WIFI SMART VALVE

Product User Manual

NAVARCH (JINAN) INTELLIGENT EQUIPMENT CO.,LTD

耐 威 科 （ 济 南 ） 智 能 设 备 股 份 有 限 公 司

1. Product summary

This product uses Wi-Fi connectivity and allows users to remotely open and close the valve via the Tuya Smart Life app. Users can also view the valve ’ s operating status and battery level within the app. The product features a high protection rating, low power consumption, and a long service life. The valve body is rust-proof and corrosion-resistant, and it comes with a stroke memory function that automatically calibrates the stroke upon power-up, ensuring excellent control accuracy.

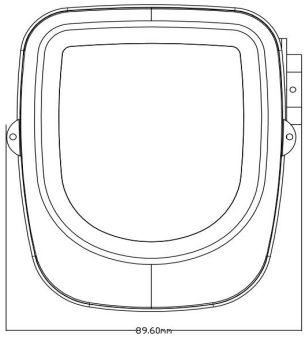
2. Product Features

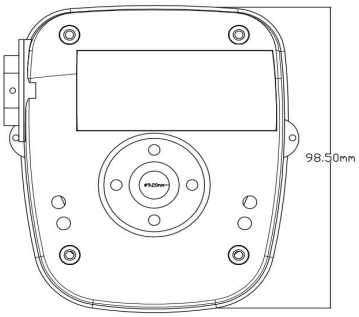
- Wi-Fi Remote Valve Control
- IP68 Waterproof and Corrosion-Resistant
- 5000mAh High-Capacity Battery for Long-Lasting Power
- Remote and Manual Dual Control
- Precise Valve Control with Long Battery Life
- LED Indicator for Easy Status Recognition
- Universal Size for Easy Installation
- Remote Online Updates

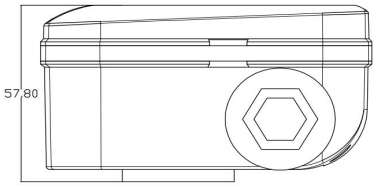
3. Product Features

Size	1/2'~2', DN15-DN50
Valve	Brass
Working Pressure	1.6MPa
Voltage	DC5V
Battery	5000mAh Rechargeable Li-ion Battery
Interface	Type-C, DC, Mini-USB
Protection Rating	IP67
Medium temperature	(4~95)°C
Life Times	100000 times
Installation method	Horizontal, inclined or vertical
Power Options	External Solar Panel
Accessories	Soil Moisture and Temperature Sensor

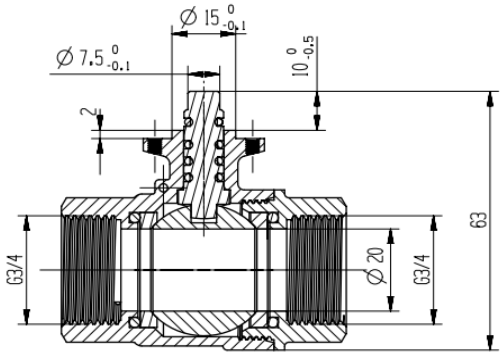
4. Actuator Size

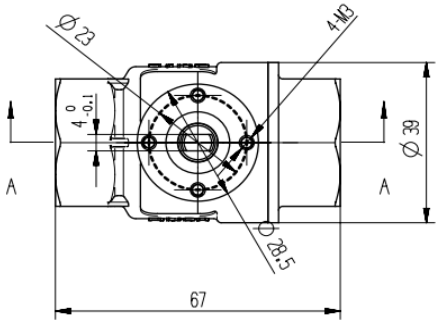






5. Valve Size





Nominaldiameter（mm）	DN15	DN20	DN25	DN32
Length（mm)	59	67	74	91
Thread length（Internal）L1(mm)	12	12	14	16
width W (mm)	33	39	47	59
Height H (mm)	78	127	133	141
Connectingthreads	G 1/2	G 3/4	G 1	G 1¼
size（mm）	59	67	74	91
weight（ g）	210	290	420	650

6. Use Cases

1. Smart Home

Suitable for houses, apartments and villas. Realize remote control and timing water management via APP. It works with flood sensors to cut off water automatically when leakage occurs. The Zigbee version supports whole-house smart linkage.

2. Rental Housing

Ideal for rental houses and shared apartments, realizing convenient water management.

3. Commercial Places

Suitable for hotels, homestays, shops and small offices for unattended water management.

4. Garden & Irrigation

Applied to courtyard greening and landscape sprinkler systems for automatic irrigation.

5. Heating & HVAC

Control pipelines of household heating and small central air conditioning systems.

7. Valve Size

►This product is equipped with a built-in 5000mAh rechargeable lithium battery and supports external power supply via Type-C, DC, or Mini-USB. Please use a power adapter that meets the specified requirements.

►The device has an IP67 protection rating; do not submerge it in water for extended periods.

►Do not expose the device to temperatures outside the range of 4°C to 95°C to prevent damage;

►Do not apply excessive force to the valve body while it is in operation;

►Use a 2.4 GHz Wi-Fi network for network configuration; 5 GHz Wi-Fi is not currently supported.

