

Owner's Manual

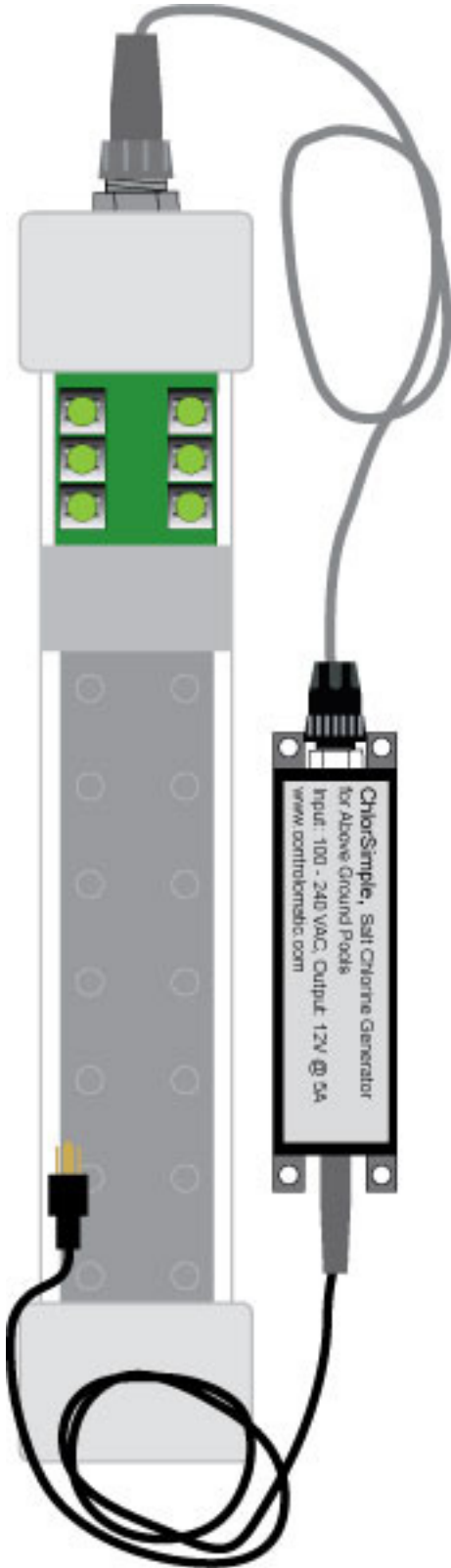
ColorChlorSimple

(With Built-In Pool Lighting)

&

ChlorSimple

(No Light Shows - Just Pure Chlorination)



***Above Ground Pool
Chlorine Generator***

110/220 VAC

Pools to 20,000 gallons

ControlOMatic, Inc.

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Manual Version: 8/10/10

Made in the USA

Patent Pending

TABLE OF CONTENTS

Table of Contents

TABLE OF CONTENTS	2
INTRODUCTION	2
STEP 1 - IMPORTANT SAFETY REVIEW	3
STEP 2 - WATER PREPARATION & MAINTENANCE	4
Conditioner	4
Pool Cover	4
STEP 3 - ADDING SALT	4
STEP 4 - ChlorSimple INSTALLATION	5
Installation Location	5
110 VAC Installation	5
220 VAC Installation	5
ChlorSimple Cell Installation	6
Turn ChlorSimple On	6
STEP 5 - CHANGING POWER LEVEL	6
Setting the Power Level	6
STEP 6 - TURNING POWER OFF	7
STEP 7 - SALT LEVEL INDICATOR	7
STEP 8 - Light Shows and Tilt Technology	7
SELF CLEANING - Reverse Polarity	9
Cleaning the Plates	9
TROUBLE SHOOTING	9
Winter or Cold Water	10
ChlorSimple Package	10
PRODUCT REGISTRATION	10
LIMITED WARRANTY	11

INTRODUCTION

Thank you for purchasing our salt water chlorine generator. We hope you will enjoy the many benefits of this new and innovative product.

ChlorSimple is a semi-automated, salt water chlorine/bromine generation system specifically designed for above ground pools up to 20000 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 concentration is about 90% less 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 product. Less than two teaspoons of salt per gallon of water is all it takes for ChlorSimple to produce fresh, pure chlorine leaving your water clean and clear day after day. Please completely review steps 1 through 8 and the important safety instructions before installation.

