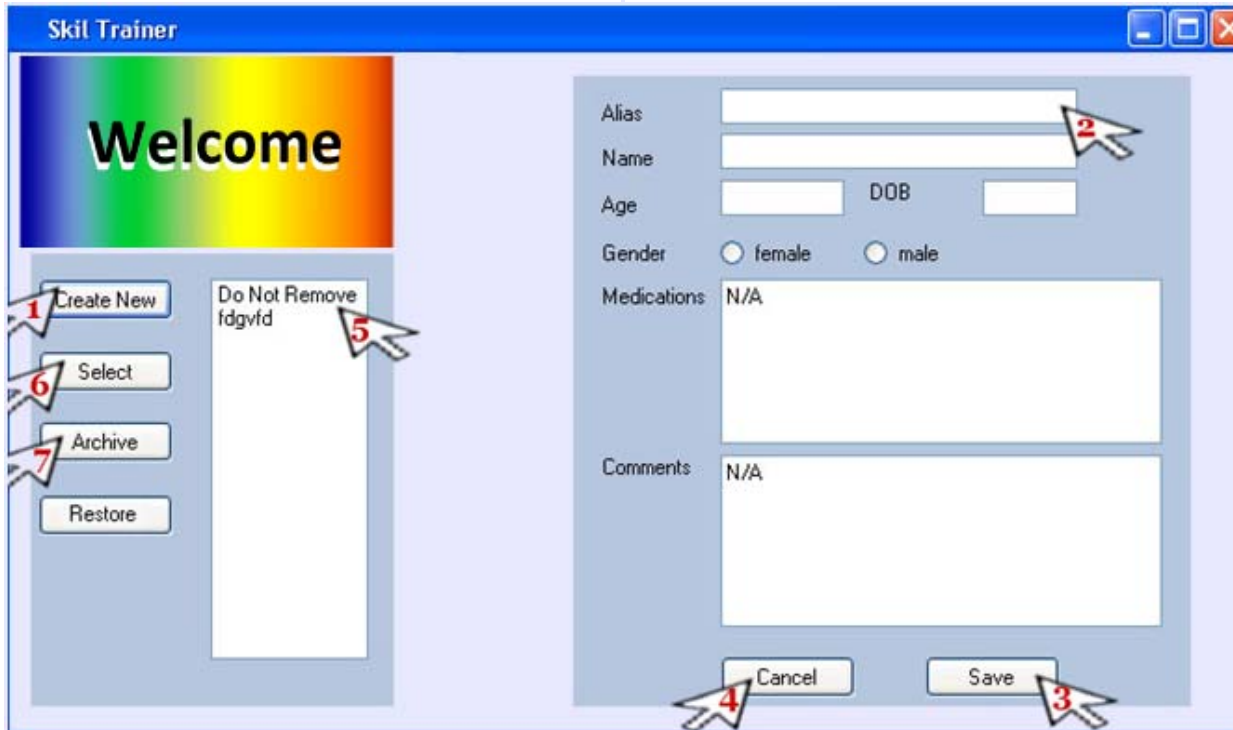


# SKIL TRAINER

## First Time Setup

### Welcome Screen



At the welcome screen we can create a new client, select a current client, archive client data, and restore a client to the current list of clients.

