

## Foodcare

HI981033

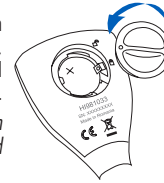
## Wine pH Tester



## Battery Replacement

To change the CR2032 lithium-ion battery, turn the battery cover, located on the back of the tester, counterclockwise to unlock. Remove cover and replace the battery with positive (+) side facing out.

**Note:** Only use the battery type specified in the manual. Old batteries should be disposed in accordance with local regulations.



## Warranty

HI981033 is warranted for a period of one year against defects in workmanship and materials when used for its intended purpose and maintained according to instructions. This warranty is limited to repair or replacement free of charge. Damage due to accidents, misuse, tampering or lack of prescribed maintenance is not covered. If service is required, contact your local Hanna Instruments Office. If under warranty, report the model number, date of purchase, serial number and the nature of the problem. If the repair is not covered by the warranty, you will be notified of the charges incurred. If the instrument is to be returned to Hanna Instruments, first obtain a Returned Goods Authorization (RGA) number from the Technical Service department and then send it with shipping costs prepaid. When shipping any instrument, make sure it is properly packaged for complete protection.

## Recommendations for Users

Before using this product, make sure it is entirely suitable for your specific application and for the environment in which it is used. Any variation introduced by the user to the supplied equipment may degrade the tester's performance. For yours and the tester's safety do not use or store the tester in hazardous environments.

## Certification

All Hanna Instruments conform to the CE European Directives. **Disposal of Electrical & Electronic Equipment.** The product should not be treated as household waste. Instead hand it over to the appropriate collection point for the recycling of electrical and electronic equipment which will conserve natural resources.

**Disposal of waste batteries.** This product contains batteries, do not dispose of them with other household waste. Hand them over to the appropriate collection point for recycling.

Ensuring proper product and battery disposal prevents potential negative consequences for the environment and human health. For more information, contact your city, your local household waste disposal service, the place of purchase or go to [www.hannainst.com](http://www.hannainst.com).

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IST981033 10/19



RoHS compliant



## Auto-Off

From measurement mode, press and hold the ON/OFF button. The LCD will show "OFF", "CAL" followed by "d08" (default setting, 8 minutes). Release the ON/OFF button. A single press on the ON/OFF button will change the auto-off timer to "d60" (60 minutes). To disable the auto-off feature press the ON/OFF button again, LCD will show "d--". Press and hold to exit.

## Clear Calibration

To clear the user calibration and restore the tester to factory default. From calibration mode, press and hold the ON/OFF button, the LCD will show "CLr".

## "Err" Message

In calibration mode, if the probe is in the correct buffer solution and the "Err" message is displayed, the probe should be cleaned. Soak the probe in cleaning solution for 20 minutes. Rinse with water and hydrate electrode in storage solution for a minimum of 30 minutes before calibrating.

## Battery Indicator

When the battery level is low, the tag on the LCD will blink. When the battery is depleted the "Erb" message is displayed and the tester is powered off.

- When not in use, add a few drops of storage solution to the protective cap to keep the glass tip and the junction hydrated. If storage solution is not available, pH 4.01 or pH 7.01 buffer can be used. Never store the probe in distilled or deionized water.
- Samples to be tested and buffer solutions should be kept at the same temperature. Significant differences in temperature may result in inaccurate readings

**Note:** Never immerse the tester over the maximum immersion level.

## Refilling the Electrode

- Keep the electrode upside-down and rotate the PE sleeve, while moving it down, to expose the fill hole.
- Turn the tester right-side up and carefully shake out remaining electrolyte solution.
- Use the supplied pipette to refill with fresh HI9070 Electrolyte fill solution through the exposed fill hole.
- Carefully rotate the PE sleeve back in place to cover the exposed fill hole.

**Note:** Do not allow the reference electrolyte solution to drop below minimum recommended level.



## Accessories

## pH Buffer Solution

HI50003-02 pH 3.00 buffer solution, 20 mL sachet (25 pcs.)

HI70007P pH 7.01 buffer solution, 20 mL sachet (25 pcs.)

## Electrode Cleaning Solution

HI700601P General purpose cleaning solution, 20 mL sachet (25 pcs.)

HI700635P Cleaning solution for wine deposits, 20 mL sachet (25 pcs.)

HI700636P Cleaning solution for wine stains, 20 mL sachet (25 pcs.)

## Electrode Storage Solution

HI70300L Electrode storage solution, 500 mL

HI70300M Electrode storage solution, 230 mL

HI9072 Electrode storage solution, 13 mL dropper

## Electrode Fill Solution

HI9070 Electrolyte fill solution, 3.5M KCl + AgCl

HI740155P Electrode refilling pipette (20 pcs.)



## Care &amp; Maintenance

## General Information

Please read the information below, to ensure the highest possible accuracy:

- Fresh buffer should be used for each calibration, once the sachets are open the buffer value can change over time.
- For improved accuracy a two-point calibration is recommended.
- If the electrode is slow or sluggish, soak it in cleaning solution for 20 minutes. Rinse with water and hydrate the electrode in storage solution for a minimum of 30 minutes before calibrating.
- If measurements are taken successively, rinse the probe thoroughly in distilled or deionized water to eliminate cross-contamination.

## Dear Customer,

Thank you for choosing a Hanna Instruments product. Please read this instruction manual carefully before using the tester.

