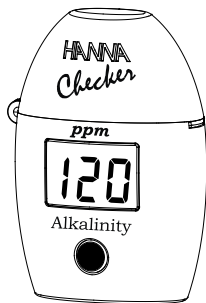


HI775

Alkalinity



HANNA
instruments

www.hannainst.com

Dear Customer,

Thank you for choosing a Hanna Instruments Product.

Please read this instruction manual carefully before using the instrument. If you need additional technical information, do not hesitate to e-mail us at tech@hannainst.com or view our worldwide contact list at www.hannainst.com.

Preliminary examination

Please examine this product carefully. Make sure that the instrument is not damaged. If any damage occurred during shipment, please contact your local Hanna Instruments Office. Each HI775 meter is supplied complete with:

- Sample Cuvettes and Caps (2 pcs.)
- One bottle of Alkalinity Liquid Reagent
- 1 mL syringe with tip
- 1.5V AAA Battery (1 pc.)
- Instruction Manual and Quick Reference Guide

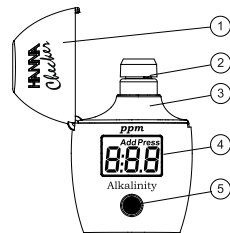


For more details about spare parts and accessories see "Accessories".

Technical specifications

Range	0 to 500 ppm
Resolution	1 ppm
Accuracy	± 5 ppm ± 5% of reading @25 °C/77 °F
Light Source	Light Emitting Diode @610 nm
Light Detector	Silicon Photocell
Method	Colorimetric method. The reaction causes a distinctive range of colors from yellow to blue to develop. This meter has been developed to work with fresh water samples.
Environment	0 to 50 °C (32 to 122 °F); max 95% RH non-condensing
Battery Type	1.5V AAA (1 pc.)
Auto-Shut off	After 10 minutes of non-use
Dimensions	86.0 x 61.0 x 37.5 mm (3.4 x 2.4 x 1.5")
Weight	52 g (1.84 oz.)

Functional description



1. Dust cover.
2. Cuvette with cap.
3. Cuvette holder.
4. Liquid Crystal Display.
5. Button.

Errors and warnings



Light High: There is too much light to perform a measurement. Please check the preparation of the zero cuvette.



Light Low: There is not enough light to perform a measurement. Please check the preparation of the zero cuvette.



Inverted Cuvettes: The sample and the zero cuvette are inverted.



Under Range: A blinking "0" indicates that the sample absorbs less light than the zero reference. Check the procedure and make sure you use the same cuvette for reference (zero) and measurement.



Over Range: A flashing value of the maximum concentration indicates the reading is over range. Dilute the sample and re-run the test.



Battery Low: The battery must be replaced soon.



Dead Battery: This indicates that the battery is dead and must be replaced. Once this indication is displayed, normal operation of the instrument will be interrupted. Change the battery and restart the meter.

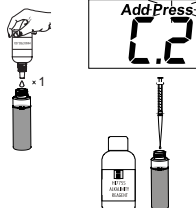


Measurement procedure

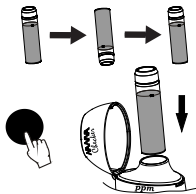
- Turn the meter on by pressing the button. All segments will be displayed. When the display shows "Add", "C.1" with "Press" blinking, the meter is ready.
- Fill the cuvette with 10 mL of unreacted sample and replace the cap. Place the cuvette into the meter and close the meter's cap.
- Press the button. When the display shows "Add", "C.2" with "Press" blinking the meter is zeroed.



Note: Any chlorine present in the sample will interfere with the reading. To remove the chlorine interference add one drop of HI93755-53 Chlorine Remover to the unreacted sample.



- Remove the cuvette from the meter and unscrew the cap. Using a 1 mL syringe carefully add exactly 1.00 mL of HI775S Reagent to the sample. Replace the cap and gently invert 5 times. Place the cuvette back into the meter.

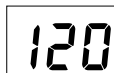


Note: Pay attention not to spill reagent otherwise full color development may be inhibited.

- Press the button. The instrument directly displays the concentration of alkalinity in ppm of CaCO₃. Alkalinity conversion:

$$\begin{aligned} 1 \text{ ppm CaCO}_3 &= 0.02 \text{ meq/L} \\ &= 0.056 \text{ dKH} \end{aligned}$$

The meter automatically turns off after 10 minutes.



Tips for an accurate measurement

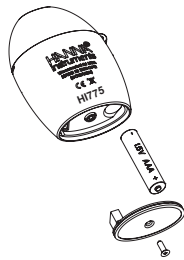
- It is important that the sample does not contain any debris.
- Whenever the cuvette is placed into the measurement cell, it must be dry outside, and completely free of fingerprints, oil and dirt. Wipe it thoroughly with HI731318 or a lint-free cloth prior to insertion.
- Shaking the cuvette can generate bubbles, causing higher readings. To obtain accurate measurements, remove bubbles by swirling or by gently tapping the cuvette.
- Do not let the reacted sample stand for too long after reagent is added, as accuracy will be affected.
- After the reading it is important to immediately discard the sample, otherwise the glass might become permanently stained.

Battery management

To save the battery, the instrument shuts down after 10 minutes of non-use. One fresh battery lasts for a minimum of 5000 measurements. When the battery is dead the instrument will display "bAd" then "bAt" for 1 second and then turns off. To restart the instrument, the battery must be replaced with a new one.

To replace the instrument's battery:

- Turn the instrument off by holding the button until the meter shuts off.
- Turn the instrument upside down and remove the battery cover with a screwdriver.



- Remove the battery from its location and replace it with a new one, inserting the negative end first.
- Insert the battery cover and replace the screw with a screwdriver.

Recommendations for Users

Before using this product, make sure that it is entirely suitable for your specific application and for the environment in which it is used.

Operation of this instrument may cause unacceptable interferences to other electronic equipment, thus requiring the operator to take all necessary steps to correct interferences.

Any variation introduced by the user to the supplied equipment may degrade the instrument's EMC performance.

To avoid damage or burns, do not put the instrument in microwave oven. For the safety of you and the instrument do not use or store the instrument in hazardous environments.

Accessories

REAGENT SETS

HI775-26 Liquid Reagents for 25 Alkalinity tests, 1 syringe and 1 tip

OTHER ACCESSORIES

HI775-11 Alkalinity Certified Standard Kit
HI731318 Cloth for wiping cuvettes (4 pcs.)
HI731321 Glass cuvettes and Seal Cap for Checker® HC Colorimeters (4 pcs.)
HI731225 Cuvette Black Cap for Checker® HC Colorimeters (4 pcs.)
HI731353 Cuvette Seal Cap for Checker® HC Colorimeters (4 pcs.)
HI740028P 1.5V AAA batteries (12 pcs.)
HI740142P 1 mL graduated syringe with tip (10 pcs.)
HI93703-50 Cuvette cleaning solution (230 mL)
HI93755-53 Chlorine Remover

Warranty

HI775 is warranted for a period of one year after date of purchase 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, first obtain a Return Goods Authorization number from the Technical Service department and then send it with shipping costs prepaid. When shipping any instrument, make sure it is properly packed for complete protection.

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