

ChlorSimple™

TM



OPERATING INSTRUCTIONS

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Manual Version: 11/1/11 Made in the USA

INTRODUCTION

ChlorSimple is a semi-automated, salt water chlorine generation system specifically designed for above ground pools up to 20,000 gallons. ChlorSimple generates chlorine from a small amount of ordinary salt (Sodium Chloride, NaCl) dissolved in the pool water. The amount of salt added is very small in relation to the volume of the water in the pool. It's about 90% less concentration than ocean water and below the typical taste level of most humans.

The small addition of salt also benefits users by providing a softening effect on the water, leaving hair and skin feeling smoother and healthier than with traditional sanitizing products. Only 25 cups of salt per 1,000 gallons of water is all it takes for ChlorSimple to produce fresh, pure chlorine leaving your water clean and clear day after day.

ChlorSimple is uniquely designed with 7 underwater light shows to turn any evening into great fun and entertainment for all friends and family.

IMPORTANT SAFETY INSTRUCTION

- WARNING:** Use ChlorSimple only according to these instructions. Any modification or misuse of this product will void the warranty.
- WARNING:** Install ChlorSimple in accordance with all national and local electrical, plumbing, safety, and other applicable codes.
- WARNING:** Connect ChlorSimple to a GFCI (ground fault circuit interrupt) or GFI (ground fault interrupt) protected 110 VAC power source only.
- WARNING:** Protect the power supply, gray electrical box and outlet from exposure to the elements including direct sun, rain, snow, condensation, etc.
- WARNING:** DO NOT BURY ELECTRICAL CORDS, USE WITH AN EXTENSION CORD OR LEAVE GRAY ELECTRICAL BOX ON THE GROUND. INJURY MAY RESULT.
- WARNING:** DO NOT operate and remove ChlorSimple when using an automatic pool cleaner.
- WARNING:** DO NOT allow children to operate ChlorSimple unless under adult supervision.
- WARNING:** DO NOT allow children to plug/unplug the ChlorSimple from power supply.
- WARNING:** DO NOT insert objects into, or tamper with ChlorSimple's body in any way. Inserting metal objects into the body may cause damage and void the warranty.
- WARNING:** DO NOT operate ChlorSimple if damaged in any way.
- WARNING:** DO NOT pull on the cord to disconnect from power source. Do not allow the cord to rest on sharp edges or corners or to be walked upon. DO NOT drop on hard surfaces, throw, or otherwise rough handle ChlorSimple.
- WARNING:** DO NOT handle the unit during chlorine production (visible bubbling). Slight discomfort may be felt in cuts, sores, or sensitive skin areas due to chlorine concentration and the electrolysis process. Stop chlorine production by either removing ChlorSimple from the water by lifting the cord (do not grasp the housing), or by flipping the toggle switch at the bottom of the gray box to the off position.
- WARNING:** Unit must be disconnected from power source before performing any maintenance or troubleshooting operations.
- WARNING:** Disconnect, remove, and store or ChlorSimple indoors when pool has been winterized or drained.
- WARNING:** Leave the pool cover area above the cell open to allow gasses to escape.
- WARNING:** If unit is not working properly, or has been damaged in any way, contact technical support immediately at 1-530-205-4520.
- WARNING:** Measure water quality parameters and adjust if necessary prior to each pool use.
- WARNING:** Make sure all pool electrical components and power cords have been thoroughly inspected by a licensed electrician prior to using ChlorSimple.

WATER PREPARATION & MAINTENANCE

Use the test strips to measure water chemistry and verify that the water has been balanced properly. Replacing the filter is recommended but not required unless the pool was previously sanitized with a hydrogen peroxide system. The combination of hydrogen peroxide and chlorine may cause gum-like build up, water discoloration, and skin irritation.

