User's Guide

Conductivity/TDS/Salt/Temp

Waterproof Tester

Model: 7021

μS

0

COND

25.0 °C

EZ DO

Cond · TDS · Salt

7021

H/M   MODE

CAL

CE

INDEX

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 ℃ /℉ switchable.

※ Icon **COND** **TDS** **Salt** and unit μ**S, mS, ppm, ppt, ℃, ℉** 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 μS 2.00~20.00 mS	0 ~ 1300 ppm 1.30~13.00 ppt	0 ~ 1000 ppm 1.00~12.00 ppt	0 ~ 90.0 ℃
Accuracy	± 2% FS (Cond.、TDS、Salt)			± 0.2 ℃+1 digit
Resolution	1 μS/0.01 mS	1 ppm/0.01 ppt	1 ppm/0.01 ppt	0.1 ℃
ATC	0 ~ 50 ℃			
Calibration	0 μS, 1413 μS, 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:

Lanyard Connection

Battery Compartment Cap

Main Display

EZDO

Cond · TDS · Salt
7021

Hold/Max & Min Button

Function Mode Button

Power/Calibration Button

Electrode Collar

Protective Cap

Electrode Module

Sensor Tip

Sensor Protective Cap

Display Description:

mg/l % μS mS ppt ppm mV pH ⟵————— **Unit**

Measuring Value ⟶

Calibration mode

DO | O₂ | COND | SALT | TDS | ORP | PH ⟵— **Function Mode**

Maximum value ⟶ MAX CAL

Battery consumption indicator ⟶

MIN HOLD   88.8 °C °F ATC

Temperature indicator

Automatic Temperature Compensation

Minimum value
Hold reading
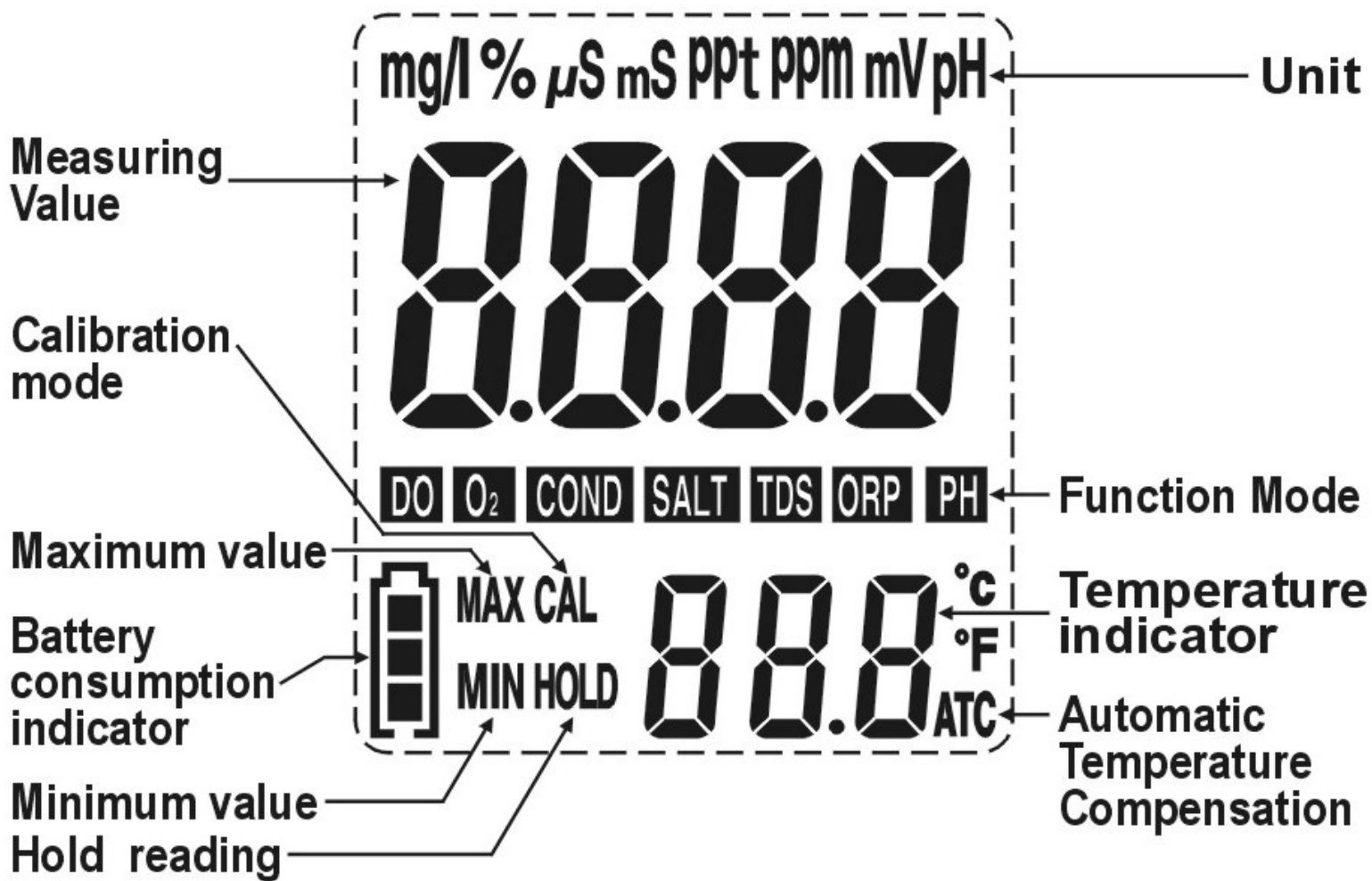
Functions of keyboard:

🔘 **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 ℃ or ℉.

🔘 **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 µS/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 (⏻/CAL) 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 µS/cm. Stir gently and wait until the display stabilized. Press and hold (⏻/CAL) button to enter calibration mode until the display appears icon **CAL**, and then flash 1413 μS/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 µS/cm while the meter in air and doesn't dip it into any solution, then calibrate it in air to make reading becomes 0 µS/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 ⟨MODE⟩ 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 μS/cm or mS/cm, ppm or ppt.

Functions mode

1. Press ⟨H/M⟩ 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 ⟨H/M⟩ 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 ⟨H/M⟩ button until icon **MAX** and **MIN** disappear, and return to measurement mode.
3. Press ⟨MODE⟩ button to select the desired measurement mode Conductivity, TDS or Salinity.
4. Press and hold ⟨MODE⟩ button to change Degree ℃ or ℉.

   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

Calibration Certificate

This certificate guarantee that the product has been inspected and tested in accordance with the published specifications.

The instrument has been calibrated by using equipment which already calibrated to standards traceable to international standards.

Model: **7021**

Serial no.: _____

Date _____