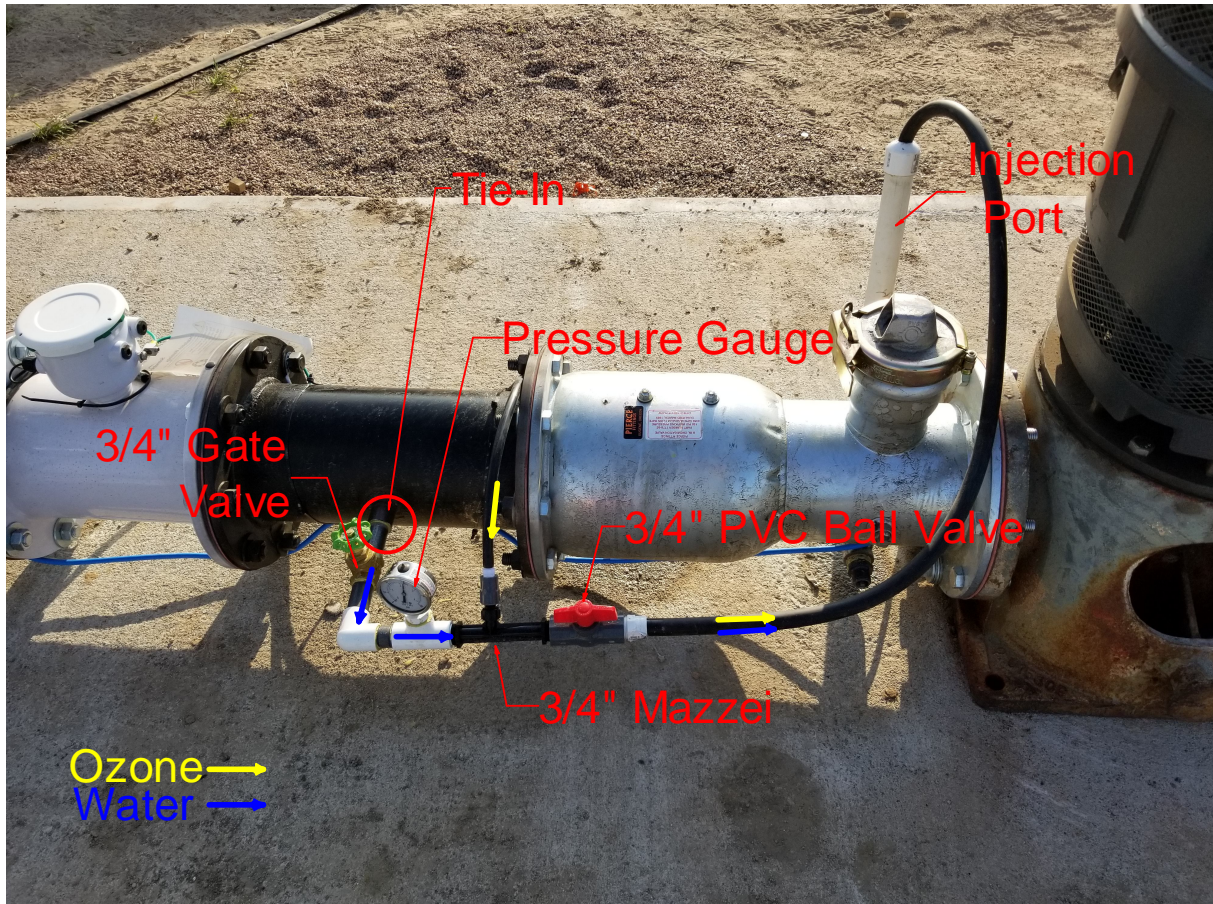




[www.0zon3pro.com](http://www.0zon3pro.com)

## Setup Instruction for the Ozon3Pro

**Direct Well Install** - The Ozon3Pro will perform best when the discharge treated water is injected directly back down the well/casing at a test port or any other port at the well. This will allow the Ozone to treat the well casing and pump components as well as the irrigation system. See below (A1). If this is not possible, the Ozone unit will need to be installed using the side stream method.