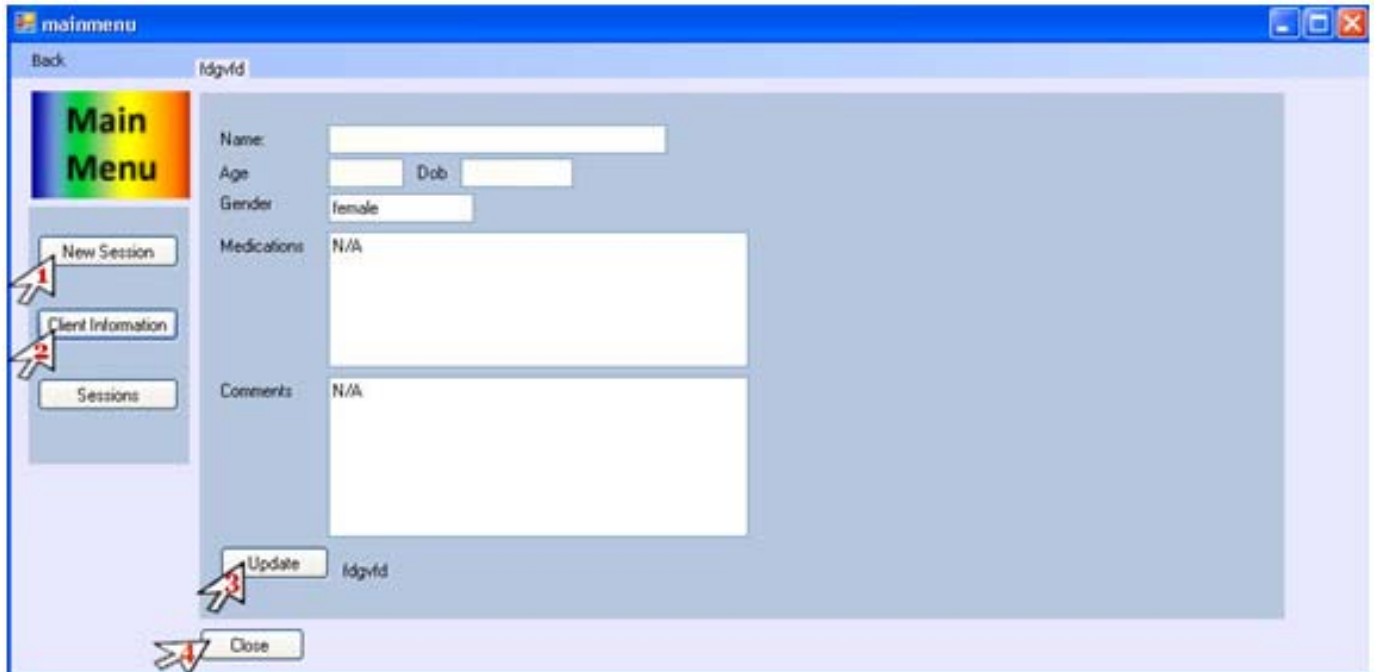
1. Clicking on the **Create New** button opens up a section in the same window that allows us to add a new client.
2. When we add a new client, we must create a unique alias for this individual for privacy and data management purposes. Complete the information (age, name, gender) for this client on this panel.
3. Press the **Save** button to create new entry in client database.
4. We can press the **Cancel** button to close this section without saving.
5. Our current clients are organized by aliases in the order in which they were entered. Click on an alias to highlight a client.
6. When we press the **Select** button, we'll be taken to the main menu.
7. If we want to remove a client, select their alias and press the **Archive** button. This will **not** destroy their files, but simply move them to storage.



8. If we've archived a client and wish to restore them to the current list, the **Restore** button opens a list of archived aliases.

