



**A2Z Ozone, Inc.**

**PRODUCT  
MANUAL**

# SPA OZONE GENERATOR

Aquatic 2



## **INSTALLATION & OPERATION MANUAL**

**CE**

[www.a2zozone.com](http://www.a2zozone.com)

**Rev. 02142018**

# CONTENTS

	<b>Page</b>
• <b>Important Safety Instructions</b> .....	<b>3</b>
• <b>Specifications</b> .....	<b>4</b>
• <b>Installation Instructions</b> .....	<b>5</b>
• <b>Troubleshooting</b> .....	<b>11</b>
• <b>Warranty</b> .....	<b>12</b>

# IMPORTANT SAFETY INSTRUCTIONS

***Proper installation and usage of your Aquatic 2 Spa Ozone Generator is your responsibility. Read and follow this owner's manual carefully for important installation, operation and safety information. Basic safety precautions should always be followed, including but not limited to the following:***

1. All electrical connections should be made by a qualified electrician.
2. Follow all applicable electrical codes.
3. Be sure the electrical power is shut OFF at the main circuit breaker before installing the Aquatic 2.
4. If the Aquatic 2 electrical connection will be attached to the spa controls, be sure the spa controls are protected by Ground Fault Circuit Interrupter (GFCI).
5. If the Aquatic 2 is connected to an independent electrical supply, a GFCI must be installed between the ozone generator and the electrical supply.
6. Do not bury cord.
7. WARNING – To reduce the risk of electrical shock, replace a damaged cord immediately.
8. Per UL spa requirements, the ozone generator must be mounted indoors or under a cover to ensure it is sheltered from the elements (rain, sun, sprinklers).
9. Mount the Aquatic 2 so that it is inaccessible to anyone in the spa. Never attempt servicing when wet.
10. To reduce the risk of injury, the unit should be mounted where it is inaccessible to children.
11. Plastic ozone supply tubing is available with the Aquatic 2
12. Never replace this tubing with metal tubing.
13. Do not operate the Aquatic 2 unless sufficient air flow is being drawn through the unit.
14. WARNING – Short term inhalation of high concentrations of ozone and long-term inhalations of low concentrations of ozone can cause harmful physiological effects. Do not inhale ozone gas produced by the device.
15. PLEASE SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

# SPECIFICATIONS

<b>Model</b>	<i>Aquatic 2</i>
<b>Electric</b>	<i>85-250 VAC 50/60 Hz</i>
<b>Power</b>	<i>6w</i>
<b>Ozone Output</b>	<i>300 mg/hour</i>
<b>Size</b>	<i>3.6 x 2.5 x 5.7 inches 92 x 62 x 146 mm</i>
<b>Weight</b>	<i>0.74 lbs, 330 grams</i>
<b>Connection</b>	<i>AMP model</i>
<b>Cable</b>	<i>5.5 feet</i>
<b>Check Valve</b>	<i>1/4 inch</i>

# INSTALLATION INSTRUCTIONS

## *How the Aquatic 2 Works*

The Aquatic 2 produces ozone gas which is introduced to spa water through suction created by a spa injector. The provided tubing is used to connect the Aquatic 2 to an injector or vacuum port provided by the spa manufacturer. The injector ports are vacuum sources used to pull the ozone gas out of the Aquatic 2 and into the water. Please keep in mind, at no time should water come in contact with the Aquatic 2. The unit must be mounted and plumbed as described in this manual to prevent water from traveling backwards through the tubing and into the ozone generator.

## *Installation Parts*

- 1 installation manual
- 1 check valve
- 2 screws and plastic anchor for mounting
- 4 hose ties
- 5 feet of tubing

## *Installation Tools and Materials*

- Phillips screwdriver
- Pliers

## *Unit Assembly*

- The Aquatic 2 is pre-assembled and ready to install

## *Mounting*

- Mount the Aquatic 2 as high as possible within the spa's protected equipment area or outside.
- Screws are provided for mounting but may not be appropriate for all surfaces. Please substitute proper mounting hardware as required.

