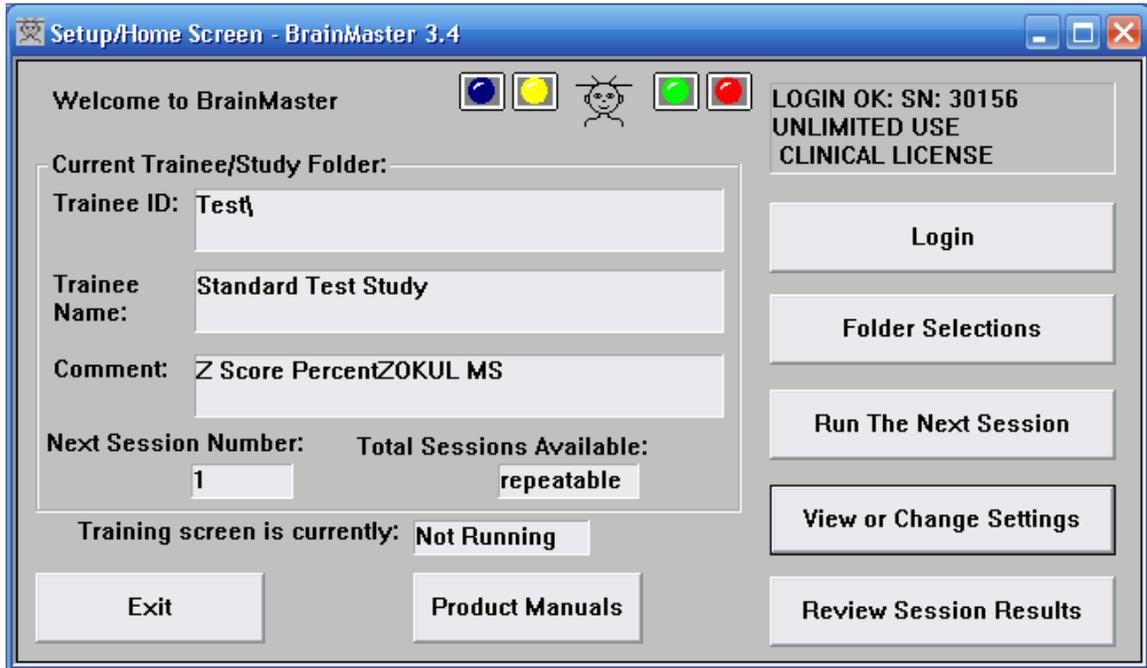


PercentZOKUL Mark Smith Set-up Guide

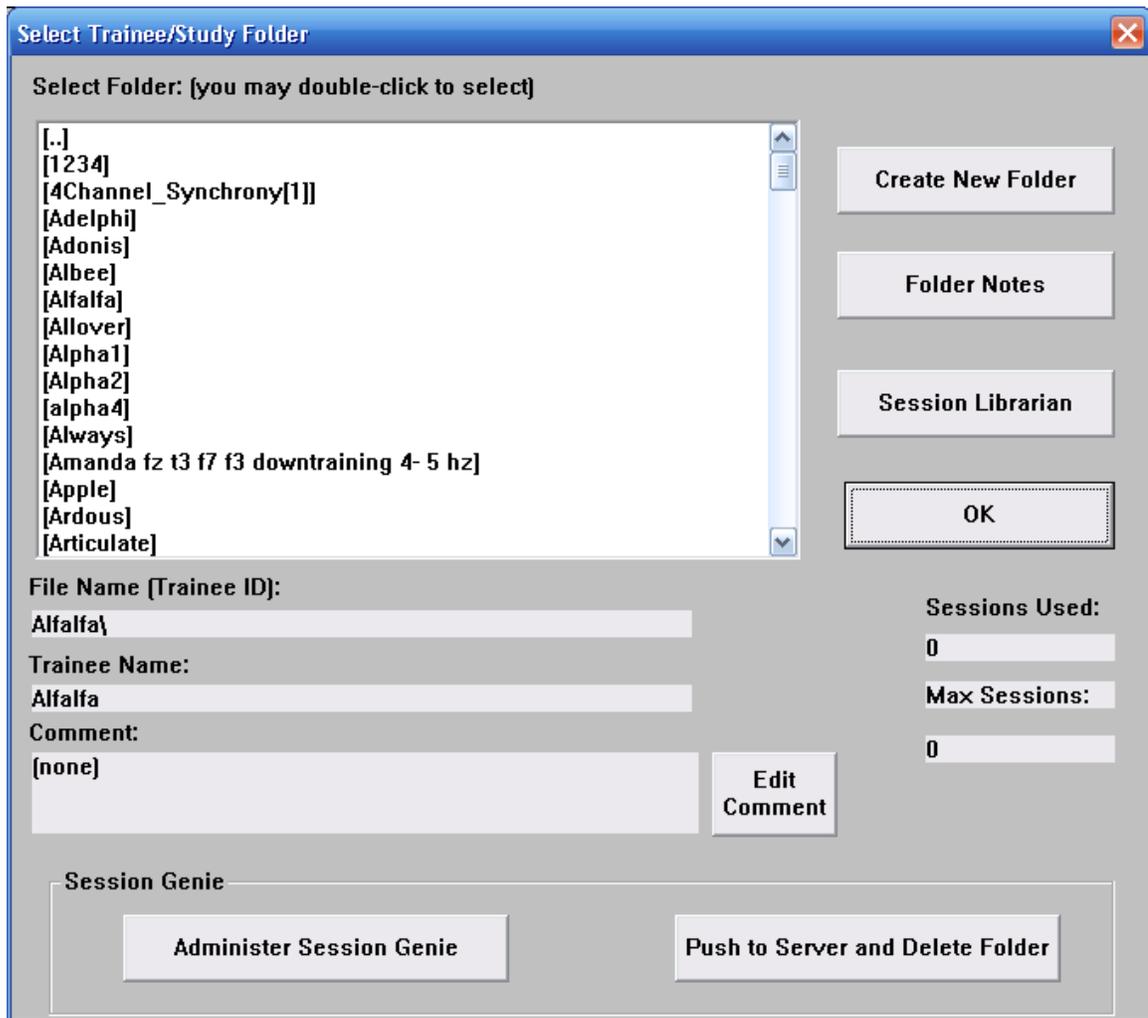
Mark Llewellyn Smith LCSW

Create New Protocol

1. Open the Brainmaster software from the desktop.
2. Click on Folder Selections.



3. Select Create New Folder.

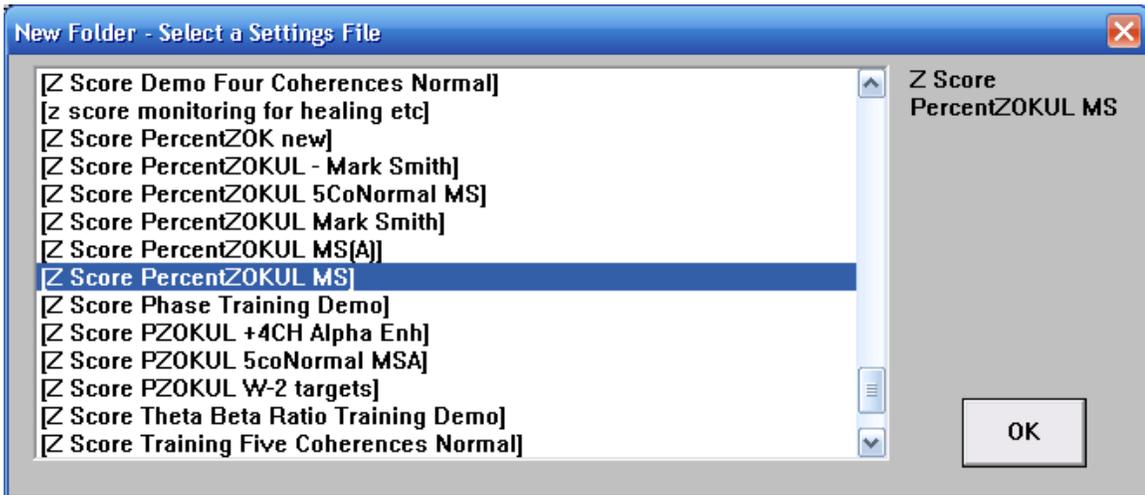


4. In Create New Folder dialogue box place the cursor in the name field and type the clients name.



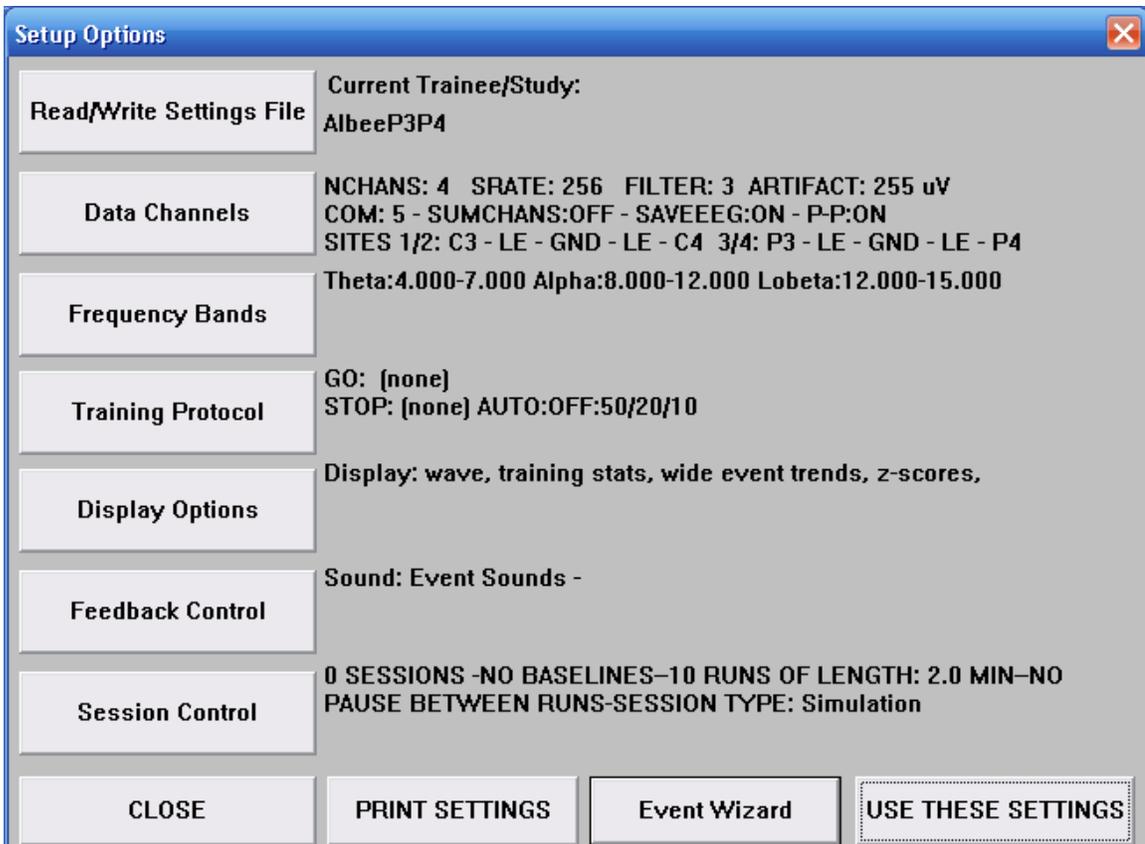
5. Place the cursor in the File ID field and create a file ID. Suggestion: use the clients last name plus the 10/20 sites to be trained. Suggestion: select Use Name for File ID for easy identification.
6. Click OK in the Create New Folder dialogue box.
7. Click OK in the Confirm New Folder dialogue box.

8. In the New Folder-Select a Settings File dialogue box, scroll down to the Z Score PercentZOK MS2 settings file and select it by highlighting the name of the file and click on OK.



9. In the Setup/Home Screen select View or Change Settings

10. The Setup Options screen opens. Select Data Channels.



11. In the Data Channels dialogue box confirm that the four channel option is selected under the EEG Channels heading.

Data Channels

EEG Channels:
 One nIR HEG
 Two
 Four pIR HEG or TEMP

Software Digital Filter Order:
 1 2 3 4 5
 6 7 8 9 10
lower order is faster
higher order is more selective

