

OZ-T4115 and OZ-T4115V

Combined 1.5 Ipm Oxygen Concentrator & 5 gram/hr Ozone Generator

Installation and operation instructions.

Principle of Operation:

The Oxyzone OZ-T4115 is a combined 1.5 litres per minute (lpm) oxygen concentrator and 5 gram per hour (gph) corona discharge ozone generator.

The oxygen concentrator is based on the Pressure Swing Absorption (PSA) method of extracting or concentrating the oxygen in the air we breath. The small compressor provides high pressure air to the molecular sieve bed module. The sieve bed module

has 2 chambers, while one chamber is absorbing the nitrogen and allowing the oxygen to pass through the other chamber is exhausting the nitrogen back to the atmosphere. This process is controlled by timing valves within the sieve module. The output of the sieve module is approx 93% +/- 3% oxygen.

The concentrated oxygen is used as the feed gas for the ozone generator which produces a higher concentration of ozone with less impurities than with ambient air.

The OZ-T4115 is available in either a fixed 5 gram ozone output or a variable ozone output model (OZ-T4115V)



Figure 1. - Cabinet Layout

Operation:

Operation is straight forward.

1) Ensure the ozone delivery hose is connected to the delivery point.

2) Apply power to the system.

3) Turn the system on via the power switch. *Note:* The ozone and oxygen generators will not function while the door is open.

4) Adjust the venturi suction via the bypass valve so that the suction level is shown on the oxygen flow gauge is approx 1.5 lpm.

5) Adjust the variable output control knob if supplied to the desired ozone output.

Note: There are no other user adjustable parameters.

Specifications:

Cabinet – 500 x 500 x 250 mm Approx

Cabinet Material – 304 Stainless Steel

Oxygen Concentrator – 1.5 lpm oxygen @ 7 psi (48 kpa)

Ozone - Single cell - 5 grams per hour output - air cooled by internal fans and cabinet vents

Power - 240 Volts AC 50 Hz - 300 watts

Installation:

The OZ-T4115 is not designed to be used outdoors and must be protected from sun and rain.

Install the OZ-T4115 vertically on a wall or skid frame with either the supplied mounting brackets (X 4) or the M8 mounting holes in the rear of the cabinet.

An air gap of 200 mm should be provided around the cabinet to allow for adequate air flow in and out of the ozone generator.

Power is supplied via a standard 10 amp GPO.

The OZ-T4115 is usually supplied with a 10mm compression fitting to attach to a 10mm teflon tube. Teflon is the recommended tubing for ozone delivery as it is resistant to ozone gas. The teflon tube is usually connected to a ventui. An additional check valve at the ventui is recommended to protect the ozone generator from water back flow. Water will cause damage to the ozone cell and should be avoided.

Maintenance:

It is recommended the ozone cell be serviced on a yearly basis. Oxyzone have service kits available:

<u>Single Cell Service Kit</u> – P/N 49201 (Yearly Service) Kit comprises viton & teflon o-rings and heat sink transfer compound.

<u>Service Cleaning Kit</u> – P/N 49200 (Initial purchase only – brush kit will last for many services) – Stainless steel tube cleaning brush and scouring pad.

Cell Service instructions on our web site at www.oxyzone.com.au/support