### ***Plumbing – Vacuum System (refer to Figure 1)***

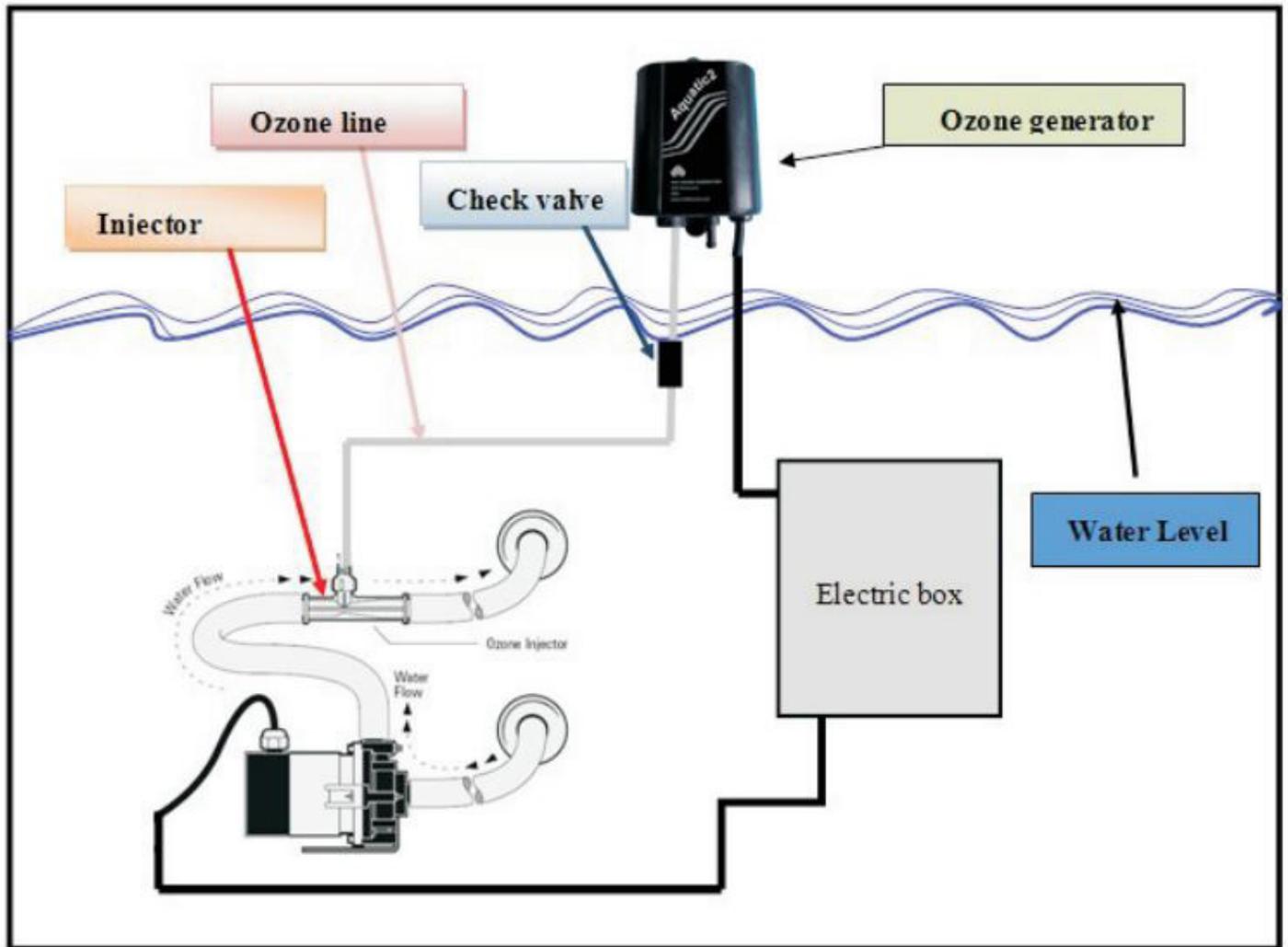
- Most spas are factory equipped with an ozone injector or vacuum port (like the one displayed in Figure 1).
- Review your spa's installation manual to identify the correct ozone connection location.
- If the spa is not equipped with an injector (vacuum source), A2Z Ozone Systems provides a wide range of optional installation kits. Contact A2Z Ozone Customer Service for assistance at 502-499-4977.

