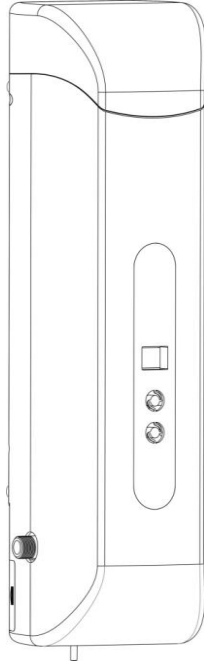


# SHOWER SOFTENER

**Model: RL-R50/MYA-1**

## User Manual



The appearance is just for reference. It is subject to the real product.

Version 1

**Please read this manual in details before using the product and keep it properly in order to consult in the future.**

0WRX.466.623

**Application:** The product is mainly used for making soft water for shower, can also be used in applications, such as floor heating, beauty salon, hairdressing salon, washing machines etc..

**The treated water of the product can not be drunk.**

### **Warm Note**

1. With upgrading of the product, there may be some of words or figure in the manual is different with the real product, please be subject to the real product.
2. All the contents are carefully checked. If there is any printing errors or mistakes in the manual, we reserve the rights of interpretation.

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## Notice

1. If it is necessary to buy spare parts for installation, please select the parts with good quality.
2. The thread of the product is standard. When the ender user buys the matched accessories, please select it with good quality to prevent the accessories can't be matched, thread cross, etc..
3. User manual is a guiding document for the correct use of the product, please do the usual operation, check and maintenance strictly in accordance with the manual.
4. It is recommended to select professional personnel appointed by authorized dealer to install the product. When installation, ender user should inform the detail information of installation wall, such as the material of wall, distribution of water pipeline and wire, etc.. If the product is installed by ender user himself, if there is any problem happened during the installation, we will not take any responsibility.
5. The product is suit for municipal tap water, water pressure is 0.1~0.6 MPa, water temperature is 5°C-70°C. It is forbidden to use it out of the range.
6. The product is only suitable for indoor installation and use. It should be put in a cool and dry place, avoid direct sunlight. The pipeline connected to the product should be kept away from light source, heat source, corrosive environment and crash with sharp objects.
7. There is a sewer within 1 meter around the product which is used for drainage.
8. In any case, do not spray water to the product.
9. When the product is in failure, please cut off the water and contact the local dealer in time.
10. In order to prevent the regeneration can't achieve the desired effect, please use the grain salt provided by our company as possible.
11. When the transformer or cable damaged, the replaced one must be from our company.
12. Due to the product need electricity in use, please put the transformer in a place where no water can spray.
13. If the consequences happened due to not operating according to the above notes, our company will not take any responsibility.

## 1. Product Overview

### 1.1. Characteristics

- Wall-mounted, no brine tank, small volume.
- Dynamic regeneration mode, bigger water treatment capacity, save salt and water.
- Extensive applicability: could be installed before or after the water heater. Installed before water heater could prevent it damaged because of scaling.
- Automatically controlling the regeneration time, one button to realize regeneration. No need people stand by, LED display each status.
- Remind the use days and show the next regeneration time.
- It has an automatic backwash function to reduce the phenomenon of resin harden and strainer blockage, and improve the service lifetime of resin.
- Internal structure adopts quick connection, more easier to maintain and replace the resin.
- There is a check valve on outlet to prevent the water in water heater backflow.
- Data saved after power off.

### 1.2. Technical Parameters

Item	Requirement
Working Pressure	0.1~0.6MPa
Inlet Water Temperature	5℃~70℃
Environment Temperature	5℃~50℃
Electrical Facility	AC100~240V/50~60Hz
Water Treatment Capacity	750L
Inlet/Outlet	G1/2
Salt Consumption of Regeneration	400g
Applicable Water	Municipal Tap Water

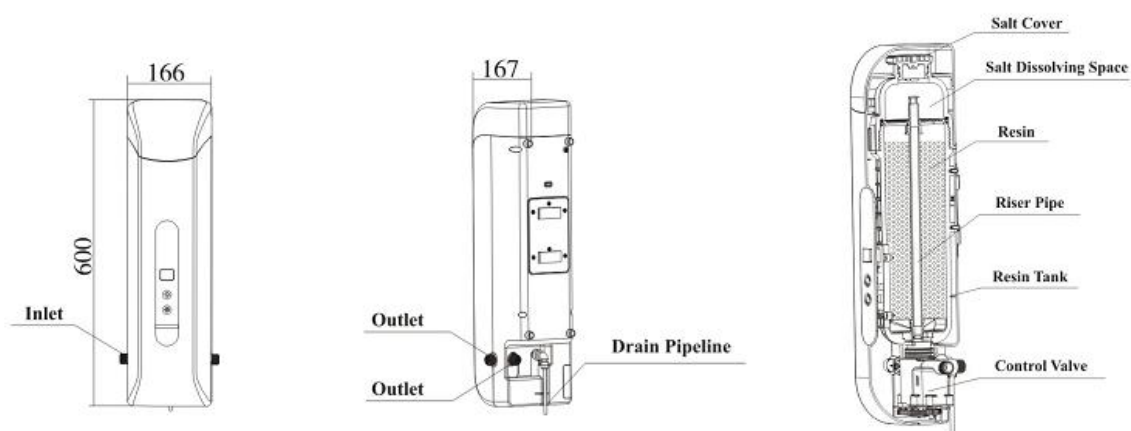
Outlet water quality: Meet the requirement of Sanitary Safety and Function Evaluation Regulation of Water Treatment Device for Drink Water-General Water Treatment Device (2001).