Sum-Channel Mode:
 ON OFF

Atlantis Hardware Control

4-channel Sum Method:
 Split Combine

Amplitude Scale:
 Peak-to-Peak RMS

Save EEG to Disk:
 ON OFF

Artifact Threshold:
255 microvolts

Software Notch Filters:
 60 Hz Notch Filter 50 Hz Notch Filter

EEG Data Sampling Rate:
 120 sps 256 sps

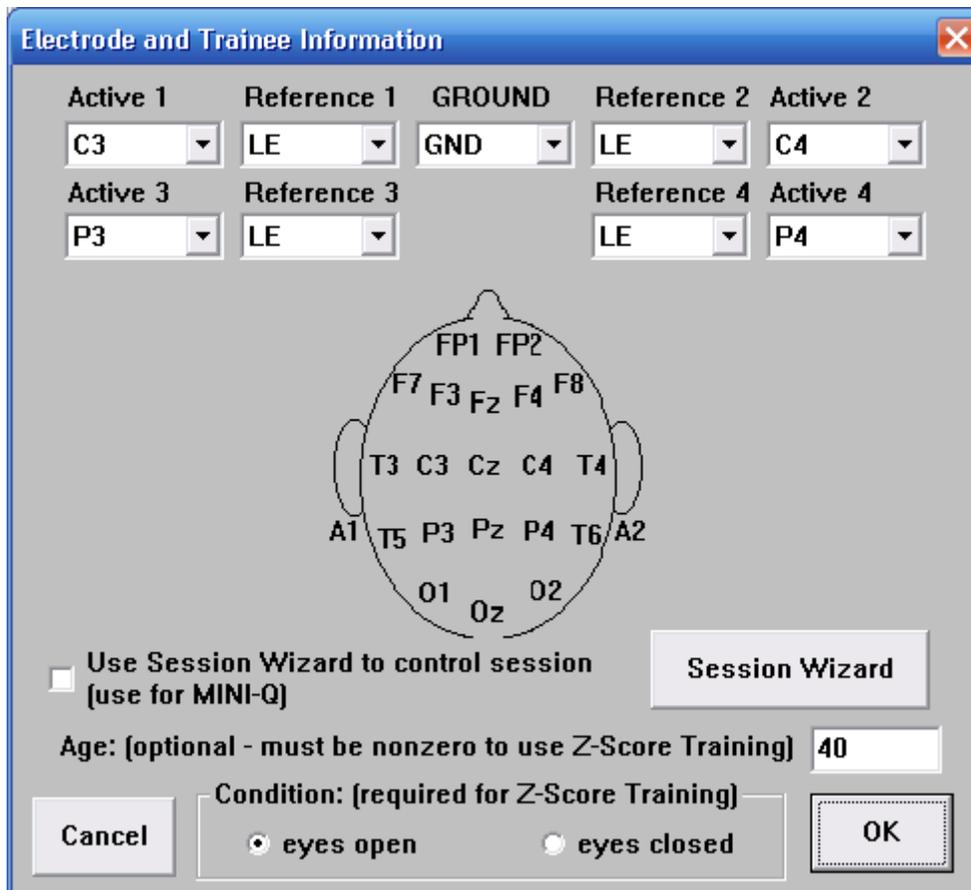
COM Port Select:
Enter COM Port Number [1, 2, 3, ..., 32] 5

Search this PC for Available COM Ports

Cancel **Electrodes & Trainee Info** OK

12. In the Data Channels dialogue box select the Electrodes and Trainee Info button.

- In the Electrode and Trainee Info dialogue box place the four 10/20 sites to be trained under Active 1, Active 2, Active 3, and Active 4 by selecting the down arrow under each heading and highlighting the appropriate 10/20 site.



- Place the clients age in the box labeled: Age (Optional-must be nonzero to use Z Score Training).
- Select Eyes Open or Eyes Closed under the heading: Condition (required for Z Score Training)
- Click OK at the bottom of the Electrode and Trainee info dialogue box and the OK again in the Data Channels Dialogue box.
- You are now back in the Setup Options dialogue box. Select the Session Control button. Under the Number of Sessions heading place the number of sessions desired in the box.

Session Control [Close]

