

**Obtaining Service Under the Warranty**

Any product and/or part not performing satisfactorily may be returned to CWT for evaluation. A Return Goods Authorization (RGA) number must first be obtained by either calling or writing your local authorized dealer, distributor or CWT direct, prior to shipping the product. The problem experienced with the product and/or part must be clearly described. The RGA number must appear prominently on the exterior of the shipped box(es). The product and/or part must be packaged either in its original packing material or in comparable and suitable packing material, if the original is not available. You are responsible for paying shipping charges to CWT and for any damages to the product and/or part that may occur during shipment. It is recommended that you insure the shipment for the amount you originally paid for the product and/or part.

If, after the product and/or part is returned prepaid and evaluated by CWT, it proves to be defective while under warranty, CWT will, at its election, either repair or replace the defective product and/or part and will return ship at lowest cost transportation prepaid to you except for shipments going outside the 50 states of the United States of America. If upon inspection, it is determined that there is no defect or that the damage to the product and/or part resulted from causes not within the scope of this limited warranty, then you must bear the cost of repair or replacement of damaged product and/or part and all return freight charges. Any unauthorized attempt by the end user to repair CWT manufactured products without prior permission shall void any and all warranties. For service, contact your authorized dealer or distributor or CWT direct at (805) 549-9724.

**Exclusive Warranty**

There is no other expressed warranty on CWT products and/or parts. Neither this warranty, nor any other warranty, expressed or implied, including any implied warranties or merchantability of fitness, shall extend beyond the warranty period. Some states do not allow limitation on how long an implied warranty lasts, so that the above limitation or exclusion may not apply to you.

**Disclaimer of Incidental and Consequential Damages**

No responsibility is assumed for any incidental or consequential damages; this includes any damage to another product or products resulting from such a defect. Some states do not allow the exclusion or limitation of incidental or consequential damages, so that above limitation or exclusion may not apply to you.

**Legal Remedies of Purchaser**

This warranty gives you specific legal rights and you may also have other rights, which vary from state to state.

**THIS STATEMENT OF WARRANTY SUPERSEDES ALL OTHERS  
PROVIDED TO YOU AT ANY PRIOR TIME.**

# Ozone Systems

## Installation & Operation Manual

### CIP20



ClearWater Tech, LLC.  
Integrated Ozone Systems

850-E Capitolio Way, San Luis Obispo, CA 93401 • 805-549-9724 • Fax: 805-549-0306  
E-mail: [service@cwtozone.com](mailto:service@cwtozone.com) • [www.cwtozone.com](http://www.cwtozone.com) • Copyright © 2015 - ClearWater Tech, LLC  
Reproduction of any kind is prohibited • LIT213 • REV021015

# **APPENDIX C – WARRANTY INFORMATION**

## **ClearWater Tech, LLC. Limited Three-Year Warranty**

### **Summary of the Warranty**

ClearWater Tech, LLC (“CWT”) makes every effort to assure that its products meet high quality and durability standards and warrants the products it manufactures against defects in materials and workmanship for a period of three (3) year, commencing on the date of original shipment from CWT, with the following exceptions: 1) The warranty period shall begin on the installation date if the installation is performed within 90 days of the original shipment from CWT; 2) The warranty period shall begin on the date of the bill of sale to the end user if the installation date is more 90 days after the original shipment date. To validate the warranty, a warranty card, accompanied by a copy of the bill of sale, must be returned to CWT and must include the following information:

- End user name
- Complete address, including telephone number
- Date installed
- Complete model and serial number information
- Name of company from which the unit was purchased



Repairs and replacement parts provided under this warranty shall carry only the unexpired portion of this warranty or 90 days, whichever is longer.

