

# EEG Electrode Manual

## EEG Dry Electrodes and The 10-20 System

The main advantage of Dry Electrodes is to eliminate the need for EC2 or Ten20 electrode paste to achieve electrical contact with the subject. EC2 or Ten20 is difficult for subjects to clean up their hair after the procedure. However, they have the advantage of holding the electrode in place.

The electrical contact is made by the small fingers on the electrode. In the event the contact is not adequate a hole is provided on the top so that electrode GEL can be injected. Electrode gel is much easier to clean up than EC2 or Ten20.

Electrodes can be held in place with a head band, hair clips or an electrode cap. An electrode cap has the advantage of indicating the areas to clean.

The first and **most important step** is to clean the electrode site. This can be done with alcohol or prep solution with a Q-tip.

The TDE-201 Disposable / Reusable Wet (or Dry) EEG Electrode is the better choice for forehead placements and the TDE-430 Silver-Silver Chloride Ear Clip Electrode for ear connections.

A good discussion of the 10-20 System is in Wikipedia see [http://en.wikipedia.org/wiki/10-20\\_system\\_%28EEG%29](http://en.wikipedia.org/wiki/10-20_system_%28EEG%29)

Another source is the 10/20 Position Manual. [http://www.transcranial.com/local/manuals/10\\_20\\_pos\\_man\\_v1\\_0\\_.pdf](http://www.transcranial.com/local/manuals/10_20_pos_man_v1_0_.pdf)

TDE-200 and TDE-201 electrodes can be used a number of time as long as they are not damaged. They are only used one time where the person does not what to clean the electrode after each use.