



# UPPER TRAPEZIUS EVALUATION SUITE



## Limited Edition Software Suite

The Upper Trapezius Evaluation suite is based on pain research conducted by Susan Middaugh, PhD, PT, which was subsequently adapted into clinical method by Tony Hughes, PhD, MFCC. Jane Arave, LPC, and Pedro Teixeira, PT, who have worked together and separately on other BFE teams, adapted Dr. Hughes method to this equipment and software platform. This suite was adapted and designed for professionals, educators and researchers who want to use surface electromyography biofeedback with those suffering from back pain, neck pain, tension headaches. Athletes in various sports can also benefit from such an evaluation since elevated tension or asymmetry impede motion and decrease fluidity of movement (such as with golfers). The suite includes:



- The Upper Trapezius Evaluation script, for assessing muscle asymmetry and elevated resting tension between upper trapezius muscles, by comparing resting muscle tonus to that of specific simple movement exercises.
- Excel Report for interpretation of the Upper Trapezius Evaluation statistics. The relevant muscle tension means from each activity are arranged for easy reading and interpretation of clinically relevant asymmetry and over-activity.
- Simple retraining screens are for teaching progressive relaxation of muscles.



## Education & Training Opportunities

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

**Upper Trapezius Evaluation Report**

For Client: [Name], Date: [Date]

Activity	Left Trapezius (mV)	Right Trapezius (mV)	Asymmetry (%)	Notes
Resting	139.30	82.66	40.00	
SHRUG	139.30	82.66	40.00	

*Note: This report is for informational purposes only. It is not a medical diagnosis. Please consult your healthcare provider for any concerns.*

- **1-Hour Introduction to the Upper Trapezius Evaluation Suite Webinar:** Jon Bale, BFE Research Manager, reviews the software and documents included in the “Upper Trapezius Evaluation Suite” from pre-assessment to training. The webinar covers the following items; authors, goals of the suite, necessary equipment, sensors & accessories, the upper trapezius evaluation, evaluation Excel report, interpretation, and training screens.



Since this suite has only just been put up for sale, no other online lessons or meetings have been scheduled or run in relation to this software. If you are interested in arranging other types of qualified instructor-guided lessons, then please contact the BFE Shop ([shop@bfe.org](mailto:shop@bfe.org)) to make such arrangements. Potential online instructions can include:

- **6-Hour Upper Trapezius Evaluation Class:** four 90-minutes session of online instruction from a qualified instructor on upper trapezius evaluation and training. This class is well suited for beginners or experienced practitioners that want to make use of the upper trapezius evaluation 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 of being able to successful use all aspects of the software and equipment.
- **3-Hour Upper Trapezius Evaluation Case Conferences:** these three 1-hour sessions would consist of online presentation and discussion with a qualified instructor of case examples from practice, including review of excel report data and training plan strategy. The case conference is attended by professionals who are able to properly run the Upper Trapezius Evaluation Suite software and use it with clients. We encourage attendees to bring in their own case examples for review from an expert opinion.



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

[greenirep@gmail.com](mailto:greenirep@gmail.com)

[www.bfe.org/buy](http://www.bfe.org/buy)



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## 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 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 only need one of the encoders and its associated sensors to run the software:

- **FlexComp Infiniti encoder** is the ten-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.
- **ProComp Infiniti encoder** is similar to the FlexComp Infiniti, but records data from up-to eight channels. Its sampling rate is slightly slower.
- **ProComp 5 encoder** is similar to the ProComp Infiniti, but only records data from up-to five channels.
- **ProComp2 encoder** is a compact, 2 channel version of the ProComp Infiniti encoder, although it sampling rate is slightly slower.
- **MyoTrac Infiniti encoder** allows for the measurement of two channels of high-resolution surface electromyography (SEMG) and perform EMG-triggered electrical stimulation. Two EMG sensors are built directly into the encoder.
- **Myotrac3 encoder** is a highly sensitive dual channel sEMG biofeedback device. Two EMG sensors are built directly into the encoder.

The suite only requires recording data from 2 sensors simultaneously.

## Select Associated Sensors Necessary for use with Encoder

Depending on the selected encoder, you may need to purchase two sensors:

- **MyoScan-Pro sensors (x 2)** are pre-amplified surface electromyography sensors for measuring muscular tension. These sensors are required for the ProComp Infiniti, ProComp 5 and ProComp 2 encoders. Comes with EMG extender leads.
- **MyoScan sensors (x 2)** are pre-amplified surface electromyography sensors for measuring muscular tension. These sensors are required for the FlexComp Infiniti encoder. Comes with EMG extender leads.

No sensor purchases are required for the MyoTrac Infiniti or Myotrac 3 encoders, since the sensors are built directly into the encoders.



## Disposable Electrodes (100 per box)

Disposable electrodes are necessary for all sensors or electrode leads. Since there are two electrode placement types, there are also two types of electrodes. The triode disposable electrode is used for narrow placement and the unigel for wide electrode placement. You will need to purchase at least one type of disposable electrode:

**(A) Triode electrode**, with standard 2cm spacing of silver silver chloride electrodes, backed with nickel plated brass snaps to prevent corrosion when connected to pre-amplifiers for extended periods.

**(B) UniGel electrodes**, pre gelled single electrodes, or sensitive placements on dry skin.

