

Power Point Manual

Get On The
BUS



BrainMaster
Universe
Simplified



“Alert”
level 3

Alert

Level 3

- How can I add %reward meters to the Alert Protocol
- This will incorporate use of the Event Wizard and Panel Wizard.

All protocols are for demo and research purposes only. Clinicians must determine protocol choices. All protocols must be used within scope of practice and scope of competence.

Alert

Level 3

- In the Level 1 and Level 2 Alert Protocol training was conducted through the “built in” Brainmaster digital filters.
- In Level 3 we change use of the “built in” Brainmaster digital filters to use of the Event Wizard.
- We also learn how to use the Panel Wizard and associated Panel Menus to add to or change the screen appearance.

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Alert

Level 3

Lets Begin

- Make Sure the Atlantis Amplifier is plugged in.

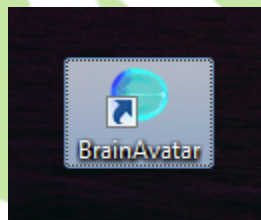


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Alert

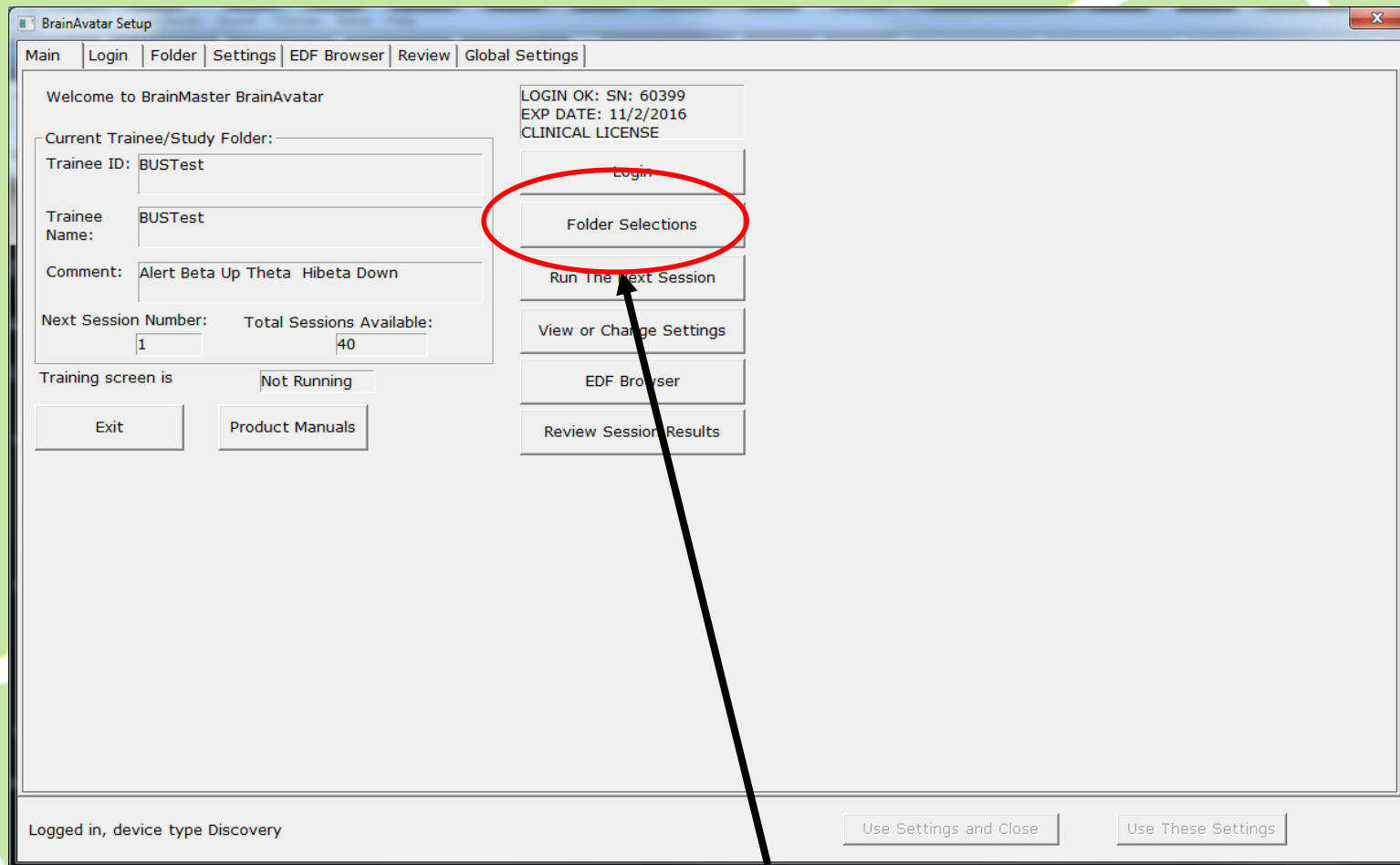
Level 3

- Open BrainAvatar by double-clicking the BrainAvatar Icon



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- The BrainAvatar Setup Window will Appear



- Click “Folder Selections”.

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- The Select Folder Screen will appear.

BrainAvatar Setup

Main | Login | Folder | Settings | EDF Browser | Review | Global Settings

Select Folder | Create Folder | Folder Notes | Session Librarian | Edit Folder Info.

Select Folder: (you may double-click to select)

Study Name	Birth Date	Sess	Max	Comment	Technician	Physician	Trainee Name	Created	Modified
BUSTest	2000-7-4	40		Alert Beta Up T...	EEG tech		BUSTest	2016-8-3	2016-8-3

Study Name (Trainee ID): BroJad4chPZOKP3P4O1O2

Trainee Name: BroJad4chPZOKP3P4O1O2

Comment: comment

Sessions Used: 4

Max Sessions: 40

Session Librarian

Administer Session Genie | Push Current Study to Server and Delete | Archive Current Study | Archive Current Study and Delete

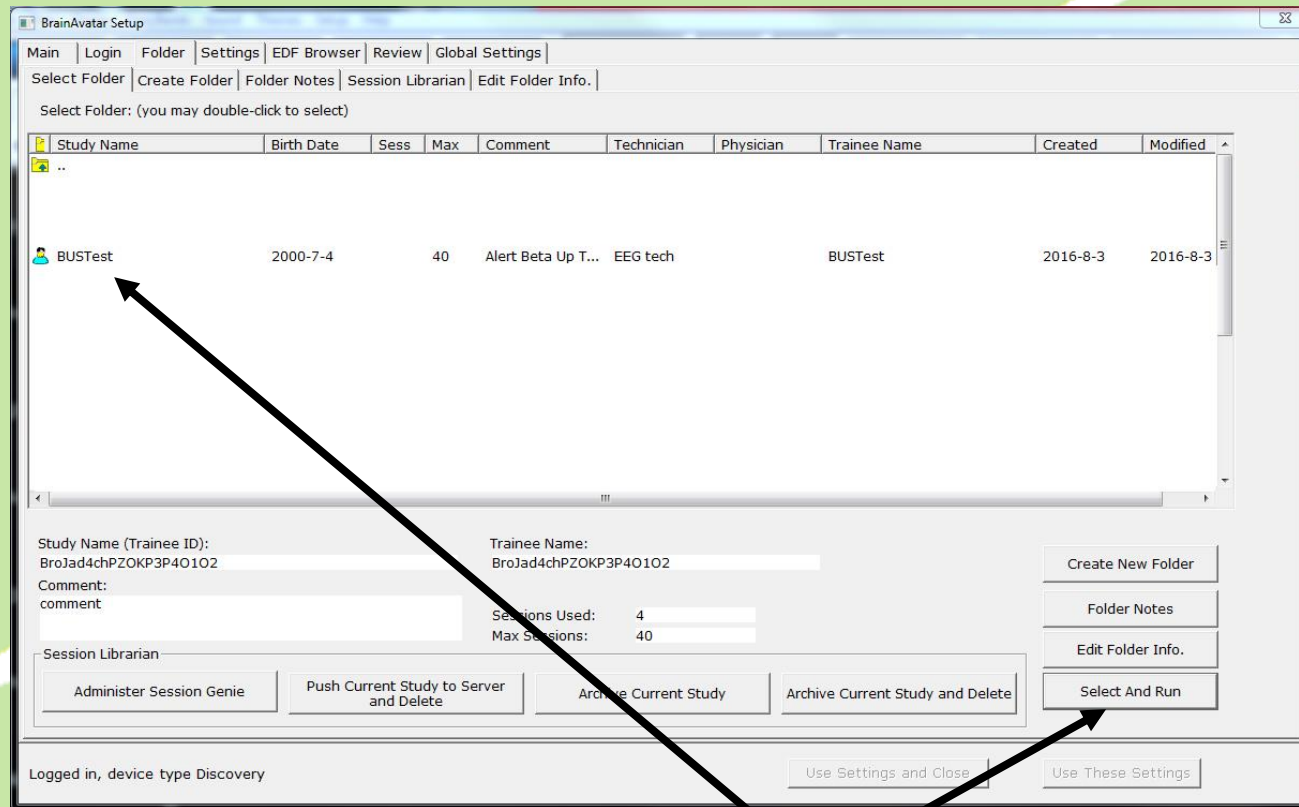
Create New Folder | Folder Notes | Edit Folder Info. | Select And Run

Logged in, device type Discovery

Use Settings and Close | Use These Settings

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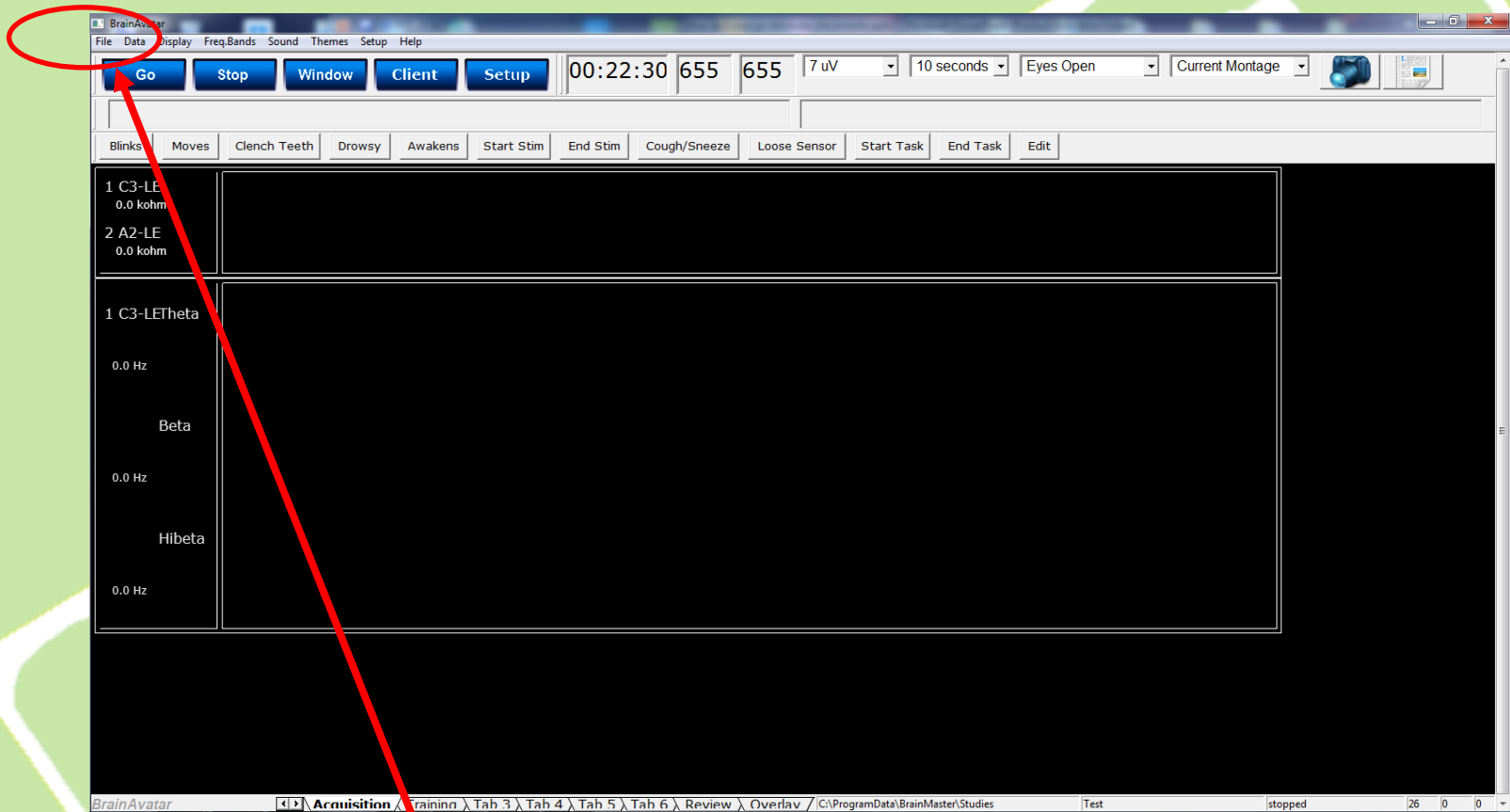
- The Select Folder Screen will appear.



- Click the Study (Folder) you would like to open (in this case BUSTest) and then click “Select and Run”.

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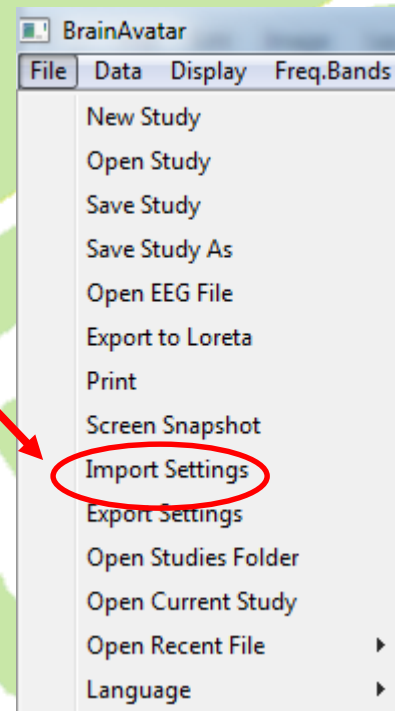
- The BrainAvatar Acquisition Screen is illuminated. Let's load the Setting File created in the last lesson.




- Click “File” from the Main Menu at the top.

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- Next click “Import Settings”.



- Scroll to find the Alert Level 3 File from the last exercise and double click it.

