

EEGer™ Quick Start Guide

Table of Contents

Introduction	1
Accessing the EEGer Manual & EEGer Tutorial	2
Access the EEGer Manual	3
Access EEGer Help	3
View the EEGer Tutorial	3
System Requirements	4
BASIC OPERATION	5
STARTING YOUR HARDWARE AND SOFTWARE	5
RUNNING EEGer™ SESSIONS	6
I. Create Client - Clinical Use Only	6
II. Select Client	8
III. Choose Layout - Clinical Use Only	9
IV. Plan Session - Clinical Use Only	10
V. Begin Session	14
VI. Run Session	18
VII. Post-Session and Other Options	19
a. Replay Raw Data	19
b. Review	19
c. Spectral	20
d. Client File Management	20
Appendix A — Keypresses Commonly Used During Feedback	22
Appendix B — What Is This?	24



Introduction

Welcome! We'd like to thank you for purchasing EEGer™ and hope that you enjoy the new software. There are a number of exciting new features available.

This manual is designed to give you a brief overview of the basic requirements and functionality of EEGer™ to get you started quickly.

-
- Instructions for accessing the Tutorial and complete EEGer Manual
- System Requirements
- Basic Operations
- Keystrokes Most Commonly Used During Feedback

For more in-depth information, please refer to the EEGer Manual available on your installation CD or on the web at <http://www.eeger.com>.

The EEGER website is also a great source of other useful information. You can also download the very latest updates for your EEGer™ program and related software.

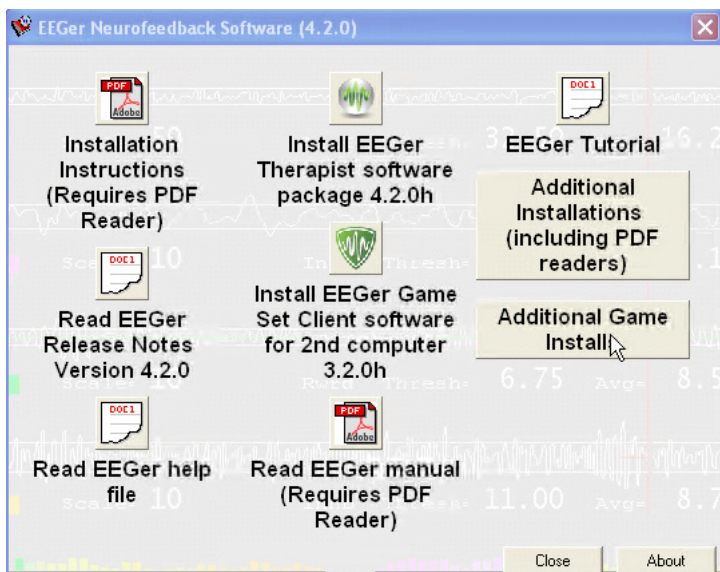
Please visit us at www.eeger.com.

DOS & WINDOWS® 98 UPGRADE USERS: Your system must be running Windows XP or later to perform the installation or take advantage of the documentation available on the CD. DOS and Windows 98 systems are not able to run EEGer software version 4.2 or later. Please review the system requirements carefully to be sure the Client/Game system is compatible with EEGer.

To run Windows on the Client/Game computer, press Esc to exit the game menu.

Accessing the EEGer™ Manual & EEGer Tutorial

Insert your EEGer Installation CD and the installation menu appears. (If it does not, double-click the CD/DVD drive in “My Computer”.)



Adobe Acrobat Reader is required to view the on-disk EEGer manual. Acrobat Reader installation is available in Additional Installations on the Install CD. The manual is also available online for those who do not have Adobe Acrobat installed.

Access the EEGer™ Manual:

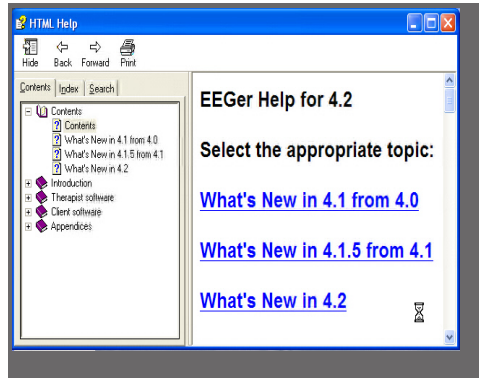
1. Click Read EEGer Manual on the Installation CD menu.
2. The manual is displayed in an Adobe Acrobat Reader window. Use the VCR style buttons in the toolbar to page through the manual.



Access EEGer Help:

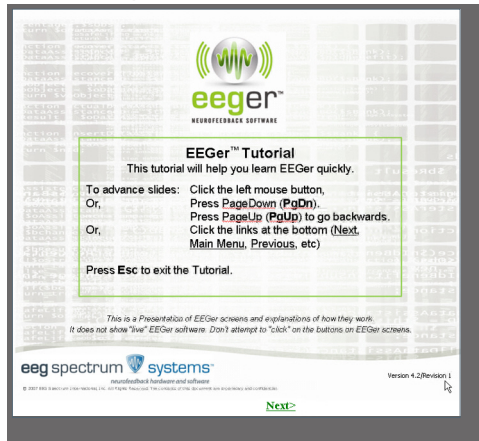
The EEGer manual contents are included in the EEGer Help that is available, with index and search options, from the main EEGer screen.