IMPORTANT: The ChlorSimple has no buttons or knobs and uses the ControlOMatic new Tilt Technology. The ChlorSimple must be vertical to produce chlorine, do not allow the ChlorSimple to lay flat on the pool floor.

STEP 1 - IMPORTANT SAFETY REVIEW

CAREFULLY READ AND FOLLOW ALL INSTRUCTIONS

- ◇ **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, safety, and other applicable codes.
- ◇ **WARNING:** Connect ChlorSimple to a GFCI (ground fault circuit interrupt) or GFI (ground fault interrupt) protected 110 or 220 VAC power source only.
- ◇ **WARNING:** Protect the power supply and outlet from exposure to the elements including direct sun, rain, snow, condensation, etc. Single and double outlet weather protective covers can be purchased at any local hardware store.
- ◇ **WARNING:** DO NOT USE WITH AN EXTENSION CORD. INJURY MAY RESULT.
- ◇ **WARNING:** DO NOT allow children to operate ChlorSimple.
- ◇ **WARNING:** DO NOT allow children to plug/unplug the unit's power supply.
- ◇ **WARNING:** DO NOT operate ChlorSimple if damaged in any way.
- ◇ **WARNING:** DO NOT pull on the cord to disconnect the Power Supply from power source. Do not allow the cord to rest on sharp edges or corners or to be walked upon. Do not drop, throw, or otherwise rough handle the ChlorSimple.
- ◇ **WARNING:** Unit must be disconnected from power source before performing any maintenance or troubleshooting operations.
- ◇ **General Usage Cautions**
- ◇ **CAUTION:** If unit is not working properly, or has been damaged in any way, contact technical support at 1-530-205-4520.
- ◇ **CAUTION:** Measure water quality parameters and adjust if necessary at least once per week.
- ◇ **CAUTION:** Make sure all pool electrical components and power cords have been thoroughly inspected by a licensed electrician prior to using the ChlorSimple.

STEP 2 - WATER PREPARATION & MAINTENANCE

If the following conditions in the pool exist - **The Water Must Be Drained & Replaced:**

- ◇ The water hasn't been replaced in over 3 years.
- ◇ The previous sanitizer was bromine, or hydrogen peroxide.

To ensure proper operation the pool should be balanced to the recommended levels indicated in this section before turning on the ChlorSimple. Use the test strips to measure the 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. Above ground pools are unique in both size and usage patterns. ChlorSimple will significantly reduce the amount of maintenance required, but chemical check-ups including chlorine levels and PH are recommended before each use. Proper water maintenance will prolong the life of your ChlorSimple. The following table generally describes optimum water chemistry for above ground pools.

PARAMETER	RECOMMENDED LEVEL
Free Chlorine	1.0 to 3.0 PPM
PH Balance	7.2 to 7.6
Total Alkalinity	80 to 120 PPM
Calcium Hardness	150 to 300 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 to shock the pool every couple weeks or after it has been used 10 times using either a chlorine based shock or chlorine free shock.

Conditioner

Chlorine generators make chlorine at a slow rate and keeping the conditioner lever between 10 and 30 is recommended to protect the chlorine against ultraviolet rays from the sun. Without conditioner the ChlorSimple will need to run at a higher power level.

Pool Cover

If the pool isn't covered some chlorine will be lost to the rays of the sun and the ChlorSimple will need to be kept at a higher power level.

STEP 3 - ADDING SALT

The amount of salt to add and dissolve is dependent upon the size of the pool and if there is any salt in the water to start. Determine the volume of water in gallons or liters by checking the pools owner's manual or use any internet volume calculator.

Simply pour the recommended amount of salt directly into the pool water or even the skimmer if it has a basket. The salt will dissolve faster if the pools circulation pump is on. If the water is cold it may take several hours for the salt to fully dissolve.

Sodium Chloride for Making Chlorine, 2000 PPM

Use only sodium chloride (NaCl) salt 99% pure or better. 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. These approved salts are generally available at pool & spa supply stores and home improvement centers in a 40 pound bags. **Never use rock salt or salts that have more than 1% “anti-caking agents”, “yellow prussiate of soda”, “sodium ferrocyanide” or iodine. These compounds may cause surface staining.**

NOTE: The amount of salt to add when starting with fresh water is approximately 1.5 Lbs per 100 gallons of water or 0.7 kg per 379 L of water to achieve 2,000 Parts Per Million.