All the parameters of the product is tested under the standard test condition (Tested water hardness is CaCO<sub>3</sub>, 200 mg/ L). The parameters will be different if the actual usage condition changed.

### 1.3. Water Technological Process

Municipal tap water → Na cation resin → Soft water

### 1.4. Appearance Dimensions



### 1.5. Structure Chart

## 2. Installation

### 2.1. Installation Type Instruction

There are two types of installation.

#### A. Installed before water heater

Advantage: Installed before water heater, the water flowing into water heater is soft which prevent the scaling and energy saving, as well as ensure the soft water for shower. It is suited for the user whose house is not decorated, could distribute the piping.

#### B. Installed after water heater

Advantage: Installed after water heater, easy pipeline installation, soft water for shower. It is suited for the user whose house has already decorated.

The above two types of installation is optional in accordance with need.

### 2.2. Product Installation

The product adopts wall-mounted. It is recommended to select professional personnel to install the product. If you install by yourself, please follow the following steps.

#### 2.2.1. Prepare the installation tools

These tools may be needed: Adjustable spanner, pipe wrench, screwdriver, percussion drilling.

#### 2.2.2. Installation Location

(The product installation location and pipeline connection relate to installation type, please refer to the pipeline installation instruction in details).

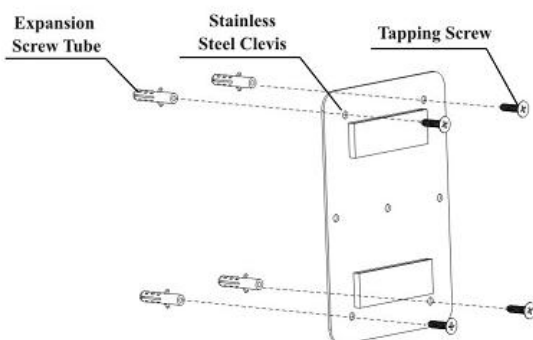
When the resin goes invalid during the usage of the product, it needs to add salt. Depending on the operator's height, hang the product in a proper height. There is a sewer within 1 meter around the product.

#### 2.2.3. Product wall-mounted operation steps:

2.2.3.1. Open package, please check if the softener is complete and accessories are complete.

2.2.3.2. Take out the expansion screws and stainless steel clevis, remark the hole of clevis on the wall and drill the hole with percussion drilling. The expansion screw is ST3.9 x30. It is suggested to select the percussion drill head with 6 mm diameter. Product installation height should be considered of adding salt manually.

2.2.3.3. Normally, stainless steel clevis only need 4 expansion screws. But if the wall is soft, such as wooden wall, lime wall, it needs more screws. As shown in Figure 1.

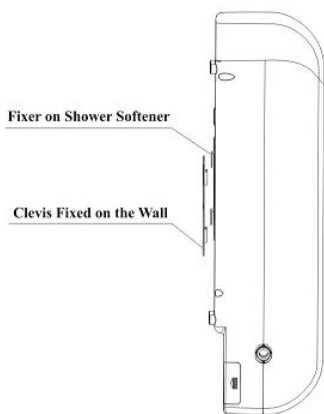


( Figure 1 ) Install the Stainless Steel Clevis

2.2.3.4. Put the expansion screw tube into the in the drilled hole, then use a screwdriver to fix the clevis on the wall, as shown in Figure 2. The cone side should face outwards.

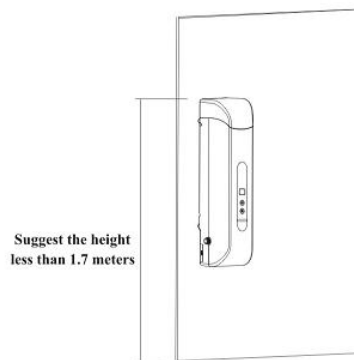
2.2.3.5. Fixed the plate of shower softener on the slot of clevis. After the installation, it is shown as in

## SHOWER SOFTENER



( Figure 2 )

The Shower Softener Fixed on the Wall



( Figure 3 )

Schematic View of after Installation

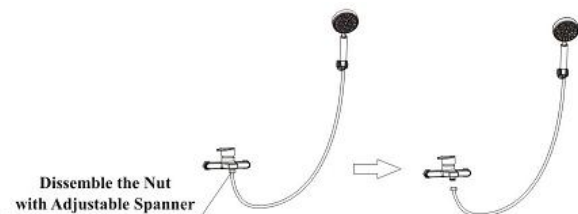
### 2.3. Pipeline Installation Instruction

#### 2.3.1 Installed after Water Heater

Remind: No water flows out when the shower softener in regeneration status (about 1 hour). If there is no spare faucet in the bathroom, it is suggested to have a spare outlet reserved when installation.