Click the **Help** menu in EEGer to select **Help Manual**.



View the EEGer Tutorial:

1. Click the EEGer Tutorial icon to run the application from the installation CD or go to **Additional Installations** to install the EEGer Tutorial to your hard drive and access from the EEGer program group.
2. Use the left mouse button or PgUp/PgDn to page through the Tutorial. Underlined words are links you can click with the left mouse button.



System Requirements

MINIMUM Recommendations for EEGer™ Computers

Processor

1.8 GHz or greater; do not mix manufacturers in two-computer system configuration
(*Pentium 2 GHz or greater recommended*)

Operating System & RAM (memory)

- Windows® XP
 - > Two computer configuration: 512 MB
 - > Single computer configuration: 1 GB
- Windows® Vista/Windows 7
 - > Two computer configuration: 2 GB
 - > Single computer configuration: 3 GB

Video

- DirectX 9.0 supported, accelerated video card with at least 64MB memory for 800x600 with 16-bit color
- Mid-level game graphics recommended for 2-computer configuration
- High-level game graphics recommended for single-computer configurations.
- Dedicated video memory preferred.
- Do not select INTEL graphics for Dual Monitor configuration.

VIDEO CARD REQUIREMENTS

Video cards are the most significant factor in "usability" since they directly affect the therapist and game display. Feedback is independent of video speed, but responsiveness to keystrokes is not.

1. You must be able to use DirectX version 9.0. However, if you upgrade your version of DirectX to the current version, you must first be sure that your card has drivers that are compatible with that version of DirectX. If not, it will be necessary to replace your video card.
2. Displays are affected by the amount of on-card memory and the resolution you choose. You must have at least 64mb of on-card memory, but if you use larger resolutions (*e.g., 1024x768*) or higher color sets, you'll need more memory. Most currently available cards provide at least 256 MB of memory.

Example: The minimum resolution of 800x600 with 16-bit color setting requires 64 MB of memory. An increase to 32-bit color setting requires 128 MB of video card memory.

Connections

Communications (each computer) - 1 Serial or USB-serial adapted **-or-** 1 Ethernet port
(Ethernet recommended)

Video for Dual Monitor system - Secondary VGA or DVI port with VGA adapter.

Licensing - 1 USB slot (*each computer*)

Amplifier Connection (*Therapist computer only*)

1 USB **-or-** 1 Serial or USB-serial adapted port (*depending upon amplifier*)

Laptops or desktops may be used. Most newer laptops will work for the Therapist or Client computer with the EEGer™ software.

Technical Support: EEGER Affiliates - Free Non-Affiliates - \$100 per hour (15 minute increments)

NOTE: While the vast majority of systems will support our software, there are too many variations to test them all. It could happen that a particular system configuration will be unable to support operation of EEGer™, as with any retail software.

BASIC OPERATION

This booklet is designed to give you a quick overview of EEGer™ to get you started. Refer to the EEGer manual on the installation CD for more details on the software features and options.

STARTING YOUR HARDWARE AND SOFTWARE



Once the software and hardware are installed, we recommend that you connect/disconnect cables and other devices used with your computer(s) with the power off. If you must connect anything with the power on, attach only one thing at a time to allow Windows to configure them properly.

1. Turn on your computer(s).
2. If necessary, disable any hardware or software and make adjustments that are necessary to avoid interference during a live neurofeedback session (e.g., disable wireless network adapters, exit email software, adjust video resolution, etc.).
3. Start the Software:



Double-click the EGS icon on the **Game/Client** computer first if you use a two-computer configuration. Check the communication selection in the upper-left corner to be sure the correct choice is displayed. *(The text is in red and changes to white when a connection is made with the Therapist system.)*



Double-click the EEGer icon on the **Therapist** computer.

- If a message regarding port settings is displayed, it is meant to notify you that your EEGer setup choices do not match the available communication options. Note which ports are not valid and which are available.
- The *Unable to connect to game computer - Abort/Retry/Ignore* message appears if the communication options are not set correctly or if the Game/Client computer does not have the EGS Game menu displayed. In the latter case, double-click the EGS icon then click Retry. For incorrect connections, review the installation guide for correct settings.

RUNNING EEGer™ SESSIONS

The basic steps involved in running EEGer are:

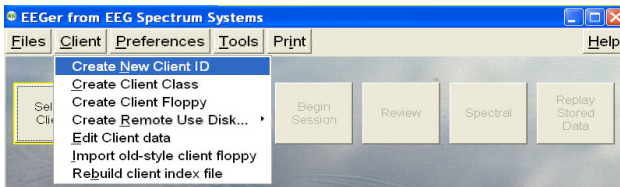
- I. Create Client (Clinical Systems Only)
- II. Select Client
- III. Choose Layout
- IV. Plan Session (Clinical Systems Only)
- V. Begin Session
- VI. Run Session
- VII. Post-Session and Other Options

I. Create Client - Clinical Use Only

Clinical Use: Client creation and setup can only be performed using EEGer Clinical Systems. You must complete the first two steps.

