EEGfree
(Manual)

By DreamFree Inc.

Tel: 82-2-555-5892 Fax: 82-2-555-5893

771 Yeoksam-Dong Kangnam-Ku Seoul Korea

www.dreamfree.com

www.eegfree.com

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Product description

What is EEGfree?

EEGfree is the newest light and sound instrument, which consists of a unique one body of a light glasses and a controller produced by DreamFree Inc. It enhances concentration for studying and helps relieve tension, exhaustion, and stress. It has an easy operation for everyone to maintain his or her best mind condition.

What is EEG?

It stands for Electroencephalogram that is used in hospitals, laboratories and colleges which study Neuro-Technology as a professional. It is simply called "Brain Wave."

Principles of EEGfree

FFR (Frequency Following Response)

: It refers to the brain's natural tendency to mimic or to resonate the same frequencies generated by outside stimuli. This is the process light and sound instruments utilize for entraining the brain

The signal of Inducing EEG

: A signal to induct a specific brain wave, applying FFR

Effects of EEGfree

Use	Effects
Study	Increasing learning efficiency of students
Sleep	Providing deep sleep and eliminate fatigue
Concentration	Increasing training efficiency for sportsmen who need mental concentration
Relaxation	Relieving stress and anxiety

Features of EEGfree

- One-bodied product (Controller + glasses)
- Seven basic EEG signals + downloadable EEG signals ( )
- Seven levels of sound and light intensity
- One AAA size battery
- Auto shut off function after playing a mode
- Compatible with PC, cassette and CD player
- Various EEG signals downloadable from website (www.eegfree.com)
- Various music offered for musical therapy
- Modernized design and light weight

Types of EEG

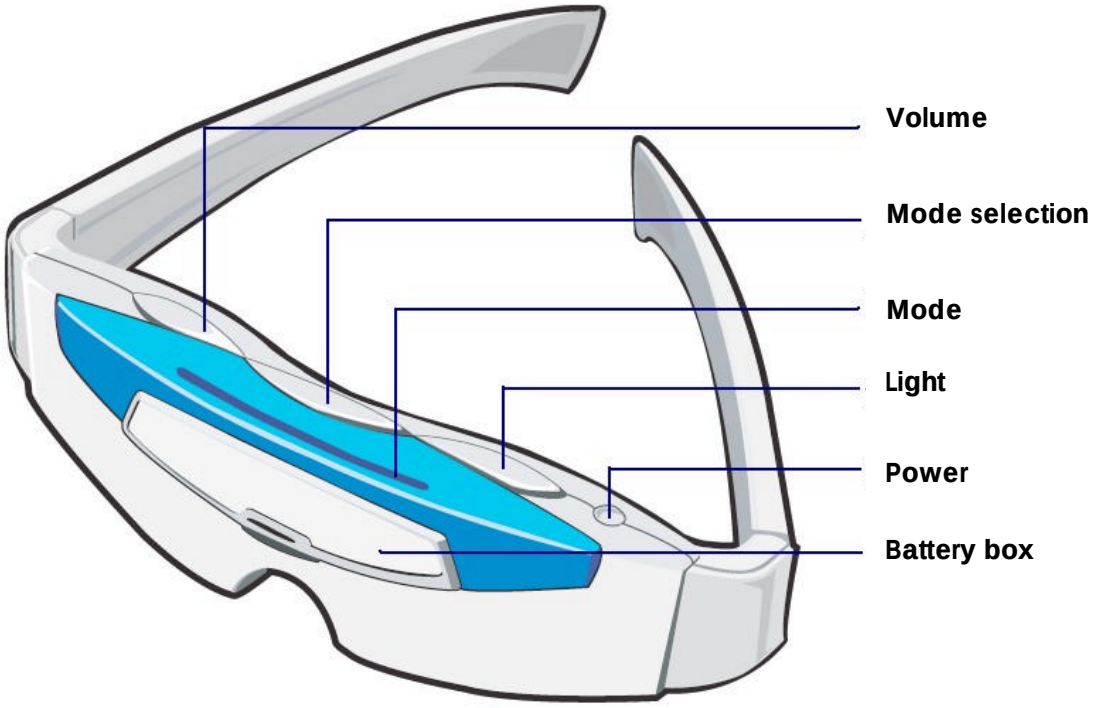
Wave		State of mind and body
Gamma - 35 Hz (ã)		Unstable, hot-tempered
Beta - 13~34Hz (â)		Active, concentrated
Alpha- 8~12 Hz(á)	Fast á - 11~12Hz	Concentrated
	Middle á - 10~11Hz	Maximum concentration and memorization Lucid Mental State, Reduced Tension
	Slow á -8~9Hz	Meditative state
Theta - 4~7Hz(è)		Light sleep, telekinesis
Delta - 0.5~3Hz(ä)		Deep sleep

