

SX620 pH Pen Tester Instruction Manual

1. Brief Introduction

Thank you for purchasing APERA INSTRUMENTS SX620 pH Pen Tester. This product is featured with reliable and accurate measuring performance with a single-button operation in a slim body, ideal for measuring pH in regular water solutions, including (but not limited to) hydroponics, aquaculture, water treatment, pools& spas, cooling towers, beverage making, body fluid (e.g. urine, saliva). The pH probe is replaceable and suitable for test tube measuring and other small-volume sample testing.

2. Specifications


- 1) Measuring Range: -1 to 15.00 pH; Temperature: 0 to 60°C
- 2) Resolution: 0.01 pH; Temperature: 0.1°C
- 3) Accuracy: ± 0.01 pH, ± 1 digit; Temperature: $\pm 0.5^\circ\text{C}$
- 4) Automatic calibration: 1-3 points calibration (pH 7.00, pH 4.00, pH 10.01)
- 5) Power: CR2032 Cell Battery*2
- 6) Dimension and Weight: 148*29*14mm/49g
- 7) Waterproof rating: IP57

3. Instructions

- 1) Calibration: Rinse the probe in distilled water and dap off excess water with tissue paper. Dip the probe in the standard buffer solution pH7.00. Stir gently, hold still, and wait for the reading to become stable. Then press the CAL button for about two seconds until **CAL** appears on the screen. When the calibration value **7.0** flashes, the calibration will finish after several seconds, and the meter will return to measurement mode and the icon (M) will appear on the screen.
- 2) Rinse the probe in distilled water, and dap off excess water with tissue paper. Then dip the probe in the other standard buffer solutions (pH 4.00 or pH 10.01) to complete calibration according to the steps in 1). Icon (L) will appear when pH 4.00 is calibrated, and icon (H) will appear when pH 10.01 is calibrated.
- 3) Measurement: Rinse the probe in distilled water and dap off excess water with tissue paper. Dip the probe in the sample liquid. Stir gently and let it stand still until you receive a stable reading.
- 4) After measurement, rinse the probe with distilled water, dap off excess water, and put the protection cap back on. It's a good practice to pour a few drops of storage solution (3M KCL) that comes with kit into the protection cap when storing the meter, since it will help keep the accuracy of the pH probe.
- 5) Temperature Unit Switch: When meter is turned off, hold the CAL button until the meter reboots and then the temperature unit will be switched ($^\circ\text{C}$ – $^\circ\text{F}$)

4. Notes

- 1) The tester should be calibrated at least once in a week. Calibrate one point with pH 7.00 buffer solution for tests requiring general accuracy ($\geq 0.1\text{pH}$). Calibrate two points with pH 7.00 and pH 4.00 buffer solutions for tests of acidic solutions (measurement value is less than pH7.00). Calibrate two points with pH7.00 and pH 10.01 buffer solutions for tests of alkaline solutions (measurement value is more than pH 7.00). If the measurement range is broad, calibrate three points with pH 7.00, pH 4.00 and pH 10.01. To ensure the reliability of calibration, pH standard buffer solutions should be replaced after 10-15 times of calibration.

- 2) Maintenance is necessary for the head of the probe because it can become contaminated after long-term use. To perform the maintenance, rinse the probe head in soap water and clean it with a soft brush. Then rinse the bulb with distilled water, and perform calibration again after several hours.
- 3) The typical service life of the pH electrode is about 12-18 months. When the icon “Err” appears on the screen, or the accuracy/response speed cannot meet your requirements, please replace a new probe. The replacement probe’s model number is SX615. Please go to support.aperainst.com to watch a tutorial video regarding how to replace the pH probe (and batteries).
- 4) The instrument will turn off automatically after 10 minutes if no operation.
- 5) Replace the batteries when  appears on screen.

5. Warranty

We warrant this instrument to be free from defects in material and workmanship and agrees to repair or replace free of charge, at option of APERA INSTRUMENTS, LLC, any malfunctioned or damaged product attributable to responsibility of APERA INSTRUMENTS, LLC for a period of **two years** from the delivery (a **six-month** limited warranty applies to electrodes). Warranty period is the time limit to provide free service for the products purchased by customers, not the service life of the tester or electrodes.

This limited warranty does not cover any damages due to:

- i. transportation;
- ii. storage;
- iii. improper use;
- iv. failure to follow the product instructions or to perform any preventive maintenance;
- v. modifications;
- vi. combination or use with any products, materials, processes, systems or other matter not provided or authorized in writing by us;
- vii. unauthorized repair;
- viii. normal wear and tear; or
- ix. external causes such as accidents, abuse, or other actions or events beyond our reasonable control.