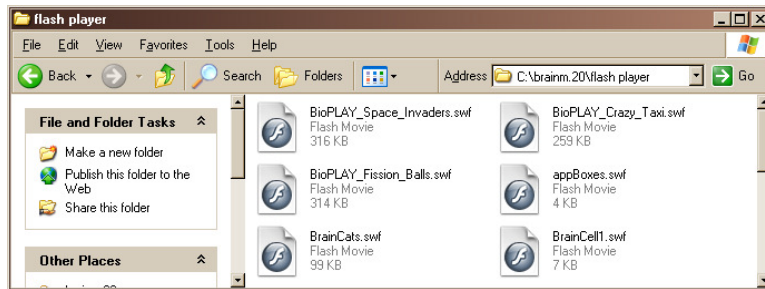




Adapting for BrainMaster

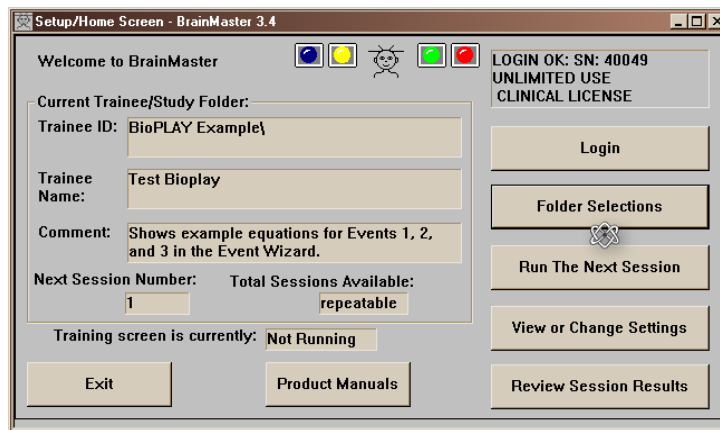
Storing Your New Games

You will find it most convenient to save your new games in the "flash player" folder within your BrainMaster folder.

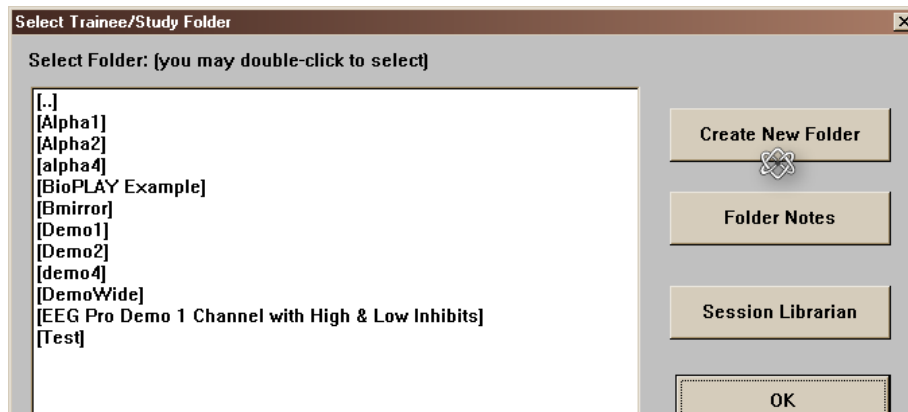


Folder Setup

Start BrainMaster and press "Folder Selections" in the Setup/Home Screen.

