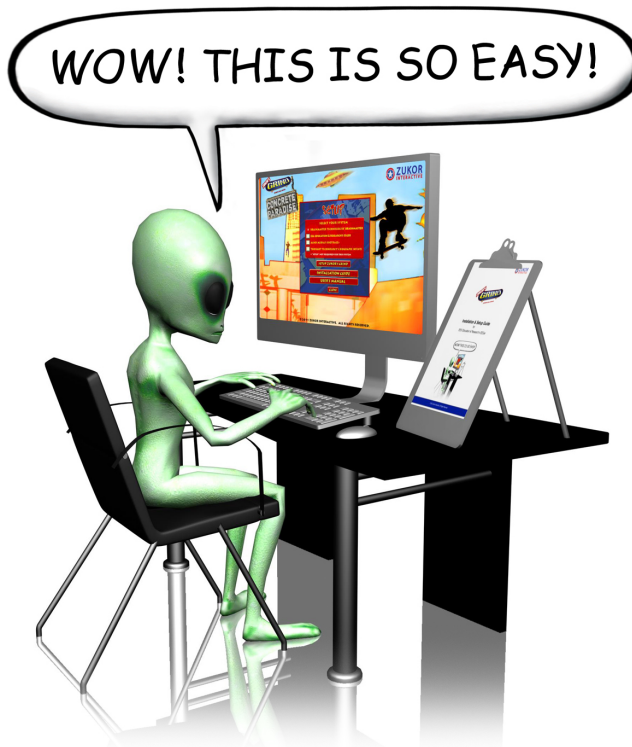




QUICK START GUIDE

Installation, Setup & Basic Operation
with
BrainMaster Technologies (all systems)
Version 30



Zukor's Grind

Quick Start Guide

© 2012 Zukor Interactive. All rights reserved.

Under the copyright laws, this guide may not be copied, in whole or in part, without the written consent of Zukor Interactive. Your rights to the software are governed by the accompanying software license agreement. Every effort has been made to ensure that the information in this document is accurate. Zukor Interactive is not responsible for printing or clerical errors.

Zukor Interactive

101 Convention Center Drive, Suite 700
Las Vegas, NV 89109 USA
www.zukor.com
info@zukor.com

The Zukor Interactive and Zukor's Grind logos are trademarks of Zukor Interactive.

All content contained within Zukor's Grind is owned and copyrighted by Zukor Interactive. All rights reserved.

Other company and product names mentioned herein are trademarks of their respective companies. Mention of third-party products is for informational purposes only and constitutes neither an endorsement nor a recommendation. Zukor Interactive assumes no responsibility with regard to the performance or use of these products.

ACKNOWLEDGMENTS

ZUKOR'S GRIND

is dedicated in loving memory of

Helen Turcotte Davis
1937 - 2011

Jefferson C. Davis, M.D.
1932 - 1989

*They dedicated their lives to advances in medicine
and continuing medical education.*

NEUROFEEDBACK ADVISORY TEAM

Chief Neurofeedback Clinical Advisor: Allen Novian, Ph.D.

Neurofeedback Clinical Advisors: John Anderson, M.A.; Randall R. Lyle, Ph.D.; Stephen Sideroff, Ph.D.; Ross Thompson, MA, LMFT; Betsabe Rubio, LMFT, LPC

Neurofeedback Systems Technical Advisor: Kate Novian

SPECIAL THANKS

BrainMaster Technologies

Tom Collura, Terri Collura, Bill Mrklas, David Horne, Robert Milicia, Becca Hosier, Kristen Stahl, Ashley Johnson.

Contents

5	Introduction
6	System Requirements
7	Installation via Internet Explorer
8	Installation via Firefox
9	Installation via Chrome
10	Installation via Safari
11	Monitor Setup
14	Using Zukor's Grind & BrainMaster
18	Profiles Screen
21	Configuring BrainMaster for Stored Data
30	Configuring BrainMaster for Live Data
40	Uninstall Zukor's Grind

Welcome to Zukor's Grind!

Thank you for purchasing Zukor's Grind. It is our sincere hope that it contributes to improved patient treatment. Our goal was to create a feedback game with the same world-class professionalism and sophistication as our neurofeedback and biofeedback system partners provide in their amplifiers and system software.

With Zukor's Grind, we have introduced many features to neurofeedback and biofeedback feedback games which have never before been seen in the field. Each feature was methodically considered and carefully developed under the guidance of and with feedback from experienced neurofeedback clinicians, in particular, our chief clinical advisor, Dr. Allen Novian.

This guide will help you make the most of these features. Additionally, there is built-in Help throughout the game. Should you need additional explanation of any feature, please contact us directly and we will make sure you fully understand it.

As you use Zukor's Grind, we hope you not only benefit from its vast range of innovative new features, but also from the ability to customize the features to meet your specific neurofeedback or biofeedback training strategy and the unique needs of each patient. Even more than the features themselves, we strongly believe (and our clinical advisors have repeatedly told us) that the ability for clinicians to select and customize features is critical for effective clinical neurofeedback and biofeedback treatment.

We welcome your feedback and suggestions, which we will use to create even more effective feedback games in the future. So, please let us know how we are doing.

Zukor Interactive is committed to supporting the increasingly important fields of neurofeedback and biofeedback. We are a proud member of the ISNR and AAPB and are financially supporting industry research efforts.

We strongly believe neurofeedback and biofeedback have an extremely bright future.

Thank you again for your support!

Samuel Turcotte Davis
President & CTO
Zukor Interactive

MINIMUM COMPUTER SYSTEM REQUIREMENTS

Your computer system needs to meet the below requirements to properly run Zukor's Grind. Systems which don't meet these requirements may run the game, but you might encounter issues ranging from minor to extreme. These requirements are in alignment with the requirements of BrainMaster Technologies as well.

Note: Most computers sold within the last two years will meet the key requirements.

1. OPERATING SYSTEM

- **Windows 7 on a regular PC or on a Mac (via Bootcamp).**

NOTE: Microsoft no longer supports many versions of Windows XP and Windows Vista.

IMPORTANT: Please make sure you have downloaded and installed **ALL** Windows 7 updates **PRIOR TO INSTALLING** and running Zukor's Grind. Failure to do this may lead to improper operation of the game.

2. COMPUTER GRAPHIC REQUIREMENTS

- **Dedicated graphics card with at least 512 MB dedicated video memory.**

NOTE: Systems which do not meet these graphic requirements will still likely play the game, but may require graphic adjustments within the game to reduce graphics quality so the game will play smoothly.

3. MONITORS/DISPLAYS

- **Two monitors. (Game monitor should be "widescreen" and 21+ inches.)**

NOTE: Video projectors, Plasma TVs and LCD TVs "usually" work as well, but could require different Windows graphic drivers to be selected.

NEUROFEEDBACK SYSTEM SOFTWARE REQUIREMENTS

- **BrainMaster Technologies (any system)**
- **BrainMaster third-party game license key**

Note: It is highly recommended that BrainMaster and Zukor's Grind be run on a single, dedicated system with no other applications running.

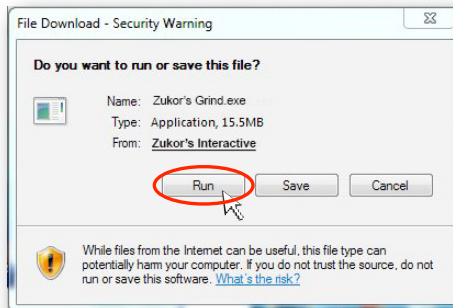
Installation via Download (Explorer)

If using Internet Explorer

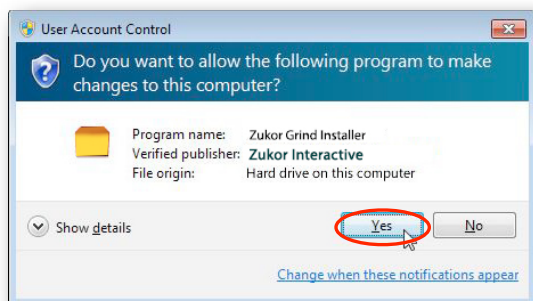
1. Download Zukor's Grind.



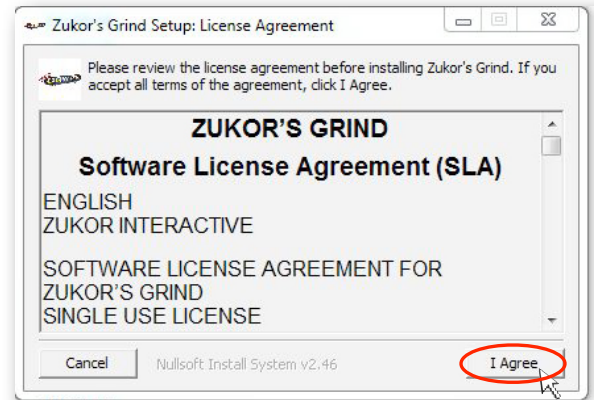
2. When the **File Download Security Warning** box appears, click **Run**.



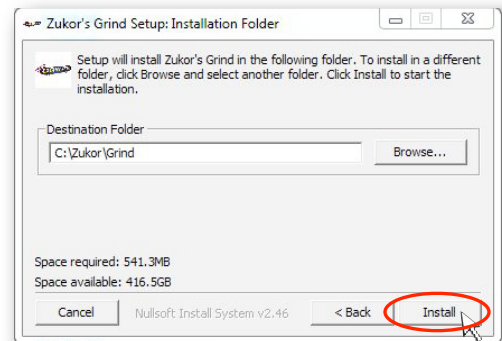
3. When the **User Account Control** box appears, click **Yes**.



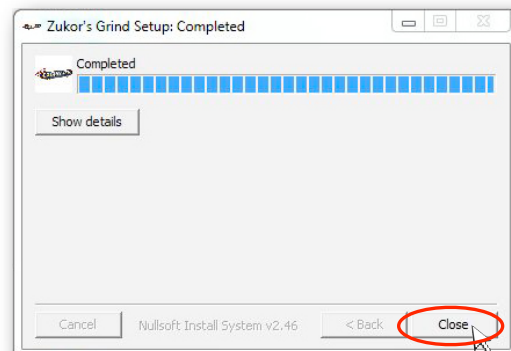
4. When the **Software License Agreement** appears, please read it, then click, **I Agree**.



5. When the box below appears, click **Install**.



6. When installation is **Completed**, click **Close**.



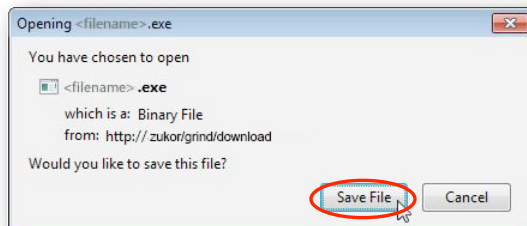
Installation via Download (Firefox)

If using Firefox

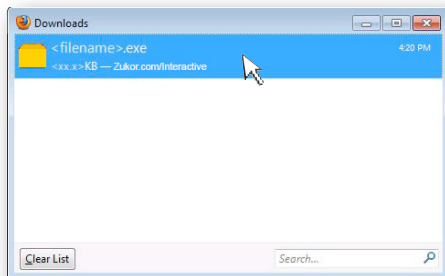
1. Download Zukor's Grind.



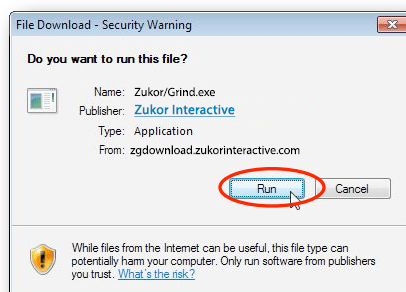
2. When the box below appears, click **"Save File."**



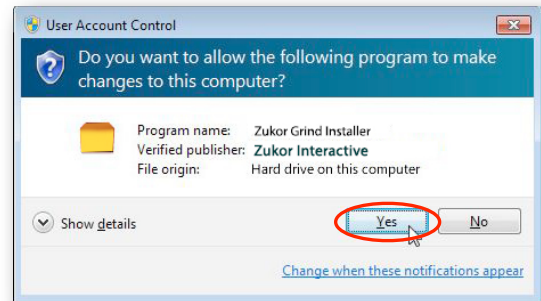
3. Double click **Zukor-Grind-Installer.exe** to open.



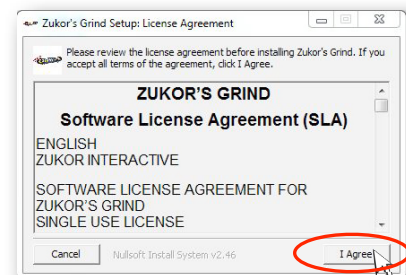
4. When the **File Download Security Warning** box appears, click **"Run."**



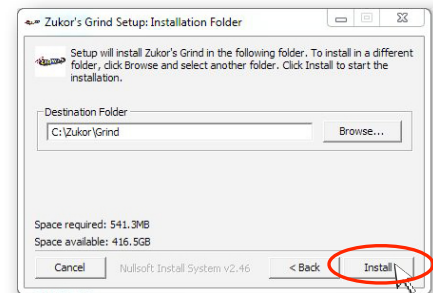
5. When the **User Account Control** box appears, click **"Yes."**



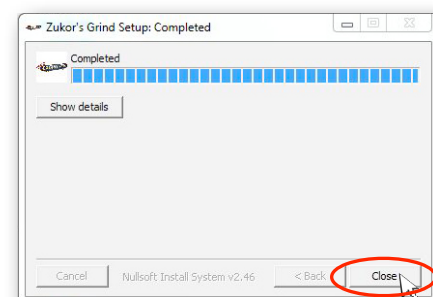
6. When the **Software License Agreement** appears, please read it, then click, **"I Agree."**



7. When the box below appears, click **"Install."**



8. When installation is **Completed**, click **"Close."**



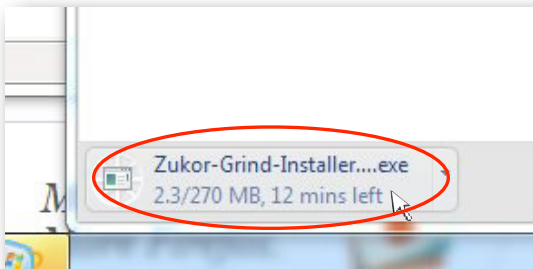
Installation via Download (Chrome)

If using Chrome

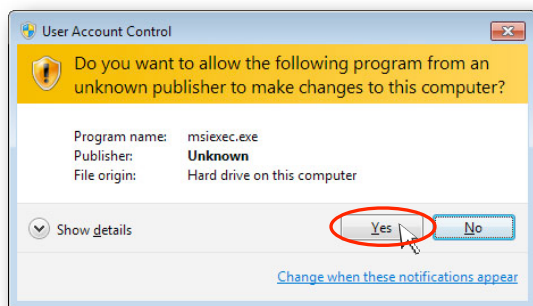
1. Download Zukor's Grind.



