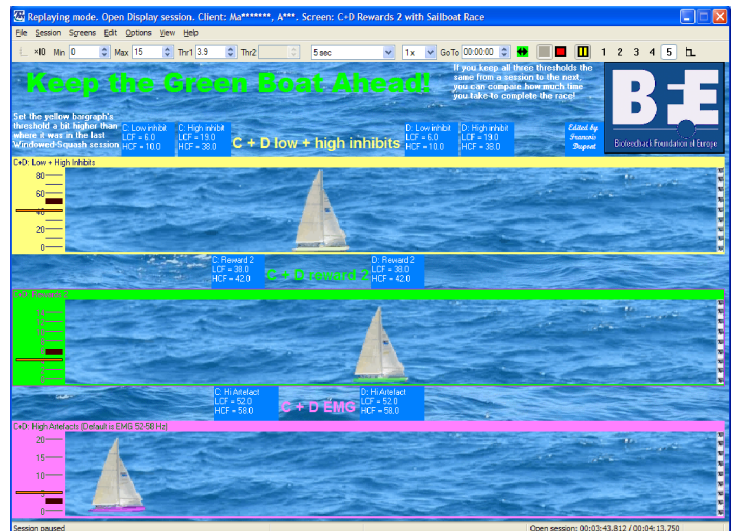
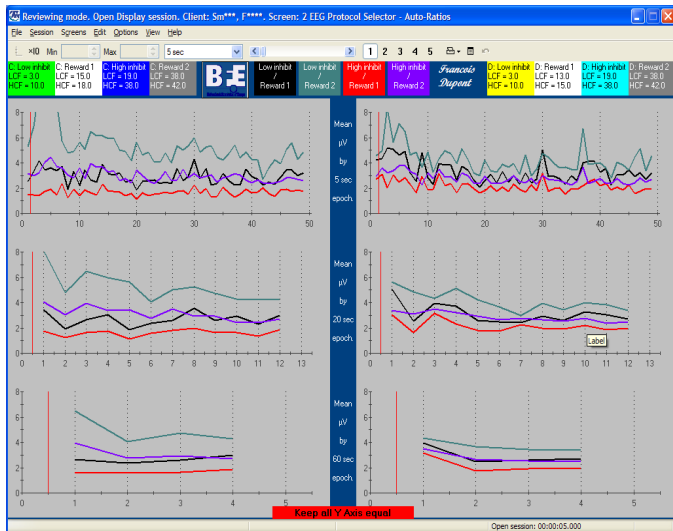
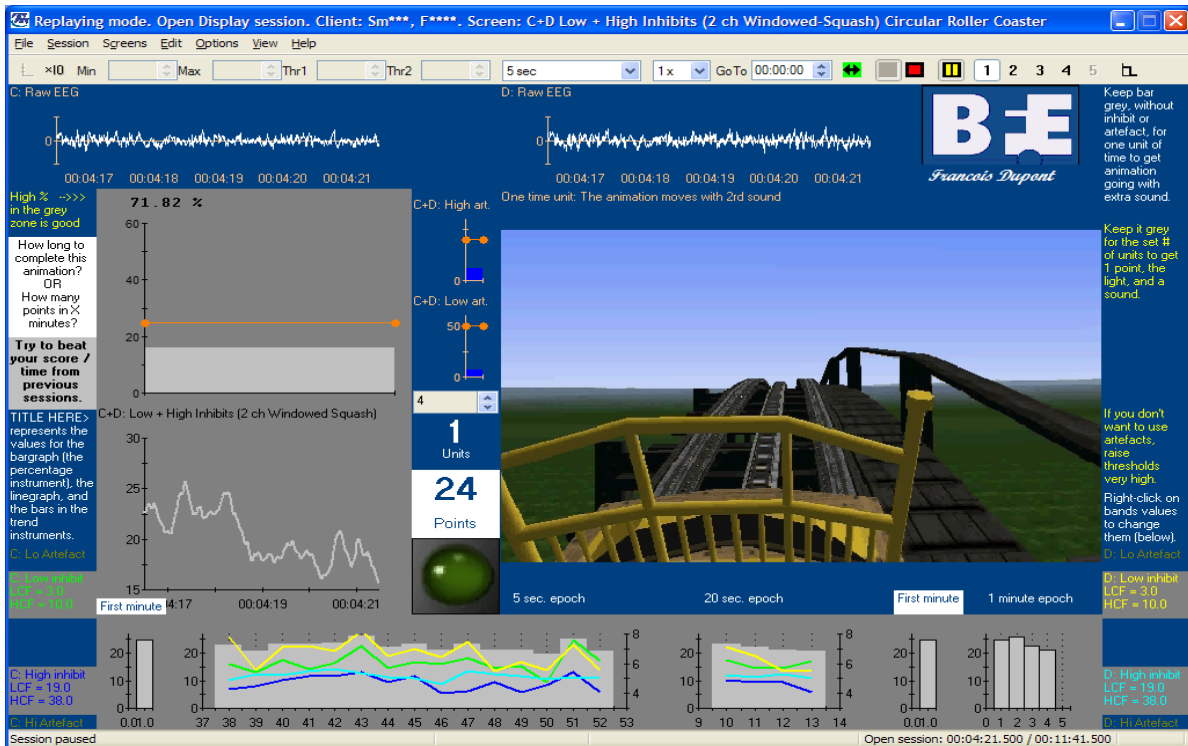


