HI 991301

pH/EC/TDS/temperature meter
Quick Reference Guide

MEASUREMENTS

- **Range**: pH 0.00 to 14.00 pH
  EC 0 to 20.00 mS/cm
  TDS 0 to 10.00 ppt (g/l)
  Temperature 0.0 to 60.0°C / 32.0 to 140.0°F
- **Accuracy**: ±0.01 pH
  (@20°C/68°F) ±2 % F.S. (EC / TDS)
  ±0.5°C / ±1°F

OPERATIONAL GUIDE

- **To switch ON and OFF**: press **ON/OFF/MODE**.
- **To freeze the display:** press **SET/HOLD** until "HOLD" appears.
- **To take measurements:** connect the probe when **the meter is off**, remove the protective cap, turn the meter ON, immerse the probe tip in the sample, stir briefly and wait until the "Not Stable" tag is turned off.
- **To enter the Calibration mode**: first select the measurement range, press the **SET/HOLD** button to select pH, EC or TDS; then press **ON/OFF/MODE** until "CAL" appears. Release the button.
- **To select °C or °F unit**: press **ON/OFF/MODE** until "TEMP" appears, then select the temperature unit with **SET/HOLD**. Press **ON/OFF/MODE** twice to return to normal mode.
- **To change the calibration buffer set:** in pH mode; press **ON/OFF/MODE** until "TEMP" appears. Press again **ON/OFF/MODE**: the message "pH 7.01 BUFF" (or "pH 6.86 BUFF") appears. Change the buffer set with **SET/HOLD**. Press **ON/OFF/MODE** to return to normal mode.
- **To change the EC/TDS conversion factor (CONV) and the temperature compensation coefficient (BETA):** in EC or TDS mode; press **ON/OFF/MODE** until "TEMP" appears, press again **ON/OFF/MODE**: the message eg."0.50 CONV" appears. Press again **SET/HOLD** to change the value. Press **ON/OFF/MODE** button to show eg."2.1 BETA", press **SET/HOLD** to change the value. Press **ON/OFF/MODE** to return to normal mode.

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CALIBRATION PROCEDURES

Calibration messages:

- **USE :** default suggested buffer or standard.
- **REC :** a valid buffer or standard is recognized.
- **WRNG :** invalid buffer or standard detected.

Two-point pH calibration procedure:

- Place the probe in pH 7.01 (or 6.86) buffer.
- After the first point is accepted, the "pH 4.01 USE" message appears.
- Place the probe in pH 4.01, 10.01 (or 9.18) buffer.
- When the second point is accepted, the "OK 2" message appears and then the meter returns to normal mode.

Single-point pH calibration procedure:

- **With pH 4.01, 9.18 or 10.01 buffer:** when the calibration point is accepted, the buffer value and "OK 1" message appear and then the meter returns to normal mode.
- **With pH 7.01 or 6.86 buffer:** after the calibration point has been accepted, the **ON/OFF/MODE** button must be pressed to return to normal mode.

EC calibration:

- Immerse the probe in the **HI 7030** (12.88 mS/cm) calibration solution.
- When the calibration point is accepted the "OK" message appears and the meter returns to normal mode.

NOTES

- Since there is a known relationship between the EC and TDS reading, it is not necessary to calibrate the meter in TDS.
- If the **probe is dry**, soak it in **HI 70300** Storage Solution for half an hour.
- **To clean the meter:** use water.
- **To quit calibration (ESC):** press **ON/OFF/MODE** after entering the calibration mode and before the first point is accepted.
- **To clear calibration (CLR):** press **SET/HOLD** after entering the calibration mode and before the first point is accepted.
- When the **battery** symbol appears, the batteries should be replaced soon.
- Open the battery compartment cap on the bottom of the instrument and replace old batteries with new ones, following the instructions on the rear of the instrument.