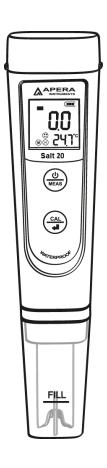


# Salt20 Pocket Salinity Tester Instruction Manual









APERA INSTRUMENTS, LLC

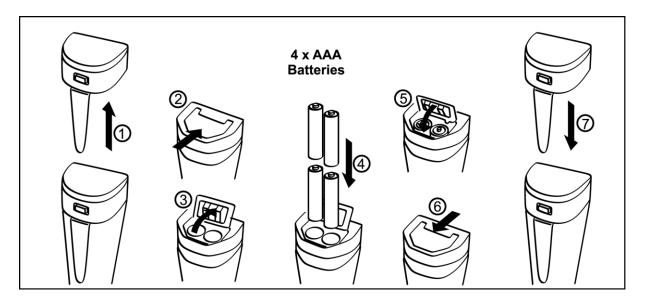
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# **Salt20 Pocket Salinity Tester Instruction Manual**

#### 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



- 1. Short press to turn on, long press to turn off;
- 2. When turned off, long press to enter setup;
- 3. In mode setting, short press to change parameter;



- 1. When turned on, long press to enter calibration mode.
- 2. In calibration mode, short press to confirm calibration;
- 3. In mode setting, short press to confirm parameter selection.

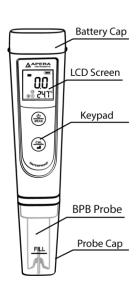


Diagram - 1

# 3. Complete Kit

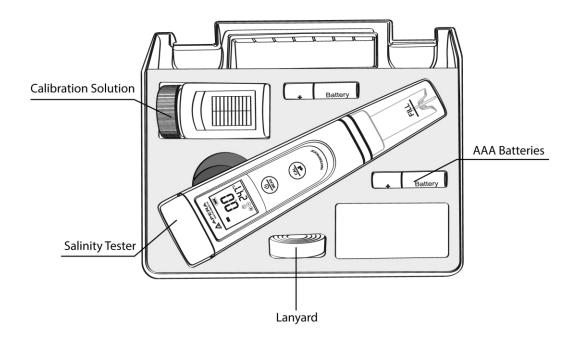


Diagram - 2

#### 4. Calibration

- 4.1 Rinse the probe in distilled water and dry it. Short press  $\stackrel{\circlearrowleft}{\text{MEAS}}$  to turn on the tester.
- 4.3 Dip the probe into the calibration solution. Stir gently, leave it to stand, LCD displays short press (CAL call) to complete 1-point calibration.

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

#### 5. Salinity Measurement

- 5.1 Short press  $\frac{0}{MEAS}$  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
Er 1	Wrong calibration solution, which exceeds the recognizable range of the meter.	<ol> <li>Check if calibration solution is correct</li> <li>Check if probe is damaged.</li> </ol>
Er2	(© 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  $\stackrel{(\)}{\overset{(\)}{\text{MEAS}}}$  to enter setup  $\rightarrow$  short press  $\stackrel{(\)}{\overset{(\)}{\text{MEAS}}}$  to switch P1-P2  $\rightarrow$  Short press  $\stackrel{(\)}{\overset{(\)}{\text{CAL}}}$ , parameter flickering  $\rightarrow$  short press  $\stackrel{(\)}{\overset{(\)}{\text{MEAS}}}$  to choose, short press  $\stackrel{(\)}{\overset{(\)}{\text{CAL}}}$  to confirm parameter selection  $\rightarrow$  Long press  $\stackrel{(\)}{\overset{(\)}{\text{MEAS}}}$  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

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

# 9. Other Functions & Parameters

Indication of		Auto Power-	Power-off in 8	
calibration points	(H)	off	minutes if no	
			operation	
Indication of stable	$\odot$	Waterproof	IP67, floats on water	
measurements	)	level		
Self-Diagnosis	Er1, Er2	Power Supply	AAA batteries*4	
information				
Low battery	Flashes to	Battery Life	1000 hours	
reminder	remind to replace			
	batteries			
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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