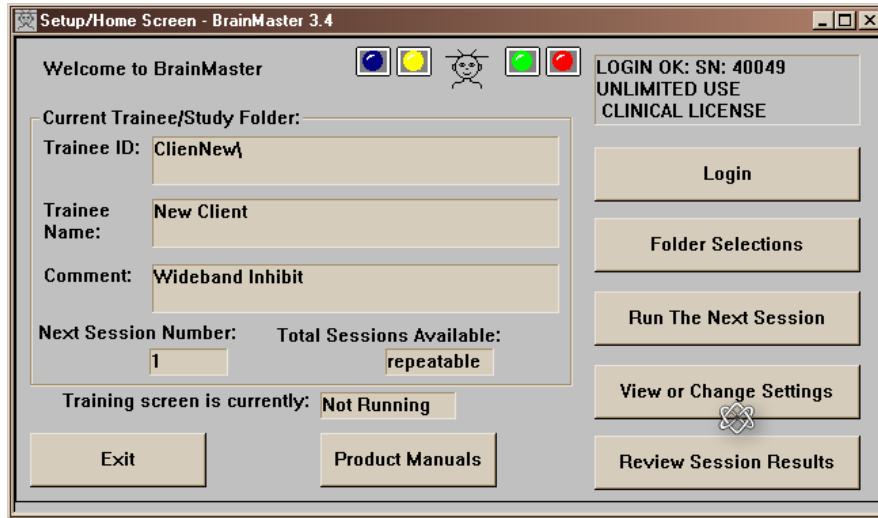


Select the desired folder or create a new folder and select a settings file for it.

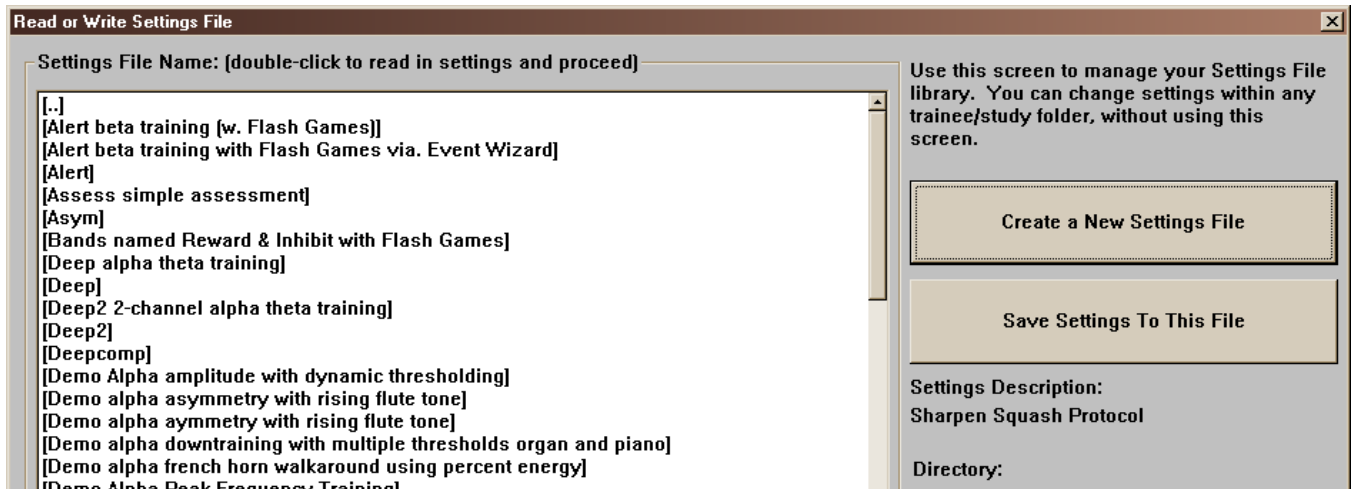




Press "View or Change Settings"



Then you may press "Read/Write Settings File" and "Create a New Settings File" for BioPLAY settings.



Press "Save Settings To This File" and the current protocol in your folder will be saved to the new BioPLAY file.

Settings for BioPLAY Games

In the Setup Options screen Press "Event Wizard"



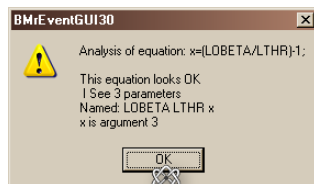
Read/Write Settings File	Current Trainee/Study: New Client
Data Channels	NCHANS: 1 SRATE: 256 FILTER: 6 ARTIFACT: 240 uV COM: 1 - SUMCHANS:OFF - SAVEEEG:OFF - P-P:ON SITES: C4 - A1 - A2
Frequency Bands	Theta:2.000-13.000 Lobeta:12.000-15.000 Hibeta:14.000-30.000
Training Protocol	GO: 1:Lobeta[4.4] STOP: 1:Theta[7.4] 1:Hibeta[22.6] AUTO:ON:60/20/10 AUTOUPDATE BEFORE EACH RUN
Display Options	Display: wave, therm, training stats, event trends.
Feedback Control	Sound: Reward Sound -
Session Control	0 SESSIONS -NO BASELINES-10 RUNS OF LENGTH: 2.0 MIN-NO PAUSE BETWEEN RUNS-SESSION TYPE: Simulation
<input type="button" value="CLOSE"/> <input type="button" value="PRINT SETTINGS"/> <input type="button" value="Event Wizard"/> <input type="button" value="USE THESE SETTINGS"/>	