9. We click on the alias we would like to restore and press the **Add** button to move the alias back in the main list.

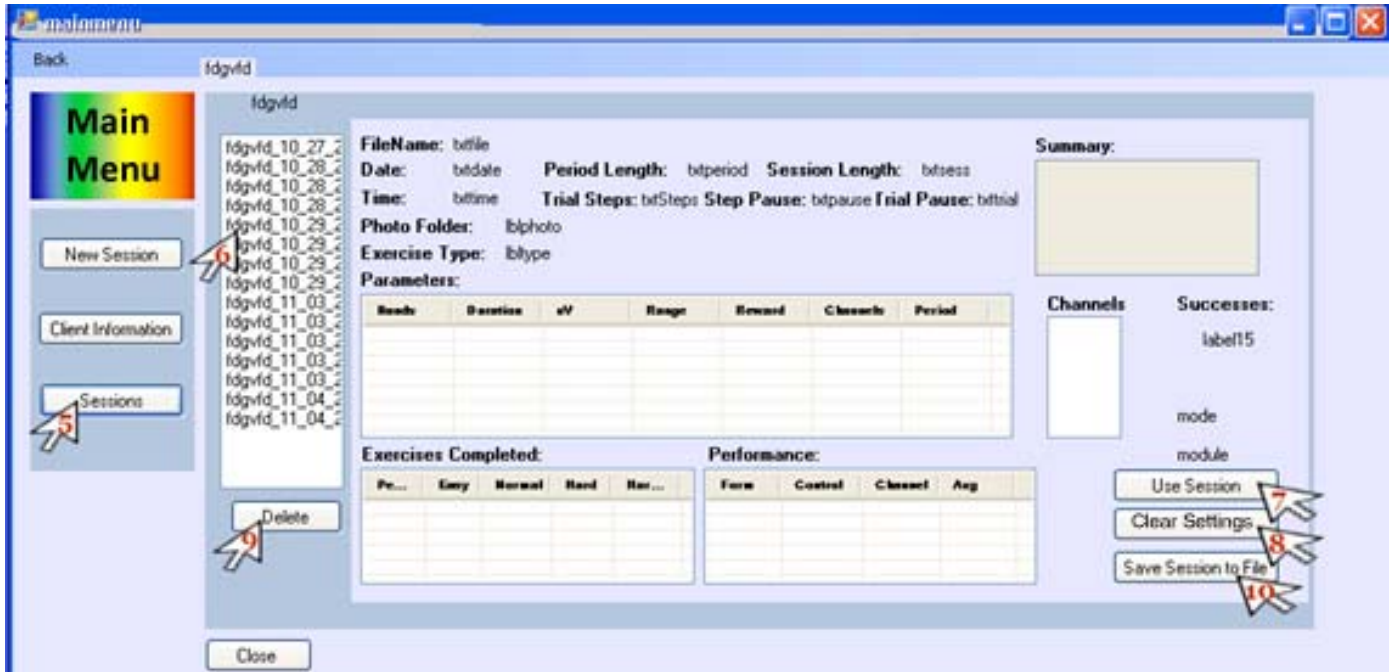
## MAIN MENU



At the main menu we can start a new session, view our client's information, or view a previous session.

1. The **New Session** button takes us to the Setup Screen.
2. The **Client Information** button opens up a panel where we can edit our client's personal information.
3. To edit information, change the text in the appropriate fields and press **Update**.
4. If we press the **Close** button instead of update, any new information will not be saved.

