Air-Duct 2000 Installation and Operating Instructions

Please be sure to read over the installation and operating instructions before operating this unit. Be sure to closely read the “OZONE LEVELS” section of this manual. It is advised to use as little ozone as possible by adjusting the burst timer for air purification. It is very important to adjust the ozone level for the exact situation that this unit is used for.

It is best to test your unit before installation. Test your Air-Duct 2000 unit by inserting the small jumper plug into the small jack on the side of the CE Box. Turn the power switch on the Air-Duct 2000 unit to the on position, and turn the round Ozone Knob all the way clockwise to the highest position. The ozone element should glow purple and a buzzing sound should be heard. Do not touch the ozone element. Note that the Air-Duct unit will NOT power on unless the small jumper plug is inserted into the jumper jack of the CE box and there is a 1 minute delay before the unit powers on.

Installation

The Air-Duct 2000 can be installed on an output air duct, or on a sidewall of the HVAC system. It is advised to install the device on the output side of the HVAC System for maximum effectiveness.
1. Locate the spot on the duct where the unit will be installed. The unit will need a
clearance of 4 inches into the duct to provide room for the ozone element. Make sure the
duct is sturdy enough to handle the weight of the unit. Do not plug the unit in to the wall
outlet until the unit has been installed.

2. Draw a horizontal rectangle on the duct that is 8.75 inches wide by 4 inches tall.
This is the area of the duct that must be cut out to insert the unit. Do not make a larger
hole than this. Four holes can be drilled on the inside corners of the rectangle and a
jigsaw can be used to cut out a portion of duct. The duct may also be cut by tin snips.
Sand or use a rotor tool to smooth out any sharp edges of the edge of the duct. The unit
may also be mounted into a vertical configuration.

3. After the hole has been cut on the duct wall, slide the unit into the opening hole.
While holding the unit in place, use a pencil to mark the 6 screw holes on the side of the
duct work. Remove the unit and drill the six holes with a 0.133” drill bit.
Use the included 6 self-threading screws to affix the unit onto the duct.

4. Install the Huba Air Pressure Switch. Please see the Huba Pressure Switch instructions
for the installation procedure. Be sure and leave enough cord on the Huba switch to reach
the jack that will be attached to the Air-Duct 2000. The Huba switch should be installed IN FRONT of the airflow going to the Air-Duct 2000 as shown in the diagram. The Huba switch should be adjusted according to its instructions.

5. After the HUBA switch has been installed on the duct, remove the small jumper plug from the CE box and replace it with the cord from the HUBA switch.

**Note that the Air-Duct 2000 will not power on if either the cord from the HUBA switch, or the small jumper plug is not inserted into the CE Box. One of the plugs MUST be inserted into the CE box for the Air-Duct unit to power on.**

**Controls**

The POWER button turns the unit ON/OFF.

To select the OZONE LEVEL, Turn the round ozone knob from low to high, clockwise. It is best to leave the ozone level at the highest position. The ozone element will self clean by burning off any dirt that accumulates on it.

**Burst Timer Control**

The unit can “burst” the ozone on and off for specified periods of time. The GREEN timer button can be pressed to adjust the ozone output for so many seconds per each minute. This function allows the user to lower the ozone output for more suitable levels used for air purification. Please read the section below entitled “OZONE LEVELS” for recommendations on how to set the ozone level control.

To set the Burst Timer: Press the GREEN button to change the timer mode. This will enable the unit to run so many seconds per minute, every minute. The five LED’s inform the user where the timer is set:

- When the 1st LED is lit it means that the unit will produce ozone for 5 seconds per minute.
- When the 2nd LED is lit it means that the unit will produce ozone for 10 seconds per minute.
- When the 3rd LED is lit it means that the unit will produce ozone for 20 seconds per minute.
- When the 4th LED is lit it means that the unit will produce ozone for 30 seconds per minute.
- When the 5th LED is lit it means that the unit will produce ozone for 45 seconds per minute.
If all of the timers 5 LED’s are lit means the unit will produce ozone continuously for 60 seconds per minute, it means the unit is running in the continuous mode.

**If all 5 of the timer LED’s are lit the unit is running in the continuous mode.**

The unit has a “smart chip” in it and will remember the last timer setting it was on when turned off.

There is no “countdown timer” on the unit. If the user desires this unit to run for a specified period of time the unit may be plugged into a separate lamp timer. The Air-Duct 2000 uses very little electricity. Any simple electrical timer will be satisfactory.

**Ozone Levels**

Ozone at low levels has a fresh clean smell much like that of a rainstorm. It is not even necessary to smell the sweet smell of ozone for it to be effective. Ozone works best when it is turned down below the level detected by the nose. Please note that the nose may become used to the odor of ozone. Try to avoid the temptation of turning the ozone level up higher and higher. It is advised only to use as much ozone as needed to accomplish the task.

Start with the ozone control knob at its lowest level for room air cleaning. Set the BURST TIMER to the lowest setting of Level 1. 1 LED lit means that the unit will produce ozone for 5 seconds per minute.

You should notice a sweet smell similar to that of after a thunderstorm. The proper level of ozone is the level at which all the ozone is being used up to accomplish the removal of odors, and to freshen the air. If the air is still not fresh enough turn the ozone control knob until the odors are not as noticeable. Note that after time the ozone level in the room can rise, and the ozone level may need to be turned down.

Adjust the ozone level, and the BURST TIMER according to the level of odor contamination in the room.

If the ozone generator is used to combat cigarette smoke adjust the level of ozone output for the amount of smokers in the room. If the unit is set on a high level for 10 smokers and 9 leave the room, the ozone level should be turned down accordingly.

