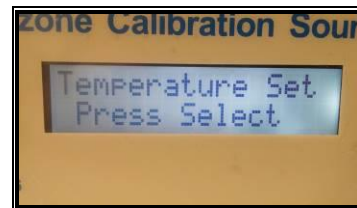
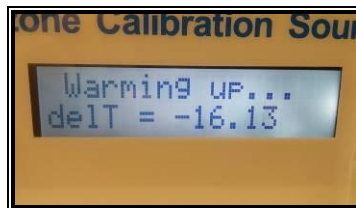


Model 306 Start Up Instructions

PLEASE READ BEFORE ATTEMPTING ANY MEASUREMENTS WITH THE MODEL 306

Before using the Model 306 in your application, please perform the following steps to establish the baseline performance of the instrument. By following this procedure when the instrument is first received, the user will be able to verify that the instrument has been setup correctly and, in the future, will be able to determine if there is any loss in instrument performance after prolonged periods of usage.

1. Connect Power Source. Use either the supplied 12 VDC power supply or a 12V battery.
2. Power ON the instrument. "Warming Up" is displayed in LCD. The amount of time the warm up takes is dependent on ambient temperature. Please allow the instrument to warm up fully before operation. LCD will display "Temperature Set" when ready.

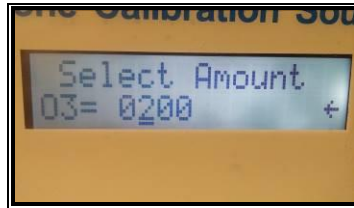


3. Connect to outlet. Locate the stainless steel bulkhead on the right end of the rear of the instrument. This bulkhead is the outlet for the ozone produced by the model 306. It is to this bulkhead that you will want to connect the provided connection tubing. Attach the desired ozone monitor to the other end of the connection tubing. **DO NOT add an overflow T on the connection tubing as the model 306 has an internal overflow T to compensate for any flow rate differential.**

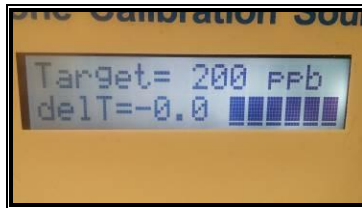


(Note, as of 2020 the inlet fittings on the Model 306 are stainless steel, not nylon shown in these pictures.)

- With your Model 306 attached to your ozone monitor via the connection tube, you may now begin generating ozone. Press the select switch on the front of the instrument and scroll to "O3" in the menu. Set the desired amount of ozone and press the select switch again to begin generating ozone.



- Allow the bar located on the LCD to max out before you begin logging your measurements.



- At this point your Model 306 is fully operational and may be used for calibration.
- If you have any problems, please contact 2B Technologies at (303)-273-0559 or via the web at <https://2btech.io/support/>.

Model 306 Installation Guidelines

Typical Installation: Connection to a Device Drawing Flow from the Model 306

The Model 306 is frequently used to calibrate an ozone monitor or to provide a known ozone concentration to another kind of equipment that draws flow from the calibrator. The Model 306 is designed for this type of installation. Inside the Model 306, an air pump maintains a total flow of ~ 4 L/min through the ozone generator. Any portion of the total flow that is not being drawn into the user's equipment is vented through an internal ozone scrubber and vented inside the enclosure (Figure 1).

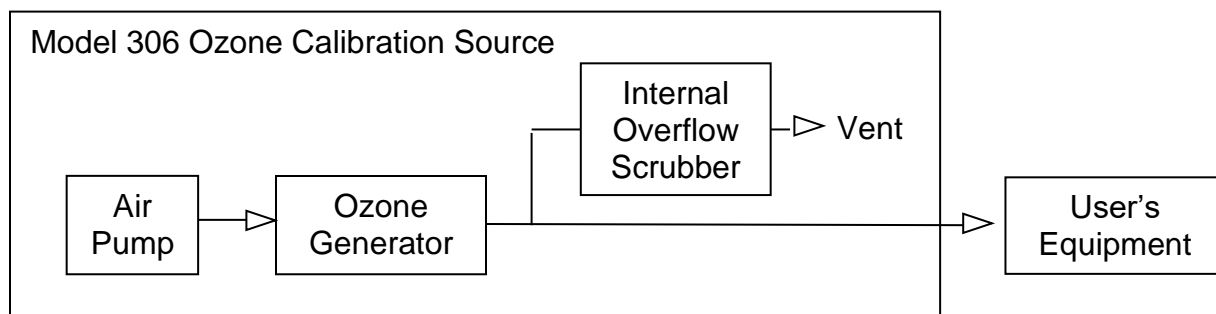


Figure 1. Schematic of the Model 306 showing the internal overflow scrubber and vent for any unused portion of the total flow rate.

Alternative Installation: Pushing flow from the Model 306.

