

water²**BUY**

Use and Care Guide

Water2buy Water Conditioners[®]



Thank you . . .

AND WELCOME TO YOUR NEW WORLD OF BETTER LIVING WITH SOFTENED WATER.

If this is your first experience having soft, conditioned water in your home, you'll be amazed at the marvelous difference it makes. We promise that you'll never want to be without it again. We hope you will become familiar with this Guide so that you will better understand how your new appliance works, and how you can help it give you the many benefits of softened, filtered, conditioned water.

SODIUM INFORMATION: Water conditioners using sodium chloride for regeneration add sodium to the water. Persons who are on sodium-restricted diets should consider the added sodium as part of their overall sodium intake.

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How your water conditioner works

WHY WATER GETS HARD AND HOW IT'S SOFTENED

All of the fresh water in the world originally falls as rain, snow, or sleet. Surface water is drawn upward by the sun, forming clouds. Then nearly pure and soft as it starts to fall, it begins to collect impurities as it passes through smog and dust-laden atmosphere. And as it seeps through soil and rocks it gathers hardness, rust, acid, unpleasant tastes and odors. Water hardness is caused primarily by limestone dissolved from the earth by rainwater. Because of this, in earlier times people who wanted soft water collected rainwater from roofs in rain barrels and cisterns before it picked up hardness from the earth.

THE WATER2BUY PROCESS

Today, research and technology have combined to produce an appliance that removes hardness (dissolved rock) using ion exchange resins, which have superior ability to attract and capture the dissolved hardness impurities in water.

Water2buy water conditioning resin is the happy result of such research. Here's how it works in your water conditioner . . .

1 Your water conditioner directs the flow of your household water through a column of water2buy resin. The beads of resin remove the hardness impurities from the water and hold them. When they can hold no more, they must be recharged. First, the automatic recharge system supplies hard water to your household, bypassing your water conditioner.

2 Next, the filtered sediment is flushed to the drain. Then, the Water2buy resin is automatically bathed by a salt solution (brine), removing hardness impurities. Then it is rinsed free of excess brine.

The water conditioner is again ready to soften more water for you. Under normal conditions, this cycle can be repeated indefinitely as the resin lasts for years and years.

Safety Information . . .

This water conditioner's control valve conforms to the highest industry standards for materials and structural integrity.

- Please review this entire Installation and Operation manual before installing unit.
- As with all plumbing projects, we recommend that this Water Conditioning Unit be installed by a trained professional. Please follow all local codes for plumbing this unit.
- Follow local electrical codes. Install a correctly sized electrical bonding jumper between the inlet and outlet pipes when these devices are installed in metallic plumbing systems.
- Inspect this unit carefully for carrier shortage or shipping damage before beginning installation of unit.
- This system is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.
- This system is to be used only for potable water.
- Use only lead-free solder and flux, as required by federal and state codes, when installing soldered copper plumbing.
- Use caution when sweat joining metal pipes near this water conditioning system. Heat can adversely affect the plastic used in this system and bypass valve.
- Use only silicone grease for lubrication of this unit.
- Do not allow this water conditioning unit to freeze. Damage from freezing will void this water conditioning unit's warranty.
- Do not store flammable or volatile chemicals near this water conditioning unit.
- For the purpose of plumbing system sizing, only the rated service (i.e. "Normal") flow and corresponding pressure loss may be used. The rated service flow rates are the flow rates

Installation Guide . . .

Step-by-Step Water Conditioner Installation Guide Line:

Approx Time to install is 3 hours

Overview:

This installation guide gives a step-by-step; start to finish procedure for installing a basic Water Conditioner.