### ***Plumbing – Ozone Generator (refer to Figure 1)***

- Connect shorter PVC ozone tube provided (8 inches) to the hose barb on the Aquatic 2 side.
- Connect other end to the check valve.
- Connect longer PVC tube to injector suction.
- Be sure to run the spa and pump to check the vacuum **BEFORE** connecting the PVC tube to the injector.
- If there is no vacuum at suction, then you need to check the injector or pump water flow.
- Do not connect the Aquatic 2 if there is no vacuum at injector suction.

**NOTE:** If the Aquatic 2 is mounted below the water line, run the tubing to a point above the water line and back down to the vacuum source. Secure the tubing in this position, slide the hose ties on each end into the tubing and secure all tubing connections with the hose ties.

# Figure 1



# Safety Information

Please make sure water will not back up into the unit before use. Water will damage internal components of the unit, and will not be covered by the unit's warranty. Please follow these steps when installing your unit:

## *Installing the Aquatic 2*

1. Install the unit above water level and as high as possible.
2. Mount the unit so the tube, light and wires are toward the ground (disregard the front label).
3. Install the check valve according to the arrow on the check valve.
  - a. The arrow should face toward the injector.
4. You will need an injector for injecting ozone into the water line. If you do not have an injector, please contact us to purchase one. The unit does not work without an injector.
5. At this point, a vacuum should be created and the suction can be felt on the tube.
6. The Aquatic 2 should be on ONLY when the pump is ON. If your spa did not have an ozonator, then connect the ozone electric wire to the pump wires.