For some applications, the customers may want the Model 306 to push into a chamber or other type of passive equipment that does not actively pull or push flow. In the case that the equipment is not very restrictive and is near ambient pressure, the Model 306 may provide enough flow (up to ~ 1 L/min) and will not need any additional modification. If more flow is needed (up to ~ 4 L/min) or the chamber/equipment is fairly flow-restrictive, a needle valve can be installed on the outlet of the internal overflow scrubber (see Figure 2). Adjustment of the needle valve will control the portion of flow that is vented inside the box and the portion that is directed to the outlet.

Suggestions for Measuring the Flow to the User's Equipment

If the user wants to measure the flow rate delivered to their equipment, we suggest they use one of the following methods:

1. Use a flow meter on the internal overflow scrubber to measure the vented flow rate and read the total flow rate from the Model 306. The flow to the user's equipment is the difference between these two measurements.
2. Use a scrubber after the user's equipment and then a flow meter. This allows for direct measurement of the process flow, but may pressurize the process if the scrubber or flow meter is restrictive. Ozone must be destroyed in the gas stream using a scrubber to prevent damage to the user's flow meter.

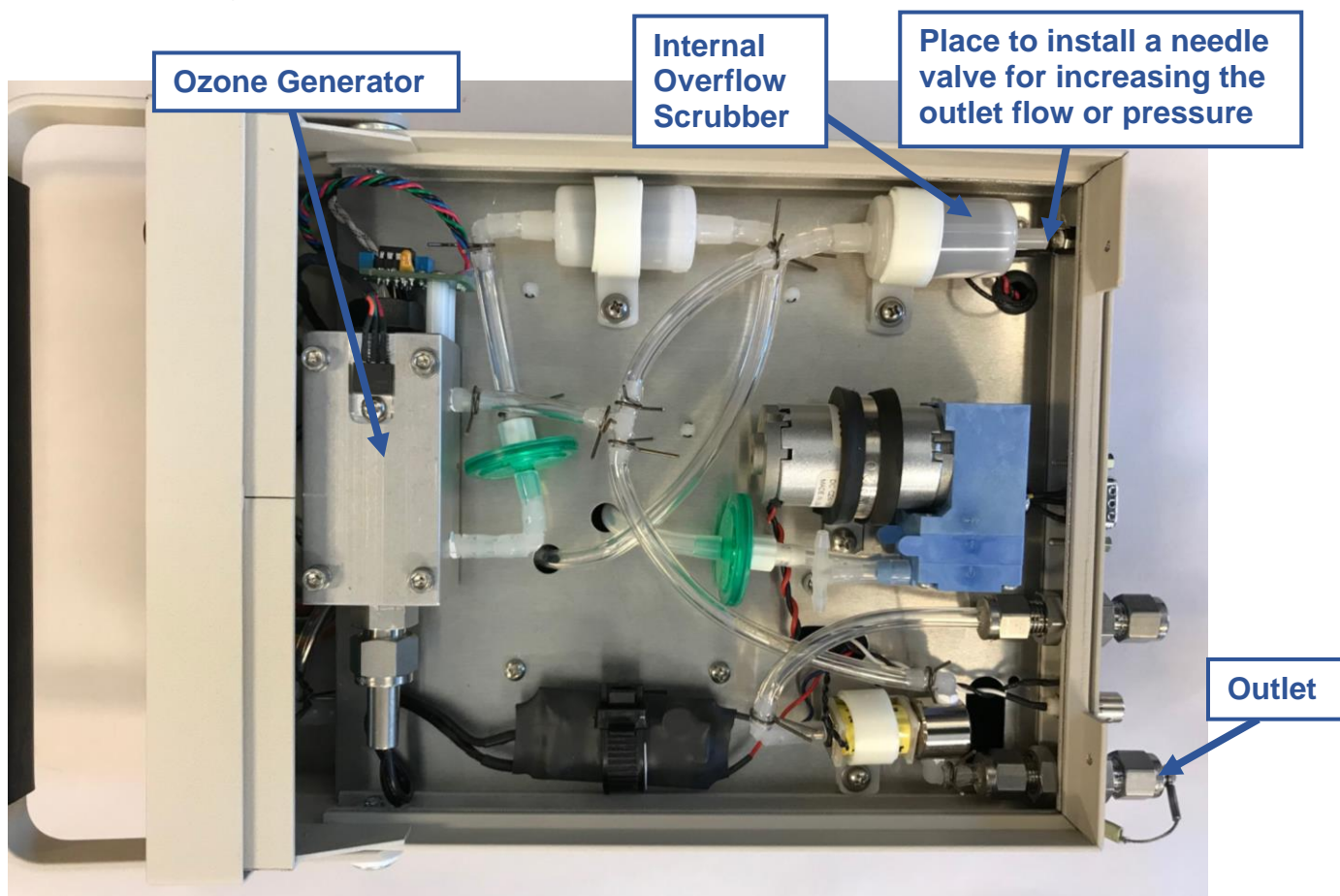


Figure 2. Photograph of the Model 306 showing where a needle valve can be installed to increase the flow or pressure at the outlet.

The Model 306 has proven performance over many years and in a variety of applications. We are confident that these instruments will perform well in your application.

Thank you for choosing the 2B Technologies Model 306 Ozone Calibration Source!

The 2B Technologies Team