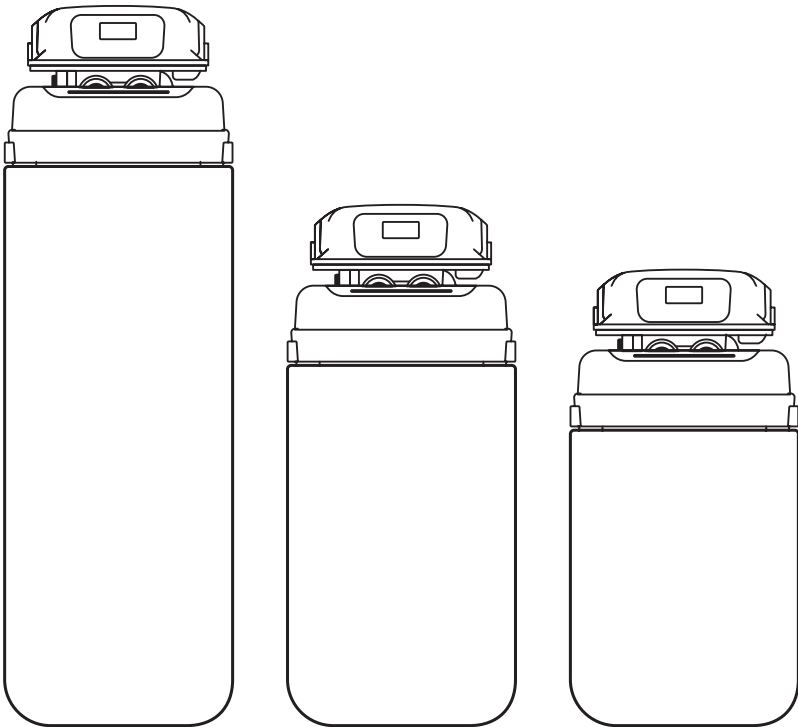




MANUAL BLU SOFTENER



CONTENTS

1. Introduction	3
1.1 General provisions	3
1.2 Manufacturer	3
1.3 Safety rules	3
2. Technical data	5
2.1 Dimensions	5
2.2 BLU series	6
3. Product package	7
4. Preparation of the installation site	8
5. Procedure for installing softeners	8
5.1 Optional equipment	9
6. Quick Set Up Guide	11
7. Installation diagram	16
8. Service	17
8.1 Maintenance work	17
8.2 User responsibility	17
8.3 Service and spare parts	17
8.4 Disposal	17
9. Troubleshooting	18
10. Guarantee	20
11. Serial information	21

1. INTRODUCTION

1.1 GENERAL PROVISIONS

Filter installation should be carried out by a specialist with appropriate qualifications and experience. Children aged 8 years and older, as well as people with limited physical, sensory and mental abilities, with the lack of necessary knowledge and experience to use this device, they can use softener only under supervision and in compliance with the specified data security rules equipment and understand the hazards involved. Cleaning and user maintenance shall not be made by children without supervision. Do not allow children to play with the device!

If the softener is not used for a long time used: If you do not plan soon sometimes use the equipment (for example, during holidays) put it in bypass mode and turn it off it from the water supply network. For this it is necessary move the three taps to the opposite position (according to the installation section of this manual softener); or carry out the necessary procedures for using the Multiblock block (depending on what you are the one using it).

If the installation has not been used for a long time, we recommend softener regeneration in manual mode, in accordance with Section 4.2. given instructions.

Protection against extreme temperatures:

Do not install the softener where it is joining it (including drainage pipes and overflow hose) can be exposed to temperature below 5 °C or above 40 °C.

1.2 MANUFACTURER

BLU SOFTENER 22 BV

RENEWELL WATER FILTRATION LTD

Knockagh, Hackballscross,

Dundalk, Co Louth,

Ireland, A91 ENP6.

1.3 SAFETY RULES

Electrical safety — we ask you use an adapter or battery (option) supplied with equipment before using the device, check compatibility of the technical characteristics of the power supply unit with characteristics of the local power supply network.

A 50 Hz 230 V input voltage must be used to connect the water softener.



ELECTRIC SHOCK!

Danger to life due to electric shock.

Work with electrical equipment is allowed only to authorized service centers or qualified electricians who have been instructed.

1. INTRODUCTION



TOUCHING LIVE PARTS CAN LEAD TO ELECTRIC SHOCK.

When carrying out service work with the control valve of the softener, turn off the power supply from the outlet.