A. Function definition

The device function peripherals are as follows：

Peripheral	Specification
Left button	Touch the button
Right button	Touch the button
Green led indicator	Upside
Blue led indicator	Downside

B. Operating state

1、Valve status indication

Under normal conditions, the LED will automatically indicate the valve status at an interval of 10 seconds, in addition, short press (less than 3 seconds) the left or right key indicator will indicate the current valve status, the specific status is as follows:

Key	Function
Short press the left button	LED indicates valve status
Short press the right button	LED indicates valve status

LED Indicator Status	Valve status
Blue	Valve closed
Green	Valve open

2、Hand opening valve

Under normal conditions, long press the left or right button (more than 3 seconds) to open or close the valve, after the completion of the valve, the corresponding LED indicator light is off, the specific state is as follows:

Key	Function
Long press the left button	Valve closed
Long press the right button	Valve open

Note: When the valve is closed or opened, press the left and right keys at the same time to stop the emergency!

LED Indicator Status	Valve status
Valve is closing	Valve is closing
Blinking green	Valve is opening

3. Distribution network mode

Under normal conditions, press the left and right keys at the same time to enter the distribution mode, and the LED status in the distribution mode is as follows:

LED Indicator Status	Distribution network status
The blue and green lights blink quickly	Starting the network distribution
The blue light is off and the green light is blinking rapidly	The WIFI connection is successful
Blue and green Closing	Distribution network is complete

Note: During the distribution process, press the left and right buttons at the same time to stop the distribution network (this function can be used when the device cannot be found for a long time, after stopping the distribution network, it will enter the normal working state)!

4、 Power supply selection

Under normal conditions, WIFI smart door and valve devices can be powered by batteries and USB.

By default, 3.6V battery is used to power the device. In low power consumption mode, the device can be woken up by touching any key to perform local operations, such as opening and closing valves and distribution network.

When the USB power supply voltage of the connected external power supply is greater than 4V, the external power supply is used to power the device. In this case, the device does not enter the low power consumption mode and is always running. You can perform local and remote operations on the device at any time.

C. Tuya APP（SmartLife）use

APP Download

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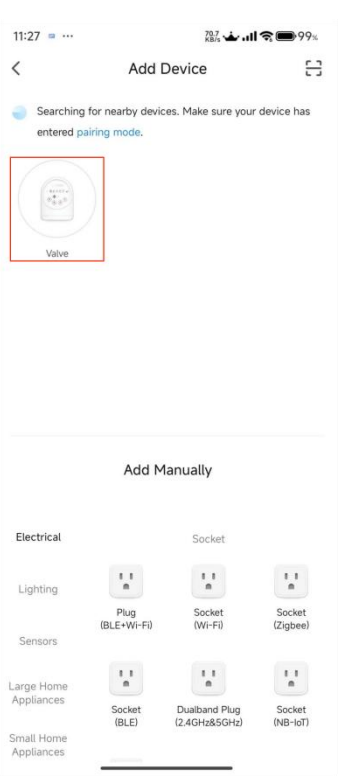
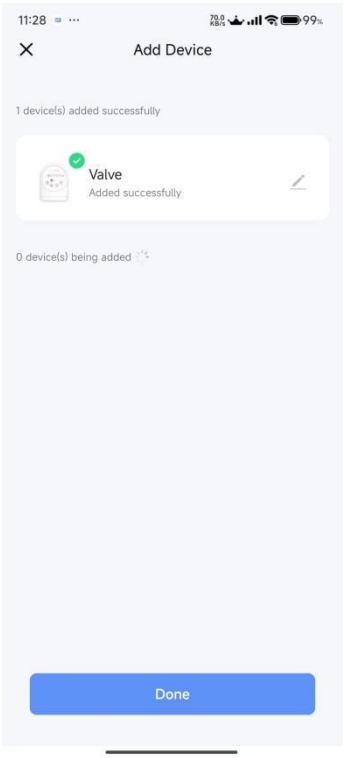
C1. APPLinkagewithValve

1. Add device:

After opening the app, click the “ + ” icon in the upper right corner, and then click the Add Device button to add the device, Press the “ On ” and “ Off ” buttons simultaneously five times; the blue and green indicator lights on the device will flash alternately, indicating that the device has entered.

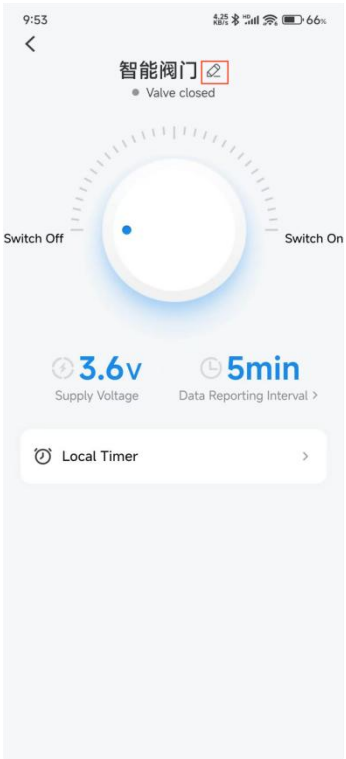
App will automatically search for nearby devices, when the device is searched, the device icon will be displayed, click on the icon to enter the device configuration page, enter the wifi name and password, the device will be connected to the wifi.

