

Interactive Brainwave Visual Analyzer System : IBVA4

Next Step = OSX Bluetooth IBVA4 Intel Mac = Next Dimension

masahiro kahata psychic lab inc. New York, NY, USA

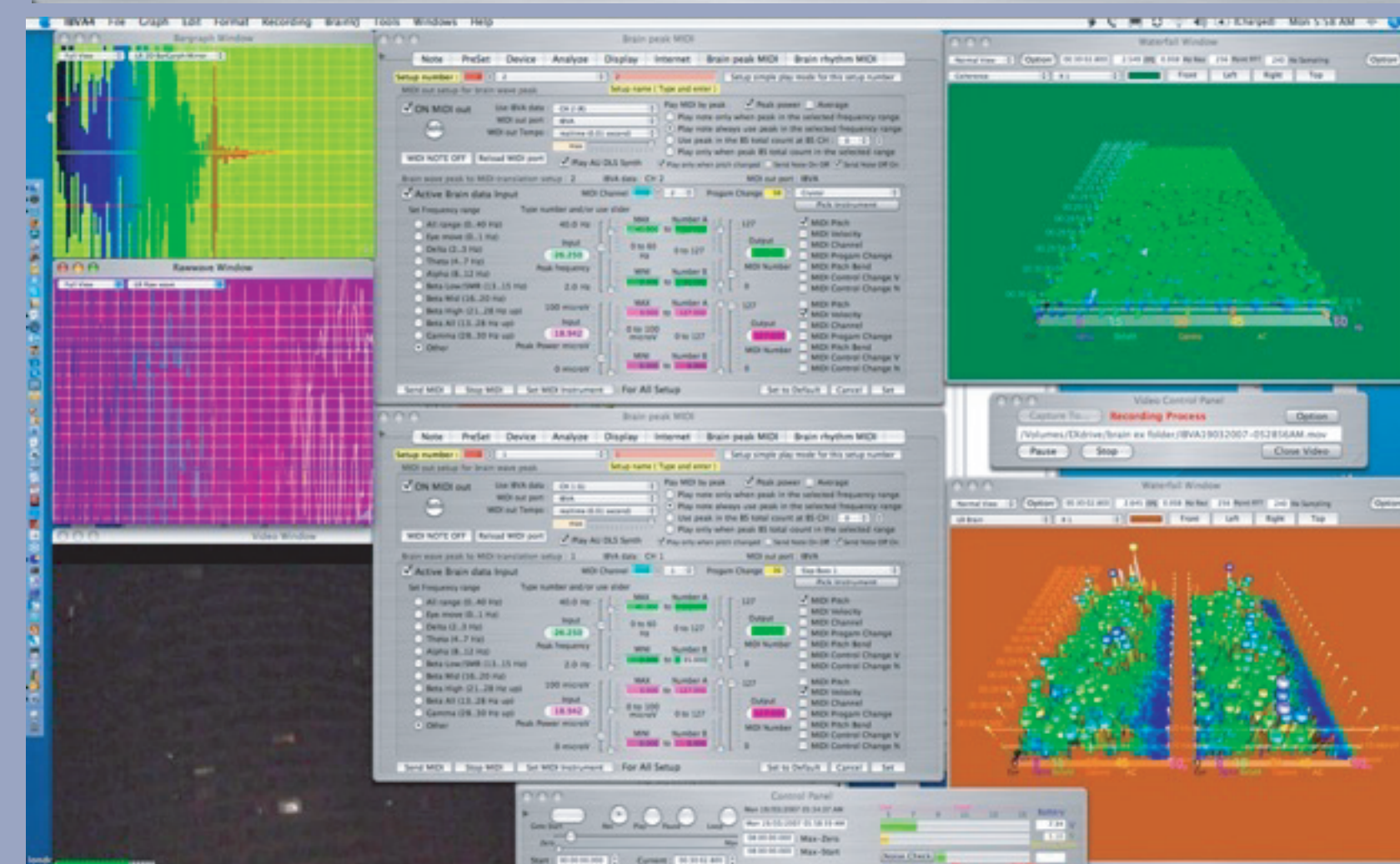
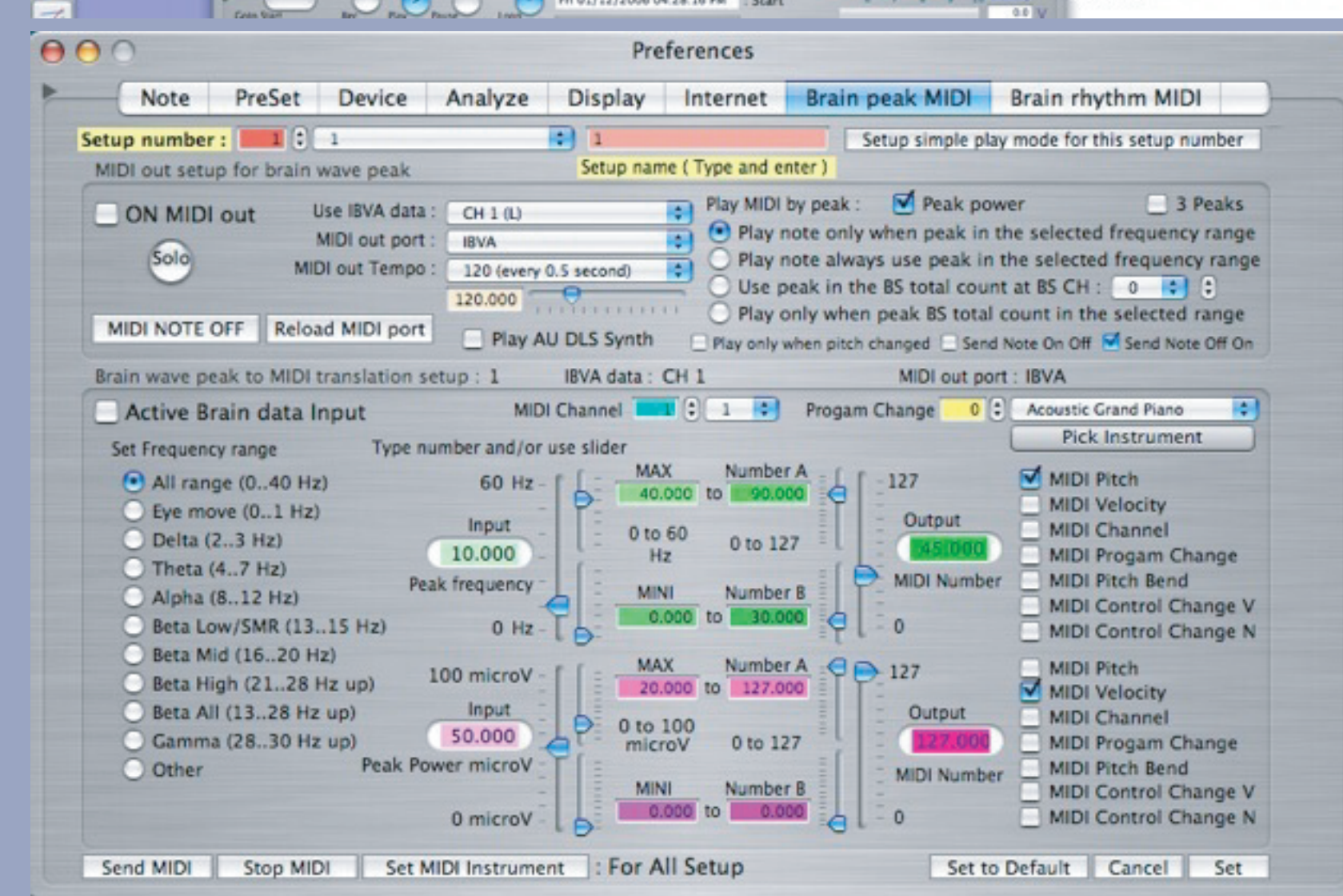
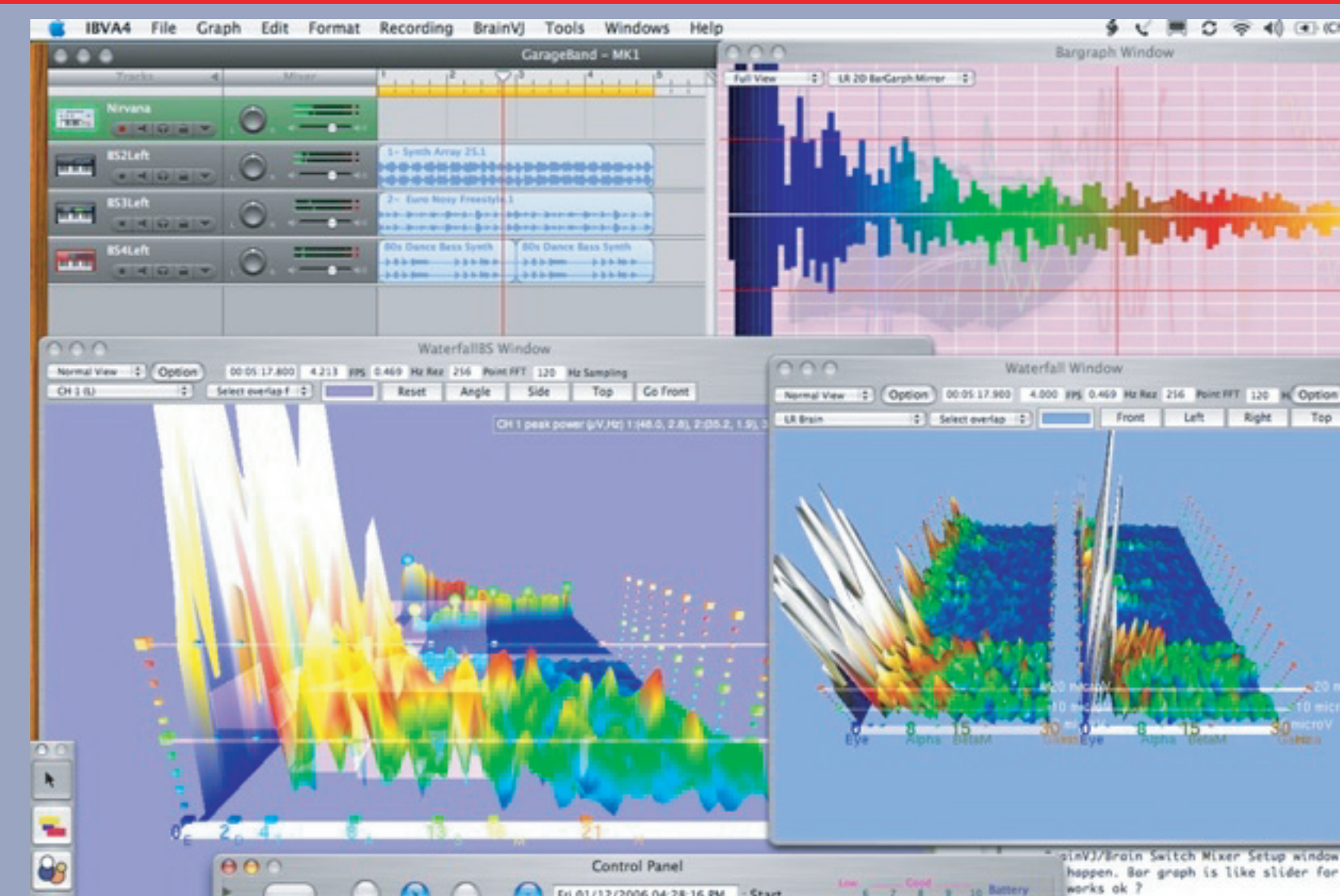


