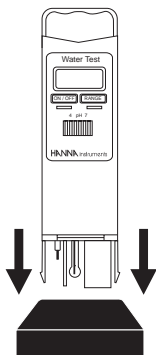


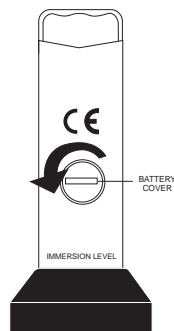
MAINTENANCE

- Separate the compartment from the tester.
- Remove deposits formed on the liquid junction and pH glass bulb by soaking in **HI 7061** cleaning solution for 30 minutes.
- Soak the platinum wire in acetone for 30 minutes.
- Rinse glass bulb, platinum wire and liquid junction thoroughly with distilled water
- Re-assemble the compartment and the tester.
- Fill the compartment with tap water.



BATTERY REPLACEMENT

When the **Water Test** cannot be switched on or the display fades, pull out the battery cover and replace all three 1.5V batteries, while paying attention to their polarity. Battery replacement must only take place in a safe area and using the battery types specified in this instruction manual.



ACCESSORIES

HI 7004M	pH 4.01 buffer solution, 230 mL
HI 7004L	pH 4.01 buffer solution, 500 mL
HI 7007M	pH 7.01 buffer solution, 230 mL
HI 7007L	pH 7.01 buffer solution, 500 mL
HI 7010M	pH 10.01 buffer solution, 230 mL
HI 7010L	pH 10.01 buffer solution, 500 mL
HI 7031M	1413 µS/cm conductivity solution, 230 mL
HI 7031L	1413 µS/cm Conductivity solution, 500 mL
HI 7061M	General cleaning solution, 230 mL
HI 7061L	General cleaning solution, 500 mL
HI 731326	Calibration screwdriver (20 pcs)

Recommendations for Users

Before using this product, make sure that it is entirely suitable for the environment in which it is used. Operation of this instrument in residential area could cause unacceptable interferences to radio and TV equipments, requiring the operator to take all necessary steps to correct interferences.

The glass bulb at the end of the pH electrode is sensitive to electrostatic discharge. Avoid touching this glass bulb at all times. For calibration it is recommended to use an antistatic screwdriver.

Any variation introduced by the user to the supplied equipment may degrade the instrument's EMC performance. To avoid electrical shock, do not use this instrument when voltages at the measurement surface exceed 24 Vac or 60 Vdc.

To avoid damages or burns, do not perform any measurement in microwave ovens.



ISTWATERSTR2_0705

HI 98204 Water Test

pH/ORP/EC/Temperature in One Unit

GENERAL DESCRIPTION

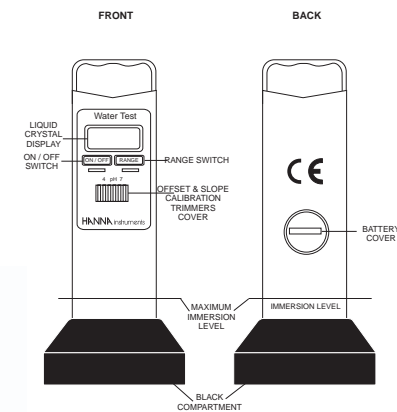
The **Water Test** is a "four-in-one" portable meter designed for quick and reliable measurement of the four most important variables in water analysis: pH, ORP, conductivity and temperature.

Water Test is engineered with great simplicity, that even non-technical personnel can use it: just fill the base with the sample to be measured, press the RANGE key to select the mode and read the measurement.

Water Test is perfect for use in the fields of water treatment analysis, wastewater test, ecological studies, aquaculture and hydroponic applications.

SPECIFICATIONS

	pH	ORP	Conductivity	Temperature
Range	0.0 to 14.0 pH	±1000 mV	0 to 1999 µS/cm	0.0 to 60.0°C
Resolution	0.1 pH	1 mV	1 µS/cm	0.1°C
Accuracy (@20°C/68°F)	±0.2 pH	±5 mV	±2% F.S.	±1°C
Typical EMC Deviation	±0.4 pH	±2mV	±2% F.S.	±1°C
Calibration	manual 2 point	factory calibrated	manual 1 point	factory calibrated
Battery Type/Life	3 x 1.5V / approx. 200 hours of continuous use			
Environment	0 to 50°C (32 to 122°F); RH max 95%			
Dimensions / Weight	190 x 85 x 85 mm (7.4 x 3.3 x 3.3") / 260 g (9.2 oz.)			