## SESSION PANEL

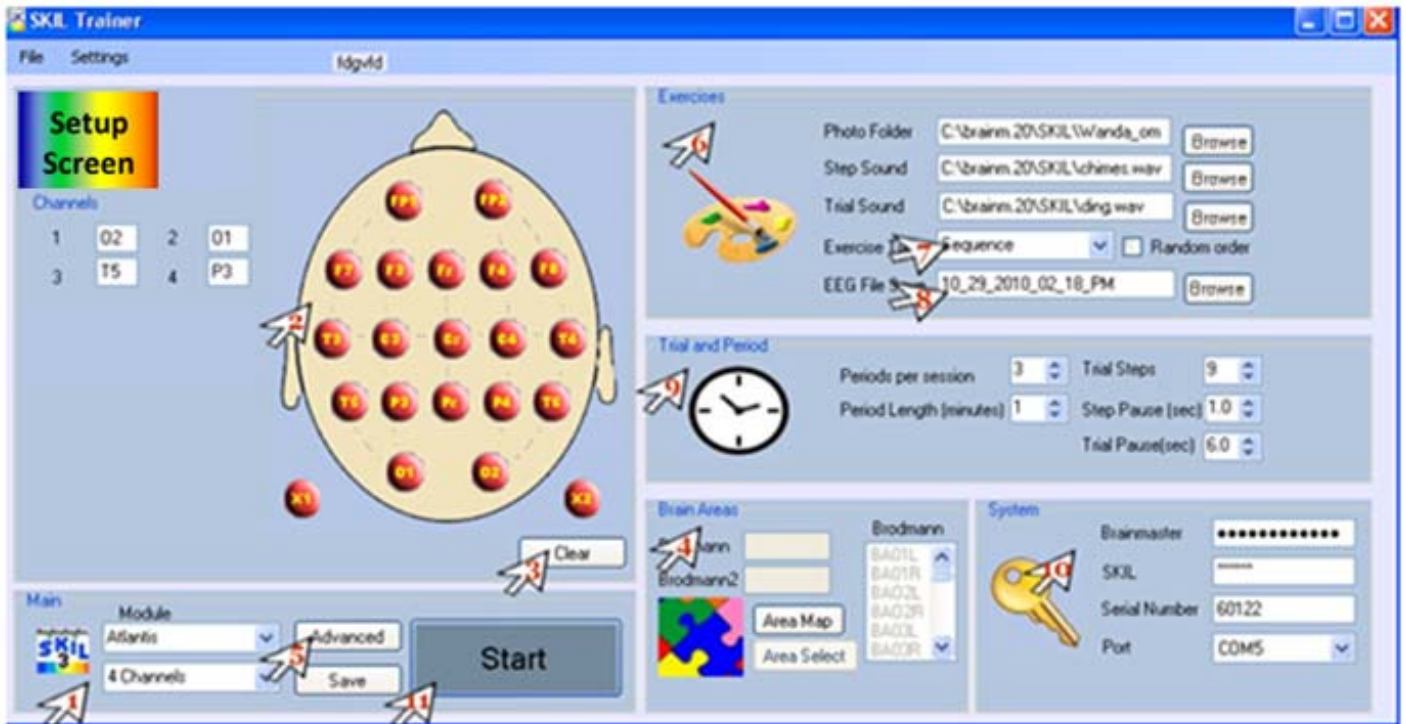


5. The **Sessions** button opens up a panel that allows us to view our client's previous sessions. A list of previous sessions appears and we can select which session we wish to view by clicking on the session name. Unless otherwise specified, file names are dated at the end of each session. One way to locate a file is by date.

Once session settings are loaded, we have the option to use the last saved settings or save the session to a text file. Saving to a text file is useful for printing or emailing the information.

6. If we press the **Use Session** button, the settings and screens of the previous session will be used for the current session.
7. If we do not want to use the previous settings for this session, we can cancel the settings by pressing **Clear Settings**.
8. To delete a specific session, we select a file and press **Delete**.
9. To save a session to a text file, we press **Save Session to File**.

## SKIL TRAINER SETUP SCREEN



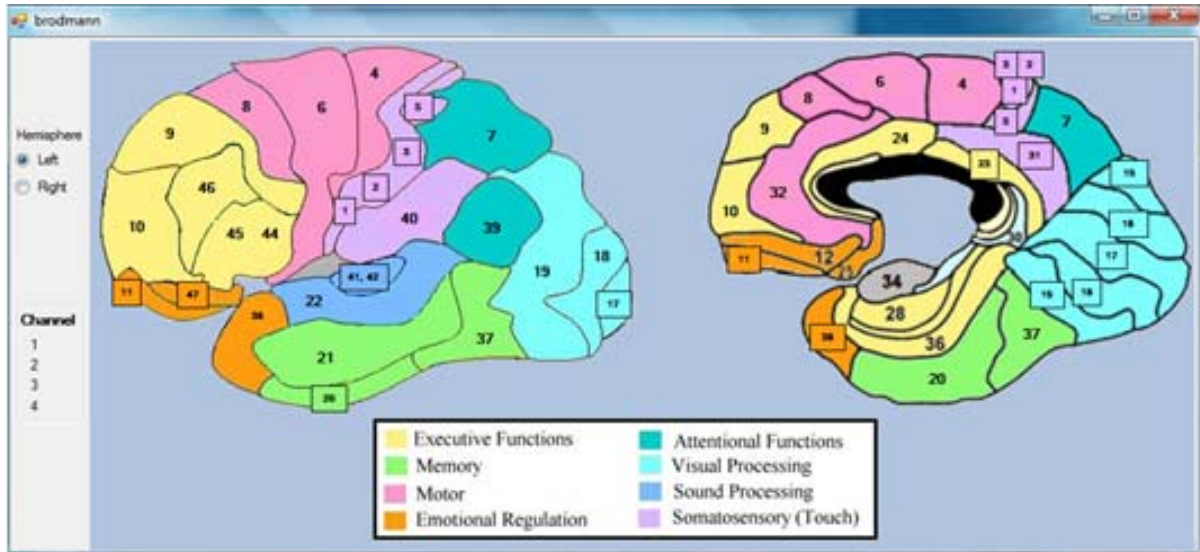
First-time setup can be a bit overwhelming, but we can save our preferred settings for each client, allowing customized client settings. Controls are divided into sections with the name of the control on the upper left portion of each section.