Abstract

EEG Bio & Psychic Feedback System : Bluetooth interface brain wave amplifier and IBVA4 application with Quartz Composer IBVA4 plugin and MAX IBVA4 external for brain wave interactive experience.

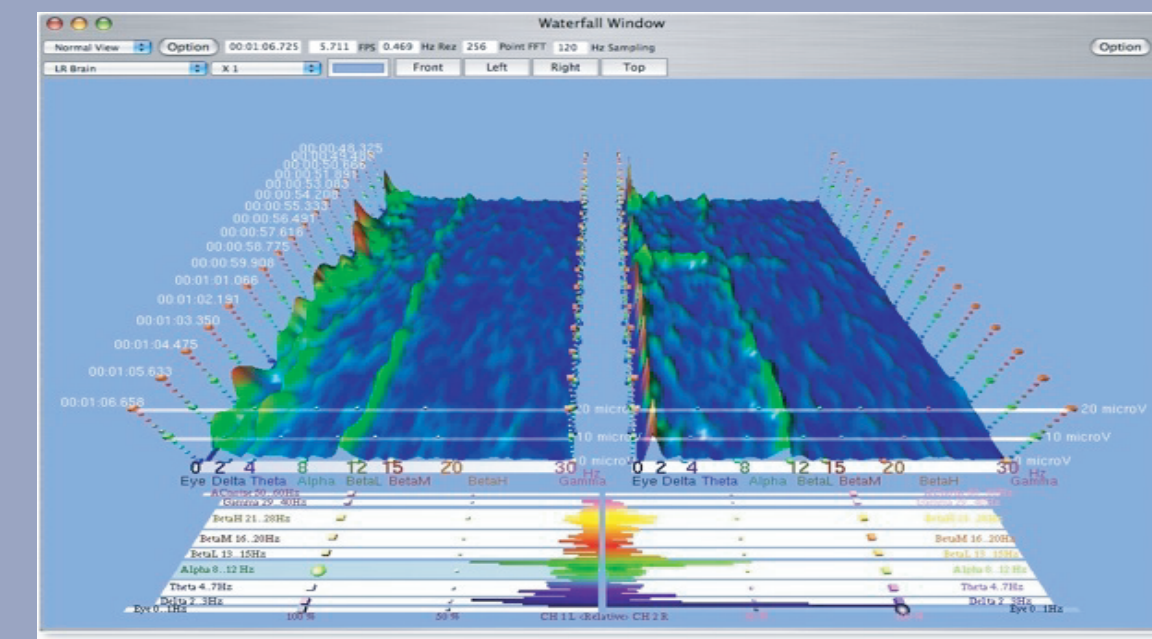
Raw wave, Bar graph, OpenGL 3D waterfall left, right and coherence graph display window. Brain Core MIDI translation for Direct MIDI sound play and/or connect to music composing application, Synthesizer and other MIDI interface system.

