

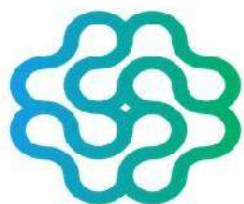
**New Mind Technologies HOME TRAINING
Software Manual**

Prepared by

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for

NewMind Technologies



NewMind
Home Training

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WELCOME

Changing Lives and Inspiring Hopeful Futures

Dear Home Neurofeedback Training User:

Thank you for your interest in Home Neurofeedback Training.

In this manual, you will find everything you need to successfully participate in clinically monitored Neurofeedback sessions in the convenience of your home.

Please read through this manual carefully. Step-by-step instructions are covered in detail on the following pages.

Keep in mind that Neurofeedback is a gentle training process that is a form of learning, which helps the brain become more efficient, balanced and flexible over time.

You will not likely experience much improvement with any single session but as you continue training you will begin to notice improvements toward your health goals. Clients/Trainees often report feeling calmer, have more balanced moods, can focus, and concentrate and begin sleeping better. Some will see results quickly; others will take an extended time. Be patient and keep at training regularly. Your clinician will guide you on the number of sessions to complete each week.

Your clinician will be monitoring your training sessions. As changes occur in response to the training process, he/she may communicate with you about updating your training protocol. Your clinician may also perform periodic qEEG testing to remap your progress.

Finally, please remember to login and use your progress tracker. This is how you document subjective progress to us.

Yours in Health.

PS - Remember, your clinician is just a phone call or E-mail away if you have any questions or concerns.

OVERVIEW

NewMind Technologies HOME TRAINING Software Manual

This manual is designed to help you, in a step-by-step process, to use the NewMind Technologies home training software. Your neurofeedback training sessions are set up and monitored by your clinician. Type of session, session length and reward feedback are all established and preset by the clinician and should be explained to you as a part of your home training. In this manual **OPERATIONAL INSTRUCTIONS** will be in **GREEN TEXT** and **WARNINGS** will be in **RED TEXT**.

If you have any questions regarding the use of the software, equipment, or supplies provided to you by your clinician, please contact your clinician directly.

Clinicians Name:

Contact Information:

E-Mail:

Phone:

Your clinician will generally provide you with the following equipment and supplies:

Equipment and supplies:

- 1 - Training Computer and power transformer/cord (Optional if you do have your own with the necessary specifications)
- 1 – HT2 Pro Amplifier
- 1 - USB connection cable
- 5 - Electrodes
- 1 - Jar of 10/20 paste
- 1 - Tube of Nuprep EEG skin prep gel
- 1 - Training Manual
- 1 - User/password login information sheet for My-NewMind Maps

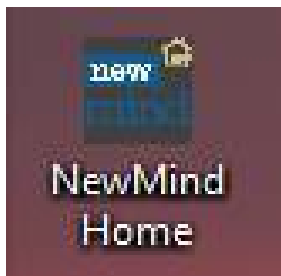
WARNING: Do not use The HT2 Pro system and software on any person not approved by your clinician. Unsupervised training may create negative side effects on unapproved and unevaluated persons.

PLEASE READ AND REVIEW THIS ENTIRE MANUAL BEFORE YOU RUN YOUR FIRST NEUROFEEDBACK HOME TRAINING SESSION!

Getting Started

Your clinician should have downloaded the NewMind Home Training software on your computer. If the software has not been downloaded, follow your clinician's instructions on how to download and install the NewMind Home Training software. If you need to download the software you can get it at <http://www.newmindfileshare.com/download/AtHome/NewMindTraining-AtHomeSetup.exe>

After the NewMind Training software has been downloaded on the computer, the following Icon will appear on the computer desktop.



Turn on your computer and connect your HR2Pro Amplifier to your computer using the UBS cord included with the home training system. It is a good idea to have all your electrodes and prep supplies close by and ready to use. This will make your set-up easier and go more smoothly.

Setting Up Media

Depending upon whether you are training with your eyes closed or eyes opened, you will want to set up your music, DVD, or Video as instructed by your clinician.

If you are training with your eyes closed and listening to music, it can be played through your computer using a CD / DVD player or Windows Media Player. **Set the volume to a comfortable level.**

If you are training with your eyes opened, you will want to get your DVD set up or log on to a *Streaming App* such as Netflix, Amazon Prime, Vudu, YouTube, HBO, Hulu, Redbox, etc.

What should you watch? Examples include Planet Earth (or anything about nature or animals you might enjoy), Extraordinary Homes by the Sea or some similar programing. Avoid, any programing that may evoke a strong emotional reaction. **Movies/TV shows containing genres like horror, violence or strongly emotional content should be avoided during training.**

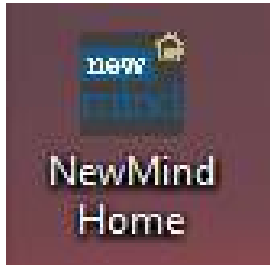


Where to locate content: If you have a Netflix, Hulu or other similar account, you can login in now and pull up something to watch. There is no need to pay for a streaming service if you do not already have an account. YouTube has plenty of appropriate content that can be used during your training sessions.

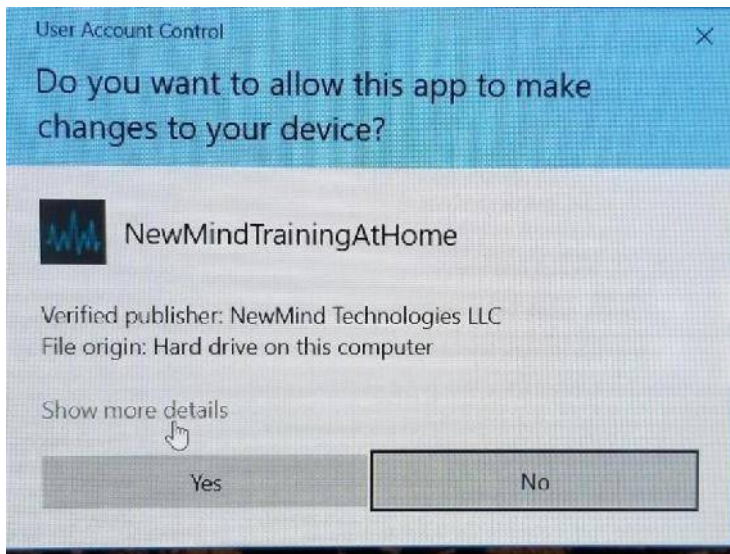
Once your music or visual entertainment is set up, Open the NewMind Home Training software.

Operating NewMind Home Training Software

To open the NewMind Training software **double click on the ICON**



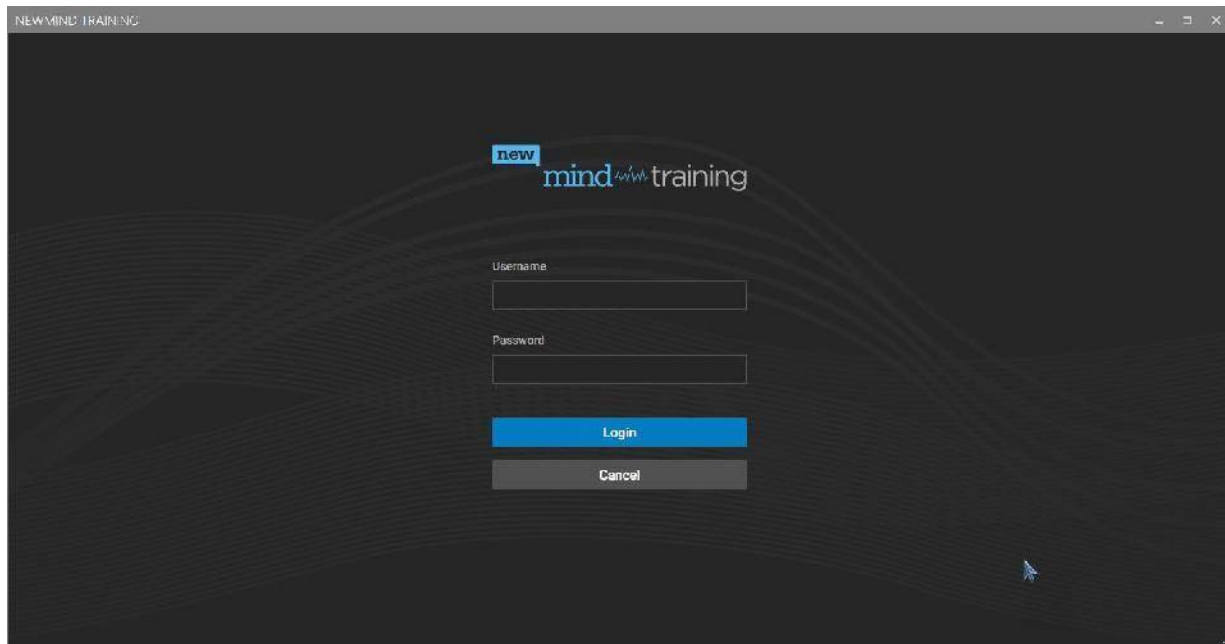
The following screen will appear asking, “Do you want to allow this app to make changes to your device.” **Click on the “YES”**



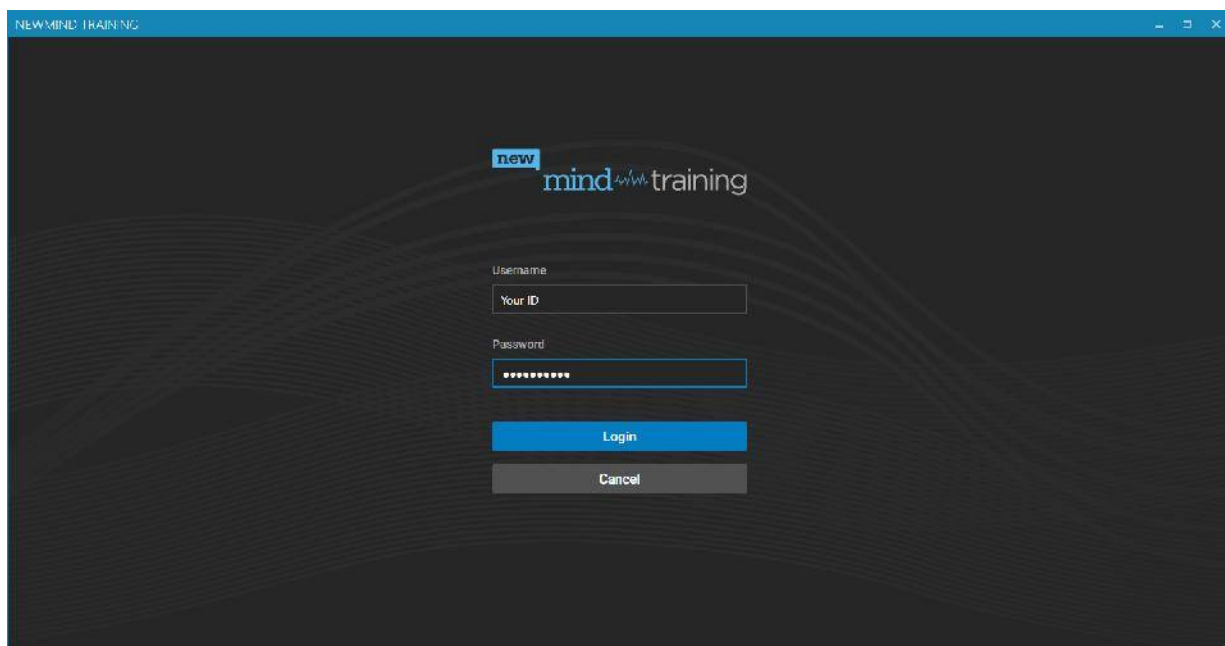
The software will load, and the following window appears:



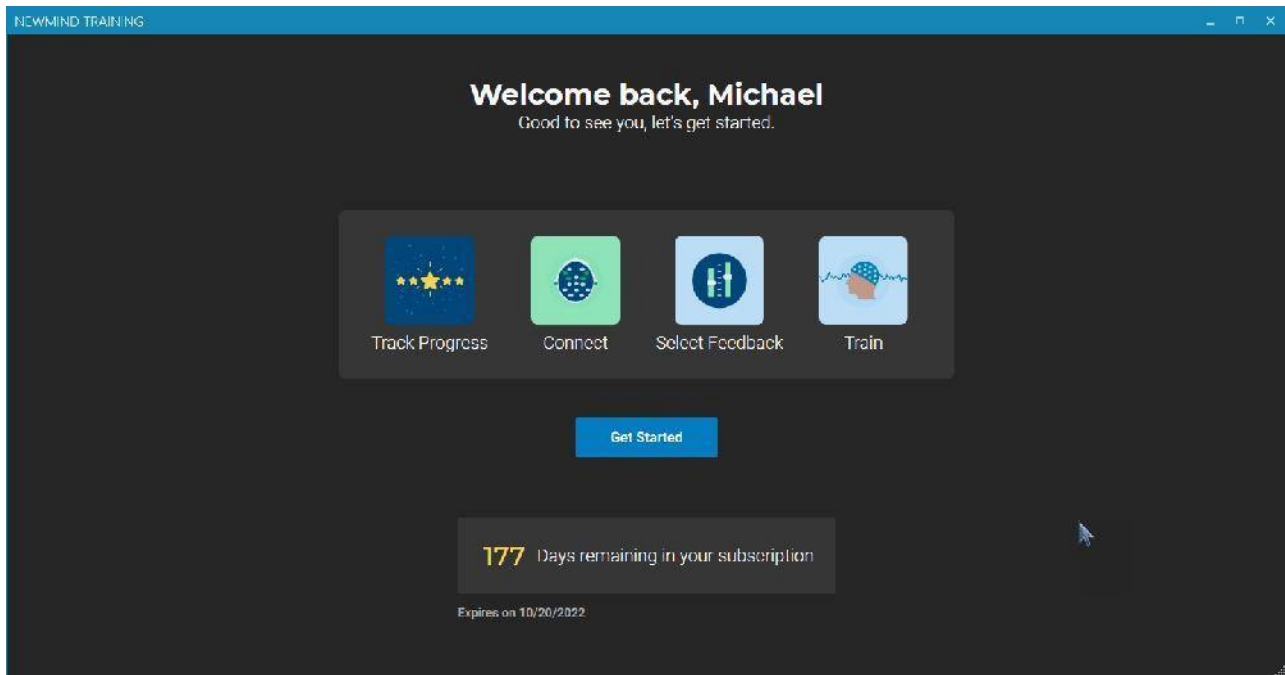
Once the software has loaded then the following screen appears:



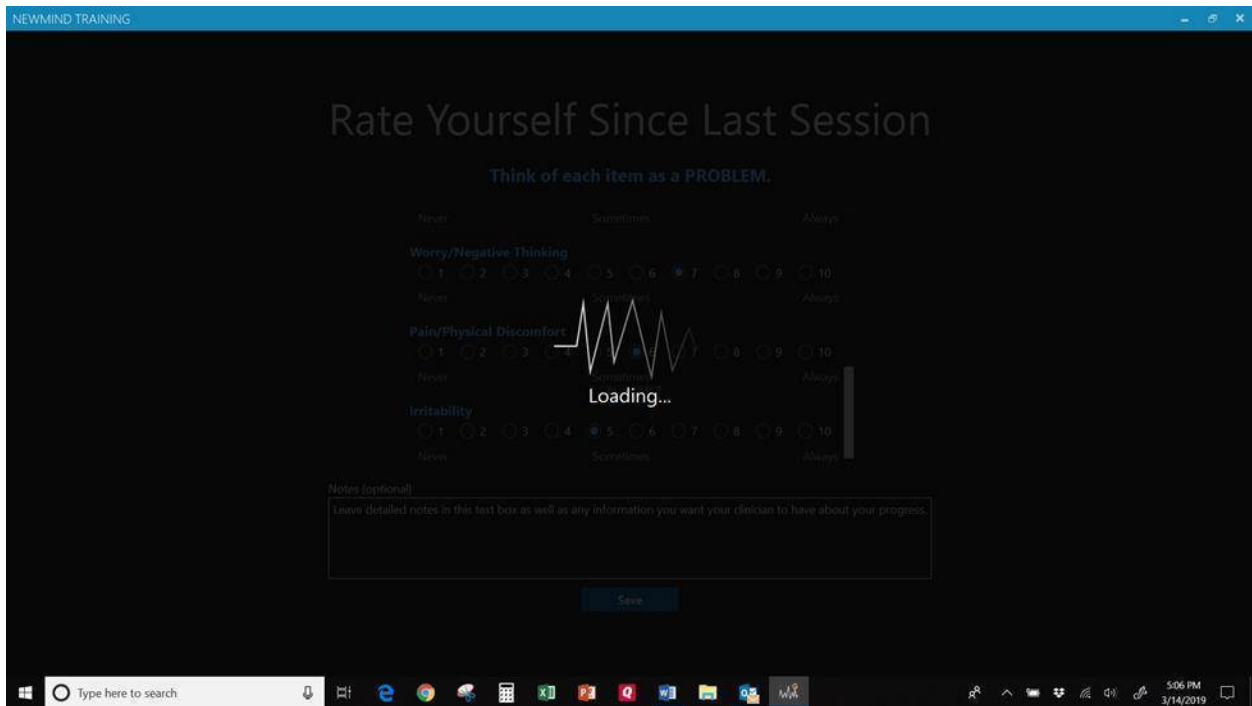
Enter your NewMind Maps ID (Username) and Password and then click on Login



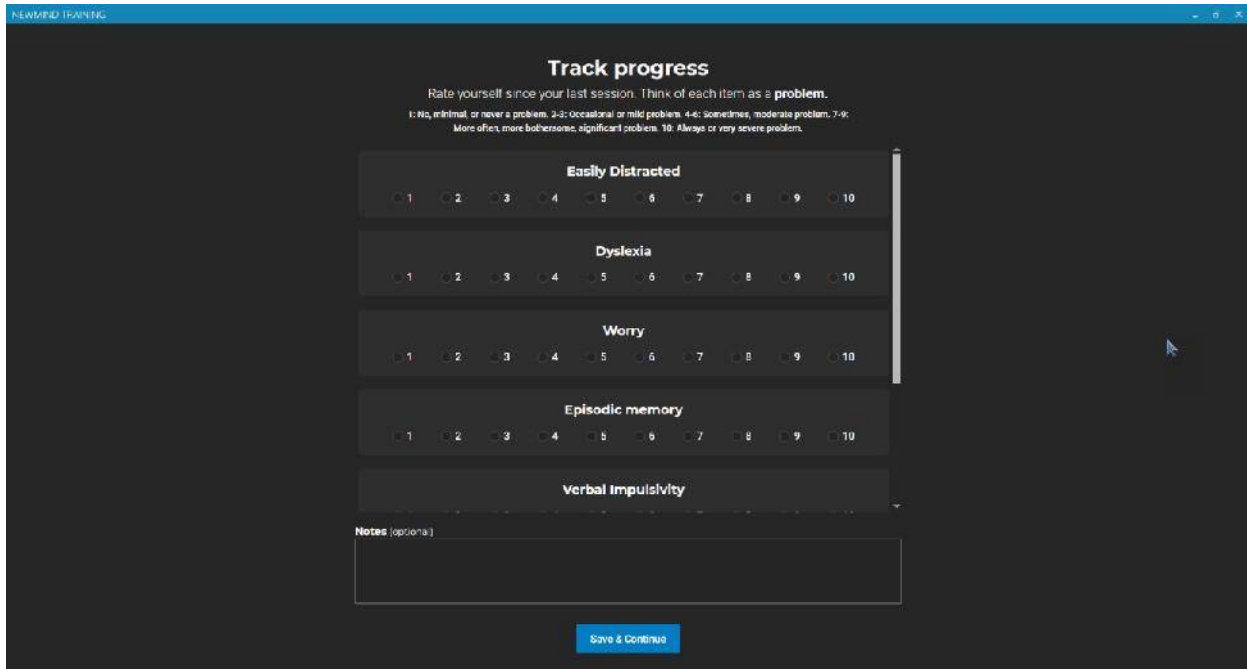
Once you have logged in **click on Get Started**



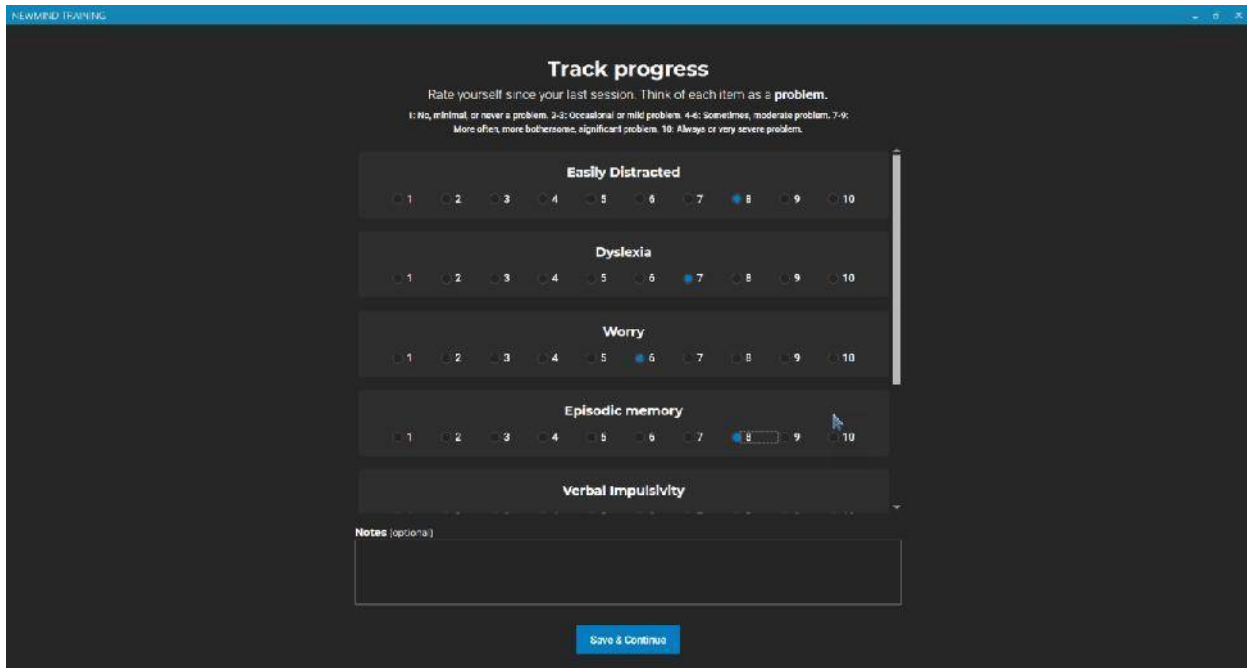
When you **Click on Get Started** the following screen appears:



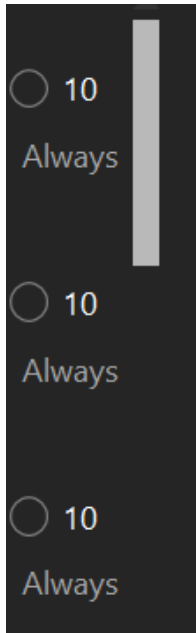
After the loading screen appears the *Rate Yourself Since Last Session* screen appears which is the progress tracking set up by you and your clinician.



