

Quick Start Guide to using Crystal Air Ozone Generators

Congratulations on receiving your new Crystal Air ozone generator. Let's see if we can help you get familiar with it and get you started solving your problems. For specific model control operation please refer to the owners manual.

This Quick Start Guide will cover basic ozone machine usage and treatment procedures for odor management.

Before performing ozone shock treatments all **PETS, PLANTS and PEOPLE** must be evacuated from the treatment area and any area susceptible to ozone seepage.

Proper sizing of the ozone machine for the application and size of space will be the first thing to do.

Once the correct model is selected it will still have a vary large variation in space and intensities of odor it will treat based on type of odor and it's source.

Ozone will always remove an odor as long as the ozone production is adequate for the intensity of odor in question.

If the odor returns it is because the **source** of the odor was not physically removed or the **temperature** of the room or materials being treated is to **cold**, or the ozone treatment had not gone on long enough for the ozone to fully penetrate as deep as the odor was absorbed.

Shock Treatment- Assuming you are using a model appropriate for your application, a shock treatment is performed by placing the machine in the room in a position the air intake of ozone generator is not blocked and the output is not blowing directly on a carpet or finished floor. You will need a fan to blow the ozone air around for best penetration of all materials. The treatment can be set in most cases to run for 10 minutes to a couple hrs. Ozone has an approximate half life of 30 minutes at room temperature and every 30 minutes $\frac{1}{2}$ the ozone cracks back to oxygen.

This ozone cracking back process can last as long as 3-4 or more hrs after a strong or long shock treatment and must be accounted for in cases of treating bedrooms and automobiles.

Colder temperatures close the pores of material and impedes ozone penetration. Warm indoor room temperatures are required for most successful ozone treatments. In some cases the odor was generated at **higher** temperatures may require **raised** temperatures above normal room temperature to open the pores again to allow ozone penetration.

Excessively hot air in the room fed to the ozone machine impedes ozone production as high temperatures crack ozone back to oxygen quicker.

Timer Models : you can arrange to return and enter the room up to 3-4 hrs after the timer turns off. Always be careful entering a room after a shock treatment to be sure the ozone levels are lowered to a satisfactory level. Shorter treatments equal shorter waiting periods after the timer turns off.

Adjustable Output Models: can adjust the out put lower than the maximum for ozone treatments requiring lower levels in more sensitive applications.

Ozone Shock Treatment : Ozone Shock

Treatment In Progress! Warning signs should be placed on all entrances to inform emergency responders before entering live ozone treatment areas for any reason like police, fire or flood etc.

The warning signs can be found and printed from this link www.ozone.ca then **Support** then **Downloads**.

Anything very expensive, irreplaceable or does not need to be treated should be removed to avoid blaming ozone on any future troubles that may arise.

Ozone Treatment Tips.

Rule of Thumb: The **source** of the odor must always be physically removed for long term results.

In all cases try to use less ozone vs more ozone. Until you are familiar with the way ozone works try to start out with 10 minute treatment sessions then assess the results after airing out the space and re treat if necessary. It can be surprising both how little ozone is needed in some cases and how much is needed in other cases.

Ozone always reacts with and breaks down an odor. If an odor returns either the ozone treatment session was not long enough, ozone levels were too low, the temperature was too cold or the source of the odor was not removed from the space.

Colognes, hair spray and paint are difficult to remove with ozone. Oil based paints will require weeks or so of drying and off gassing before ozone will be of any use.

Ozone will only oxidize mold spores floating in the air or loosely resting on a surface. If mold is seen growing it is protected in the pores and ozone will not reach and oxidize the protected spores.

Ozone is a form of oxygen and can not be smelled. What we smell is the reaction of ozone in our nasal passages not ozone itself. Strong or extended ozone treatments may oxidize organic materials as in pet dander, skin and bug body parts. As a result there may be a lingering odd sense of ozone smell which is actually oxidized organic material lasting as long as a few days in some cases.