

# *BAND TRAINING*

ADD Protocol

# Assumptions on the etiology of ADD / ADHD

Research has demonstrated that the area responsible for executive focus and concentration are primarily in the frontal areas of the brain, which are functioning in the “sleepy” frequencies. By increasing these frequencies a person can function at high levels of accomplishment.

# Introduction

- The Bioacoustical Utilization Device (BAUD) is a product that was derived from the empirical effect of acoustics on specific brain patterns. In as slow acoustical patterns as drum beats to 5 Hertz, several studies have shown that the brain will attune itself to an overall frequency in the Theta range (4 – 7 Hertz) within 10 minute for adult human beings. The impact of a consistent acoustical rhythm certainly has impact on emotional feeling and actions, especially when blended with musical melody and harmony. Studies have also verified changes in brain patterns with specific musical rhythms.

# Introduction Continued-2

- The design of the BAUD represents a more complex yet more consistent with the physics of sounds and the neurology. The engineering technology utilizes a stereophonic sound wave of a square pattern for each ear in which the interference between the two will form a third frequency considered to be the medium that drives brain patterns. Each person's listening perception and stimulation is based on the comparisons between the senses coming from each ear, making most critical signal being the combined frequencies.

# Introduction Continued-3

- In a simplified explanation, the application of the BAUD to neurological control is based on increasing the management and logistics to the client. In neurotherapy sessions, the client is told to increase or decrease the acoustical feedback in accordance to the goals for brain function, offering feedback to his or her manipulation of the machine. For example, if the desired frequency is to increase LoBeta or SMR, as for concentration (ADD protocol), the client can quickly observe that listening to an acoustical stimulation can influence that observed frequencies of the brain significantly.

# Introduction Continued-4

- In our experience, the client can usually learn to manage his or her brain frequencies to a noticeable difference within twenty minutes. The resultant increased self confidence and expertise experience can increase motivation and training facility. Moreover, once that experience is obtained, the client can take the BAUD to specific arenas for experimenting with specific challenges. The BAUD is approximately the size of a cell phone and light in weight. Some students have worn the device inside their shirts in school.

# Introduction Continued-5

- Alternative approaches to using an EEG feedback system also work, but a leap of faith has to be made because there is less objective validating feedback. The client has use the feedback of improving focus time and efficiency of work effort. For example, many client are given passages to read in a book and measures of time and comprehension can be obtained before utilizing the BAUD. After five minutes in adjusting the volume and choosing a frequency setting based on their intuitive sensation of feeling in their heads or eyes, they read similar passages and compare their comprehension and time required. They adjusted the frequencies throughout their exercise using their own feedback of concentration.

# Introduction Continued-6

- Similar methods have been used using mathematical problems, logical puzzles, and spatial puzzles. Truck drivers have used the BAUD to maintain alertness on the road. They are well aware of their fatigue level, and the decrease of this energy loss can be correlated to the frequency adjustment on the BAUD. The basic idea is to provide some means in which the client can learn to increase his or her concentration by means of adjusting the frequency stimulations.



# Introduction Continued-7

- Everyone has concentration and attention deficits at some time in their lives. For examples, when we are stressed and fatigued, our attention span suffers. When we are anxious or depressed, there is a significant drop in the abilities to remember and store information. When we are multitasking we lose huge amounts of information for detail. Even certain kinds of food will diminish our attention skills. There is no secret why Attention Deficit Disorder (ADD) is misdiagnosed 67 percent of the time. The protocol for concentration deficits is helpful for all kinds of attention problems, not just ADD.

# Introduction Continued-8

- The symptoms and signs that are used for the diagnoses of ADD are based on behaviors, usually not psychological or neurological testing. There are:
  1. Lack of ability to sustain focus of attention on a topic or project.
  2. Poor memory for specific steps toward assigned tasks.
  3. Avoids tasks that require sustained concentration.
  4. Careless in work assignments.
  5. Fails to finish assignments.
  6. Often in a dream-like state.
  7. Restless

# Introduction Continued-9

- In noting that the primary diagnostic brain pattern for both Spect Scan and QEEG is a significant lower frequency pattern for the frontal lobe (high delta and theta, low LowBeta). These findings have been very reliable and consistent with the clinical interpretations of lowered frontal lobe capacities. The clinical observations of these lowered frequencies are lack of attention, executive functions of organization and planned action toward completion, and concentration. The correlation of the brain patterns to the diagnosis of Attention Deficit Disorder appear to be conclusive. However, there is always required more testing and supportive evidence to support a final diagnosis.

