



QUICK START GUIDE

Installation, Setup & Basic Operation
with
Mind Media's BioTrace+
Version 20



Zukor's Grind

Quick Start Guide

Installation Setup & Basic Operation

© 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

Mind Media

Erwin Hartsuiker, Pieter Ermers, Thomas Baumgartner, Rinse Rooker,
Angelique Smeets, Tim Keren, Yoran Paulus

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	Setup BioTrace+
17	Using BioTrace+ Stored Data
22	Using BioTrace+ Live Data
28	Creating a Clinician Screen for BioTrace+
35	Uninstall Zukor's Grind

Welcome to Zukor's Grind!

First, 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 BioTrace+ 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 Windows XP or 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

- **Mind Media's BioTrace+ V2012C**
- **NX10 Intermediate v2012C1 Update**

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

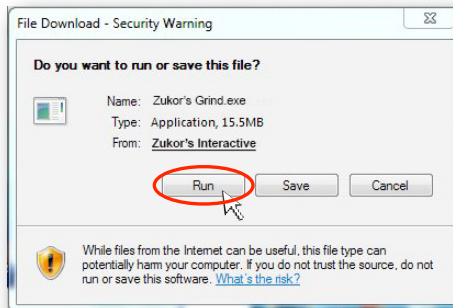
Installation via Download (Explorer)

If using Internet Explorer

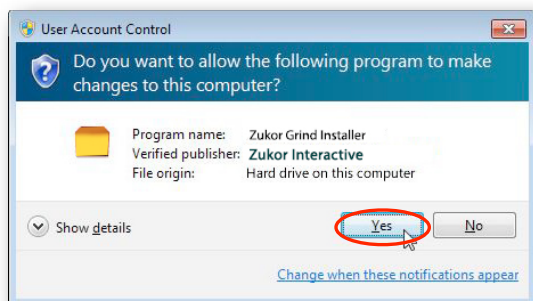
1. Download Zukor's Grind.



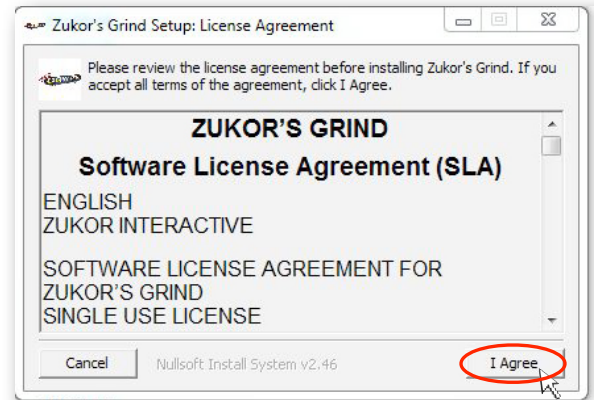
2. When the **File Download Security Warning** box appears, click "Run."



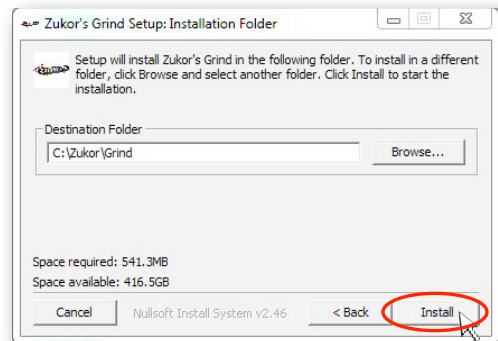
3. When the **User Account Control** box appears, click "Yes."



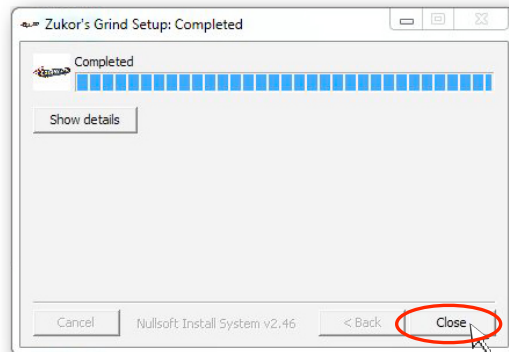
4. When the **Software License Agreement** appears, please read it, then click, "I Agree."



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



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



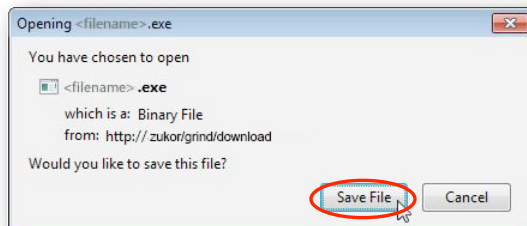
Installation via Download (Firefox)

If using Firefox

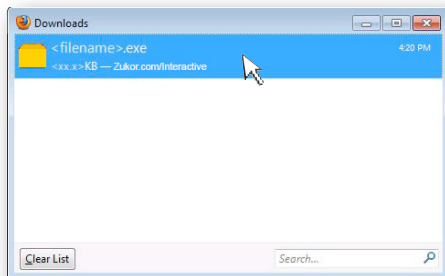
1. Download Zukor's Grind.



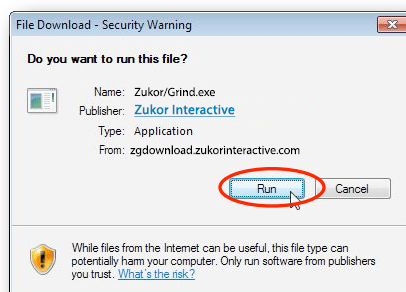
2. When the box below appears, click "Save File."



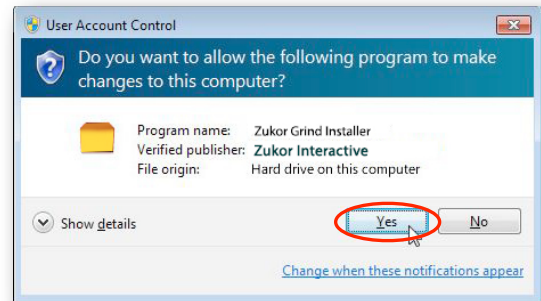
3. Double click **Zukor-Grind-Installer.exe** to open.



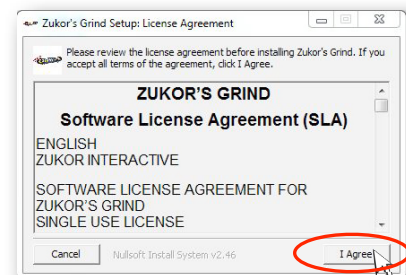
4. When the **File Download Security Warning** box appears, click "Run."



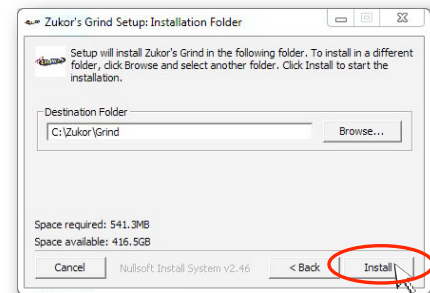
5. When the **User Account Control** box appears, click "Yes."



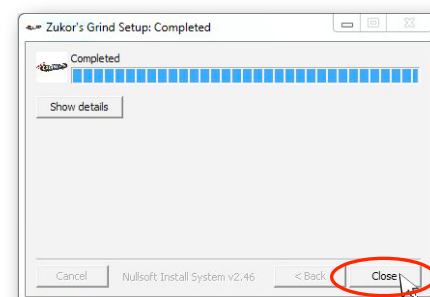
6. When the **Software License Agreement** appears, please read it, then click, "I Agree."



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



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



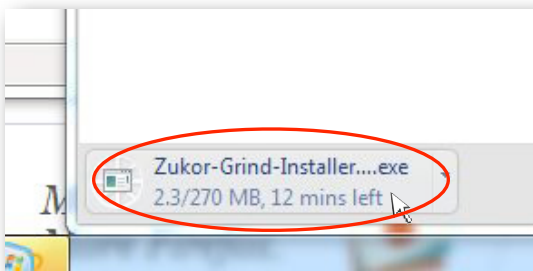
Installation via Download (Chrome)

If using Chrome

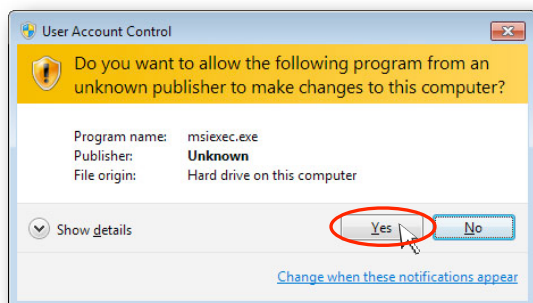
1. Download Zukor's Grind.



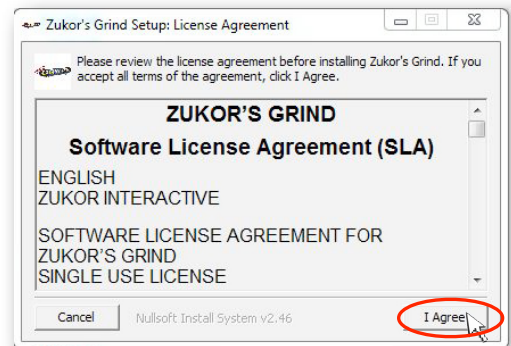
2. Locate the installer **Zukor-Grind-Installer.exe** on the bottom left corner of your browser and click to open.



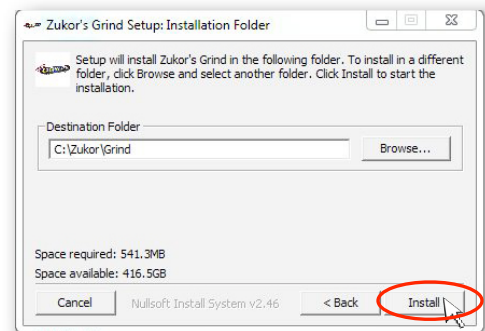
3. When the **User Account Control** box appears, click Yes."