The power cord cannot be replaced. If the power cord is damaged, the appliance should not be used. If the power cord is damaged, please ask consultation with a qualified electrician. In the event of a power outage during regeneration, ensure the draining of wastewater into the drain. So BE SURE to connect to a softener overflow hose and drainpipes and connect them to suitable for this drainage / sewage system to avoid spillage of water in the room.

Warning: Do not use aggressive detergents. Wipe contaminated surfaces dry with a damp cloth.

Maintenance: When carrying out installation and technical works maintenance and repair of the softener isolate it. To make the softener last longer maintained good work results, necessary regularly carry out service work service. In more detail you can find out about it by contacting the nearest one partner service organization of the Ecosoft company.



PIPELINES OF WATER SOFTENING SYSTEMS ARE UNDER PRESSURE.

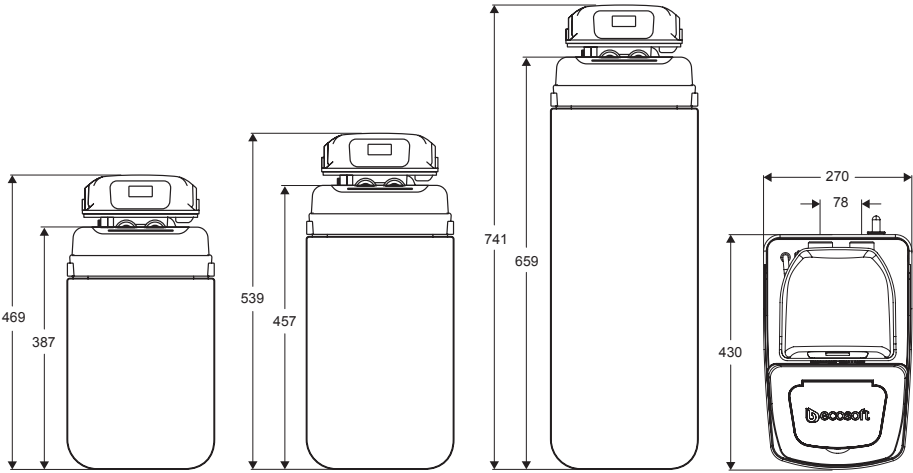
Before starting work with water softening systems, it is necessary to eliminate the pressure in the water supply.

Opening threaded connections or taps can cause injury!

Unauthorized modification or changes to the system design may adversely affect the safety of people and the operation of the system.

2. TECHNICAL DATA

2.1 DIMENSIONS



Control valve port sizes (port height, mm)				
Model	Water Inlet	Water Outlet	Drain Outlet	Brine Inlet
FU1013CABDVUPBT	1" M (540)	1" M (540)	3/4" M (640)	3/8" CF (640)
FU1016CABDVUPBT	1" M (970)	1" M (970)	3/4" M (1070)	3/8" CF (1070)
FU1024CABDVUPBT	1" M (970)	1" M (970)	3/4" M (1070)	3/8" CF (1070)

2. TECHNICAL DATA

2.2 BLU SERIES

Technical specification:

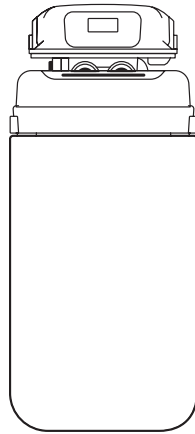
Parameter	FU1013CABDVUPBT	FU1016CABDVUPBT	FU1024CABDVUPBT
Operating/maximum flow rate, m ³ /h	1.0/1.2	1.3/1.5	16/18
Quantity of media, L	10	15	20
Volume capacity, m ³ 250 mg/L CaCO ₃ influent hardness	2	3	5
Usage of salt per regeneration, kg	0.8	1.2	1.6
Usage of water per regeneration (discharge per regeneration), m ³	0.08	0.09	0.1
Duration of regeneration, minutes	80–110		
Pressure drop in service mode, bar	0.5		
Inlet pressure, bar	2–6		
Electrical requirements	230 V, 50 Hz		
Power consumption, W	30		
Inlet/outlet pipe connections	3/4"		
Dry weight, kg	18.8	22.2	32.5
Overall dimensions, (Width × Depth × Height), mm	270 x 430 x 469	270 x 430 x 539	270 x 430 x 741

Influent water limitations:

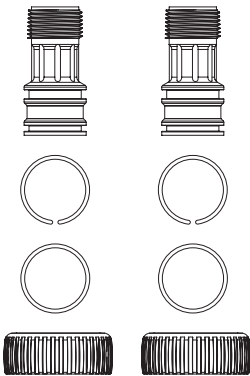
Hardness	750 mg/L CaCO ₃
Iron	0.2 mg/L
Manganese	0.05 mg/L
Chemical Oxygen Demand	5 mg/L O ₂
Sediment prefilter rating	100 µm
Temperature of water	+4...+30 °C