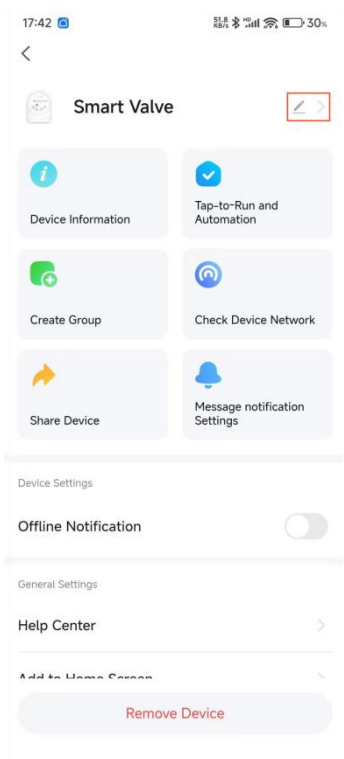


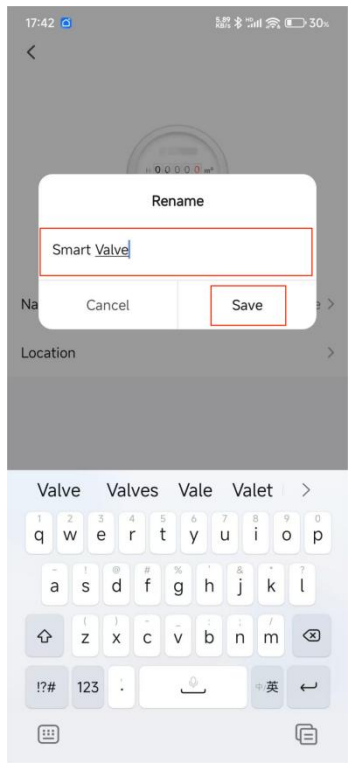


Once the device has been successfully networked click on the Click Finish button to complete the device mapping.

Device Settings: After successfully adding a device, click to enter the device details page. On this page, you can make the following settings:
Device name modification: Click the pencil icon on the right side of the device name to modify the device name, which is convenient for you to identify and manage the device.







Switch Setting:

►In wake-up mode

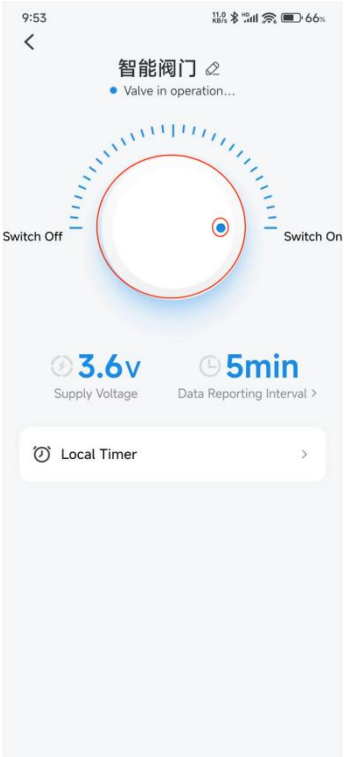
Click the labeled button, APP will immediately send the opening command to the smart valve. Wait for a while, the smart valve will execute the opening operation, at this time you can observe the valve status display “Switch On”. Tap the labeled button again, the APP will immediately send a close command to the smart valve. Wait for a while, the smart valve will execute the closing operation, at this time you can observe the valve status display “ON Off”.

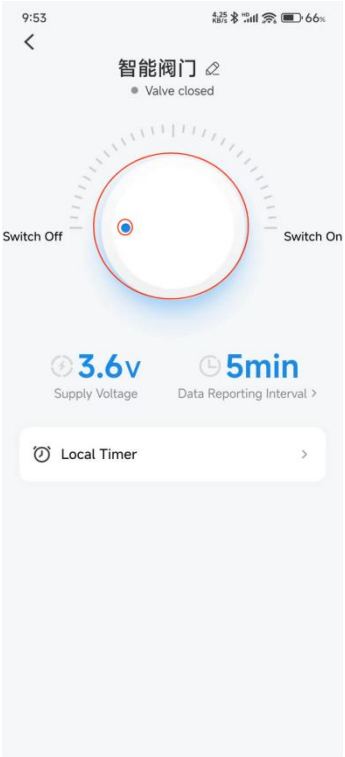
►In sleep state

Step 1: Send a command from the app.

Step 2: Wake up the valve by pressing the ON and OFF buttons simultaneously five times.

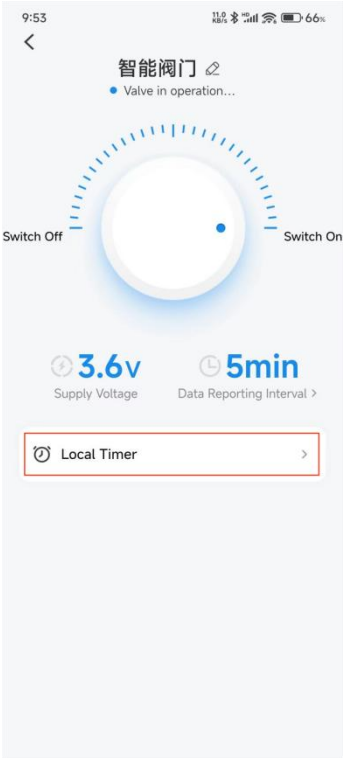
Step 3: The valve will automatically execute the command after waking up.