It is important to properly maintain your pool for the health and safety of its users. Pools are unique in both size and usage patterns. ChlorSimple will significantly reduce the amount of pool maintenance required, but chemical check-ups including chlorine levels and PH are recommended before each use. Proper water maintenance will prolong the life of ChlorSimple and the pool. The following table describes generally accepted optimum water chemistry for above ground pools.

| PARAMETER | RECOMMENDED LEVEL |
|-----------------------------|-------------------|
| Free Chlorine | 1.0 to 3.0 PPM |
| PH Balance | 7.2 to 7.8 |
| Total Alkalinity | 80 to 150 PPM |
| Conditioner (Cyanuric Acid) | 10 to 50 PPM |
| Calcium Hardness | 200 to 400 PPM |

It is recommended that chlorine and PH levels are checked before each use, or at least once per week when not in use. Alkalinity, Calcium Hardness, and Salt Concentration should be checked at least once per month. It is recommended that the pool is manually shocked after each use. Always remember to leave the pool circulating for several hours before retesting. Phosphates in the pool water will increase the demand for chlorine and will reduce the life expectancy of the generator. Remove Phosphates upon start up and each month there after. Phosphate Remover can be purchased at many local Pool & Pool supply store.

WARNING: Consistent chlorine levels above 5.0 PPM or consistent salt concentration levels above 5,000 PPM may lead to corrosion of metal components in the pool.

WARNING: Consistently low Calcium Hardness levels below 150 PPM may lead to pool equipment damage and failure. Make sure Calcium Hardness levels are within the recommended range above.

SALT REQUIREMENT

CHLORINE SALT - SODIUM CHLORIDE (NaCl): Raise Salt Level to 2,000 PPM (Parts Per Million). Approved salts include “pool salt” made for salt water chlorine generating systems, canning and pickling salt from your local market, and some water softener salts that are 99% pure sodium chloride or better. Some high-end, mineral enriched salts can be used but require higher quantities to achieve 2,000 PPM sodium chloride salt level. These approved salts are generally available at pool & pool supply stores, home improvement centers and On-Line stores in a variety of sizes. *Never use rock salt or salts that have more than 1% “anti-caking agents”, “yellow prussiate of soda”, or “sodium ferrocyanide”. These compounds may cause surface staining.* Please use chart below.

Chart is Based on 1000 Gallons or 3790 Liters of Pool Water

| SALT TYPE | POUNDS | CUPS |
|---|--------|------|
| 99% Pure Sodium Chloride (NaCl) - Water Softener & Other Coarse Grain Salts | 15 | 25 |

The amount of salt to add and dissolve is dependent upon the size of the above ground pool. Determine the volume of water in gallons or liters by checking the pool owner’s manual or use any internet volume calculator.

99% Pure Sodium Chloride (NaCl) Coarse Grain Example For a 7,500 Gallon Pool: Divide 7,500 Gal by 1000 Gallons then multiply answer by 25 Cups. ($7500 / 1000 = 7.5 \times 25 = 187.5$ Cups)

99% Pure Sodium Chloride (NaCl) Coarse Grain Example For a 7,500 Gallon Pool: Divide 7,500 Gal by 1000 Gallons then multiply answer by 15 Pounds. ($7500 / 1000 = 7.5 \times 15 = 112.5$ Pounds)

Simply pour the recommended amount of salt directly into the pool skimmer with the pool pump on. Warmer water will aid in dissolving the salt faster.

WARNING: Do not turn ChlorSimple on until all the salt has fully dissolved.

SALT LEVEL INDICATOR

ChlorSimple will indicate if the salt level is within the recommended range listed above. ChlorSimple will indicate proper salt levels by showing solid **BLUE** lights while producing chlorine.

Solid **GREEN** lights while producing chlorine: **Salt Level High (It will make more chlorine)**

