

**Series** 

**GO-4L** 

## GLACIER O<sub>3</sub>ZONE

OWNER'S MANUAL

Read This Manual Completely Before Operating

#### GLACIER LLC

## **Operation and Maintenance Manual**

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# Introduction: Read This Manual Completely Before Operating

Congratulations! You have purchased state-of-the-art Glacier clean ozone generating equipment.

ver 20 years of research and development have gone into the perfection of this equipment and technology. This proprietary equipment can do marvelous cleansing of the air we breathe that will help enhance personal and commercial environments by removing stubborn toxic and obnoxious odors, as well as eliminating Volatile Organic Compounds (VOC's), plus molds, mildew, fungus, bacteria, viruses and much more.

#### **The Science of Ozone Purification**

This machine generates clean ozone by producing an ultraviolet light wavelength that converts some of the oxygen surrounding the environment into clean ozone. Ordinarily, this clean ozone has a life span of approximately 20-minutes before it reverts back into oxygen, unless it finds a carbon molecule to destroy.

The System speeds up the cleansing process of foul-smelling infested areas by saturating the contaminated area with a huge volume of clean ozone molecules. The molecules as denoted in Grolier's Book of Popular Science are a form of Super Charged Oxygen. These Super Charged Oxygen molecules seek out and destroy the offending odors and VOC's in the same manner as exposing something to an enormous amount of outside fresh air. Super Charged Oxygen just does it super fast!

OFFENDING ODORS, BACTERIA, FUNGI AND VIRUSES SIMPLY CANNOT SURVIVE WHEN EXPOSED TO GLACIER OZONE'S TECHNOLOGY.

Super Charged Oxygen will seek out and destroy bacteria, molds, fungi, viruses, noxious odors and contaminating particles such as smoker's residue, pet odors, cooking odors, household odors, molds, mildew, fungus, hydrocarbons, garbage, dead and decaying carcass odors, animal and human waste, restroom odors, plus formaldehyde and petroleum product odors. All are *destroyed* rather than masked with temporary chemical deodorizers.



Although Glacier Ozone Generators will usually take care of offending odors with one treatment, tough problems may require several repeat exposures to completely eliminate the problem. Remember that the problem you are attempting to clean-up may have accumulated over a period of time and may be deeply imbedded.

The system literally destroys airborne odor particles, bacteria, viruses, molds, fungus and dust mite feces. Also petroleum product odors such as diesel, gasoline, grease or kerosene can be history, especially in the boating and motor home industry.

Stale smelling areas contaminated with pipe, cigar, cigarette smoke, toilet, urine and foul odors that are only temporarily masked by janitorial applications with so-called "sanitizers" can be made to smell fresh and clean. Bacteria, viruses, mold and fungus (mildew) do not grow in a super Charged Oxygen environment!

Odors in trash rooms, homes, vehicles, boats, buildings, or any enclosed area are composed of many different noxious elements and materials, yet they all have one thing in common; they are made of carbon molecules and ozone destroys carbon molecules. These are the culprits that become entrapped in wool, cotton, synthetic fibers as well as numerous other materials. These are the odors that often cannot be removed by any other method other that Glacier Ozone's proven technology.

Dry cleaning solvents (such as perchloroethylene) lock offending odors into garments and drapes (the same as shampooing a rug or furniture) making odor elimination nearly impossible. The solution to this problem is to treat garments, rugs, drapes and furniture by using the Glacier Ozone Generator before the item(s) are dry-cleaned or shampooed.



#### **Important Safety Precautions**

he Glacier Ozone system will do its job very well. However, IT SHOULD NOT BE USED WHEN HUMANS OR ANIMALS ARE PRESENT. High concentrations of ozone can cause throat irritations, headache and burning eyes. The area exposed should always be ventilated (purged) with fans by circulating inside and outside air for approximately 30 minutes after the application to allow the ozone to dissipate.

#### <u>CAUTION – Read entire warning label on machine before operating.</u>

IMPORTANT: Always make sure the area to be treated is not excessively wet (standing water). If the area is excessively wet or very damp, such as after a flood, or water damage from extinguishing a fire etc., it is strongly advisable to use a dehumidifier to remove moisture before, during and after treatment for the system to do its job properly and effectively. The system will work wonders on eliminating the odors that are left behind by fire, smoke, and water damage when the areas are dried out. However, multiple treatments may be required if the environment being treated is slow to dry out.

See Chapter 3, Operating Instructions for specific power requirements.

#### **IMPORTANT USER WARNING**

ALWAYS DISCONNECT (UNPLUG) THE MACHINE WHEN SERVICING. IF YOU DECIDE TO SERVCE YOUR SYSTEM BY CLEANING OR REPLACING ANY OF THE LAMPS, PROLONGED DIRECT VIEWING OF THE ULTRAVIOLET GENERATOR(S) IN THE SYSTEM WHEN LIT CAN CAUSE TEMPORARY BURNS TO THE EYES.



### **Operating Instructions**

Experience is certainly the best teacher.

etermining the source and type of odor is a start. The nose knows! If possible, always position your equipment nearest to the primary source of the problem, at least 12"-18" off the floor.

