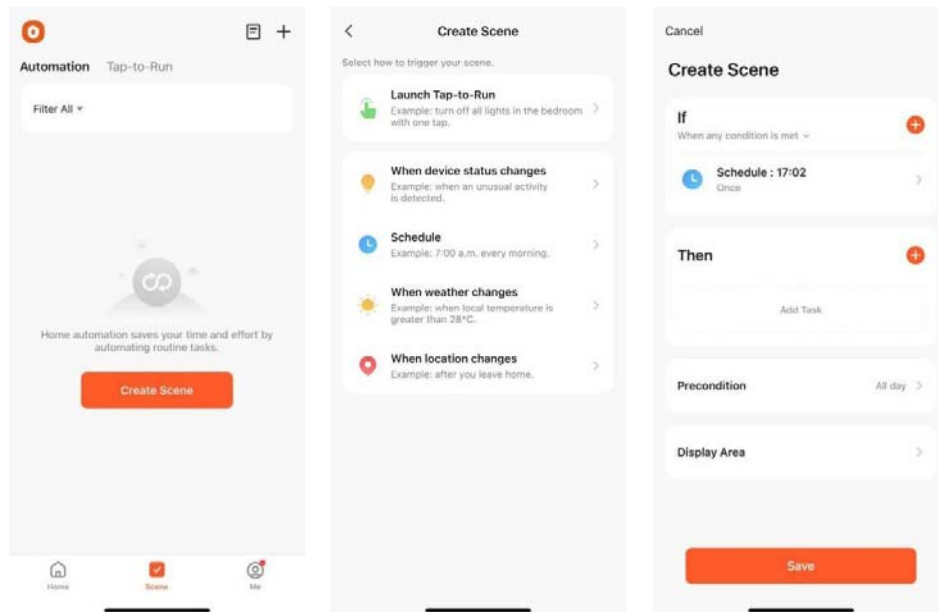
1. Open the MysmartH App.
2. Select the device.
3. Tap Settings  Icon
4. Select “Remove Device.”
5. Select “Disconnect and Erase Data”.
6. Confirm the operation.

The device will return to factory default settings and enter pairing mode.



(6) Scene

Create smart scenarios with conditions and tasks.



13. Leak Protection Function

When paired with compatible leak sensors:

- Leak detection alerts are sent through the MysmarthH App.
- The valve can automatically close when a leak is detected.
- Users can remotely restore water service after the issue has been resolved.

Important:

Automatic shut-off functionality depends on proper installation and pairing of compatible leak sensors. The leak detection system is intended to reduce the risk of water damage but cannot guarantee complete protection against all leaks or water-related incidents.

14. Maintenance

To ensure proper operation:

- Inspect the valve periodically.
- Exercise the valve at least once every 30 days.
- Keep the actuator enclosure clean and dry.
- Check Wi-Fi connectivity regularly.
- Verify leak sensor battery status if applicable.

15. Troubleshooting

Issue	Possible Cause	Solution
Valve does not operate	No power supply	Verify 5V DC power
Wi-Fi not connecting	Weak signal	Move router closer
Wi-Fi LED off	Not paired	Re-enter pairing mode
Valve not responding in App	Network interruption	Check internet connection
Valve opens/closes slowly	Low power supply	Verify power source
Valve fault indication	Mechanical obstruction	Contact support
Device offline	Wi-Fi disconnected	Reconnect network

16. Technical Specifications

Item	Specification
Communication	Wi-Fi 2.4GHz
Wi-Fi specification	802.11 b/g/n
Valve Type	Motorized Ball Valve
Valve Material	Forged Brass
Ball Material	Stainless Steel 304
Working Pressure	Max. 1.6 MPa (232 PSI)
Water Temperature	2°C to 95°C
Operating Temperature	0°C to 60°C
Storage Temperature	-10°C to 70°C
IP Rating	IP68
Input Voltage	5V DC

17. Disclaimer

This product is intended to assist in reducing the risk of water damage.

XX Technology Ltd. shall not be liable for any direct, indirect, incidental, or consequential damages arising from water leaks, installation errors, power failures, network interruptions, or improper use of the product.

18. Regulatory & Compliance Information

* Certification status may vary by model and region.

Drinking Water Compliance

This product is certified to:

- NSF/ANSI/CAN 61 – Drinking Water System Components – Health Effects
- NSF/ANSI/CAN 372 – Drinking Water System Components – Lead Content

FCC Compliance Statement

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

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.

IMPORTANT NOTE:

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.

ISED Canada Compliance Statement

This device complies with Innovation, Science, and Economic Development Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

FCC/IC Radiation Exposure Statement:

This equipment complies with FCC/ISED 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.

L'appareil est conforme aux limites d'exposition aux rayonnements spécifiées par la FCC/ISED pour les environnements non contrôlés. La distance entre le radiateur et le corps doit être d'au moins 20 cm lors de l'installation et du fonctionnement de l'appareil.