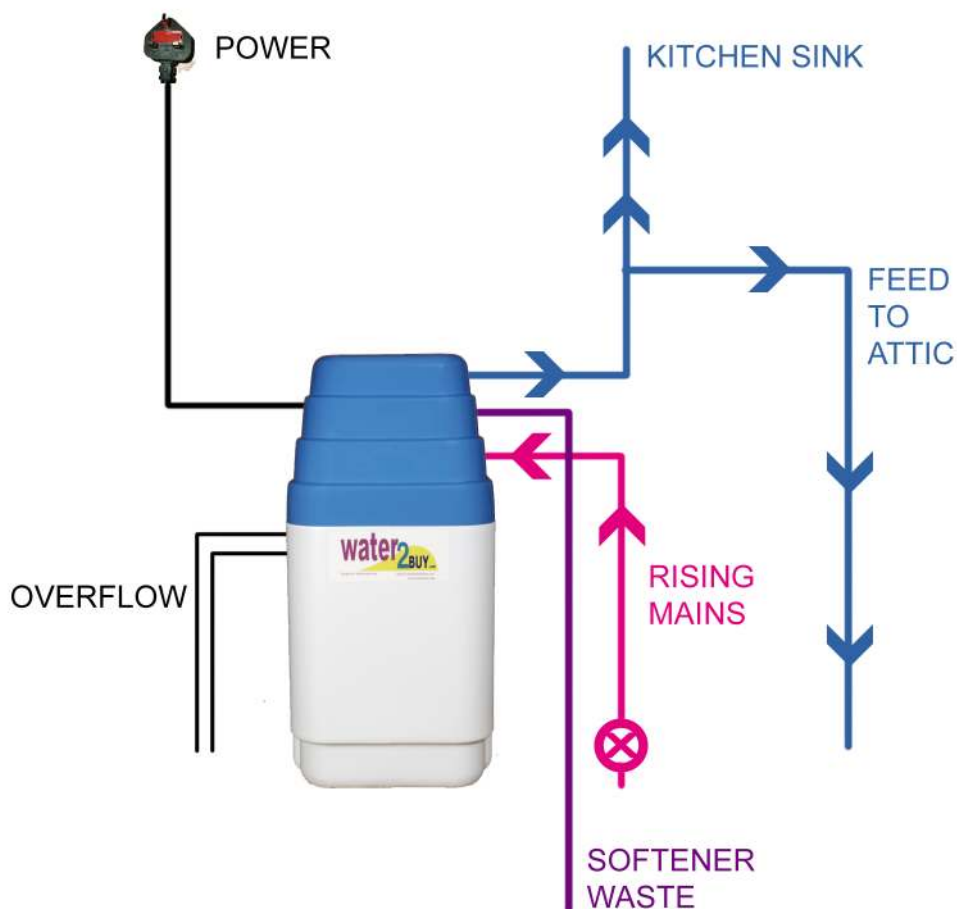
Locate mains water pipe this is usually located under the kitchen sink or in the pump house if you have a well supply.

Decide on position where you want to locate your water conditioner the 3 most common areas are:

- 1)Under your kitchen sink**
- 2)Outside Wall of House**
- 3)In Pump House**

Step-by-Step:

- 1)Connect brine suction pipe in water conditioner (this goes from control valve to salt bin)
- 2)Turn Off water mains
- 3)Release pressure by turning on cold tap
- 4)Cut incoming water mains (make sure connection is taken before tee piece for pipe going to the attic).
- 5)Connect mains pipe to water inlet on control valve
- 6)Connect outlet from control valve back to mains pipe feeding house
- 7)Connect backwash fitting on control valve to outside drain
- 8)If installing inside house drill $\frac{3}{4}$ " hole 2 inches from top of cabinet and install $\frac{3}{4}$ " overflow pipe to outside
- 9)Plug in unit and set time for backwash.
- 10)Add salt to salt cabinet you can fill this up to top of cabinet and as you see salt dissolve over the next few weeks refill (approx 4-6 weeks per bag of salt) there must be 5 inches of salt in tank at all times.
- 11)Set setting on control valve
- 12)Turn on Water
- 13)Turn on cold kitchen sink tap there may be air in water let it run for 3-4 minutes
- 14)Job Done you now have trouble free softened water for year to come.



All plumbing must conform to local codes.

