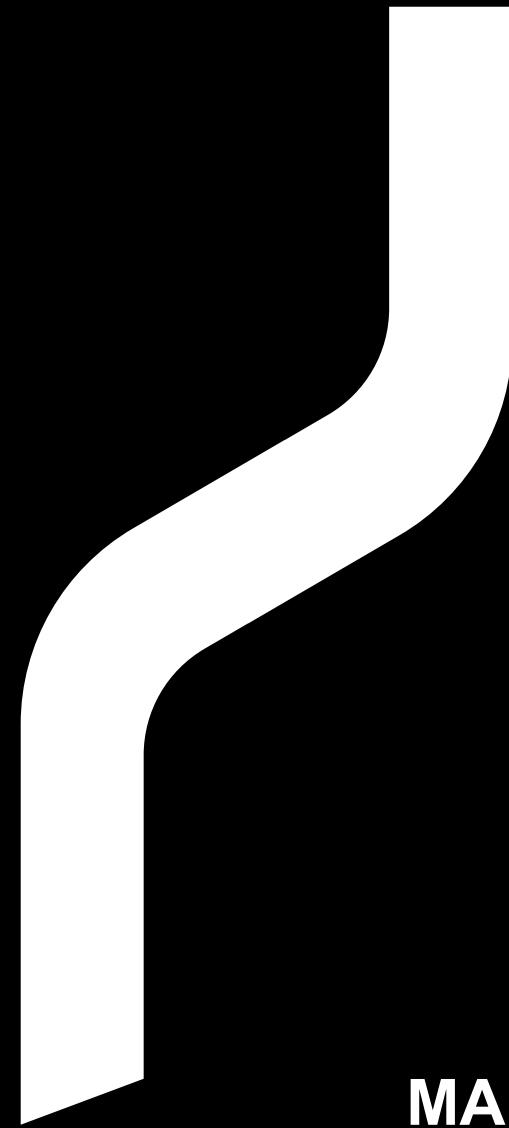


IMRITA
WHOLE HOUSE WATER FILTRATION SYSTEM



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MADE IN CHINA

MANUAL
IMT-S2/S4 PULS

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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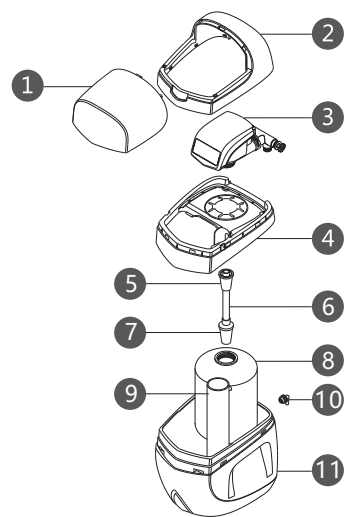
THE PRINCIPLE OF PERFORMANCE

Product introduction

1. Household water softener series products, with large water flow, high efficiency water softening effect, stable equipment performance, automatic intelligent operation, can realize automatic wet and dry salt, up/downstream regeneration and many other characteristics.
2. Leakage detection: water volume and time for double detection to ensure safety.
3. Remote wireless control, can be remote control the valve open and closed, control range 10-30 meters.
4. The main device can be paired with 1 remote control and 7 pieces sensor probe, can quickly and accurately sense the leakage point and close the valve.
5. built-in lithium battery, double power automatic switch, automatic charge and discharge protection function, power outage also leak proof.
6. WiFi smart controlling, remote control via mobile APP, can be easily controlled without on-site operation.

Structure diagrams

- ① Front Up Cover
- ② Up Cover
- ③ Control Valve
- ④ Middle Cover
- ⑤ Top Strainer---fine Slot
- ⑥ Outlet Manifold
- ⑦ Down Strainer--fine Slot
- ⑧ Resin Tank
- ⑨ Brine Valve
- ⑩ Overflow Port
- ⑪ Brine Tank



Function& Feature

1,Full automatic running

Built-in time controller for 24 hours time controlling. It will regenerate according to softening capacity or source water hardness,interval days and regeneration time(the default time is generally in early morning).

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

After the raw water flows through the water softener under certain pressure and flow rate, the Na in ion exchange resin is exchanged with the cations such as Ca²⁺ and Mg²⁺ in water,and also it will reduce the concentration of Ca²⁺ and Mg²⁺ in water, so that the water quality is softened.