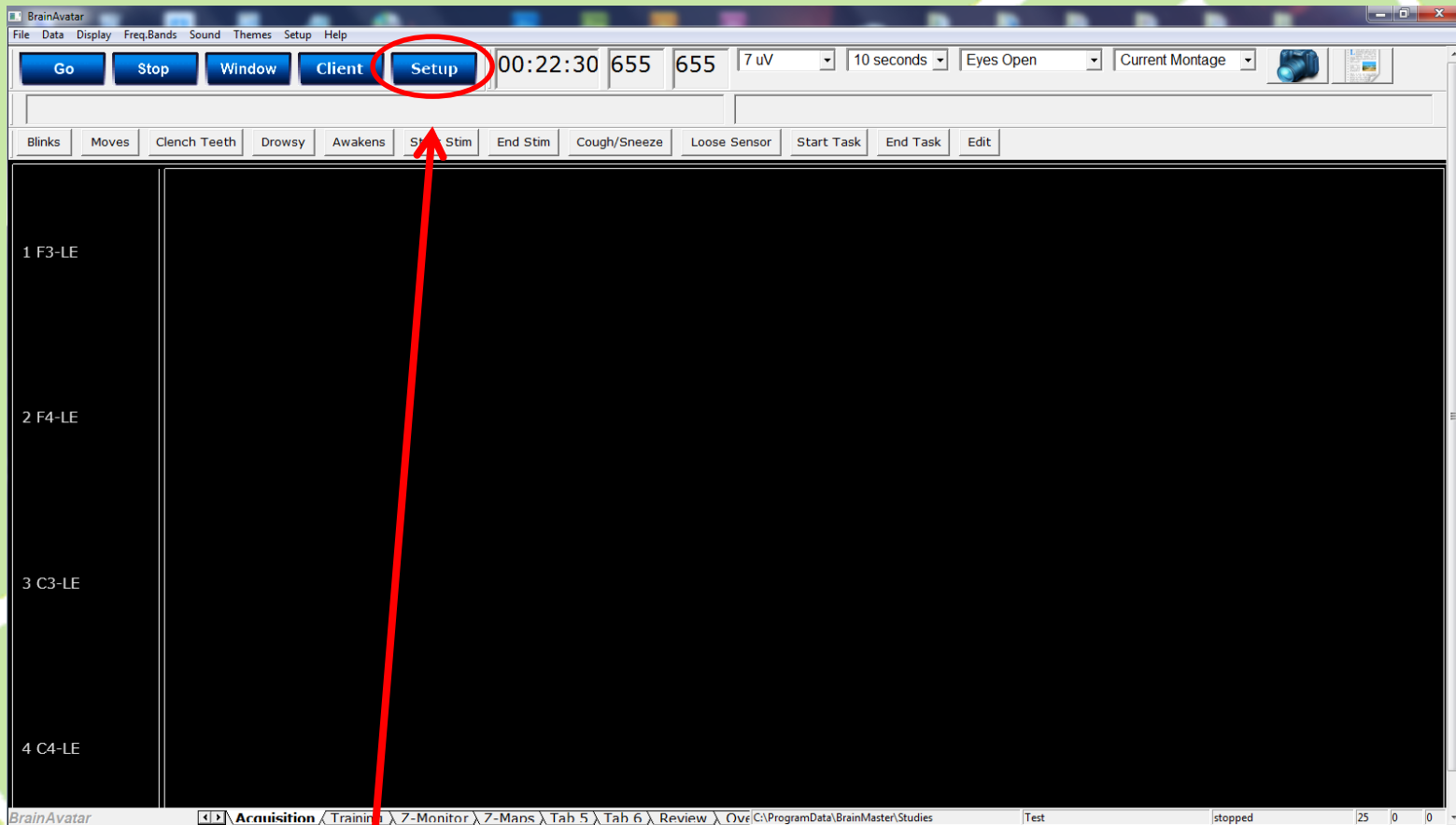
Name	Date modified	Type	Size
 0203001AlertEventWizard.bdb2	9/11/2016 3:04 PM	BDB2 File	144 KB

- The Alert Level 3 setting is imported into the Client's Study and is now ready for modification.

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ALERT

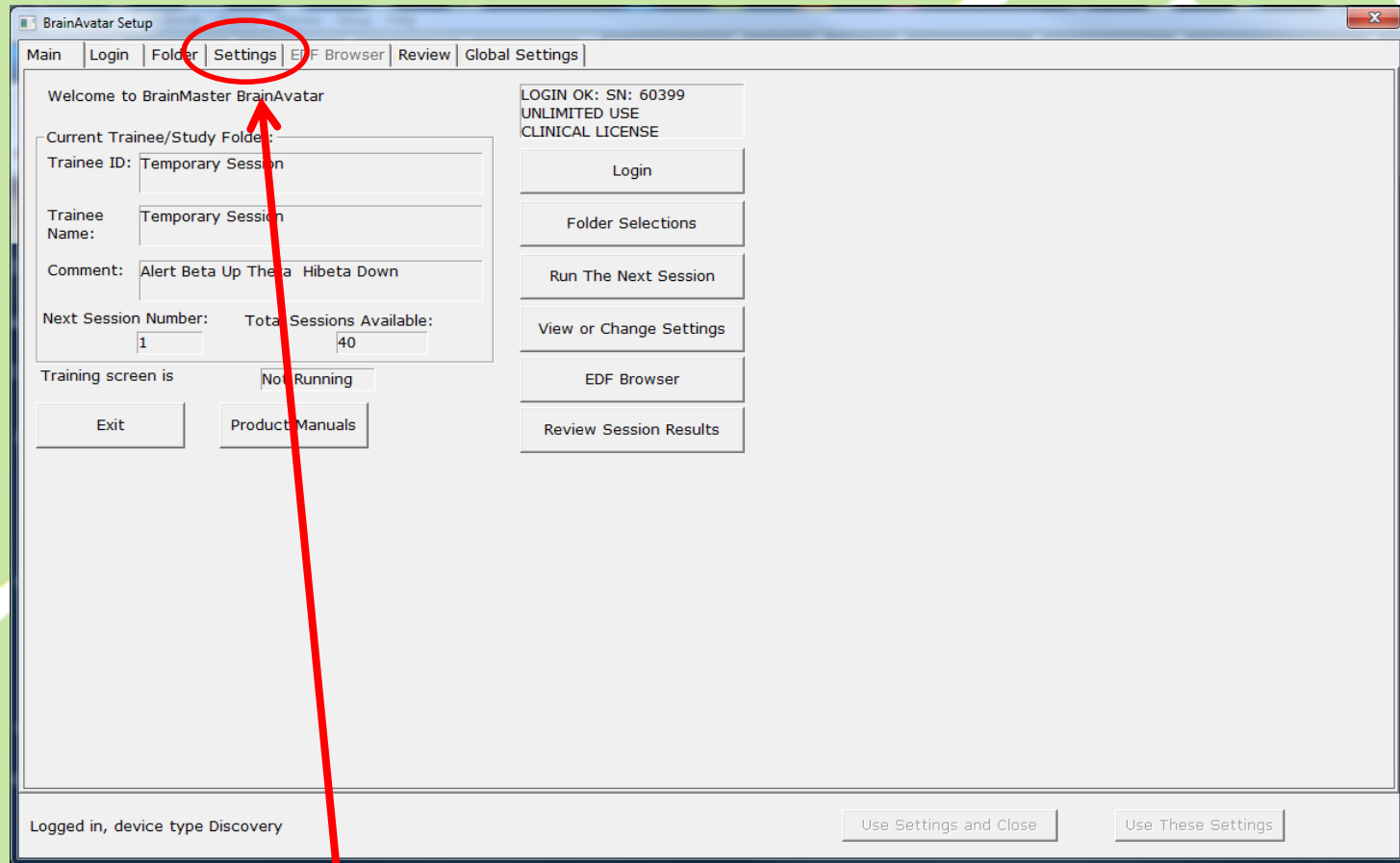
The Protocol is now ready for Modification



- Click “Setup”.

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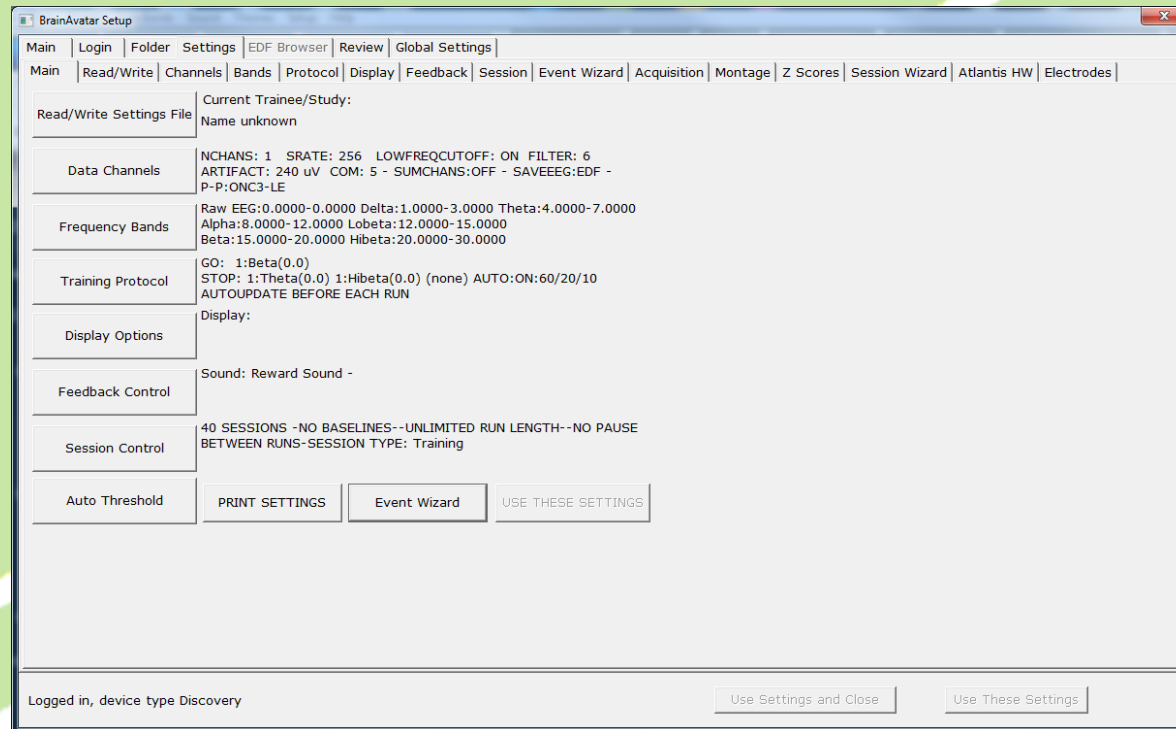
ALERT



- Click “Settings”.

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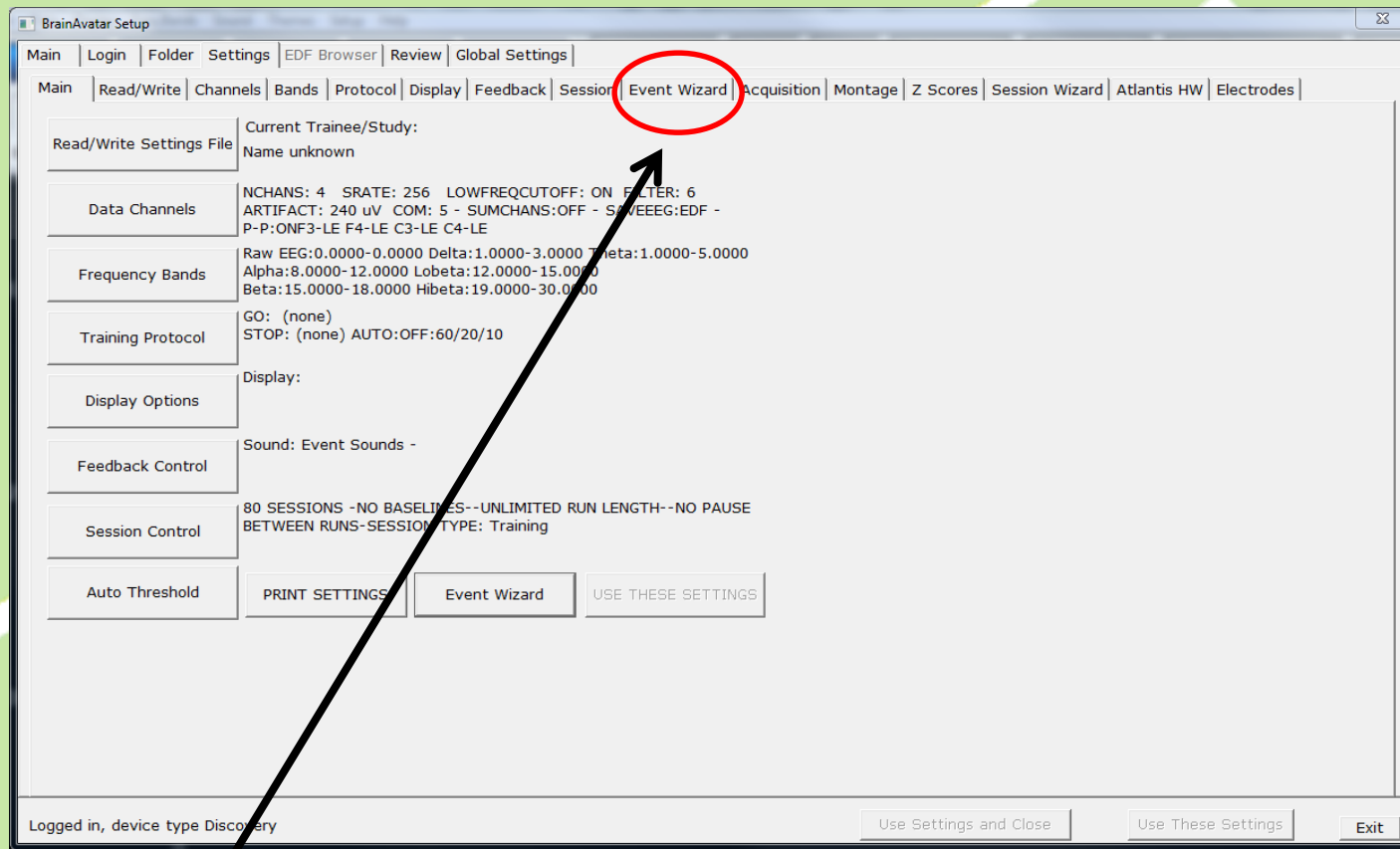
ALERT



YOU ARE NOW ABOUT TO ENTER THE “BRAIN CENTER” OF THE BRAINAVATAR PROGRAM. ANY HAPHAZARD MODIFICATIONS HERE WITHOUT KNOWLEDGE MAY CAUSE UNPREDICTABLE RESULTS. THIS INSTRUCTION MANUAL WILL GIVE YOU THE PROPER KNOWLEDGE TO ALTER THESE CONTROL SCREENS WITHOUT CONCERN. AGAIN, YOU CAN ALWAYS INSTALL THE ORIGINAL SETTING FILE IF NECESSARY.