### **Items Excluded from the Warranty**

This warranty does not extend to any product and/or part from which the factory assigned serial number has been removed or which has been damaged or rendered defective as a result of:

- An accident, misuse, alteration or abuse
- An act of God such as flood, earthquake, hurricane, lightning or other disaster resulting only from the forces of nature
- Normal wear and tear
- Operation outside the usage parameters stated in the product user’s manual
- Use of parts not sold by CWT
- Service or unit modification not authorized by CWT
- Check valve/solenoid valve failure
- Damage which may occur during shipping
- Failure to meet service requirements as outlined in the I & O manual
- Damage due to exposure to other chemicals

# APPENDIX B – OZONE PRODUCTION

---



Water Inlet Pressure (PSI)	Water Outlet Back Pressure (PSI)	Water Flow Rate (GPM)	Dissolved Ozone Level (PPM)
20	5	1.3	0.54
60	15	2.3	0.30
100	30	3.0	0.23

## Notes:

- Water inlet pressure minimum is 20 PSI, maximum is 100 PSI
- Water outlet back pressure must not exceed given levels
- Water flow rate may vary
- Dissolved ozone level is based on given water flow rates

## INTRODUCTION

---

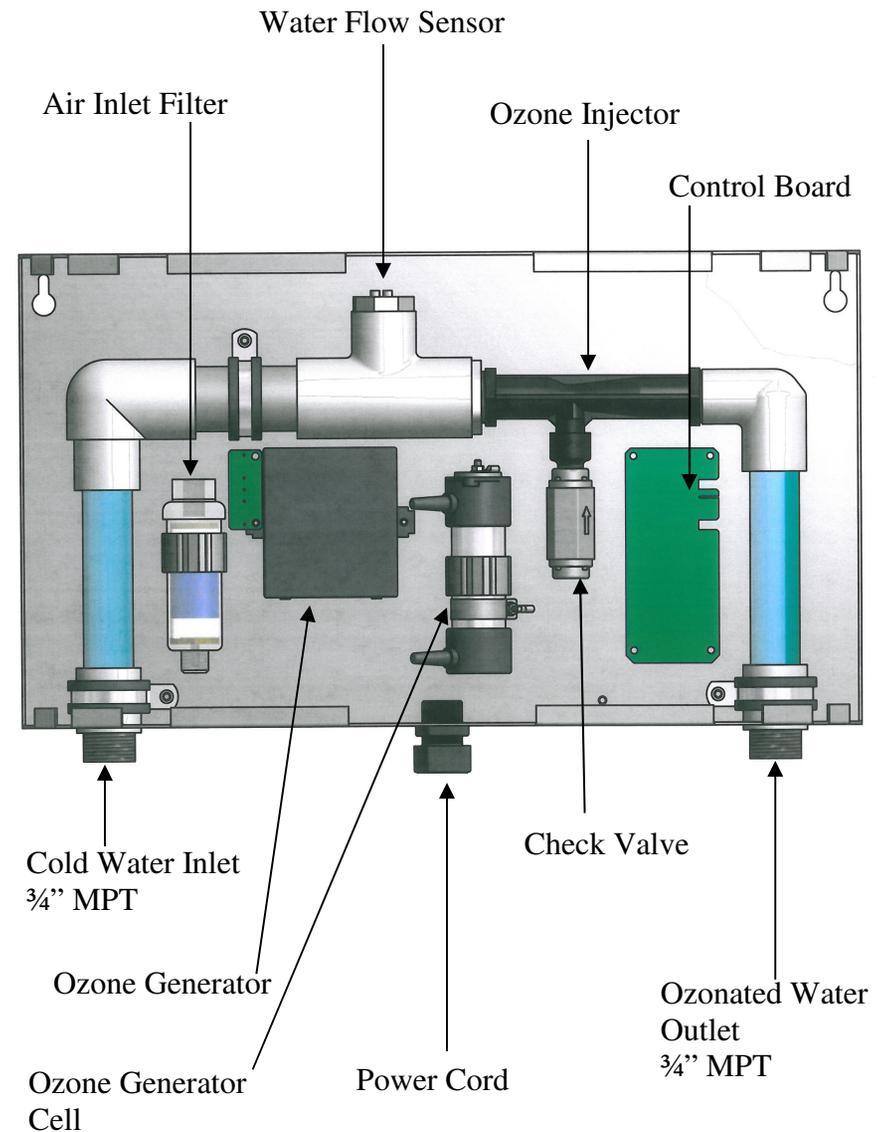
This Installation and Operation Manual is written to assist in the installation, operation and maintenance of systems manufactured by ClearWater Tech, LLC. This equipment has been designed using the most modern materials and technology available.

