



## Oxygen Concentrator installation and operating instructions

Our 5 lpm oxygen concentrator is designed for use with ozone generators up to 4 gm/hour output. Like all good oxygen concentrators it uses molecular sieving technology to remove Nitrogen, trace gases and moisture from ambient air.

Oxygen purity can be up to 95% which means that the feed gas used to power your chosen ozone generator will be dry and free from impurities. This results in a very substantial power increase with the chosen ozone generator and a much longer life between services.

Our oxygen concentrators are medical grade units and must be sited in dry, cool and weatherproof enclosures to ensure efficient operation and protection from the elements.

Oxygen output can be adjusted and controlled from 1 lpm up to a maximum of 5 lpm.

Our units as standard are fitted with a timer, hours run monitor, oxygen concentration monitor and temperature, low oxygen and power loss fault alarms and are designed to be controlled remotely if required via a suitable switched outlet from a Redox controller.

In a normal operating environment, units are recommended to be serviced and inspected every 4000 hours or when the displayed oxygen concentration drops below 30%.

We recommend that units are run for a maximum of 12 hours per day, and on a seasonal basis this would apply to summer use when water temperatures are at their highest and fish feed rates are also heaviest. In Winter, ozone system can normally be switched off entirely in January and February in unheated ponds when pathogen levels are at their lowest and the biological oxygen demand is also much reduced. From March onwards, ozone systems can be run as required but daily usage would normally start from 3-4 hours in every 24, gradually increasing to 12 hours in every 24 by June.

These usage patterns are obviously suggestions and may vary considerable from pond to pond depending on stocking levels and feed rates, water temperatures and methods of filtration so should be taken as guidance only.

## Operation of your oxygen concentrator

The operation of the oxygen concentrators is straightforward - when you first remove the unit from its packing, remove the transit straps that you will find underneath the unit - these prevent excessive movement of the compressor inside during transit. Then position in a cool and dry weatherproof enclosure as above. Connect the oxygen outlet to the ozone generator inlet, then switch on the power at the rear of the machine and then start by pressing the on/off button on the control display panel. The unit will cycle up and the oxygen purity will be displayed. This will settle at around 94% purity when the machine is first used. Set the oxygen output to 4 lpm using the flow monitor control on the front of the unit. That's it - you are ready to go!



Oxygen concentrator



Oxygen flow control - normally set to 4 lpm and showing oxygen outlet connection above. (Note connection lower left is not used)



Oxygen concentrator control panel, showing on/off control, timer control and alarms.

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