

INTRODUCTION

You have purchased the most innovative, high quality audio-visual entrainment (AVE) device available on the market today. The DAVID PAL36 with CES combines the necessary principles of audio/visual stimulation and cranial electrical stimulation to safely and effectively guide the user into desired states of consciousness and maximum brain functioning. We are confident you will find using the DAVID PAL36 with CES not only an enjoyable, relaxing experience, but also beneficial as you explore heightened states of consciousness and personal awareness.

The portability of the DAVID PAL36 with CES lends itself to easy travel (airport X-ray machines will not harm the DAVID PAL36 with CES).

In order to obtain maximum enjoyment and benefits from your DAVID PAL36 with CES, please read this operator's manual thoroughly.

COMPONENT LIST

- (1) DAVID PAL36 with CES - Serial Number _____
- (2) Tru-Vu Omniscreen™ Eyeset (U.S. Patent 5,709,645)
- (3) Headphones
- (4) CES Stimulus Cable
- (5) Stereo Patch Cord
- (6) Carry Bag
- (7) 9-Volt Alkaline Battery
- (8) DAVID PAL36 with CES Operator's Manual and Warranty Card

OPTIONAL ACCESSORIES FOR DAVID PAL36 with CES

- (1) 9-Volt Adapter
- (2) DAVID Session Editor
- (3) Two-User Package (includes: eyeset, headphones, splitter cords)
- (4) View Hole Omniscreen Eyesets

If you have any questions, require assistance, or wish to receive information on new product developments and research currently being conducted at Mind Alive Inc., visit our website at www.mindalive.com or call toll free at 1-800-661-MIND(6463). Outside Canada and the U.S. call (780)465-6463.

WARNINGS FOR USING CRANIO-ELECTRO STIMULATION (CES)

- **Do not** use if you have a heart pacer. The electrical signals may cause pacer malfunction.
- **Do not** use on anyone with epilepsy, brain tumour or recent stroke.
- **Do not** use while driving or operation hazardous machinery.
- **Do not** place electrodes over skin lesions, new scars, cuts eruptions or sunburn.
- Setting the intensity too high may result in a mild irritation or blistering of the skin. Set the intensity to lower levels so that the stimulus is only mildly noticeable. A double blind study showed that CES works at sub-threshold (below feeling level).

WARNINGS FOR USING AUDIO-VISUAL ENTRAINMENT (AVE)

- **If you are an epileptic or photic epileptic:** We recommend that people with a history of epilepsy, photic epilepsy or have ever had a seizure of any kind **not** use AVE unless under the supervision of a health care professional* who is qualified in the safe detection of seizures.
- **If you have had a brain injury or suffer from any mental disorder or psychiatric illness:** We recommend that people who have had a brain injury or have a history of psychiatric illness or mental disorders **not** use AVE unless under the supervision of a qualified health care professional*.
- **If you are taking drugs or using alcohol:** We recommend that people currently using drugs and/or excessive alcohol consumption consult with their health care professional before using AVE.
- **If you are a first-time AVE user:** We advise that you always remain seated or reclined while using AVE. We also suggest that new users always begin sessions with low intensity (brightness) in the eyesets. If at any time during a session, you begin to feel vertigo, euphoria, “déjà vu”, nausea, or a sense of mental instability, lower the intensity of the eyesets and lower the volume of the tones or **discontinue the session**.

- **Traumatic Childhood Experiences** – AVE can cause the release of suppressed memories. If traumatic memories surface during or after a session, be certain to seek appropriate support.
- **Somnatic Shock** - If abruptly returning to a normal conscious **state**, a mild case of somnatic shock can result, leaving the user feeling disoriented, nauseous, or experiencing a headache. All preset sessions in the DAVID PAL36 with CES are programmed to end with the lights fading out (Soft Off™) to avoid this.
- **Orthostatic Hypotension** - Occasionally, when a person becomes very relaxed during a session, his/her blood pressure may fall significantly. We advise rising slowly after a session.
- * *It is the responsibility of the health care provider to complete a proper intake, addressing the concerns mentioned above. Mind Alive Inc., its employees, suppliers and distributors are exempt of any liability in damages resulting from a seizure or psychiatric condition that may occur from using this device.*

WARRANTY

The DAVID PAL36 with CES is warranted against defects in workmanship or materials for one year from date of original purchase, on the terms stated herein. Should this unit become inoperative within the one-year period, it will be repaired or replaced at our option, without charge. Any postage, insurance and shipping costs incurred in returning the DAVID PAL36 with CES for service are the responsibility of the customer.

