

# CLEARWATER™

## POOL SYSTEMS

*The Healthy Alternative in Pool Maintenance*

### MineralPURE®

*Mineral Ionization*



### OzoneMAX™

*Vacuum-ultraviolet Ozone System*



### pH PURE™

*CO<sub>2</sub> Injection for pH Control*



# INFORMATION GUIDE





*The Healthy Alternative in Pool Maintenance*



## The Closest System Possible to a Chemical & Maintenance Free Pool

Most swimming pool owners enjoy their pool, but nobody likes the experience of taking care of it. The time and maintenance required is a treacherous chore. Unless you're a chemist, balancing the pool can be tricky.

Swimming in chemicals like chlorine and muriatic acid is certainly not enjoyable. To make matters worse, the price of these chemicals has skyrocketed to levels beyond belief.

Chlorine is a strong bleach and is dangerous. Muriatic acid is volatile and corrosive. Purchasing and storing these chemicals is another issue.

**Clearwater Pool Systems** has just released a complete package that will enable you to truly enjoy your pool!





# Our System



**MineralPURE®**  
*Mineral Ionization*



**OzoneMAX™**  
*Vacuum-ultraviolet Ozone System*



**pH PURE™**  
*CO<sub>2</sub> Injection for pH Control*

**There are three components that make up our phenomenal system – each with their own unique technology.**

*They can be purchased “a` la carte” or as a complete package:*

- **MineralPURE** – A mineral-based ionization system that lowers chlorine use up to 90%
- **OzoneMAX** – A VUV Ozone system that oxidizes the water and compliments the **MineralPURE**
- **pH PURE** – Injects CO<sub>2</sub> (carbon dioxide) into the water to balance the pool with virtually no chemicals





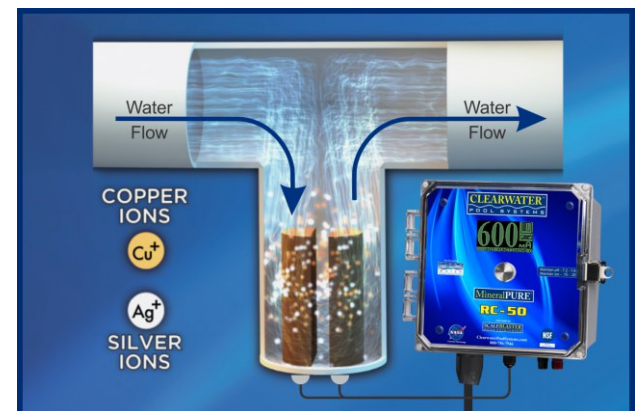
For nearly 100 years, chlorine has been perceived as the only way to disinfect water in swimming pools and spas. Yet, this method commonly yields red irritated eyes, dry and brittle hair, itchy skin and bleached out swimsuits.



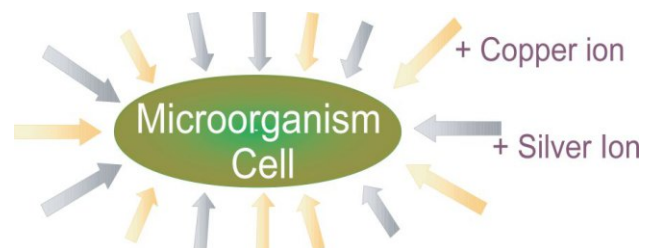
**Chlorine is a strong bleach and is dangerous.**

**The bottom line is, nobody likes CHLORINE!**

**MineralPURE** is an alternative purification system that uses two of nature's most precious minerals to help purify the water while safely reducing chlorine use in a pool by up to 90%. The system consists of a computerized control box and a pair of scientifically designed electrodes composed of copper or copper/silver. As water passes through a specially designed flow cell chamber that houses the electrodes, a low voltage alternating DC charge is sent to them, releasing ions into the water. They flocculate or form masses with algae and bacteria and are then removed by the existing filtering equipment.



