IMRITA

WHOLE HOUSE WATER FILTRATION SYSTEM
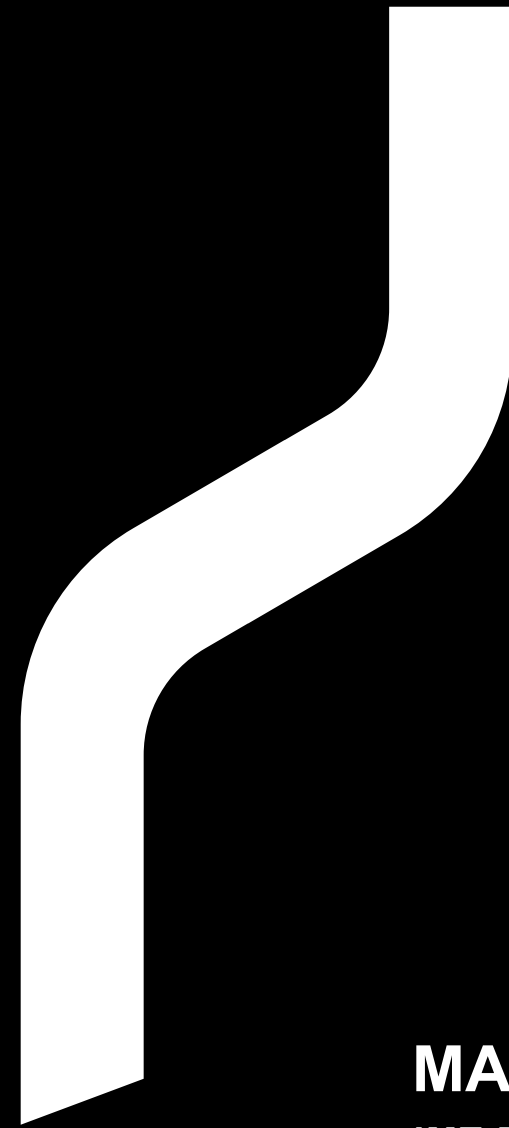
MANUAL

IMT-P-EV6 Pro
IMT-P-EV8 Pro

THANKS

Thanks very much for choosing IMRITA brand,and be the user of IMRITA.

Before the machine installation,we suggest you to read this manual carefully.

If you have any questions during use, please read this manual carefully or contact us directly.

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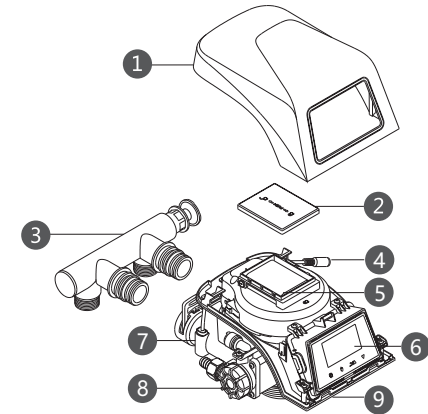Your valuable comments on our products and services are most welcome.

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THE PRINCIPLE OF PERFORMANCE

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Function & Feature

1,Full automatically running

Built-in time controller, 24-hour time control, according to the softening capacity or raw water hardness, interval days and regeneration

time (the default time is generally early morning) for regeneration.

The control system can calculate and run the most effective soft water treatment scheme according to the actual raw water situation and water consumption of users.

Function of the program

Backwash: After the ion exchange resin is saturated, backwash should be carried out before regeneration. Its purpose is to wash out the suspended impurities and some broken resin that are intercepted and agglomerated on the surface layer of the resin. The second is to loosen the compressed resin layer, which is conducive to the full contact between the resin granule and the regeneration liquid during regeneration, and provides good conditions for the regeneration of the ion exchange resin.

Regeneration:A certain concentration and flow of salt liquid which flows through the entire ion exchange resin layer,will be regenerated of saturated resin, so that to recover its original softening exchange capacity.

Brine refill : Add water to the brine tank to dissolve and regenerate the salt, and produce saturated salt solution for the next regeneration.

Wash: It can remove the residual salt solution in the resin layer,and compress the resin layer to achieve the best softening effect.

2, A reliable way for running .
Adopt high flatness, corrosion resistance, wear resistance ceramic end sealing spacer, no leakage.

3, Optional dry salt regeneration, wet salt regeneration mode.

4, Raw water can be used at the same time during regeneration (24-hour water supply).

5,Soft water regeneration (replenishing soft water and melting salt during regeneration).

6, Multiple machines in series can achieve 24 hours of soft water supply.
As long as at least one valve "regeneration trigger time" setting is staggered with the other valves, 24 hours of soft water supply can be achieved

7, Leakage detection
Leakage sensor, water time and volume triple monitoring to ensure safety.

8, Remote controller
1)Wireless remote control can remotely control the open, close the network, the control range of 10-30 meters.
2)The main device can pair with 1pc remote controller and 7pcs sensors, which can quickly and accurately sense the leakage point and close the f valve.

9, Dual power supply
Built-in lithium battery, dual power automatic switch, automatic charge and discharge protection function, main power off also leak proof

10, Intelligent control system
WiFi smart connection, remote control via mobile APP, can be easily controlled without on-site.

11, Salt shortage alert
When the lack of salt has affected the resin regeneration, the system will alarm to remind to add salt.

Product parameter

Product Name: Water Softener Valve	
Item No.:IMT-P-EV6 Pro	Work Pressure:0.15-0.60MPa
Product Size:335x251x192mm	Power:5W
Water flow:2.5m³/h（0.3MPa）	Temperature:5℃~38℃
Outlet/Inlet:3/4 " M	Voltage:100-240V~50/60Hz
Base Size:2-1/2 " -8NPSM	Application:Municipal Tap Water
Outlet Manifold Size:1.05 " OD（26.7mm）	Anti Electric Shock Type:Ⅲ

Item No.:IMT-P-EV8 Pro	Work Pressure:0.15-0.60MPa
Product Size:335x251x192mm	Power:5W
Water flow:3.5m³/h（0.3MPa）	Temperature:5℃~38℃
Outlet/Inlet:1 " M	Voltage:100-240V~50/60Hz
Base Size:2-1/2 " -8NPSM	Application:Municipal Tap Water
Outlet Manifold Size:1.05 " OD（26.7mm）	Anti Electric Shock Type:Ⅲ

Notes: M-Male fitting OD-Outer Diameter

INSTALLATION INSTRUCTION

Installation Notice

1,Do not install the water softener near acidic or alkaline substances or gases to avoid corrosion of the water softener.

2,The single-phase AC power supply must be 100-240V ~ 50/60Hz. Do not use other power supplies. The socket must have a reliable ground cable when power connection.

3,The water softener is required to be installed indoors. If it is needed to be installed outdoors, insulation measures must be taken to the water softener and pipelines, especially sun protection,anti-freezing,and waterproof.

4,The best inlet water pressure is 0.15-0.6Mpa, if it is under or above the standard, a booster pump or a reduce valve is need to be added to ensure the proper functioning.

5,The pipe should be close to the wall as far as possible in the process of pipe connection. The line of the pipe should be straight, the bend angle should be clear, and the pipe should be fixed on the wall with a fixed frame after the end of the pipe distribution.

6,In the connection of the rotary port parts, generally equipped with a sealing ring, therefore, it is not appropriate to exert too much force, which is easy to cause the sliding teeth and the rotary mouth crack.

Pipeline installation instruction

1,Take a outlet manifold with an outer diameter of 26.7mm and seal it with glue with the down strainer-fine slot. Put into the bottom of the tank, cut off the outlet manifold over the mouth part and cut off the outer edge of the mouth end face.

2,Fill the specified amount of resin into the tank.

3, Install the outlet manifold into the water softener valve.

4, Insert the fine slot into the valve and tightened the valve to the softener tank,as shown in below picture.
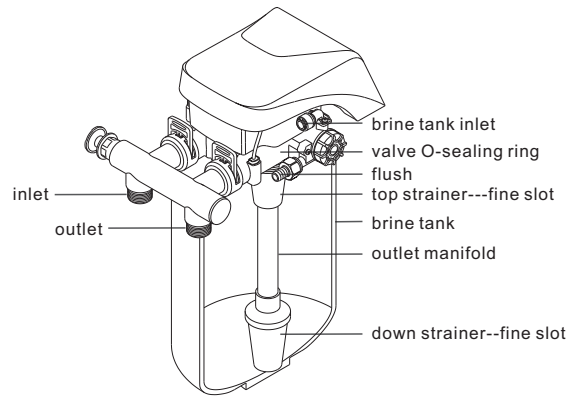
Notice:
1)The end face of the outlet manifold truncated shall not be 5mm higher than the tank mouth, nor 7mm lower than the tank mouth, and the outer edge of the end face of the outlet manifold truncated shall be chamfered to avoid damage to the O sealing ring.
2)When filling the resin, the resin should be prevented from entering the brine tank.
3)When installing the soft water control valve, do not forget to install the valve O-sealing ring.

inlet
outlet

brine tank inlet
valve O-sealing ring
flush
top strainer---fine slot
brine tank
outlet manifold

down strainer--fine slot

By pass valve instruction

pull the expansion link

Outlet

Inlet

When the expansion link is pulled away from the position shown in the figure, the by-pass valve is in a softening state, and the water is softened through the resin.

push the expansion link

Outlet

Inlet

When the expansion link is pushed to the position shown in the figure, the bypass valve is in the straightthrough state, and the water does not soften through the resin.