To activate your warranty, return the enclosed warranty card to Mind Alive Inc., 9008 - 51 Avenue, Edmonton, Alberta, Canada, T6E 5X4, or you can register online at www.mindalive.com/registration.htm

This warranty does **NOT** cover:

- shipping damage
- damage caused by re-charging batteries
- damage caused by accidents or by other than normal use
- improper battery installation and/or charging
- cords for headphones, Omniscreen™ eyeset and CES cable
- damage caused by exposure to excessive static electricity
- damage caused by any unauthorized person opening the DAVID PAL36 with CES.

Should your DAVID PAL36 with CES require repairs, you must contact our service department at 1(800) 661-MIND (Canada and U.S. only) or (780) 465-6463 to obtain a warranty/repair authorization number and important shipping instructions.

When returning your DAVID PAL36 with CES, be sure to surround the DAVID PAL36 with CES with at least one inch of tight packing on all sides in a strong carton. Neither Mind Alive Inc. nor courier companies will pay for damage incurred by poorly packaged goods. Label the carton "**FRAGILE, HANDLE WITH CARE**". Include a copy of your sales receipt and a brief written description of the problem. All postage, insurance and shipping costs incurred in returning the DAVID PAL36 with CES for service are the responsibility of the customer.

FOR UNITED STATES AND INTERNATIONAL CUSTOMERS:

Failure to receive proper instructions about completing customs and shipping documents may result in additional brokerage and duties charges to the customer. Some courier companies do not include brokerage fees in their quoted charges. The customer is responsible for any and all charges. Equipment will not be returned to the customer until these charges have been paid. Indicate on **ALL** shipping documents **“RETURN TO COUNTRY OF ORIGIN FOR REPAIRS UNDER WARRANTY”**.

DISCLAIMER OF LIABILITY

Mind Alive Inc., its employees, its authorized dealers and distributors shall not be held liable for any claim, demand, action, cause of action, liability or damages arising out of any injuries resulting from malfunction or defect of the said DAVID PAL36 with CES whether wilful or negligent either to person or damage to property of the purchaser, employees of the purchaser, persons designated by the purchaser for training in the use of the DAVID PAL36 with CES, clients or patients of the purchaser, any other person, designated by the purchaser for any purpose, prior to or subsequent to acceptance, delivery, installation and use of the DAVID PAL36 with CES either at the premises of Mind Alive Inc. or the premises of its dealers or distributors or the purchaser's premises.

The purchaser, employees of the purchaser, clients or patients of the purchaser or any other person designated by the purchaser for any purpose, hereby undertake to waive and disclaim any action in respect of the aforesaid terms as above.

ABOUT AVE

The AVE sessions in the PAL36 with CES were designed to support you in your quest for wellness by promoting various areas of the brain to work together in a harmonious fashion. Through the experience of AVE, you may experience yourself in a new and beneficial way.

Many users of AVE experience:

- deep relaxation while feeling more energized,
- visual images, colors and patterns,
- the sense of feeling “grounded” and calm,
- the boost of mental clarity when resolving problems.

How and why do these sensations occur? Several changes take place during and following an AVE session:

The first aspect of AVE involves dissociation. Dissociating is the first step towards effective meditation. This is the clearing of thoughts and loss of body awareness similar to what a Zen mediator would experience.

Secondly, cerebral blood flow increases. Most cognitive and emotional disorders involve areas of the brain that are low in blood flow. A study by Fox and Reichle showed AVE increased cerebral blood flow up to 28%.

Thirdly, EEG activity changes. The concept of entrainment is about altering brainwave activity. Quantitative EEG (QEEG) studies have confirmed the normalization of brain activity during and following an AVE session. Brain activity similar to that of experienced Zen mediators may be created. Aberrant brainwave activity in various conditions such as depression, anxiety, ADD, seasonal affective disorder, chronic fatigue, etc., may be restructured into healthier patterns.

