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User's Guide

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CDH-7X

Conductivity/Total Dissolved Solids Pocket Tester

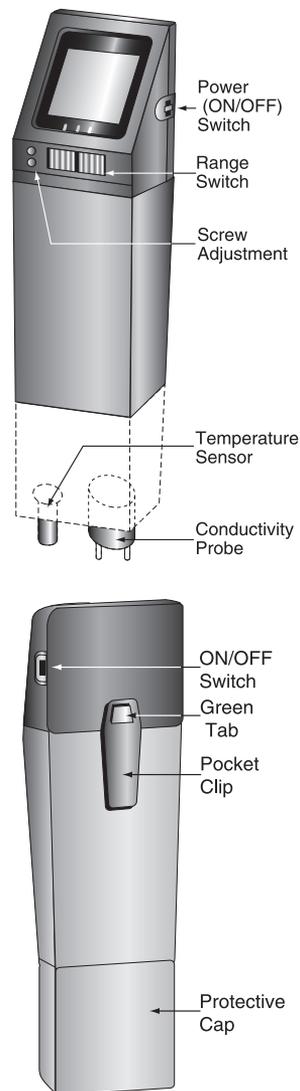
GENERAL DESCRIPTION

The CDH-7X Conductivity/Total Dissolved Solids Tester is an economical, portable handheld unit, ideal for quick field checks of water-based solutions. It features large display (0.5"-12.7mm), for easy reading, automatic temperature compensation, and calibration trimmers. All readings are referenced to 25°C using a 2% per °C temperature coefficient. The CDH-7X displays Conductivity in microsiemens/cm and millisiemens/cm, or Total Dissolved Solids in ppm and ppt (1ppm=2uS/cm).

Caution: Never immerse the tester more than 2 inches from the sensor tip.

OPERATING PROCEDURE

1. Remove the protective cap.
2. Turn the CDH-7X on using the ON/OFF switch located on the top right side of the unit. Check display units of measure for TDS or Conductivity, to change gently slide green case, and using the enclosed screwdriver you can switch between TDS and Conductivity from the switch below the battery compartment.
3. With a clean probe the unit should read 00 in air, ...zero conductivity.
4. Select the range for the solution to be measured from the range switch.
Start with the range switch at the left position for the narrowest range. If the reading displays 1---, the solution is Overrange, and change the next range to the right.
5. Dip the CDH-7X to the immersion level, and stir gently, allowing few seconds for the reading to stabilize.
6. If the reading is off, clean the stainless steel electrodes periodically with a mild detergent or solvent (i.e.alcohol) because oily solutions can built up. Clean the electrodes before recalibration.
7. Units are shipped factory calibrated; however, should calibration be required, use the enclosed screwdriver and GENTLY adjust the "Z" zero and "S" span adjustments are on the left side of the Range Switch. Start by checking and adjusting zero in air if needed, then immerse the unit in a standard solution of a known value.The value of this solution should be close to that of the solution to be measured. To calibrate adjust the span trimmer until the display matches the value of the standard solution.
8. When not in use, switch off the instrument. Rinse the electrode with distilled water, shake off any excess, and replace the protective cap.



CHANGING BATTERIES

Remove the green plug-in electrode by pressing the green tab above the pocket clip. Replace old batteries with fresh ones. The notice polarity is shown in the battery compartment.

SPECIFICATIONS

Range:

Cond. 0 to 199 $\mu\text{S/cm}$ 0.00 to 1.99 mS/cm 0.0 to 19.9 mS/cm

TDS 0 to 199 ppm 0.00 to 1.99 ppt 0.0 to 19.9 ppt

Resolution: 1 $\mu\text{S/cm}$ or ppm 0.01 mS/cm or ppt 0.1 mS/cm or ppt

Accuracy: $\pm 2\%$ of full scale

$\pm 4 \mu\text{S/cm}$ or ppm $\pm 0.04 \text{mS/cm}$ or ppt $\pm 0.4 \text{mS/cm}$ or ppt

Electrodes: Stainless steel

Operating

Temperature: 0 to 70°C (32 to 158°F), Automatic Temperature Compensation uses a precision temperature sensor with 2% per °C temperature coefficient; readings are referenced to 25°C.

Display: 2 1/2 digits 12.7mm (0.5") high LCD

Battery: Three 1.35V (included) EVEREADY 357

Battery Life: 50 hours continuous

Dimensions: 152 x 43 x 23mm (6"H x 1.7"W x 0.9"D)

Weight: 113 g (4 oz)



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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 which wear are not warranted, including but not limited to contact points, fuses, and triacs.

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FOR WARRANTY RETURNS, please have the following information available BEFORE contacting OMEGA:

1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR NON-WARRANTY REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

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