Electrical Diagrams

100-240V~50/60Hz

L
N

power switch   12V

battery   12V

leak detection wireless module

2G/WIFI module

Master display board

micro switch

flow detection element

motor

Commissioning Instructions

1,The commissioning work of the water softener should be carry out by the installation person, the user do not need to carry out other operation in the condition of power supply uninterrupted and a certain amount of salt in brine tank.Only need to reserve 4 ports, then connect the water inlet, outlet,sewage,overflow. It can be used after connecting the power supply.

2,Resin tank water injection

Adjust the controller to the back flush position and slowly open the inlet valve to 1/4 position (rapid opening may cause equipment damage and resin loss). Slow air discharge should be heard in the drain line at first. When the air in the resin tank is completely discharged (the water from the drain pipe starts to stabilize), fully open the water inlet valve.

3,Brine tank refilling

For the first time to join 5 l of water into the salt box.

**4,Adjust the water hardness (Specific operation reference parameter Settings)**

Adjust the water hardness according to the different area, the defaulted value is 8.76grains per gallon, and back to the main working interface after adjustment(This step is very important,if the softener hardness is not coincide with actual value, that will affect the softening water effect.)

5,In case of water softener failure or other special circumstances, the by pass valve can be adjusted to the direct position, you can temporarily directly use the municipal tap water, with fault or problem troubleshooting, and then adjust the by pass valve to the position of softening state, to restore the soft water supply (refer to the by pass valve description)
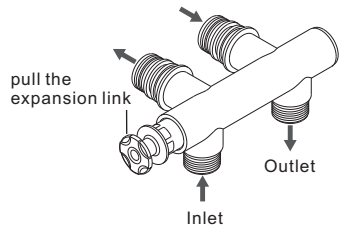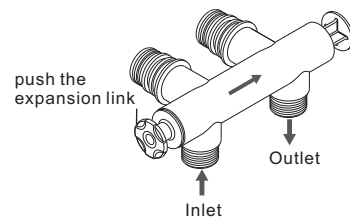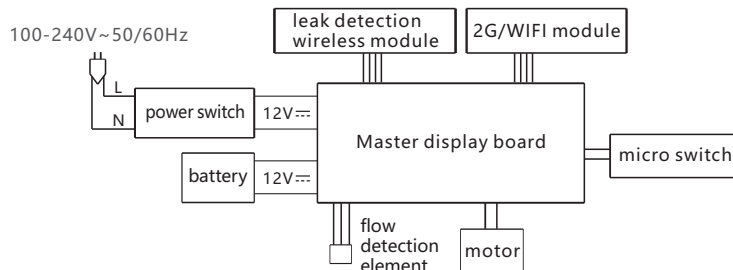
HOW TO USE

Method

Key lock function

If there is no key operation within one minute, the key will be automatically locked. Press and hold "RESET" for 3 seconds to unlock the key before performing the operation again. This function can effectively prevent the occurrence of misoperation caused by collision.

Control panel & its button

display area

MENU   SET   RESET/UPWARD   DOWN

Key function description

Listed as flowing:

1. Menu/Confirm 🗐 :
①. In the working state, long press 🗐 for 3 seconds to enter the setting menu, short press the 🗐 to highlight the setting item to query parameter value.
②. In the setting query state, press 🗐 and select the highlighted data parameter values one by one to enter the setting state, then the parameter value can be modified
③. After the setting is complete, press 🗐 to confirm the successful setting and return to the menu state.
④. In the working state, continuously press 🗐 five times to enter the water leakage sensor, remote control pairing mode.
⑤. In the working state, long press 🗐 for 6 seconds to switch the machine.

2. Cancel/Manual regeneration ✋ :
①. long press ✋ in the working state for 6 seconds to manually start the regeneration, and short press ✋ during the regeneration process to quickly enter the next step.
②. Under the query state or the setting state, press ✋ to return to the menu.
③. When modifying parameters in the Setting state, press ✋ ,the set parameters are not saved and return to the menu.
④. long press the ✋ in the working state for 3 seconds to release the salt shortage alarm.
⑤. In the working state, continuously press ✋ 3 times to manually switch the valve.

3, Key lock ⤺ :
①. In the key lock mode, press ⤺ for 3 seconds to release the key lock, and the buzzer beeps. Press ⤺ for 6 seconds permanently unlock the key.
②. Permanently release the key lock mode, press ⤺ for 6 seconds to start the key lock mode, and the buzzer beeps.

③. Temporarily release the key lock mode, press ⤺ for 1 minute without any operation will automatically lock the key, at the same time buzzer beeps.
④. No key can be operated in the key lock mode (switch on, switch off, WiFi reset distribution network, and do not need to release the key lock to remove E1 faults)

4, Scroll up ▲ :
①. In the menu state, press ▲ to turn up each setting item in turn.
②. In the setting state, press ▲ to adjust the parameter value upward.

5, Scroll down ▼ :
①. In the menu state, press ▼ to turn over each setting item in turn.
②. In the setting state, press ▼ to adjust the parameter values downward.

6. Combination key:
①. Press and hold 🗐 and ✋ for 3 seconds at the same time to release the E1 alarm, and the valve enters the self-test state.
②. Press and hold ✋ and ⤺ for 3 seconds to restore the factory Settings. And the buzzer beeps.
③. Press and hole 🗐 and ⤺ for 3 seconds at the same time to enter the WiFi reset state. At the same time the buzzer beeps.

Manual regeneration function
Hold down the ⤺ for 3 seconds to release the child lock, and then hold down the ✋ key for 6 seconds to achieve manual regeneration. Until running the complete regeneration process, and finally return to the normal water production state.

State Display

All data displayed on the following page is used as an example.
During power-on, the system automatically starts the system, and "Valve Self Testing•••"is displayed . There are three sounds of "BI" before power on, and "Current Time" and "Water Hardness" are indicated after the self-test is completed. These two parameter Settings are always prompted to be set when the confirm key is not pressed. After the setting is complete, the standby screen is displayed. The display will automatically turn off after 1 minute without any key operation, and a beep means that the key is automatically locked. Click any key to light up the screen. As shown in the picture below:

	Current Time	Water Hardness
Valve Self Testing•••	12:00	08.76 gpg
	🗐 OK	🗐 OK
	✋ Cancel ▲▼ Modify	✋ Cancel ▲▼ Modify
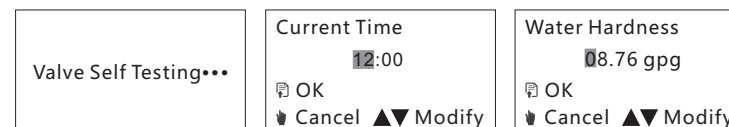
2. Standby display: the valve is placed In the "water production " position, the screen displays "In Service••• ,Time 12(h) : 00 (min) : 00 (s), Remain, Flow Rate. As shown in the picture below:

3. Display when using water: the valve is placed in the "water production" position, and the screen displays "Water Supplying•••, Time

12 (h) : 00 (min) : 00 (s), Remain, and Flow Rate. As shown in the picture below:

4. Motor running display:When the regeneration is performed by switching from one state to another, the display will show "motor running"

As shown in the figure below

12:00:00 In Service••• Remain:2641.7 GAL Flow Rate: 0.0GPM	12:00:00 Water Supplying••• Remain:2641.7 GAL Flow Rate: 13.2GPM	Motoring•••
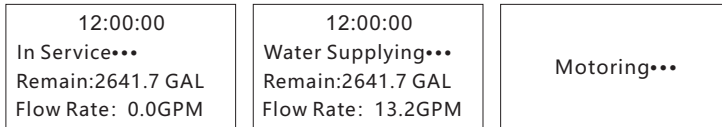
5, Refill display: the valve is placed In the "Refill" position, and the screen displays "Time, In Refilling••• ,water refill time countdown (the first two digits display the minute countdown, the last two digits display the second countdown). As shown in the picture below:

6, Salt dissolving display: The valve is placed in the "water production" position, and the screen displays "Salt Dissolving•••" salt soak time countdown (the first two digits show minute countdown, the last two digits show second countdown). As shown in the picture below:

7. Backwash display: the valve is placed In the "backwash" position, and the screen displays "Time, In Back Washing•••

Backwash time countdown (the first two digits show the minute countdown, the last two digits show the second countdown) ". As shown in the picture below:

12:00:00 In Refilling••• 05:00 (min:s)	12:00:00 Salt Dissolving••• 05:00 (min:s)	12:00:00 In Back Washing••• 02:00 (min:s)

8, Salt absorption slow wash display: The valve is placed In the "salt absorption slow wash" position, and the screen displays "Time, In Brine Drawing•••, countdown time for salt absorption slow wash (the first three digits display minute countdown, the last two digits display second countdown)". As shown in the picture below:

9. Flush display: the valve is placed In the "flush" position, and the screen displays "Time, In Rinsing•••, washing time countdown (the first two digits show the minute countdown, the last two digits show the second countdown) ". As shown in the picture below:

12:00:00 In Brine Drawing••• 060:00 (min:s)	12:00:00 In Rinsing••• 03:00 (min:s)
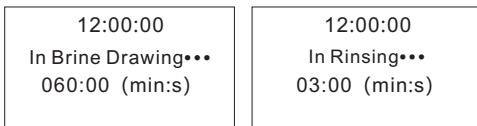
10, Manual valve closed display. Press 🖐 three times, the valve is set to the Off Valve position. "Valve closed manually" is displayed. As shown in the picture below:

11, Remote control valve close display: press valve close key in the remote control, the valve is placed in the " valve close" position, the screen displays "Valve closed by controller". As shown in the picture below:

12, Remote Valve closing display: Press the valve close key remotely in the APP, and the valve is placed in the "valve close" position. The screen displays "Valve closed remotely". As shown in the picture below:

12:00:00 Valve closed manually Press🖐3 times to open	12:00:00 Valve Closed by controller Press🖐3 times to open	12:00:00 Valve closed remotely Press🖐3 times to open
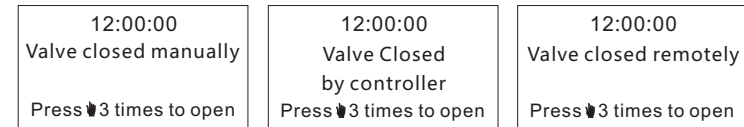
13. Continuous no water days exceed the set value automatic Valve close display: continuous no water days exceed the set value, the valve is placed in the " valve close" position, the screen displays "Valve Closed, Holiday Mode" , after closing the valve need to manually open the valve. As shown in the picture below:

14. Low battery alarm display: When the battery voltage reach to 10.2V ,the screen displays "Battery Low Power, Recharge it in time" it will come into low battery alarm, the buzzer Beep 10 times, and it will repeat again every 60 minutes.(the motor will not work and the regeneration program will not run) until connect the external power supply,it will stop alarming. When the battery voltage reach to 9.8V, it will auto shut-off valve and power off, as shown in the below pictures.

12:00:00 Valve Closed Holiday Mode Press🖐3 times to open	12:00:00 🗋 Battery Low Power Recharge it in time

15. Leak alarm display:

1)Normal working mode: LED screen lights up, the buzzer alarms till open the valve manually.

2)Power saving mode: LED screen lights up and alarms for 20 seconds, then it will auto shut off valve; After alarms 20 seconds, the LED screen stays off but the machine still in alarming status, and will not repeat alarming till valve opened manually.

…Continuous Water consumption exceeds the set value alarm close valve display: Continuous water consumption exceeds the set value, the valve is placed in the "valve close" position, the screen displays the "Water using volume exceeded" , and the buzzer alarms. After closing the valve, manually open the valve. As shown in the picture below:

…Continuous Water use time exceeds the set value alarm close valve display: continuous water use time exceeds the set value, the valve is placed in the "valve close" position, the screen displays the "Water using time exceeded" , and the buzzer alarms. After closing the valve, manually open the valve. As shown in the picture below:

…The detection sensor detects water leakage alarm valve close display: the detection sensor detects water leakage alarm, the valve is placed in the "valve close" position, the screen displays "Check the pipeline leaks" , and the buzzer alarms. After closing the valve, manually open the valve. As shown in the picture below:

12:00:00 Valve Closed,Water using volume exceeded Press ⬇3 times to open	12:00:00 Valve Closed,Water using time exceeded Press ⬇3 times to open	12:00:00 Valve Closed,Check the pipeline leaks Press ⬇3 times to open
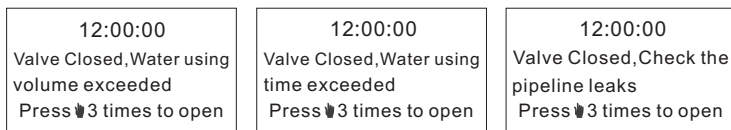
16. E1 fault alarm display: When the valve motor is working, the micro switch will not be closed or disconnect exceed 60 seconds, or could not find the original point, then the LED screen shows "E1 Alarm". As shown below:

17.Salt shortage alarm display: When the number of regeneration reaches the set value, the screen displays "Salt Shortage, Add Softening Salt" prompt, and the buzzer will sound 5 times and stop. The next time you use water, it will sound 5 times again until the salt shortage alarm is released. As shown in the figure below:

18.Lock screen display: The keys are automatically locked when no operation is performed for 1 minute; after the keys are locked, touch any key and the screen prompts "Locked, press 3s to unlock". Press and hold the "RESET" key for 3 seconds to unlock the key, and the buzzer beeps once. When the keys are locked, no keys can be operated (power on and off, WiFi reset, and E1 fault resolution do not require releasing the key lock). As shown below:

12:00:00 E1 Alarm press🔲+⬇3s to Release	12:00:00 Salt Shortage Add Softening Salt press ⬇3s to Release	🔒 12:00:00 Locked press↻ 3s to unlock
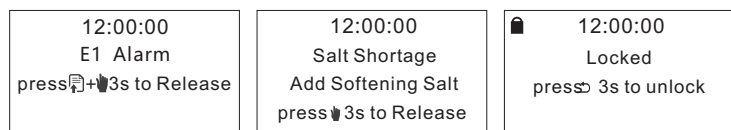
19.Detection point pairing display: Short press the button 5 times continuously to pair the detection points. When the detection points are paired, the screen displays: "Sensor Pairing•••". When the pairing is successful, the screen displays the "Sensor Pairing Succeed" prompt and then disappears, and the screen displays the detection point icon at the same time; When pairing fails, the screen displays the prompt "Sensor Pairing Failure, Try Again!". As shown below:

12:00:00 Sensor Pairing•••	12:00:00 ⬭ Sensor Pairing Succeed	12:00:00 Sensor Pairing Failure Try Again
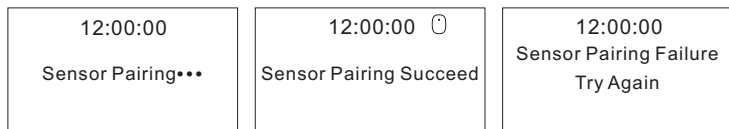
20.Battery charging display: When the battery is charging, the battery icon is displayed on the screen to indicate that it is charging. As shown below:

21.WiFi display: After connecting to WiFi, the icon on the display flashes 3 times and then stays on. And connect to the server realize IoT functions. If there is no connection within 5 minutes, the WIFI will be turned off. If you need to connect to WIFI again, press and hold the "MENU" and "RESET" keys at the same time for 3 seconds to wake up and reconnect to WIFI. As shown below:

12:00:00 🔋	12:00:00 📶
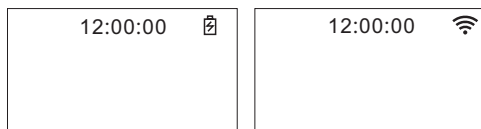
Parameter Settings

All data displayed on the following interface are examples, Please refer to actual data for specific data.
Note: When setting parameters, in key lock mode, you need to press and hold the "RESET" key for 3 seconds to release the key lock before setting parameters. Short press the " SET" key to not save the parameters and return to the menu state.
1.Set current time:
1)Long press and hold the"MENU" key for 3 seconds to enter the setting menu item. The system will highlight the "Current Time" option by default;
2)Short press the " MENU" key again to confirm the "Current Time" option and enter the "Current Time" interface;
3)Then short press "MENU" key to select the highlighted parameter value to the right in sequence, and at the same time short press "UPWARD" or " DOWN" key to adjust the parameter value in sequence;
4)After the setting is completed, short press "MENU" key to confirm the setting and return to the menu state.
For example: 12 (h): 00 (min), the hour is set to cycle in increments of 1 hour,and minutes are set to cycle in increments of 1 minute (Time is set to 24-hour format). As shown below:

Current Time	⟹	Current Time
Water Hardness		12:00
Softener Param.	↕	⎘ OK
Leak Detection Param.		✋ Cancel ▲▼ Modify
Language		
Unit		
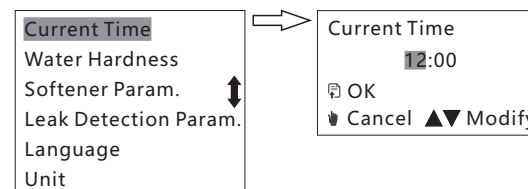
2.Set water hardness:
1)Long press " MENU" key for 3 seconds to enter the setting menu item, then press the key briefly to scroll down and highlight the "Water Hardness" option;
2)Press the key"MENU" again to confirm the "Water Hardness" option and enter the "Water Hardness" interface.
3)Then short press"MENU"key to select the highlighted parameter value to the right in sequence, and at the same time short press "UPWARD" or "DOWN" key to adjust the parameter value in sequence;
4)After the setting is completed, press "MENU" key and confirm ,and then return to menu status.
8.76 gpg represents adjustable water hardness, 2.92-58.34gpg is adjustable. As shown below:

Current Time	⟹	Water Hardness
Water Hardness		08.76 gpg
Softener Param.	↕	⎘ OK
Leak Detection Param.		✋ Cancel ▲▼ Modify
Language		
Unit		
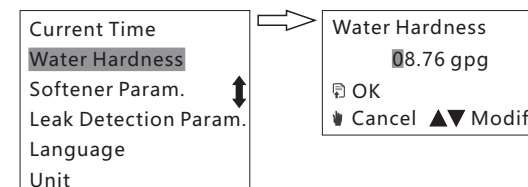
3.Set resin volume:

1) Long press "MENU" key for 3 Seconds to enter the setting menu item, then short press "DOWN" key to scroll down and highlight the "Softener Param" option;

2) Then short press "MENU" key to confirm the "Softener Param" option and enter "Softener Param" menu item, the system selects the highlighted "Resin Volume" option by default;

3) Then short press"MENU" key again to confirm the "Resin Volume" option and enter the "Resin Volume" interface;

4) Then short press "MENU" key to select the highlighted parameter value to the right in sequence, and at the same time short press "UPWARD" or "DOWN" key to adjust the parameter value in sequence;

5) After the setting is completed, press "MENU" key to confirm the setting and return to the menu state.