Judgement is the key in dealing with odor problems – how much time is required for a certain area and how intense is the problem? On a scale of 1-10, ask your customer to rate how severe the odor problem is. When you inspect the area, do your own judgement. The size of the area and the contamination determines the time required to treat an area. However, if the problem is an intolerable situation, when in doubt, treat for a longer period of time. It is better to over-saturate than under-saturate.

Our advice is in situations where the smell is more than a mere irritation a larger output machine will be desired. The use of additional machines is also efficient and requires less time. You will find this especially true when treating larger homes, warehouses, motor homes, travel trailers, buses trucks, boats and automobiles.



To use the unit, plug into approved (see below) power supply and press the "On" button on the front of the unit. To turn the unit off, click the button to the "Off" position.

#### <u>INCORRECT POWER SUPPLY – DAMAGE TO EQUIPMENT</u>

- 1. **A.C. POWER FLUCTUATIONS**: The 110 volt 60HZ ozone generators are manufactured to operate on 108 125 bolts, 60 HZ. The 220/240 volt 50/60HZ
- 2. **PARAMOUNT:** Using an A.C. Wire Circuit Analyzer, test outlet to verify the outlet is correctly wired. (Hot (black) Neutral (white)). If they were not installed in the correct order, then they will cause damage to the machine. CAUTION: This simple test is insurance for the longevity of the machine and if not done will negate the warranty.

- 3. LOW VOLTAGE AND HIGH VOLTAGE: Use an AC plug inline voltage monitor. Various areas in Canada and U.S experience severe voltage fluctuates below 110 volts, and as high as 140 volts. The generator must receive between 108V and 125V to operate properly.
- 4. **POWER EXTENSION CORDS**: Always use three-wire (minimum 14 gauge) extension cords not over 25-feet in length; if over 25-feet then use 12 gauge wire. Never extend more than 50-feet. Check the "NEEDS" rating on the label on the machine to determine the right power supply.

#### 5. AUXILIARY POWER PLANTS:

- ✓ Always oversize by 50%. Never under-size. DO NOT GUESS.
- ✓ Always use heavy enough power cords.
- ✓ Always purchase a reliable power plant.

## SURGING WILL DAMAGE THE EQUIPMENT AND IS NOT COVERED UNDER WARRANTY.

CAUTION IMPORTANT! Always use a 3-wire circuit analyzer / tester *before* plugging in the machine(s). If you cannot find an outlet correctly wired, then DO NOT attempt to use the machine. If extension cords are required, always us a #14 extension cord. DO not exceed over 25-feet in length.

FAILURE TO DO THE ABOVE COULD SEVERELY DAMAGE YOUR SYSTEM AND VOID THE WARRANTY.



#### **Care for Your Glacier Ozone Generator**

Proudly made in the USA

our System is manufactured in the United States by experienced technicians using the highest quality parts and materials. When properly cared for, your System will give you many years of excellent performance.

It is required maintenance of your System to protect the durable stainless steel cabinet and the generator when transporting the unit. Although the cabinet is high quality stainless steel, the machine should be kept out of the weather and as dry as possible. Never use the system where water could get inside.

To clean your system, simply wipe the stainless steel exterior with either Stainless Steel Magic Original Formula spray, or Professional Easy-Off Stainless Steel Cleaner & Polish.

When required, remove the filter retainer from the intake fan guard, and remove the fan filter. Wash with warm soapy water. When the filter is dry, replace it and the retainer. Or, if needed, replace filter. Always operate the system with the intake fan filter in place. Keep the power cord clean and free of chemicals and avoid kinking.

Unplug the system by pulling on the plug, not the cord. Never pick up the system by the cord or drag the system with the cord. Always transport the system in a secure, upright position.



#### **USER WARNING**

Always disconnect (unplug) the machine when servicing. If you decide to service your system by cleaning or replacing any of the lamps, prolonged direct viewing of the ultraviolet

generator(s) in the system when lit can cause temporary welding-type burns to the eyes.

To see if the lamps come on, look indirectly for a lavender glow. If the system seems to be low in generation, disconnect (unplug), remove cover and clean lamps: Wipe with 70-91% Isopropyl Alcohol with paper towel and dry with a clean paper towel.

#### WARRANTY

All Glacier clean Ozone Generator's have a 1 (one) year unconditional warranty on all parts and labor with the exception of the lamps. CAUTION/IMPORTANT: Mishandling can damage the lamps. The lamps are unconditionally warranted for 6-months from the date of delivery, except for breakage. All parts and lamps replaced under warranty by the purchaser must be returned before replacement to qualify for a no charge exchange. If replacement parts are not returned, a charge for parts will be made.

Generators returned during the 1-year warranty period will be examined and repaired (excluding lamps, see above) within 10-business days of receipt (excluding backorder parts items). There is no charge for repair, however the customer is responsible for all shipping charges.

#### **WARRANTY REGISTRATION**

Name		
Address		
	StateZip	
Phone	Email	
Model:	S/N	
Purchased from	Date Recieved	

and enclose copy of invoice or receipt, and mail to:

Glacier Ozone PO Box 348 Auburn, WA 98092

Your Serial # is located on the warning label on the top of your unit. Please keep a copy of this