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,Well proportioned concentration of saturated salt solution

The water in the brine tank is replenished from the bottom up, and the salt water settles from the top down and is mixed by natural convection until it reaches saturation.

3, A reliable way for running

Adopt high flatness, corrosion resistance, wear resistance ceramic end sealing spacer, no leakage.

4, Optional upstream regeneration, downstream regeneration or mixed regeneration mode.

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

6, Leakage detection

Water time and volume double monitoring to ensure safety.

7, Remote controller

Wireless remote control can remotely control the open, close the network, the control range of 10-30 meters.

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.

8, Dual power supply

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

9, Intelligent control system

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

10, Salt Shortage Alarm Reminder

When the salt shortage has affected the resin regeneration effect, the system will alarm to add salt.

Product Parameter

Product Name: Water Softener	
Item No.: IMT-S2	Item No.: IMT-S4
Product Size: 379x483x586(mm)	Product Size: 383x527x1223(mm)
Pure water flow: 1.0m ³ /h	Pure water flow: 3.0m ³ /h
Regenerate cycle: 2.0m ³	Regenerate cycle: 3.5m ³
Filter Type: Resin	
Inlet Pressure: 0.1-0.4MPa	
Temperature: 5°C~38°C	
Application: Municipal Tap Water	
Rated Power: 5W	
Voltage/Frequency: 100-240V~50/60Hz	
Anti Electric Shock Type: III Class	

Notice: The regenerate cycle is different according to the water hardness.

Period of filter cartridge replacement

It is suggested that the softening resin's replacement is about 6 years.

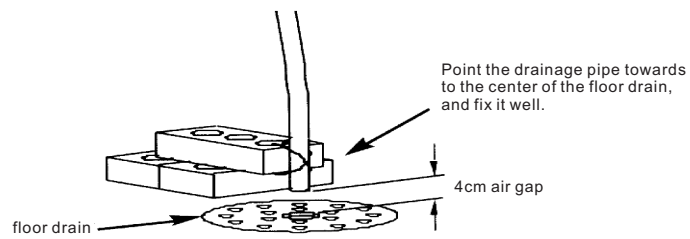
Note: The replacement period is different according the local water quality and hardness.

INSTALLATION INSTRUCTION

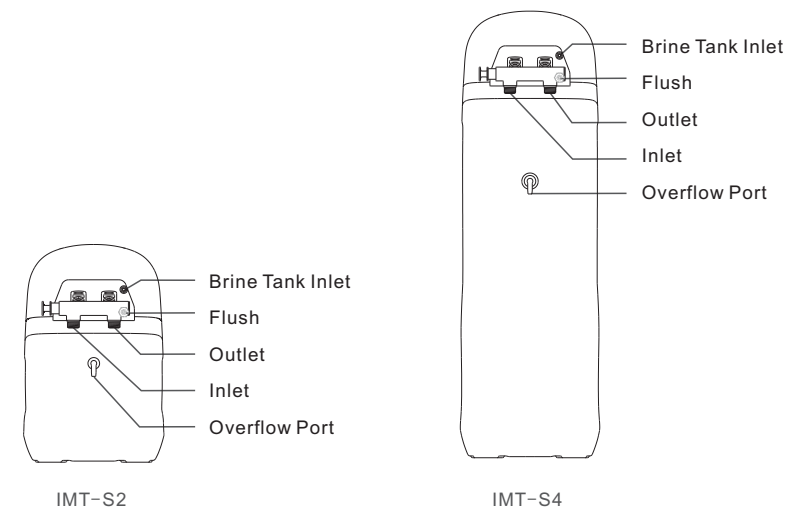
Installation Notice

- 1,It is prohibit to lay diagonally or horizontally when transportation,installation and using.
- 2,The floor where the water softener is to be installed must be flat, bearing more than 300 kg/square meter, and equipped with ac power, water inlet and outlet, sewage pipe, and floor drain.
- 3,Do not install the water softener near acidic or alkaline substances or gases to avoid corrosion of the water softener.

