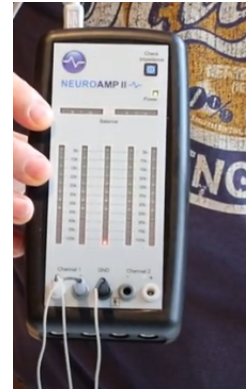


SALT WATER TEST - EN

Aim: Detect if electrodes are broken and check if the quality of the electrode is fine.

Therapists often come to us because they experience the following:
They have a bad EEG signal or when they press the "Check Impedance" button on their NeuroAmp only the lowest red LED lights up for the GND electrode (=ground electrode) and they do not see the impedances of the electrodes¹.

Reason for that single red LED light is that the impedance of one, two or three (all) electrodes are above the maximum which is above 100.000 Ohm. When the impedance of the electrodes exceeds this limit the impedance meter cannot function correctly. Reason for bad impedances can be that the contact of the electrode to the skin is not good enough. It could also be that one or more of the electrodes is broken.



The therapists can do a simple test to find out which electrode is broken. This way the therapist can identify the broken electrode and exchange it by an electrode of the same material. The color of the electrode is not relevant.

How to perform the test

Equipment for the test: glass, distilled water, salt [sodium chloride from the pharmacy or some of the conductive paste (Ten 20)]

- Plug 3 electrodes into the NeuroAmp sockets of channel 1 (even better is to plug electrodes into all five sockets (channel 1 and channel 2))
- You can dissolve some reagent grade salt (sodium chloride) in distilled water or a pea-sized piece of Ten20. This will make the water conductive.
- Hang the electrodes into the glass of salt solution. You should then get green readings on all impedance bars when pressing the "Check Impedance" button.
- The broken electrode will show as a red LED. Please note that the impedance meter always needs at least three working electrodes in order to measure. This is why you should connect all five electrodes, if possible.
- If only the middle bottom LED is red, then possibly the electrode plugged into the GND socket is broken. Exchange this one for another, because this electrode must always work for the test.

The impedance check should be performed routinely before each session because a broken electrode cannot always be seen in the EEG.

¹ This is only normal when the electrodes are in dry air and not connected to a head.