Installation steps:

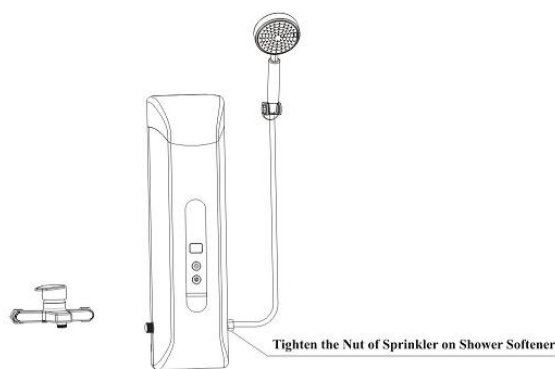
2.3.1.1. The water mixing valve is closed. Disassemble the nut between sprinkler and water mixing valve with adjustable spanner as shown in Figure 4.



( Figure 4 )

Disassemble the Nut between Sprinkler and Water Mixing Valve

2.3.1.2. Tighten the nut of sprinkler on the outlet of shower softener, as shown in Figure 5.



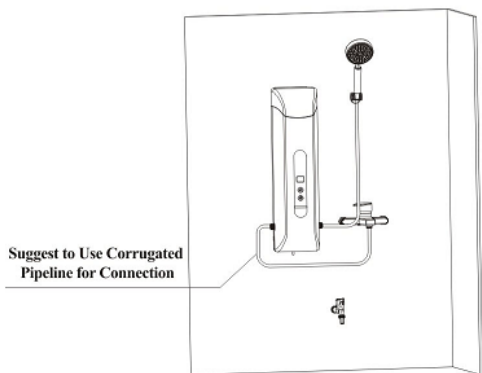
( Figure 5 )

Tighten the Sprinkler on Shower Softener

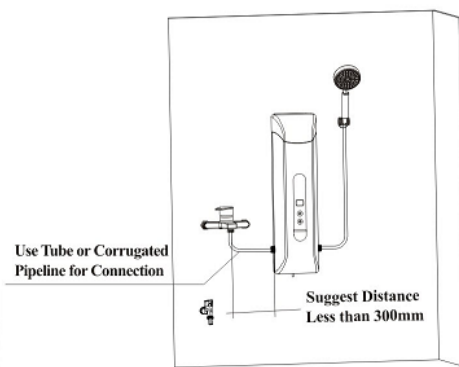
2.3.1.3. Connect the outlet of water mixing valve with the inlet of shower softener by braided tube or corrugated tube. As the shower softener installation location relates to the inlet pipeline connection, take some samples of common installation types for reference.

a. It is the schematic view of spare faucet available in installation place. The shower softener could be installed either at the right or left side of shower softener, as shown in Figure 6 and 7.

## SHOWER SOFTENER

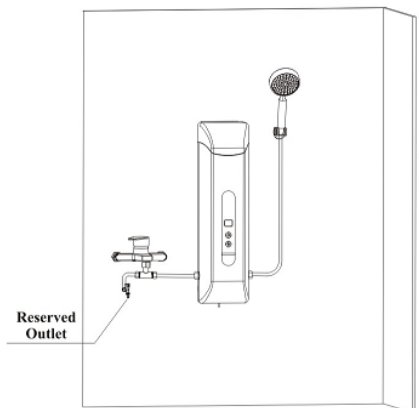


( Figure 6 )  
Installation Schematic View of Shower Softener  
at the Left Side of Water Mixing Valve

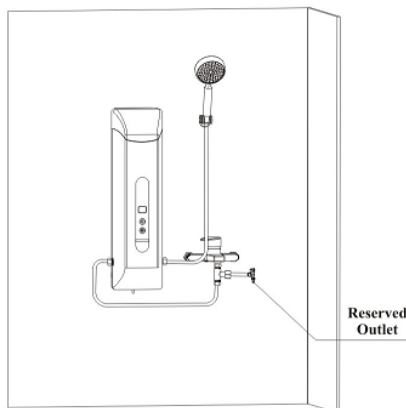


( Figure 7 )  
Installation Schematic View of Shower Softener  
at the Right Side of Water Mixing Valve

b.If there is no spare faucet available in installation place and the ender user needs to use water in regeneration, it is suggest to have a spare outlet reserved on the outlet pipeline of water mixing valve. The shower softener could be installed either at the right or left side of shower softener, as shown in Figure 8 and 9.



( Figure 8 )  
Installation Schematic View of Shower Softener at the Right  
Side of Water Mixing Valve with Spare Outlet Reserved





( Figure 9 )  
Installation Schematic View of Shower Softener at the Left  
Side of Water Mixing Valve with Spare Outlet Reserved

### 2.3.2. Installed before Water Heater

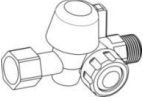
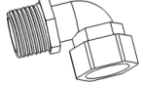
A.Installation for electrical water heater, solar water heater with double pipelines for water flowing up and down as well as some similar products.

