



Installation, Operation & Maintenance Manual

Cabinet Style Metered Residential Water Softeners:

BMB 8

BMB 12

BMB 30



For more details, please visit:
www.bmbtechnology.com

smart water technology ...

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Introduction

The **BMB Technology** cabinet style residential water softeners are elegantly designed state of the art machinery with smart capabilities. Some of the features are stable performance via proprietary software, compact structure and simple handling. They can meet the soft water demand of a small flat to a large villa up to 10 m³ / day. The soft water applications are endless, such as dishwashers, washing machines, heating, cleaning, bathing, boiling and much more. Additionally the systems can be used to supply high quality soft water for restaurants, cafes, institutions, schools, group companies and more. In order to correctly install, setup and use this **BMB Technology** product line, please read the manual carefully and follow the instructions step-by-step. After the installation, this manual can be referenced for any problems related to product operation.

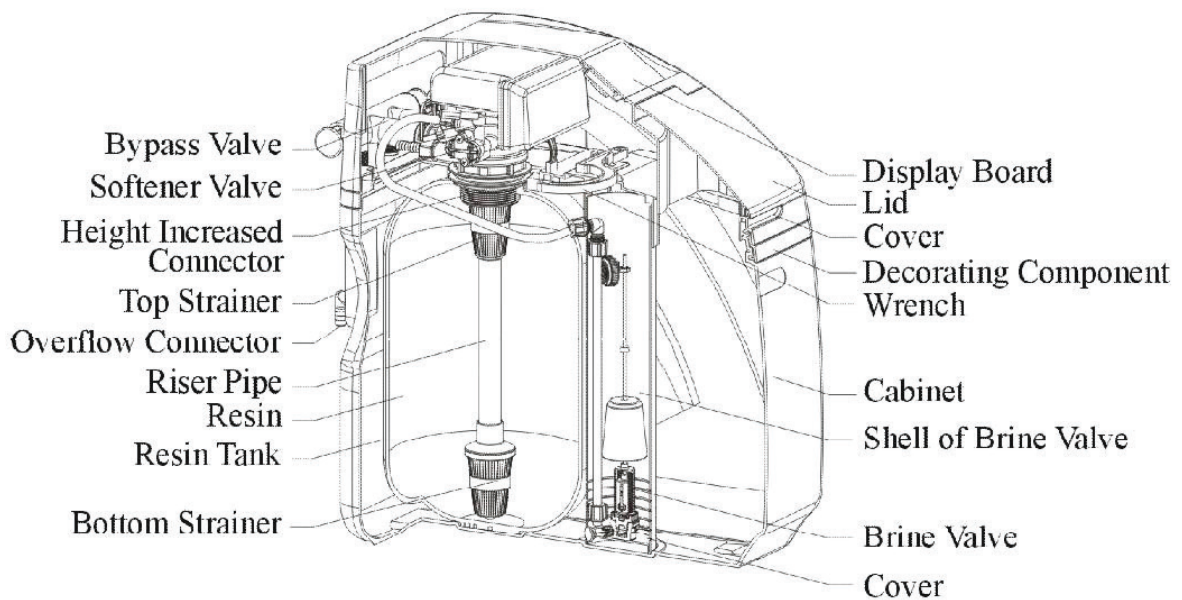
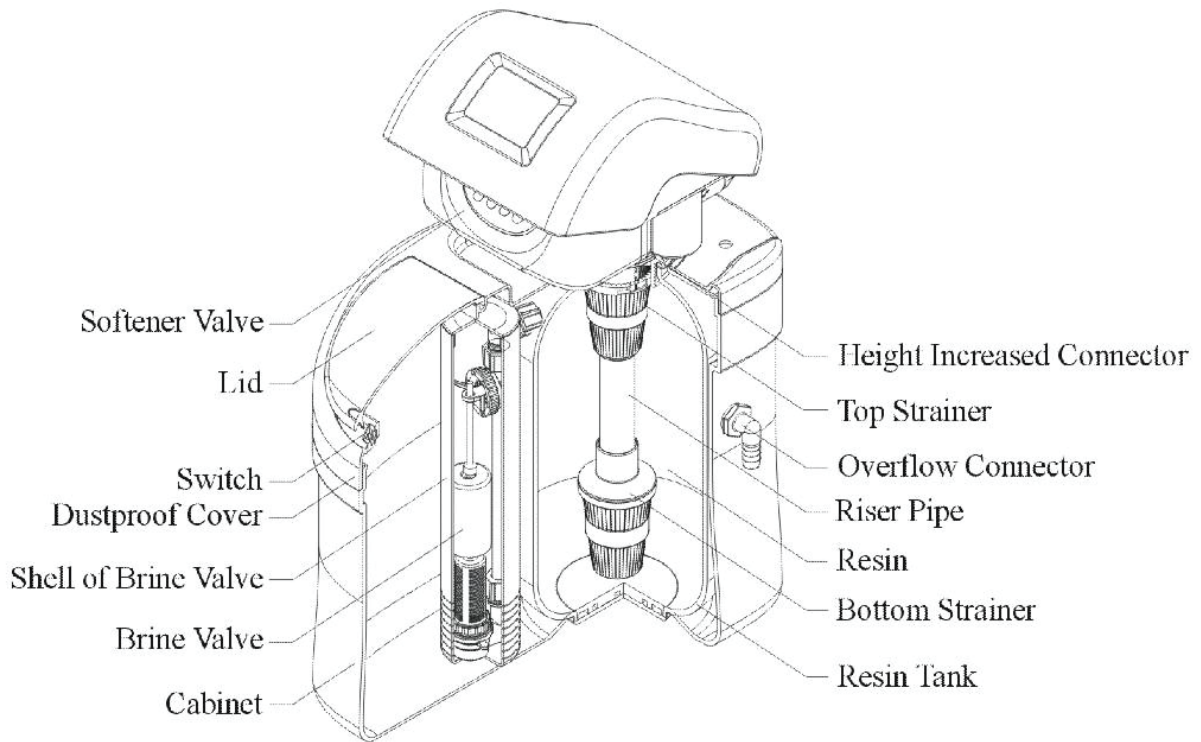
1. Product Profile

This **BMB Technology** water softener series is a fully automatic and intelligent machine. It uses food-grade cation resin to soften the water while maintaining a low pressure drop and high flow rate / softening efficiency. Once the resin is saturated, the system will implement “regeneration” (automatic series of cycles to recover softening efficiency) during the user’s preset time (usually middle of the night). The regeneration cycles (backwash, regeneration, brine refill and fast wash) operate autonomously without any manual operation. The control valve within is commanded through the LCD display screen. Users can set parameters and conduct operations according to the menu icons that are displayed on the screen.