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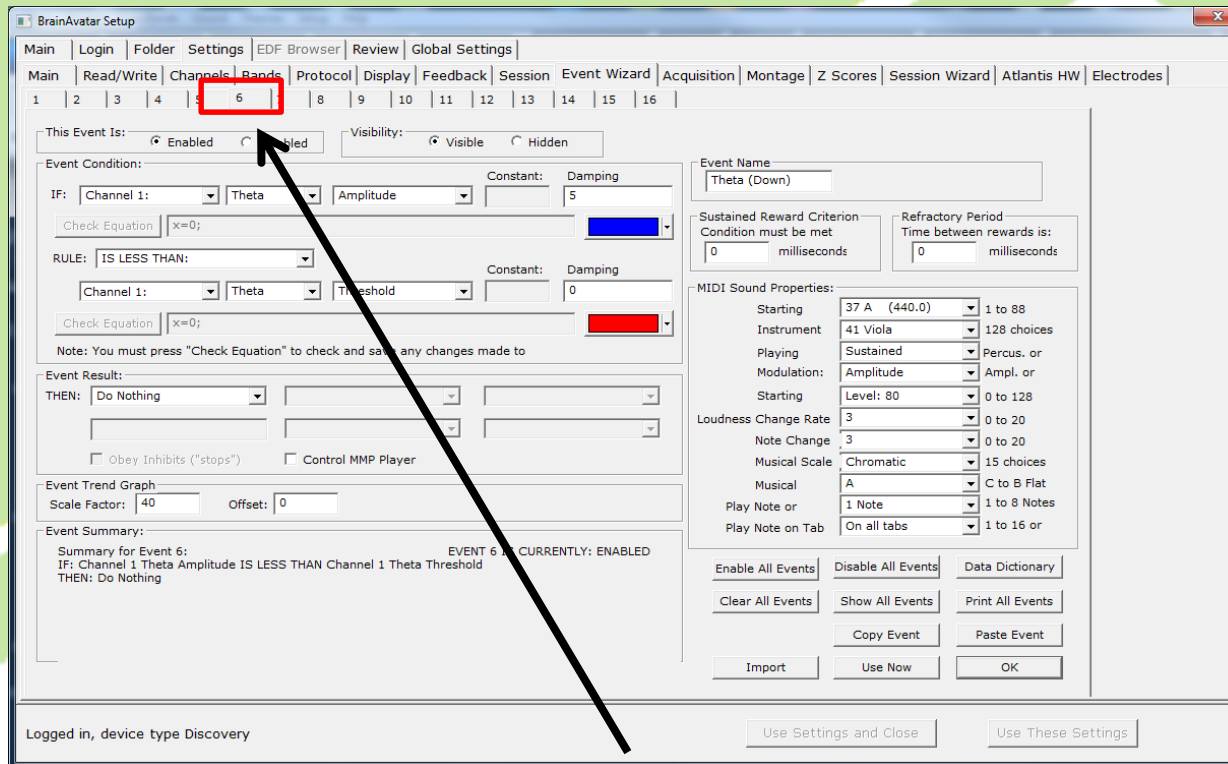
ALERT



Click "Event Wizard".

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ALERT



- So let's venture to tab 6 of the Event Wizard Screen.

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ALERT

BrainAvatar Setup

Main | Login | Folder | Settings | EDF Browser | Review | Global Settings

Main | Read/Write | Channels | Bands | Protocol | Display | Feedback | Session | Event Wizard | Acquisition | Montage | Z Scores | Session Wizard | Atlantis HW | Electrodes

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16

This Event Is: ☒ Enabled ☐ Disabled Visibility: ☒ Visible ☐ Hidden

Event Condition:

IF: Channel 1: Theta Amplitude Constant: 5 Damping: 5

Check Equation x=0;

RULE: IS LESS THAN

Channel 1: Theta Threshold Constant: 0 Damping: 0

Check Equation x=0;

Event Name: Theta (Down)

Sustained Reward Criterion: Condition must be met 0 milliseconds

Refractory Period: Time between rewards is: 0 milliseconds

MIDI Sound Properties:

Starting: 3 A (440.0) 1 to 88

Instrument: 4 Viola 128 choices

Playing: Sustained Percus. or

Modulation: Amplitude Ampl. or

Starting: Level: 80 0 to 128

Loudness Change Rate: 3 0 to 20

Note Change: 3 0 to 20

Musical Scale: Chromatic 15 choices

Musical: A C to 8 Flat

Play Note or: 1 Note 1 to 8 Notes

Play Note on Tab: On all tabs 1 to 16 or

Enable All Events | Disable All Events | Data Dictionary

Clear All Events | Show All Events | Print All Events

Copy Event | Paste Event

Import | Use Now | OK

Event Result:

THEN: Do Nothing

☐ Obey Inhibits ("stops") ☐ Control MMP Player

Event Trend Graph

Scale Factor: 40 Offset: 0

Event Summary:

Summary for Event 6:

IF: Channel 1 Theta Amplitude IS LESS THAN Channel 1 Theta Threshold

THEN: Do Nothing

EVENT 6 IS CURRENTLY: ENABLED

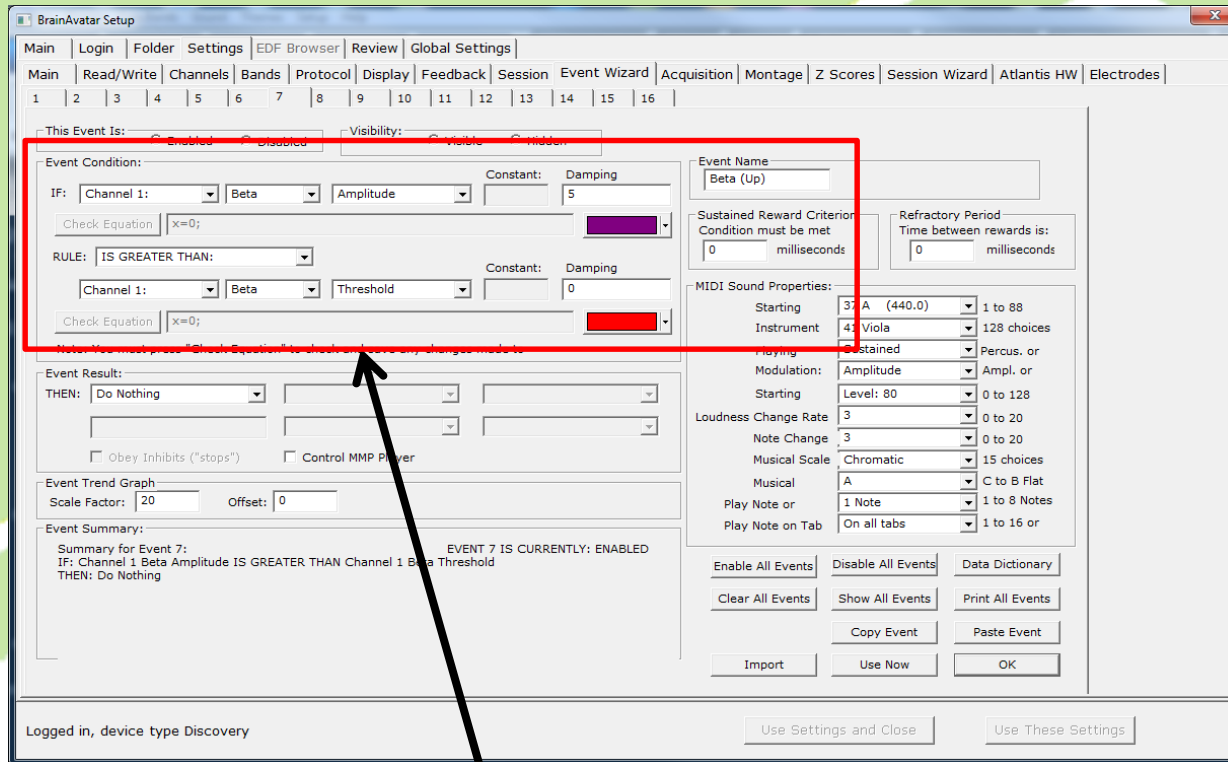
Logged in, device type Discovery

Use Settings and Close | Use These Settings

- In review, Event 6 provides for the Theta Inhibit by comparing the Theta Amplitude to the Theta Threshold and if the amplitude is less than the threshold as we would like, it does not inhibit the reward feedback.

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ALERT



- Event 7 provides for the Beta Reward by comparing the Beta Amplitude to the Beta Threshold and if the amplitude is greater than the threshold as we would like, it allows the reward feedback.

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ALERT

The screenshot displays the 'BrainAvatar Setup' window, specifically the 'Event Wizard' tab. A red rectangular box highlights the 'Event Condition' section for 'Event 8'. Inside this box, the 'IF' condition is set to 'Channel 1: Hibeta Amplitude' with a 'Constant' of 5 and 'Damping' of 5. The 'RULE' is set to 'IS LESS THAN:'. Below this, the 'Channel 1' is again 'Hibeta' and the 'Threshold' is set to 0. A note below the rule states: 'Note: You must press "Check Equation" to check and save any changes made to'. A black arrow points from this note to the 'Check Equation' button. To the right of the red box, the 'Event Name' is 'HiBeta (Down)'. Further right, the 'Sustained Reward Criterion' is set to 0 milliseconds and the 'Refractory Period' is also 0 milliseconds. The 'MIDI Sound Properties' section on the right includes settings for Starting (3), Instrument (4), Playing (Sustained), Modulation (Amplitude), Starting Level (80), Loudness Change Rate (3), Note Change (3), Musical Scale (Chromatic), Musical (A), Play Note or (1 Note), and Play Note on Tab (On all tabs). At the bottom of the window, there are buttons for 'Enable All Events', 'Disable All Events', 'Data Dictionary', 'Clear All Events', 'Show All Events', 'Print All Events', 'Copy Event', 'Paste Event', 'Import', 'Use Now', 'OK', 'Use Settings and Close', and 'Use These Settings'.

- Event 8 provides for the Hibeta Inhibit by comparing the Hibeta Amplitude to the Hibeta Threshold and if the amplitude is less than the threshold as we would like, it does not inhibit the reward feedback.

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Alert

Level 3

- It may be important for us to know the % reward generated by our settings so that we may properly set our thresholds.
- For example, according to many studies the Theta Inhibit should be set near 80% below threshold, the Beta Reward set near 40%-60% above threshold and the Hibeta Inhibit set near 90% below threshold.
- So far, this information is not presented anywhere on the screen.

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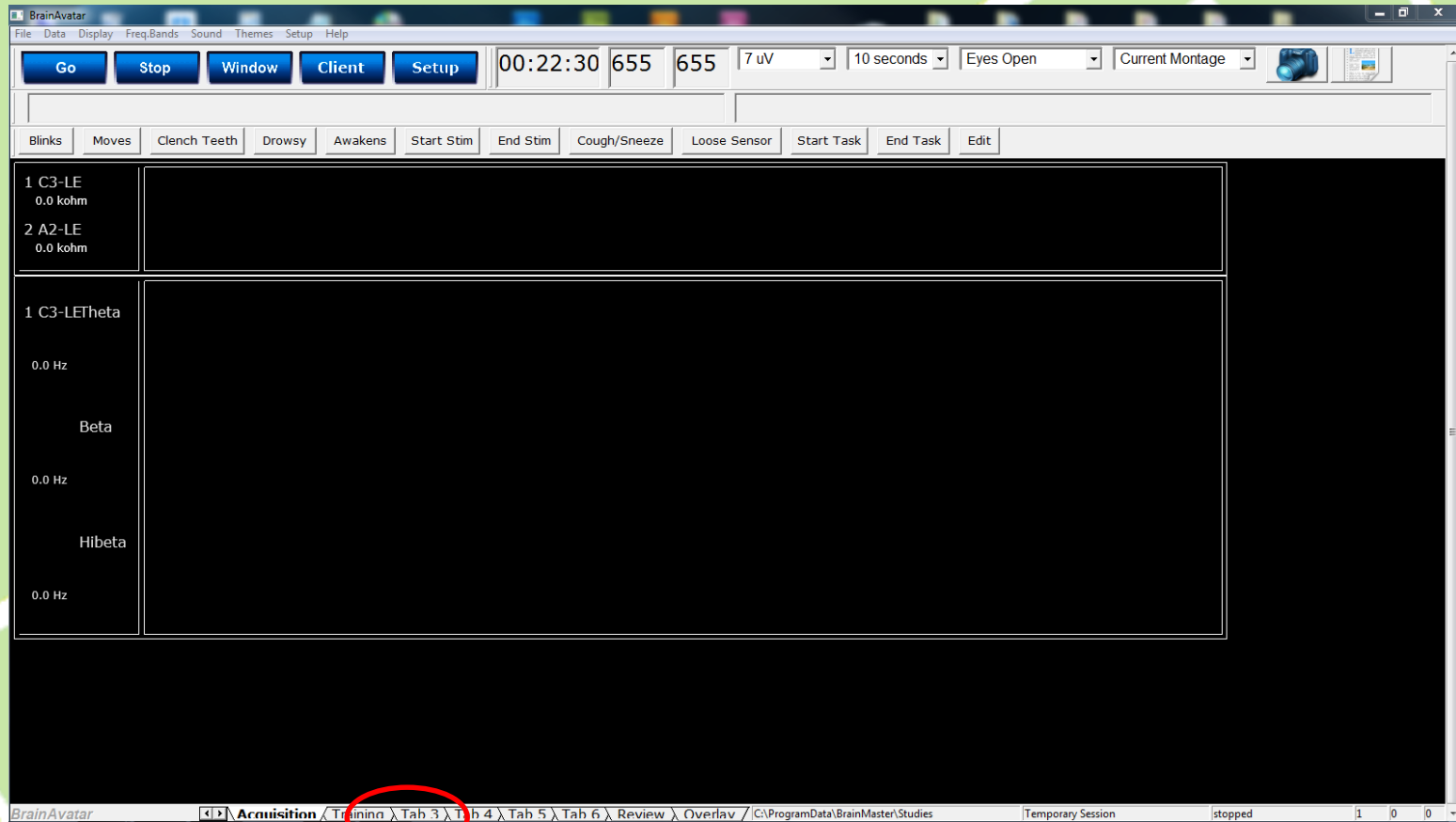
Alert

Level 3

- There are two ways the % reward may be presented on the screen.
 - In its own tab utilizing Text Stats, or
 - On the Training Screen by creating and placing % reward meters by utilizing the Panel Wizard.
- Utilizing text stats we do not need to create formulas for % reward because text stats have them already built in.
- Lets start with that.