Example For a 10,000 Gallon pool: Divide 10,000 Gallons by 100 Gallons then multiply the answer by 1.5 lbs. ($10,000 / 100 = 100 \times 1.5 = 150$ lbs)

Example For a 37,850 Liter pool: Divide 37,850 liters by 379 Liters then multiply the answer by 0.7 kg. ($37,850 / 379 = 3.5 \times 0.7 = 68$ Kg)

STEP 4 - ChlorSimple INSTALLATION

The ChlorSimple is equipped with a 110/220 VAC Auto-Sensing Power Supply allowing the ChlorSimple to be installed on almost any above ground pool. Please follow the installation steps below.

WARNING: Make sure the SPA is protected with a GFI safety circuit.

Installation Location

1. The power supply should not be installed in direct sunlight. The power supply will heat up when making chlorine and should be located where it will not have additional heating effects.
2. Some above ground pools have straps that go all around the pool. The power supply can be wedged in between the pool liner and one of these straps. The pool water on the liner will help to keep the power supply cool.
3. The power supply needs to be located at least 1 foot above the ground.
4. The power supply is rain proof, but if you have a location that will keep it dry that is preferred.
5. Some above ground pools have metal supports. Installing the supply into one of these supports will help to keep the power supply in the shade, the metal support will help to keep the power supply cool, and this will provide some protection against rain.
6. Do not use extension cords. This leads to a safety hazard as someone could place the cord in the water.
7. When producing chlorine the chlorine will be concentrated near the ChlorSimple. Locating the ChlorSimple near the water inlet to the pool will help to disperse the chlorine.

110 VAC Installation

Locate the power supply within 6 feet of an existing 110 VAC outlet near the pool and mount using the above guidelines. If the outlet isn't GFI protected then it needs to be switched to a GFI outlet before proceeding. GFI Outlets have a test and reset button on them and the pool pump should also be protected. When plugged in the GFI outlet should have a suitable rain protected cover for the cord to keep water out.

220 VAC Installation

Very few above ground pools use 220 VAC. If you do have 220 VAC then have a licensed electrician install the power supply. The end of the power cord will need to be cut off and wired into the existing 220 VAC circuit.

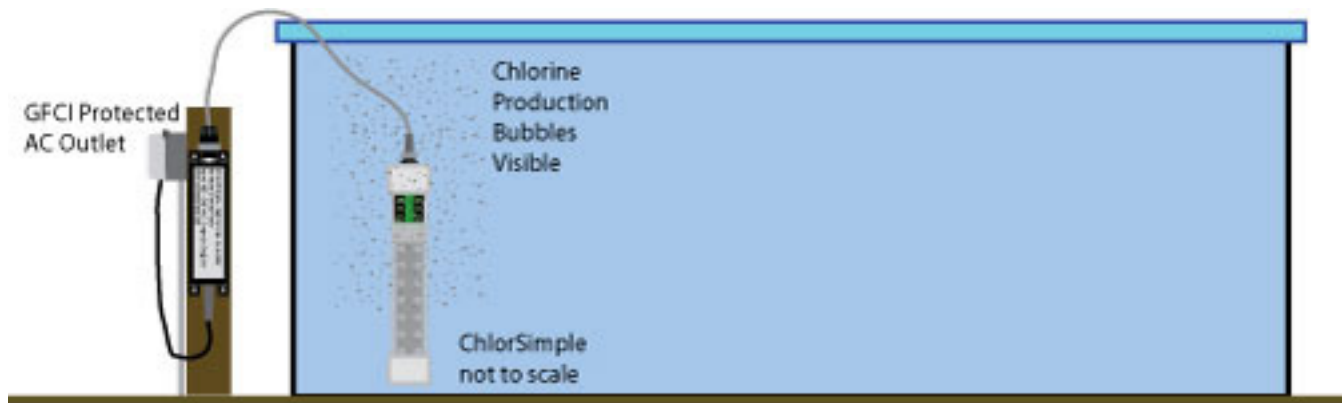
ChlorSimple Cell Installation

The ChlorSimple is a drape over the side chlorine generator and the installation is simple placing it in the water. No modification to the above ground pool is needed.

