

AIR POLLUTION CONTROL SYSTEM FOR FOOD PREMISES

Ozone Generators OG-Series

Installation and Maintenance

A. Shipment

Check that the unit hasn't been damaged during transport. Report any sign of damage to AOM. The generator has been tested before shipping. Read the complete guide before starting the installation.

B. System overview

An electrostatic filter (AOM EAN-Series) treats solid particle contaminants within the airflow. Therefore, the filter is able to remove a proportion of the odour generated by the cooking process. The remaining odour is a gas that needs to be treated with a very strong neutralizer. Ozone is a well-known powerful disinfectant which will mitigate odour from the kitchen exhaust system.

The generator ozone outlet is connected to the exhaust duct after the exhaust hood. The ozone needs a minimum contact time with the odour to be able to change its structure and destroy it. Two seconds is the ideal timing.

The ozone generator can be installed without an electrostatic filter if the cooking only generates grease mist (no smoke). The ozone breaks down the grease and odour by oxidation.

OZONE - AN ENVIRONMENT FRIENDLY AND NATURAL WAY OF AIR CLEANING

The AOM ozone generator changes oxygen molecules (O_2) as found in the air we breathe to ozone (O_3) . Ozone is an unstable gas and, depending on temperature, reverts back to oxygen in about 10-20 minutes. Ozone in contact with the odour molecule will oxidise the odour molecule and will reduce back to oxygen. Hence, only oxygen will be exhausted.



AOM OZONE GENERATOR - OG 35

SPECIFICATIONS AND DIMENSIONS



- 1. Voltmeter
- 2. Amperemeter
- 3. Green LED, ozone is produced
- 4. Green LED, unit is operating
- 5. Ozone output adjustment
- 6. Red LED, malfunction
- 7. Switch ON-OFF
- 8. 100 mm PVC pipe
- 9. Stainless steel casing
- 10. Handle & Lock
- 11. Power connection & BMS connection

MAXIMUM TREATMENT AIR VOLUME (L/S) 1750

VOLTAGE (V) 240/1PH

POWER CONSUMPTION (W) 350

ELECTRICAL CONNECTION 1 x metre cord

WEIGHT (KG) 26

DIMENSIONS (mm) 400 x 335 x 600 high

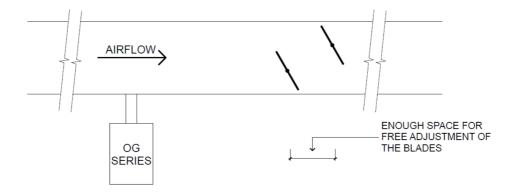
NOTE: MAXIMUM TREATMENT EXHAUST AIRFLOW INDICATIVE ONLY, SPEAK TO YOUR AOM REPRESENTATIVE PRIOR TO ORDERING

AOM AUSTRALIA



C. Installation guidelines

- 1. Install the ozone generator on a wall with two screws. Two lags have been pre-drilled at the top of the unit.
- 2. The ideal installation position is in the kitchen or in the store room with easy access for servicing. Always leave the generator free of material that can restrict the unit airflow.
- 3. Cut one 110mm hole in the exhaust duct side or top, as close as possible to the exhaust hood outlet or after the AOM ESP filtration unit. Fit a PVC 100 mm flange in the hole. Connect the duct flange to the generator ozone outlet with a 100mm PVC plumbing pipe. Seal the pipe with the recommended glue.
- 4. A maximum of eight metres of PVC pipe is recommended.
- 5. Plug the generator electrical lead to a power point. When the exhaust fan switch is activated, the voltmeter should indicated 240 Volt. Press the switch ON-OFF to ON. The operating green LED should be on. The unit should be automatically powered when the exhaust fan is running. Adjust the ozone output to the level of ozone needed (0-35 g/h). The green ozone LED is on.
- 6. The kitchen exhaust discharge point could be at roof or street level. Discharges should be located away from windows, doors or walkways.
- 7. Install a double damper as per the drawing below to be able to adjust the correct air flow and to mix the ozone with the air pollutants to achieve the best efficiency.
- 8. AOM recommends switching on the generator only when cooking occurs. The generator has an in-built timer that can be programmed for the injection of ozone during heavy cooking (lunch/diner time). The other solution to fit a two speeds controller to the exhaust fan. This equipment will switch the ozone generator only in high speed.





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D. Suggested specification

Exhausted kitchen hood grease particles & odour shall be treated by an AOM ozone generator OG-Series. Efficiency of the generator shall achieve States & National Impact Assessment Criteria for Complex Mixtures of Odour Air Pollutants. The construction & installation shall meet all relevant Australian/NZ Standards. The generator should be installed and maintained according to AOM specifications. The generator power supply should be interlocked with the exhaust fan switch.

E. System test

- 1. Switch the exhaust fan on.
- 2. The voltmeter should indicate 240 volts.
- 3. Press the switch ON-OFF to ON. The operating green LED illuminates.
- 4. The generator is running.
- 5. The unit will turn itself off when the exhaust fan is off.
- 6. Adjust the ozone output for the needed level of injected ozone (0-35g/h). The ozone green LED illuminates.
- 7. The amperemeter indicates the current used by the generator for the selected ozone output. If the malfunction red LED is on, call an AOM representative.
- 8. The BMS/ remote indicator output should have an open contact when the generator is off.

F. Service and maintenance

- 1. Check every month that the two front cover green LED's are illuminated when the generator is on.
- 2. Remove the black cover on the fan air inlet and air outlet. Clean the air filters with hot water every month.



G. Warranty

Limited warranty for AOM OG-Series equipment. This warranty is subject to the following conditions:

- a. To validate this warranty, the equipment should be installed and the end user should maintain the filter as per AOM specifications.
- b. A new air cleaner is warranted to be free from defects and /or workmanship for a period of one (1) year from the date of purchase.
- c. A spare part is warranted to be free from defects and/or workmanship for a period of ninety (90) days from the date of its installation.
- d. The warranty for new equipment and spare part covers the repair or replacement of the defective part and includes labour.
- e. To validate the warranty the end user should clean the dust filters a minimum once a month.
- f. Any claim must be presented to AOM. No warranty repair will be granted without AOM written consent. If damage occurs during shipping, notify AOM at once so that a claim can be filed.
- g. The above limited warranty does not apply to damage resulting from accident, alteration, misuse or if the serial number is removed or defaced.