2. Product Profile

This **BMB Technology** model uses Ion exchange principles to remove Calcium Carbonate and Magnesium Carbonate hardness from the water supply. It will remove these ions that cause hardness and replace them with the sodium ion. By setting up the system through the LCD display menus, the automatic control valve will open and close to conduct softening, backwash, regeneration, slow rinse, brine refill and fast wash cycles.

3. Assembly and Parts





4. System Function

1. Regeneration is automatic: The system will enter the regeneration cycle automatically once it has calculated that the softening capacity has been achieved.

2. Raw water hardness is programmed: The user will need to enter the hardness of the incoming raw water through the LCD display screen menus. After this, the software will automatically calculate the softening capacity and control the automatic valve accordingly.

3. Water hardness can be adjusted: The output water hardness can be changed through adjusting the mixing valve.

4. Automatic memory function: The system saves user parameters such as regeneration time, backwash time, brine & slow rinse time, brine refill time, fast wash time, etc. even if the system is turned off.

5. Button lock function: Press and hold the  and  buttons for 5 seconds to unlock the buttons. This function can avoid incorrect operation.

6. Regeneration is delayed: Once resin capacity is achieved, the system will wait until the user input “regeneration time” to begin regeneration. During regeneration, the system will not produce any water, this is why regeneration time is usually set by the user to operate in the middle of the night in order to avoid no-water situations.

7. All cycles are automatic:

Softening: During normal operation, the raw water is softened by removing the Calcium Carbonate and Magnesium Carbonate hardness ions and replacing them with the harmless Sodium ion.

Backwashing: Once the resin is saturated and the softener loses its softening efficiency, the software will automatically start the backwashing cycle. This routine will backwash the softener which will wash away and drain any dirt, sediment or damaged resin parts that could cause pressure drop or loss in softening efficiency. Additionally any tightly packed resin will disperse preventing loss of softening efficiency for future cycles.

Brine and Regeneration: This cycle will pass brine flow (salt) through the resin and out to drain. The Calcium Carbonate and Magnesium Carbonate ions attached to the resin surface will dislocate and be replaced with the Sodium ion from the brine mixture.

Brine Refill: The brine tank is refilled with water to dissolve the salt which will provide the saturated brine solution for the next regeneration.

Fast Washing: This is the final cycle in regeneration, it is used to discharge any residual brine left in the resin tank. Additionally it will lightly compress the resin particles so higher softening efficiency can be achieved.

5. Product Dimensions

Model	Resin Tank Size (cm)	Resin Volume (L)	Brine Valve Spec. (in)	Net Weight Without Salt (Kg)	Dimensions (LxWxH) (cm)
BMB-8	20 x 43	8	08 x 17	20	44 x 26 x 63
BMB-12	25 x 43	12	10 x 17	24	53 x 33 x 62
BMB-30	25 x 89	30	10 x 35	43	53 x 33 x 107

6. Applications

The model is designed to soften tap or other qualified raw water. It will remove Carbonate based Calcium and Magnesium ions which cause hardness and add Sodium ions to the water in exchange. This model works exceptionally well in residential applications including flats, apartment complexes, homes and villas. Additionally this system can be used to soften water in restaurants, cafes, institutions, schools and group companies.

7. Technical Specifications

Model	Flow Rate (L / h)	Water Capacity Per Cycle (L)	Inlet / Outlet	Regeneration Mode	Drain (in)
BMB-8	500	1000	3/4" NPT / BSPP	Meter Delayed	1/2
BMB-12	1000	3000	1" NPT / BSPP	Meter Delayed	1/2
BMB-30	1500	6000	1" NPT / BSPP	Meter Delayed	1/2

* Water capacity per cycle is dependent on incoming water supply quality. Water quality will differ between regions as will the water capacity per cycle.

* The standard testing conditions are as follows:

- Water temperature: 25 °C
- Raw water hardness: 200mg/L CaCO₃

* Power Supply:

- Input: 100 - 240 VAC 50/60 Hz
- Output: 12 VDC / 1.5A

Service Conditions:

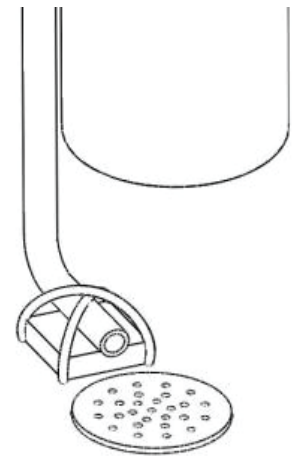
- Water Pressure: 0.15-0.6MPa
- Water Temperature: 5 - 38 °C /
- Environmental Temperature: 4 - 40 oC
- Relative Humidity < 90% @ 25 °C