Play MIDI sound and Brain DJ

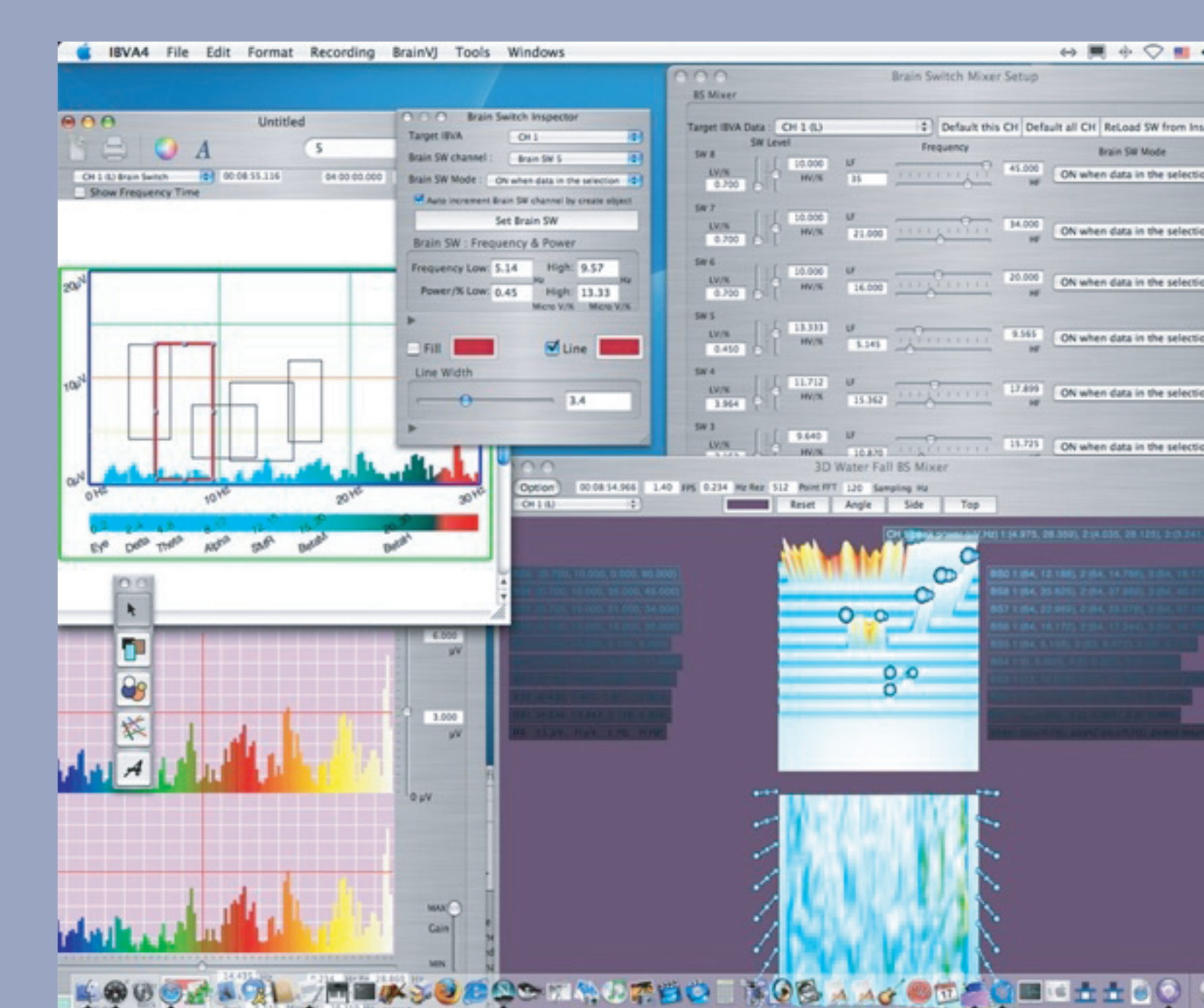