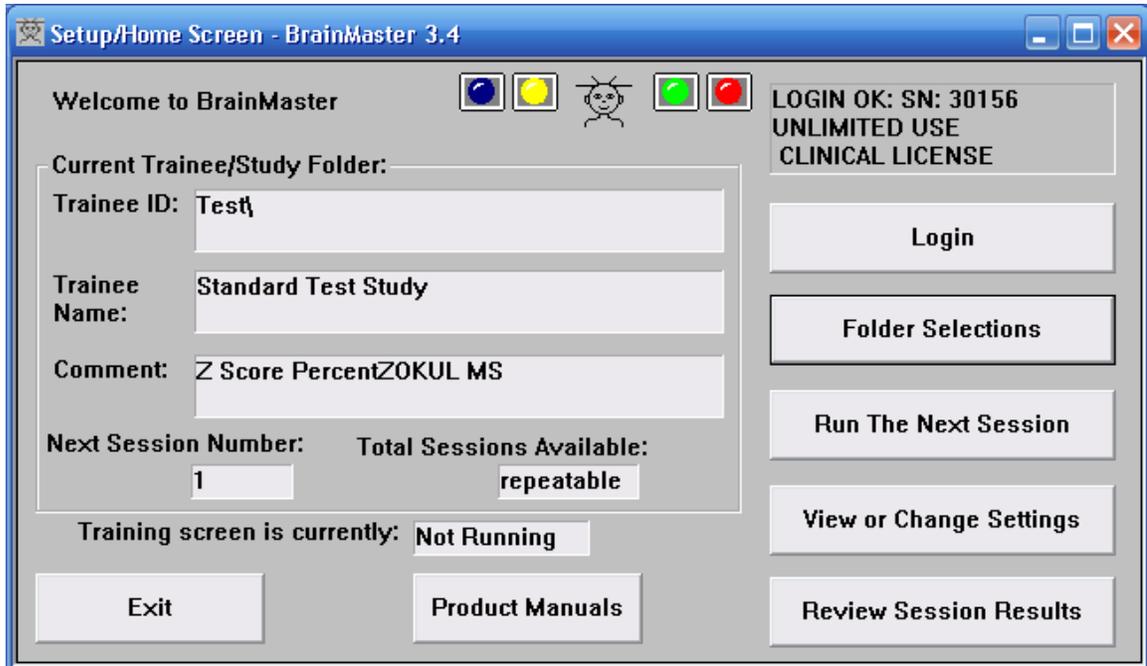
NOTE: Please enter all times as whole seconds (1, 2, 3, etc)

Baseline Length (pre and post) <input type="text" value="0"/> Seconds (before and after Runs) (Length of 0 means "no baselines")	Run Length: <input type="text" value="120"/> Seconds (0 means run indefinitely)
Number of Sessions: <input type="text" value="0"/> sessions (80 maximum) (0 allows repeated use of Test Session 1)	Number of Runs (Trials) <input type="text" value="10"/> Runs (Must have at least one Run)
