



This product was manufactured in an ISO 9001:2000 certified facility.

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# RainSoft®

Water Treatment Systems  
Since 1953

## **GOLD SERIES WATER TREATMENT CONTROL**

**MANUFACTURED AFTER AUGUST 2004**

# Owners Manual

**Upgrade**



This product was manufactured in an ISO 9001:2000 certified facility.

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You now own the finest Water Treatment System available to homeowners. To enjoy the maximum benefits of this system, please read the contents of this Owners Manual.

This system was shipped, from the factory, ready for operation and will start delivering treated water to your home immediately after installation.

## COMMON MISCONCEPTIONS OF WATER TREATMENT SYSTEMS

There are many misconceptions that people have developed about Water Treatment Systems. The most common topic of confusion is the amount of sodium (Na), not table salt (NaCl), that is added to the water from a conditioner. In reality, ion exchange does replace the hardness ions in your water with sodium ions, but the common misconception is the amount used.

For every 1 grain of hardness, the exchange process will deliver approximately 8 mg of sodium (Na) per 1 liter of water. The amount of sodium (Na) present in a standard 8 oz. glass of treated water, that was 10 grains hard prior to treatment, would be around 19 mg of sodium (Na). This is an insignificant amount of sodium (Na), considering a typical slice of wheat bread has about 140 mg. You would be amazed at the sodium content of some of your favorite foods!

Another major misconception is the idea that soft water will produce clear ice cubes. Cloudy or white, hazy ice cubes are caused by air that is slowly being released from the water during the freezing process, which has nothing to do with the performance of your Water Treatment System.

The last misconception that needs mentioning is the amount of salt used by the conditioner to regenerate the system. People seem to think that water conditioners use an enormous amount of salt, which may have been the case in the past, but that was due to old technology and standards. Water conditioners do use salt for regeneration, but the amount of salt varies by water consumption, which then determines how many regenerations the system will have to go through on a monthly basis. The more water that needs to be conditioned, the more times the system will need to clean itself, resulting in the use of more salt. Fortunately, today's technology allows us to dispense just the right amount of salt for maximum efficiency, based on your individual water consumption needs.

## OPERATING YOUR UNIT

WATER PRESSURE: 20 psi - 100 psi (138 kPa - 689 kPa)

OPERATING TEMPERATURE: 40° F - 100° F (4.4° C - 38° C)

ELECTRICAL REQUIREMENTS: A constant, properly grounded alternating current (A/C) supply is required for this system (USA: 110V/International: 220V). **Note: The system operates on low voltage and requires the use of the supplied transformer (24V).**

EXISTING PLUMBING CONDITIONS: Plumbing should be free from lime and/or iron buildup. Piping that contains large amounts of lime and/or iron should be replaced. If piping is clogged with iron, a separate iron filter should be installed in-line, before the water conditioner.

SALT REQUIREMENTS: For maximum satisfaction, add salt before the salt container is empty. Two kinds of salt are recommended for water conditioners:

1. Block Salt: Water softener block salt is reasonably priced, low in impurities and will not cake in the salt container. Block salt is pressed into the shape of a cattle block.
2. Solar Salt: Solar salt is 98% pure salt, reasonably priced and low in impurities.

**Note: Rock salt is not recommended for water conditioners. If rock salt is used, the salt container must be cleaned out periodically. DO NOT use granulated salt! The use of granulated salt may cause service problems.**

## USE OF RESIN CLEANERS

It is always wise to provide preventative maintenance for your system. IF YOU USE A CLEANER CONTAINING NITRIC ACID OR OTHER STRONG OXIDIZING AGENTS, PLEASE USE CAUTION AND FOLLOW INSTRUCTIONS CAREFULLY.

If small amounts of iron are present in your water, use a salt containing iron remover or add iron remover to the resin cleaner when adding salt. (This will prevent the treatment media from becoming iron fouled.) If an excessive amount of iron is present in your water, we recommend the installation of an iron filter before the conditioner.

## MAINTENANCE REQUIREMENTS

The regeneration valve is designed to last a lifetime, but from time to time it may be necessary to clean and lubricate the moving parts. Your water quality and the amount of regenerations necessary will affect this maintenance schedule. Your local RainSoft Dealer is knowledgeable in the different water qualities and will have the necessary parts to complete this service.

