



ZO-30N Ozone Generator



Shanghai Enaly Wish to Thank You for Purchasing Our Products

ZO-30N Ozone Generator

With proper care and maintenance, this device should give you years of trouble-free service.

Please take the time to read this manual so that you may safely operate your ozone generator and utilise the unique properties of ozone.

Specifications of the ZO-30N

Ozone output: about 100mg per hour without connection to air dryer

Max Ozone output: about 200mg per hour with connection to air dryer

Pump Output: about 2 litres per minute

Max. Pump pressure: 3/4psi=0.5 meter of water

Outlet port dimensions: 6 millimetres

Inlet port dimensions: 6 millimetres

Current: 30-35mA (AC220-240V)/60-70mA (AC110-120V)

Power Consumption: 7 Watts

Net Weight: 0.5 kilograms

Safety Information

It is the responsibility of the user to thoroughly understand the contents of this manual.

The ZO-30N ozone generator is capable of delivering 100-200mg of ozone per hour. In a confined space, ozone concentrations generated by the ZO-30N may greatly exceed the 15-minute exposure limit of 0.3 parts per million, set by the US Occupational Safety and Health Administration (OSHA). Above the OSHA exposure limit there is risk of inflammation to the respiratory system. **Where ozone is used as a fumigant, remove all people, pets and plants from the area and keep people away until all the residual ozone has disassociated or dispersed.**

Ozone has been shown to induce asthma attacks. **Asthma sufferers should not enter a newly ozonised airspace until all the residual ozone has fully dispersed and well ventilated with fresh air.**

Ozone has a distinctive sharp odour and is normally detectable by smell at concentrations well below the OSHA 15-minute exposure limit. Most people can detect the smell of ozone at concentrations around 1/10th of the 15-minute exposure limit. A strong smell of ozone normally indicates an ozone concentration that exceeds the 15-minute exposure limit. **Those people that lack a sense of smell should not operate this equipment. Don't attempt to confirm ozone production by directly smelling the ozone outlet.**

*Please use your ozone generator
In a responsible manner*

The ZO-30N Ozone Generator is not weather proof. Ensure that it is set up in a dry, well-ventilated area. Do not allow dew, moisture or condensation to enter or contact the Ozone generator. The unit should be located indoors or in a suitable enclosure with a dry, dew-free environment.

Do not operate the generator in humid conditions. High humidity can cause electrical insulation to break down resulting in high-voltage arcing in the ozone generator. Arcing may cause damage to the ozone generator. High humidity also promotes the generation of nitrogen oxides that react with the remaining water vapour and ozone to form nitric acid. This may damage the ozone generator cell and cause the generator to emit significant quantities of acid.

The ZO-30N utilises very high voltages that can result in injury or death by electrocution if the unit is misused. Do not open or insert any object into the generator. Keep all flammable and conducting liquids and vapours away from the generator and ensure that your hands are dry before touching it. Make sure that your ozone generator is secured and out of the reach of children.

Ozone is a highly reactive gas capable of destroying many commonly used plastic and rubber products with continuous contact. It is essential to use only ozone compatible tubing between the ozone generator and the injection point. Failure to use the correct materials for the ozone delivery system will reduce the amount of available ozone and could result in an undesirable leakage of ozone into the surrounding airspace.

Ensure that all tubing used is free from dust or other contaminants before connecting it to the generator. Accumulation of dust in the ozone generator or in the ozone supply line will reduce ozone output. A fine-particle filter should be placed in the air supply line to keep the generator and delivery lines free from dust (It has been built in the unit.).Do not lubricate fittings or

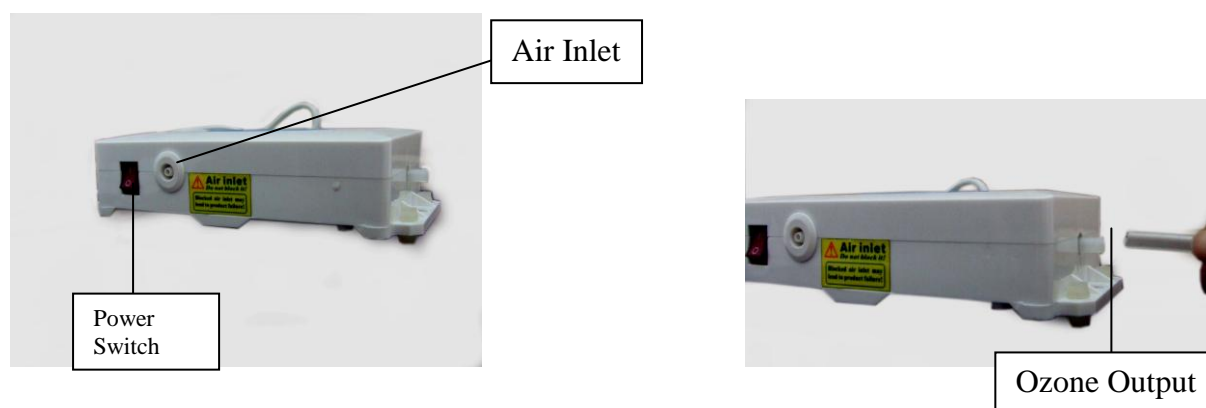
tubing with mineral oil or grease. These materials can spontaneously ignite in the presence of ozone or oxygen.

