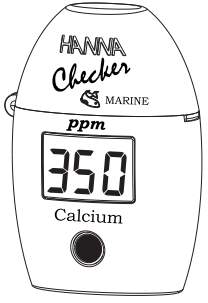
# HI 758

# Marine Calcium




HANNA instruments
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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**.

## *Preliminary examination:*

Please examine this product carefully. Make sure that the instrument is not damaged. If any damage occurred during shipment, please notify your Dealer.
Each **HI 758** meter is supplied complete with:

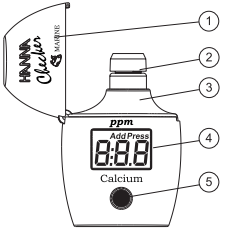
- Two Sample Cuvettes and Caps
- Reagents for 25 tests
- Droper
- 2 x 1 mL syringes with tips
- 1 x 1.5V AAA Battery
- Instruction Manual

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

### *Technical 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 zincon method. |
| **Environment** | 0 to 50 °C (32 to 122 °F);<br>max 95% RH non-condensing |
| **Battery Type** | 1 x 1.5V AAA |
| **Auto-Shut off** | After 10 minutes of non-use |
| **Dimensions** | 81.5 x 61 x 37.5 mm (3.2 x 2.4 x 1.5") |
| **Weight** | 64 g (2.25 oz.) |

## *Functional description:*




1. Cuvette cap.
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 **"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.


**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.

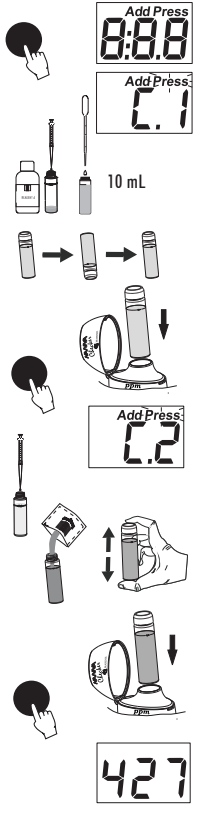
## *Measurement procedure:*

- 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.
- Add 1 mL of Reagent A to the cuvette using the syringe with the white plunger. Use the dropper to fill the cuvette to the 10 mL mark with deionized water and replace the cap. Invert 3-5 times to mix.
- Place the cuvette into the meter, close the lid and press the button. When the display shows "**Add**", "**C.2**" with "**Press**" blinking the meter is zeroed.
- Remove the cuvette from the meter and unscrew the cap. Add 0.1 mL of sample to the cuvette using the syringe with the green plunger.

**Note:** For improved accuracy fill the syringe to the 1 mL mark and dispense 0.1 mL by lowering the plunger to the 0.9 mL mark.

- Add 1 packet of 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 lid. Press the button. The meter displays concentration in ppm of calcium.

  The meter automatically turns off after 10 minutes.



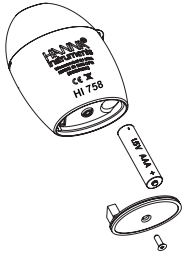

## *Tips for an accurate measurement*

- 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 **HI 731318** 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.

## *Accessories:*

REAGENT SETS

| | |
|---|---|
| **HI 758-26** | Reagent set for 25 tests |

OTHER ACCESSORIES

| | |
|---|---|
| **HI 758-11** | Marine Calcium Certified Standard Kit |
| **HI 740028** | 1.5V AAA batteries (4 pcs) |
| **HI 731318** | Cloth for wiping cuvettes (4 pcs) |
| **HI 731321** | Glass cuvettes (4 pcs) |
| **HI 731225** | Cuvette cap for checker HC (4 pcs) |
| **HI 93703-50** | Cuvette cleaning solution (230 mL) |
| **HI 70436** | Deionized water (500 mL) |

***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.

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

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