3. PRODUCT PACKAGE

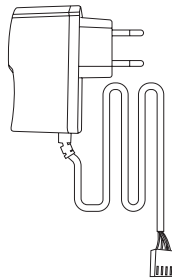
Renewell Water fabric softener comes in kit with the following parts and blocks:



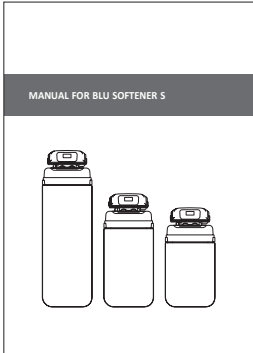
a) Softener body assembly
(includes pressure tank with media inside, Clack DV control valve)



b) Connection kit



c) Plug connector for connection
to power grids (EU)



d) Equipment manual

4. PREPARATION OF THE INSTALLATION SITE

- Installation area must meet all relevant building code. Water and power supply, and ambient conditions must meet Specification requirements of this manual.
- Observe all local plumbing and electrical code when connecting system to utilities.
- Install check valve when connecting the filter to water mains. Install second check valve after the system to prevent back flow.
- Particles such as sand, scale or rust can damage the control valve. Install a point-of-entry sediment filter.
- Equip the system with sampling taps and pressure gauges as shown on drawings. It will help in case any maintenance or troubleshooting is necessary.
- Install a vacuum relief valve as shown if there is a booster pump downstream of Renewell Water filter. The FRP tanks may implode if subjected to negative pressure.
- If your system does not include bypass valve assembly, run a bypass pipeline along the entire system. This may be necessary for diagnostics and maintenance.

5. PROCEDURE FOR INSTALLING SOFTENERS

If your cabinet was delivered pre-loaded with media, place the cabinet in the installation spot, fill salt compartment with salt pellets, and then only carry out steps 5 – 8 of the procedure, skipping steps 1 – 4. If the resin was shipped in bag, then carry out all of the following steps.

- 1.** Disconnect the flexible tube from brine inlet of the control valve. Unmount the valve by screwing it counterclockwise.
- 2.** Put a plug or cap on the top end of the riser pipe to prevent getting any media inside the pipe. Pour the media in the tank using the funnel. When loading the tank, keep riser pipe vertical. If the pipe tilts, restore it to straight vertical direction. When finished, rinse the thread of tank opening with water to remove any beads of media stuck in the groove.
- 3.** Mate the top distributor with the top end of riser pipe, then screw control valve in the tank opening. Connect the free end of brine tube back to the brine inlet of the control valve.
- 4.** Place the cabinet in the installation spot. Open top lid and fill the salt compartment with softener salt pellets at least half full.
- 5.** Connect drain pipe to the male threaded drain outlet of the control valve. Run the drain pipe to floor drain or gravity drain pipe socket. Secure the drain pipe end above the receiving fixture with at least 1" air gap.
- 6.** Mount the pipe thread elbow adapters to the control valve's In and Out ports and tighten the coupling nuts. Do not put any mechanical load on fittings or use them to support pipes.

Connect the system to water supply and downstream pipework without turning on the water supply. Do not confuse In and Out ports. They are embossed with direction arrows.

5. PROCEDURE FOR INSTALLING SOFTENERS

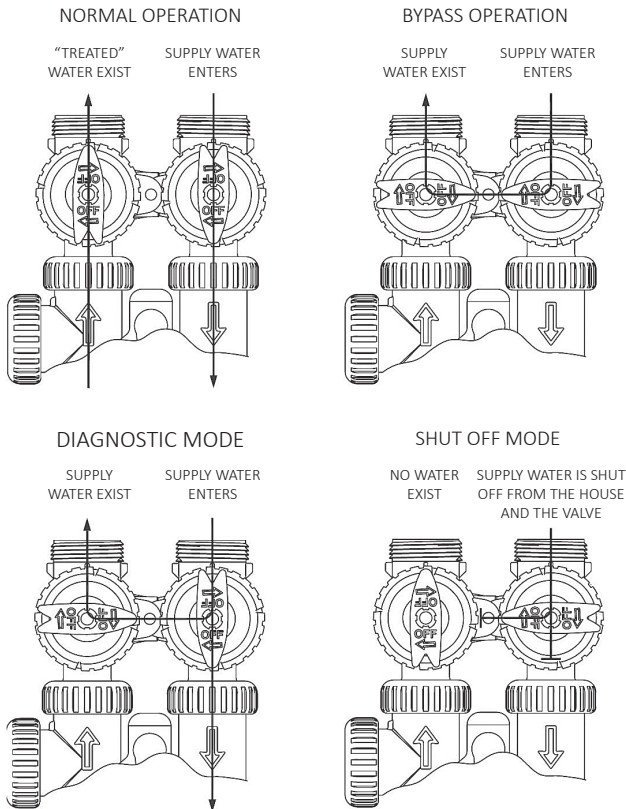
7. Remove the front panel by pulling the locking tabs on the left and right side. Run the power cord through the cord guide in the control valve's backplate and connect it to 12 VAC socket on the circuit board. Plug the power supply in the mains to power up the system.

