



# SP-3G (110V) Ozone Generator Operating Manual

Produced for and Distributed by:  
A2Z Ozone, Inc  
1844 Cargo Court.  
Louisville, KY 40299 USA  
1+502-499-4977

EPA Est.: 95432-KY-1

Active Ingredient: Ozone.  
Warning: Do Not Inhale Ozone.  
Keep Out of Reach of Children.

Produced by:  
Bluegrass Water Technology Shenzhen Co., Ltd.  
Shenzhen, Guangdong 518110

EPA Est.: 95432-CHN-1

Made in China



\* Register your product at [a2zozone.com/pages/warranty](http://a2zozone.com/pages/warranty)  
Version 1.2.2

# Table of Contents

Important Safety Information .....	2
Technical Specifications .....	3
SP-3G (110V) Features .....	4
Installation Instructions .....	7
Maintenance .....	9
Troubleshooting .....	11
Warranty .....	12

**WARNING: Do Not Inhale Ozone. Remove Immediately to Fresh Air if exposed. Keep Out of Reach of Children. Hazards to Humans and Domestic Animals--Do Not Expose Children, People, Pets, Plants or Valuables to Ozone. Ozone Health Information--If exposed to ozone, get to fresh air immediately. Seek doctor's advice if exposed to ozone. Ozone half-life is 30 minutes. Areas where ozone generator is installed must be well-ventilated in case of accidental leakage. This unit does not contain ozone. This unit produces ozone while running by creating oxygen in the air or an oxygen source to ozone. Use a degasifier and ozone destructor with the ozone generator.**

**HIGH VOLTAGE! Perform service on ozone generator by certified technicians only! If you suspect a problem, disconnect the power to the SP-3G (110V) Ozone Generator at the service disconnect box or main electrical panel and immediately contact your maintenance technician. Inspect the ozone delivery line check valves daily for proper functioning and replace the check valves every 6 months to a year.**

**NOTE: Use Only As Directed. Follow All Instructions Provided in the Manual. Buyer will assume all responsibility for installation, running and use not in accordance with direction.**

For questions, please call **1+ (502) 499-4977** OR email **info@a2zozone.com**

# Important Safety Information

## **READ AND FOLLOW ALL INSTRUCTIONS**

- Read this manual completely before attempting installation and/or operation.
- Install in accordance with the installation instructions.
- Connect to a grounded, grounding type receptacle only.
- Follow all applicable electrical codes.
- To avoid electric shock, be sure to turn power OFF and disconnect from power source before any service work is performed. Failure to do so could result in serious injury or death. Have a licensed electrician make all electrical connections. Replace damaged electrical cables immediately.
- Install the ozone generator at least five feet from water using nonmetallic plumbing.
- The SP-3G must be mounted indoors or under a cover for protection from the elements.
- Install check valves to prevent backflow into the electrical equipment.
- The electrical supply for this product must include a suitably rated switch or circuit breaker to open all ungrounded supply conductors.
- Keep ambient temperature around the equipment between 40° and 100° Fahrenheit (4.5° to 38° Celsius). If installing the equipment in an environment with temperatures over 100° Fahrenheit, provide additional air cooling. Installation without additional air cooling in an environment where temperatures exceed 100° Fahrenheit for any continuous 24-hour period cause the ozone generator to fail.

## **CAUTION!**

**In case of accidental leakage, install the ozone generator in a well-ventilated area.**

**In accordance with California Regulations, this ozone generator is solely for industrial use and must be installed by a professional. Potential health hazard: emits ozone.**

# Technical Specifications

## SP-3G (110V) Ozone Generator Features:

- LED status Indicators
- CD Corona Discharge Technology
- Air-Cooled
- Variable Ozone Output (10-100%)
- PTFE tube for O3 outlet
- Stainless steel fittings
- Quartz Glass