Recommended Reading:

Change Your Brain, Change Your Life - Daniel Amen

The Rediscovery of Audio-Visual Entrainment - Dave Siever

New Technology for Attention and Learning - Dave Siever

The AVE Session and Protocol Guide for Professionals - Dave Siever

HEART RATE VARIABILITY (HRV)

Long, graceful breathing cycles have long been used as part of meditation. Scientifically, this technique has been analysed and shown to settle down a stressed autonomic nervous system. Both sympathetic (flight-or-fight) activity and para-sympathetic (the brain's efforts to compensate) activity settle down dramatically using controlled, slowed deep breathing techniques.

The heart speeds up with every breath in and slows down with every breath out. This difference in heart rate is called Heart Rate Variability (HRV). For example, a relaxed person using controlled breathing may have a heart beat of 80 beats per minute while breathing in and as low as 65 beats per minute while breathing out. The difference or "swing" is about 15 beats per minute (bpm). When people get stressed, their heart typically clamps as low as 5 bpm HRV and spikes sometimes as high as 30 bpm HRV. This is abnormal activity and is rough on the heart.

The HRV technique used in the DAVID PAL36 with CES is based on a 10 second breathing cycle (six breaths/minute, by inhaling slowly for 5 seconds and exhaling slowly for 5 seconds in an easy, relaxed breath). When using HRV paced breathing, listen to the heartbeat generated by the PAL36 with CES through the headphones. Inhale for two heartbeats and exhale for two heartbeats (not your own heartbeats!). All PAL36 with CES sessions begin at seven breathing cycles/minute (28 heartbeats/min) and slow to six breaths /minute (24 heartbeats/min). This allows the user to breathe a little faster at the onset of a session until he/she has had time to relax.

ABOUT CES

As far back as the first century, the Greeks and Romans used the electric eel, a variety of the “Torpedo Fish” for electrical stimulation. The electric eel was used well into the 19th century, even after the invention of electronic stimulation devices. First century writings record placing a live torpedo fish under the feet of a person suffering from gout to ease the pain. There are also reports of placing these fish on people’s foreheads to treat headaches.

Current interest in CES was initiated by Robinovitch, who in 1914 made the first claim for electrical treatment of insomnia. In 1958, the book *Electro-Sleep* reflected the first serious works on CES. This book inspired research in Europe and in Eastern Block countries, as well as in South America, the Orient and finally the US. Because the CES equipment used was bulky, inconvenient, and unreliable, CES, like the electric eel, was abandoned in favour of drug therapies.

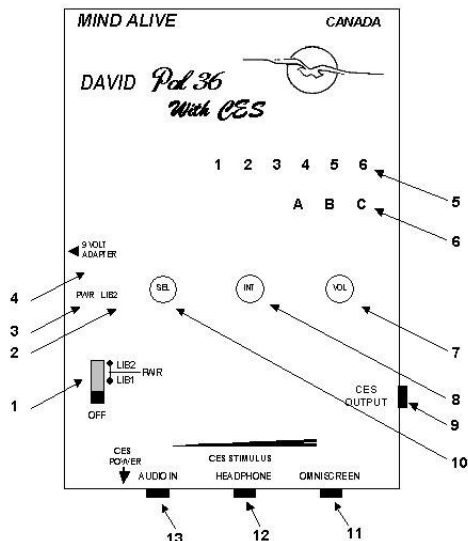
With the invention of the transistor in the 1960s, small, low-power and reliable CES devices were developed. By 1975 several companies in the US and Europe were manufacturing CES devices for public use. During this time, research on CES was quite active and scientific papers were published.

Most studies to date have shown CES as a reliable method to reduce anxiety and improve cognition in recovering alcoholics. Additional studies have shown CES to be an effective tool in reducing anxiety and improving IQ.

Research to date is quite vague on the effects of using CES at various frequencies, citing both low and high frequencies can be effective for improving learning and reducing anxiety. Many people who used CES along with AVE, have reported that they experienced deeper relaxation for prolonged periods of time. In addition to enhancing entrainment, CES increases neurotransmitter production. These neurotransmitters are necessary for information processing, memory, energy level and physical well-being. When our neurotransmitters and endorphins are not produced to necessary levels, it may lead to destructive behaviours and/or the abuse of substances as a substitute for that “natural high”.

