

Application Note

Troubleshooting UB and UP Meters

Testing the pH Electrode

1. Connect the pH electrode to the BNC connector. If using a pH/ATC probe, also connect the ATC.
2. Press Mode until it is reading mV. Check that the reading is mV and not Rel mV, if it is in Rel mV then press setup and enter to clear mV offset.
3. Place the clean electrode into a pH 7 buffer
 - In mV the reading should be 0 +/- 30 mV. Outside of this range indicates a bad electrode
4. Rinse the electrode and place into a pH 4 buffer
 - In mV reading should be 159 to 186 mV more than value in pH 7.
 - Example: pH 7 buffer reads 10 mV; therefore, the pH 4 buffer should read between 169 to 196 mV.
5. Rinse the electrode and place into a pH 10 buffer
 - In mV reading should be 159 to 186 mV less than pH 7.
 - Example: pH 7 buffer reads 10 mV; therefore, the pH 10 buffer should read between -149 to -176 mV

Record mV readings:

pH 7 _____

pH 4 _____

pH 10 _____

Temperature: _____ (should be reading near room temperature)

If electrode fails, contact the electrode manufacturer.

If electrode passes, check that correct buffer set is selected. Clear buffers and re-standardize.

Testing the pH Meter

1. Place the shorting cap on the BNC connector.
 - Reading should be 0 +/- 0.3 mV plus long term drift (0.1 mV per month). Outside of this range may indicate a bad meter. Call for service.

mV reading _____