## Items Included:

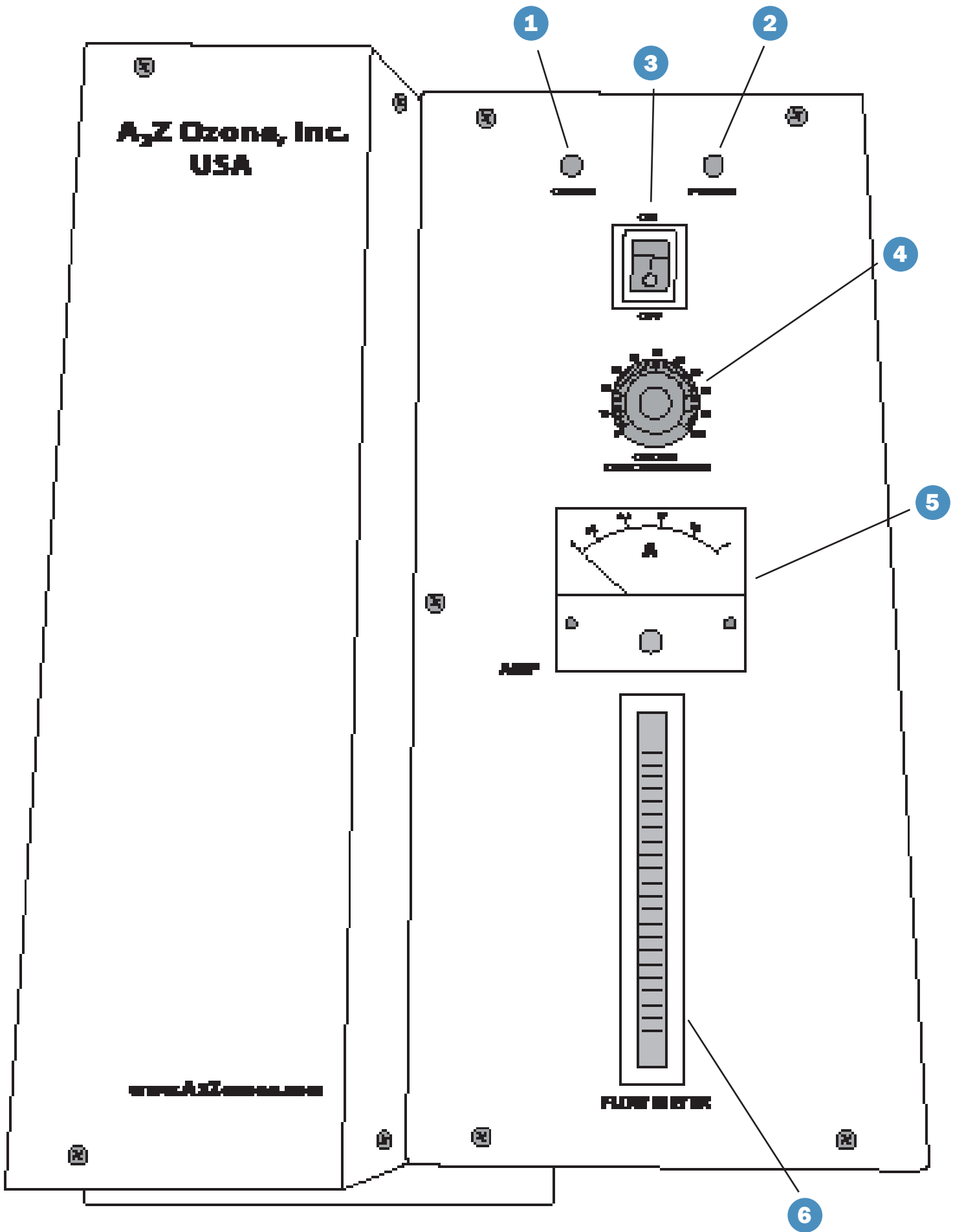
- SP-3G (110V) Ozone Generator
- SP-3G (110V) operating manual
- 8 Feet Polyurethane Flexible tubing (for oxygen supply)
- 8 Feet PTFE tubing (for ozone)
- Spare fuse
- Check valve (x2)
- Spare fan filter