In Event Number 1 in this example we see an equation. This must be set to an On/Off condition that will trigger the primary reward for the BioPLAY game. Here we have used: $x=GT1(TTHR/THETA)$; IS GREATER THAN: .5

Event Wizard Designer		This Event Is: <input checked="" type="radio"/> Enabled <input type="radio"/> Disabled		Visibility: <input checked="" type="radio"/> Visible <input type="radio"/> Hidden	
Event Number: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16					
Event Condition:			Sustained Reward Criterion		Refractory Period
IF: Use Equation: Delta Amplitude Constant: Damping Factor: 0 Check Equation: $x=GT1(TTHR/THETA)$ RULE: IS GREATER THAN: Use Entered Value: Theta Constant: Damping Factor: 0.5 Check Equation: $x=1$			Condition must be met for: 0 milliseconds		Time between rewards is: 0 milliseconds
Note: You must press "Check Equation" to check and save any changes made to equations					
Event Result:			MIDI Sound Properties:		
THEN: Do Nothing			Starting Note: 1 A (55.0) 1 to 88		
			Instrument: 0 Piano 1 128 choices		
			Playing Style: Sustained Percus. or Sust.		
<input type="checkbox"/> Obey Inhibits ("kops") <input type="checkbox"/> Control MMP Player			Modulation: Amplitude Ampl. or Pitch		
Event Trend Graph			Starting Loudness: Level 0 0 to 128		
Scale Factor: 1 Offset: 0			Loudness Change Rate: 0 0 to 20		
Event Summary:			Note Change Rate: 0 0 to 20		
Summary for Event 1: EVENT 1 IS CURRENTLY: ENABLED			Musical Scale (Mode): Chromatic 15 choices		
IF: EQN: $x=GT1(TTHR/THETA)$; IS GREATER THAN Value: 0.5			Musical Key: A C to B Flat		
THEN: Do Nothing			Play Note or Chord: 1 Note 1 to 8 Notes		
			<input type="button" value="Enable All Events"/> <input type="button" value="Disable All Events"/> <input type="button" value="Data Dictionary"/>		
			<input type="button" value="Clear All Events"/> <input type="button" value="Show All Events"/> <input type="button" value="Print All Events"/>		
			<input type="button" value="Help"/> <input type="button" value="Copy Event"/> <input type="button" value="Paste Event"/>		
			<input type="button" value="Cancel"/> <input type="button" value="Use Now"/> <input type="button" value="OK"/>		



When you enter an expression you must press "Check Equation" and OK to save the changes.