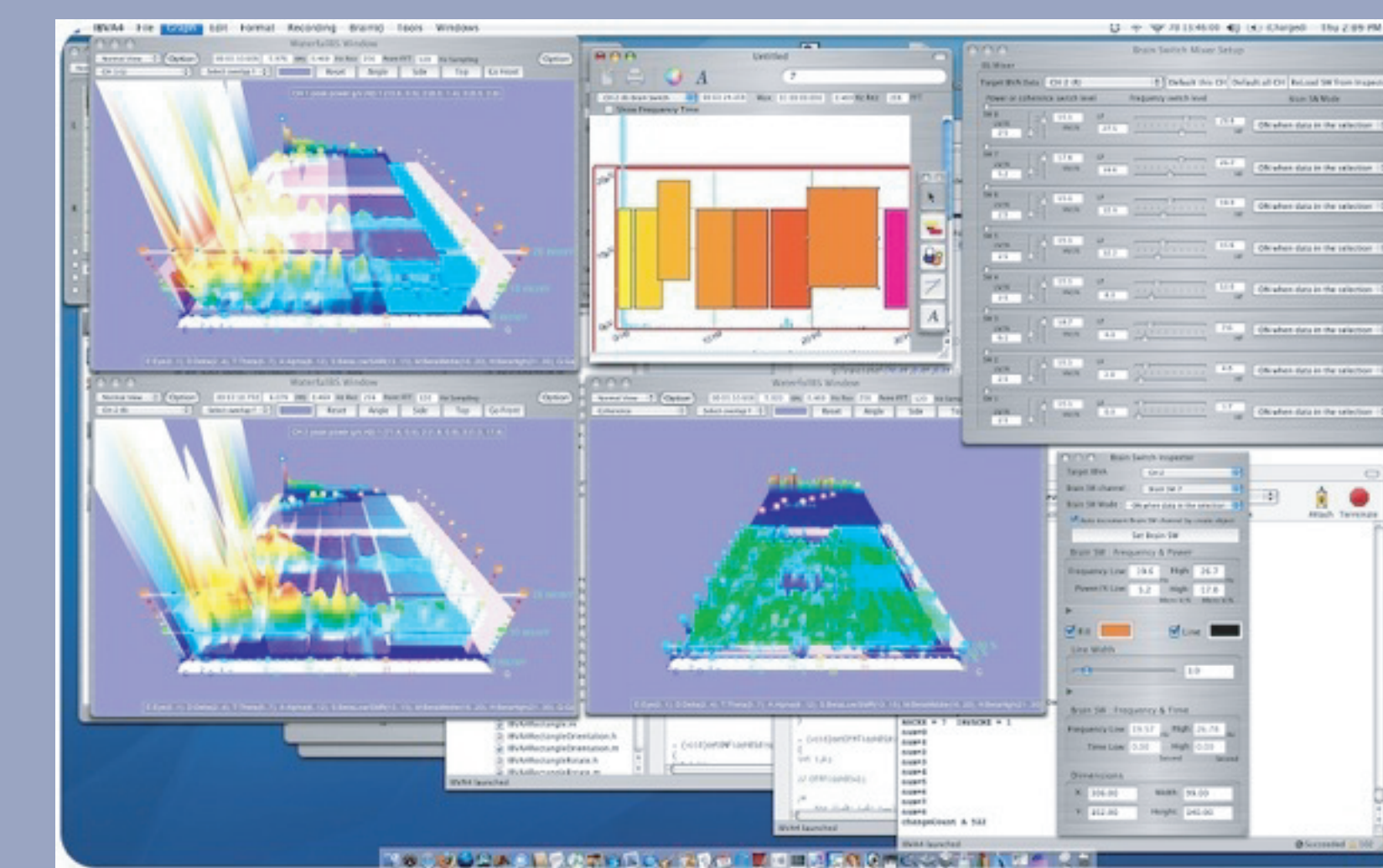


