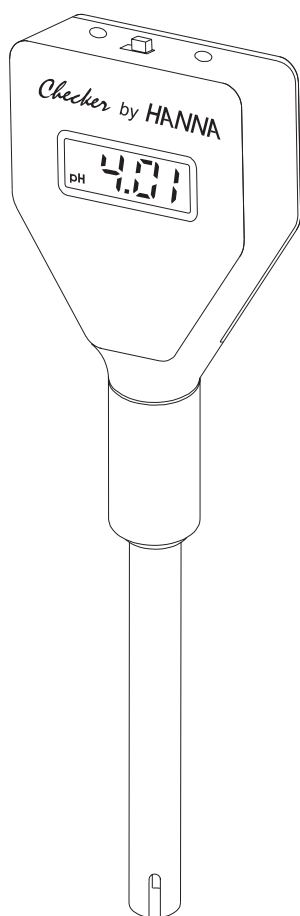


Checker®

HI 98103

pH tester with
replaceable electrode



HANNA
instruments

www.hannainst.com

Dear Customer,

Thank you for choosing a Hanna product.

Read carefully this instruction manual before using the instrument. If you need additional technical information, do not hesitate to e-mail us at tech@hannainst.com.

This instrument is in compliance with the CE directives.

PRELIMINARY EXAMINATION

Remove the instrument from the packing material and examine it carefully to make sure that no damage has occurred during shipment. If there is any damage, immediately notify your Dealer.

The meter is supplied complete with

- HI 1270 pH electrode
- 2 x 1.5V alkaline batteries
- instructions

Note: Conserve all packing material until the instrument has been observed to function correctly. Any defective item must be returned in its original packing.

WARRANTY

This meter is guaranteed for one year against defects in workmanship and materials when used for its intended purpose and maintained according to instructions. The electrode is guaranteed for a period of six months. This warranty is limited to repair or replacement free of charge. Damages due to accident, misuse, tampering or lack of prescribed maintenance are not covered. If service is required, contact the dealer from whom you purchased the instrument. If under warranty, report the model number, date of purchase, serial number and the nature of the failure. 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 Number from the Customer Service department and then send it with shipment costs prepaid. When shipping any instrument, make sure it is properly packaged for complete protection.

SPECIFICATIONS

Range	0.00 to 14.00 pH
Resolution	0.01 pH
Accuracy (@20°C)	±0.2 pH
Calibration	Manual, 2 points
Electrode	HI 1270 (included)
Environment	0 to 50°C (32 to 122°F); RH 95% max
Battery type	2x1.5V alkaline
Battery life	approx. 3000 hours of continuous use
Dimensions	66x50x25 mm (2.6x2.2x1") (meter only)
Weight	50 g (1.8 oz)

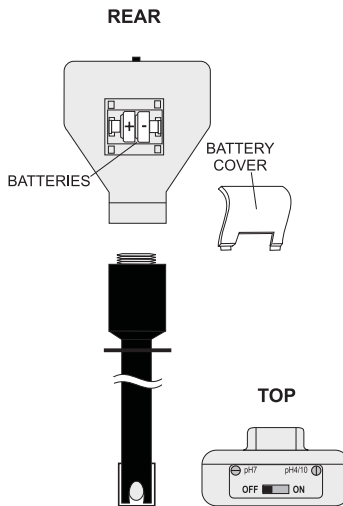
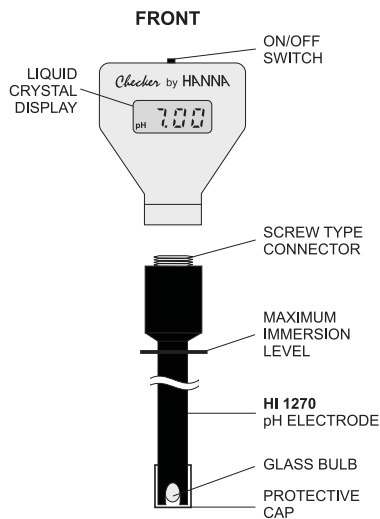
ACCESSORIES

HI 1270	Replaceable pH electrode with screw-type connector
HI 70004P	pH 4.01 buffer sachet (20 ml, 25 pcs)
HI 70007P	pH 7.01 buffer sachet (20 ml, 25 pcs)
HI 70010P	pH 10.01 buffer sachet (20 ml, 25 pcs)
HI 70300M	Storage solution, 230 ml bottle
HI 7061M	Cleaning solution, 230 ml bottle

Recommendations for Users

Before using this product, make sure that it is entirely suitable for the environment in which it is used. Operation of this instrument in residential areas could cause interference to radio and TV equipment. The glass bulb at the end of the pH electrode is sensitive to electrostatic discharges. Avoid touching this glass bulb at all times. Any variation introduced by the user to the supplied equipment may degrade the instrument's EMC performance. To avoid electrical shocks, do not use this instrument when voltage at the measurement surface exceeds 24 Vac or 60 Vdc. To avoid damage or burns, do not perform any measurement in microwave ovens.

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of "Hanna Instruments"

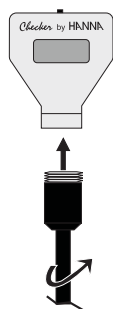


INITIAL PREPARATION

The pH electrode is shipped dry. Before using the *Checker*[®], remove the protective cap and condition the electrode by soaking the tip (bottom 4 cm/1½") in pH 7.01 buffer solution for a couple of hours. Then follow the calibration procedure.

OPERATION

- Do not be alarmed if white crystals appear around the cap. This is normal with pH electrodes and they dissolve when rinsed with water.
- Connect the electrode to the meter.

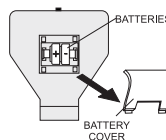


- Turn the *Checker*[®] on by sliding the switch on the top.

- Remove the protective cap and immerse the tip of the electrode (bottom 4cm/1½") in the sample to be tested.
- Stir gently and wait for stable reading. NEVER IMMERSE THE ELECTRODE OVER THE MAXIMUM IMMERSION LEVEL. THE CONNECTOR MUST BE ALWAYS CLEAN AND DRY.
- After use, rinse the electrode with water and store it with a few drops of HI 70300 storage solution in the protective cap.
- Always replace the protective cap after use.

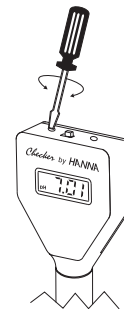
BATTERY REPLACEMENT

Replace the batteries when the display fades or the meter cannot be switched on. Remove the battery cover on the back of the meter. Insert 2 new 1.5V batteries, while paying attention to their polarity. Batteries should only be replaced in a safe area using the battery type specified in this instruction manual.



CALIBRATION

- For best results, calibrate frequently.
- Dip the tip of the electrode (bottom 4 cm/ 1½") in pH 7.01 buffer solution at room temperature. Allow the reading to stabilize.
- Use a small screwdriver to adjust the pH7 trimmer until the display reads "pH 7.01".



- Rinse the electrode with water and dip it in pH 4.01 (or pH 10.01) buffer solution. Allow the reading to stabilize.
- With a small screwdriver adjust the pH4/10 trimmer until the display reads "pH 4.01" (or "pH 10.01").



- Calibration is now complete. ALWAYS CALIBRATE USING FRESH BUFFER SOLUTIONS.