8. Start manual regeneration of the system. Scroll regeneration to backwash if it isn't the 1st step of the sequence. When the control valve starts the backwash, turn on mains water supply slightly at first. Air will be displaced from the system via drain line while the pressure tank is being filled with water. When the tank is full, water will start flowing down the drain line. At this point, fully open mains water supply.

Let the system complete regeneration, then perform one more manual regeneration.

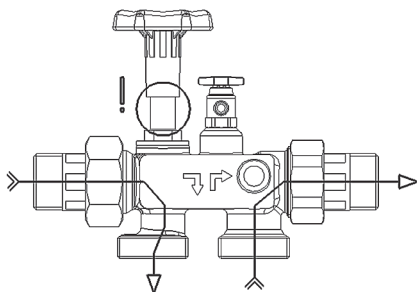
5.1 OPTIONAL EQUIPMENT

Softening systems can be additionally equipped with a Clack or Multiblock bypass valve. The Clack bypass valve is attached directly to the inlet and purified water pipes and has 4 operating modes, listed below:

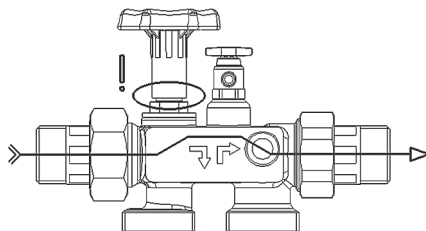


5. PROCEDURE FOR INSTALLING SOFTENERS

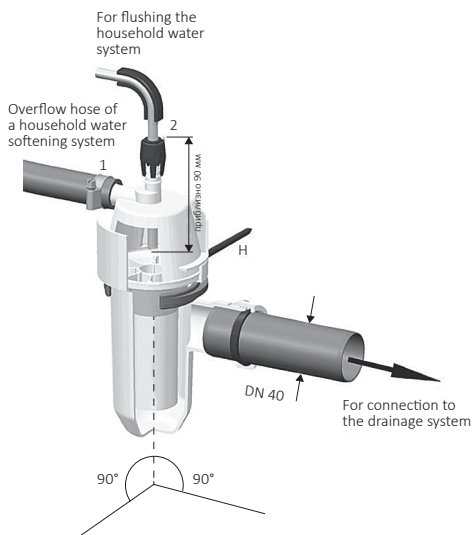
The multiblock performs a bypass function, is equipped with a sampler and has 2 modes of operation:



Open position — Supply via softener/limescale protection system: handwheel in UPPER position (stop)



Bypass position — Supply via softener/
limescale protection system: handwheel in
LOWER position (stop)



Place the fitting of the overflow hose (1) at least 20 mm below the height of the safety overflow of the domestic water softening system. Fix vertically with the bracket (H).

Connect the flush water hose with a downward slope to the fitting (2) and insert to a depth of approx 90 mm.

Connect the overflow hose from the brine tank to the fitting (1) and fix with a hose clamp.

The flush water hose and the overflow hose mustn't be connected and mustn't have narrowing in the cross section.

6. QUICK SET UP GUIDE

After installing and powering up an Ecosoft FU or FK system, set display language, water hardness, current time, and regeneration options in the Installer menu of control valve.

Use ▲ and ▼ buttons to change setting; NEXT button to save and go to next step; CLOCK to save and exit menu; REGEN to move back one step.

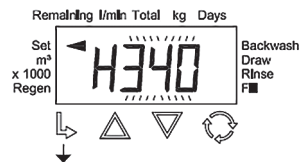
To proceed, hold NEXT and ▲ buttons simultaneously for 3 seconds.