Functions by mode

Mode	Function	Status	Operating time
M1 / Concentration	* Enhancing concentration before learning * Converting exited condition into stable status * Inspiring desire for learning * Relieving fatigue caused by insufficient sleep	* Relaxed * Having a clear head	15 min
M2 / Study	* Concentration-supporting * Activating the brain functions * Sharpening the memory * Enhancing the memory & concentration	* Use sound alone while learning) * Good concentrating * Unable to hear external sound clearly while concentrating on learning (Turn down the volume and adjust unused optic glasses to the lowest. Then it does not operate.)	60 min
M3 / Study with tape	* Supporting to concentrate * Enlightening intelligence & sharpening understanding	* Use sound alone while learning * Good concentrating * Unable to hear external sound clearly while concentrating on learning (Set the Tape Recorder Output to the EEG Input. After operating EEGfree, adjust LED to the lowest and the volume of sound enough to be mixed with teaching ads sound, in order not to be interfered with learning.)	60 min
M4 / Relaxation	* Stabilizing excited state of mind * Getting rid of fatigue * Relaxing	* Feeling relieved * Feeling free from confused thinking & recharged the spirits	16 min
M5 / Meditation	* Leading to meditation in a short time	* Lucid mental state	16 min
M6 / Vitality	* Helping cope with enervation and stress	* Motivated & relieved from displeasure	10 min
M7 / Sleep	* To be used when the deep sleep is needed	* Falling into a deep sleep	30 min

Structure & components

<Top>



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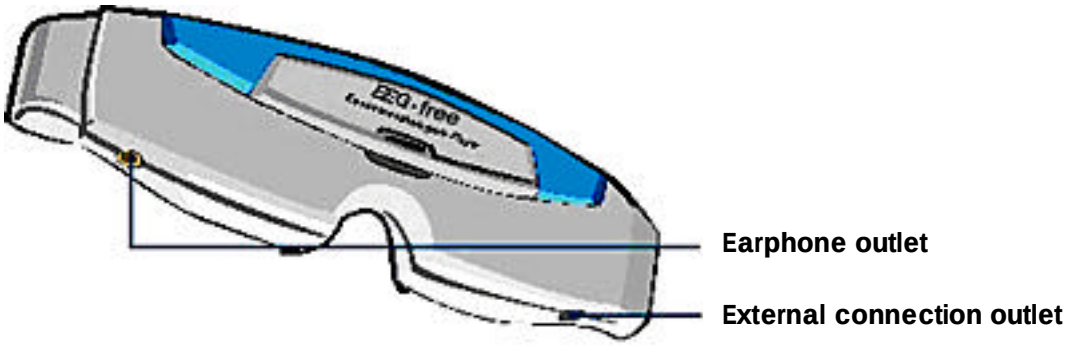

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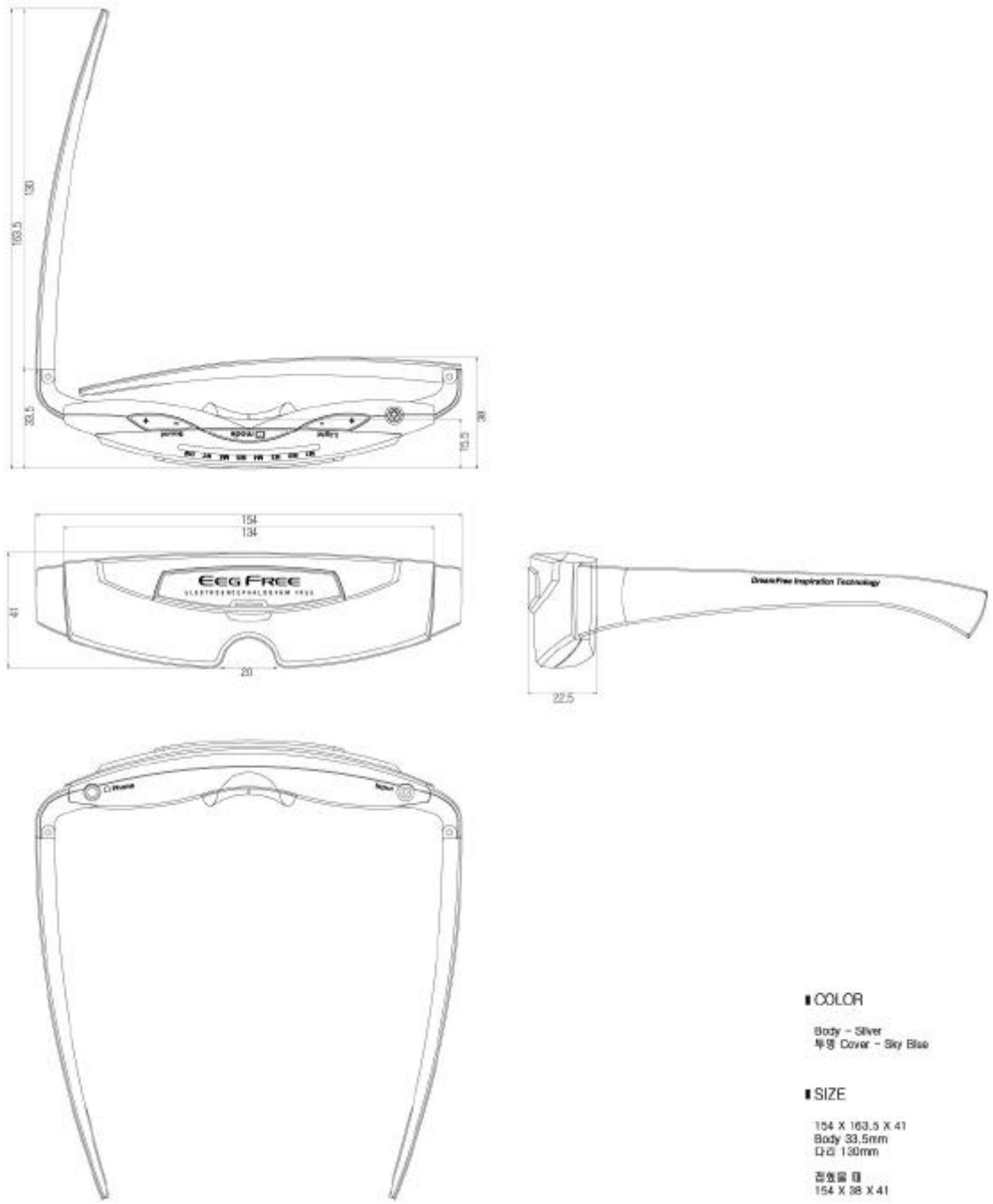
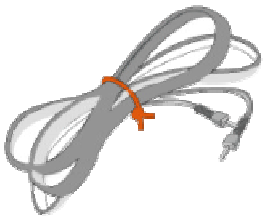