Session Type: <input type="radio"/> Assessment <input checked="" type="radio"/> Training <input type="radio"/> Simulation <input type="radio"/> Playback	<input type="checkbox"/> Pause Between Runs? Session Wizard
Cancel <input type="checkbox"/> Use Session Wizard to control session (use with MINI-Q)	OK

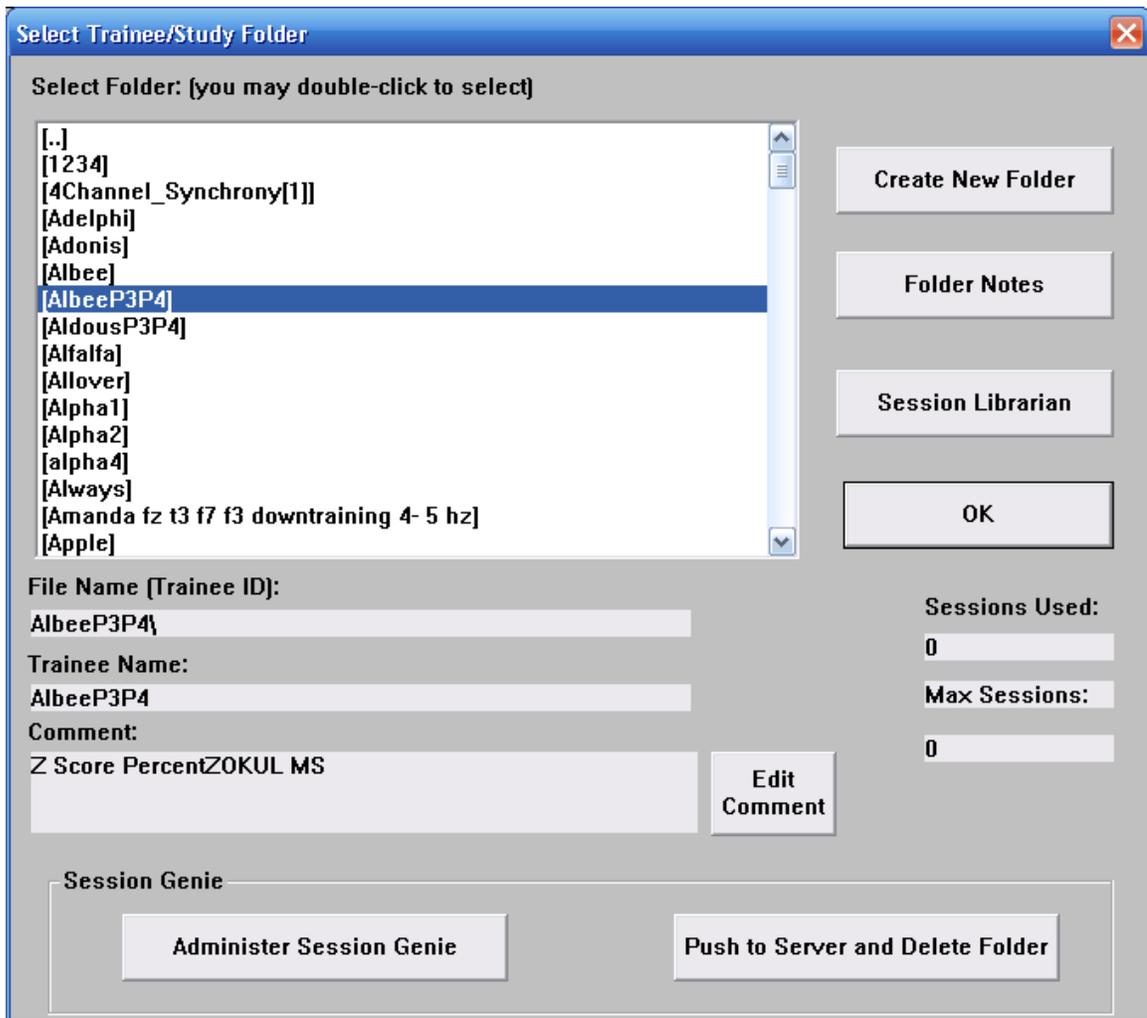
18. Under the Session Type heading select Training.
19. Select OK at the bottom of the Session Control dialogue box.
20. Select Use These Settings at the bottom of Setup Options dialogue box.
21. You are now ready to begin training.

