



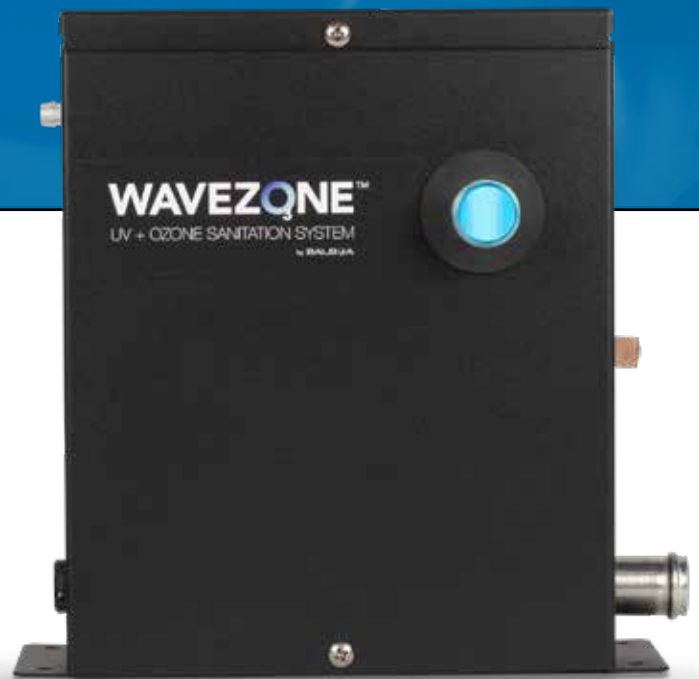
# Balboa WAVEZ<sub>3</sub>ONE™

## UV + OZONE SANITATION SYSTEM

The science of water treatment process using ozone and ultraviolet radiation! Disinfect your water naturally.

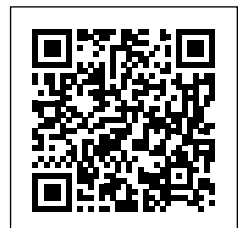
### OVERVIEW

- WAVEZ<sub>3</sub>ONE™ maximizes oxidation power.
- WAVEZ<sub>3</sub>ONE™ disinfects water by killing viruses and biological contaminants.
- WAVEZ<sub>3</sub>ONE™ reduces the use of chemical levels which means reducing the discomfort of skin and eye irritations.
- WAVEZ<sub>3</sub>ONE™ has low power consumption
- WAVEZ<sub>3</sub>ONE™ has been designed & tested specially for Spa and Swim Spa Applications
- WAVEZ<sub>3</sub>ONE™ is available in 240V, 50/60Hz
- WAVEZ<sub>3</sub>ONE™ is UL/cUL approved.



### FOR MORE INFORMATION

Visit us online: [www.balboawater.com/wavezo3ne-SanitationSystems](http://www.balboawater.com/wavezo3ne-SanitationSystems)



# WAVEZONE™

## UV + OZONE SANITATION SYSTEM

The WAVEZO<sub>3</sub>NE™ designed by Balboa, the leader in reliability in spa controls for over 20 years. This compact WAVEZO<sub>3</sub>NE™ UV + Ozone Generator Combo was created specifically to withstand the demanding environment of the hot tub. Our compact WAVEZO<sub>3</sub>NE™ UV + Ozone Generator Combo has a smaller footprint while saving energy. Balboa's WAVEZO<sub>3</sub>NE™ UV + Ozone Generator Combo's metal enclosure protects the unit from any harsh corroding environments.