STEP 1I



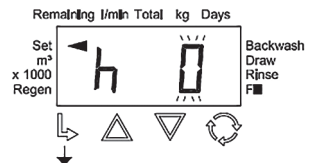
STEP 2I

STEP 2I. Hardness: Set the amount of hardness as calcium carbonate per PPM, using ▼ or ▲ . Press NEXT to go to Step 4I. Press REGEN to exit Installer Display Settings



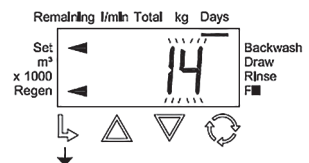
STEP 3I

STEP 3I. Service Water Hardness (PPM): If a mixing valve is installed in the valve, service hardness needs to be set. Setting range is always less than the setting in Step 2I. This screen will only appear if Step 4S is set to rES. Press NEXT to go to Step 4I. Press REGEN to return to previous step.



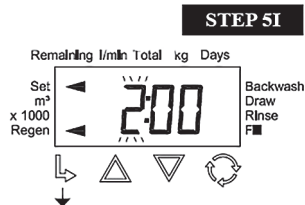
STEP 4I

STEP 4I. Set Day Override to 1 – 28 days or OFF using ▲ or ▼ . Press NEXT to go to Step 5I. Press REGEN to return to previous step.

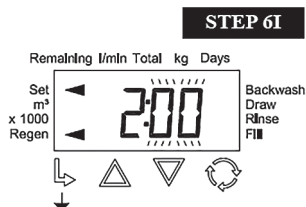


6. QUICK SET UP GUIDE

STEP 5I. Time of Regeneration, Hour: Set the time (hour) for regeneration using ▲ or ▼. The default time is 2:00 a.m. This display will show on 0 if Step 4S or Step 3F is set to on 0. Press NEXT to go to Step 6I. Press REGEN to return to previous step.



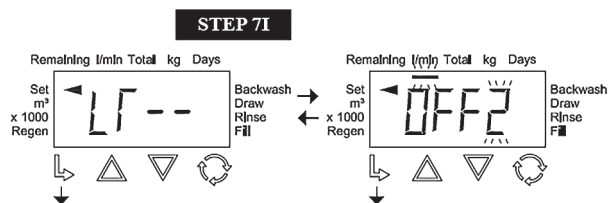
STEP 6I. Time of Regeneration, Minutes: Set the time (minutes) for regeneration using ▲ or ▼. The default time is 2:00 a.m. This display will not appear if Step 4S or Step 3F is set to on 0. Press NEXT to go to Step 7I. Press REGEN to return to previous step.



STEP 7I. Backlight Operation: Set the normal activity of the LCD backlight using ▲ or ▼. If value is set to:

- On, the backlight is always on.
- Off1, the backlight turns off after 5 minutes of no activity.
- Off2 + l/min, the backlight turns off after 5 minutes of no activity except with water flow detection.

Press NEXT to exit Installer Settings. Press REGEN to return to previous step.



NORMAL MODE

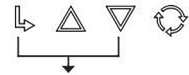
6. QUICK SET UP GUIDE

To change the factory settings, press the ▼ and NEXT buttons at the same time.

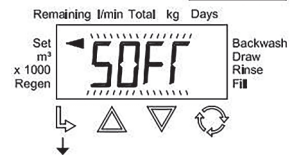
Use ▲ and ▼ buttons to change setting; NEXT button to save and go to next step; CLOCK to save and exit menu; REGEN to move back one step.

To proceed, hold NEXT and ▼ buttons simultaneously for 3 seconds.

STEP 1S

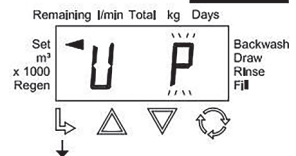


STEP 2S



STEP 2S. Set System Type to SOFT using ▲ or ▼. Press NEXT to go to Step 3S. Press REGEN to exit OEM System Setup.

STEP 3S

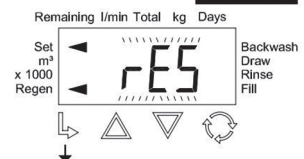


STEP 3S. Select Hardness Unit using ▲ or ▼. If value is set to:

- P, the unit will be PPM.
- FH, the unit will be °fH.
- dH, the unit will be °dH.

Press NEXT to go to Step 4S. Press REGEN to return to previous step.

STEP 4S



STEP 4S. Select Regeneration Type using ▲ or ▼. If value is set to:

- rES, regeneration will be delayed with variable reserve until the time of day set in Step 5I and Step 6I.
- dELY, regeneration will be delayed until the time of day set in Step 5I and Step 6I.
- on 0, regeneration will occur immediately when capacity remaining reaches zero.

Press NEXT to go to Step 5S. Press REGEN to return to previous step.

6. QUICK SET UP GUIDE

STEP 5S. If Step 4S is set to rES, set Ionic Capacity using ▲ or ▼.