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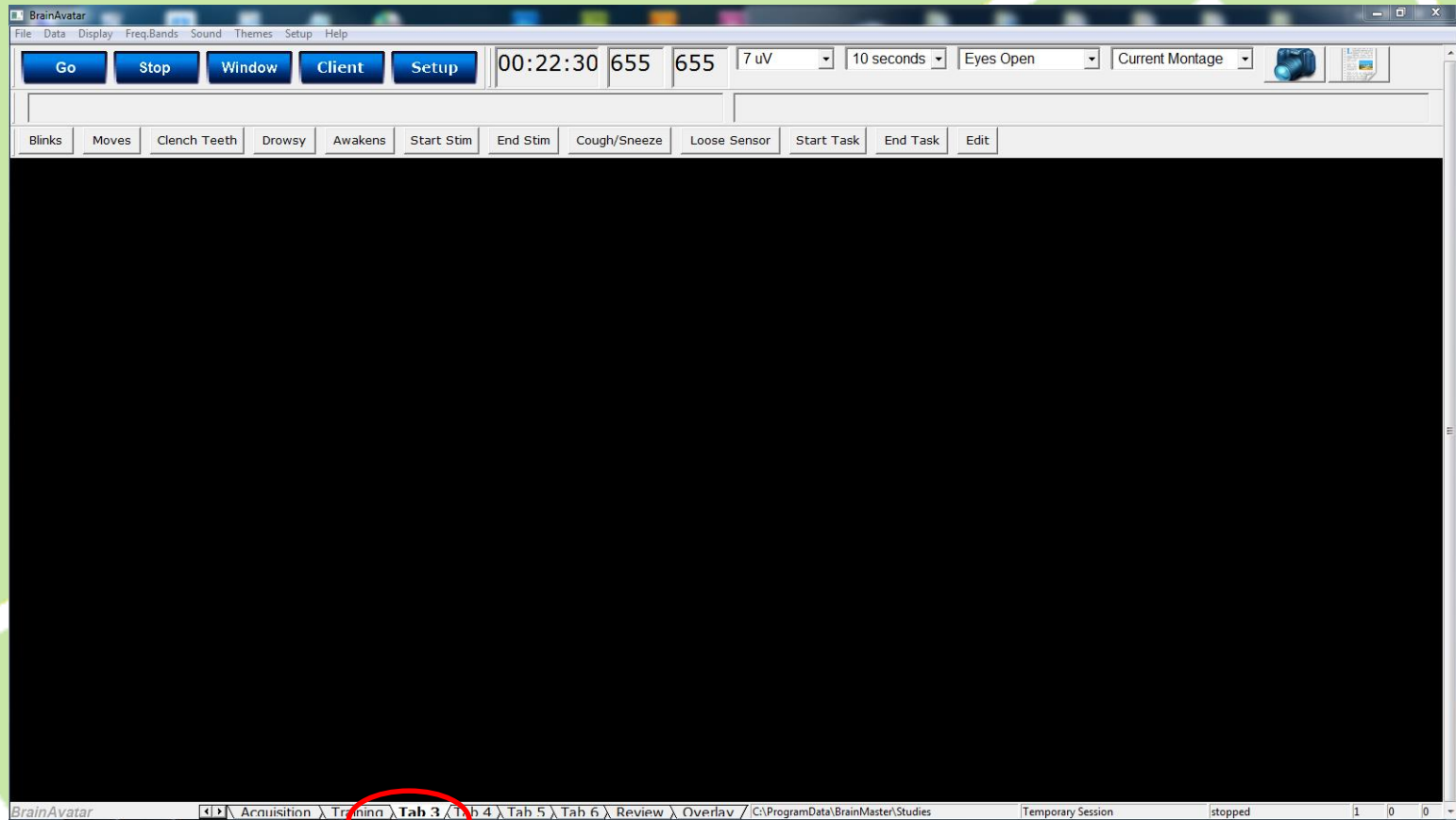
ALERT



- Let's go to an unused tab, "Tab 3".

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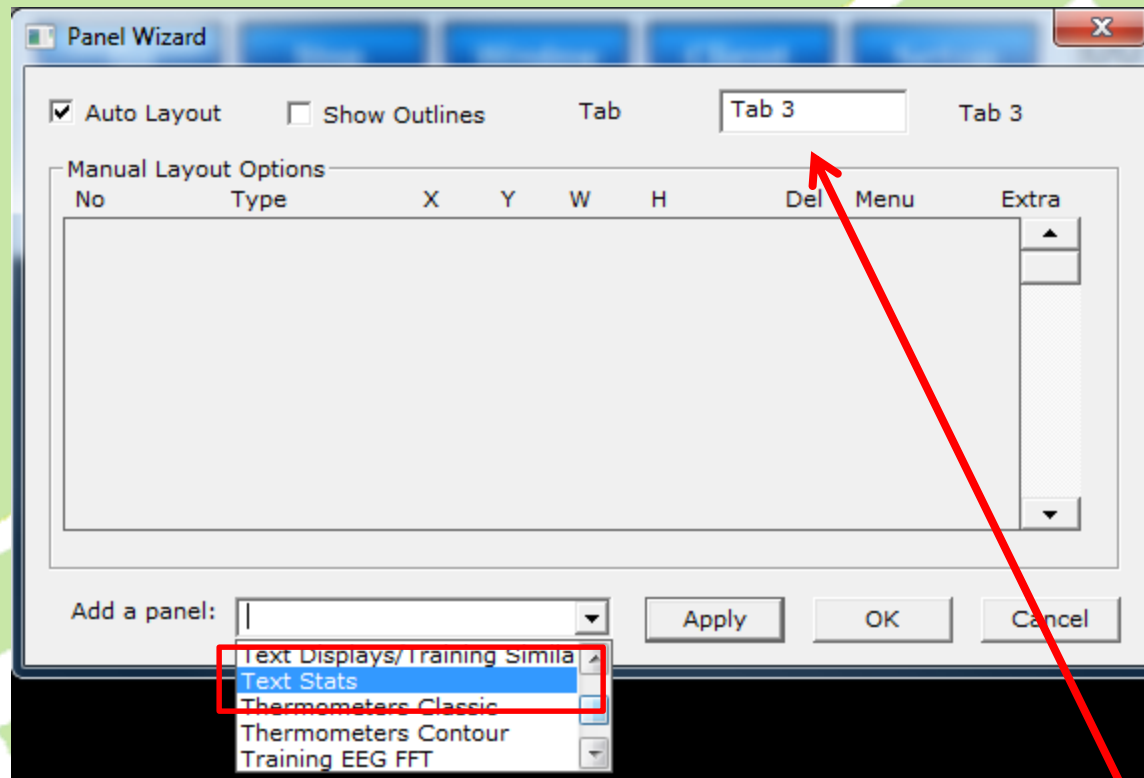
ALERT



- Right-Click the “Tab 3” to open the Panel Wizard.

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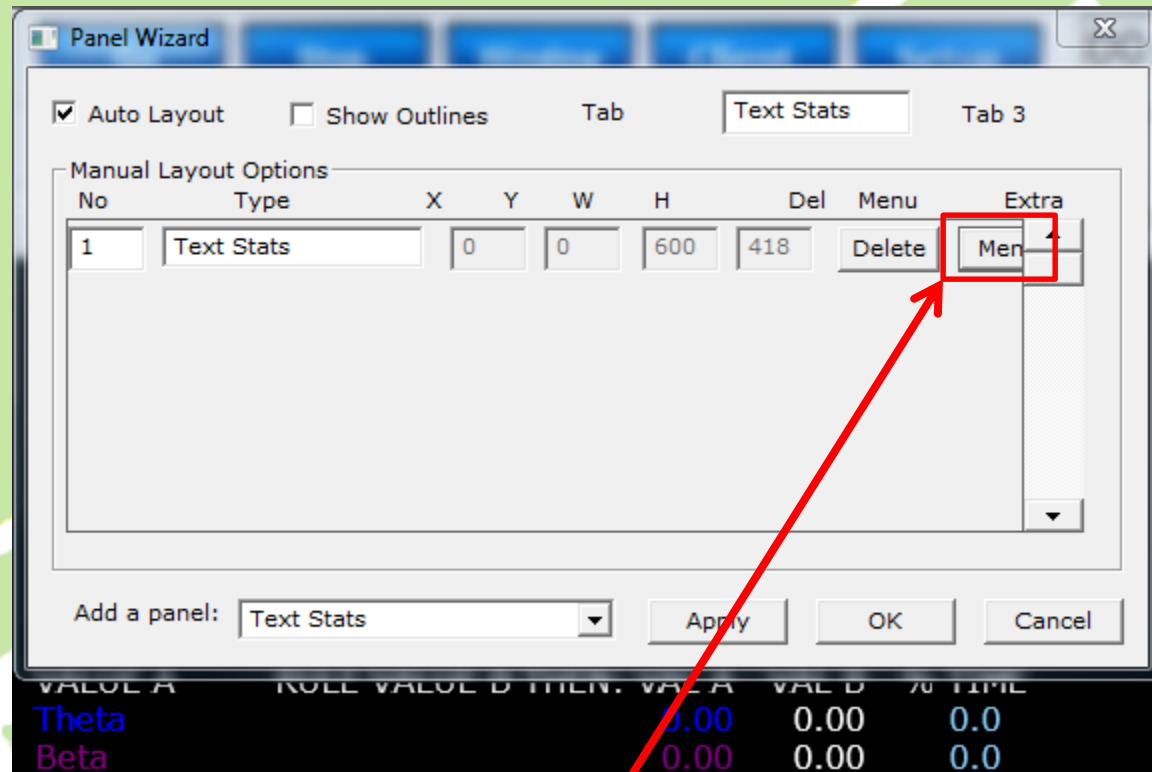
ALERT



- Click “Text Stats” from the dropdown box and enter “Text Stats” in the Tab 3 Window

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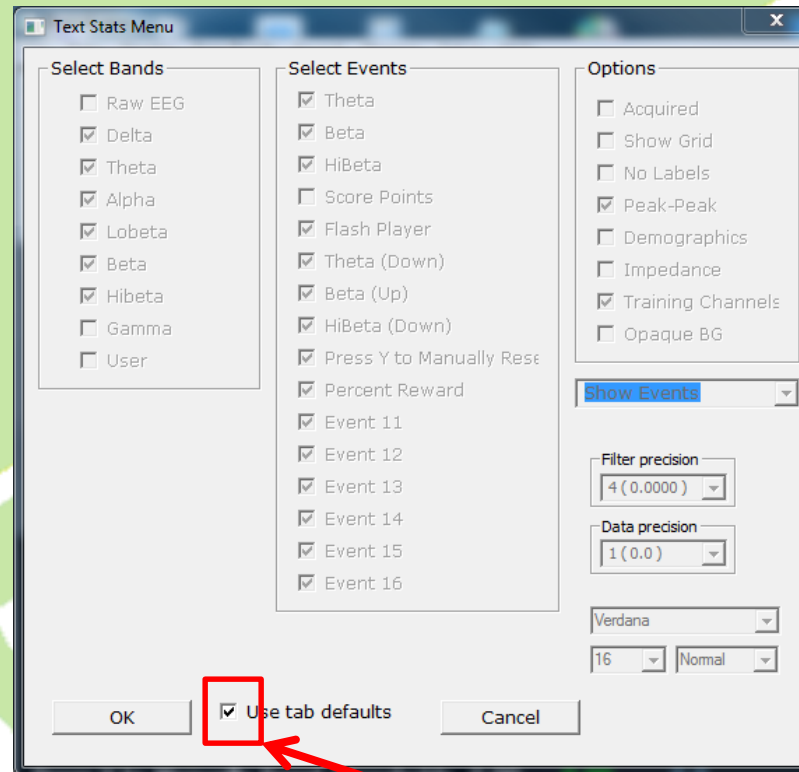
ALERT



- Notice that “Text Stats” have dropped in behind the Panel Wizard. Next, click the “Menu Button” to open the “Text Stats Menu”.

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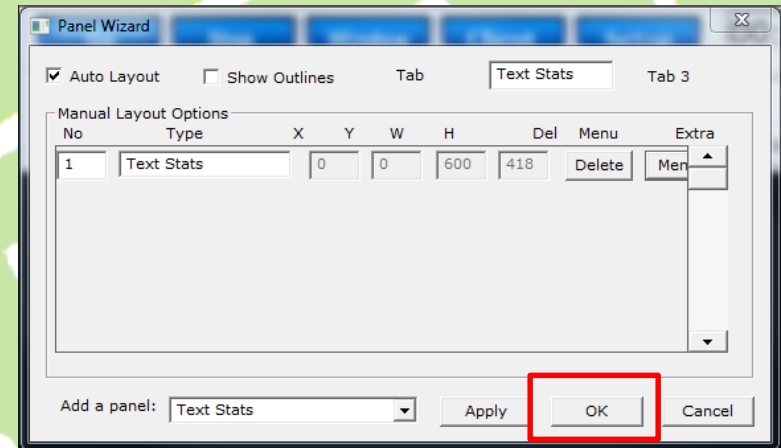
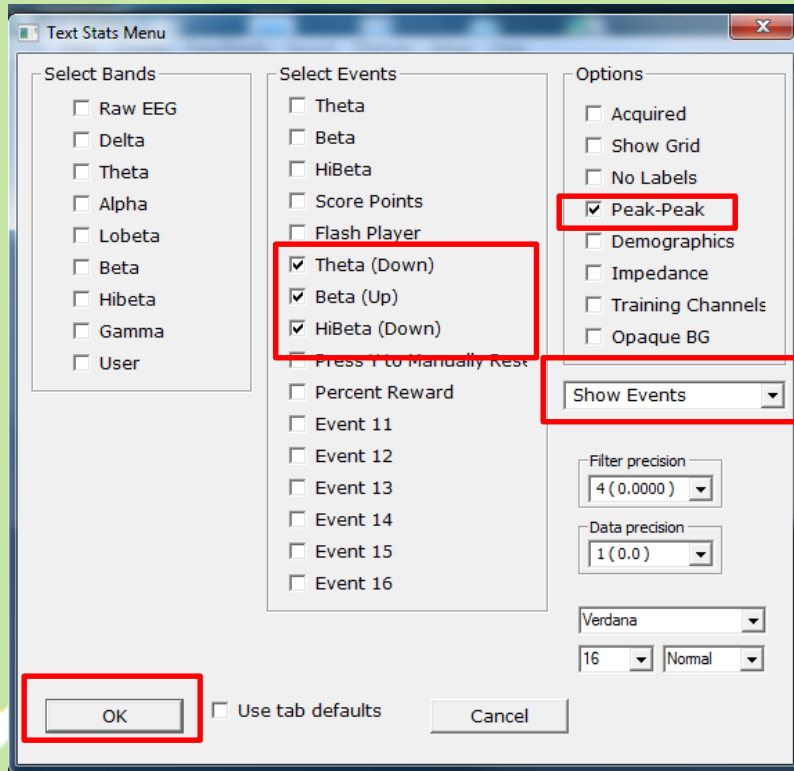
ALERT



- The “Text Stats Menu” opens with Tab Defaults. We would like specific items and so must click off the “Use Tab Defaults” checkbox to enable options.

