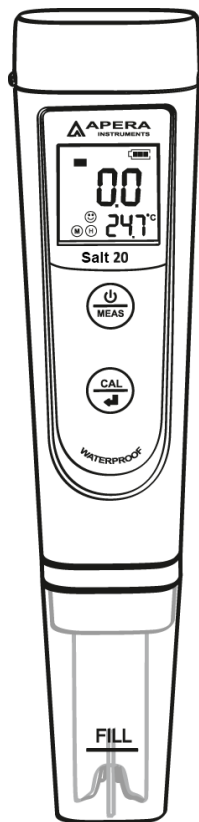


# Salt20 Pocket Salinity Tester

## Instruction Manual



**APER**A INSTRUMENTS, LLC

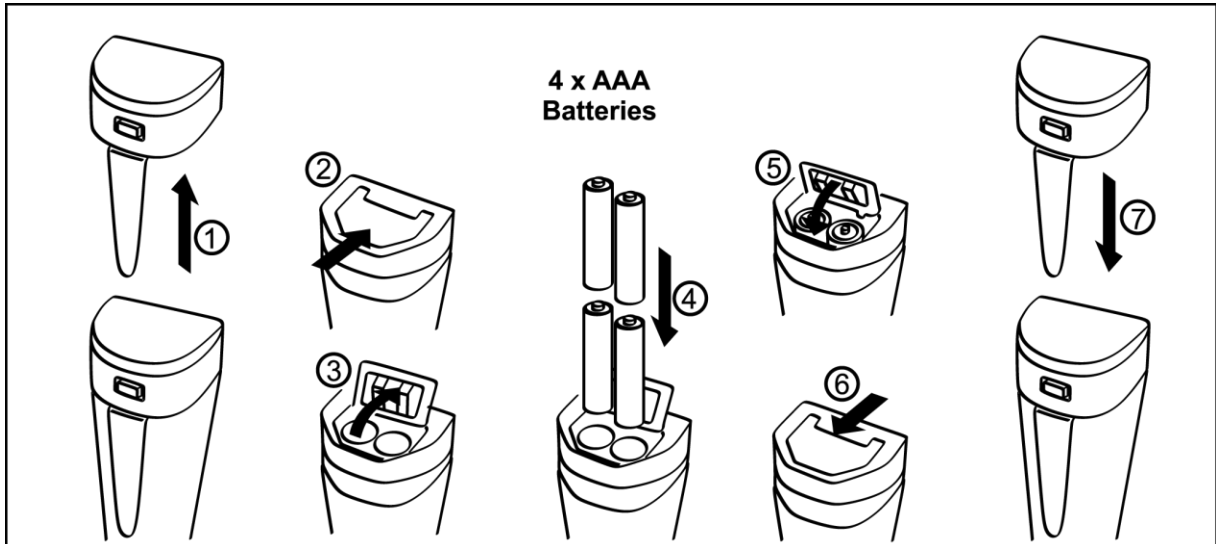
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# Salt20 Pocket Salinity Tester Instruction Manual

## 1. Battery Installation

Please install batteries according to the following steps. Please note polarity:

“+” (anode) is upward; “-” (cathode) is downward





**Note: This salinity meter measures practical salinity converted from electrical conductivity (NaCl Concentration). It does not measure absolute salinity.**

## 2. Keypad Functions

■ Short press----- < 2 seconds

■ Long press----- > 2 seconds

|   |  |
|---|--|
|  | <ol style="list-style-type: none"> <li>1. Short press to turn on, long press to turn off;</li> <li>2. When turned off, long press to enter setup;</li> <li>3. In mode setting, short press to change parameter;</li> </ol>                               |
|  | <ol style="list-style-type: none"> <li>1. When turned on, long press to enter calibration mode.</li> <li>2. In calibration mode, short press to confirm calibration;</li> <li>3. In mode setting, short press to confirm parameter selection.</li> </ol> |