Do not allow water to enter the ozone generator. Water entering the generator reaction cell will result in damaging the generator. Such damage is not covered by warranty. When ozonising water, always use a check-valve or other suitable non-return device between the generator and the injection point. Ideally, locate your ozone generator well above the waterline, (See figure 1).

Shanghai Enaly accept no liability for any damage or injury caused by this product or damages that may arise through its use by the purchaser or by others. The purchaser is responsible for ensuring that the unit is correctly installed, operated and properly maintained.

Description

The ZO-30N ozone generator is designed to continuously generate ozone by corona discharge. The conversion of oxygen to ozone occurs in a reaction cell excited by a high-voltage potential.



A push power switch to turn the unit on is at the front side of the generator.



An air inlet is at the front side of the generator. It is always connected to air dryer. Why? Firstly, it can increase the ozone output greatly. Secondly, it can decrease the possibility of generating the side-product gases. Finally, it can avoid fog or high humidity in the ozone tube leading electric failures and also will longer the life time of the ozone cell.

Please keep in mind that air dryer is an accessory and does not come with the unit unless you buy set of ZO-30N & air dryer.

Operation

Place the ozone generator close to the point of use, in a clean and dry location free from dew, condensation or high humidity. If applicable, locate your ozone generator well above the waterline to prevent water entering the generator (see figure 1).

The ozone output port is located at the right side of the generator. Insert the tubing and push the tubing fully onto the exposed barb. Connect to the ozone delivery system with ozone compatible tubing. If a check-value is required on the outlet side of the generator, ensure that it is made from ozone compatible materials.

Figure 1 shows a typical configuration for ozonising a water tank. The ozonised air is discharged through diffuser submerged to a maximum depth of 0.5 metres. Check all connections for leaks and make sure that there is sufficient airflow passing through the diffuser after switching on your ozone generator.

A suitable tank vent must be fitted to release pressure and allow a free exchange of air between the tank contents and the atmosphere. Vents also allow the tank water to continually adsorb oxygen from the air, which is essential for the maintenance of good water quality.

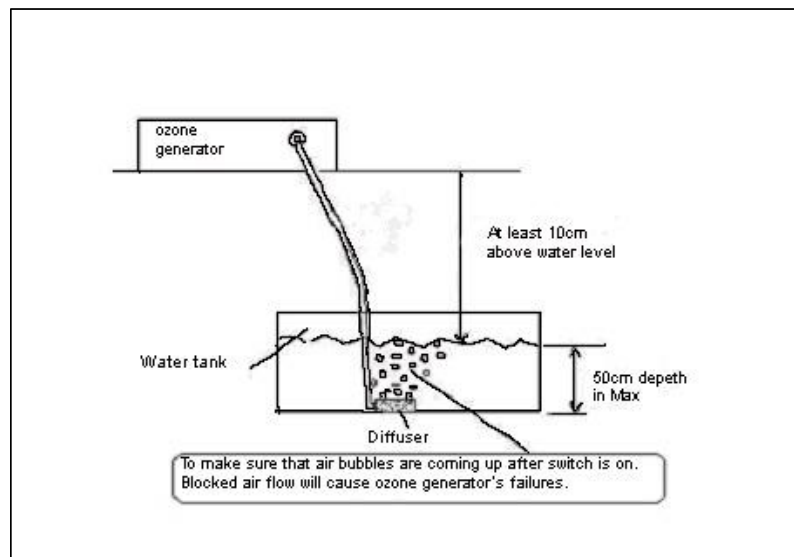


Figure1 Ozone system suitable for a water tank

Maintenance

If you only use your ozone generator intermittently, you should store the device in a dry place when not in use and protect it from dust with a plastic bag.

If you choose to use an automated ozone delivery system, carry out regular inspections to ensure that your system is working effectively.