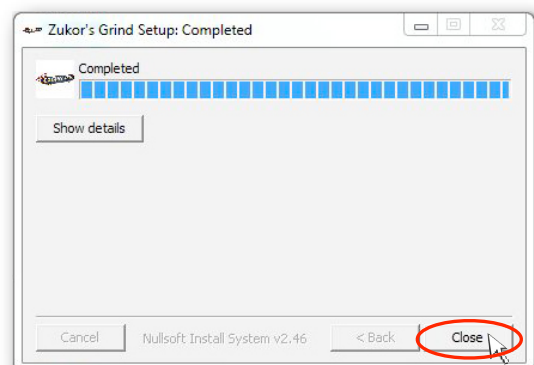
4. When the **Software License Agreement** appears, please read it, then click, "I Agree."



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



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



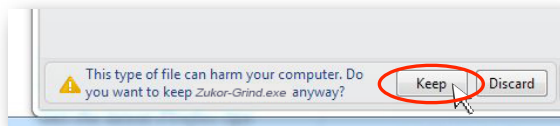
Installation via Download (Safari)

If using Safari

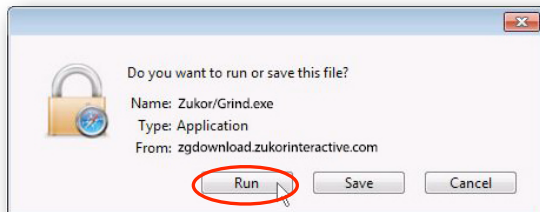
1. Download Zukor's Grind.



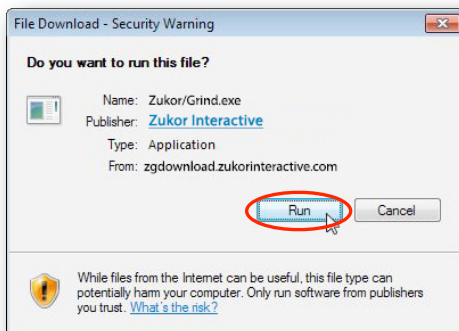
2. When the below dialogue box appears, click "Keep."



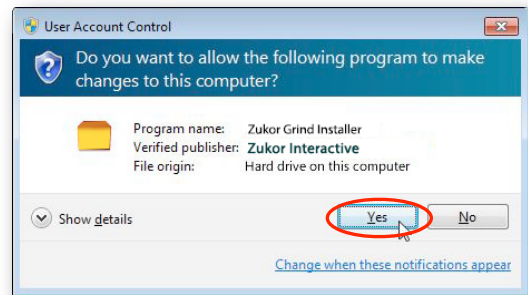
3. When the below box appears, click "Run."



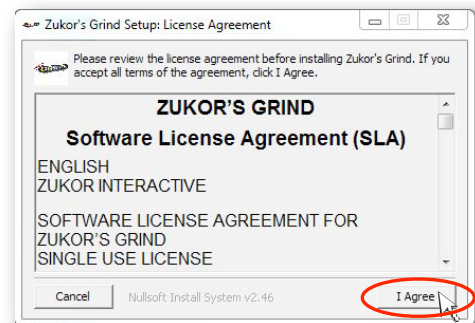
4. When the **File Download Security Warning** box appears, click "Run."



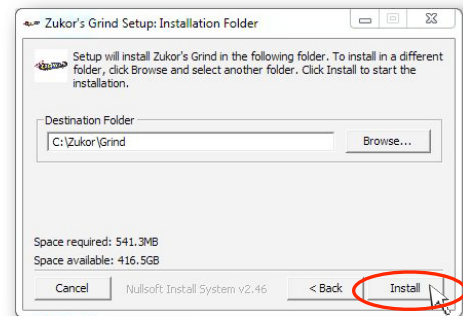
5. When the **User Account Control** box appears, click "Yes."



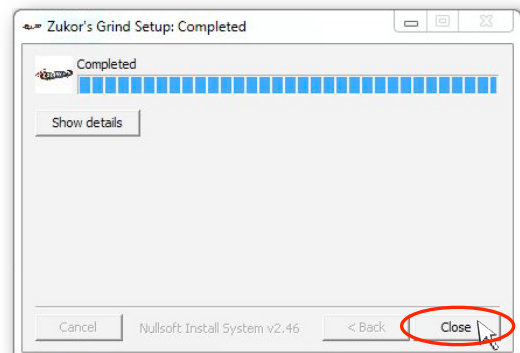
6. When the **Software License Agreement** appears, please read it, then click, "I Agree."



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 BioTrace+ in a two monitor configuration.

The below steps explain how to configure your monitors in Windows to work properly with BioTrace+ 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 BioTrace+.

OVERVIEW

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

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

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

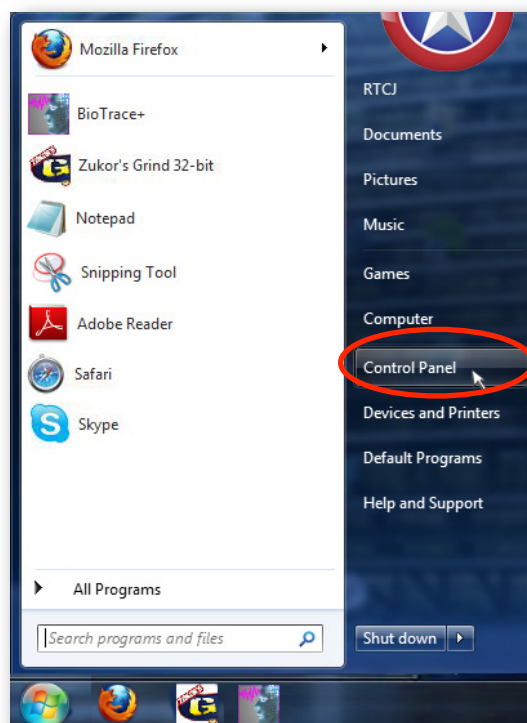
Monitor 2 = "Game Monitor" to display the Zukor's Grind feedback game for the patient.

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.

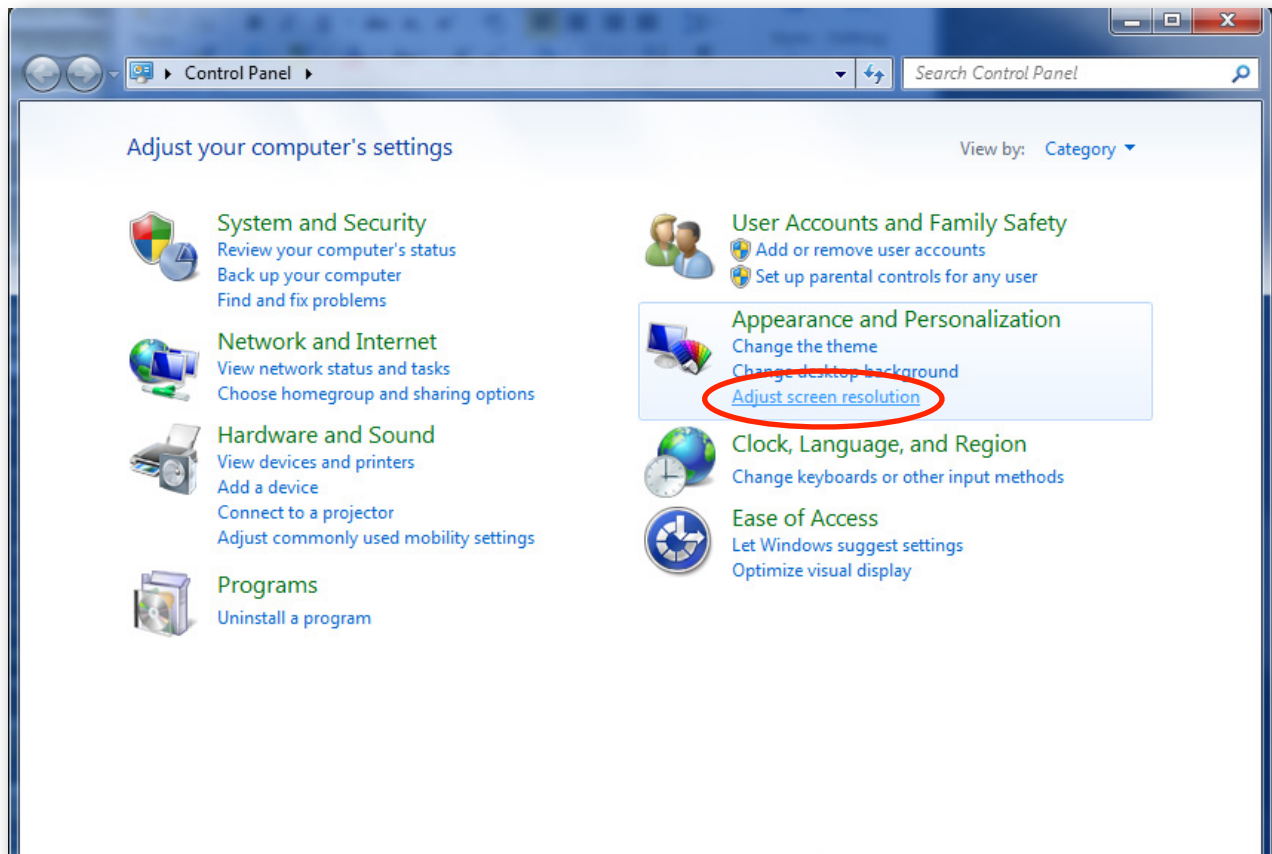
Note 2: Monitor 2 can also be a LCD/Plasma TV or video projector. However some of these alternative displays may require additional configuration changes in Windows.

MONITOR SETUP

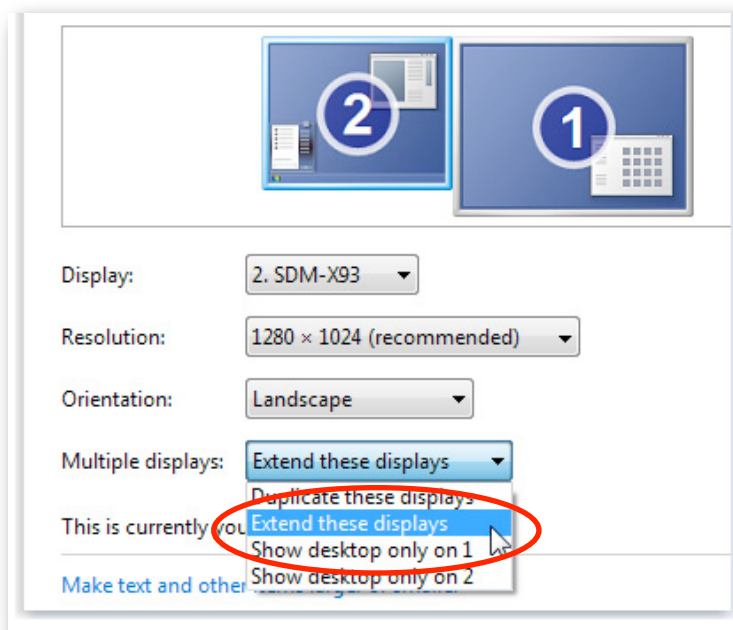
1. On the **Start** menu in Windows go to **Control Panel**.