## INSTALLATION REQUIREMENTS

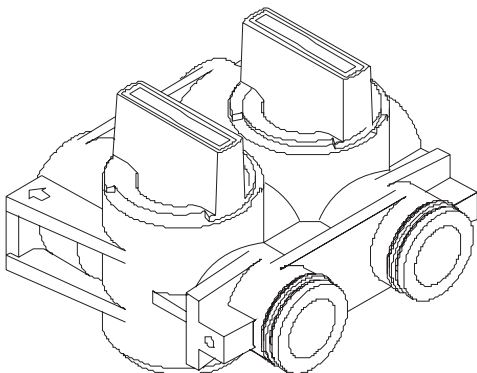
The Gold Series Water Treatment Control must be installed in accordance with all applicable state and local laws and regulations.

Do not install the Gold Series Water Treatment Control where water is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

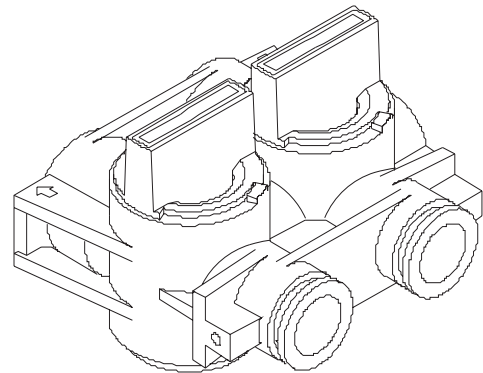
Do not install the Gold Series Water Treatment Control in areas affected by extreme heat, cold or the elements.

## OPERATION OF THE BYPASS VALVE

The bypass valve enables you to bypass the system in situations of: emergency leaks in the equipment, service calls and/or outdoor water use.



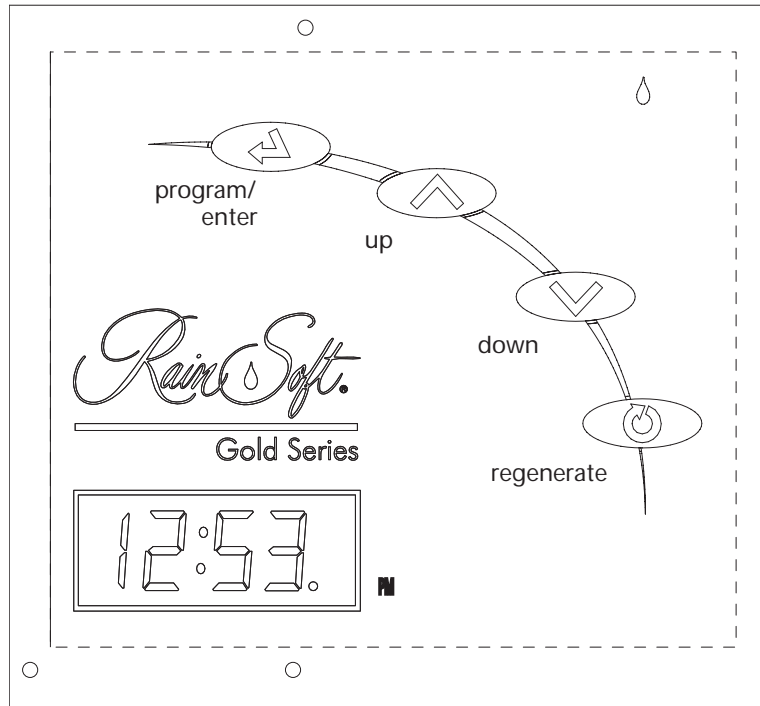
Service Position



Bypass Position

## OPERATION OF THE COMPUTER

The Gold Series is designed for years of maintenance free service, with minimal initial setup. Once the parameters are established and set by a RainSoft representative, there is no need to adjust or change the parameters of the computer. If a noticeable change in the quality of your water has taken place, please contact your RainSoft Dealer immediately.



## HOW TO ADD SALT AND ADJUST THE SALT POUNDS

**ADDING SALT:** There are two scales located on the brine tank. One scale is for block salt (designated by levels 1-4) and the other scale is for solar salt or potassium chloride (designated by 1-5). Each level represents 50 pounds of salt. **Note: Potassium chloride may be used as a substitute for salt.**

Once you have loaded the salt into the brine tank, the closest level value that is indicated on the scale will be the number that you will enter into the computer (see below).

To set or change the amount of salt pounds in the brine tank, press the "program/enter" button; the computer will display **S**, followed by an estimated salt level. Use the up or down arrow to select the corresponding level of salt that is present in the brine tank. Once the desired salt level has been entered, the "program/enter" button must be pressed again for the computer to accept the new setting.

## SALT ALARM

To set or change the salt alarm, press the "program/enter" button two times; the computer will display **A**. Use the up or down arrow to set the alarm time.

To disable the alarm, use the up or down arrow to reach the 12:00 am - 1:00 am time; "OFF" will be displayed on the board and the alarm will then be disabled.

Once the desired alarm time or disable request has been entered, the "program/enter" button must be pressed again for the computer to accept the new setting.