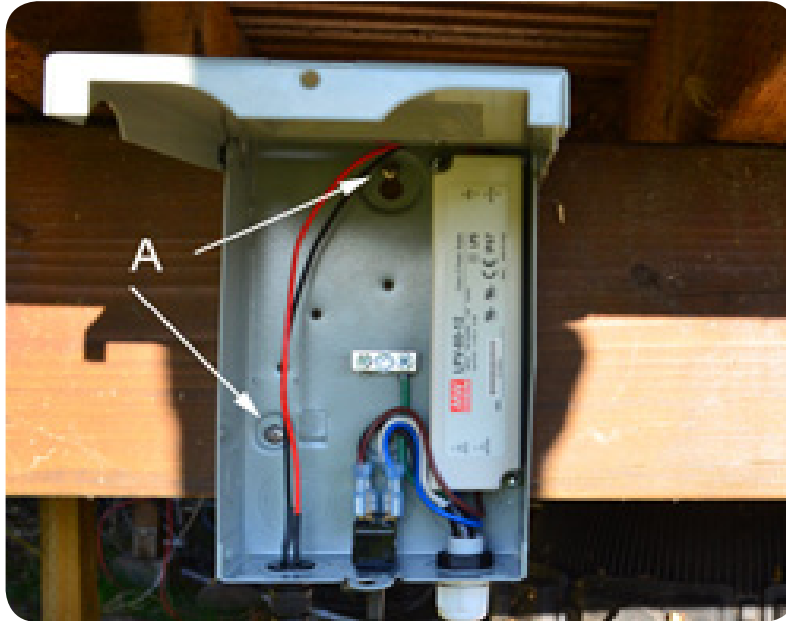
Solid **BLUE** lights while producing chlorine: **Salt Level Within Normal Range**

Solid **RED** lights while producing chlorine: **Salt Level Low**

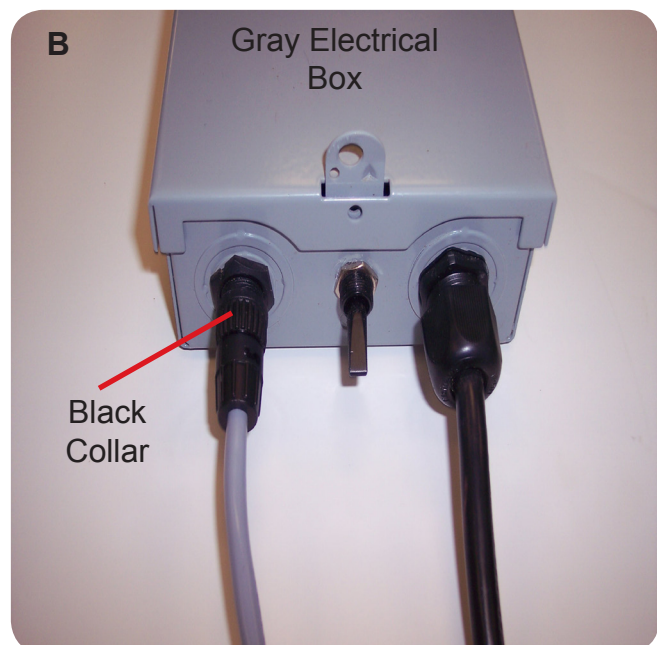
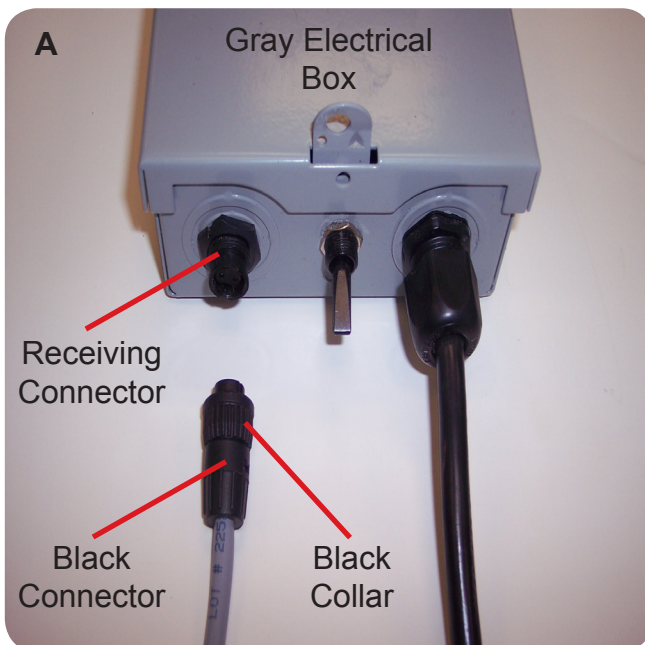
IMPORTANT: It is important to occasionally check that the lights are indicating proper salt level. Always use Salt Test Strips to check the salt level and adjust the water according to the Test Strips. If Test Strips Show High: Remove ChlorSimple or Lower the power level and allow chlorine to dissipate. **DO NOT OVER CHLORINATE.** Re-test and adjust as necessary. If Test Strips Show Too Low: Add salt. Re-Test and adjust as necessary.

