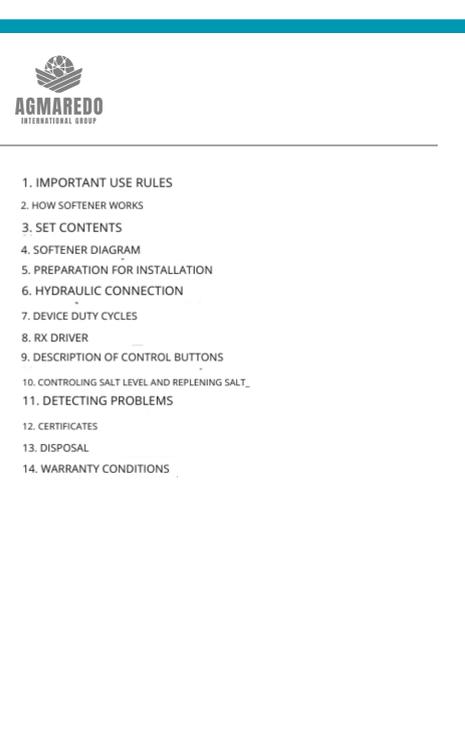


USER MANUAL



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If the combination of a water softener and activated carbon adsorption in one device was also designed for people prone to allergic reactions to hard water, chlorine and heavy metals.

The device will improve the taste and smell of water (because it contains carbon).

1. IMPORTANT USE RULES

- Using the device contrary to the instructions may result in permanent damage to the system or its incorrect operation.
- The water treatment system should be used in accordance with its intended use. Failure to comply with the rules of use contained in the manual results in loss of warranty.
- Do not interfere with the structure of the softener. Any design changes will void the warranty.
- Improper use of the softener may result in loss of health or life.
- Do not touch the power cord plug with wet or damp hands. If you notice damage to the power cord or plug, immediately contact a service authorized to perform this type of repair.
- Do not use a damaged device. After observing a fault, contact the service center for repair or inspection.
- It is important that the water treatment system is located in a safe place. Avoid contact of the softener's electrical parts with water.
- Avoid pouring running water over the softener or its parts.
- Any repairs should only be performed by trained personnel and service technicians authorized for this task.
- Protect the device against contact with sharp tools, high temperatures or fire.
- The place where the device is connected to the power supply must be properly secured.
- The softener should be checked periodically during operation.
- Periodic refilling is necessary for the system to function properly salt into the brine tank. Failure to do so may result in improper operation or damage to the device.



If the device is not disconnected from the power supply, remember that it is constantly under voltage.

- Careless use of a device connected to electricity may result in severe shock or death.
- The electrical installation to which the device is to be connected must meet national standards.
- For safety reasons, children and unauthorized persons should not be near the water treatment systems.

2. HOW DOES SOFTENER WORK?

Hard water enters your home through the main supply pipe. It enters the softener and flows through the ion exchange resin bed, which softens the water. During this time, the ion exchange process takes place, in which the ions responsible for water hardness are captured by the deposit and exchanged for sodium ions. The softened water is then supplied to the water installation in your home.

The individually programmed softener calculates the amount of water that has been treated. After using the ion exchange capacity of the bed, the device will automatically regenerate it using previously prepared brine (salt dissolved in water, collected in the brine tank). During regeneration, the device will collect the programmed amount of brine into the tank with ion exchange resin. Thanks to this, ion exchange will take place - the ion exchange resin will be "charged" with sodium ions from the salt and will release the ions previously captured from the water, which will be flushed into the sewage with the rest of the brine. During the regeneration process, the device will refill its ion exchange capacity and can soften water. The ion exchange process allows you to use the softener safely for a long time and regenerate the ion exchange resin many times.

3. SET CONTENTS

Accessories	Quantity
Softener in the cabin	1 piece
Bypass	1 piece
12V power supply	1 piece
Warranty / manual	1 piece
Key	1 piece



It is forbidden to lift the device by the electric and water cables, as they may be damaged. The device should be placed as close as possible to the water entrance to the building (water meter in the case of water supply from a water supply system or hydrophone in the case of water supply from your own intake) and close to the sewage outlet. In addition, a constant supply of electricity is required to control the device, so there should be an electrical outlet nearby. Make sure that the ground is stable and can support the weight of the device when filled with water. The selected place should allow easy access to the device during periodic refilling of salt in the brine tank.

6. TECHNICAL PARAMETERS OF SOFTENERS

The technical parameters of the softener depend strictly on its size. The key parameter is the size of the tank related to the amount of softening resin. The size of their values should be selected by the device seller based on physicochemical parameters and water consumption of the place where the softener is used.

Type of information	Parameter value / information
Resin volume (activated carbon L)	2010
Exchange resin (L)	15 x 35
KDF volume (L)	1
Flow (m ³ /h)	1.5
Equivalent connection (mm)	1" for model R50
Sewage connection	1/2
Brine connection	1/8
Flow (l/min)	12
A type of regeneration	upflow
Mode of regeneration	manual / automatic volumetric / automatic after a specified period of no flow
Consumption (l/min)	consumption
Weight (kg)	16
External bypass	+
Water hardness input	+
Consumption of electricity (kWh/year)	consumption

*Approximate weight without water and salt. **In case of 1" - closed tank.