If Step 4S is set to dELY or on 0, set Volume Capacity. Volume Capacity can be set to 0.02 m³ – 5700 m³ or OFF.

Press NEXT to go to Step 6S. Press REGEN to return to previous step.

STEP 5S

Remaining l/min Total kg Days

Set m³ x 1000 Regen

150

Backwash Draw Rinse Fill

▲ ▼ ↺ ↻

Remaining l/min Total kg Days

Set m³ x 1000 Regen

5.00

Backwash Draw Rinse Fill

▲ ▼ ↺ ↻

Setting	Units
PPM	kg of CaCO ₃
dH or FH	m ³

STEP 6S. Set Fill Type to POST or PrE using ▲ or ▼. Press NEXT to go to Step 7S. Press REGEN to return to previous step.

STEP 6S

Remaining l/min Total kg Days

Set m³ x 1000 Regen

POST

Backwash Draw Rinse Fill

▲ ▼ ↺ ↻

STEP 7S. Set Regenerant Draw Type to dn or UP using ▲ or ▼. Press NEXT to go to Step 8S. Press REGEN to return to previous step.

Note: The following displays can differ depending on system type and fill type. See Control Valve Function and Cycles of Operation for more detail.

STEP 7S

Remaining l/min Total kg Days

Set m³ x 1000 Regen

dn

Backwash Draw Rinse Fill

▲ ▼ ↺ ↻

STEP 8S. Set the length of the backwash to 1 – 95 minutes or OFF using ▲ or ▼. Press NEXT to go to Step 9S. Press REGEN to return to previous step.

STEP 8S

Remaining l/min Total kg Days

Set m³ x 1000 Regen

8

Backwash Draw Rinse Fill

▲ ▼ ↺ ↻

STEP 9S. Set the length of the regenerant draw to 1 – 180 minutes or OFF using ▲ or ▼. Press NEXT to go to Step 10S. Press REGEN to return to previous step.

STEP 9S

Remaining l/min Total kg Days

Set m³ x 1000 Regen

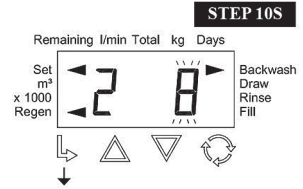
60

Backwash Draw Rinse Fill

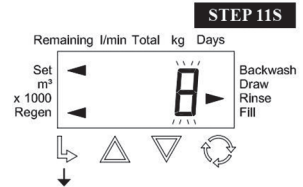
▲ ▼ ↺ ↻

6. QUICK SET UP GUIDE

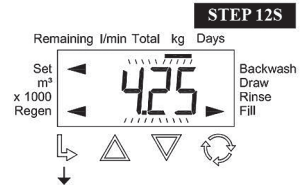
STEP 10S. Set the length of the second backwash to 1 – 95 minutes or OFF using ▲ or ▼. Press NEXT to go to Step 11S. Press REGEN to return to previous step.



STEP 11S. Set the length of rinse to 1 – 95 minutes or OFF using ▲ or ▼. Press NEXT to go to Step 12S. Press REGEN to return to previous step.



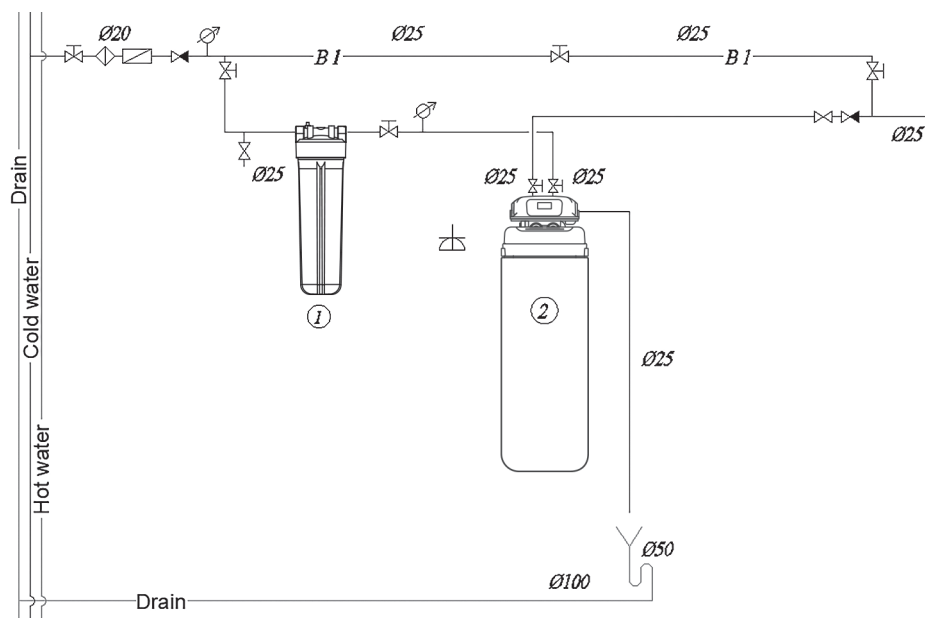
STEP 12S. Set the length of fill to 0.05 – 90.0 kg of NaCl or OFF using ▲ or ▼. Press NEXT to exit OEM Softener System Setup. Press REGEN to return to previous step.



