# RAINBOWAIR ®

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# **ACTIVATOR 1000 (Models 54XX) - OZONE GENERATORS**

110 VOLT AND 220 VOLT models

### SAVE THESE INSTRUCTIONS

These instructions contain important safety and operating information for your electronic deodorizer. This equipment is to be used in unoccupied areas only. Not for household use. For commercial use only.

**RAINBOWAIR** Activator The 1000 was designed with the end user in mind. The lightweight design is the result of years of use within the hospitality, automotive and general cleaning industry. This model is designed to deodorize areas in a short period of time using controlled levels of activated oxygen (ozone). For this reason it is required that the RAINBOWAIR Activator 1000 be used in unoccupied areas only. Using this technology will eliminate the need for scented sprays and chemical agents. No sprays of any kind should be used in conjunction with this unit.

## **Operating the unit**

On the front of the unit there are three controls. The power switch turns the unit on(continuous run or timed) and off(off is when the switch is in the middle position). The output dial controls the production of ozone from low (about 100 mg/hr) to medium (about 500mg/hr) to high (about 1000mg/hr). The bottom dial controls how long the unit runs when the power switch is activated toward the timer position. The minimum amount of time is about ten (10) minutes, the maximum time is 24 hours. To operate, plug the unit in, set the output and timer controls, place the unit in the area to be treated (the higher the better), turn the RAINBOWAIR Activator 1000 on and leave the area. The unit will turn itself off after running for the time period set. Note that the timer control not does not move as the unit

**is running.** If the unit was turned to the continuous run mode, it will run until it is manually turned off. We recommend that whenever possible the unit be run in the timer mode to avoid over ozonating.

DANGER: Elevated ozone levels exist during operation of the unit. If improperly used by unqualified personnel, exposure to ozone can be harmful to health. It may cause eye, nose and throat irritation.

To reduce the risk of electrical shock, this equipment has a grounding type plug that has a third (grounding) pin. This plug will only fit into a grounding type power outlet. If the plug does not fit into the outlet, contact qualified personnel to install the proper outlet. Do not alter the plug in *any way*.

#### Application Guide

Deodorization using ozone is part art, part science and part experience. Many factors influence the effectiveness of ozone as well as the length of time required to deodorize a particular environment. Some of these factors include temperature, humidity, area being treated, strength and origin of the offending odor and the sensitivity of the person detecting the odor. The best we can do is provide you with some general tips and guidelines for using ozone as a deodorizing tool.

1. Ozonation will be most effective by providing as much air movement within the area being treated as possible. Use additional fans or blowers to make sure the ozone is exposed to the entire area being treated.

2. Ozonation is typically the only tool used or the last step in the deodorization process.

3. When deodorizing the interior of a vehicle, it is most effective to pipe ozone into the vehicle from the outside. In addition it is easy to over ozonate the small space in a vehicle. We recommend you start with ozoning for a period

air the vehicle out and judge whether additional time is necessary.

4. The **RAINBOW***AIR* Activator 1000 will work in any temperature from -20 to +100 degrees. More ozone is produced using colder air than warmer air.

5. For deodorizing the interior of a home use the central heating system (if available) to move the ozone throughout the entire structure. Place the unit in front of the "cold air return" and turn on the fan on the central HVAC unit. This procedure will also help deodorize the duct work where odors can linger.

6. If you intend to use this unit for longer than 30 minutes in an area you wish to deodorize (or freshen up), we recommend you remove pets and plants from the area (an exception is an aquarium which may be left in place).

7. Do not attempt to deodorize leather or natural rubber products using ozone. It can dry out and ruin these materials (most gasket material is made using synthetic products).

8. If you plan to deodorize clothing using ozone, hang the clothing to allow air movement between the pieces. Add additional air movement in the area being treated.

9. In humid areas (above 82%) it is advisable to feed dehumidified air to your ozone generator to prevent shorting out of the generator plates or base.

10. In high enough concentrations ozone does kill micro-organisms such as bacteria and mold.

11. The **RAINBOW***AIR* Activator 1000 can be used for an ozone chamber with a maximum volume of 1000 cubic feet.

You are encouraged to maintain your ozone generator thoroughly. You will receive years of trouble free service by doing so. Failing to do so can cost you time and money, and may void your warranty. Here are some tips:

1. Clean or replace the generator plates often. **Use an ultrasonic cleaner** or a stiff bristle brush with soap and water to clean the plates. Dirty plates produce little ozone and can cause transformer or generator base failure.

2. Wipe the grey base material with a clean lint free cloth and rubbing alcohol. Avoid having contamination build up on the components.

# **Trouble Shooting**

# NOTE: Always disconnect the power cord before attempting maintenance or repairs.

If the unit does not come on make sure the power source is hot and the power cord is seated in the unit properly. Check the circuit breakers on the rear panel. No white should be showing on the rocker switch. If white is showing try to reset the breaker. Call **RAINBOW***AIR* to help diagnose the problem.

If the unit comes on but does not appear to be creating ozone, remove the top and make sure the ceramic plates are seated properly between the metal clips. Also check to see that none of the plates are broken or cracked. Broken or cracked plates will prevent ozone from being produced. Check the circuit breakers as above, attempting to reset any if they appear tripped. Call **RAINBOW***AIR* for assistance or repair.

THE FOLLOWING TEST CAN HELP DIAGNOSE A PROBLEM WITH YOUR UNIT. WE RECOMMEND YOU PERFORM THIS TEST ONLY IF YOU UNDERSTAND THE BASICS OF ELECTRICITY.

#### DANGER - HIGH VOLTAGE

TO PERFORM THE DARK ROOM TEST REMOVE THE TOP OF THE UNIT (4 SCREWS). TAKE THE UNIT INTO A DARK ROOM, PLUG THE UNIT IN, TURN THE OUTPUT TO HIGH AND TURN THE UNIT ON. PRESS THE SAFETY SWITCH DOWN AND **OBSERVE THE GENERATOR PLATES AND** THE GENERATOR BASE. **A PROPERLY** RUNNING UNIT WILL PRODUCE A BLUE GLOW (A CORONA) AROUND EACH OF THE GENERATOR PLATES ONLY. ANY OTHER ELECTRICAL ACTIVITY SUCH AS SPARKING **OR ARCING INDICATES A PROBLEM. TURN** THE UNIT OFF AND CONTACT RAINBOWAIR FOR REPAIR.