

Primo Series

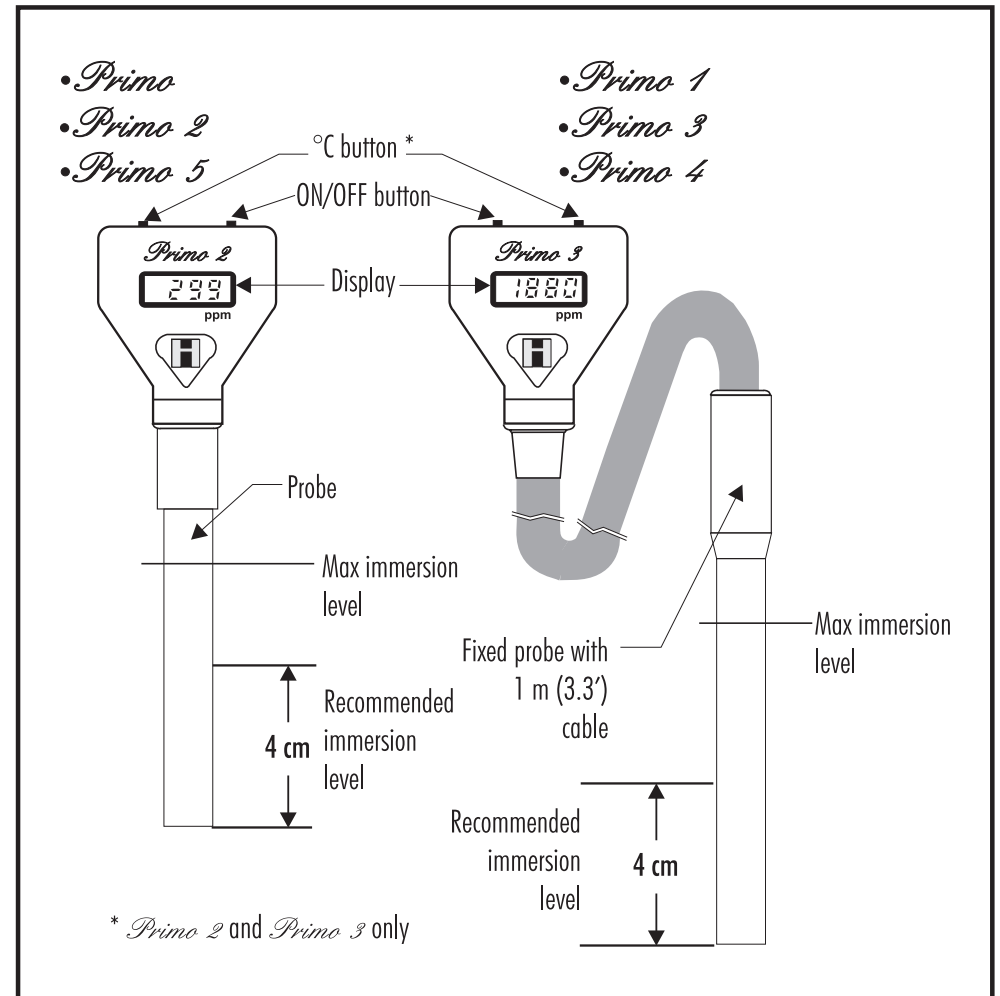
EC and TDS Testers with
Automatic Temperature
Compensation

PRELIMINARY EXAMINATION

Remove the instrument from the packing material and examine it carefully. If any damage has occurred during shipment, immediately notify your Dealer or the nearest Hanna Customer Service Center.

Each meter is supplied with batteries and instructions.

Note: Conserve all packing material until the instrument has been observed to function correctly. Any defective item must be returned in its original packing.



SPECIFICATIONS

Primo, Primo 2, Primo 5

Range

Primo	1999 ppm (mg/L)
Primo 2	1999 ppm (mg/L) / 0.0 to 60°C
Primo 5	1999 μ S/cm

Resolution

Primo	1 ppm (mg/L)
Primo 2	1 ppm (mg/L) / 0.1°C
Primo 5	1 μ S/cm

Accuracy (@20°C/68°F)

Primo	± 2 % F.S.
Primo 2	± 2 % F.S. / $\pm 0.5^\circ\text{C}$
Primo 5	± 2 % F.S.