Note: As installed before water heater is more complicated, please purchase the other accessories from dealer separately.

#### Needed Accessories When Installed before Water Heater

No.	Name	Figure	Remark
1	Hot Water Connector		On the connector engraved with " H "
2	Cold Water Connector		On the connector engraved with "C"

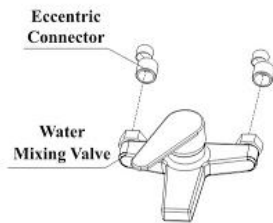
## SHOWER SOFTENER

3	Cut-off Filter Valve		Optional
4	1/2 " Elbow Connector		

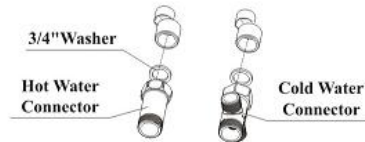
The following installation are steps for installing before water heater.

### 2.3.2.1. Install the cold and hot connector

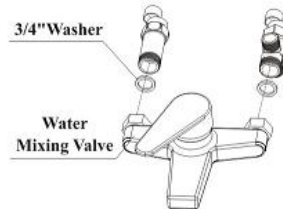
- a. Shut off the source inlet water, remove the water mixing valve with a spanner, keep the original center distance of eccentric connector the same, as shown in Figure 10.
- b. Take out the hot water connector, cold water connector and 3/4 " washers. As shown in Figure 11 to assemble the cold water connector and hot water connector on the eccentric connectors on the wall. Make sure the washers no damaged.
- c. Use spanner, connect the cold water side of water mixing valve with the cold water connector, connect the hot water side of water mixing valve with the hot water connector. Make sure the washers no damaged, as shown in Figure 12.



( Figure 10 )  
Disassemble Water Mixing Valve

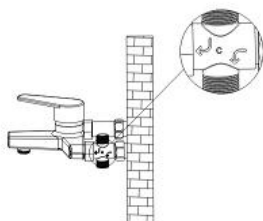


( Figure 11 )  
Installation of Cold  
and Hot Water Connector

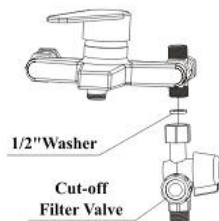


( Figure 12 )  
Installation the Water  
Mixing Valve on the Connector

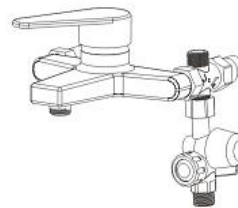
- d. Figure 13 is the schematic view of after water mixing valve installed. According to the view and mark on connector, adjust the outlet of cold water connector adown, as shown in Figure 13.
- e. In order to prevent the big grain substance entering into softener which will affect the effectiveness, it is suggested to install a shut-off filter valve. Take out shut-off filter valve and washer, tighten it between cold water and raw water. Place the washer as shown in Figure 14. After installation as shown in Figure 15.



( Figure 13 )  
Schematic View of after Installation



( Figure 14 )  
Installation of Cut-off Filter Valve



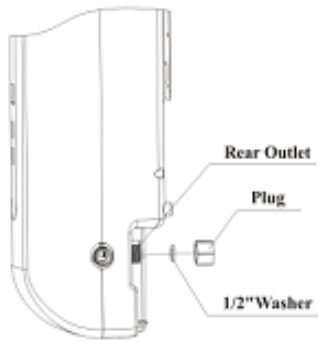
( Figure 15 )  
Schematic View of after  
Installation of Cut-off Filter Valve

### 2.3.2.2. Pipeline Installation

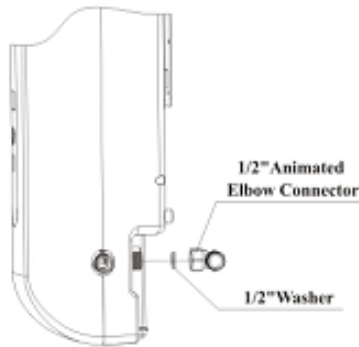
- a. Install the 1/2 " animated elbow connector on rear outlet behind the shower softener. Disassemble the sealing plug on rear outlet behind the shower softener as shown in Figure 16, take out the 1/2 " animated elbow connector from the accessories bag, tighten it on rear outlet as shown in Figure 17. Place the washer, schematic view of after installation as shown in Figure 18.
- b. Choose the appropriate location to hang the shower softener on the wall. (Please refer the previous product installation instructions)