- **The Copper ions help control algae and bacteria.**
- **The Silver ions help control viruses.**



## From Movie Stars to Waterparks

From movie-star dolphins to world-famous waterparks, our unique system has allowed operators to safely reduce their chlorine use dramatically for nearly 35 years.



Winter the Dolphin\*

Now, you can truly enjoy swimming without that chlorine residue on you.

The savings in maintenance and chemical expenses alone will pay for the system itself in no time at all! Enjoy amazing water clarity.

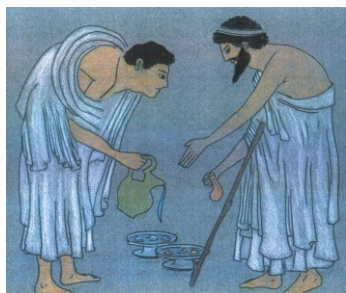


**Wet 'n' Wild Las Vegas**

\*Dolphin Tale © Alcon Film LLC/Warner Brothers



It is a well-documented fact that copper & silver ions will help control algae, bacteria and viruses.



The ancient *Greeks* were the first to discover the sanitizing powers of **copper**.



The *Egyptians* kept their water in **silver** containers to prevent contamination.



Early American pioneers put **copper** and **silver** coins into wooden water casks to provide them safe drinking water. The agitation caused the coins to discharge ions into the water to control bacteria and viruses.



During the Plague-ridden Middle Ages, mothers knew to place a **silver** spoon in an infant's mouth to ward off disease.

## NASA Connection



Licensed Technology

In 1967, NASA capitalized on this knowledge and developed an ionization system to go aboard the Apollo flights. They did not want to bring chlorine up into space.

In 1989, NASA granted Clearwater a license to commercialize from this technology.

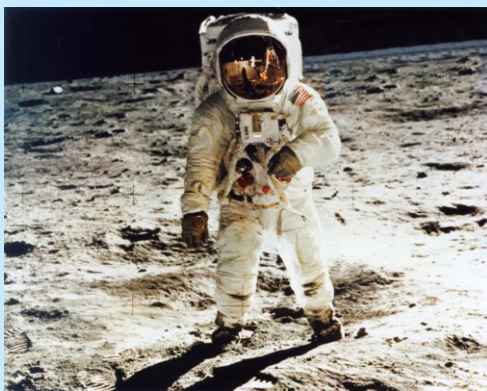
## NASA Publication



## Company Spokesman Buzz Aldrin



In the early 1990s, **Buzz Aldrin** was a company spokesman for **Clearwater Enviro Technologies**.



**Buzz Aldrin's** historic walk on the moon, July 20, 1969



In 1994, *Clearwater* was featured in *Spinoff*, a NASA publication. The story featured our equipment on "Winter the Dolphin" from the Clearwater Marine Aquarium.