A1

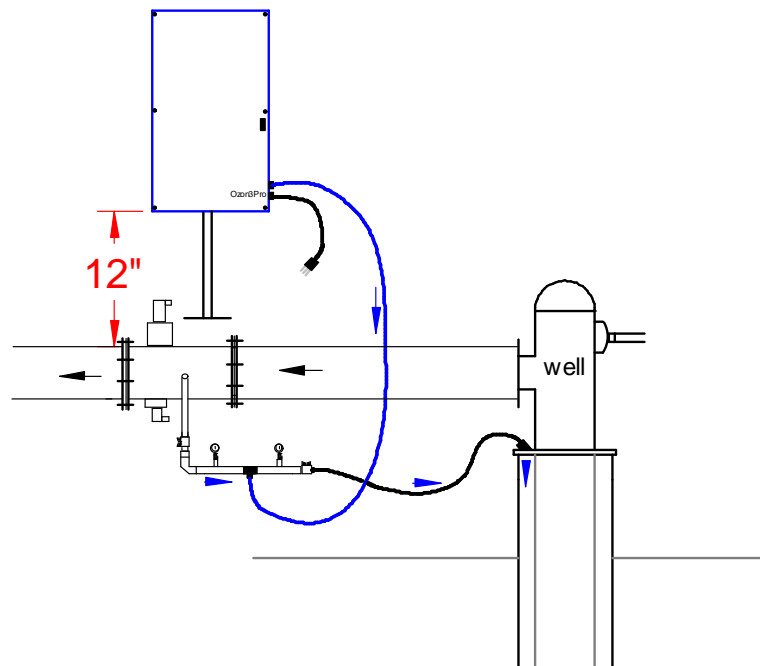
- 1) The Tie-in for the Mazzei injector can either be done by welding on a 3/4" nipple or using an existing 3/4" port. This port will be used to pull water to be mixed in the Mazzei.
- 2) A 3/4" valve will need to be installed after the tie-in to regulate the water flow. In most cases, the valve will stay wide open.
- 3) A pressure gauge will need to be installed after the valve and before going into the Mazzei.
- 4) Downstream of the pressure gauge, a 3/4" Mazzei model 684 will need to be installed, any other size or model will prevent the Ozone unit from working properly. **MAKE CERTAIN THE MAZZEI IS INSTALLED CORRECTLY. FLOW DIRECTION IS STAMPED ON THE SIDE OF THE MAZZEI.**
- 5) Downstream of the 3/4" Mazzei, a 3/4" ball valve will need to be installed to regulate flow. This ball valve is just to regulate flow. Although the flow can be regulated at the first valve install, this valve will be a backup source.
- 6) A 3/4" hose will need to be installed downstream of the ball valve to feed the treated water back into the well casing at any available port going back into the well casing. Note: **DO NOT** use hose or tubing smaller than 3/4", this will restrict the flow and the unit will not perform correctly: a larger size hose can be used. The discharge hose going back into the well should NOT be much longer than 6 feet, this could restrict flow.

Once the Mazzei injection fitting is installed, the Ozone unit can be attached using the 1/4" tubing. See below (A2)