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- Make sure all Events and Options are clicked off except the ones shown and be sure “Show Events” is listed in the box shown. When finished click “OK” in both the Text Stats Menu and the Panel Wizard.

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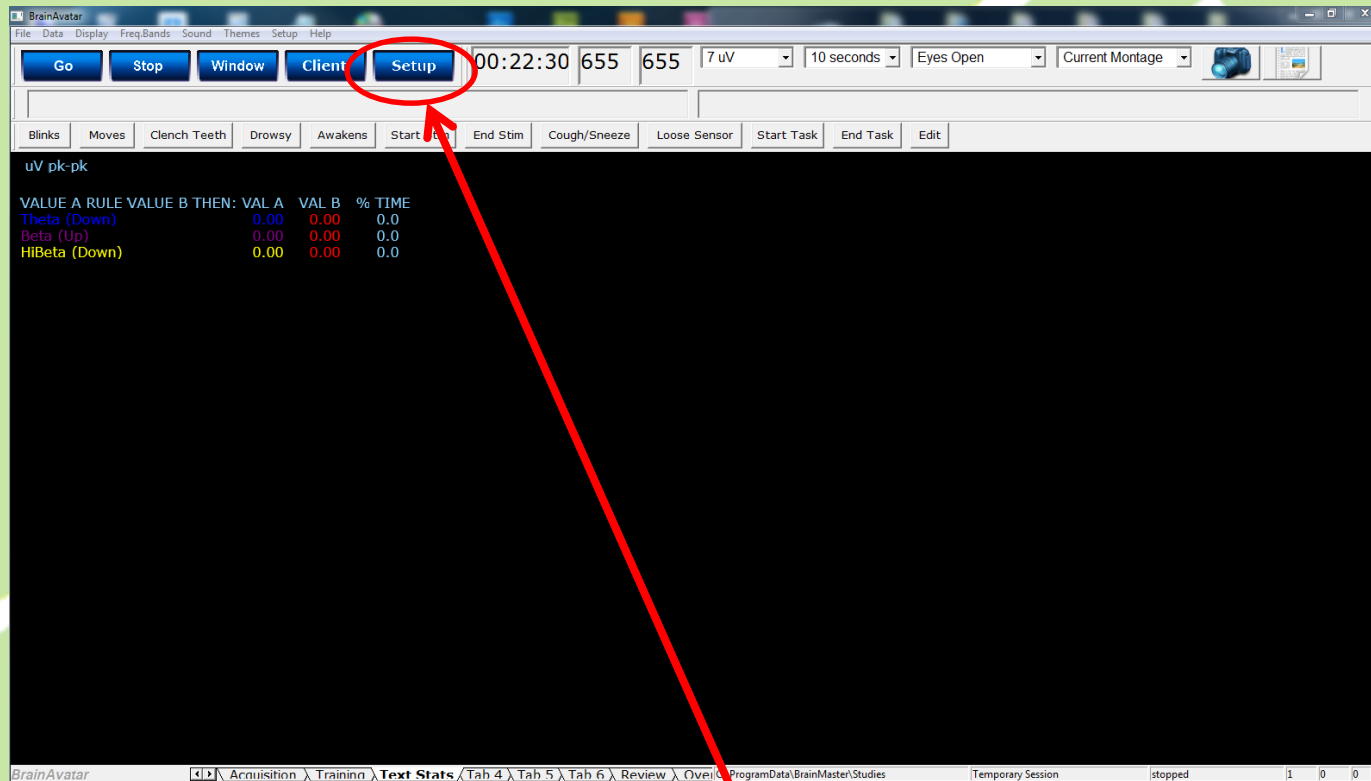
ALERT



- As you may see, “Text Stats” are now produced under their own tab. Value A for each of the frequency bands would be the amplitude, Value B would be the threshold and % Time would be the % Time over threshold for Beta and under threshold for Theta and Hibeta.

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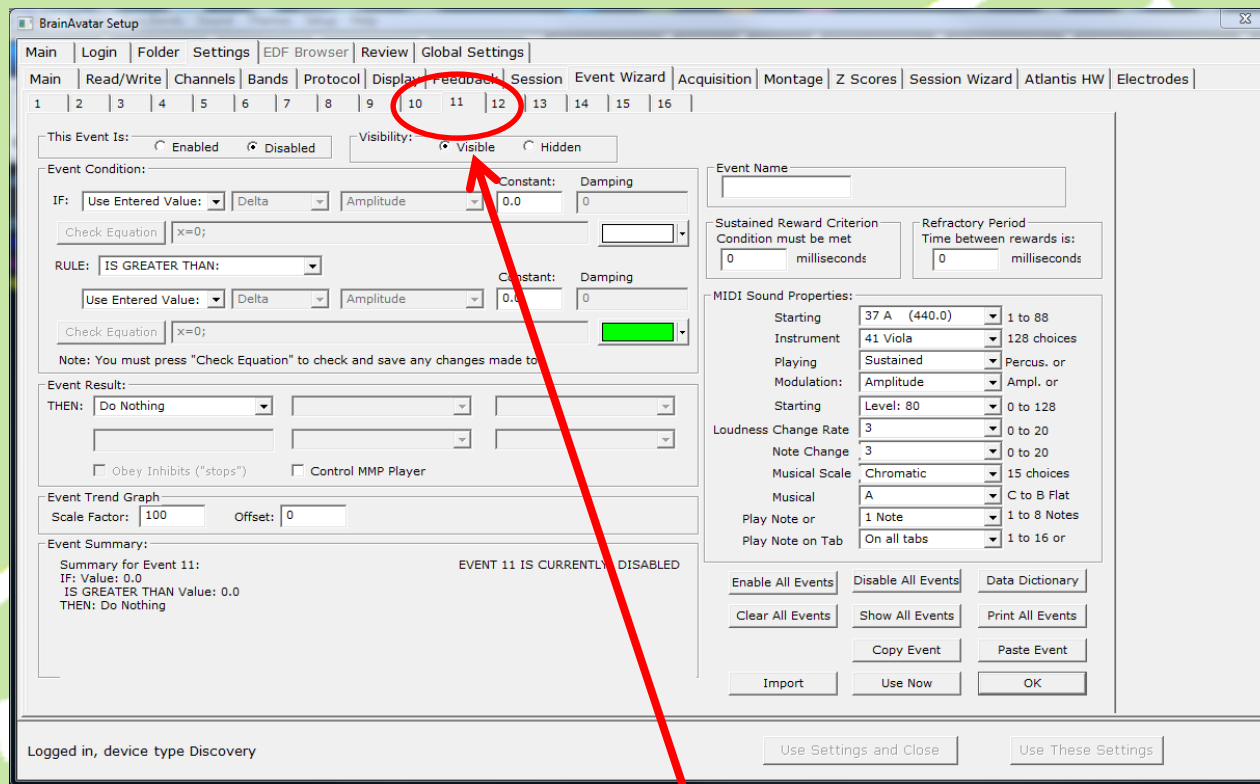
ALERT



- If we would like to place % Reward meters on our Training Tab we must first create formulas in our Event Wizard. Open the Event Wizard by selecting “Setup” and then navigating to the Event Wizard or simply tapping Ctrl-E.

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ALERT



- Let's venture over to tab 11 and utilize event 12 and 13 as well. These are unused events and are ready for modification and use for our % reward.

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ALERT

The screenshot shows the 'BrainAvatar Setup' window. A red arrow points to the 'Event Condition' section for Event 11. In this section, the 'IF' field contains the equation 'x=E6P;'. The 'Event Name' field contains 'Theta Percent Under'. The 'Event Result' section shows 'THEN: Do Nothing'. The 'Event Summary' section indicates 'EVENT 11 IS CURRENTLY ENABLED'. The 'MIDI Sound Properties' section is also visible on the right side of the window.

- Let's enter the equation $x=E6P;$ into the A statement of Event 11. This formula will produce the % under threshold from the equation in Event 6. Also, you may enter the "Event Name" – "Theta Percent Under Threshold". Do not enter Theta % Under Threshold because % is a reserved symbol and these are not allowed as titles.

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ALERT

BrainAvatar Setup

Main | Login | Folder | Settings | EDF Browser | Review | Global Settings

Main | Read/Write | Channels | Bands | Protocol | Display | Feedback | Session | Event Wizard | Acquisition | Montage | Z Scores | Session Wizard | Atlantis HW | Electrodes

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16

This Event Is: ☒ Enabled ☐ Disabled Visibility: ☒ Visible ☐ Hidden

Event Condition:

IF: Use Equation: Delta Amplitude Constant: Damping:

Check Equation x=E7P;

RULE: IS GREATER THAN:

Use Entered Value: Delta Amplitude Constant: Damping:

Check Equation x=0;

Note: You must press "Check Equation" to check and save any changes made to

Event Result:

THEN: Do Nothing

☐ Obey Inhibits ("stops") ☐ Control MMP Player

Event Trend Graph

Scale Factor: 100 Offset: 0

Event Summary:

Summary for Event 12:
IF: EQN: x=0; IS GREATER THAN Value: 0.0
THEN: Do Nothing

EVENT 12 IS CURRENTLY: DISABLED

Event Name: Beta % Over Thresh

Sustained Reward Criterion: Condition must be met 0 milliseconds

Refractory Period: Time between rewards is: 0 milliseconds

MIDI Sound Properties:

Starting: 37 A (440.0) 1 to 88

Instrument: 41 Viola 128 choices

Playing: Sustained Percus. or

Modulation: Amplitude Ampl. or

Starting: Level: 80 0 to 128

Loudness Change Rate: 3 0 to 20

Note Change: 3 0 to 20

Musical Scale: Chromatic 15 choices

Musical: A C to B Flat

Play Note or: 1 Note 1 to 8 Notes

Play Note on Tab: On all tabs 1 to 16 or

Enable All Events Disable All Events Data Dictionary

Clear All Events Show All Events Print All Events

Copy Event Paste Event

Import Use Now OK

Logged in, device type Discovery

Use Settings and Close Use These Settings

- Let's enter the equation $x=E7P;$ into the A statement of Event 12. This formula will produce the % over threshold from the equation in Event 7. Also, you may enter the "Event Name" – "Beta Percent Over Threshold". Do not enter Beta % Over Threshold because reserved symbols are not permissible as titles.

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ALERT

The screenshot shows the 'BrainAvatar Setup' window, specifically the 'Event Wizard' tab. The window has a menu bar at the top with options: Main, Login, Folder, Settings, EDF Browser, Review, Global Settings. Below the menu bar is a toolbar with icons for Main, Read/Write, Channels, Bands, Protocol, Display, Feedback, Session, Event Wizard (selected), Acquisition, Montage, Z Scores, Session Wizard, Atlantis HW, and Electrodes. A row of numbered tabs (1-16) is visible, with tab 13 selected. The main area is divided into several sections:

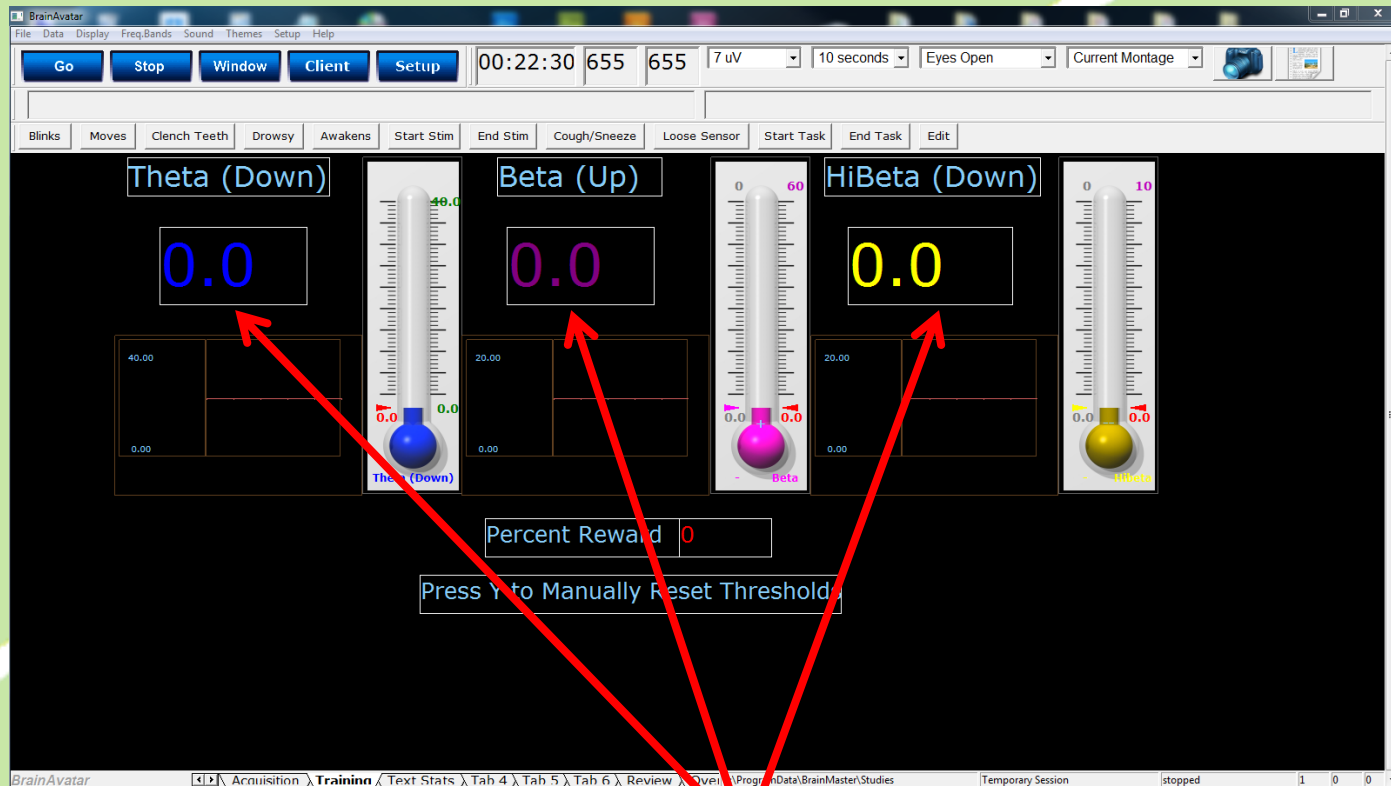
- This Event Is:** Radio buttons for 'Enabled' (selected) and 'Disabled'. **Visibility:** Radio buttons for 'Visible' (selected) and 'Hidden'.
- Event Condition:**
 - IF:** 'Use Equation:' dropdown, 'Delta' dropdown, 'Amplitude' dropdown, 'Constant' dropdown, 'Damping' dropdown.
 - Check Equation:** 'x=E8P;'
 - RULE:** 'IS GREATER THAN:' dropdown.
 - Use Entered Value:** 'Delta' dropdown, 'Amplitude' dropdown, 'Constant' dropdown (0.0), 'Damping' dropdown.
 - Check Equation:** 'x=0;'
 - Note:** 'You must press "Check Equation" to check and save any changes made to'
- Event Result:**
 - THEN:** 'Do Nothing' dropdown.
 - Obey Inhibits ("stops")** checkbox (unchecked).
 - Control MMP Player** checkbox (unchecked).
- Event Trend Graph:**
 - Scale Factor:** 100
 - Offset:** 0
- Event Summary:**
 - Summary for Event 13:**
 - IF: EQN: x=E8P; IS GREATER THAN Value: 0.0
 - THEN: Do Nothing
 - EVENT 13 IS CURRENTLY: ENABLED**
- Event Name:** 'Hibeta Percent Under'
- Sustained Reward Criterion:**
 - Condition must be met:** 0 milliseconds
 - Refractory Period:** 0 milliseconds
- MIDI Sound Properties:**
 - Starting:** 37 A (440.0) 1 to 88
 - Instrument:** 41 Viola 128 choices
 - Playing:** Sustained Percus. or
 - Modulation:** Amplitude Ampl. or
 - Starting:** Level: 80 0 to 128
 - Loudness Change Rate:** 3 0 to 20
 - Note Change:** 3 0 to 20
 - Musical Scale:** Chromatic 15 choices
 - Musical:** A C to B Flat
 - Play Note or:** 1 Note 1 to 8 Notes
 - Play Note on Tab:** On all tabs 1 to 16 or
- Buttons:**
 - Enable All Events, Disable All Events, Data Dictionary
 - Clear All Events, Show All Events, Print All Events
 - Copy Event, Paste Event
 - Import, Use Now, OK
 - Use Settings and Close, Use These Settings