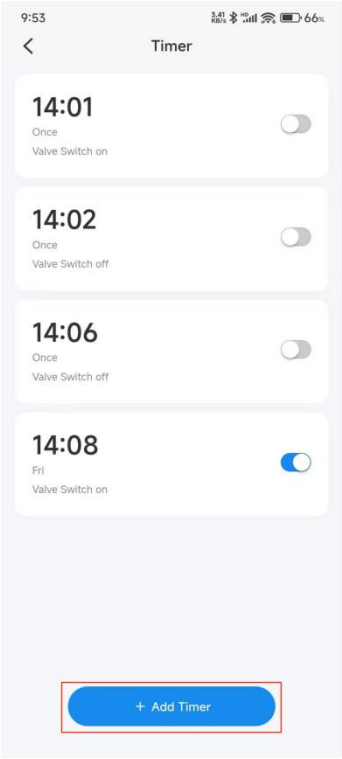


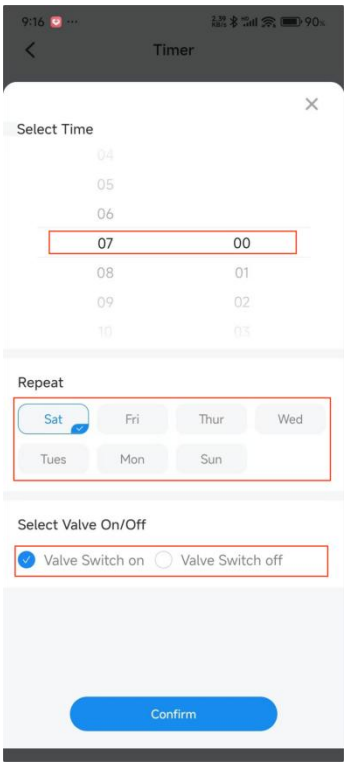


Note: After sending a command, if the device is not currently in the wake-up state, the valve will not respond immediately. Please wait patiently for the device to wake up automatically and complete status synchronization; the device’s default wake-up interval is 10 minutes.

Timing Task Setting: Click 'Local Timer' to enter the timing setting interface. Click the 'Add Timer' button at the bottom of the screen to enter the task editing page, first set the specific time of the valve action. Further down is the 'Repeat Period' setting item, you can choose the repeat frequency of the timer task. The system provides the option of 'Monday to Sunday' repeat date. You can check the specific date on which you want to perform the task. After setting, click 'OK' to return. At this time, the valve timing task you set will take effect, and the APP will control the valve opening and closing according to the time and action requirements you set.



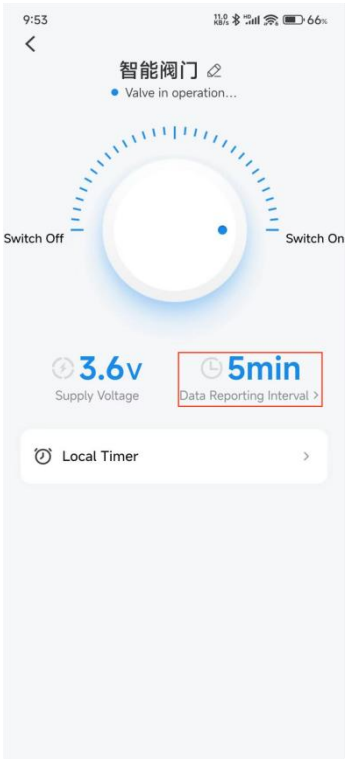


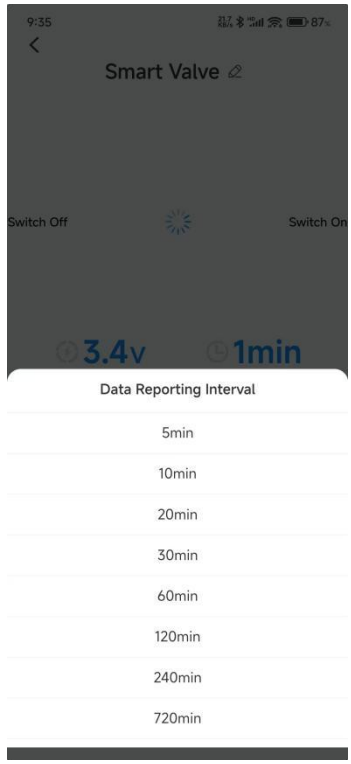


Note: After reaching the timer time, the valve on/off operation needs to be executed at the next device wake-up.

Note:

Wake-up frequency setting: Click 'DataReportingInterval' to enter the wake-up frequency setting page. This page will show the current settings of wakeup frequency (If this is the first setup, the default 10-minute setting may be displayed.), and provide 9 setting methods , respectively '1min,5min,10min,20min,30min,60min,120min,240min,720min'. Select your desired interval length, and then click on that interval length. At this time, APP will send the wake frequency parameter you set to Smart Valve, and the new wake frequency setting will be synchronized after sleep wake up, and it will take effect after synchronization.





D. APP linkage with flood sensors

The Smart Life APP is linked with the Flood Sensor, aiming to provide all-round protection for your home water safety. The flood sensor can monitor the water level in a specific area in real time, and once it detects water damage or an abnormal rise in the water level, it will immediately trigger an alarm and notify you through the Smart Life APP. At the same time, the APP can automatically control the relevant smart water valves to respond according to your pre-set linkage rules, thus effectively avoiding serious losses caused by water leakage, such as furniture damage, floor deformation, short circuit and so on, so that you can have peace of mind no matter you are at home or out of the house.