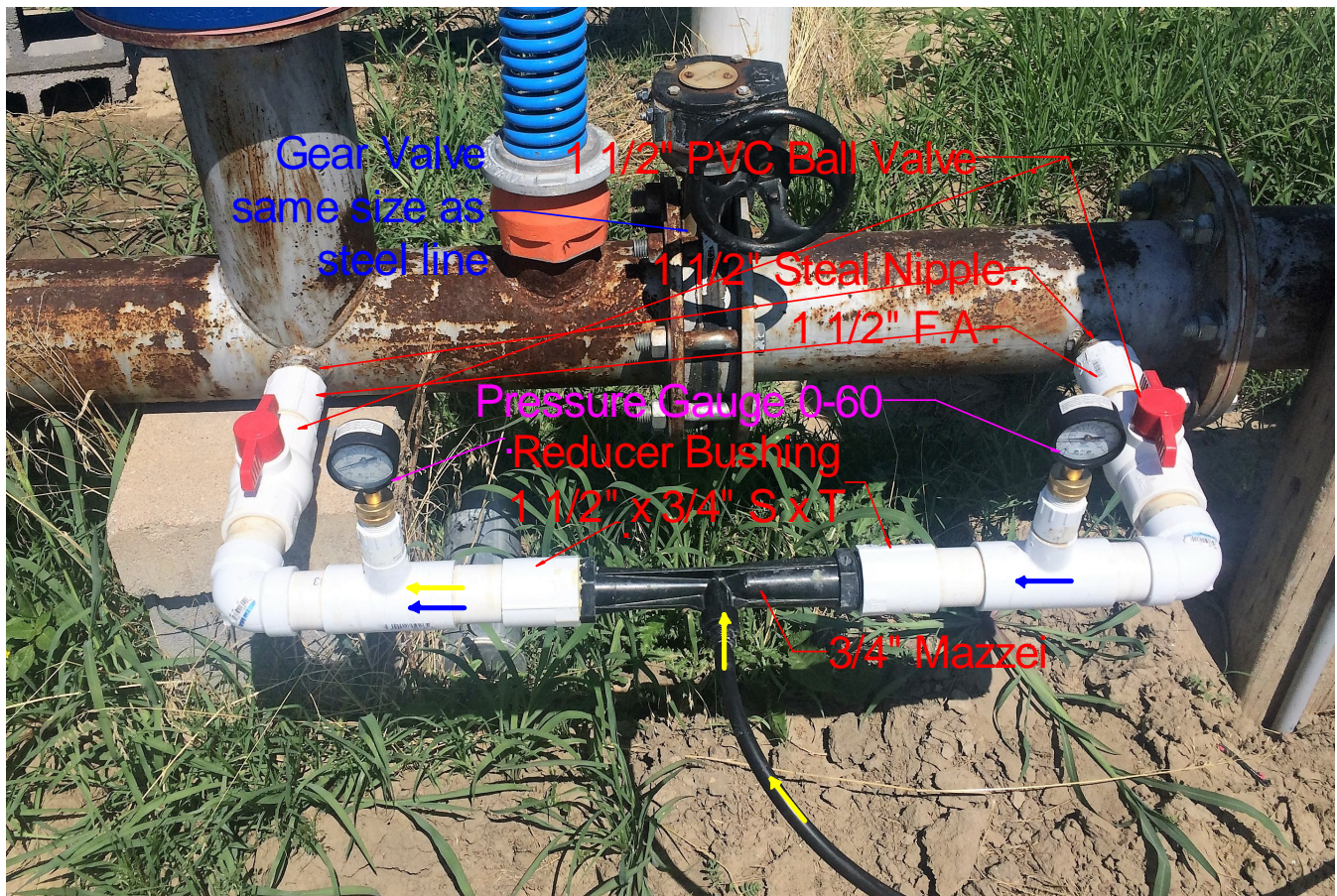
A2

The Ozon3Pro must be installed 12" or more above the highest part of the well discharge assembly. Even though the Ozon3Pro has a check valve installed, under extremely low pressure the check valve could allow water to pass by, causing the Ozone chamber to fill with water. See below (A3). The tubing from the Ozone Unit to the Mazzei should NOT exceed 8 feet, this will restrict the suction from the Mazzei.