Integrated Neurofeedback

by François Dupont, Ph.D.



LIMITED EDITION SOFTWARE SUITE



Biofeedback Foundation of Europe
Learn From the Best™

About The Author



Dr François Dupont is a Clinical Psychologist in private practice at the Health Services of the University of Ottawa. He began using bio/neurofeedback in 1991 under Paul Swingle's doctoral supervision. He has used bio/neurofeedback in the context of chronic pain, ADHD, ASD, OCD, Tourette's, anxiety, traumatic brain injury, PTSD, etc. Dr. Dupont combines bio/neurofeedback with techniques borrowed from cognitive-behavioral, dynamic/humanistic and experiential approaches. His doctoral comprehensive examination looked at the psycho-socio-existential adjustment to cancer, while his doctoral dissertation dealt with the effect of sub-threshold audio recording on EEG and on behavioral changes in ADHD children. For more information go to: www3.sympatico.ca/fdupont-phd.

Integrated Neurofeedback

While this suite includes some screens with widely used protocols, the main goal of this suite is to facilitate Neurofeedback after some form of assessment used to determine EEG bands and electrode placement sites for training. The assessment may be a full cap QEEG (NeuroGuide, SKIL, WinEEG/HBI, etc.), a mini-Q (TLC assessment, QuickQ, DCN128, etc.), as well as a symptom based assessment such as the Brownback-Mason CNC-1020. Integrating the target EEG data gathered from the assessment, the software in the suite automatically creates numerous training algorithms tailored to the trainee. This approach allows addressing a wide range of conditions and disorders. Also, innovative review screens make the tracking of progress, both within and between sessions, easier than ever. As a result of its flexibility and ease of use, the Integrated Neurofeedback Suite makes a great tool for beginners as well as for research and exploration.

Documentation

The Integrated Neurofeedback Suite includes information on the use of the training screens and the review screens, and how to make the most of the Protocol Selectors.

Sample Data

The suite contains data from clients with different symptoms, so you can replay sessions with different training screens and experiment with the review screens and the Protocol Selectors.

Suite Content Summary

In the Integrated Neurofeedback Suite many screens use multiple bands from 2 channels (most bands are trainee specific). These bands are integrated in one algorithm, which is linked to different instruments (like a bar graph, a line graph, and some trend graphs). Each one of these instruments uses different feedback to create a powerful and yet smooth experience. For example, notes of music are proportional to how deep the line goes into the condition to be reinforced. In parallel, when the bar is held in condition for one unit of time (without inhibit or artefact) there is more sound and the animation moves. And when the bar is held in condition for 4 units of time, there is another sound (like a bell) as well as a green light and one point on the counter. As complex as the algorithm can get (like a 2 channel ratio using 4 inhibit bands and 4 reward bands), it remains in the background (in the channel set). This makes it easier for the trainee to understand what is supposed to move on the screen, and in what direction. It also makes it easier for the clinician to integrate the values suggested elsewhere (in the literature, or in a process of research or exploration) for training with a specific condition, and to keep the ability to train with one main bar graph. Finally, with this one-threshold approach you can very easily implement some interesting options, like trying to beat the time it took to complete the animation in a previous session, or trying to beat the best score in a set number of minutes.