Remote Use: Proceed to Item II - Select Client.

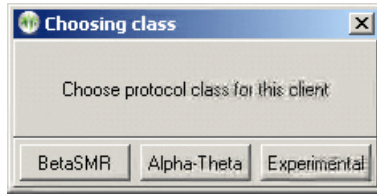
IA. Create New Client ID



- 1. From the **Client** menu, select **Create New Client ID**.
 - 2.
 - 3. Enter an **ID** for the client, using up to 31 characters without spaces or punctuation.
 - 4.
 - 5. Click **OK** to save and continue to the next screen.
 - 6. Enter the **client's name**, using up to 64 characters.
 - 7. Click **OK** to save.
 - 8. Enter the **client's date of birth** (MM/DD/YYYY).
 - 8. Click **OK** to save.
- Enter the client's biological sex (N/F)
- Click **OK** to save.
- Proceed to IB - Create Client Class.

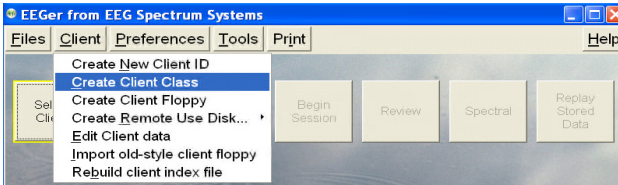
IB. Create Client Class

The Choosing Class dialog appears automatically when a new Client ID is created. Select the class type for this client by clicking the appropriate button: BetaSMR, Alpha-Theta or Experimental.

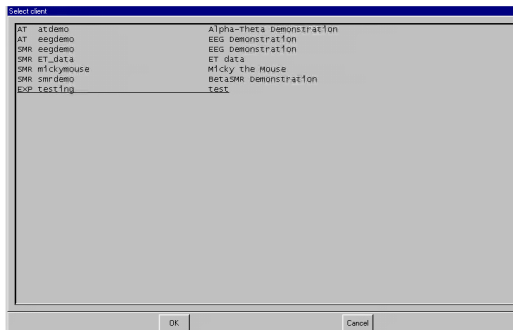


You can also set up additional classes for the client:

1. From the **Client** menu, select **Create Client Class** (formerly Create Client Protocol).



2. Select the **Client ID** you created from the list of available clients and click **OK** (or double-click the Client ID).



3. Select the class type for this client by clicking the appropriate button: **BetaSMR**, **Alpha-Theta** or **Experimental**.

Experimental class allows you to try alternative BetaSMR settings, including the optional screening layouts. Note that the data, histories, and reports are separate for each protocol class (although they may be combined using the Archive/Move option).

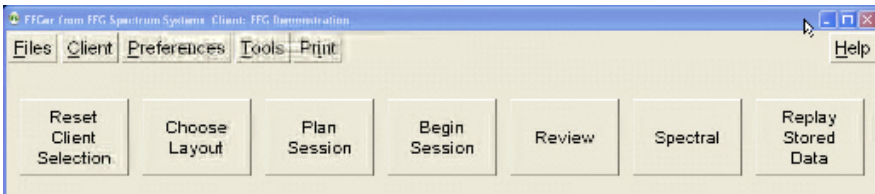
IC. Create Remote Use Disk (Optional)

Please refer to the separate Therapist/Client instructions supplied with purchase of a Remote Use system.

Additional information is available in the complete EEGer™ Manual (available on the installation CD or at www.eeger.com) The EEGer Tutorial outlines step by step directions for setting up Remote Use Session Plans. (Refer to page 2-3 of this booklet for access instructions.)

II. Select Client

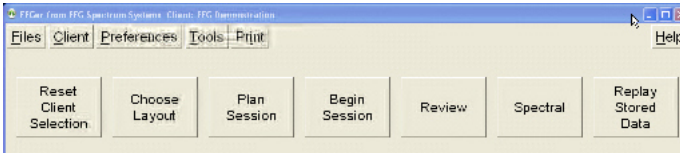
1. Insert Remote Use Storage Device (Flash drive), if used.
2. Click [Select Client](#) on the main EEGer screen.



3. Choose the appropriate Class/Client ID from the list of available clients and click **OK** (or double-click to select).
REMOTE SYSTEMS: Click the drive letter that contains your Remote Use Session Plan (click the BIG button on the screen) and the client from the external disk drive is automatically displayed.
4. At this point the client's name is displayed on the main screen and the other buttons become active.
5. REMOTE SYSTEMS: Proceed to Step V - Begin Session.