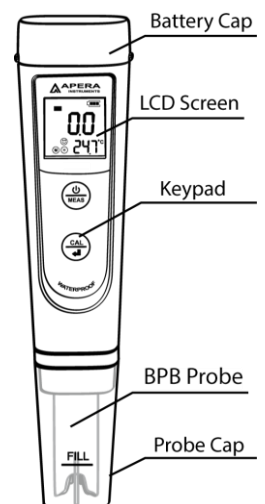


Diagram - 1

### 3. Complete Kit

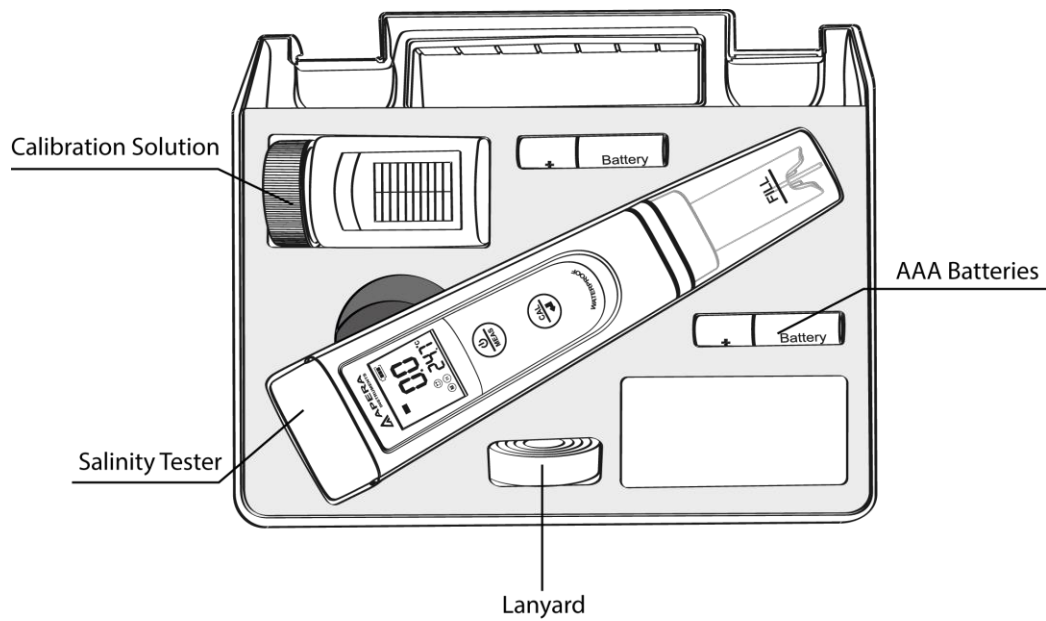








Diagram - 2

### 4. Calibration

4.1 Rinse the probe in distilled water and dry it. Short press  to turn on the tester.

4.2 Long press  to enter calibration mode; Short press  to exit.

4.3 Dip the probe into the calibration solution. Stir gently, leave it to stand, LCD displays  short press  to complete 1-point calibration.

The tester returns to measuring mode, and calibration icon  appears at the button left of LCD.



### 5. Salinity Measurement

5.1 Short press  to turn on tester. Rinse probe in distilled water and dry it.

5.2 Stir probe in the sample solution gently, leave it to stand. Get readings after the smile icon comes up and stays.

## 6. Notes

6.1 The tester has self-diagnosis functions:

| Symbol      | Self-Diagnosis information  | How to fix  |
|-------------|---|---|
| <i>Er 1</i> | Wrong calibration solution, which exceeds the recognizable range of the meter.  | 1. Check if calibration solution is correct<br>2. Check if probe is damaged.  |
| <i>Er 2</i> |  is pushed before measurement is stable (😊 comes up) | Wait for the smile icon to stay, and then short press  |







6.2 The tester has already been calibrated after manufacture. Usually users can use the tester right away, or test it in the calibration solutions to test its accuracy. When error is large, calibrate it before using.

## 7. Parameter Setting

7.1 Parameter setting reference chart:

| Symbol | Parameter Setting content  | Code       | Factory Default |
|--------|----------------------------|------------|-----------------|
| P1     | Select salinity unit       | ppt – mg/L | ppt             |
| P2     | Restore to factory default | No – Yes   | No              |

7.2 How to setup parameters:

When turned off, long press  to enter setup → short press  to switch P1-P2 → Short press , parameter flickering → short press  to choose, short press  to confirm parameter selection → Long press  to switch off.

### 7.3 Parameter setting notes

a) Select salinity unit(P1):

Optional units: ppt – mg/L, factory default is ppt.




b) Restore to factory default:

Select Yes to restore the calibration to the theoretical values and parameter setting to original values. When meter's calibration or measurement performs abnormally, this function can be adopted so the meter goes back to factory default setting and then users can conduct calibration or take measurements again.

## 8. Technical Specifications

|                 |                              |                          |
|-----------------|------------------------------|--------------------------|
| <b>Salinity</b> | Range                        | 0 – 10.00 ppt            |
|                 | Resolution                   | 0.01 ppt                 |
|                 | Accuracy                     | ± 1% F.S                 |
|                 | Calibration points           | 1 point auto calibration |
|                 | Automatic Temp. Compensation | 0-50°C                   |
| <b>Temp.</b>    | Range                        | 0-50°C                   |
|                 | Resolution                   | 0.1°C                    |
|                 | Accuracy                     | ± 0.5°C                  |

## 9. Other Functions & Parameters

|                                   |  |                  |  |
|-----------------------------------|--|------------------|--|
| Indication of calibration points  |   | Auto Power-off   | Power-off in 8 minutes if no operation |
| Indication of stable measurements |   | Waterproof level | IP67, floats on water                  |
| Self-Diagnosis information        | <b>Er1, Er2</b>  | Power Supply     | AAA batteries*4                        |
| Low battery reminder              |  Flashes to remind to replace batteries | Battery Life     | 1000 hours                             |
| Dimensions/Weight                 | Instrument: 40*31*178mm/107g; Carrying case: 190*165*140mm/438g  |                  |  |

## 10. Warranty

We warrant this instrument to be free from defects in material and workmanship and agrees to repair or replace free of charge, at option of APERA INSTRUMENTS, LLC, any malfunctioned or damaged product attributable to responsibility of APERA INSTRUMENTS, LLC for a period of **two years** from the delivery (a **six-month** limited warranty applies to probes). This warranty does not apply to defects resulting from actions such as misuse (violation of the instructions in this manual or operations in the manner not specified in this manual), improper maintenance, and unauthorized repairs. Warranty period is the time limit to provide free service for the products purchased by customers, not the service life of the tester or probe.

Apera Instruments reserves the right to update the information in this manual without giving notice in advance.

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