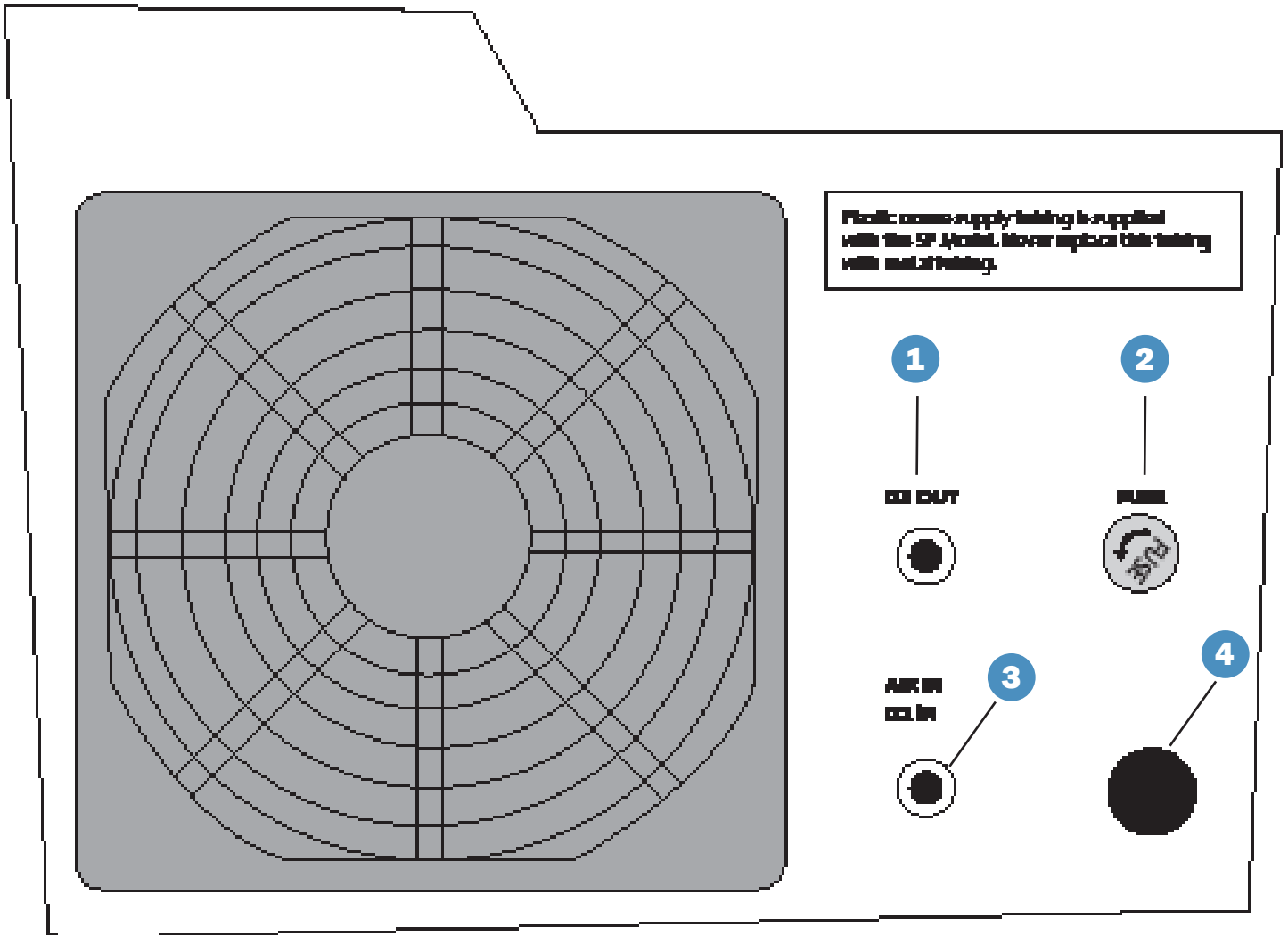
**Note:** The SP-3G (110V) Ozone Generator is not built with an internal pump. This unit requires a pump or oxygen generator to force the ozone out.

<b>Model</b>	<b>Ozone Output (g/h)</b>	<b>Electric</b>	<b>Power (Watts)</b>	<b>Size (Inches)</b>	<b>Weight (lbs)</b>
SP - 3G	3	110/120 VAC 50/60 Hz	80	11X8X14.3	14

# SP-3G (110V) Features

<b>1</b>	<b>Ozone Light</b>	Indicates ozone is functioning.
<b>2</b>	<b>Power Light</b>	Indicates when there is power to the unit. If the power is supplied, the LED will illuminate.
<b>3</b>	<b>Power Switch</b>	Used to power the unit on and off.
<b>4</b>	<b>Ozone Concentration Knob</b>	Controls the percentage of ozone produced by the unit.
<b>5</b>	<b>AMP Meter</b>	Shows real time AMP usage.
<b>6</b>	<b>Flow Meter</b>	Shows the suction amount created by the venturi injector (measured in LPM).





<b>1</b>	<b>Ozone Out Port</b>	The ozone out.
<b>2</b>	<b>Main Fuse</b>	If the unit has no power, check here first.
<b>3</b>	<b>Air/Oxygen In Port</b>	This sucks in air for the unit to produce ozone. Please do not block this intake port. Optional oxygen intake or air pump connection.
<b>4</b>	<b>Power Cord</b>	Supplies power to the unit.

# Installation Instructions

## Ozone Generator Placement

- Install the SP-3G (110V) Ozone Generator in a clean, dry area with good ventilation.
- Select a location for the ozone generator that is as close as possible to the application.
- The SP-3G (110V) Ozone Generator enclosure is not waterproof, so it is important to choose a location that will keep the system away from direct weather and excessive heat.
- Place the ozone generator above the application level because if pressure is lost in the venturi vacuum or system, gravity will cause backflow to travel down the ozone output tube and enter into the ozone generator.
- Situate the SP-3G (110V) Ozone Generator in a manner suitable for convenient electrical access.
- For convenient wall mounting, mounting holes are located on the back of the ozone generator. Mounting hardware is not provided.
- The basic installation method for the SP-3G (110V) Ozone Generator system is through a manifold plumbing connection.
- The manifold must be assembled. The manifold is sold separately.