1. Go to the **Main section** (lower left). Select the device we plan to use, Atlantis 4x4 or Discovery (current systems supported). Once we've selected a device, select training montage, either "4 Channels" (Referential), Brodmann, or Laplacian modes.
2. We can select any channel by clicking it on the **head diagram**. The button turns green to let us know we've selected it.
3. Press **Clear** to clear our selection and pick new channels.

Select the Brodmann montage and the **Brain Areas** control appears.

4. We select the **Brain Area** we want to train by clicking its label in the large combo-box labeled "Brodmann" (e.g., BA11R) or we can click the **Area map** button to display a diagram of Brodmann areas and select which area to train here. After we selected the brain area to train from the map, we close the diagram and press **Area Select**. When we do this or select a Brodmann area from the listings directly, four channel labels fill the Channels fields. Apply electrodes to the client based on this order, being sure that Channel 1 on the unit is positioned at the 10-20 location shown in Channel 1 field, and so on.

## AREA MAP



Select the Laplacian montage and choose the active electrode site. This site is surrounded by 3 electrodes, the center of a triangle. Position the neighboring electrodes N1, N2, and N3 so that they form an equilateral triangle approximately 10 cm or more across around the active electrode.

5. We select an Exercise by clicking the **Advanced button** to reveal **Exercises section**.
6. In the **Exercises section** we select a photo set and the trial and step sounds for the session. Press the **Browse buttons** to find the desired photo folder and sounds.
7. Exercise type can be either *Sequence*, *Wanda*, or *Mosaic*. *Sequence* displays an entirely new image per success, allowing special effects such as morphing or movement in our exercises. *Wanda* displays an image one panel at a time, left to right, top row followed by bottom row (3x2 panels per image). *Mosaic* displays an image one panel at a time randomly (3x3 panels per image).
8. Enter a file name for the EEG recording made during each session. Please make the extension .xml, for example: EEG1.xml
9. In the **Trial and Period area**, we can set session length based on the number of periods. Keep in mind of the 10-second break between each period. We can also set period duration. We can adjust **Trial steps** which is the number of successes to complete a trial, as well as **Step pause** and **Trial pause**. **Step pause** adjusts the length of delay between each success. **Trial pause** adjusts the length of delay at the end of so many steps, the end of a trial or exercise. Using different sounds for Step and Trial provides two forms of reward, an immediate sound for each success (“ding”), and one completing a screen or exercise, such as “tada!”

