HOMEOWNER'S MANUAL

IONICS WATER CONDITIONER Model IQ and Model EE Bacteriostatic



Manufactured by:
Puronics Water Systems, Inc.
5775 Las Positas Road
Livermore, CA 94551
(800) 339-8780
www.puronics.com

IMPORTANT

This booklet contains your Owner Limited Warranty Card. Make sure this Warranty Card is filled out by your Dealer and returned to Puronics Water Systems, Inc. within two weeks of installation to assure proper warranty registration.

Questions about your warranty registration may be answered by writing to:

Warranty Registration Dept. c/o Puronics Water Systems, Inc. 5775 Las Positas Road Livermore, CA 94551

Your Ionics Dealer is ...



Puronics welcomes you to a new, carefree way of life with conditioned water. You can take pride and satisfaction knowing that you own the very best.

We are proud that you have selected the Ionics deluxe quality Water Conditioner for your home. Your sound judgment is supported by the wide acceptance received for these units throughout the world. More and more quality conscious homeowners are purchasing Ionics Water Conditioning equipment because of its superior performance and its premium quality workmanship.

The following pages of this booklet will introduce you to your new Ionics Water Conditioner by explaining operation, care and maintenance. In addition, the booklet provides recommendations for getting the very best performance from your unit as well as answers to commonly asked questions. At Puronics, we not only care for your water...we care for your family.

Puronics Water Systems, Inc.



General Information

Your Ionics Water Conditioner is completely automatic. It will provide an abundance of conditioned water with just an occasional addition of salt to the brine tank when the salt reaches the "add salt" level. Your unit was thoroughly tested at the factory before shipping, and again at the time of installation.

The automatic timer is set to "regenerate" your water conditioner at night while you are sleeping. From experience, this is the best time because your water demand is lowest then and regeneration will not interfere with baths, washing clothes, etc. However, unconditioned water is available from all faucets during the regeneration cycle. With the Ionics Water Conditioner you are never without water.

It is a good idea to wipe the unit occasionally and then apply a good coat of wax. This procedure will keep your water conditioner looking bright and clean for a lifetime.

In case some problem should arise, you can manually by-pass the unit by throwing one lever (see illustration on page 5). Then call your authorized Ionics dealer. He has been trained in all phases of maintenance and repair work and will have the unit back in operation quickly. If there is not an Ionics dealer in your vicinity, then contact another reliable water conditioning firm. Failing that, please write directly to the factory: Puronics Water Systems, Inc., 5775 Las Positas Road, Livermore, CA 94551 Attention: Service Department.

Regeneration

Your Ionics Water Conditioning unit consists of a tank filled with a premeasured amount of a special mineral called S-759, formulated especially for Ionics equipment. On top of the tank is the control valve/timer, which works on the same principle as an electric clock. Alongside the unit is a storage tank which holds the salt and brine for the regeneration cycle.

Regeneration means recharging or recleaning the special S-759 mineral. It is important to know that the entire cycle is automatic and you will have nothing to do with it. The following steps are for your own enlightenment... and to demonstrate the thoroughness of the automatic cycle: 1. Backwashing, which reverses the action of the water, throws off the sediment (called turbidity) that has been filtered out of the water, and flushes it down the drain. 2. Salt, as brine, is injected into the unit to clean and revitalize the S-759 mineral. (The amount of salt used is controlled by a float valve, which operates the same as the float in the water tank of your toilet.) 3. Slow rinse. 4. Fast rinse. 5. Valve automatically returns to the service position to again supply you with good, conditioned water.

What Salt To Use

Salt is your water conditioner's fuel. Using the right fuel is as important here as it is to get the best performance from your car. It is strongly recommended to use only nugget or pellet type salt in your water conditioner. This type of salt is pure and free of undesirable insolubles. Nugget or pellet type water conditioner salt is available from your lonics dealer.

NOTE: Common rock salt is NOT recommended because much of it contains insolubles. The continued use of common rock salt will necessitate more frequent cleaning of the brine tank, or worse, it may cause a malfunction of the valving. However, specially processed water conditioner rock salt, as handled by your local dealer, may be used.

When To Add Salt

The brine tank has a capacity up to 250 lbs. of nugget or pellet salt. You can add salt whenever it is most convenient for you, but it is important to replenish the supply before the pellets reach the "add salt" level indicated by the label on the salt storage tank.

