Measurement & Calibration

Calibrate the electrode before using. For best results it is recommended to recalibrate periodically.

In addition, the instrument must be recalibrated:

- When high accuracy is required.
- At least once a month.

Measurement

Press the ON/OFF button to turn the tester on. Place the probe in solution. The conductivity value, automatically compensated for temperature, will be shown on the LCD.

The measured temperature will be shown on the secondary LCD.

***Note:** Before taking any measurement make sure the tester has been calibrated.*

Calibration Procedure

- Press CAL button to enter calibration mode from measurement mode.
- The tester will enter the calibration mode, displaying "mS/cm 12.88 USE" with CAL tag blinking.

1. Pour 2" (5 cm) of standard solution into a container.
2. Place the probe in calibration solution. The probe tip should be centered in the solution and submersed 1.18" (3 cm). The tester will automatically recognize the solution.
3. If the solution is not recognized or is out of the accepted range "---- Err" is displayed.
4. If the calibration solution is recognized "REC" is displayed until the reading is stable and the calibration is accepted.

- After acceptance, the "Stor" message is displayed and tester returns to measurement mode.

Clear Calibration

Place the tester in calibration mode. Press ON/OFF and "Clr" is displayed. The tester will now be at default calibration.

Error Messages

"---Err" displayed during calibration indicates that the solution is not recognized or out of accepted range.

20.00 mS/cm displayed blinking during measurement indicates that the reading is out of meter range limits.

50.0 °C or 0.0 °C displayed blinking during measurement indicates that measured temperature is out of accepted range.

Care & Maintenance

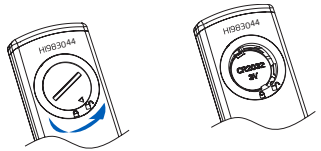
Please read the information below, to ensure the highest possible accuracy:

- Fresh buffer should be used for each calibration, once the sachets are opened the buffer value can change over time.
- If measurements are taken successively, rinse the probe thoroughly in distilled or deionized water to eliminate cross-contamination.

Battery Replacement

The tester features a low battery indicator. When the battery is running low (under 10%), the battery indicator will blink on the LCD. When the battery is discharged "**dEAd bAtt**" will be displayed on the LCD for 2 seconds and the tester will turn off.

To change the CR2032 Li-ion battery, turn the battery cover located on the back of the tester counterclockwise to unlock. Remove cover and replace with new battery + side facing up.



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

Accessories

Solutions

HI700304P	12.88 mS/cm calibration solution, 20 mL sachet (25 pcs.)

Hanna Instruments reserves the right to modify the design, construction, or appearance of its products without advance notice.

Certification

All Hanna Instruments conform to the **CE European Directives.**

CE

RoHS compliant

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.

Recommendations for Users

Before using Hanna products, make sure that they are entirely suitable for your specific application and for the environment in which they are used. Any variation introduced by the user to the supplied equipment may degrade the instrument's performance. For your and the instrument's safety do not use or store it in hazardous environments.

Warranty

HI983044 is warranted for a period of one year against defects in workmanship and materials when used for their 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 Office, 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.

IST983044 11/20

INSTRUCTION MANUAL

Pool Line

HI983044

EC Tester

HANNA® instruments

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 or e-mail us at sales@hannainst.com.
For technical support, contact your local Hanna Instruments Office or e-mail us at 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.
HI983044 is delivered in a plastic box and supplied with:

- 12.88 mS/cm calibration solution sachet (4 pcs.)
- CR2032 Li-ion battery (1 pc.)
- Storage / Protection cap
- Instrument quality certificate
- Instruction manual

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

General Description & Intended Use

HI983044 is a compact pocket-sized EC tester, part of Hanna Instruments pool-line family.
It has a compact and waterproof casing, and automatic single-point calibration.
It features an amperometric graphite electrode that provides improved repeatability in measurements as the pins do not oxidize.