## SHOWER SOFTENER



**Figure 16**

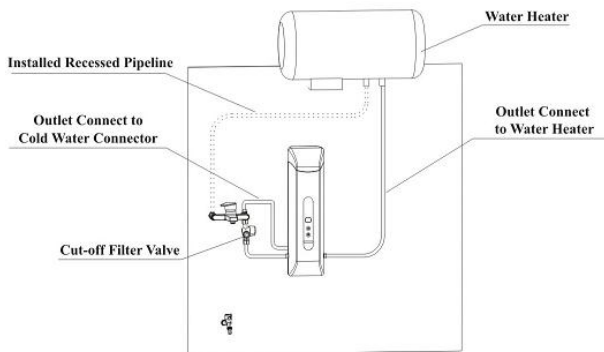


**Figure 17**

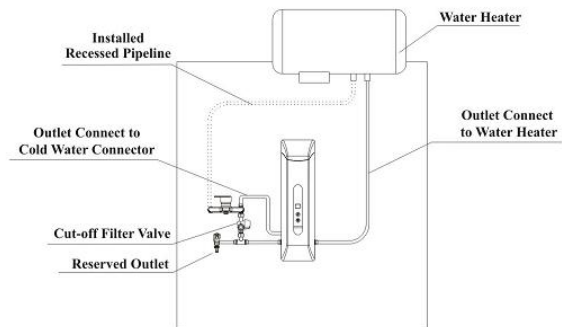


**Figure 18**

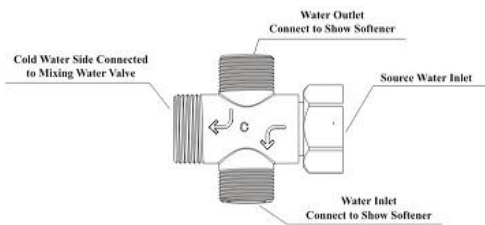
c. Use braided tube or corrugated pipeline to connect source inlet and inlet of shower softener. One outlet connects to inlet of water heater, the other outlet connects to cold water side of water mixing valve. As the product doesn't have water flow out in regeneration process, a spare outlet is reserved when distribute the pipelines if needs to use water. These are common installation schematic view for reference, as shown in Figure 19, 20. The cold water connector installation is shown in Figure 21.



( Figure 19 )  
Schematic View of Shower Softener Installed before Water Heater



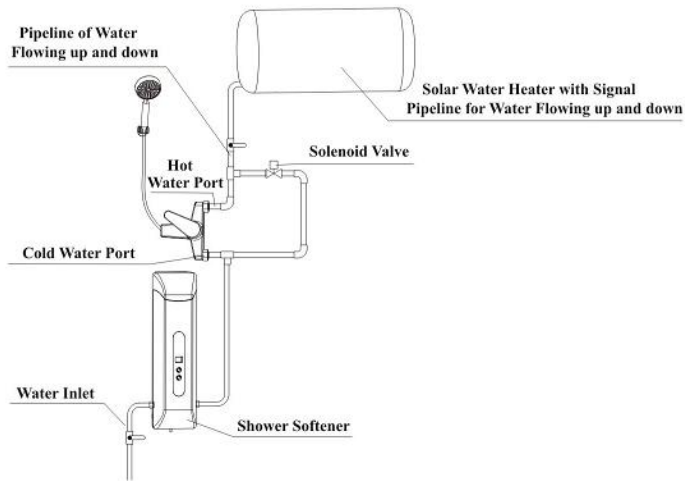
( Figure 20 )  
Schematic View of Shower Softener Installed before Water Heater with Outlet Reserved



( Figure 21 )  
Schematic View of Each Port of Cold Water Connector

B. Installation schematic view of solar water heater with **single** pipeline for water flowing up and down.

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### 2.3.3. Drain Pipeline Installation

The product has been installed drain pipeline in the factory. If the drain pipeline is needed longer, as sewer is far away or other reason, please use 1/4 "quick connector to connect the drain pipeline. Be sure the flow control in drain pipeline placed as shown in Figure 22. Please contact your distributor if you lose it.

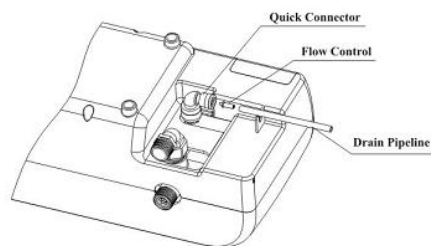


Figure 22

### 2.3.4. Power Cable Installation

The product needs the power supply far away from the water mist, when the machine is installed. The plug of power cable uses the seal design. When installation, please tighten the connection nut, installation as Figure 23.

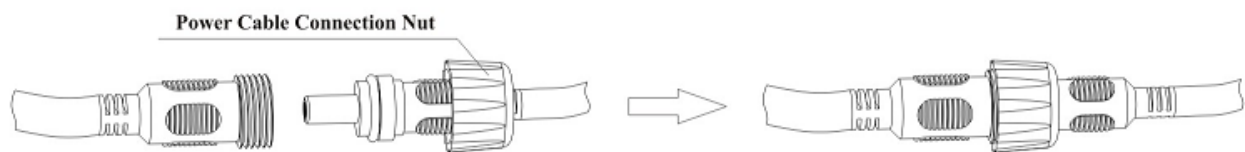


Figure 23

## 3. Trial Running

1. Power on, slowly open the source water, let the machine run in service position for about five minutes to check if there is any leakage on connection. If leak, please tighten the leaking area.
2. For the machine firstly use, there may be a little yellow water from the outlet, this is a normal phenomenon. Because the resin is new, just rinse it.

Note: Remove the plug on drain pipeline when uses the product to prevent no water drain out in

washing.