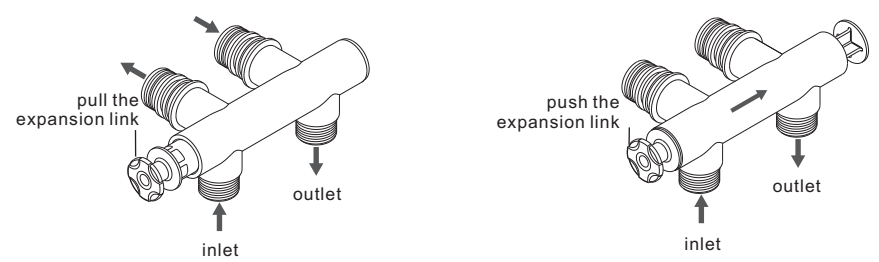
4. The single-phase AC power supply must be 100-240V ~ 50/60Hz. Do not use other power supplies. The socket must have a reliable ground cable when power connection.
5. The water softener is required to be installed indoors. If it is needed to be installed outdoors, insulation measures must be taken to the water softener and pipelines, especially sun protection, anti-freezing, and waterproof.
6. The best inlet water pressure is 0.15-0.35Mpa, if it is under or above the standard, a booster pump or a reduce valve is needed to be added to ensure the proper functioning.
7. The drainage of the sewer must be unimpeded, and there must be an air gap between the sewage pipe and the sewage. The sewage pipe cannot be sealed and connected with the sewer pipe, in case the vacuum negative pressure causes the controller to fail to work or the sewage flows back to the system.
8. Clear the remaining impurities and dust in the pipe before connecting the water inlet pipe, then close the main valve, and connect the system.
9. 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.
10. Attention should be paid to the height and placement angle of the pipeline when it is connected. There should be no obvious stress after the pipeline is connected, so as to avoid damage to the water pipe and leakage of the water softener or pipeline due to the stress of the pipeline during long-term use.
11. 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.
12. The drainage pipe which discharged by the overflow port and control valve leads directly to the drainage place and leaves air gap with sewage.



Pipeline instruction



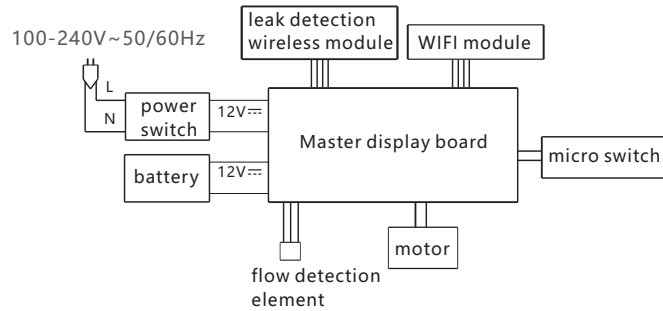
By pass valve instruction(S2/S4)



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.

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

Electrical diagrams



Commissioning Instructions

1, The commissioning work of the water softener should be carried out by the installation person, the user does not need to carry out other operations in the condition of power supply uninterrupted and a certain amount of salt in the 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.

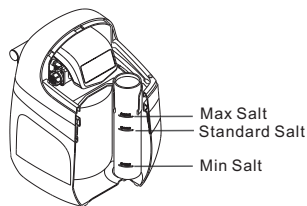
3, Brine tank refilling

Please refill the brine tank with 5 liters tap water when first use.

4, Salt refilling (as shown in following picture)

1) Model S2 type: add 20 kilograms softener salt to tank when first use. Then each time thereafter add salt to the standard salt level, not higher than the max salt level;

2) Model S4 type: add 40 kilograms softener salt to tank when first use. Then each time thereafter add salt to the standard salt level, not higher than the max salt level;



5, Adjust the water hardness

Adjust the water hardness according to the different area, the default value is 150mg/L, and back to the main working interface after adjustment (This step is very important, if the softener hardness is not coincident with actual value, that will affect the softening water effect.)