- Examine all tubing and connections for leaks or damage.
- Check air-pump flow rates.
- Examine check-valves for effectiveness.
- Replace dirty particulate filters.
- If you are using a regenerative adsorbent to remove water vapour, check its efficiency.
- Check the diffuser for an efficient bubble-pattern or if using a Venturi inlet, check for the presence of a vacuum.

Guidance for applying ozone treatment

Please visit www.enaly.com for information about additional applications and product FAQ's.

NOTICES

1. The unit is not waterproof, for indoor uses only.
2. The unit **MUST** be placed at least 10cm above liquid's surface even if a check valve is being used. Back flow water will cause electric failures.
3. If it is working in a environment of high voltage (in 120VAC line) or high temperature(over 30 degree C) or longer than 2 hours at one time, please consider taking cooling measurements to avoid the overheat of the unit, like using fan.
4. The suggested minimum room space is 30 m³ to avoid very strong smell of ozone when purifying water.
5. Suggest using with external timer for flexible control.
6. Please keep the machine at a place where it is not reachable by children and please unplug when you no longer need it.
7. Please do not use it within an environment with flammable gases or explosive materials.
8. Please do no touch the machine with wet or damp hands.
9. Please avoid using it for very long period and also repeatedly in the warehouse of metals and lactoprene materials.

ONE YEAR LIMITED WARRANTY

Shanghai ENALY M&E Ltd. warrants each new product sold by Shanghai ENALY M&E Ltd. and its authorized resellers against defects in materials and workmanship for ONE (1) YEAR from the date of original purchase of the product. This warranty applies only to the first retail purchaser of the product and is not transferable to any subsequent owners or purchasers of such products. If a defect exists, at its sole discretion Shanghai ENALY M&E Ltd. will repair or replace the product. Any repair or replacement will assumes the remaining warranty period of the original product.

One Year Limited Warranty Does Not Apply:

- 1) to damage caused by accident, abuse, misuse, misapplication, or any other product(s);
- (2) to a product or any part(s) that is modified, tampered with, altered, converted or repaired in anyway by anybody other than Shanghai Enaly staff or Shanghai Enaly authorized reseller,
- (3) to a product or any part(s) such as ozone cell (including ozone plate, ozone tube or ozone lamp) that is consumable or expendable (Shanghai ENALY M&E Ltd. reserves the right to amend the list of consumables without prior notice),
- (4) to an optional unit or any other accessories used in connection with the product such as air stones, tubing, air filters or air dryers. (Shanghai ENALY M&E Ltd. reserves the right to amend the list of optional units and accessories without prior notice).
- (5) if any serial or lot number has been removed or defaced.

THE WARRANTY AND REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER

ORAL OR WRITTEN, EXPRESSED OR IMPLIED AND WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEARBY DISCLAIMED. IF SHANGHAI ENALY M&E LTD. CANNOT LAWFULLY DISCLAIM IMPLIED WARRANTIES UNDER THIS LIMITED WARRANTY, ALL SUCH WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED IN DURATION TO THE DURATION OF THE WARRANTY. No Shanghai Enaly reseller, agent, or employee is authorized to make any modification, extension, or addition to this warranty.

SHANGHAI ENALY M&E LTD. SHALL NOT BE LIABLE UNDER ANY CIRCUMSTANCES FOR LOSS OF USE OF SUCH PRODUCT, LOST PROFITS, DIRECT DAMAGES, INDIRECT DAMAGES, CONSEQUENTIAL DAMAGES AND/OR INCIDENTAL DAMAGES. This warranty gives you specific legal rights. You may also have other rights which vary from country to country.

Obtaining Warranty Service

Contact Shanghai ENALY M&E Ltd. authorized reseller in the country where you purchased the product or us. You will be asked to furnish

- (1) your name, address, telephone number ,
- (2) the selling reseller's name,
- (3) proof of the original purchase containing a description of the product(s), purchase date, and the appropriate Enaly serial and/or lot number;
- (4) the description of failure.

You will be advised by the authorized reseller or us, if you need to return the unit for servicing. You will be responsible for all return shipping costs. Shanghai ENALY M&E Ltd. or the reseller is not responsible for incoming freight costs.

<p>PLEASE MAKE NOTES FOR YOUR OWN REFERENCES PURCHASED FROM: PURCHASED DATE: LOT NO.</p>

<p>Authorized Reseller:</p>

Shanghai ENALY M&E Ltd.

Address:	No.43, Lane 1727, Longwu Road, Xuhui District, Shanghai, China, 200231
Tel/Fax:	+86-21-6413-8841/+86-21-3363-2081
Email:	info@enaly.com
Website:	www.enaly.com