8. Installation

8.1 Installation Notice

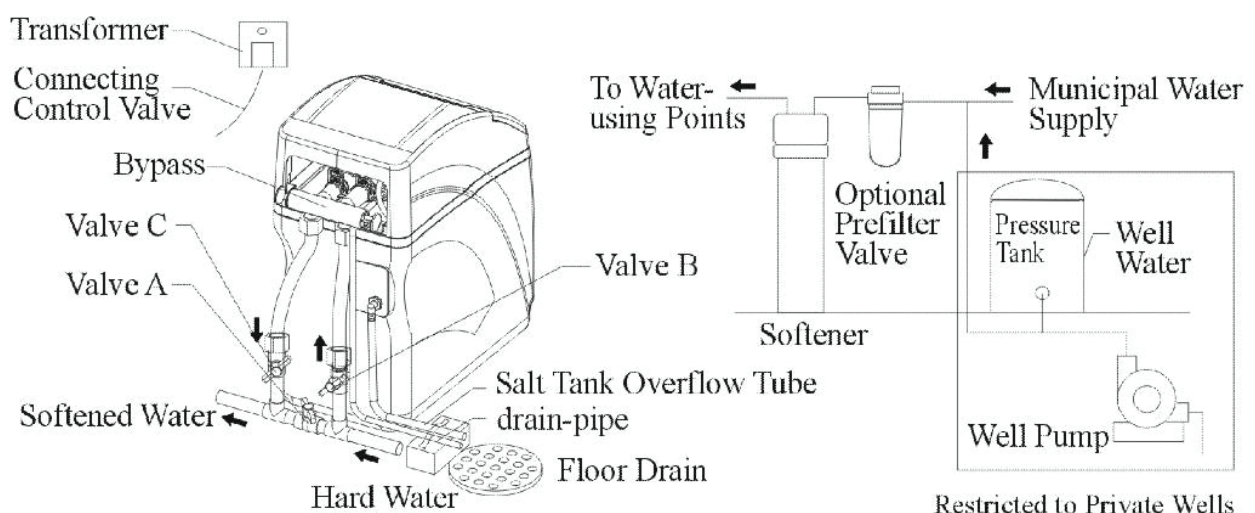
- This product should not be tilted or laid down on its side during transportation, installation or usage.
- Place the product on a flat surface that can hold at least 300 Kg / m² weight.
- Generally this product is installed near the water point of entry in the equipment room or garage. The place of installation should have water inlet, water outlet, drain and electricity. Because the system is a cabinet style system, in certain cases it can be installed outside. However, it should be protected from freezing temperatures, direct sunlight and rain.
- This product should not be installed near places with alkaline or acid substances or gas. An environment where there can be corrosion should be avoided.
- The inlet water pressure should be in the range of 0.15 Mpa min. and 0.6 Mpa max. A pressure reducer or booster pump should be installed if the inlet water pressure is out of this range.
- The incoming “total water hardness” is directly related to the softening efficiency and the softening cycle. Ideally the incoming total water hardness should not be more than 400 mg / L.
- Make sure a check valve is installed between the system and water heater or heating stove in instances when they are installed before the system. If not how water reflux or damage to the internal components of the system can occur.
- A separate drain line for the device is required. There must be 5 to 10 cm of clearance maintained between the drain pipe and the floor drain (in case of siphoning, valve damage can occur). Please see the figure on top of the next page for a detailed explanation.

- When installing the plumbing, make sure to clean the dust and dirt from the pipes.
- The plumbing that is used should meet the standards and relevant regulations of local guidelines.
- When selecting installation space, please make room for adding salt as well as cleaning and maintaining the system.



8.2 Installation and Connections

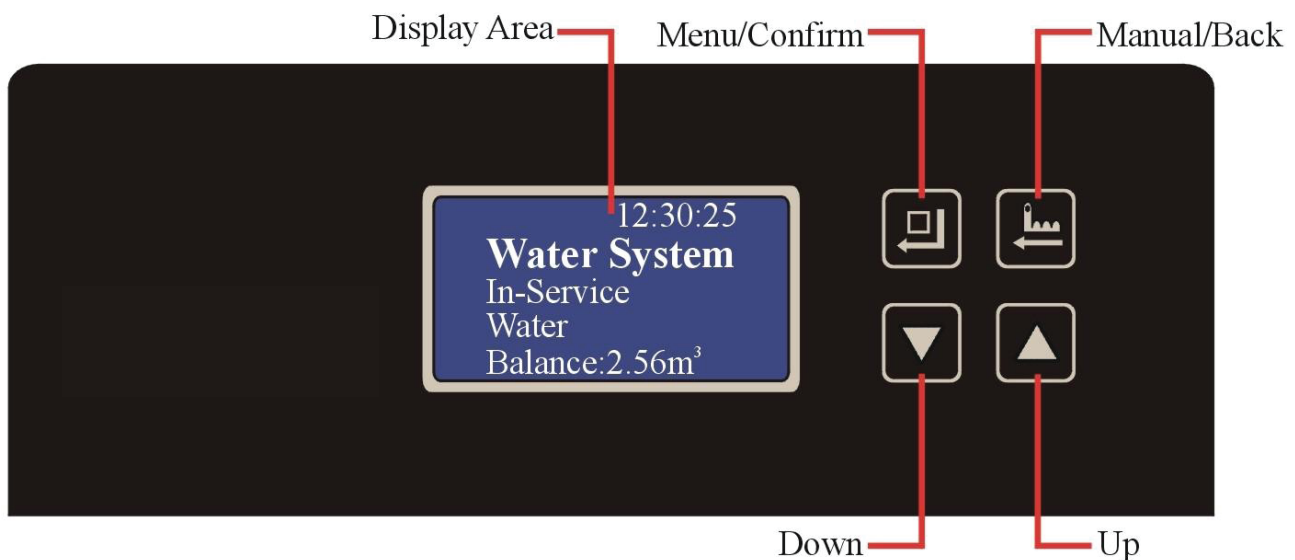
- The Inlet / Outlet plumbing should be installed parallel to each other (please see the diagram below)
- Please pay attention to “Inlet” and “Outlet” labels on the system
- The inlet and outlet plumbing, drain line and overflow pipeline should be connected in sequence and make sure there are no leaks in any of the joints.
- The types of plumbing and fittings that should be used are 304 stainless steel, alloy copper forging and high strength plastics. Iron plumbing or fittings should not be used.
- It is recommended to use the manual bypass valve that ships with the system. This will make installation and maintenance more convenient (please see the diagram below)



- If the system needs to be moved for service or repair, please open valve A and close valves B & C. During normal operation, valve A should be closed and valves B & C should be open.
- The control valve should be higher than the drain. Additionally the drain line and overflow line should not exceed 5 meters length and should also be higher than the drain.
- Each pipe should be supported with a fixed holder. The weight of the plumbing should not pull on the control valve as damage to the valve can occur.