Training

1. Open the Brainmaster software from your desktop.
2. In the Setup/Home Screen select the Folder Selections button.

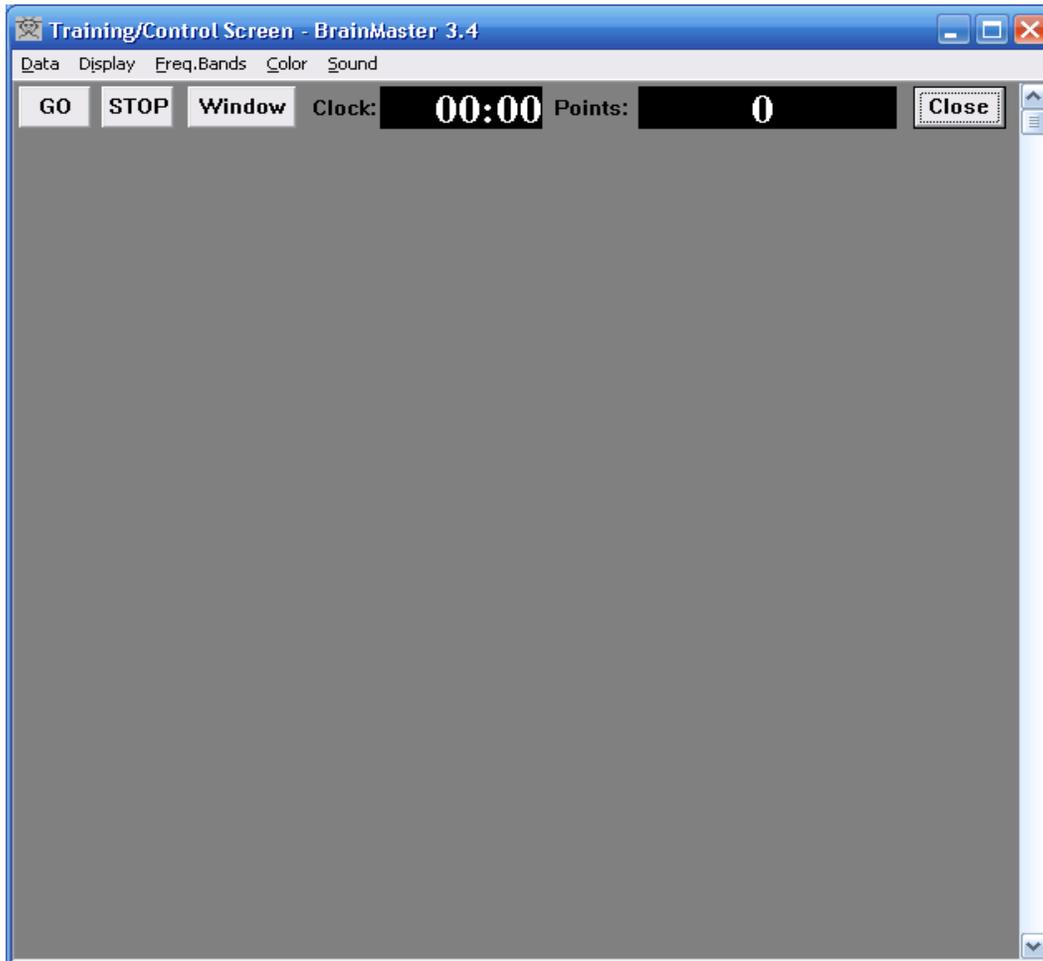


3. Scroll down to the client folder, highlight, and select OK.

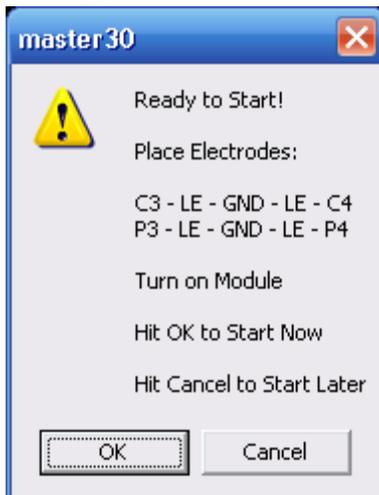


4. In the Setup/Home Screen select the Run the Next Session button.

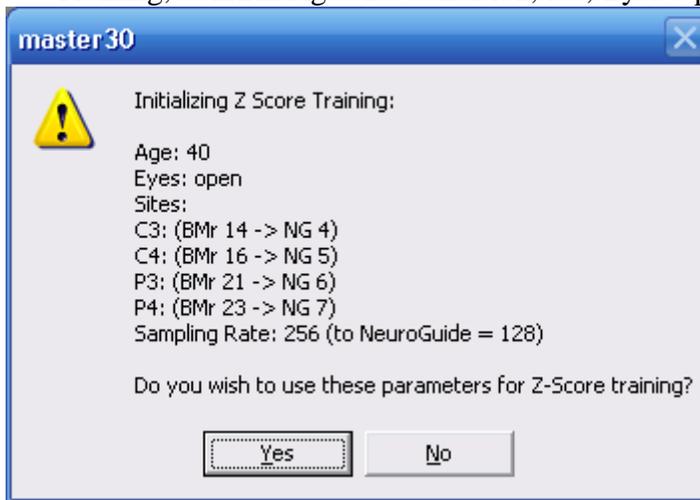
5. In the Training/Control Screen select GO.



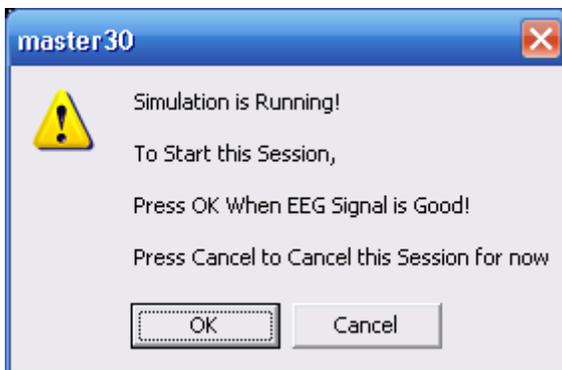
6. In the Master30 dialogue box confirm your selection of 10/20 sites then select OK.