All commercial ionizers are NSF approved along with the residential model RC-50





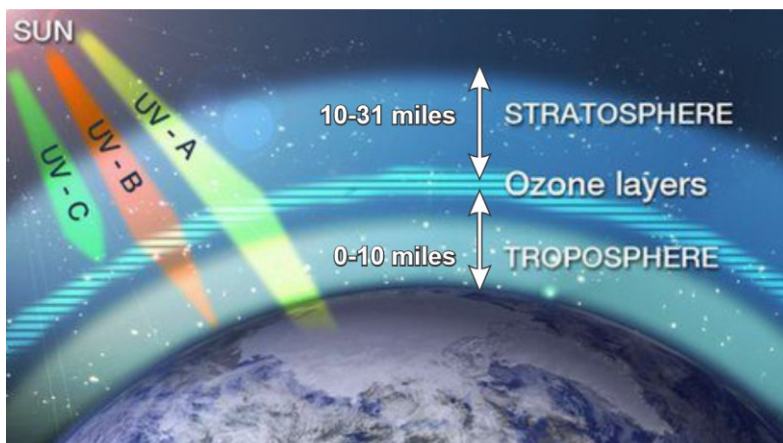
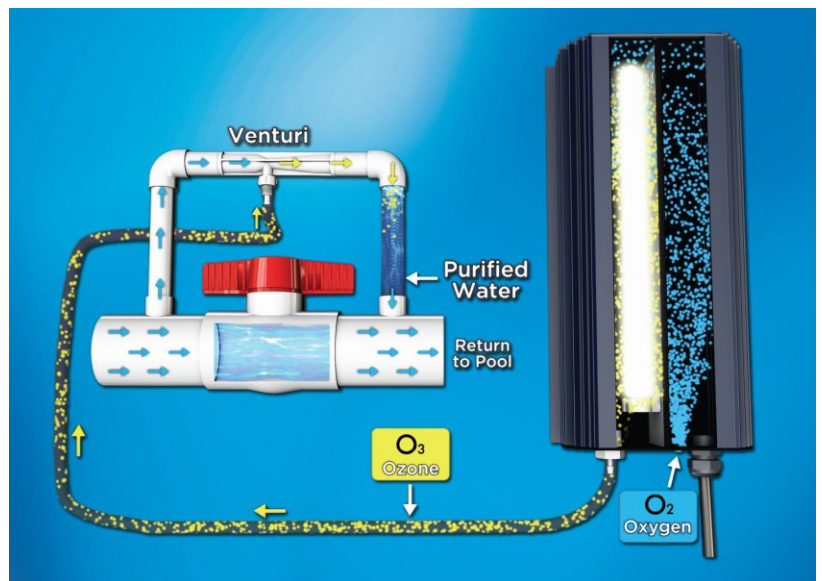
## Compliments MineralPURE

**OzoneMAX** is an ultraviolet ozone system that when added to the pool can help you safely lower chlorine use up to 50%. When combined with our **MineralPURE** ionizer, chlorine reduction can reach as high as 95%. You will also be amazed at the water clarity.

The **MineralPURE** unit does a great job of reducing chlorine use but does not oxidize the water of dead matter. The **OzoneMAX** unit greatly enhances that, requiring virtually no maintenance whatsoever. Every 2-6 years, the UV bulb will need to be replaced and are readily available for a low replacement cost.

## OzoneMAX comes with complete venturi manifold

The **OzoneMAX** unit includes a side stream venturi manifold that injects the ozone into the water. As ambient air enters the ozone generator, the venturi creates a suction-effect to pull air past the UV bulb, creating O<sub>3</sub> – ozone. The ozone is then safely injected into the water flow and the “instant purification” takes place at that time. Within seconds, the ozone is dissipated by the time it returns to the pool.



## A Natural Occurrence

Ozone is formed naturally throughout the Earth's atmosphere when sunlight reacts with oxygen molecules and is also produced during lightning storms. The **OzoneMAX** unit employs a light source that generates a narrow-band ultraviolet light. Our sun sustains the ozone layer in the stratosphere of Earth, and a similar occurrence takes place in our weather-proof aluminum enclosure.





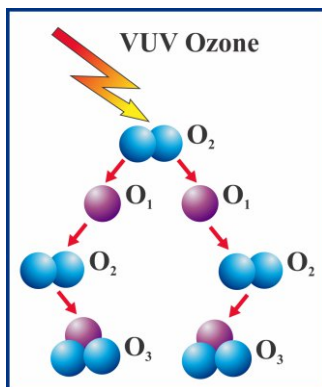
## OZONE BENEFITS

- Compliments the MineralPURE ionizer perfectly
- Excellent oxidizer
- Improves water clarity greatly
- Helps kill bacteria & viruses
- Minimal maintenance required

### OzoneMAX – UV Ozone Generator

Ozone is one of the most powerful oxidizers on Earth. It is 55 times more powerful than chlorine and reacts 3,000 times faster. It greatly improves water clarity and is effective in controlling cryptosporidium and E. coli while eliminating harmful chloramines. It will not irritate eyes or dry out your skin.

When combining this with mineral ionization, you have the most effective system at reducing chlorine use while helping kill harmful microorganisms.