III. Choose Layout - Clinical Use Only

1. Click Choose Layout.



2. Click the corresponding layout button to choose the traces for the EEG training display:

BetaSMR layouts:

- 5-trace -- ChA, ChB, Inhibit, Reward, Inhibit (EEGer 4.0 display)
- 6-trace inhibit -- ChA, ChB, Inhibit, Inhibit, Reward, Inhibit
- 6-trace reward -- ChA, ChB, Inhibit, Reward, Reward, Inhibit
- 8-trace (DUAL MODE) -- ChA, ChB, Inhibit, Reward, Inhibit, Inhibit, Reward, Inhibit
- Reward-only -- ChA, ChB, Monitor, Reward, Monitor

Alpha-Theta layouts:

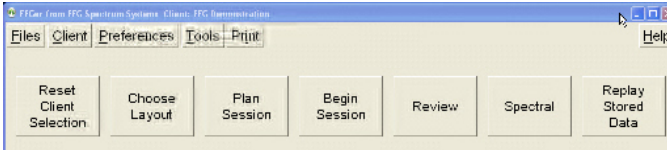
- 5-trace -- ChA, ChB, Inhibit, Reward, Inhibit
- 6-trace inhibit -- ChA, ChB, Inhibit, Inhibit, Reward, Inhibit
- 8-trace (DUAL MODE) -- ChA, ChB, Inhibit, Reward, Inhibit, Inhibit, Reward, Inhibit

Experimental layouts:

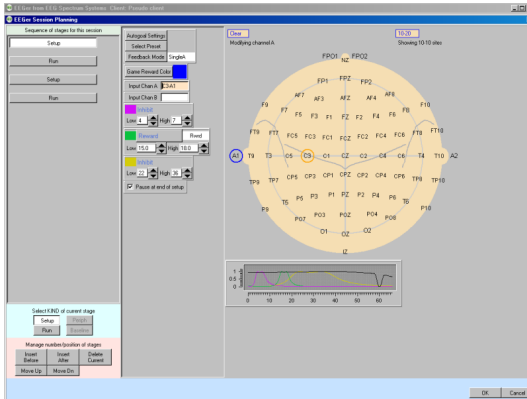
- All BetaSMR Layouts
- Optional Screening Layouts
 - » ChanA, screen - 12 Monitor traces for ChA; multiple default Setup stages
 - » 2-chan, screen - 6 Monitor traces for ChA, 6 Monitor traces for ChB, multiple default Setup stages
 - » ChanB, screen - 12 Monitor traces for ChB; multiple default Setup stages

IV. Plan Session - Clinical Use Only

1. Click the **Plan Session** button to display the EEGer™ Stage Edit screen and specific session information.



Note: The session planning screen default settings are dependent on the option selected in Choose Layout.



Each client requires a “session plan”. This is where initial site locations, frequencies, feedback modes, and autogol selections are made. Most selections are changeable during a session but an initial plan is required. A session plan is comprised of “stages”. There are two kinds of “stages”: **Setup** stages (electrode placement, frequency/mode establishment) and **Run** stages (specified time). Each client has a session plan for each protocol.

This display has three “panes”:

- ① The leftmost pane is where stages are created or selected. At the top of the left pane is a series of buttons showing which “stage” of a session is being modified. Clicking these buttons “selects” that stage for modification. The bottom of the left pane has buttons for creating and deleting stages or changing the stage type.
- ② In the center pane are the values for the currently selected stage.
- ③ On the right pane for Setup stages is a symbolic head with electrode placements and a graph showing the frequency bands for the current filter frequency settings.

2. Create Session Plan

a. Specify Setup Stage Settings

Site locations: Click in one of the Input channels. You can then type in values or click Clear to erase the current settings and use the mouse to click on desired locations on the Head Map displayed at right.

10-20 or 10-10 layout: When editing an Input Channel, you can switch the locations displayed on the Head Map between 10-20 and 10-10 options (more advanced sites) by clicking the button on the right side above the Head Map.

Inhibit(s): Click in the lower or upper range field to change the frequency, or use the Up and Down arrow buttons to increase or decrease the value.

Reward(s): Click in the fields to change the low or high end of the frequency, or use the Up or Down arrow buttons to increase or decrease the value by a whole number. Click the Reward button to change Reward Mode.

Monitor(s): Click in the lower or upper range field to change the frequency, or use the Up and Down arrow buttons to increase or decrease the value. These traces are not included in determining rewards.

Pause at end of setup: Check this box to allow time between stages. Uncheck the box to move to the next stage without interruption.

Feedback Mode: Click the Feedback Mode button (top center) to display choices for initial feedback modes. At actual feedback time, any unlicensed condition will cause SingleA (single channel, A input) to be selected. Of course, you can change the feedback mode (using F3) during the actual feedback process.

The feedback modes work as follows:

SingleA - Single channel, source data from the "A" input channel

SingleB - Single channel, source data from the "B" input channel

Sum - Sum of A & B channels is used as source data

Differ - Difference of A & B channels is used as source data

Psync - Compares filtered A & B envelopes (Synchrony)

Async - Compares filtered A & B envelope slopes (Comodulation)

GAsync - Compares lowpass A & B envelope slopes (Global Comodulation)

AminusB - Difference between filtered A & B envelopes

BminusA - Difference between filtered B & A envelopes

PDelta - Phase difference between A & B signals

RatioA - Input is A; reward is ratio of reward trace to inhibit trace just above reward trace

RatioB - Input is B; reward is ratio of reward trace to inhibit trace just above reward trace

Dual - Input is A & B lowpass values (A feeds 3 traces, B feeds 3 traces); reward is SMR

MonitorA - Input A lowpass value; No rewards or game outputs

MonitorAB - Input A & B lowpass values; 6 traces from A, and 6 from B; No rewards/game outputs

MonitorB - Input is B lowpass value; No rewards or game outputs

Additional choices are available if the ANI ZScore module is installed. Refer to the ZScore appendix in the EeGer™ Manual or program Help.

