Quick Start Guide

710Aplus pH/ISE Meter

All meter functions are described in detail in the accompanying instruction manual. For calibration and measurement only a few steps are required, and step-by-step instructions are given in this guide.

Meter Overview

1. Results are displayed in the large main field of the display.
2. Mode is indicated by ▼ along the bottom of the display corresponding to the legend below it.
3. Some of the keys on the keypad have multiple functions. Their primary functions are labeled in white. For those with secondary functions, these functions are labeled in green, and are accessed by pressing **2nd** then

   the function.
4. The parameters in the setup menu are preset to typical values and usually do not require changing. Please see instruction manual if changing parameters is necessary.
5. If you want to escape the sequence you are in, or you are not sure of which function you are in, pressing measure will take you to MEASURE mode where you can start again.

Meter Connections

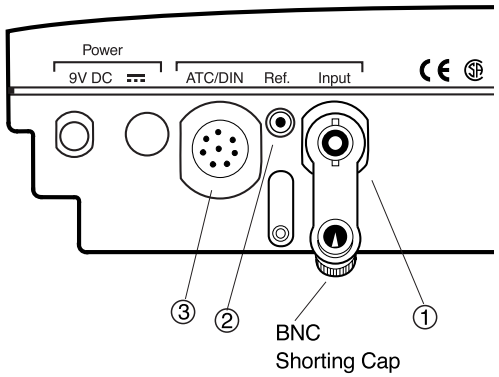
Power

1. Plug line adapter into an appropriate wall outlet.
2. Plug line adapter firmly into power input on rear panel of meter.

Electrode Connection

1. Remove BNC shorting cap.
2. Attach electrode with BNC connector by sliding BNC connector onto electrode input (**1**), then push down and turn clockwise to lock into position.

NOTE: If using a combination electrode with a BNC connector, the reference electrode input (**2**) is not used.



3. Attach ATC probe with DIN connector by sliding the DIN connectors into the ATC probe input (**3**) until firmly in place.

pH Measurement Overview

pH measurement is easy and accurate with the Model 710Aplus. The meter/electrode system is calibrated with one to five buffers, which bracket your sample pH.

For better accuracy, at least a two buffer calibration is recommended.

The autocalibration feature automatically recognizes 1.68, 4.01, 7.00, 10.01, and 12.46 buffers. For best results, an ATC probe is recommended to compensate for temperature variation.

ISE Measurement Overview

Direct measurement using ion selective electrodes (ISE's) is fast and convenient with the Model 710Aplus. The meter/electrode system is calibrated with one to five standards of known concentration which bracket sample concentration. Unknown sample concentration is then read directly from the display in units used for calibration, molarity, ppm, %, etc.

Quick Start Guide

710Aplus pH/ISE Meter

See the appropriate electrode instruction manual for preparation of sensing and reference electrodes, required solutions (ionic strength adjusters, standards, etc.) and other special requirements. For best results during calibration, always use the most dilute standard first, and always use a fresh aliquot of standard.

pH Autocalibration with Two Buffers

1. Select pH mode by pressing mode until ▼ the mode indicator, is aligned with pH legend along bottom of display.
2. Place electrode(s) into pH 7 buffer and stir moderately.
3. Press **2nd** then **cal** to begin calibration. The date and time of the last calibration will be displayed. “P1” is also displayed indicating meter is ready for the first buffer.
4. When “READY” is displayed beside the reading, indicating electrode stability, the reading will flash. Press **yes**. The buffer value is stored and meter display freezes for three seconds. The meter automatically switches to buffer two, indicated by the “P2” on the display.
5. Remove electrode(s) from first buffer. Rinse with deionized water.
6. Place electrode(s) into second buffer and stir moderately.
7. When “RDY” is displayed beside the reading, press **yes**.
8. Press **measure** to end calibration. The electrode slope is calculated and displayed for five seconds. Meter automatically proceeds to MEASURE mode.
9. Remove electrode(s) from buffer. Rinse with deionized water. Place electrode(s) into sample. When “READY” is displayed beside the reading, record the sample results.

Calibration of Ion-Selective Electrodes (ISE) with Two Standards

1. Select concentration mode by pressing **mode** until ▼, the mode indicator, is aligned with the conc legend along bottom of display.
2. Place electrode(s) into most dilute standard and stir moderately.
3. Press **2nd** then **cal** to begin calibration. The date and time of the last calibration will be displayed. “P1” will also be displayed indicating meter is ready for the first standard.
4. When “READY” is displayed beside the reading, indicating electrode stability, the reading will flash. Use the scroll keys, ▼ ▲, to enter the correct value:
   a. Press ▼ or ▲ key, the decimal point will flash. Press ▼ or ▲ repeatedly to position the decimal point and press **yes**.
   b. The first digit will then flash. Scroll to the correct value and press **yes**.
   c. Continue step b for each digit on the display. When completed, the standard value is stored and the meter display freezes for three seconds.
5. The meter automatically switches to standard 2, indicated by “P2’ on the display.
6. Remove electrode(s) from first standard. Rinse with deionized water.
7. Place electrode(s) into second standard and stir moderately.
8. When “READY” is displayed beside the reading, follow repeat step 4 to enter the correct value of the standard.
9. Press **measure** to end calibration. The electrode slope is calculated and displayed for five seconds. Meter automatically proceed to MEASURE mode.
10. Remove electrode(s) from standard. Rinse with deionized water.
11. Place electrode(s) into sample. When “READY” is displayed next to the reading, record the sample results.

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