PRODUCT INSTALLATION

1. Install the Gray Electrical box to a wooden post using the provided screws as shown in the diagram below as item A. Make sure the electrical box is at least 12" inches from the ground and mounted in a vertical position as shown in the picture below. The mounting location needs be within 20 feet of a 110 GFI Protected outlet for the electrical chord to reach the power source and within 10' from the pool to allow the product cord to drape into the pool. **WARNING: Do not install in Direct Sun Light.**

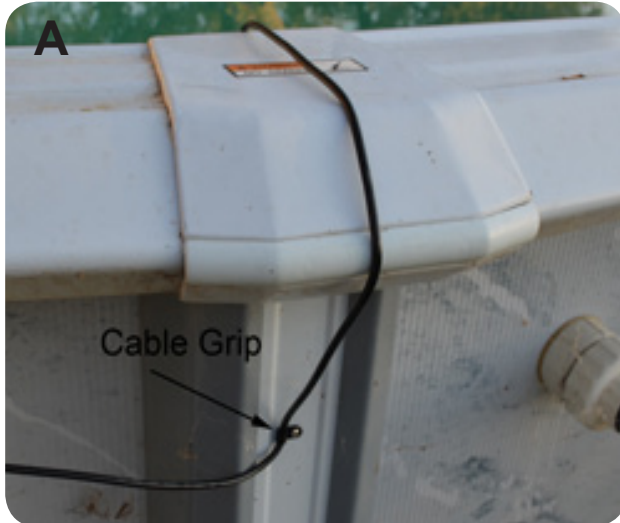


2. Connect the black watertight connector at the end of the product cable to the receiving black connector at the bottom of the gray electrical box as shown in the picture A below. Once connected, push the black collar towards the electrical box and turn the black collar clockwise until it clicks into place and tightens the connector as shown in picture B below.

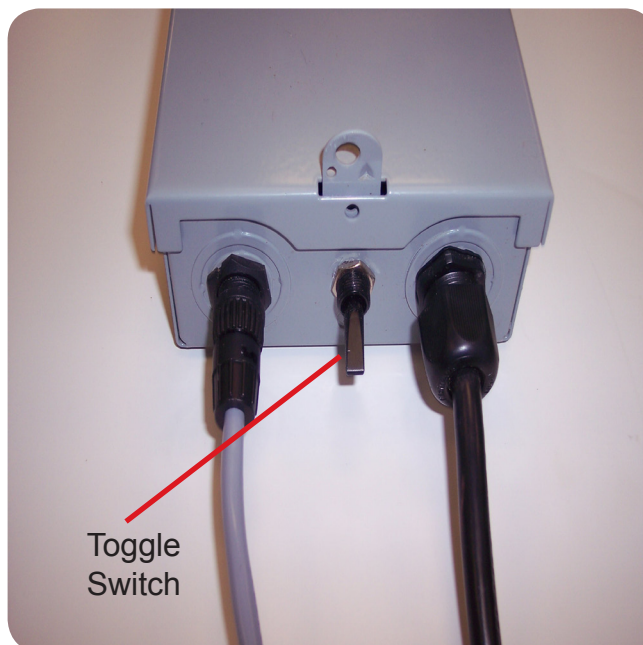


PRODUCT INSTALLATION CONTINUED

3. Metal Sided Pools (Picture A): Attach the supplied cable clip to the outside of the pool by first inserting the cable into the cable clip. Then use the screw to fasten the cable clip to any point near the pool's edge that would allow ChlorSimple to vertically hang not more than 3 feet deep in the water. Be careful not to drill through the pool liner. Vinyl Sided Pools (Picture B): Loop the cell cord around Outlet Tee a few times allowing enough cord length for the cell to vertically hang not more than 3 feet deep in the water.



