WHAT IS DCN128?
HOW WERE THE NORMS ESTABLISHED?

Digital Clinical Norms-1.0 (DCN-1.0) REFERENCING DATABASE software, by John N Demos, MA, LCMHC, BCIA-EEG, provides a graphic and numeric presentation of the EEG from 12 key International 10-20 system scalp locations. Digital EEG data are acquired from a two-channel EEG amplifier connected to Brainmaster's MiniQ® hardware. Data are displayed by Microsoft Window's Excel® in accord with Brainmaster's Quick File format. Files are uploaded automatically to DCN-1.0.

DCN-1.0 software for MiniQ® processes 6 minutes of data with eyes open as well as 6 minutes of data with eyes closed: two Excel® files of 6 minutes each are created. EEG data are graphically displayed as ratios & proportions, digital amplitude norms as well as coherence percentages. Also included is a summary page with neurotherapy protocol suggestions for suspected cognitive or emotional disturbances. DCN128 ver.1.1 includes adults and children; the database is made up of 30 adults ranging in age from 16-55 and 39 children ranging in age from 7-15 years old.

Candidates for this database were picked in accord with several criteria:

No medication
No diagnosis
Not in treatment as a client
Normal social life
Employed or employable for adults
Passing all subjects for children.

Any test subject whose EEG was clearly over aroused or under aroused was deleted from the database, hence about 10-15 others (children or adults) were disallowed or removed and no part of the above listed numbers.

Live artifacting is used to limit the influx of movement (EMG) and eye movement (EOA). This is accomplished by repeatedly pressing the "r" key until BrainMaster's thresholding bars are set properly. All data that exceeds the set threshold is deleted from the final record to be processed.

The official name for the software is *Digital Clinical Norms Referencing database*. Users compare their client's data with the mathematical mean or average for each of BrainMaster's eight filters. Database results teach users to pin point the mean of each age range. Users soon learn what to look for or expect from a normal EEG, that is, normal as far as it compares to the referencing database. It must also be noted that an innovative math process to determine deviations from the norm. Standard deviations were not employed. The goal of this educational product is to clarify the connection between data and results. For example, users quickly learn common ratios, coherence and variability patterns in graphic and numeric patterns. For

example, a 3:1 theta-to-beta ratio means that the amplitude of theta was three times greater than the amplitude of beta. Clinicians will be able to use training data to track changes in the original assessment.

Skilled clinicians will have no difficulty acquiring and processing data within the typical one hour session. Clients will see data on screen before a typical one hour session is over.

This product was designed for BrainMaster. All data for the referencing database was acquired with Brainmaster systems--*No conversion process* was used; FFT was not used. The data rendered relates directly to BrainMaster's 6th order Infinite Impulse Response (IIR) filtering--that has been available for many years. When clinicians acquire data from new subjects they will be using the same equipment and format that was used to create the database. All data is presented in a user-friendly fashion for health care professionals rather than for researchers.

DCN128-1.0 is intended for review and interpretation by a trained health care professional. Neurotherapy is not intended to substitute for appropriate medical treatment.

If you would like to contribute or add to this referencing database. Please email me at workshop@sover.net.

DCN128-1.0 is a product of Neurofeedback of S.VT, LLC.

$695 for Version 1.0
Call 802-254-3305 to order