

Quick Reference Guide

HI5421

DO/BOD/OUR/SOUR/Temperature Bench Meter

SPECIFICATIONS

- RANGE**

DO	0.00 to 90.00 ppm (mg/L) 0.0 to 600.0 % saturation
Temperature	-20.0 to 120.0 °C / -4.0 to 248.0 °F / 253.2 to 393.2 K (Measurement range) 0.0 to 50.0 °C / 32.0 to 122.0 °F / 237.1 to 323.1 K (DO compensation range)

- ACCURACY**

DO	±1.5 % of reading ± 1 least significant digit
Temperature	±0.2 °C / ±0.4 °F / ±0.2 K

OPERATIONAL GUIDE

- **Before taking measurements:** make sure you have a conditioned probe.
- **To switch ON and OFF:** use the power switch from the back of the instrument.
- **To select the DO, BOD, OUR or SOUR measure mode:** press **MODE** while in measure mode and then the appropriate virtual key.
- **To take the DO measurements:** connect the probe connector to the appropriate socket and insert the probe into the sample. Stir briefly and wait for a stable reading. For accurate readings, make sure you have a calibrated meter.
- **To enter calibration mode:** press **CAL** while in DO measure mode.
- **To delete the old calibration:** press **Clear Cal** after entering calibration menu.
- **To access one of the displaying modes (Basic, GLP, Graph or Log History):** press **Display** while in measure mode and then the appropriate virtual key.

Note: The measured value is always displayed on the LCD, together with the appropriate information for GLP, Graph and Log History displaying modes.

- **To access the zoom graph menu:** press **SETUP** while in Graph displaying mode and then the appropriate zoom axis virtual key; to zoom the selected axis: press **Zoom IN** or **Zoom OUT**.
- **To obtain general informations about the selected option/operation:** press **HELP**.

SETUP

- **To access one of the SETUP modes (System Setup, DO/BOD/OUR/SOUR Setup):** press **SETUP** while in measure mode and then the appropriate virtual key.

Note: Each SETUP mode has specific options:

System Setup: Beeper, Saving Confirmation, GLP Data, Date & Time, LCD Setup, Color Palette, Language, Serial Communication, Meter Information, Restore Factory Settings and Software Update.

DO Setup: Profile, Reading Mode, Temperature Unit, Calibration, Measurement Unit, Barometer, Salinity, Sample ID, Stability Criteria, Log and Alarm.

BOD Setup: Profile, Temperature Unit, Measurement Unit, Method Configuration, Barometer, Salinity, Sample ID, Log and Alarm.

OUR Setup: Profile, Temperature Unit, Measurement Unit, Method Configuration, Barometer, Salinity, Sample ID, Log and Alarm.

SOUR Setup: Profile, Temperature, Measurement Unit, Method Configuration, Barometer, Salinity, Sample ID, Log and Alarm.

- **To highlight the desired parameter/option:** press **Δ** or **▽**.
- **To access the desired parameter/option or to confirm:** press **Select**.
- **To enter text:** use Text Editor menu.

- **To exit from current menu:** press . If the Saving Confirmation is enabled and where necessary: press to accept the modified value, to escape without saving or to cancel operation.

DO CALIBRATION PROCEDURE

The following options are available for the Dissolved Oxygen calibration:

- automatic calibration in one or two points at 0% saturation and at 100% saturation;
- manual calibration in one point using a standard value set by the user in % saturation, mg/L or ppm.

To calibrate the meter (in DO only):

- For accurate calibration use two beakers for each of the calibration standards.
- Insert and rinse the probe in the first beaker in order to decontaminate it;
- Insert the probe in the second beaker;
- Tap the probe repeatedly;
- Enter in calibration mode by pressing ;
- Wait to stabilize;
- You can delete a previously performed calibration by pressing .

When the automatic standard recognition is selected:

- The calibration point will be automatically selected from the two standards available.
- Press to perform the calibration or to exit calibration.

Note: If you want to perform automatic DO calibration in two points, perform the calibration at 0% saturation first and then at 100% saturation.

When the user standard is selected:

- The calibration can be performed only in one point.
- Edit the desired standard value by using and .
- Press to finish the calibration or to exit calibration.

DO Calibration messages:

- **Wrong standard solution:** Please check the standard solution.
- **Wrong standard temperature:** The standard temperature is out of the defined range.
- **The current standard was already calibrated:** Change the standard solution.

LOGGING

- **If Automatic Logging Type has been chosen:** press / while in measure mode to start/stop the logging session.
 - If the Reading Mode is set as Direct/AutoHold and was pressed: the logged value is the one that has been frozen on the LCD until returning to normal logging mode by pressing .
 - To adjust the logged area or logging saving interval: press while in Log Save screen.
 - To save the logged data: press or to exit without saving.
- **If Manual Logging type has been chosen:** press while in measure mode to manually log a record.
 - To generate a new lot: access the appropriate measured unit SETUP and select New Lot option.
 - If the Reading Mode is set as Direct/AutoHold and was pressed: the logged value is the one that has been frozen on the LCD.
 - To store another frozen value: press to return to normal logging mode and then again.
- **If AutoHold Logging Type has been chosen:** press / while in measure mode to start/stop the logging session. The logged values are only the ones frozen on the LCD after was pressed.
 - To store another frozen value: press to return to normal logging mode and then again.
- **To enter Log Recall mode:** press while in measure mode then .
- **To view the desired memorized data:** press or .
- **To delete lots:** press while in Log Recall mode, press to select or option and then proceed to delete lots.