AWE

Model APS 2

pH & mV Simulator

The APS2 pH & mV simulator is a source of precise mV signals for calibrating pH and mV meters. It is substituted for the service electrode and maybe also be used to check the serviceability of extension cables and of wiring within the meters themselves.

1. Operation the APS2 simulator is powered by a standard PP3 or equivalent 9v. battery. Access to this is by removing the battery compartment lid on the bottom of the instrument. When the battery voltage becomes low, the right -hand LED indicator lights up. The battery should be replaced.

2. To check the calibration a pH meter

A Disconnect the electrode from the meter and connect the APS2 simulator.

B Set that the impedance switch to ''0 Ω''

C. Switch on the pH meter and turn the function switch on the simulator to "pH". The LED indicator should not light up.

D. Step the set-switch round. The pH meter readings should correspond broadly to the settings disregard slight deficiencies of correspondence.

E. If the meter fails to follow the settings, then a fundamental fault maybe assumed. Depending upon the meter in question, this could be an electrical, electronic or mechanical failure. In any case, reference should then be made to the Instrument Operating Manual and further to the instrument manufacturer or manufacturers agent.

3. To check a mV (Redox) meter

A. Disconnect the electrode from the meter and connect the APS2 simulator.

B. Set that the impedance switch to ''0 Ω''

C. Switch on the mV meter and turn the function switch on the simulator to "mV". The LED indicator should not light up.

D. Turn the set-switch to 0 mV (7 pH) This corresponds to meter zero adjust the mV meter reading accordingly.

E. Step the set-switch round. The mV meter readings should correspond broadly to the settings disregard slight deficiencies of correspondence.

F. If the meter fails to follow the settings, then a fundamental fault maybe assumed. Depending upon the meter in question, this could be an electrical, electronic or mechanical failure. In any case, reference should then be made to the Instrument Operating Manual and further to the instrument manufacturer or manufacturers agent.

4. To check an extension lead

A. Carry out one of the above testes to check that the meter is working satisfactorily.

B. Insert the extension lead between the meter and the APS2 simulator.

C. Turn the impedance switch to "250 MΩ"

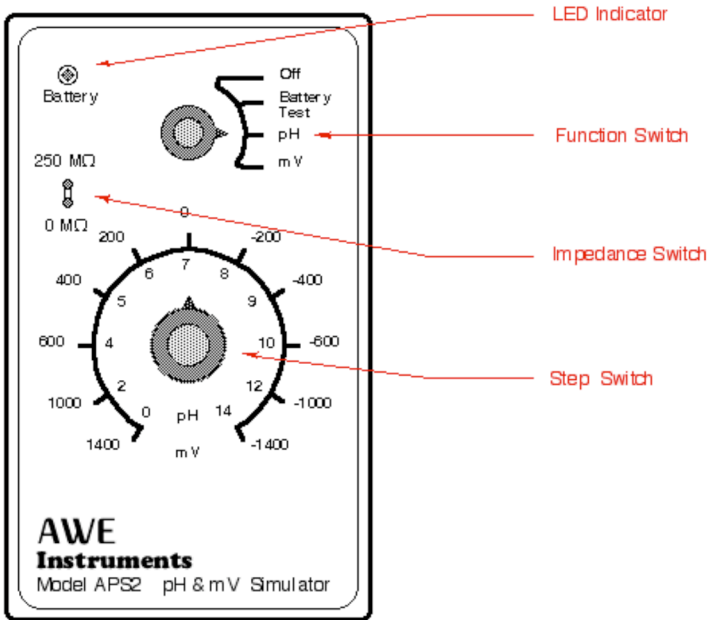
D. Repeat stepping sequence. If meter readings are different from those observed previously, then the extension lead is faulty e.g. damp in the insulation, corroded contact surfaces or failed solder joints. Replace the lead with a factory manufactured and tested pH -Ex lead.

Specifications

APS2

pH settings	0, 2, 4, 5. 6. 7. 8. 9. 10. 12 & 14 pH
mV. settings	± 200, 400. 600, 1000 & 1400 mV.
Controls.	Function switch Step switch Impedance switch.
Impedance settings	Zero & 250 Meg ohms.
Output connection	1 meter cable with BNC connector.
Calibration	Factory set internally
Construction	Ready wired with battery.
Supply	9 Volt PP3 battery.
Size	147mm. x 92 mm. 33mm.

Controls



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