Please read this manual carefully and in its entirety before proceeding with any installation, operation, or maintenance procedure associated with this equipment. Failure to follow these instructions could result in personal injury, damage to the equipment, or reduced product performance.

In an ongoing effort to improve reliability and operating efficiency, ClearWater Tech may find it necessary to make changes to its products. Therefore, the information contained in this manual may not conform in every respect to earlier versions of ClearWater Tech systems found in the field. If you have any questions, please contact your ClearWater Tech dealer or the ClearWater Tech service department

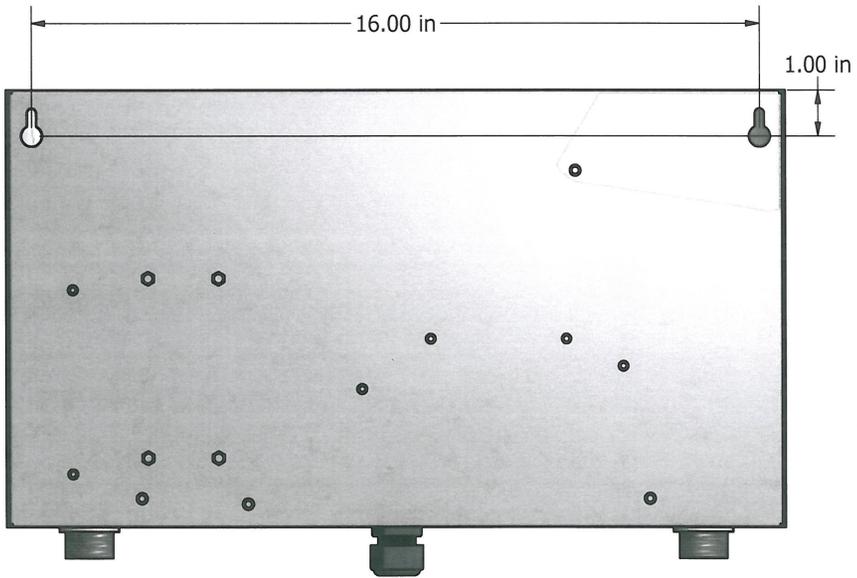
# TABLE OF CONTENTS

Theory of Operation .....	3
Instructions .....	4
Installation Procedures .....	5
<i>Figure 1 – Feature Callout</i> .....	6
Operating Instructions .....	7
<i>Figure 2 – Summary of LED Indicators</i> .....	7
Trouble Shooting .....	8
Appendix A – Specifications .....	9
Appendix B – Ozone Production .....	12
Appendix C – Warranty Information .....	13



## THEORY OF OPERATION

---



The CIP20 System is an environmentally friendly device allowing you generate dissolved ozonated water as needed. Using only a small amount of electricity, the CIP20 System takes oxygen from the air and converts it into ozone ( $O_3$ ), a very powerful natural oxidizer. Once the ozone is injected into the water passing through the CIP20, that water can be used to naturally disinfect without leaving chemical residue.

# INSTRUCTIONS

1. Save these instructions
2. Before using, please read the owner's manual carefully
3. Disconnect power before servicing
4. Make sure the CIP20 is horizontal. See installation instructions. Do not mount vertical or at any angle.
5. Do not operate the unit with the cover removed
6. Do not use an extension cord.
7. Water treated by the CIP20 is intended for disinfection purposes only and is not intended for drinking or ingesting.
8. The CIP20 System is intended for use with the cold water line only. Hot water will not damage the CIP20 System, but it will greatly reduce its effectiveness.
9. The CIP20 System should be cleaned with a damp cloth. Avoid using harsh chemicals, abrasives, or cleaners.