154
134
EEG FREE
41
20
22.5
COLOR
Body - Silver
투명 Cover - Sky Blue
SIZE
154 X 163.5 X 41
Body 33.5mm
다리 130mm
154 X 38 X 41

<Components>

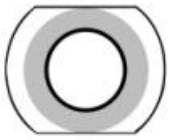
EEGfree body

Earphone

Connector to a PC



Connector to an audio



Dr.EEG Program CD

User's guide

Battery (1.5V AAA)

Case

How to use EEGfree

1. Insert battery
   - Push the button on the battery case and take the cap apart
   - Put an AAA battery into the battery case
   - Close the cap
   - Its standard durability is 24 hours.
   - In case of rechargeable battery, the durability may be shorter than 8 hours.

2. Connecting with earphone, audio and PC
   - Put an earphone jack into the outlet
   - When you connect an audio, connect an audio cable jack to the external input outlet of EEGfree.
   - You can connect either side of jack of the audio cable with EEGfree.
   - You can use not only an audio but also MP3 with EEGfree.
   - When you connect a PC, connect a computer cable jack to the external input outlet of EEGfree.

3. Power on
   - Power will be on one second after you press power button.
   - When power is on, LED of Mode 1 on the top of EEGfree gets red light.
   - The mode 1 is set default. If you want to change a mode or turn power off, the mode should be initialized as the start mode.

4. Mode selection
   - There is the waiting mode for 2.5 seconds after pushing power button.
   - A signal start automatically after waiting mode.
   - A mode can be changed only when the status is in the waiting mode. While EEGfree is in play, mode cannot be changed.
   - If you press the power button while EEGfree is playing, EEGfree will be converted to the state of waiting mode.
   - A mode LED blinks while EEGfree is playing.

5. Volume

- You can adjust volume when EEGfree is playing.
- We recommend you to set the lower volume if this is your first use.

6. Light

- You can adjust intensity of the light only while EEGfree is playing.
- We recommend you to set the lower intensity of the light if this is your first use.

7. Power off

- While EEGfree is playing, convert it to the waiting mode by pressing the power button once and turn it off by pressing the button again,
- EEGfree will be automatically turned off after finishing play.

Dr.EEG

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Chapter 1 Overview
Chapter 2 System requirements
Chapter 3 Install
Chapter 4 Run
Chapter 5 Uninstall

Appendix F. Users Manual

Chapter 1 Overview

Dr.EEG is a program to download signals from "www.eegfree.com" to EEGfree.

Chapter 2 OS environment

Windows	98/Me/2000/XP
CPU	Intel Pentium and more recommended
Memory	32M RAM and more recommended

Chapter 3 Installation

Install Dr.EEG by using CD in the package or downloading the program from "www.eegfree.com."

1. Click Next to start installing (Pic. 1) DrEEG.exe

<Pic. 1> Start installing Dr.EEG

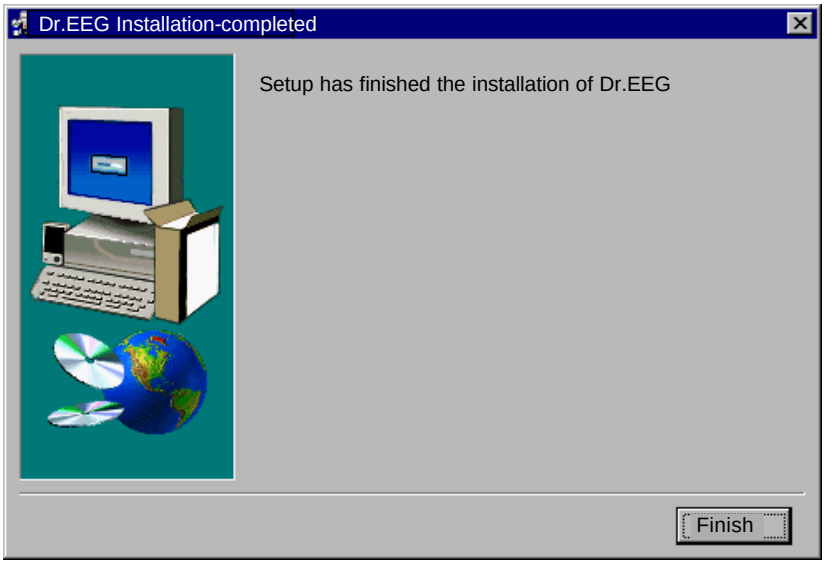
2. Installation folder looks like <Pic. 2> and the default root is set C:\Program Files\Dr.EEG. To install into different directory, click Browse and select another directory.