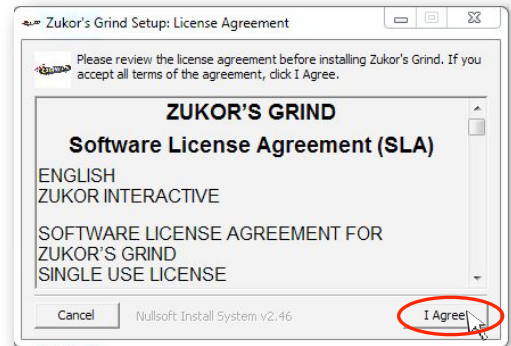
2. Locate the installer **ZukorsGrind-Installer.exe** on the bottom left corner of your browser and click to open.



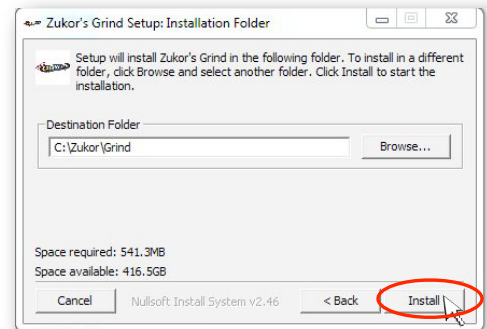
3. When the **User Account Control** box appears, click **Yes.**



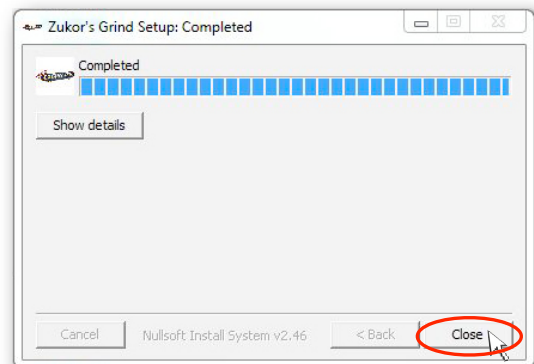
4. When the **Software License Agreement** appears, please read it, then click, **"I Agree."**



5. When the box below appears, click **"Install."**



6. When installation is **Completed**, click **"Close."**



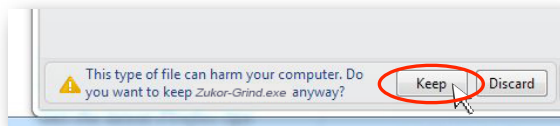
Installation via Download (Safari)

If using Safari

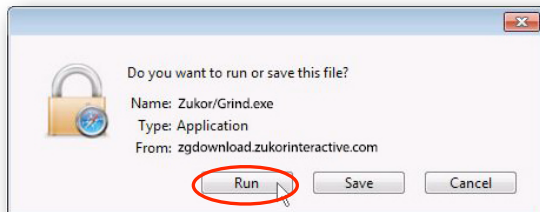
1. Download Zukor's Grind.



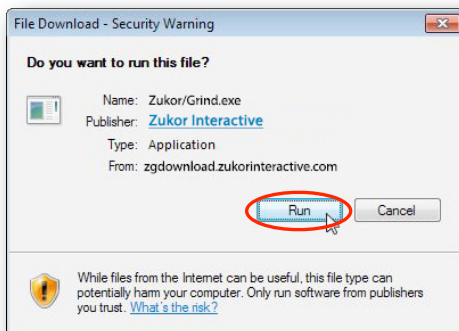
2. When the below dialogue box appears, click “Keep.”



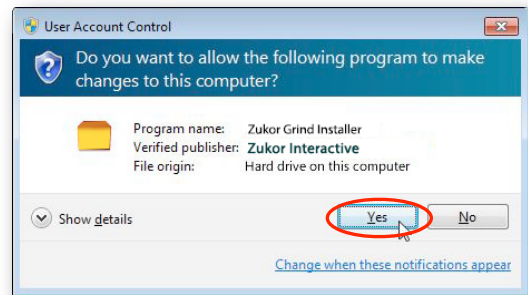
3. When the below box appears, click “Run.”



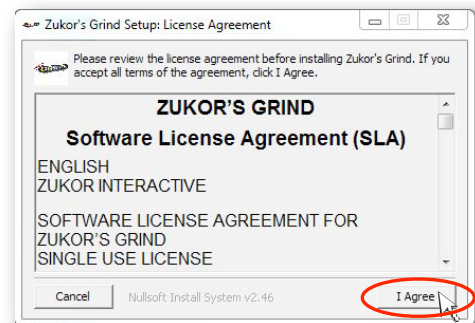
4. When the **File Download Security Warning** box appears, click “Run.”



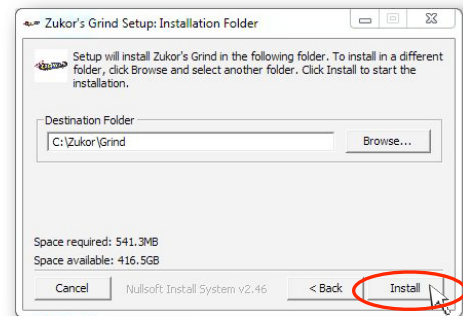
5. When the **User Account Control** box appears, click “Yes.”



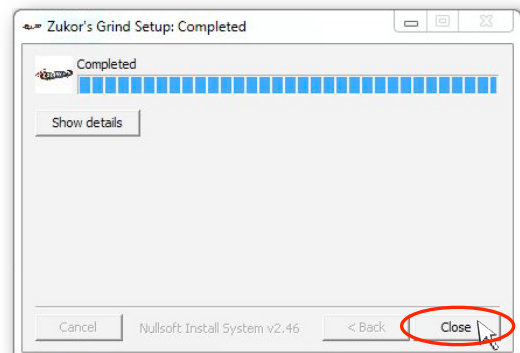
6. When the **Software License Agreement** appears, please read it, then click, “I Agree.”



7. When the box below appears, click “Install.”



8. When installation is **Completed**, click “Close.”



Monitor Setup

Zukor's Grind is designed to work with BrainMaster in a two monitor configuration.

The below steps explain how to configure your monitors in Windows to work properly with BrainMaster and Zukor's Grind.

Note: If you have previously been using your computer with a second monitor, then it is likely your monitors are already set up correctly. However, following the below steps will make sure your monitors work correctly with Zukor's Grind and BrainMaster.

OVERVIEW

Zukor's Grind works with BrainMaster and two monitors as follows:

Monitor 1 = "Clinician Monitor" to display the BrainMaster application and clinician screen.

Note: the Clinician Monitor (Monitor 1) can be a laptop screen.

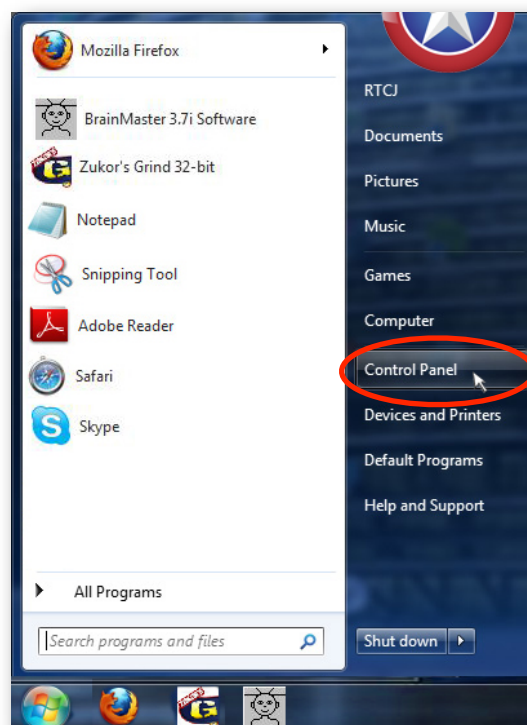
Monitor 2 = "Game Monitor" to display the Zukor's Grind feedback game for the patient.

Note 1: Per the Zukor's Grind system requirements, the Game Monitor (Monitor 2) should be a widescreen 21+ inch monitor. A smaller and/or a non-widescreen monitor will work, but the game display experience will be less than optimal.

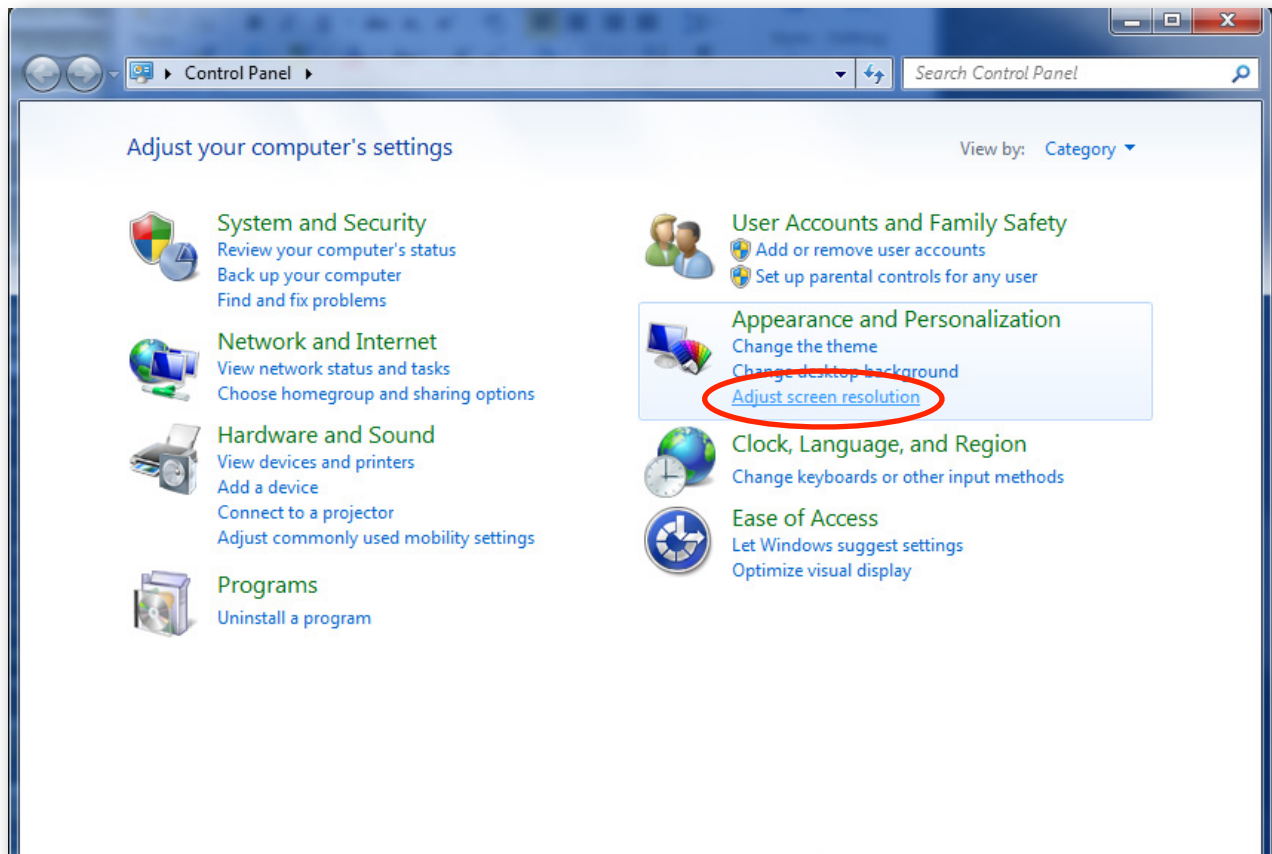
Note 2: Monitor 2 can also be a LCD/Plasma TV or video projector. However some of these alternative displays may require additional configuration changes in Windows.

MONITOR SETUP

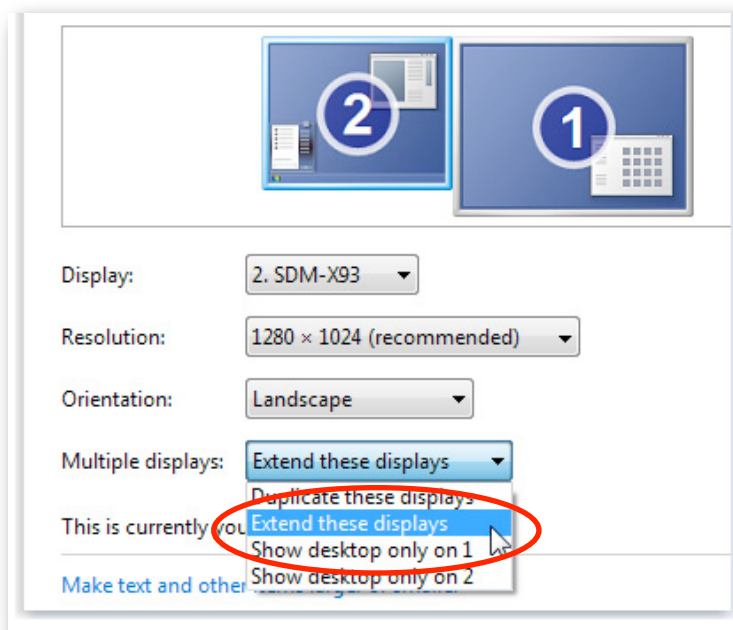
1. On the **Start** menu in Windows go to **Control Panel**.



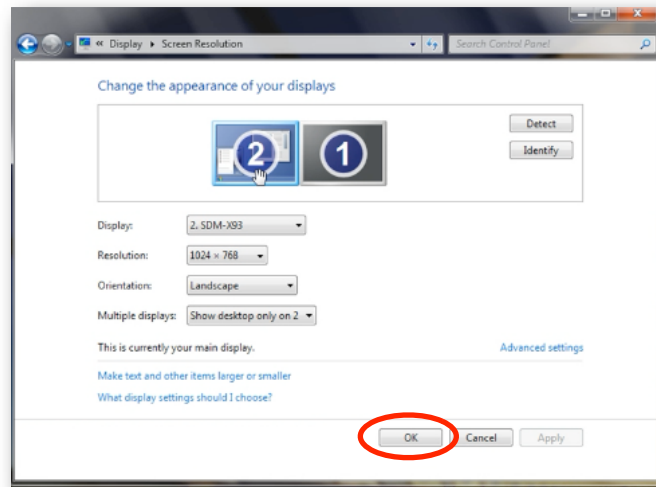
2. On the **Control Panel** window under **Appearance and Personalization**, click on **Adjust screen resolution**.