0.42 ft³ represents the adjustable resin volume, 0.03-3.49 ft³ is adjustable. As shown below:

Current Time	⇨	Resin Volume	⇨	Resin Volume
Water Hardness		Regen. Processing		0.42 ft³
Softener Param. ↕		Regen. Start Time		▯ OK
Leak Detection Param.		Regen. Interval Days		☟ Cancel ▲▼ Modify
Language		Backwash Time ↕		
Unit		Slow Rinse Time		
		Brine Refilling Time		
		Rinse Time		
		Valve Self Test Days		
		Every Turn Flow		
		Salt Short Regen. Freq.		
		Regen. Work Mode		

4.Set up the regeneration process:

1) Long press " MENU" key for 3 seconds to enter the setting menu item, then short press "DOWN" key to scroll down and highlight the "Softener Param" option;

2) Then short press "MENU" key to confirm the "Softener Param" option, enter the "Softener Param" menu item, and then short press "DOWN" key to scroll down and highlight the "Regen. Processing" option;

3) Then short press "MENU" key to confirm the "Regen. Processing" option and enter the "Regen. Processing" interface. The system selects the highlighted "Dry Salt" option by default;

4) Then short press "UPWARD" or"DOWN" key to scroll up and down to select the highlighted option;

5) After the setting is completed, short press "MENU" key to confirm the setting and return to the menu state.

The default is dry salt regeneration, dry salt regeneration and wet salt regeneration are optional. As shown below:

Current Time	⇨	Resin Volume	⇨	Regen. Processing
Water Hardness		Regen. Processing		Dry Salt
Softener Param. ↕		Regen. Start Time		▯ OK Wet Salt
Leak Detection Param.		Regen. Interval Days		☟ Cancel ▲▼ Modify
Language		Backwash Time ↕		
Unit		Slow Rinse Time		
		Brine Refilling Time		
		Rinse Time		
		Valve Self Test Days		
		Every Turn Flow		
		Salt Short Regen. Freq.		
		Regen. Work Mode		

5.Set regeneration trigger time:

1) Long press " MENU" key for 3 seconds to enter the setting menu item, then short press "DOWN" key to scroll down and highlight the "Softener Param" option;

2) Then short press "MENU" key to confirm the "Softener Param" option, enter the "Softener Param" menu item, and then short press "DOWN" key to scroll down and highlight the "Regen. Start Time" option;

3) Then short press " MENU" key again to confirm the "Regen. Start Time" option and enter the "Regen. Start Time" interface;

4) Then short press "MENU" key to select the highlighted parameter value to the right in sequence, and at the same time short press "UPWARD" or "DOWN" key to adjust the parameter value in sequence;

5) After the setting is completed, short press "MENU" key to confirm the setting and return to the menu state.

0 2: 0 0 (h: min) represents the adjustable regeneration triggering time. The hour is set to an incrementing cycle of 1 hour, and the minute is set to an incrementing cycle of 1 minute (time is set to 24-hour system). As shown below:

Current Time	⇨	Resin Volume	⇨	Regen. Start Time
Water Hardness		Regen. Processing		02:00
Softener Param. ↕		Regen. Start Time		▯ OK
Leak Detection Param.		Regen. Interval Days		☟ Cancel ▲▼ Modify
Language		Backwash Time ↕		
Unit		Slow Rinse Time		
		Brine Refilling Time		
		Rinse Time		
		Valve Self Test Days		
		Every Turn Flow		
		Salt Short Regen. Freq.		
		Regen. Work Mode		

6.Set the number of days between regeneration：

1) Long press "MENU" key for 3 seconds to enter the setting menu item, then short press "DOWN" key to scroll down and highlight the "Softener Param." option;

2) Short press "MENU" key again to confirm the "Softener Param." option, enter the "Softener Param." menu item, and then short press "DOWN" key to scroll down and highlight the "Regen. Interval Days" option;

3) Short press "MENU" key again to confirm the "Regen. Interval Days" option and enter the "Regen. Interval Days" interface;

4) Then short press "MENU" key to select the highlighted parameter value to the right in sequence, and at the same time short press "UPWARD" or "DOWN" key to adjust the parameter value in sequence;

5) After the setting is completed, short press "MENU" key to confirm the setting and return to the menu state.

30d represents the adjustable regeneration interval days, 01-30 days are adjustable. "Residual water production flow" intelligently controls regeneration, whichever comes first will execute regeneration first. As shown below:

Current Time	⇨	Resin Volume	⇨	Regen. Interval Days
Water Hardness		Regen. Processing		30d
Softener Param. ↕		Regen. Start Time		🖫 OK
Leak Detection Param.		Regen. Interval Days		⌨ Cancel ▲▼ Modify
Language		Backwash Time ↕		
Unit		Slow Rinse Time		
		Brine Refilling Time		
		Rinse Time		
		Valve Self Test Days		
		Every Turn Flow		
		Salt Short Regen. Freq.		
		Regen. Work Mode		

7.Set backwash time：
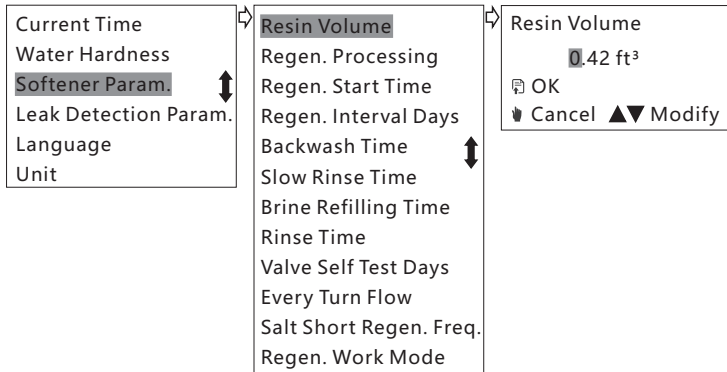
1) Long press "MENU" key for 3 seconds to enter the setting menu item, then short press "DOWN" key to scroll down and highlight the "Softener Param." option;

2) Short press "MENU" key again to confirm the "Softener Param." option, enter the "Softener Param." menu item, and then short press "DOWN" key to scroll down and highlight the "Backwash Time" option;

3) Then short press "MENU" key to confirm the " Backwash Time" option and enter the " Backwash Time" interface;

4) Then short press "MENU" key to select the highlighted parameter value to the right in sequence, and at the same time short press "UPWARD" or "DOWN" key to adjust the parameter value in sequence;

5) After the setting is completed, short press "MENU" key to confirm the setting and return to the menu state.
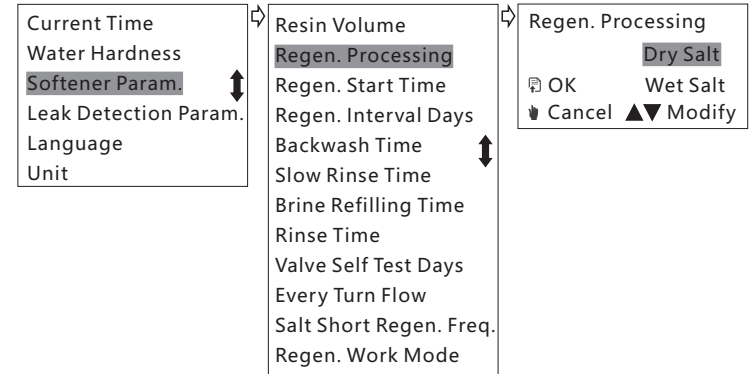
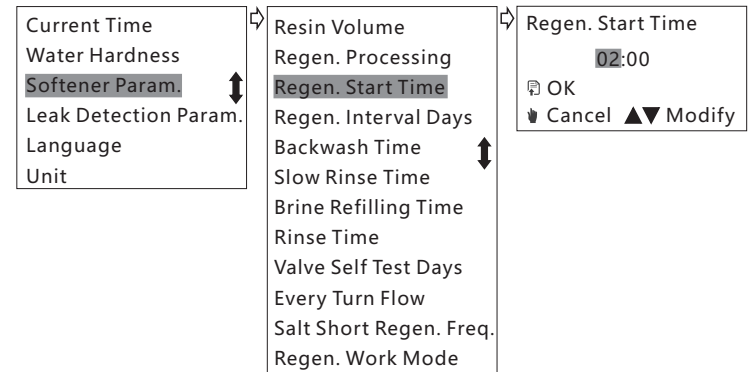02min represents the adjustable backwash time, which is adjustable from 0 to 99 minutes. When set to 0, this function is invalid (this process will be skipped in the regeneration program). As shown below:

Current Time	⇨	Resin Volume	⇨	Backwash Time
Water Hardness		Regen. Processing		02min
Softener Param.		Regen. Start Time		🖫 OK
Leak Detection Param.		Regen. Interval Days		⌨ Cancel ▲▼ Modify
Language		Backwash Time ↕		
Unit		Slow Rinse Time		
		Brine Refilling Time		
		Rinse Time		
		Valve Self Test Days		
		Every Turn Flow		
		Salt Short Regen. Freq.		
		Regen. Work Mode		