DAVID PAL36 with CES DIAGRAMS

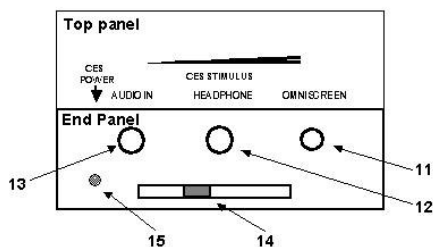
Figure 1 – Front Panel



- (1) **Power Switch (OFF/PWR/LIB1/LIB2)** – Set to PWR to turn the PAL36 with CES on and to select Library 1 (LIB1) sessions or Library 2 (LIB2) sessions.
- (2) **Library 2 Light (LIB2)** – Indicates that sessions in Library 2 have been selected.
- (3) **Power Light (PWR)** - Indicates that the PAL36 with CES is on or in standby.
- (4) **9-Volt Adapter Jack** – Insert adapter plug into adapter jack (use a 9-volt adapter with 1.3 mm plug and centre positive).
- (5) **Session Number Lights (1 - 6)** – Indicates the session number. They are also used to display the battery power, intensity, and volume levels.
- (6) **A B C Indicator Lights** - Indicates the session number.
- (7) **VOL Button (Volume)** – *Note: button raised to guide you in locating with eyes closed during sessions.* Use to increase or decrease the volume of the tones. Also used to clear most recently played sessions.

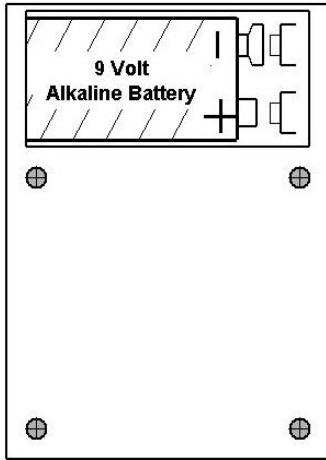
- (8) **INT Button (Intensity)** – *Note: button raised to guide you in locating button with eyes closed during session.* Use to increase/decrease intensity of the lights in the eyeset.
- (9) **CES OUTPUT Jack** – Insert CES cable into CES OUTPUT jack.
- (10) **SEL Button (Select)** – Use to select session while sessions are scanning. During a session, use to select tone – Pulsed Tone, Binaural Beats, Chime, or to turn all tones off. Also use to turn heartbeat sound on or off.
- (11) **OMNISCREEN Jack** - Insert Omniscreen eyeset plug into OMNISCREEN jack. Use the patch cord with the small 2.5 mm plug.
- (12) **HEADPHONE Jack** - Insert headphone plug into HEADPHONE jack.
- (13) **AUDIO IN Jack** – Use to listen to music during a session. Also use to download or erase a session with the DAVID Session Editor. Plug one end of the patch cord with the larger 3.5 mm plug into the headphone output of your CD player, computer or MP3 player and the other end into the AUDIO IN jack of the PAL36 with CES.

Figure 2 – End Panel



- (14) **CES Stimulus Intensity Slider** – Use to adjust the intensity of the CES Stimulation.
- (15) **CES Power Indicator Light** – Indicates that CES is operating. If flickering, indicates that intensity is set too high and needs to be set to low to start CES.

Figure 3 – Back



Battery Compartment - Install 9-volt battery into battery compartment as shown.

AVE OPERATING INSTRUCTIONS

For best results, we recommend that you drink a glass of water 15 minutes before a session. Ensure that your environment is conducive to relaxation. For example, be sure that you will not be interrupted, you are wearing comfortable clothing, there is no excessive noise and the room is set at a comfortable temperature. You should be sitting down in a reclined position or lying down. Although you may keep your eyes open or closed, most people enjoy the sessions with their eyes closed.

Turning DAVID PAL36 with CES On and Off

To turn the PAL36 with CES on, slide the power switch to the PWR (either LIB1 or LIB2) position. To select a session from Library 1 sessions, set switch to LIB1. To select a session from Library 2 sessions, set switch to LIB2. If using CES, slide the CES slider all the way to the left to reset. The CES power indicator light will turn on. To turn the PAL36 with CES off, slide the power switch to the OFF position. If no session is selected, the PAL36 with CES will go into standby after two minutes. The green PWR light will remain dimly lit reminding you to turn the PAL36 with CES off.