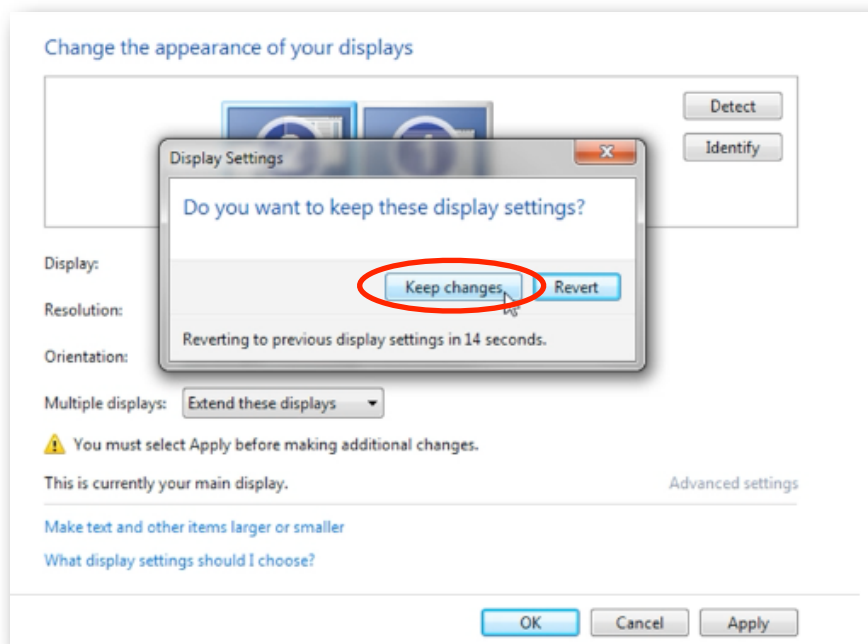
3. Click the drop-down list next to **Multiple displays** and select **Extend these displays**.



4. Then click **OK**.



5. On the **Display Settings** confirmation popup, click **Keep changes**.



Your monitors are now setup to work properly with Zukor's Grind and BrainMaster. When you start BrainMaster it should appear on Monitor 1 (Clinician Monitor) and when you launch Zukor's Grind it should appear on Monitor 2 (Game Monitor).

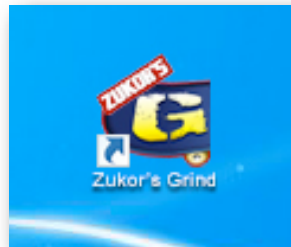
If it does not, then please review the above steps again. If it's still not working, then please contact Customer Support.

Using Zukor's Grind & BrainMaster

The below steps will take you through how to get ready to run the first period of a new patient session. Please carefully follow, understand and learn these basic steps.

IMPORTANT: Do not proceed with the following steps until you have completed the installation and your feedback session is active.

1. Locate the **Grind** icon on your desktop & double click it:



This will launch Zukor's Grind and bring up the **Registration & License Key System**.

2. Complete the **Registration & License Key System** using the on-screen instructions.

ZUKOR'S GRIND

REGISTRATION & LICENSE KEY SYSTEM

THIS SCREEN ALLOWS YOU TO REGISTER AND RECEIVE A LICENSE KEY TO USE ZUKOR'S GRIND

INSTRUCTIONS

1. FILL IN YOUR NAME AND EMAIL ADDRESS IN THE SPACES BELOW.
2. CLICK THE SEND BUTTON. THIS WILL SEND YOUR NAME, EMAIL ADDRESS AND COMPUTER ID TO ZUKOR INTERACTIVE.
3. WHEN YOU RECEIVE AN EMAIL FROM ZUKOR INTERACTIVE WITH THE SUBJECT LINE "LICENSE KEY" YOU MUST COPY AND PASTE THE LICENSE KEY INTO THE LICENSE KEY BOX AND THEN CLICK APPLY. (IN MOST CASES YOU WILL RECEIVE YOUR LICENSE KEY EMAIL WITHIN 1 HOUR, BUT IT COULD TAKE UP TO 24 HOURS.)

IMPORTANT NOTE: YOU MUST START AND COMPLETE THIS PROCESS ON THE SAME COMPUTER YOU INTEND TO USE ZUKOR'S GRIND. ONCE THIS PROCESS IS COMPLETED THE GAME WILL BE TIED TO THAT COMPUTER AND ONLY RUN ON THAT ONE COMPUTER.

NAME

E-MAIL

COMPUTER ID **SEND**

LICENSE KEY **APPLY**

ALTERNATIVELY, TO REGISTER AND RECEIVE YOUR LICENSE KEY BY PHONE,
CALL ZUKOR INTERACTIVE AT (702) 534-4727, EXTENSION 2.

CLOSE **HELP**

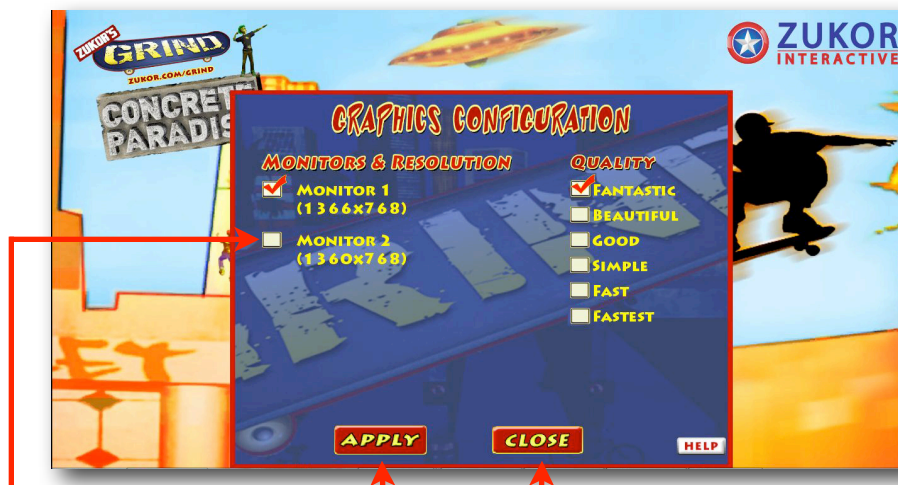
3. Once a valid license key is applied, then Zukor's Grind will start up, and the Main Menu will appear along with the profile popup, click **Options**.



4. The **Graphics Configuration** popup appears. This pop up shows which monitor Zukor's Grind is assigned and the graphics quality settings. In most cases, Monitor 1 will be checked when you first open this popup. In a standard setup, the clinician's monitor will be Monitor 1 and the feedback game monitor (for Zukor's Grind) should be Monitor 2. Therefore, you need to change the game monitor to Monitor 2.

CRITICAL: You MUST have your second monitor connected prior to doing the next step!

- A. Click the white check box next to **Monitor 2**.
- B. Click **APPLY**.
- C. Click **CLOSE**.



- A. Click Monitor 2. B. Click **APPLY**. C. Click **CLOSE**.

NOTE: If you don't change these settings, then Zukor's Grind will open "behind" the clinician's screen (the software of your neurofeedback or biofeedback system software) in Monitor 1 and thus partially or completely cover Zukor's Grind. If this ever happens, then quit your neurofeedback or biofeedback system software, go to the Graphics Configuration popup from the Options button and follow steps A, B, C above.

5. The **Profiles** menu will appear.

A. Enter the patient's first and last name into the NAME field.

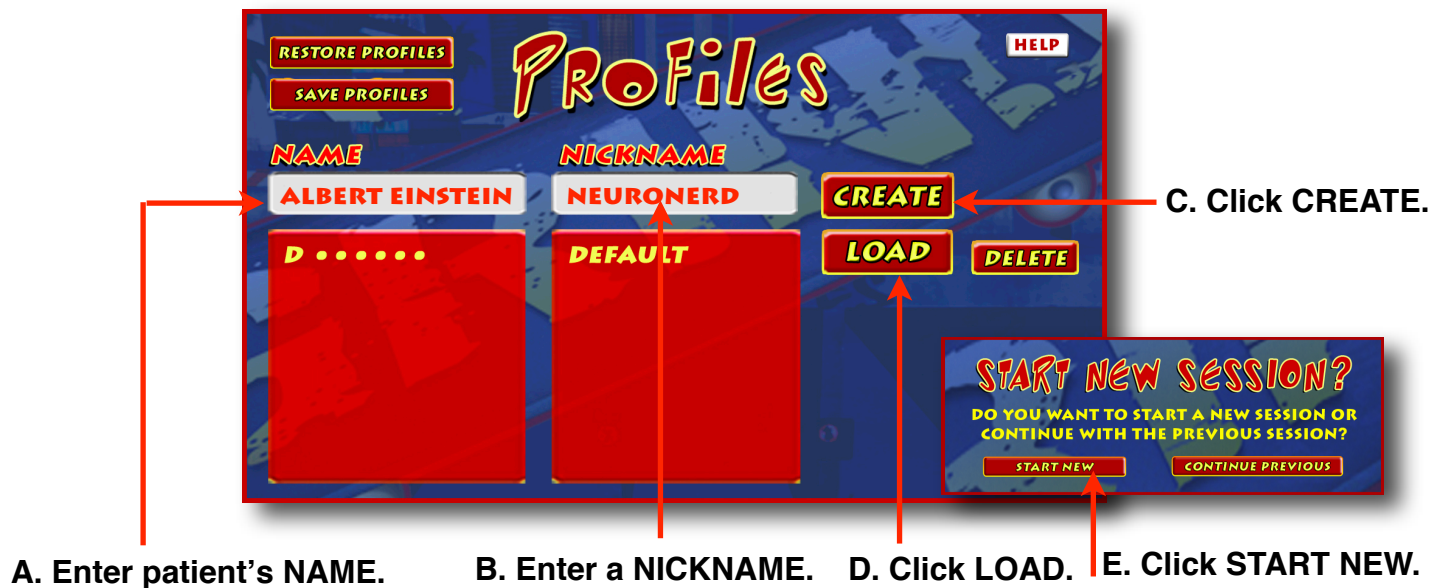
B. Enter a nickname into the NICKNAME field.

C. Click the CREATE button.

D. Click the LOAD button.

E. Click the START NEW SESSION button to load this profile and go to the Main Menu.

NOTE: If the NICKNAME box is left blank, the system will fill the NICKNAME box with the full name from the NAME box. If you prefer not using Nicknames we suggest you simply put a period "." in the nickname box.



Please continue to the next page...

5. If desired, click **OPTIONS** to make changes to the settings of the game.



Note: By default there are 10 periods to a session and each period is 2 minutes and 50 seconds.

IMPORTANT: Make any **Options** changes you need to make **PRIOR** to launching your BrainMaster session.

6. Select the desired **Character**.

- A. Click the **CHARACTERS** button on the Main Menu.
- B. Click on your desired character.
- C. Click MAIN MENU to go back to the Main Menu.



B. Click on the Character.

C. Click MAIN MENU.

Note: See the in game Help for information on Bonus Characters.

7. Select a **Level** by checking the white box next to the desired level.

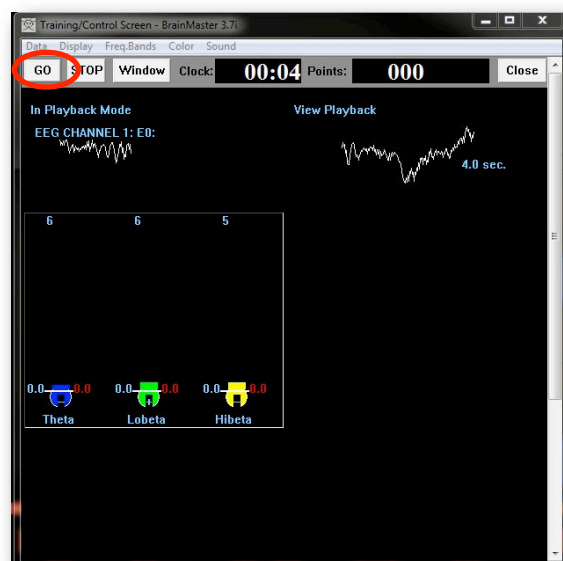


8. Click the **PLAY GAME** button.

This will take you to the “Ready” screen.



9. To start the feedback session, use your mouse to move the cursor to the Brain Master screen on the “clinician” monitor and click on the clinician screen to make Brain Master active. Then click **GO**. and your session will begin.



Profiles Screen

OVERVIEW

The Profiles screen allows the clinician to create patients “profiles” to store game-related data for each patient, such as option settings and scores. It also allows the clinician to assign a nickname for each patient which the patient can select themselves. The Profiles do not store EEG or biometric data or other neurofeedback or biofeedback system-related information.

The patient profile serves several important purposes. First, it allows for patient-specific game options settings from the last session to be preloaded for the next session, which thus saves time. Second, it allows all session scores from past sessions to be accessed and compared to the current session, thus monitoring and encouraging improvement. Third, the nickname feature offers a fun and familiar feature from modern video games to reinforce the “game” aspect of the feedback training which makes the feedback training more fun for kids and thus increases the likelihood they will continue their treatment.

Zukor’s Grind’s Profiles screen is fully HIPPA-compliant and will only display the first initial of patients’ first and last names followed by large dots.

CREATE A PROFILE

1. Enter the patient’s first and last name into the NAME field.
2. Enter a nickname into the NICKNAME field.
3. Click the CREATE button.
4. Click the LOAD button to load this Profile and go to the Main Menu.

NOTE: If the NICKNAME box is left blank, the system will fill the NICKNAME box with the full name from the NAME box. If you prefer not using Nicknames we suggest you simply put a period “.” in the nickname box.

CAUTION: Deleting a Profile is permanent! Deleted profiles cannot be restored!





SAVE PROFILES

As a precaution, profiles are automatically saved in two locations on your computer. Additionally, the “Save Profiles” button on the Profiles popup allows you to save a third copy of the profiles data into another location in the Zukor’s Grind folder, C:\Zukor\Grind\profiles\saved. To do this, just click the “Save Profiles” button on the Profiles popup.



CRITICALLY IMPORTANT!!!!!!!!!!

It is **highly recommended** that clinicians do a manual save at the end of each day using the “Manually Backing Up Profiles” instructions below. In the result of a catastrophic computer malfunction this backup copy of the profiles can be used to restore profiles after the computer is fixed or replaced.

MANUALLY BACKING UP PROFILES

To manually back up the profiles, click the “Save Profiles” button on the Profiles popup. Then, copy the “saved” profiles folder which are located at C:\Zukor\Grind\profiles\ to an external storage device such as a CD, backup hard drive, memory stick, etc.