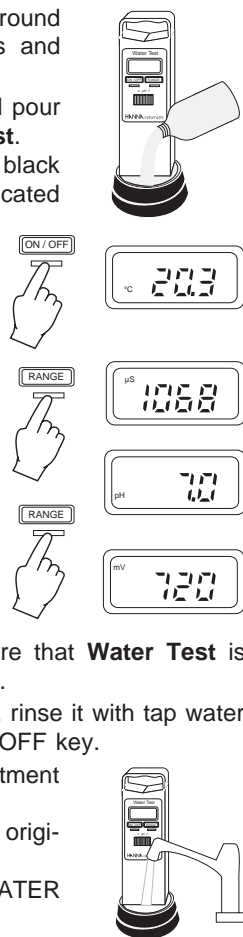
PEWA
Messtechnik GmbH

Weidenweg 21
58239 Schwerte

Tel.: 02304-96109-0
Fax: 02304-96109-88
E-Mail: info@pewa.de
Homepage: www.pewa.de

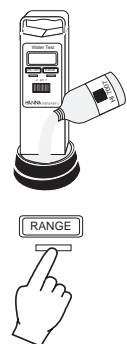
OPERATION

- Do not be alarmed if white crystals appear around the cap. This is normal with pH electrodes and they dissolve when rinsed with water.
- Take a sample of the water to be tested and pour into the black compartment of the **Water Test**. If you are scooping up the water with the black compartment, do not immerse above the indicated maximum immersion level.
- Turn the tester on by pressing the ON/OFF key on the front panel.
- The tester will enter the temperature measurement mode, indicated by the "°C" symbol on the display.
- Press the RANGE key once to enter the conductivity ($\mu\text{S}/\text{cm}$) mode.
- Press the RANGE key again to display pH.
- Press the RANGE key once again to display ORP (mV).
- If the tester compartment has been left dry for more than 2 days, wait for about 5 minutes before taking pH measurements.
- For more accurate measurements, make sure that **Water Test** is calibrated for pH and conductivity before use.
- After measurements, empty the compartment, rinse it with tap water and switch the tester off by pressing the ON/OFF key.
- When the tester is not in use, fill the compartment with tap water.
For long term storage, keep the tester in its original box.
NEVER USE DISTILLED OR DEIONIZED WATER FOR STORAGE PURPOSES.

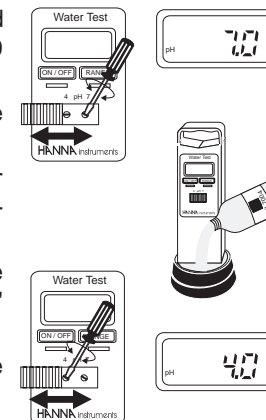


pH CALIBRATION

- Pour a small quantity of distilled water into the black compartment, rinse by shaking the compartment and then discard the content.
- Pour a small quantity of pH 7 (HI7007) buffer solution into the compartment and switch the tester on by pressing the ON/OFF key.
- Press the RANGE key until the display enters the pH measurement mode.

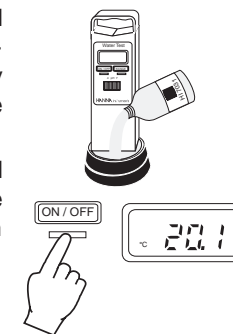


- Adjust the right trimmer located behind the front cover until the display shows "7.0 pH".
- Discard the pH 7 solution and rinse the compartment with distilled water.
- Pour a small quantity of pH 4 (HI7004) or pH 10 (HI7010) buffer solution into the compartment.
- Adjust the left trimmer located behind the front cover until the display shows "4.0 pH" or "10.0 pH".
- Discard the buffer solution and rinse the compartment with distilled water.
- The unit is now calibrated for pH and ready for use.

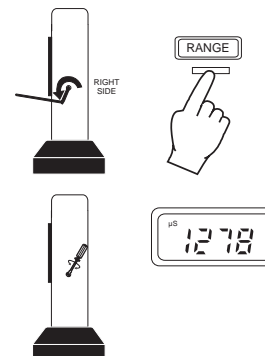


CONDUCTIVITY CALIBRATION

- Rinse the black compartment with distilled water, then fill it with HI7031 conductivity solution to overflow and switch the tester on by pressing the ON/OFF key. The temperature of the solution will be displayed.
- Note the temperature of the solution and read the corresponding conductivity from the table on the solution bottle label (e.g. 1413 $\mu\text{S}/\text{cm}$ @25°C).



- Remove the screw on the right side of the casing to access the conductivity calibration trimmer. Press the RANGE key to display the conductivity measurement mode and adjust the trimmer until the display shows the conductivity reading at the noted temperature (e.g. 1278 $\mu\text{S}/\text{cm}$ @20°C). Replace the screw after calibration.



°C	°F	HI7031 ($\mu\text{S}/\text{cm}$)	°C	°F	HI7031 ($\mu\text{S}/\text{cm}$)
0	32	776	22	71.6	1332
5	41	896	23	73.4	1359
10	50	1020	24	75.2	1386
15	59	1147	25	77	1413
16	60.8	1173	26	78.8	1440
17	62.6	1199	27	80.6	1467
18	64.4	1225	28	82.4	1494
19	66.2	1251	29	84.2	1521
20	68	1278	30	86	1548
21	69.8	1305	31	87.8	1575

**ALWAYS USE FRESH BUFFERS
FOR CALIBRATION**