6, In case of water softener failure or other special circumstances, the bypass 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 bypass valve to the position of softening state, to restore the soft water supply (refer to the bypass valve description)

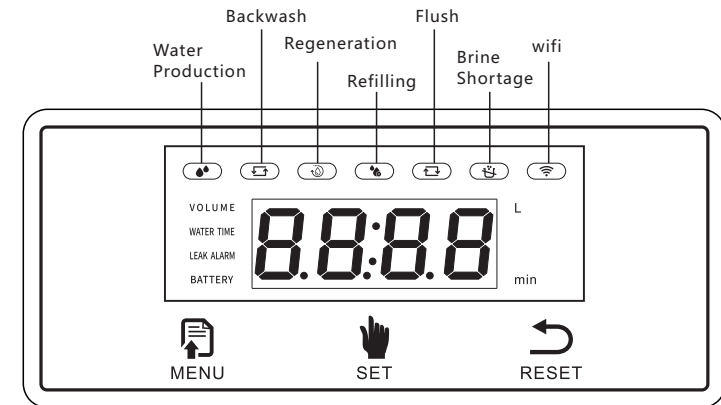
HOW TO USE

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



Key function description

Listed as following:

key	short press	long press	continuous press	combination key			
	short press to select parameter in the parameter setting mode	1, long press 3 seconds to enter into the parameter setting or save the setting 2, long press 6 seconds to turn on or off the machine	continuous press 5 times to enter into the pairing mode for leak sensor probe and remote controller	press the "MENU" + "SET" at the same time for 3 seconds to release E1 alarm.	press the "MENU" + "REFILL" at the same time for 3 seconds to restore factory setting.	press the "MENU" + "WIFI" at the same time for 3 seconds to enter into WIFI pairing mode.	press the "MENU" + "RESET" at the same time for 3 seconds for manually valve opened or closed
	it is the transposition key in parameter setting when short press it.	1, long press for 3 seconds to release salt shortage alarm. 2, long press for 6 seconds to enter the manual regeneration (after entering the manual regeneration, short press the key to fast-forward the regeneration process) 3, Continuous Press it 3 times for manually valve open or close.					
	short press "RESET" to adjust the numbers in parameter setting.	1, long press for 3 seconds to release the child lock, 2, long press for 6 seconds to permanently release and activate the child lock.					

State Display

All data displayed on the following page is used as an example.

1, Power on and long press" MENU" 6 seconds to turn on the machine and will BEE sounds. LED screen shows the current time, and will light off after 1 minute, then can touch any key to light up the screen. It will self check at the same time.

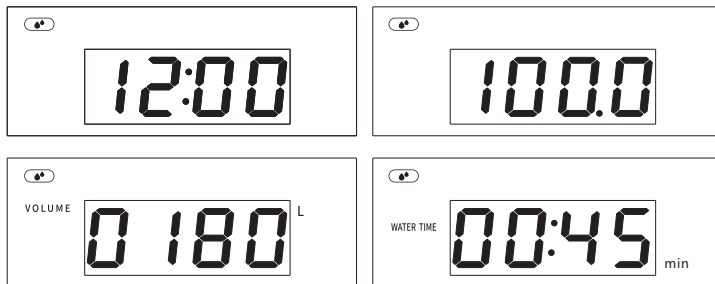
2, Normal display: the LED screen shows the current time 12 (H):00(min) when there is no water using, the water production indicator is on (indicating the valve body in the water production position).

3, The water softener valve in water production, the flow meter is running, it is in the normal water production state: LED screen switches the current time back and forth, counting down the remaining water volume regeneration, counting down the single water consumption, counting down the single water consumption time (switching the four scene every 8 seconds), and the water production indicator flashes (as shown in the following picture).

"the remaining water volume regeneration"--- LED screen shows the remaining water volume decline (m3), 100.0-99.9-99.8...0 decrease.

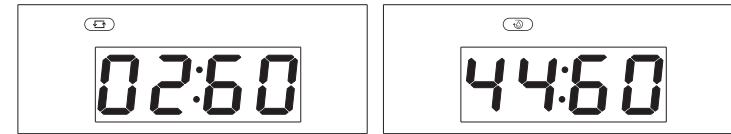
"VOLUME" + "L" indicator light up at the same time, LED screen shows the remaining water consumption decline(L), 180-179-...0 decrease.

"WATER TIME" + "min" indicator light up at the same time, LED screen shows the continuous water shut-off valve time(min), 45-44-...0 countdown.



