



# TEMPEROMANDIBULAR DISORDERS (TMD) SUITE

Paul Canavan, PhD



## Limited Edition Software Suite

Temperomandibular disorders (TMD) are a group of problems characterized by a dull, deep orofacial pain typically in front of the ear, the muscles of mastication, the masseter in particular, or the temporomandibular joint (TMJ), which can result in decrease in function and quality of life for the individual. Dr. Paul Canavan, professor at Northeastern University, brings his clinical knowledge and experience in physical therapy and rehabilitation to this suite for the treatment of TMD.

Through the use of surface electromyography and this software suite, physical therapists and clinicians can assess for over-activity, elevated resting tension and asymmetric muscle activity in the myofacial region. The suite includes:

- Two assessment scripts for designed specifically for determining the base muscle tension levels of the myofacial region, during three different exercises.
- Three training scripts for muscle re-education—one for each type of training exercise (mandibular opening, protrusion and tongue roof-to-mouth).
- Option for “open display sessions”, if the clinician prefers to not make use the fixed training protocols.
- Suite documents are included explaining the training methodology and how to initiate software recordings.



## 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.

**6-Hour Temperomandibular Joint Disorders Online Class:** four 90 minutes sessions of online instruction from a qualified instructor on the use of the TMD software for treatment of TMD. This class is well suited for beginners or experienced practitioners that want use Jeff Dr. Canvan’s SEMG biofeedback 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. The class covers the theory of TMD, treatment outcomes, how to run a session on a client (including the non-biofeedback prep and the EMG biofeedback aspects).



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)) to make such arrangements.



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

[greenatm@gmail.com](mailto:greenatm@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 TMD 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 one of the below encoders 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.
- **ProComp 5 encoder** is similar to the ProComp Infiniti, but only records data from up to five channels. We only ever use two sensors with this suite. (Note: when purchasing the suite for this encoder, purchase the ProComp Infiniti edition of the suite. It works perfectly fine with this encoder.)
- **ProComp2 encoder** is a compact, 2 channel version of the ProComp Infiniti encoder, although its sampling rate is lower.
- **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.

## Select Associated Sensors Necessary for use with Encoder

This list consists of all the sensors necessary for running the suite. Depending on the selected encoder, you may need to purchase two sensors:

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



No sensor purchases are required for the MyoTrac Infiniti encoder, since the sensors are built directly into the encoder.



## Disposable Electrodes for Sensors

Disposable electrodes are required for using the sensors (this includes the MyoTrac Infiniti encoder built-in sensors). For this suite, the suggested disposable electrode is the **triode**.