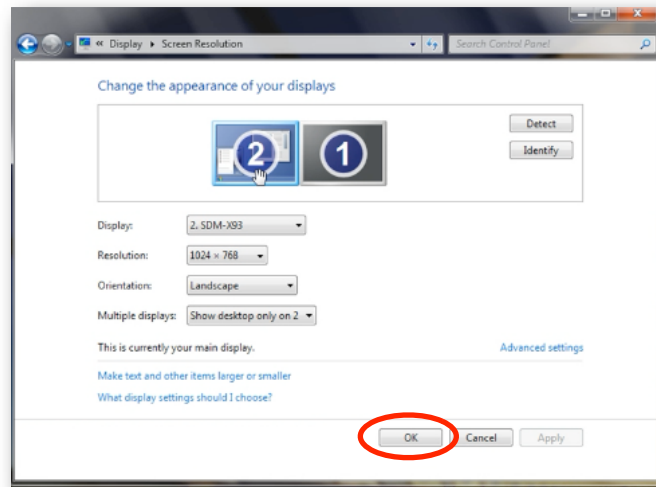
2. On the **Control Panel** window under **Appearance and Personalization**, click on **Adjust screen resolution**.



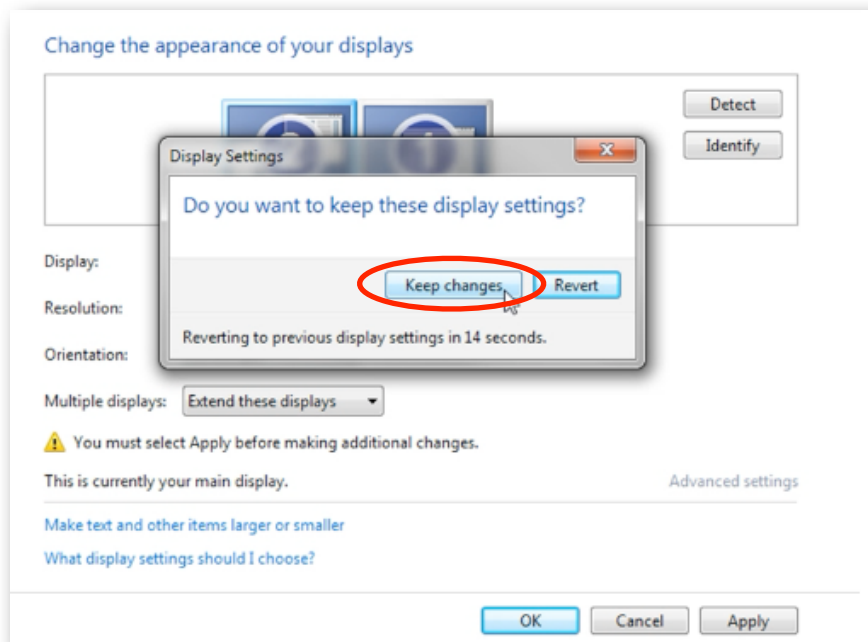
3. Click the drop-down list next to **Multiple displays** and select **Extend these displays**.



4. Then click **OK**.



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

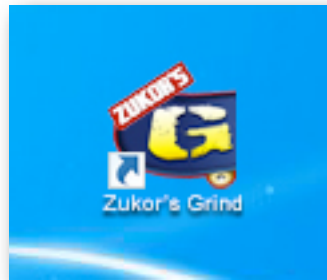


Your monitors are now setup to work properly with Zukor's Grind and BioTrace+. When you start BioTrace+ it should appear on Monitor 1 (Clinician Monitor) and when you launch Zukor's Grind it should appear on Monitor 2 (Game Monitor).

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

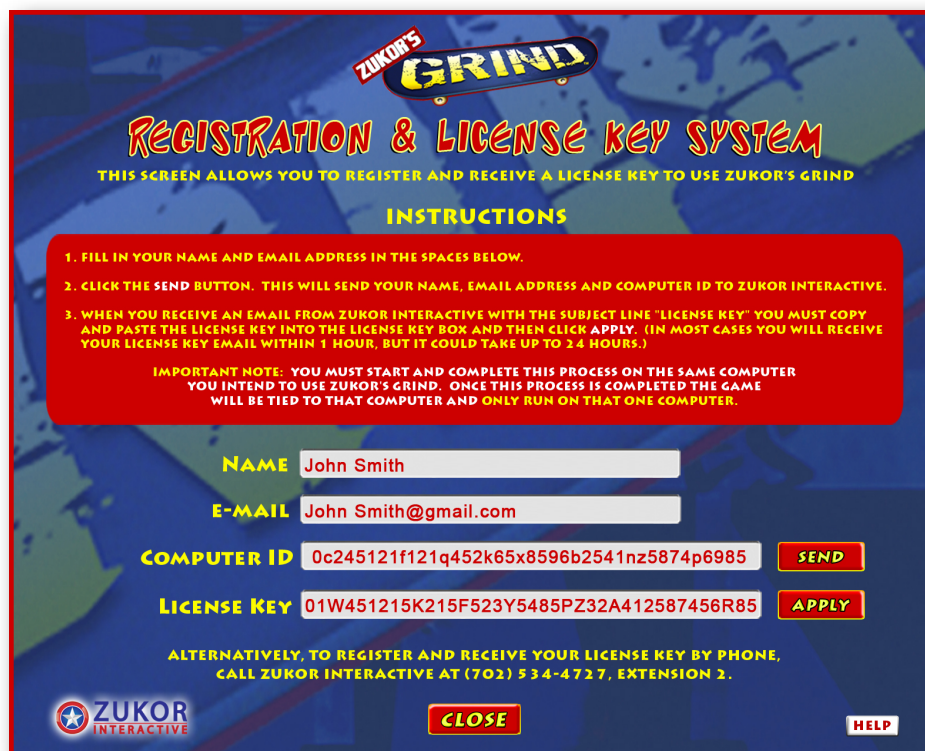
Setup BioTrace+

1. Locate the **Zukor's Grind** icon on your desktop and 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.

A screenshot of the 'Zukor's Grind' Registration & License Key System window. The window has a blue background with a map-like pattern. At the top, it says 'ZUKOR'S GRIND' in a stylized font. Below that, it says 'REGISTRATION & LICENSE KEY SYSTEM' in large, bold, red letters. Underneath, it says 'THIS SCREEN ALLOWS YOU TO REGISTER AND RECEIVE A LICENSE KEY TO USE ZUKOR'S GRIND' in smaller yellow text. A red box contains the following 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.)
Below the instructions, there is an 'IMPORTANT NOTE' in yellow text: '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.' Below the note, there are four input fields with labels in yellow: 'NAME' (John Smith), 'E-MAIL' (John Smith@gmail.com), 'COMPUTER ID' (0c245121f121q452k65x8596b2541nz5874p6985), and 'LICENSE KEY' (01W451215K215F523Y5485PZ32A412587456R85). To the right of each field is a button: 'SEND' for the computer ID and 'APPLY' for the license key. At the bottom, it says 'ALTERNATIVELY, TO REGISTER AND RECEIVE YOUR LICENSE KEY BY PHONE, CALL ZUKOR INTERACTIVE AT (702) 534-4727, EXTENSION 2.' There are three buttons at the bottom: 'ZUKOR INTERACTIVE' (with a logo), 'CLOSE', and 'HELP'.

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.

3. On the Main Menu, below the profile popup click **SETUP**.



4. Check the white box next to **THOUGHT TECHNOLOGY'S BIOGRAPH INFINITI**.

5. Click **SETUP ZUKOR'S GRIND**.



6. In the **Select BioTrace+ installation folder**, click once **BioTrace**.
7. Then, click **Select**.



8. When the Setup Complete popup appears, click **CLOSE**.



9. This will bring up the **Main Menu**, Click **QUIT** to exit the game.



Congratulations! You have completed the set up process.

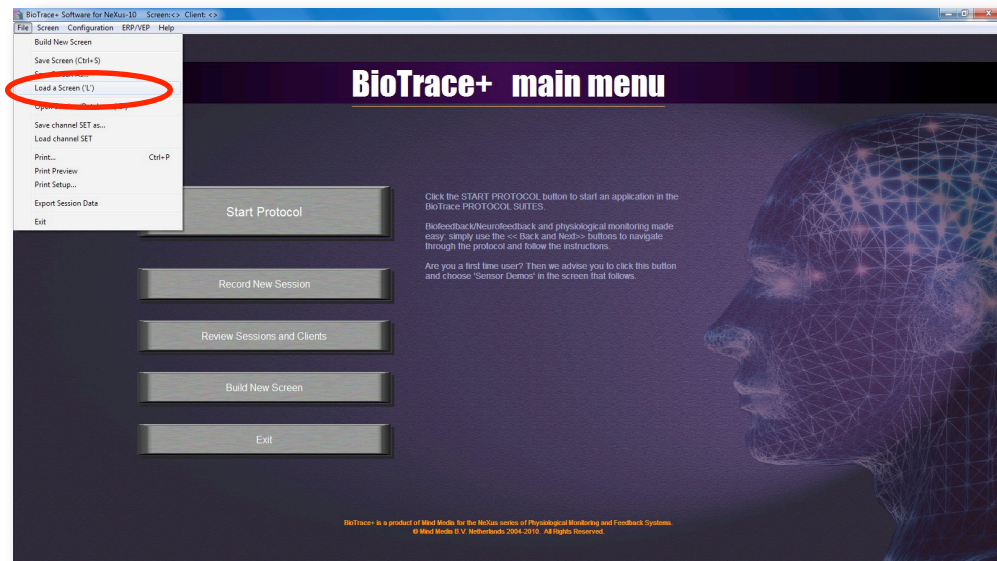
Zukor's Grind is now ready to use.