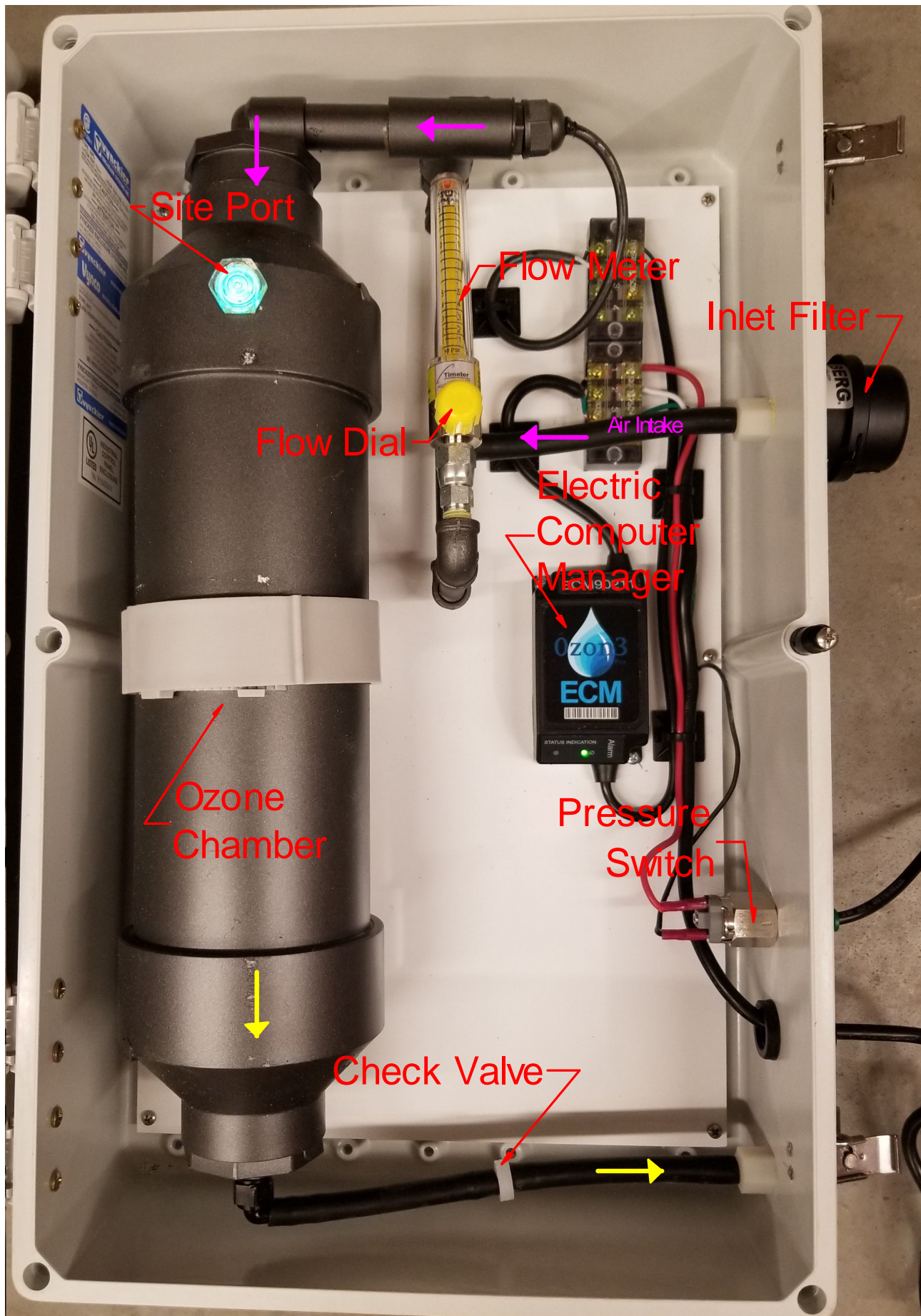
A3

**Side Stream Installation** – The Ozone Unit will be setup pulling water from the well then injecting Ozone directly back into the water stream and out into the irrigation system. Avoid using the side stream method if possible. This method could cause a reduction in system flow due to the fact the valve between the inlet and the outlet of the Mazzei will need to be turned down in order to force flow through the Mazzei to create the suction needed to get the required amount of Ozone.



