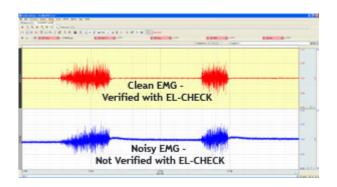
## PRODUCT SHEET

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## **EL-CHECK – ELECTRODE IMPEDANCE CHECKER**





**BIOPAC EL-CHECK** video tutorial!

Use EL-CHECK to determine electrode/surface contact impedances. Measurements are selectable to a standard three-point contact (Vin+ to GND, Vin- to GND and Vin+ to Vin-). Electrode impedance range from  $< 5~\text{k}\Omega$  to  $> 50~\text{k}\Omega$  is indicated in seven levels. EL-CHECK accepts standard 1.5 mm Touchproof and BioNomadix connectors.

EL-CHECK will support over 50,000 10-second measurements with a single 9-volt battery.

The EL-CHECK is suitable for measuring electrode contact impedance for all surface biopotential measurements, including ECG, EEG, EGG, EMG, EOG, Bioimpedance and Impedance Cardiography. The EL-CHECK permits simultaneous connection of up to three electrode leads, for quick impedance checking between any two electrodes in the three connected leads (Active or Vin+) and (Reference or Vin-) and GND.

To test the impedance between any two electrode leads:

- 1. Insert the leads into the appropriate connectors on the front panel of the EL-CHECK.
- 2. Switch the selector knob to the corresponding position, and then press and hold the "Test" button.

Green, Yellow, Orange and/or Red LEDs will illuminate to indicate the measured electrode impedance. The EL-CHECK is only active when the "Test" button is pressed.

For best biopotential measurement results, the impedance between any two electrode leads should be less than  $5 \text{ k}\Omega$ . To obtain electrode lead-to-lead impedances of less than  $5 \text{ k}\Omega$ , it's advisable to lightly abrade the skin with an abrasive pad, such as BIOPAC's ELPAD, and then apply a well-gelled (not dry) surface electrode. Dried-out surface electrodes can sometimes be rejuvenated by applying a small amount of BIOPAC's electrode gel to the contact pad of the electrode.

## **Specifications**

Test Frequency: 25 Hz

Test Current: 3.5 µA rms (10 µA peak-peak: constant current)

Electrode Impedance  $< 5 \text{ k}\Omega$ ,  $5\text{k}-10 \text{ k}\Omega$ ,  $10 \text{ to } 20 \text{ k}\Omega$ ,  $20\text{k}-30 \text{ k}\Omega$ ,  $30\text{k}-40 \text{ k}\Omega$ ,  $40-50 \text{ k}\Omega$ ,  $> 50 \text{ k}\Omega$ 

Range Indicators:

Lead Compatibility: Standard female touchproof (1.5 mm) electrode leads, all BIOPAC

electrodes and leads that terminate in female 1.5 mm touchproof

sockets, all BN- EL and BN-Adapt series.

Testing Configurations Active (Vin+) to Reference (Vin-), Active (Vin+) to Ground (GND),

Switch Selectable: Reference (Vin-) to Ground (GND)

Power: One 9 V Alkaline battery, ~50,000 impedance tests possible per battery

Dimensions: 14 cm long x 8 cm wide x 2.2 cm high

Weight: 132 grams