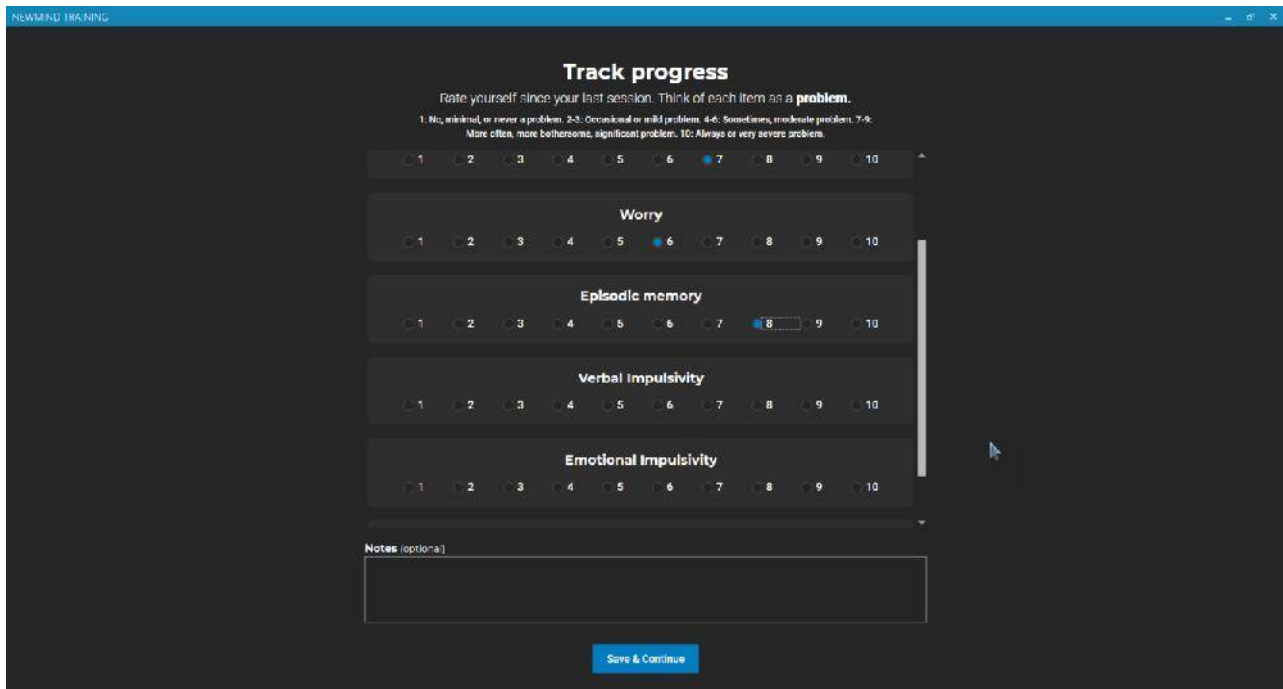
Rate each of your symptoms by checking the appropriate rating number as illustrated below. Think of each item as a PROBLEM. For each one, use the following scale:
1= no problem, rare problem, extremely mild problem
10 = significant, severe, or frequent problem. In other words, 1 is good, 10 is not good



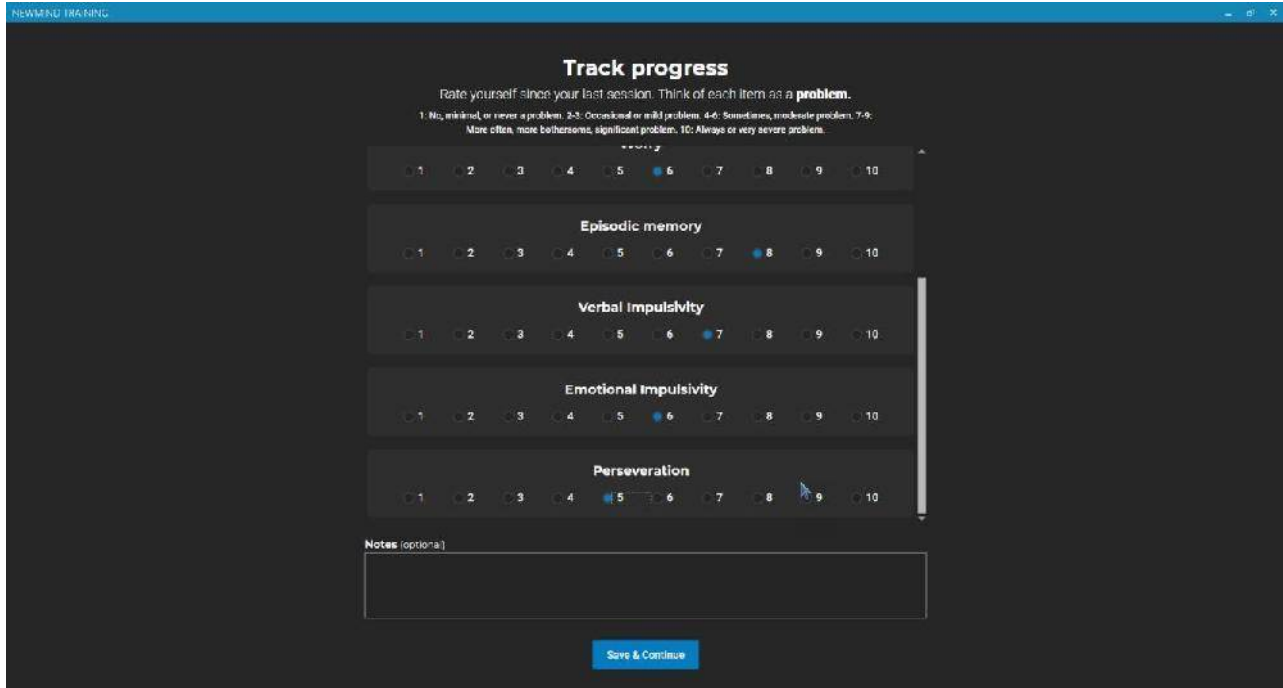
Using the **Slider Bar** on the right side of the checklist, slide down to the next set of items on your progress tracker and rate them using the 1-10 rating scale described above.



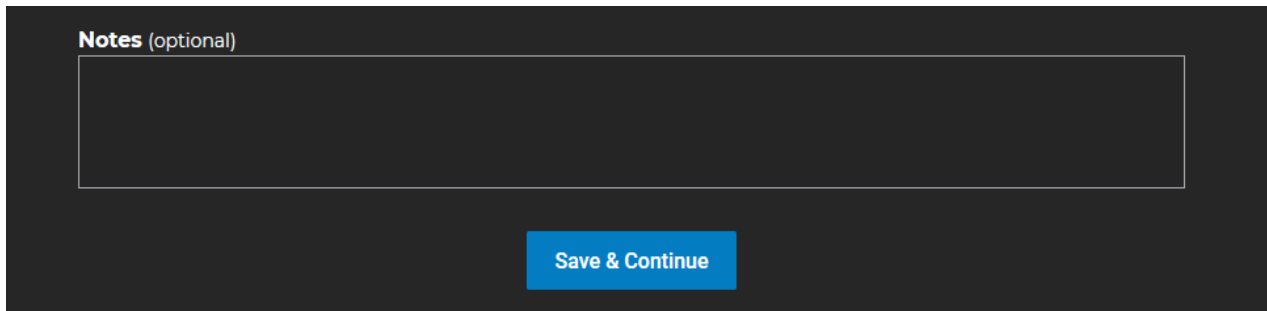
Using the slider bar, the next set of symptoms appears and are rated as illustrated below.



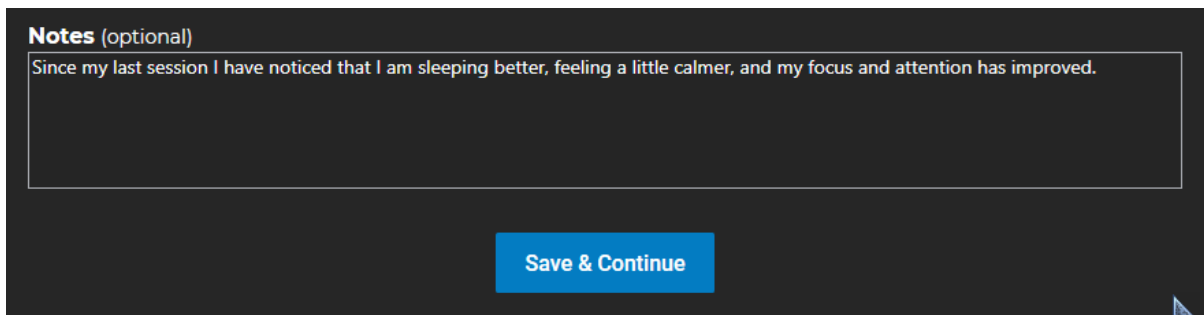
Continue to use the slider bar and rate your symptoms until you get to the bottom of your symptom list. The goal is to get most of your ratings for each symptom down to a 1, 2 or 3.



At the bottom of the progress tracker is a text box as illustrated below.

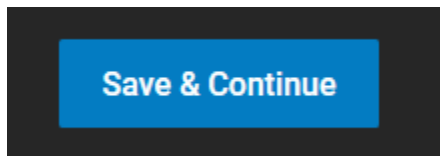


You can fill in the text box with a note to your clinician outlining any specific information you want him/her to know about your overall progress and symptoms since your last session (see illustration below).

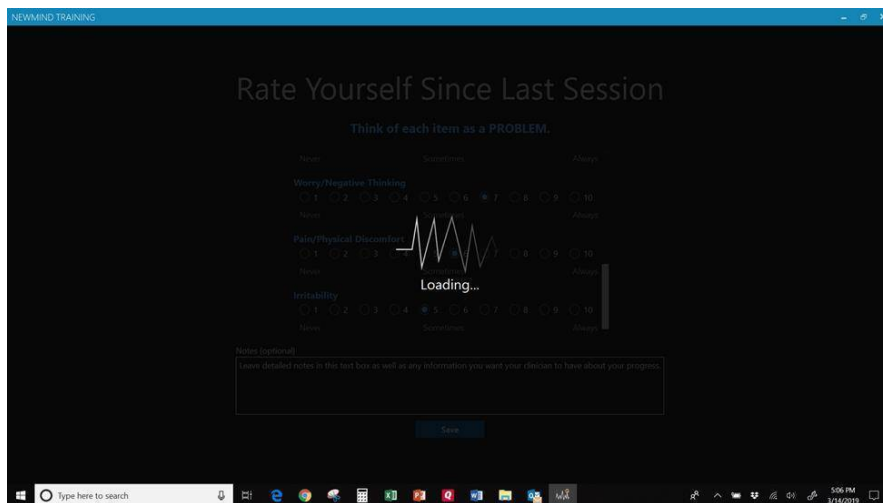


Please enter comments as often as there is something that adds clarification, more information, or perspective. For example: I started a new medication called (name of med) for (condition being treated) and since then I haven't been able to sleep; after last week's session I felt better than ever/worse than ever for a few days; Johnny's grandmother is very ill and he's had a rough week; I fell last week and hit my head; I've had the flu, etc.

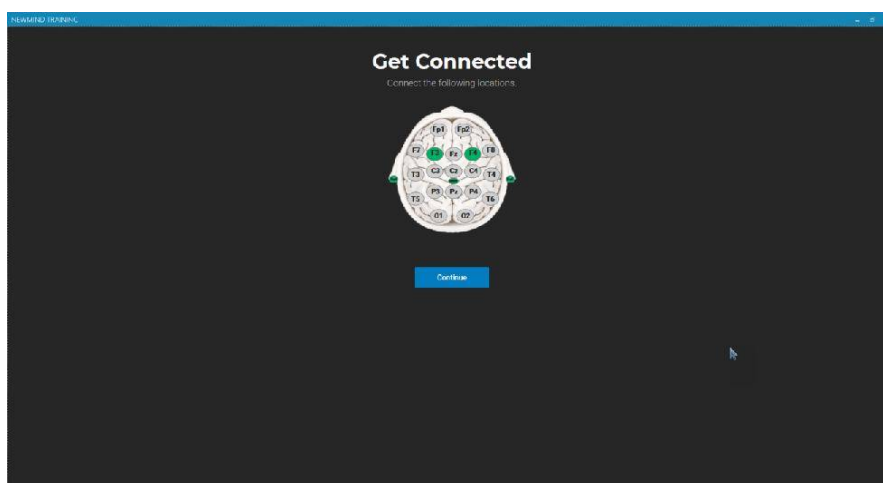
Click on **SAVE & Continue!**



The following screen appears:



And then the following screen appears.



When you are ready to start your session, **CLICK ON Continue**

Preparation for Your Home Neurofeedback Training Session

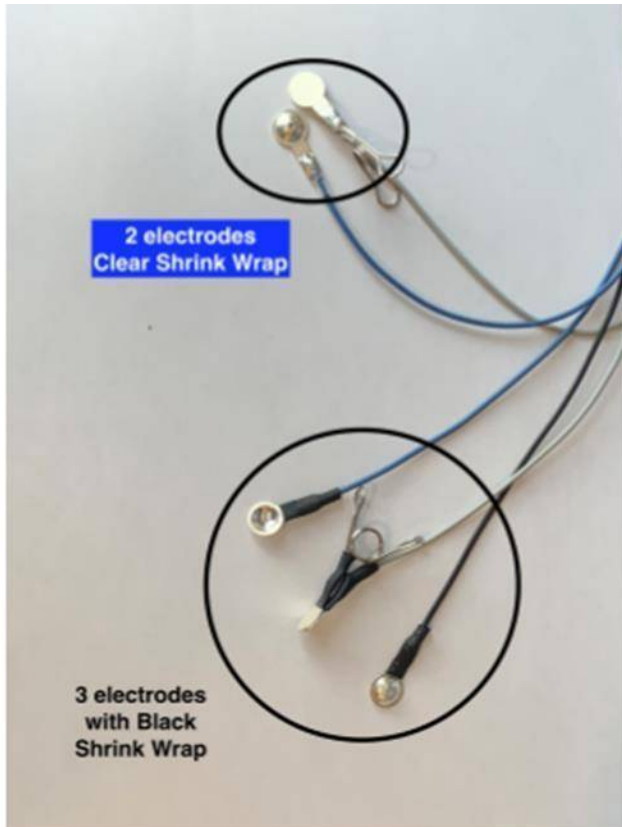
To prep for your Home Neurofeedback Training sessions, you will need a NuPrep Cleanser, Ten20 Paste, facial tissues, 6' non-sterile wooden Q-Tips, and alcohol prep pads.



Clean the areas where you will be placing ear clips (lobes of the ears) and pasting electrodes (see electrode placement sites below). Place a small amount of NuPrep on the wooden Q-Tip and cleanse both sides of the ear lobes, and the sites on the head where you will place the Ground connection (this is typically Cz) and the Active Electrode sites, i.e., C3 & C4. Alternately you can use alcohol prep pads to clean these sites. This helps ensure body oil and any hair product, make-up, etc., are removed so the electrodes can make a clean connection and adhere properly.



There are different brands of electrodes. The examples below are of two different brands a clinician may use.



Apply paste to ear clips and electrodes:



Use a small amount (small pea sized) of Ten20 paste on both sides of each ear clip and on the attachment side of each electrode. It is useful to tear off a small corner of facial tissue (you can also use 2x2 cotton gauze squares or a small piece of paper towel), when placing the electrode so it does not stick to your finger.

The picture below shows a piece of 2x2 white gauze over a scalp electrode.



The picture below shows the two active electrodes and the ground electrode pasted to the scalp.



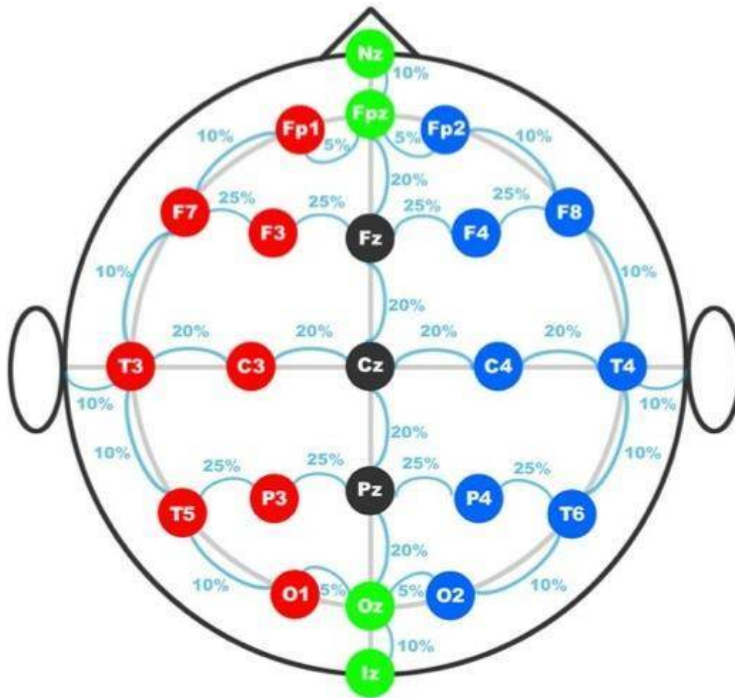
The picture below shows the 2x2 white gauze around the attached ear clip.



Electrode Placement using the 10 / 20 International System

Electrode placement is done according to the International 10 / 20 System of electrode placement. The diagram below shows the locations. The top of the diagram is the front of the head

10 / 20 System Electrode Distances



The outer black circle with the ears (where the top of the ear connects to the scalp and the top of the nose where it connects to the face between the eyes; represents the 50% mark for understanding the percentages. Therefore, if you use CZ as the center than C3 is 20% of the distance between Cz and the outer black circle. T3 would represent 40% of the distance. The same formula would be used for C4 and T4.

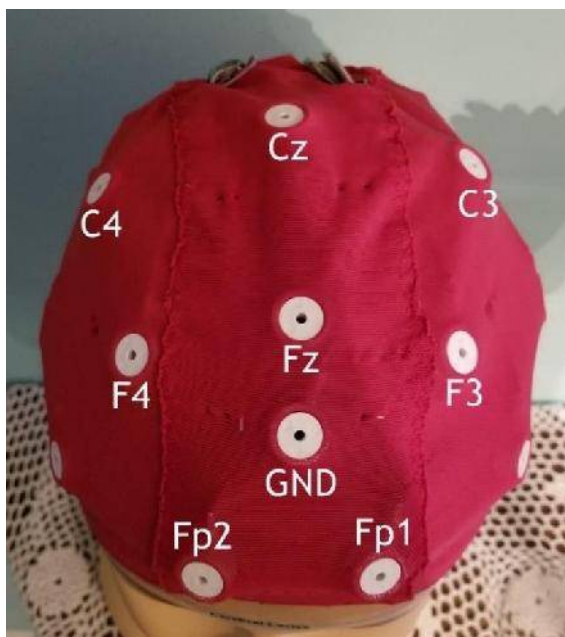
The 10-20 system uses specific identifiers. For example, the letters indicate the lobe of the brain; Fp = Pre-Frontal cortex, F = the Frontal lobe, C = the motor strip, T = the Temporal lobe, P = the Parietal lobe and O = the Occipital lobe. **Odd Numbers** (left side of the head), i.e., 1,3,5,7 are always on the **LEFT** hemisphere and the **Even Numbers** (right side of the head), i.e., 2, 4, 6, 8 are always on the **RIGHT** hemisphere of the brain. **Zs (Fz, Cz, Pz)** go down the mid-line or middle of the brain between both hemispheres.

Looking at the QEEG cap photos below, (like the one that you would have worn if you had a QEEG Brain Map conducted), will help guide you to the approximate location of each electrode.