RETURN TO NORMAL MODE

7. INSTALLATION DIAGRAM

Compact water softener.



8. SERVICE

8.1 MAINTENANCE WORK

To ensure proper operation softener, the user should regularly carry out the following checks: Check the presence of salt and if necessary, add.

Check water hardness: hardness of drinking water and the hardness of mixed water should be checked no less than 2 times a year, if necessary, it should be adjusted the hardness of the mixed water (see the "Installation" section).

Check for tightness, carry out: visual inspection: check for possible leakage of all connections and pipelines. Check the cleanliness of the salt and saline solution storage capacity 1 time in 2 months, if necessary, clean and rinse clean water.

The indicated terms of the recommended inspections are available are minimal and must be adjusted, depending on operating conditions.

8.2 USER RESPONSIBILITY

Any technical equipment requires regular maintenance.

Constantly monitor the quality and level of softened pressure water. If the water quality has changed, change it too parameter settings are set. If necessary, consult a specialist.

Regular checks by the operator are required as a guarantee normal functioning of the device. Emollient water should be regularly inspected compliance with the conditions of its operation.

Frequency of checks performed by the user:

After use: add salt for regeneration.

2 times a year: check the pressure.

2 times a year: check water quality.

Once a year: clean the salt tank.

8.3 SERVICE AND SPARE PARTS

Parts that wear out must also be replaced in the specified maintenance period so that to guarantee flawless operation of the installation and perform warranty conditions. Softener maintenance it is recommended to carry out once a year.

Replacement of wearing parts can be performed only qualified personnel (specialists of the organization water supply or service).

We recommend concluding a service contract service with our service department.

Cleaning: do not use alcohol for cleaning or alcohol-based detergents to avoid damage surfaces of plastic parts.

8.4 DISPOSAL

After the end of the service life of the installation contact Ecosoft Service to arrange softener replacement. Disposal of softener and of all electrical parts is carried out only in specialized recycling centers.

9. TROUBLESHOOTING

Problem	Cause	Correction
1. Decreased service flow capacity	Decreased supply water pressure	Increase supply water pressure
	Clogged filter bed	See paragraph 3
	Obstructed/clogged drain line	Clean the drain line
	Clogged control valve	Inspect and clean the control valve
	NHWBP/MAV failure (if used)	Inspect and repair the motorized valve
2. Decreased quality of treated water	Faulty chemical analysis of water	Perform one more test using freshly prepared reagents
	Supply water chemistry has changed	Make new check analysis and if changed contact your dealer
	Bypass valve is set to bypass	Turn bypass valve to operating position
	Riser pipe or seals are damaged	Take apart the filter, inspect and replace or lubricate pipe and seals if necessary
	Clogged filter bed	See paragraph 3
	Filter media loss	See paragraph 4
	Improper filter regeneration	See paragraph 6
	Leakage of raw water inside the control valve	Take apart the control valve, inspect and replace or lubricate the seals if needed
3. Clogged filter bed	Insufficient backwash flow rate	Check backwash flow rate. If supply pressure is within the limits and the flow rate is insufficient, inspect and clean the drain line flow control or replace it if needed
	Insufficient backwash stage	Increase the duration of backwash stage
	Clogged top distributor	Clean the top distributor
	Excessive backwash flow rate	Measure backwash flow rate. If supply pressure is normal and the flow rate is exceeding, consider changing the drain line flow control
4. Filter media entrainment	Filter media is entrained and discharged during backwash	Replace the top distributor if needed
	Filter media is entrained and discharged during service	Replace the bottom distributor if needed