- 1) For installation using the Side Stream method, you will need to weld on a 1 1/2" steel nipple - one for the inlet flow and one for the outlet flow. Tie-in to the nipple welded on with a 1 1/2" Female adaptor followed by a 1 1/2" PVC Ball valve, and a 1 1/2" PVC 90. If the irrigation system does not have a gear valve installed, one will have to be installed between the inlet and outlet side of the Mazzei to direct flow into the Mazzei.
- 2) Install a 1 1/2" x 1/2" Reducing tee S x S, then 1/2" x 1/4" reducer bushing S x T for the pressure gauge to be installed.
- 3) Install a 1 1/2" PVC Union S x S and glue a 1 1/2" x 3/4" reducer bushing S x T inside the 1 1/2" Union for the 3/4" Mazzei to thread into.
- 4) Install the 3/4" Mazzei, then install the same fittings for the outlet of the Mazzei as used on the inlet side.

Note: On some irrigation systems a larger Mazzei may be required depending on the GPM and PSI of the well. The above 1 1/2" fitting can be replaced with all 3/4" fittings. During research it appeared that using (larger fittings) 1 1/2" there was less flow restrictions then using 3/4".



Site Port

Flow Meter

Inlet Filter

Flow Dial

Air Intake

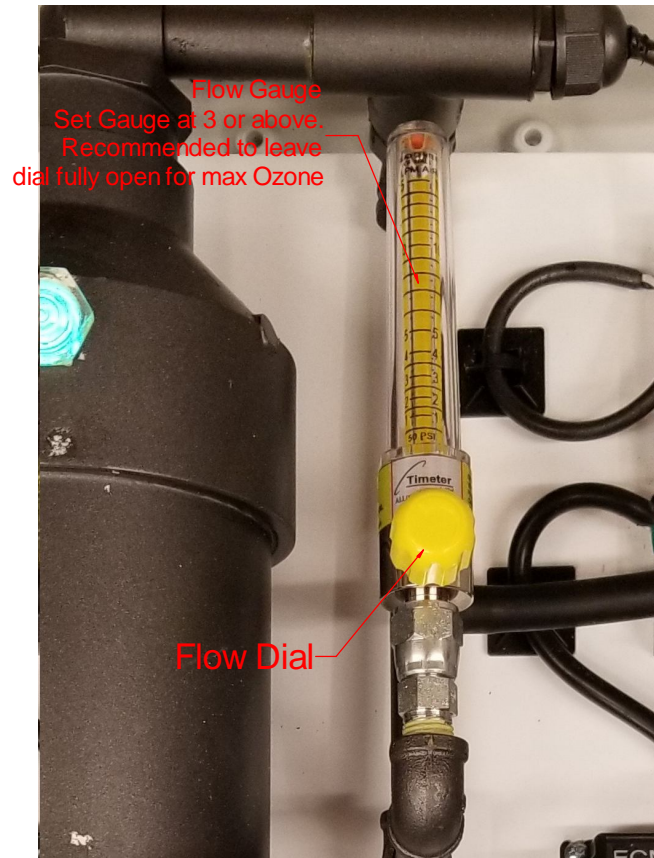
Electric  