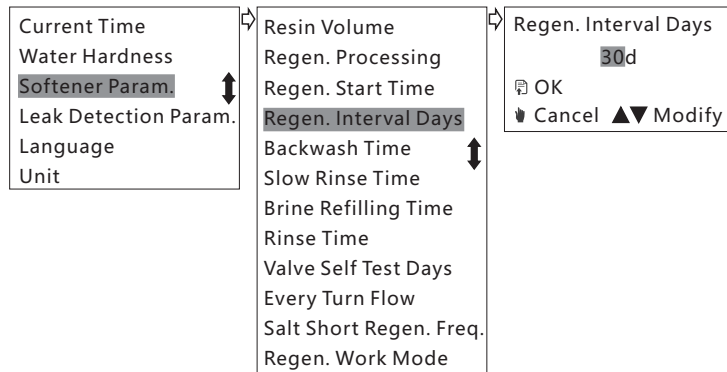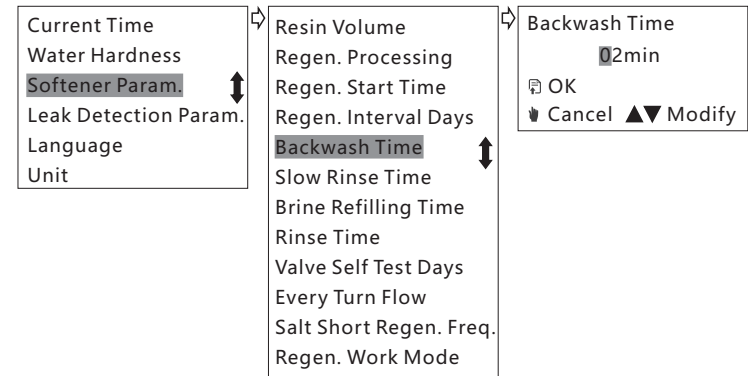**8.Set the salt absorption slow washing time:**

1) Long press "MENU" key for 3 seconds to enter the setting menu item, then short press "DOWN" key to scroll down and highlight the "Softener Param." option;

2) Short press "MENU" key again to confirm the "Softener Param." option, enter the "Softener Param." menu item, and then short press "DOWN" key to scroll down and highlight the "Slow Rinse Time" option;

3) Then short press "MENU" key to confirm the " Slow Rinse Time" option and enter the " Slow Rinse Time" interface;

4) Then short press "MENU" key to select the highlighted parameter value to the right in sequence, and at the same time short press "UPWARD" or "DOWN" key to adjust the parameter value in sequence;

5) After the setting is completed, short press "MENU" key to confirm the setting and return to the menu state.

060min represents the adjustable salt absorption slow washing time, which is adjustable from 0 to 255 minutes. When set to 0, this function is invalid (this process will be skipped in the regeneration program). As shown below:

Current Time	⇨	Resin Volume	⇨	Slow Rinse Time
Water Hardness		Regen. Processing		060min
Softener Param. ↕		Regen. Start Time		🖫 OK
Leak Detection Param.		Regen. Interval Days		⌨ Cancel ▲▼ Modify
Language		Backwash Time ↕		
Unit		Slow Rinse Time		
		Brine Refilling Time		
		Rinse Time		
		Valve Self Test Days		
		Every Turn Flow		
		Salt Short Regen. Freq.		
		Regen. Work Mode		

9.Set the salt tank refill time：

1) Long press "MENU" key for 3 seconds to enter the setting menu item, then short press "DOWN" key to scroll down and highlight the "Softener Param." option;

2) Short press "MENU" key again to confirm the "Softener Param." option, enter the "Softener Param." menu item, and then short press "DOWN" key to scroll down and highlight the "Brine Refilling Time" option;

3) Then short press "MENU" key to confirm the " Brine Refilling Time" option and enter the " Brine Refilling Time" interface;

4) Then short press "MENU" key to select the highlighted parameter value to the right in sequence, and at the same time short press "UPWARD" or "DOWN" key to adjust the parameter value in sequence;

5) After the setting is completed, short press "MENU" key to confirm the setting and return to the menu state.

05min represents the adjustable salt tank refilling time, which is adjustable from 0 to 99 minutes. When set to 0, this function is invalid (this process will be skipped in the regeneration program). As shown below:

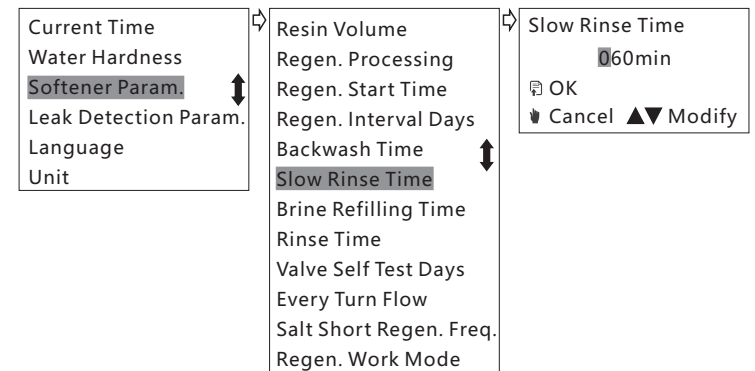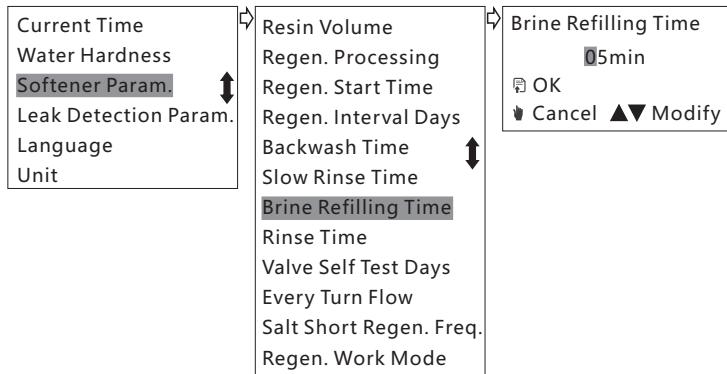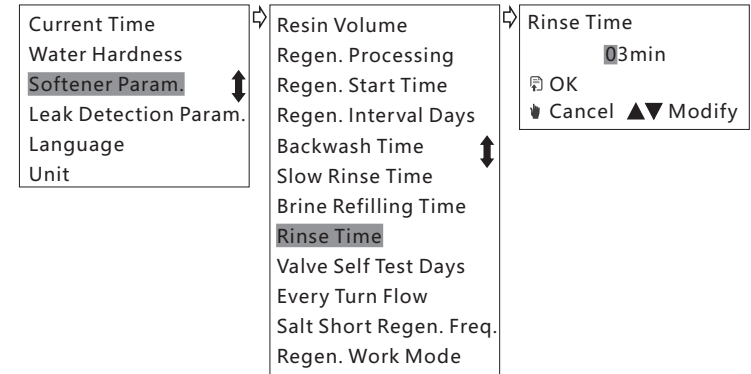| Current Time	Resin Volume	Brine Refilling Time
Water Hardness	Regen. Processing	05min
Softener Param.	Regen. Start Time	OK
Leak Detection Param.	Regen. Interval Days	Cancel ▲▼ Modify
Language	Backwash Time	
Unit	Slow Rinse Time	
	Brine Refilling Time	
	Rinse Time	
	Valve Self Test Days	
	Every Turn Flow	
	Salt Short Regen. Freq.	
	Regen. Work Mode	

10.Set up washing time:

1) Long press "MENU" key for 3 seconds to enter the setting menu item, then short press "DOWN" key to scroll down and highlight the "Softener Param." option;

2) Short press "MENU" key again to confirm the "Softener Param." option, enter the "Softener Param." menu item, and then short press "DOWN" key to scroll down and highlight the "Rinse Time" option;

3) Then short press "MENU" key to confirm the " Rinse Time" option and enter the " Rinse Time" interface;

4) Then short press "MENU" key to select the highlighted parameter value to the right in sequence, and at the same time short press "UPWARD" or "DOWN" key to adjust the parameter value in sequence;

5) After the setting is completed, short press "MENU" key to confirm the setting and return to the menu state.

03min represents the adjustable of washing time, which is adjustable from 0 to 99 minutes. When set to 0, this function is invalid (this process will be skipped in the regeneration program). As shown below:

Current Time	Resin Volume	Rinse Time
Water Hardness	Regen. Processing	03min
Softener Param.	Regen. Start Time	OK
Leak Detection Param.	Regen. Interval Days	Cancel ▲▼ Modify
Language	Backwash Time	
Unit	Slow Rinse Time	
	Brine Refilling Time	
	Rinse Time	
	Valve Self Test Days	
	Every Turn Flow	
	Salt Short Regen. Freq.	
	Regen. Work Mode	

11.Set valve self-test days：

1) Long press "MENU" key for 3 seconds to enter the setting menu item, then short press "DOWN" key to scroll down and highlight the "Softener Param." option;

2) Short press "MENU" key again to confirm the "Softener Param." option, enter the "Softener Param." menu item, and then short press "DOWN" key to scroll down and highlight the "Valve Self Test Days " option;

3) Then short press "MENU" key to confirm the " Valve Self Test Days " option and enter the " Valve Self Test Days " interface;

4) Then short press "MENU" key to select the highlighted parameter value to the right in sequence, and at the same time short press "UPWARD" or "DOWN" key to adjust the parameter value in sequence;

5) After the setting is completed, short press "MENU" key to confirm the setting and return to the menu state.

