

# SSO-03-SPA01

## SPA O<sub>3</sub> System

**User Manual** 

Ver: 2.01



## Certified by:





















#### Ozone

- 1 Ozone is an extremely powerful oxidizing agent, capable of effectively oxidizing bacteria, fungi, microorganisms and viruses.
- 2 Ozone is 1,5 times stronger than chlorine and 3 125 times faster in inactivating bacteria and viruses.
- 3 Ozone does not change the pH or the alkalinity of the water.
- 4 Ozone is 100% natural and after its action it is returned to nature in the form of oxygen.

#### **Application**

- 1 Eliminates harmful elements from water Ozone is an oxidizing agent capable of effectively oxidizing more than 99% of bacteria, algae, fungi, microorganisms, protozoa and viruses.
- 2 Does not produce toxins avoiding the formation of organic by-products Ozone promotes the oxidation of organic and non-organic particles without the formation of undesirable by-products, such as chloramines (generated from the reaction of chlorine with impurities present in water such as tanning, makeup, body creams, urine, sweat and other secretions).
- 3 Removes obsolete odors and smells Ozone is a powerful oxidizing agent that allows oxidizing harmful toxic elements and organic odors in water, removing bad smells and reducing their toxicity without any secondary pollution.
- 4 *Reduces water consumption* Ozone improves water quality, keeping it clean and crystalline for longer, reducing water seedlings.
- 5 *Does not cause irritation* The use of ozone in the treatment of SPAs reduces the risk of skin and eye irritation, allergies, respiratory problems, ear infections, and dehydration of the skin and hair that normally occurs with the use of chlorine.
- 6 Does not damage bathing suits The use of ozone does not harm bathing suits (discoloration and fragility of the elastics.

#### Specifications

Model	SSO-03-SPA01	
Ozone Output	100mg/h	
Gas Supply	Ambient Air	
Water Volume	≤ 10 m³	
Fuse	100 mA	
Rated Power	≤ 12W	
Voltage	240 V AC	
Size (LxWxD) mm	200 x 110 x 65	
Weight (kg)	0,60	

Table 1— Specifications



#### **Equipment Structure:**

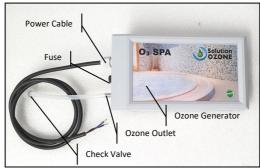


Image 1 - Equipment Structure

#### Included:

- √ 1 Ozone Generator SSO-O3-SPA01
- ✓ 1 Silicone Tube
- ✓ 1 Check Valve
- ✓ 1 Venturi ½"
- ✓ User Manual
- √ Wall-mouted screws

#### **Installation and Operation Instructions**

- 1.1 Remove the equipment and the silicone tube from the box.
- 1.2 Turn off power to SPA. Be sure the electrical power is shut OFF at the main circuit breaker before installing the SSO-O3-SPA01.
- 1.3 Find the ozone generator installation fitting, on the wall of the equipment compartment. Install the SSO-O3-SPA01 at the ozone generator installation fitting, use the mounting screws and fasten the unit to the wall.

Note: Be cautions of the mounting location as to not cause the screws to penetrate any plumbing. The SSO-O3-SPA01 must be mounted indoors or sheltered, under a cover, from natural elements (rain, sun, ...). Mount the SSO-O3-SPA01 so that is inaccessible to anyone in the SPA.

- 1.4 The SSO-O3-SPA01 must be installed horizontally, with the front image on the right position and the Ozone Outlet turned to the left/down side (see image 2). Use both mounting flanges and install the equipment as high as possible with the protected equipment area.
- 1.5 Plumbing for an optimal dissolution of ozone into the SPA Water, install the SSO-O3-SPA01 mixing system in the Water circulation lina as shown in Image 2:
  - 1.5.1 Connect the additional silicone tube (supplied with the Ozone Generator) to the check valve on the SSO-O3-SPA01.



- 1.5.2 Run tubing to the venturi (supplied with the Ozone Generator) or to an appropriate vacuum source.
  - 1.5.2.1 If the ozone generator is installed above the SPA Water Line, tubing may be run directly to the venturi or to an appropriate vacuum source.
  - 1.5.2.2 If the ozone generator is installed below the SPA Water Line, run tubing to a point above the water line and back down (loop) to the venturi/vacuum source.
- 1.5.3 Secure all tubing connections with hose clamps.

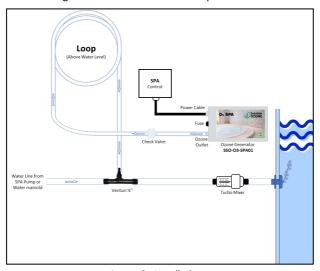


Image 2 - Installation

Note: For circulation systems different from the one shown in image 2, contact your SPA supplier for proper plug configuration.

- 1.6 Electrical installation (see image 3):
  - 1.6.1 Verify there is no power to the SPA and connect the SSO-O3-SPA01 power cord into the mating connector(s) on the SPA Control Box.

#### WARNING:

To reduce the risk of electrical shock, if the power cord is damaged, replace the entire unit immediately.