8.3 Settings




This model has a foreground and background mode that can be selected from the menu. The foreground mode is user input parameters such Time of Day, Regeneration Time and Feed Water Hardness. The background mode is preprogrammed for the Backwash Time, Brine & Slow Rinse Time, Brine Refill Time, Fast wash Time and Resin Volume.






Foreground Mode Parameters







- Button lock indicator
 - Light indicates that the buttons are locked and disabled. The system will not allow operation for one minute, the light will light on and lock the buttons.
 - Solution: Press and hold both the Up and Down buttons for 5 seconds until the light is turned off.
- Manual/Confirm button
 - Press the Manual/Confirm button under the service status, the system changes to the settings interface. Select the item and input the value.
 - Under input status, press the Manual/Confirm button the digits will flash. Parameters can be adjusted from the interface by pressing the Up and Down buttons.
 - After changing the setting press the Manual/Confirm button to save the settings (a sound confirmation will occur).

C.  Manual/Return button

Press  in service status, the current cycle will finish and the next will start. For example if the target water hardness is not achieved, after unlocking the buttons, press  in service status and the regeneration cycles will start instantly. During regeneration if a cycle needs to be skipped, press  and the next cycle will start.



- Press  in inquiry status, the system will go back to the service status interface. Press  in settings status, the system will go back to the inquiry status interface.
- In setting status, press  and the system will go back to the inquiry status screen without saving the setting value.

D. Down  and Up 

- In the inquiry status screen, press  or  to view all settings.
- In the setting status screen, press  or  to change the values.
- Press and hold both  and  for 5 seconds to unlock the buttons.

E. **Parameters Set By The User**

Setting	Parameter Range	Factory Default	Actual Value User Needs to Input
Time of Day	00:00 ~ 23:59	Current Time	
Regeneration time	00:00 ~ 23:59	02:00	
Incoming Water Hardness	50 ~ 400 mg / L	150 mg / L	































- Press and hold both  and  for 5 seconds in the service status screen and the system will display the language selection interface.

F. **Process Display**

After power on, the system will enter into the user mode. Here the user can see which process the system is undergoing. A few examples can be found below.

<p>12:30:25 Water System In-Service Water Balance:2.56m³</p> <p>Service Status 1</p>	<p>12:30:35 Water System In-Service Water Flow Rate:3.65m³/h</p> <p>Service Status 2</p>	<p>12:30:45 Water System In-Service Water Trig time:02:00</p> <p>Service Status 3</p>	<p>02:08:00 Water System Back washing... Left: 2min.</p> <p>Backwash Status</p>
<p>02:40:25 Water System Brine & Slow Rinse ... Up-Flow Left: 30min.</p> <p>Brine & Slow Rinse Status</p>	<p>03:15:50 Water System Refilling ... Left: 5min.</p> <p>Refill Status</p>	<p>03:25:50 Water System Fast washing ... Left: 3min.</p> <p>Fastwash Status</p>	<p>Motor Running...</p> <p>Motor Running</p>

- For the “Brine & Slow Rinse” status in the display screen, “Down-flow Regeneration” and “Up-Flow Regeneration” will be shown depending on the situation. This can be selected and changed by the user (“Down-flow Regeneration” is recommended).
- The operation cycles are as follows:
Service → Backwash → Brine & Slow Rinse → Brine Refill → Fast Wash → Service

Setting	Setup	Screen
Time of Day	<p>When  light is on, press and hold both  and  for five seconds until  light is off.</p> <ol style="list-style-type: none"> 1. Press  and enter into the “Soft-Volume Para Set” interface as the figure on the right. The “Clock” setting will be selected by the system automatically. 2. Press  so the setting interface will display the time as the figure on the right. The hour “12” will flash, use  or  to adjust the hour. 3. Press  to save and go to the minute parameter, which will flash. Use  or  to adjust the value. 4. Press  to save the minute setting followed by a sound confirmation. 	<div style="border: 1px solid black; padding: 5px;"> Soft-Volume Para Set » Set Clock Set Rchg. Time Set Water Hardness </div> <p style="text-align: center;">LR1</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"> Time of Day 12 : 30 </div> <p style="text-align: center;">LR2</p>
Regeneration Time	<ol style="list-style-type: none"> 1. Press  and enter into the “Soft-Volume Para Set” interface. 2. Press  and select “Set Rchg Time”, then press  so the setting interface will display the time as the figure on the right. The hour value “02” will flash. use  or  to adjust the hour value. 3. Press  to save and go to the minute parameter, which will flash. Use  or  to adjust the value. 4. Press  to save the minute setting followed by a sound confirmation. 	<div style="border: 1px solid black; padding: 5px; text-align: center;"> Set Rchg Time 02 : 00 </div> <p style="text-align: center;">LR3</p>
Incoming Water Hardness	<ol style="list-style-type: none"> 1. Press  and enter into the “Soft-Volume Para Set” interface as the figure on the right. 2. Press  twice and select “Set Water Hardness”. Then press  which will cause “150 mg/L” to flash. 3. Use  or  to set the incoming water hardness value. 3. Press  to save and go to the minute parameter, which will flash. Use  or  to adjust the value. 4. Press  to save the incoming water hardness value setting followed by a sound confirmation. 	<div style="border: 1px solid black; padding: 5px; text-align: center;"> Set Water Hardness 150 mg/L </div>

- After setting the feed water hardness, the display screen will show the total softening capacity. If the softening capacity volume is too low to meet demand, the capacity can be increased by lowering the feed water hardness.