Flood sensor installation:

① Preparation before installation

Confirm the battery type: This sensor is suitable for AAA7 batteries, please be sure to use the specified type of battery, other models may cause the sensor can not work properly or damage the device.

② Installation Steps

Locate the battery compartment: There is a button on the bottom of the flood sensor to open it, which is the battery compartment.

Open the battery compartment: The battery compartment is a snap-on design, carefully pull out the snap button.
(Be careful to avoid excessive force to avoid damage to the sensor housing)

Install the battery: Put the new battery into the battery compartment according to the positive and negative direction ('+' for positive, '-' for negative). Make sure the batteries are in place and have good contact. If the battery is installed in the wrong direction, the sensor will not operate.

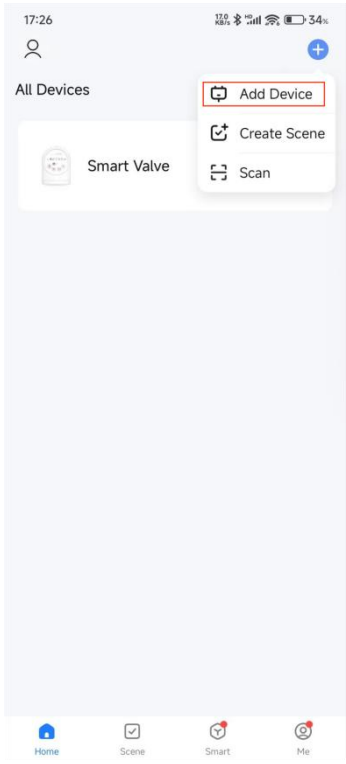
Close the battery compartment: After installing the batteries, return the battery compartment cover to its original position. Press down on the cover until the snap fastens.

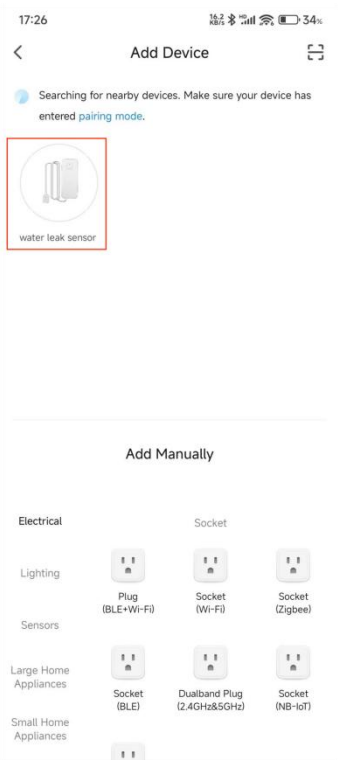
installed: Choose a suitable location to install the flood sensor. When installing, make sure that the sensor's sensing surface is facing downward and is about 1-2 centimeters away from the ground or surfaces that may be waterlogged to ensure that flooding can be detected accurately and in a timely manner. Follow the product manual of the flood sensor to complete the fixing of the device and battery installation (some flood sensor power supply use connection).

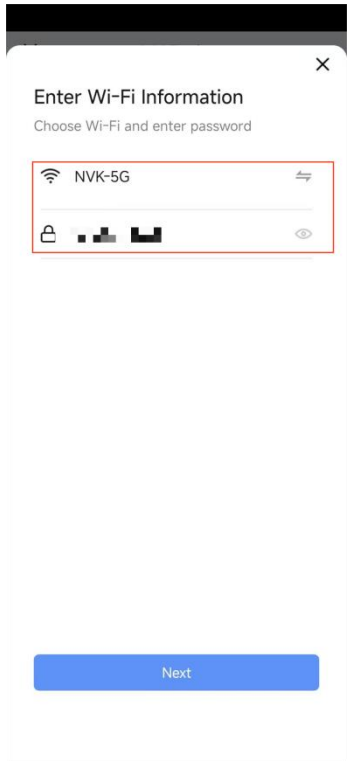
1. Add Device

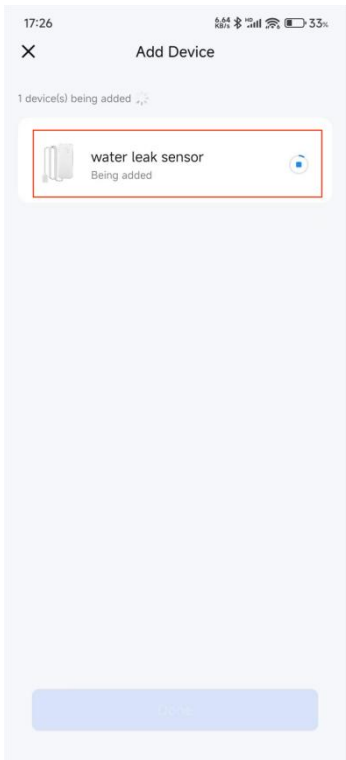
Add to Smart Life APP: Click the “ + ” button on the upper right corner of the page and select “ Add Device ”. Find the “ Flood Sensor ” category in the device list, and select the corresponding option according to the brand and model of the flood sensor you are using.