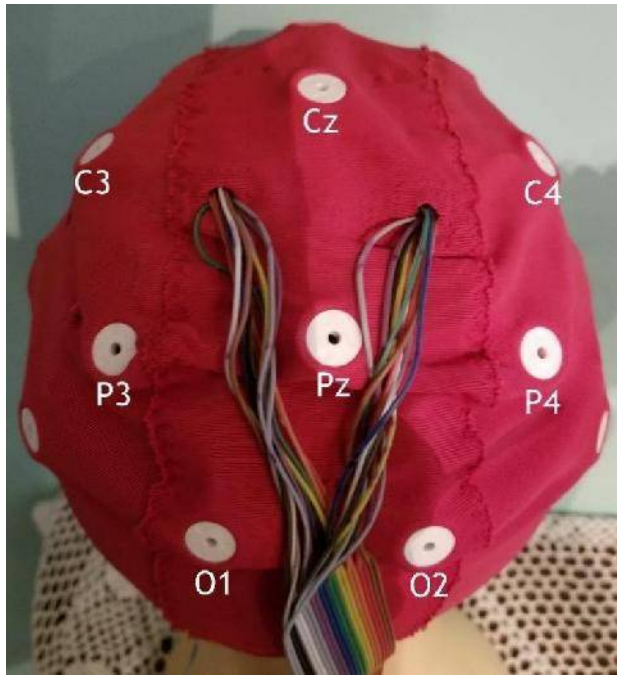
In the picture below is the front of the head. Front left to right electrode placements is Fp1 (above the left eye) and Fp2 (above the right eye).



In the picture below, the top of the head is shown which reveals from top to bottom and from right to left the electrode sites are: C4, Cz, C3, F4, Fz, F3, Fp2, and Fp1. Cz is at the very center and top/crown of the head. NOTE: The bottom center electrode is a “Ground” in the cap.



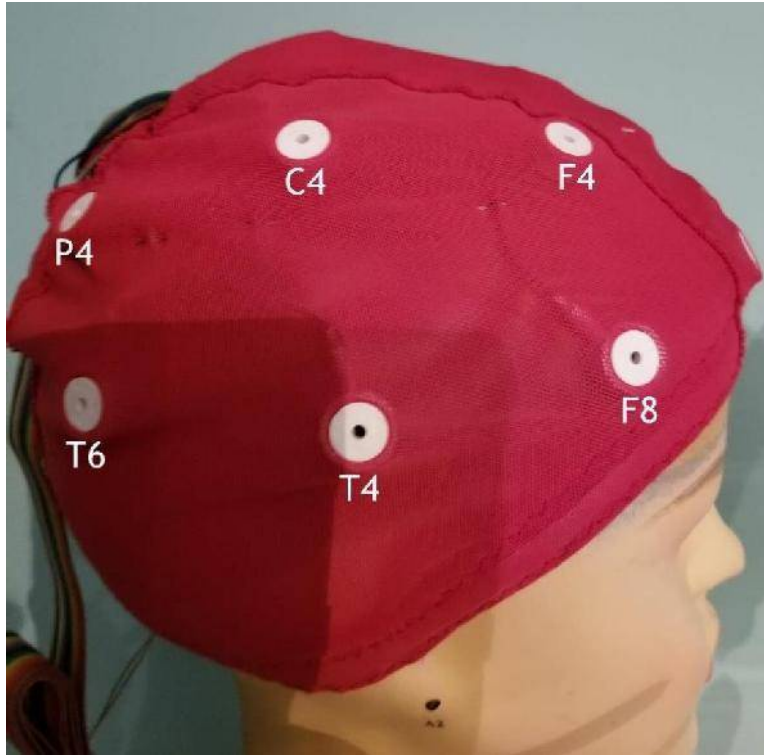
In the picture below is the back of the head showing from top to bottom and from right to left; C3, Cz, C4, P3, Pz, P4, O1, and O2.



The picture below shows the left side of the head. From top to bottom and from left to right the electrode sites are F3, C3, P3, F7, T3, and T5.



The picture below shows the right side of the head. From top to bottom and from left to right the electrode sites are P4, C4, F4, T6, T4, and F8.



Plug in the electrodes where the Connect Diagrams below indicate they should be placed.

HT2Pro Box and Electrode Connections. There are 5 electrodes (sensor wires) included with the system. **The clinician will mark each electrode for you, so you know which electrode is plugged into each plug-in / port.**



Version 1



Version 2

One and Two Channel Protocol Set-up for Version 1 Amplifier

If your amplifier does not match the pictures below, please go to the next page

One Channel Training Set-up



Two Channel Training Set-up



The **GND** port of the HT2Pro box, is for the **ground lead wire** (often placed at Cz). The clinician will mark this electrode for you, so you know where the ground electrode is plugged in.

The **REF1** and **REF2** ports on the HT2Pro box are for the **Ear Clip leads**. The clinician will mark each reference (ear clip) electrode for you, so you know where each ear clip electrode is plugged in.

The **CH1** and **CH2** ports on the HT2Pro box are for the **active leads** (these will be placed on the head according to your protocol). The clinician will mark each active electrode for you, so you know where each active electrode is plugged in.

Make sure you have cleaned your earlobes and the locations you will be placing your electrodes and have placed Ten20 paste on all the electrodes as described above.

To avoid making mistakes it is recommended that you use the same electrodes for Ground, Left Ear, Right Ear, and Active Electrode One (on the left side) and Active Electrode Two on the right side.

IMPORTANT: In the above diagrams note that regardless of one or two channel protocols, the left ear clip (grey wire with grey plug) is always plugged into L-Ear and the right ear clip (grey wire with white plug) is always plugged into R-Ear. The ground (black wire) is always plugged into GND and active electrode one (blue wire with blue plug) is always plugged into CH1. With a two-channel training then active electrode two (blue wire with white plug) is plugged into CH2.

Electrode wires are made in a variety of colors. Your clinician will mark each electrode for you, so you know what color goes in which plug.

One and Two Channel Protocol Set-up for Version 2 Amplifier

One Channel Training Set-up



Two Channel Training Set-up



The **GND** port of the NewMind training box, is for the **ground lead wire** (often placed at Cz). The clinician will mark this electrode for you, so you know where the ground electrode is plugged in.

The **L-Ear** and **R-Ear** ports on the NewMind training box are for the **Ear Clip leads**. The clinician will mark each reference (ear clip) electrode for you, so you know where each ear clip electrode is plugged in.

The **CH-1** and **CH-2** ports on the NewMind training box are for the **active leads** (these will be placed on the head according to your protocol). The clinician will mark each active electrode for you, so you know where each active electrode is plugged in.

Make sure you have cleaned your earlobes and the locations you will be placing your electrodes and have placed Ten20 paste on all the electrodes as described above.

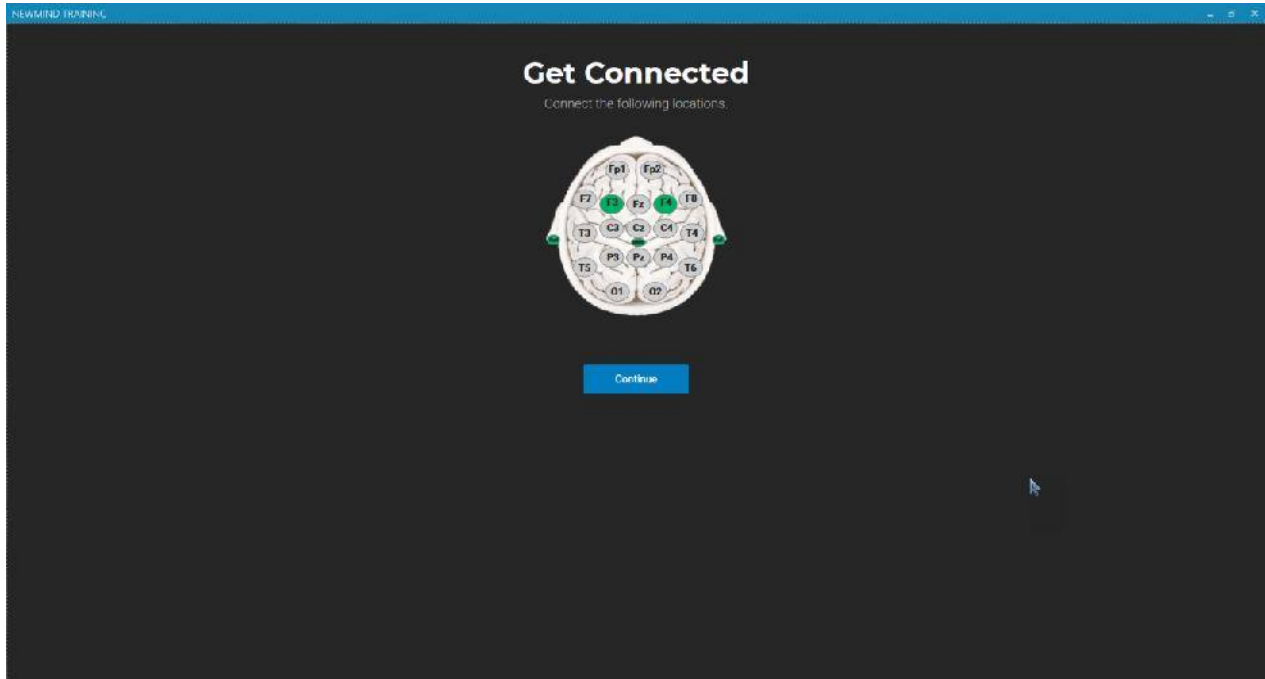
To avoid making mistakes it is recommended that you use the same electrodes for Ground, Left Ear, Right Ear, and Active Electrode One (on the left side) and Active Electrode Two on the right side.

IMPORTANT: In the above diagrams note that regardless of one or two channel protocols, the left ear clip (grey wire with grey plug) is always plugged into L-Ear and the right ear clip (grey wire with white plug) is always plugged into R-Ear. The ground (black wire) is always plugged into GND and active electrode one (blue wire with blue plug) is always plugged into CH1. With a two-channel training then active electrode two (blue wire with white plug) is plugged into CH2.

Electrode wires are made in a variety of colors. Your clinician will mark each electrode for you, so you know what color goes in which plug


Audio and Visual Settings

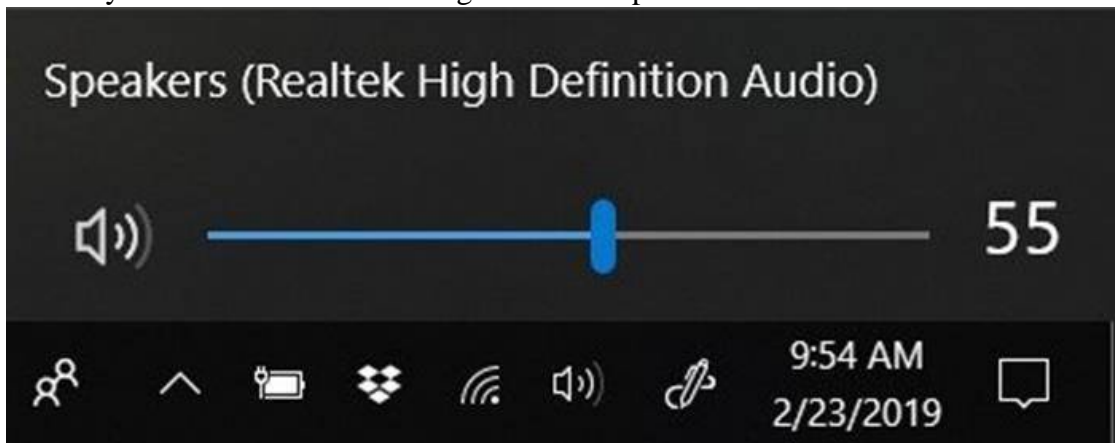
When you are ready to start your session, **CLICK ON CONTINUE**



Before you run your first session, practice getting the media settings for your session set up correctly.

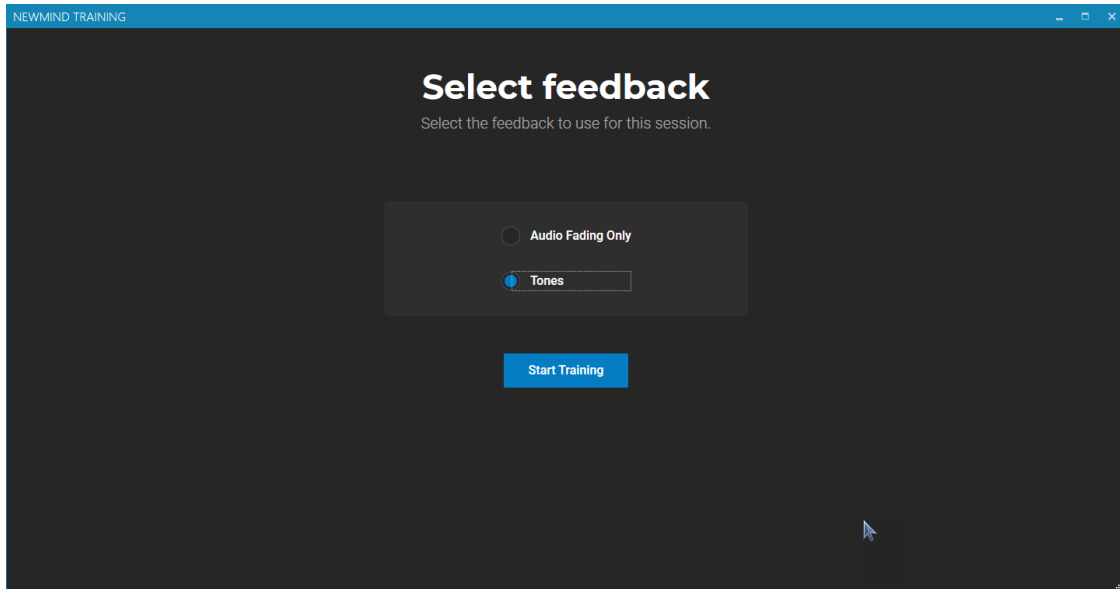
If you are using a computer with windows 10 and click on the speaker symbol in the lower right

Icon tray  the volume setting will come up



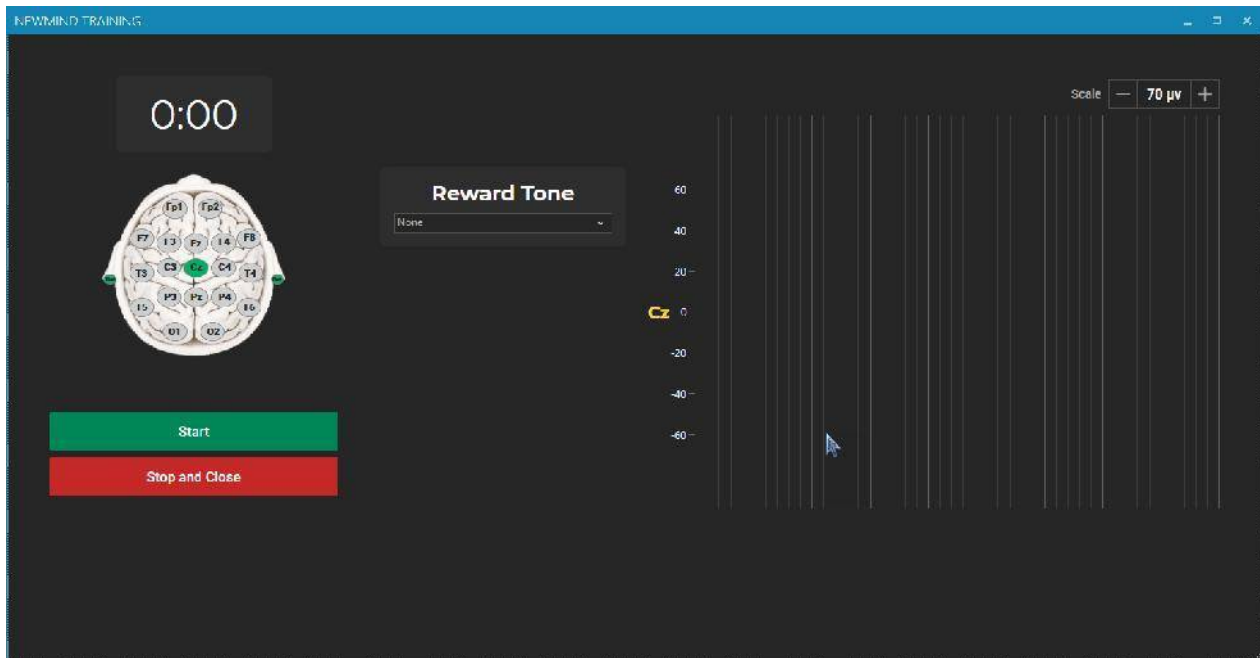
Using the slider bar, find a comfortable volume for the music.

In most cases, if you are doing an eyes closed session, then you are listening to some music and or a “TONE”. Depending on the settings set up by your clinician, a screen that looks like this might appear.

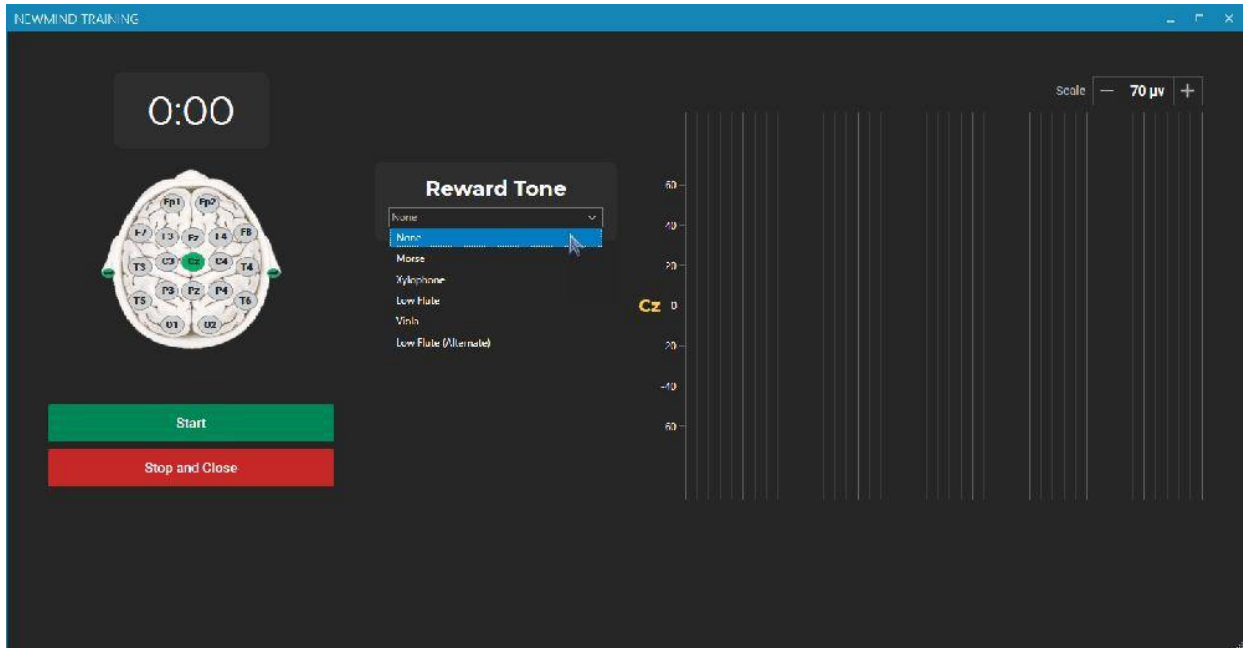


In this example the clinician has given you (the trainee) a choice of listening to music and using the Audio Fader Only or a Tone. The tone is selected and then you would **click on Begin Session.**

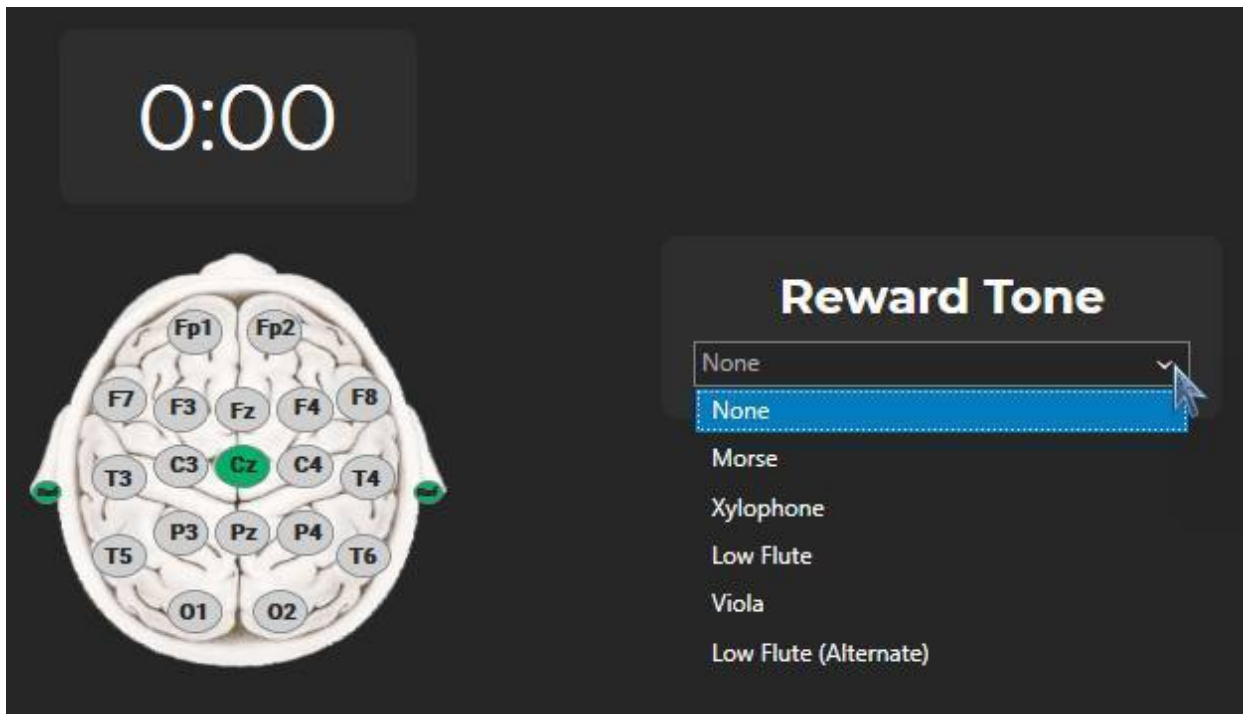
If you are using a “TONE” then when you are ready to start your session, the follow screen appears. The Illustration below is the screen you will see with a One Channel Training session.