To End a Session Early Using Soft Off™

Press and hold the INT and VOL buttons. When you select Soft Off™ the indicator lights will scroll from 6 to 1 to confirm that Soft Off™ is in progress. Soft Off™ will take two minutes to complete.

Battery Power Level

As soon as the PAL36 with CES is turned on, the battery power level will show on the lights from 1 to 6. If the power level is 1, then the battery is too low to operate the PAL36 with CES, and it will automatically go into standby. If the power level is 2 or less, the battery may not have enough power for the entire session and the session will end early. Replace the battery or switch to an AC adapter, if battery level is at or below 2. If you have the PAL36 with CES plugged into a 9-volt adapter, the power level will always show a battery level of 6.

Selecting a Session

The PAL36 with CES has 30 preset sessions. They are organized in two libraries (LIB1 and LIB2). Refer to page 16 to select a preset session. As soon as the PAL36 with CES is turned on, the last three sessions selected will be displayed (including whether they were from LIB1 or LIB2). Then the PAL36 with CES will start to scroll through each of the preset session numbers starting with bank “A” (A1, A2, A3, etc.). After the “A” sessions,

the PAL36 with CES will scroll through the “B” sessions, and then the “C” sessions. When the desired session lights up, press SEL. If you want a session from group “B” or “C”, wait for the “A” group to finish and the “B” group will scan, followed by group “C”. Pressing the INT button will allow you to scan through the sessions faster. If LIB2 sessions are being selected, the LIB2 light will be on. Once a session has been selected, the session number will flash a few times. Then the eyeset lights and headphone volume will start low and gradually increase over ten seconds until the levels reach the preset settings of intensity and volume (Soft On). This allows you time to put on the eyesets and headphones. During the remainder of the session, the session light (eg. A1, B4) will flash briefly every few seconds to remind you of the session number selected. Every eighth flash will show the battery power level (1 to 6). As the session ends, the eyeset lights and volume will fade out (Soft Off™). If no buttons are pressed, the PAL36 with CES will go into standby in two minutes. The green PWR light will remain dimly lit reminding you to turn the PAL36 with CES off.

Selecting Heartbeat

All of the DAVID PAL36 with CES sessions (except Sound Sync Sessions) begin with the heartbeat on. To turn to heartbeat off, press and hold the SEL button for approximately one second. To turn the heartbeat back on, press and hold the SEL button again for approximately one second.

Selecting Pulsed Tone/Binaural Beats/Chime

All of the DAVID PAL36 with CES sessions (except Sound Sync Sessions) begin with the classic tone on. Press the SEL button once to select Binaural Beats. Press the SEL button again to select Chime. Press the SEL button once more to turn all tones off. Press the SEL button again to turn the classic tones on again.

Adjusting Volume

Note: The volume button (VOL) is raised to guide you to locate button with eyes closed during sessions. To increase the volume of the tones through the headphones, press and hold the VOL button. To decrease the volume, release VOL button and press and hold again. Or you may press short single steps for small adjustments in the volume. The indicator lights 1 to 6 will show the volume level.

Adjusting Intensity

Note: The intensity button (INT) is raised to guide you in locating button with eyes closed during sessions. To increase the intensity of the lights in the Omniscreen eyeset, press and hold the INT button. To decrease the

intensity, release the INT button and press and hold again. Or you may press short single steps for small adjustments in the intensity. The indicator lights 1 to 6 will show the intensity level.

To Save Intensity, Volume, Tone and Heartbeat Settings

Specific preferences (settings of intensity, volume, tone and heartbeat on or off) can be saved for each session. To save preferences, while the session is running, adjust intensity, volume, tone and heartbeat as desired. Press and hold SEL and INT. The indicator lights 1 to 6 will scroll from 1 to 6 and back to 1. Your new preferences will be saved only when the session ends (all lights and tones are completely off). You may use Soft Off™ (press and hold INT and VOL) to end the session sooner (2 minutes).

Playing Pre-Recorded Material

To play pre-recorded material into the headphones, plug one end of the patch cord provided into the headphone jack of the CD, MP3, computer or cassette tape player and plug the other end into the AUDIO IN jack of the DAVID PAL36 with CES. If the playing time of the audio material is longer than the session selected, the session will end, but the audio material will continue to play and be heard through the headphones.

