



## PH EQUIPMENT EVALUATION

### VISUAL INSPECTION OF EQUIPMENT

Look for broken cables, tight connections, corrosion, missing or broken parts.  
pH electrode solution levels, proper filling solution, clean electrode fill chambers.  
ATC probe should read accurately for temperature correction—verify with thermometer comparison.

### CLEAN AS NEEDED

70% Isopropyl alcohol and water work well for external dirt. Rinse electrodes with pure water using a Pasteur pipet or eyedropper until inner chamber is free of debris and excess salt crystal build up.

Refill electrode with correct fill solution and soak in electrode storage solution or pH 4 buffer to stabilize readings.

### ELECTRONIC CHECKOUT

Run internal calibration using shorting strap or paper clip.

### pH ELECTRODE CHECKOUT

Calibrate on pH7 and pH4 buffers. Check and note slope.  
mV range for buffers should fall into the following points:

pH 4.00	150 to 210 mV
pH 7.00	0 +/- 30 mV
pH 10.00	-150 to -210 mV

If electrode and meter calibrate properly, pH measurements should fall into acceptable levels.

Calibrate with pH7 then pH4. Check pH7, pH4, pH3, pH10 and to samples previously analyzed for comparison results.

Let soak in electrode storage solution or pH4 colorless buffer and recheck at a later time or the next day for continued performance accuracy.

For sluggish electrode response, soak electrode in 0.1N Hydrochloric Acid for 10 to 30 minutes. This will recharge salt bridge to encourage free movement and unclog any minor crystal blockage. After charging with acid rinse well with pure water and soak in colorless pH4 buffer until readings stabilize.