## LOW SALT ALARM

A low salt alarm will sound when the salt in the brine tank becomes lower than the desired level (30 lbs. or less). The alarm has been preset by the factory to sound at 5:00 pm. To change this time, see "SALT ALARM" on page 5.

To turn off the alarm, press the "program/enter" button and wait for the **S** to appear. After the salt level has been displayed, add salt and press "program/enter" button.

## HOW TO ADJUST THE HOUR OF REGENERATION

To set or change the time of regeneration, press the "program/enter" button three times; the computer will display **h**. After the computer displays the time, use the up or down arrow to scroll through the am and pm times. Once the correct time of regeneration is visible, you must press "program/enter" for the computer to accept the time. **Note: The fast-scroll option is available during this function.**

## HOW TO ADJUST THE CORRECT TIME OF DAY

To set or change the correct time of day, press "program/enter" four times; the computer will display **P**, followed by the time. Use the up or down arrow to scroll through the am and pm times.

By pushing and holding the up or down arrow, you will activate the fast-scroll option and the numbers will start counting by 10's. You will notice the individual beeps are gone, this is normal in the fast-scroll option. If you let go of the up or down arrow and use individual arrow depressions, the computer will return to counting by 1's. Once the correct time of day is visible, you must press "program/enter" for the computer to accept the time. **Note: If you change from standard to daylight savings time, you may want to reset the time of day. If the power goes out, the unit will hold the time of day for a minimum of 3 days.**

## CAPACITY AND HARDNESS SETTINGS

The capacity of the unit is specific to the size of the tank and the amount of media present. The capacity setting will be preset by your RainSoft Dealer at the time of installation. **Note: The capacity does not require adjustments by the homeowner.**

The hardness of water is unique to the individual and is based on several parameters. The two most common types of parameters are: the well delivery system (well or city) and geography. The hardness of the water must be predetermined by your RainSoft Dealer through a water analysis. Your RainSoft Dealer will program the hardness setting based on your water analysis. If there is a noticeable change in the quality of your water, please contact your RainSoft Dealer immediately. **Note: In most applications the hardness will not require adjustments. The hardness of water rarely changes for most individuals.**

## BACKWASH, RINSE & NUMBER OF REGENERATIONS PER WEEK

The computer automatically determines the timing scheme needed for each of these cycles to effectively and efficiently regenerate the system. If there is a noticeable change in the quality of your water, please contact your local RainSoft Dealer immediately. **Note: These settings will not require adjustments by the homeowner.**

## HOW TO MANUALLY INITIATE A REGENERATION

To manually initiate a regeneration, press the "regeneration" button. The unit will go into a regeneration, just like it would have during the normal, scheduled regeneration time.

## TROUBLESHOOTING YOUR UNIT

SYMPTOM	CAUSE	SOLUTION
1. The system fails to regenerate automatically	1. The power supply is plugged into intermittent or dead power source.	1. Connect to a constant power source.
2. The system regenerates at the wrong time	1. The computer is not set properly. 2. The time is off due to daylight savings.	1. Reset time of day/time of regeneration. 2. Reset the time of day.
3. The system is using large amounts of salt	1. Improper computer set-up. 2. Excessive water in the brine tank.	1. Call your RainSoft Dealer to readjust the computer settings. 2. Call your RainSoft Dealer for service.
4. Loss of water pressure	1. Low pressure to the unit.	1. Bypass the system and call your RainSoft Dealer. If the problem still exists after bypass, it is not related to a RainSoft product. Have your water distribution system checked.
5. Excessive water in the brine tank and/or salty water	1. Plugged/restricted drain line. 2. Dirty brine valve. 3. Low inlet pressure. 4. The computer is not set properly. 5. The injector is plugged.	1. Check the water flow to the drain. Check for any crimps in the drain line. Call your RainSoft Dealer for service. 2. Clean the brine valve. 3. Call your local RainSoft Dealer to increase the inlet pressure (20 psi minimum). 4. Call your RainSoft Dealer to reset the computer settings. 5. Call your RainSoft Dealer to clean or replace the injector.
6. The system fails to use salt	1. Plugged/restricted drain line. 2. No water in the brine tank. 3. Low inlet pressure. 4. The injector is plugged.	1. Check the water flow to the drain. Check for any crimps in the drain line. Call your RainSoft Dealer for service. 2. Call your RainSoft Dealer for service. 3. Call your local RainSoft Dealer to increase the inlet pressure (20 psi minimum). 4. Call your RainSoft Dealer to clean or replace the injector.
7. Constant flow to the drain	1. Foreign material in the valve.	1. Call your RainSoft Dealer to clean the valve.