Autogoal Settings: Click **Autogoal settings** at the bottom of the session planning screen to bring up a menu that allows adjustment of threshold values used when F11 is pressed (BetaSMR example).

- Any stream with 0% selected has NO change with F11.
- The **Minimum μv** value is the minimum (measured average value) threshold is “automatically” set by F11.
- The **Maximum μv** value is the largest threshold value set by F11.
- The frequency of Autogoal adjustment is set using a toggle button. Click the button to select:
 - » **Autogoal only on F11**
 - » **Automatic autogoal every rest period** (seconds must be 0)
 - » Enter a number of seconds to select **Autogoal every # seconds**

Click **OK** to save settings and return to the setup stage planning

b. Specify Run Stage Settings

Clicking a **Run** button brings up a slightly different screen.

Notice there is no “head” shown. The important field on this screen is **Minutes to run**. Enter the number of minutes you want to run the settings displayed in the preceding Setup stage.

To run a session manually, you can delete the Run stages from setup. You can also check **Pause at end of run** to have the program wait for your instruction so that you can prepare for the next phase.

c. Other Setup Options

- **Preset Settings**

Clicking the **Presets** button (top center) brings up a selection list of defined settings. These are the values available from the user-defined presets established using the Preferences menu (Edit filter setups). Use them to automatically fill in settings you commonly use for your clients' sessions.

- **Inserting and Deleting Stages**

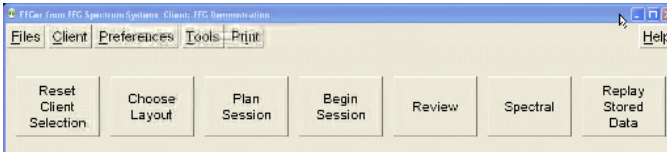
- » Clicking **Insert Before** or **Insert After** button adds a new stage with a type of "Empty".
- » An Empty stage type must be assigned a type by clicking **Run** or **Setup**.
- » The **Delete Current** button deletes the stage.

3. Click **OK** to save all of your session plan specifications.

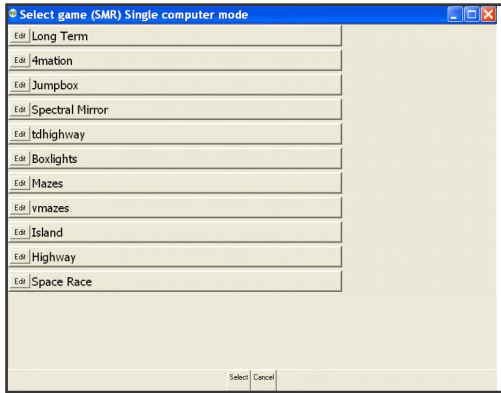


V. Begin Session

1. To run a session, click **Begin Session** on the main screen.



2. The **Choose Game** window is displayed. Click the name of the game to highlight the game you wish to run and click **Select**, or double-click the game name.



If you choose to Edit game options from this screen, they will only be used for the current session. To modify game options for all sessions, use Tools-Tailor Installed Games.

3. The brainwave display appears on the Therapist computer and the Client game screen is initialized. For Single-computer, Single-screen mode, press the Space Bar to switch between displays.



EGS game details are available in the EEGer™ User Manual on your CD or at www.eeger.com.

Optional game information is available in the Quick Reference Guide for Optional Games or EEGer program Help.



This sample shows a typical single channel setup for the 5-trace display.



The top two streams are the input channels (labeled “A” and “B”). In this example, the “A” channel electrodes are at C4-A2. The three streams below that are reward and inhibit streams (labeled at about the middle of each stream display).

Possible legends are:

- a. ArtI Artifact Inhibit (lowpass data)
- b. Inhb Inhibit
- c. Rwd Reward (signal above threshold)
- d. Down Reward (signal below threshold)

Additionally, for advanced users:

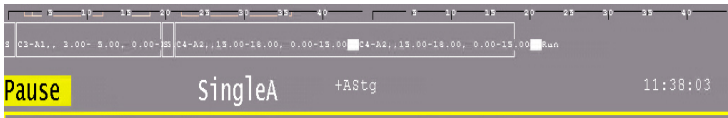
- e. Cntr Reward (signal close to threshold)
- f. Elev Reward (signal above threshold, clamp to threshold)
- g. DevU Reward (deviation above)
- h. DevD Reward (deviation down)



The current frequency range of each stream is shown at the left next to the color blocks that contain the trace number. The “color” of the blocks is based on the center frequency of the frequency range (using the customizable colors selectable from the Tools menu). Other trace information includes:

- Scale, Thresh, and Avg values are microvolts (peak-to-peak).
- The %above value is the percent of time the signal was over the threshold voltage (smoothed over the previous 30 seconds).
- The Avg value is the average value of the signal smoothed over the previous 30 seconds.
- The blue horizontal lines represent the relative position of the threshold setting.
- The (frequency) colored bars at the bottom are a measure of the energy contained in each 1 Hertz frequency range from 0 to 45 Hz. They are computed as FFT (Fast Fourier Transform) values every ½ second.
- The Raw stream shows a horizontal GREEN line when all reward criteria are met (no artifact/inhibit & all rewards OK). The vertical GREEN line indicates when a reward (beep) is issued.
- The reward stream shows a GREEN line in the center when the signal is over threshold.
- The inhibit band displays a RED line when the signal is above threshold.
- GREEN lines must be present in the Reward band to issue a reward, but if RED lines appear in the Inhibit band no reward is issued.

The bottom area of the screen has a number of regions of data. Shown below are some boxes with text inside. This is a graphical representation of the session plan.



- The little boxes with “S” inside represent Setup stages.
- The run stages have the setup text from the previous setup and a width proportional to the specified run time.
- The entire bottom width is scaled to represent the maximum session time (from the preferences screens).
- The white bar is filled in to show the current position in the session plan.
- The boxes, text, and bar disappear if the session plan is no longer being followed (e.g., if no Run stage is present or Ctrl+F5 is used for manual run).



Below the stage information boxes is a line of status information.

- The leftmost field contains the current status of feedback (Pause, Run, Rest, Stage) with a different background color for each status.
 - » **Pause** indicates an operator action (F5) is required to continue the session.
 - » **Rest** is shown during the rest periods between game periods and implies no operator action is required.
 - » **Stage** displays when there is an operator action/decision needed (move electrodes, continue/change session process, etc.).
- The current period, score, and feedback time (minutes:seconds) is shown to the right of the current status. Next is shown the current feedback mode (SingleA).
- There are a number of flags and operator-changeable modes whose state is shown in the middle of this line.

Possibilities are:

- | | |
|-------|--|
| +PB | playback mode (not live) |
| +Gen | signal generator mode |
| +Athr | autothreshold (auto F11) at beginning of rest period |
| +Astg | auto stage processing enabled |
| -DC | DC compensation turned off |
| -Ainh | artifact inhibit turned off |
| -lpf | lowpass filter disabled |
| -Nuse | unused raw trace data is suppressed |
| Eopn | eyes open |
| Ecls | eyes closed |
- -

Further right, the current time of day (24hr clock) is shown.

- At the lower-right edge, the battery-operated amplifier voltage is shown (or NONE if no amplifier is being sensed). If another I/O device is used, other data may show here. In all cases, a flashing RED message indicates a fatal error condition. The bottom two lines contain program messages, in this case displaying the setup-specified site locations.

VI. Run Session

During a session there are certain actions that can be taken to adjust the display and client feedback. Press F1 for Help to display a list of available options and keypresses. The most common keypresses are listed in Appendix C of this guide.

Run/Pause (F5)

When the brainwave screen first appears, it is in Pause mode. When the Client's game screen is ready:

- Press **F9** to autoscale the traces
- Press **F11** to initialize Autogoal
- Press **F5** to change to Run mode and begin the session. To Pause the session, press F5 again.

Single Computer (Space)

Press the **Space Bar** to choose between training and game display.

Adjust Scale (F9)

Sometimes the display of waves would be easier to read if they were displayed larger or smaller. Scale is used to zoom in or out on the wave display. Press Page Down (**PgDn**) or Page Up (**PgUp**) to select the line you wish to adjust. Press **F9** to activate scale adjustment. Use the plus (+) and minus (-) keys to increase and decrease the scale. The larger the scale, the smaller the display. Press Enter twice to leave the trace.

Adjust Threshold (F11)

Depending on the current mind-state of the client, it might be advantageous to modify the thresholds to adjust the reward or inhibit feedback. Pressing **F11** if a stream is selected, will choose appropriate threshold value for only that stream. If the stream is a lowpass stream, the threshold adjusts based on 1% over threshold as target. If no streams are selected, EEGer will choose appropriate threshold value for all non-lowpass streams. If the user-specified threshold percentage is zero, no autothreshold action is ever taken on that stream.

Changing Stages (Auto-stage or F4)

When the session plan is set for a second stage, the program can automatically pause before the second protocol setting begins to run. Press **F5** to continue the training when ready to run the second stage. You may also manually switch by pressing **F4** to change to the next stage. This change also turns off the Autotimer. To restart the Autotimer for the next stage, press **Ctrl-F4**.



Notes (F8 or Shift+F8)

Pressing **F8** opens a full-screen text Editor for note taking. **Shift+F8** causes the two bottom lines to be used as a single-line text entry area for notes or “marks”.

Help (F1)

Press **F1** at any time to display a Help screen of keys and their associated function.

Exiting the Brainwave Display (Esc)

When the session is complete, press **Esc** to exit the brainwave display.

