EEG Audio Control Panel

The EEG Audio is an optional component that is provided to users who have acquired the AVI Audio/Video Interface. If you are using the AVI animations, and do not have your system configured to use the EEG Audio interface, contact BrainMaster Technologies for information that will allow you to use this component.

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	BrainMaster Screens		Demo Animation	Contributed Software
	X-Wing	BoxFlow	Dolphin	Bug Run
	BrainMan	Mini BMirr	Audio/Video Interface	Cricket
	Numbers	Spectral		
	Thermos	TrendView		Additional SW
	Waves	Circles	AVI Extensions	Browse
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Press "AVI Extensions" to access the AVI Extensions browser. It will contain the EEG Audio program, the EEG Audio documentation, and any additional AVI extensions you may have:

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EEG Audio Shortcut 1 KB	EEGAudio.pdf Adobe Acrobat Document 175 KB	

To run the program, double-click on (or right-click and select "Open") the "EEG Audio" icon. The EEG Audio control panel will appear as follows:



This program is designed to play overlapping sound files, so that the trainee hears two types of sounds. "Background" sounds are played continually, and reflect the overall amount of average EEG energy in two specified component bands. If the first band is larger on the average, the program will play its background sound continually. If the second band is larger on the average, its sound will be played. For example, one band may play a "river" sound, while the other plays a "surf" sound. In this way, trainee receives gentle information protraying the overall relative EEG energy in the two bands. In addition, the program plays "Reward" sounds whenever either component exceeds its threshold at any moment. For example, one band may have a high "bing" sound, while the other has a lower "bong" sound. Again, the trainee receives a gentle indication that their EEG momentarily increased the energy in a particular band.

This approach is particularly well suited to Alpha/Theta training, although the control is versatile enough to be used with any type of protocol that includes two enhance ("go") components, and in which it is desirable to inform the trainee of their relative size, as well as when either of them goes above threshold.

When you press Start Session, EEG Audio will begin to read the EEG data from the BrainMaster program, and display them in the appropriate display areas. At the same time, it will begin to play sounds, as appropriate for the protocol. There are also indicators for the current Threshold for each component, its current Value, the Damped (averaged) Value, the amount that the component is currently above threshold (negative if below), and whether or not any inhibits are active (for example, a high beta "stop"). Inhibits will stop the Reward sounds from coming.



NOTE: If you do not have this software enabled on your PC, you will see values of "-1" in all of the numeric fields shown above. If this is the case, you should contact BrainMaster Technologies for information about how to enable this program on your PC.

You may use the "Change Sounds" control at any time, to select the 4 "wav" files that are used for the feedback. The following control panel provides the ability to select the files that will be played.

Dialog Caption								
Wave One Background	Wave One Reward	Wave Two Background	Wave Two Reward					
Alpha Default Backgrou Nature rain light.wav Nature stream.wav Nature waterfall.wav Nature waves Heavy.wa Nature waves Light.wav	Alpha Default Reward.w Chimes.wav Notify.wav	music1.wav Nature blizzard.wav Nature fire.wav Nature Hurricane.wav Nature rain heavy.wav Theta Default Backgrou	HAMMER.WAV Horn.wav Theta Default Reward.w theta_bong1.wav					
Done								

When the default sounds are chosen as shown, the Alpha background will be a continuous stream (if Alpha is on the average larger than Theta), and the Alpha reward will be a light "bing". The

Theta background will be a continuous surf sound (if Theta is on the average larger than Alpha), and the Theta reward will be a deep "bong". You may choose other sounds as appropriate, to suit the goals of the particular training protocol.

NOTE: It is also possible to include your own sound files for this program, by placing them in one of the following folders, as appropriate:

\brainm.20\assist\Sounds\BackGround1 \brainm.20\assist\Sounds\Reward1 \brainm.20\assist\Sounds\BackGround2 \brainm.20\assist\Sounds\Reward2

NOTE: It is necessary to have the Microsoft Forms 2.01 software installed on your PC in order to operate this program. If you have Microsoft Office installed, you will have Microsoft Forms. If you do not, you can run the file EEG Audio Forms Installer that appears in the AVI Extensions Folder when you open it. You may use the following link to access this program:

..\..\..\..\..\..\..\..\..\brainm.20\Assist\fm2paste.exe

You may also need to run the EEG Audio Visual Basic Installer (once), if your PC does not have all the files in Windows necessary to support the program. You may use the following link to access this program:

..\..\..\..\..\..\..\..\..\brainm.20\Assist\vbrun60sp3.EXE

These installers are provided by Microsoft, and will give you the proper software additions, with a free license to use them. You need only run these Installers once on a given PC with Windows.