10d represents the adjustable of Valve self-test days , which is adjustable from 0 to 99 days. The number of days is set to cycle in increments of 1 day. After reaching the set value of days, the valve automatically starts self-test (default: perform self-test at 02:00)). When set to 0, this function has no effect. As shown below:

Current Time	Resin Volume	Valve Self Test Days
Water Hardness	Regen. Processing	10d
Softener Param.	Regen. Start Time	OK
Leak Detection Param.	Regen. Interval Days	Cancel ▲▼ Modify
Language	Backwash Time	
Unit	Slow Rinse Time	
	Brine Refilling Time	
	Rinse Time	
	Valve Self Test Days	
	Every Turn Flow	
	Salt Short Regen. Freq.	
	Regen. Work Mode	

12.Set the flow rate per revolution of the flow meter：

1) Long press "MENU" key for 3 seconds to enter the setting menu item, then short press "DOWN" key to scroll down and highlight the "Softener Param." option;

2) Short press "MENU" key again to confirm the "Softener Param." option, enter the "Softener Param." menu item, and then short press "DOWN" key to scroll down and highlight the "Every Turn Flow" option;

3) Then short press "MENU" key to confirm the " Every Turn Flow " option and enter the " Every Turn Flow " interface;

4) Then short press "MENU" key to select the highlighted parameter value to the right in sequence, and at the same time short press "UPWARD" or "DOWN" key to adjust the parameter value in sequence;

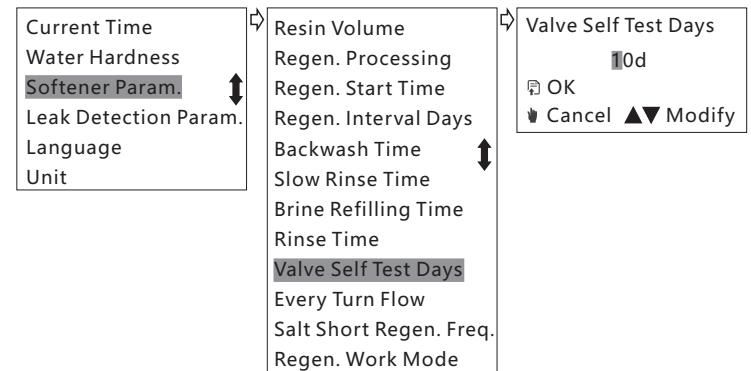5) After the setting is completed, short press "MENU" key to confirm the setting and return to the menu state.

2100mL/n represents the flow rate per revolution of the adjustable flow meter (used to calibrate water flow), and 0-9999mL/n is adjustable. As shown below:

Current Time	Resin Volume	Every Turn Flow
Water Hardness	Regen. Processing	2100mL/n
Softener Param.	Regen. Start Time	OK
Leak Detection Param.	Regen. Interval Days	Cancel ▲▼ Modify
Language	Backwash Time	
Unit	Slow Rinse Time	
	Brine Refilling Time	
	Rinse Time	
	Valve Self Test Days	
	Every Turn Flow	
	Salt Short Regen. Freq.	
	Regen. Work Mode	

13.Set the number of salt shortage alarm regeneration times:

1) Long press "MENU" key for 3 seconds to enter the setting menu item, then short press "DOWN" key to scroll down and highlight the "Softener Param." option;

2) Short press "MENU" key again to confirm the "Softener Param." option, enter the "Softener Param." menu item, and then short press "DOWN" key to scroll down and highlight the "Salt Short Regen.Freq" option;

3) Then short press "MENU" key to confirm the " Salt Short Regen.Freq " option and enter the " Salt Short Regen.Freq" interface;

4) Then short press "MENU" key to select the highlighted parameter value to the right in sequence, and at the same time short press "UPWARD" or "DOWN" key to adjust the parameter value in sequence;

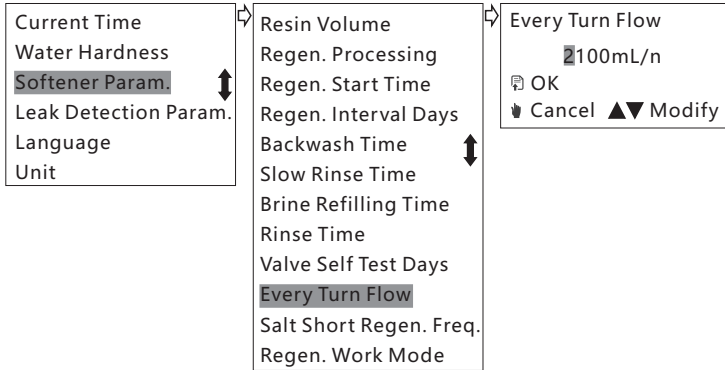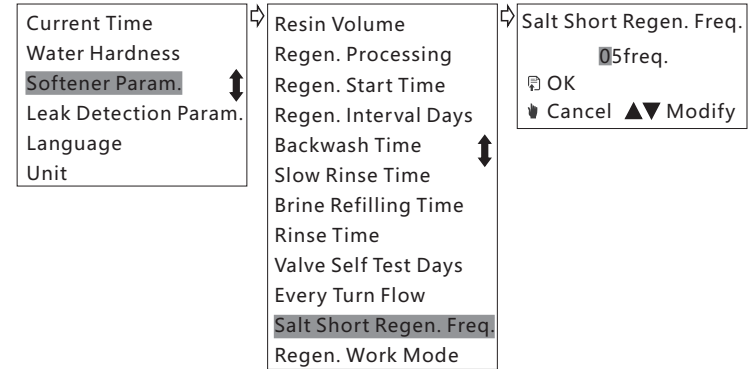5) After the setting is completed, short press "MENU" key to confirm the setting and return to the menu state.

05freq. represents the adjustable of salt shortage alarm regeneration times, 0-99 times are adjustable. When set to 0, this function is invalid. As shown below:

Current Time	Resin Volume	Salt Short Regen. Freq.
Water Hardness	Regen. Processing	05freq.
Softener Param.	Regen. Start Time	OK
Leak Detection Param.	Regen. Interval Days	Cancel ▲▼ Modify
Language	Backwash Time	
Unit	Slow Rinse Time	
	Brine Refilling Time	
	Rinse Time	
	Valve Self Test Days	
	Every Turn Flow	
	Salt Short Regen. Freq.	
	Regen. Work Mode	

14.Set Regen. Work Mode**：**

1) Long press "MENU" key for 3 seconds to enter the setting menu item, then short press "DOWN" key to scroll down and highlight the "Softener Param." option;

2) Short press "MENU" key again to confirm the "Softener Param." option, enter the "Softener Param." menu item, and then short press "DOWN" key to scroll down and highlight the "Regen. Work Mode" option;

3) Then short press "MENU" key to confirm the "Regen. Work Mode" option and enter the " Regen. Work Mode" interface，the system defaults to selecting the highlighted "Delayed" option;

4) Short press "UPWARD" or "DOWN" to scroll and select the desired option;

5) After the setting is completed, short press "MENU" key to confirm the setting and return to the menu state.

defaults to "Delayed"，"Delayed"、"Immediate"are adjustable. As shown in the picture below:

Current Time	Resin Volume	Regen. Work Mode
Water Hardness	Regen. Processing	Delayed
Softener Param.	Regen. Start Time	OK Immediate
Leak Detection Param.	Regen. Interval Days	Cancel ▲▼ Modify
Language	Backwash Time	
Unit	Slow Rinse Time	
	Brine Refilling Time	
	Rinse Time	
	Valve Self Test Days	
	Every Turn Flow	
	Salt Short Regen. Freq.	
	Regen. Work Mode	
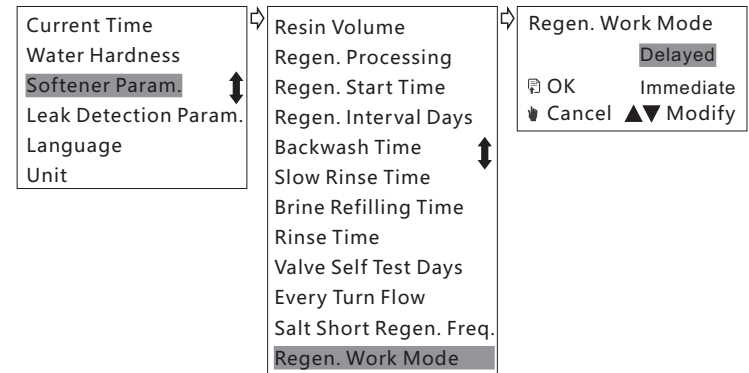
15. Continuous Water Usage Setting

1) Long press "MENU" for 3 seconds to enter into parameter setting. Then, short press "DOWN" to scroll down and select the highlighted "Leak Detection Param." option;

2) Short press "MENU" again to confirm "Leak Detection Param." option, entering the "Leak Detection Param." menu item, the system defaults to highlighting the "Water Volume" option;

3) Short press "MENU" again to confirm the "Water Volume" option, entering the "Water Volume" interface;

4) Short press "MENU" again to sequentially select the highlighted parameter value to the right. Meanwhile, short press "UPWARD" or "DOWN" to adjust the parameter values accordingly;