4. Close the Electrical Box Cover and plug ChlorSimple into a 110 VAC wall outlet. **WARNING: A 110 VAC GFCI or GFI protected outlet is required. If an outlet needs to be installed, have a licensed electrician add a 110 VAC GFI protected outlet. Do not use an extension cord or leave the gray electrical box on the ground.**
5. Make sure pool water is at the appropriate salt level (See "Salt Requirement" Section). Flip the toggle switch to the on position (forward) and after a brief pause, the unit will begin chlorine production. **WARNING: Place a lock on the box to prevent children from opening the cover.**



PRODUCT OPERATION

ChlorSimple operates by simply turning the power off and on and then submerging ChlorSimple in the water on the appropriate light color indicated in the chart below. Please review the operational features below.

1. **TURNING POWER OFF:** If plugged into a power source, simply pull ChlorSimple out of the water to temporarily turn the power off (lights will be off). To turn power off longer term, simply unplug or shut off the toggle switch (flip switch backward) at the bottom of ChlorSimple's gray box or shut down the main power (breaker) at the power source.
2. **TURNING POWER ON:** Connect ChlorSimple to power source, flip the toggle switch on the gray box to the on position and immediately submerge ChlorSimple in the pool water. ChlorSimple is pre-set by the manufacturer to power level 3 (1 Row of **BLUE** Lights) . ChlorSimple will automatically begin chlorine production on power level 3.
3. **STANDBY MODE:** Standby Mode is indicated by a quick **GREEN** flash every 10 seconds when it is not producing chlorine (off cycle).
4. **CHANGING POWER LEVELS:** Please use the following steps to change power levels;
 - A. Turn ChlorSimple off by flipping the toggle switch at the bottom of the gray box to the off position.
 - B. Remove ChlorSimple from the water and allow the water to drain from the cell for approximately one minute.
 - C. Keep ChlorSimple out of the water while turning ChlorSimple back on by flipping the toggle switch to the on position.
 - D. After turning ChlorSimple on, the lights will indicate the current power level setting by referring to the table below followed by a pause (no lights on). ChlorSimple will then start the power level colors in the chart below.
 - E. The lights will cycle through the entire table below at a slow rate (approximately 5 seconds per light). When the lights are at the power level indicated by the appropriate light display, simply submerge ChlorSimple to set the new power level. ChlorSimple will then begin chlorine production at the new power level.

| Power Level | ChlorSimple Power Level |
|-------------|-------------------------------|
| | Light Indicators |
| 1 (Low) | 1 Row of RED Lights |
| 2 | 2 Rows of RED Lights |
| 3 (Medium) | 1 Row of BLUE Lights |
| 4 | 2 Rows of BLUE Lights |
| 5 | 1 Rows of GREEN Lights |
| 6 (High) | 2 Rows of GREEN Lights |

EXAMPLE (Power Level 3 to Power Level 5): Turn off ChlorSimple and remove from the water allowing it drain for a minute. Turn ChlorSimple back on while keeping the unit out of the water. It will display 1 Row of **BLUE** Lights for 5 seconds indicating that it is currently set to power level 3. Then a 5 second pause (no lights on) followed by 1 Row **RED**, then 2 Rows **RED**, then 1 Row **BLUE**, then 2 Rows **BLUE**, then 1 Row **GREEN**, then 2 Rows **GREEN**, each lasting 5 seconds. When it displays 1 Row of **GREEN** Lights, simply submerge the unit in the water to set it power level 5. (See Table Above).

