



# OZN-jr. Ozone Generator

*Custom Automated Products offers a full range of equipment for the growing enthusiasts. Ozone is a naturally occurring molecule which is produced in the upper atmosphere when UV (ultra-violet) light strikes oxygen. The earth's "Ozone layer" protects us from harmful UV rays. Ozone is also produced during thunderstorms... that fresh smell after a rainstorm is ozone.*

## OVERVIEW

- The OZN-jr. Ozone Generator safely produces ozone by using a safe ultra-violet light.
- Ozone is a very powerful "oxidizer" which means it can sterilize water and air by attaching itself to offending odors and destroying them by actually changing their chemical composition.
- When used properly, levels far below the OSHA and EPA limits are maintained with no harmful effects.

## WHAT IS OZONE?

Ozone (O<sub>3</sub>), is a strange and reactive molecule consisting of three atoms of oxygen (O<sub>1</sub>). Ozone is created when UV light strikes a molecule of oxygen (O<sub>2</sub>), which has two atoms of oxygen. The molecule is split into two individual atoms of oxygen that are free to attach to two molecules of oxygen producing ozone (O<sub>3</sub>). The third atom of oxygen is "weakly" attached to the molecule, which makes it very unstable and able to react quickly with pollutants. When a molecule of ozone "bumps" into an offending odor, the third "weakly" bonded atom of oxygen attaches to the odor molecule, which destroys the chemical's "smell," thus eliminating odors. The simple equation is  $UV\ light + O_2 + O_1 = O_3$ .

## HOW TO USE THE OZN-JR.

The OZN-jr. is very easy to use. Most people find a location to hang the unit on a wall away from human activity. It does not have to be directly by the source of odors because the OZN-jr. can effectively treat up to 1000 Cubic Feet. When the unit is plugged in and the switch on the front is turned on, the fan draws in air and passes it over the UV lamp located inside the enclosure. Ozone is created inside the unit and is expelled from the front of the unit. The turbulence created when the air flows through the ductwork increases the "mixing" of the ozone to fully neutralize all odors. The OZN-jr. operates in cycles of 10 minutes on and then 10 minutes off to prevent ozone levels from becoming too high in a small area.



***WARNING: OSHA limits for ozone exposure are .5 ppm for 8 hours. Do not operate the OZN-jr. in small closed spaces while occupied. When used properly with adequate ventilation, exposure to ozone is nearly eliminated. Some people are more sensitive to ozone than others. Indications of overexposure include strong ozone smell, sore throat or irritation.***

## SAFETY AND MAINTENANCE

We have made the OZN-jr. as safe as possible. The unit should never be opened while plugged in. The power light will verify the unit is getting power. The OZN-jr. will always have a light on when it is plugged in.

## TROUBLESHOOTING

If you are having problems with this unit, refer to these troubleshooting hints.

<i>Problem</i>	<i>Suggested Action</i>
<b><i>The red light does not light up when plugged in.</i></b>	Check the power into the unit. Plug the unit into a different outlet that is known to be working.
<b><i>The power switch is lit up but the unit does not work.</i></b>	If a yellow light is on, then the OZN-jr. is in standby mode for 10 minutes. Either press the power button twice to over-ride the standby mode or wait 10 minutes for the unit to go to on mode (green light).
<b><i>I smell a strong "ozone" odor.</i></b>	You may have to ventilate more often or move the unit to an area not directly around people.
<b><i>I develop a sore throat after being exposed to the ozone.</i></b>	Excessive exposure to ozone can be dangerous above .5 ppm. To reduce exposure, increase ventilation. People with asthma or chronic respiratory disease may be more susceptible to problems than others and should not use an ozone generator in a closed area if ill affects are being felt. Prolonged extreme exposure to high concentrations of ozone (over .5 ppm) can damage the lungs.

## PRECAUTIONS

- If you detect a strong ozone smell, the level is too high. Increase ventilation or move the unit to an unoccupied area.
- Operate only in dry and safe ventilated environments.
- DO NOT open the cover. There are no user serviceable parts inside.
- DO NOT disable any safety devices on this unit.
- DO NOT operate this unit with the cover removed. Looking at the UV light can cause eye damage.
- People with asthma or chronic respiratory disease may be more susceptible to problems than others and should not use an ozone generator in a closed area if ill affects are being felt.

## WARRANTY

***The OZN-jr. is warranted against defects in workmanship and parts for Three Years.***

## SPECIFICATIONS

Main power voltage:	120 volts	Amperage:	Less than 1 amp
Coverage Area:	Up to 1000 Cubic Feet	Wattage:	6 watts
Weight:	1 lb.	Dimensions:	8" x 2" x 5.5"
Ozone Cycle:	10 minutes ON - 10 minutes OFF		

***Published by Custom Automated Products, Inc.  
Copyright 2006 All Rights Reserved***

***Custom Automated Products, Inc. and their retailers and distributors are not responsible for any damage or injuries, consequential or otherwise arising from the use of this product. The purchaser assumes all responsibility for the use and proper installation of this device.***

***[www.capcontrollers.com](http://www.capcontrollers.com)***