Calibration solution

Primo	HI 70032 (1382 ppm)
Primo 2	HI 70032 (1382 ppm)
Primo 5	HI 70031 (1413 μ S/cm)

Calibration

Primo	Automatic, at 1382 ppm
Primo 2	Automatic, at 1382 ppm
Primo 5	Automatic, at 1413 μ S/cm

Temperature Compensation

Automatic, 0 to 60°C (32 to 122°F); $\beta = 2\%/^\circ\text{C}$

Probe

Direct, fixed

Environment

0 to 50°C (32 to 122°F); RH max 95%

Battery Type / Life

2 x 1.5V / approx. 200 hours of continuous use
auto-off after 5 minutes of non-use

Dimensions / Weight

180 x 50 x 25 mm (7.1x2.0x1.0") / 50 g (1.8 oz.)

Primo 1, Primo 3, Primo 4

Range

Primo 1	1999 ppm (mg/L)
Primo 3	1999 ppm (mg/L) / 0.0 to 60°C
Primo 4	10.00 mS/cm

Resolution

Primo 1	1 ppm (mg/L)
Primo 3	1 ppm (mg/L) / 0.1°C
Primo 4	0.01 mS/cm

Accuracy (@20°C/68°F)

Primo 1	± 2 % F.S.
Primo 3	± 2 % F.S. / $\pm 0.5^\circ\text{C}$
Primo 4	± 2 % F.S.

Calibration solution

Primo 1	HI 70032 (1382 ppm)
Primo 3	HI 70032 (1382 ppm)
Primo 4	HI 70039 (5.00 mS/cm)

Calibration

Primo 1	Automatic, at 1382 ppm
Primo 3	Automatic, at 1382 ppm
Primo 4	Automatic, at 5.00 mS/cm

Temperature Compensation

Automatic, 0 to 60°C (32 to 122°F); $\beta = 2\%/^\circ\text{C}$

Probe

Fixed, with 1 m (3.3') cable

Environment

0 to 50°C (32 to 122°F); RH max 95%

Battery Type / Life

2 x 1.5V / approx. 200 hours of continuous use
auto-off after 5 minutes of non-use

Dimensioni/Peso

66 x 50 x 25 mm/ 50 g

OPERATION

- Turn the meter on by pressing the ON/OFF button.
- Immerse the probe in the sample to be measured, without exceeding the maximum immersion level.
- Stir gently and wait for stable reading. The meter automatically compensates for temperature variations.
- To extend the batteries life, after 5 minutes of non-use the meter provides for auto-off.

CALIBRATION

- Switch the meter on.
- Press and hold the ON/OFF button for about 3 seconds. The required calibration solution value will start blinking on the display to indicate that the calibration mode has been entered.

"1382" for *Primo, Primo 1, Primo 2, Primo 3*

"5.00" for *Primo 4*, and "1413" for *Primo 5*

- Immerse the probe in the proper calibration solution without exceeding the maximum immersion level.
- Stir gently and wait for about 20 seconds.
- Once the display stops blinking, the meter is calibrated and ready for use.

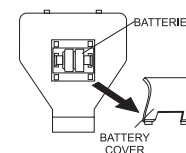
BATTERIES REPLACEMENT

The "Eb" message on the LCD warns the user when the batteries have to be replaced.

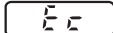


Open the battery compartment and replace the both 1.5 V batteries, while paying attention to the correct polarity.

Batteries should be replaced only in a non hazardous area using the battery type specified in this instruction sheet.

Important note: Once the batteries have been replaced, turn the meter OFF and then ON again. Wait for about 30 seconds to allow a complete self-test, and then perform a new calibration.



ERROR CODES

	Error in calibration, wrong calibration solution or damaged probe.
	Over range.
	Low battery indication.

Recommendations for Users

Before using these products, make sure that they are entirely suitable for the environment in which they are used.

Operation of this instrument in residential areas could cause interference to radio and TV equipment. Any variation introduced by the user to the supplied equipment may degrade the instrument EMC performance.

To avoid electrical shocks, do not use this instrument when voltage at the measurement surface exceeds 24Vac or 60Vdc. To avoid damage or burns, do not perform any measurement in microwave ovens.