10. In the **Systems section** we fill in our code keys. Select the port your device accesses.

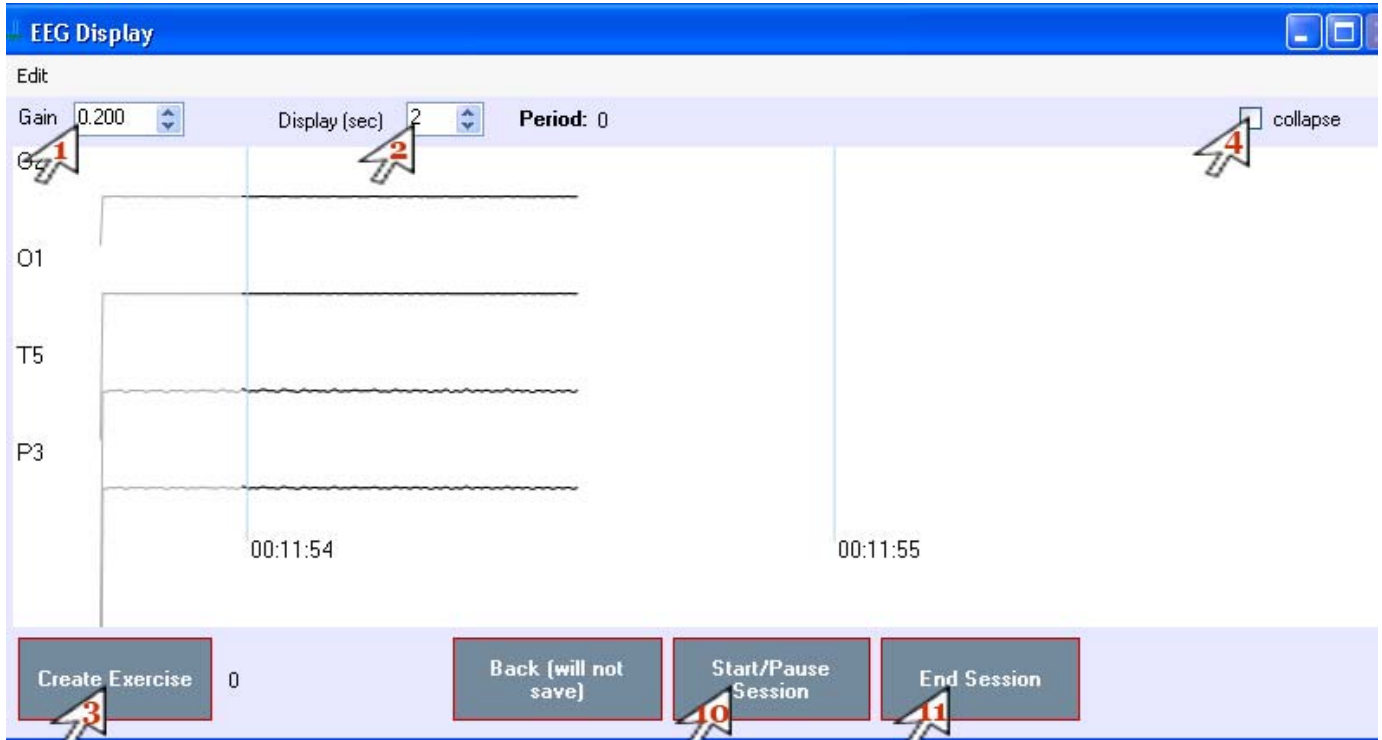
*You can confirm the port number used by the Atlantis or Discovery by opening the Windows Control Panel (from the Windows Start button), and selecting System (in classic view), then Device Manager, then Ports*

11. We are all set up now! In the main section, press the **Save button**. We won't have to set this up for this client again.