<Pic. 2> Choose installation directory

3. If you finish to select a directory, click Install button <Pic. 2>.
4. To quit install, click Cancel button <Pic. 3>

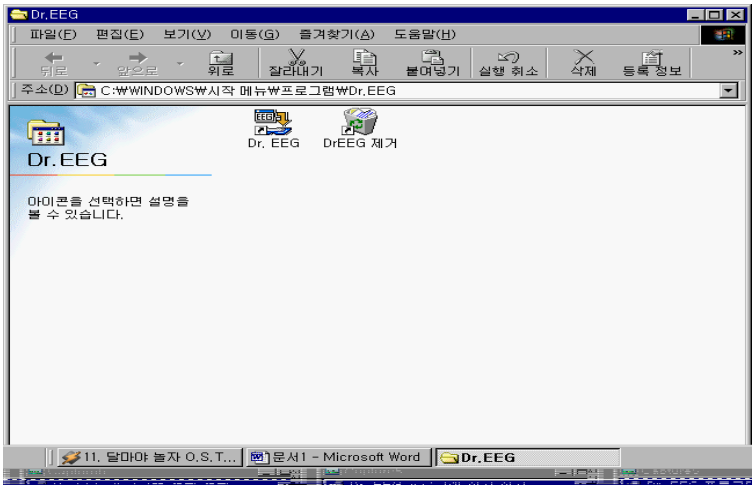
<Pic. 3> Installing program

5. When installation is done, click OK button <Pic. 4>.



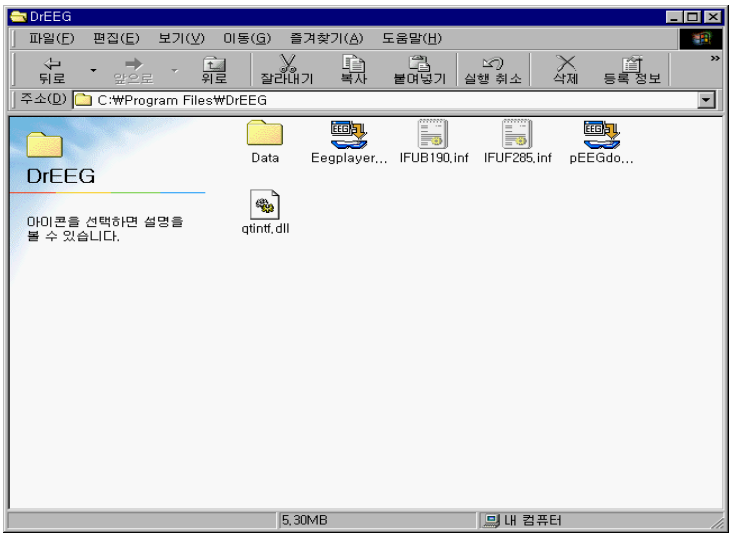
<Pic. 4> Installation completed

6. The executable icon and a uninstall icon will be created in C:\indows\Start\Program\DrEEG and installed in C\Program Files\DrEEG or the directory you selected. See <Pic. 5>.



<Pic. 5> Directory after installation of Dr.EEG is done

7. There are installed files in the directory. See <Pic. 6>.



<Pic. 6> Installed files in the directory

(1) Data folder : Sound signals will be saved in this folder. If this folder is removed, the program will not run. Therefore, create the data folder again in DrEEG folder and run the program again if the data folder is missing. The default directory is C\Program Files\DrEEG. If you did not change the directory, just create C\Program Files\DrEEG\Data.

(2) EEGfree04.ico : Icon image file

(3) iFU31A2.inf : Installation information file

(4) DrEEG.exe : Executable file

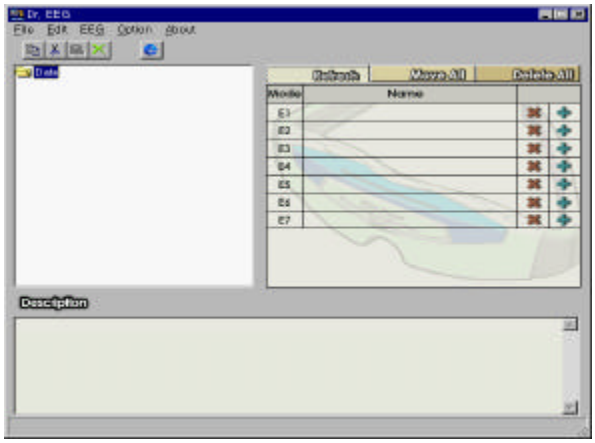
(5) qtintf.dll

Chapter 4 Start the program

4.1 Start the program

1. Connect EEGfree to the serial port.
2. Run "DrEEG.exe" in the folder or on background
3. If EEGfree is disconnected or malfunctioned, the message shows up like <Pic 7> that EEGfree is not connected well. If then, check the connection first. Please make sure that if it is connected or not when you download signal files.
4. If you want to create or edit library, click OK button on the message of connection confirmation.
5. DrEEG shows up on the screen.
6. To quit the program, click Exit of the "File Menu" or click Exit button on the top right of the page.