Easy to connect MAX, GarageBand, other applications and external entity via Core MIDI virtual MIDI port: We can create a different setup (1 to 128) for each different IBVA Data channel (1 to 4 and coherence) in the "Brain peak MIDI" and "Brain rhythm MIDI". Each IBVA Data channel can translate MIDI in to different ways and send MIDI to a different MIDI port with different MIDI Out Tempo. Use with high brain wave frequency 3 to 10 times more wide range play can possible.

Continuously Alpha rhythm, meditation inside Crop Circle. August 1997 in UK. 120 Hz sampling, 40 Hz high cut filter.

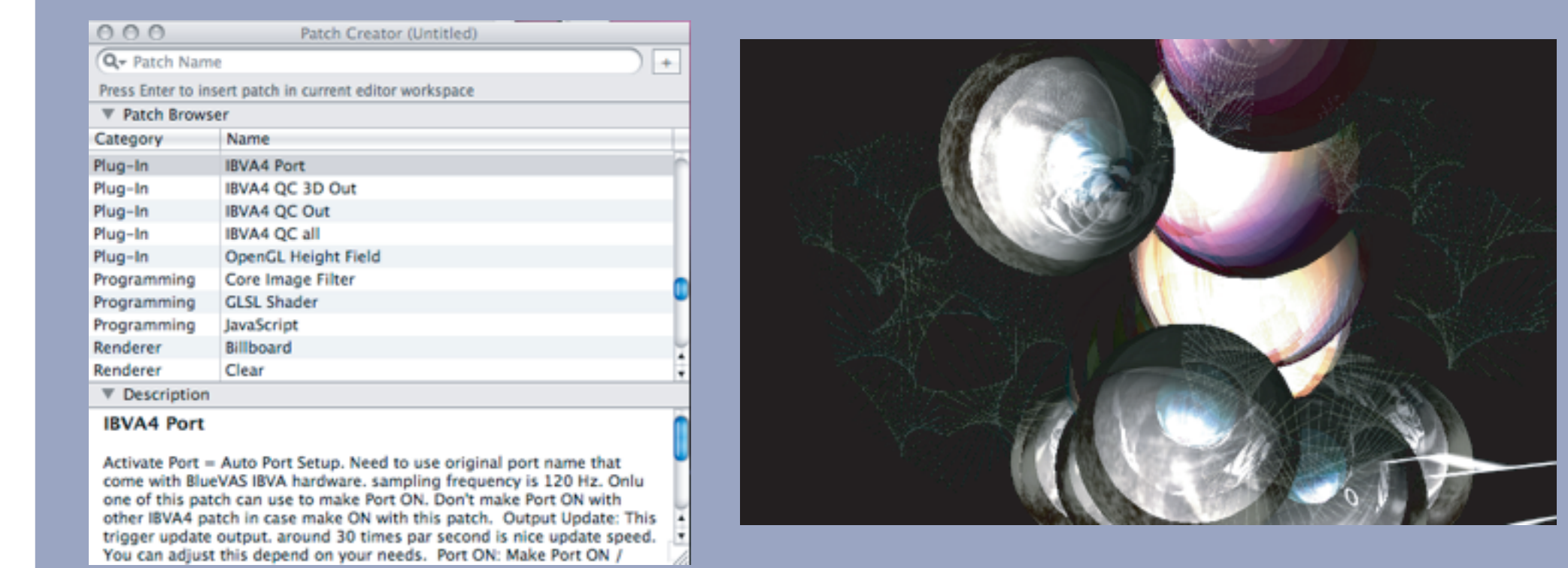


Brain switch mixer setup

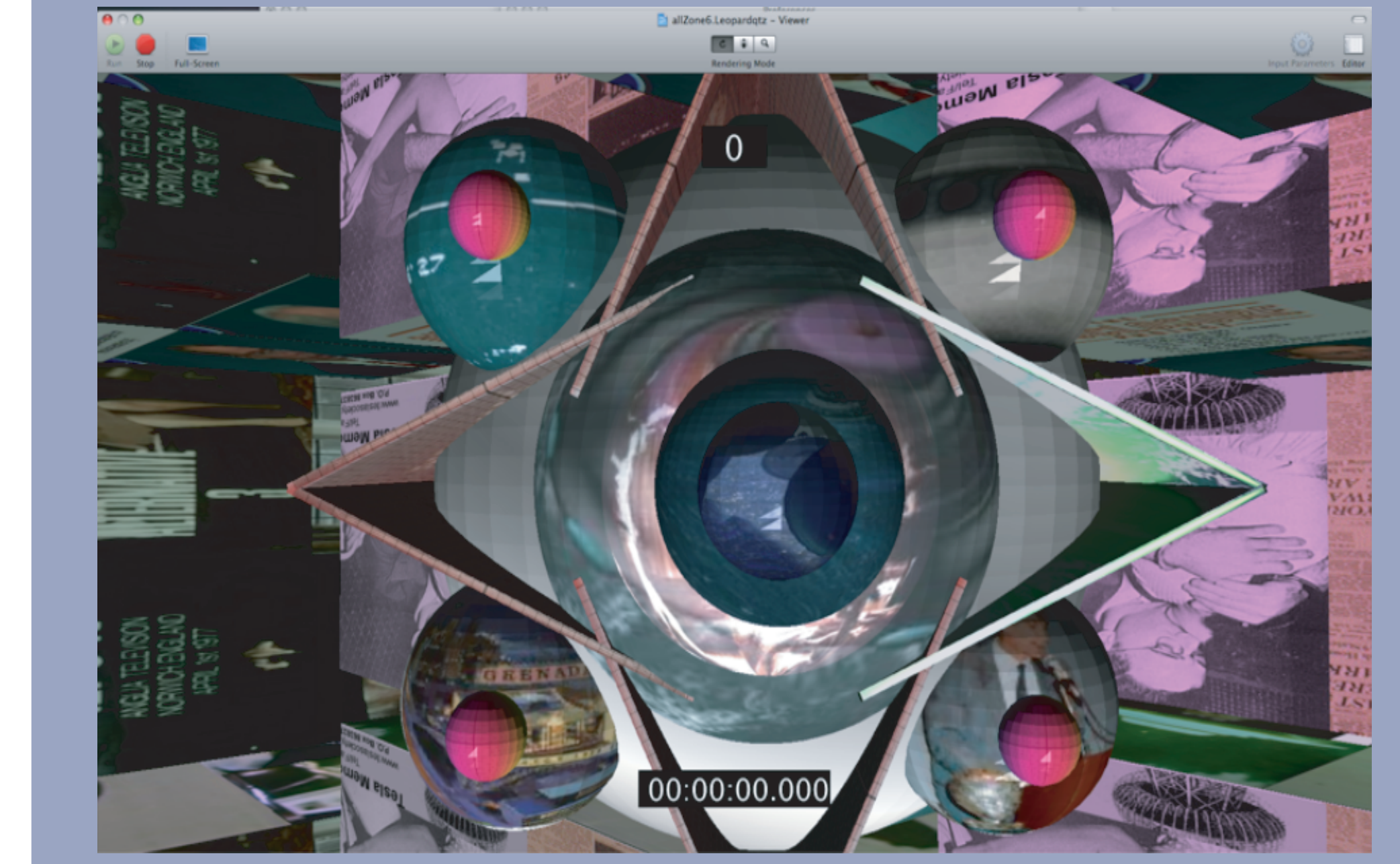
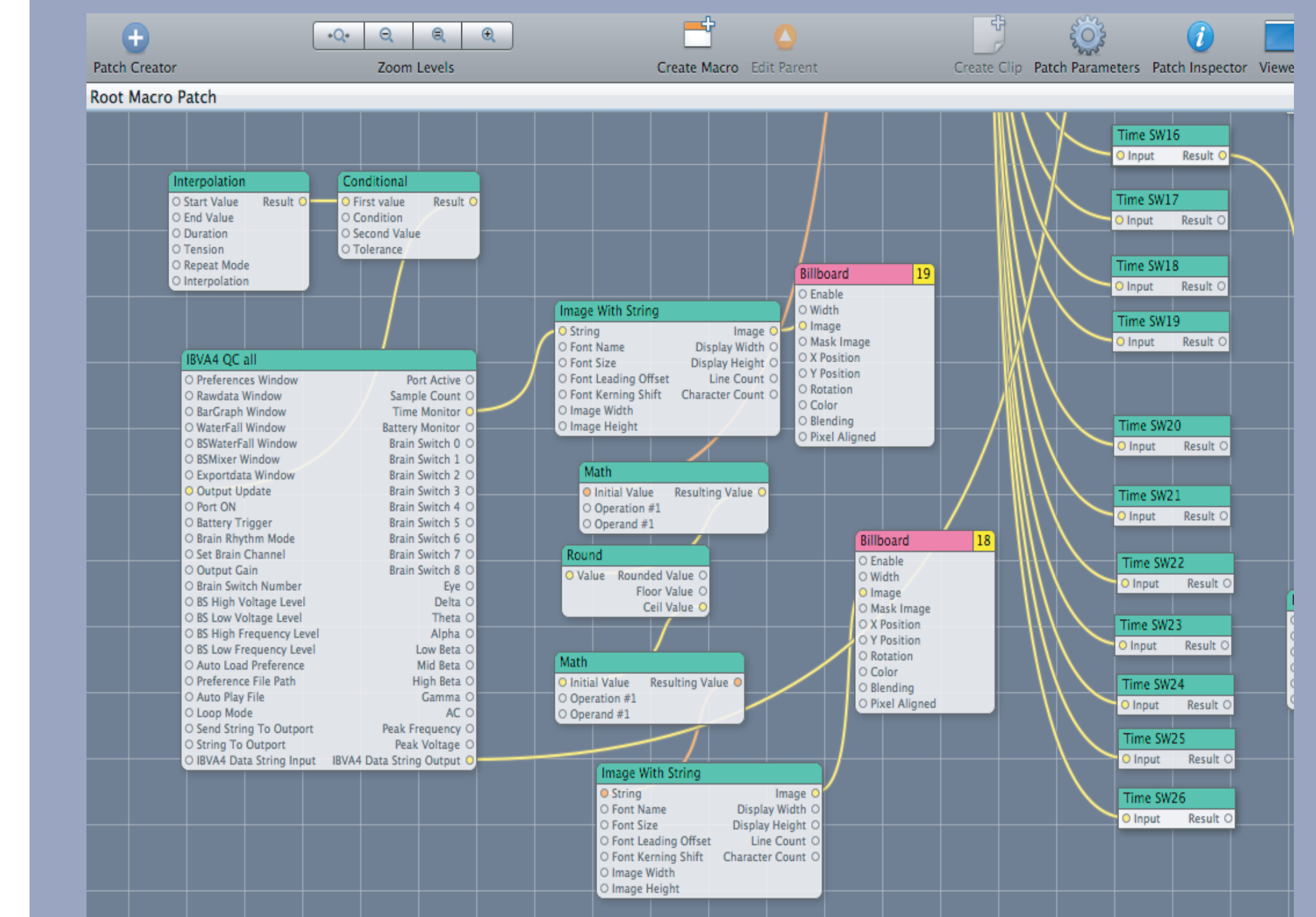