Bridging Or Caking

The salt platform in your brine tank has been engineered to eliminate salt bridging or caking. However, under certain atmospheric conditions these circumstances can occur and will prevent the salt from coming in contact with the water level. When your water seems to be hard, check the salt in the storage tank. If it appears to be bridging or caking, break it up with a short wooden stick. In doing so, be careful not to probe the full depth of the brine tank because you may damage the salt platform.

Bacteriostatic — An Ionics Exclusive

If your Ionics Water Conditioner is an Environmental Protection Agency (EPA) Registered Bacteriostatic model, you have two unique added features. First, this unit inhibits the growth of bacteria within the S-759 ion exchange filter media bed. Second, it reduces and in many cases completely eliminates organic tastes, odors and colors from the water.

Inside the Bacteriostatic model water conditioner a layer of HYgene* silver-impregnated activated carbon (EPA-Registered Bacteriostatic Water Filter Media) is placed on top of the S-759 mineral. The silver acts as the inhibiting agent while the activated carbon adsorbs objectionable tastes, odors and colors.

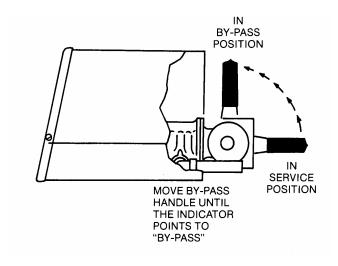


IT IS A VIOLATION OF FEDERAL LAW to use this product in a manner inconsistent with its labeling. Only use EPA Registered HYgene silver-impregnated carbon replacement media in this unit. Use of any medium other than HYgene silver carbon manufactured by Puronics Water Systems, Inc. is a violation of the proper operation of the unit, and voids the manufacturer's warranty. For your protection, do not accept a replacement media unless it is factory-sealed with both the tape and label reading "HYgene" manufactured by Puronics Water Systems, Inc.. The EPA has restricted the Bacteriostatic models for use only on treated municipally supplied tap water, which precludes its use on well water.

By-Pass Instruction

In case any problem should occur that cannot be immediately resolved, it is recommended to manually by-pass the unit as shown and call your authorized lonics dealer.

MODELS IQ AND EE



LIFE EXPECTANCY OF HYGENE® BACTERIOSTATIC MEDIA

Model Nos. (EE or IQ)	Tank Diameter	HYgene Content	Bacteriostatic Gallons	Media Life Family of 4
0820-B	8"	2lb.	75,000	12 months
1030-B	10"	3lb.	112,500	18 months
1240-B	11"	4lb.	150,000	24 months

NOTE: CHLORINE LEVELS IN EXCESS OF 1 PPM MAY REDUCE LIFETIME OF MEDIA.

It is suggested that a water meter reading be noted at time of installation. Add to that reading the expected gallonage life of the Bacteriostatic medium from the above chart. Record what the water meter reading will be when replacement should be made.

Model IQ Special Features		
Water meter reading, media replacement		Gallons
Expected life of media (from above chart)	+	Gallons
Water meter reading at time of installation		Gallons

Directions For Use

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. For use on cold water only.

Meter-Controlled Regeneration

The Model IQ control minimizes salt usage and water waste by accurately monitoring the conditioned water and then initiating a regeneration only when the S-759 mineral is near exhaustion. Six-cycle downflow brining assures accurate salting while the adjustable time regeneration program uses the minimum amount of water required per cycle.

In service a mechanical meter accurately monitors water usage. This feature eliminates the costly wasted capacity due to premature regenerations.

Vacation Periods

There is no need to be concerned about disconnections or adjustments on your Model IQ Water Conditioner before leaving your home for long periods of time. When no water is being used, the "brain" will simply remain idle for that period of time and be ready to monitor water usage when you return home.

High Usage Demand/Weekend Guests

The Model IQ Water Conditioner's "brain" will automatically recognize the increase in water usage and regenerate before running out of conditioner water. Unpredictable water demand is never a problem with the Ionics Model IQ.