RESTORE PROFILES

If you have manually saved your Profiles using the “Save Profiles” button on the Profiles popup and for any reason want to restore the Profiles, then click the “Restore Profiles” button on the Profiles popup. **This is a significant action, so you will need to “confirm” that want to do it by clicking “Yes” in the “Restore Profiles?” confirmation popup:** “This is a significant action that will remove all the profiles currently displayed on the Profiles popup and replace them with the manually saved profiles from the last time you saved them using the “Save Profiles” button on the Profiles popup.” Once the profiles are successfully restored you will see the “Profiles Restored” popup.





PROFILES NOT FOUND

If you click the “Restore Profiles” button and the “No Profiles Found” popup comes up, this means there are no profiles in the “saved” folder. You will then need to manually restore the profiles. Please see **“CRITICALLY IMPORTANT”** above and **“MANUALLY RESTORING PROFILES”** below.



MANUALLY RESTORING PROFILES

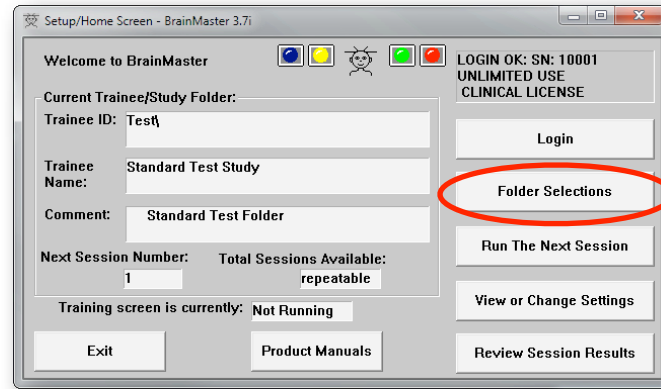
To manually restore your profiles you will use the backup copy of the profiles you saved externally (see **“CRITICALLY IMPORTANT”** above) by manually placing them back into the “saved” profiles folder. To do this, take the externally stored copy of the profiles from your external hard drive, memory stick, CD, etc. and copy them into the “saved” folder located at C:\Zukor\Grind\profiles\. Then click the “Restore Profiles” button on the Profiles popup. Once the profiles are successfully restored you will see the “Profiles Restored” popup.



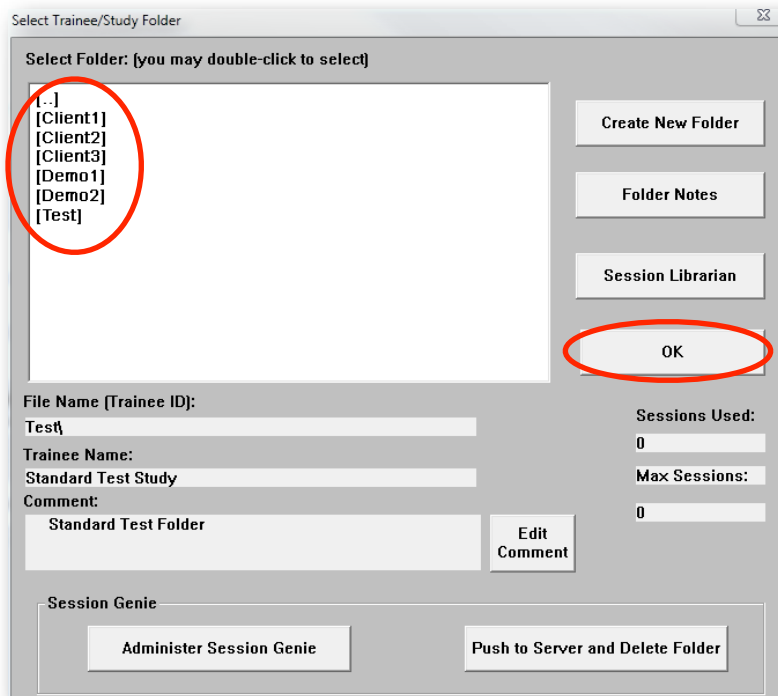
Configuring BrainMaster for Stored Data Playback

Follow these steps to configure BrainMaster to use stored data playback with Zukor's Grind.

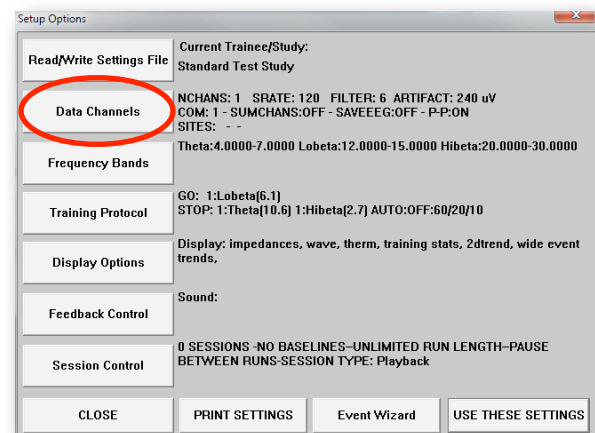
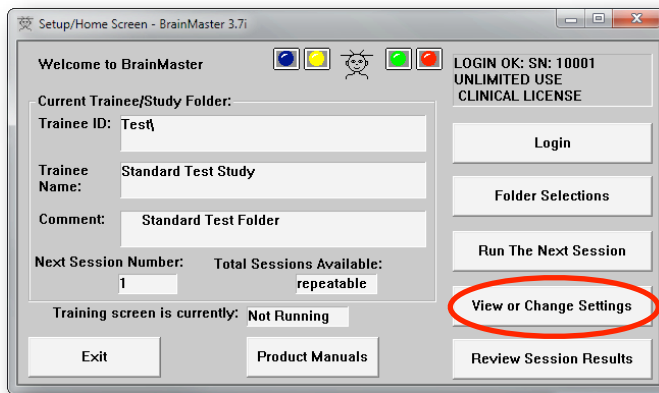
1. Open BrainMaster in the normal manner, and then click on **Folder Selections**.



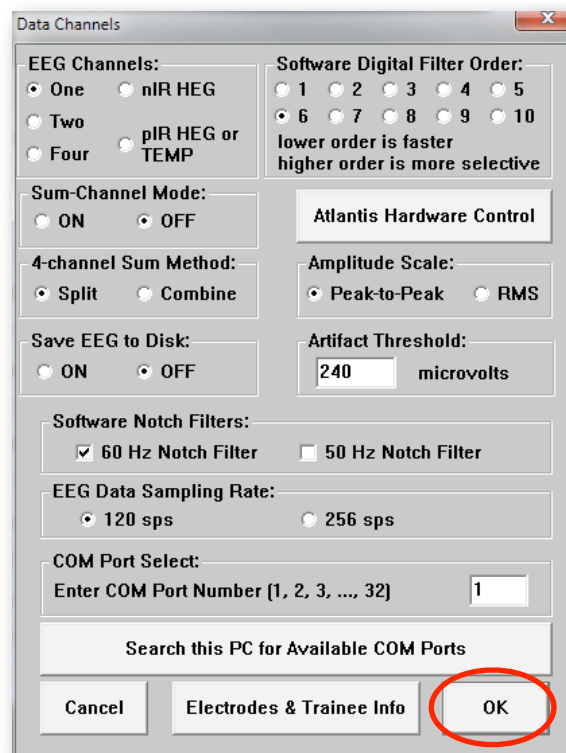
2. In the **Select Trainee/Study Folder** window:
 - I. Under **Select Folder**, select an existing client.
 - II. Click **OK**.



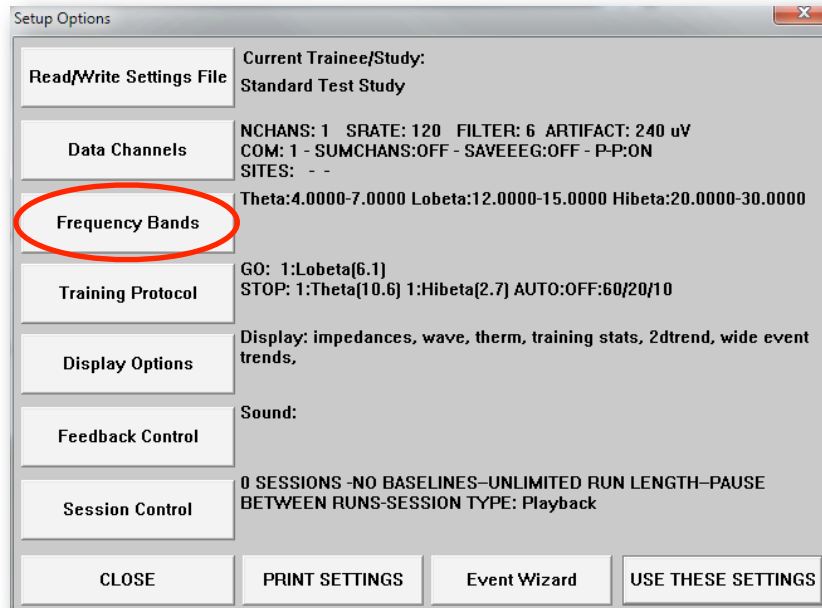
- Next, click on **View or Change Settings**.
- On the **Setup Options** window click **Data Channels**.



- Make sure the **Data Channels** settings match the ones below, then click **OK**.



6. On the **Setup Options** window click **Frequency Bands**.

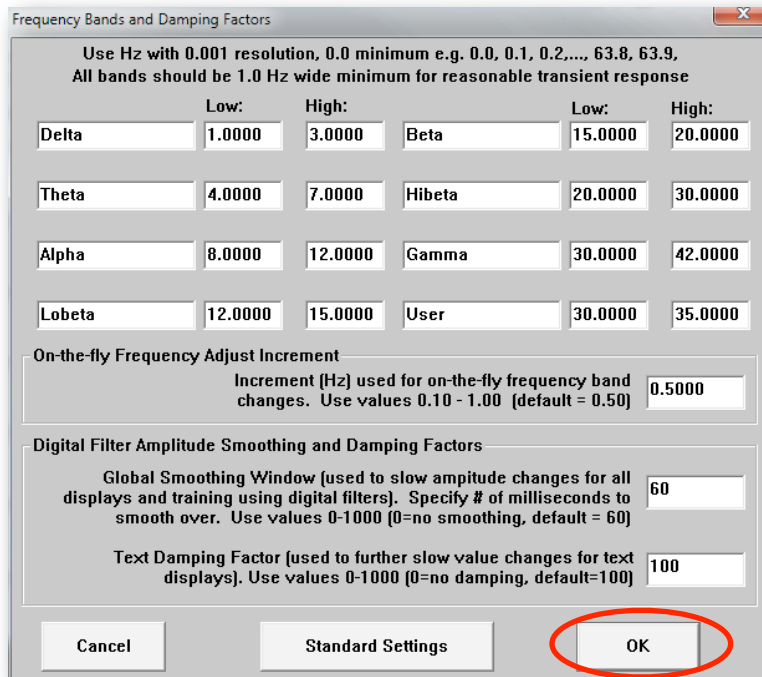


The screenshot shows the 'Setup Options' window. The 'Frequency Bands' tab is selected and highlighted with a red circle. The window displays various settings for a 'Standard Test Study'.

Tab	Settings
Read/Write Settings File	Current Trainee/Study: Standard Test Study
Data Channels	NCHANS: 1 SRATE: 120 FILTER: 6 ARTIFACT: 240 uV COM: 1 - SUMCHANS:OFF - SAVEEEG:OFF - P-P:ON SITES: - -
Frequency Bands	Theta:4.0000-7.0000 Lobeta:12.0000-15.0000 Hibeta:20.0000-30.0000
Training Protocol	GO: 1:Lobeta[6.1] STOP: 1:Theta[10.6] 1:Hibeta[2.7] AUTO:OFF:60/20/10
Display Options	Display: impedances, wave, therm, training stats, 2dtrend, wide event trends,
Feedback Control	Sound:
Session Control	0 SESSIONS -NO BASELINES-UNLIMITED RUN LENGTH-PAUSE BETWEEN RUNS-SESSION TYPE: Playback

Buttons at the bottom: CLOSE, PRINT SETTINGS, Event Wizard, USE THESE SETTINGS

7. Make sure the **Frequency Bands and Damping Factors** settings match the ones below, then click **OK**.



The screenshot shows the 'Frequency Bands and Damping Factors' window. It contains settings for frequency bands and damping factors. The 'OK' button is highlighted with a red circle.

Use Hz with 0.001 resolution, 0.0 minimum e.g. 0.0, 0.1, 0.2,..., 63.8, 63.9, All bands should be 1.0 Hz wide minimum for reasonable transient response

	Low:	High:		Low:	High:
Delta	1.0000	3.0000	Beta	15.0000	20.0000
Theta	4.0000	7.0000	Hibeta	20.0000	30.0000
Alpha	8.0000	12.0000	Gamma	30.0000	42.0000
Lobeta	12.0000	15.0000	User	30.0000	35.0000

On-the-fly Frequency Adjust Increment
Increment (Hz) used for on-the-fly frequency band changes. Use values 0.10 - 1.00 (default = 0.50) 0.5000

Digital Filter Amplitude Smoothing and Damping Factors
Global Smoothing Window (used to slow amplitude changes for all displays and training using digital filters). Specify # of milliseconds to smooth over. Use values 0-1000 (0=no smoothing, default = 60) 60
Text Damping Factor (used to further slow value changes for text displays). Use values 0-1000 (0=no damping, default=100) 100

Buttons at the bottom: Cancel, Standard Settings, **OK**

8. On the **Setup Options** window click **Training Protocol**.

Setup Options

Read/Write Settings File

Current Trainee/Study:
Standard Test Study

Data Channels
NCHANS: 1 SRATE: 120 FILTER: 6 ARTIFACT: 240 uV
COM: 1 - SUMCHANS:OFF - SAVEEEG:OFF - P-P:ON
SITES: - -

Frequency Bands
Theta:4.0000-7.0000 Lobeta:12.0000-15.0000 Hibeta:20.0000-30.0000

Training Protocol
GO: 1:Lobeta[6.1]
STOP: 1:Theta[10.6] 1:Hibeta[2.7] AUTO:OFF:60/20/10

Display Options
Display: impedances, wave, therm, training stats, 2dtrend, wide event trends.

Feedback Control
Sound:

Session Control
0 SESSIONS-NO BASELINES-UNLIMITED RUN LENGTH-PAUSE
BETWEEN RUNS-SESSION TYPE: Playback

CLOSE PRINT SETTINGS Event Wizard USE THESE SETTINGS

9. On the **Control Protocol and Threshold Values** window make sure **Theta** is set to **Stop**, **LoBeta** to **Go** and **HiBeta** to **Stop**. All others should be set to **Ignore**. Then click **OK**.