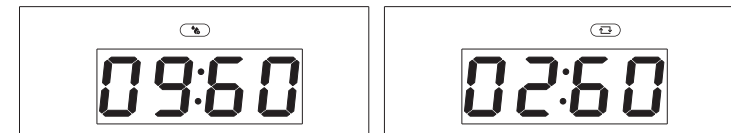
4, Backwash Display: the valve in the backwash position, LED screen shows the remaining backwash time--countdown (the first two digits show the countdown to minutes, and the last two digits show the countdown to seconds), backwash indicator flashes, as shown in the below picture.

5, Downstream/upstream regeneration display: in the regeneration procedure, the valve is placed in the downstream/upstream regeneration position, the LED screen displays the remaining downstream/upstream regeneration time countdown (the first two digits show the countdown to minutes, and the last two digits show the countdown to seconds). downstream/upstream regeneration (unified regeneration) light flashing, as shown in the below picture below.



6, Refill display: the valve in refilling position, LED screen shows the remain refilling time--countdown (the first two digits show the countdown to minutes, and the last two digits show the countdown to seconds), the refilling indicator flashes, as shown in the below picture.

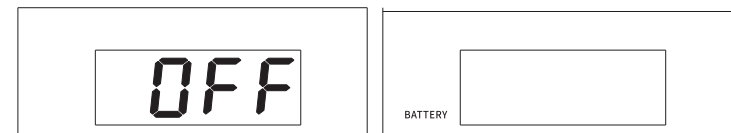
7, Flush display: the valve in flush position, LED screen shows the remaining flushing time--countdown (the first two digits show the countdown to minutes, and the last two digits show the countdown to seconds), the flushing indicator flashes, as shown in the below picture.



8, Manual valve open/closed display:

Method for manual valve open/close - press "MENU" + "SET" + "RESET" for 3 seconds at the same time or press "SET" for 3 times for valve open/close; The valve in the close position, LED screen shows "OFF", the indicator lights up.

9, Low battery alarm display: When the battery voltage reach to 10.0V, it will come into low battery alarm. "BATTERY" quick flashes, 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 9.5V, it will auto shut-off valve and power off, as shown in the below pictures.



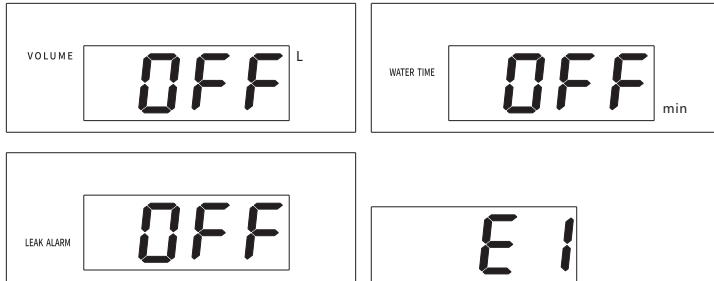
10, Leak alarm display:

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.

***VOLUME (single water use consumption volume) alarm: "VOLUME" + "Leak Alarm" indicator quick flashes, "L" indicator lights up, buzzer alarm, valve closed, LED screen shows OFF, as shown in below picture.

*** WATER TIME (single continuous use time) alarm: "WATER TIME" + "Leak Alarm" indicator quick flashes, "min" indicator lights up, buzzer alarm, valve closed, LED screen shows "OFF", as shown in below picture.

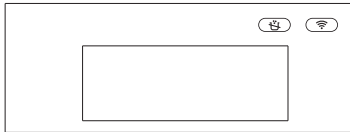
***LEAK ALARM (the sensor probe leak alarm): "LEAK ALARM" indicator quick flashes, buzzer alarm, valve closed, LED screen shows "OFF", as shown in below picture.



11, E1 fault self-test 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" and alarm, and determined that the valve is faulty.

12, Salt shortage alarm display: "☹" indicator quick flashes, buzzer alarm. Long press "SET" for 3 seconds to release the salt shortage alarm.

13, WIFI display: After connect WIFI,2G, "☺" indicator blink 3 times then light up. And connect with the server to achieve the function of the Internet of Things. If do not connect to WIFI within 5 minutes, turn off WIFI. If connect to WIFI again, hold "MENU"+ "RESET" button for 3 seconds to wake up and reconnect to wifi.



Parameter Setting

All data displayed on the following page is used as an example.

