



Your PDF Guides

You can read the recommendations in the user guide, the technical guide or the installation guide for HANNA INSTRUMENTS HI 9811-0. You'll find the answers to all your questions on the HANNA INSTRUMENTS HI 9811-0 in the user manual (information, specifications, safety advice, size, accessories, etc.). Detailed instructions for use are in the User's Guide.

User manual HANNA INSTRUMENTS HI 9811-0
User guide HANNA INSTRUMENTS HI 9811-0
Operating instructions HANNA INSTRUMENTS HI 9811-0
Instructions for use HANNA INSTRUMENTS HI 9811-0
Instruction manual HANNA INSTRUMENTS HI 9811-0

Instruction Manual
HI 9811-0 • HI 9811-5
Portable
pH/EC/TDS/°C Meters



HANNA
instruments
www.hanna.com



[You're reading an excerpt. Click here to read official HANNA INSTRUMENTS HI 9811-0 user guide](http://yourpdfguides.com/dref/2865933)
<http://yourpdfguides.com/dref/2865933>

Manual abstract:

hannainst.com Dear Customer, Thank you for choosing a Hanna product. Please read this instruction manual carefully before using the meter. This manual will provide you with the necessary information for correct use of the instrument, as well as a precise idea of its versatility. If you need additional technical information, do not hesitate to e-mail us at tech@hannainst.com. These instruments are in compliance with the directives. PRELIMINARY EXAMINATION Remove the instrument from the packing material and examine it carefully to make sure that no damage has occurred during shipment. If noticeable damage is found, notify your Dealer. Each meter is supplied with:

· Combination probe with 8-pin DIN connector & 1 m (3.3') cable: · HI 1285-0, pH/EC/TDS probe, for HI 9811-0 · HI 1285-5, pH/EC/TDS/°C probe, for HI 9811-5 · HI 70007, pH 7.01 sachet, 1 pc · HI 70031, 1413 µS/cm sachet, 1 pc · HI 70032, 1382 ppm (mg/L) sachet, 1 pc · HI 700661 cleaning solution sachet, 2 pcs · Instruction manual · 1 x 9V alkaline battery. Note: Save all packing material until you are sure that the instrument functions correctly. Any defective item must be returned in the original packing together with the supplied accessories. WARRANTY All Hanna Instruments meters are warranted for two years against defects in workmanship and materials when used for their intended purpose and maintained according to instructions.

Probes are warranted for a period of six months. This warranty is limited to repair or replacement free of charge. Damages due to accidents, misuse, tampering or lack of prescribed maintenance are not covered. If service is required, contact the dealer from whom you purchased the instrument. If under warranty, report the model number, date of purchase, serial number and the nature of the failure.

@@@ FUNCTIONAL DESCRIPTION

.....
.....
.....
.....

... 4 SPECIFICATIONS..

.....
.....
.....
.....
.....
.....
.....
.....

... 5 OPERATIONAL GUIDE

.....
.....
.....
.....
.....
.....

6 pH CALIBRATION

.....
.....
.....
.....
.....
.....
.....
.....

... 8 pH VALUES AT VARIOUS TEMPERATURES

.....
.....
.....
.....

9 EC/TDS CALIBRATION

.....
.....
.....
.....
.....
.....
.....

..... 10 EC/TDS CONVERSION FACTOR.....

.....
.....
.....
.....
.....

..... 10 BATTERY REPLACEMENT ..

.....
.....
.....
.....
.....
.....
.....

11 PROBE MAINTENANCE

.....
.....
.....
.....
.....
.....

.... 12 ACCESSORIES

.....
.....
.....
.....
.....
.....
.....
.....
.....

. 13 CE DECLARATION OF CONFORMITY

.....
.....
.....
.....

..... 14 GENERAL DESCRIPTION HI 9811-0 and HI 9811-5 are the complete, versatile and rain-proof portable combined meters designed with utmost precision and simplicity. Both models provide measurements for pH, EC and TDS ranges, which are easily selectable through a membrane keyboard on the front panel. Conductivity measurements are automatically compensated for temperature changes with a built-in temperature sensor.

The temperature coefficient is fixed at 2%/°C. @@@@±2% f.s. ±0.5 (HI 9811-5 only) 0.
5 ±0.1 ±2% f.s. ±2% f.s.

@@@@@@@@@. Select the pH mode. @@The display shows the pH value. @@@@. Select the °C mode.

@@@@@@@@@b) At least once a month. c) After testing aggressive chemicals. @@The ChecktempC thermometer has to be located close to

the probe. Note: If turning the knob the needed value can not be reached, clean the probe (see the "Probe Maintenance" section). If also after the probe cleaning the value can not be reached, replace the probe. PREPARATION Pour small quantities of pH 7.01 (HI 7007) or pH 4.

01 (HI 7004) or pH 10.01 (HI 7010) solution into a clean beaker. To obtain accurate readings, use pH 7.01 (HI 7007) if you are going to measure neutral or close to neutral samples, pH 4.01 (HI 7004) if you are going to measure acidic samples or pH 10.01 (HI 7010) for alkaline measurements. If you need to calibrate to NBS standards, use pH 6.86 (HI 7006) instead of pH 7.01 and pH 9.18 (HI 7009) instead of pH 10.