5) After the setting is completed, short press "MENU" to confirm the setting is successful and return to the menu state.
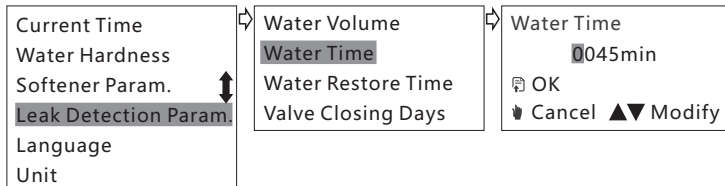
79 GAL represents the adjustable continuous water usage, 0-2640 GAL can be adjusted. When set to 0, this function is invalid. As shown in the picture below:

```
Current Time        ⇨  Water Volume      ⇨  Water Volume
Water Hardness          Water Time               0079 GAL
Softener Param.         Water Restore Time    ⊡ OK
Leak Detection Param.   Valve Closing Days    ✋ Cancel  ▲▼ Modify
Language
Unit
```
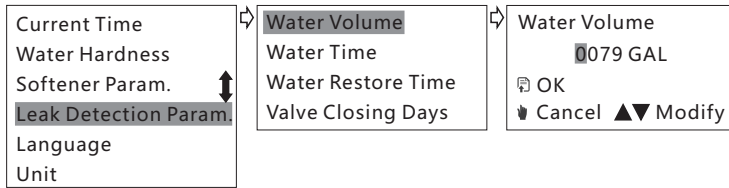
16. Continuous Water Usage Time Setting

1) Long press "MENU" for 3 seconds to enter into parameter setting. Then, short press "DOWN" to scroll down and select the highlighted "Leak Detection Param." option;

2) Short press "MENU" again to confirm "Leak Detection Param." option, entering the "Leak Detection Param." menu item. Then, short press "DOWN" to scroll down and select the highlighted "Water Time" option;

3) Short press "MENU" again to confirm the "Water Time" option, entering the "Water Time" interface;

4) Short press "MENU" again to sequentially select the highlighted parameter value to the right. Meanwhile, short press "UPWARD" or "DOWN" to adjust the parameter values accordingly;

5) After the setting is completed, short press "MENU" to confirm the setting is successful and return to the menu state.
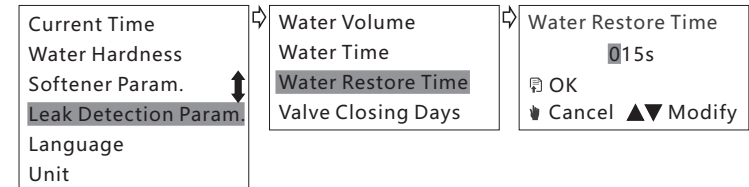
0045 min represents the adjustable continuous water usage time, 0-9999 min can be adjusted. When set to 0, this function is invalid. As shown in the picture below:

```
Current Time        ⇨  Water Volume      ⇨  Water Time
Water Hardness          Water Time               0045min
Softener Param.         Water Restore Time    ⊡ OK
Leak Detection Param.   Valve Closing Days    ✋ Cancel  ▲▼ Modify
Language
Unit
```

17. Automatic Water Restore Supply Time Setting

1) Long press "MENU" for 3 seconds to enter into parameter setting. Then, short press "DOWN" to scroll down and select the highlighted "Leak Detection Param." option;

2) Short press "MENU" again to confirm "Leak Detection Param." option, entering the "Leak Detection Param." menu item. Then, short press "DOWN" to scroll down and select the highlighted "Water Restore Time" option;

3) Short press "MENU" again to confirm the "Water Restore Time" option, entering the "Water Restore Time" interface;

4) Short press "MENU" again to sequentially select the highlighted parameter value to the right. Meanwhile, short press "UPWARD" or "DOWN" to adjust the parameter values accordingly;

5) After the setting is completed, short press "MENU" to confirm the setting is successful and return to the menu state.
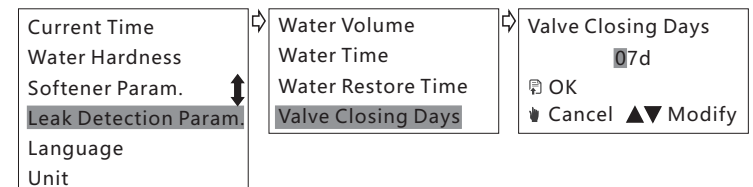
015s represents the adjustable automatic water restore supply time, 0-999s can be adjusted. When set to 0, this function is invalid. When the abnormal situation described in 14, 15 above occurs and leads to the valve closing and water supply shutdown, if the faucet is closed within 15s, the water supply will be automatically resumed. If the faucet is not closed within this time, the valve should be closed and the valve should be opened manually. As shown in the picture below:

```
Current Time        ⇨  Water Volume      ⇨  Water Restore Time
Water Hardness          Water Time               015s
Softener Param.         Water Restore Time    ⊡ OK
Leak Detection Param.   Valve Closing Days    ✋ Cancel  ▲▼ Modify
Language
Unit
```

18. Automatic Valve Closing Days Setting

1) Long press "MENU" for 3 seconds to enter into parameter setting. Then, short press "DOWN" to scroll down and select the highlighted "Leak Detection Param." option;

2) Short press "MENU" again to confirm "Leak Detection Param." option, entering the "Leak Detection Param." menu item. Then, short press "DOWN" to scroll down and select the highlighted "Valve Closing Days" option;

3) Short press "MENU" again to confirm the "Valve Closing Days" option, entering the "Valve Closing Days" interface;

4) Short press "MENU" again to sequentially select the highlighted parameter value to the right. Meanwhile, short press "UPWARD" or "DOWN" to adjust the parameter values accordingly;

5) After the setting is completed, short press "MENU" to confirm the setting is successful and return to the menu state.

07d represents the adjustable automatic valve closing days, 0-99 days can be adjusted. If the valve is closed beyond the set days, the valve shall be manually opened. When set to 0, this function is invalid. As shown in the picture below:

```
Current Time        ⇨  Water Volume      ⇨  Valve Closing Days
Water Hardness          Water Time               07d
Softener Param.         Water Restore Time    ⊡ OK
Leak Detection Param.   Valve Closing Days    ✋ Cancel  ▲▼ Modify
Language
Unit
```

19. Language Setting

1) Long press "MENU" for 3 seconds to enter into parameter setting. Then, short press "DOWN" to scroll down and select the highlighted "language" option;

2) Short press "MENU" again to confirm "language" option, entering the "language" interface, the system defaults to selecting the highlighted "Chinese" option;

3) Short press "UPWARD" or "DOWN" to scroll and select the desired option;

4) After the setting is completed, short press "MENU" to confirm the setting is successful and return to the menu state.

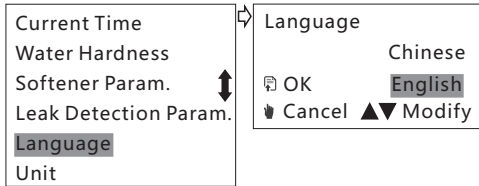The language defaults to Chinese domestically and to English internationally. As shown in the picture below:

```
Current Time          ⇨  Language
Water Hardness                        Chinese
Softener Param.       ↕    🗋 OK       English
Leak Detection Param.     👆 Cancel  ▲▼ Modify
Language
Unit
```

20. Unit Setting

1) Long press "MENU" for 3 seconds to enter into parameter setting. Then, short press "DOWN" to scroll down and select the highlighted "Unit" option;

2) Short press "MENU" again to confirm "Unit" option, entering the "Unit" interface, the system defaults to selecting the highlighted "U.S. Unit" option;

3) Short press "UPWARD" or "DOWN" to scroll and select the desired option;

4) After the setting is completed, short press "MENU" to confirm the setting is successful and return to the menu state.
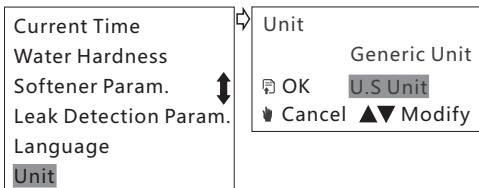
The English version defaults to "U.S. Unit", Generic Unit (m³, L, L/min, mg/L), U.S. Unit (GAL, ft³., GPM, gpg) are adjustable. As shown in the picture below:

```
Current Time          ⇨  Unit
Water Hardness                        Generic Unit
Softener Param.       ↕    🗋 OK       U.S Unit
Leak Detection Param.     👆 Cancel  ▲▼ Modify
Language
Unit
```

All model regeneration process comparison table: The regeneration process is divided into dry salt regeneration and wet salt regeneration. The specific process is as follows:

Regeneration Name	Regeneration Process				
dry salt regeneration	refilling	salt dissolving (water control level)	backwash	regeneration (slow washing with salt absorption)	flush
wet salt regeneration	backwash	regeneration (slow washing with salt absorption)	refilling	flush	

All model regeneration parameter setting comparison table (The following backwash, regeneration, refilling and flush time parameters are data tested under 0.24MPa water pressure.)

Item No.	Resin Volume (ft³.)	Water Hardness (gpg)	Regeneration Trigger Time	Regeneration Interval Days (d)	Backwash Time (min)	Regeneration Time (min)	Refilling (min)	Flush (min)	Salt Dissolving Time (min)
EV6 Pro dry salt regeneration	0.42	8.76	02:00	30	2	30	3	3	5
EV6 Pro wet salt regeneration	0.42	8.76	02:00	30	2	30	3	3	
EV8 Pro dry salt regeneration	0.88	8.76	02:00	30	3	83	8	4	5
EV8 Pro wet salt regeneration	0.88	8.76	02:00	30	3	83	8	4	

Item No.	Water Usage (GAL)	Water Usage Time (min)	Auto Water Resupply Time (s)	Auto Valve Closing Days (d)	Valve Self-Check Interval Days (d)	Flow Rate per Revolution of Flow Meter (mL/n)	Salt Shortage Alarm (Regen. Freq.)
EV6 Pro	79	45	15	7	10	2100	0
EV8 Pro	79	45	15	7	10	2100	0

Working Mode

There are two modes for the machine: normal working mode and power saving working mode:

1. Functions in normal working mode: Valve closes and alarms when the water consumption (single water use consumption volume) exceeds the set value; Valve closes and alarms when the time (single continuous water use time) exceeds the set value; Valve closes and alarms when the leak time (single continuous leak time) exceeds the set value; Valve closes and alarms when the maximum flow exceeds the set value; Automatic restore water supply function; Continuous disuse water days exceeds the set value; Low power alarm; Valve interval self-testing; Wireless remote control; Sensor probe detects leak and valve close function; WIFI function.