For more information about Hanna Instruments and our products, visit [www.hannainst.com](http://www.hannainst.com) or e-mail us at [sales@hannainst.com](mailto:sales@hannainst.com).

For technical support, contact your local Hanna Instruments Office or e-mail us at [tech@hannainst.com](mailto:tech@hannainst.com).

## Preliminary Examination

Remove the tester and accessories from the packing material and examine it carefully. If you require any further information, please contact Hanna Instruments technical support team at [tech@hannainst.com](mailto:tech@hannainst.com).

Each HI981033 is delivered in a cardboard box and is supplied with:

- HI70003 pH 3.00 buffer solution, 20 mL sachet (2 pcs.)
- HI70007 pH 7.01 buffer solution, 20 mL sachet (2 pcs.)
- HI700635 Cleaning solution for wine deposits
- HI700636 Cleaning solution for wine stains
- HI9072 Electrode storage solution, 13 mL dropper
- HI9070 Electrolyte fill solution
- Pipette
- CR2032 3V Lithium-ion battery
- Instrument quality certificate
- Instruction manual

**Note:** Save all packing material until you are sure that the tester works correctly. Any damaged or defective item must be returned in its original packing material with the supplied accessories.

## General Description & Intended Use

The HI981033 Wine pH Tester is designed to measure the pH at each step of the winemaking process: from pre-fermentation & fermentation to post-fermentation & bottling. It features a single button operation system and is easy to use.

It has a compact and waterproof casing and automatic pH calibration at one or two points. All readings are automatically compensated for temperature variations with a built-in temperature sensor. The pH electrode is equipped with a movable Polyethylene (PE) sleeve that features a specialized Clogging Prevention System (CPS™) technology that maintains reading stability and a fast response.

## Probe Features

### Domed Tip

Provides optimal surface contact for wine pH measurements.

### Specialized Glass Formulation

Specialized low temperature (LT) pH glass ensures fast stabilization and accurate results at lower temperatures.



**Polyethylene (PE) Movable Sleeve with Clogging Prevention System (CPS™)**  
The PE movable sleeve is part of the outer ground glass junction. The PE material repels solids and prevents clogging. Additionally, the sleeve can be moved and the ground glass surface cleaned, resulting in stable readings and fast response times.

## Specifications

Range	0.00 to 12.00 pH
Resolution	0.01 pH
Accuracy	±0.05 pH
Calibration	Automatic, one or two-point
Temperature compensation	Automatic, 0 to 50 °C
Electrode	Built-in probe for specific application
Battery Type	CR2032 Lithium-ion (included)
Battery Life	Approximately 800 hours of continuous use
Auto-off	8 minutes, 60 minutes or disabled
Environment	0 to 50 °C (32 to 122 °F); RH 95% max
Dimensions	51 x 157 x 21 mm (2 x 6.2 x 0.9")
Weight	48 g (1.7 oz.)

## Functional Description & LCD Display



## Preparation

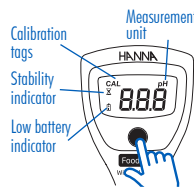
- Remove the protective cap. Do not be alarmed if salt deposits are present. Rinse the probe with water and blot dry.
- If the glass and / or junction are dry soak the electrode (bottom 3 cm / 1.2") in storage solution for a minimum of 30 minutes. Rinse with water and blot dry.
- Calibrate the electrode before using. For best results is recommended to recalibrate periodically.

## Storage

- To ensure a quick response, the glass tip and junction should be kept moist.
- Replace the protective cap with a few drops of storage solution when not in use. Do not store the electrode in distilled or deionized water.

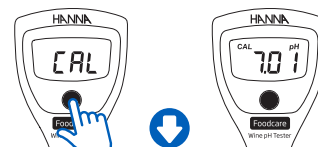
## Operation

Press the ON/OFF button to turn the tester on. The tester displays all LCD segments for a few seconds. The tester will enter measurement mode, the current reading and calibrated buffers will be shown.



## Calibration

From measurement mode, press and hold the ON/OFF button until "CAL" is displayed.



**A** For one or two-point calibration using pH 7.01 buffer solution, follow procedure A.

**B** For one-point calibration using pH 3.00 buffer solution, follow procedure B.

**Note:** It is recommended to calibrate the electrode with buffers at the temperature it will be used at.

## A One or Two-Point Calibration with pH 7.01



One-Point



Press the ON/OFF button to save the one-point calibration.



"Sto" will be displayed when the calibration is saved.



The tester will return to measurement mode.

When "7.01" is displayed, place the tip of the electrode in pH 7.01 buffer. When the reading is stable, the stability icon will disappear. When "3.00" is displayed, follow the procedure to the right for a one or two-point calibration.

Two-Point



Place the tip of the electrode in pH 3.00 buffer. The buffer is automatically recognized, the stability indicator will blink.



Wait until the measurement is stable and the stability indicator disappears. "Sto" will be displayed when the calibration is saved.



The tester will return to measurement mode.

## B One-Point Calibration with pH 3.00



When "7.01" is displayed, place the tip of the electrode in pH 3.00 buffer. The buffer value will be recognized automatically and "3.00" will be displayed.



When the reading is stable, the stability indicator will disappear. "Sto" will be displayed when the calibration is saved.



The tester will return to measurement mode.