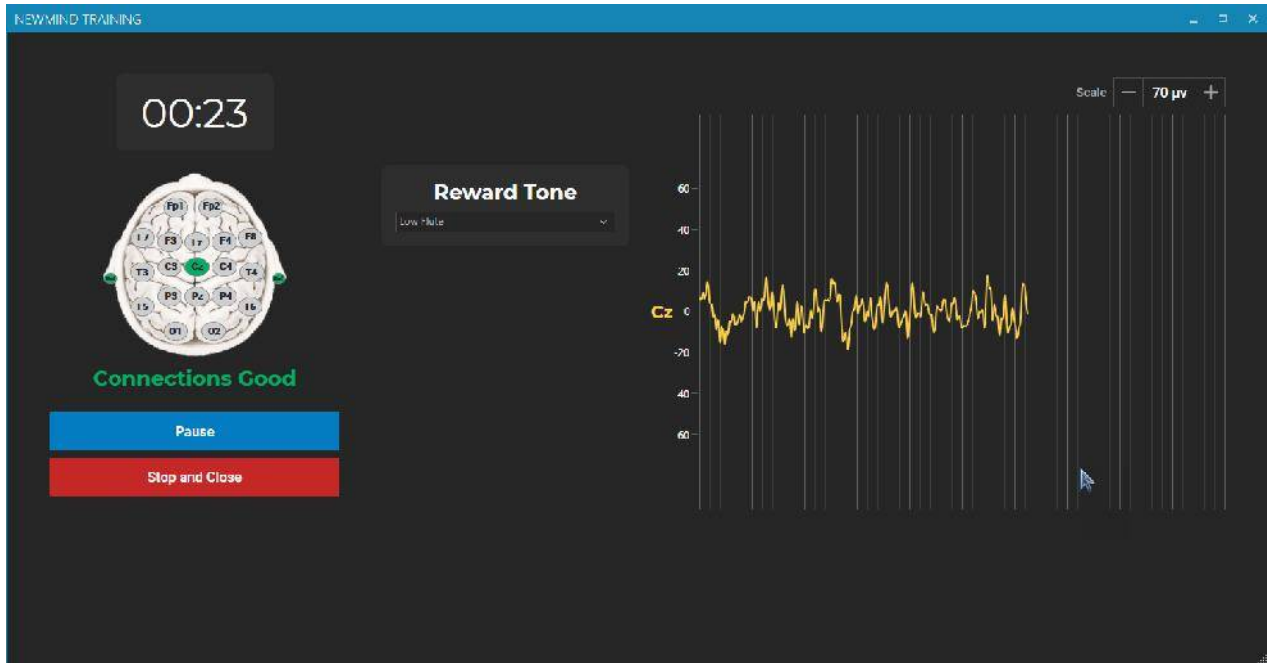
When you select Reward Tone (clicking on the arrow on the right side of the gray bar under Reward Tone), a dropdown menu occurs, and you will select the tone you prefer to listen to.



Highlight the reward tone you wish to listen to and click on it.



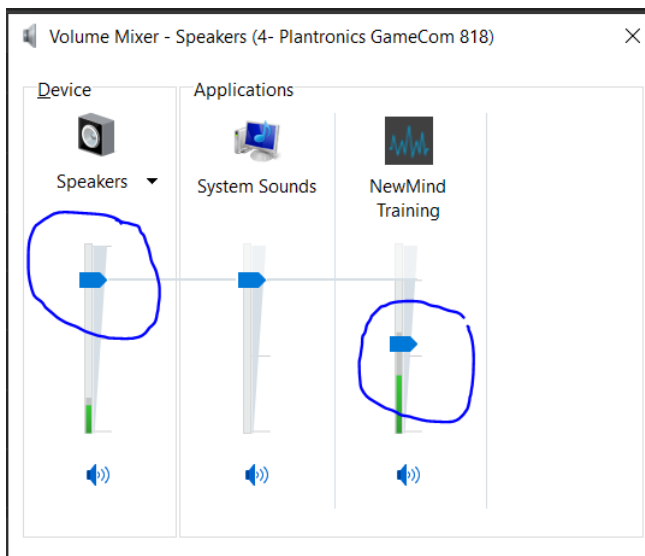
If you do not like a particular tone, you can change the tone you listen to during a session. In the picture below, the session was paused, and **Low Flute** was selected.



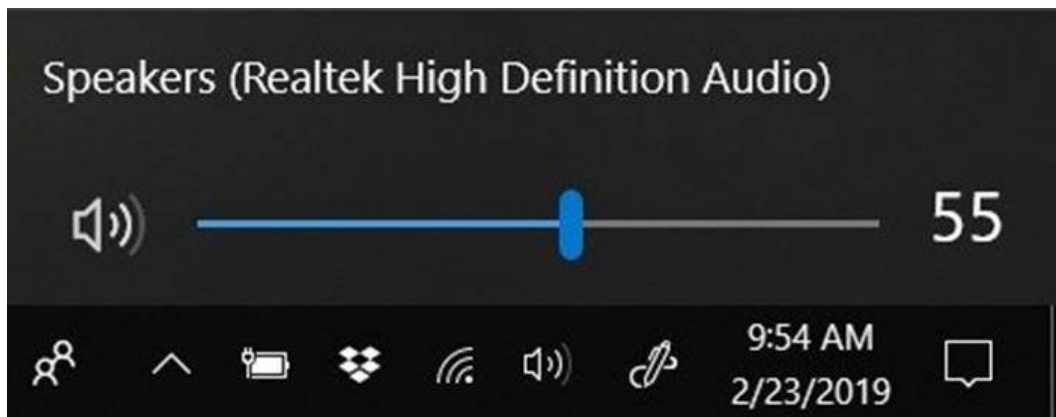
If you need to adjust the volume during your session, right click on the speaker symbol in the



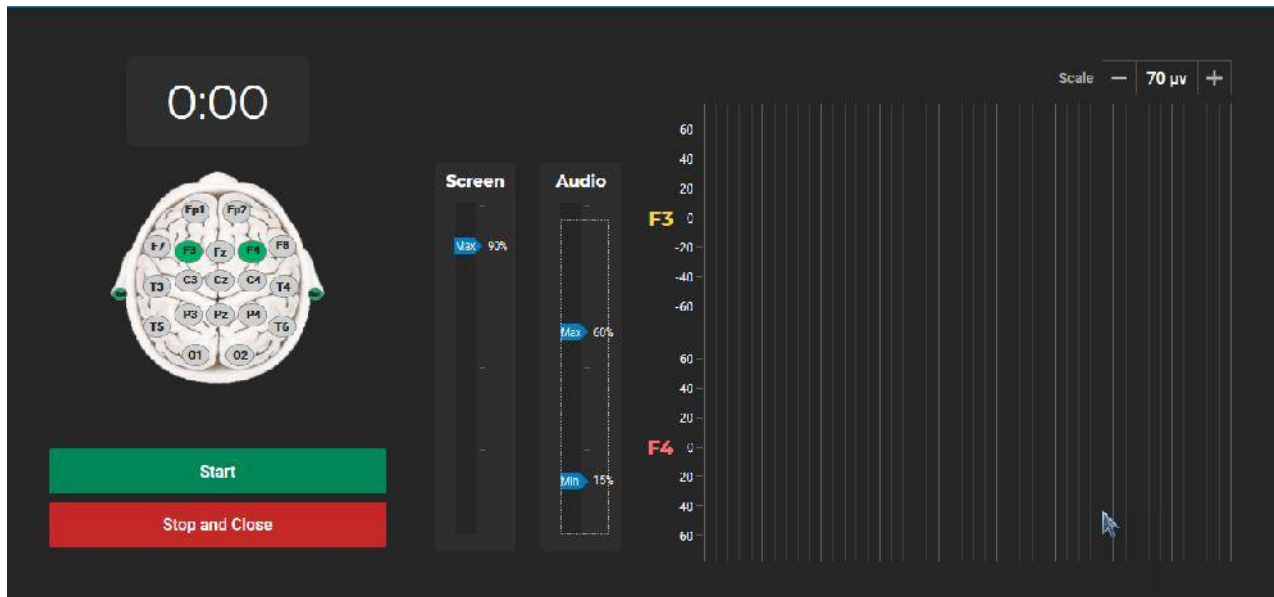
lower right Icon tray and the Volume mixer panel (pictured below) will come up on your screen. You can adjust the volume setting by using the slider bar under **Device** or **NewMind Training**.



Find a comfortable volume for the MUSIC or VIDEO



Audio settings are commonly set at 10-15 and 50-60. Video settings are commonly set at 90% as illustrated below.



PLUG IN YOUR ELECTRODES

After you are prepped and conducted all the preliminary set up functions, you will need to plug your electrodes into your HT2Pro/NewMind training unit. For a *Single Channel* training protocol, the electrodes are plugged in as illustrated below.



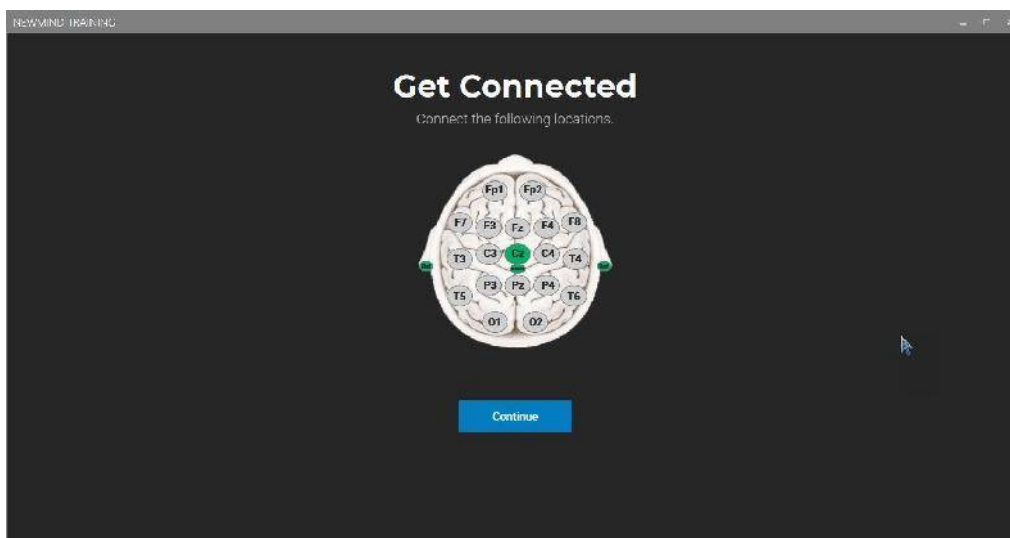
Version 1



Version 2

Once you are prepped, your electrodes have been applied to ear lobes and scalp, and then plugged into the HT2Pro/NewMind training unit, you are ready to begin your session.

For a ONE-CHANNEL training when this screen appears, and your electrodes are plugged into the HT2Pro/NewMind training unit, [click on Continue](#)



For a *Two Channel* training protocol the electrodes are plugged in as illustrated below.

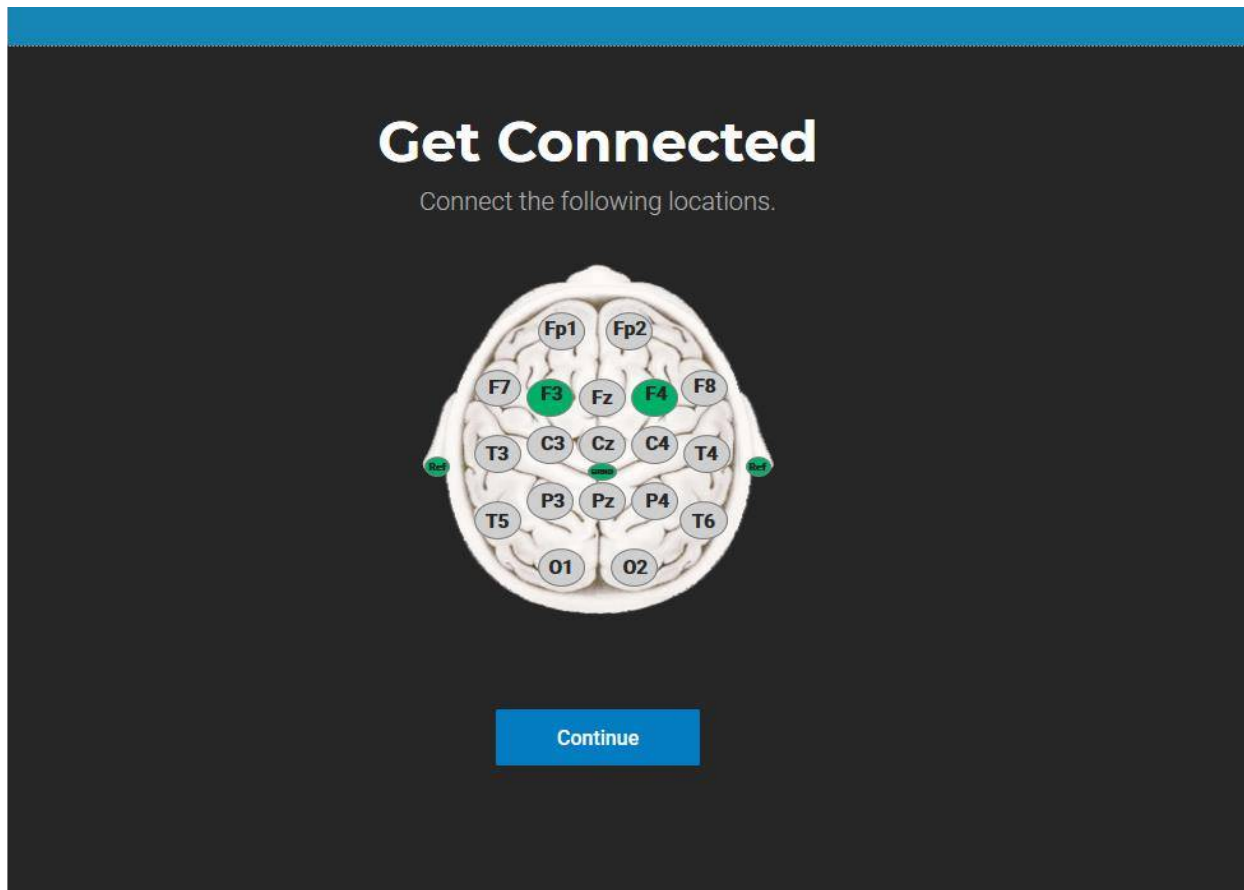


[Version 1](#)



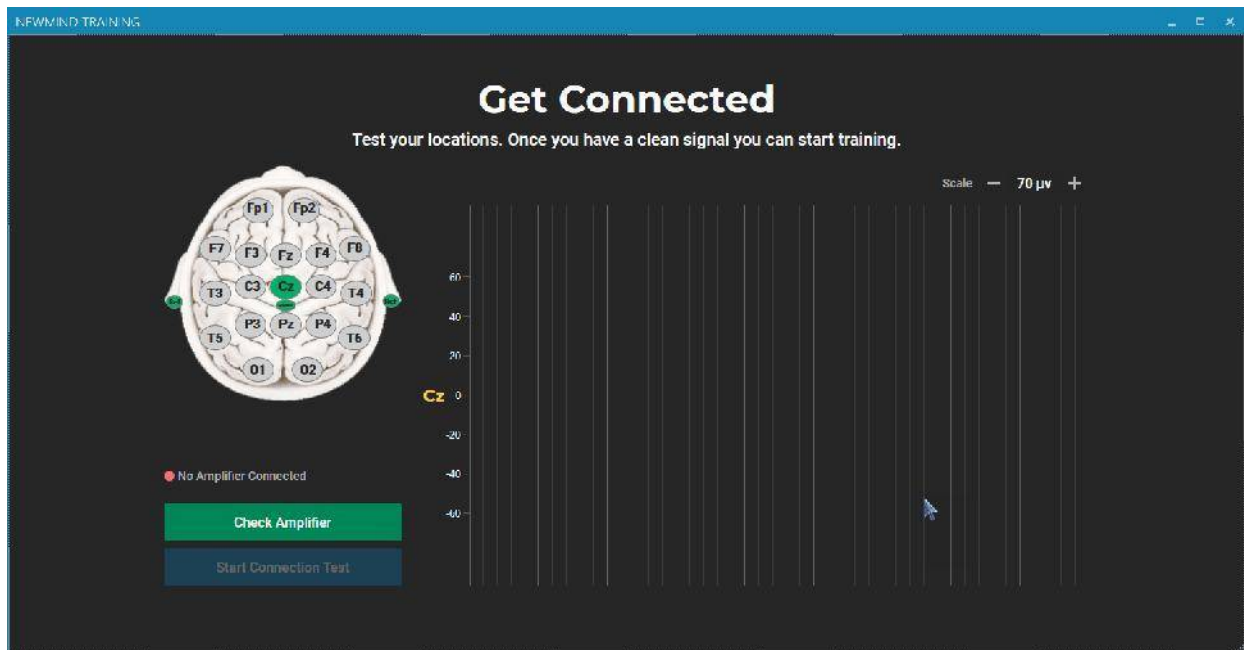
[Version 2](#)

For a 2-CHANNEL training when this screen appears, and your electrodes are plugged into the HT2Pro/NewMind training unit, [click on Continue](#)

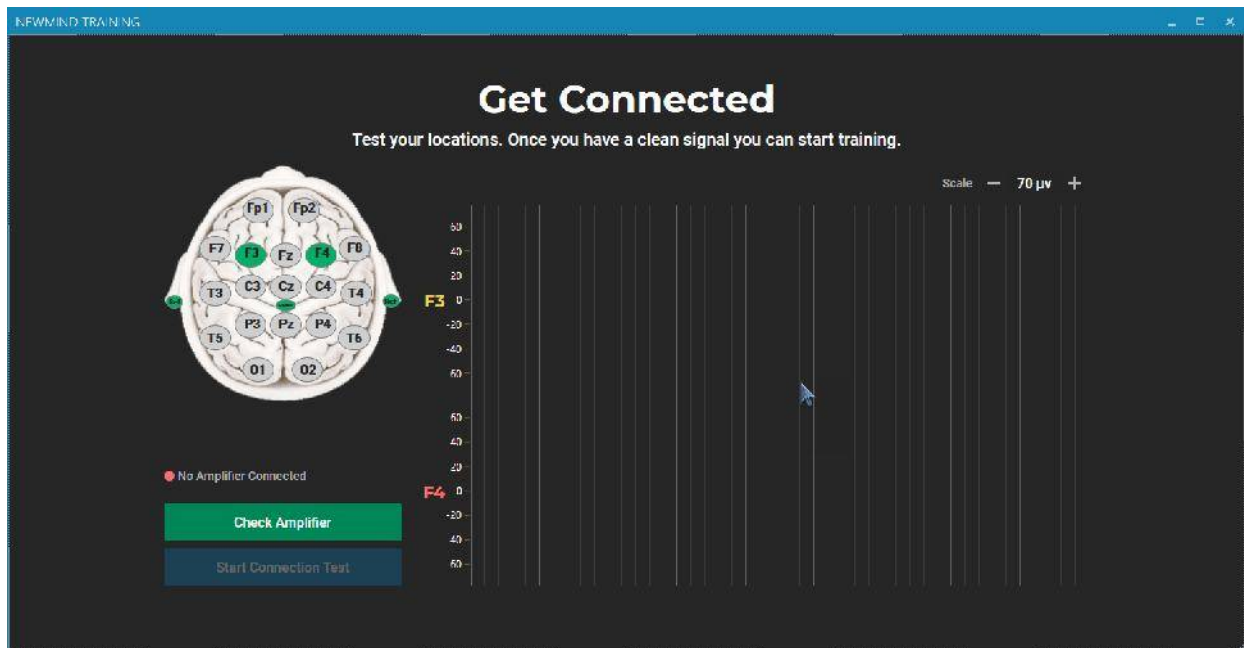


TESTING YOUR EQUIPMENT AND CONNECTIONS

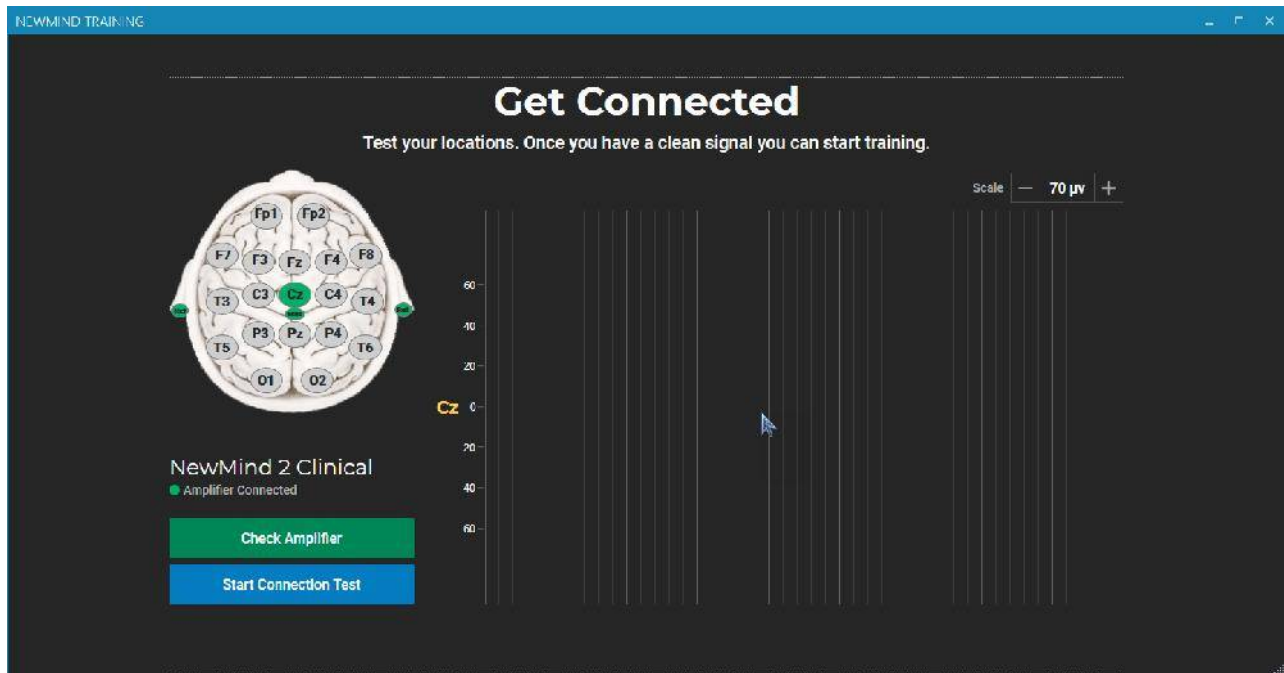
Click on [Check Amplifier](#).



