



## Respond O2 Analyzer: Full “Two Step” Calibration Procedure

### Room Air:

*NOTE: Do not connect unit to oxygen source or introduce oxygen to the unit during this procedure.*

1. Push On/Off button to turn unit on
2. Ensure the unit is stabilized at room air – displays 20.9% (+/-2%)
  - a. If necessary, introduce room air at 2 LPM  
**NOTE: Do not exhale breath into unit – moisture will affect calibration**
  - b. A slight suction can be used to evacuate the chamber
3. After the unit is stabilized at room air (displays 20.9% +/-2%), push On/Off button to turn unit off.

### USP Oxygen:

1. **With unit off** – press and hold the “Pure O2 Calibrate” button. NOTE: Display screen will remain blank.
2. While continuing to hold the “Pure O2 Calibrate” button, press and release the On/Off button.
3. Continue to hold down the “Pure O2 Calibrate” button until the display reads “ \_\_\_ ”
4. Release the “Pure O2 Calibrate” button. The display will read “CAL AIR”.
5. Press and release the “Pure O2 Calibrate” button again. The display will roll for approximately one minute while it calibrates to room air.
6. When the unit display reads “CAL O2”
  - a. Hook up the Respond O2 unit to an oxygen source (cylinder or liquid), using the supplied tube
  - b. Introduce USP 99.9% oxygen at 2 LPM to the unit.
7. Press and release the “Pure O2 Calibrate” button again. The display will roll for approximately one minute while it calibrates to oxygen.
8. When the calibration sequence is complete, the unit will display “END CAL”. The unit is calibrated and ready for use.

### To Verify the Unit is Properly Calibrated:

1. With USP oxygen flowing into the unit at 2 LPM, press and hold the “Pure O2 Calibrate” button.
2. The unit will alternately display “O2” and a numeric reading (should be 99.9% +/-2%)
3. Disconnect oxygen source and turn off unit.

### Usage Tips and Troubleshooting:

1. Always check concentrators at the highest flow. A concentrator at lower flows (2 or 3) will show a higher concentration level.
2. A concentrator produces 95.6% purity at maximum performance; therefore, the Respond O2 Analyzer will not read more than 96%.
3. If the unit displays “CAL ERR” during the verification or calibration procedures, check to ensure USP oxygen (99.0%>) and that the flow is turned on to at least 2 LPM and repeat procedure.
4. If the unit displays “ \_\_\_ ” during the verification or calibration procedures, release the “Pure O2 calibrate” button or the unit will shut off automatically.