**NOTE:** Be sure to place the ozone generator in temperatures 40° and 100° Fahrenheit (4.5° to 38° Celsius).

*The use of a degasifier and ozone destructor system is required.*



# Main Power

- Use the power cable provided to connect the SP-3G (110V) Ozone Generator to a properly rated and grounded receptacle.
- A ground fault circuit interrupter must protect the circuit if the ozone generator will be used where water is present.

# Tube Connection and Start Up

- Connect a silicone tube (if using an oxygen generator, oxygen tank or external air compressor) to the SP-3G (110V) Ozone Generator (Air In). This will serve as oxygen or air for ozone production. (2-4 LPM @ 2 PSI maximum.)
- Connect the ozone generator PTFE tube (Ozone Out) to the application processor.
- Install a check valve 10 inches after the ozone outlet tube fitting. Install the check valve by cutting the tube ten inches after ozone out fitting. Next, connect both ends of the cut tubes to the check valve. Please direct the arrow on the check valve toward the . NOTE: The venturi injector has an internal check valve to help prevent backflow.
- Make sure there is a vacuum (or that there is suction) at the opening via a gauge or test it by putting your finger on the opening.
- There will be a small suction at this opening. The suction will move the ozone out of the SP-3G (110V) Ozone Generator and inject it into the piping system.
- Check that the flow meter indicates that the air flow is at least 2-4 LPM.
- Now connect the PTFE tube from the application processor venturi injector to the ozone generator.
- Turn on the power on the external panel of the ozone generator.
- The ozone indicator light should illuminate and the unit's fan should turn on.
- Increase power to the cells by turning the ozone control knob clockwise.

# Maintenance

## Clean Air Filter

This filter must be cleaned regularly. Depending on the location of the SP-3G (110V) Ozone Generator, it may be necessary to clean the air filter monthly. The filter elements are located on the bottom of the cabinet. This is the air intake element for the cooling fan, so it requires more frequent cleaning. Clean the element with soap and water, rinse, and dry completely before reinstalling. Clean this filter regularly. Failure to do so will promote overheating and void the warranty.

**NOTE:** In a clean environment, perform the cleaning procedure every three months.

- Turn the SP-3G (110V) Ozone Generator off
- Clean the filter screen with soap and water
- Rinse
- Dry the filter with a clean towel
- Install the screen back onto the unit
- Turn the ozone generator on
- NOTE: Be sure the SP-3G (110V) Ozone Generator's screen does not touch fan blade

**CAUTION:** There is extremely high voltage inside the ozone generator. If you suspect a problem, disconnect the power to the SP-3G (110V) Ozone Generator at the service disconnect box or main electrical panel and immediately contact your maintenance technician. Inspect the ozone delivery line check valves daily for damage and replace the check valve every 6 months to a year.

## Check Valves

Two check valves are available for the ozone delivery system. There is a check valve close to where the ozone tubing attaches to the ozone generator and a check valve also is included in the venturi injector. The purpose of these check valves is to prevent water from backing up into the ozone generator. Inspect the PTFE ozone delivery line daily to ensure water is not flowing back into the ozone generator. Replace check valves every 6 months to a year of use.

**NOTE:** The only time it is possible for water to flow back toward the ozone generator is during a system shutdown. Always inspect tube and check valve during this time.

## Fuses

The fuse is located on the panel at the bottom of the SP-3G (110V) Ozone Generator. The fuse is 3 AMP for this unit.

# Troubleshooting

## **The test method for failure of the ozone generator:**

- Check the power input for correct voltage (110V)
- If the ozone generator is on, but not producing ozone, then the SP-3G (110V) Ozone Generator is overheating or there is backflow to the ozone generator.
- Turn off the ozone generator and let the air flow through the unit for 1 to 2 hours to dry the ozone tube.
- Check the main fuse. Change it if needed. It is a 3 AMP for this unit.
- Check the tubing inside the machine for kinks.
- If the machine can produce some air, but the air is not ozone; please check the following:
  - The power indication lamp is lit.
  - Check the ozone control knob is set above zero.
  - Check the ozone board fuse.
  - Check the wire from terminal to ozone board.
  - Check that the potentiometer wire is connected to the ozone board.

If you are still experiencing problems, please contact A2Z Ozone at 1+ (502) 499-4977.

# 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 (shipping is prepaid for units under warranty for USA customers only). Buyer's acceptance of the product and use thereof constitutes acceptance of these terms.

**A2Z Ozone WARRANTY REGISTRATION CARD**

This information can be also sent 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: \_\_\_\_\_

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**