A red arrow points from the 'A' statement of Event 13 to the 'Use Equation' dropdown menu.

- Let's enter the equation $x=E8P;$ into the A statement of Event 13. This formula will produce the % over threshold from the equation in Event 8. Also, you may enter the "Event Name" – "Hibeta Percent Under Threshold". Do not enter Hibeta % Under Threshold because reserved symbols are not permissible as titles. When finished click "Use Settings and Close" to exit the Event Wizard.

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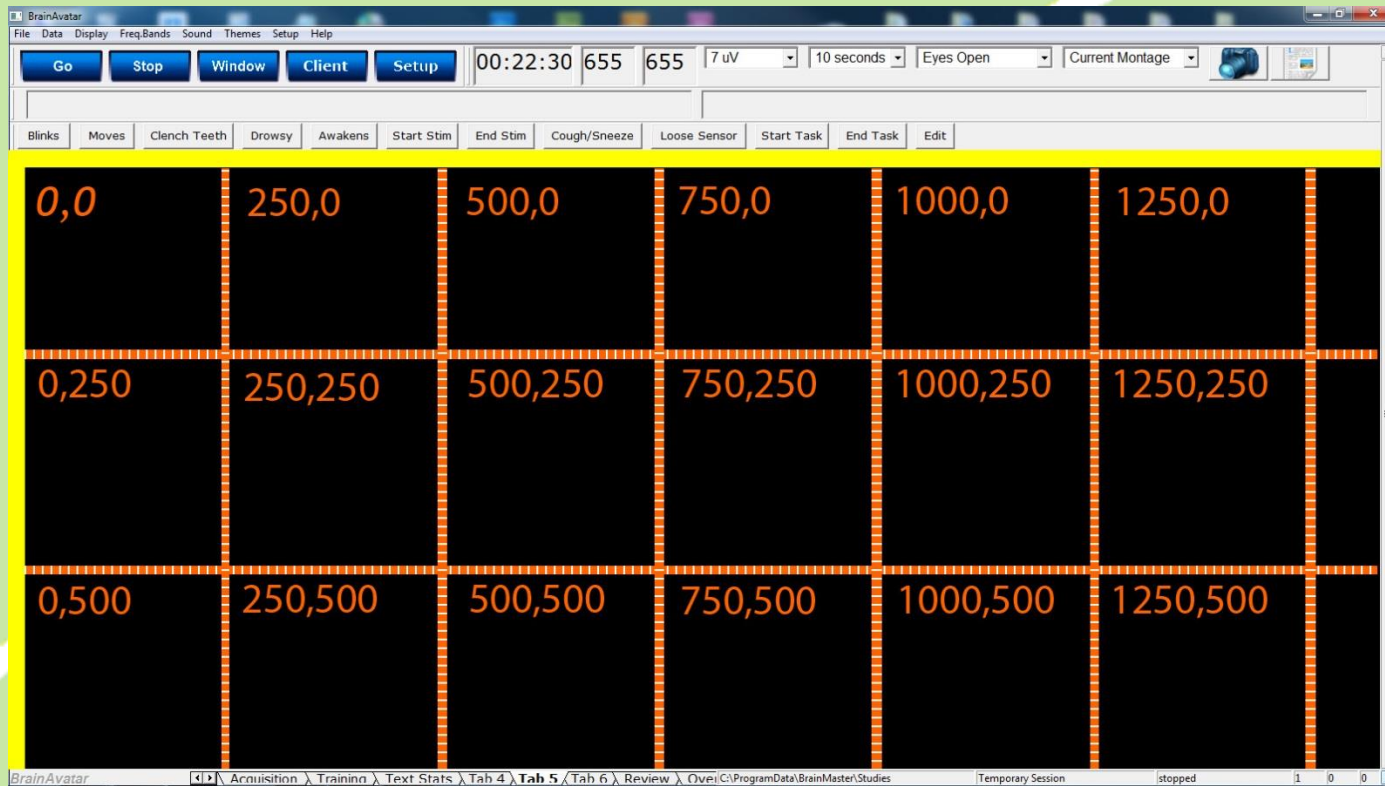
ALERT



- Let's navigate over to the "Training" Tab. We would like to place a percent above/below threshold meter underneath the amplitude meter in each frequency band. In order to do this we first need to learn something about the BrainAvatar Grid System.

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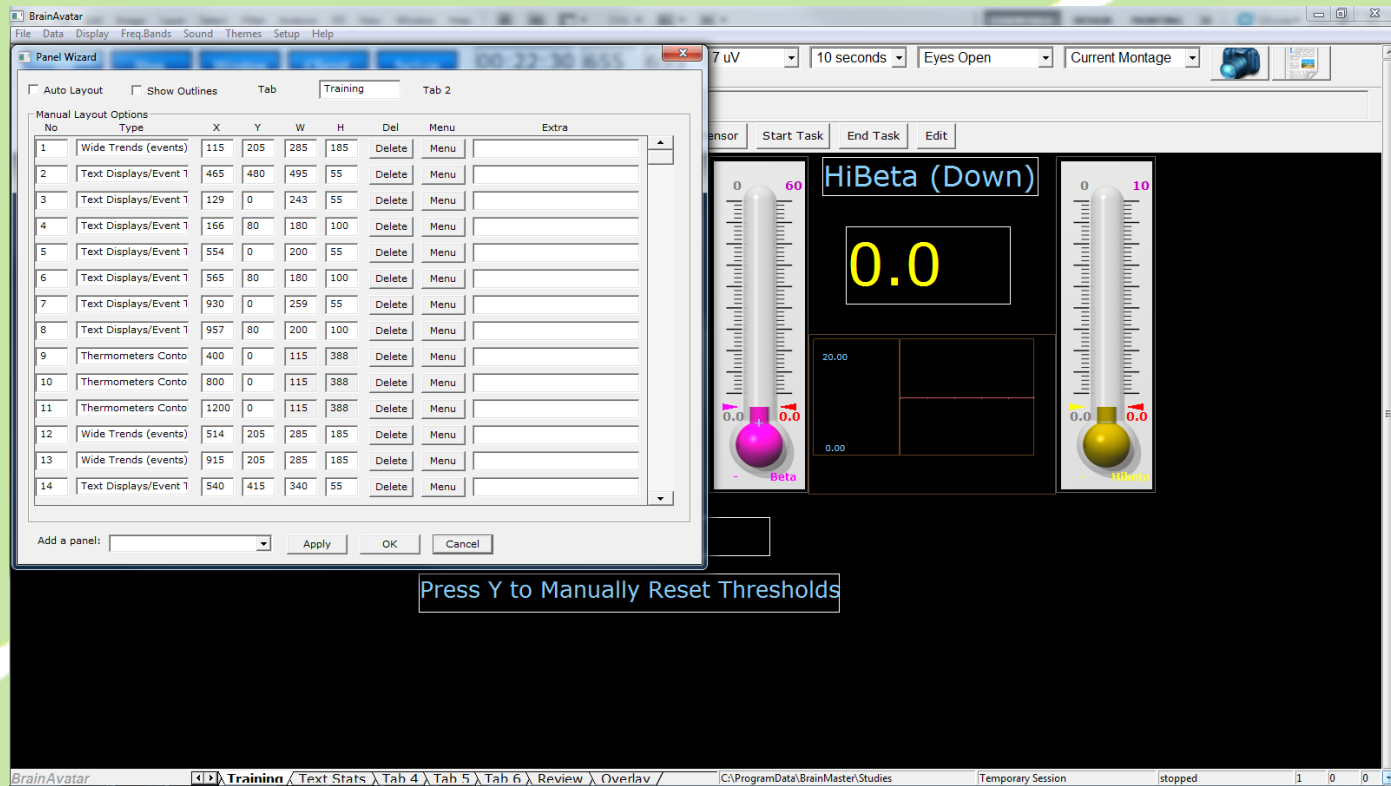
ALERT



- The BrainAvatar workspace is divided into the X axis (horizontal plane) and Y axis (vertical plane) with the upper left corner being the point of origin (0,0). The number of pixels of horizontal width and vertical height is dependent on the screen resolution of your system. Common resolutions are 1366 x 600 and 1910 x 1080.

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ALERT



- If you Right-Click the Training Tab the Panel Wizard will appear listing all of the objects on the screen including all of their X,Y coordinates along with the widths and heights that they occupy.

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ALERT

BrainAvatar

File Data Display Freq.Bands Sound Themes Setup Help

Go Stop Window Client Setup 00:22:30 655 655 7 uV 10 seconds

Blinks Moves Clench Teeth Drowsy Awakens Start Stim End Stim Cough/Sneeze Loose Sensor Start Task End Task

Theta (Down) 0.0

Beta (Up) 0.0

HiBe 0.0

Percent Reward 0

Press Y to Manually Reset Thresholds

Panel Wizard

Auto Layout Show Outlines Tab Training Tab 2

Manual Layout Options

No	Type	X	Y	W	H	Del	Menu
1	Wide Trends (events)	115	205	285	185	Delete	Menu
2	Thermometers Conto	400	0	115	388	Delete	Menu
3	Text Displays/Event 1	130	0	245	55	Delete	Menu
4	Text Displays/Event 1	165	80	180	100	Delete	Menu
5	Text Displays/Event 1	555	0	200	55	Delete	Menu
6	Text Displays/Event 1	565	80	180	100	Delete	Menu
7	Wide Trends (events)	515	205	285	185	Delete	Menu
8	Thermometers Conto	800	0	115	388	Delete	Menu
9	Text Displays/Event 1	930	0	260	55	Delete	Menu
10	Text Displays/Event 1	960	80	180	100	Delete	Menu
11	Wide Trends (events)	915	205	285	185	Delete	Menu
12	Thermometers Conto	1200	0	115	388	Delete	Menu
13	Text Displays/Event 1	530	415	405	55	Delete	Menu
14	Text Displays/Event 1	400	480	650	55	Delete	Menu

Add a panel: Apply OK Cancel

- Consider the left uppermost object, the “Theta (Down) Text Display. Reviewing the Panel Wizard you can see this object occupies space 130,0 and is 245 pixels in width and 55 pixels in height.

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ALERT

BrainAvatar

File Data Display Freq.Bands Sound Themes Setup Help

Go Stop Window Client Setup 00:22:30 655 655 7 uV 10 seconds

Blinks Moves Clench Teeth Drowsy Awakens Start Stim End Stim Cough/Sneeze Loose Sensor Start Task End Task