### Figure 3



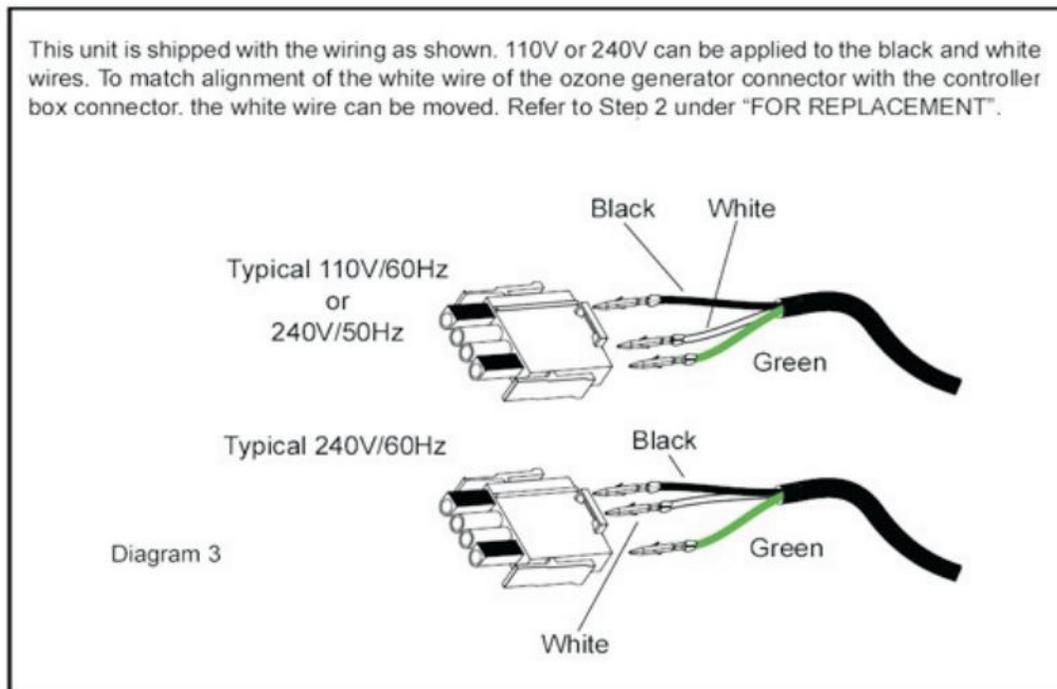
## Electrical

1. Test the GFCI breaker protecting the spa for proper operation.
2. Disconnect power to the spa.
3. Connect the Aquatic 2 cord to the mating connector(s) on the spa control box as described in the spa's installation manual and Figure 2.
4. Where possible, route the power cord away from other electrical lines. Do NOT run the power cord parallel to any low voltage signal wires.
5. Secure the power cord as required to prevent damage.

## Operation

1. With the spa filled to the proper level, run the spa controller through several cycles.
2. Verify that the Aquatic 2 turns on and off as required by the controller.
3. The red LED light will be visible from the viewing window on the bottom left.
4. Verify that gas is flowing into the injector (there should be no water in the tubing and very small bubbles entering the spa through the return).
5. Verify that water does not push past the check valve during any spa cycle.
6. Check for and correct any leaks.

### Figure 2



## *Maintenance*

Once properly installed, the ozone generator requires no further maintenance. It will operate automatically with the spa system.

To ensure the highest degree of sanitation at all times, refer to the chart below. Renew your Aquatic 2 as needed with a renewal kit.

<b>Daily Use</b>	<b>Average Unit Life</b>
<b>2 hour/day ozone cycle</b>	<b>3 years</b>
<b>3 hour/day ozone cycle</b>	<b>2 years</b>
<b>6 hour/day ozone cycle</b>	<b>1 year</b>

# TROUBLESHOOTING

**SYMPTOM:** Cloudy water conditions even though the unit appears to be operating properly.

**SYMPTOM:** Water is backing into the ozonator when the system is ON or OFF.

When your system is in its ON cycle, a suction of air is being pulled through the tubing from the ozonator to the return line. When the system is in its OFF cycle, water tends to flow back in the tubing toward the ozonator. Therefore, mounting your ozone unit as high as possible in relation to the spa water level is important. There is also a one-way check valve provided to prevent the back flow of water from reaching the ozonator. As a secondary precaution, a Hartford Loop in the tubing will help prevent water damage to the Aquatic 2. Keep in mind, the Hartford Loop should also be hanging above water level.

**SYMPTOM:** The red LED light is not lit.

This means there is no power to the Aquatic 2. Check the electrical connections and then the fuse.

<b>Possible Cause</b>	<b>Corrective Action</b>
<i>The unit and pump did not operate long enough</i>	Increase the operating time (minimum 6 hours is recommended)
<i>Total alkalinity is not correct</i>	Adjust total alkalinity between 80 and 150 ppm
<i>pH is not correctly balanced</i>	Check for proper pH between 7.2 and 7.6
<i>Not enough suction</i>	Clear any obstruction in the water lines or return fitting, straighten any kinks in the water or ozone plumbing, and clean the spa filter.
<i>The filter is dirty, loose or cracked</i>	Check/replace the spa filter as needed.
<i>There are metals or minerals in the water</i>	Ozone may react with metals or minerals in the water (this is common when new water is added) causing cloudy water. Check alkalinity, pH and clean filter. Run filtration system and ozone 24 hours.