Computer  
Manager

Ozone  
Chamber

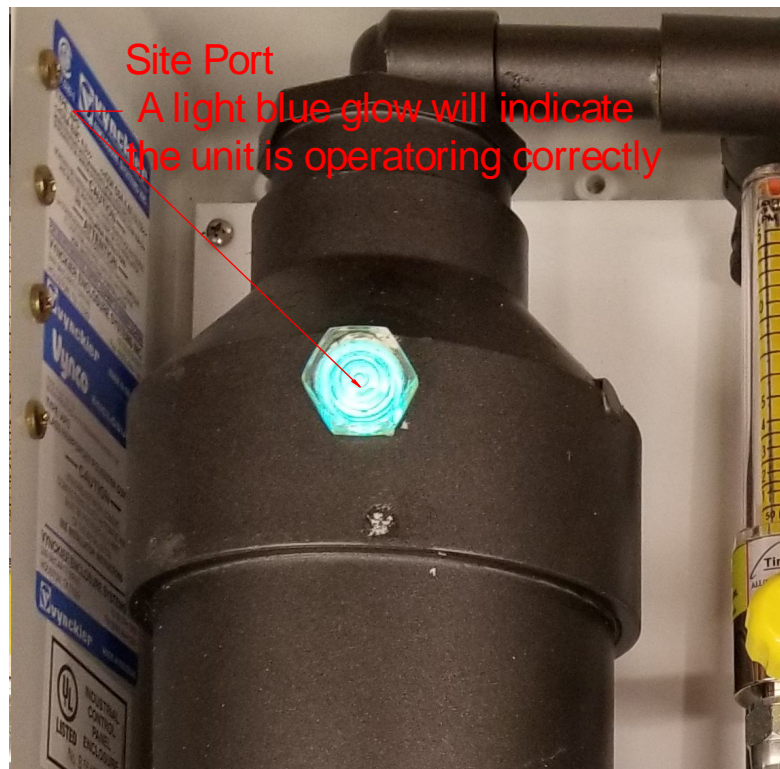
Pressure  
Switch

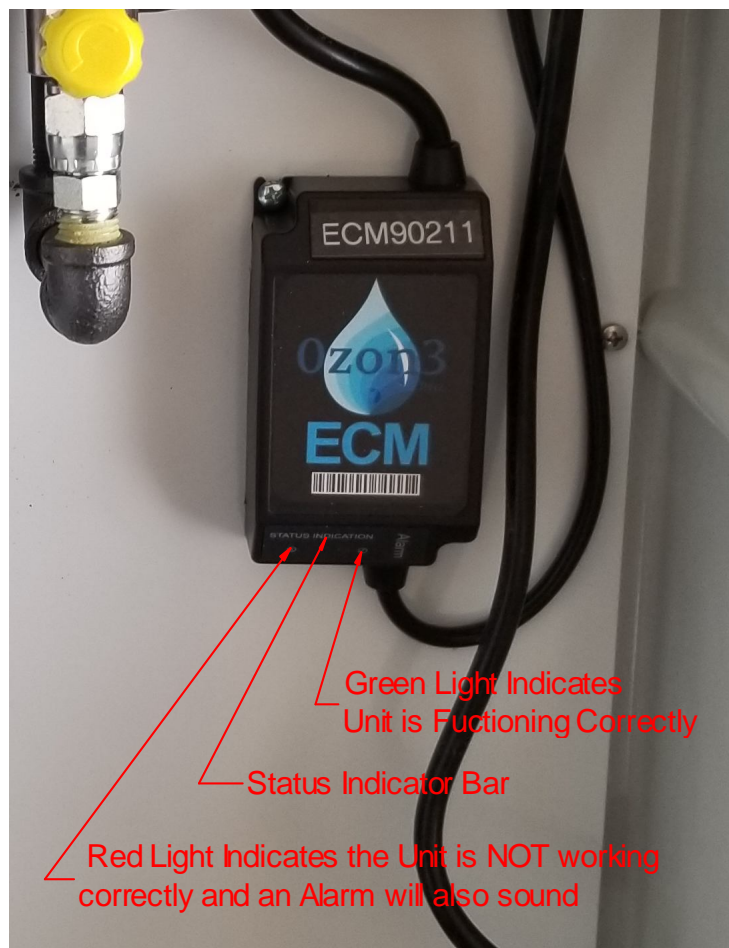
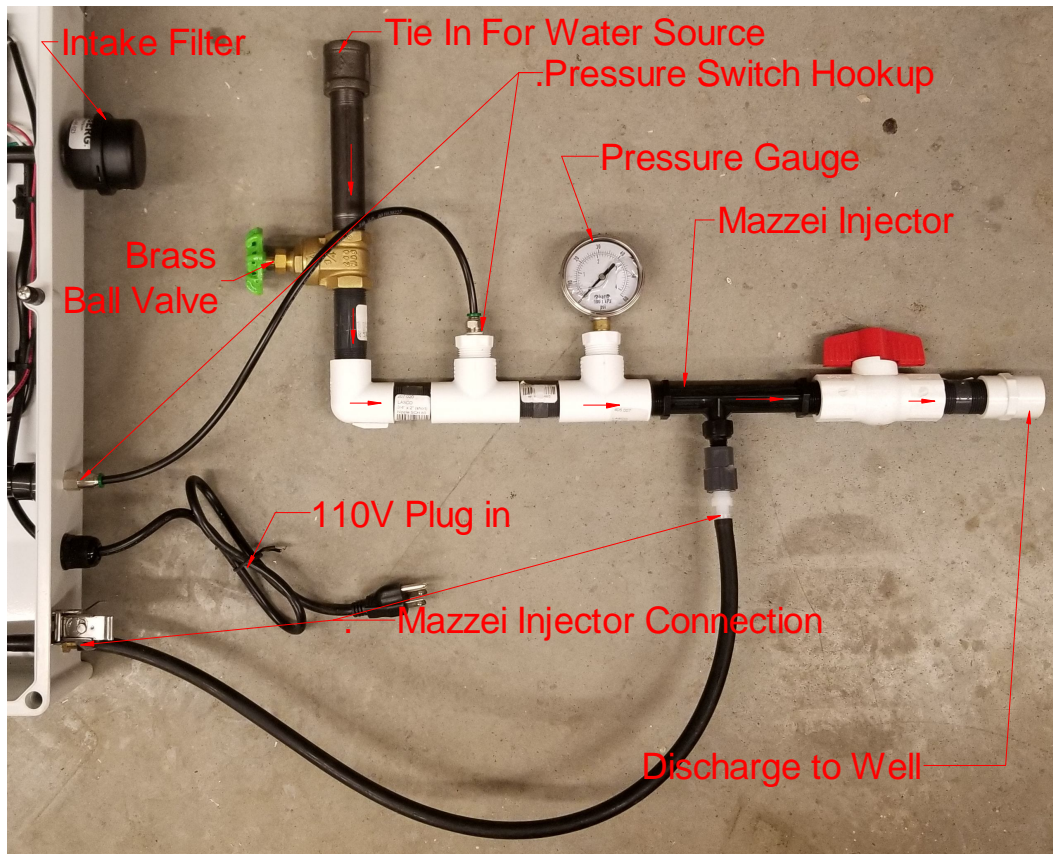
Check Valve

Flow Gauge should read 3 or above. It is recommended that the Dial be turned wide open for max Ozone in cases of really bad bacteria in the water.



The Site Port should always have a light blue glow while in operations.





## **Ozon3Pro Operation - Direct Well Installation**

When the Ozon3Pro is in operation, there are a few things that may need adjusted and things to watch for, in order for the unit to function properly.