### How Ozone is Made

Ozone is produced by splitting oxygen molecules with an ultraviolet lamp. This produces a pair of unstable atoms ( $O_1$ ) that will combine with normal oxygen molecules ( $O_2$ ) and forms ozone ( $O_3$ ), which is injected into the water by a venturi manifold - included with the system.

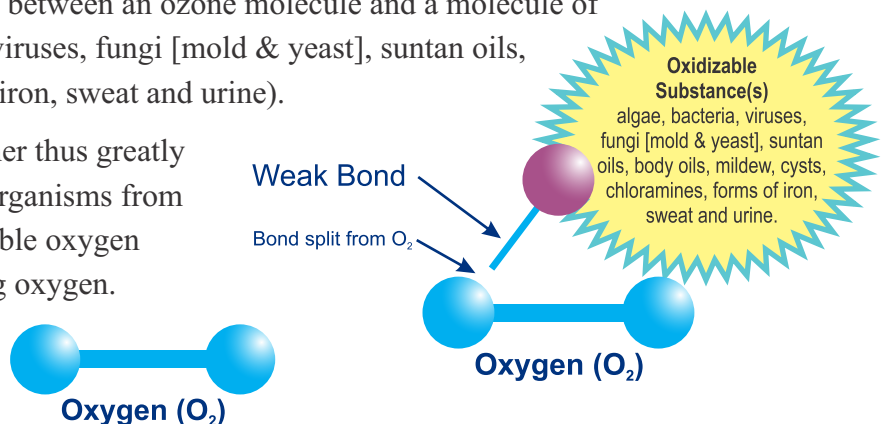


### How Ozone Performs

An oxidation reaction occurs upon any collision between an ozone molecule and a molecule of an oxidizable substance(s) (i.e. algae, bacteria, viruses, fungi [mold & yeast], suntan oils, body oils, mildew, cysts, chloramines, forms of iron, sweat and urine).

These oxidized compounds then “clump” together thus greatly enhancing your filter’s ability to capture these organisms from your water. Once the ozone loses the third unstable oxygen molecule, it simply reverts back to life breathing oxygen.

The weak bond splits off leaving oxygen as a by-product.



## Balancing a Pool Has Never been Easier

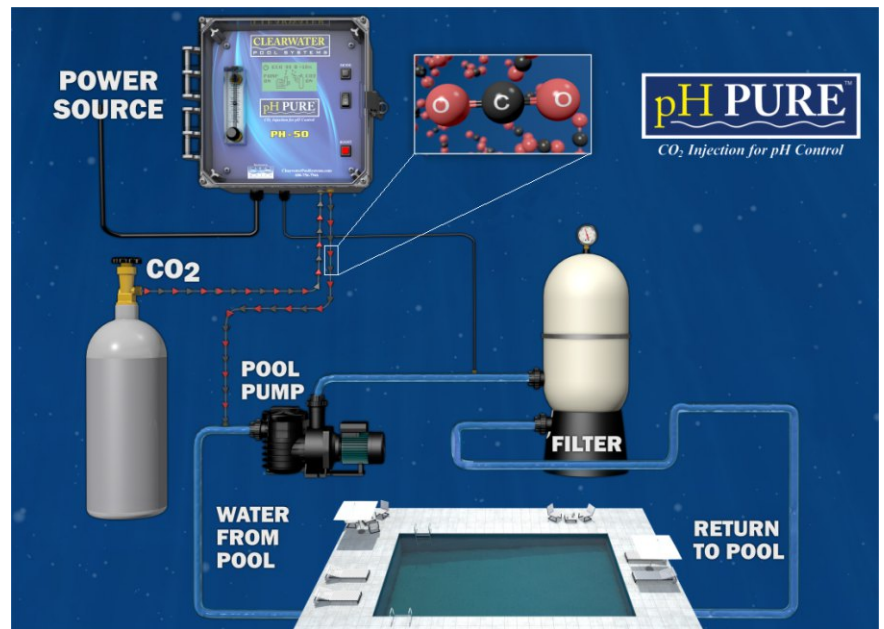


### The pH PURE System

The **pH PURE** system consists of a control box and a CO<sub>2</sub> tank that is installed next to your existing pool equipment. Trace amounts of safe and natural CO<sub>2</sub> (carbon dioxide) are released into your pool's water in time-controlled amounts throughout the day with our computerized control system. Taking care of your pool could never be easier! Adding CO<sub>2</sub> to your water produces the same interaction that takes place when you add muriatic acid.