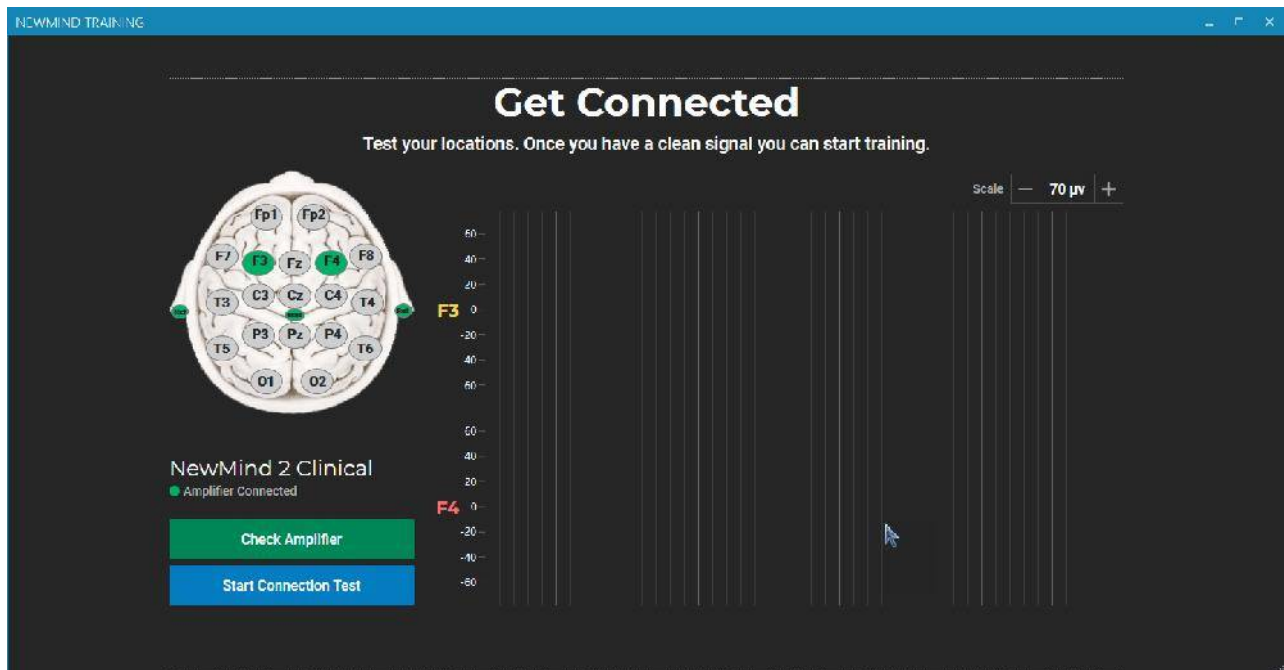
Or with a *Two Channel* protocol: Click on [Check Amplifier](#).



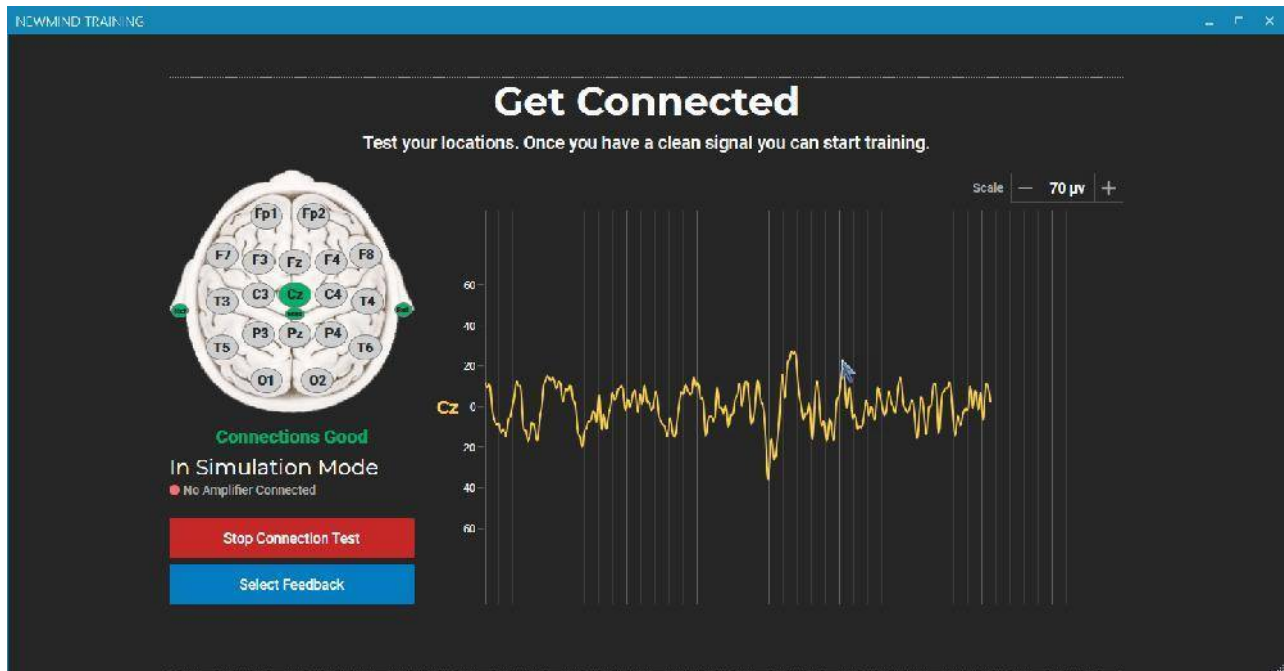
When the blue bar appears then **click on Start Connection Test**



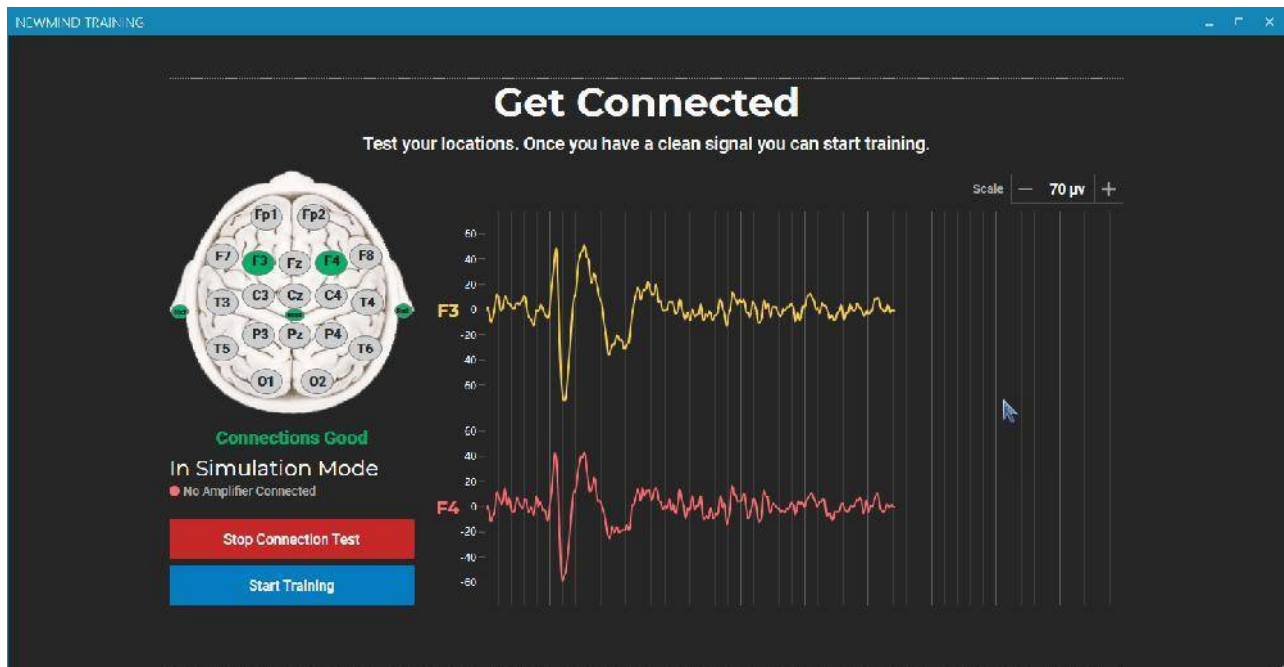
Or with a *Two Channel* protocol: **click on Start Connection Test**



When the connection test is complete, [click on Start Training](#)

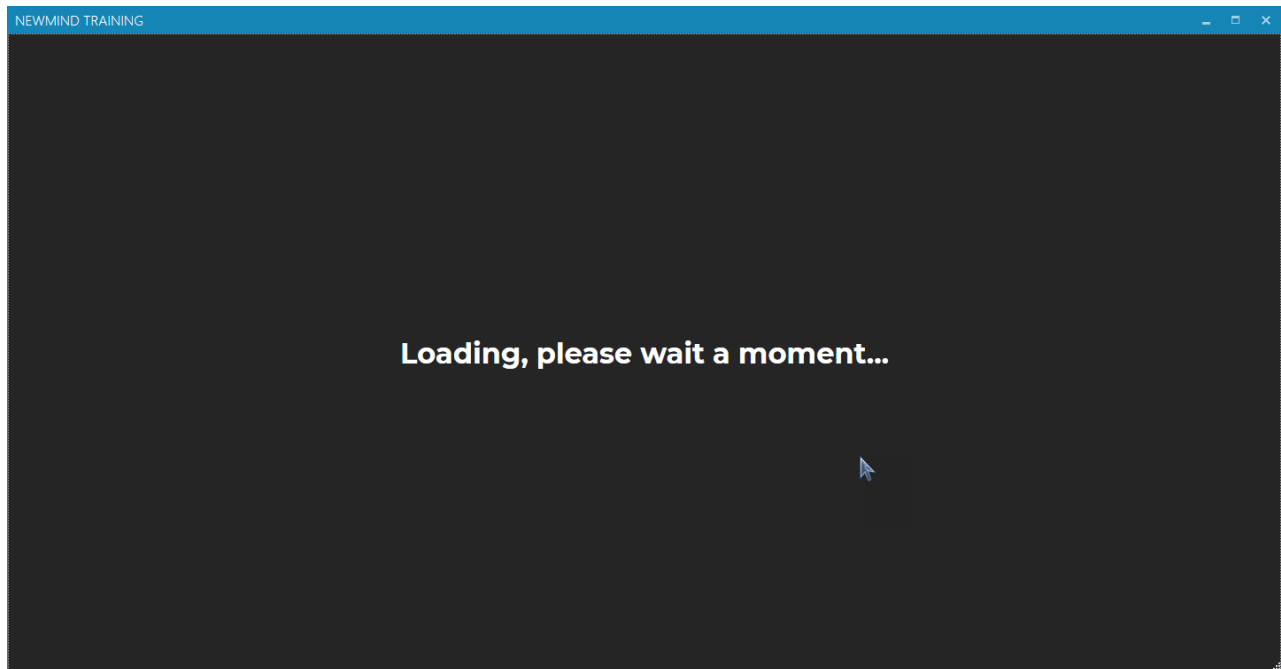


Or with a *Two Channel* protocol: [click on Start Training](#)

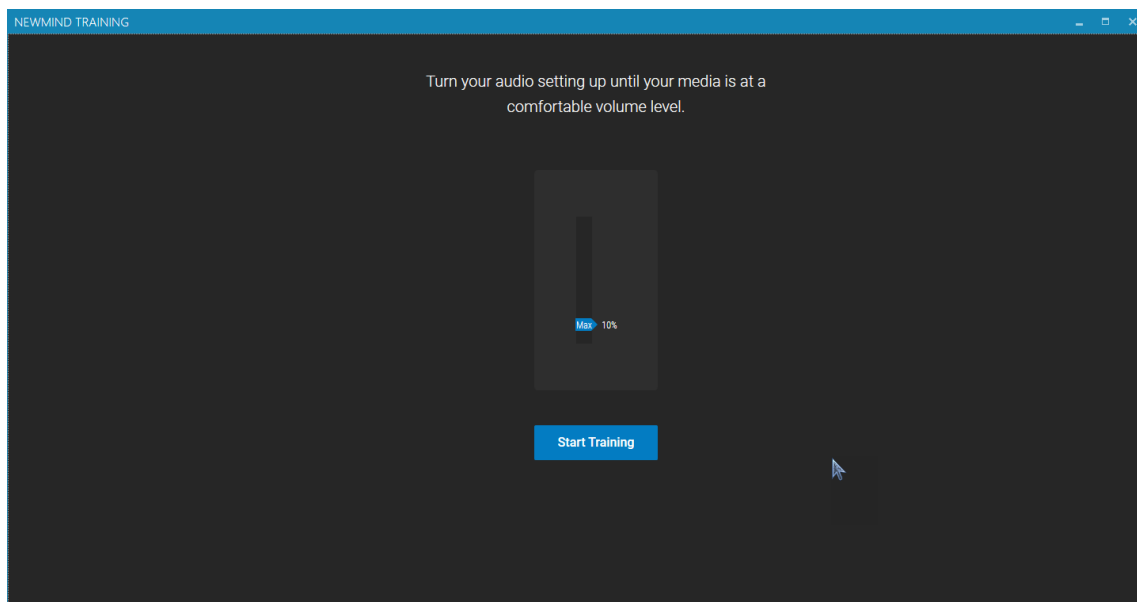


FINAL CHECK & SET-UP BEFORE STARTING YOUR TRAINING SESSION

Once you have finished testing the HT2Pro/NewMind training unit and your connections, and Clicked on Start, the following screen appears before the session is ready to begin.

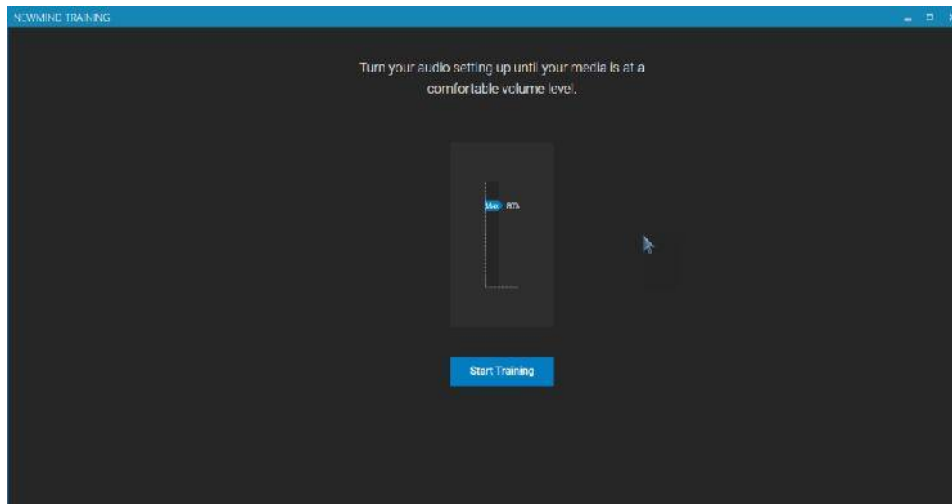


If you are doing an eyes closed session, the **Audio** setting screen will pop up and you will have a chance to set and or verify the volume level you desire.



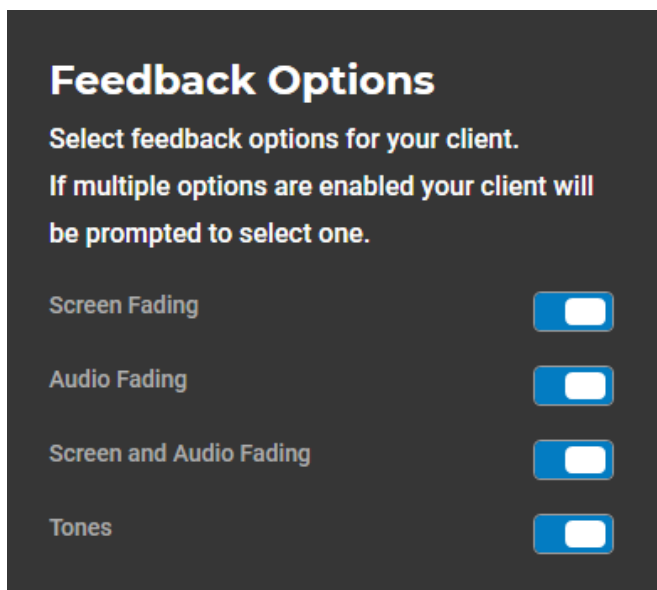
Use the slider bar to adjust the volume to the desired setting

As illustrated below, Volume is set at 80%



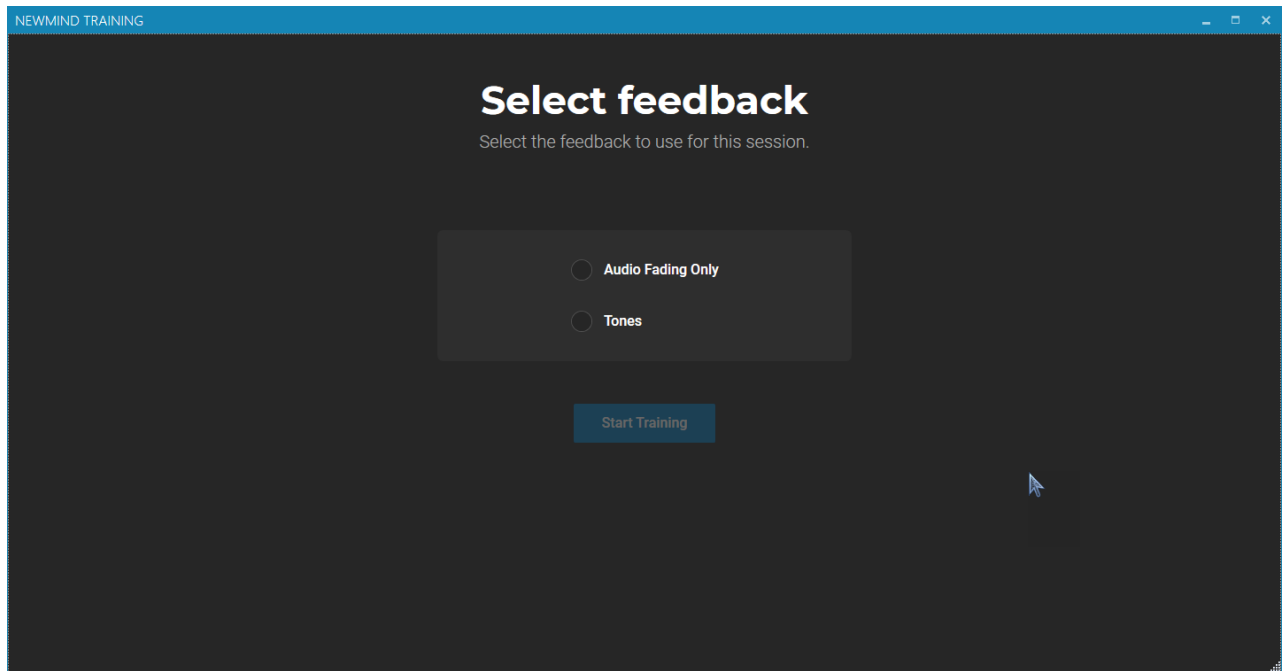
Click Done when finished.