<Pic. 7> Connecting EEGfree

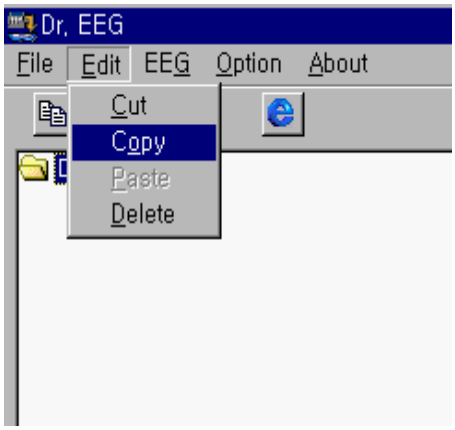


<Pic 8> Main screen

4.2 Main menu

1. Main menu is on the top of the main page. See <Pic. 8>.

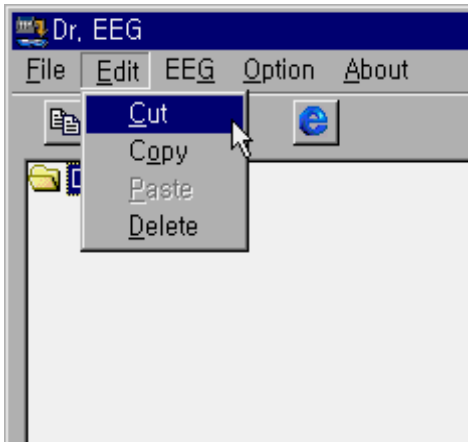
2. Copy files in data folder
   - Click Copy menu under the "Edit"menu. See <Pic. 9>.
   - Click Copy icon. See<Pic 10>.



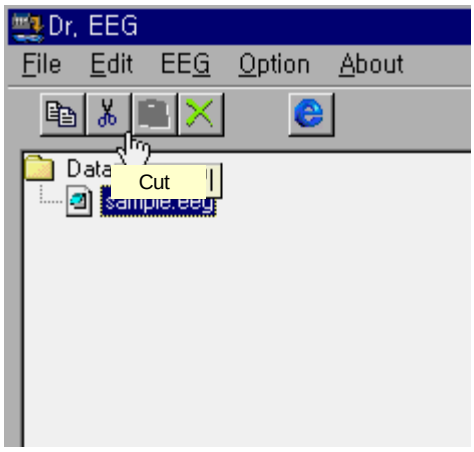
<Pic. 9> Method 1

<Pic. 10> Method 2

3. Cut files in data folder
   - Click Cut menu under the "Edit" menu. See <Pic. 11>.
   - Click Cut icon. See<Pic 12>.

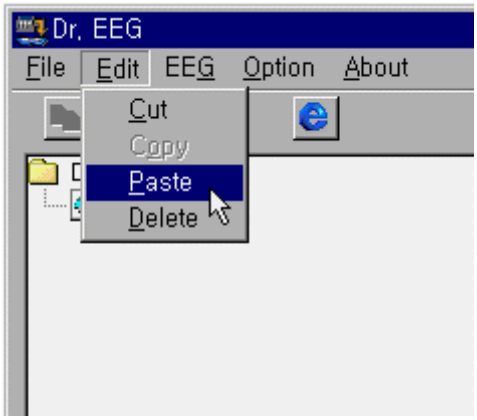


<Pic. 11> Method 1

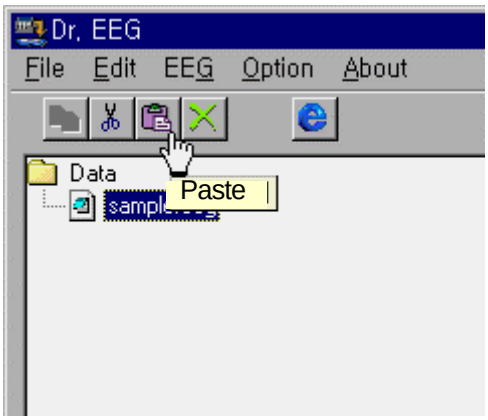


<Pic. 12> Method 2

4. Paste files in data folder
   - Click Paste menu under the "Edit" menu. See <Pic. 13>.
   - Click Paste icon. See<Pic 14>.

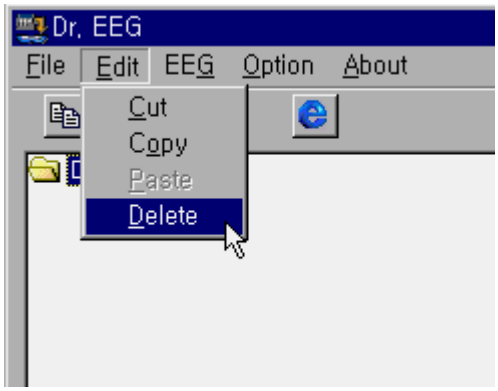


<Pic. 13> Method 1

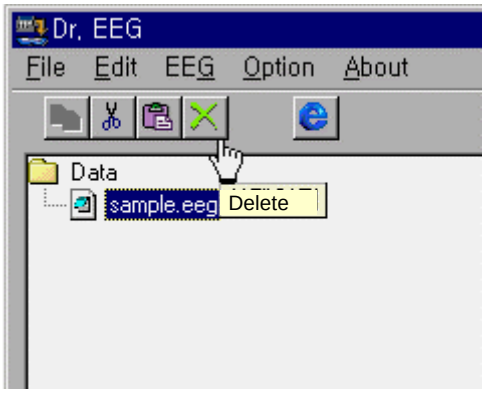


<Pic. 14> Method 2

5. Delete files in data folder
   - Click Delete menu under the "Edit" menu. See <Pic. 15>.
   - Click Delete icon. See<Pic 16>.