### Eliminate using Muriatic Acid for pH Control

This system never requires the use of muriatic acid to control the pH. This system balances your pool's water 24-hours a day. At the same time, your total alkalinity will remain relatively steady, eliminating the regular use of sodium bicarbonate (baking soda) to raise it. This is one of the most remarkable products we've ever produced!



*The pH PURE unit releases CO<sub>2</sub> into the pool's water to balance the pool*

- **Compatible with all sanitizing systems including salt-chlorine generators**
- **Balances the pH without using muriatic acid and constant monitoring**
- **Quick payback period – 1/5th the price to operate vs. using muriatic acid**
- **Totally safe for swimmers, your pool, and the environment**
- **Handles any size residential pool up to 50,000 gallons**
- **Easy installation in under an hour with no special tools required**





Wet N Wild®, Las Vegas, Nevada

## Technology Used on Commercial Pools

CO<sub>2</sub> injection has been used safely and economically on commercial pools for decades and is now available for residential pools.

The savings in money versus using chemicals like muriatic acid and sodium bicarbonate will quickly pay for the **pH PURE** unit in no time at all. The skyrocketing prices of these chemicals are unreasonable. You will be able to cut back on hauling, storing, and swimming in those hazardous chemicals.



## What is Carbon Dioxide?

Carbon Dioxide (CO<sub>2</sub>) is a common and essential compound found in nature. Humans and animals release CO<sub>2</sub> every time they exhale from breathing.

Plants require it in the process of photosynthesis. CO<sub>2</sub> is used to give soft drinks their fizz and is used with kegerators to keep beer carbonated.

## Acquiring CO<sub>2</sub> Cylinders

When purchasing the **pH PURE** System, you will need to either rent or purchase one or more CO<sub>2</sub> cylinders depending on the size of your pool and the length of the pool season. When ordering **pH PURE**, you will need to specify the desired regulator you will need - either *a single, double, or triple tank regulator*.

Acquiring and handling a CO<sub>2</sub> tank is very similar to that of a propane tank. They are readily available everywhere in the USA.

A simple Google search of “CO<sub>2</sub> Tanks Near Me” will guide you in the right direction. We strongly suggest you rent either one or two 50-pound tanks depending on pool size. You can also purchase your own tanks and get them filled yourself if you elect to.

Airgas is a top supplier of CO<sub>2</sub> tanks in the USA with 900 locations. They also supply many independent stores in their areas with low-cost delivery available.

Go to **ClearwaterPoolSystems.com** for full details or contact us at 1-800-756-7946 (SWIM)





# Select MineralPURE Installations

BELLAGIO®  
LAS VEGAS

Bellagio Conservatory



Wet'n'Wild  
Las Vegas



Federated States of Micronesia  
Olympic Swimming Pool



Six Flags®  
FIESTA TEXAS



Northfield Swimming Pool  
United Kingdom



Wet'n'Wild  
Hawaii





# Select MineralPURE Installations



Santa Cruz de Tenerife, Spain



Tiger Moat



Sea Lion Tank

**El Rollo Water Park**  
Mexico



**Church of Christ - Cordell, Oklahoma**  
1,000 gallon baptismal tub



**University of Texas, Littlefield Fountain**  
Austin, TX





# Performance Comparison

**MineralPURE®**

*Mineral Ionization*

**OzoneMAX™**

*Vacuum-ultraviolet Ozone System*



**MineralPURE®  
+ OzoneMAX**



**Salt  
Generator**



**Chlorine**

HELPS CONTROL ALGAE?  
HELPS CONTROL BACTERIA?  
HELPS CONTROL VIRUSES?