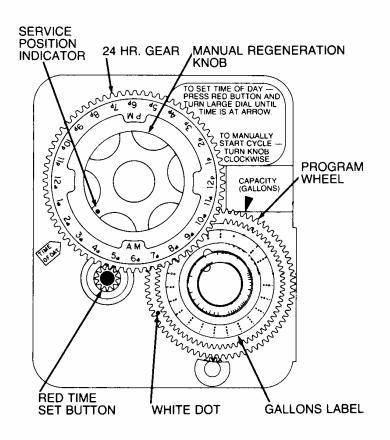
How To Set The Time Of Day

If you should have a power failure or want to adjust for Daylight Saving Time, follow these Instructions.

Press and hold in the red button to disengage the drive gear.

Turn the large gear until the actual time of day is opposite the time of day pointer.

Release the red button to engage the drive gear.



How To Manually Regenerate Your Water Conditioner At Any Time

Turn the manual regeneration knob clockwise.

This slight movement of the manual regeneration knob engages the program wheel and starts the regeneration program.

The black center knob will make one revolution in the following three hours and stop in the position shown in the drawing.

Even though it takes three hours for this center knob to complete one revolution, the regeneration cycle of your unit might be set for only one-half of this time.

In any event, conditioned water may be drawn after rinse water stops flowing from the water conditioner drain line.

Model EE Special Features

Directions For Use

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

For use on cold water only.

Energy Efficient Control

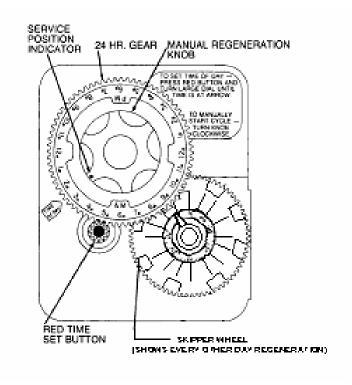
This fully automatic six-cycle valve with 12-day timer schedules regenerations at preset intervals. The day and the hour for regeneration, as well as the salt dosage, have been set at the time of installation by the installer. These settings have been carefully calculated according to your family needs and to get the maximum recovery of the resin while minimizing water usage. **Do Not Change These Settings Without First Consulting Your Dealer.**

Vacation Periods

Why allow your water conditioner to continue regenerating while you are on vacation? It would be a waste of salt to recharge an already charged mineral bed. With your Energy Efficient Ionics Model EE Water Conditioner, vacation time has been taken into account. Simply move the by-pass valve lever (see illustration on page 5 of this manual) until the indicator points to "by-pass". By doing so, the unit will continue to go through the preset regeneration cycles, but actually it will not regenerate. When you return home, move the by-pass valve lever back to the "service" position and you will again have conditioned water as before.

High Usage Demand/Weekend Guests

As mentioned previously, your Ionics Model EE unit is set for your own needs. Higher than normal usage such as weekend guests will naturally place a greater demand for conditioned water on the unit. The method for manually regenerating the unit is covered on page 9. This "extra" regeneration will not interfere with the regular programmed cycle.



How To Set The Time Of Day

If you should have a power failure or want to adjust for Daylight Saving Time, follow these instructions.

Press and hold in the red button to disengage the drive gear.

Turn the large gear until the actual time of day is opposite the time of day pointer.

Release the red button to engage the drive gear.

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Questions And Answers

What is water conditioning?

Water conditioning is that branch of engineering that determines the chemical characteristics of a tap water supply, as it enters your home, and treats these characteristics so as to provide water more suitable and economical for household use.

Why is it essential to improve water quality?

Beyond being an absolute necessity of life, water is an outstanding cleaning agent. The trouble is that nature does a lot of things with water long before you have a chance to use it in your laundry or at your kitchen sink. You get it, as it were, second hand. Therefore, improving your water quality by water conditioning is just as essential as any other home appliance.

Does the conditioned water have a "different" taste?

Taste is difficult to define as no two people have the same sense of taste. A water conditioner will remove certain minerals and turbidity from the water, giving you a cleaner, better tasting water.

Will conditioned water give a cleaner, brighter wash?

Yes. For best results, you should use the proper amount of laundering agent. Keep in mind a 60 to 80% soap saving can be achieved with conditioned water. Learn to use less laundering agent because none of the cleansing compound will be wasted as in hard water cleaning. The amount of laundering agent you use depends on: (1) its effectiveness, (2) the volume and temperature of water, (3) the size of the wash load, and (4) the type and amount of dirt and grime.

What effect will conditioned water have on plumbing?