7. HYDRAULIC CONNECTION

TO BE PERFORMED BY A PROFESSIONAL

The device should be connected to the installation using flexible hoses (not included in the set). A mechanical filter (minimum 50 microns) must be installed. Pre-filters are installed to protect water installers and sanitary facilities against contamination: rust, sand particles, salt, hydraulic sea flows, etc. It is recommended to install mechanical filters before water treatment stations, which will extend their life and ensure proper operation of the device.

Locate the water inlet and outlet from the device on the control head marked with arrows pointing inside and outside the device. There should be a turbine at the outlet of the device (in the bypass). Before starting the installation, check whether the turbine rotates freely (e.g. by blowing strongly on it). To assemble the device, use materials intended for water installations.



1. Connecting the device to the sewage
2. Connecting the overflow elbow to the sewage
3. Connecting the water intake and tank filling system
4. Connecting the water outlet to the sewage
5. Connection to the sewage system
6. Sewer volume
7. Valve closing the overflow of treated water from the softener
8. Distribution of treated water
9. Controller

The flexible hose should be connected to the sewage drain and secured with a 1/4 inch hose clamp. The sewage discharge hose should be routed below the device head and not bent on any section. The hose should be secured in such a way as to prevent flooding of the room.

If the brine intake and tank filling system is not working properly, the tank may overflow. The excess brine is then drained through an overflow elbow to the outside of the device. To avoid flooding the room in the event of a malfunction of the softener, connect the overflow elbow to the sewage outlet using a flexible hose.



1. Water supply
2. Filter
3. Filter equipment for other bypasses and sea flows
4. Pre-cleaning filter with a mechanical lining
5. Connection to the sewage system
6. Sewer volume
7. Valve closing the overflow of treated water
8. Distribution of treated water
9. Controller



8. DEVICE WORK CYCLES

While the device is operating, the name of the current work cycle will be visible on the display. During regeneration, the time remaining until the end of the cycle will be visible. During the regeneration of the deposit, it is possible to draw raw water. The controller alternately shows the following indicators:

1. Volume of water remaining for regeneration
2. Current water flow
3. Current opening
4. Pre-cleaning filter with a mechanical lining
5. Connection to the sewage system
6. Sewer volume
7. Valve closing the overflow of treated water
8. Distribution of treated water
9. Controller

Work (in service) - The device is in the water treatment position. Raw water enters the reservoir with the bed through the controller, flows through the bed and is directed upwards through the distribution pipe to the controller and further to the installation.

Backwash - The device is in the counter-current (reverse) rinsing position. Raw water flows through the controller into the tank with the filtration bed and is directed downwards through the distribution pipe. The water rinses and loosens the bed and is then directed to the sewage system.

Brine intake and slow rise - The flow of water through the control head causes the brine to be sucked in, which regenerates the bed. The cycle will be visible. During the regeneration of the deposit, it is possible to draw raw water. The controller alternately shows the following indicators:

Fast rinse - It ensures quick rinsing of brine residues from the bed and influences the proper positioning of the bed. During rinsing, water is directed from the top through the ion exchange resin and then upwards through the central tube.

9. SMART BLUE CONTROLLER

The SB controller is equipped with a microcomputer that allows you to set the operating parameters of the water treatment system, adapted to the physicochemical parameters of the water.

There are two types of menus in the 798D and 828D controller: open and closed. To enter the open menu, unlock the device by simultaneously pressing the "up and down" buttons. In the open menu, you can edit the basic parameters, i.e. set the brine, input water hardness and regeneration time. Switching between parameters and changing their values is done by pressing the "up and down" buttons. The selection of the parameter and confirmation of the change is confirmed with the "enter" button.

Water hardness units: 1dH (d) = 1.78 FH (°F) 0.36 mval/l = 17.8 mg CaCO₃/l (approx. 1 degree FH = 1 French degree mval/l - millival/liter mg CaCO₃/l - milligrams of calcium carbonate/liter)

ATTENTION! To access the closed menu, you must have appropriate installation knowledge. Changing the softener's operating parameters to inappropriate ones may cause the device to consume more water, salt or fail to regenerate and operate properly.

10. DESCRIPTION OF THE CONTROL BUTTONS

During water treatment, the instruction appears on the screen: work (in-service). During regeneration, the number of the current work cycle is displayed (description below) and the current volume of water that the system can treat without the need for regeneration.

A-MENU/CONFIRM B-FORCE REGENERATION/RETURN C-DOWN D-UP

11. CONTROLLING THE SALT LEVEL AND ADDING UP SALT

11.1 First start-up
Before starting the device for the first time, pour salt into the salt tank and fill it with water. Wait approximately 20 minutes until a sufficient amount of salt has dissolved in the water. Then regenerate the bed.

11.2. Checking the regularly recommended salt
You should regularly (recommended at least once a week) check the amount of salt in the tank to make sure it does not run out. Salt should be refilled as needed so that its level is always above the water level (no water should be visible). Only use tableted salt intended for water treatment systems.

