

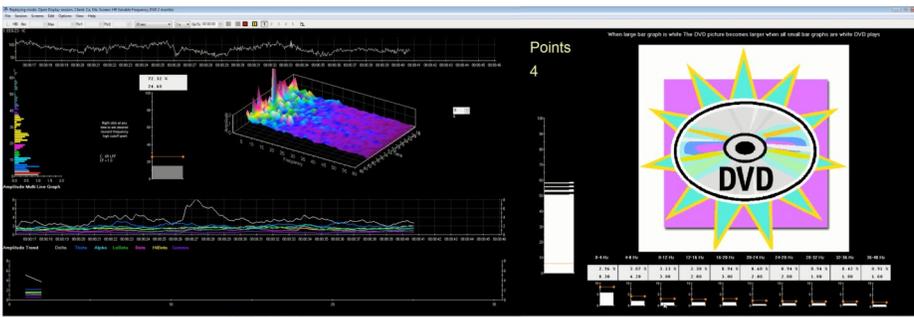
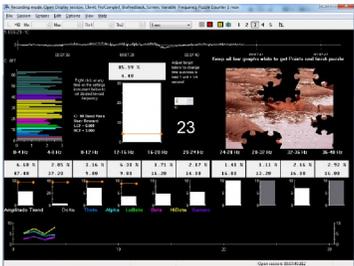
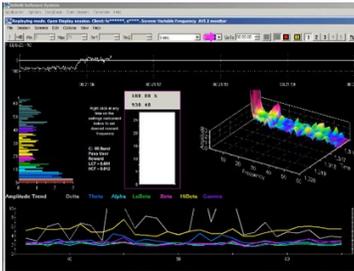


# LOW FREQUENCY SUITE



## Limited Edition Software Suite

Recent work by Dr. Sigfried Othmer and Susan Othmer has stirred interest in low frequency neurofeedback. Taking advantage of the engineering design of the EEG-Z3 sensor, Othmer training protocols can be followed across the ranges of 3.000 to 0.001 Hz. The screens within this suite are a good starting point for practitioners, educators and researchers who wish to further research or work in this specialization. The suite includes:



- Over 25 screens for monitoring and/or training low frequency bandwidth amplitudes. The screens are pre-grouped into Quick Starts for quick session initiation. A variety of feedback animations/videos of DVD options are available.
- Distinctions within the signal processing allow for training of EEG amplitudes according to peak-to-peak or root-mean-squared (RMS) statistics. Training can also be performed with one or two channels of EEG.
- On-screen monitoring of physiology sensors is also enabled.
- 1-monitor or 2-monitor screen setups are available. Two-monitor training makes sure to minimize the distraction of the client on their own monitor, while the therapist can observe at the necessary statistics.
- Reference files and articles, included in the suite documents, provides clinicians with an initial foundation of understanding low frequency training.

## Education & Training Opportunities

The BFE currently offers one type of online lesson/session designed to meet your diverse education and training needs. All sessions provide continuing education (CE) credits to psychologists.

- **6-Hour Low Frequency Neurofeedback Online Class:** four 1.5 hours sessions of online instruction from a qualified instructor on low frequency neurofeedback for the use of neurofeedback training on a general population. This class is well suited for beginners or experienced practitioners that want to use the Low Frequency Suite and methods in their practice. All aspects of using the software will be covered in great detail, and recorded data will be reviewed to ensure proper recording. Interpretation of data by the instructor will occur, however focus is maintained on being able to successfully use all aspects of the software and equipment.

If you are interested in arranging other types of qualified instructor-guided lessons, then the BFE would gladly do so. Please contact the BFE Shop ([shop@bfe.org](mailto:shop@bfe.org)) do make such arrangements.



**For more Information or Questions: To purchase the suite and/or education & training, go to the BFE Shop:**

**bluelowfrequency@gmail.com**

**www.bfe.org/buy**



## BioGraph Infiniti Software

BioGraph Infiniti Software is the core of all current and future Thought Technology biofeedback 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 Low Frequency 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.

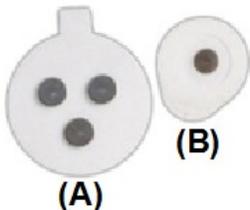


**x1 or x2**

## Select Sensor Measurements for Collecting Data

This list consists of the all sensors that can be used with the suite. The minimum requirement is one EEG-Z3 sensor. All non-EEG sensors are for monitoring data only.

- **EEG-Z3 sensors (x1 or x2, although only 1 is best)** are pre-amplified electroencephalograph sensor with built in impedance checking, for measuring brainwaves. **DC-EEG monopolar/bipolar kit with DIN cable** is also necessary to use this sensor. Potentially necessary would also be the **DC-Connectivity kit(s)** appropriate for connecting the two EEG-Z3 sensors together for a referential setup.
- **MyoScan-Pro sensor** is a pre-amplified surface electromyography sensor for measuring muscular tension. Disposable electrode pads are necessary with this sensor.
- **BVP sensor** is a blood volume pulse detection sensor (otherwise known as a PPG sensor) housed in a small finger worn package, to measure heart rate & provide BVP amplitude, BVP waveform, HR and Heart rate variability feedback.
- **Respiration sensor** is a durable, latex girth belt for monitoring respiration rate, waveform and amplitude sensor.
- **Skin Conductance sensor** measures the conductance across the skin, and is normally connected to the fingers.
- **Temperature sensor** measures skin surface temperature between 10°C – 45°C (50° F - 115°F ).



## Disposable Electrodes for MyoScan-Pro (EMG) Sensor

If using the MyoScan-Pro sensor, it is necessary to purchase at least one type of disposable electrodes for its effective use. There are two potential electrode placement types, so there are also two types of electrodes for purchase. The **triode (A)** disposable electrode is used for narrow placement and the **unigel (B)** for wide electrode placement.

## Additional Computer Setup Information

The Low Frequency suite is designed for use with either a 1-monitor or 2-monitors computer setup. Purchase of a second monitor is required if the user wishes to take advantage of the 2-monitor screens.