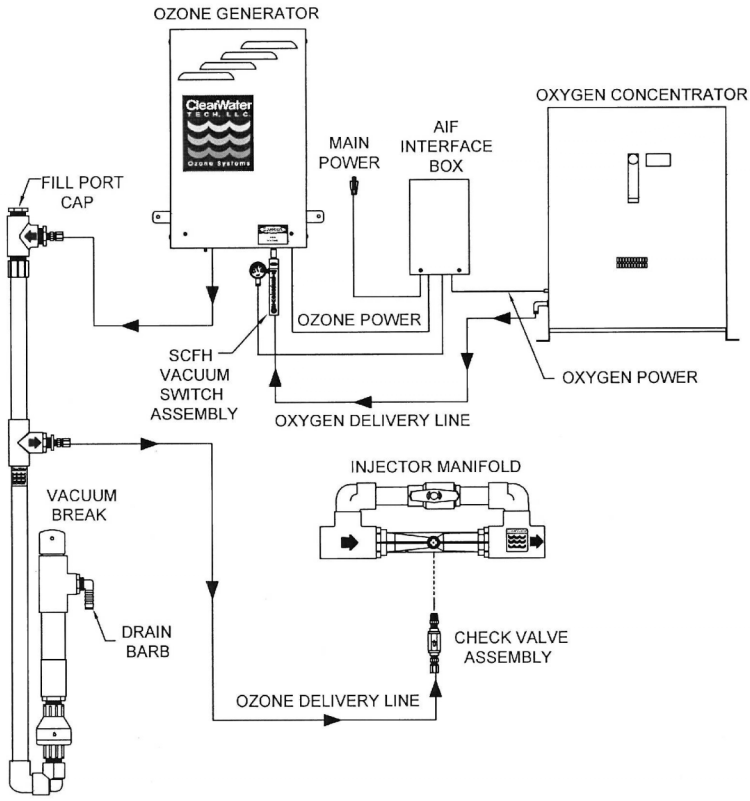
Apex IV and VI Quick Installation Guide

Product Description

The ClearWater Tech, LLC. Apex Packages are complete and fully integrated for easy installation. The Apex IV and VI both use Pressure Swing Absorption (PSA) oxygen technology for maximum ozone output efficiency, a variable output Ozone Generator with an LED light display, a positive atmospheric Vacuum Break for water back for prevention, an Injector Manifold with Check Valve Assembly for mass transfer of ozone in solution and an SCFH (Standard Cubic Feet Per Hour) and Vacuum Gauge Assembly for accurate operating parameter measurements. The assembly also includes a normally open Vacuum Switch that will signal the AIF interface box, which will energize and de-energize the ozone generator and the oxygen concentrator.



Specification Chart				
System	**Ozone Generator**	**Ozone Output**	**Vacuum**	**System Control**
Apex IV	CD10	4.0g/h @ 4 SCFH 3% by weight	-3 to -8inHg	Vacuum Switch
Apex VI	CD12	8.0g/h @ 8 SCFH 3% by weight	-3 to -8inHg	Vacuum Switch

Quick Install

Step 1: Unpack and placement. Mount ozone generator to a suitable flat vertical surface.

Step 2: Install the side stream booster pump, if required. The booster pump will require separate dedicated power.

Step 3: Install the Injector Manifold and thread the Check Valve Assembly into the Venturi. To prepare for start-up close the by-pass valve half way. This will create vacuum at the injector as soon as water is flowing through the injector manifold.

Step 4: Install the contact vessel and off-gas vent (if so equipped).

Step 5: Apply separate power to the oxygen concentrator and set the air flow to 4 SCFH for an Apex IV or 8 SCFH for an Apex VI before connecting delivery line to the ozone generator. **NOTE: The SCFH gauge on the oxygen concentrator will reduce in flow rate after connecting the oxygen delivery line.**

Step 6: AIF10 120VAC 60 Hz - Plug in both the ozone generator and oxygen concentrator into the outlets provided. **NOTE: There is no specific orientation of the plugs.** AIF20 240VAC 50/60Hz - Cut off the plugs of the ozone generator and oxygen concentrator main power cords. Strip cord back and terminate inside the AIF20 to the main terminal strip provided. **NOTE: Use main power ground stud (inside AIF20) to ground both units.**

Step 7: Mount the SCFH/Vacuum Gauge Assembly to the ozone generator according to the installation directions provided. **NOTE: Plug 2-position connector into the bottom of the AIF interface box.**

Step 8: An external 4-20mA control signal may be used to control ozone output. According to the 4-20mA control device I/O Manual, wire in the Orange (+) and Purple (-) leads located under the ozone generator to the 4-20mA controller. **NOTES: The 4-20mA signal will over-ride the Manual Ozone Output Control setting.**

Step 9: Attach the barbed fittings to the indicator cartridge and connect the braided oxygen delivery lines using hose clamps.

Step 10: Connect the Teflon® ozone delivery line; from the ozone generator to the vacuum break, then from the vacuum break to the injector manifold check valve assembly.

Step 11: Remove Vacuum Break Fill Port Cap. Fill the Vacuum Break with water through fill port until the water spills out of the drain barb. Replace fill port cap.

Step 12: Switch the main power switch of the ozone generator to the 'ON' position (if not already done so). Apply Main Power to the AIF box.

Step 13: Apply main power to the booster pump and/or side stream booster pump to initiate water flow.

Step 14: Make final adjustments to the to by-pass valve on the injection manifold and needle valve of the SCFH/Vacuum gauge assembly to set the SCFH, while at the same time achieving the correct vacuum (middle of the 'Green Zone'). **NOTE: See Specification Chart above for the parameter settings.**

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