To reset to the default calibration

To clear a previous calibration, press the ON/OFF/MODE button after entering the calibration mode. The bottom LCD will display *ESC* for 1 second and the meter will return to normal measuring mode. The "CAL" symbol on the LCD will disappear. The meter will be reset to the default calibration.

Battery replacement

The meter displays the remaining percentage when turned on. When the battery level is below 5%, the ⟺ symbol on the bottom left of the LCD lights up to indicate a low battery condition. If the battery level is low enough to cause erroneous readings, the Battery Error Prevention System (BEPS) turns the **HI 991301** off.

To ensure a watertight seal, the batteries are accessed by separating the front and back halves of the meter. The 4 Philips-head screws are located on the 4 corners of the back of the meter. Once the back has been removed, carefully replace the 4 AAA batteries located in the battery compartment, paying attention to their polarity. Re-attach the back, making sure that the gasket is in place.

Calibration solutions

HI 77400P	pH 4.01 & 7.01 (20 mL, 5 pcs each)
HI 770710P	pH 7.01 & 10.01 (20 mL, 5 pcs each)
HI 70004P	pH 4.01 calibration solution (20 mL, 25 pcs)
HI 70006P	pH 6.86 calibration solution (20 mL, 25 pcs)
HI 70007P	pH 7.01 calibration solution (20 mL, 25 pcs)
HI 70009P	pH 9.18 calibration solution (20 mL, 25 pcs)
HI 70010P	pH 10.01 calibration solution (20 mL, 25 pcs)
HI 70030P	12.88 mS/cm @25°C (20 mL, 25 pcs)
HI 70038P	6.44 ppt (g/L) @25°C (20 mL, 25 pcs)

Other accessories

HI 710007	Protective rubber boot

HI 991301 is in compliance with the CE directives
EN 50081-1 and 50082-1

HANNA instruments

HI 991301   Instruction Manual
Portable pH/EC/TDS/Temperature Meter

SPECIFICATIONS

Range	**pH**	0.00÷14.00
	EC	0.00÷20.00 mS/cm
	TDS	0.00÷10.00 ppt
	Temperature	0.0÷60.0°C or 32.0÷140.0°F
Resolution	**pH**	0.01pH
	EC	0.01 mS/cm
	TDS	0.01 ppt
	Temperature	0.1°C or 0.1°F
Accuracy	**pH**	±0.01pH
(@20°C/68°F)	**EC/TDS**	2% F.S.
	Temperature	±0.5°C or ±1°F
Typical EMC	**pH**	±0.3pH
Deviation	**EC/TDS**	2% F.S.
	Temperature	±1°C or ±1°F
Temperature	**pH**	Automatic
Compensation	**EC/TDS**	BETA ß=0.0%/°C, 1.8%/°C 1.9%/°C (default), 2.0%/°C, 2.1%°C 2.3%/°C, 2.4%/°C
pH Calibration		1 or 2 point with auto-buffer recognition 4.01/7.01/10.01 pH or 4.01/6.86/9.18 pH
EC/TDS Calibration		Automatic (25°C/77°F) 1 point at: 12.88 mS/cm, 6.44 ppt (0.5 conv.) 9.02 ppt (0.7 conv.)
Conductivity to TDS Conversion Factor		0.45, 0.50 (default), 0.55, 0.60, to 0.65, 0.68, 0.70, 0.75, 1.00 (CONV)
Probe HI 1288		pH/EC/TDS/temp. probe (included)
Battery Type/Life		4 x 1.5V AAA with BEPS / 500 hours
Environment		0 to 50°C (32 to 122°F); RH 100%
Dimensions		143x80x38mm (5.6x3.2x1.5")

OPERATIONAL GUIDE

To connect the probe

Connect the **HI 1288** probe to the DIN socket on the top of the **HI 991301** by aligning the pins and pushing in the plug. Tighten the nut to ensure a good connection. Remove the protective cap from the **HI 1288** probe before taking any measurements.

To turn HI 991301 on and to check battery status

Press the ON/OFF/MODE button for 2 seconds. All the used segments on the LCD will be visible for a few seconds, followed by a percent indication of the remaining battery life. Eg. % *100 BATT*.

To turn HI 991301 off

Press the ON/OFF/MODE button from normal measuring mode. *OFF* will appear on the bottom display.

To select the measurement unit (pH or EC or TDS)

Press the SET/HOLD button from normal measuring mode. The meter will display pH or EC or TDS. Temperature will always be displayed on the bottom. E.g. pH *5.73 22.5 °C*.

To freeze the display

Press the SET/HOLD button for 2 seconds until *HOLD* appears on the bottom display. Eg. pH *5.73 HOLD*.
Press any button to return to normal mode.