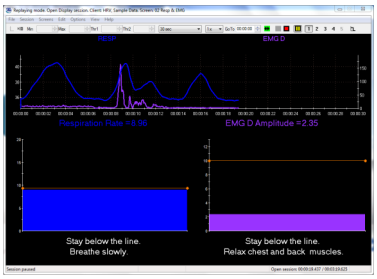
Heart Rate Variability (HRV) Suite

Don Moss, PhD and Fred Shaffer, PhD



Limited Edition Software Suite

Don Moss, PhD and Fred Shaffer, PhD are well known in the biofeedback world for their published works and expertise with regards to heart rate variability (HRV) and biofeedback in general. A team of clinicians and the BFE collaborated with Dr. Moss and Dr. Shaffer in order to implement their research and methods into a software suite for training HRV. From that work, the Heart Rate Variability Suite was born. The software and supporting documents teach the techniques for a variety of convergent training strategies necessary for increasing HRV. Psychologists, therapists and other health practitioners will find this suite, and included clinical guide, particularly helpful for entering the field of HRV biofeedback. The suite includes:

- Over 30 training screens, to be used with progressive strategies for increasing HRV. The screens focus on HRV, but can also measure muscle tension data, skin conductance and temperature. Even some secondary EEG monitoring exists.
- Training screens with designed for 1 or 2 monitor setups.
- One general stress assessment script (19min) and six HRV-related training scripts (10-14min), that include simple instructions for guiding the client.
- Excel reports that enable easy data interpretation for the general assessment and resonant frequency determiner script.
- Heart rate data monitoring can be done with either the BVP (blood-volume pulse) or EKG (electrocardiogram) sensor, depending on the supervising clinicians' preference.
- Software manual for explaining technical details of the software and equipment.
- Clinical manual, originally written by Dr. Moss and Dr Shaffer and expanded upon by the BFE, on HRV theory and training strategies for use with the suite or in general practice.

Education & Training Opportunities

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

- 6-Hour **Heart Rate Variability (HRV) Class**: 4 x 1.5 hours of online instruction from a qualified instructor on assessment and training for increasing heart rate variability. This class is well suited for beginners or experienced practitioners that want to use proper recording. Interpretation of data by the instructor will occur, however focus is maintained on being able to successful use all aspects of the software and equipment.

- 3-Hour **HRV Grand Rounds**: attend live 60-minute online sessions scheduled monthly for three consecutive months and take the opportunity to ask Dr. Moss or team members your questions about different training methods, share new information and discuss cases. Demonstrations of recorded and live data and other information set in an interactive framework provide up-to-date, relevant summaries that can immediately be put to use.

For more Information or Questions:

redhrv@gmail.com

To purchase the suite and/or education & training, go to the BFE Shop:

Www.bfe.org/buy

HEART RATE VARIABILITY (HRV) SUITE

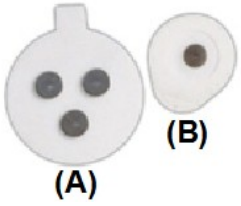
DON MOSS, PHD AND FRED SHAFFER, PHD

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 HRV 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.

Required Encoder for running 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. It records data from up-to eights sensors simultaneously.
- **ProComp 5 encoder** is similar to the ProComp Infiniti, however can only record up-to 5 channels of data simultaneously.
- **ProComp 2 encoder** is a compact, 2 channel version of the ProComp Infiniti encoder, which can be easily worn on a head band or a shirt collar. It can record date from up-to two sensors simultaneously.



Select Sensor Measurements for Collecting Data

This list consists of the all sensors for use with this suite, by to encoder type. The respiration and heart rate sensors required, while others are useful, but optional.

- **MyoScan-Pro sensors (x2 ProComp Infiniti; x1 ProComp 5)** are pre-amplified surface electromyography sensors for measuring muscular tension. Disposable electrode pads are necessary with this sensor.
- **BVP sensor (x1 all encoders)** is a blood volume pulse sensor to measure heart rate & heart rate variability. It is not necessary to own both BVP and EKG sensors.
- **EKG sensor (x1 all encoders)** is a pre-amplified electrocardiograph sensor that gives us heart rate and heart rate variability information. It is not necessary to own both BVP and EKG sensors.
- **Respiration sensors (x1 all encoders)** are durable, latex girth belt for monitoring respiration rate, waveform and amplitude sensor.
- **Skin Conductance (x1 ProComp Infiniti/5)** sensor measures the conductance across the skin, and is normally connected to the fingers.
- **Temperature sensor (x1 ProComp Infiniti/5)** measures skin surface temperature.
- **Experimental: EEG-Z sensor (x1 ProComp Infiniti)** is pre-amplified electroencephalograph sensor with built in impedance checking, for measuring brainwaves. **EEG monopolar/bipolar kit with DIN cable** is also necessary to use this sensor.

Disposable Electrodes - Triode and/or Unigel

The MyoScan-Pro sensors require the purchase of one type of disposable electrode: the **triode** disposable electrode (A) is used for narrow placement and the **unigel** (B) for wide electrode placement. The EKG sensor requires the purchase of **unigel** electrodes (B).

Additional Computer Setup Information

The software suite allows (but does not require) for a dual-monitor setup for training clients. Purchase of a second monitor is required if the user wishes to take advantage of that option.