



TRACER POCKETESTER[®]



ORP

CODE 1742

TRACER
ORP POCKETESTER™
CODE 1742

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Introduction

Congratulations on your purchase of the TRACER ORP PockeTester. The advantages of the TRACER to the user include: Easy to use and maintain, high accuracy, automatic calibration, and fast response. The TRACER a 15-reading memory storage. Careful use and maintenance will provide years of reliable service.

Specifications

| | |
|------------------------|---|
| Display | Multifunction LCD with Bar graph |
| Operating Conditions | 32 to 122°F (0 to 50°C) and < 80% RH |
| ORP Range & Accuracy | ±999mV/±4mV |
| Measurement storage | 15 tagged (numbered) readings |
| Power | Four CR2032 button batteries (see Page 6) |
| Low battery indication | 'BAT' appears on the LCD |
| Auto power off | After 10 minutes of inactivity |

Contents

| | |
|--|-----------|
| ORP TRACER PockeTester Kit, ±999mV Range | Code 1742 |
| Includes Sample Cup w/cap* | |

*Not sold individually. See below.

Parts & Accessories

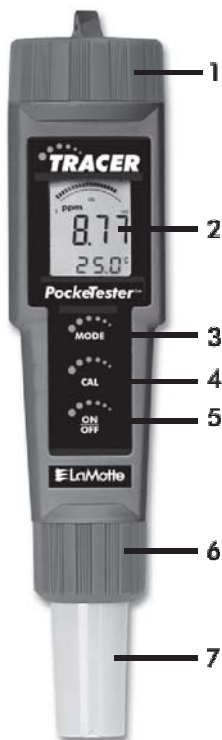
| | |
|----------------------------------|-----------|
| ORP Replacement Electrode | Code 1734 |
| Weighted Stand w/Sample Cups (5) | Code 1746 |
| Sample Cups w/caps (24) | Code 1745 |

Meter Description

Front Panel Description

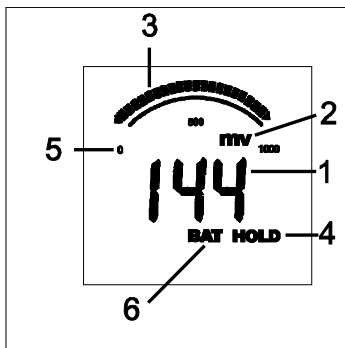
1. Battery compartment cap
2. LCD Display
3. MODE/HOLD button
4. CAL/RECALL button
5. ON/OFF button
6. Electrode Collar
7. Electrode

(Note: The Electrode cap is not shown)



Display Description

1. Reading
2. Units
3. Bargraph
4. Data Hold
5. Scale
6. Low Battery



Basic Operation

Powering the TRACER

If the batteries are weak, the *BAT* indicator will appear on the LCD. Press the ON/OFF key to turn the TRACER on or off. The auto power off feature will shut the TRACER off automatically after 10 minutes of inactivity.

Electrode Recognition

When the TRACER is turned on, it will recognize the type of electrode that is connected and will display the appropriate unit of measure. An electrode must be attached before turning the meter on.

Automatic Calibration

When the TRACER is turned on, it will enter the Automatic Calibration mode. 'SELF' and 'CAL' will appear on the display while calibration is in progress. After the calibration is completed, the 'SELF' and 'CAL' display icons will extinguish and both the main display and the bargraph will read ORP in mV.

Data Hold

Press the MODE/HOLD button to freeze the current reading. The *HOLD* display icon will appear along with the held reading. The held reading will be stored in the next 15-reading storage location. Press the MODE/HOLD button to return to normal operation.

TESTING

Overview

ORP is the abbreviation for Oxidation Reduction Potential and represents the oxidizing or reducing nature of a solution. The overall reactive tendency of a solution can be determined from ORP measurements.

Display

When the electrode is placed in a solution, the main display and bar graph will indicate the ORP reading. Readings flash until they have stabilized. The bar graph is 'center zero', i.e. at 500mV there is no display. As the readings increase from 0 to 1000 mV the bar will move from the left to the right.

Getting Started

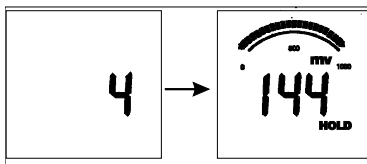
1. Remove the cap from the bottom of the TRACER to expose the flat surface electrode and reference junction.
2. White KCL crystals may be present in the cap. Rinse the crystals with tap water.

ORP Measurement

1. Press the ON/OFF button to turn the meter on. Place the electrode ½" to 1" into the test sample .
2. Stir once and let the reading stabilize for 1 to 3 minutes.
The main display will indicate the ORP in numeric units from 0 to 1000mV. The bar graph will also display the ORP value. As the ORP increases, the bar graph will move from left to right.
3. Press the ON/OFF button to turn the meter off. Rinse the electrode with distilled water. Replace cap.

Storing Readings

1. After the reading is made press the MODE/HOLD button to store the current reading. The **HOLD** icon will be displayed. The storage location number will also be displayed followed by the reading being stored.
2. Press the MODE/HOLD button to return to normal operation.
3. Repeat step 1 to store the next reading.
4. If an attempt is made to store more than 15 readings, the stored readings (starting with the first reading) will be overwritten.



