Mind Alive Inc. Product History

Product	Type	Years Sold
DAVID 1	AVE	(1984-1990)
DAVID Jr & DAVID Jr.+	AVE	(1988-1990)
DAVID Paradise	AVE	(1990-2000)
DAVID Paradise Jr	AVE	(1995-2000)
DAVID 2001	AVE	(1995-2003)
DAVID Paradise XL	AVE	(1995 - 2007)
DAVID Paradise TC	AVE	(2000 - 2007)
DAVID Paradise XL +	AVE + CES	(2001 - 2007)
DAVID Pal	AVE	(2003 - 2011)
DAVID Pal 36	AVE	(2003 – 2011)
DAVID Pal 36 & with CES	AVE & CES	(2006 - 2011)
DAVID ALERT	AVE	(2007 - Present)
DAVID Delight	AVE	(2009 – Present)
DAVID Delight Plus	AVE	(2010 – Present)
DAVID Delight Pro	AVE & CES	(2010 – Present)
DAVID ALERT Pro	AVE & CES	(2012 – Present)
DAVID SMART	AVE	(2012 – Present)

- Oasis (3-wire) CES (1993 – 1994)
- Oasis 2-wire CES (1994 - 1995)
- Oasis Stereo CES (1995 - 2001)
- Oasis Variable Frequency CES (2001 - 2007)
- Oasis II CES (2008 – 2013)
- CESta CES & tDCS (2007 - 2011)
- Oasis Pro CES & tDCS (2011 – Present)
- Bioscan EDA EDR Biofeedback (1997 – 2007)
- Bioscan ABT EEG Biofeedback (2002 - 2006)

Definitions

AVE - Audio-Visual Entrainment

CES - Cranio-Electro Stimulation

TENS - Transcranial Electro-neural Stimulation

tDCS - transcranial Direct Current Stimulation

EDR Biofeedback - Electrodermal Response - measures electrical resistance of skin to detect stress

ABT Biofeedback - Alpha Brainwave Trainer - measures brain EEG activity to differentiate between attention and meditation

Audio-Visual Entrainment (AVE) Products

In November of 1984, I began design of the DAVID 1, used to help Performing Arts students overcome stage-fright. I finished the first product in June of 1985. Word caught on quickly with clinicians and I sold about 150 more units.

There seemed to be a need for a lower cost device for the general population, we developed the DAVID Jr., a 10-session AVE device and then shortly thereafter, the DAVID Jr. Plus, which was essentially a DAVID Jr, but one-session (one module) programmable and in an attractive case with a sloped panel.

We wanted an AVE product that had more sessions, a numeric display and a keypad for selecting the various sessions, but also allowed manual control – and so the DAVID Paradise was born. It held 36 sessions and could be manually programmed via the keypad with one fairly complex session consisting of many modules. We made 19 variations of the Paradise. We wanted a “family” of devices, so we made a lower-cost Paradise Jr. in 1995.

With the development of the Tru-Vu (field-independent) eyesets, we developed the Paradise XL, which looked much like the Paradise, but supported dual-frequency stimulation and pulse-width control. Users could also program their own sessions into it using the Paradise XL Session Editor. It was programmable via the serial port on a computer. It held 40 factory-preset sessions and could accommodate up to 24 custom-made sessions (with an overall total of 140 modules), plus another 24 proprietary sessions, that could be purchased as add-ons. It also had non-volatile memory in that the battery could go dead and the User Defined Sessions would not be lost from memory.

In 1995, we also developed the DAVID 2001. This was a concept AVE device that used large cup-sized headphones in which all of the electronics were embedded into the left cup. It had 18 sessions plus intensity control. Volume was controlled via dials on each ear cup. Rechargeable batteries were slipped into the padded band covering the head and the band end was stitched closed to keep the batteries in. There was an eyeset jack on the left cup and the eyeset had a short 3" wire that plugged into it. The 2001 was very popular and nice to use.

In 2000, we introduced the Paradise TC. The display and the manual frequency adjustment was removed, and it was priced lower than the Paradise XL.

The DAVID Pal Brand

With the development of smaller microcontrollers, we were able to dramatically reduce the size and cost of the electronics and, so we developed the Pal series of devices.