Using BioTrace+ With Stored Data

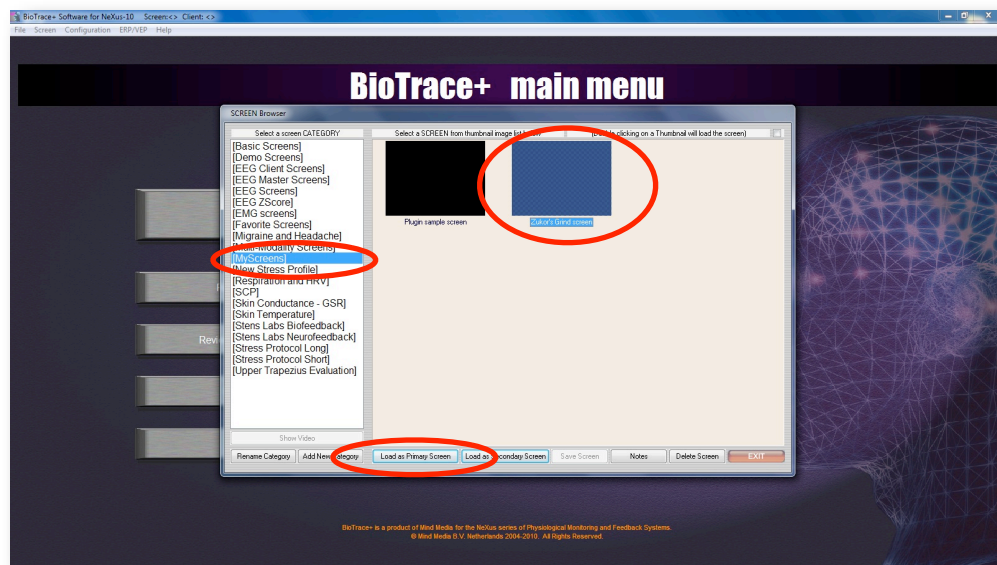
Once the installation and basic setup of Zukor's Grind are completed, the following steps will show you how to run a feedback session with Zukor's Grind and BioTrace+ using stored data.

TIP: Trying Zukor's Grind with stored data is a great way to try out the game and understand how it works before using it with a patient.

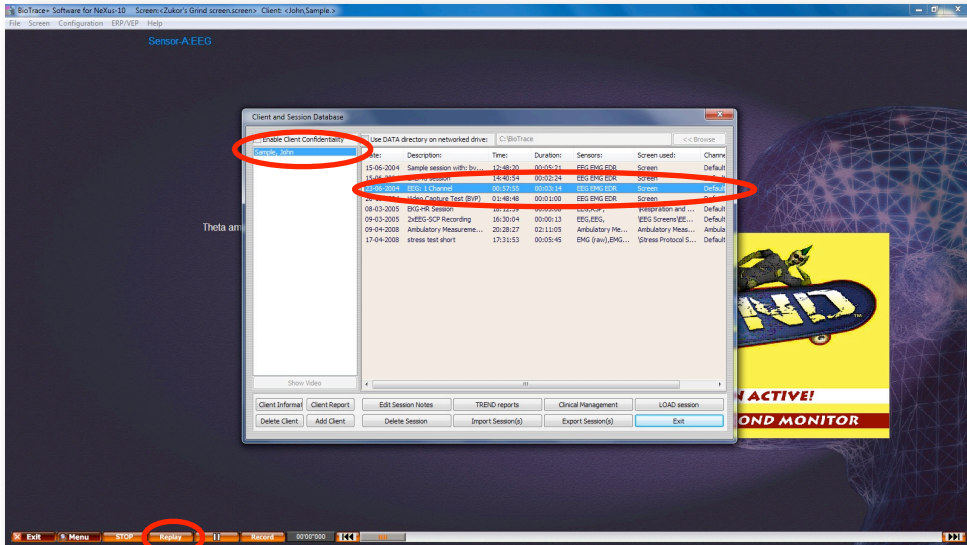
1. Start BioTrace+ using the BioTrace+ desktop shortcut icon or in the normal manner.
2. On the BioTrace+ main menu window, click on **File / Load Screen("L")**.



3. On the **SCREEN Browser** window, under **CATEGORY** click [**MyScreens**].
4. Select **Zukor's Grind** screen, then click on **Load as Primary Screen**.



6. Select the desired file, then double click on it, or click **Replay**.

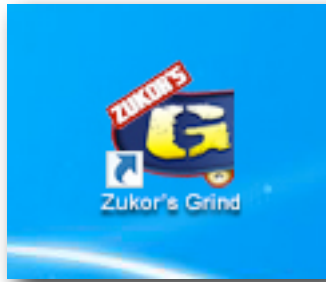


The “Clinician Monitor” should look like the image below.



Please continue to the next page to open Zukor's Grind

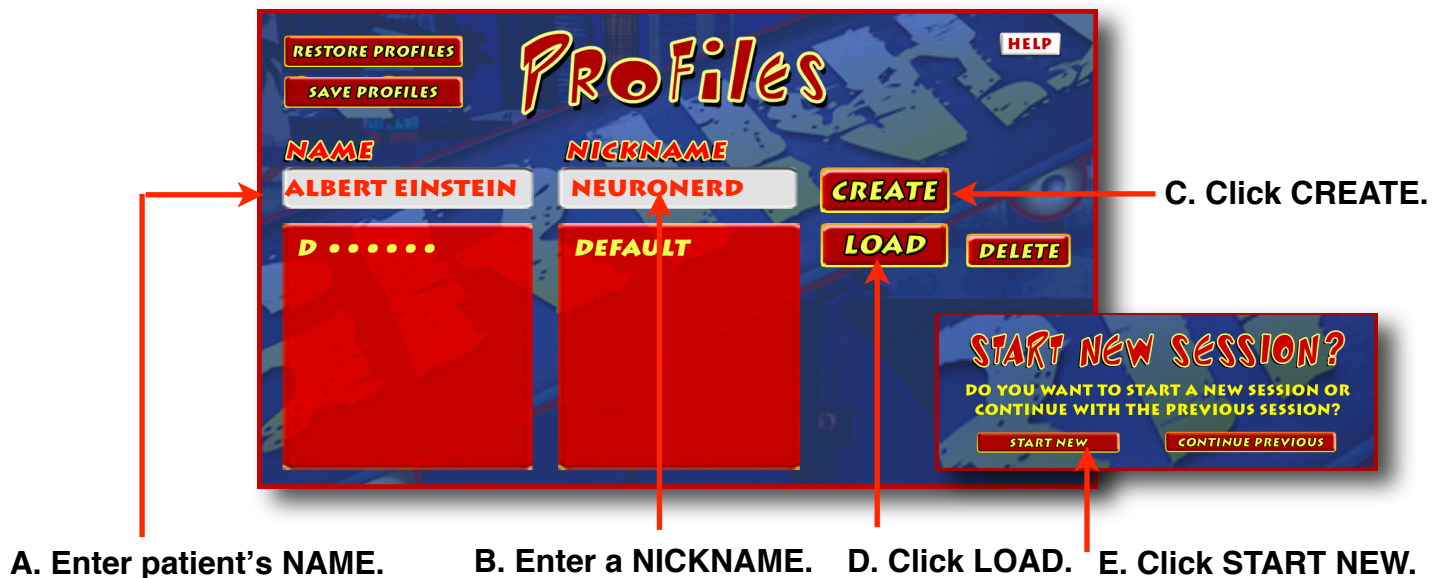
1. Locate the **Zukor's Grind** icon on your desktop and double click it.



2. After the Zukor's Grind startup animation 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.



For more information on **Profiles** please press the **HELP** button in the in game Pop up.

3. If desired, click **OPTIONS** to make changes.



For more information on **Options** please see the “Options” section in the User’s Manual.

4. 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.

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



6. Click the **PLAY GAME** button.

Your feedback session will begin.