Before the water was conditioned, the hard water caused a scale buildup in the hot water pipes and water heater. Scale acts as an insulating material. In the water heater, scale reduces heat transmission, wastes fuel and often causes heating coil and tube failure. The installation of a water conditioner not only prevents further scale formation but will gradually remove previously formed scale deposits. A recent study indicates that softened water offers a saving of 23% in energy cost in the operation of a hot water heater.

Are the minerals which a conditioner removes from hard water essential to health? No. The quantity of minerals found in hard water are not essential to good health.

Is the sodium in softened water harmful to people on restrictive diets?

Much depends on the strictness of the diet itself. When the patient is on an extremely restrictive diet, he should drink neither hard nor softened water. Under these conditions he should have demineralized water, distilled water, or water known to be free of sodium for drinking and for the cooking of foods. Such patients are commonly hospitalized.

In establishing a salt-free diet for patients, physicians should not overlook the fact that even hard water may contain appreciable amounts of sodium. To determine the amount a complete analysis of the water is necessary.

How much sodium is added to softened water?

Each grain per gallon (GPG) hardness removed adds 7.875 milligrams (mg) of sodium to a liter of water, which is approximately one quart. The average daily sodium intake of an adult individual is 3,000 to 4,000 milligrams and the average fluid intake is 1.6 to 2.0 liters per day. A liter is slightly more than four 8-ounce glasses of water. Two liters per day or 8.4 eight-ounce glasses of water amounts to a total sodium intake from a source of softened 8 GPG water of 125.16 milligrams. This is approximately 3% of the average daily sodium intake.

There is another way to answer this question, and that depends on the hardness of your raw water. The following table shows the additional amount of sodium consumed by drinking ONE quart of softened water.

Initial Water Hardness

5 Grains/Gallon 10 Grains/Gallon 20 Grains/Gallon 40 Grains/Gallon

Sodium Added By Softening

37.5 Milligrams/Quart 75.0 Milligrams/Quart 300.0 Milligrams/Quart 300.0 Milligrams/Quart

How does this sodium content of conditioned water compare to sodium found in common foods?

The data in the following table demonstrate the usual range of sodium in common foods.

Food	Amount	Milligrams of Sodium
Milk	2 Cups	226
Bread	2 Slices	322
Corn Flakes	1 Ounce	260
Tomato Juice	4 Ounces	504
Chili	1 Cup	1194
Tomato Soup	1 Cup	932
Beef Broth	1 Cup	1152
Frankfurter	1 Medium	610
Hamburger (Fast Food)	1/4 Pound	1510
Catsup	1 Tablespoon	204
Canned Baked Beans	¾ Cup	1130
Canned Asparagus	½ Cup	560
Frozen Peas	½ Cup	295
Cottage Cheese	4 Ounces	457
Parmesan Cheese	1 Ounce	528
Pretzels	1/4 Pound	1925

It is important to note that about 2/3 of the daily water intake of any individual is through food and only about 1/3 from water itself.



EE/IQ Limited Lifetime Warranty

EE/IQ— Bacteriostatic
LIMITED LIFETIME WARRANTY

THE ATTACHED WARRANTY REGISTRATION CARD MUST BE FILLED OUT COMPLETELY AND RETURNED TO PURONICS WATER SYSTEMS, INC. AT THE ADDRESS WHICH APPEARS BELOW, WITHIN 30 DAYS FROM THE DATE OF INSTALLATION TO VALIDATE WARRANTY.

Puronics Water Systems, Inc., 5775 Las Positas Road, Livermore, CA 94551, warrants to the original purchaser only that the lonics Water Conditioner to which this warranty applies shall be free of defects in materials and workmanship from the date of purchase for the lifetime of the product.

IMPORTANT

BACTERIOSTATIC MODELS — EPA-REGISTERED HYgene® REPLACEMENT

IT IS A VIOLATION OF FEDERAL LAW TO SUBSTITUTE OR REPLACE THE HYgene® EPA-REGISTERED BACTERIOSTATIC CARBON MEDIA IN ANY PURONICS WATER SYSTEMS, INC. UNIT WITH ANYTHING OTHER THAN HYgene® MANUFACTURED BY PURONICS WATER SYSTEMS, INC. THE INSTALLATION OF ANY OTHER MEDIA WILL VOID THIS WARRANTY. FOR YOUR PROTECTION, DO NOT ACCEPT REPLACEMENT MEDIA UNLESS IT IS FACTORY-SEALED WITH BOTH THE TAPE AND LABEL READING "HYgene®" MANUFACTURED BY PURONICS WATER SYSTEMS, INC. OWNER MUST FOLLOW REPLACEMENT SCHEDULE AS OUTLINED IN THE HOMEOWNERS MANUAL FOR WARRANTY TO REMAIN IN EFFECT.