Long press "MENU" 3 seconds to enter into or exit out the parameter setting, and all the set parameter will be saved at the same time. In parameter setting mode, "MENU" key is the parameter selection key, "SET" key is the transposition key, "RESET" key is number adjustment key(long press to adjust the number quickly).

1, Current time setting: Long press "MENU" key for 3 seconds to show the current water flow when water using. Press "MENU" set the current time: 12(hour):00(minute); Hour is set as the unit increasing cycle of 1 hour and minute as the unit increasing cycle of 1 minute (time is set as the 24-hour system). As shown in the picture below. Press "MENU" to go to the next setting interface.



2, Model setting: "S2-1" represents product item no., and can be set as: S2-1,S2-2,S2-3,S2-4; S4-1,S4-2,S4-3,S4-4, as shown in the picture below. Press "MENU" to go to the next setting interface.



3, Resin volume setting: "1-01", 1 represents serial no., 01 represents the adjustable resin volume, 01-99 Liters can be adjusted, as shown in the picture below. Press "MENU" to go to the next setting interface.



4, Water hardness setting: "- 150mg/L", 150 is the default water hardness, 050-999mg/L can be adjusted, as shown in the picture below. Press "MENU" to go to the next setting interface.



5, Regeneration time setting: 02(hour): 00(time), hour is set as the unit increasing cycle of 1 hour and minute as the unit increasing cycle of 1 minute (time is set as the 24-hour system), 02:00 is the default time, as shown in the picture below. Press "MENU" to go to the next setting interface.



6, Regeneration interval days setting: "2-30" days, 2 represents serial no., 30 is the default regeneration interval days, 01-30 days can be adjusted, as shown in the picture below. Press "MENU" to go to the next setting interface.



7, Backwash time setting: "0-99" minutes can be adjusted, when set with "0", this function is invalid(it will ignore this program when regeneration), the backwash indicator lights up, as shown in the picture below. Press "MENU" to go to the next setting interface.



8, Regeneration (downstream/upstream) time setting: "0-99" minutes can be adjusted, when set with "0", this function is invalid(it will ignore this program when regeneration), the regeneration indicator lights up, as shown in the picture below. Press" MENU "to go to the next setting



9, Refilling time setting: "0-99" minutes can be adjusted, when set with "0", this function is invalid(it will ignore this program when regeneration), the refilling indicator lights up, as shown in the picture below. Press" MENU "to go to the next setting interface.interface.



10, Flush time setting: "0-99" minutes can be adjusted, when set with "0", this function is invalid(it will ignore this program when regeneration), the flush indicator lights up, as shown in the picture below. Press" MENU "to go to the next setting interface.



11, Volume(single water use consumption volume) setting: "0000-99999" liters can be adjusted, when set with "0", this function is invalid, "VOLUME"+"L" lights up at the same time, as shown in the picture below. Press" MENU "to go to the next setting interface.



12, Water time(single continuous use time) setting: "0000-9999" minutes can be adjusted, when set with "0", this function is invalid, "WATER TIME"+"min" lights up at the same time, as shown in the picture below. Press" MENU "to go to the next setting interface.



13, Automatic water restore supply time setting: "F015 s", F represents serial no., 015 is the default time, 000-999s can be adjusted, when set with "0", this function is invalid. When the abnormal situation described in 11,12 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. Press "MENU" to enter the next setting interface.



14, Holiday mode(automatic valve closing time without continuous water supply) time setting: "H003 days", H represents serial no., 003 is the default days, 000-999 days can be adjusted, when set with "0", this function is invalid. After the valve is closed beyond the set days, the valve shall be manually opened, as shown in the picture below. Press "MENU" to enter the next setting interface.



15, Holiday mode(automatic valve closing time without continuous water supply) time setting: "H003 days", H represents serial no., 003 is the default days, 000-999 days can be adjusted, when set with "0", this function is invalid. After the valve is closed beyond the set days, the valve shall be manually opened, as shown in the picture below. Press "MENU" to enter the next setting interface. 15,Valve self-test interval time setting: "P-10" days, P represents serial no., 10 is the default days,the number of days is set as 1 day for the unit increasing cycle,when the number of days reaches the set value, the valve will be automatically switched on and off once to verify whether the valve function is abnormal, (default: 02:00). It is invalid when it sets with "0", as shown in the picture below. Press "MENU" to enter the next setting interface.