Once in the water, attach the cable grip to the side of the pool with a tie strap to hold the ChlorSimple in place.

Turn ChlorSimple On

If not on already plug in the ChlorSimple to turn it on. There is no on/off switch. If the salt has dissolved in the water you will see bubbles leaving the cell.



STEP 5 - CHANGING POWER LEVEL

Selecting the proper power level usually requires some trial and adjustment. There are many external factors that affect the sanitizing needs of a pool. How often the pool is used, conditioner level, if it is covered, climate and so on.

However, after the trial and adjustment period, the ChlorSimple will take care of your sanitation needs day after day. After properly installing, please refer to the chart below and program the ChlorSimple power level according to the next section and submerge in the water. If your pool isn't covered and has no conditioner (chlorine stabilizer) increase the power level by 1 in the table.

Power Level	Above Ground Pool Gallons	Turn On Lights
1	Less than 3000	3 LED Red
2	3000 to 6000	6 LED Red
3	6000 to 9000	3 LED Blue
4	9000 to 1200	6 LED Blue
5	12000 to 15000	3 LED Green
6	15000 and up	6 LED Green

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

If the chlorine level is zero 24 hours after installation, the initial chlorine demand on the pool may be above what the ChlorSimple can produce to break away from zero. In this case, either turn up the power level for 1 day or manually add chlorine or shock (according to the product label) to assist in the initial set-up.

Setting the Power Level

Please use the following procedure to set the power level:

1. Turn ChlorSimple off

2. Remove ChlorSimple cell from the water and let the water drain out of the cell for 1 minute.
3. Keep the cell out of the water and turn the ChlorSimple on.
4. The lights will at first display the current power level per the above table.
5. Then the lights will cycle 1 time through the lights in the above table at a very slow rate (5 seconds per power level). When the lights are at the power level you want, simply put it back in the water to set the new power level.

Note: If the salt hasn't dissolved in the water or is too low of a level the ChlorSimple will not be able to tell if it is in the water and you will not be able to change the level.

STEP 6 - TURNING POWER OFF

The ChlorSimple doesn't have an on/off switch. To turn it off simply unplug the power supply cable from the power supply or unplug the power supply cable from the wall outlet (preferred).

STEP 7 - SALT LEVEL INDICATOR

Then in the chlorine generation mode the ChlorSimple indicates the salt level by the color of the lights.

Red: Salt may be low

Blue: Salt is OK

Green: Salt may be high

IMPORTANT: It is important to occasionally check to make sure the lights are indicating the proper salt level. Always use Salt Test Strips to check the salt level before adding salt. The ChlorSimple salt indicator is only an indicator and not an actual salt level measurement.

If Test Strips Show Too High: remove some water from the pool and replace with fresh water. Re-test and adjust as necessary. If Test Strips Show Too Low: Add salt. Re-Test and adjust as necessary.

STEP 8 - Light Shows and Tilt Technology

The ChlorSimple has 6 lighting modes that can be activated by tilting the ChlorSimple from the straight down vertical position to straight up. While holding the ChlorSimple straight up (or anywhere between horizontal to straight up) it will continue to cycle through all 6 lighting modes until put back to the straight down position. When a lighting mode is selected, it will last 1 hour and chlorine production will be off. After the 1 hour the ChlorSimple will go back to normal operation.