1.6.2 - Where possible, route the SSO-O3-SPA01 power cord away from other electrical lines. Avoid routing the power cord parallel to any low-voltage signal wires.



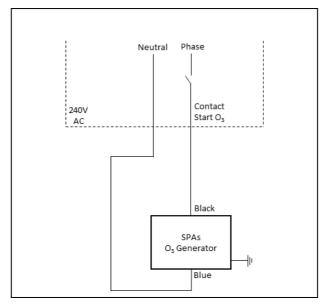


Image 3 - Electrical Diagram

#### WARNING:

The Ozone Generator works at high voltage and should only be opened by Solution Ozone® Technicians. Before carrying out any work on the Pool Circulation System, make sure that the electrical supply to the Ozone Generator is turned off.

#### 1.7 - Operation:

- 1.7.1 With the SPA filled to the proper level, run the SPA Controller through several cycles.
- 1.7.2 Check for and correct any leaks in the ozone tubing.

#### WARNING:

Do not breathe ozone directly. If there is any leakage of ozone in the system, turn it off immediately and leave the space and only return after 30 minutes (so that all the ozone in the air is completely dissipated). According to OSHA standards, you should not be exposed for more than 0.1 ppm for periods of 8 hours / day.

1.7.3 - Check that the Ozone Generator is working properly. Note that bubbles are being placed into the SPA via heater return and you will notice a faint scent that resembles a rain storm.



#### Maintenance

2.1 - To ensure the proper functioning of the system, it is recommended to carry out periodic maintenance on the Ozone Generator.

Maintenance Plan	Biweekly	Monthly	Semiannual	Annual
Check the Fan Dust Filter	Χ			
Check the Pressure in the Circulation and		v		
Mixing System		^		
Perform the O₃ Generator Checkout by				V
Solution Ozone® Technicians				٨

Table 2 - Maintenance Plan

2.2 - Regularly inspect ozone supply tubing for cracks or wear. Make sure that is no water present between the check valve and ozone generator - this indicates check valve failure. In this case, replace the ozone check valve immediately.

#### WARNING:

If you notice any ozone leakage, turn OFF the equipment's power supply immediately, leave the space and only return after 30 minutes, so that all the ozone in the air is completely dissipated.

#### Cautions

- 3.1 Follow the instructions in this Manual carefully.
- 3.2 Ensure that the equipment is placed in a location where it is at a level above the maximum SPA water level. Use the fixing brackets and fix the equipment according this manual.
- 3.3 You should not put the system into operation if the ozone generator is not well supported. Ensure the installation of the equipment in a safe place, which protects it from the weather, splashing water or excessive heat. When not in use, store the equipment in a dry place at room temperature. Keep the equipment away from sources of water and/or moisture.
- 3.4 Do not breathe ozone directly. Breathing ozone directly can be toxic, OSHA regulations must be respected. Avoid sniffing or breathing directly over the equipment's air outlet.
- 3.5 Do not remove the screws or security seals from the equipment, in addition to violating and voiding the warranty of the same, there is a risk of electric shock. Remember that this equipment operates at high voltage even when disconnected from the power supply.



- 3.6 Keep the equipment out of the reach of children.
- 3.7 Do not cover the equipment during its operation.
- 3.8 Do not insert any objects through the ozone outlet grilles, as this may cause equipment malfunctions or short-circuits.
- 3.9 Clean the equipment with a clean, dry cloth. Do not use abrasive products.
- 3.10 Do not open the equipment High Voltage inside.

### **Problems / Faults**

Problem / Failure	Possible Causes	To DO	
The Ozone Generator does not turn on	Generator without power supply	Check that the power is working properly.	
does not turn on	Blown Generator Fuse	Replace the fuse.	
	Damaged check valve	Replace the check valve.	
SPA without ozone	Silicone tubing damaged with ozone leakage	Replace system silicone tubing.	

Table 3 - Fault Identification

#### Warranty

- 4.1 This equipment has a free 2 years warranty period, if the equipment fails in normal use, according to the manual instructions (determined by the company). To activate it, you must present the invoice and the warranty card.
- 4.2 The warranty applies to the Ozone Generator System. Consumables such are not covered by the warranty (check valve, silicone tube, venturi).
- 4.3 During the warranty period, the following conditions are not covered:
  - Does not present the warranty card and invoice;
  - Failures and damages caused by improper use or improper repairs;
  - Failures and damages caused by transport and fall;
  - Failures and damages caused by other external factors, natural disasters or other human factors:
  - Failures and damage caused by water or other types of solutions on the equipment;
  - Failures and damages caused by the use of energy or voltage other than those specified;
  - Failures by different use from what is specified in this manual;
  - Damaged or missing Warranty Seal;
  - Signs of attempting to open the equipment.

## **Warranty Card**

Full name Address	Phone Number
Invoice nr.	Purchase Date
Maintenance Record	
Date of Maintenance	
Analysis	
Result	
Clerk Signature	



www.solutionozone.com info@solutionozone.com