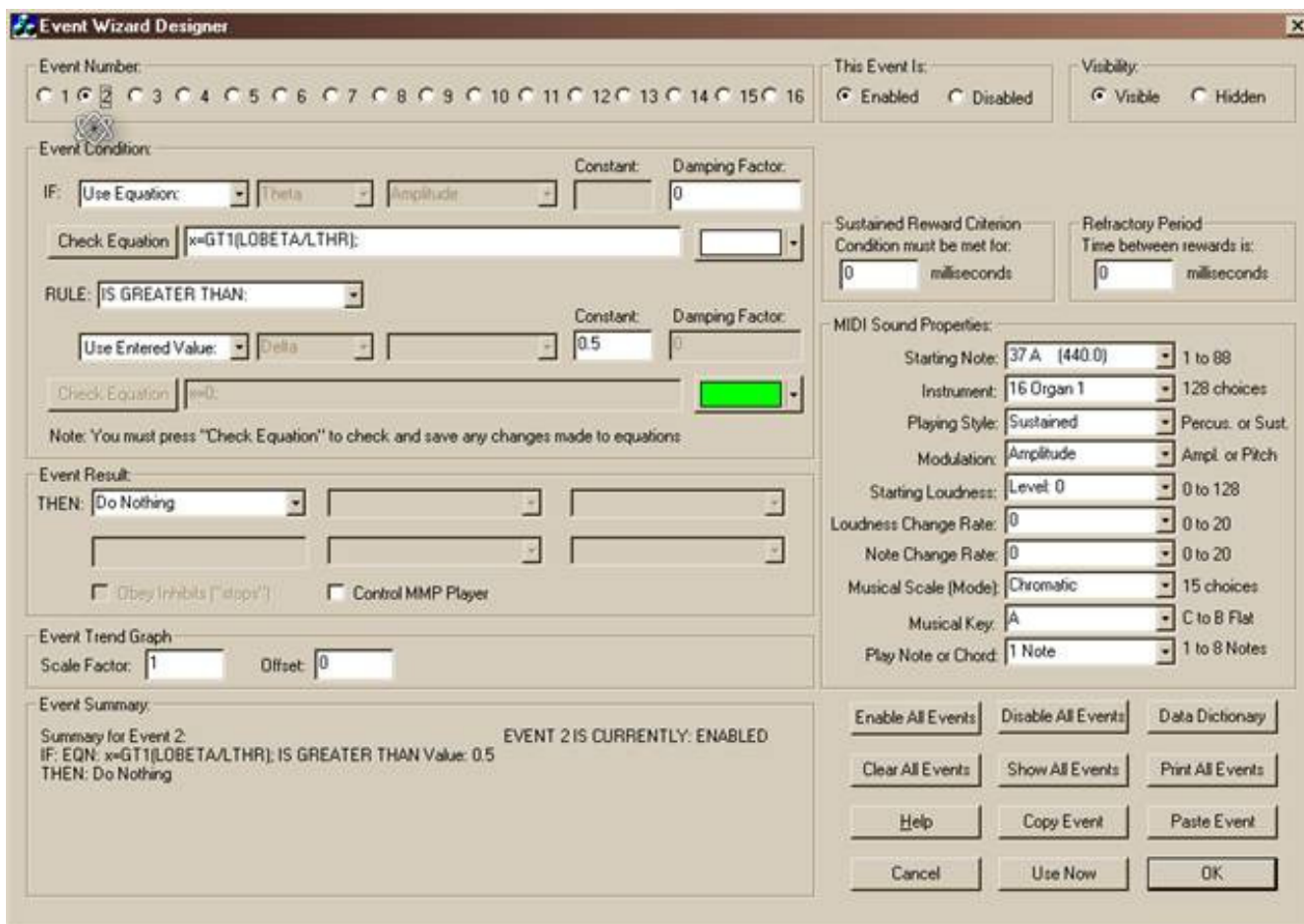


To see abbreviations for the various bands (T for Theta, etc.) press "Data Dictionary."

Be sure "Damping Factor" is 0 and "Enabled" is checked for this event.



Check Event Number 2 and enter an equation to give an On/Off trigger for Bio2 which gives extra powers to the game. Here we used: $x=GT1(LOBETA/LTHR)$; IS GREATER THAN: .5