16,Flow meter every turn flow setting: default 1600mL/n, 0000-9999mL/n adjustable. As shown in the following picture, press the "MENU" button to enter the next setting interface.



17, Salt Shortage Alarm Setting: "3-10" times, "3" represents serial no., "05" is the default regeneration times,00-99 days can be adjusted, when set with "0", this function is invalid. as shown in the picture below. Press "MENU" to enter the next setting interface.



All model regeneration process comparison table;

Item No.	Regeneration Processing							Remarks
	water production	refilling	salt dissolving	backwash	upstream regen	flush		
S2-1	water production	refilling	salt dissolving	backwash	upstream regen	flush		dry salt+upstream regen.
S2-2	water production	backwash	upstream regen	refilling	flush			wet salt+upstream regen.
S2-3	water production	backwash	upstream regen	downstream regen	refilling	flush		wet salt+downstream/upstream regen.
S2-4	water production	refilling	salt dissolving	backwash	upstream regen	downstream regen	flush	dry salt+downstream/upstream regen.
S4-1	water production	refilling	salt dissolving	backwash	upstream regen	flush		dry salt+upstream regen.
S4-2	water production	backwash	upstream regen	refilling	flush			wet salt+upstream regen.
S4-3	water production	backwash	upstream regen	downstream regen	refilling	flush		wet salt+downstream/upstream regen.
S4-4	water production	refilling	salt dissolving	backwash	upstream regen	downstream regen	flush	dry salt+downstream/upstream regen.

All model regeneration parameter setting comparison table.

Item No.	Resin Volume (L)	Water Hardness (mg/L)	Regeneration Time	Regeneration Interval Days(day)	backwash Time(min)	Upstream Regeneration Time(min)	Downstream Regeneration Time(min)	Refilling (min)	Flush (min)	salt dissolving time(min)
S2-1	12	150	02:00	30	2	80		5	3	30
S2-2	12	150	02:00	30	2	80		5	3	
S2-3	12	150	02:00	30	2	40	40	5	3	
S2-4	12	150	02:00	30	2	40	40	5	3	30
S4-1	25	150	02:00	30	3	99		10	4	30
S4-2	25	150	02:00	30	3	99		10	4	
S4-3	25	150	02:00	30	3	50	50	10	4	
S4-4	25	150	02:00	30	3	50	50	10	4	30

Working Mode

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

1,Function 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 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 exceed the set value;Low power alarm; Valve interval self-testing; Wireless remote control; Sensor probe detects leak and valve close function;

2,Function in power saving mode: cancel the valve interval self testing function,wireless remote control function,sensor probe,detects leaks 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

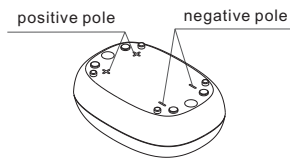
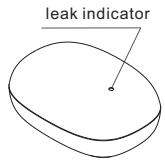
Continuously press " MENU" for 5 times, then the "MENU" indicator will flash continuously, press the "OPEN" or "CLOSE" button on the remote controller for pairing; The main device will ring 2 times if it paired successfully. The "MENU"indicator is constant light up to exit pairing. If it is not paired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

The usage of the sensor probe

Before use 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

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 constant light up to exit pairing; After pairing succeed, wait till the indicator flashes 60seconds and run out, then can pair the next sensor probe. Otherwise the pairing will be repeated or failure. 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.



2, Leak indicator alarm mode

When the sensor probe detects the 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, and 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 av, 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 the sensor probe, and place it in the area which is easily leaking; Fast and accurate detects the leaks,and close valve, more safety assurance.
- 2)For large water consumption needs user, if the leakage could not be monitored by single continuous water volume and time, adjust this two parameters appropriately, and place the sensor probe in the area which 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 an ponding area, in case of false closing valve.
- 3)The battery needs to replace every 1-1.5 years.

ROUTINE MAINTENANCE

Notice

Do not do any operation or disposal of the machine without reading and truly understanding the contents of this instruction manual.

