

# pH -2 pH METER

OPERATION AND  
SERVICE GUIDE  
O-785  
SEPT. 1988

## SAFETY PRECAUTIONS BEFORE USING EQUIPMENT

1. Read Operating Instructions and Instructions supplied with chemicals to be used.
2. Refer to Chemical Resistance Data Chart for compatibility of material with solution to be used.
3. Note temperature and pressure limitations of equipment.
4. Operating personnel should always wear suitable protective clothing:  
face mask or goggles, apron and gloves.

## OPERATING INSTRUCTIONS

1. Deploy the pH electrode to the 90 degree or 180 degree measurement position, and remove the protective plastic bottle.
2. Slide the battery compartment door open to the first stop and locate the Temperature Compensation Screw.
3. Turn the Temp. Comp Screw to the approximate temperature of the solution to be measured and close the battery compartment door.
4. Insert the pH probe into the test sample.
5. Depress the ON button and hold to observe the pH reading.
6. Remove the pH electrode and rinse thoroughly.
7. Replace the protective plastic bottle or the vinyl storage cap. Make sure the bottle or cap are filled with #4 buffer solution or tap water.

## CALIBRATION INSTRUCTIONS

Your instrument has been calibrated prior to shipment. However, it is important to verify the pH calibration periodically with fresh pH buffers .

1. Rinse electrode thoroughly with pure water.
2. Slid the battery compartment door back to the first stop exposing the adjustment potentiometers.
3. Insert pH electrode in a fresh #7 buffer solution.
4. Measure the temperature of the buffer solution.
5. Adjust the Temp. Comp. Screw to the corresponding temperature value.
6. Observe the pH reading and adjust the "Cal" pot to 7 pH if required.
7. Remove pH electrode & rinse in pure water.
8. Insert in a #4 or #10 buffer.
9. Adjust the slope pot until the measured value corresponds with the #4 or 10 pH buffer.

## HELPFUL HINTS

1. pH electrode should be rinsed thoroughly in pure water after each test.
2. Make sure to keep the electrode in either the plastic bottle or vinyl cap between uses.
3. Keep these storage devices filled with #4 buffer or tap water.  
DO NOT USE PURE WATER
4. Remove the battery if the pH meter will be stored for an extended period.
5. For best results, calibrate the pH meter with a buffer that is within 3 ph units of the samples to be tested.
6. If the ph electrode is allowed to dry out, rinse in a 10% HCL solution for 10 seconds. Rinse with pure water and store in a warm KCL solution overnight. This may regenerate the ph electrode.

## WARNING

1. ph electrode must be kept moist at all times.
2. Remove and SAVE protective bottle on pH electrode before use.
3. This bottle is filled with tap water, #4 or #7 buffer solution.
4. When not in use, replace bottle with liquid to keep pH electrode bulb wet.
5. Allowing electrode bulb to dry out will cause erratic readings, inability to calibrate, and may damage electrode.
6. If pH electrode bulb has dried, try soaking pH electrode in KCL or tap water for one hour.
7. Taking care of your pH electrode will insure maximum life, trouble free operation, and optimum accuracy.

## pH -2 pH METER

1. VINYL STORAGE CAP
2. pH ELECTRODE
3. DO NOT EMERSE BELOW  
ELECTRODE CAP
4. ELECTRODE PIVOT HINGE
5. LCD DISPLAY AND  
ANNUNCIATORS  
pH  
LOBATT
6. ON/OFF BUTTON
7. ADJUSTMENT  
POTENTIOMETERS: CAL:  
TEMP. COMP.  
SLOPE
8. BATTERY COMPARTMENT
9. 9V TRANSISTOR BATTERY
10. BATTERY COMPARTMENT DOOR