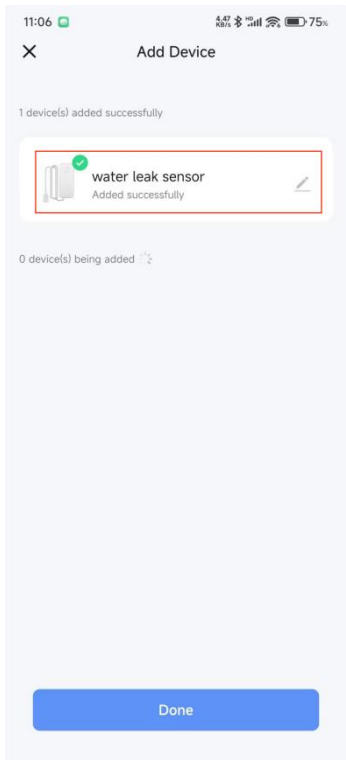
After successful addition, you can see the added flood sensor in the list of smart living devices.

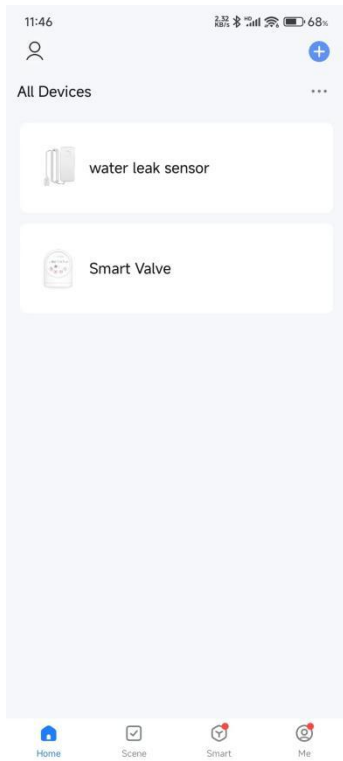








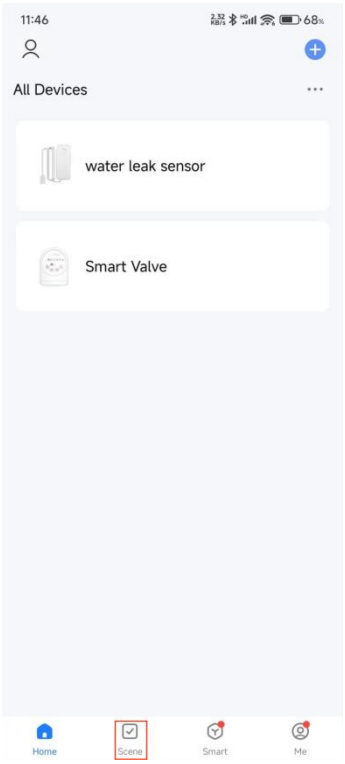


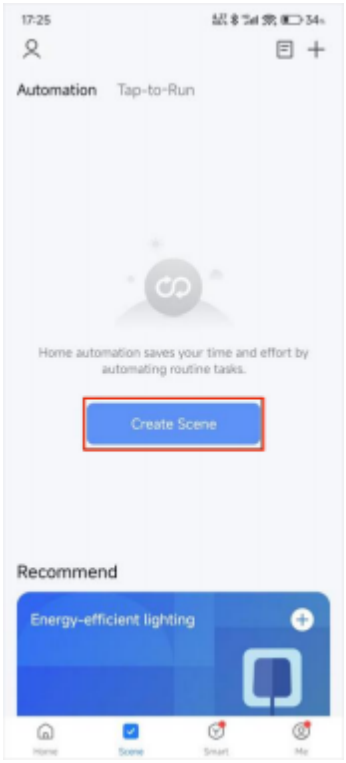


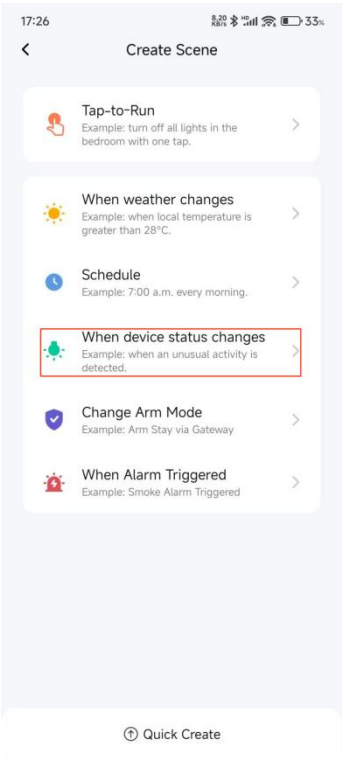
2. Linkage Setting Steps

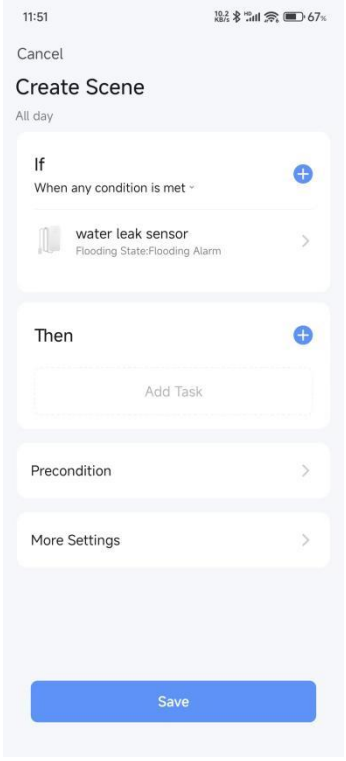
① Enter the linkage setting page:

In the smart home device list of Smart Life APP, click on the added flood sensor card and follow the picture steps to enter the flood sensor device detail page.