Control Protocol and Threshold Values

PROTOCOL SETTINGS FOR CHANNEL 1: ACTIVE: REFERENCE:

Delta
☐ Go ☐ Stop ☒ Ignore 0.0

Beta
☐ Go ☐ Stop ☒ Ignore 0.0

Theta
☒ Go ☐ Stop ☐ Ignore 10.6

Hibeta
☐ Go ☒ Stop ☐ Ignore 2.7

Alpha
☐ Go ☐ Stop ☒ Ignore 0.0

Gamma
☐ Go ☐ Stop ☒ Ignore 0.0

LoBeta
☒ Go ☐ Stop ☐ Ignore 6.1

User
☐ Go ☐ Stop ☒ Ignore 0.0

Select Channel to Adjust
☒ 1 ☐ 2 ☐ 3 ☐ 4

Use these controls to define the protocol and starting threshold for each channel and component band.

Global Sustained Reward Criterion (all channels)
Training Conditions must be met for:
to achieve a reward point and sound
(use value = 0 - 10000, default=500) 500 milliseconds

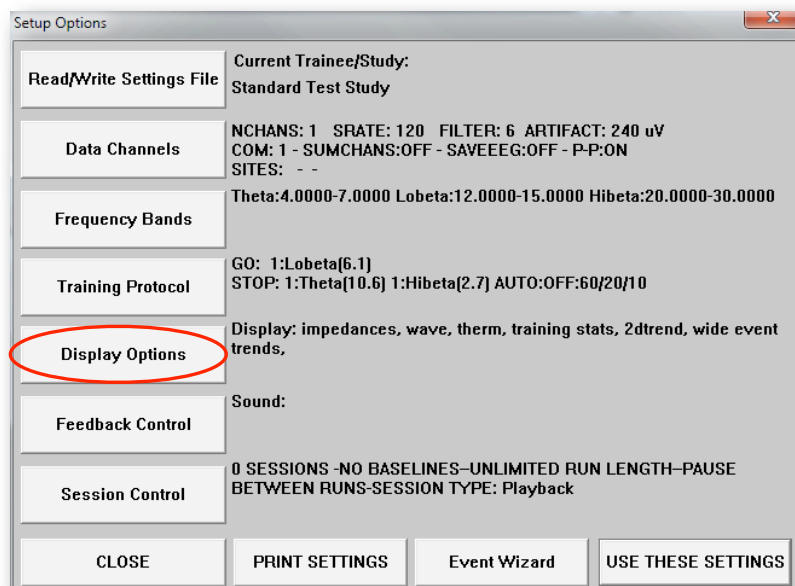
Global Refractory Period (all channels)
After a reward, system will wait for:
before another reward is possible
(use value = 0 - 10000, default=0) 0 milliseconds

"Original" Sweet Spot Feedback Settings
☐ ON ☒ OFF About...

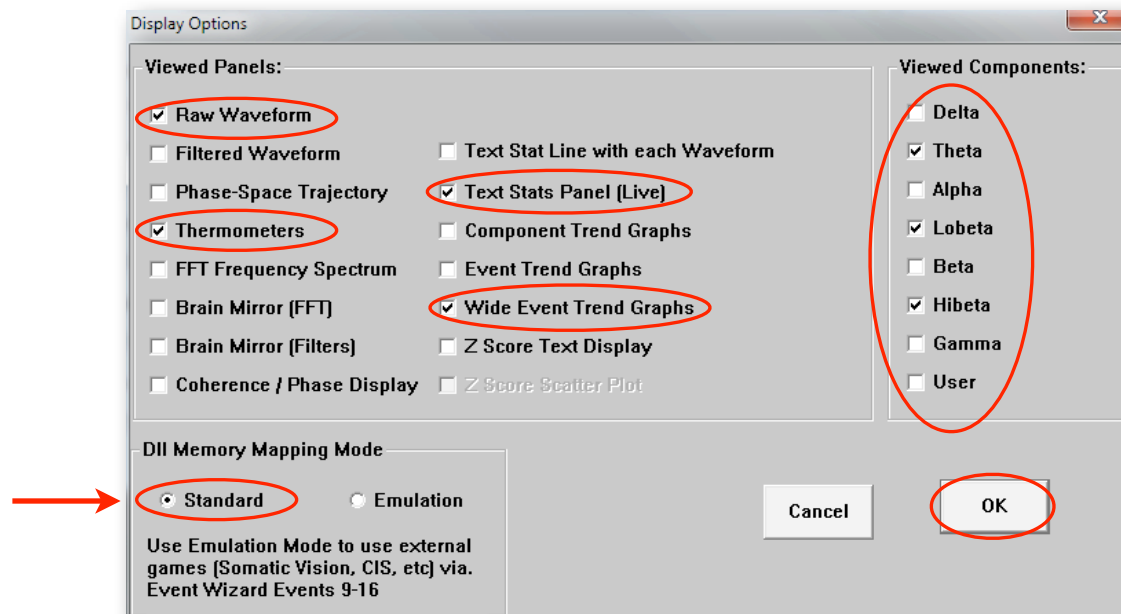
Points Counting Method
☒ Normal (1 Counter) ☐ Split for 2 Players (2 Counters) About...

Autothreshold Options
Use the button at left to view and change Autothresholding Options OK

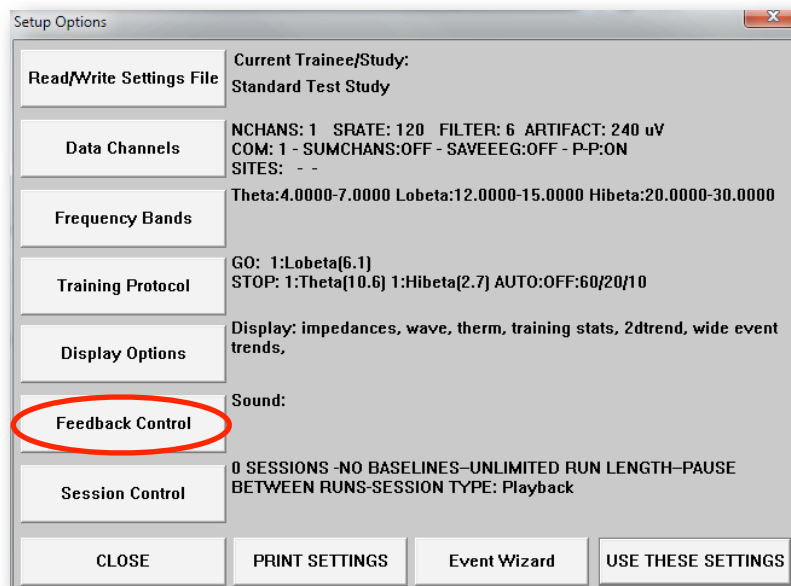
10. On the **Setup Options** window click **Display Options**.



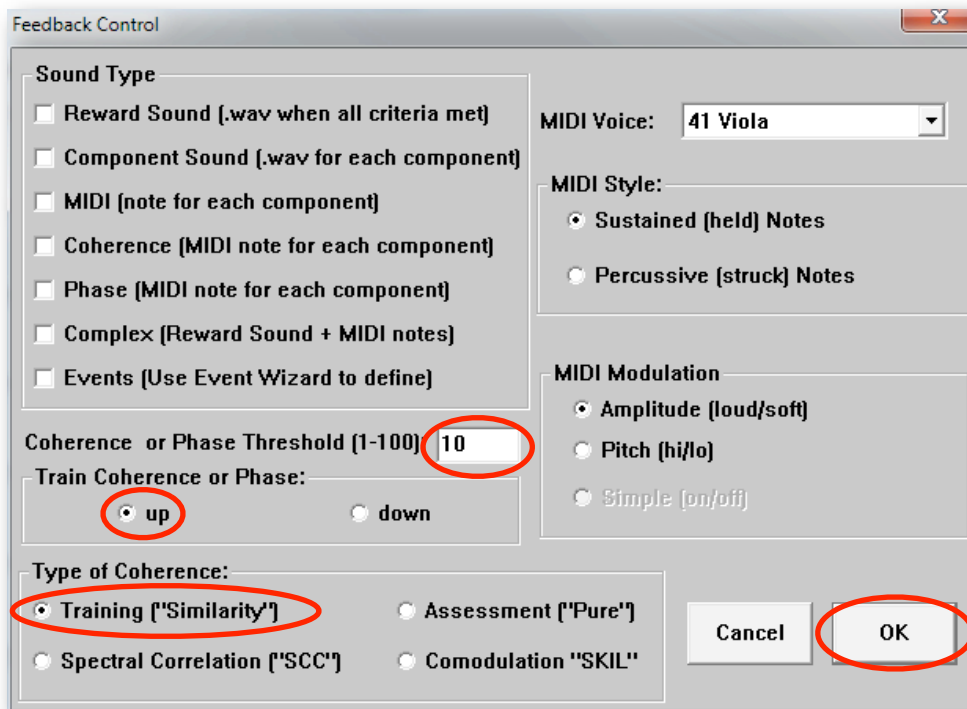
11. Make sure the **Display Options** screen matches the one below. Then click **OK**.
Note: It is essential that **Standard** is selected in **DII Memory Mapping Mode**.



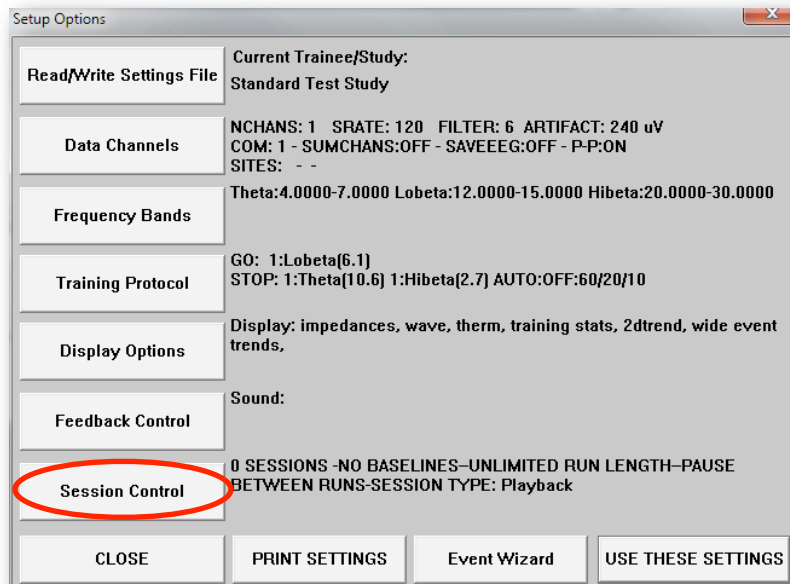
12. On the **Setup Options** window click **Feedback Control**.



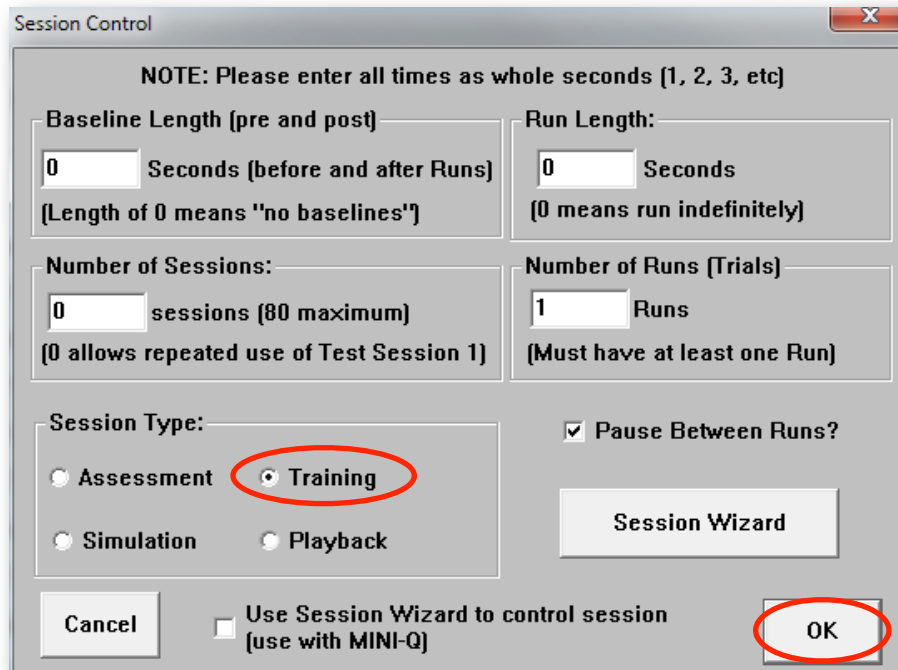
13. Make sure the **Feedback Control** setting match the ones below. Then click **OK**.



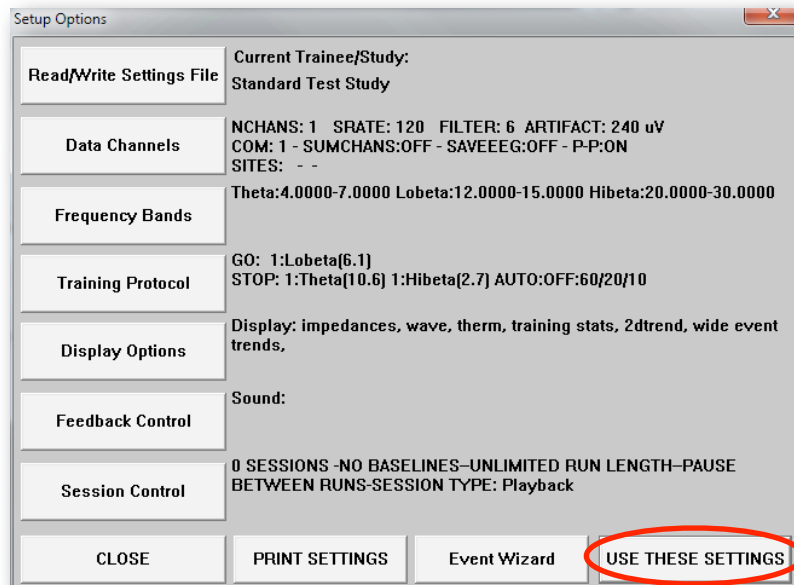
14. On the **Setup Options** window click **Session Control**.



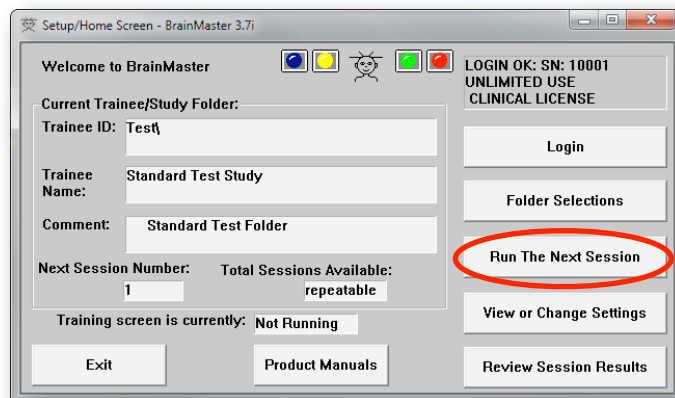
15. Make sure the **Session Control** settings match the ones below. Then click **OK**.



