

## SOP-E039

### Operation Procedure for Orion model 720Aplus pH Meter

**Objective:** pH Autocalibration with Two Buffers

A one or two point calibration should be performed using fresh buffers before pH is measured.

**Procedure:**

1. If meter is in standby, press any key for main display.
2. Verify selected input is in use: The prompt line should read **CH-1**. If not, then press **2nd** then **channel** until **channel 1** is displayed.
3. Verify meter is in pH mode. **pH** should be displayed on main display. If not, press **mode** button until **pH** is displayed on main display.
4. Place electrode into pH 7 buffer and stir moderately.
5. Press **calibrate**. The date and time of last calibration is displayed.
6. Press **2**, then **yes** to select two buffer calibration.
7. When **"RDY"** is displayed on prompt line, indicating electrode stability, press **yes**. The buffer value is entered, stored and the meter display freezes for three seconds. The meter automatically switches to buffer 2.
8. Remove electrode from the first buffer. Rinse with deionized water.
9. Place electrode into second buffer.
10. When **"RDY"** is displayed on prompt line, press **yes**.
11. The electrode slope is calibrated and then actual value in percent is displayed for five seconds.
12. Meter will automatically proceed to the **measure** mode.
13. Remove electrode from buffer. Rinse with deionized water.
14. Place electrode into sample. When **"RDY"** is displayed record the sample results.
15. Rinse electrode with deionized water and return to electrode storage solution.
16. Meter will automatically time out to **standby** mode.

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