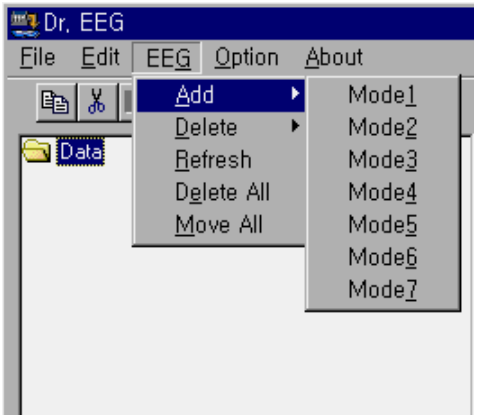
<Pic. 15> Method 1



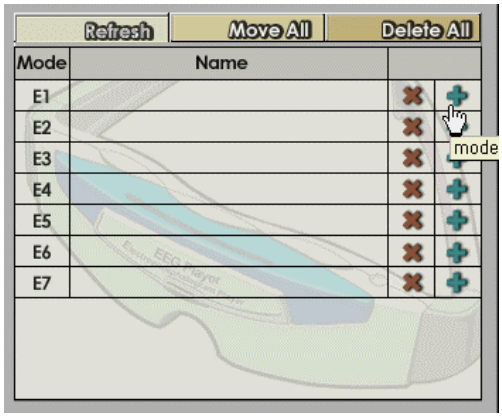
<Pic. 16> Method 2

6. Add files to EEGfree modes

- You can add files with selecting proper files and "EEG" in main menu. To add modes, Click "EEG," and "Add," and click a mode you want to add. See <Pic. 17>.
- Or click the button to add modes. See <Pic. 18>.



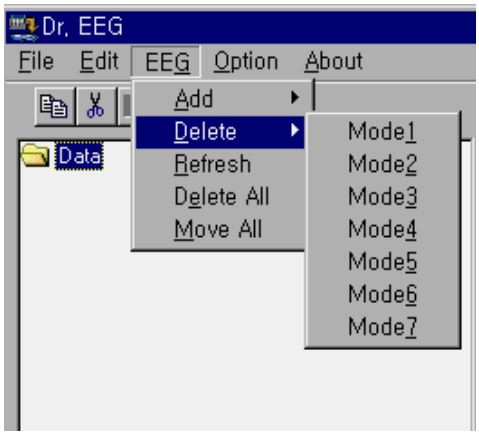
<Pic. 17> Method 1



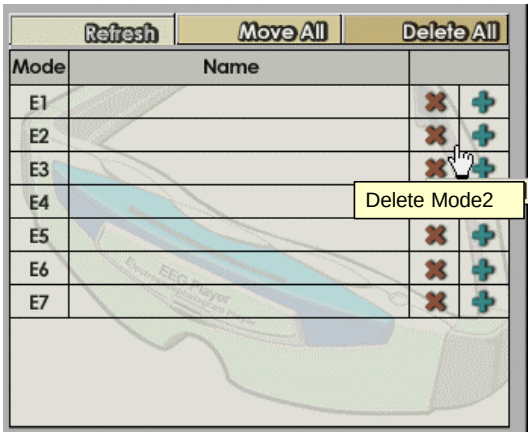
<Pic. 18> Method 2

7. Delete modes in EEGfree

- You can delete files with selecting "EEG" in main menu. To delete modes, Click "EEG," point to "Delete," and click a mode you want to delete. See <Pic. 19>.
- Or click the button to delete modes. See <Pic. 20>.



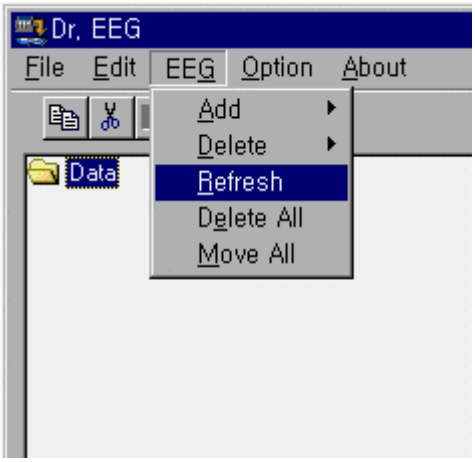
<Pic. 19> Method 1



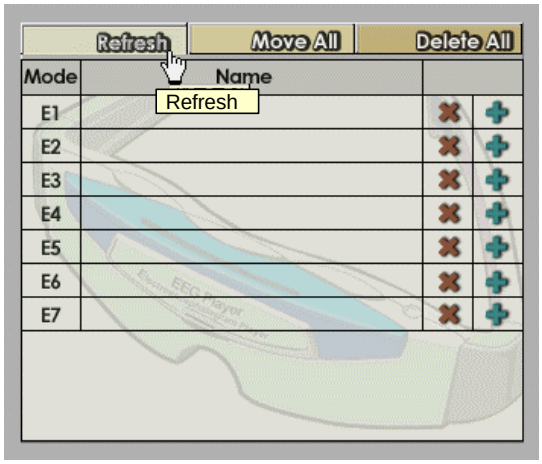
<Pic.20> Method 2

8. Confirm jobs

- You can confirm jobs with selecting "Refresh" on the left window. To confirm jobs , Click "EEG" and click "Refresh." See <Pic. 21>.
- Or click the "Refresh" button to confirm jobs. See <Pic. 22>.