Theta (Down) 0.0

Beta (Up) 0.0

HiBe 0

Percent Reward 0

Press Y to Manually Reset Thresholds

Panel Wizard

Auto Layout Show Outlines Tab Training Tab 2

Manual Layout Options

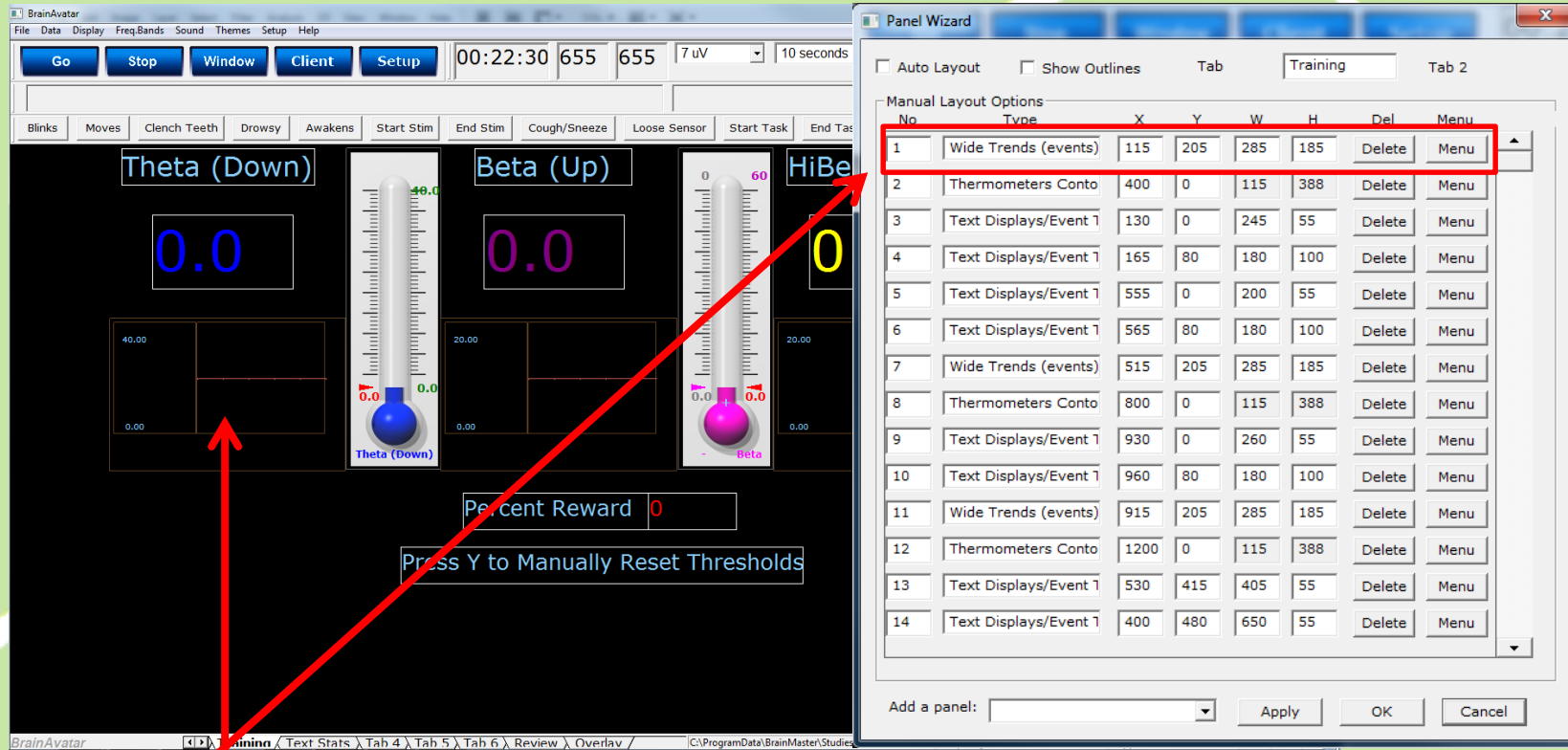
No	Type	X	Y	W	H	Del	Menu
1	Wide Trends (events)	115	205	285	185	Delete	Menu
2	Thermometers Conto	400	0	115	388	Delete	Menu
3	Text Displays/Event 1	130	0	245	55	Delete	Menu
4	Text Displays/Event 1	165	80	180	100	Delete	Menu
5	Text Displays/Event 1	555	0	200	55	Delete	Menu
6	Text Displays/Event 1	565	80	180	100	Delete	Menu
7	Wide Trends (events)	515	205	285	185	Delete	Menu
8	Thermometers Conto	800	0	115	388	Delete	Menu
9	Text Displays/Event 1	930	0	260	55	Delete	Menu
10	Text Displays/Event 1	960	80	180	100	Delete	Menu
11	Wide Trends (events)	915	205	285	185	Delete	Menu
12	Thermometers Conto	1200	0	115	388	Delete	Menu
13	Text Displays/Event 1	530	415	405	55	Delete	Menu
14	Text Displays/Event 1	400	480	650	55	Delete	Menu

Add a panel: Apply OK Cancel

- Just below is the Text Display of the Theta Amplitude at 165, 80 having a width of 180 pixels and a height of 100 pixels.

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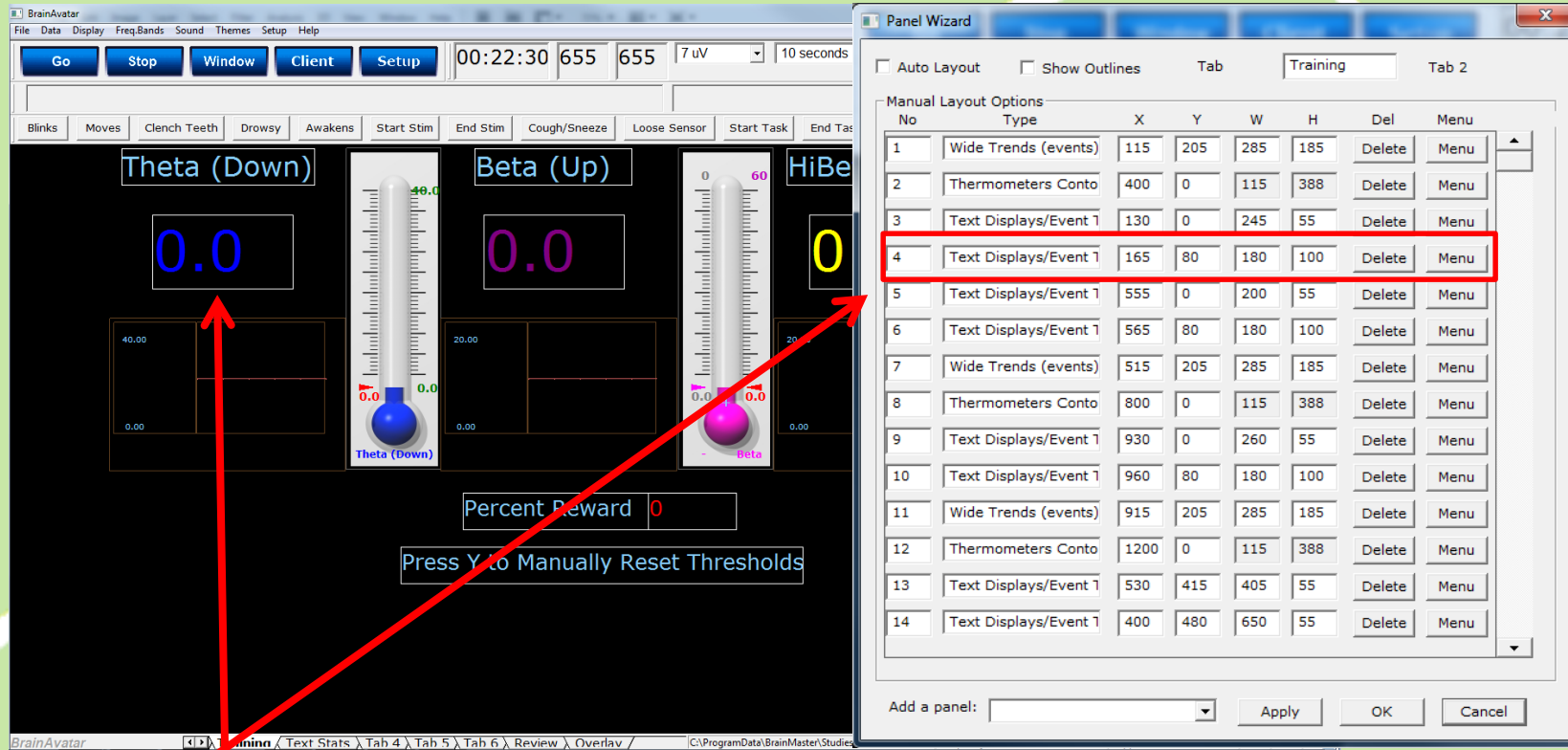
ALERT



- Just above that is the Wide Trend graph of the Theta Amplitude at 115, 205 having a width of 285 pixels and a height of 185 pixels. Let's consider placing a Text Display of the percent of time under threshold for theta under the theta amplitude Text Display. To accomplish this we must ask 1) How large shall we make the Text Display? and 2) How far down must we move the Wide Trend Graph to make room for it?

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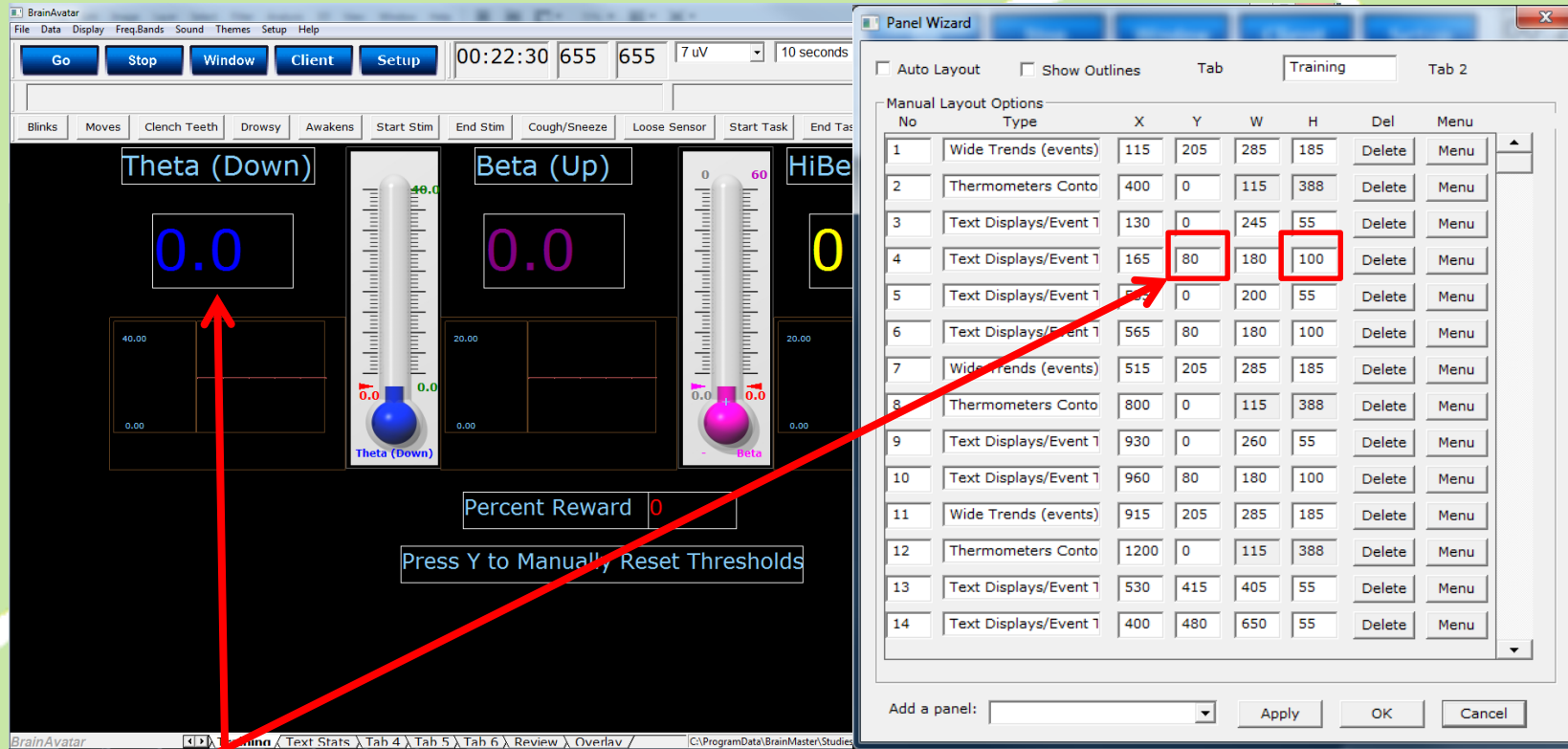
ALERT



- To answer 1) How large shall we make the Text Display? Let's make it the same size as the Test Display for amplitude. That would be W = 180, H = 100.

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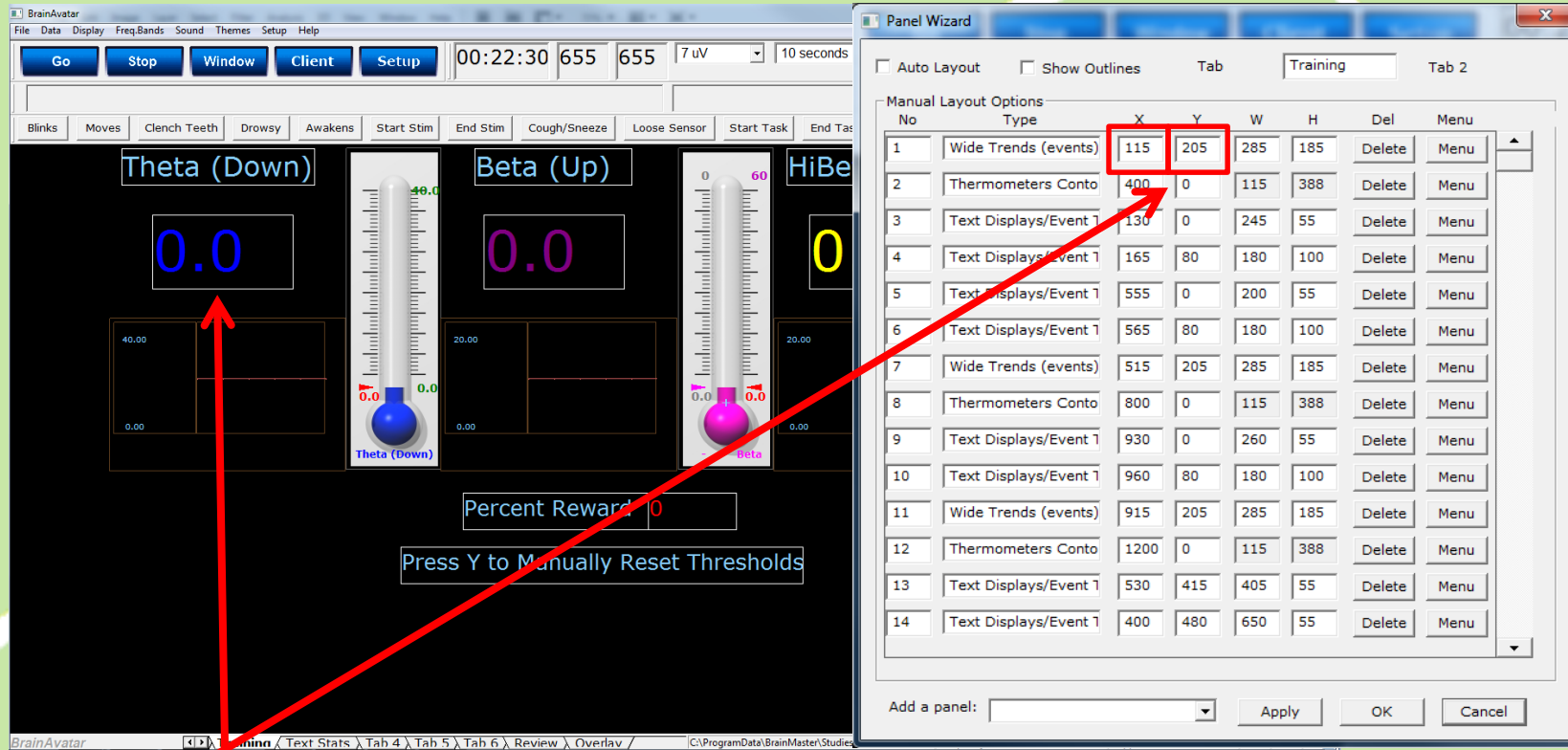
ALERT



- To answer 2) How far down must we move the Wide Trend Graph to make room for it? We start by analyzing the space between the Text Display for amplitude and the new text display for percent of time below threshold. The Text Display for amplitude has a height of 100 pixels. It's upper left coordinate is 165, 80. This means the bottom left coordinate would be 80 (the upper left coordinate) + 100 (the height of the Text Display) or 180.