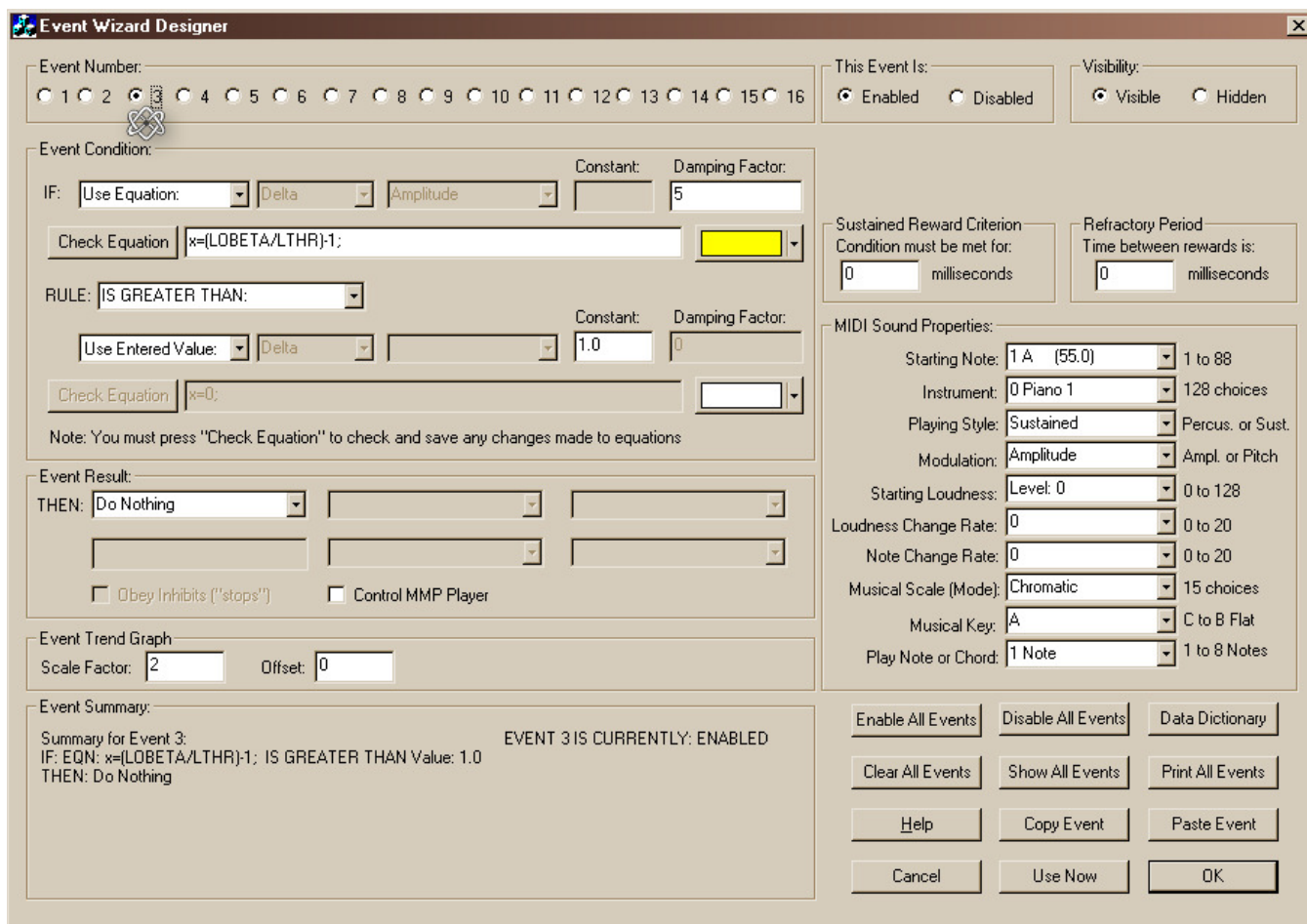




Press "Check Equation" and OK. Be sure "Damping Factor" is 0 and "Enabled" is checked.

Notice the ratio written for theta was Threshold/Theta- downtraining; the ratio for Lo Beta is written as LoBeta/Threshold for uptraining.