The Pal devices (Pal, Pal 36 & Pal 36 with CES) were compact and quite easy to use. The Sound Sync was also dramatically improved, producing sometimes vivid imagery from various audio files and music and it would shut off automatically when the audio ended. The Pal had 18 sessions in one library consisting of three banks of six sessions. The Pal 36 had two libraries of 18 sessions and the Pal 36 with CES had a small slider in the front that also controlled CES. And it was smart too! If the slider wasn't turned up for stimulation, it would shut the CES section off as a battery-saving feature. It also knew if the slider was left turned up and refused to provide stimulation until the CES stimulation was turned down first. The session editor was also improved dramatically and renamed as the DAVID Session Editor.

The DAVID Delight Brand

The Delight series (Delight, Delight Plus and Delight Pro) really are a delight to use. Icons were used for virtually all functions to make it accommodate clients of all languages. All of the sessions are in categories, making it easy to select a session without consulting the manual all of the time. They also remember the last session used in each category, making it easy to go back to your favorite session. The Delight has five categories of two sessions each. Simply press the icon and that session will run. The Delight Plus also had five categories plus a user-defined section. However, it contained 25 sessions plus five Sound Sync sessions, so the bar graph was used for the actual session within a selected category. It remembered the last session selected in any category, making it easy to replay favorite sessions.

Electro-Stim Products

TENS - Transcutaneous Electro-Neural Stimulation

CES - Cranio-Electro Stimulation

tDCS - Transcranial DC Stimulation

Oasis Brand

The Oasis products are hand-held, 9-volt powered CES/Micro-TENS devices. The original Oasis had three wires, based on the Neuropulse and operated at the Schumann Resonance frequency of 7.8 Hz. The next Oasis had two wires only and a bi-phasic pulse. It could also be synchronized with the lights on the Paradise. My third design of the Oasis could be synchronized in a proprietary stereo technique with the photic stimulation of the Paradise XL, which was now incorporating the Tru-Vu (independent-field) eyesets. The fourth was the Variable Frequency Oasis, which also had a frequency dial on it, ranging from 1 to 20 Hz. The Oasis II and the new Oasis Pro are microprocessor controlled. The Oasis II is a two-channel CES/MET device that does very simple 0.5 and 100 Hz stimulation. There are several unique aspects to the stimulation, including a rounded front pulse edge (patented) to reduce sting plus randomization (patented) of the stimulus timing to reduce habituation.

CESta

Based on the DAVID Pal format, this was our first multi-session, programmable CES device. It also supported transcranial DC Stimulation, an up-and-coming fascinating approach to Neurotherapy. We later added 50% duty cycle to the CES section. The CESta was also capable of producing colloidal silver. Both the tDCS and the colloidal silver were digitally current controlled.

Oasis Pro

The new Oasis Pro is an improved design of our original CESta. It has improved controls and electrode impedance-checking ability. It outputs dual frequencies from 0.1 to 25.4 Hz plus 100 Hz. The stimulus may be fixed or randomized. Sessions can be programmed to run any length of time from under a minute to 9 hours. It also automatically shows the frequency range (delta, theta, alpha, beta, etc) that it is stimulating at. It also has a tDCS bar graph showing the exact amperage output. It is our nicest electro-stimulation device to date.

Biofeedback Products

EDA Bioscan

I had originally made an electro-dermal activity monitoring feedback device as early as the late ‘80s. Then I came to realize that it would be a valuable clinical tool if a baseline measurement could be made such that a clinician could see a referenced, objective trend over the course of treatment. So in 1997, I designed the EDA Bioscan, which comprised of a bar graph and variable tone pitch to indicate state arousal. A “Trait” dial was added, which allowed the clinician to determine a person’s overall trait arousal and observe that trend over the weeks, against the level prior to treatment.

ABT Bioscan

The Alpha-Brainwave Trainer (ABT) Bioscan was developed primarily to help people learn the difference between meditation and focused attention. There were selections for theta, alpha or SMR frequency bands. A bar graph and a variable pitch tone would indicate the amplitude of the brain wave. We didn't sell very many of these units, but they were fun to play with and demo.

DAVID Session Editor

Clinicians often need to stimulate their patients at a frequency in accordance with EEG or QEEG brain wave analysis. This graphical editor allows for user programming of all of our AVE and CES/tDCS units, except the Oasis II.