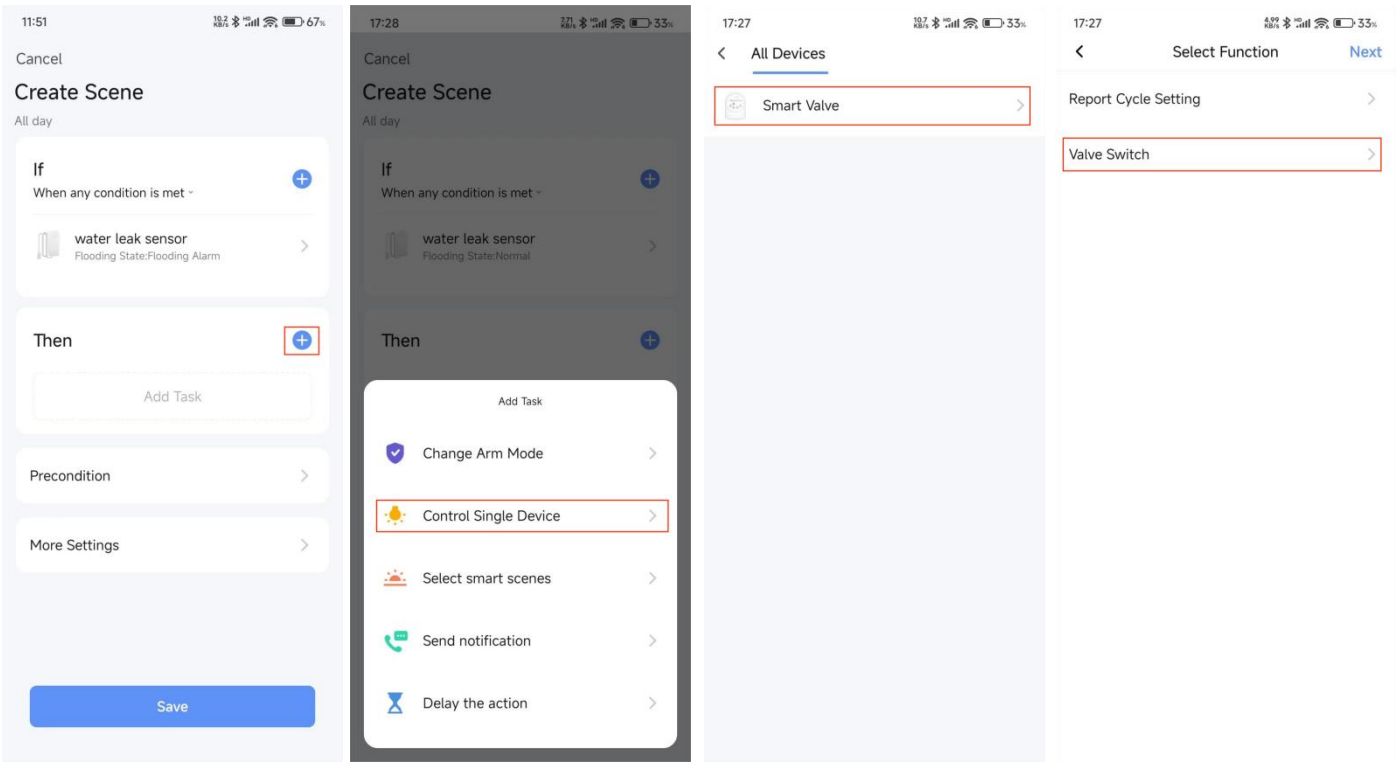
3. Add Linkage Rule:

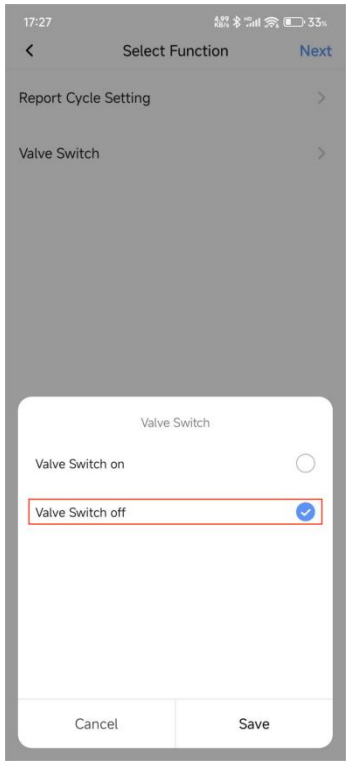
On the Linkage Settings page, click the Add Linkage Rule button. At this time, you need to set the trigger condition and execution action.