## 4. Regeneration Operation

### 4.1. Water Treatment Capacity

Water treatment capacity relates to water hardness. For a family with 3 persons, if everyone uses 40L water for shower, calculate the regeneration time.

Water Hardness	Water Capacity	Regeneration Time
200mg/L	750L	About 6 days
400 mg/L	320L	About 3 days

The ways of the residential softener to remind are time clock type and meter type. The users who choose time clock type should estimate the time according to the practical situation of water using. The users who choose meter type should set local water hardness only, and then the system will calculate the water treatment capacity automatically. It will remind to regenerate when the resin becomes ineffective.

The way to remind of time clock type

When the product is in service, there will show the using days, such as 01 (it stands for that has been used for one day after regeneration), 02 (it stands for that has been used for 2 days after regeneration)..., which is convenient to check the using days.

Users can set to remind according to the practical using situation so that control the time of regeneration better. For the details of setting steps, please see parameter setting.

The way to remind of meter type

In meter type mode, system will show "1111" when in service. "1" stands for 25% of water treatment capacity. When the water treatment capacity reaches a certain point, the screen will be flashy and remind users.

Users must set the local water hardness when use the meter type. The unit is mg/L, and local water hardness =the value you set×10. Such as value "10" means 100mg/L, value "15" means 150mg/L, and so on.

### 4.2. Regeneration Salt Consumption

Regeneration salt is made according to the characteristics of shower softener. One time of regeneration consumes 400g of salt (1 bag).

Note: Use other brand of salt may cause bad effect of regeneration.

### 4.3. Regeneration Process Operation

When the water treatment capacity reaches a certain value, the resin invalid, it needs to regenerate with salt.

It is no need to regenerate for the new product installing first time until the resin becomes ineffective.

Operation methods:

4.3.1. The shower softener needs water supplied for regeneration. For the shower softener installed after water heater, the ender user needs to open the water mixing valve to let cold water enter to shower softener to regenerate, or else the regeneration is invalid.

4.3.2. During regeneration, press and hold the button  for 3 seconds, and hear a sound "Di", enter into regeneration status. The display board shows  when motor is rotating. When it reaches at


## SHOWER SOFTENER

backwash status, it shows **2-**, water flows out from drain. After 20 seconds at **2-** status, it will switch to **3-** status automatically. **3-** figure flashes and sounds buzzer.

4.3.3. Open upper cover of shell as shown in Figure 24, unscrew the salt cover as shown in Figure 25, add 400 grams of special regeneration salt through salt adding port as shown in Figure 26. Stir the grain salt to be flat and distributed equally. Tighten the salt cover, put the upper cover. It is better to control the salt adding operation within in 3 minutes.

Note: the Salt Cover can be opened only in **3-** status. Do not open the Salt Cover in other statuses.

4.3.4. The shower softener will regenerate automatically, no need people to check. The regeneration process is about 1 hour. After regeneration, if it is the mode of installed before water heater, the shower softener will enter into water using statuses **00**, if it is the mode of installed after water heater, the

shower softener will enter into waiting status **dd**. If it needs to use water, ender user presses and holds regeneration button  to switch it to water using status.

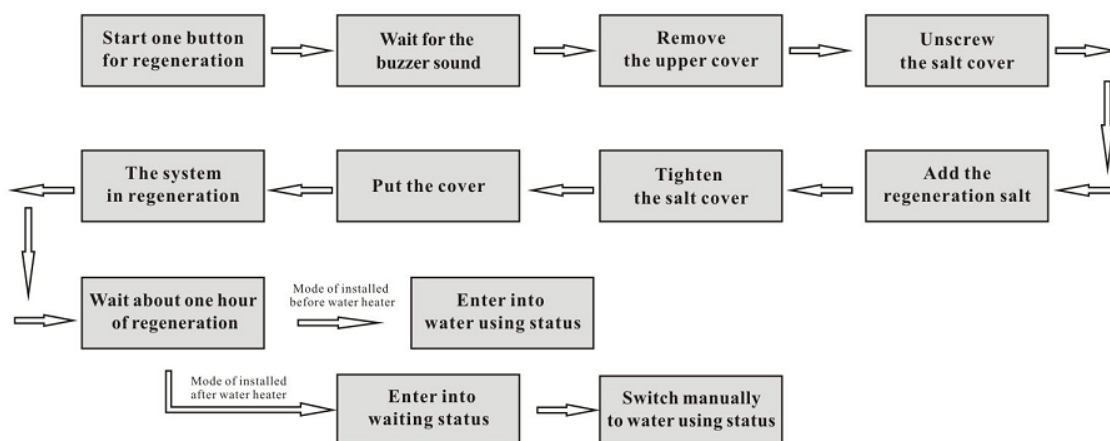
Note: During the switching of regeneration process, there will be some water flowing out from outlet. Make sure the outlet of sprinkler not face to the shower softener.