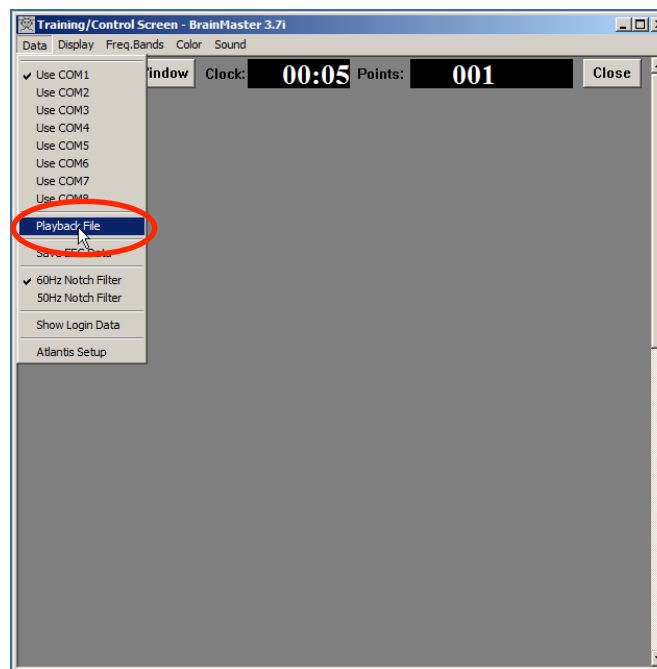
16. On the **Setup Options** window click **USE THESE SETTINGS**.



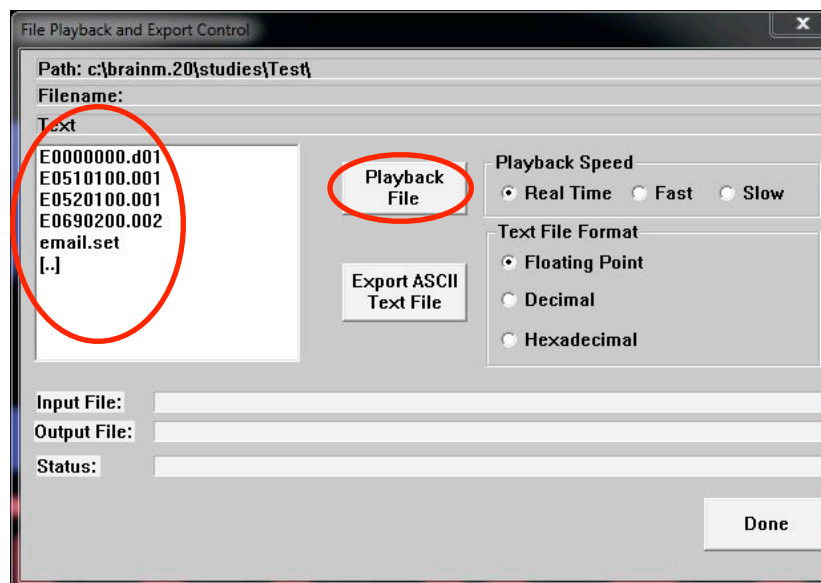
17. Click **Run The Next Session**.



18. On the **Training/Control Screen** under **Data** Click on **Playback File**.



19. Click on your desired replay session file, then click **Playback File**.



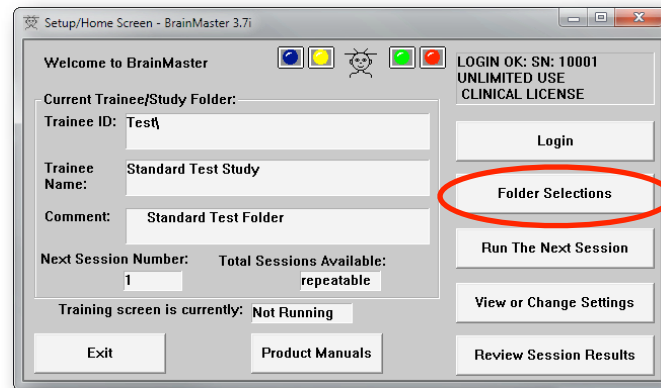
You have now correctly configured BrainMaster to use stored data for playback with Zukor's Grind.

Please now go to **Quick Start: Using Zukor's Grind & BrainMaster** on page 14.

Configuring BrainMaster for Live Data

Follow these steps to configure BrainMaster to use live data with Zukor's Grind.

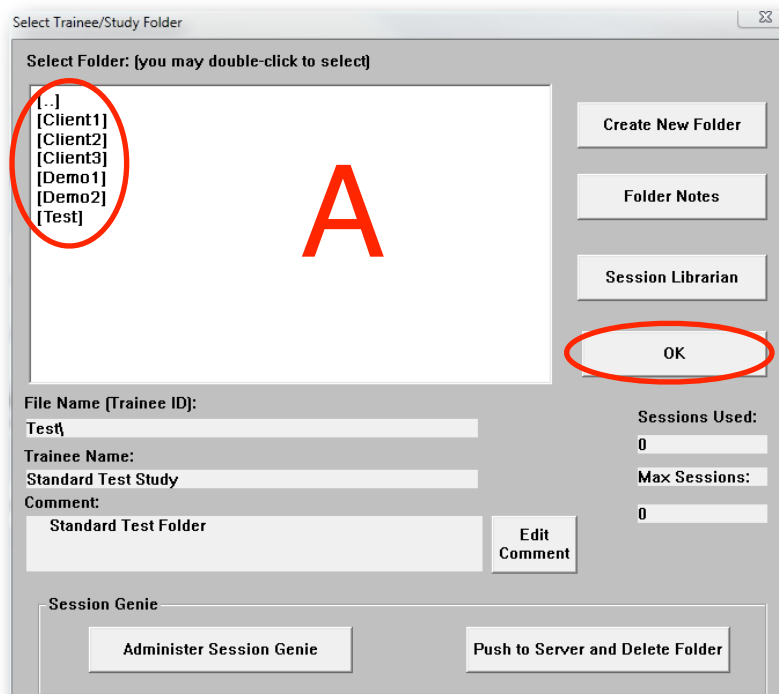
1. Open BrainMaster in the normal manner, and then click on **Folder Selections**.



2. In the **Select Trainee/Study Folder** window either:

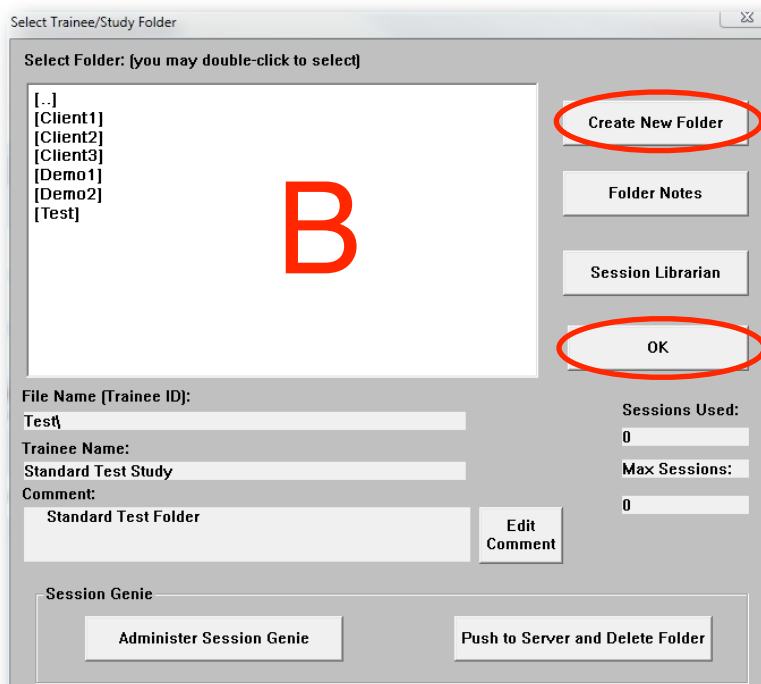
- A. Select an existing client (go to option A below).
- B. Create a new client (go to option B on next page).

- A. To select an existing client, first click on the desired client folder under **Select Folder**, then click **OK**.

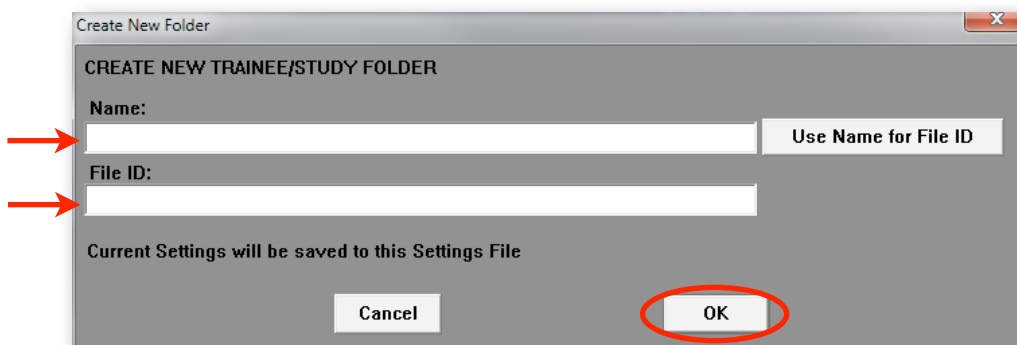


B. To create a new client:

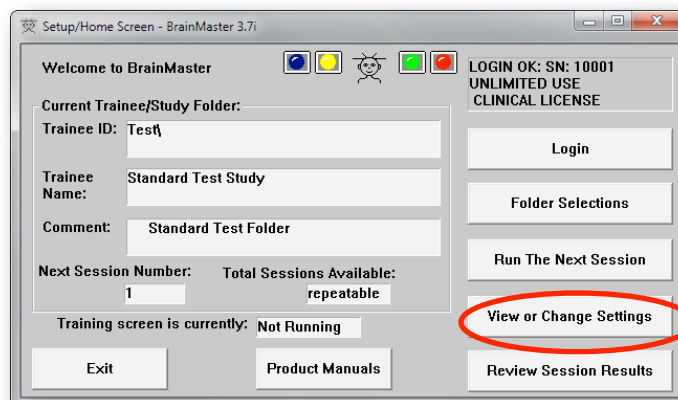
I. Click on **Create New Folder**, then click **OK**.



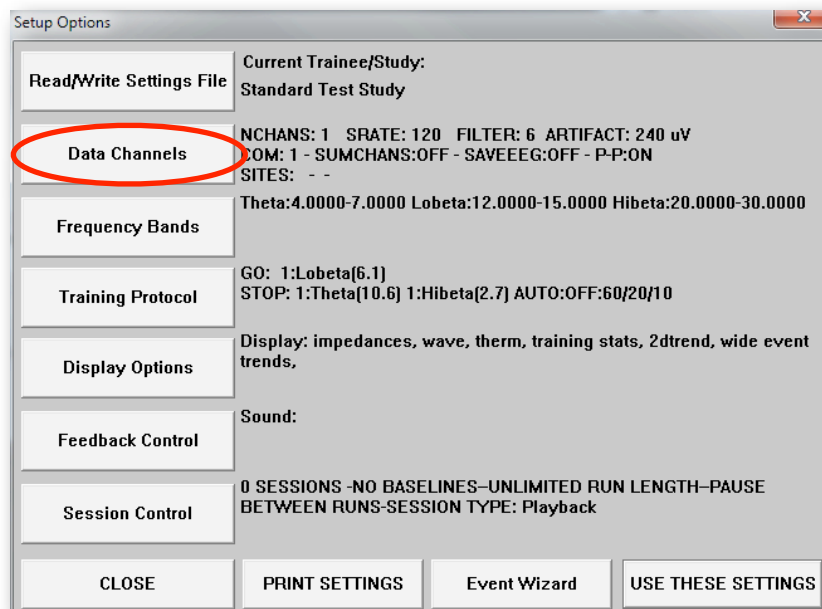
II. When the **Create New Folder** window below appears, fill in the **Name** and **File ID** fields, then click **OK**.



3. Next, click on **View or Change Settings**.



4. On the **Setup Options** window click **Data Channels**.

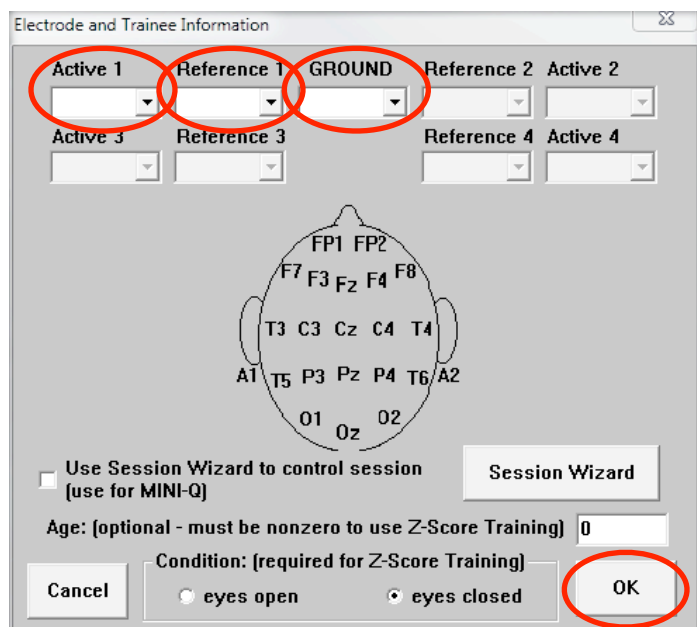
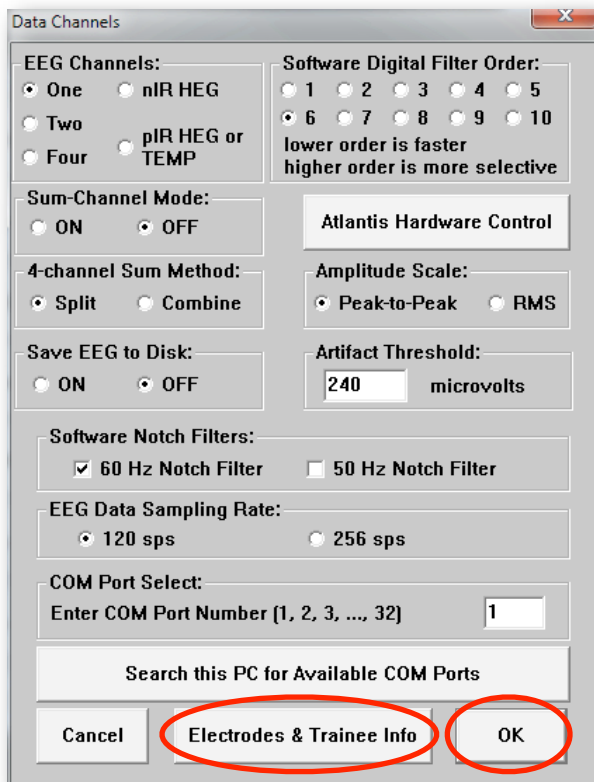


5. In the **Data Channels** window:

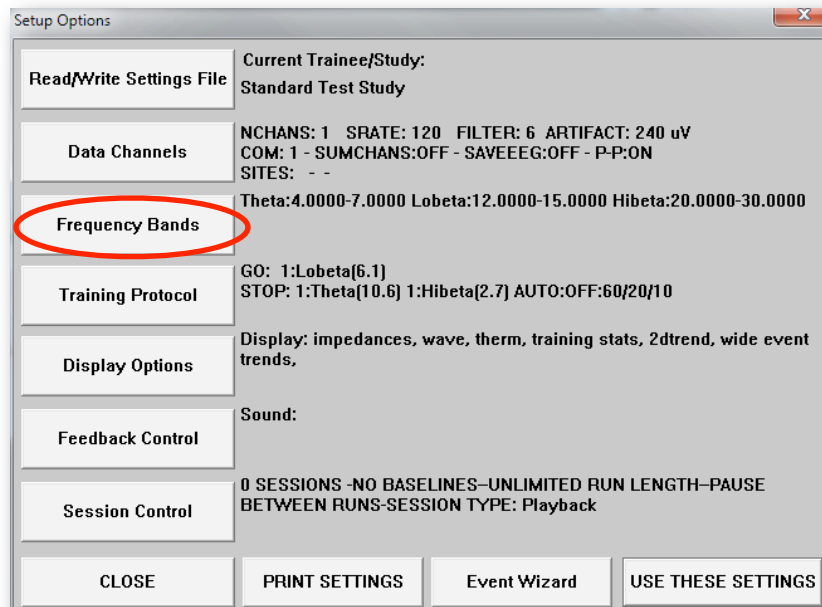
A. Click on **Electrodes & Trainee Info**.

