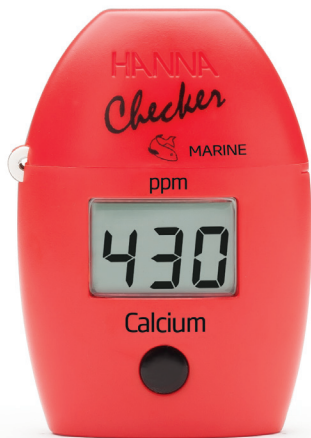


# INSTRUCTION MANUAL

## HI758 Marine Calcium



## Thank You

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

For more information about Hanna Instruments and our products, visit [www.hannainst.com](http://www.hannainst.com).

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

Find your local Hanna Instruments Office on [www.hannainst.com](http://www.hannainst.com).

## Preliminary Examination

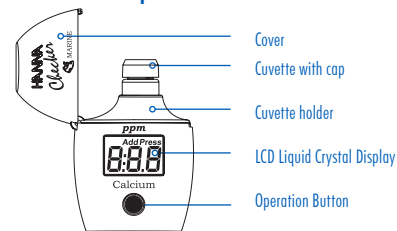
Please examine this product carefully. Make sure that the instrument is not damaged. If any damage occurred during shipment, please contact your local Hanna Instruments Office. Each HI758 meter is supplied complete with:

- Sample Cuvettes and Caps (2 pcs.)
- Reagents for 25 tests
- 1 mL syringe with tip
- minipipette with tips
- plastic pipette
- 1.5V AAA battery
- Instruction manual and quick reference guide

## Specifications

Range	200 to 600 ppm
Resolution	1 ppm
Accuracy	± 6 % of reading @ 25 °C / 77 °F
Light Source	light emitting diode @ 610 nm
Light Detector	silicon photocell
Method	adaptation of the zircon method
Environment	0 to 50 °C (32 to 122 °F); RH max 95% non-condensing
Battery Type	1.5V AAA (1 pc.)
Auto-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	64 g (2.3 oz)

## Functional Description



## 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 Cuvette:** The sample and the zero cuvette are inverted.



**Under Range:** A blinking "200" indicates that the reading is under range.



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



**Low Battery:** The battery is low and must be replaced soon.



**Dead Battery:** 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.

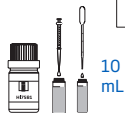


## Measurement Procedure

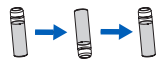
Turn the meter on by pressing the button. All segments will be displayed. When the display shows "Add", "C1" with "Press" blinking, the meter is ready.



Add 1 mL of HI7581 Reagent A to the cuvette using the 1 mL syringe. Use the plastic pipette to fill the cuvette to the 10 mL mark with deionized water and replace the cap. Invert 3-5 times to mix.



10 mL



Place the cuvette into the meter and close the meter's cap. Press the button. When the display shows "Add", "C2" with "Press" blinking the meter is zeroed.



Remove the cuvette from the meter and unscrew the cap. Use the minipipette to add 0.1 mL of sample to the cuvette.



Add 1 packet of HI7582 Reagent B. Replace the cap and shake vigorously for 15 seconds or until the powder is completely dissolved. Allow air bubbles to dissipate for 15 seconds before taking a reading.



Place the cuvette back into the meter and close the meter's cap. Press the button. The meter displays concentration in ppm of calcium. The meter automatically turns off after 10 minutes.



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

## Minipipette Instructions:

- Attach the pipette tip.
- Press the button down to the **first stop**.
- Immerse the pipette tip in the liquid approximately 2-3 mm.
- Slowly let the button move back to the **original position**, wait 2 seconds.
- Remove the pipette tip from the liquid.
- To dispense the liquid, place the pipette tip on the inside wall of the container.
- Slowly press the button down to the **first stop**.
- Wait until all of the liquid has been dispensed.
- Press the button down to the **second stop**, this will allow any remaining liquid to be dispensed.

Original position First stop Second stop



## 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 conserve 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 replace the 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. Replace the battery from its location and replace it with a new one, inserting the negative end first. Replace the battery cover and screw.



## Recommendations for Users

Before using Hanna Instruments products, make sure that they are entirely suitable for your specific application and for the environment in which they are used. Operation of these instruments may cause unacceptable interferences to other electronic equipment, thus requiring the operator to take all necessary steps to correct such interferences. Any variation introduced by the user to the supplied equipment may degrade the instrument's EMC performance. To avoid damages or burns, do not put the instrument in microwave oven. For yours and the instrument safety do not use or store the instrument in hazardous environments.

## Accessories

### Reagent Sets

HI758-26 reagent set for 25 marine calcium tests

### Other Accessories

HI758-11 marine calcium certified standard kit

HI731315 Glass Cuvettes and Caps for Checker® HC Colorimeters (2 pcs.)

HI731318 cloth for wiping cuvettes (4 pcs.)

HI731339P 0.1 mL minipipette

HI731349P tip for 0.1 mL minipipette (10 pcs.)

HI740028P 1.5V AAA batteries (12 pcs.)

HI70436M deionized water (230 mL)

HI93703-50 cuvette cleaning solution (230 mL)

## Warranty

HI758 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.