01. pH VALUES AT VARIOUS TEMPERATURES For temperature compensation during calibration, please refer to the following chart. TEMP °C °F 32 0 41 5 50 10 59 15 20 68 77 25 86 30 95 35 40 104 45 113 50 122 55 131 60 140 65 149 70 158 4.01 4.01 4.

00 4.00 4.00 4.00 4.01 4.

02 4.03 4.04 4.05 4.06 4.07 4.09 4.11 4.12 6.86 6.

98 6.95 6.92 6.90 6.88 6.86 6.85 6.84 6.84 6.83 6.

83 6.84 6.84 6.85 6.85 pH VALUES 7.

01 9.18 9.46 7.13 9.39 7.

10 9.33 7.07 9.27 7.04 9.22 7.03 9.18 7.01 9.14 7.

00 9.10 6.99 9.07 6.98 9.04 6.98 9.01 6.98 8.99 6.

98 8.97 6.98 8.95 6.99 8.

93 6.99 10.01 10.32 10.24 10.

18 10.12 10.06 10.01 9.96 9.92 9.88 9.85 9.82 9.79 9.

77 9.76 9.75 PROCEDURE · Connect the probe and switch the meter on, then press the "pH" key to display pH measurement. · Remove the protective cap from the probe, rinse and immerse it in the buffer and stir gently. Wait a couple of minutes for the reading to stabilize. · Take the temperature of the buffer solution, e.g. 10.0°C, as follow: for HI 9811-0, with a ChecktempC (or another accurate thermometer); for HI 9811-5, select the °C mode and read the displayed value. · Adjust the pH calibration knob until the LCD shows the pH value at the above temperature (see the pH versus temperature chart).

For instance, if the buffer temperature is 25°C, the display should show pH 4.0 or 7.0 or 10.0. If the buffer temperature is 10°C, the display should show pH 4.0 or 7.0 or 10.1. · The pH calibration is now complete. 8 9 EC/TDS CALIBRATION Accessories needed: · Use HI 70031 (1413 µS/cm) EC calibration solution or HI 70032 (1382 ppm, or mg/L) TDS calibration solution.

Note: The conversion between EC and TDS is made by a built-in circuit, hence it is requested to calibrate the meter only in EC or TDS range. The other range is thus automatically calibrated. BATTERY REPLACEMENT These meters are powered by a 9V battery that is located on the rear of the instrument. When the battery level is so low that it may cause unreliable measurements, the meter turns off. It is recommended to replace the battery immediately. @@@@HI 70031) into a beaker. If possible, use plastic beaker to minimize any EMC interference. · Immerse the probe in the solution. @@@@· Press the "µS/cm" (or "mg/L") key. · Turn the EC/TDS calibration knob until the display shows the EC or TDS reading at 25°C.

EC/TDS CONVERSION FACTOR The TDS value in aqueous solutions is directly proportional to the conductivity. The ratio between the two parameters depends on the solution. Both HI 9811-0 and HI 9811-5 models have a fixed conversion factor set to 0.5. This means that 1 µS/cm is equal to 0.5 mg/L of TDS.

Make sure the battery contacts are tight and secure before replacing the cover. 10 11 PROBE MAINTENANCE PERIODIC MAINTENANCE Inspect the probe and the cable. The cable used for the connection to the meter must be intact and there must be no points of broken insulation on the cable or cracks on the probe stem or bult of the copyright owner. 15 14 SALES AND TECHNICAL SERVICE CONTACTS Australia: Tel.

(03) 9769.0666 · Fax (03) 9769.0699 China: Tel. (10) 88570068 · Fax (10) 88570060 Egypt: Tel. & Fax (02) 2758.

683 Germany: Tel. (07851) 9129-0 · Fax (07851) 9129-99 Greece: Tel. (210) 823.5192 · Fax (210) 884.0210 Indonesia: Tel.



[You're reading an excerpt. Click here to read official HANNA INSTRUMENTS HI 9811-0 user guide](http://yourpdfguides.com/dref/2865933)
<http://yourpdfguides.com/dref/2865933>

(21) 4584.2941 · Fax (21) 4584.2942 Japan: Tel. (03) 3258.9565 · Fax (03) 3258.9567 Korea: Tel. (02) 2278.5147 · Fax (02) 2264.1729 Malaysia: Tel. (603) 5638.

9940 · Fax (603) 5638.9829 Singapore: Tel. 6296.7118 · Fax 6291.6906 South Africa: Tel. (011) 615.6076 · Fax (011) 615.8582 Taiwan: Tel. 886.2.2739.3014 · Fax 886.2.2739.2983 Thailand: MAN9811-2R2 05/05 Tel. 66.2619.0708 · Fax 66.2619.0061 United Kingdom: Tel.

(01525) 850.855 · Fax (01525) 853.668 USA: Tel. (401) 765.7500 · Fax (401) 765.7575 For e-mail contacts and complete list of Sales and Technical offices, please see www.hannainst.com.



[You're reading an excerpt. Click here to read official HANNA INSTRUMENTS HI 9811-0 user guide](http://yourpdfguides.com/dref/2865933)
<http://yourpdfguides.com/dref/2865933>