# APPENDIX A - SPECIFICATIONS

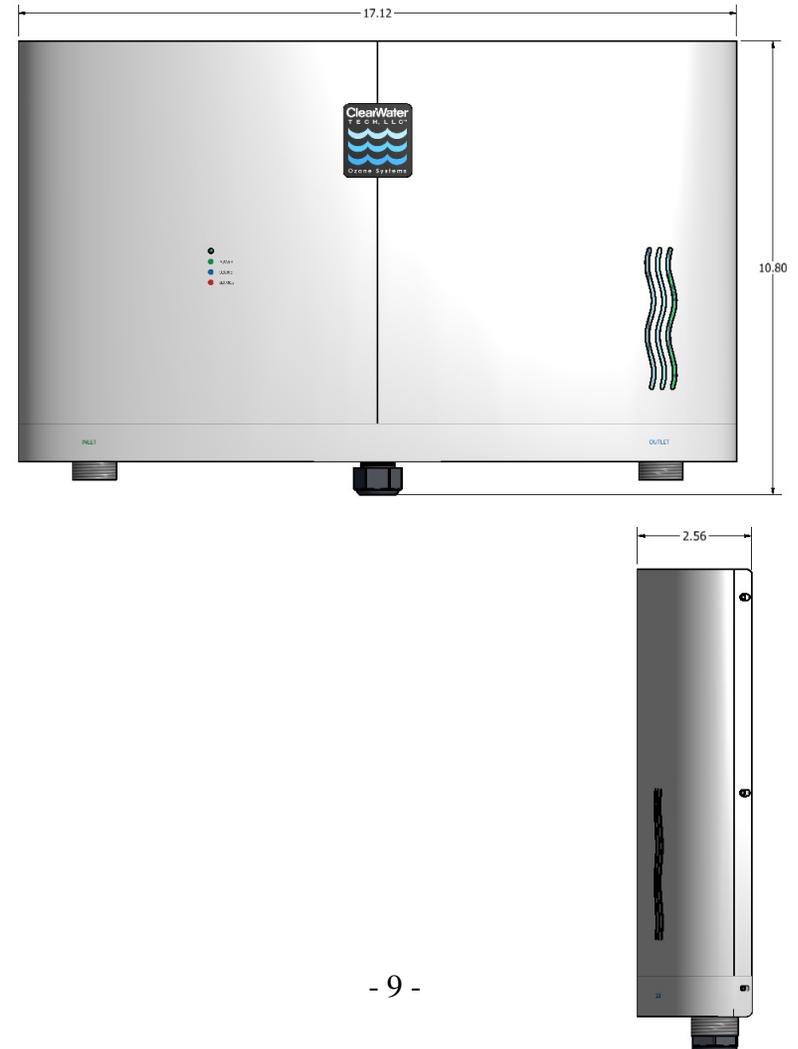
Electrical Input: 120 VAC 60Hz, 0.5A

Water Pressure: 20psi to 100psi

Water Operating Temperature: Cold water only, hot water will reduce the effectiveness of the CIP20 System

Dimensions: 17.12in X 10.55in X 2.57in

Weight: 6 lbs.



# TROUBLE SHOOTING

---

## Green light does not come on

- Verify the unit has power

## Blue light does not come on

- Make sure the cold water line valve is open completely
- Make sure water is moving through the system

## Indicator light is red

- The unit needs servicing

## Indicator light is red and there is an audible alarm

- There is a water leak in the system. Shut off the water flow to the inlet of the system immediately.

