

# pH/mV Meter/Simulator

## SMH-2



### FEATURES

- \* Mode selection for pH and mV simulation.
- \* High impedance electrode simulation.
- \* BNC sockets for coaxial cable connections.
- \* Ideal to test and calibrate electrodes and controllers
- \* Sweep only, part of the pH or mV range for accurate testing of set points.

Use the pH/mV meter and simulator together for efficient trouble shooting.

The 9 volt battery is easily replaced in a separate compartment at the back of the simulator

Lo - battery indicator

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## SPECIFICATIONS

**Simulator**

<b>Range pH:</b>	2-12pH in 1pH steps ( <i>CALIBRATE mode</i> ) +/-2pH continuous, centered on calibrate position. ( <i>SWEEP mode</i> )
<b>Range mV:</b>	-1000mV to +1000mV in 200mV steps ( <i>CALIBRATE mode</i> ) +/. 400mV continuous, centered on calibrate position. ( <i>SWEEP mode</i> )
<b>Output resistance:</b>	Selectable for 10kOhms direct and 100 MOhms high impedance output.
<b>Stability:</b>	Drift at constant ambient temperature less than 0.01pH/day, non cumulative. Change with temperature less than 0.01pH (0.05mV)/10°C.
<b>Temperature compensation:</b>	Internally fixed for pH at 20°C (57mV/pH)
<b>Output:</b>	Panel mounted BNC socket and 1 metre coaxial cable with BNC connector.

**pH/mV Meter**

<b>Range:</b>	0-14 pH      0.01 pH resolution +/- 1999mV      1mV resolution
<b>Display:</b>	Liquid crystal display 3 1/2 digits
<b>Input resistance:</b>	suitable for electrodes up to 1000 MOhms membrane resistance
<b>Temperature compensation:</b>	Manual adjustment, 0-100°C
<b>Isopotential:</b>	Pre-set at 7 pH .
<b>Output:</b>	Panel mounted BNC socket

**SMH-2**

<b>Power supply:</b>	9 volt battery NI-CAD preferred for longer performance. One battery will last for approximately 100 hours operation.
<b>Indicator:</b>	LO-BAT sign shows on the LCD display if battery voltage drops below 8.5 volts.
<b>Dimensions:</b>	82(W) x 152(H) x 30(D)mm.

## FEATURES

**Simulator**

Finding and isolating the source of a fault fast is of primary importance when carrying out a service call, making good calibration instruments essential for efficient calibration and servicing of pH or mV controllers. The **SMH-2** simulator connected to a controller electrode input enables the operator to test the operation of the unit and pumps or valves attached. Using the CALIBRATE pH/mV function will test the accuracy of the controller while using the SWEEP pH/mV function tests all connected pumps or valves for their response to signal changes of the controller.

A 4-20mA current output connected to a central processing consol can equally be tested for its functionality.

The electrode simulation featured with the **SMH-2** enables the operator to test for possible controller input problems and cable impedance or cable leakage faults.

**pH/mV Meter**

The pH/mV meter will further assist in troubleshooting an installation to determine existing faults. The pH or mV reading of the meter versus the installed controller will quickly point to a potential problem with the electrode or other equipment.

**Example:** Isolation problems caused by earth loops will show immediately if the controller pH reading is incorrect and the portable meter reading agrees with the known value.

The **SMH-2** will act as a reliable and accurate portable pH/mV meter if connected and calibrated to an electrode.

SOLD AND SERVICED BY

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