B. Select your **Active 1, Reference 1** and **GROUND**, and then click **OK**.

C. Then in **Data Channels** click **OK**.



6. On the **Setup Options** window click **Frequency Bands**.

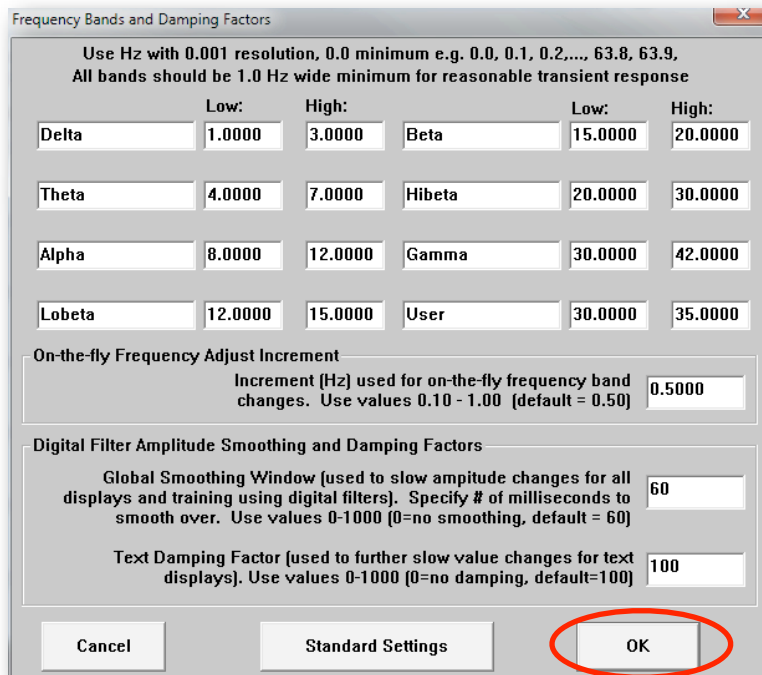


The screenshot shows the 'Setup Options' window. The 'Frequency Bands' tab is selected and highlighted with a red circle. The window displays various settings for a 'Standard Test Study'.

Section	Settings
Read/Write Settings File	Current Trainee/Study: Standard Test Study
Data Channels	NCHANS: 1 SRATE: 120 FILTER: 6 ARTIFACT: 240 uV COM: 1 - SUMCHANS:OFF - SAVEEEG:OFF - P-P:ON SITES: - -
Frequency Bands	Theta:4.0000-7.0000 Lobeta:12.0000-15.0000 Hibeta:20.0000-30.0000
Training Protocol	GO: 1:Lobeta[6.1] STOP: 1:Theta[10.6] 1:Hibeta[2.7] AUTO:OFF:60/20/10
Display Options	Display: impedances, wave, therm, training stats, 2dtrend, wide event trends,
Feedback Control	Sound:
Session Control	0 SESSIONS -NO BASELINES-UNLIMITED RUN LENGTH-PAUSE BETWEEN RUNS-SESSION TYPE: Playback

Buttons at the bottom: CLOSE, PRINT SETTINGS, Event Wizard, USE THESE SETTINGS

7. Make sure the **Frequency Bands and Damping Factors** settings match the ones below, then click **OK**.



The screenshot shows the 'Frequency Bands and Damping Factors' window. It contains settings for frequency bands and damping factors. The 'OK' button is highlighted with a red circle.

Use Hz with 0.001 resolution, 0.0 minimum e.g. 0.0, 0.1, 0.2,..., 63.8, 63.9, All bands should be 1.0 Hz wide minimum for reasonable transient response

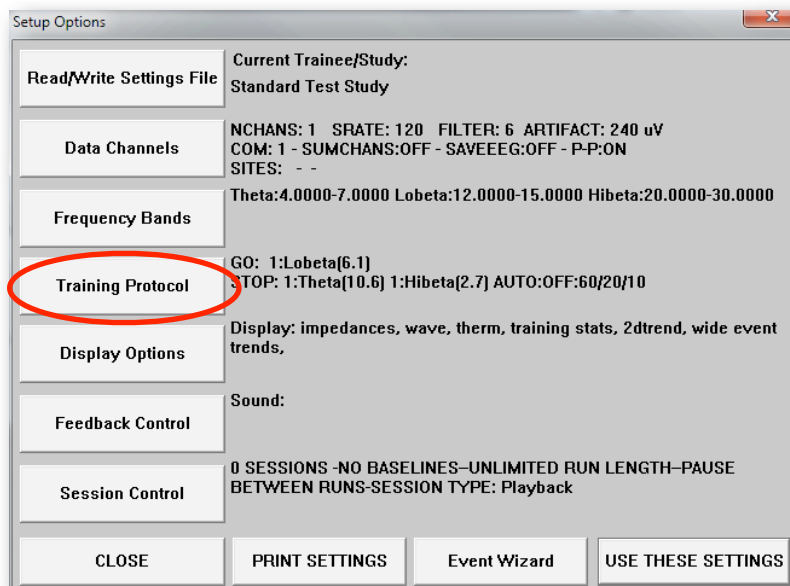
	Low:	High:		Low:	High:
Delta	1.0000	3.0000	Beta	15.0000	20.0000
Theta	4.0000	7.0000	Hibeta	20.0000	30.0000
Alpha	8.0000	12.0000	Gamma	30.0000	42.0000
Lobeta	12.0000	15.0000	User	30.0000	35.0000

On-the-fly Frequency Adjust Increment
Increment (Hz) used for on-the-fly frequency band changes. Use values 0.10 - 1.00 (default = 0.50) 0.5000

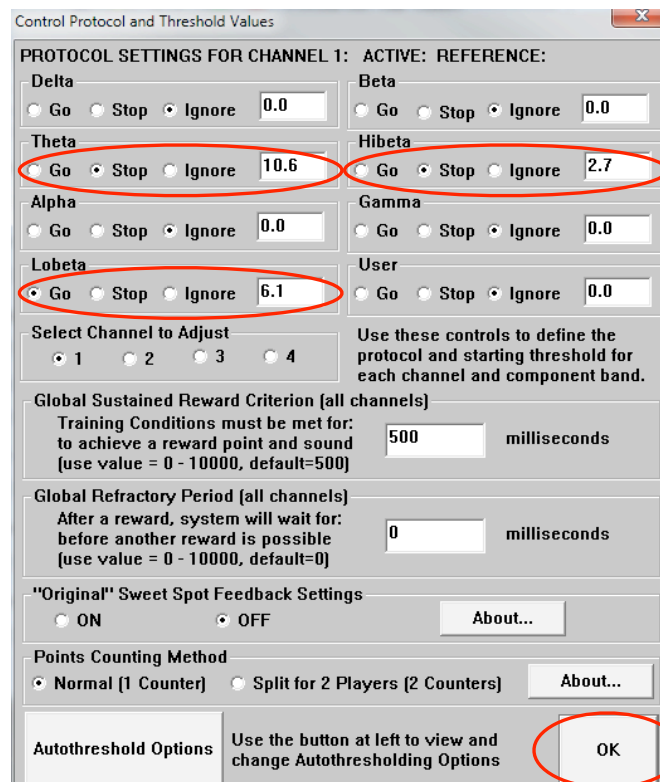
Digital Filter Amplitude Smoothing and Damping Factors
Global Smoothing Window (used to slow amplitude changes for all displays and training using digital filters). Specify # of milliseconds to smooth over. Use values 0-1000 (0=no smoothing, default = 60) 60
Text Damping Factor (used to further slow value changes for text displays). Use values 0-1000 (0=no damping, default=100) 100

Buttons at the bottom: Cancel, Standard Settings, OK

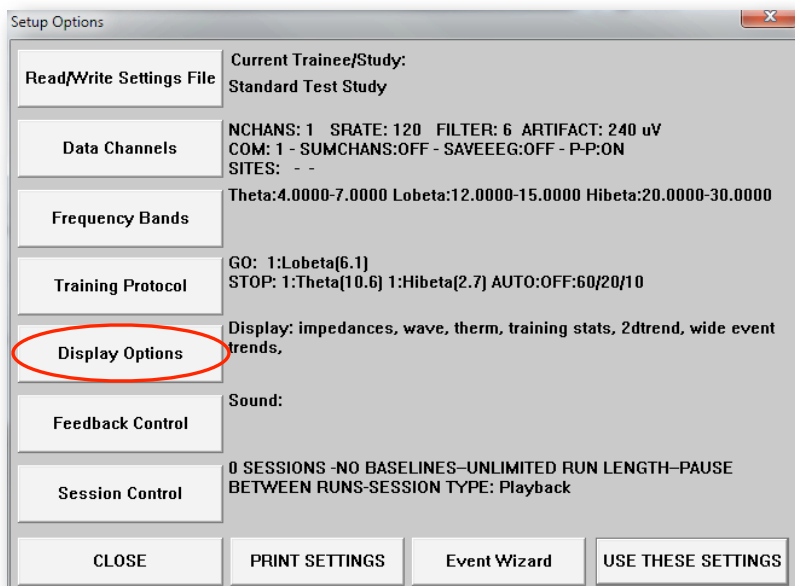
8. On the **Setup Options** window click **Training Protocol**.



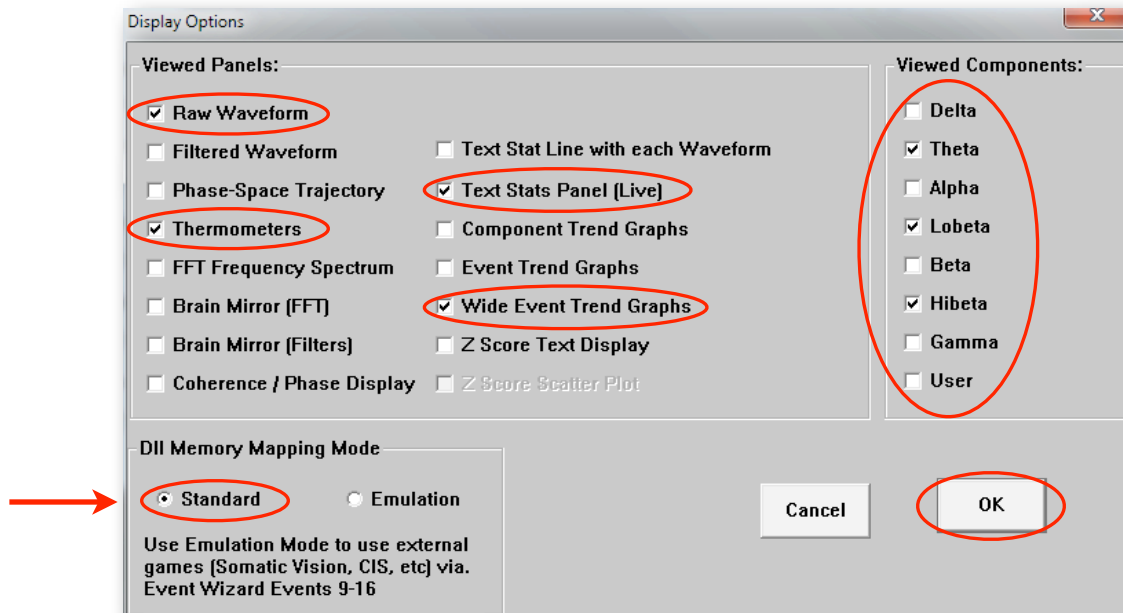
9. On the **Control Protocol and Threshold Values** make sure **Theta** is set to **Stop**, **LoBeta** to **Go** and **HiBeta** to **Stop**. All others should be set to **Ignore**. Then click **OK**.



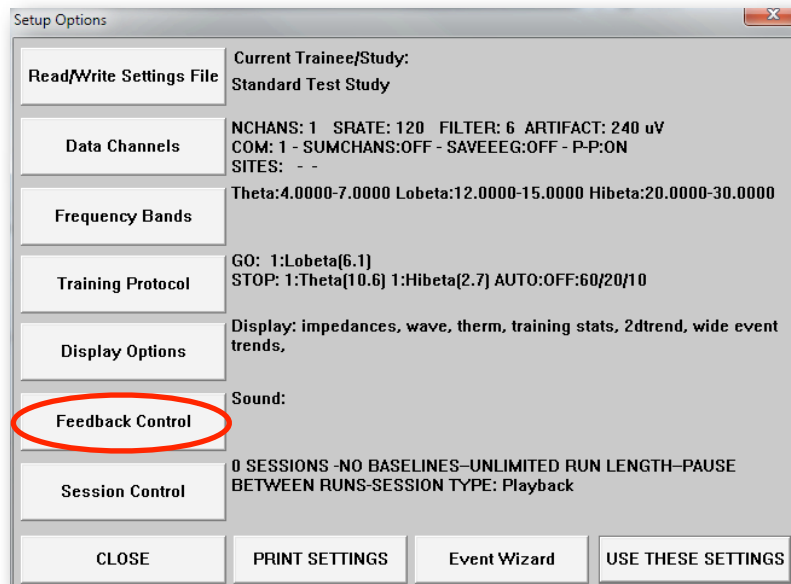
10. On the **Setup Options** window click **Display Options**.



