

## CDH-93

### Conductivity/Resistivity/TDS/Salinity Tester

INSTRUCTION  
SHEET

M5527/1115

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#### I . Technical Parameters :

- |  |                     |
|--|---------------------|
| 1. Range: Conductivity: 0 ~ 50.0μ S/cm | Res: 0 ~ 20.0 MΩ·cm |
| 50 ~ 500μ S/cm                         | TDS: 0 ~ 35.0 g/L   |
| 0.50 ~ 5.00 mS/cm                      | Salt: 0 ~ 25.0 ppt  |
| 5.0 ~ 50.0 mS/cm                       | Temp: 0 ~ 50.0°C    |
- Accuracy: Conductivity: ±1.0% FS; Temperature: ±0.5°C
  - Temp. compensation range: 0 ~ 50°C (auto.); Compensation coefficient: 2.0% /°C
  - Automatic calibration: 1 point calibration (1413μ S/cm)
  - Power: CR2032 lithium battery×2, battery life +100 hours.
  - Size and weight : 148×29×14mm / 38g
  - Waterproof grade: IP57

#### II . Instructions :

- The Key Operation:
  - Short press (<1.5 seconds) — switch power;
  - Depress (>2 seconds) — calibration;
  - Depress and do not release, the LCD will in turn display **COND** → **RES** → **TDS** → **SAL** → **COND**; Release the key after confirming the measuring mode. The unit will start in the same measuring mode next start up.
- Meter Calibration:
  - Wash the electrode with pure water and dry it, place it into 1413μ S/cm calibration solution, briefly stir, depress the key for 2 seconds after the reading is stable, the icon “**CAL**” appears on the LCD, and blinks “1413” μ S/cm. The calibration will finish after several seconds, the meter will return to measuring mode and the icon “**M**” appears;
  - The meter can only be calibrated under the **COND** mode. It can not be calibrated under the mode of **RES**, **TDS** and **SAL**, calibrate in the **COND** mode, and then switch back after calibration.
- Sample Test:
  - Wash the electrode with pure water and dry it, place it into the sample solution, briefly stir, and take the reading after value to be stable.
  - Press the key and hold, then choose the corresponding resistivity, TDS or salinity value against the conductivity value, then release after confirming.

### III. Considerations:

1. The meter has been calibrated before leaving factory. Generally, user can use it directly. It is suggested to calibrate every month under normal use, the new and electrodes that have been stored for a long period should be calibrated.
2. The meter adopts advanced automatic frequency conversion and voltage regulation technology, which enable the measuring range of constant  $K=1$  to extend to 5~10 times. It can meet this electrode's measuring accuracy in all ranges by using only one point calibration.
3. The conductivity calibration solution should be stored in a cool dark place and kept uncontaminated. New solution should be used for each calibration.
4. In order to reduce electrode polarization, there has a layer of platinum black on the electrode response stick, and **do not touch the layer** when wash electrode to avoid damage of the Pt black layer.
5. The electrode for this meter can be replaced, the method is take off the electrode upper cover and the circuit connector of meter, and insert it into the new conductivity electrode, the electrode model is CDE-93 conductivity electrode.
6. The meter will automatically power off if no operation occurs after 10 minutes.
7. Please change the battery when the icon “” appears on the LCD.
8. The switch for the temperature unit between °C and °F: when turn off, depress the key for more than 3 seconds and release to change the temperature unit.

**For the above instructions, please refer to the schematic on the back of the meter.**



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If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

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2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

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