# WARRANTY

## A2Z Ozone Systems Inc. - ONE YEAR LIMITED WARRANTY

The limited warranty set forth below applies to products manufactured by A2Z Ozone Systems Inc. - and sold by A2Z Ozone Systems or its authorized dealers. This limited warranty is given only to the first retail purchaser of such products and is not transferable to any subsequent owners or purchasers of such products. A2Z Ozone warrants that it or its authorized dealers will repair or replace, at its option, any part of such products proven to be defective in materials or workmanship within ONE (1) year from the date of retail purchase of such products. (All parts

ANY REPAIR OR REPLACEMENT WILL BE WARRANTED ONLY FOR THE BALANCE OF THE ORIGINAL WARRANTY PERIOD. NOTE: USE ONLY A2Z Ozone AUTHORIZED REPLACEMENT PARTS. USE OF ANY OTHER PART(S) WILL AUTOMATICALLY VOID THIS WARRANTY. THIS LIMITED WARRANTY DOES NOT INCLUDE ANY OF THE FOLLOWING:

- (a) Any labor charges for troubleshooting, removal, or installation of such parts;
- (b) any repair or replacement of such parts necessitated by faulty installation, improper maintenance, improper operation, misuse, abuse, negligence, accident, fire, repair material, and/or unauthorized accessories;
- (c) Any such products installed without regard to required local codes and accepted trade practices;
- (d) ANY IMPLIED WARRANTY OF MERCHANTABILITY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE, AND SUCH WARRANTIES ARE HEREBY DISCLAIMED: AND
- (e) A2Z Ozone SHALL NOT BE LIABLE UNDER ANY CIRCUMSTANCES FOR LOSS OF USE OF SUCH PRODUCTS, LOST PROFITS, DIRECT DAMAGES, INDIRECT DAMAGES, CONSEQUENTIAL DAMAGES AND/OR INCIDENTAL DAMAGES.

TO OBTAIN WARRANTY SERVICE

Contact A2Z Ozone, 1844 Cargo Court Louisville, KY 40299, USA

Customer Service Number: +1 502-499-4977.

When filing a claim, you must provide:

- 1) Your name, mailing address and telephone number
- 2) The selling dealer's name
- 3) Proof of date of purchase
- 4) The date of failure
- 5) A description of the failure.

After this information is provided, A2Z Ozone will release a RETURN GOODS AUTHORIZATION (RAN) NUMBER.

After receiving the RAN number the part in question must be returned to A2Z Ozone, freight prepaid, with the RAN number clearly marked on the outside of the package. All preauthorized defective parts must be returned to A2Z Ozone within thirty (30) days. Under no circumstances may any product be returned to A2Z Ozone without prior authorization. You must call or write prior to returning product or your returned goods shipment will be refused. Upon receipt of preauthorized returned goods, A2Z Ozone will repair or replace, at its option, the defective product(s) and return them freight (prepaid for products under warranty). Buyer's acceptance of the product and use thereof constitutes acceptance of these terms.

**A2Z Ozone WARRANTY REGISTRATION CARD**

This information can be also send by EMAIL to us. Please provide ALL pertinent information and send within twenty (20) days to: [service@a2zozone.com](mailto:service@a2zozone.com)

Otherwise, please fill out completely and return to A2Z Ozone by post within twenty (20) days of purchase.

**Customer Info:**

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone (\_\_\_\_) \_\_\_\_\_

**Dealer Info:**

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

Dealer Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone ( ) \_\_\_\_\_

**Purchase/Product Info:**

Purchased Date: \_\_\_\_\_ Date Installed \_\_\_\_\_

Product Purchased: SWIMMING POOL A2Z S-SERIES OZONE GENERATOR

**Comments / Questions:**

**DO NOT FORGET TO CUT OUT, PLACE IN ENVELOPE AND MAIL TO THE FOLLOWING ADDRESS FOR INSTANT WARRANTY COVERAGE!**

**A2Z Ozone Systems Inc.**

**ATTN: Warranty Dept.**

**1844 Cargo Court**

**Louisville, KY 40299, USA**