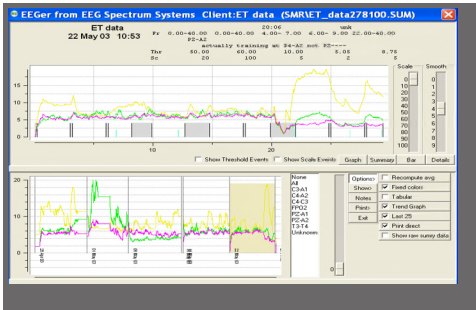
VII. Post-Session and Other Options

1. Replay Stored Data

After running a client session, the data can be displayed and analyzed using the Replay Stored Data selection from the main screen. Note: This feature replays the data, but not the settings used during the session. It is not like replaying a tape of the session.

2. Review

You can compare the data from multiple sessions with the Review option from the main menu. The following image is an example of the line graph display. Refer to the EEGer Manual or program Help for more details.

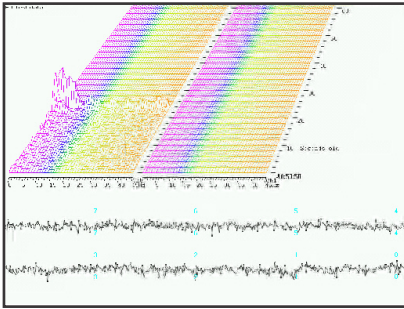


When Review is first opened, the graph for last session run appear in the upper section. The Trend graph appears in the lower section. Click the date-labeled area of the Trend graph to view a different session graph at the top. Move the cursor over the upper graph to view session details at the top of the display for any given point in the session.

You can also print the Summary, Detail or Trend graph directly to your Windows default printer or to a file for printing later or sending for a consultation. (NOTE: EEGer prints to a printer by default. To change that option, go to Preferences-Configuration and select the Setup tab. Click to uncheck “Print directly to default printer” and save.)

Refer to the EEGer™ Manual or program Help for more information.

3. Spectral



- F1 - Help, List of all control keys
- Pause - Pause or Resume playback
- C - Continue/Start
- P - Pause
- Esc - Quit
- F6 - Save screen shot
- F12 - Toggle number of channels

4. Client File Management

a. Archive Client

From the **Files** menu, select **Archive** and click the **Archive** button. You are prompted to select the client and files to be archived. The Archive function reduces the size of the files and saves them in a separate directory. The archived sessions do not appear for Review/Spectral/Replay. Use the Unarchive button to restore the historical sessions.

b. Edit Client Name or Birthdate

To edit a client's full name or birthdate, click the **Client** menu and select **Edit Client data**. Select the client ID you wish to update. Enter any changes to the client name and click **OK**, then edit the birthdate (MM/DD/YYYY) and click **OK**. The correct birthdate is necessary for ANI ZScore modes.

c. Rename an Existing Client

To change the Client ID, click the **Files** menu and select **Archive**. Click the button labeled **Rename an existing client**. Select the client to rename, then enter a new Client ID and click **OK**.

d. Delete Individual Client Files

From the **Files** menu, select **Archive**. Click either **Delete files from active client** or **Delete files from archived client**. Select a Client ID and choose files to delete.

e. Delete Client

From the **Files** menu, select **Archive** and click button labeled **Permanently delete an entire client without possible recovery**. You are prompted to select the client and confirm deletion. This process removes all data for the selected Client ID.

f. Move Session Data to a Different Client ID

From the **Files** menu, select **Archive**. Click the button labeled **Move files from active client/class to another client**. Select the ID that includes the files you want to move. Choose the files to be moved. Select the destination client ID. The session data is transferred to the Client ID folder for the chosen client.

g. Back Up Client Files

It is important to back up your client files to another computer or external drive *on a regular basis* in case of hard drive failure. How you do this depends on your hardware environment. You can burn the files to CD, store on an external device such as a ZIP drive or USB memory stick, back up to another hard drive, or use any other procedure that works for you.

1. Manual file backup

FILE STRUCTURE:

```
C:\(Hard Drive Root Directory)
  \EEGer
    \CLIENTS
      \YourClientID
        \SMR
        \AT
```

2. WHICH FILES SHOULD I BACK UP?

Back up the files in the EEGER\CLIENTS folder. You can do the entire folder or back up each ClientID folder individually. The “eegdemo” and “ET_data” sample clients can always be recovered by reinstalling EEGER.

Also, back up the C:\EEGER\Preferences folder. Your license file and game options are stored in the Keys subfolder. If you have archived clients (to make them inactive), you should also back up the C:\EEGER\Archive folder.

NOTE: if you have changed the default folders for EEGER, you should back up wherever you have redirected those folders!

HOW DO I RESTORE FILES?

How you restore files depends on how you backed up the files. Copy the files you’ve backed up into the appropriate folder through My Computer in Windows. If you used a compression utility for backup, such as WinZip, you’ll need to extract the files to copy them into the appropriate location.

If you stored the entire CLIENTS folder, you can copy the entire CLIENTS folder into the EEGER folder, replacing the contents.

You can copy the individual ClientID folders into the EEGER\CLIENTS folder.

- a. Individual sessions can be copied into the appropriate protocol folder for the client. View the file’s date/time property to determine which file corresponds to the session.

b. When finished copying files, open EEGER. Go to the **Clients** menu and select **Rebuild Client Index File**.

