

# Calibration Procedures

## SensION2 Portable pH Meter

### Step 1

Prepare 4.01 (red), 7.00 (yellow), and 10.01 (blue) buffer solutions – one pillow packet for each 50 mL container of distilled water. **Make sure the containers are clean before you begin.**

### Step 2

Twist off storage cap from electrode.

### Step 3

Pump button on probe until gel solution is visibly coating membrane tip. Gel comes out of hole which looks as though you could stick a common pin into it.

### Step 4

Insert electrode into 4.01 buffer solution.

### Step 5

Press the blue I/O exit button to turn meter on.

### Step 6

Press the cal button. The display should show CAL in upper left hand corner and a 1? in the upper right hand corner along with the word Standard.

### Step 7

Press the blue READ/ENTER button. The word Stabilizing... will blink in upper left hand corner. Wait for series of beeps (some meters no longer beep). The 1? should change to 2?.

### Step 8

Remove probe from buffer, rinse with distilled water. Insert electrode into 7.00 buffer solution.

### Step 9

Press the blue READ/ENTER button. The word Stabilizing... will blink in upper left hand corner. Wait for series of beeps (some meters no longer beep). The 2? should change to a 3?.

### Step 10

Remove probe from buffer, rinse with distilled water. Insert electrode into 10.01 buffer solution.

### Step 11

Press the blue READ/ENTER button. The word Stabilizing... will blink in the upper left hand corner. Wait for a series of beeps (some meters no longer beep).

### Step 12

Check the slope value. This number must be  $\pm 3$  mV from  $-58$  mV.

### Step 13

Press the blue READ/ENTER button to save a successful calibration only. Otherwise hit the blue I/O exit button and begin again.

**If you are unsuccessful in calibrating, re-mix your buffer solutions before beginning again. Be sure to completely rinse out the containers, and wipe them out if necessary so that they are clean to begin with.**

### Step 14

Record calibration information onto field data sheet (both successful and any unsuccessful attempts).

### Step 15

Turn meter off unless ready to take a reading. Secure buffer solutions for transport.

sensION2 Portable pH Meter Keypad