SELECTING THE RIGHT POWER LEVEL

Selecting the right power level requires some testing and adjustment. There are many factors that affect the sanitizing needs of a pool such as: Frequency of pool use, number of people, pool cover, conditioner level, pool temperature, last drain and refill, etc. However, after the testing and adjustment period, ChlorSimple will take care of your sanitation needs day after day. As a starting point, please program ChlorSimple and set the power level to the general recommendations shown in the chart below.

| Power Level | ChlorSimple |
|-------------|------------------|
| | Pool (Gallons) |
| 1 | Less than 2,500 |
| 2 | 2,500 to 5,000 |
| 3 | 5,000 to 10,000 |
| 4 | 10,000 to 15,000 |
| 5 or 6 | 15,000 and above |

Test the Chlorine Level with test strips after 1 to 2 days. If the chlorine level is LOW, increase the power level by one level. If the chlorine level is HIGH decrease the power level by one level. Wait a day or so after this initial adjustment, re-test and repeat as necessary until a consistent chlorine residual has been achieved. If the chlorine level is VERY high or VERY low, adjust by 2 levels, as needed.

IMPORTANT NOTE: If the chlorine level is zero 24 hours after installation, the initial chlorine demand on the pool may be above what ChlorSimple can produce to break away from zero. In this case, manually add chlorine or shock (according to the product label) to assist in the initial set-up.

If pool usage drops (vacation, winter, etc), it is important to re-set the power level down several levels. If usage significantly increases, (return from vacation, etc) it is important to adjust the power level up accordingly. Always retest and adjust the power level as needed.

LIGHT SHOW OPERATION

Use the following steps to begin a light show. ChlorSimple uses a "Tilt" feature as the switch to advance through each of the light shows. TILTING: Simple pull ChlorSimple out of the water holding it in a Vertical Upright position. Then "Tilt" ChlorSimple 90 degrees to a horizontal position and quickly back to the upright vertical position. Tilting will advance ChlorSimple through the light shows below.

1. Starting a light show can be done with ChlorSimple in or out of the water. If starting a light show out of the water, ChlorSimple will stop the chlorine generation process. If starting a light show in the water while ChlorSimple is producing chlorine, ChlorSimple will continue to produce chlorine.
2. In or out of the water, tilt ChlorSimple a single time to advance to Lights Off. Wait a few seconds and tilt ChlorSimple again to advance to the next light show, etc. Use the chart below to tilt to the light show of your choice, or simply experiment on your own. Each light show is programmed to last 30 minutes if left alone. If left alone for an entire light show, ChlorSimple will automatically resume the chlorine generation process.

EXAMPLE: Tilt ChlorSimple 7 times with a brief pause in between each tilt to start the Rainbow Temptation light show below.

1st Tilt: All Lights Off (All lights will be off for 30 Minutes)

2nd Tilt: Wild **White**, all LED's are solid **white**.

3rd Tilt: Brilliant **Aqua**, all LED's are solid **Aqua**.

4th Tilt: Awesome **Violet**, all LED's are solid **Violet**.

5th Tilt: Rainbow Delight, slowly fades from **Yellow, Orange, Red, Green, Aqua, Blue**.

6th Tilt: Rainbow Sensation, slowly fades from **Green, Aqua, Blue, Aqua, Green, Aqua**

7th Tilt: Rainbow Temptation, slowly fades from **Red, Pink, Violet, Blue, Violet, Pink**

8th Tilt: Temperature Display (**Red** = 100's, **Green** = 10's, **Blue** = 1's) Count flashes

TEMPERATURE DISPLAY

The 8th tilt advances ChlorSimple to the Temperature Display light show (Refer To Chart Above). When you have successfully advanced through 8 tilts, ChlorSimple will flash the current temperature; **Reds** = 100's, **Greens** = 10's, **Blues** = 1's.

Examples: 1 **red** flash and 4 **blue** would be 104°F

1 **red** flash with a brief delay followed by a **red** flash would be 100°F

9 **Green** flashes and 8 **Blue** flashes = 98°F and so on.

Note: Temperature display is considered a light show. The temperature will keep repeating for 30 minutes if left alone or simply tilt to the next light show of choice.