2. Functions in power saving mode: cancel the valve interval self-testing function, wireless remote control function, sensor probe detects leak and valve closing function, WIFI function, other functions are reserved.

Double power supply for automatic switching: automatically enter normal working mode when external power supply is supplied, which can realize all set functions; When the external power supply is off, it automatically switches to the battery power supply and starts the power-saving working mode. Only the basic functions are realized and some functions are automatically shielded to save power.

The pairing method between the main device and the remote controller

Continuously press "MENU" for 5 times, then the "MENU" indicator will flash continuously, press the "OPEN" or "CLOSE" button on the remote controller for pairing. The main device will ring 2 times if it paired successfully. The "MENU" indicator is constantly light up to exit pairing. If it is not paired successfully, the device will not ring then reset the main device is needed before pairing again according to the above method.

The usage of sensor probe

Before using the sensor probe, it has to be paired with the main device for normal using. The device could pair with 1pc remote controller and 7pcs sensor probe. If exceed the paired quantities the device will cover the first pairing unit (the controller or the sensor probe) which means that the first pairing unit is invalid.

1. The pairing method with main device
Continuously press "MENU" key for 5 times, the "MENU" indicator will flash constantly, and then short the positive and negative poles of the sensor probe (water short circuit or conductive metal for conduction), the device will ring 2 times if it paired successfully. The "MENU" indicator is constantly light up to exit pairing. After pairing successfully, wait till the indicator flashes 60 seconds and run out, then can pair the next sensor probe. Otherwise the pairing will be repeated or failed. Pairing all the sensor probe according to the above method. If it is not paired successfully, the device will not ring, then reset the main device is needed before pairing again according to the above method. As shown in the picture below:

leak indicator   positive pole   negative pole

2. Leak indicator alarm mode
When the sensor probe detects leakage, its positive and negative poles will be short circuited, the leak indicator on the sensor probe will flash and alarm and send the valve-closing instruction to the main device, the device will auto shut off valve. At this time, the valve need to be manually opened.
When the battery voltage is higher than 8V, the leak indicator will flash and alarm for 60 seconds (1 time per second).
When the battery voltage is lower than 8V, the leak indicator will fast flash and alarm for 60 seconds (2 times per second), at this time, need to replace the battery in time.
Note: It will not remind of low power supply when the sensor probe does not detect any leaks or alarm.

3. Use condition
1) For general users, use with sensor probe and place it in the area where is easily leaking can fast and accurately detects the leaks and close valve, more safety assurance.
2) For large water consumption user, if the leakage could not be monitored by single continuous water usage volume or time, adjust these two parameters appropriately and place the sensor probe in the area where is easily leaking for detection.
4. Pay attention:
1) Keep out the reach of children to assure normal use when place the sensor probe.
2) Do not place the sensor probe in a ponding area in case of false closing valve.
3) The battery needs to be replaced every 1-1.5 years.

ROUTINE MAINTENANCE

Notice

1. The water during regeneration period is not softened. It is not recommended to use water under regeneration as will affect its regeneration effect.
2. After the water softener stops working for a period of time, a regeneration operation should be manually added before reuse to ensure the quality of water production.
3. During using softener, do not cut off the power supply to avoid the clock error of the softener, which will affect the original set of the regeneration start time of softener, so that the user may misuse the un-softened water.
4. If the source water hardness changes, it should be set in time to ensure the quality of softened water.
5. Water hammer should be prevented during the operation of the equipment. For example, the valve and water pump should not be opened or closed quickly.
6. Do not apply external force to the softener, and avoid direct sunlight and other heat sources of radiation.

Jet device cleaning

If the salt absorption rate is found to be slow or non-salt absorption after long-term use of the product, it may be that the jet nozzle is blocked, and the jet device should be removed for cleaning. As shown in the picture below:

jet nozzle

jet nozzle
sealing gasket
nut
strainer
cover
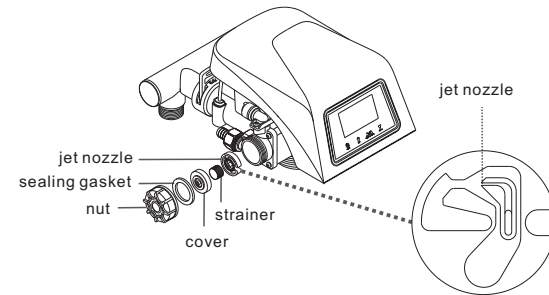
Battery replacement

Main device battery replacement
The battery for main device is rechargeable. It needs to be replaced when its charging life has expired or the battery bulge has affected normal use. The process of replacement is as shown in the picture below:

Remove the top cover of the display   **Remove the battery cover**   **Replace the battery**
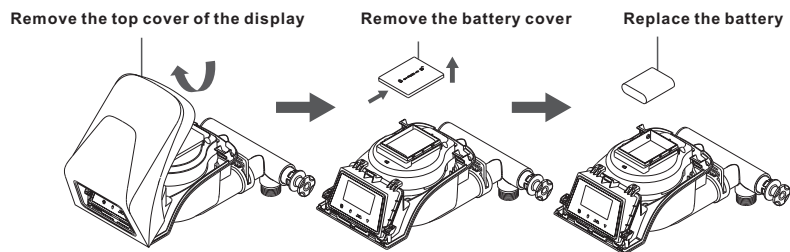
Sensor probe battery replacement

The battery in the sensor probe is non-rechargeable. It is recommended to replace every 1-1.5 years. Battery specification: 23A 12V. After replacing the battery, you do not need to re-pair it. It can be used directly. The process of replacement is as shown in the picture below:

Unscrew the screws   Remove the cover   Replace the battery
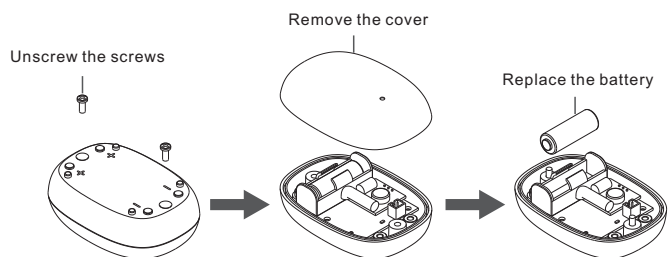
Malfunctions and Handling

Malfunction	Troubleshooting	Handling
E1 alarming	The connection line for micron switch falls off	Check the micro switch connection line
	The micro switch is faulty	Replace a new micro switch
	Motor fault	Replace a new motor
	Main control board fault	Replace a new main control board
Control valve is not working	Electric adapter is unplug	Connect the power supply
	Socket malfunction	Replace the socket
	Electric adapter malfunction	Replace the electric adapter
Regeneration time is incorrect	Power cut off or power supply connector loosen	Adjust the time according to the manual
Leakage	The connection is loosen	Tighten the connection or reconnected
Abnormal noise	The air comes into water softener	Back flush to exhaust air
Softened water quality has blister	The air comes into water softener	Turn on the water faucet to exhaust air
high value of softened water hardness	The bad quality of source water	Contact with the retailer
	The regeneration time is set too long	Reduce the regeneration time
	The period of water production is expired	Manually regenerate the resin
No salt supply	Inlet water pressure is too low	Improve the inlet pressure above 0.15Mpa
	The pipeline for salt supply is blocked	Cleaning the strainer
	Refill time is out of control	Check all the pipeline parts to eliminate leakage
Brine tank overflow	The pipeline for salt supply is air leakage	Contact with the retailer
	Brine tank valve is malfunction	
No softened water after regeneration	Regeneration device does not work	Check the power supply
	No salt in brine tank	Add salt
	Jet device is blocked	Clean the jet device and reinstall it
Water flow is too high or too low when back flushing	Ejector is not suitable	Replace the ejector
	Foreign material is in ejector	Remove the foreign material
Hard water drains out when working	The regeneration is incorrect	Regenerate with the correct salt ratio
	Leakage of by pass valve	Replace the O ring
	Outlet's O ring is broken	Replace the O ring
	The source water hardness is set incorrectly	Test the hardness of source water and reset it

Important Notice

As the parts of the control valve is controlled by electronic circuit, the time data will be lost when the power is cut off for two days (48 hours), which will cause the water softener not to regenerate at the set time. It is recommended to check whether the time displayed on the control panel is correct after the power is restored. If it is incorrect, please refer to the related contents in the manual of the control valve to calibrate the clock of the water softer control valve.   Please purchase regular water softener special salt from the local dealer to protect the normal operation of the water softener.

Note:There could be some differences between the graphic ,process,and data of this product with the actual sample,please refer to the actual sample.

Packing List

No.	Parts Name	Quantity
1	Main Device	1
2	Power Adapter	1
3	Sensor Probe (optional)	1
4	Remote Controller (optional)	1
5	Instruction Manual	1
6	Warranty Card	1
7	Qualified Certificate	1

Note: The sensor probe and remote controller is optional. Users need to purchase it voluntarily.