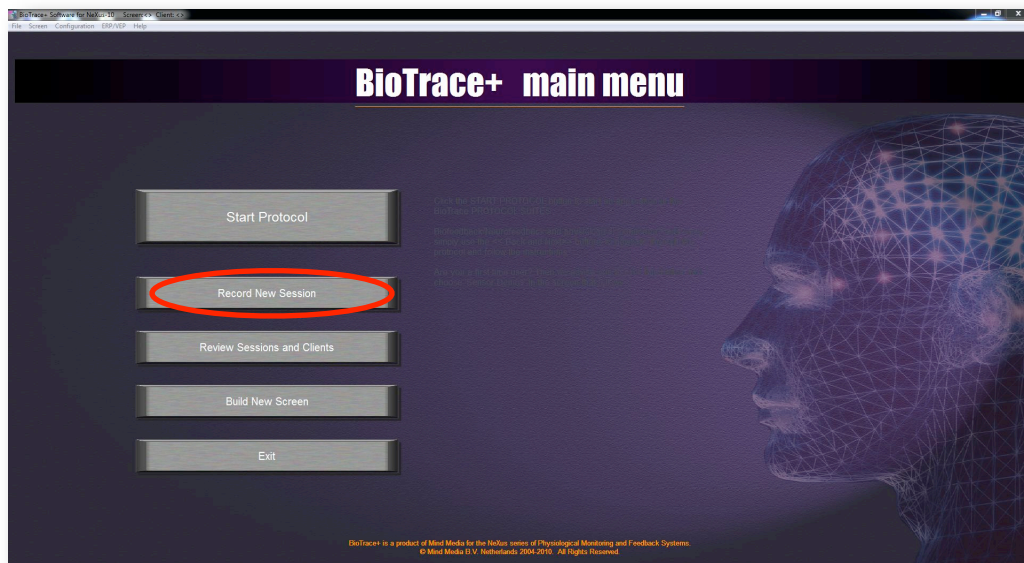


Using BioTrace+ With Live Data

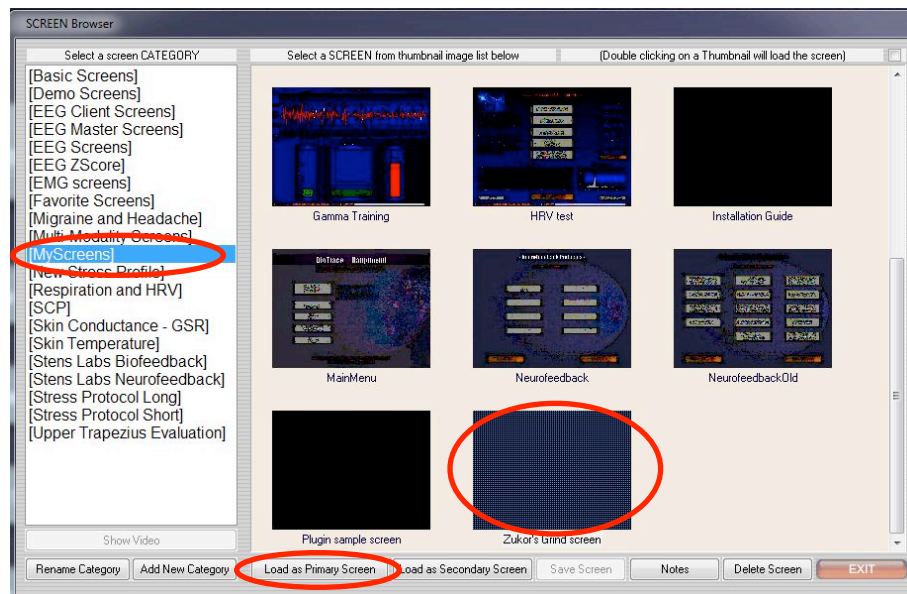
Once the installation and basic setup of Zukor's Grind are completed, the following steps will show you how to run a feedback session with Zukor's Grind and BioTrace+ using live data.

TIP: If you have not done so already, we suggest first trying Zukor's Grind with stored data to understand how it works before using it with a patient (live data).

1. Start BioTrace+ using the BioTrace+ desktop shortcut icon or in the normal manner.
2. On the main menu BioTrace+ window click on **Record New Session**.



3. On the **SCREEN Browser** window, under **CATEGORY** click **[MyScreens]**.
4. Select **Zukor's Grind** screen, then click on **Load as Primary Screen**.



5. In the **CLIENT** window you can **either**:

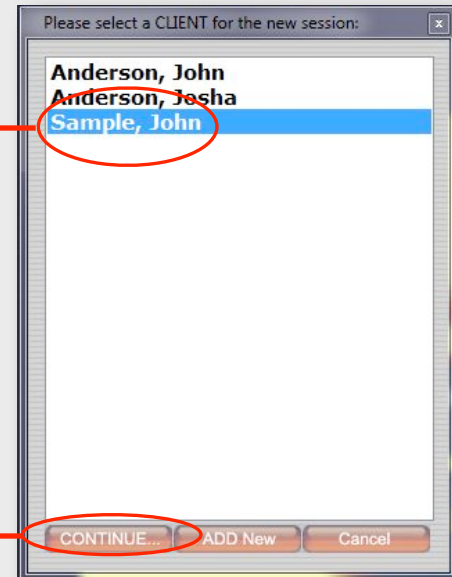
- A. Select an existing client (**go to option A below**).
- B. Create a new client (**go to option B below**).

A. In the **CLIENT** window, to select an existing client.

I. Under **CLIENT** click on desired client.

II. Click **CONTINUE**.

A
New Session



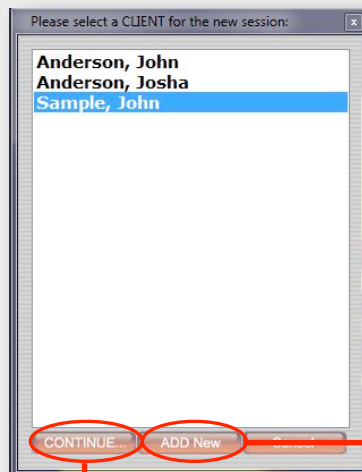
B. In the **Start Session** window to create a new client:

I. Click on **Add New**.

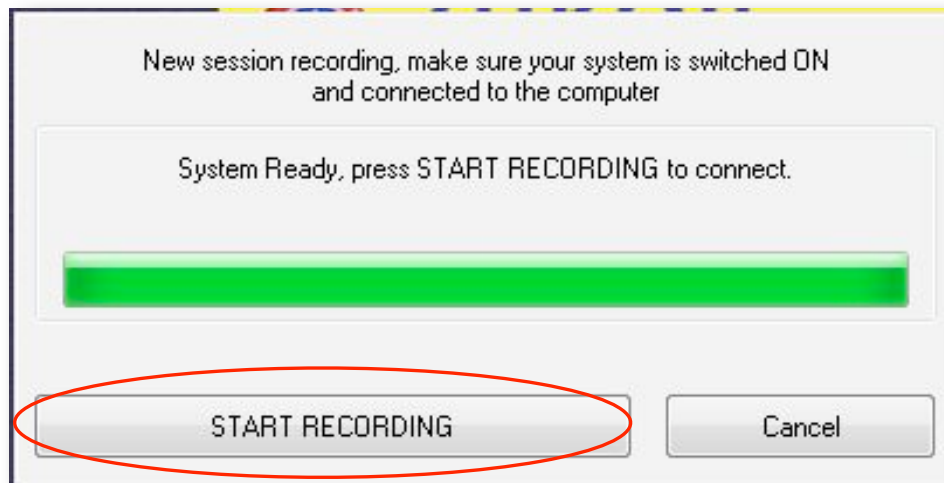
II. Fill the fields required for a new client, then click **OK**.

III. Back on **Start Session** click on **Define New Session**.

B
New Client



6. On the popup window click **START RECORDING**.

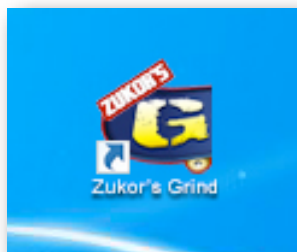


The “Clinician Monitor” should look like the image below.



Please continue to the next page to open Zukor’s Grind

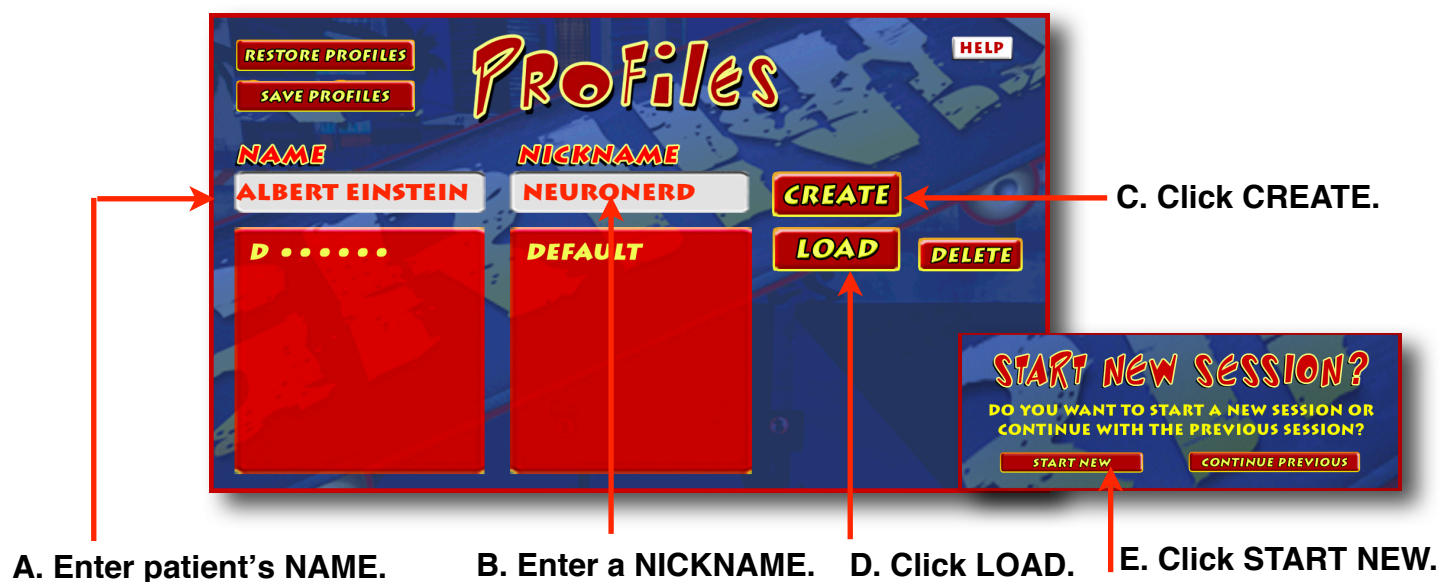
1. Locate the **Zukor's Grind** icon on your desktop and double click it.



1. After the Zukor's Grind startup animation 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.



For more information on **Profiles** please press the **HELP** button in the in game Pop up.

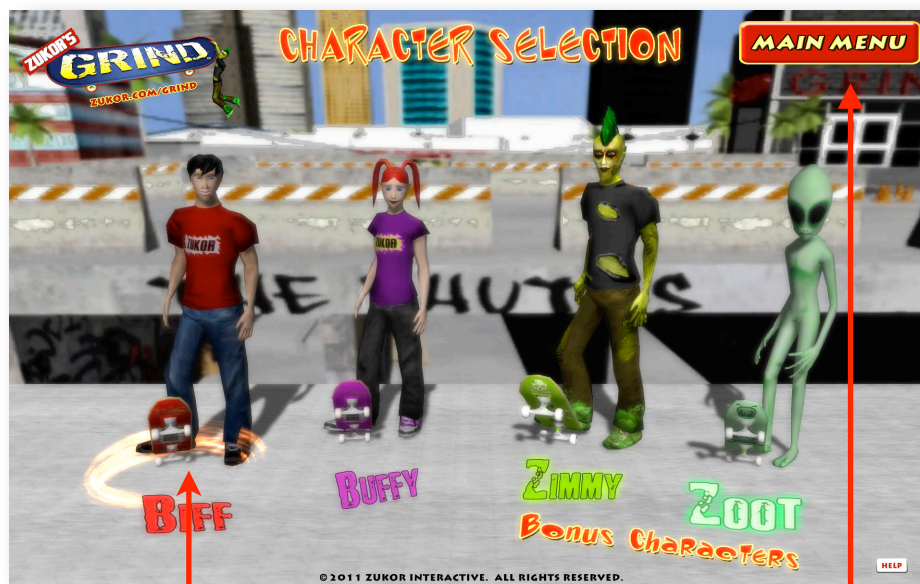
2. If desired, click **OPTIONS** to make changes.



