



ST Series Pen Meter

Instruction Manual

Welcome to OHAUS (www.ohaus.com)!

After more than a century of perfecting the art of measurement through our durable weighing products, OHAUS precision is now available in a line of portable electrochemistry products that provides accurate measurement of pH, ORP, conductivity, TDS and salinity.

ST series pen meters are the economical option when you are simply looking for meters that are easy to use and provide accurate measurements.

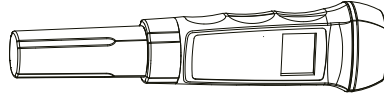
The pen meters should not be used by Children of age 12 or younger.

This product conforms to the EMC Directive 2004/108/EC. The Declaration of Conformity is available online at europe.ohaus.com/europe/en/home/support/compliance.aspx.

ST10R & 20R pen ORP meter Instruction Manual

Thank you for choosing OHAUS waterproof pen meters. Please read the manual completely before use. This manual serves the following models:

- ST10R (pen ORP meter)
- ST20R (pen ORP meter)



First Usage

Condition the ORP electrodes by immersing it in ORP electrode protection solution for 1 hour before using. If the ORP electrode protection cap is dry (may cause white crystals), add storage solution in the cap and soak the ORP electrode for 1 hour.

ORP Measurement

Remove the protection cap, rinse the ORP electrode glass bulb with pure water (distilled water), and wipe clean. (Glass bulb is fragile, be careful, do not scratch it.)

- Press button-On/Off turn on the meter.
- Dip the electrode about 2 to 3cm into the test solution(at least 20ml). Stir and wait until the reading stabilized.
- Clean the electrode with pure water after measurement.
- When measurement, you can press button-Hold to freeze the reading, press button-Hold again to release measurement again.
- Press and hold button-On/Off to turn off the meter.

Check

You can check if the ORP electrode (ST10R/ST20R) is good, you can use the standard potential solution to check it.

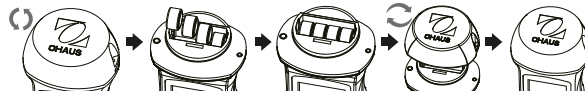
- Test Pen Standard Potential (25 C)
 - 86mV±15mV (add excess Quinhydrone Chinhydrone in pH 7.00 buffer to have saturated solution.)
 - 265mV±15mV (add excess Quinhydrone Chinhydrone in pH 4.00 buffer to have saturated solution.)
 - The difference between 7.00 and 4.01 should be ≥ 165mV
- If the check result is not good, should clean the ORP electrode then check again; or purchase a new one.

Maintenance

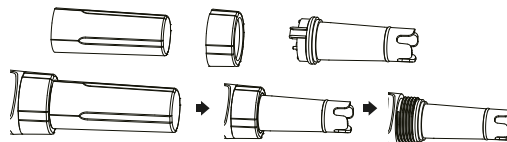
Clean the electrode after test and cover the protection cap, be sure storage solution is not dry in the cap.

Harsh samples may short the pen meter life time, such as sticky, dirty or oily liquids.

The meter use button battery 1.5V (AA)*4, replace all the batteries when the display fade or not turn on.



The electrode is replaceable.



Order Information

Model	Description
ST10R	waterproof pen ORP meter
ST20R	waterproof pen ORP meter

Specification

Water Proof Pen Meters	ST10R	ST20R
Cond. range	-1000~ +1000 mV	-1000~ +1000 mV
Resolution	1 mV	1 mV
Accuracy	NA	0.0~99.9 °C
Battery	4 x 1.5V	4 x 1.5V
Dimension	185x42x37mm	185x42x37mm
Weight	105g	105g
Auto-off	After 6 min no operation	After 6 min no operation
Ambient temperature	0~50 °C(32-122°F)	0~50 °C(32-122°F)
Materials	ABS	ABS

Replaceable electrodes:

Electrode R10 ST
Electrode R20 ST



In conformance with the European Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE) this device may not be disposed of in domestic waste. This also applies to countries outside the EU, per their specific requirements. Please dispose of this product in accordance with local regulations at the collecting point specified for electrical and electronic equipment. If you have any questions, please contact the responsible authority or the distributor from which you purchased this device. Should this device be passed on to other parties (for private or professional use), the content of this regulation must also be related. Disposal instructions in Europe are available online at europe.ohaus.com/europe/en/home/support/weee.aspx. Thank you for your contribution to environmental protection.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: Reorient or relocate the receiving antenna, increase the separation between the equipment and receiver or consult the dealer or an experienced radio/TV technician for help.