Your Clinician has several choices to select for you regarding the feedback you will get during your Home Neurofeedback Training Sessions. Your clinician may select **Video and Audio Fader** (typically used with eyes opened training), **Video Fader Only** (typically used with eyes opened training), **Audio Fader Only** (typically used with eyes closed training), and **Tones** (typically used with eyes closed training),

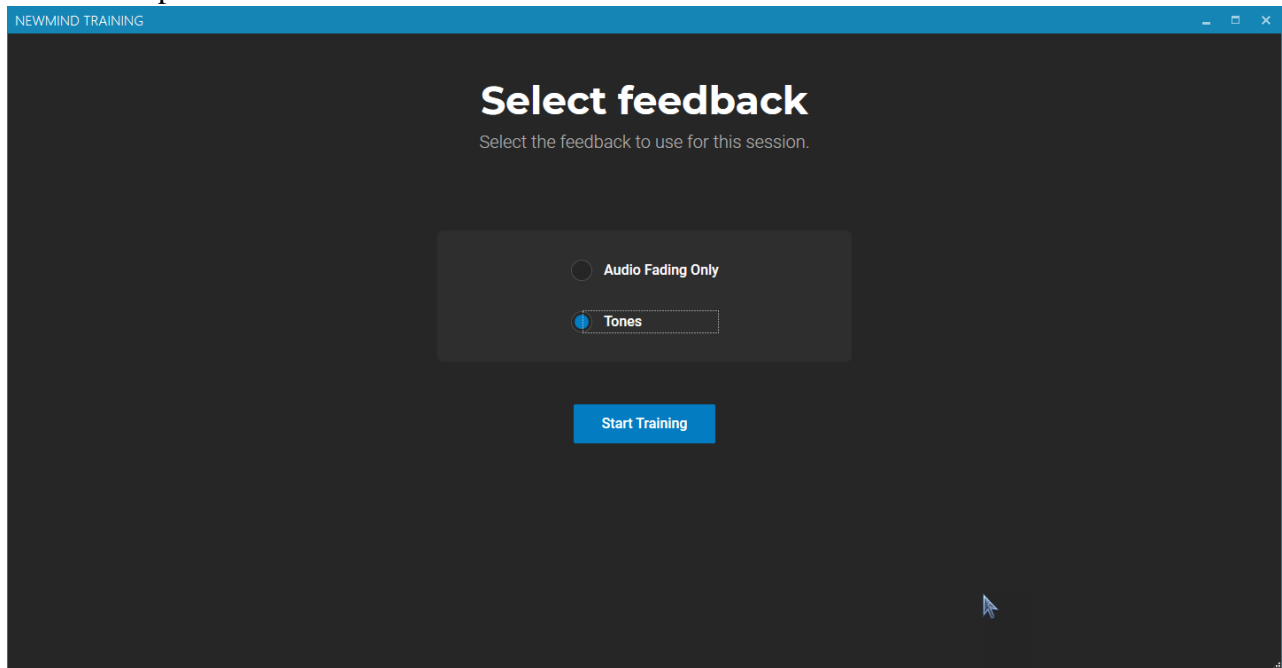


NOTE: This window does not show up on your screen; it for the clinician's use only.

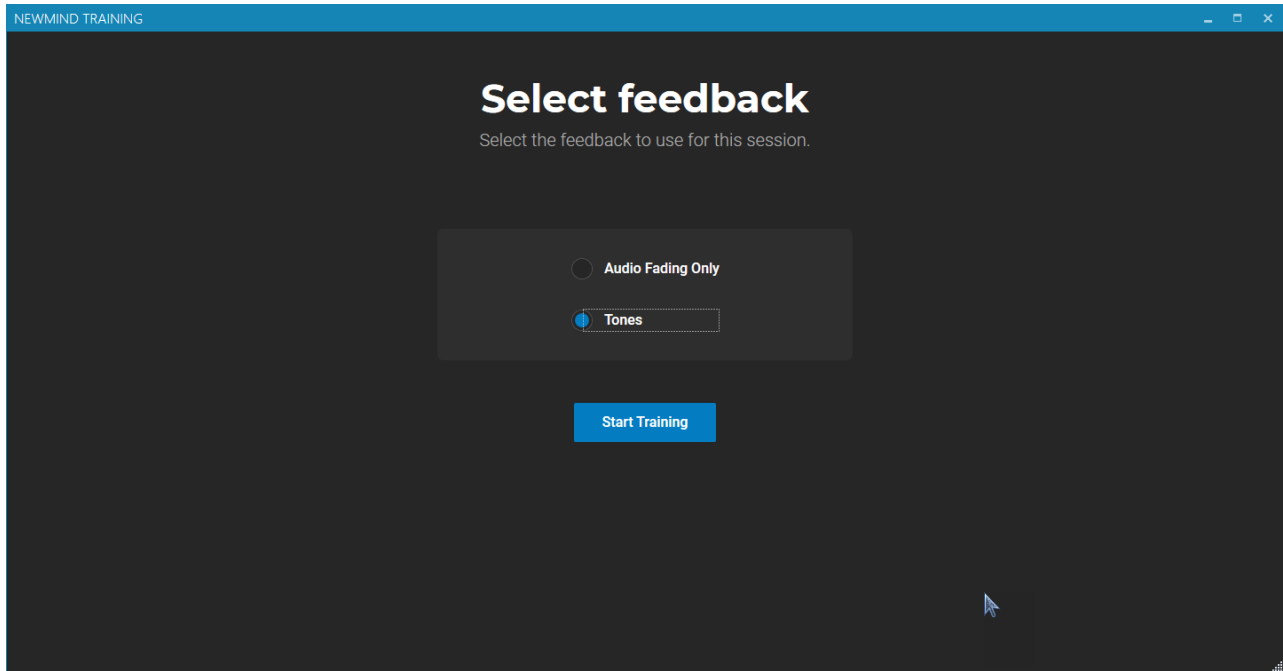
In some protocols the *Select Feedback* window appears. Based upon your clinician’s instructions you can select one of the options given. In the example below the choices are Audio Fader Only or Tones.



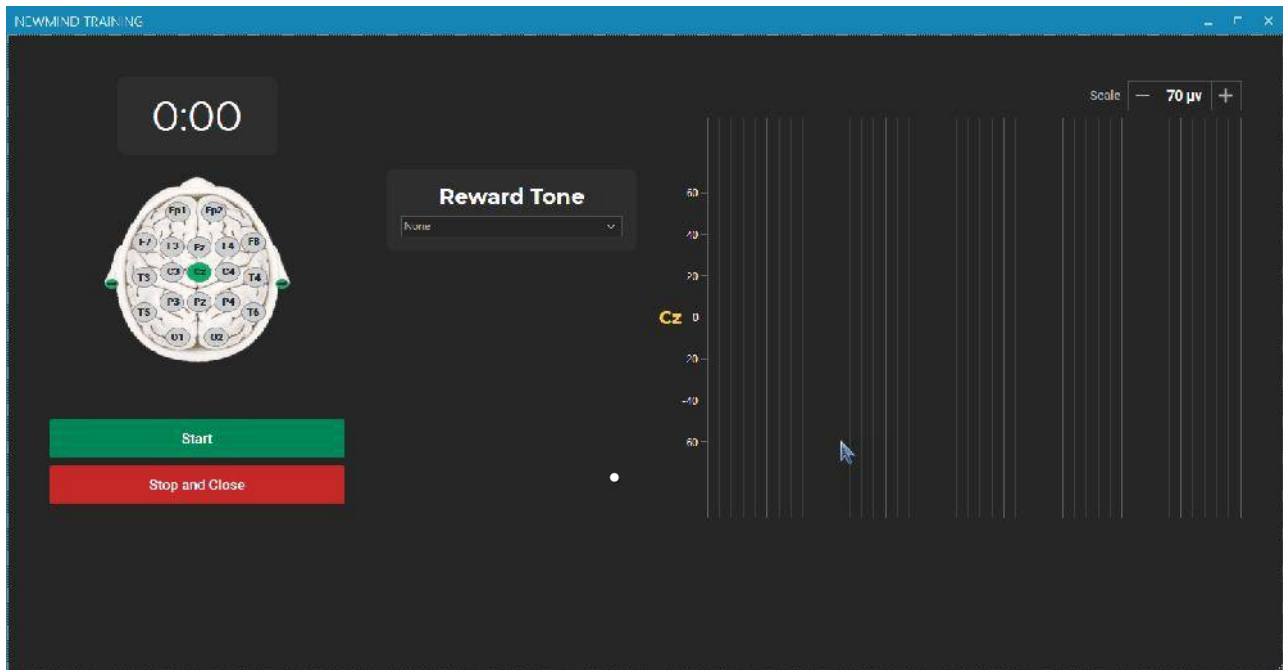
In the example below “Tones” is selected.



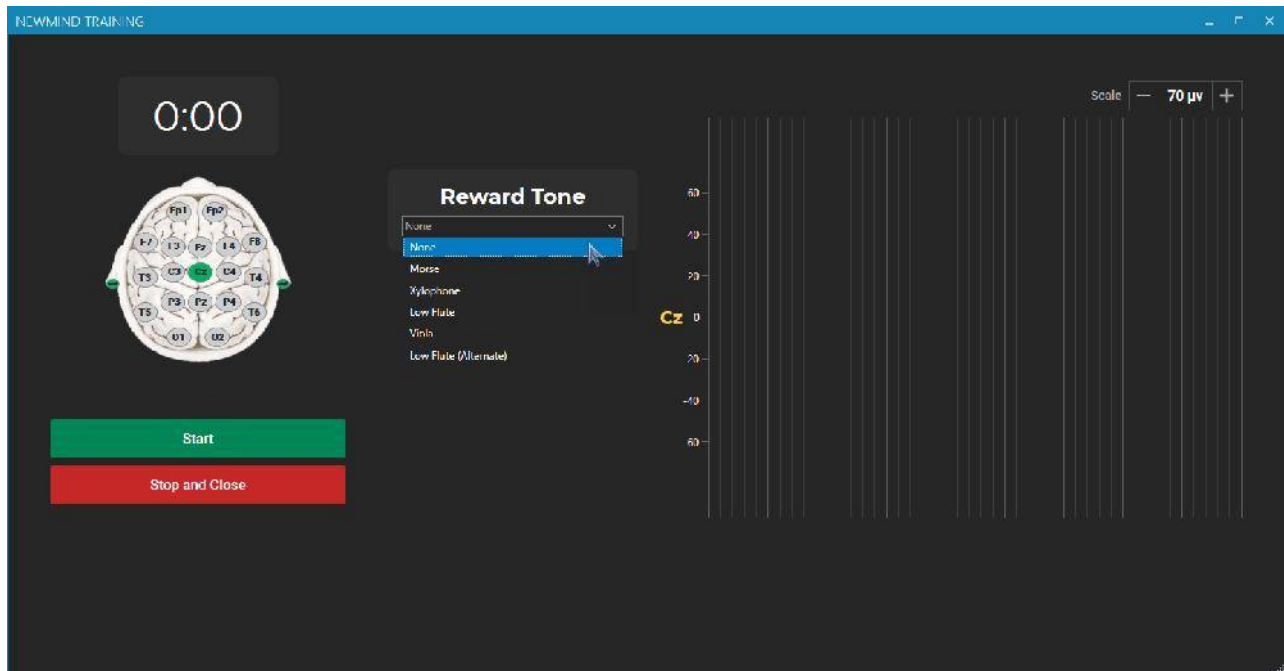
When you have selected your Feedback, click on Start Training.



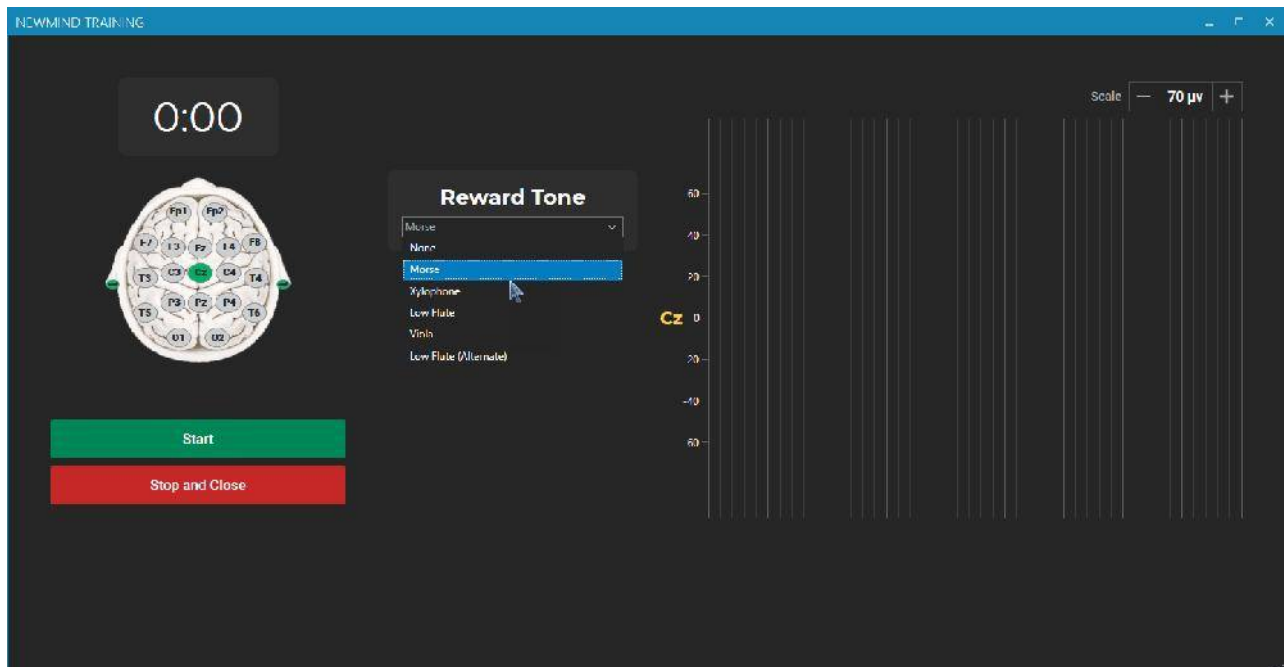
If you selected **Tone**, the window below appears and gives you an option of tones under **Reward Tone**.



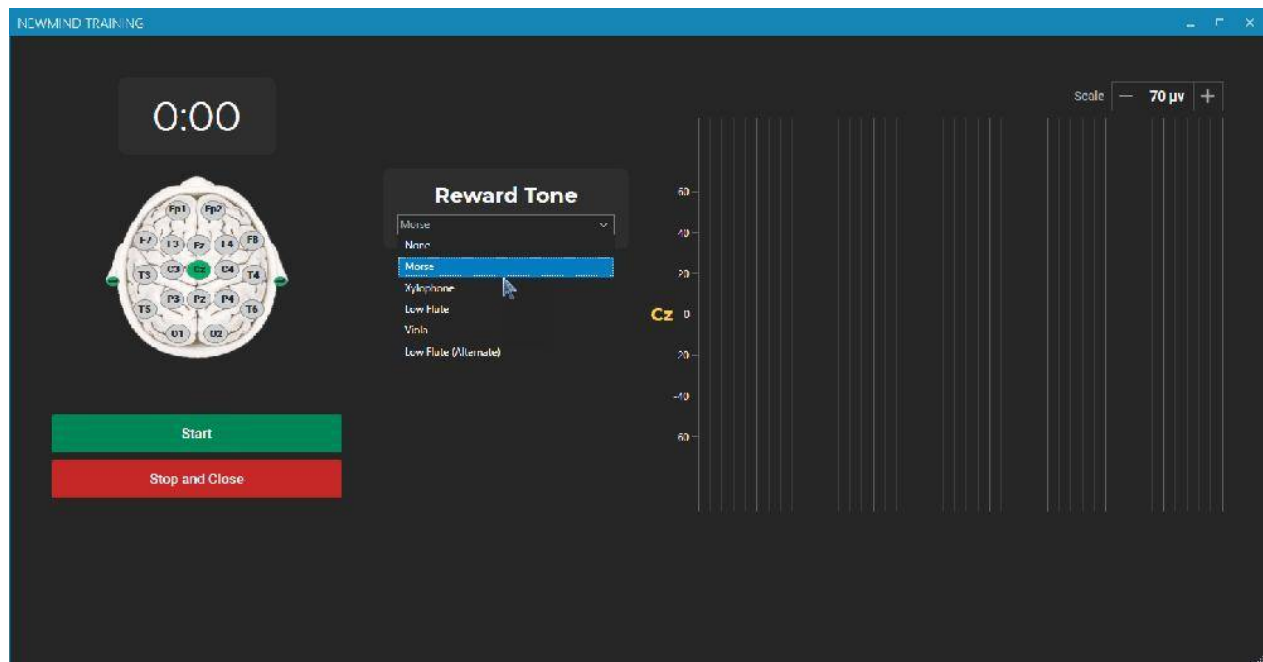
Click on the Gray bar arrow and a choice of tones appears.



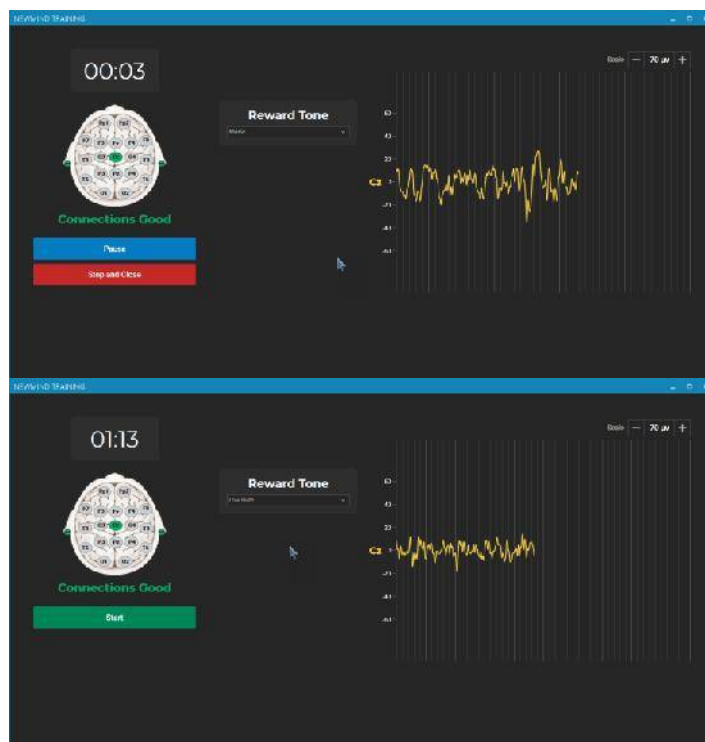
In the example given below “Morse” is selected



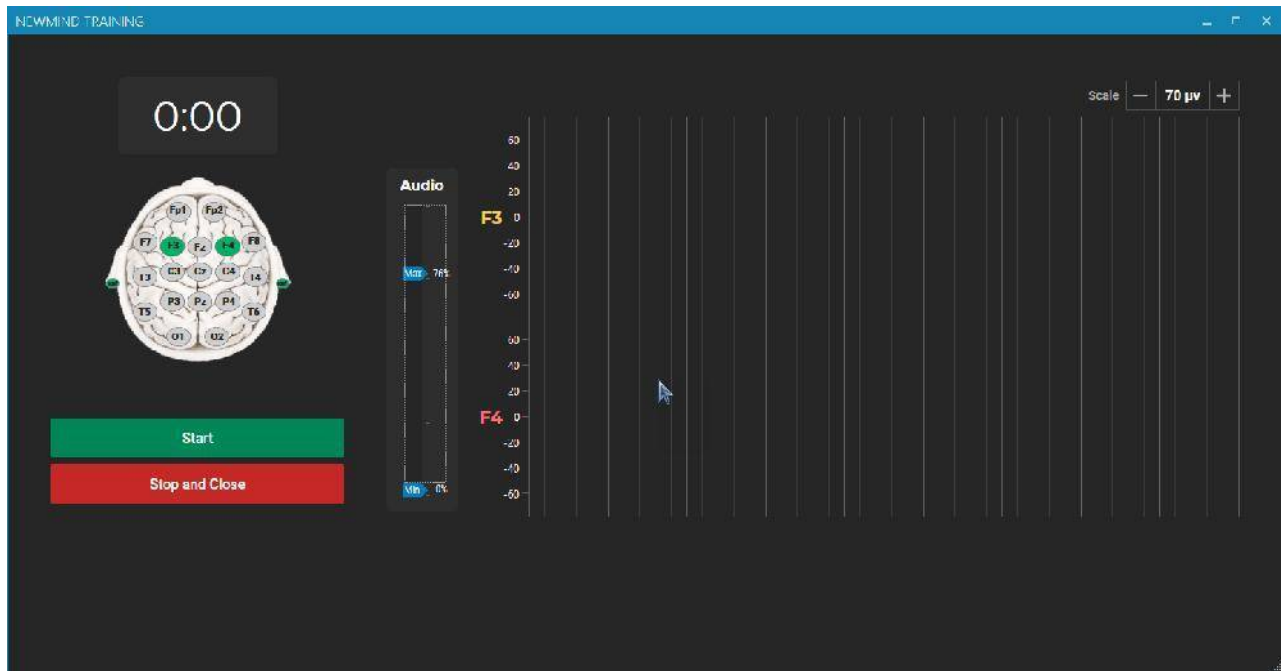
Once you have selected the tone, **Click Start** to begin your session.