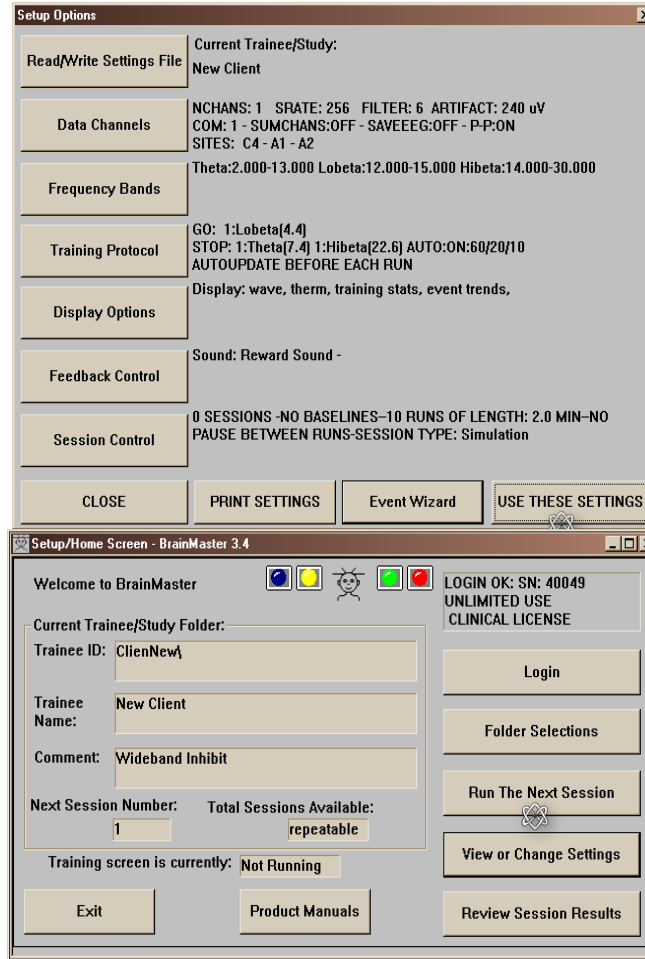
Check Event Number 3 and enter an equation that will give a variable output rather than On/Off. This will run Bio3 in your BioPLAY games and will increase or decrease speed or power according to the level of success in training. Here we used: $x=(LOBETA/LTHR)-1$; IS GREATER THAN: 1



Press "Check Equation" and OK. Be sure "Enabled" is checked. "Damping Factor" will affect the speed that the feedback changes. You may set this lower or higher as desired.

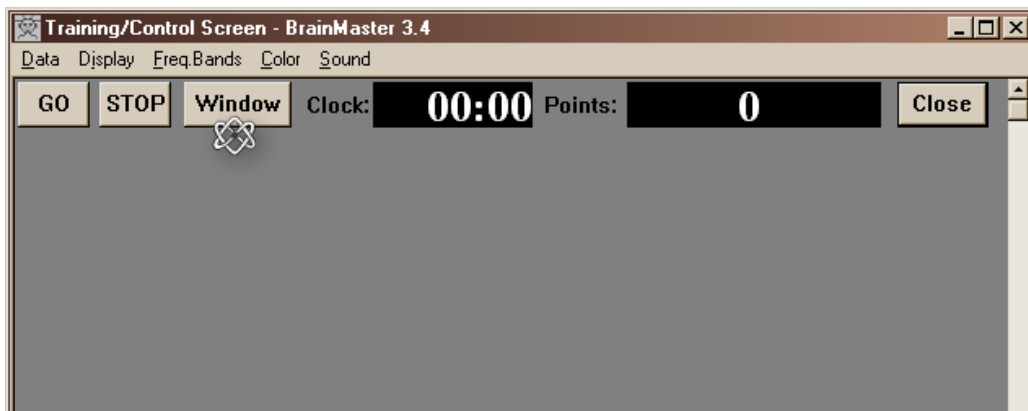
Press OK.

In the Setup Options screen press "USE THESE SETTINGS" and in the Setup/Home Screen press "Run The Next Session"