If the troubleshooting section did not resolve the unit's symptoms, please contact your local RainSoft Dealer for service. If you cannot locate your local RainSoft Dealer, please contact RainSoft Customer Service at 1-800-860-7638 or log onto [www.rainsoft.com](http://www.rainsoft.com) for the name and location of your nearest Dealer.

# *Limited Lifetime Warranty*

*For as long as you own the equipment*

RainSoft Division of Aquion Water Treatment Products, LLC, believing its

## **RAINSOFT WATER TREATMENT CONTROL**

to be of exceptional quality, hereby warrants said equipment to its first purchaser at retail as follows:

**THE CONTROL VALVE IS WARRANTED AGAINST DEFECTS IN MANUFACTURE FOR THE LIFETIME OF THE FIRST PURCHASER AT RETAIL.**

**THE ELECTRICAL PARTS ARE WARRANTED AGAINST DEFECTS IN MANUFACTURE FOR FIVE YEARS AND PRO-RATA WARRANTED FOR AN ADDITIONAL FIVE YEARS.**

**THE TREATMENT TANK AND CONDITIONER RESIN CARRY THE REMAINDER OF THE ORIGINAL WARRANTY BASED ON THE DATE OF INSTALLATION.**

This warranty begins at the time the equipment is first connected for use, and is contingent upon the return of a signed owner's registration card.

This warranty does not require replacement of the entire unit. If the equipment does not perform properly, you should request service from the dealer that sold you the equipment. If you are not satisfied, you should notify our Customer Service Manager. If we are not able to arrange local servicing, you should send the defective part(s) (or, if you prefer, send the entire unit,) directly to the manufacturer, freight prepaid, with proof of purchase and a copy of this warranty. The defective part(s) (or entire unit) will either be repaired or new RainSoft part(s) furnished, for a nominal charge to cover labor, handling, packing and the increase, if any, in the retail price of the part(s) since the date of purchase. Genuine RainSoft parts must be used. Failure to use genuine RainSoft parts will void the warranty and certifications.

This warranty does not include labor charges, and does not cover installation, transportation, or any other claims or torts. Some states do not allow the exclusion or limitation of incidental or consequential damages, so parts of the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. You also have implied warranty rights. In the event of a problem with warranty service or performance, you may be able to go to a small claims court, a State court, or a Federal District Court.

This warranty is void if equipment is not installed and operated according to instructions. It does not apply to damage caused by abuse, accident, neglect, freezing, fire, or other abnormal conditions beyond the company's control. This warranty is void on any part from which the manufacturing date has been removed or made illegible.

Benefits will be provided by various types of RainSoft equipment when installed and operated according to the manufacturer's recommendations. Operational, maintenance and replacement requirements are essential for the product to perform as advertised. All claims are based on the best available information at the time of printing. Manufacturer makes no representations as to the suitability of this equipment for a particular application. Buyer relies entirely on the dealer's recommendations in the purchase of this equipment.

Independent RainSoft dealers may include, together with your RainSoft product, a product or component that is not manufactured by RainSoft or their parent company, Aquion Water Treatment Products, LLC. Any non-RainSoft product may be covered by the manufacturer of that product, and is not covered by the RainSoft warranty. Aquion Water Treatment Products, LLC does not warrant that your RainSoft product and the non-RainSoft product will perform properly when used together, and assume no liability therefore.

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# INSTALLER SPECIFICATION SHEET

*This sheet is to be filled out in its entirety at the time of installation.*

Dealer Name: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Installation Number: \_\_\_\_\_

Installation Date: \_\_\_\_\_

Model Number: \_\_\_\_\_

Serial Number: (See Label) \_\_\_\_\_

Hardness: \_\_\_\_\_ Iron: \_\_\_\_\_ TDS: \_\_\_\_\_

Line Pressure: \_\_\_\_\_ (psi)

Capacity of the Unit: \_\_\_\_\_ (grains)

Tank Size: Diameter \_\_\_\_\_ (inch) Height \_\_\_\_\_ (inch)

Flow Control Size: (Circle) 1.5 2.0 3.0 (gpm)

Time of Regeneration: \_\_\_\_\_ (Circle): AM PM

Starting Capacity Setting: (Circle) 33% 60% 70% 80%

Adjusted Brine Refill Time (1): \_\_\_\_\_ (minimum)

Adjusted Brine Make-up Time (2): \_\_\_\_\_ (minimum)

Adjusted Backwash Time (3): \_\_\_\_\_ (minimum)

Adjusted Brine/Slow Rinse Time (4): \_\_\_\_\_ (minimum)

Adjusted Fast Rinse Time (5): \_\_\_\_\_ (minimum)