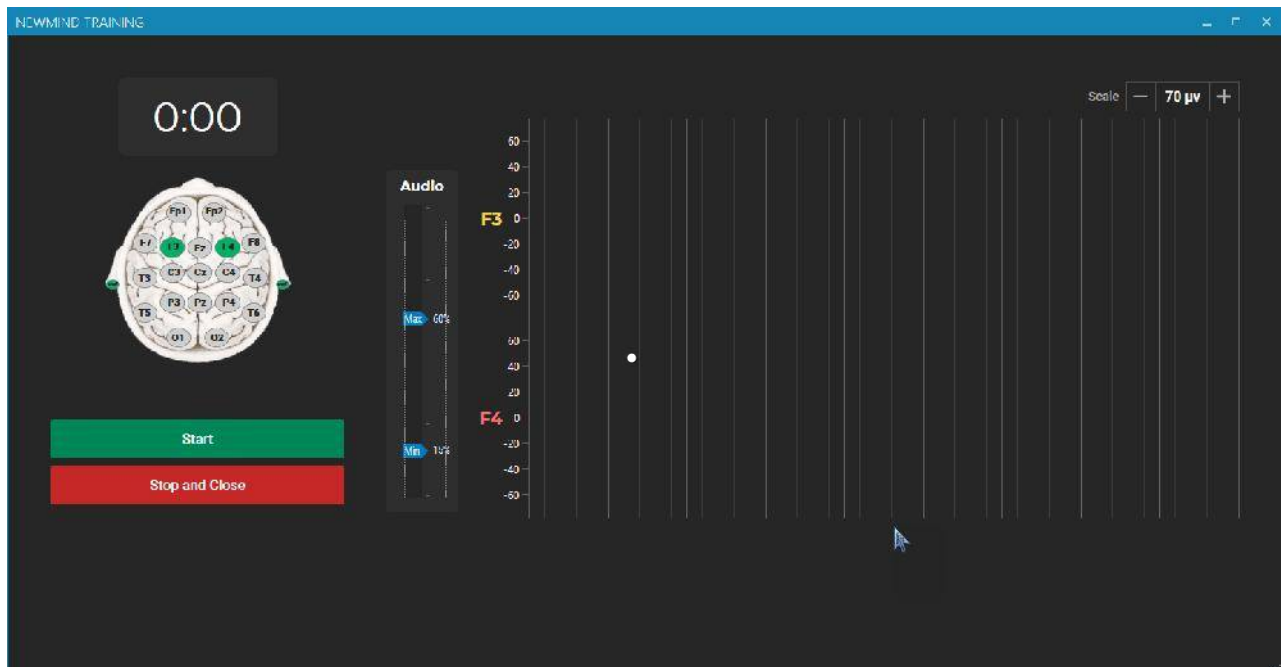
If you want to change the tone you are listening to, you can **pause your session (click on Pause), click on the Reward Tone Gray bar**, and change to tone as illustrated below. In this example, Low Flute has been selected. **The Click on Start.**



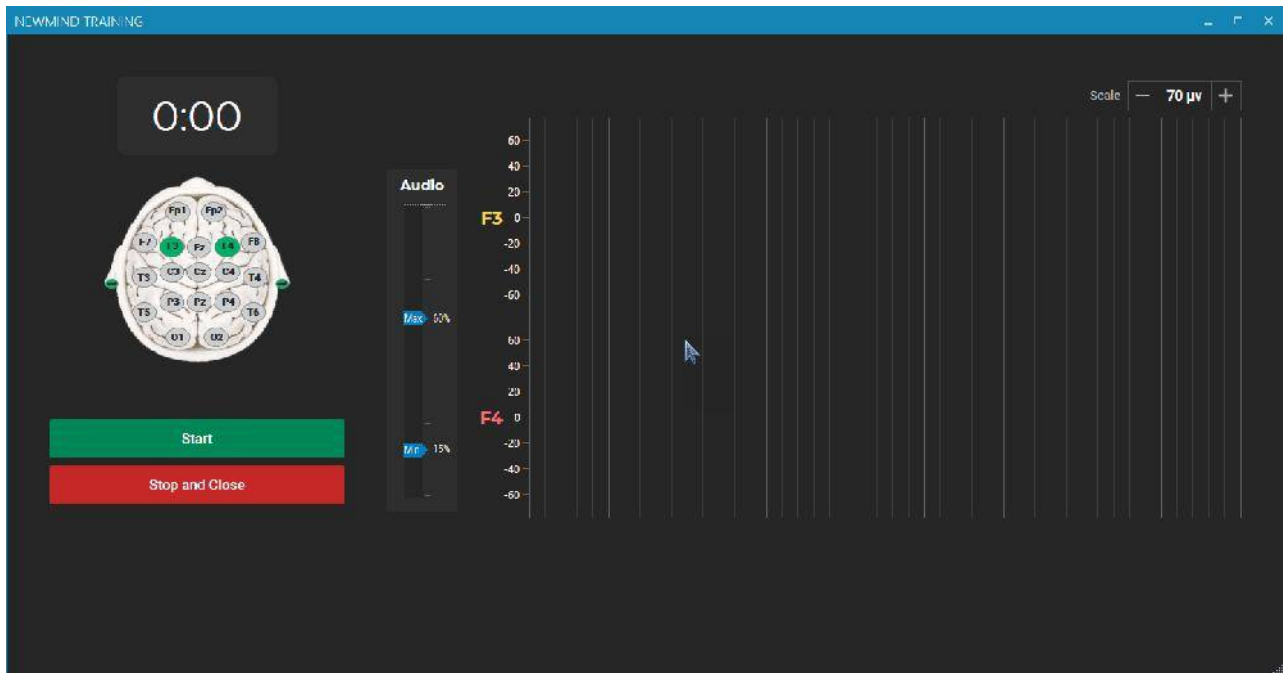
If you are using Audio Fader, set Audio settings as instructed by your clinician.



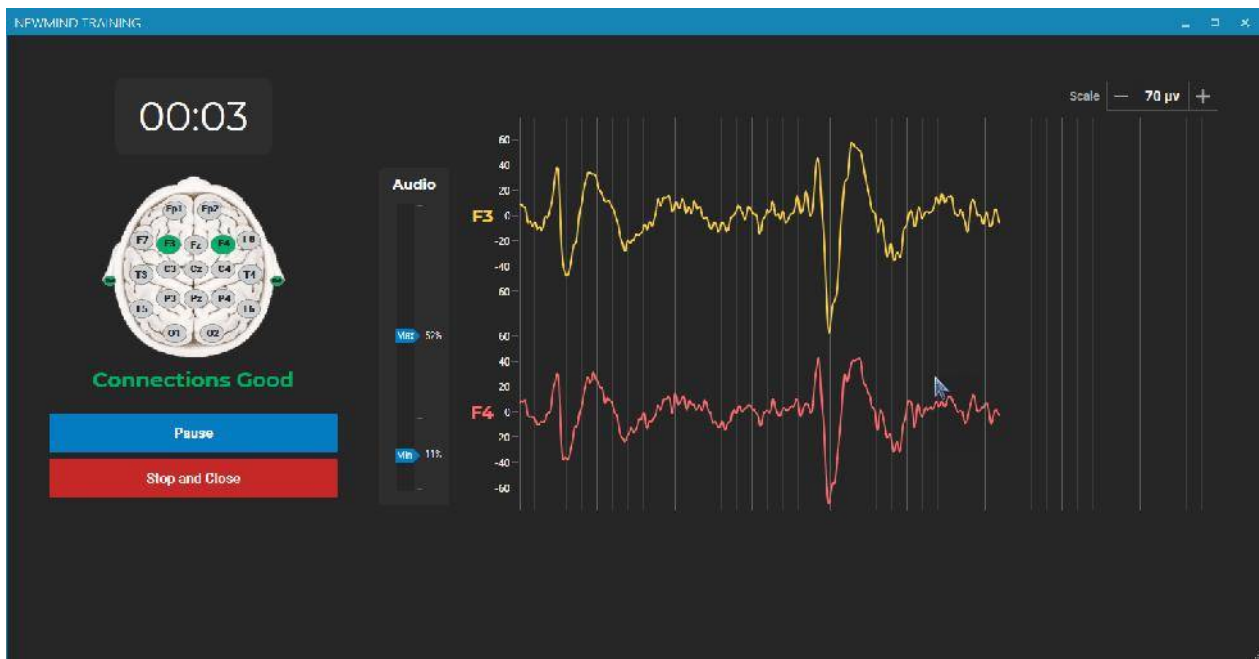
In the illustration below, **Min** is set at **15%** and **Max** is set at **60%**



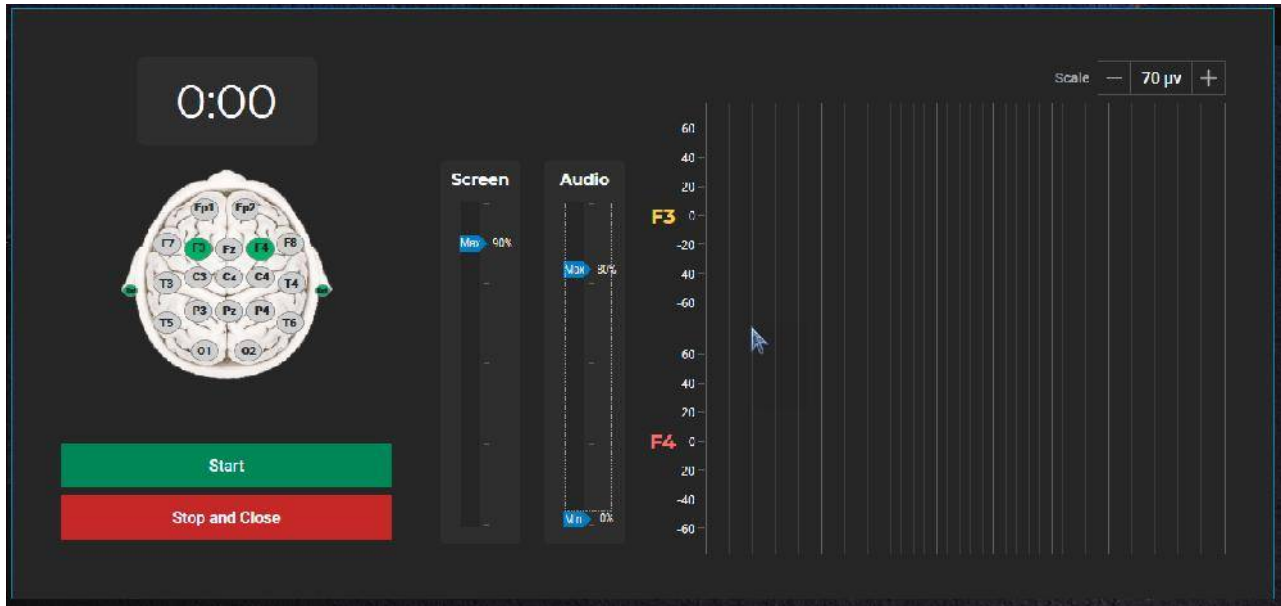
Once you have selected the **Audio** settings, **Click Start to begin your session.**



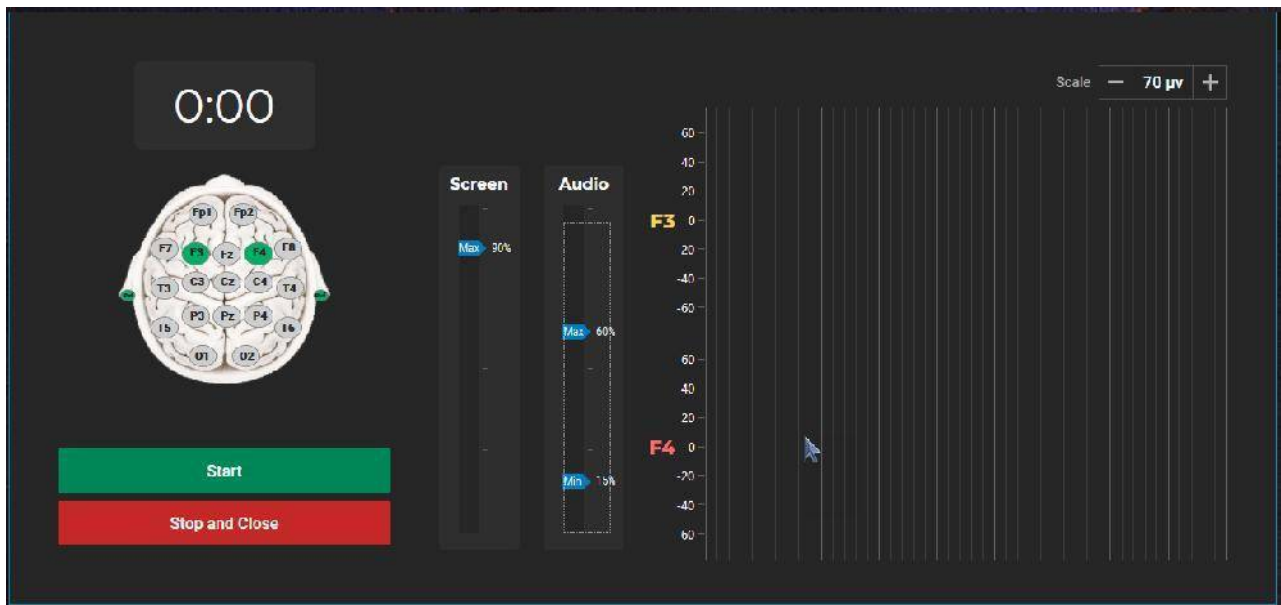
You can adjust the audio settings during a session if necessary. In the illustration below **Min** was reduced to **11%** and **Max** was reduced to **52%**



If your clinician, has you training with your eyes opened watching a DVD or streaming from an App: you can adjust both audio and Video as recommended by your clinician



In the illustration below, **Video** is set to **90%** and **Audio** is set **Min** is **15%** and **Max** is **60%**



When training with your eyes opened, after you have adjusted your Audio and Video settings you **click on START** and the settings window will reduce its size and just show the 10/20 Electrode placement head as illustrated below.



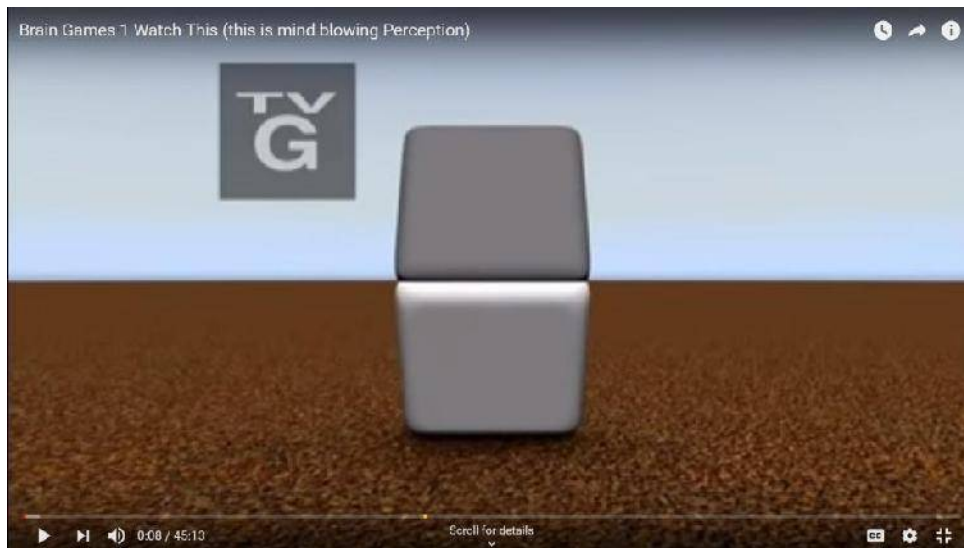
START YOUR TRAINING SESSION

NOTE: Before starting your session make sure the computer powerpack, all electronics (including Wi-Fi Routers, and Cellular Telephones are at least three (3) feet away from the training computer and the person being trained.

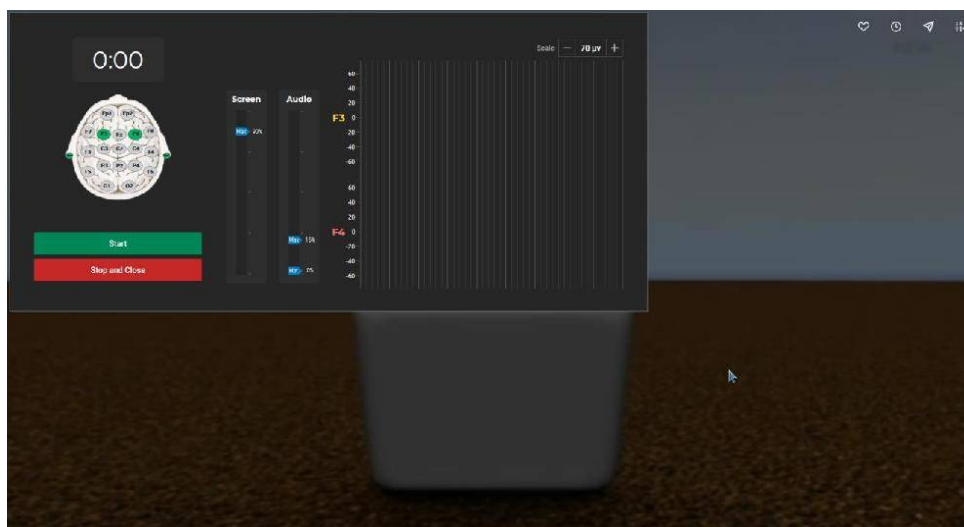
If you are training using an eyes closed session with Music or Tones, set up your session as outlined on pages 20-24 and 28-38.

If you are training with your eyes open, follow the instructions

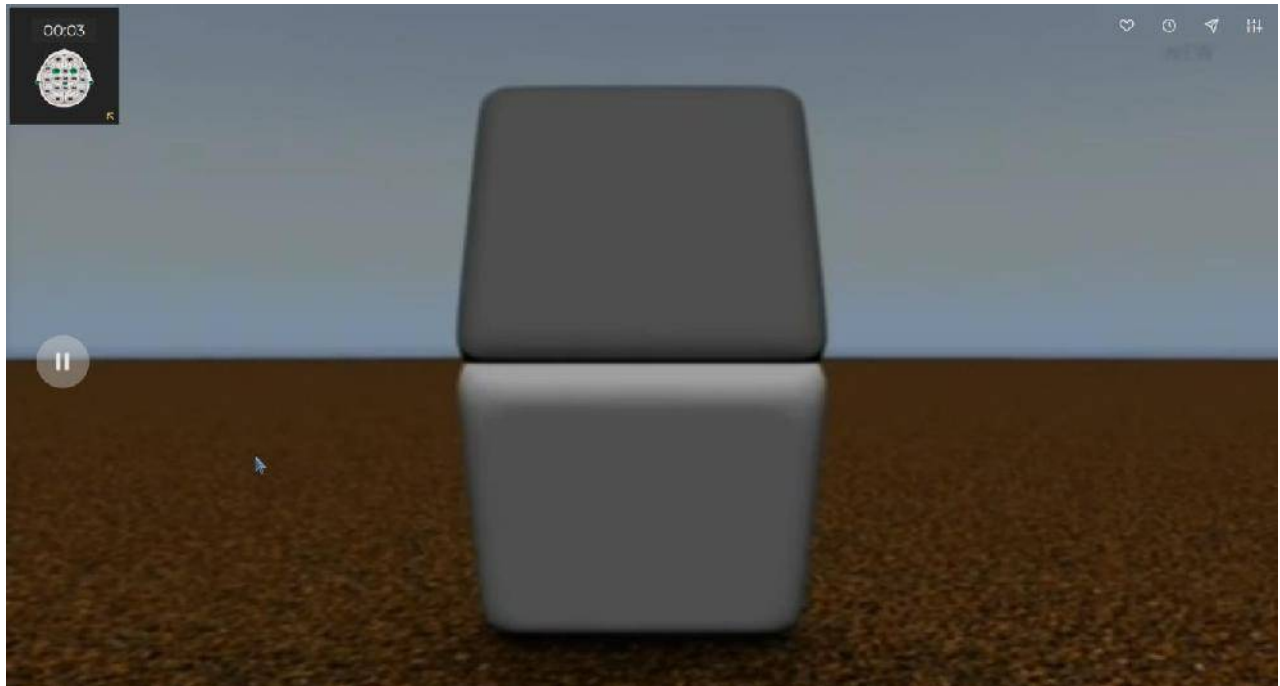
below. Start your Video



Click on START and begin your session.



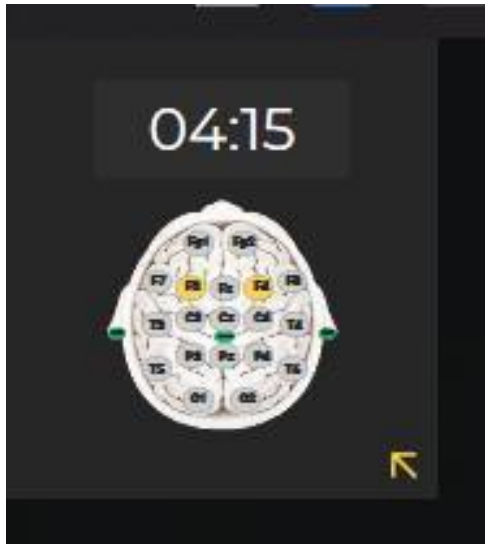
Once you start your session The NewMind Home Neurofeedback Training screen reduces in size to a small window in the upper left-hand corner of your screen as illustrated below.



If you are using the Video Fader, your computer screen will fade from light to dim during the entire session as illustrated in the picture below.