9. TROUBLESHOOTING

Problem	Cause	Correction
5. System will not regenerate	No electric power	Check power supply
	No/insufficient salt in brine tank	Check the amount of salt in brine tank and add salt if needed
	Brine is not sucked in during regen., or not all brine is drawn	See paragraph 6
	Control valve is out of order or settings were changed	Check the control valve and its settings (see the manual for the control valve)
	Brine tank is not refilled or is refilled with not enough water	See paragraph 7
6. Brine will not draw during regeneration or not all brine will draw	Low supply water pressure	ICheck supply water pressure
	Clogged injector or brine tube	Clean brine injector and/or brine tube
	Clogged basket or salt crystals on ball in air check valve	Clean air check valve basket and/or ball
	High pressure drop on the filter (control valve, distributors or filter media are clogged)	See paragraphs 1 and 4
	Air is injected due to brine line not being airtight	Check airtightness of the drain line
	Control valve settings changed	Increase brine stage duration
7. Brine tank is not refilled or refilled with less water than needed	Low supply water pressure	Check supply water pressure
	Clogged injector or brine tube	Clean brine injector and/or brine tube
	Stuck ball in the air check valve	Clean the air check valve
	Control valve settings changed	Check the duration of brine tank refill and correct if necessary
8. Excess use of salt per regeneration	Control valve settings changed	Decrease the amount of salt per regeneration in the control valve settings
	Brine tank filled with excess water	See paragraph 9
9. Brine tank is refilled with excess water	High main water pressure	Check water pressure. Install pressure regulator if needed
	Control valve settings changed	Check the duration of brine tank refill and correct if necessary

10. GUARANTEE

WARRANTY OBLIGATIONS

The warranty period of the water purification system is 12 months and is counted from the day of sale of the system through the retail network (unless otherwise stated in the product warranty card).

The manufacturer guarantees that this water purification system does not contain manufacturing defects and that such defects will not be detected during the warranty period specified in the warranty card, from the moment of sale from the manufacturer's warehouse or retail network, in the event that the purification system is installed and operates in accordance with the technical requirements and operating conditions. Before using the water purification system, be sure to read the instructions for connecting and operating the water purification system and the terms of the warranty obligations.

Carefully check the appearance of the water purification system and its completeness. Submit all claims regarding appearance and completeness to the seller upon receipt of the product.

We reserve the right to make changes to the design, configuration, or manufacturing technology, such changes do not impose obligations to replace or improve previously released products.

The warranty card is valid only if the model, date of sale, and clear stamps of the seller are correctly specified.

Consumer claims, in accordance with current legislation, can be submitted during the warranty period of operation, provided that the defects of the water purification system did not arise as a result of:

- non-observance of the conditions of operation and storage of systems specified in the instructions for connection and operation of the system;
- caused by transport damage, incorrect installation, careless use or misuse, connection to a power supply voltage that does not correspond to that specified in the operating instructions, failure to follow the attached connection and operating instructions;
- operation with unremedied defects, or with defects that arose as a result of maintenance or repair by persons or organizations that are not representatives of an authorized service center;
- causes independent of the manufacturer, such as: power supply voltage drops, natural phenomena, and natural disasters, fire, ingress of foreign objects (liquids) or other substances into the product;
- external and internal contamination, scratches, cracks, bruises, abrasions, and other mechanical damage that occurred during operation;
- changing the design or unauthorized opening of system nodes, when changing the serial number of the product or the date of manufacture;
- untimely replacement of elements, the terms of which are indicated in the instructions for connection and operation, as well as when using replaceable elements of other manufacturers.

10. GUARANTEE

WARRANTY OBLIGATIONS

Warranty obligations do not extend to:

- replaceable elements (cartridges, reverse osmosis membrane, carbon postfilter, mineralized, and other replaceable elements that can be equipped with the system) and sealing rings;
- components that need to be replaced as a result of their wear and tear;
- types of work, such as adjustment, cleaning, replacement of consumables, and other care of water purification systems, stipulated by the instructions for connecting and operating the product.

The manufacturer shall not be liable for any damage or any other damage, including lost profits, arising incidentally or as a result of the use or inability to use this product. The material liability of the Manufacturer under this Warranty cannot exceed the cost of the water treatment system.

In the case of an independent connection of the system, the manufacturer is not responsible and does not accept claims that may be caused by incorrect connection and incorrect operation of the system as a whole. The list of authorized service centers is indicated on the website www.renewellwater.com

All claims regarding the quality of water, taste, smell and other properties of water purified with the help of water purification systems are accepted only in the presence of a confirming protocol of analysis performed by a research accredited laboratory in accordance with the ISO 17025 standard.

Cases not covered by this Warranty are regulated by the Legislation.

11. SERIAL INFORMATION

INSTALLATION

date of installation

address and phone

accepted (customer's name and signature)

INSTALLER

organization

date of sells

address and phone

dealer company

works accomplished (name and signature)

saller name