Playing Sound Sync (LIB2 – B3 – B6)

Using the patch cord provided, connect your CD, MP3, computer or tape player to the DAVID PAL36 with CES (follow instructions above). Select Sound Sync session. With the Omniscreen eyeset on, increase the volume on the audio material until you notice the lights "dance". If there is no sound for 30 seconds, the Omniscreen eyeset lights will Soft Off™. When the sound returns, the lights will brighten up and "dance" again.

Battery Replacement and Power Management

The PAL36 with CES can be powered using a 9-volt battery or a 9-volt adapter (positive centre, 1.3 mm plug). If the PAL36 with CES is plugged into an adapter, no power will be used from the battery. For safety reasons, the CES section will not operate if the PAL36 with CES is plugged into an adapter. To turn CES on, reset the CES intensity slider to off position (far left). If the CES slider is not reset, the CES power light will flash to show an error. Turn the PAL36 with CES off at the end of your session to preserve your battery. To replace the battery, slide battery compartment cover off and place battery as shown in Figure 3 (page 11). Place the bottom of the battery down into the compartment first and then push the top down against the metal clips. An alkaline 9-volt battery will provide approximately seven hours of operation.

To Record or Clear Session History

Each time you play a preset session, the session number will be stored in the PAL36 with CES, so that you can have faster access to the last three sessions selected. To clear these sessions, press VOL while the PAL36 with CES is scrolling for a session to be selected. This will erase or clear the session history.

Downloading/Erasing a Session

Your DAVID PAL36 with CES is programmable. There are six blank sessions (C1 to C6 in Library 2) for storing additional sessions. All of the preset sessions may be reprogrammed or erased. To add or change sessions, you will need the DAVID Session Editor. The PAL36 with CES may also be programmed automatically from an encoded CD (eg. Special Application Sessions). Refer to the DAVID Session Editor help file for design and download instructions.

CES OPERATING INSTRUCTIONS

CES will only operate while an AVE session is running. The rate of the stimulus is synchronized with the AVE. When using CES by itself you can operate it while sitting, lying down or engaged in a quiet, non-hazardous activity such as a relaxing walk.

To use the CES, turn the intensity slider to lowest setting (far left). Insert the CES stimulus cable into the CES OUTPUT jack.

Attach the yellow clip to the left earlobe and the blue clip to the right earlobe. For better conductance, we recommend putting a small amount of water or saliva on the earlobes.

Slide the intensity slider to the right slowly until a very mild sensation is felt. Setting the intensity too high may result in skin irritation.

After a few minutes, you may notice that the intensity of the stimulation is stronger. Reduce the intensity. It is not necessary to feel the sensation to get results. At the end of the session, turn the intensity down and remove the clips from the earlobes.

DESCRIPTION OF PRESET SESSIONS

Note: All Preset Sessions include Heart Rate Variability throughout the session and Dissociation at the beginning of each session. For Dual Brainwave Stimulation Sessions (eg. Session C4 - L10/R19), the “L” and “R” for the target rate represent the visual field of stimulation. Left visual

field stimulation means right brain hemisphere stimulation; right visual field stimulation means left brain hemisphere stimulation.

<u>Session Number</u>	<u>Description</u>	<u>Session Time</u>	<u>Target Rate (Hz)</u>
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Library 1 Sessions (LIB1) – 1 - 18

SMR and Beta - Let's Get Alert

A1	Sensory Motor Rhythm (SMR) - Use to achieve relaxed attention.	24 min	14
A2	SMR for Sleep - Use to improve sleep for those with insomnia due to a “racing” mind but relaxed body.	40 min	14
A3	Beta Perker - A great way to get going in the morning without caffeine. This session helps reduce ADD and SAD symptoms. May cause anxiety.	20 min	18 to 20
A4	ADD and Learning – This session has rapid transitions for mental stimulation to help keep the user “engaged” in the session. Used in the ADD study published in the Journal of Neurotherapy.	26 min	L14/R18 & 10
A5	Brain Brightener – Use with seniors to improve mental functioning and memory. Similar to A4 but uses gentle transitions. Can also be used for ADD.	30 min	L14/R18 & 10
A6	Skill/Sport Enhancement - Use this session to develop any skill or improve performance. Visualize feeling your best during the first half (alpha). Then visualize your perfect performance during the second half (beta) of the session.	24 min	7.8 to 18

<u>Session Number</u>	<u>Description</u>	<u>Session Time</u>	<u>Target Rate (Hz)</u>
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Library 1 Sessions (LIB1) – 1 - 18

Alpha - Great for Relaxation and Meditation

B1	Healthy Alpha Relaxer – Healthy alpha	30 min	10
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is 10 Hz. Most disorders have alpha slowing. This session re-establishes the natural alpha rhythm. Good for beginners.