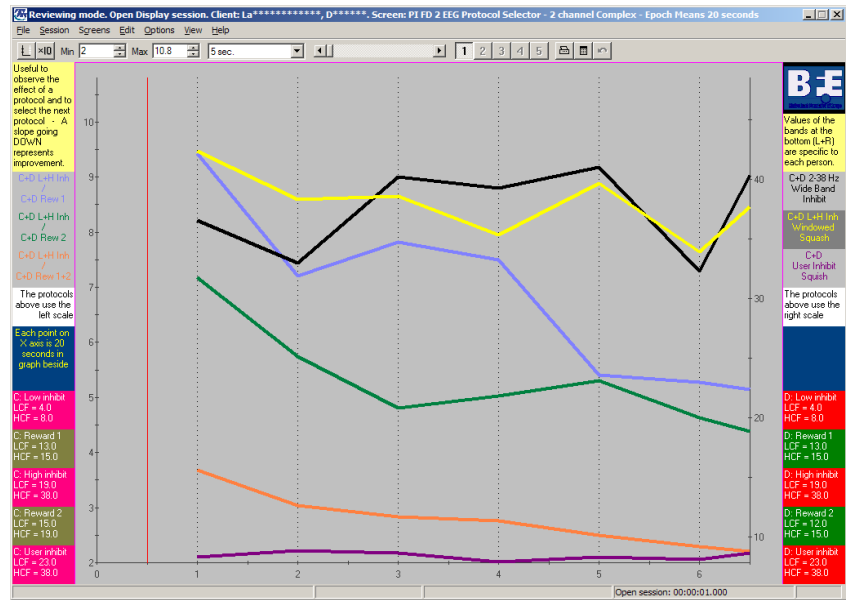
Limited Edition Software Suite

Display Screens

The Integrated Neurofeedback Suite contains many powerful channel sets to support training screens like Alpha-Theta, Alpha and Beta balance, Peak Alpha Frequency, the Simple and Complex Auto-Ratios, the 2 Channel Coherences, the Percentage of Total Power from Joint Time-Frequency Analysis (JTFA - Gabor), the Racing Screens, etc. Every screen/algorithm comes with a version using an AVI animation and a version playing a DVD as feedback. The DVD option is a hit with many trainees. An initial 2 channel screen is used to set the trainee specific bands: Wide Bands, Low and High Artefacts, Low and High Inhibits, Small Band Inhibits, Rewards 1 and 2, etc.

Review Screens

- Most review screens present 2 channels, even when we use only one channel during training. As a rule, left input is used for the left or front of the head and right input for the right or the back of the head. This approach helps the comparison of results from different sessions.
- The Protocol Selector screens plot the actual algorithm (the main bar graph value) instead of displaying only the values of individual bands. For example, it plots the value of "left and right, low and high inhibits" (yellow line) not only to quickly and easily show if the trainee is making progress, but also to verify if another algorithm might be superior to the one used during the recording. Analysing the graph here, one could decide to test the hypothesis that the blue algorithm (2 ch. Ratio with Reward 1), the green algorithm (2 ch. Ratio with Reward 2), or even the orange algorithm (2 ch. Ratio with Rewards 1+2) could bring better results than the yellow algorithm that was used for training.
- Some review screens focus on statistics while others offer the possibility of integrating the same review tools with other BFE and Thought Technology suites (created with different channel sets).



AVAILABLE NOW!

COMPATIBLE WITH:

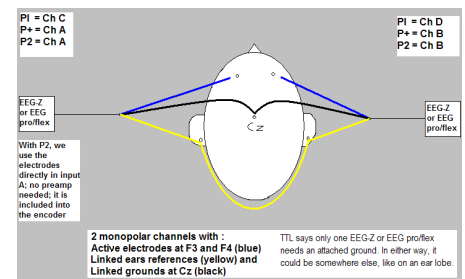
- ProComp2™
- ProComp Infiniti™
- ProComp5™
- ProComp+™

Hardware & Software Configurations

The Suite integrates many features only available in BioGraph Infiniti software version 5; like the shortcuts/favourites placed on the desktop to start a session without opening Infiniti first. Also, a judicious integration of the new feedback smoothing options contributes to an enhanced audio experience.

Suggested Sensors, Extender Cables and Accessories

Optimal use of the suite requires 2 EEG pre-encoders (like the EEG-Z) and related sensors. Linked ear references and common ground is preferable. Contact your equipment distributor for options.



Enhance your practice with specialized software.

When you purchase a BFE Limited Edition Suite, you not only invest in an ensemble of specialized channel sets, screens and scripts for the Infiniti system; but you also join a global network of practitioners and researchers. Being part of this group gives you many privileges including reduced costs for the Learn From the Best program of online lectures, supervision and mentoring sessions and how-to beginner and intermediate level courses. When you use the Infiniti software with a BFE suite you are not only investing in software and documentation you are buying extra time to treat your clients and enhance your practice. What is more, you will know that your purchase is contributing to the advancement of research and education in this exciting field.

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Purchasers agree not to copy or distribute the software without the written permission of the Biofeedback Foundation of Europe.

*Integrated Neurofeedback—Intermediate Level Online Course
Mondays, September 28th, October 5th, 12th & 19th, from 9:00-10:30 EDT*

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