*If you're using the Atlantis, press the reset button on the back of the Brainmaster hardware. It is the protruding metal button located directly above "Photic LR" on the front of the unit.*

12. Press **Start**.

## EEG DISPLAY SCREEN



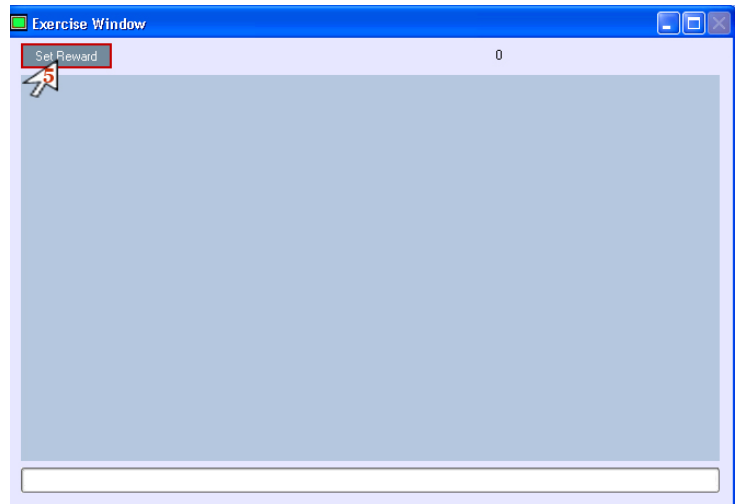
At this point we should be seeing EEG signals on the screen. If this screen does not open, we may have forgotten to reset the Atlantis or some other electronic error occurred. To rectify, close the entire program and start again. Fortunately our client's setup settings are saved and already populate the screen so all we have to do is reset the unit (if an Atlantis), and press Start.

1. We can adjust the height of the signals by changing the display **Gain**.
2. We can display up to 8 seconds of real time signal. The default is set to 2 seconds, but we can adjust display length with the **Display** combo-box

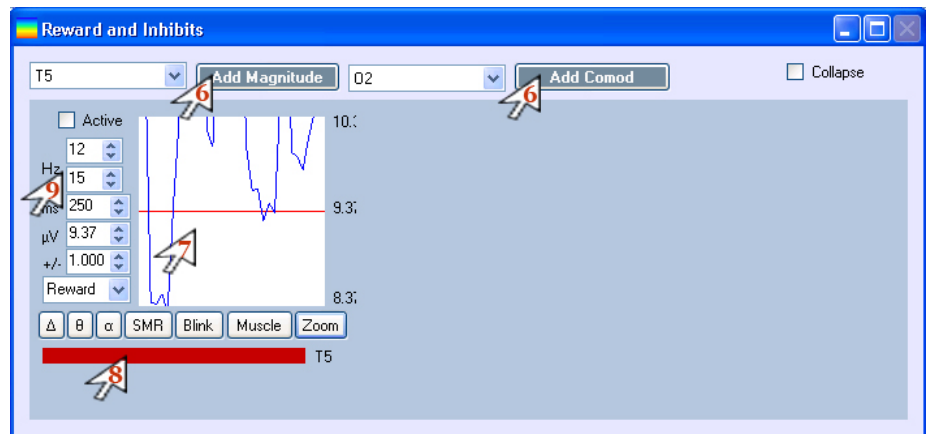
Unless we are using a previous session's settings, we need to set up goals for our client.

3. Press the **Create Exercise** button to open an exercise screen. We can have up to four exercise screens open at a time.
4. We can use the **Collapse checkbox** to expand or contract each screen, which may be helpful in adjusting settings.

5. From the exercise window, press the **Set Reward** button and a control panel for this exercise window appears.
6. On the Reward/Inhibit Control window (RIC), we can have up to 12 control panels allowing us to train either magnitude or comodulation. Choose a channel from the drop-down boxes and press either the **Magnitude** or **Comod** button. A control panel will appear.