Background Mode Parameters

A. Entering into background mode

Within 6 seconds of start-up, press and hold  and  for more than 3 seconds to enter the background settings menu. The interface can be seen from the figures below H1-1 and H1-2.

B. Setting Parameters

In the background mode the following parameters can be set: mode; valve model, control type, resin volume, interval regeneration time, backwash time, brine & slow rinse time, fast wash time, service time and brine draw type.

» Set Mode — Softener
Set Valve Mode — F79
Set Type — Volume
Set Resin Vol. — 8L
Set Brine — Up-Flow ↓

H1-1

» Set Rchg Day — 30Days
Set Backwash — 2Min
Set Brine — 30Min
Set Refill — 5Min
Set Fastwash — 3Min

H1-2

Set Mode
 Purifier
 Softener

A1

Set Valve Mode
 F69 ↓
 F82
 F79

A2

Set Type
 Time
 Volume

A3

Set Resin Vol.
11L

A4

Set Brine
 Up-flow
 Down-flow

A5

Set Rchg Day
30days

A6

Set Backwash
3 min.

A7

Set Brine
30 min.
















A8




































Set Refill
5 min.

A9

Set Fastwash
3 min.

A10

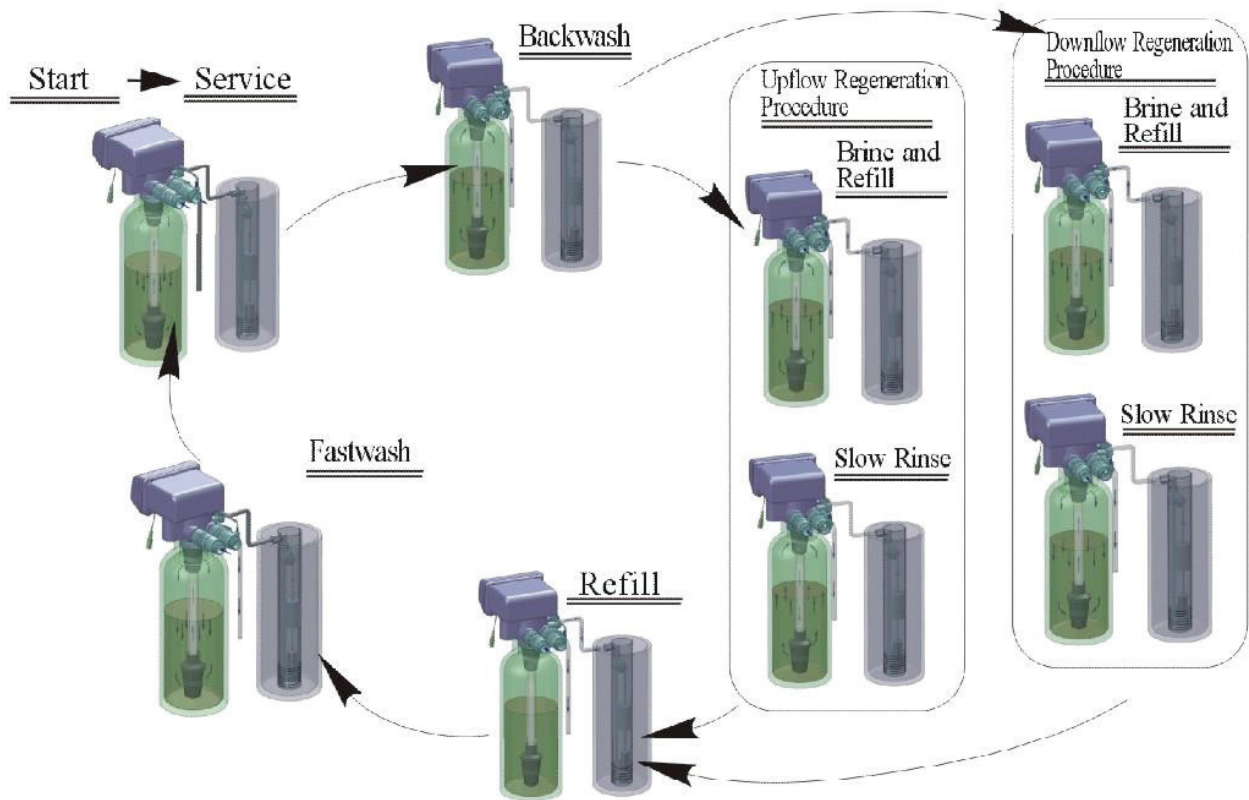
1. In the H1 interface, select “Mode” and press  as figure A1 above. Press  or  to select the mode that is needed. Press  to save the settings and turn back to the H1 menu or press  to turn back to H1 without saving the setting.
2. In the H1 interface, select “Set Valve Model” and press  as figure A2 above. Press  or  to select the mode that is needed. Press  to save the settings and turn back to the H1 menu or press  to turn back to H1 without saving the setting.
3. In the H1 interface, select “Set Type” and press  as figure A3 above. Press  or  to select the mode that is needed. Press  to save the settings and turn back to the H1 menu or press  to turn back to H1 without saving the setting.