For more information on **Options** please see the “Options” section in the User’s Manual.

3. 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.

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



5. Click the **PLAY GAME** button.
Your feedback session will begin.

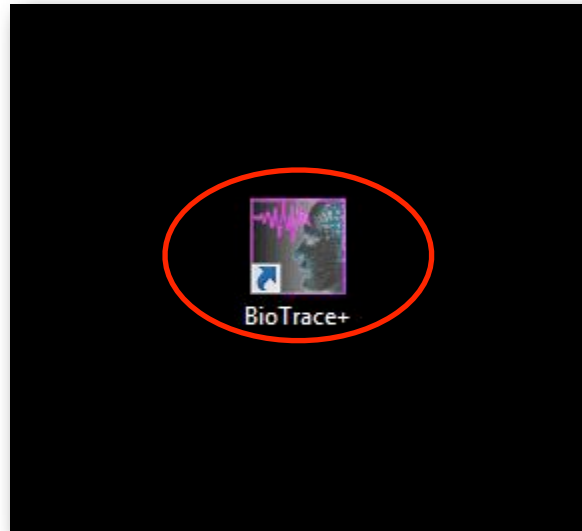


Creating a Clinician Screen for BioTrace+

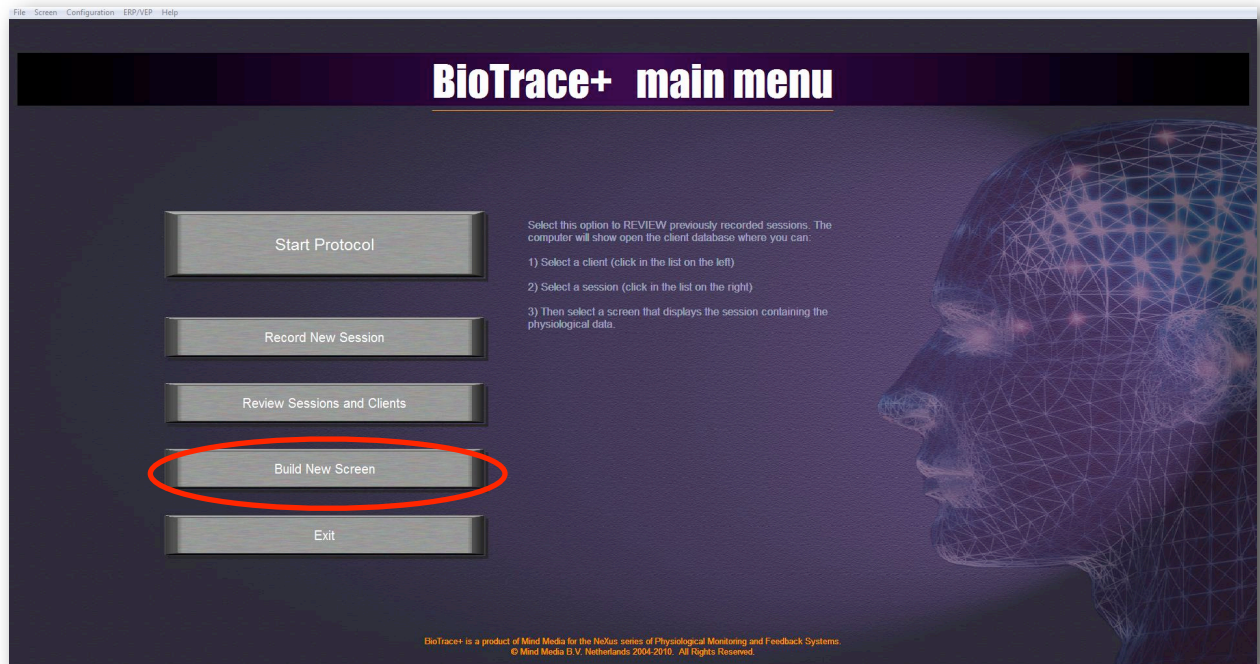
This section explains how to create a BioTrace+ clinician screen.

Yes, you can do it yourself. Really, you can.