This warranty is a LIMITED WARRANTY. The obligations of Puronics Water Systems, Inc. hereunder and the original purchaser's sole remedy shall be limited to the repair or the replacement of the product or part only, at the sole option of Puronics Water Systems, Inc.. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, PURONICS WATER SYSTEMS, INC. AND ITS OFFICERS, DIRECTORS, EMPLOYEES, AGENTS, AFFILIATES, SUPPLIERS AND LICENSORS SHALL NOT BE LIABLE OR RESPONSIBLE UNDER ANY CIRCUMSTANCES OR IN ANY AMOUNT FOR ANY DAMAGES WHATSOEVER ARISING OUT OF THE USE OF THE PRODUCT, INCLUDING, WITHOUT LIMITATION, FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES OR FOR INJURY OR DAMAGES TO PERSONS OR PROPERTY USING OR USED IN CONNECTION WITH THE PRODUCT, OR FOR LOSS OF PROFITS OR OTHER COSTS OR EXPENSES OF ANY KIND OR CHARACTER. THIS LIMITATION WILL APPLY REGARDLESS OF THE FAILURE OF THE ESSENTIAL PURPOSE OF ANY LIMITED REMEDY. Labor charges incidental to the repair and/or replacement of parts other than factory repairs are expressly excluded from this warranty. Transportation costs incurred in the receipt and installation of replacement parts covered by this warranty shall be paid by the owner. This warranty shall not apply to any system which has been damaged by accident, fire, flood, act of God, abuse, neglect, freezing, unusual physical or electrical stress, misuse, or alteration, or installation or operation not in accordance with Puronics Water Systems, Inc. instructions and applicable plumbing codes and ordinances. The lonics Water Conditioner is subject to normal wear and tear during its usable service life. Wear and tear is not regarded as a defect and is not covered by this warranty. Cosmetic damage is not regarded as a defect and is not covered by this warranty. This warranty covers the original product only and does not cover replacement filters or media. This warranty must be presented at time of claim, and all claims must be presented within 30 days of occurrence.

FOR RESIDENTIAL USE ONLY. THERE ARE NO WARRANTIES OR REPRESENTATIONS BY PURONICS WATER SYSTEMS, INC. OTHER THAN AS SET FORTH ABOVE, EITHER EXPRESSED OR IMPLIED, AND NO PERSON, FIRM, OR CORPORATION IS AUTHORIZED TO MAKE ANY REPRESENTATION OR INCUR ANY OBLIGATION IN THE NAME OF OR ON BEHALF OF PURONICS WATER SYSTEMS, INC. EXCEPT AS STATED ABOVE. ANY OTHER WARRANTIES OR GUARANTEES, ORAL OR WRITTEN, EXPRESSED OR IMPLIED, ARE NOT RECOGNIZED.

HOMEOWNER'S INFORMATION				
Name				
Address		City	State	Zip
Phone	Email			
MODEL NUMBER	SERIAL NUMBER		_ DATE INSTALLED	

Tear Off and Mail to: Puronics Water Systems, Inc. 5775 Las Positas Road, Livermore, CA 94551



(Detach Here)

TO BE FILLED OUT BY DEALER AND RETURNED IMMEDIATELY FOLLOWING INSTALLATION OF EQUIPMENT

Model	Serial	Date	
Number	Number	Installed	<u>Water Analysis</u>
Customer Name			□ Municipal Water □ Well Water
Address			Number in Family Hardnessgpg
City, State, Zip Co	de	Chlorineppm Ironppm	
Phone Number(s)			Sulfurppm Manganeseppm
Dealer name and			pHppm
address			Other
Salesperson			
Remarks:			

Tear Off and Mail to: Puronics Water Systems, Inc. 5775 Las Positas Road, Livermore, CA 94551