## WHY BALBOA'S WAVEZO<sub>3</sub>NE™ IS SUPERIOR

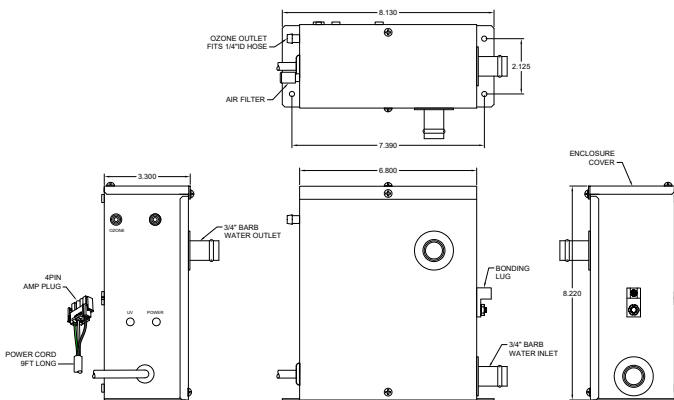


- ✓ Powerful UV and ozone generators designed for spa and swim spa applications
- ✓ Electronic UV ballast and ozone power supply
- ✓ US manufactured UV Lamp
- ✓ LED indicator lights
- ✓ Low power consumption
- ✓ Available in 240V, 50/60Hz
- ✓ Available with single ozone cell and dual ozone cells
- ✓ Ozone output options from 50mg/h to 200 mg/h
- ✓ Unique design CD ozone cell with solid stainless-steel electrode for exceptional longevity
- ✓ Ozone cells are fully potted with epoxy for complete water ingress protection
- ✓ 316L stainless steel with special heat-treated UV reactor – No degrading – No melting
- ✓ Electrical enclosure is made from galvanized steel with powder coated
- ✓ Cool operation with low heat generation
- ✓ Super low production and field failure rates
- ✓ Small compact unit requires very minimal room for installation
- ✓ Mounting tabs for easy installations
- ✓ Extra thick inlet/outlet barb to prevent breakage
- ✓ Silicone air filter included

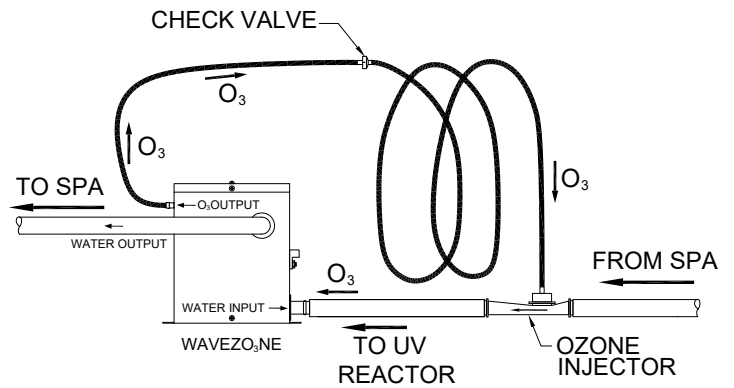
# WAVEZONE<sup>TM</sup><sub>3</sub>

## SANITATION SYSTEMS

### DIMENSIONS



### INSTALLATION



### SPECIFICATIONS

BWG P/N NUMBER	SYSTEM VOLTAGE	LAMP WATTAGE	RATED AMPERAGE	SYSTEM FREQUENCY	FLOW RATE	QTY OZONE CELL	OZONE OUTPUT (2LPM)	CONNECTION SIZE	MAX VOLUME (GALLONS)	APPROVAL AGENCIES	UL MODEL NUMBER
59326	230V	7W	0.5A	50/60Hz	6 GPM	1	50 mg/h	3/4" Barb	600	UL/cUL	UVOZ127-XX
59327	230V	7W	0.5A	50/60Hz	6 GPM	1	100 mg/h	3/4" Barb	1000	UL/cUL	UVOZ127-XX
59328	230V	7W	0.9A	50/60Hz	6 GPM	2	150 mg/h	3/4" Barb	1500	UL/cUL	UVOZ227-XX
59329	230V	7W	0.9A	50/60Hz	6 GPM	2	200 mg/h	3/4" Barb	2000	UL/cUL	UVOZ227-XX

# WAVEZONE<sup>TM</sup><sub>3</sub>

## SANITATION SYSTEMS

### UV/OZONE COMBO: POWERFUL SANITATION METHOD

1. UVC radiation “kills” bacteria and viruses in the water that are exposed to the UV rays.
2. Ozone (O<sub>3</sub>) is a powerful oxidant that oxidizes organics contaminants in water.
3. UV generators and Ozone generators are being widely used for spa and hot tub applications today.
4. When combining Ozone and UV together in a reactor chamber, the sanitation power is multiplied.

### THE SCIENCE BEHIND IT.

#### AOP: ADVANCED OXIDATION PROCESS

AOP is a set of chemical reaction process used to sanitize water through reaction with hydroxyl radicals.

AOP is based on production of hydroxyl radicals. The more hydroxyl produced the better sanitation power.

The chemical formula of hydroxyl radical is (·OH).

Hydroxyl radical is highly reactive. It is the strongest oxidant in water.

Hydroxyl radicals oxidize unselectively both organic and inorganic contaminants.



#### HOW HYDROXYL RADICALS ARE FORMED IN THE UV/OZONE CHAMBER?

1.  $\text{O}_3 + \text{UV} \Rightarrow \text{O}_2 + \text{O}$ .
2.  $\text{O} + \text{H}_2\text{O} \Rightarrow 2 (\cdot\text{OH})$ . 2 Hydroxyl radicals
3.  $2 (\cdot\text{OH}) \Rightarrow \text{H}_2\text{O}_2$ . Hydrogen peroxide is an oxidant agent.
4.  $\text{H}_2\text{O}_2 + \text{UV} \Rightarrow 2 (\cdot\text{OH})$ . 2 Hydroxyl radicals