ORP

HI 98201

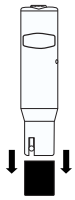
Pocket-sized Redox Meter

HANNA instruments

Manufacturers since 1978

OPERATION:

- *Remove the protective cap.*
- *Turn the meter on with the ON/OFF switch located on the top of the meter.*



- *Immerse it in the solution to be tested without exceeding the maximum immersion level.*
- *Stir gently and wait for the reading to stabilize.*
- *After use, rinse the electrode with tap water to minimize contamination.*

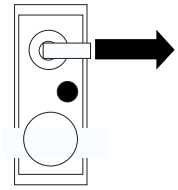
- *Always replace the protective cap after use.*

MAINTENANCE:

- *Check the meter by immersing it in* **HI7020** *ORP solution. The reading should be between 200 and 275 mV at 20ºC (68ºF). Otherwise clean the platinum tip of the electrode by rubbing it with a soft cotton or lint-free cloth soaked with* **HI7061** *cleaning solution.*

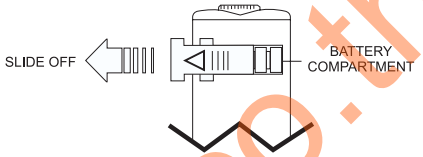
- *For more accurate readings, condition the meter by immersing it in a pretreatment reducing (***HI7091***) or oxidizing (***HI7092***) solution for half an our before taking measurements.*
- *In case of erroneous readings even after an accurate conditioning and calibration, the reference junction might be contaminated or clogged.*
- *Pull out 2 mm (1/8") of the cloth junction to renew the electrode reference (it is recommended to cut the cloth leaving always at least 2 mm - 1/8" over the reference compartment) and repeat the maintenance and conditioning procedure.*

The cloth junction can be pulled out approximately 20 times. After that, the electrode can be replaced (see the Electrode Replacement section).



BEPS & BATTERY REPLACEMENT:

The meter is supplied with BEPS (Battery Error Preventing System) which avoid any erroneous reading due to low battery level. When the batteries are too low, the meter automatically switches itself off. To replace the batteries, slide off the battery compartment cover and replace all four 1.5V batteries while paying attention to their polarity.



Batteries should only be replaced in a nonhazardous area using the battery type specified in this instruction manual.

ONE YEAR WARRANTY & SERVICEABLE:

Covered by ***one year*** *warranty against defects in workmanship and materials, this tester is now completely serviceable. Contact your dealer for further information.*

The ***ORP*** *is in compliance with the CE directives.*

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SPECIFICATIONS:

RANGE	-999 to +999 mV
RESOLUTION	1 mV
ACCURACY (@20°C/68°F)	±5 mV
TYPICAL EMC DEVIATION	±5 mV
ENVIRONMENT	0 to 50°C (32 to 122°F); 95% RH
BATTERY TYPE	4 x 1.5V alkaline (included)
BATTERY LIFE	approx. 700 hours of continuous use
DIMENSIONS	175 x 41 x 23 mm (7.9 x 1.8 x 1")
WEIGHT	78 g (2.7 oz.)

ACCESSORIES:

HI 7020M	ORP 200/275 mV solution (230 mL bottle)
HI 7091M	Reducing solution (230 mL bottle)
HI 7092M	Oxidizing solution (230 mL bottle)
HI 70300M	Storage solution (230mL)
HI 7061M	Electrode cleaning solution (230mL bottle)
HI 73201	Spare electrode

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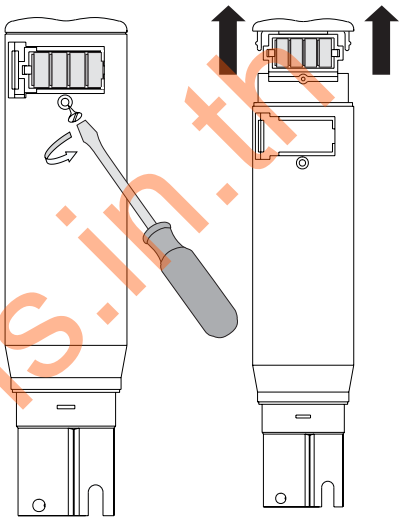
ELECTRODE REPLACEMENT:

The electrode can be easily replaced in the following way:

- Slide off the battery cover.
- Remove the screw on the back of the **ORP** located below the battery compartment and slide off the whole internal part of the tester.

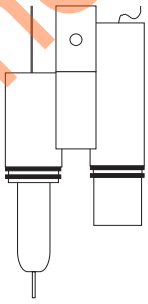


- To remove the electrode proceed as follows:

  Remove the fastening screw on the front (1) to loose the electrode. The internal circuit is connected to the electrode through two wires (one for the glass sensor and one for the reference). Remove the two small screws (2 & 3) which fasten the four connecting wires to their sockets.

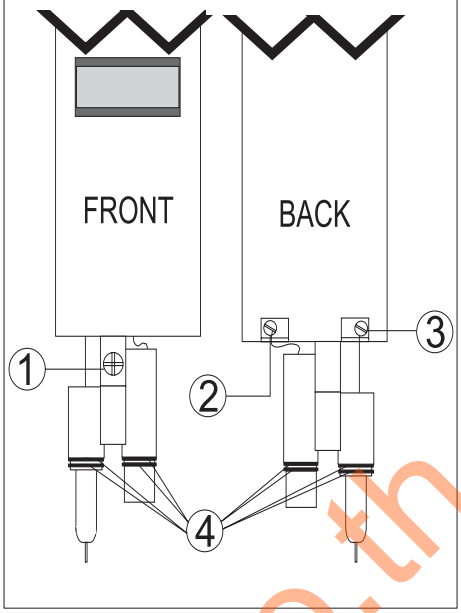
- Remove the electrode and replace it with a new **HI73201**.
- Connect the new electrode as follows:

  first fasten the screw on the front (1) to attach the electrode to the circuit. Insert the two small wires into their sockets and fasten the two screws (2 & 3).



HI73201

Internal circuit and electrode:



- The new electrode is supplied with four new O-rings (4). Make sure they are placed properly (as shown on the above drawing) before reinserting the circuit into the plastic casing.
- Reinsert the internal circuit with the new electrode into the plastic casing.
- Fasten the screw on the back below the battery compartment.
- Reinsert the battery compartment cover.
- Recondition the **ORP** before using it again.