Overuse of ozone is not recommended. If too much ozone is present in the room the ozone smell can turn from sweet to an obnoxious bleach type odor. This should be avoided. The nose can rapidly lose its ability to smell the ozone. Ozone at too high a level can cause a headache, burning eyes, or a sore throat. If this occurs simply turn the unit off or the ozone control down to a non-objectionable level.

To get the most effective air cleaning from ozone, it is recommended that you use as little as ozone as possible to control odors.
**High Ozone Shock Treatments**

One of the best features of a high-powered ozone generator is the ability to perform High Ozone Shock Treatments in UNOCCUPIED rooms. To remove strong odors such as mold, or animal urine the ozone level should be set to its highest level. This is called a high ozone shock treatment.

If there are existing odors it is better to PRE TREAT with a High Ozone Shock Treatment in an UNOCCUPIED area BEFORE the use of ozone for lower air purification purposes. This will help remove the odor or bacterial/mold problem before ozone is used for air purification and will allow the user to use less ozone for air purification because the problem has been pre treated.

**IMPORTANT NOTICE!**

When performing High Ozone Shock Treatments: The area the unit treats MUST have all persons, animals, and plants VACATE THE AREA!

If this unit treats an entire home the ENTIRE home MUST BE VACATED of ANY LIVING BEINGS!

This is an ABSOLUTE MUST!

A separate countdown timer (not included) MUST be used to make sure the unit has shut down at least 1 hour before the occupants return to the premises.

Once again the use of a separate timer is an absolute MUST!!!

To perform a High Ozone Shock treatment using the Air-Duct 2000:

Set the unit to its highest ozone level and turn your fan on for the duct system. All the Timer LED’s should be ON, and the unit’s power switch should be ON.

Plug the unit into a separate lamp type timer and set the time to treatment is to be performed. It is recommended that shock treatments of 1 to 2 hours be used at first.

Make sure the air handling system is set on the fan mode for a continuous airflow.

Be sure to use measured shock treatments at first. Most odor problems can be taken care of with a 1 or 2 hour treatment. If the shock treatment is overdone too much after odor of the ozone might be present. There could be a very strong bleach type of odor.

Be sure to wait at least ONE HOUR AFTER the timer has shut the ozone generator off before returning to the premises after a High Ozone Shock Treatment.

The room may have a “bleach-like” odor at first, but after airing the rooms out it will smell much fresher than before the treatment. Over time the bleach odor will disappear. Mold and stubborn odors may require treatments to be repeated as needed on a periodic or maintenance basis.

The most important thing to remember is that it is advisable to get as high an ozone concentration into an area as possible to kill mold, and to remove serious odors.
It is best to start with shorter shock treatments to get a feel for the machine and what it can accomplish. Overuse of ozone is never recommended. Too much ozone can eventually harden rubber items and make them brittle. Always use as little ozone as possible required to do the job.

The Air-Duct 2000 is NOT meant to remediate mold in an entire house at once. The remediation of mold in an entire home takes a much higher ozone output than this machine can produce.

**Maintenance**

BE SURE TO ALWAYS HAVE A CLEAN AIR FILTER ATTACHED TO THE AIR HANDLING SYSTEM THIS UNIT WILL BE USED WITH.

A dirty airflow will lead to the ozone element becoming dirtier faster. If the ozone elements become dirty the ozone output may be reduced. To clean the ozone element, FIRST unplug the unit. Then remove the screws that hold the unit to the duct. The ozone element can then be blown clean with an air hose. The ozone element should have all dust blown from it once every two months.

If the ozone output is still low after having the dust blown out from it, it can be disassembled. After removing the outer safety cage the element can be accessed and disassembled. The outer “grid” of the ozone element can then be brushed clean with a toothbrush. Be sure not to drop the glass part of the ozone element.

The element can be reassembled in the same manner in which it was removed. Be very careful to align the element in the same way it was taken apart.

If this cleaning still does not produce the original ozone output, the outer grid of the ozone element may need replacement. It is usually not necessary to replace the entire element; it is usually just the outer grid that would need replacement.

Please contact us for replacement parts.

MAKE SURE THE UNIT IS UNPLUGGED BEFORE SERVICING!!!
THE HIGH VOLTAGE OZONE ELEMENT OPERATES AT 5000 VOLTS!!!
Warranty Information

Every Air-Zone Air-Duct 2000 series ozone generator is checked to be in perfect working condition before it is shipped, and is warranted from manufacturing defects for a period of five years. Air-Zone will repair or replace the unit at our cost if a defect is determined to be from the manufacturing process.

This warranty does not cover damage caused by misuse by owner. This warranty does not cover ozone elements.

Ozone elements are under warranty for six months. Shipping of the unit for service is solely the customer’s responsibility.

Air-Zone is not responsible for any damages caused by the use or misuse of this product.

Technical Specifications Air-Duct 2000:
Rated Ozone Output Per Hour: Variable from 83 mg/hr to 2000 mg/hr.
   MAX. ACTUAL OZONE OUTPUT: 2,150 mg/hr (ozone output verified by SGS)
Ozone Burst Timer: 5, 10, 20, 30, 45 seconds per minute (turn off for continuous)
Generation Method: Corona Discharge, US Patented Xetin ozone
Heavy Duty Stainless Steel Housing
Fully Automatic Operation with HUBA airflow switch
High Voltage Transformer Output: 5,000V, one transformer
Electrical Source: AC 115V 60 Hz
Electrical Consumption: 0.26 Amp, 32 Watts
Dimensions: 10.24" X 6.7" X 7.72"
Weight - 6 lb.