ATTENTION! Salt water (brine) may cause irritation to eyes, skin and wounds, so avoid contact with the inside of the brine tank. In case of contact, quickly wash off the brine with running water.

11.2. Preventing salt caking

High air humidity or the wrong type of salt can lead to the formation of large lumps of salt (brine deposits) in the tank. This process can lead to difficult to prepare the right amount of brine capacity and can soften water. The ion exchange process allows you to use the softener safely for a long time and regenerate the ion exchange resin many times.

If you suspect that a salt deposit has formed, you can gently tap the sides of the salt tank and pour water over the salt to break up the deposit. The deposit can also be broken up from the outside using a long object (e.g. a tube). If the salt has clumped due to poor quality salt, rinse the brine tank and fill it with salt of the right quality.

12. DETECTING PROBLEMS

Problem	Cause	Solution
The device does not regenerate	No salt	Check electrical connections - fuses, plug power supply
	Device incorrectly set	Correct the controller settings or contact a specialist to properly set the controller.
The device supplies hard water	Overflows	Clear the bypass.
	No salt in the brine tank	Check the brine tank filling time setting. Regenerate the brine tank. Check whether the brine tank is empty.
	Inlet filter contaminated	Contact a professional or clean the resistor.
	Inefficient water filling of the brine tank	Check the brine tank filling time setting (open and close the overflow valve). Check whether the brine tank is empty.
Excessive water consumption	The head being regenerated	Check the setting of the brine tank filling time (adjustment level).
	Too much water in the brine tank	Reduce the time needed to fill the brine tank with water.
	Too much brine consumption	Reduce brine collection time. Adjust the brine valve setting.
Pressure drop	Low pressure in the network	Clear the control valve. Increase the regeneration frequency before bedload. Check whether water is being supplied.
	Blocked socket installation	Remove any obstructions from the water installation or head of the device.
Too much water in the brine tank	The amount in the controller is not correct	Remove any obstructions and clean the device.
	Pre-cleaning filter cartridge is contaminated	Replace the pre-cleaning filter.
Too much water in the brine tank	Presence of air in the installation	Remove air from the brine tank. When using brine in the brine tank, check whether the brine tank is empty.
	Inlet filter blocked	Clear the resistor.
Too much water in the brine tank	Faulty brine in the brine tank	Replace the brine valve.
	Faulty regeneration	Check the electrical power.
	Brine valve incorrectly set	Adjust the brine valve setting.

13. CERTIFICATES

RX controllers have the following certificates:

1. National Institute of Hygiene (PIZH) No. HK/00248/02/2013, which proves that the RX controllers meet the hygienic requirements in the treatment of drinking water.

2. CE declaration of conformity with the EMC directive 2014/30/EU

3. ISO 9001:2000, which proves that the production of RX controllers is carried out in accordance with the ISO 9001:2000 quality management systems.

14. DISPOSAL

At the end of its service life, the device should not be disposed of with municipal waste. The softener must be delivered to a collection point for electrical and electronic waste. It is the user's responsibility to deliver the waste to the collection point. Failure to comply with the above-mentioned rules may result in the imposition of a penalty in accordance with the regulations in force in a given area. Correct disposal of the device guarantees proper processing of waste in an environmentally safe manner.

15. WARRANTY CONDITIONS

- The manufacturer provides a warranty for the proper operation of the device, provided that the device is operated in accordance with the instructions, including regular refilling of salt in the salt tank.
- The softener is covered by a 5-year warranty from the date of sale.
- The conditions for giving the warranty are that the hydraulic installation and commissioning of the device is in accordance with the instructions and is performed by a qualified person.
- It is the User's responsibility to perform at least one warranty inspection per year. The cost of the inspection includes the costs of labor and the employer's obligation and travel. The Supplier is obliged to perform these inspections for a fee after being notified by the User about the upcoming date. The notification should be made in writing (email). Service/delivery of a part by phone is 52 2019 000, at least 7 days before the next inspection).
- In the case of factory damage, the fault must be reported to the manufacturer within 14 days after its occurrence.
- If a service technician arrives on an unjustified call, the service costs and travel are borne by the user.
- The condition of the warranty is the installation of pre-filtration before the device and its regular servicing.

WARRANTY DOES NOT COVER

- review services;
- device program change services;
- consumables that wear out during operation, i.e.: filter bed, regeneration salt;
- damage resulting from: theft, fire, external factors or atmospheric conditions, use of inappropriate consumables, assembly of parts and components without the manufacturer's consent;
- damage resulting from improper use;
- damage resulting from improper storage of the device and consumables;
- consequences resulting from immobilization of the device;
- mechanical damage to the device.

THE BUYER LOSES WARRANTY RIGHTS IN THE EVENT OF:

- failure to follow the recommendations contained in this manual;
- installation, start-up and use (e.g. lack of salt) not in accordance with the instructions;
- failure to complete the repairs on time;
- the purchaser or third parties carry out independent repairs, alterations and modifications that are inconsistent with the instructions;
- mechanical damage to the device.

Sale date:

Date	Signature and seal

Certification of inspections

Review No	Date	Signature and seal