Location Selection

1. The distance between the unit and a drain should be as short as possible.
2. Since salt must be added periodically to the brine tank, the location should be easily accessible.
3. Do not install any unit closer to a water heater than a total run of 10 feet (3m) of piping between the outlet of the conditioner and the inlet to the heater. Water heaters can sometimes overheat to the extent they will transmit heat back down the cold pipe into the unit control valve.
Hot water can severely damage the conditioner. A 10-foot (3-m) total pipe run, including bends, elbows, etc., is a reasonable distance to help prevent this possibility. A positive way to prevent hot water from flowing from heat source to the conditioner, in the event of a negative pressure situation, is to install a check valve in the soft water piping from the conditioner. If a check valve is installed, make certain the water-heating unit is equipped with a properly *rated temperature and pressure safety relief valve*. Also, be certain that local codes are not violated.
5. Do not locate unit where it or its connections (including the drain and overflow lines) will ever be subjected to room temperatures under 34oF (1oC) or over 120oF (49oC).
6. Do not install unit near acid or acid fumes.
7. The use of resin cleaners in an un-vented enclosure is not recommended.

Drain Line Connection

1. Ideally located, the unit will be above and not more than 20 feet (6.1 m) from the drain. For such installations, use an appropriate adapter fitting (not supplied), to connect 1/2-inch (1.3-cm) plastic tubing to the drain line connection of the control valve.
2. If the unit is located more than 20 feet (6.1 m) from drain, use 3/4-inch (1.9-cm) tubing for runs up to 40 feet (12.2 m). Also, purchase appropriate fitting to connect the 3/4-inch tubing to the 1/2-inch NPT drain connection.
3. If the unit is located where the drain line must be elevated, you may elevate the line up to 6 feet (1.8 m) providing the run does not exceed 15 feet (4.6 m) and water pressure at conditioner is not less than 40-psi (2.76 bar). You may elevate an additional 2 feet (61 cm) for each additional 10-psi (0.69 bar).
4. Where the drain line is elevated but empties into a drain below the level of the control valve, form a 7-inch (18-cm) loop at the far end of the line so that the bottom of the loop is level with the drain line connection. This will provide an adequate siphon trap.
5. Where the drain empties into an overhead sewer line, a sink-type trap must be used.

IMPORTANT: Never insert drain line into a drain, sewer line or trap. Always allow an air gap between the drain line and the wastewater to prevent the possibility of sewage being back-siphoned into conditioner.

Note: Standard commercial practices have been expressed here. Local codes may require changes to these suggestions.

Brine Line Connection 6

It will be necessary to install the brine tube and line to a fitting installed on the control valve

Overflow Line Connection

In the absence of a safety overflow and in the event of a malfunction, the BRINE TANK OVERFLOW will direct "overflow" to the drain instead of spilling on the floor where it could cause considerable damage. This fitting should be on the side of the cabinet or brine tank. To connect overflow, locate hole on side of brine tank. Insert overflow fitting (not supplied) into tank and tighten with plastic thumbnut and gasket. Attach length of 1/2-inch (1.3-cm) I.D. tubing (not supplied) to fitting and run to drain. Do not elevate overflow line higher than 3 inches (7.6 cm) below bottom of overflow fitting. Do not tie into drain line of control unit. Overflow line must be a direct, separate line from overflow fitting to drain, sewer or tub. Allow an air gap as per drain line instructions

Adjusting your **METER** controlled conditioner.

Refer to diagram 1 on the next page.

AN ADJUSTMENT IS NEEDED WHEN:

1 You change the clocks around your home after a power failure, time change, or other reason. Remember also to reset the time-of-day on your water conditioner.

2 You want a recharge to occur at a different time than was set at installation.

Note: recharge should be set for a time when water use is at a minimum.

Usually this is in the wee hours of the morning, such as 2:00 a.m.

3 More softening capacity is needed on a continuous basis than was originally set, either because of increased use or change in water characteristics.

If a temporary increase in water use is anticipated or has occurred, an immediate recharge can be initiated without interfering with the automatic settings. Use the "Manual Recharge" to do this twist knob 'A' in **diagram 1** 10 degrees clockwise a regeneration will start and last 2 hours.

SERVICE (SOFT WATER) POSITION

The timer is in the "service" position supplying conditioned water to the house when knob 'A' is in position as shown in **diagram 1**.

TIME-OF-DAY

You must set time of day to what ever time of day it is when setting unit up (this unit is factory preset to regenerate at 2:00am) if its 5 o clock now set time to 5 o clock. Press the red button 'D' and turn dial 'A' to the correct time. See **Diagram 1**

TIME OF RECHARGE

During recharge, hard water is automatically by-passed into the house lines. Recharge time is factory set to start at about 2:00 a.m. when most families are not using water.

