



# E Instruments


## AQ VOC Air Quality Monitor

### Quick Reference Operating Instructions




**NOTE: FIND FULL DETAILED MANUAL ON INCLUDED THUMBDRIVE**

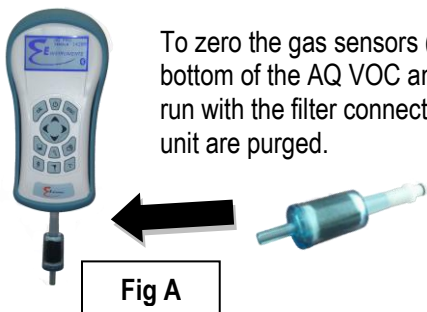
**NOTE: DO NOT LIFT OR HANDLE THE INSTRUMENT BY THE EXTERNAL BLACK TEMP+RH MODULE!**

1. Push the **ON/OFF** power button to activate the monitor & sampling pump.
  - a. Press the MEASURE  key to view the Main Measuring Screen including ambient temperature, barometric pressure, relative humidity, dew point. The toxic gas readings you selected in your kit are also displayed: VOCs and any other gases.

*Note: Be sure to stand arms' length from AQ VOC while taking measurement to ensure that you are not affecting readings.*

2. **Turn Pump On/Off:** Press the PUMP  button to Turn Pump On & Off. When Pump is OFF, no sample is being made
3. **Zeroing VOC & Gas Sensors using AQ CAL-ZF (except for CO<sub>2</sub>) in AMBIENT AIR CONDITIONS**

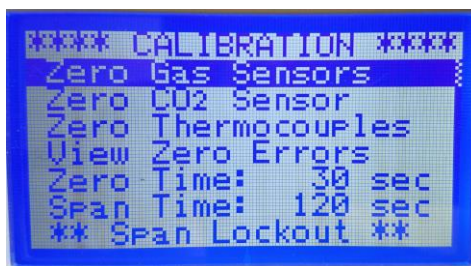
**NOTE: Let the instrument run in ambient conditions for minimum of 5 minutes BEFORE Connecting the AQ CAL-ZF Filter and performing the ZERO.**



To zero the gas sensors (except CO<sub>2</sub>) in Ambient Air, insert the **AQ CAL-ZF** filter into the Middle Sample In "A" inlet at the bottom of the AQ VOC and ensure that the opening on the bottom end of the filter is not blocked (**See Fig A**). Allow the unit to run with the filter connected for at least 30 seconds before continuing, this ensures that any potential contaminants inside the unit are purged.

**ZERO GAS SENSORS:** This will set the zero point of VOCs and up to two (2) other gases from the following list: CO, NO, CH<sub>2</sub>O, NO<sub>2</sub>, SO<sub>2</sub>, O<sub>2</sub>, and H<sub>2</sub>S values based on the cleaned air using the **AQ CAL-ZF**. With Filter Connected, Press the **OK** key to execute a Zero cycle of all the gas sensors while the instrument is running in ambient air. This ZERO cycle lasts 30 seconds. (**See Fig B**)

Press the **CALIB** key (bottom RIGHT button) and have the cursor (reverse color) point to "Zero Gas Sensors":



4. At the end of the zero period the AQ VOC reads the output of all gas sensors (*except for the CO<sub>2</sub> sensor*) and sets them all to ZERO (with the exception of the Oxygen (O<sub>2</sub>) that it sets to 20.9%). If no error messages appear at the end of the countdown, place the AQ CAL-ZF back into the included sealable bag to prevent moisture from entering it and proceed with your measurements.

**CO<sub>2</sub> should ALWAYS be ZERO Calibrated w/ a Cylinder of ZERO AIR. Do Not Use Ambient Air for CO<sub>2</sub> ZERO sensor calibration. Please refer to Chapter 9 of the included manual for more information on Calibration of CO<sub>2</sub> and other parameters.**

## 5. Sensor Protection with AQ Moisture Filter

All IAQ devices equipped with PID or optical sensors such as VOCs and/or CO<sub>2</sub> sensors should be protected from potential moisture, humidity and/or particulates in the air. Each AQ VOC unit is equipped with one (1) disposable AQ Moisture Filter. **Part #: (AQ650078)**. See photo below.



Fig C

- After Zeroing of the AQ VOC unit using the **AQ CAL-ZF** is complete (Section 3 above); insert the provided AQ Moisture Filter into the Middle Sample In “A” inlet at the bottom of the AQ VOC and ensure that the opening on the bottom end of the filter is not blocked (**See Fig C**).
- Leave the AQ Moisture filter connected during your analysis / sampling for better protection of the sensor.



Moisture Filter

## 6. Storing Data to Internal Memory (Store Data Points or Long-Term Periodic Tests) *Refer to Chapter 7 in Manual for more info*



- Press Data Storage Button
- Select “Store Current Buffer” to store a single complete set of data or one of the other Buffer Storage options depending on your needs. If you want to store data in a different location, use the UP, DOWN, & OK keys to select a new tag. Empty tags show the word empty.
- Select “Review Buffer” to view previously stored data
- Select “Name Buffer” and “Erase Buffer” as needed

- START PERIODIC DATA STORAGE:** This will turn on the periodic (long-term) store function. In this mode, the unit will continuously store data at an interval displayed on the next line.
  - In the Data Storage Menu, Highlight “SELECT INTERVAL”: The time between each store is set here. This can range from 10 seconds to 60 minutes.
  - To **START** data storage: Highlight and Press OK to START PERIODIC STORE.
  - To **STOP** data storage: Highlight and Press OK to STOP PERIODIC STORE.

## 8. Reattaching the Temperature/%RH probe

- If the External Black Temp+RH module becomes detached, reinsert into the round inlet at base of the unit
- When connecting the Temp+RH module, be careful to align the probe so that the black stripe is oriented to the top/front of the instrument. **See Fig D.** →



Fig D