NT SERIES

AMBIENT OZONE DESTRUCTION UNIT

MODEL: NT-400

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.

Ensure that the Ozone Generator is in a well-ventilated area. 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:

 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.

INTRODUCTION

The NT-series unit is designed to destroy ambient ozone levels at a flowrate of 400 SCFM. This can be accomplished with a once-pass setup or as a recirculating setup to maintain a constant zero ozone environment. The NT-series unit provides an ozone-free "blanket" of air around sensitive equipment.

Typical applications for the NT-series unit include ozone removal in small rooms, laboratories with sensitive equipment, and many other situations were problematic ozone levels exist.

THEORY OF OPERATION

Ambient air, which contains ozone, is sucked into the unit and broken down with proprietary ozone destruct media. Internal fans propel the air through the unit while destroying ozone as it passes through the media. Ozone free air is expelled out the opposite side.

SECTION 2

INSTALLATION GUIDELINES

The unit can be placed in any orientation as long as the air intake is free from obstruction and there is not excessive pressure on the unit's outlet. It is recommended to keep static pressure below 0.5" of water. Higher static pressures will affect flow rate.

It is highly recommended to aim the outlet of the unit towards the area of the room or piece of equipment you wish to provide ozone-free air. Another method is to have the inlet positioned to take in ozone from the source. This unit may also be placed within a sealed case to provide ozone-free recirculation and to achieve a zero ozone environment for sensitive equipment. This entails putting the unit completely inside of an enclosed space so no new air, and/or ozone, enters the space.

This unit is designed for indoor use and must not get wet. Water will destroy the catalyst and render this unit ineffective!

IMPORTANT: The NT-series unit should not be run in areas were the humidity exceeds 90% or where high volatile organic compound (VOC)

levels are present. The user must prevent water from condensing on the unit. If in doubt about the VOC levels, please contact Ozone Solutions. Air that is pulled through the unit should be properly filtered, as to not shorten the life of the destruct media.

START UP

Plug the unit into a grounded 115V/60Hz AC (or 230V/50Hz if appropriate) source and push the unit's main power switch to the ON position. Air will be pulled into the inlet & forced out of the outlet. The user should be able to feel the air forced from the unit.

SPECIFICATIONS

NT-Series	Flow Rate	Power	Temperature Range	OD Spout	Dimensions - LxWxH	Weight
NT-400	400 SCFM	45 Watts	-4 to 176 F	8"	30"x18"x16"	60 lbs

SECTION 3

OPERATION GUIDELINES

The NT-series unit is designed for continuous or intermittent use. The unit can be picked up and moved while operating. Ambient ozone levels 100 parts per billion (PPB) or less will be reduced to less than 5 PPB at the outlet. Ambient ozone levels greater than 100 PPB will result in elevated ozone levels from the outlet.

To test the ozone levels before and after the installation of the NT-series unit, Ozone Solutions recommends a high accuracy low concentration monitor. For monitor inquiries, please contact Ozone Solutions at 712.439.6880 or www. ozonesolutions.com.

MAINTENANCE AND SERVICE PARTS

The NT-series ambient ozone destruction unit is a sealed unit, and servicing shall not be completed by the customer. Please contact Ozone Solutions if any part of the unit fails to function properly.

WARRANTY

Ozone Solutions warrants all new 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.

If any part of the equipment manufactured by Ozone Solutions proves to be defective during the warranty period, please contact Ozone Solutions at 712.439.6880, or service@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 \rightarrow \Box PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING, IS THE SOLE PROPERTY OF OZONE SOLUTIONS. ANY REPRODUCTION UNPAIT OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF OZONE SOLUTIONS IS PROHIBITED. ←←AIR FLOW DIRECTION←← --←AIR FLOW DIRECTION← 2 2 21.66 29.67 DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL±1/4 ANGULAR: MACH± BEND± TWO PLACE DECIMAL±0.125 THREE PLACE DECIMAL±0.0625 MATERIAL INTERPRET GEOMETRIC TOLERANCING PER: ASME Y-14.5-09 UNLESS OTHERWISE SPECIFIED: COMMENTS: DO NOT SCALE DRAWING (0 MFG APPR. DRAWN CHECKED OPERATIONS ТВ 9/26/2018 DATE 17.39 DWG. NO. 14.38 **≯**SIZE SCALE: 1:10 REV 1 NT-400 Customer Overview SHEET 1 OF 1 Overview

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Revision 2b

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