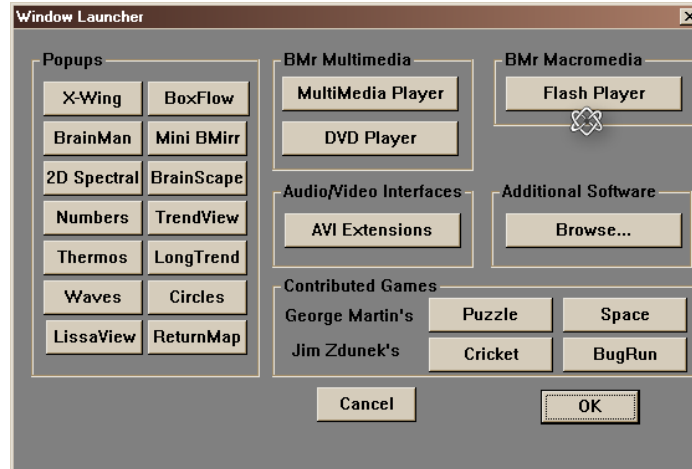


Loading the BioPLAY Game

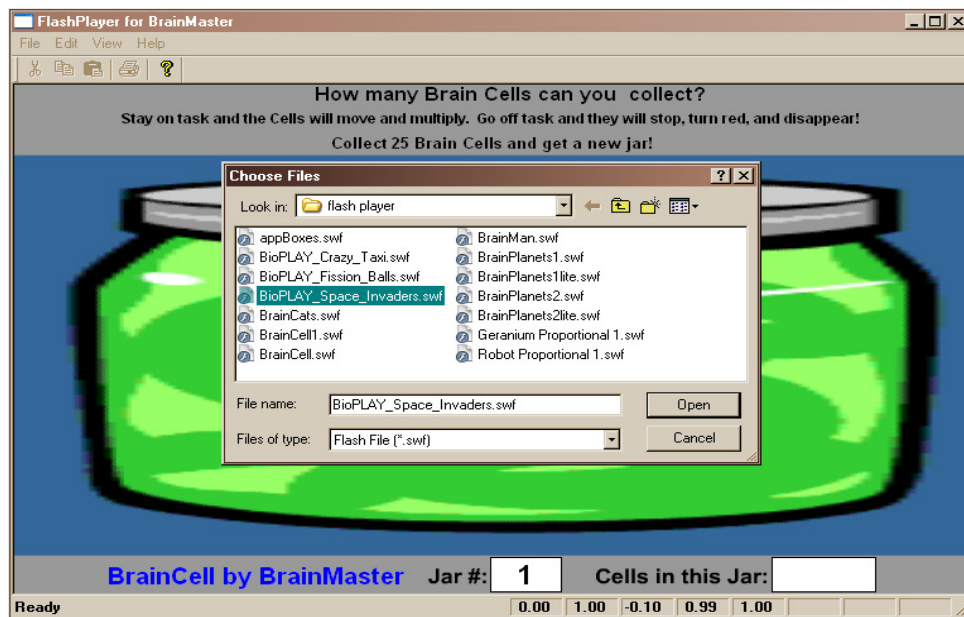
Press "Window"



Press "Flash Player"



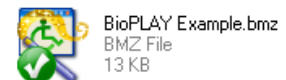
Choose "File" and "Open" and choose the game you wish to use.



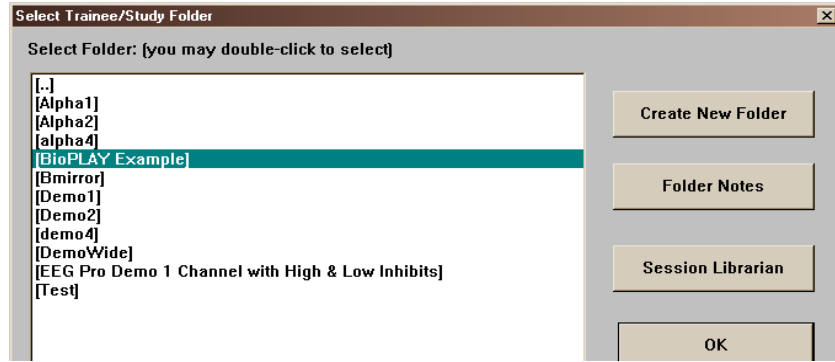
Testing Games with Example File

To try games with a ready-made protocol you can use the example file.

Save the BioPLAY Example.bmz file to your computer. Double-click the file icon and it will automatically unpack inside the BrainMaster "studies" folder.



Start BrainMaster. Choose "Folder Selections." You should now see "BioPLAY Example" an option.



Double-click to open it.

Press "Run The Next Session," then "Window" and "Flash Player." On the flash screen, choose "File" and "Open" and choose the game you wish to use.