DR Series
HIGH OUTPUT SHOCK TREATMENT OZONE GENERATOR

Model: DR-10
Installation & Operations Manual
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IMPORTANT SAFETY INSTRUCTIONS READ AND FOLLOW ALL INSTRUCTIONS.
Read this manual completely before attempting installation.
SAVE THESE INSTRUCTIONS!
SECTION 1

Safety Precautions

Ozone is a powerful oxidizing agent. Observe strict operating procedures while using ozone equipment. **It is imperative that only ozone compatible materials are used in conjunction with the ozone system.**

**Note:** If the operator has asthma, he or she must not enter an airspace that has a significant ozone concentration. Ozone can induce an asthma attack.

Do not allow rain or condensation to contact the Ozone Generator. The Ozone Generator is not weather proof. The unit must be operated indoors or in an enclosure in a non-condensing environment.

Carefully review and familiarize yourself with the following important safety information concerning the Ozone Generator:

1. Ozone is an extremely aggressive and powerful oxidizer. The Occupational Safety and Health Administration (OSHA) 8-hour exposure limit is 0.10 PPM. The OSHA 15-minute exposure limit for ozone is 0.3 PPM. Above 0.3 PPM, there is the risk of damage to respiratory tissues.

2. People who have no sense of smell should not operate this equipment.

3. Never attempt to verify ozone production by directly breathing or smelling the ozone outlet or the ozone-tubing outlet.

4. The Ozone Generator contains high voltages. Unauthorized entry can result in serious injury or death. For service instructions, contact Ozone Solutions.

5. Make sure all tubing connections between the Ozone Generator and the injection point are secure and in good working condition. Failure to do so could result in the discharge of ozone into an undesired space.

Introduction

The DR-10 ozone generator produces ozone from air. Ozone Solutions air purifiers use modern ozone generating methods to create disinfecting ozone the same way nature uses lightning to create ozone. Oxygen is very unstable in its tri-atomic form (also known as ozone) and naturally attaches to most organic chemical contaminants, mold spores, odors, etc., leaving them oxidized and broken down molecularly. This reaction leaves an area with fresh clean air.

**Ozone Generation from Corona Discharge**

**Theory of Operation**

The DR-10 is designed to operate in suitable conditions with no more than 60% humidity and 100 degrees Fahrenheit ambient temperature. Lower humidity produces more ozone. The unit’s output should also be placed at least three feet away from any obstruction.

1. Plug the unit into a standard 110 Volt A/C 60 Hz power source.

   **Ensure that all People, Pets, and Plants are removed from the room being Ozonated.**

   A. If you are concerned about reentering the room with ozone present to turn the unit off, place the unit inside the room with the power cord going under the door to a safe area that can be reached later.
B. This step is an optional way to ozonate a room/space. Attach a 4” dryer vent hose to the DR-10 and duct the ozone to the room you desire leaving the DR-10 in an adjacent room. When using this process the room will have to be sealed up better to prevent the ozone escaping from that room. Push the black button on the top one time to set the DR-10 on continuous (Hold), or push until you reach the desired time up to 48 hours.

2. Ensure that the unit is operating correctly. (A blue or purple glow should be visible through the front grill of the unit and the flow of the fan should be felt at this same location.)

3. Leave the room and return 2 - 6 hours after the unit has stopped.

4. When Ozonating a vehicle place the DR-10 inside the vehicle or attach a 4” dryer hose to the DR-10 sitting outside the vehicle and duct in the ozone. Make sure the rest of the window is sealed with plastic etc. to prevent ozone escape. Keep the run time to under 20 minutes per cycle.

5. This process can be repeated if the original odor is not completely removed.

SECTION 2
Component Diagram

| LEGEND | 1. Ozone Output | 2. Timer Control | 3. Inlet Fan | 4. Ozone Block |

Component Description

1. **Ozone Output** – 4” Cap attached for easy venting
2. **Timer Control** – One Touch easy to control timer
3. **Inlet Fan** – Two Fan inlets to push ozone over the ozone block
4. **Ozone Block** – Ozone Plasma Block turns purple when ozone is manufactured.