4. In the H1 interface, select “Resin Vol.” and press  as figure A4 on the previous page. Press  or  to select the mode that is needed. Press  to save the settings and turn back to the H1 menu or press  to turn back to H1 without saving the setting.
5. In the H1 interface, select “Set Brine” and press  as figure A5 on the previous page. Press  or  to select the mode that is needed. Press  to save the settings and turn back to the H1 menu or press  to turn back to H1 without saving the setting.
6. In the H1 interface, select “Set Rchg Day” and press  as figure A6 on the previous page. Press  or  to select the mode that is needed. Press  to save the settings and turn back to the H1 menu or press  to turn back to H1 without saving the setting.
7. In the H1 interface, select “Set Backwash” and press  as figure A7 on the previous page. Press  or  to select the mode that is needed. Press  to save the settings and turn back to the H1 menu or press  to turn back to H1 without saving the setting.
8. In the H1 interface, select “Set Brine” and press  as figure A8 on the previous page. Press  or  to select the mode that is needed. Press  to save the settings and turn back to the H1 menu or press  to turn back to H1 without saving the setting.
9. In the H1 interface, select “Set Refill” and press  as figure A9 on the previous page. Press  or  to select the mode that is needed. Press  to save the settings and turn back to the H1 menu or press  to turn back to H1 without saving the setting.
10. In the H1 interface, select “Set fast wash” and press  as figure A10 on the previous page. Press  or  to select the mode that is needed. Press  to save the settings and turn back to the H1 menu or press  to turn back to H1 without saving the setting.

Note: All of the background parameters come preset from the factory according to the product type and the region that they are sold in. Please make sure that the background parameters are only changed by a professional **BMB Technology** dealer.

Parameter	Unit	Factory Default
Backwash Time	Min.	3
Brine & Slow Rinse Time	Min.	BMB-8 :: 36 BMB-12 :: 40 BMB-30 :: 55
Brine Refill Time	Min.	BMB-8 :: 4 BMB-12 :: 5 BMB-30 :: 7
Fast Wash Time	Min.	5
Interval Regeneration Days	Min.	30

8.4 Softener Flow Chart

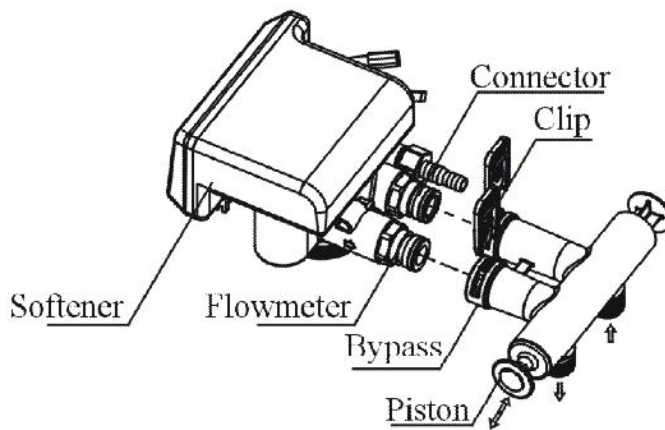
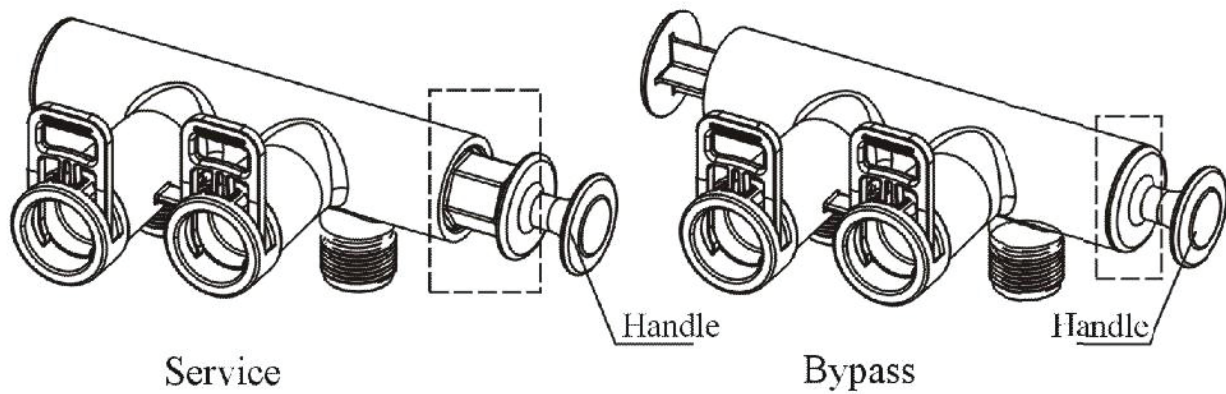


8.5 Brine Valve

The brine valve has two different roles in the system. First, in the Brine & Slow Rinse cycle (with the floating ball), the brine valve will prevent the air from coming back into the system which can harm the regeneration cycle. Second, in the Brine Refill cycle, the brine valve will control the volume of water for refilling by controlling the vertical position of the floating ball.

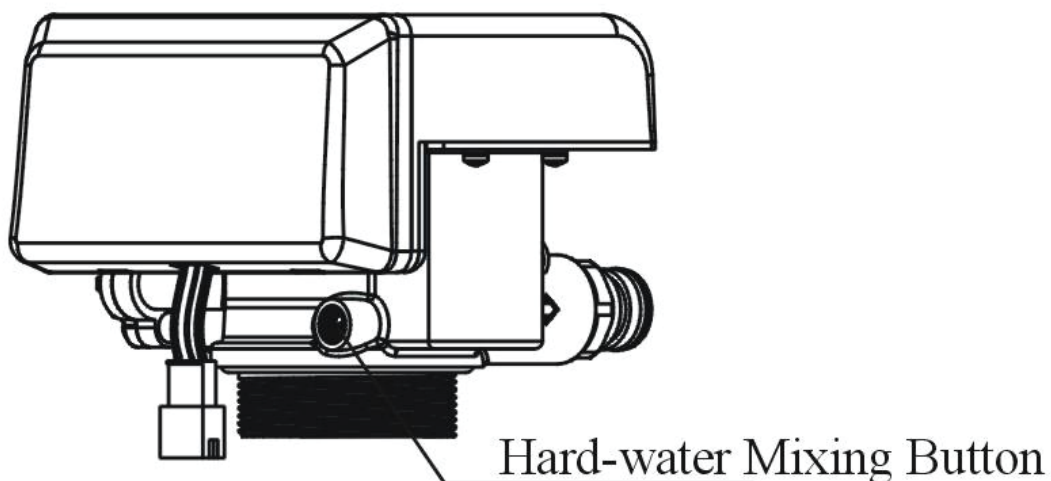
8.6 Bypass Valve

The bypass valve has the role of bypassing the system for situations such as maintenance and system down time. When the piston is pushed to the position of inlet and outlet, the valve is in service status. When the valve is pushed towards the opposite side, the valve is in bypass status. Please see the figure on the next page for a detailed example of how the bypass valve works.