1st Light Mode: Lights Off

2nd Light Mode: White

3rd Light Mode: Aqua

4th Light Mode: Purple

5th Light Mode: Light cycles: yellow, orange, red green aqua and blue

6th Light Mode: Light cycles: green, aqua, blue

7th Light Mode: Light cycles: red, pink, violet, blue

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

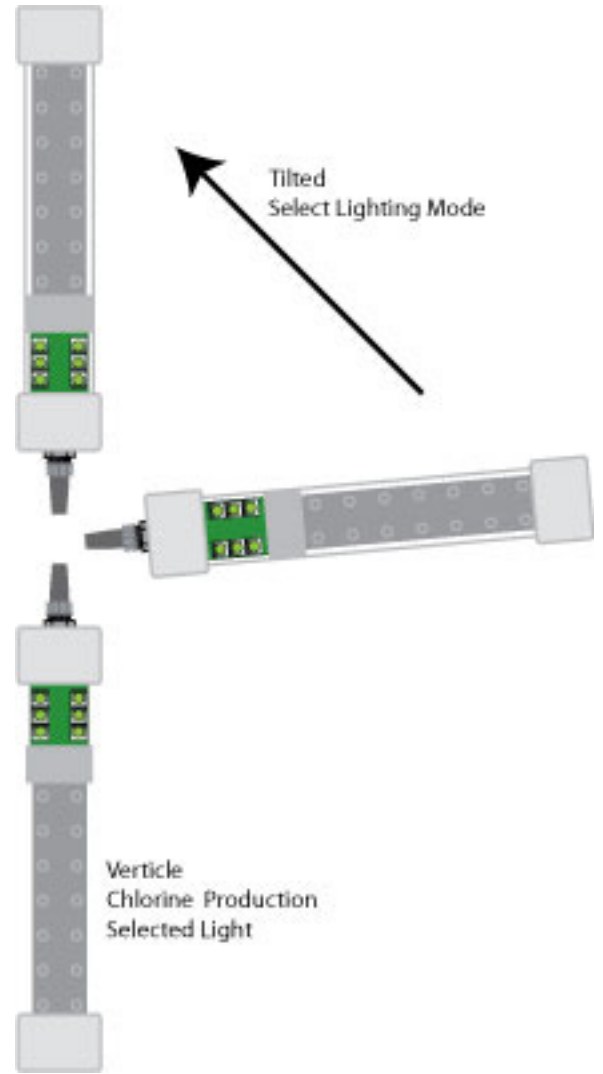
TEMPERATURE DISPLAY

The temperature display is more accurate when the ChlorSimple has been in the non producing chlorine mode as the ChlorSimple will heat up when making chlorine but will give a temperature reading within a couple degrees of the water temperature.

Reds = 100's, Greens = 10's, Blues = 1's.

Examples: 0 red flash, 7 green and 4 blue would be 74°F

1 red flash with a delay followed by a red flash would be 100°F
9 Green flashes and 8 Blue flashes = 98°F and so on.



SELF CLEANING - Reverse Polarity

The ChlorSimple has self cleaning capability and will automatically reverse the polarity on the titanium plates to keep them clean. Periodically inspect the plates by looking through the clear cell body and if there is buildup between the plates they may need cleaning. It is normal for a small amount of buildup. If the hardness of the water is very high the self cleaning feature may not be enough to keep the plates clean. If they need cleaning there will typically be a buildup of a white substance (calcium).

Cleaning the Plates

1. Unplug the ChlorSimple from the power supply.
2. Submerge the cell in a tall cup of pure white vinegar (or mild acid) for approximately 15 to 30 minutes. Rinse the plates off. You can use a piece of wood (toothpick) to carefully scrape off any buildup prior to placing in the mild acid.
3. Repeat until the plates are clean.

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
Consistently Low Chlorine	Power level too low	Increase the power level
	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 spa
Clean the filter		
	Shock the water	
Consistently High Chlorine	Power level too high	Lower the power level

Winter or Cold Water

Chlorine generators should not be operated when the water temperature is below 60 degrees Fahrenheit. At these lower water temperatures the plate life will degrade faster and less chlorine will be generated. When the water temperature will be below 60 degrees for an extended period of time the ChlorSimple should be removed from the pool and stored.

ChlorSimple Package

1. ChlorSimple Cell with 15 foot cable
2. ChlorSimple 12 volt dc power supply
3. Pool side sticky tape cable tie
4. Tie strap
5. 4 stainless steel wood screws
6. Salt and chemical test strips (10 test strips each)
7. Owners manual

PRODUCT REGISTRATION

Please fill out the information below and send to ControlOMatic to properly register your product. Or register your product on line at <http://www.colorchlor.com/owners/registration>. If your ChlorSimple was shipped by ControlOMatic it has already been registered.

First Name: _____

Last Name: _____

Address: _____

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

Phone: _____ E-Mail: _____

Product Model: ChlorSimple _____ Serial Number: _____

Please copy this section and forward a copy to

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

LIMITED WARRANTY

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

ControlOMatic, Inc. Warrants the system to be free of all defects in material and workmanship for one (2) years 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 spa. The warranty does not cover any loss or damage to the spa, spa 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 spa 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.