# SERVICING

---

## Annual service

- Replace the air inlet filter
- Replace the check valve

## Indicator light is red

- Replace the Ozone generator cell.
- Reset the service light by jumping the two contacts on the water detection PCB with a screwdriver

# INSTALLATION PROCEDURES

---

## Unpacking

Make sure all of the components are in the box before beginning installation of the CIP20 System.

## Locate a Mounting Location

Before beginning the installation, locate a suitable location for the CIP20 System. The CIP20 System will mount to a flat portion of a wall. Please consider the following when selecting a mounting location:

- Never install the CIP20 System in an area where water may freeze. Freezing water will damage the internal components.
- The CIP20 System must be installed horizontally as shown in Figure 1 on the next page. Mounting vertically, or at an angle may make the leak detection circuitry ineffective.
- Close enough to a power outlet so an extension cord is not necessary.

## Mount the CIP20 System

- The mounting keyholes are located 16 inches on-center.
- Use the appropriate tools and mounting hardware for the material the wall is constructed from and install 2 screws 16 inches on-center and each equal distance from the ground to ensure the unit is horizontal.
- Do not tighten the screws completely; instead leave 1/8 inch space between the head of the screw and the wall.
- Place the CIP20 unit on the screws.

## Connecting Water

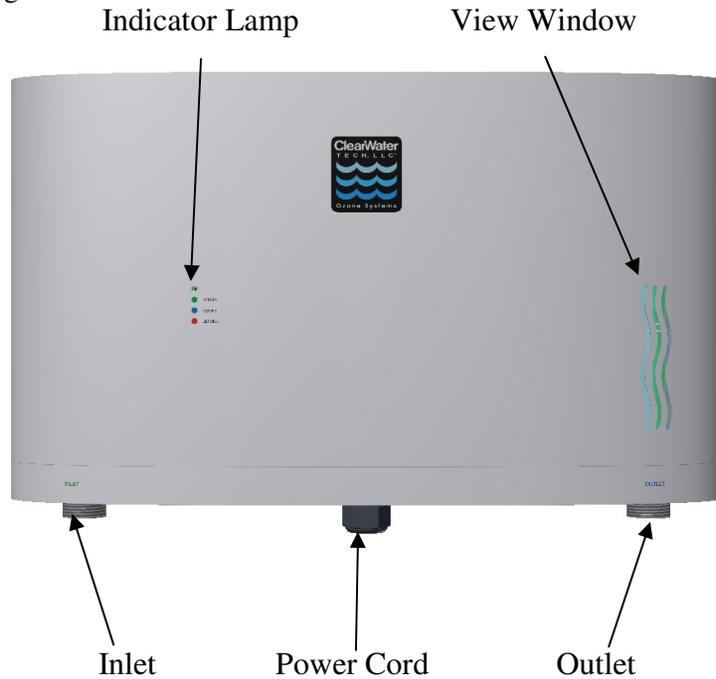
- Connect the cold water line to the ¾” MPT inlet connection of the CIP20. (see the diagram below)
- Connect the ozone water outlet device/line to the ¾” MPT outlet connection of the CIP20 (see the diagram below).
- Make sure all of the water connections are tight.
- Turn on the water.

## Connect Power

- Plug the CIP20 Unit into a GFCI protected outlet.
- Verify the green light illuminates after a few seconds (without water flow).

## Feature Callout

Figure 1



# OPERATING INSTRUCTIONS

Once installed, the CIP20 System is ready to use. The CIP20 System will have a green indicator light letting you know the unit is operating normally and in standby mode waiting for water to move through the system.

When water flows through the system, the CIP20 will automatically sense this and turn on. The indicator light will change from green to blue and the indicator window will become illuminated so the ozone bubbles can be observed in the water as it flows out of the CIP20.

In unlikely event of a leak occurring in the system, the indicator light will change to red, the lights in the indicator window will begin flashing, and an audible alarm will alert a problem.

## Summary of LED Indicators

Figure 2

Indicator LED	Description
Green	System is in standby
Blue	System is running
Red	System needs maintenance
Red with Alarm	Leak Detected