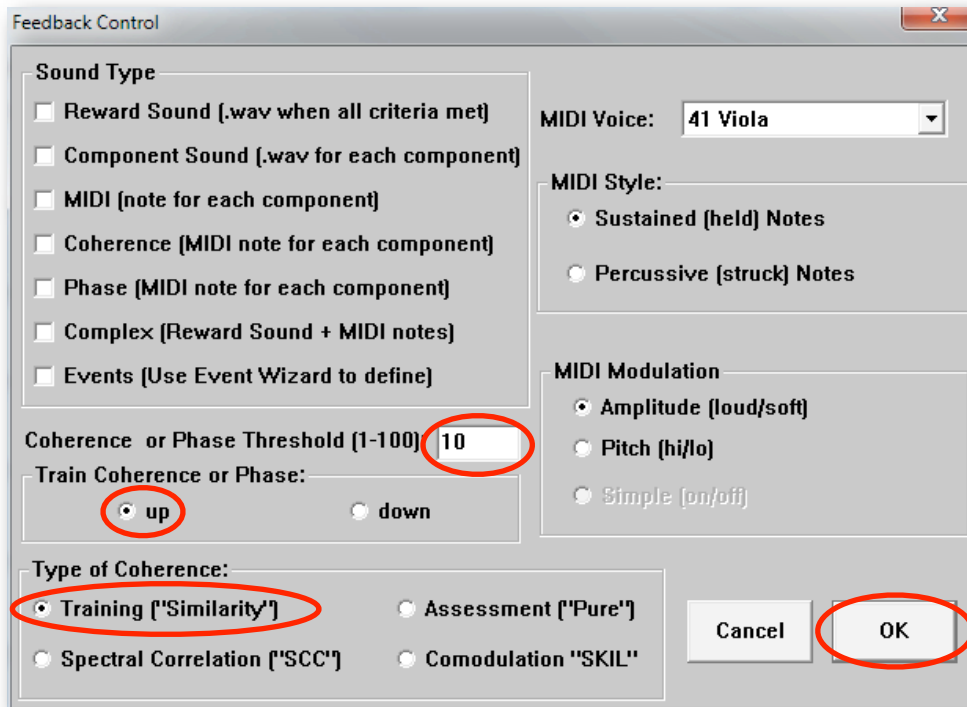
11. Make sure the **Display Options** setting match the ones below. Then click **OK**.
Note: It is essential that **Standard** is selected in **DII Memory Mapping Mode**.



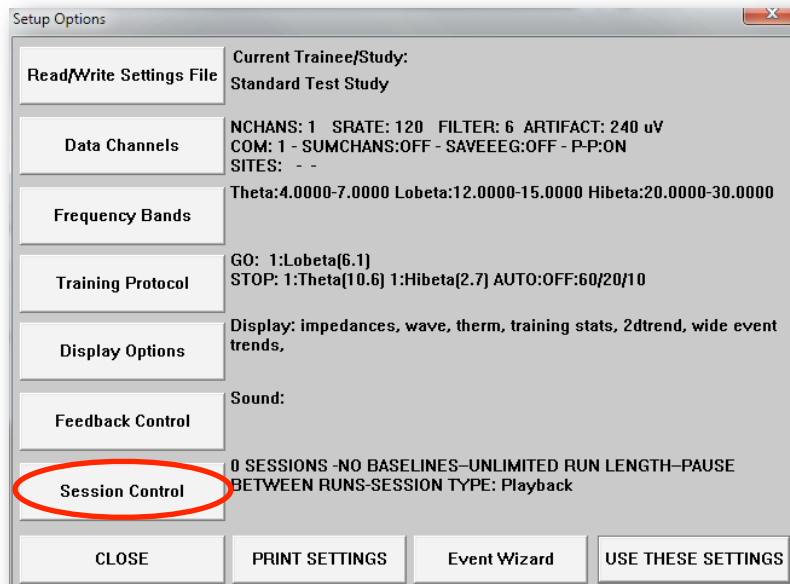
12. On the **Setup Options** window click **Feedback Control**.



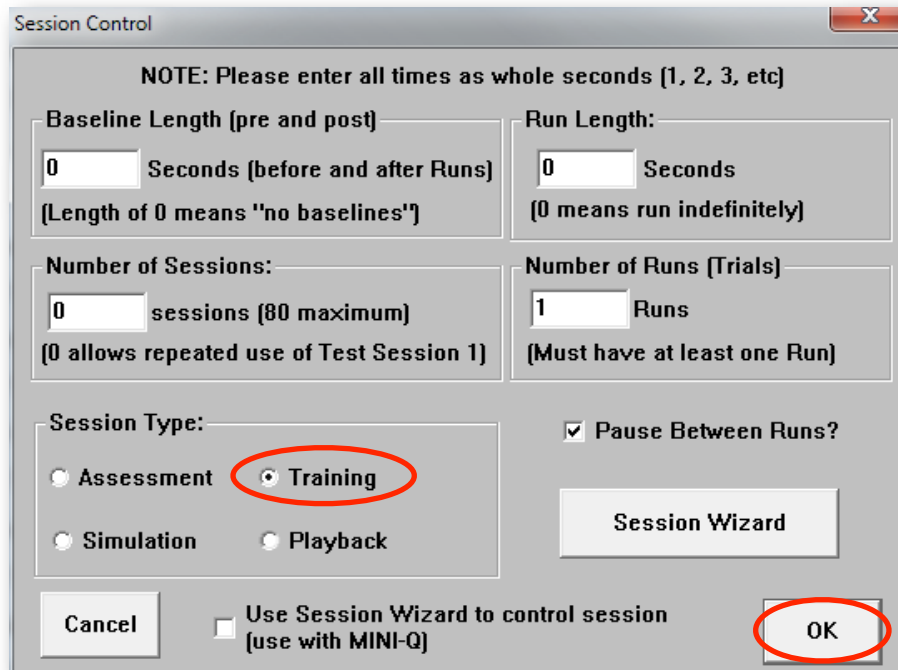
13. Make sure the **Feedback Control** settings match the ones below. Then click **OK**.



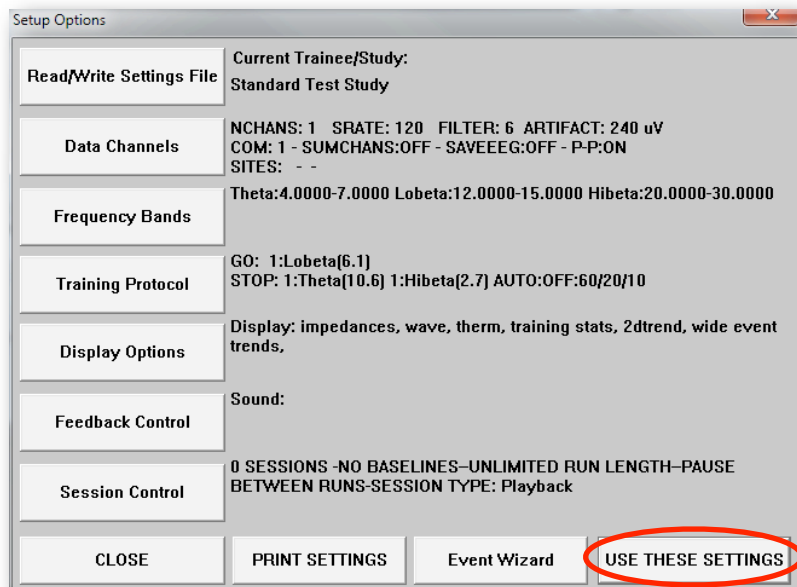
14. On the **Setup Options** window click **Session Control**.



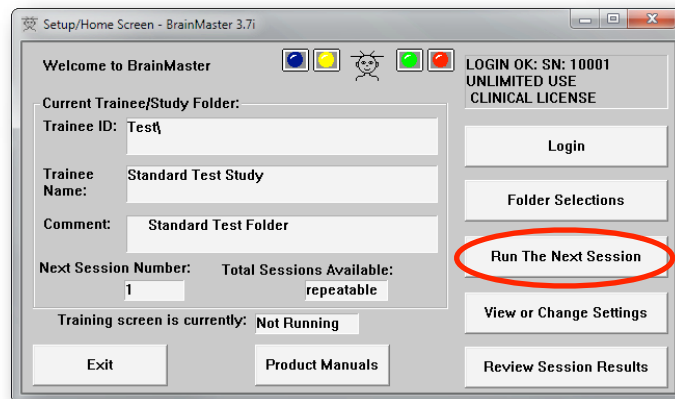
15. Make sure the **Session Control** settings match the ones below. Then click **OK**.



16. On the **Setup Options** window click **USE THESE SETTINGS**.

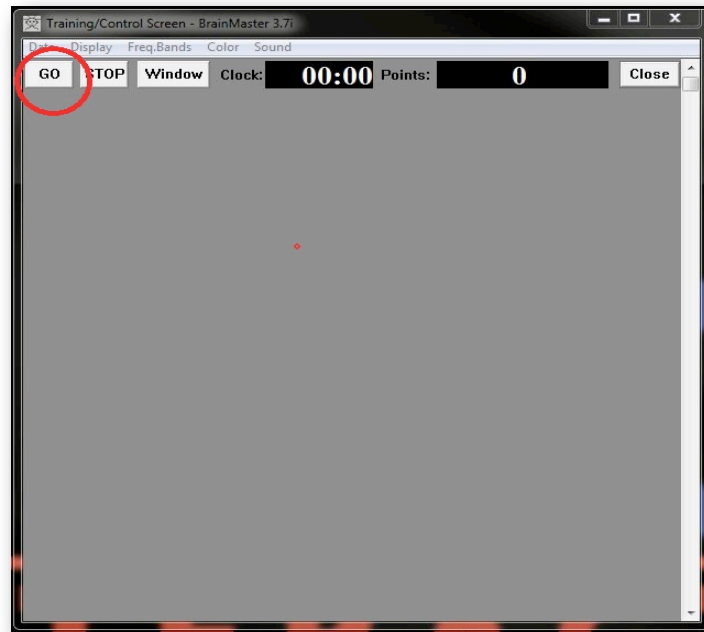


17. On the **Setup/Home Screen** click on **Run The Next Session**.

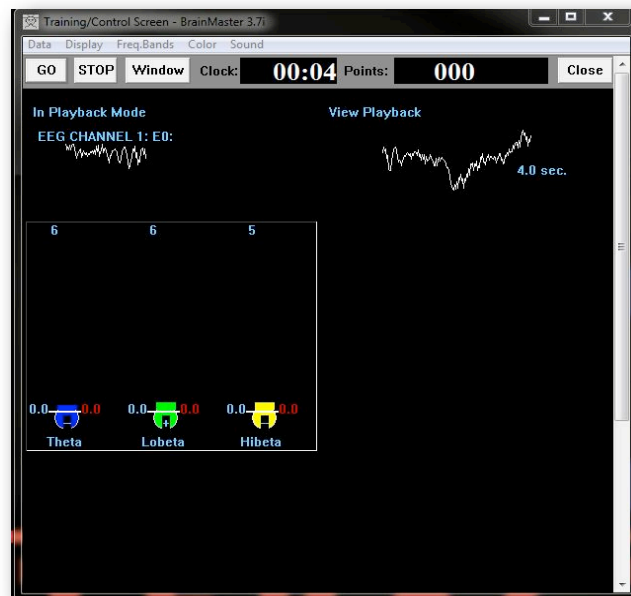


Please continue to next page...

18. On the **Training/Control Screen** under **Data** Click on **GO**.



Then your clinician screen should look similar to this:



You have now correctly configured BrainMaster to play live data with Zukor's Grind.

Please now go to **Quick Start: Using Zukor's Grind & BrainMaster** on page 14.

Uninstall Zukor's Grind

If you need to uninstall (remove) Zukor's Grind from your computer for any reason, please follow the below steps.

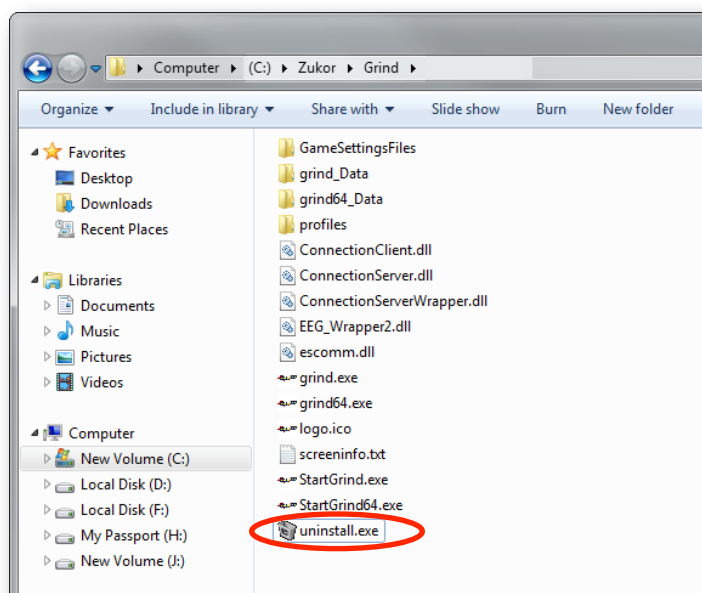
Uninstall Steps

1. Locate and open the **Zukor** folder on your computer.

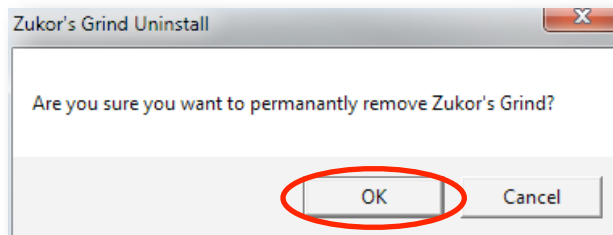
Note: If you followed the regular installation and did not change the installation location, then this folder should be located at: C:\Zukor.

2. Inside the Zukor folder, open the **Grind** folder.

3. Locate the and double click **uninstall** or **uninstall.exe**.



4. On the confirmation window, click **OK**.



IMPORTANT NOTE: The patient Profiles, including Scores will not be deleted and can be used if you reinstall another version of Zukor's Grind.