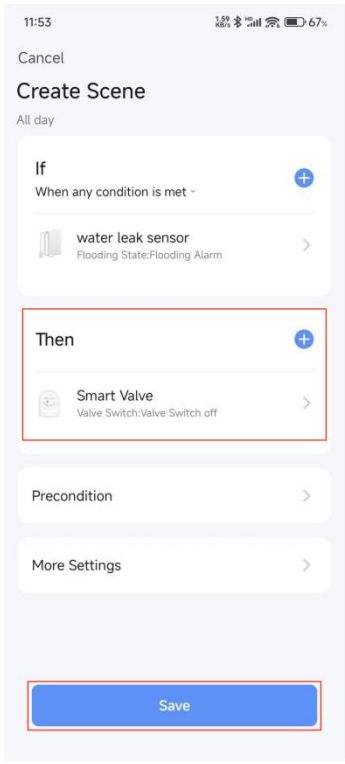
① Trigger condition setting: The trigger condition is when the flood sensor detects flooding. In the 'Trigger Condition' field, select ' Flooding Detected' or 'Flooding Not Detected' as the trigger event.

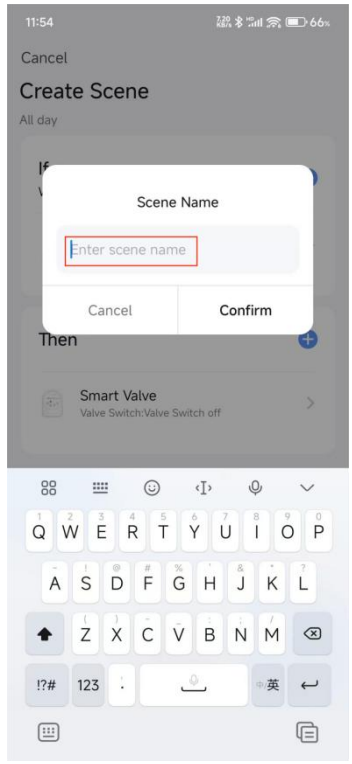
② Execution Action Setting: The execution action mainly refers to the measures taken by the Smart Life APP to control the related smart devices after the flood sensor triggers an alarm. In the Execution Action Settings column, click 'Add Execution Action' . Select the corresponding smart water valve device, and choose 'close smart water valve' and 'open smart water valve' as the execution action.

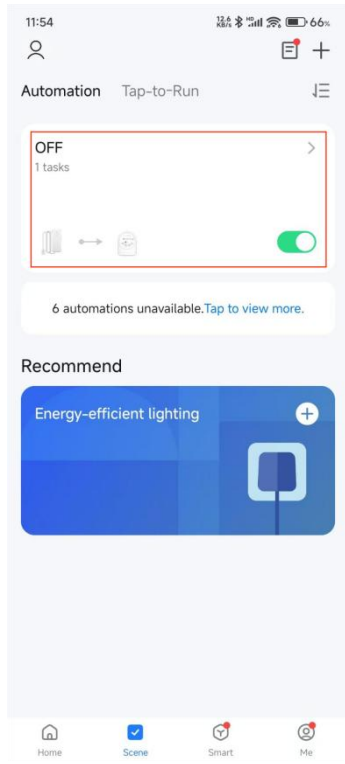
③ Save the linkage rules: After completing the settings of trigger conditions and execution actions, click the “Save” button on the upper right corner of the page to save the linkage rules and note the name of the rules. At this point, the linkage between Smart Life APP and the flood sensor has been completed, and the flood sensor will start to monitor in real time and automatically perform the corresponding operation according to the linkage rules you have set up when flooding is detected.




17:27
Select Function
Next
Report Cycle Setting
Valve Switch
Valve Switch
Valve Switch on
Valve Switch off
Cancel
Save


11:53
Cancel
Create Scene
All day
If
When any condition is met
water leak sensor
Flooding State:Flooding Alarm
Then
Smart Valve
Valve Switch:Valve Switch off
Precondition
More Settings
Save


11:54
Cancel
Create Scene
All day
Scene Name
Enter scene name
Cancel
Confirm
Then
Smart Valve
Valve Switch:Valve Switch off


11:54
Automation
Tap-to-Run
OFF
1 tasks
6 automations unavailable.Tap to view more.
Recommend
Energy-efficient lighting
Home
Scene
Smart
Me

Note:

► View Linkage Rules: In the Linkage Settings on the Flood Sensor Device Details page, you can view all the linkage rules that have been set up. Each linkage rule will show the trigger conditions, execution actions and the enabled status of the rule in detail. You can understand at a glance the current linkage configuration between the Smart Life APP and the flood sensor.

► Modify linkage rules: If you need to modify a linkage rule, click the corresponding linkage rule to enter the edit page. In the editing page, you can adjust the triggering conditions and execution actions (e.g. replace the associated smart water valve device). Click 'Save' button after modification, the new linkage rule will take effect immediately.

► Enable/Disable Linkage Rule: In the linkage rule list, there is a switch button next to each rule, which is used to enable or disable the linkage rule. When the switch button is on, the linkage rule is enabled, and the flood sensor will execute the linkage action according to the rule; when the switch button is off, the linkage rule is disabled, and the flood sensor will not execute the relevant linkage action after triggering the alarm. You can flexibly enable or disable the linkage rules according to the actual needs, such as temporarily disabling the linkage rules to avoid false triggering in the case of cleaning or maintenance of the house which may lead to short-term accumulation of water.

► Delete rule: If you don't need a rule anymore, you can slide the rule to the left in the list of rules and the 'Delete' button will appear. Click 'Delete' to remove the linkage rule from the settings, and the linkage between Smart Life App and Flood Sensor will no longer be performed according to this rule.