1. Open BioTrace+ using the BioTrace+ desktop shortcut icon or in the normal manner.

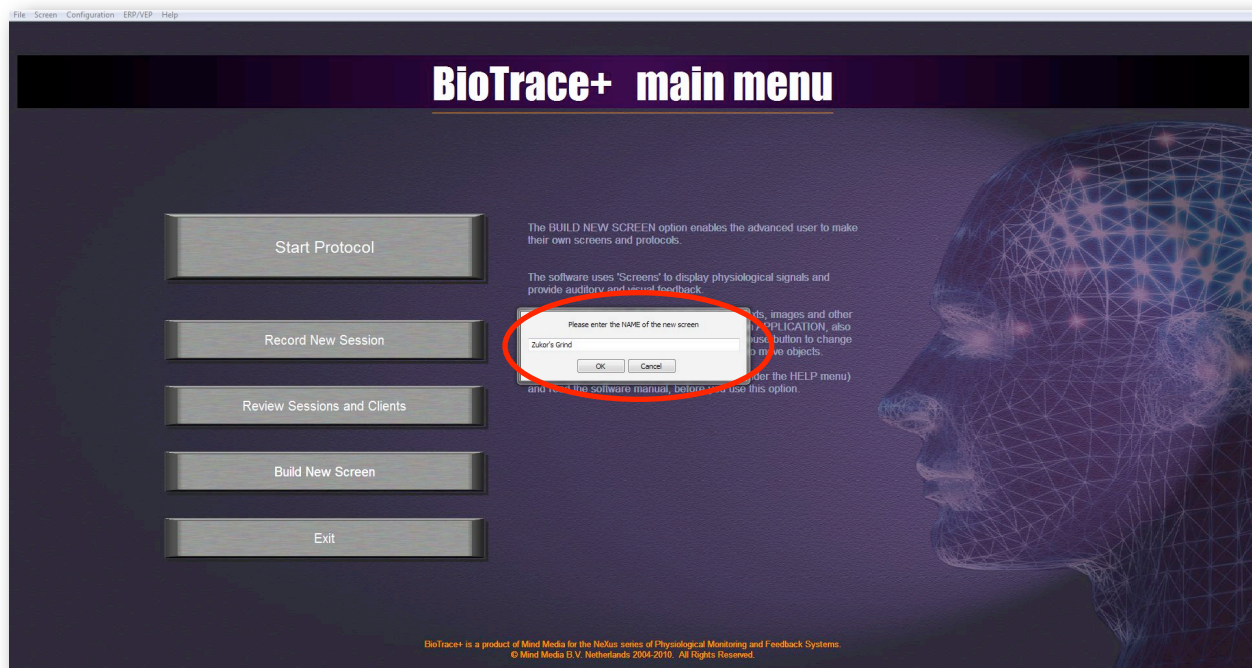


2. Click **Build New Screen**.

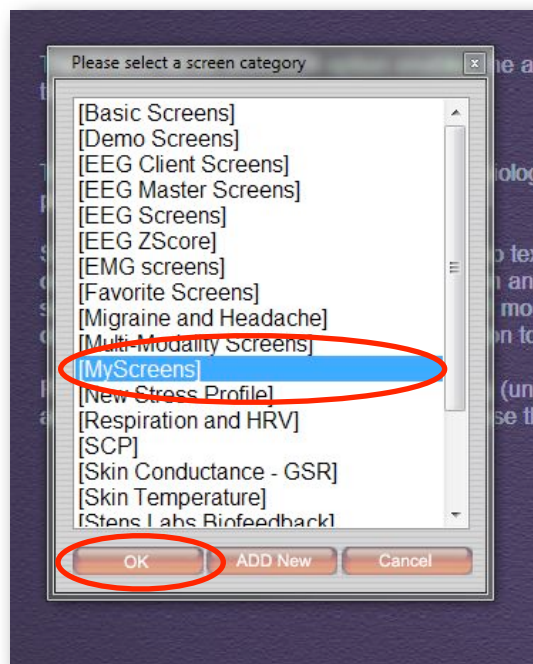


3. Name your new screen **Zukor's Grind**

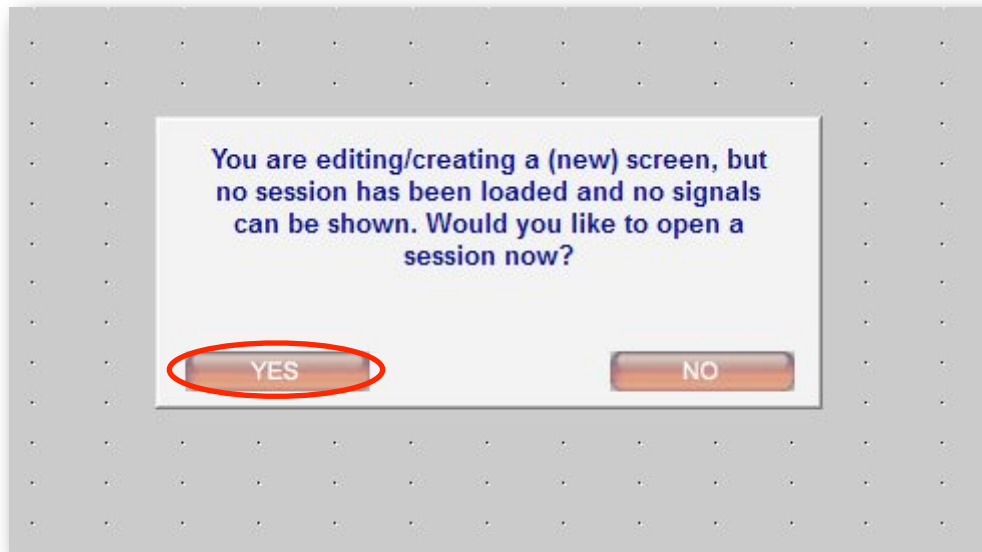
4. Click **OK**



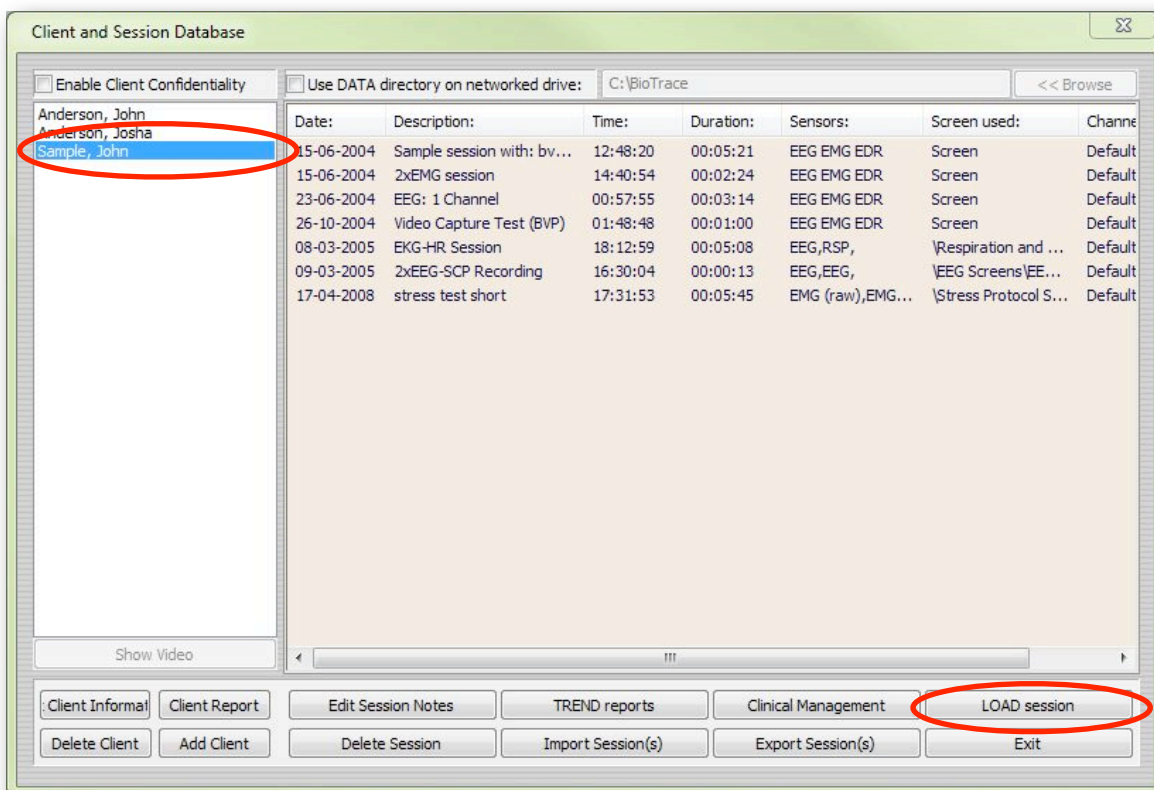
5. Select **My Screens** as the area to save your new screen and click **OK**



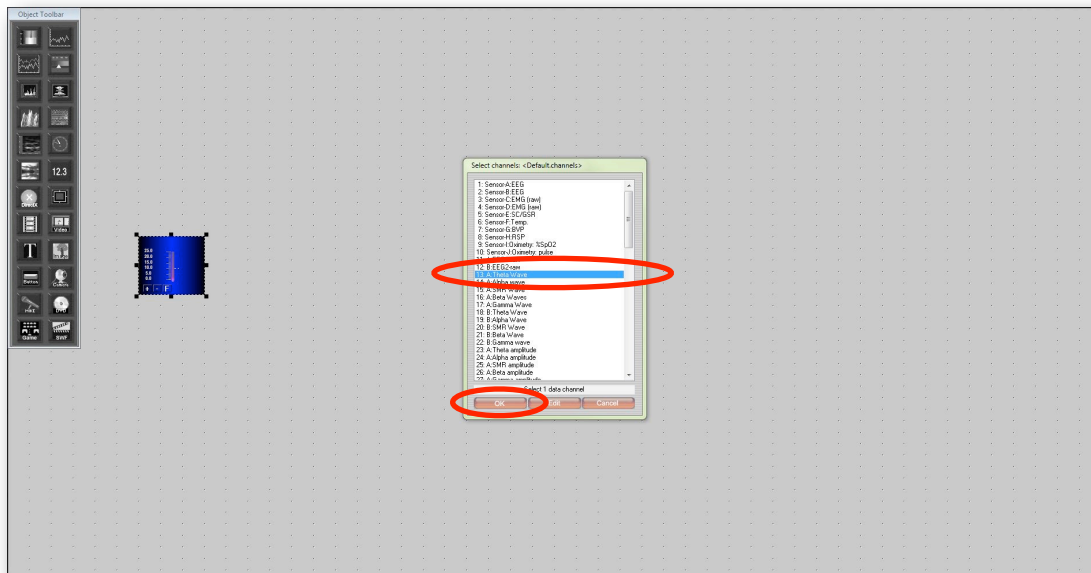
6. Click **YES** to load a new session for your screen.



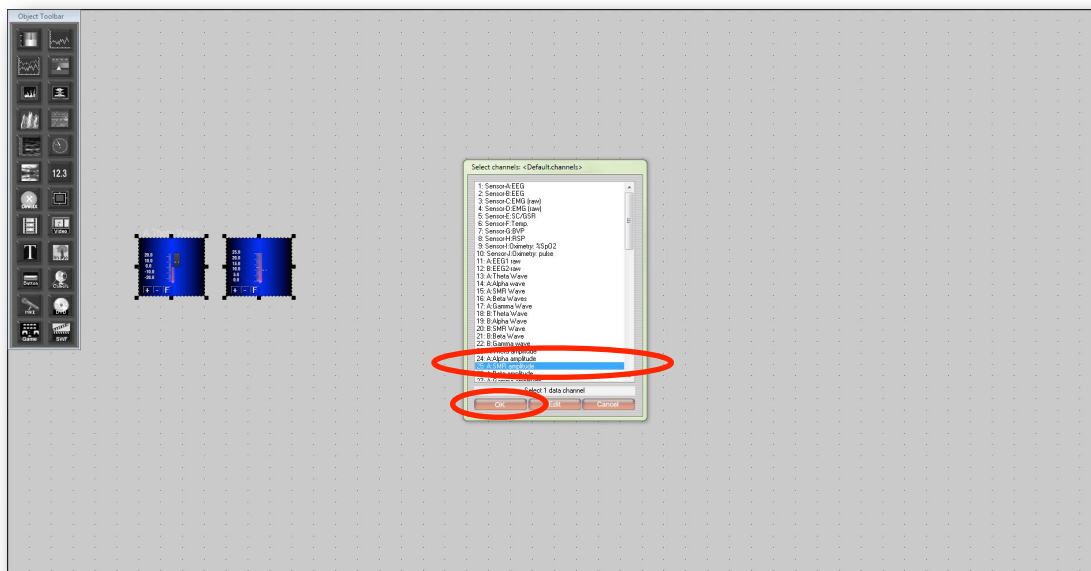
7. Select your client and click **LOAD session**.



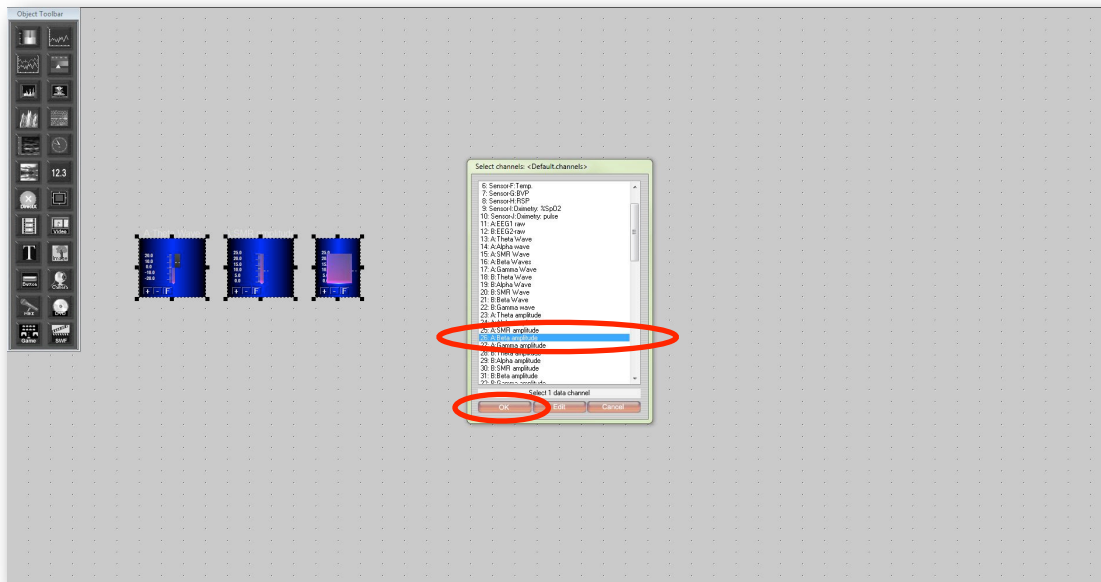
8. Place 3 bar meter controls on the screen by clicking on the top left meter in the Object Toolbar and placing them on the screen.
9. The first bar (placed in the far left), should be connected to: **23. A: Theta Amplitude Channel Set.** click **OK**.