YES  
YES  
YES

YES  
YES  
NO

YES  
YES  
NO

CORROSIVE TO EQUIPMENT?  
EVAPORATES?  
LINKED TO CANCER?  
ABSORBS THROUGH SKIN?  
FORMS CARCINOGENIC THM'S?  
REQUIRES USE OF CYANURIC ACID?  
HARMFUL TO THE ENVIRONMENT?  
COSTS \$100'S A YEAR TO OPERATE?  
HARMFUL TO EYES?  
IRRITATING TO SKIN?  
BLEACHES HAIR?  
EXPLOSIVE, UNSAFE TO HANDLE?  
DANGEROUS TO STORE?  
FADES SWIM SUITS?  
UNPLEASANT TO SMELL?  
CREATES CHLORAMINES?

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# Performance Comparison



*CO<sub>2</sub> Injection for pH Control*



**pH PURE**

**Traditional Methods**

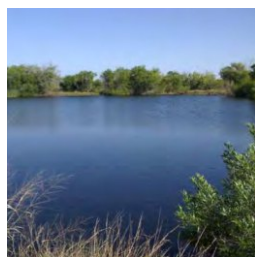
REQUIRES DANGEROUS HANDLING OF CHEMICALS?	NO	YES
REQUIRES CONSTANT MONITORING TO KEEP BALANCED?	NO	YES
REQUIRES MURIATIC ACID USE TO BALANCE THE PH?	NO	YES
REQUIRES BAKING SODA TO BALANCE THE TOTAL ALKALINITY?	NO	YES
KEEPS PH RELATIVELY STEADY ALL THE TIME?	YES	NO
KEEPS TOTAL ALKALINITY RELATIVELY STEADY ALL THE TIME?	YES	NO
EXPENSIVE TO OPERATE?	NO	YES
REQUIRES DANGEROUS CHEMICAL STORAGE?	NO	YES
IS IT DIFFICULT TO KEEP THE POOL BALANCED PROPERLY?	NO	YES
ALLOWS CHLORINE USE TO BE MOST EFFICIENT?	YES	NO
IDEAL FOR POOL BUILDERS DURING CURING TIME?	YES	NO

## Alternative Applications of the Clearwater Pool System

The Clearwater Pool System isn't only for pools. There are several applications where it can be installed, including:



Cooling Towers



Lakes, Ponds & Quarries



Fountains

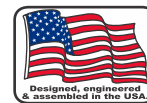


Marine Inhabitant Aquariums



Cisterns

# MineralPURE & pH PURE



## MineralPURE®

## Residential Pools and Spas



### RC-50 – Platinum Deluxe Ionization System

- Our most sophisticated ionizer ever built
- Handles up to 50,000 gallon pools
- Full LCD digital readout display panel
- Includes test kit & electrode
- Built-in ScaleBlaster for limescale control
- 5 - year warranty NSF, UL listed

**up to 50,000 gallon pools**



### R-40 – Economical Pool Ionization System

- Economically-priced ionization system
- Handles up to 40,000 gallon pools
- 6 - settings
- Includes test kit & electrode
- 5 - year warranty

**up to 40,000 gallon pools**



### SPA-1R – Spa Ionization System

- Premium spa ionization system
- Handles up to 1,000 gallon spas
- Alternating electrode indicators
- Includes test kit & electrode
- 5 - year warranty

**up to 1,000 gallon spas**

## pH PURE™

## Residential Pools



### PH-50 – CO<sub>2</sub> Injection for pH Control

- Injects small amounts of safe Carbon Dioxide (CO<sub>2</sub>)
- Virtually eliminate muriatic acid use
- Stabilizes pH & Total Alkalinity without chemicals
- For a healthier and safer environment
- Quick payback period with a "Peace of Mind"
- 3 - year warranty

**up to 50,000 gallon pools**



# OzoneMAX & Commercial MineralPURE



## OzoneMAX™

## Residential Pools and Spas



### OZ-50 – Pool Ozone System

- Vacuum Ultraviolet Ozone System
- Handles up to 50,000 gallon pools
- Heavy duty metal enclosure
- Includes Venturi Manifold Assembly
- Amazing water clarity
- Competitively priced
- 1 - year warranty

up to 50,000 gallon pools



### OZ-SPA – Spa Ionization System

- Vacuum Ultraviolet Ozone System
- Handles up to 1,000 gallon spas
- Heavy duty metal enclosure
- Includes Venturi assembly
- Amazing water clarity
- 1 - year warranty

up to 1,000 gallon spas

## MineralPURE®

## Commercial Pools

All units include a test kit, are NSF, UL and CUL listed, and have a 3-year warranty.



