

Device Report-CIS

Description:

<http://beyondvr.net/index.htm>

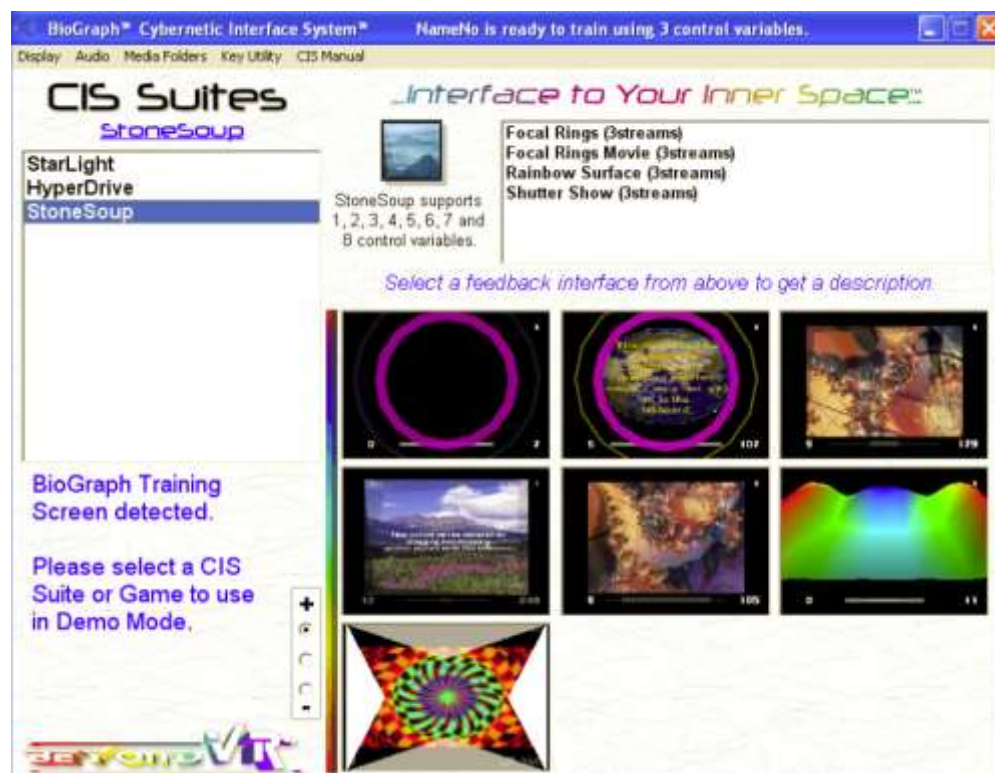
The CIS is the platform for physiologically-controlled 3D graphics. The CIS can provide data visualization or positive and negative reinforcement for multiple incoming streams of data, making it versatile enough to handle feedback for any biofeedback application on the market today. The feedback interfaces define the way the physiologically-controlled content is to look and behave.

Basically designed for clinician to use to create training program.

Feedback Interfaces-The actual 3D scenes used for feedback.

Feedback Streams –A CIS feedback interface is designed to receive and display data for a certain number of incoming stream of data. 3D Relief feedback interfaces only respond to a single stream of data-an audio tone changing in pitch.

CIS Suites-are collection of CIS feedback interfaces.



Supported Systems:

1. BioGraph

<http://www.thoughttechnology.com/>

Their products include clinical grade and portable instrumentation supporting 1-40 channels. They produce a wide variety of instrumentation to monitor surface electromyography (sEMG), electroencephalography (EEG), electrocardiology (EKG), heart-rate variability (HRV), hemoencephalography (HEG), skin conductance (SCL, GSR), temperature, blood volume pulse (BVP), and respiration.

2. Brainmaster

<http://www.brainmaster.com/>

EEG-based equipment, software, systems, publications, and training directed toward the emerging fields of neurofeedback, mental fitness, peak performance, and brain modification technology.

3. EEGer

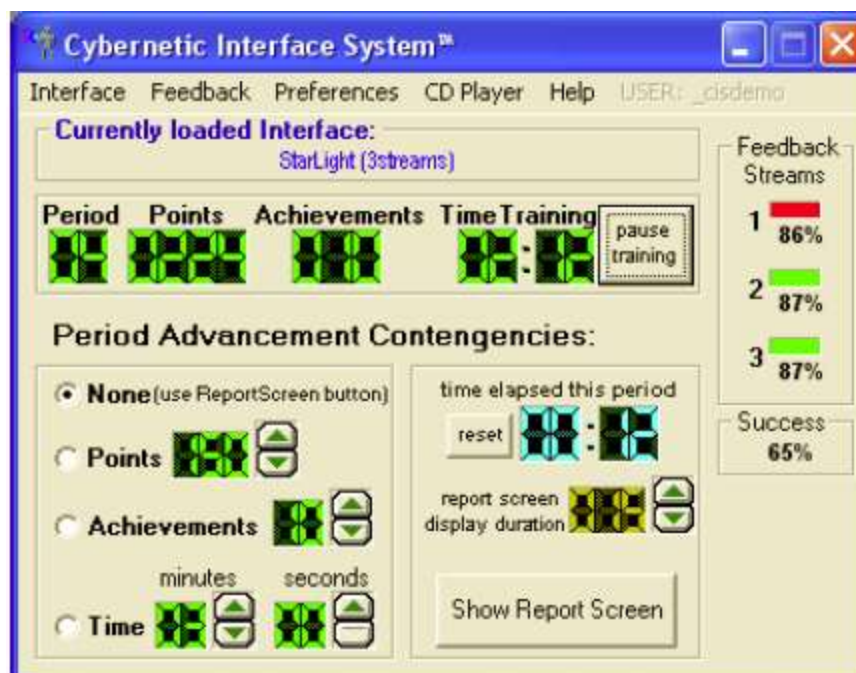
<http://www.eegspectrum.com/>

4. MIDI-controlled

5. Audio-controlled

Pro :

1. Good interface. Easy to create simple program don't need programming



2. Support lots different devices including Thought Technology Biograph which can provide varieties of accurate data.
3. Integrated different biofeedback devices. Make it easy to use different feedback streams.

Con:

1. Can't totally control the program freely. Hard to combine with complicated game play mode.
2. Expensive. For example, If we want to use GSR ,we have to buy hardware from Thought Technology first.
3. Medical devices. Expert knowledge needed to analysis the raw data.
4. Hard to combine motion control.

Conclusion:

According our objective, CIS system is more useful to Build small simple prototype or health training program. Although they said they may support wild divine and neurosky for us, according to their manual and website, the main purpose of their product is in medical use. It is not necessary to buy this platform.