



PST

PACIFIC SENSOR TECHNOLOGIES

MEASURING THE WORLD AND BEYOND

User's Guide

Conductivity/TDS/Salt/Temp

Waterproof Tester

Model: 7021



CE

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Introduction:

Thank you for selection model 7021 microprocessor-based waterproof Conductivity/Temp tester. It is possible to measure a wide range of Conductivity, TDS, Salinity and Temperature with a replaceable electrode. We recommend that you read and follow the manual carefully.

Features:

- ※ Large LCD displays Conductivity or TDS or Salinity and Temperature simultaneously.
- ※ Waterproof IP-57 standard and rugged design for field use conveniently. It floats on water.
- ※ Automatic Temperature Compensation (ATC) and degree °C /°F switchable.
- ※ Icon **COND** **TDS** **Salt** and unit μS , **mS**, **ppm**, **ppt**, °C, °F for recognition easy during select function mode.
- ※ Displays Maximum/Minimum value and data hold.
- ※ Low battery and consumption indicator. Auto shut off after 10 minutes of non use.
- ※ Easy to replace Conductivity cell module by user.

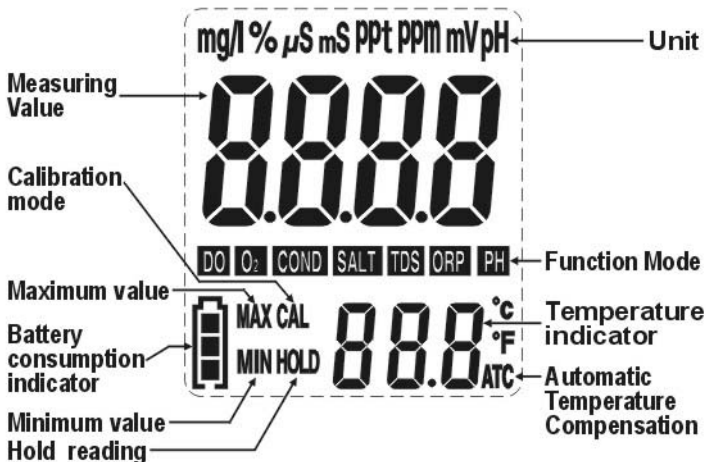
Specifications:

7021				
	Conductivity	TDS	Salinity	Temp.
Range	0 ~ 2000 μ S 2.00~20.00 mS	0 ~ 1300 ppm 1.30~13.00 ppt	0 ~ 1000 ppm 1.00~12.00 ppt	0 ~ 90.0 °C
Accuracy	± 2% FS (Cond., TDS, Salt)			± 0.2 °C+1 digit
Resolution	1 μ S/0.01 mS	1 ppm/0.01 ppt	1 ppm/0.01 ppt	0.1 °C
ATC	0 ~ 50 °C			
Calibration	0 μ S, 1413 μ S, 12.88 mS			
Power	DC1.5V × 4 battery (UM-4/AAA)			
Dimensions	Meter: 195 × 40 × 36 mm, Kits: 230 × 205 × 50 mm			
Weight	Meter: 135g (with battery), Kits: 640g			

Device Description:



Display Description:



Functions of keyboard:



Power/Calibration

1. Press button to switch power On or Off.
2. Press and hold button to enter calibration mode.



Function Mode

1. Press button to select the desired measurement mode Conductivity, TDS or Salinity.
2. Press and hold button to change degree °C or °F.



Hold/Max & Min

1. Press button to enter Hold mode.
2. Press and hold button to enter Maximum/Minimum mode.
Press button with light to get Maximum and Minimum value.
3. Press and hold button again to exit this mode and return to measurement mode.


Operating procedure:

Accessories

Upon receiving the shipment, inspect the container and equipment for any signs of damage. Remove the packing list and verify that you have received all equipments :


Meter, Standard solution 1413 $\mu\text{S}/\text{cm}$, Battery(has been installed), Lanyard, Instruction manual, Carrying case.

Preparation

1. Remove the protection cap from meter to rinse the electrode with clean water and wipe it dry.
2. Press  button to turn the meter power on.

Note: Don't touch or wipe the surface of inner black sensor of conductivity cell.


Calibration

Dip the conductivity cell into the standard solution 1413 $\mu\text{S}/\text{cm}$. Stir gently and wait until the display stabilized. Press and hold  button to enter calibration mode until the display appears icon **CAL**, and then flash 1413 $\mu\text{S}/\text{cm}$. When the display stop flashing and indicates "SA", and then "End" while calibration is ending, and return to measurement mode.

Note: (1) Calibrated by 12.88 mS/cm standard solution would be better for measuring high conductivity solution. The 12.88 mS/cm solution is optional.

- (2) The icon **COND** will display automatically during enter calibration mode.
- (3) "SA" will not appear if the calibration fails.
- (4) If reading are not 0 $\mu\text{S}/\text{cm}$ while the meter in air and doesn't dip it into any solution, then calibrate it in air to make reading becomes 0 $\mu\text{S}/\text{cm}$.






Measurement

1. After calibration, rinse the conductivity cell with clean water and wipe it dry. Dip the conductivity cell into sample solution to be measured. Stir gently and wait until a stable reading can be obtained.
2. Press  button to select the desired measurement mode Conductivity, TDS or Salinity.

Note: (1) The display will appear “_ _ _ _” when it is over measuring range.

- (2) The unit will auto-range to $\mu\text{S}/\text{cm}$ or mS/cm , ppm or ppt.

Functions mode

1. Press  button to enter hold function mode. The icon **HOLD** will appear, and the reading value can be locked shows on display. Return to measurement mode while pressing button again.
2. Press and hold  button to enter measuring maximum and minimum function mode until the display appears flash icon **MAX** and **MIN**. The value of maximum and minimum will show at display while pressing button with light. To exit this mode, press and hold  button until icon **MAX** and **MIN** disappear, and return to measurement mode.
3. Press  button to select the desired measurement mode Conductivity, TDS or Salinity.
4. Press and hold  button to change Degree $^{\circ}\text{C}$ or $^{\circ}\text{F}$.

Note: (1) The display could not auto shut off under the status of MAX/MIN mode.

- (2) Change a new battery when the battery indicator flashing.

Maintenance:

Battery replacement

1. Loosen the screw by screwdriver from battery compartment cap.
2. Replace the fresh AAA(UM-4) type battery, and note polarity.
3. Replace the battery compartment cap, and tighten with screw by screwdriver.

Note: (1) Be sure the correct position of battery by polarity
(2) Don't lose the O-ring which has been mounted on cap.

Electrode replacement

1. Unscrew the electrode collar counterclockwise, and remove it completely.
2. Pull the electrode module out from the tester.
3. Plug an new electrode module into the tester socket carefully.
4. Replace and tighten the electrode collar to make a good seal.

Applications:

Agriculture • Anti-freeze recycling • Aquarium • Boiler •
Chemical industry • Cooling tower • Drinking water • Fish
farming • Food industry • Garden husbandry • Hydroponic •
Laboratory usage • Plating industry • Swimming pool & Spa •
Water treatment



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