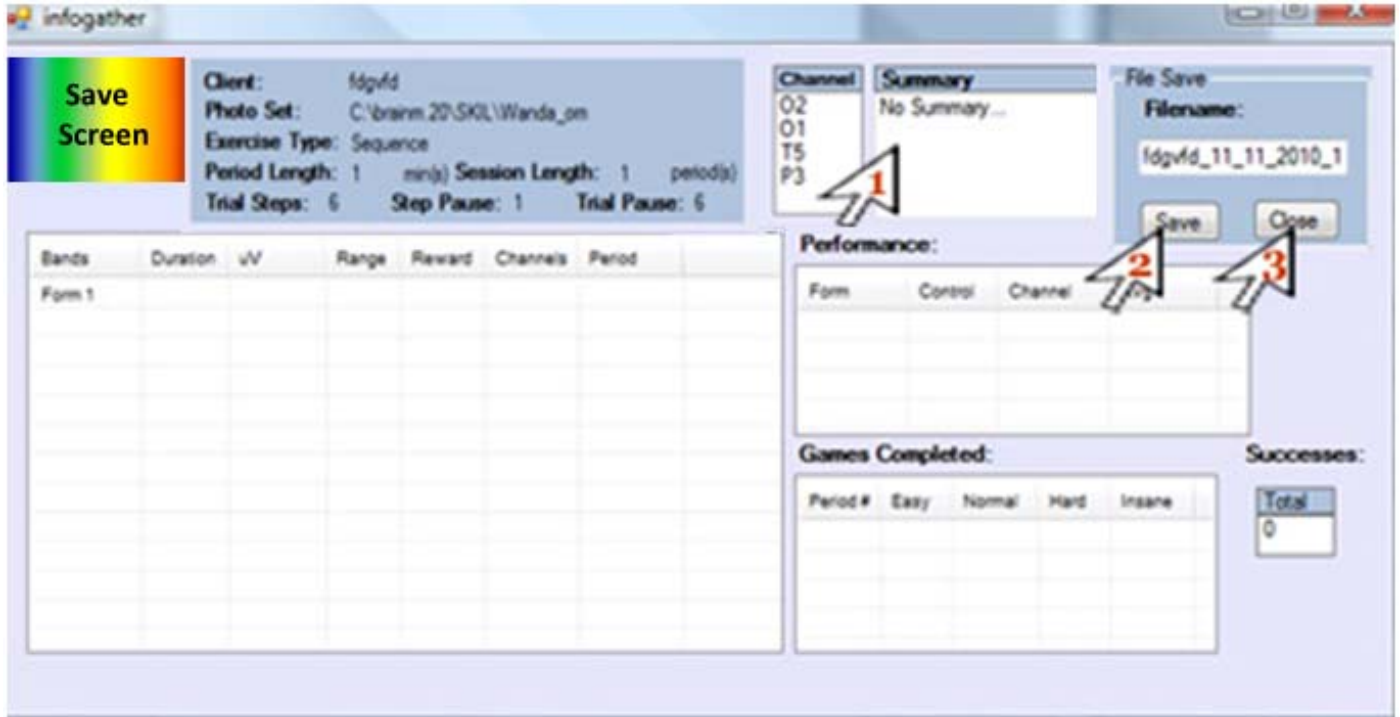


7. The control panel allows us to set the **frequency**, microvolt or comodulation **threshold**, and whether we want to reward or inhibit this activity. We can also **zoom** in on



- the range displayed and change the amount of time above or below threshold. It is defaulted to 250 ms, with 125 ms steps available. We can also turn off a control panels contribution to training by unclicking the **Active** checkbox. This allows us to monitor a rhythm without training it.
8. When a client meets the criteria of a control panel, the indicator bar turns green, else it stays red.
9. Each control panel also contains buttons to quick adjust the frequency band. Bands can also be tailored using the up and down arrows.
10. Once we have finished setting up an exercise, we return to the EEG Display Screen and press **Start**. We can pause a session at any time by pressing the Start/Pause button. Once we press the Start button, we cannot add any more exercise screens or control panels to the session.
11. We can end the session at any time with the **End Session** button.

## SAVE SCREEN



When a session ends, we are taken to the **Save Screen** where the results from the session are displayed.

1. We can enter a **summary description** or comment for each session.
2. Go to the **File Save section** to save session results. A file name is automatically provided (with date and time of the session), but we can provide a unique name for each session instead. Press **Save** to return to the Setup Screen, where we can run another session.
3. If we press the **Close** button, the session information is not saved.