Digitimer

D175 Impedance Meter

Portable • Battery Powered • Easy to Use Wide Impedance Range • Low/High LED Indicators



The D175 Impedance Meter is a compact battery powered device designed to allow checking of electrode impedances prior to recording or stimulating through surface electrodes attached to the skin.

In the case of electrical stimulation, high electrode impedance can reduce the amount of current that can pass through the target tissue, resulting in lower than expected stimulation and a poor evoked response. Likewise, high impedances can reduce the quality of recordings, such as ECG, EEG and EMG that rely on surface electrodes.

The D175 is a tool that allows suitably trained operators to rapidly assess surface electrode impedances in order to decide if they are low enough for the procedure being undertaken.

The D175 features green/red bi-colour LEDs allowing the operator to set a threshold impedance at which an LED will light as red rather than green. This facilitates electrode impedance checking, by providing the operator with an easily visible indication of "good" (green) or "bad" (red) electrode impedances.

The impedance values that the D175 can display are 0, 0.5, 2, 3, 5, 7, 12, 20, 30, 50 kohm. For display purposes, measured impedances are rounded up to the next highest displayable value, i.e 4 kohm lights up the 5 kohm LED.

By pressing and holding the Power Button for longer than 4 seconds, the D175 will enter the SETUP MODE and allow the operator to change the level at which the LEDs illuminate green or red. In SETUP MODE, the LED corresponding to the highest "good" (green) level will flash green.

The D175 preserves battery power by switching off if a button is not pressed for a period of greater than one minute.



Meters DIL/D

Impedance Meter

Digitimer D175

Specifications

Electrode Connection Sockets: Red and Black 1.5mm DIN42802 Sockets.

Current Frequency: $30 \text{ Hz} \pm 10\%$ (biphasic square wave).

Compliance Voltage: 300 mV.

Maximum Current: ±6.8 µA.

Impedance Range: 0 - 50 kohms.

Indicators: Bi-colour (red/green) LED array for impedance display and battery test.

Power Button: Brief Press powers unit ON/OFF

Unit switches OFF automatically after being on for 1 minute to preserve batteries.

Press & hold for longer than 4s to initiate SETUP MODE.

Battery Test Button: Brief Press powers unit ON, press again & hold to test batteries.

Battery Type: 2x 1.5V AA (LR6, FR6, ZR6).

Dimensions: 110mm x 66mm x 25mm.

Weight: 152g (including batteries).

Included Items: D175 Impedance Meter, 2x AA Batteries, Operator's Manual.



Bicolour LED Impedance Indicators

Digitimer Ltd

37 Hydeway, Welwyn Garden City, Hertfordshire, AL7 3BE, UK

E-mail: sales@digitimer.com **Website:** www.digitimer.com