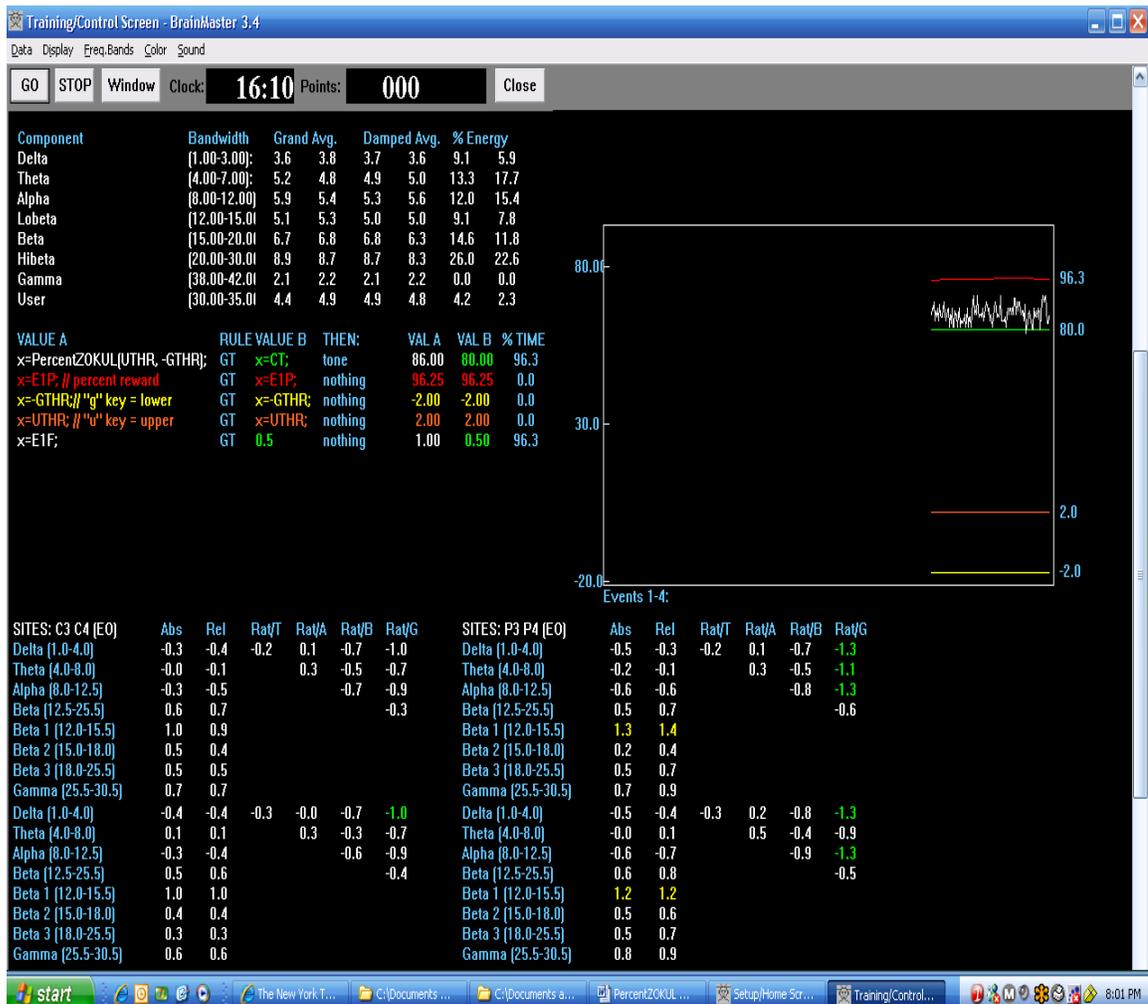


7. In the following Master30 dialogue box with the sub-heading Initializing Z Score Training, confirm Age and Condition, i.e., Eyes Open or Closed, then select Yes.



8. In the last Master30 dialogue box select OK when the signal is good to begin training.





9. The positive Z scores are adjusted with the “u” key. Raise the positive Z score by typing u on the keyboard. Lower the positive Z score by holding the Shift key down and pressing the “u” key. The default is +2 STD.
10. The size of the positive Z score can be confirmed by looking at the number to the right of the orange line in the Event 1-4 graph. The size of the positive Z score can also be confirmed by examining the third number from the top in columns Val A or Val B.
11. The negative Z scores are adjusted with the “g” key. Raise the negative score by typing “g” on the keyboard. Lower the negative Z score by holding the Shift key down and pressing the “g” key. The default is -2 STD.
12. The size of the positive Z score can be confirmed by looking at the number to the right of the yellow line in the Event 1-4 graph. The size of the negative Z score can also be confirmed by examining the fourth number from the top in columns Val A or Val B.
13. The percentage of Z scores that must be met in order for the client to receive a reward is adjusted with the “c” Key. Press “c” to raise the percentage of Z scores. Hold down the Shift key while pressing the “c” key to lower the percentage of Z scores.

14. The percentage of Z scores that must be met to produce a reward for the client is confirmed by examining the first number in column Val B. It is also confirmed by examining the number to the right of the green line in the Wide Trends (events) graphic.
15. The actual percentage of Z scores that is being captured by the Z score window is confirmed by examining the first number in column Val A.
16. The percentage of time that reward criteria are being met is confirmed by the first number in column % Time. It is also confirmed by examining the number to the right of the red line in the Wide Trend (events) graphic.