TIMER OPERATION

The timer located on the Top of the unit can be easily set for any duration between 2 hours and 48 hours. Once the time has expired the unit will turn off.
Specifications

<table>
<thead>
<tr>
<th>DR Series</th>
<th>Ozone Production Grams/hour</th>
<th>Ozone Flow Rate (CFM)</th>
<th>Timer Range (HOURS)</th>
<th>Power Consumptions (Watts)</th>
<th>Dimensions (LxWxH)</th>
<th>Weight (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DR-10</td>
<td>10</td>
<td>150</td>
<td>2 - 48 (ON/HOLD)</td>
<td>150</td>
<td>17”x6”x7.25”</td>
<td>11</td>
</tr>
</tbody>
</table>

Available Options

<table>
<thead>
<tr>
<th>Optional Accessories</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 Hz Power</td>
<td>Necessary for overseas use</td>
</tr>
</tbody>
</table>

SECTION 3

Maintenance

The DR-10 is designed to operate continuously with little to no maintenance. If the unit does not produce its maximum ozone output, a simple cleaning process can be performed.

- Unplug the DR-10 from its power source and remove end cap.
- Use a compressed air source of no more the 100 PSI to remove any debris from the ozone block. Keep the wand six inches away to prevent damage.
- The same air source can then be used to clean the two 3 ¼ inch particulate filters located on the sides of the unit. If the particulate filters need replacement, contact Ozone Solutions.
- For cleaning the ozone block, remove the two black screws that hold on the end cap. This is the end of the generator that the air blows out of.
- Once a month, after heavy use or after using in high humidity, the ozone block should be cleaned. A razor blade can be used to lightly scrape off the acidic crust buildup on the ozone block tubes.
- Ensure that the unit is properly operating before resuming the ozonating process. If any failure should occur please ship the unit back to the manufacturer, Ozone Solutions, to be repaired by a technician.

Trouble Shooting

WARNING: UNPLUG THE UNIT FROM THE POWER SOURCE BEFORE ANY ATTEMPT TO REPAIR!!!

* Decrease in ozone output…
  - Unscrew & remove the front cover
  - Clean the ozone block (See Maintenance Section)
  - Clean or replace intake fan filters

* Generator is not running at all…
  - Please contact Ozone Solutions at 712-439-6880

* One or both fans are not running…
  - Unscrew & remove the filter covers
  - Ensure that the fan spins freely by spinning it by hand, if not
  - Look for obstructions or buildup of debris in the fan.
  - Check for loose wires or burnt out fan motors
  - Check for buildup of soil, soot or other debris on the side of the fan casing.
Warranty

Ozone Solutions warrants all equipment assembled, manufactured, and sold to be free from defects in material and workmanship under normal use and service for a period of one (1) year after date of sale to the original purchaser.

Some products may have a specific warranty period other than what is outlined in this document. For such products, the manufacturer warranty will supersede this warranty. Ozone Solutions will honor the manufacturer’s warranty, but if and when advised by the manufacturer, may have the customer deal directly with the manufacturer.

This warranty covers all parts that are not outlined in a product maintenance schedule. This warranty will be void if any piece of the equipment is used in a manner other than what is explicitly outlined in the product manuals. The ozone block is considered a consumable item and is NOT covered under warranty.

If any part of the equipment manufactured by Ozone Solutions proves to be defective during the warranty period, please contact Ozone Solutions at 1-888-892-0303, or tech@ozonesolutions.com.

Prior authorization is required before working on or shipping a product back to us. Failure to get prior authorization may result in denial of your claim. Once authorized, you may return the defective equipment to Ozone Solutions with the transportation charges prepaid. If Ozone Solutions finds the equipment to be defective, it will be repaired or replaced at our discretion, free of charge, to the original purchaser (F.O.B. factory).

This warranty shall not place any liability on Ozone Solutions for any transportation charges, labor, or cost for, or during the replacement of any parts. The replaced part(s) or product will then continue the original warranty duration. The replaced parts will not start a new one (1) year coverage period.

The purchaser by acceptance of the equipment will assume all liability for the consequences of its use or misuse by the purchaser, employees, or others.

This warranty shall not apply to any piece of equipment, or part thereof sold by this company which has been subject to any accident caused in transit, alterations by unauthorized service, negligence, abuse, or damage by flood, fire, or act of God.

This warranty shall constitute the entire warranty and/or agreement between Ozone Solutions and the original purchaser, and in lieu of all other warranties, expressed or implied, either oral or written, including the warranty of merchantability and fitness for a particular use and of all other obligations or liabilities on our part. Ozone Solutions neither assumes nor authorizes any other person or entity to assume for us any liability associated with the sale of its products or equipment.

The term “original purchaser,” as used in this warranty, means whom the product was originally sold to by Ozone Solutions or by an authorized dealer.

Ozone Solutions reserves the right to make changes in its products without notice. Because of this, Ozone Solutions is not obligated to replace warranty defective part(s) and/or product with the same original part or product.

Contact Information

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SECTION 4
Appendix A - CAD Drawings