Figure 24

Figure 25

Figure 26



**Flow Chart of Regeneration Process**

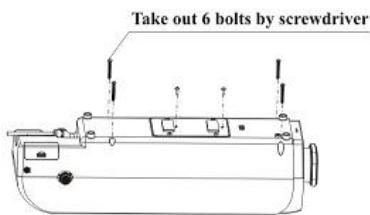
## 5. Resin Replacement

It needs to replace the resin after the shower softener being used for 2 to 4 years. It is recommended to do it by professional personal. If you replace the resin by yourself, please follow these steps:

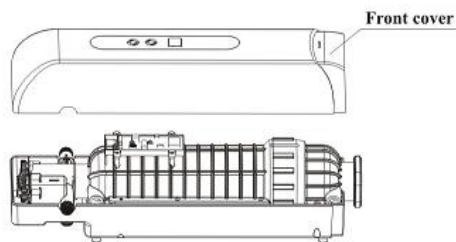
- a. Unscrew 4 bolts on back cover and 2 bolts on clevis by a cross screwdriver.
- b. Take out the front cover of shower softener. Be sure not scratch the surface.
- c. Unscrew 4 bolts which are used to fix resin tank to back cover by a cross screwdriver.
- d. Take out the resin tank and valve. Taking them with care to prevent causing damage of circuit board.
- e. Unscrew the resin tank cover with a special tool.
- f. Take out the strainer carefully and prevent the riser pipe falling out.
- g. Press the riser pipe to prevent it falling out. Pour out of resin, and put 2.5 liters of new resin in to resin tank.
- h. After resin replaced, assemble the shower softener according to the above instruction.

Install the shower softener according to above steps, please note:

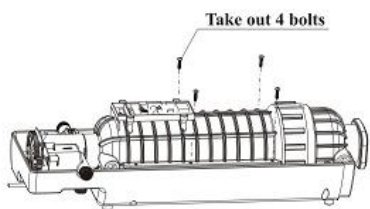
1. Thread on resin tank and O-ring should be cleaned.
2. If the riser pipe falls out, it needs to be cleaned and inserted into resin tank.
3. Be sure the drain line flow control is undamaged when installing the drain pipeline.