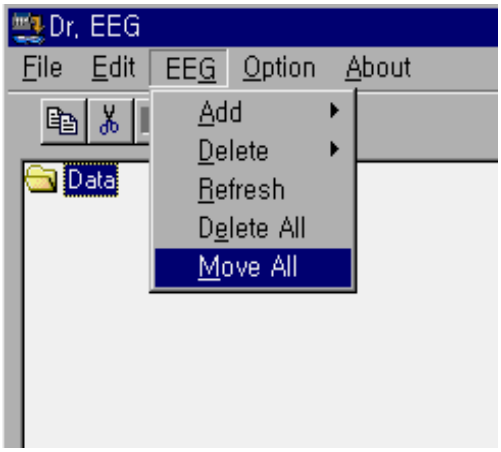
<Pic. 21>Method 1



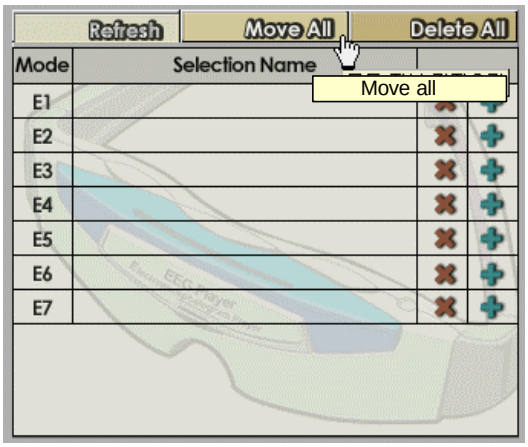
<Pic. 22> Method 2

9. Add all modes at once

- You can add all files at once in data folder and EEGfree mode selecting "Move all" on the left window. To add all files at once , Click "EEG" and click "Move all." See <Pic. 23>.
- Or click the "Move all" button to add all files at once. See <Pic. 24>.



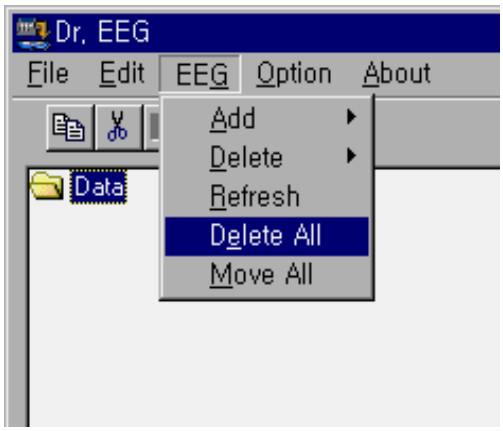
<Pic. 23>Method 1



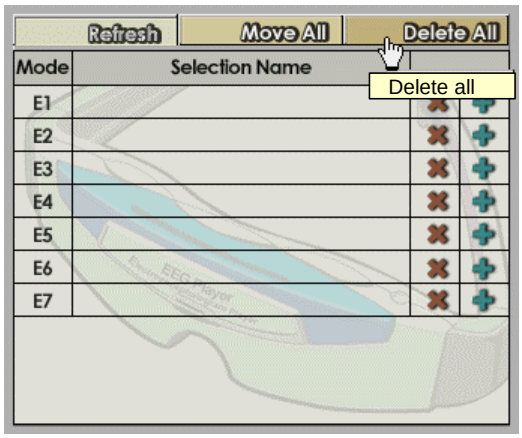
<Pic. 24>Method 2

10. Delete all files at once

- You can delete all files at once in data folder and EEGfree mode selecting "Delete all" on the left window. To delete all files at once , Click "EEG" and click "Delete all." See <Pic. 25>.
- Or click the "Delete all" button to delete all files at once. See <Pic. 26>.



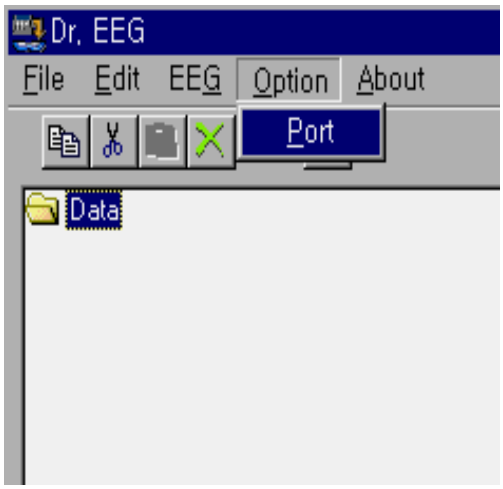
<Pic. 25>Method 1



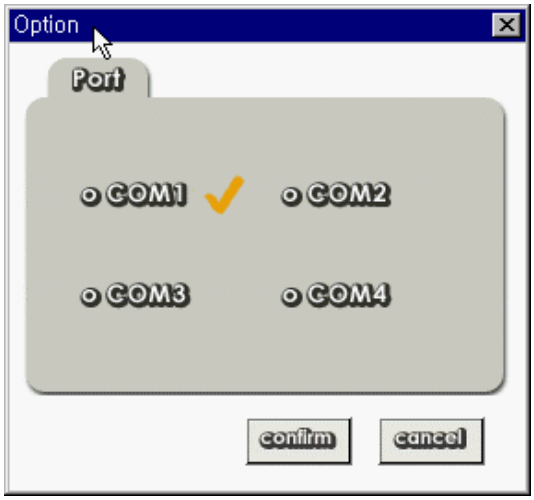
<Pic. 26>Method 2

11. Option

- You must connect a serial port to a computer port. This is the menu to setup the port. The option window shows up when you click "Port" under the "Option" menu.
- You can choose only one port among 4 ports (Com1 to Com 4).



