Air Injection System
Control Box Users Manual

This Air Injection System Control Box is used to monitor and control the air injection system. It requires 80 psi air pressure, 25 cfm air supply, and 60 psi water pressure to provide maximum performance. It utilizes 115V power and plugs into any standard 15 amp receptacle. Water and air are fed into the box using ½" low pressure tubing. The output is automatically controlled by electric solenoid valves and adjustable pressure regulators.

The Control Box includes the FOGCOntroller II dual relay microprocessor with built in humidity sensor. The sensor is fully calibrated reflow humidity sensors with digital output that sends binary data over RS485 protocol with an accuracy of +/- 2%. The sensors follow typical SHT15 standards.

The box is designed to be placed in the area to be humidified. Once the controller settings are programmed, the system is ready to operate. Alternatively, the FOGCOntroller II also allows for the use of a remote sensor that can be connected using a 4 pin connector and instrumentation cable. This allows the control box to be placed in a remote location with only the sensor placed in the area to be humidified.

The controller includes 2 relays. Relay 1 will control the air valve and relay 2 will control the water valve.

The pressure settings for the control box should be set to 40 psi air pressure and 35 psi water pressure. This will provide 12 lbs/hr flow rate with 1.6 cfm air consumption. This setting will provide excellent atomization and dry fog performance. Adjusting the water pressure up to 40 psi will produce 16 lbs/hr flow with 1.5 cfm air consumption. Adjusting the water pressure down to 30 psi will provide 8 lbs/hr and 1.7 cfm air consumption. Exact settings may vary depending on the on-site conditions. The Control Box can support up to 10 Fogco Air Injection nozzles.

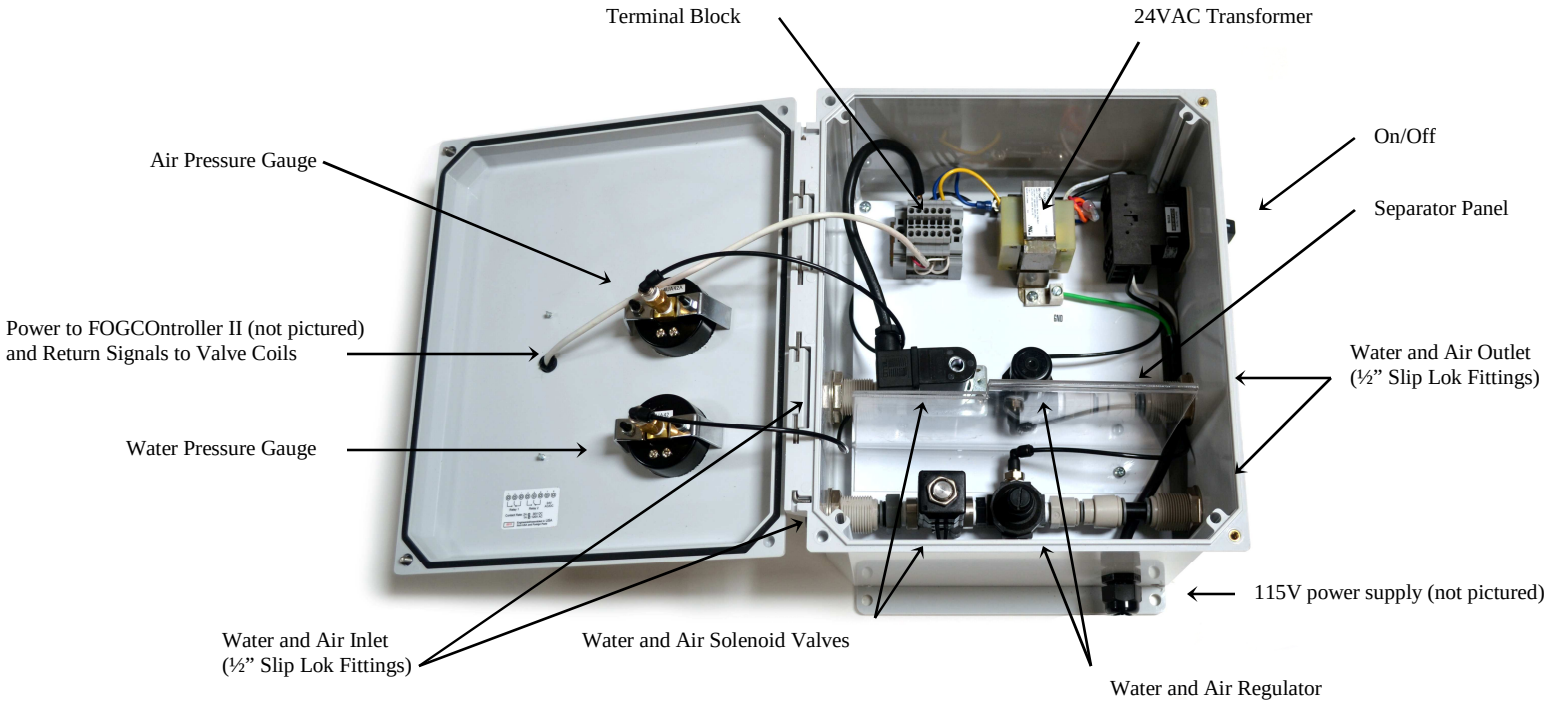
Notes

- Adjust the air pressure to 40 psi first, and then set the water pressure between 30 psi and 40 psi depending on system performance requirements.
- The 90 degree fittings on the pressure gauges and regulators are designed to swivel to allow the opening and closing of the control box door.
- The Humidity, Hysteresis, and relay delays are set in the programming mode of the FOGCOntroller II.
- The FOGCOntroller factory default settings are Humidity 50%; Hysteresis 2%; Delay Start Relay 1: 0; Delay Stop Relay 1: 0 seconds; Delay Start Relay 2: 0 seconds; Delay Stop Relay 2: 0.

Programming

Once the FOGCOntroller II is powered up, the display will show the current humidity level, the humidity set point and the hysteresis set point. To change the set points or to set the relay delays, press the **Menu** button.

- Use the **Up** and **Down** buttons to select internal or remote sensor. Press the **Menu** button when done.
- Use the **Up** and **Down** buttons to set the desired humidity level. Press the **Menu** button when done.
- Use the **Up** and **Down** buttons to set the hysteresis set point. Press the **Menu** button when done
- Use the **Up** and **Down** buttons to set the delay start for Relay 1. Press the **Menu** button when done.
- Use the **Up** and **Down** buttons to set the delay stop for Relay 1. Press the **Menu** button when done.
- Use the **Up** and **Down** buttons to set the delay start for Relay 2. Press the **Menu** button when done.
- Use the **Up** and **Down** buttons to set the delay stop for Relay 2. Press the **Menu** button when done.



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