- 1) The site port on the Ozone chamber will have a light blue glow, as well as a green light on at the Status Indicator Bar on the ECM box.
- 2) If for some reason the Ozone chamber is not functioning correctly, there will be high pitch alarm sound coming from the ECM box as well as a red light on at Status Indicator bar on the ECM box.
- 3) The irrigation system will need to be in operation for the Mazzei to create the suction required for the Ozon3Pro to work properly. The Ozon3Pro will not come on until there is pressure on the irrigation system.
- 4) In most cases the brass gate valve should remain fully open, unless you need to restrict flow because of over flow going back down the well port. The PVC ball valve downstream of the Mazzei should be adjusted to the point suction is achieved on the Mazzei. (The pressure gauge should read 20 psi or above)
- 5) Check the pressure on the pressure gauge that was installed upstream of the Mazzei. For best results and flow, the pressure on the system needs to be 20 psi or above. Pressure below 20 psi could cause little or no suction, therefore the Ozon3Pro will not operate correctly. If this becomes an issue, a small booster pump can be added.
- 6) Check the air flow meter inside the Ozon3Pro. Use the flow dial to adjust the Ozone mixture. For max Ozone, the dial can be left fully open. It is best for the flow gauge to read 3 or above on the meter. Although the amount of flow can be adjusted by using the valves installed on the Mazzei assembly, it is best not to use this method or it will restrict flow going through the Mazzei reducing the suction. Use only the dial on the flow meter for adjustments.
- 7) The Pressure switch is set at 20 psi approximately, if the Ozon3Pro does not have power to it and your irrigation system is pressured up, the pressure switch may need to be adjusted. This can be done using a small allen wrench and adjusting the set screw located between the wire terminals on the pressure switch. Screw IN the set screw to increase the set pressure. Screw OUT the set screw to decrease the set pressure.

## **0zon3pro Operation - Side Stream Installation**

When the 0zon3Pro is in operation, there are a few things that may need adjusted and things to watch for, for the unit to function properly.

On a side stream installation, steps, 1, 2, and 3 for the direct well setup will be the same.

4) For a Side Stream set up, start out by opening up both 1 1/2" PVC ball valves.

5) The gear valve between the inlet and outlet of the Mazzei will need to be turned down slowly, but not completely, to direct flow through the Mazzei.

6) The reading on the pressure gauge on the upstream side of the Mazzei needs to have a higher pressure than the downstream side at a minimum of 25%. For example, if the upstream gauge reads 40 psi, the downstream gauge should read 30 psi.

7) Check the pressure on the pressure gauge that was installed upstream of the Mazzei. For best results and flow, the pressure on the system needs to be 20 psi or above. Pressure below 20 psi could cause little or no suction, therefore the 0zon3Pro will not operate correctly. If this becomes an issue, a small booster pump can be added.

8) Check the air flow meter inside the 0zon3Pro. Use the flow dial to adjust the Ozone mixture. For max Ozone the dial can be left fully open. It is best for the flow gauge to read 3 or above on the meter. Although the amount of flow can be adjusted by using the valves installed on the Mazzei assembly, it is best not to use this method or it will restrict flow going through the Mazzei, reducing the suction. Use only the dial on the flow meter for adjustments.

8) The Pressure switch is set at 20 psi approximately, if the 0zon3Pro does not have power to it and your irrigation system is pressured up, the pressure switch may need to be adjusted. This can be done using a small allen wrench and adjusting the set screw located between the wire terminals on the pressure switch. Screw IN the set screw to increase the set pressure. Screw OUT the set screw to decrease the set pressure.



**AC Unit**



**DC Unit**

## 0zon3pro DC Unit

When installing a 0zon3Pro with DC, a marine battery and a solar panel will be needed. A charge controller will also be required to prevent the battery from over charging. The charge controller needs to be installed between the solar panel and battery. If a irrigation engine uses a battery, then it is best to NOT use this battery as the power source for the Ozone unit. This is because any fluctuation in power from the irrigation engine could cause the Ozone unit to be under or over powered, causing damage to the Ozone unit.



## Testing for Ozone

There are options for testing for Ozone. Test strips, Laboratory Test Kit or ORP Meter. The Hach test kit will give the most accurate results. Instructions will be included in any of these kits.



OZONE TEST STRIPS



HACH TEST KIT Model HYP-1



ORP METER