Specifications

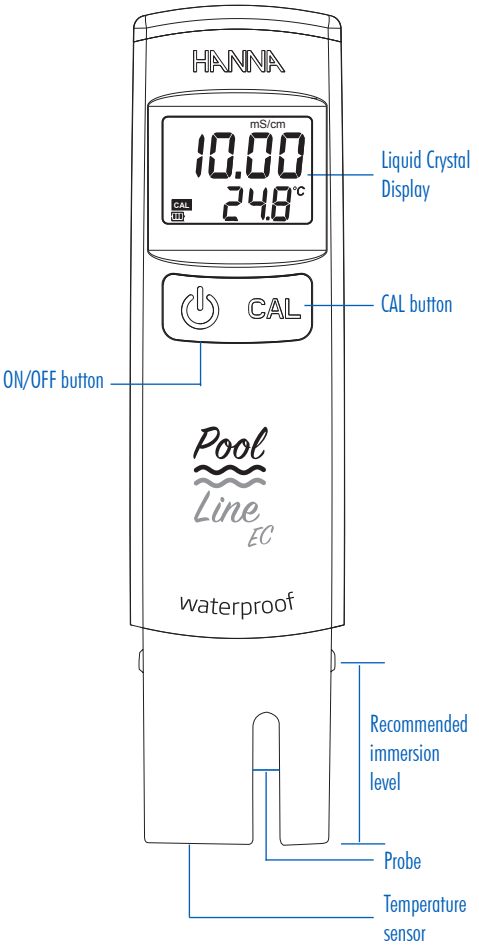
Range	0.00 to 20.00 mS/cm 0.0 to 50.0 °C (32.0 to 122.0 °F)
Resolution	0.01 mS/cm 0.1 °C (0.1 °F)
Accuracy (@25 °C/77 °F)	±2% F.S. ±0.5 °C (±1.0 °F)
Calibration Solutions	HI700304 (12.88 mS/cm)
Calibration	automatic, single point (12.88 mS/cm)
Temperature Compensation	automatic, 0.0 to 50.0 °C (32.0 to 122.0 °F)
Battery type	CR2032 Li-ion 3V
Battery life	approximately 250 hours of continuous use
Environment	0 to 50 °C (32 to 122 °F); RH 100% max.
Weight (without battery)	68 g (2.4 oz.)

Preparation

The probe is shipped dry. Remove the protective cap and follow with the calibration procedure.

- Press the ON/OFF button to turn the tester on.
- Immerse the tip of the probe in the sample to be tested.
- Stir gently and wait for the stability tag to disappear.
- The electrode automatically compensates for temperature variations.
- The reading on display is directly expressed in mS/cm.
- For best results, recalibrate periodically.
- After use, rinse the probe with water.
- Always replace the protective cap after each use.

Functional Description & LCD Display



Operational Guide

Turn the Tester On & Check the Battery Status

Press the ON/OFF button to turn the tester on. At start-up, all the LCD segments are displayed for 1 second, then the percent indication of the remaining battery life is displayed for another second. The tester then enters the normal measuring mode.

Note: *Keeping the ON/OFF button pressed while turning the tester on will display all LCD segments as long as the button is pressed.*

Enter Calibration Mode

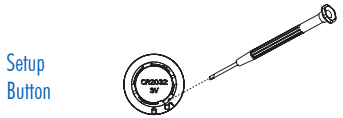
Press the CAL button. "CAL" message is displayed.

Enter Setup Mode

Remove the battery cover and press the Setup button located on the side of the battery.

Tester Setup

While in measurement mode, remove the battery cover. Press the Setup button located on the side of the battery in the battery compartment. The tester will enter in setup mode. Press the ON/OFF button to move through setup parameters. Change option by pressing CAL button. The default settings are: "Set t" measure unit - °C, "AOFF" - 8 min.



Select the Temperature Unit (°C or °F)

To select the temperature unit, with "SET t" displayed, press the CAL button to select temperature unit.

Select the Auto-Off Time

To select the AUTO OFF, with "AOFF" displayed, press the CAL button to select between 8 min, 60 min or --- (disabled).

Return to Measurement Mode

Press the ON/OFF button.