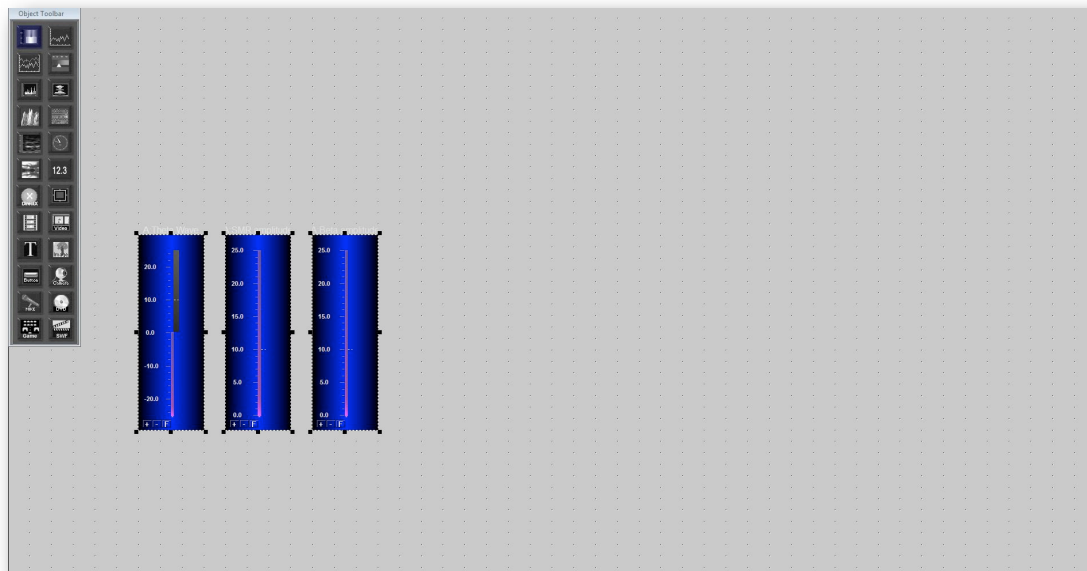
10. The second bar (placed to the right of the first bar), should be connected to: **25. A: SMR Amplitude Channel Set.** click **OK**.



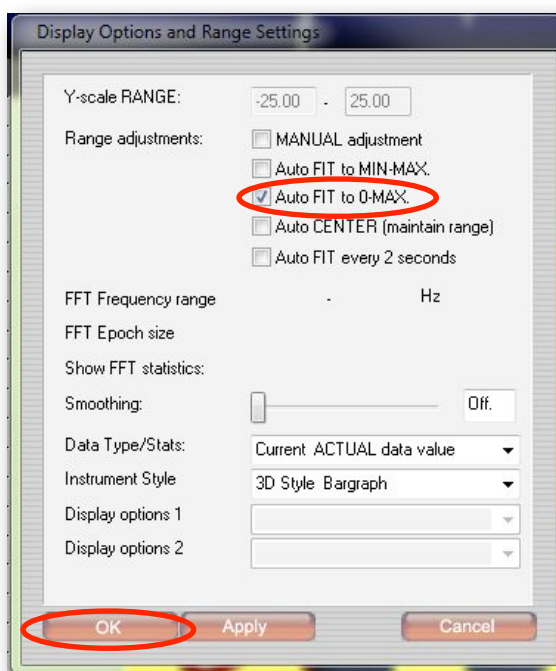
10. The third bar (placed to the right of the middle bar), should be connected to: **26. A: Beta Amplitude Channel Set.** click **OK**.



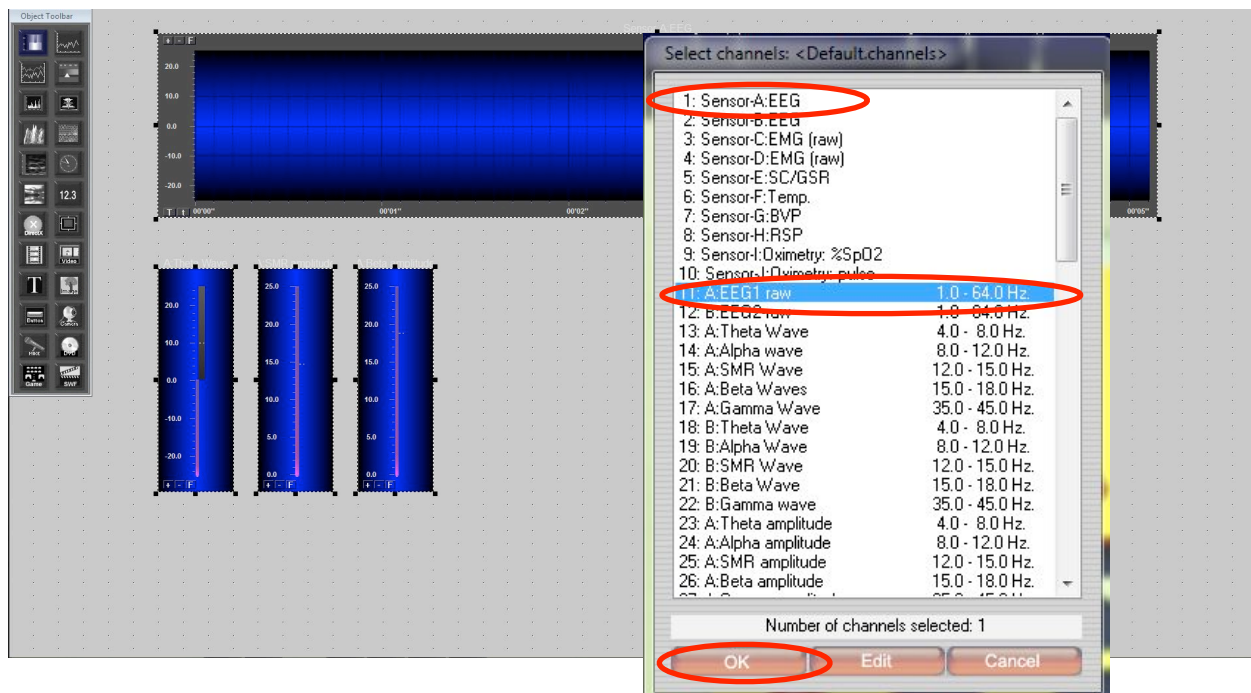
11. Grab each bar and stretch it out so that they look like this:



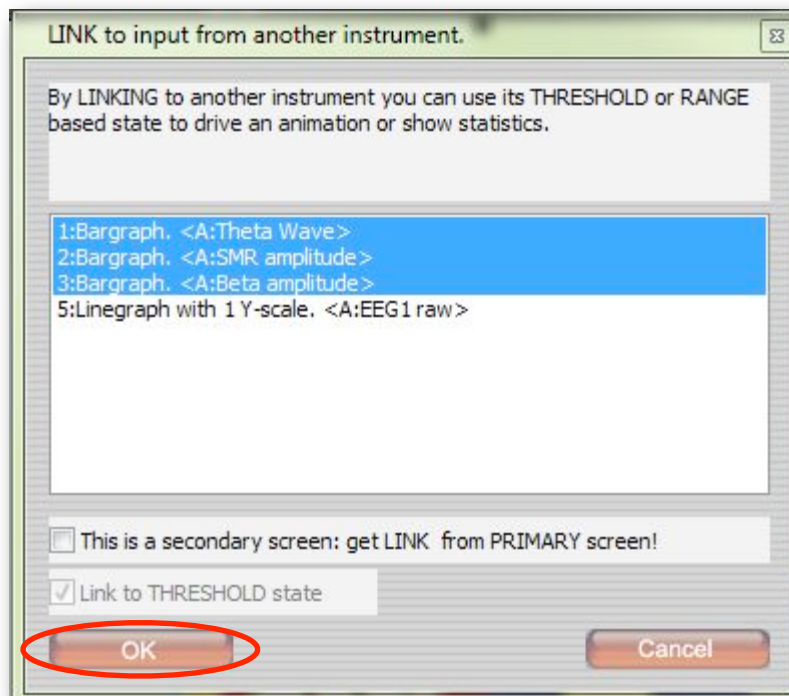
12. Right click on **EACH** Bar Meter and select: Display Options and Range Settings. Check mark the Auto FIT to 0-MAX box and click **OK**. **Make sure to do this for EACH bar meter.**



13. Grab and drag the Raw EEG meter tool (top tool on the right in the Object Toolbar), onto the screen and place above the three bar meters. Drag and stretch it out so it appears as below. Link it to: **1 Sensor AEEG** and **11: A:EEG1 raw** and click **OK**.



14. Right Click on the right border of the Direct X object and select 'Link to Instrument'. Highlight the three bar meter controls 1,2 and 3 and click **OK**.



15. Save the Screen.

16. Go to Screen > Edit Screen. Click **Edit Screen**.



Note: It's been noted that during replay mode the 2 meters of Theta wave or Beta can disappear This is a BioTrace+ problem that has been reported.

Uninstall Zukor's Grind

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

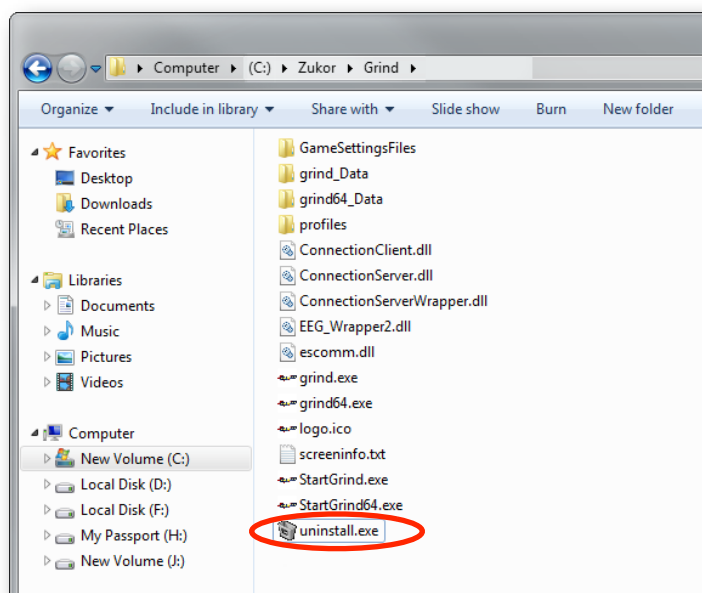
Uninstall Steps

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

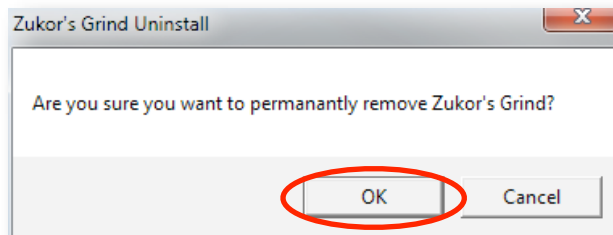
Note: If you followed the regular installation and did not change the installation location, then this folder should be located at: C:\Zukor.

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.

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 they themselves 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 is located at C:\Zukor\Grind\profiles\ to an external storage device such as a CD, backup hard drive, memory stick, etc.

RESTORE PROFILES

If for any reason you need to restore the Profiles and if you have manually saved your profiles using the “Save Profiles” button on the Profiles popup, then just click the “Restore 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.