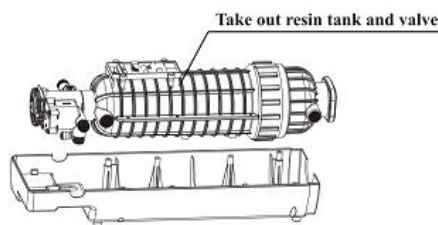
a. Take out bolts on back cover



b. Disassemble front cover



c. Disassemble resin tank bolt



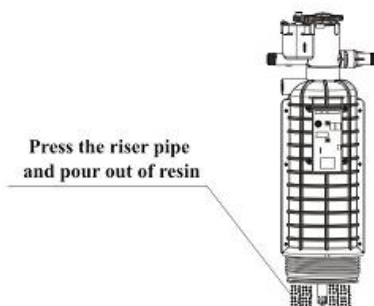
d. Take out resin tank unit



e. Unscrew resin tank cover



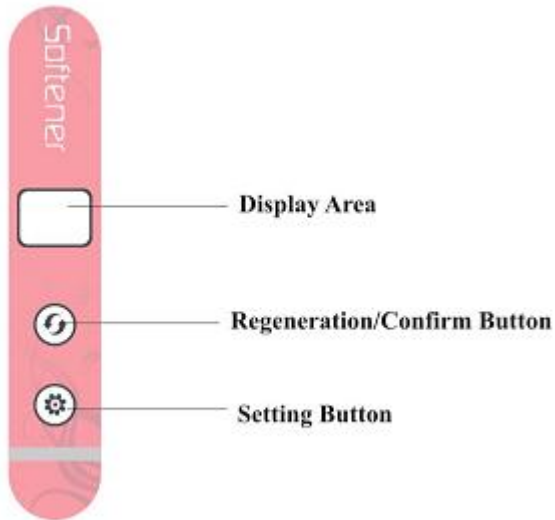
f. Take out top strainer



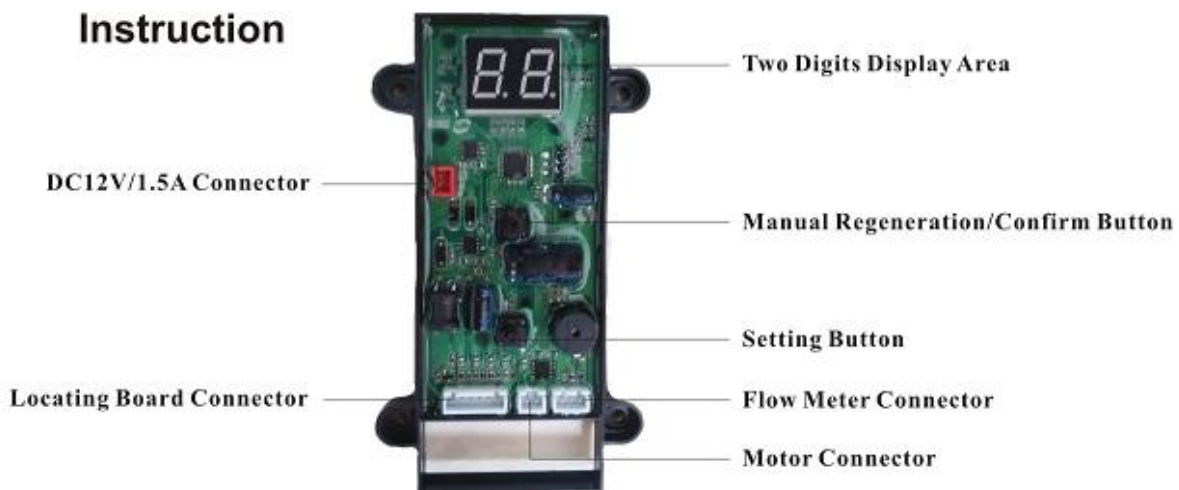
g. Pour out of resin

## 6. Parameter Setting

### 6.1. Product Control Panel Instruction



### 7.2. Display Board Connector Instruction





The connectors on the display board are unique. Set the connector with the same color and same cores of plug.



### 6.3. Product Installation Type Setting

There are two types of installation, which are installed before and after water heater. It has difference processes accordingly. Resin invalid warning has time clock type and meter type.

The meanings of each code are as following:

Code	Meaning	Setting
5H	Installed after water heater, time clock type	Power on, press and hold both  and  buttons for three seconds to enter into
59	Installed before water heater, time clock type	


## SHOWER SOFTENER

LH	Installed after water heater, meter type	installation type selection, press  to select the type, then press  to save the setting and quit.
L9	Installed before water heater, meter type	


Enquiry mode: Power on, interface will display installation type.

### 6.4. Regeneration Days Reminding Settings

The shower softener can be set up alarm of regeneration days according to the practical circumstance.

The screen flashes to remind the ender user to add salt. Under the time clock mode, press and hold 

button to enter into the interface of setting regeneration days reminding. Press  to set the days, then

press  to save the setting and quit. For example, if it is set 07, 7 days after regeneration, the screen flashes to remind the ender user to add salt. The default setting is 00 which means no reminding. The parameter setting range is 00-60.

#### Setting the local water hardness

When users choose meter type, they should set the local water hardness only, and then the system will calculate the water treatment capacity automatically. When the water treatment capacity reaches a certain point, the screen will be flashy and remind users to add salt to regenerate. Setting way is as

following: press and hold  in meter mode to enter the menu of setting the local water hardness, and

then press  to set the value of hardness. Press  to turn back and save when finish the setting.

The unit is mg/L, and local water hardness = the value you set × 10. Such as value “10” means 100mg/L, value “15” means 150mg/L, and so on.

### 6.5. Meaning of Running Code

Code	Meaning	Explanation	Code	Meaning	Explanation
00	Service/ Service Days		5-	Salt Disssluton	
	Service/Remaining water volume	In meter type mode, one bar stands for 25% of water treatment capacity.	6-	Fast Rinse	Water flows out from drain
2-	Backwash	Water flows out from drain	7-	Salt Disssluton	
3-	Salt Disssluton		8-	Fast Rinse	Water flows out from drain
4-	Fast Rinse	Water flows out from drain	dd	Closing and Waiting	

## 7. Trouble Shooting

Problem	Cause	Correction
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**SHOWER SOFTENER**

Leakage	No o-ring installed or assembly not tight.	Install o-ring and tighten the connection.
Water flow rate decreased	Strainer blocked.	Clean strainer and install front filter screen.
Outlet water unqualified	1.Resin invalid. 2.Resin lifetime expired. 3.Regeneration effect not good.	1.Regenerate resin. 2.Replace resin. 3.Check if the drain pipeline blocked or use the special regeneration salt.
Regeneration effect not good	1.Do not use the special regeneration salt. 2.The drain is blocked. 3.Source water is not opened during regeneration.	1.Use the special regeneration salt. 2.Clean the drain line flow control. 3.Open the source water and regenerate again.
E1 flash	1.Motor failure. 2.Control board failure. 3.Locating board failure. 4.Moving disk stuck.	1.Replace motor. 2.Replace Control board. 3.Replace locating board. 4.Clean the substance between moving disk and fixed disk.
E2 flash	1.Wiring of locating board is bad. 2.Control board failure.	1.Replace the locating board wiring. 2.Replace control board.
E3 flash	Control board failure.	Replace control board.

**8. Warranty Card**

Dear client:

This warranty card is the guarantee proof of our Shower Softener. It is kept by client self. You could get the after-sales services from the supplier which is appointed by manufacturer. Please keep it properly. It couldn't be retrieved if lost. It couldn't be repaired free of charge under the below conditions:

- 1.Guarantee period expired.(One year);
- 2.Damage resulting from using, maintenance, and keeping that are not in accordance with the instruction;
- 3.Damage resulting from repairing not by the appointed maintenance personnel;
- 4.Content in guarantee proof is unconfirmed with the label on the real good or be altered;
- 5.Damage resulting from force majeure.

Product Name	SHOWER SOFTENER		
Model		Code of Valve Body	
Purchase Company Name		Tel/Cel.	
Problem			
Solution			



**SHOWER SOFTENER**

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Date of Repairing		Date of Accomplishment		Maintenance Man Signature	
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