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|----|---|--------|-----|
| B2 | Extended Deep Alpha Relaxer – Stay relaxed for your dental, massage, physiotherapy, chiropractic and other appointments. | 80 min | 8.4 |
| B3 | Schumann Resonance – For a quick thorough afternoon meditation. For those on the go. | 22 min | 7.8 |
| B4 | Extended Schumann Resonance - For effective deep meditation and to improve the onset of sleep. Calms “hyper/chatter” minds. Also for chronic fatigue, fibromyalgia and anxiety. Ideal for those with insomnia who have a busy mind and tense body. | 40 min | 7.8 |
| B5 | “State Five Meditation” - Use for ultra-deep meditation and for sleep. Use to quiet “hyper” minds. Based on Maxwell Cade’s work with Zen meditators. | 33 min | 7 |

Theta - The Dream State - Enhance Your Creativity - Use theta with guided imagery, music or for learning new behaviours and habits.

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|----|--|--------|-----|
| B6 | Theta Hemi-Step - Use for creative visualization and sleep. | 36 min | 5.5 |
|----|--|--------|-----|

Delta - The Sleep State -These sessions help bring on sleep by turning off the “chatter” that sometimes occurs after a busy day.

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|----|---|--------|--------|
| C1 | Meditate to Sleep – Meditate, visualize and think soothing thoughts during the first half (8 Hz); fall asleep during the second half (3 Hz). | 45 min | 8 to 3 |
|----|---|--------|--------|

Session Number	Description	Session Time	Target Rate (Hz)
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Library 1 Sessions (LIB1) – 1 - 18

C2	Delta - To aid in falling asleep. Best for those with fibromyalgia. Fall asleep with session running.	45 min	3.5
C3	Sub-Delta – Calms the hypothalamus. Beneficial for some with fibromyalgia and hypertension.	24 min	0.5 - 1

Depression Reduction

C4	Alpha/Beta – Settles down negative emotions from the right brain while stimulating the left brain to rebalance alpha asymmetry.	30 min	L10/R19
C5	Alpha to Alpha/Beta – This session has an alpha front end to reduce anxiety and enhance relaxation.	42 min	10 to L10/R19

Hypnosis

C6	Fractionated Hypnosis/Alpha - This session simulates the hypno-therapy process.	30 min	8
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Library 2 Sessions (LIB2) – 19 - 30

Relaxation and Sleep

A1	“Wise Guy” Alpha – It has been shown that people with fast running alpha waves have higher than average IQs.	30 min	10.6
A2	Coffee Break Alpha - Great for a little rest during your coffee or lunch break.	15 min	10
A3	Paradise – A gentle slide down to Theta II. Extraverts with low anxiety produce high levels of this frequency.	36 min	6.5
A4	Sleep – Alpha/Theta – This session can really help to break up distressing thoughts that are interfering with sleep.	36 min	L10/R6

Session Number	Description	Session Time	Target Rate (Hz)
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Library 2 Sessions (LIB2) – 19 - 30

Stimulating Sessions

A5	SMR/Beta – Like the Brain Brightener but more gentle and more entraining.	24 min	L13.5/ R18
A6	Mental Flexibility – To “loosen up” a stuck mind. Can also be used for fibromyalgia.	22 min	4 to 20
B1	Artistic Development and Creativity - This session stimulates the right brain only. Helps “left-brained” analytical people feel more spontaneous and creative.	30 min	L18/R0.2
B2	Roller Coaster – This action-packed session is very engaging. Some with ADD can benefit.	7 min	

Lucid Dreaming – Sound Sync – Generates random frequencies based on audio input. Travel on lucid journeys with your favorite music.