8.7 Mixing Valve


In certain conditions the user will want to increase the total hardness that is coming from the softener. As an example for industrial type dishwashers used in the restaurant industry, some detergents and polishers prefer soft water but only down to 50 mg/L. In cases like this, the mixing valve on the system can be adjusted so that some of the water bypasses the resin. Please untighten the screw in the mixing port of the system to increase the hardness. Please refer to the figure below for more information.



9. System Start-up

After installing the device and setting the relevant parameters, please conduct a trial run as follows:

1. Fill the brine tank half-way with salt.
2. Switch on the power. Press  and go to the backwash status.
3. Slowly open the inlet valve until it is 1/4 open. Avoid opening the valve too quickly as this can damage the device and wash away some of the resin. Air will be heard exiting the system.
4. Once all of the air is out, open the inlet valve completely. Backwashing should be done for 3-4 minutes until the outlet water is clean. This step will clean all of the foreign materials in the resin tank.
5. Press  which will go to the next cycle, Brine & Slow Rinse. The salt will be absorbed from the salt tank into the resin which will start the regeneration process. After absorbing, the brine valve will close and the system will conduct about 15 minutes of slow rinse which will get rid of residual brine in the system.
6. Press  which will go to the next cycle, Brine Refill. The brine tank will be refilled with water to dissolve the salt for the next generation cycle. When the level reaches a certain height, the controller will cut the flow.
7. Press  which will go to the next cycle, Fast wash. This 3 minute cycle will discharge the residual brine in the system and compress the resin to increase the softening efficiency.
8. Check the hardness of the outlet water, if the hardness is acceptable, press  to end the fast wash cycle and the system will turn in to the service cycle, ready for use.

Once the system has calculated that the resin capacity is achieved, the regeneration cycle will start at the next "Rchg Time" that the user has set. During regeneration, the system will not give output water. Each cycle will be completed automatically, according to the parameters in the background mode. If a cycle in the regeneration needs to be skipped, press . Under normal circumstances, the user only needs to add salt to the system, everything operates automatically.

10. Notice

Please do not try to operate the system without reading and understanding the instructions in the manual.

1. Do not install the system near a heat source.
2. Do not connect the system to a hot water source.
3. If the inlet water is low quality such as particles, bacteria or high chlorine concentration, pre-treatment should be used.
4. During operation, please check the salt tank regularly. Salt should be added to roughly 50% of the salt tank when it is about 10% full. Make sure that the new salt has been in the tank for at least 6 hours before regeneration in order to allow adequate time for the salt to dissolve.
5. Please make sure that refined salt that is +99% pure is used for the system. Otherwise the lifetime of the resin will be reduced.
6. If the system will not be used for some time (as an example the family is going on a vacation), please close the inlet valve to the system and remove the power plug. Upon return, please make sure to set the time of day.
7. When using the softener for the first time or the system has been idle for a long time, there may be some yellowish color in the water. This is normal. Please conduct 2-3 minutes of rinsing for the problem to be resolved.
8. Sometimes a salt bridge can form in the brine tank. That is, the salt in the brine tank has caked (clustered) which will prevent the salt on top of the bridge from dissolving. This can hinder the regeneration performance. In this case, use a stick to break up the caking.

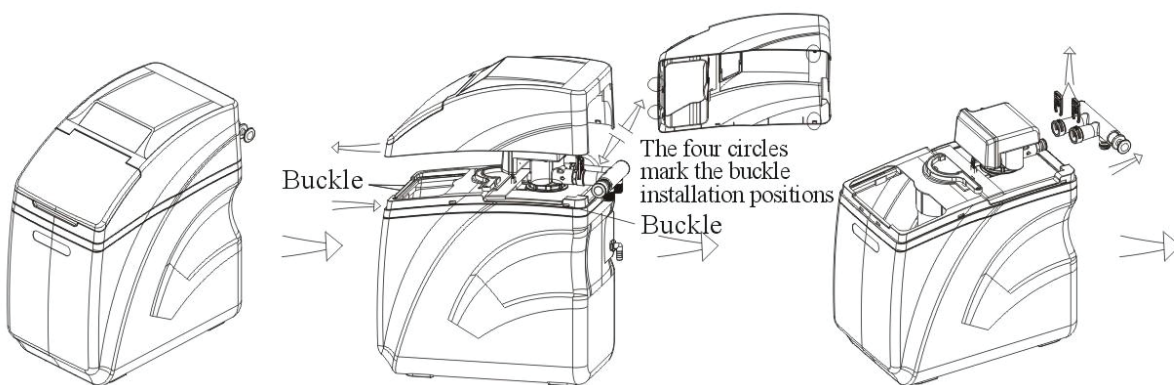
11. Troubleshooting

Before doing any maintenance, please check the following tips.