LIGHT SHOW DISPLAY BELOW



TROUBLE SHOOTING

It is always a good idea to revisit the user manual to make sure installation or maintenance steps were not overlooked before referring to the trouble shooting section.

| Problem | Possible Causes | Corrective Action |
|---|---|--|
| Solid Red Lights | Salt level very low | Add salt - use test strips |
| | Plates need cleaning | Soak the units plates in vinegar for 10 to 30 minutes |
| | Plates damaged | Unit needs to be replaced |
| Consistently Low Chlorine | Power level too low | Increase the power level |
| | Plates need cleaning | Soak the unit in Vinegar for 30 minutes |
| | Low salt level | Adjust the salt level as necessary - use test strips |
| | Large bather load | Additional chlorine or shock may be needed |
| | Just doesn't keep up | Remove organic material, such as leaves, etc. |
| | | Make sure the unit is at the lowest point in the pool |
| Clean the filter | | |
| | Remove Phosphates | |
| | Shock the water | |
| Consistently High Chlorine | Power level too high | Lower the power level |
| Plates Are Dirty With White Or Scale Build Up | Hard water, high calcium and minerals in water. | If cell plates are dirty, soak the unit in vinegar for 30 minutes. Also reduce calcium level in water. |

LIMITED WARRANTY

Models: This warranty applies to ChlorSimple models referenced as “System”.

ControlOMatic, Inc. Warrants the system to be free of all defects in material and workmanship for one (1) year from the original purchase date. The system includes the power supply unit, cable, electronics, and electrolytic generator for residential use only. The product must be installed properly and used in accordance with this manual and all applicable local codes and regulations. This warranty is not transferable.

In no event shall ControlOMatic, Inc. be liable for consequential damages for breach of this warranty. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply. The warranty does not cover any loss or damage to the product due to improper installation, product abuse, misuse, negligence, or improper maintenance of the system, pool or pool. The warranty does not cover any loss or damage to the pool, pool components, users, or anything outside the system due to system failure. Purchaser assume all responsibility for using the system.

This warranty does not apply to any costs, repairs, services, damages, claims or losses for all of the following: Service calls to correct the installation of the product, or to explain the usage of the system to the buyer, repairs necessitated by use other than normal home use, damage resulting from misuse, unintended use, unforeseen use, non pool or pool use, abuse, accidents, alterations, improper installation, or corrective work necessitated by repairs made by anyone other than an authorized service technician.

THE FOREGOING WARRANTIES ARE CONTINGENT ON THE PROPER USE OF THE SYSTEM IN ACCORDANCE WITH THESE INSTRUCTIONS AND SPECIFICATIONS AND SHALL NOT APPLY TO ANY SYSTEM THAT HAS BEEN REPAIRED OR MODIFIED BY PERSONS OTHER THAN THE MANUFACTURER.

THE EXPRESS WARRANTIES SET FORTH IN THIS AGREEMENT ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. MANUFACTURER HEREBY SPECIFICALLY DISCLAIMS ANY OTHER REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

IN NO EVENT WILL MANUFACTURER’S LIABILITY FOR ANY CLAIM, WHETHER IN CONTRACT, TORT OR UNDER ANY OTHER THEORY OF LIABILITY, EXCEED THE AMOUNT NECESSARY TO REPAIR OR REPLACE THE COVERED SYSTEM.

Damage to the system from improper water maintenance is not covered in this warranty.

Should any problem develop during the warranty period, go to: www.controlomatic.com to obtain the proper technical support phone number. You will need the serial number visible in the clear part of the system body. You may be required to return the defective component, and if necessary, the component will either be repaired or replaced.

PRODUCT REGISTRATION

Please fill out the information below and send to ControlOMatic to properly register your product. Or register your product on line at www.ControlOMatic.com.

First Name: _____

Last Name: _____

Address: _____

City: _____ State / Province: _____ Postal Code: _____

Phone: _____ E-Mail: _____

Please copy this section and forward a copy to

ControlOMatic, Inc.
13433 Lime Kiln Road
Grass Valley, CA 95949

Or Register At www.ControlOMatic.com

Product Model: _____ Serial Number: _____