B3	Sound Sync – Use with hypnosis and relaxation CDs for deep hypnotic induction/ meditation.		6.5
B4	Sound Sync – Use with hypnosis and relaxation CDs for deep hypnotic induction/ meditation.		7.8
B5	Sound Sync – Use with recorded sporting events or lectures for sports hypnosis and game CDs.		14
B6	Sound Sync – Use with energizing music, lectures or sports recordings.		18

Sessions C1 to C6 in Library 2 are empty for user designed sessions to be saved and stored.

CARE AND MAINTENANCE FOR THE PAL36 with CES

Cleaning of the PAL36 with CES should be done with a soft cloth slightly moistened with water (or with a mild detergent). Do not clean with any solvents. Although precautions have been taken to protect the PAL36 with CES from static electricity, do not subject the PAL36 with CES to static, such as placing it near a television set or static producing fabrics and materials. Do not place the PAL36 with CES near heat sources such as radiators or air ducts, or in direct sunlight, or expose to excessive dust or mechanical vibration. Should any liquid enter the PAL36 with CES, turn it off immediately. Although the PAL36 with CES is water resistant, it is not waterproof. If liquid does enter the electronics, we advise that the PAL36 with CES be checked by authorized personnel before commencing operation.

BEFORE YOU CALL FOR REPAIRS

If	Means	Response
PWR light is dim and PAL36 with CES is unresponsive	PAL36 with CES is in standby	Turn off PWR switch, then turn PWR switch back on
Light 1 flashes, then PAL36 with CES shuts off	Battery is low	Replace battery or use adapter
PAL36 with CES does not turn on. (PWR light not on)	Battery is dead	Replace battery or use adapter
Lights in eyeset are on left side only	Eyeset not plugged in completely	Check eyeset connection
Tones in headphone are on left side only/sound hollow	Headphone not plugged in completely	Check headphone connection
No sound from audio player	Plugged into audio player incorrectly	Check all connections to audio player
Download is not recognized	Audio player improperly plugged in	Check all connections to audio player
	Volume too high/too low	Adjust volume to moderate listening level
CES power indicator light on, but no CES stimulation felt	Intensity too low	Moisten earlobes, turn intensity up, check cable/jack connection
	CES cable broken	Replace cable
CES power indicator blinking	CES not operating	Slide CES slider to full left, reslide to right to desired setting
CES power indicator off while AVE session running	Plugged into adapter	Operate on 9Volt battery only
Session runs but no lights and/or tones on start up, but can be adjusted manually	Preferences have been set/saved at zero	Re-adjust settings and re-set preferences

WARNING

ALL persons who:

- a) have a history of epilepsy, photic epilepsy or any seizure disorder,
- b) suffer from any mental disorder or psychiatric illness,
- c) are currently using ANY drugs (prescription or recreational),
- d) are under the influence of alcohol,
- e) have had any head injuries,
- f) has ever had seizure of any kind,

SHOULD NOT USE the **DAVID PAL** unless under the supervision of a health care provider qualified in the safe detection of seizures.

NOTICE TO HEALTH CARE PROVIDERS:

It is the responsibility of the health care provider to complete a proper intake addressing these concerns mentioned above. Mind Alive Inc., its employees, suppliers and distributors are exempt of any liability in damages resulting from a seizure or psychiatric condition that may occur from prescribing this device.

THE DAVID PAL IS NOT RECOGNIZED AS A TREATMENT OR CURE OF ANY MEDICAL CONDITION OR DISABILITY. HOWEVER, RESEARCH SUGGESTS THAT THE DAVID PAL IS AN EFFECTIVE RELAXATION AND MEDITATION TOOL.

The **DAVID PAL** is a non-invasive tool.
All resulting effects are produced in the brain solely by audio and visual stimulation.

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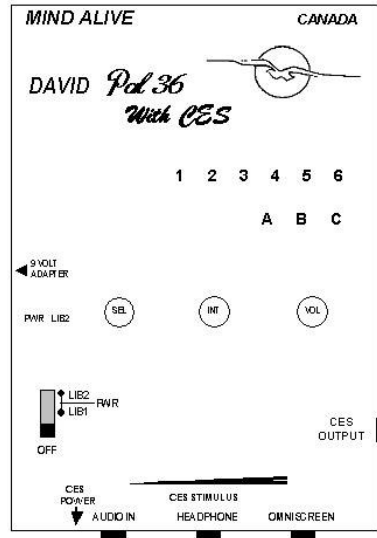
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DAVID PAL36 with CES



Operator's Manual