Brain switch : Brain power peaks in each epoch can trigger frequency and power region to make switch count over some epoch time. We can transmit this count number as system notification. Movie control sample is use brain switch to trigger and change start time point of Quick Time movie. Also connect volume and speed control. End user can use this system notification to use there own interactive experience. AU brain plugin use this brain switch notification to sound volume control in the AU supported music application such as GarageBand, Logic, etc. Use for Brain sound mixing.

Quartz Composer IBVA4 plugin



Quartz Composer IBVA4 plugin patch for Brain VJ. Sample patch is brain wave interactive Quick Time movie and picture image control with effect.



Contact & other Info

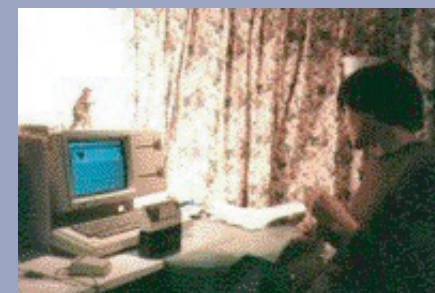
contact@psychiclab.net
http://www.psychiclab.net



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IBVA4 Bluetooth interface System

IBVA4 system is portable EEG system. Start develop it 1983 use Lisa computer with object pascal.



Prototype IBVA demo with OS 3.3 Color Mac II at UFO conference in Sapporo Japan 1987. Actual product IBVA ship since 1991 for System 7. In 1998 IBVA got Best of Show awards at New York Mac world with System 8.

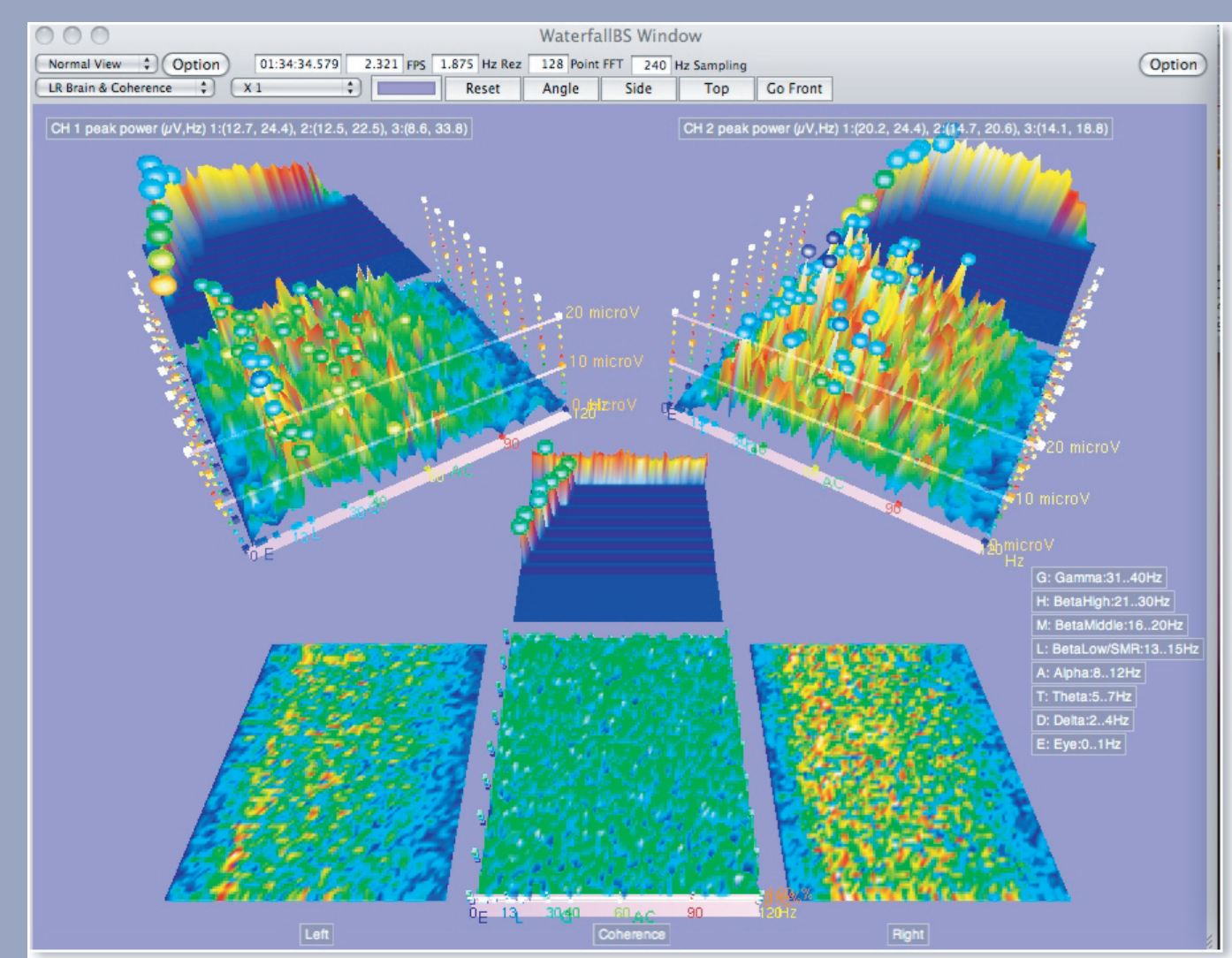


New Bluetooth interface IBVA4 works with any Mac OSX10.5.X. Low noise DC coupling amplifier, variable sampling, digital filter and high common AC noise reduction circuit provide wide range brain wave interactive research and experience.



Classic brain wave category and frequency range is Delta (1..3 Hz), Theta (4..7Hz), Alpha (8..12Hz), Beta (13 .. 30Hz), Gamma (31..40Hz). However with IBVA4 system can see over 900 Hz brain wave. Actually up to 100 .. 200 Hz brain wave power can see normal condition. IBVA4's headset electrode position is forehead which is most development part of human brain, to show personality. Nice tool for Meditation, Hypnotherapy, Brain DV/VJ and brain gesture control.

Left brain wave Right brain wave



Sample image shows right brain wave power over 100 Hz, when listen lecture by Zeev Bioenergetic healer. 240 Hz sampling, 100 Hz high cut filter. 28 May 2008, NY. Next Dimension of the brain wave research and experience.