- 1,The water during the regeneration period is not softened. It is recommended not to use water under regeneration as to it 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 when 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 the softener, so that the user may misuse the unsoftened water.
- 4,If the source water hardness changes, it should be set in time to ensure the quality of softened water.

5,Due to the hot water can cause serious damage to internal processing system of soft water machine,if the water heater needed to be installed behind the water softener, please make sure there will be at least 3 meters above the connection pipes between the outlet of the softener and water heater, if there is no guarantee for 3 m connecting line, suggest to add a check valve between the softener and water heater.

6,To ensure the safety during using, the overflow pipe must be installed when water softener is installed.

7,The ambient temperature for the water softener is 1~39°C. The ion exchange resin loaded in brine tank is prone to frost cracking and damage. Please pay attention to anti-freezing to avoid resin invalid.

8,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.

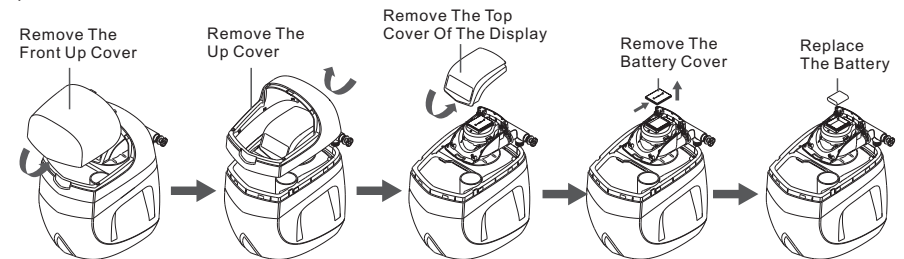
9,The check valve should be added in the front of the water softener when the high-rise is used in the residential area to avoid the negative pressure caused by the water used by the low-rise users to the water softener and the damage to the tank.

10,Do not apply external force to the softener, and avoid direct sunlight and other heat sources of radiation.

Battery replacement

Main device battery replacement

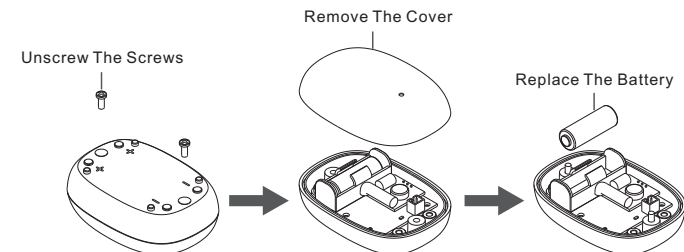
The battery for main device is a rechargeable battery. Replace the battery when its charging life has expired or the battery bulge has affected normal use. Replace the battery as shown in the picture below:



Sensor probe battery replacement

The battery in the sensor probe is non rechargeable; It is recommended to replace the battery every 1-1.5 years.

Battery specification: 23A 12V. After replacing the battery, you do not need to re-pair it. You can use it directly.



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
Control valve is not working	Electric adapter is un plug	Connect the power supply
	The Socket is malfunction	Replace the socket
	Power cut off	Waiting for power recovery
	Electric adapter is malfunction	Replace the electric adapter
The 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 re connected.
The water purifier has abnormal noise	The air comes into the water softener	Back flush to exhaust air.
Softened water quality has blister	The air comes into the 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 too long	Reduce the regeneration time
	The period of water production is expired	Manual regenerate the resin
No salt supply	Inlet water pressure is too low	Improve the inlet press above 0.15Mpa
	The pipeline for salt supply is blocked	Cleaning the strainer
	The pipeline for salt supply is air leakage	Check all the pipeline parts to eliminate leakage
Brine tank overflow	Refill time is out of control	Contact with the retailer
	Brine tank valve is malfunction	
There is no softened water after regeneration	Regenerator is not working	Check the power supply
	No salt in brine tank	Add salt
	Ejector is blocked	Cleaning the ejector and re installed it.
Water flow is too high or too low when back flushing	Ejector is not suitable	Replace the ejector
	Foreign material in ejector	Remove the foreign material
Hard water drains out when working	Regeneration is incorrect	Regenerate with the correct salt ratio
	Leakage of by pass valve	Replace the O ring
	Outlet's O ring broken	Replace the O ring
	The source water hardness is incorrect setting	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.