Problem	Cause	Solution
Control valve is not working	<ul style="list-style-type: none"> • Power is not plugged • Power socket problem • Power outage • Power supply damaged 	<ul style="list-style-type: none"> • Connect to power • Replace or repair socket • Check power supply • Replace the power supply
Regeneration time incorrect	<ul style="list-style-type: none"> • Time of day setting incorrect • Power outage +3 days 	Reprogram the Time of day
Leakage	<ul style="list-style-type: none"> • Connector is loose • O-ring damaged 	<ul style="list-style-type: none"> • Tighten the connectors • Replace the o-rings
Noise	<ul style="list-style-type: none"> • Air trapped in device 	<ul style="list-style-type: none"> • Perform backwash cycle
Output water too hard	<ul style="list-style-type: none"> • Bad raw water quality • Regeneration period too long • Bypass open • Mixing valve open 	<ul style="list-style-type: none"> • Contact distributor • Shorten regeneration time • Close bypass valve • Close mixing valve
Brine failure	<ul style="list-style-type: none"> • Low inlet pressure • Brine pipe clogged • Injector broken • Air leaking to brine pipe 	<ul style="list-style-type: none"> • Increase inlet pressure • Check and eliminate clogging • Replace injector • Check components, seal leakage
Brine tank overflow	<ul style="list-style-type: none"> • Brine refill time too long • Too much water left after brine refill cycle 	<ul style="list-style-type: none"> • Shorter brine refill time • Check brine status
Water still hard after regeneration	<ul style="list-style-type: none"> • Valve damaged • Low inlet pressure • No salt in brine tank • Injector damaged • Riser pipe o-ring damaged 	<ul style="list-style-type: none"> • Replace controller • Increase inlet pressure • Add salt and start regeneration • Clean injector • Replace the o-ring
Too high or low flow rate during backwashing	<ul style="list-style-type: none"> • Flow restrictor is damaged • Flow restrictor is clogged 	<ul style="list-style-type: none"> • Replace flow restrictor • Clean flow restrictor
Salty output water	<ul style="list-style-type: none"> • Low inlet pressure • Drain pipe clogged • Too much salt in brine tank • Fast wash cycle too short 	<ul style="list-style-type: none"> • Increase inlet pressure • Eliminate clogging • Reduce the amount of salt • Increase fast wash time
Drain port is continuously draining	<ul style="list-style-type: none"> • Blackout control valve is not reset • Leakage in control valve • Clogging in control valve 	<ul style="list-style-type: none"> • Adjust program to "service" • Replace control valve • Eliminate the clogging

12. Maintenance

1. Before performing any maintenance please make sure to turn off the softener inlet valve or bypass the softener by using the bypass valve.
2. Do not use any harmful detergents or chemicals to clean the system.
3. Wipe the system surface with a moistened soft fabric.
4. Do not allow any water or dust to enter the internals of the valve. This can cause damage to the electrical components.
5. Put the system to Brine status.
6. Disassemble the system per the figure below and next page.



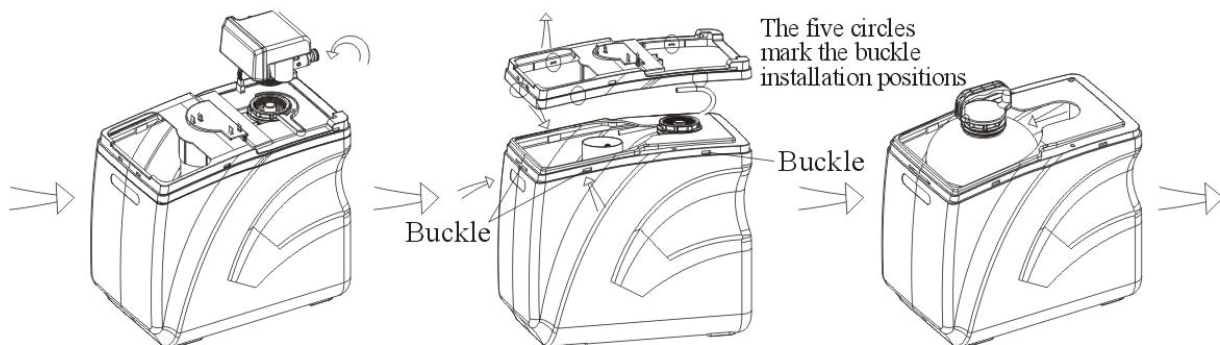
Softener

Uninstall Dustproof Cover Assembly

Press inward the decorative part and pull outward the dustproof cover buckle, set apart the front two buckle positions and pull upward the cover, then set apart the rear buckle positions and disassemble the dustproof cover assembly.

Uninstall Bypass Valve

Pull out the clips in the bypass, uninstall the bypass backward, Unscrew the hex nut, pull out the brine tube(with plug), take out the drain line flow control, loosen the clamp, pull out drain pipe.



Uninstall Control Valve

Take out the wrench fixed on the decorative part, wedge it in the height increaser, reverses the control valve, uninstall the valve body.

Uninstall Decorative Part

Set apart the front three buckles, pull upward the decorative part, and take out the brine valve.

Remove Resin Tank

Use the special-purpose life to screw the resin tank, and take out the valve body.



Take Out Resin Tank

13. Warranty

Thank you for choosing a **BMB Technology** water softener. For your protection please make sure to read this manual and warranty guidelines fully.

1. The warranty period is one year from the purchase of the system.
2. During the warranty period, maintenance and parts are free for failures and other problems that are attributed to product quality.
3. The user is responsible for failures and other problems that are attributed to incoming water quality, electricity or use.
4. Once the warranty period has expired, after sales service such as maintenance, changing resin, spare parts, etc. will be provided at a cost. Contact a **BMB Technology** dealer for prices.
5. The system can not be repaired free of charge for the below conditions:
 - Damage to the resin, seal, valve or shell that is caused by fire, flood, electric shock, earthquake, etc.
 - Damage resulting from disassembly or retrofitting by the user
 - Damage resulting from unscheduled maintenance
 - Damage caused by improper transportation, installation, usage or maintenance.
 - User can not provide a warranty card