

## **TINNITUS SUITE**

#### **Limited Edition Software Suite**

This Tinnitus Suite is based on the published work of Dr. Dohrmann and her research group at Universität Konstanza, in Germany, as well as on-going research by Eliana Sapaio, PhD. Linda Walker, one of the Biofeedback Federation of Europe's software developers and senior instructors, adapted the methodology into an easy-to-use software package. As a tinnitus-sufferer herself, Ms. Walker feels this software was an excellent starting point for therapists and researchers who wish to continue with their own research interests related to Tinnitus and to provide them with a framework for reducing tinnitus via neurofeedback training. The protocols base heavily on the up-training of the alpha/delta ratio amplitude at several sites of the brain, in order to diminish the "ringing" or "roaring" sensation, but the suite can also include focused work on the Alpha, Delta or Gamma ranges. The suite includes:

- Two neurofeedback training protocols, both with durations of 30 minutes. One protocol
  follows closely to the Dohrmann protocol while the other is a modification to suit Ms.
   Walker's training style. Instructions for the therapist and subject are embedded directly
  into the software when running a protocol
- Open session training, with durations decided by the therapist, remain available with 4 different training screen variations for Alpha/Delta, Alpha, Delta or Gamma.
- Training occurs simultaneously with either 2 or 4 EEG sensors.
- Possibility of Z-Score statistics monitoring, for those with the Z-Score license. For users without the license, there is no loss in protocol of training screen effectiveness.
  - Suite documents are included with the software, which provide a collection of literature, samples of tinnitus questionnaires, sample data from a tinnitus client, and research notes

Note: Use of the suite requires a 2-monitor computer setup.

**Education & Training Opportunities** 



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## **BioGraph Infiniti Software**

BBioGraph Infiniti Software is the core of all current and future Thought Technology biofeed-back and psychophysiology products. It provides a multimedia rich graphical experience, while capturing and analyzing raw data. It includes all the features and functions required to run our specialized Tinnitus Suite and offers the ability to customize your own screens using the Developer Tool. The suite functions with **BioGraph Infiniti version 5.1.4** or **6.0**, and is designed to provide full compatibility with the latest Windows 8 operating system.



#### Choose the Encoder to Meet Your Needs

You need the encoder to run the software:

• ProComp Infiniti encoder is the eight-channel, multi-modality encoder that has all the power and flexibility you need for real-time, computerized biofeedback and data acquisition in any clinical setting. We only ever use two sensors with this suite.



## **Select Sensor Measurements for Collecting Data**

This list consists of the all sensors that should be used with the suite:

 EEG-Z sensors (x2 or x4) are pre-amplified electroencephalograph sensors with built in impedance checking, for measuring brainwaves. EEG monopolar/bipolar kits with DIN cables are necessary to use these sensors. It would also be highly advisable to purchase a 2 or 4-channel connectivity kit to link the sensor grounds and reference electrode together.



# Additional Computer Setup Information The Tinnitus Suite requires the use of a 2-monitors computer setup.