### CS-75

- Handles up to 75,000 gallon pools
- One 6" electrode
- Includes one regular schedule 80 tee



### CS-150

- Handles up to 150,000 gallon pools
- Two 6" electrodes
- Specify regular tee and/or cross tee - schedule 80



### CS-225

- Handles up to 225,000 gallon pools
- Three 6" electrodes
- Specify regular tee and/or cross tee - schedule 80



### CS-300

- Handles up to 300,000 gallon pools
- Four 6" electrodes
- Specify regular tee and/or cross tee - schedule 80



### CS-450

- Handles up to 450,000 gallon pools
- Six 6" electrodes
- Specify regular tee and/or cross tee - schedule 80



### CS-600

- Handles up to 600,000 gallon pools
- Eight 6" electrodes
- Specify regular tee and/or cross tee - schedule 80



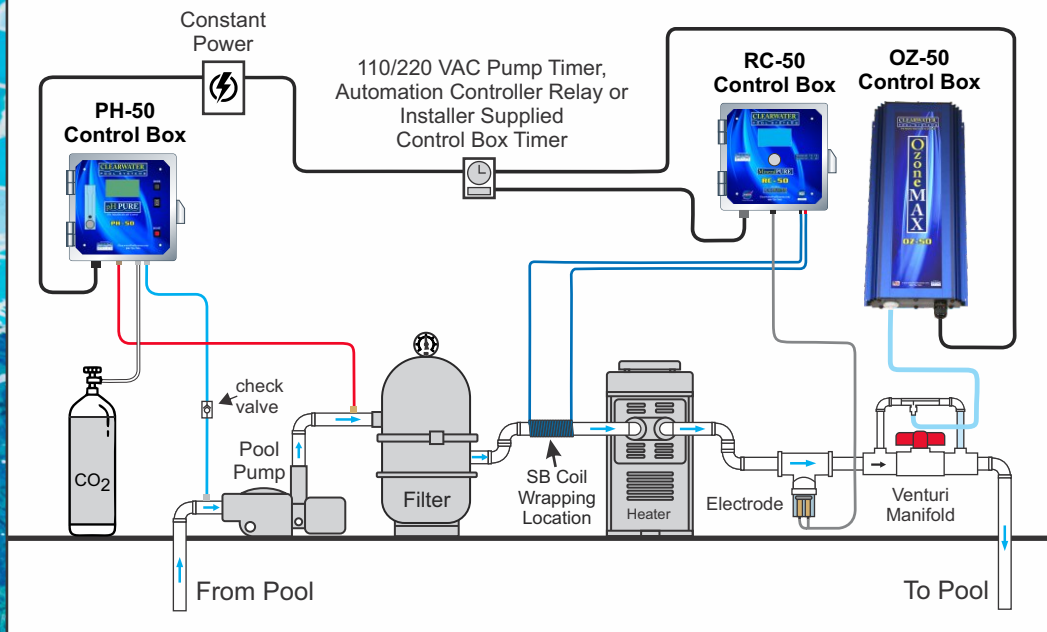


# CLEARWATER™

## POOL SYSTEMS

*The Healthy Alternative in Pool Maintenance*

### Clearwater Pool Systems Installation



## MineralPURE®

*Mineral Ionization*

## O<sub>3</sub>zoneMAX™

*Vacuum-ultraviolet Ozone System*

## pH PURE™

*CO<sub>2</sub> Injection for pH Control*

Manufactured by



Established 1989

ClearwaterPoolSystems.com

1-800-756-SWIM (7946)