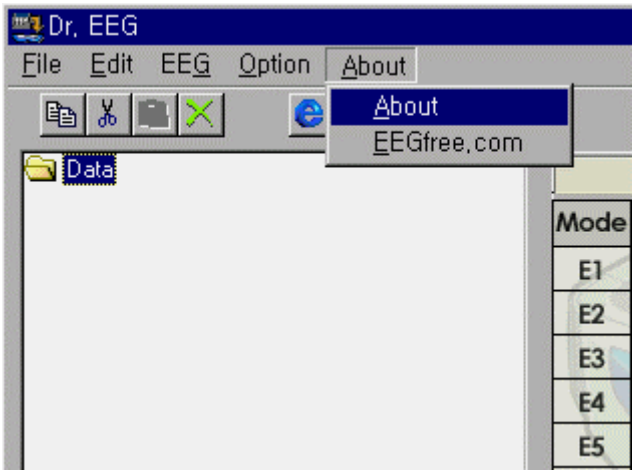
<Pic. 27> Port setup



<Pic. 28> Port setup screen

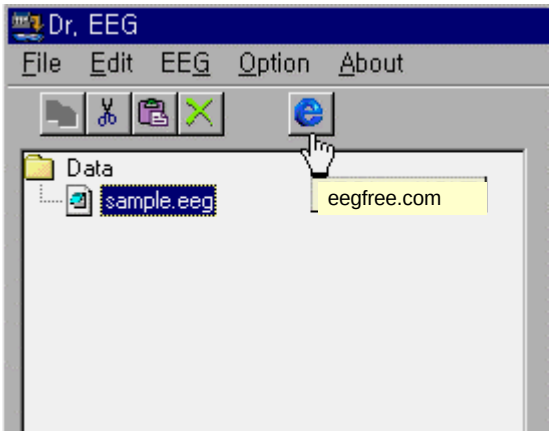
12. About

- There are two menus under the “About” menu.
- To see the information of Dr.EEG program, click “About” under the “About” menu<Pic. 29>. and to see www.eegfree.com, click EEGfree.com under “About” men, or click e icon<Pic. 31>



<Pic. 29> About

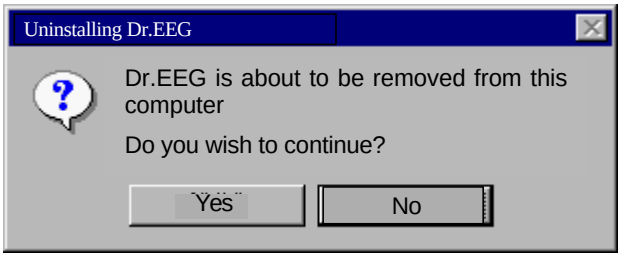
<Pic. 30> EEGfree.com



<Pic. 31> Shortcut to EEGfree.com

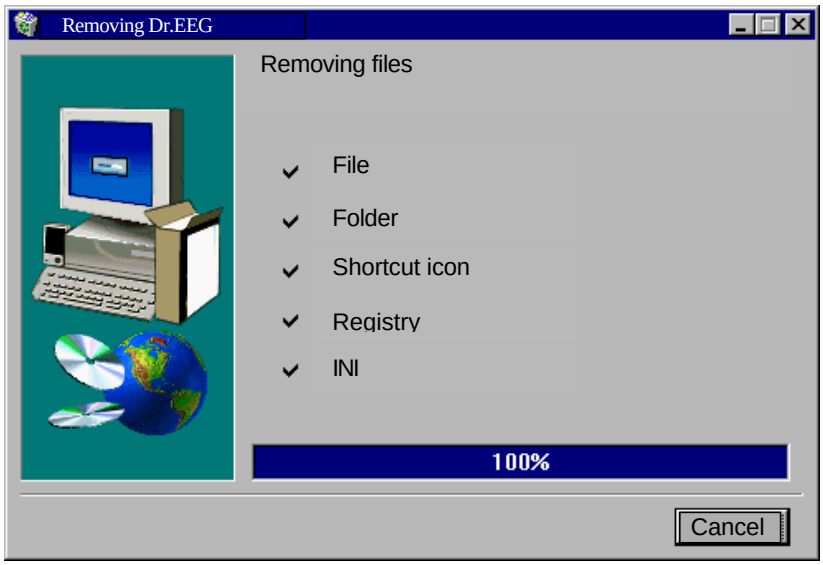
Chapter 5 Uninstall program

- To uninstall program, click "Start"menu, point to "Program," point to DrEEG program group, and click "Uninstall Dr.EEG" And then you will see <Pic. 32>



<Pic. 32> Confirm DrEEG uninstall

- To uninstall the program, click "Yes," to quit the uninstall program, click"No."
- While processing the uninstall program, <Pic. 33> shows up.



<Pic. 33> Deleting

- After all processes are done, DrEEG program will be removed from the computer.

M E M O

For a class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual.

Note: This equipment has been tested and found to comply with the limit for a Class B digital device, pursuant to part 15 of the FCC Rules.
These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions. If this equipment does cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. **IF** this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encourage to try to correct the interference by one or the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experience radio TV technician for help.

Change or modification not expressly approved by the party responsible for Compliance could void the user's authority to operate the equipment.