FREQUENCY OF RECHARGE

Set number of meters cubed between regeneration On wheel marked 'B' in line with white dot on wheel 'C' see **Diagram 1**

This example shows the white dot on wheel 'C' across from the number 2 on wheel 'B' this unit will regenerate every 2 meters cubed which is 2000 litres

Note: *This has been already factory set for you.*

SALT SETTING

This is factory set you do not need to change it.

MANUAL RECHARGE FOR MORE SOFTENING CAPACITY

When you expect guests or feel that your use of soft water will temporarily increase, you can get more softening capacity with a manual recharge.

This can be initiated by moving the dial 'A' in **Diagram 1** clockwise 15 degrees slowly until you here water going out the backwash drain. The unit will then complete the regeneration this takes 2 hours.

***NOTE:** A manual recharge should not be initiated during the two-hour period before a regularly scheduled recharge.



Adjusting your **TIMER** controlled conditioner.

Refer to diagram 2 on the next page.

AN ADJUSTMENT IS NEEDED WHEN:

1 you adjust the clocks around your home after a power failure, time change, or other reason. Remember also to reset the time-of-day on your water conditioner.

2 you want recharge to occur at a different time than was set at installation.

Note: recharge should be set for a time when water use is at a minimum.

Usually this is in the wee hours of the morning, such as 2:00 a.m.

3 more softening capacity is needed on a continuous basis than was originally set, either because of increased use or change in water characteristics.

If a temporary increase in water use is anticipated or has occurred, an immediate recharge can be initiated without interfering with the automatic settings. Use the "Manual Recharge" to do this, twist knob 'X' in **diagram 2** 10 degrees clockwise. Regeneration will start and last 2 hours.

SERVICE (SOFT WATER) POSITION

The timer is in the "service" position supplying conditioned water to the house when the arrow marked 'W' on the internal wheel is pointing towards the red button marked 'Z' in **diagram 2**.

TIME-OF-DAY

There is no need to set the time of day, you must set the number of hours to regeneration i.e. if you want the regeneration to take place in 2 hours from now set the number 2 to bottom of wheel marked 'X' We recommend you set unit to regenerate at 2 a.m.

Example if it is 6 o'clock now when you are setting up unit Set the number 8 to the bottom of the wheel and the unit will regenerate in 8 hours time at 2am.

TIME OF RECHARGE

During recharge, hard water is automatically by-passed into the house lines. Recharge time is factory set to start at about 2:00 a.m. when most families are not using water.

FREQUENCY OF RECHARGE

There are twelve stainless steel tabs on wheel marked 'Y' on **diagram 2** which program the regeneration frequency.

When all 12 tabs are pulled out, the unit will recharge every day. If every second tab is in, recharge will occur every second day.

Remember Pull out to recharge, push in to skip

Suggestion Pull out 1 pin per person i.e. if you have 4 people in the house, pull out pins (3,6,9,12)

SALT SETTING

This is factory set you do not need to change it.

MANUAL RECHARGE FOR MORE SOFTENING CAPACITY

When you expect guests or feel that your use of soft water will temporarily increase, you can get more softening capacity with a manual recharge. This can be initiated by moving the dial 'X' clockwise slowly 15 degrees until you here water going out the backwash. The unit will then complete a regeneration this takes 2 hours. ***NOTE:** A manual recharge should not be initiated during the two-hour period before a regularly scheduled recharge.



Salt supply, usage and service . . .

WHAT KIND OF SALT IS BEST?

All Water2buy Water Conditioners are designed to use any water conditioner salt of good quality, including “rock,” “pellet,” “solar,” or “evaporated” types. All rock salt, regardless of source, contains insoluble material, which collects at the bottom of the salt storage tank and requires periodic clean out.

If purified salt products are used, the salt storage compartment will require less frequent clean-out, but you must check more frequently for “bridging” (see page 12)

How Much Salt should I Put into Tank?

You can fill the brine tank to the top with salt and when it gets down to the last 4-5inches refill the tank. The Average water conditioner uses 1 bag of salt per month.

Care and cleaning of your water conditioner

Following these simple precautions will help assure continued trouble free service, and keep your Water2buy Water Conditioner looking like new for years.