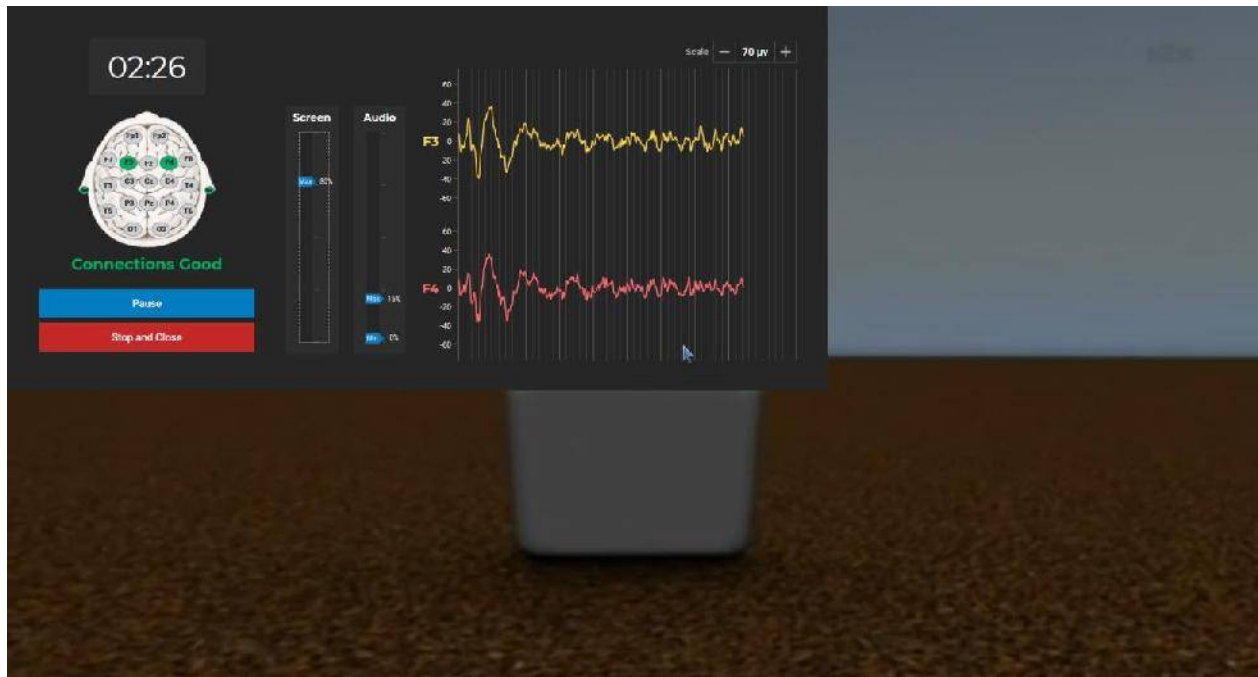
If you move your mouse cursor over the Electrode Training head:



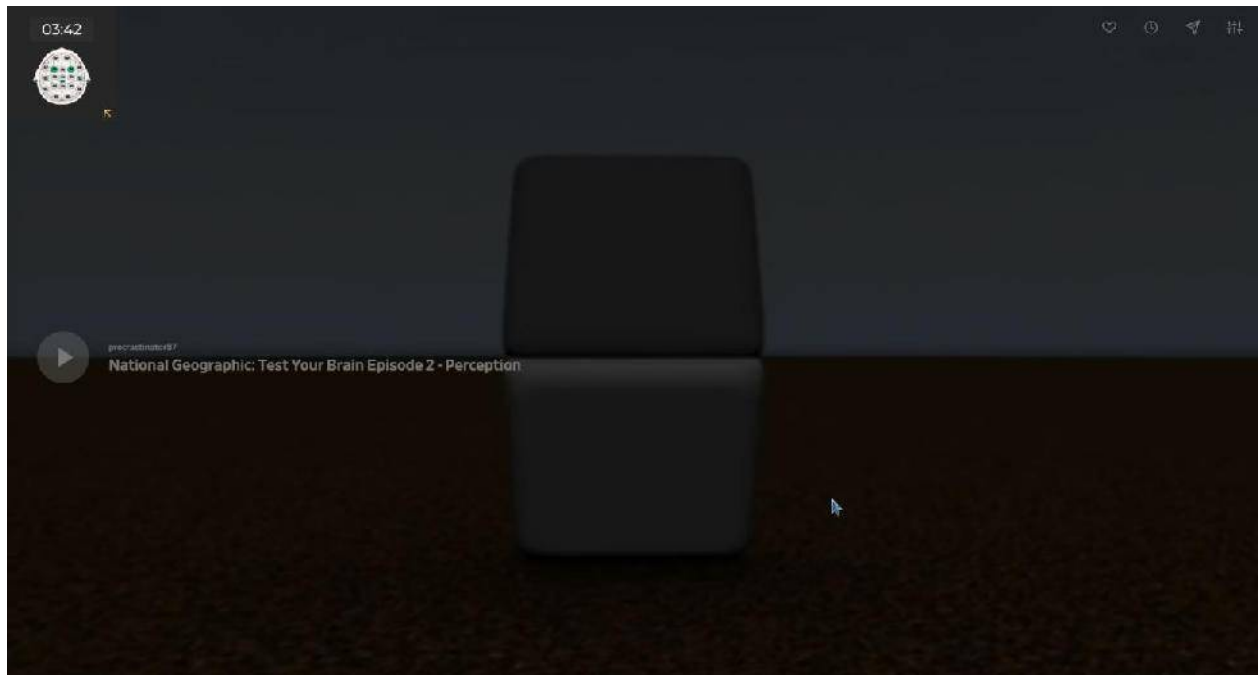
The training window will open as illustrated below.



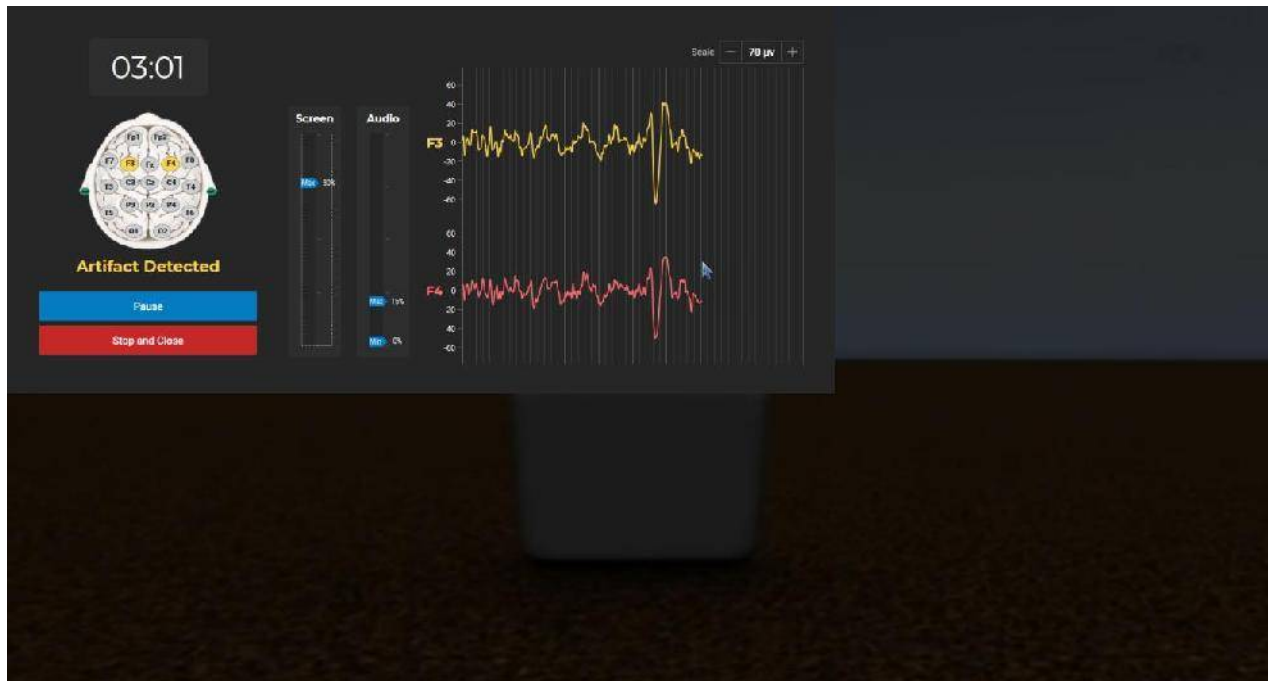
You can adjust your **Video** or **Audio** settings anytime during your session as instructed by your clinician.



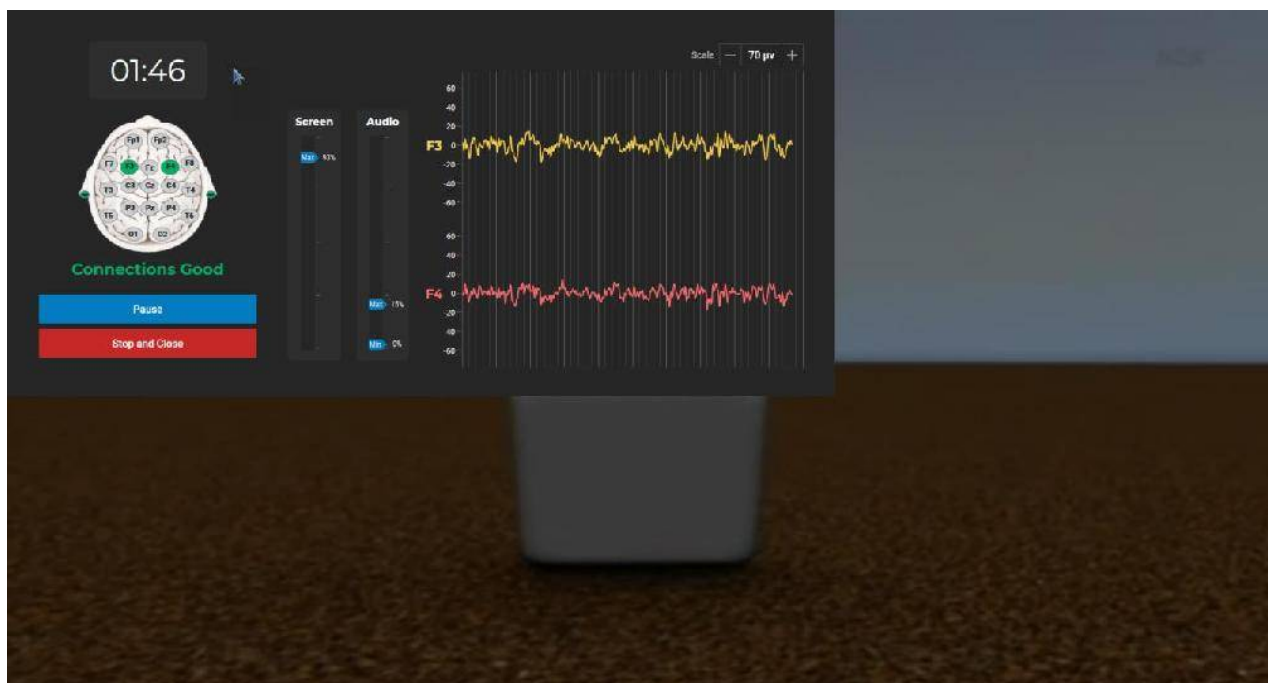
Once you move your mouse away from the training screen window, the electrode head window will move back up to the small window in the upper left-hand corner.



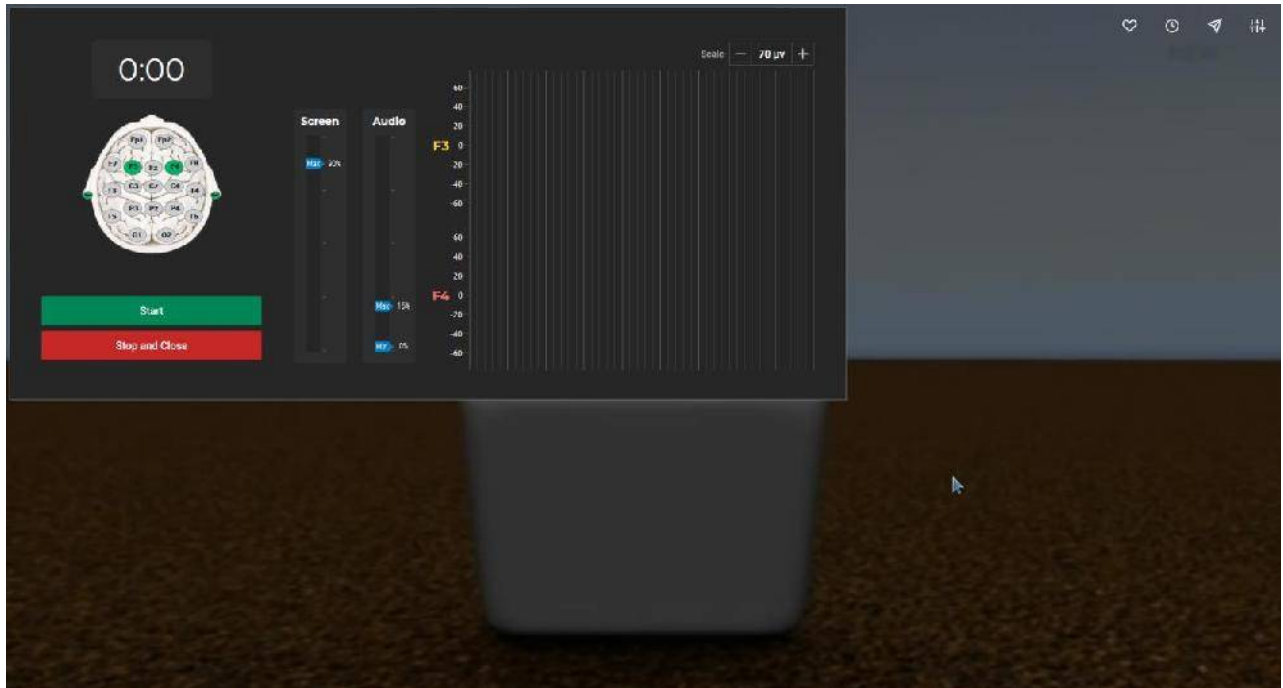
If you are moving in the chair during your session, the **Artifact Detected** symbol will appear on the training screen. Generally, if you sit still and stop moving it will go away.



If you need to pause your session for any reason, **click on Pause**



Click on **Start** to resume your training session.



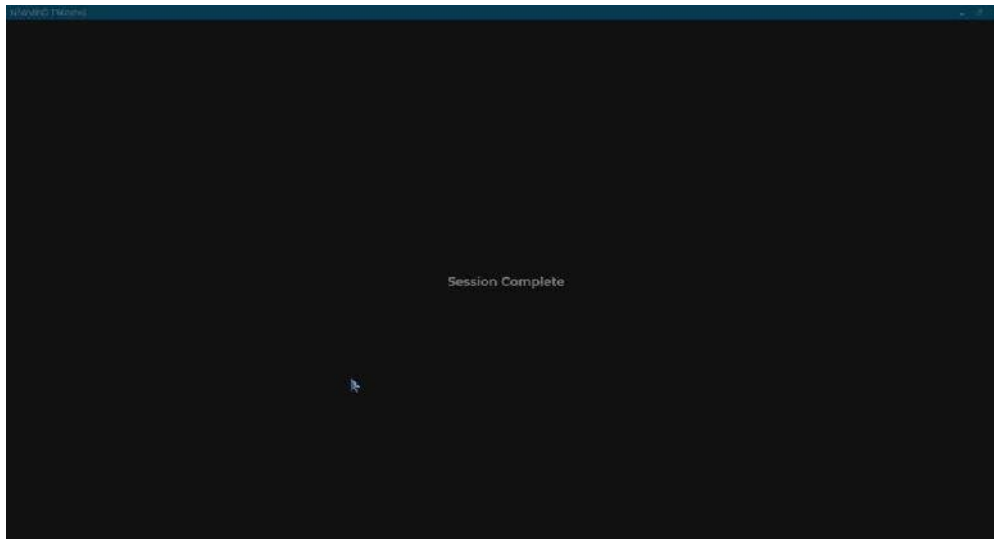
If you need to stop your session early, click on **Stop and Close**



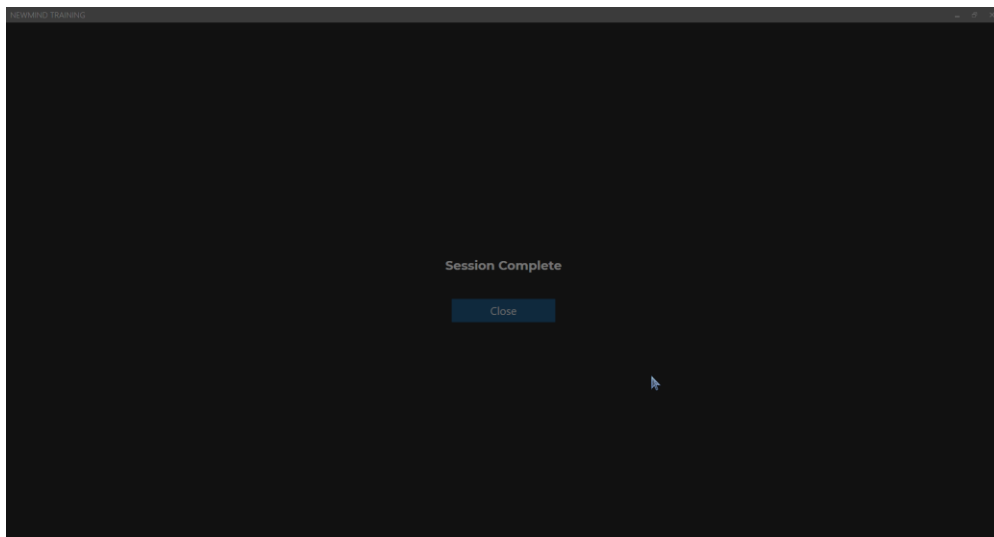
IMPORTANT INFORMATION: Sessions and Settings. Ending Your Session

IMPORTANT: Once you start your session, if there are any problems try to correct them right away. If you cannot fix the problem before Three (3) Minutes, stop the session. Once a session has run for more than 3 Minutes the session is counted and billed against your credits.

When your timed session is completed, the following window will appear on your screen. Once you see this screen: **WAIT** for the next window to appear.



After your session is complete the following window will appear. **When you see this window, Click on CLOSE**

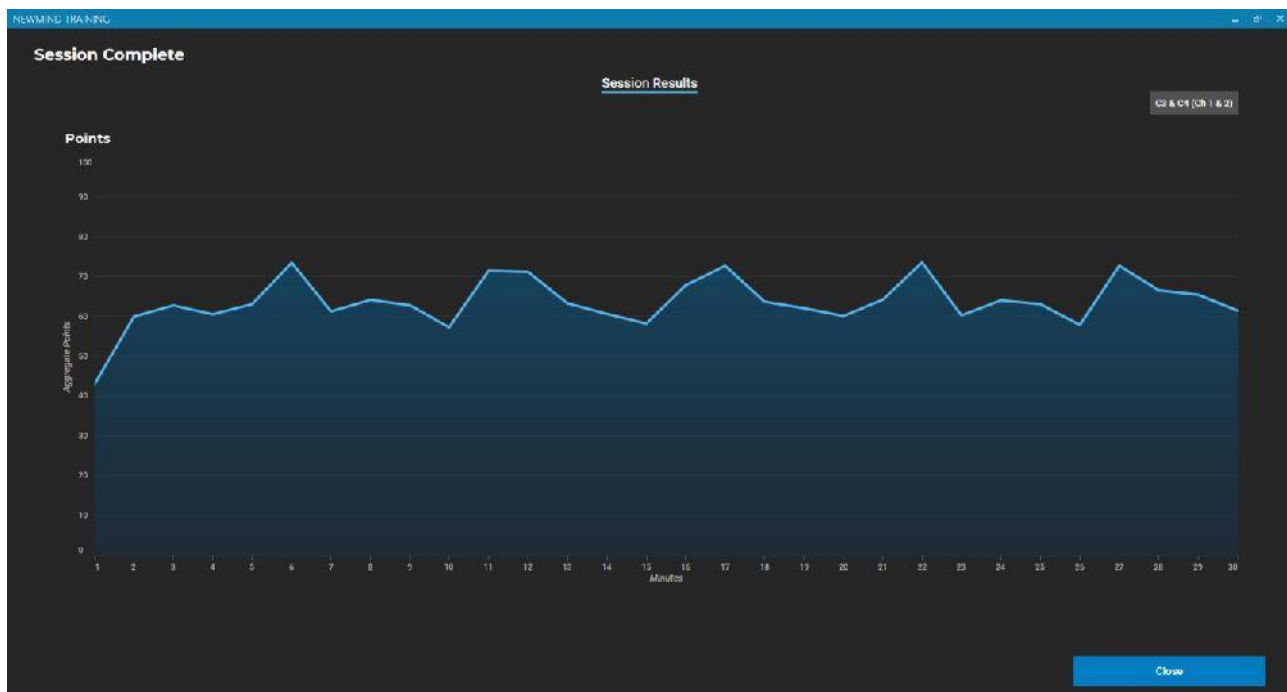


Session Results

At the end of your training session, you may or may not see session results. Your clinician will determine if that is something that they want to add into your training plan. Please keep in mind that it is the decision of each clinician to tailor your training plan to what they decide to be the best for you. Below is an explanation of the results if your clinician does decide to allow the session results to be viewed at the end of your session.

The image below is an example of the session results. The session is scored on a points system from 1-100 with 100 being the best score possible. The software will always compare your current session that you just completed to the last session that was completed. If at any point during the current session you did better than the previous session the software will place a gold star to signify the improvement.

Since neurofeedback is a non-linear process, you will not see an improvement on every session. Some sessions may have a much lower score than the previous sessions. Do not let this discourage you. Variables such as the quality of sleep from the night before can greatly affect how your brain will respond on any given day. Instead, you want to look at “The Big Picture”. Look at the session scores over time and the general trend instead of each session on its own. Your clinician will also be looking at the sessions and will let you know what they see in your overall improvements.



Once the session has been recorded and closed, it is sent to your clinician and results are instantly available for your clinician to review. Any changes to your Home Neurofeedback Training Session protocols will be done by your clinician.

If you have further questions or problems with your NewMind Home Trainer or NewMind Home Training Software, please contact your clinician.

DO NOT CONTACT NEWMIND TECHNOLOGIES UNLESS YOUR CLINICIAN ASKS YOU TO DO SO.

UPDATED & REVISED: March 14, 2019 – REL

Images updated 05-01-22 by Erin Meldrum