Recalling Stored Readings

NOTE: First ensure that the **HOLD** symbol is not displayed. If it is, exit the HOLD function by pressing the MODE/HOLD button.

1. Press the CAL/RECALL button once and then press the MODE button **immediately** after **CAL** is displayed; the location number (1 through 15) will flash. If the CAL mode is accidentally accessed (display flashing), press the CAL/RECALL button again to exit.
2. The last stored reading taken will be displayed first. To advance through the stored readings, press the MODE/HOLD button. The location number is displayed first, followed by the reading stored in that location.
3. To exit the recall mode, press the CAL/RECALL button and the TRACER will return to normal operation.

If the batteries are removed, any stored readings will be discarded.

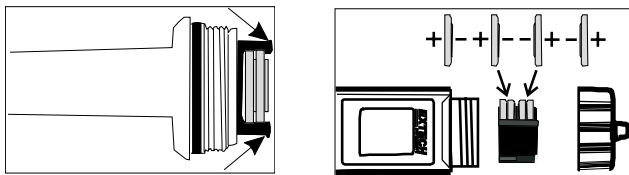
MAINTENANCE

Storage

To preserve electrode life keep the sponge in the protective cap soaked with tap water. Do not use deionized or distilled water. Cap TRACER when not in use. Store vertically.

Battery Replacement

1. Twist off the battery compartment cap.
2. Hold the battery housing in place with one finger. Remove the battery carrier by pulling on the small tabs.
3. Replace the four CR2032 batteries. Observe polarity.
4. Replace the battery compartment cap.



NOTE: If the batteries are removed, stored data will be cleared. Factory calibrations will be retained.

Troubleshooting

| Problem | Cause | Action |
|------------------------------------|-----------------------------|---|
| Power on but no display | Batteries | Insert batteries |
| | Batteries | Verify correct polarity |
| | Batteries | Replace batteries |
| Unstable readings | Electrode | Immerse electrode more deeply in sample |
| | Electrode | Condition electrode before first use. Soak in tap water for 10 minutes. |
| | Electrode | Remove air bubbles caught under electrode |
| | Electrode | Clean electrode |
| | Electrode | Replace electrode |
| Static charge | Wiping electrode | Rinse electrode and blot. Do not wipe electrode |
| Same readings in different samples | Cracked or broken electrode | Replace electrode. Avoid plunging electrode into bottom of container and stir bars. |
| Display frozen | HOLD function | Press MODE or turn meter off |
| | Button response | Remove batteries (stored data will be lost) |
| Steady “-1” display | Wait | Reading not stable yet |

Replacing the Electrode

The TRACER is shipped with an electrode attached. If the electrode needs to be replaced, follow these steps for removing and connecting electrodes.

1. Turn meter off.
2. To remove the electrode, turn the collar counter-clockwise and remove it.
3. Gently rock the electrode from side to side, pulling it downwards, until it disconnects from the meter.
4. To attach an electrode, carefully plug the electrode into the meter socket. Note that the electrode connector is keyed to ensure a proper connection.
5. Tighten the electrode collar firmly enough to make a good seal. A rubber gasket will seal the electrode with the meter.

Expand Your TRACER

Interchangeable electrodes are available to convert the ORP TRACER to a Total Chlorine TRACER or a pH TRACER.

Remember to ask for instructions and appropriate reagent or buffer tablets when ordering Total Chlorine or pH electrodes.

Total Chlorine TRACER Electrode, 0.00-10.00 ppm Code 1732

The Total Chlorine TRACER Electrode (Code 1732) requires the use of TRACER TCL Tablets. Order Code 7044A-J (100 pack).

pH TRACER Electrode, 0.00 - 14.00 pH Code 1733

The pH TRACER Electrode is used with pH 4.0, 7.0 and 10.0 buffers. Order using the following codes:

pH 4.0 Mini Buffer Tablets (100) Code 3983A-J

pH 7.0 Mini Buffer Tablets (100) Code 3984A-J

pH 10.0 Mini Buffer Tablets (100) Code 3985A-J

WARRANTY

This Instrument is guaranteed to be free from defects in material and workmanship for a period of one (1) year from the original purchase date. The probe is guaranteed to be free from defects in material and workmanship for a period of six (6) months from the original purchase date. In the event that a defect is found during the warranty time frame, LaMotte Company agrees that it will be repaired or replaced without charge except for the transportation costs. This guarantee does not cover batteries.

This product can not be returned without a return authorization number from LaMotte Company. For warranty support or a Return Authorization Number, contact LaMotte Company at 1-800-344-3100 or tech@lamotte.com.

Limitations

This guarantee is void under the following circumstances:

- Damage due to operator negligence, misuse, accident or improper application.
- Damage or alterations from attempted repairs by an unauthorized (non-LaMotte) service.
- Damage due to improper power source, AC adapter or battery.
- Damage caused by acts of God or natural disaster.
- Damage occurred while in transit with a shipping carrier.

LaMotte Company will service and repair out-of-warranty products at a nominal charge.



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