- 1 Do not place heavy objects on top of the salt storage tank or timer case.
- 2 Use only mild soap and warm water when cleaning the exterior of the conditioner. Never use harsh, abrasive cleaning compounds or those which contain acid, such as vinegar, bleach and similar products.
- 3 **WARNING: Protect your water conditioner and the entire drain line from freezing temperatures. DANGER: If your unit should freeze, do not attempt to disassemble it. Call Water2buy.**
- 4 The timer is very accurate. Keep setting correct to assure recharging at the proper time.
- 5 Should service, adjustment or trouble-shooting information be needed which is not covered in this Use and Care Guide, refer to the appropriate Installation Manual for your model. If you do not have this material, it may be obtained online @ www.water2buy.ie

To clean out the salt storage tank

A periodic clean-out of the Salt Storage Tank is necessary to keep your Water2buy Water Conditioner at peak operating efficiency. Do it at least every 2 years when the salt supply is low. Follow these step-by-step procedures:

Tools needed:

Scoop

Clean, bucket-size container

Garden hose

Household scrub brush or sponge

- 1 Remove the salt storage tank cover and the cap from the brine valve chamber.
- 2 If you'd like to save any clean, dry salt remaining in the tank, remove it and place it in a clean container.
- 3 Using a scoop dig out and discard as much remaining salt, water and debris as possible.
- 4 Lay the salt tank on its side and direct a brisk stream of water from your garden hose to its inside to rinse out all residue.
- 5 Using a household scrub brush and a mild soapy solution, clean the salt plate. This will complete the tank cleaning.
- 6 Fill the salt storage tank with 4 to 6 inches of water.
- 7 Fill the tank with salt to within a few inches from the top.
- 8 Replace salt storage tank cover.

Before you call for service . . .

If you unexpectedly experience hard water, make these simple checks before calling Water2buy. One of the following conditions may be the reason for your interruption of service.

IMPORTANT:

If any of the following conditions are found, the water conditioner should be manually recharged according to instructions on page 7 after you have corrected the condition.

POWER SUPPLY

Check your power supply cord. Is it plugged fully into the electric outlet? Be certain that the outlet does not have a wall switch, which has been turned off. Reset conditioner to proper time of day and then plug in.

BLOWN FUSE

Check the house fuse or circuit breaker panel. Replace a blown-out fuse or reset an open circuit breaker.

POWER FAILURE

Any interruption in your power supply, or time changes — such as daylight savings — will disrupt your conditioner's recharge schedule by causing the timer to run off schedule. Reset timer to proper time of day.

SALT SUPPLY

Check it. Refill if necessary and wait approximately four hours for the salt to dissolve before initiating a recharge cycle.

INCREASED USAGE

Guests, family additions, new water-using appliances, etc. all will result in more water usage and will require more capacity from your conditioner. You can reprogram your recharging schedule by following the directions on adjustments on pages 7 and 9.

NO WATER

If you aren't getting any water flow at all, make sure your water supply is working. Open a tap ahead of the conditioner (outside tap) to see if you have any water pressure.

CONTINUOUS FLOW TO DRAIN

If water runs to drain continuously, check to make sure unit is not in recharge. If it is recharging, allow unit to finish cycle, then reset time of day if necessary. If the unit is not in recharge, contact Water2buy.

SALT BRIDGING

Salt "bridging" occurs when a space is formed between the salt and the water preventing the salt from dissolving in the water to make brine. No brine — no soft conditioned water! High humidity and/or use of some brands of purified salt products may cause a salt bridge to form.

The best way to check and eliminate a salt bridging problem is to take a broom handle or similar instrument and make a mark 32 inches from the end. Then carefully begin to probe down through the salt with the instrument. Should an obstruction be found before the mark on your instrument reaches the rim of the salt storage tank, a salt bridge is likely to have formed. Continue to probe and break up the bridge.

Preventive Maintenance . . .

Inspect and clean brine tank and screen filter on end of brine pickup tube once a year or when sediment appears in the bottom of the brine tank.