NOTE: If you are prompted to replace a file, only do so if the file to be replaced is OLDER than the file you are copying to the drive.

Appendix A — Keypresses Commonly Used During Feedback

(complete list available on Help screen and in the EEGer Manual)

NO BAND SELECTED

Function	Action	DOS Key
PgUp / PgDn	Select band to adjust	PgUp/PgDn
F1	Help (F1 again to exit)	F1
F2 / Shift+F2	Cycle for Downtraining or other reward mode	Ctrl+F2
F3 / Shift+F3	Switch Channel (A to B); cycle or popup feedback mode menu	F3
Ctrl+F3	Toggle game color	automatic
Alt+F3	Toggle Low Pass filter	
F4	Switch protocols (next Stage)	F4
Shift+F4	Turn Autostage back on	
Ctrl+F4	Change to previous session frequency	
F5	Start/Stop	F5
Ctrl+F5	Turn off automatic timer – Manual run	
F6	Save current EEG display to print	F6
Ctrl-F6	Change feedback source	
Alt+F6	Sine wave signal generator	
F7	Toggle integral display (debug)	
Ctrl+F7	Impedance for J&J amplifiers (Ctrl+F7 to return)	
F8	Insert comment (text)	
Alt+F8	Toggle Arti Inhib	
F9	AutoScale training bands (no band selected)	F2
Ctrl+F9	Single scale A-adjust	
F10 / Shift+F10	Increase/Decrease spectral display band height	
Ctrl+F10	Hide spectral bands	
Alt+F10	FFT markers On/Off	
F11	AutoThreshold all traces (no band selected)	F11
Ctrl+F11	Toggle AutoThreshold at stage and AutoThreshold with F11	
F12 / Shift+F12	Graph of live session trend and spectral mirror (F12 to return)	
Ctrl+F12	Toggle draw speed	
Alt+F12	Toggle “hide unused traces”	
Ctrl+↑ or ↓	Increase/Decrease REWARD frequency	
Alt-A / Alt-B	Insert text note if protocol changed	
Esc	End session and exit	Esc
Space	Toggle single-computer Therapist/Game display	
% or G / V / T / O	Adjust Goal, Volume, or Tactile settings	
D / F	Adjust Therapist Display or Feedback Display options	

BAND SELECTED (Highlighted)

Function	Action	DOS Key
PgUp / PgDn	Select band to adjust	PgUp/PgDn
+ / -	Increase/Decrease: 1. scale value (F9, then + or -, Enter) 2. threshold width	+ / -
Ctrl+← or →	Increase/Decrease LOWER frequency for band	
Ctrl+↑ or ↓	Increase/Decrease UPPER frequency for band	
F9	Manually set scale for currently selected band	F2
Alt-E	Alternately change Eyes open/closed state	
Ctrl+F9	AutoScale currently selected band	
F11	AutoThreshold for selected band	
Enter	Finish change on current band	Enter

Appendix B — What Is This?

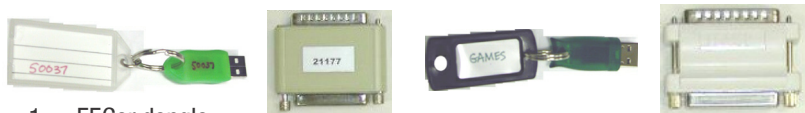
These images provides a visual aid for items distributed with neurofeedback component kits. The items you receive are dependent upon your computer configuration and amplifier model. Not all items listed here are included in your shipment.

SOFTWARE INSTALLATION DISKS



1. EEger™ Installation CD
2. EEger Keyblock File CD
3. SpaceRace Installation CD
4. Chomper Installation CD
5. BoatRace Installation CD
6. BeyondVR Cybernetic Interface System 2-CD Installation Set (for StarLight, Squared, INtoIT, Kaleidoscope, and StoneSoup installation)

SECURITY KEYS



1. EEger dongle
2. DOS NeuroCog dongle (obsolete)
3. BeyondVR USB HASP key (black or green key)
4. BeyondVR Parallel HASP key (obsolete)

CONNECTION CABLES AND DEVICES



1. Null Modem Cable
2. Ethernet Cable (crossover or direct)
3. USB-Serial adapter with driver installation CD
4. USB 4-port Hub with power supply

AMPLIFIER & COMPONENTS -

esiPRO 4.3



1. esiPRO 4.3 amplifier
2. USB cable
3. esiPro 2.2 amplifier

J&J Technologies



1. BrainLynx amplifier
2. GP+ amplifier (obsolete)
3. C2-Mini amplifier with XP1.0 USB adapter (obsolete)
4. TP-60 Electrode adapter (C2-Mini and GP+)
5. Shorting plug (C2-Mini and GP+)

Thought Technology



1. ProComp Infiniti 8-channel amplifier
2. ProComp2 2-channel amplifier
3. Fiber optic cable
4. ProSB interface adapter
5. 9-25 Pin Null Modem Cable
6. FlexPro pre-amplifier (ProComp 8-channel and ProComp2 ChB only)
7. DIN electrode adapter