# STEPS...

- The Bioacoustical Utilization Device (BAUD) should be introduced by a professional health care provider who understands the specific uses of the device and can guide the individual through its simple steps.

# STEP ONE

- Help the client be aware of how he or she feels when they are struggling for concentration and focus. Have them use memories in which they were trying to accomplish a task and their lack of focus was a real problem in accomplishing their work. For example, students who have to work six hours a night on their homework often describe how bored they are, how tired they feel and the low level of motivations they have as they are pressed to finish. Some will describe how they have trouble seeing their work and drifting off on some dream or thinking of other things.

- Perhaps a form might be helpful at this stage.

<u>Event</u>	<u>Struggle</u>	<u>Feeling</u>
1. <i>homework</i>	<i>couldn't stay focused</i>	<i>frustration, guilt</i>
2.		
3.		
4.		
5.		
6.		

- When the client is aware of the feelings and experience, you have an implicit baseline to be visited later to determine progress. For example, both improved concentration and feelings states should be a correlated effect.

# STEP TWO

- Adjust both volume knobs as shown (OFF)
- Turn on the device
- Insert the plug for your ear buds
- Adjust the volume such that the balance is equal, between the ears
- The volume should be “relatively” high
- Turn off the BAUD



# STEP THREE

- With the device off so the individual can hear your instructions, have the person close their eyes to make a humming sound that feels as if it vibrates in his or her brain. This step is to take advantage of the intuitive nature for people to image the auditory impact on their brain.
- EEG MONITORING
  - If this process is being used in conjunction with EEG monitoring, it would be worthwhile to have the client open his or her eyes to see that his or her humming makes an impact on the measurements, as represented by the graphs on the monitor (shifts from high delta or theta or increase in LoBeta.) There may be an artifact of the muscular activity on the EEG readings; however, the affects are considered only as incidental and will not be problems when the client ceases this step.
  - If the practitioner is working without the benefit of EEG feedback, this step will prove to be intuitive only. However, there is some indirect validation, such as having more visual acuity or experiencing faster reading of three sentences while humming a tone.

# STEP FOUR

- With the tone found, instruct the individual to use the upper right knob (pitch) to bring the device pitch to approximate the tone he or she was just doing and see if the pitch from the device also makes some change on the EEG monitor (decreased delta or theta or increases in LoBeta). If no EEG validation is available, use the intuitive sense of feeling more stimulation in the brain or using the indirect means mentioned above. For example, As the client changes the pitch to approximate the tone or just to have some sensations that have the image of affecting the brain, observe behavioral changes as well. After three minutes, most people also feel a lifting of spirits.





# STEP FIVE

- Once the pitch has been determined (although this might be re-determined later) have the client select the upper left knob to magnify the impact of the acoustical stimulation to change the brain frequencies. EEG feedback is the optimal choice to validate the direct influence of the client's management of the acoustics (decreased delta or theta or increases in LoBeta). However, as mentioned before, some clients find other means to validate their perceptions. For examples, they can read and comprehend more, be more efficient in math functions, and many experience better visual attention (keeping their eyes on a page longer).
- For an academic understanding of the acoustical changes made by the right and left upper knobs, the frequencies are being changed in pitch as well as differences between the two ear stimulations. The upper right knob changes both tones simultaneously. If the knob is turned all the way to the left, the pitches of both right and left ear phones would go up or down as the knob is turned. If they are attuned to be the same frequencies (left upper knob turned to zero – all the way to the left), then there will be no differences between the two. It will sound like one tone changing.
- The upper right knob is thought to assign itself to locating the place in the brain or perceived to be where the client experiences it as the most sensitive.
- The differences between the two sounds is managed by the upper left knob, and creates a third wave form. The difference ratio between the right and left wave forms creates a frequency from zero (no differences) to 26 Hertz. The brain appears to listen to the difference ratio of stimulation.



# STEP SIX

- Once successful, have the individual experiment with concentration tasks, such as homework or sports (batting a baseball or soccer kicking through the goal. Changes in fatigue levels while during these experiences should also be noted. For example, many truck drivers have noted that they do not get sleepy while driving when they have the BAUD on.
- Encourage the client to use the BAUD with every concentration assignment, even taking tests, to offer more tweaking of the signals as well as more confidence.