Clean injector screen and injector **once a year**:

1. Unplug the control valve.
2. Shut off water supply or put bypass valve(s) into bypass position.
3. Relieve system pressure by opening valve (at rear) with a screwdriver.
4. Using a screwdriver, remove injector screen and injector cap
5. Clean screen using a fine brush. Flush until clean.
6. Using needle-nose pliers, pull injector straight out.
7. Flush water into the injector screen recess of the valve body to flush debris out through the injector recess.
8. Clean and flush the injector.
9. Lubricate the O-rings on the injector, injector cap and injector screen with silicone lubricant.
10. Reinstall the injector, injector cap and injector screen. See **IMPORTANT** note.
11. Plug the wall-mount transformer into outlet; reset time of day.
12. Slowly open water supply valve or return bypass valve(s) to the "not in bypass" position.

IMPORTANT: Do not over tighten the plastic cap. Seat the cap lightly into position. Over tightening may cause breakage of the plastic cap that may not be immediately evident.



Troubleshooting . . .

The technology upon which the 5 Series 255 control is based is well established and proven in service over many years. However, should a problem or question arise regarding the operation please refer to table below.

IMPORTANT: Service procedures that require the water pressure to be removed from the system are marked with a ! after the possible cause. Refer to Preventative Maintenance section for instructions.

Common Problem Possible Cause Solution

Problem	Problem Cause	Solution
1. Control will not regenerate automatically.	a. Transformer or motor not connected. b. Defective timer motor. c. Skipper pins not out on timer skipper wheel.	a. Connect power. b. Replace motor. (Contact dealer.) c. Pull out pins for days regeneration required. (ie one pin out per person house)
2. Control regenerates at wrong time of day.	a. Timer set incorrectly	a. Correct time setting according to instructions.
3. Control will not draw brine.	a. Low water pressure. b. Restricted drain line. c. Injector plugged. d. Injector defective. e. Air check valve in brine suction pipe closes prematurely.	a. Set pump to maintain 20 psi at conditioner. b. Change drain to remove restriction. c. Clean injector and screen. d. Replace injector. (Contact dealer.) e. Put control momentarily into brine/slow rinse. Replace or repair air check brine suction pipe if needed.
4. System using more or less salt than salt dial setting.	a. Foreign matter in controller causing incorrect flow rates. b. Defective controller	a. Remove brine control and flush out foreign matter. Manually position control to brine/slow rinse to clean controller (after so doing position control to "purge" to remove brine from tank). b. Replace brine control.
5. Intermittent or irregular brine draw.	a. Low water pressure. b. Defective injector.	a. Set pump to maintain 20 psi at conditioner. b. Replace injector.
6. No conditioned water after regeneration.	a. No salt in brine tank. b. Injector plugged. c. Air check valve closes prematurely.	a. Add salt to brine tank. b. Clean injector and screen. c. Replace or repair air check brine suction pipe if needed.
7. Control backwashes or purges at excessively low or high rate.	a. Incorrect drain controller used. b. Foreign matter affecting controller operation.	a. Replace with correct size controller. b. Remove drain controller and clean ball and seat

SHOULD YOU NOTICE ANY NEW PROBLEMS WITH YOUR WATER, WATER2BUY HAS THE CAPABILITIES TO SOLVE THEM.

Today we have the technology to substantially reduce many of the contaminants listed as undesirable by the EU in its Drinking Water Standards.

Water2buy products and systems reduce both natural and man-made water pollutants — provide the best water for each specific use and application. Your new Water2buy Water Conditioner can be adjusted to handle to wide range of water problems, but it does have limitations. It has been specified onto the basis of your water conditions at the time of sale. It is possible for the chemical makeup of your water to change in time, and such changes cannot be predicted. Your needs and uses may also change. Water2buy is ready to help you if any problem should arise.

With Water2buy, you get more than a quality product . . .

Our reputation is based on prompt, courteous, efficient attention to your needs.

Selling water conditioners is our full-time business, and satisfied customers are our best assets. **AND YOU GET THE SECURITY OF DEALING WITH AN ORGANISATION THAT'S TRUSTED ALL OVER EUROPE.**

Water2buy sells more water conditioners online than any other brand in the world. This leadership position is not awarded it is earned. It means that a Water2buy product will never be an "orphan" because we will always stand behind our warranties. It means that we will always strive to deserve your confidence.