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ALERT



- Next we calculate the size of the space between the bottom of the Text Display and the top of the Wide Trend (event) Graph. We start with the upper left coordinate of the Wide Trend Graph. That coordinate is $x=115$ $y=205$. Now, if we subtract the y coordinate for the bottom of the Text Display (180 pixels) from the top of the Wide Trend Graph (205) we find the size of the space between the two is $205 - 180 = 25$ pixels.

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ALERT

The screenshot shows the BrainAvatar software interface. The main display features several panels: 'Theta (Down)' with a value of 0.0, 'Beta (Up)' with a value of 0.0, and 'HiBe' with a value of 0. Below these are two vertical thermometers for 'Theta (Down)' and 'Beta'. At the bottom, there is a 'Percent Reward' display showing 0 and a button labeled 'Press Y to Manually Reset Thresholds'. The top of the interface has a menu bar (File, Data, Display, Freq.Bands, Sound, Themes, Setup, Help) and a toolbar with buttons (Go, Stop, Window, Client, Setup). A status bar at the bottom shows 'BrainAvatar' and a file path.

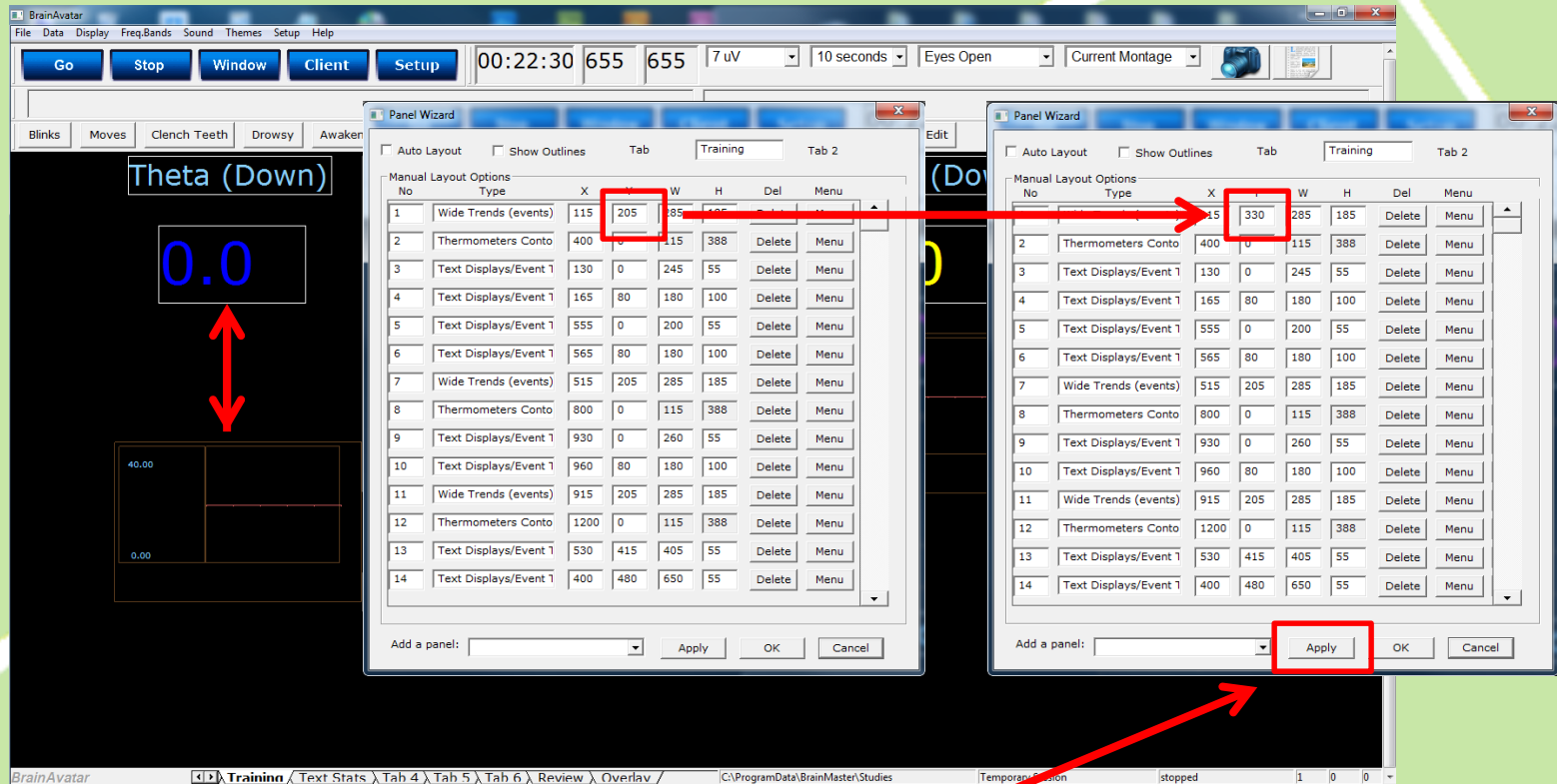
The 'Panel Wizard' dialog box is open, showing a table of panel layout options. The 'H' column value of 100 for the 'Text Displays/Event 1' panel is highlighted with a red box. A red arrow points from this value to the 'Theta (Down)' display on the main interface.

No	Type	X	Y	W	H	Del	Menu
1	Wide Trends (events)	115	205	285	185	Delete	Menu
2	Thermometers Conto	400	0	115	388	Delete	Menu
3	Text Displays/Event 1	130	0	245	55	Delete	Menu
4	Text Displays/Event 1	165	80	180	100	Delete	Menu
5	Text Displays/Event 1	555	0	200	55	Delete	Menu
6	Text Displays/Event 1	565	80	180	100	Delete	Menu
7	Wide Trends (events)	615	205	285	185	Delete	Menu
8	Thermometers Conto	800	0	115	388	Delete	Menu
9	Text Displays/Event 1	930	0	260	55	Delete	Menu
10	Text Displays/Event 1	960	80	180	100	Delete	Menu
11	Wide Trends (events)	915	205	285	185	Delete	Menu
12	Thermometers Conto	1200	0	115	388	Delete	Menu
13	Text Displays/Event 1	530	415	405	55	Delete	Menu
14	Text Displays/Event 1	400	480	650	55	Delete	Menu

- Therefore, the distance we must move the Wide Trend Graph downwards is the width of the new Text Label (the same height as the Text Label for amplitude) = 100 + 25 (The space between the objects, or 125 pixels).

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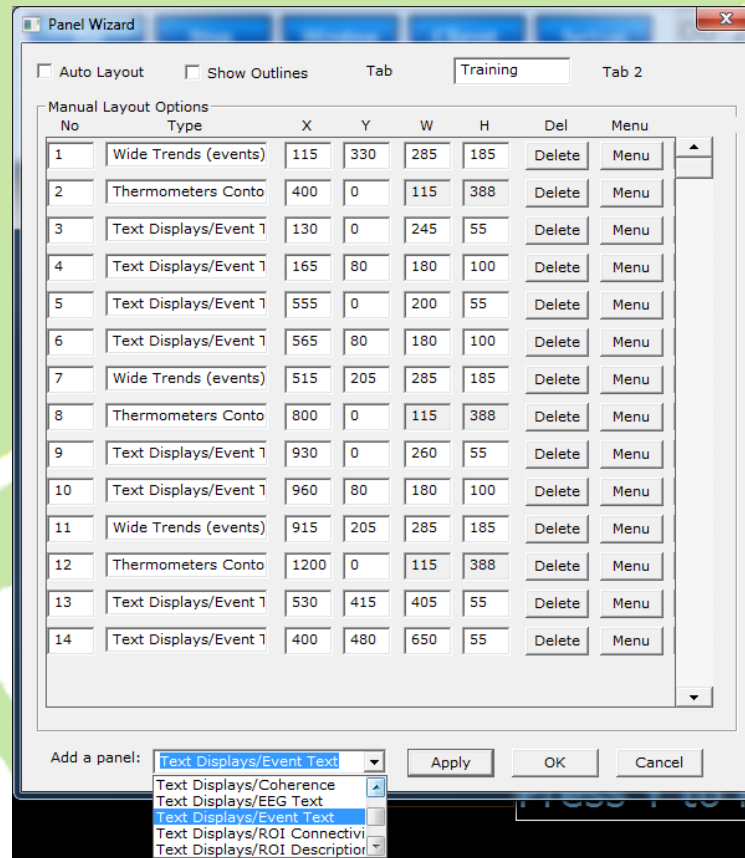
ALERT



- The y coordinate for the Wide Trend Graph is 205. We must now add 125 to it and make the new y coordinate for the Wide Trend Graph 330. Now, enter 330 in the box shown above and then click "Apply" to effect the change. Notice the Wide Trend Graph has relocated to the new position.

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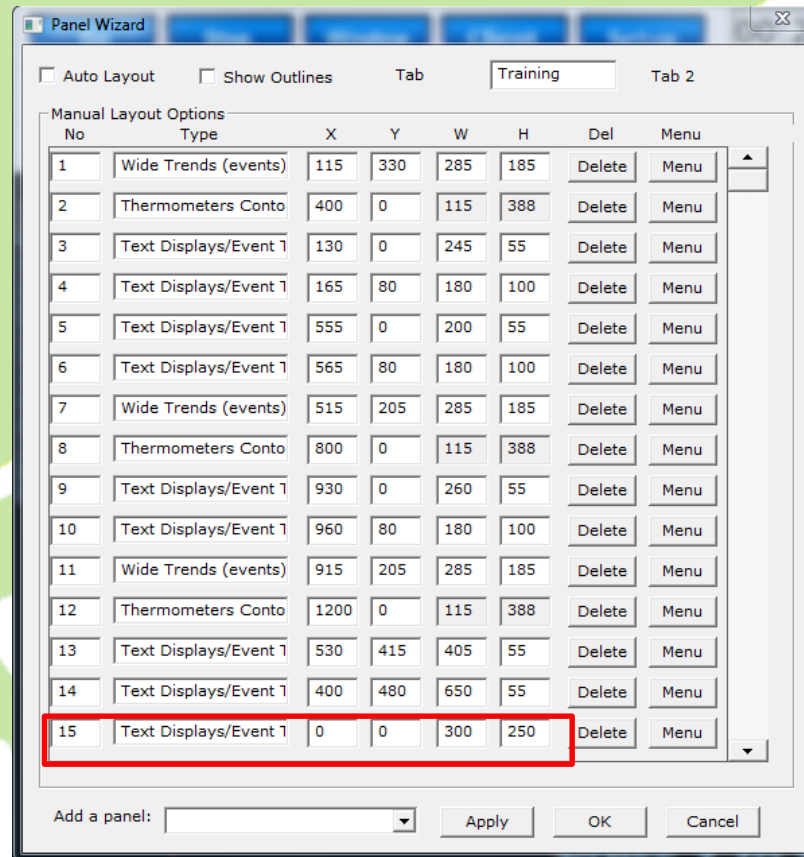
ALERT



- Now, we may create the new Text Display for percent of time under threshold for theta. With the Panel Wizard still open select the “Add a panel:” dropdown box (you may have to widen the display to find the “Add a panel:” dropdown box). Choose Text Displays/Event Text.

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- As you can see, a new Text Display/Event Text was created.

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ALERT

Panel Wizard

☐ Auto Layout ☐ Show Outlines Tab Training Tab 2

Manual Layout Options

No	Type	X	Y	W	H	Del	Menu
1	Wide Trends (events)	115	330	285	185	Delete	Menu
2	Thermometers Conto	400	0	115	388	Delete	Menu
3	Text Displays/Event 1	130	0	245	55	Delete	Menu
4	Text Displays/Event 1	165	80	180	100	Delete	Menu
5	Text Displays/Event 1	555	0	200	55	Delete	Menu
6	Text Displays/Event 1	565	80	180	100	Delete	Menu
7	Wide Trends (events)	515	205	285	185	Delete	Menu
8	Thermometers Conto	800	0	115	388	Delete	Menu
9	Text Displays/Event 1	930	0	260	55	Delete	Menu
10	Text Displays/Event 1	960	80	180	100	Delete	Menu
11	Wide Trends (events)	915	205	285	185	Delete	Menu
12	Thermometers Conto	1200	0	115	388	Delete	Menu
13	Text Displays/Event 1	530	415	405	65	Delete	Menu
14	Text Displays/Event 1	400	480	650	55	Delete	Menu
15	Text Displays/Event 1	0	0	180	100	Delete	Menu

Add a panel:

- To put in the proper coordinates and size let's first start with the size. The size of this Text Display should match that of the Theta Amplitude Text Display or 180 x 100. You may enter that now.

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Panel Wizard

☐ Auto Layout ☐ Show Outlines Tab Training Tab 2

Manual Layout Options

No	Type	X	Y	W	H	Del	Menu
1	Wide Trends (events)	115	330	285	185	Delete	Menu
2	Thermometers Conto	400	0	115	388	Delete	Menu
3	Text Displays/Event 1	130	0	245	55	Delete	Menu
4	Text Displays/Event 1	165	80	180	100	Delete	Menu
5	Text Displays/Event 1	555	0	200	55	Delete	Menu
6	Text Displays/Event 1	80	80	180	100	Delete	Menu
7	Wide Trends (events)	55	205	285	185	Delete	Menu
8	Thermometers Conto	80	0	115	388	Delete	Menu
9	Text Displays/Event 1	90	0	260	55	Delete	Menu
10	Text Displays/Event 1	90	80	180	100	Delete	Menu
11	Wide Trends (events)	95	205	285	185	Delete	Menu
12	Thermometers Conto	100	0	115	388	Delete	Menu
13	Text Displays/Event 1	50	415	405	55	Delete	Menu
14	Text Displays/Event 1	400	480	650	55	Delete	Menu
15	Text Displays/Event 1	165	0	180	100	Delete	Menu

Add a panel:

- Now for the coordinates. We would like to place this Text Display even with the Text Display for theta amplitude along the left edge. Thus, the left coordinate is the same as that of the Text Display for Theta Amplitude or $x = 165$ pixels. Enter that figure now.

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Panel Wizard

☐ Auto Layout ☐ Show Outlines Tab Training Tab 2

Manual Layout Options

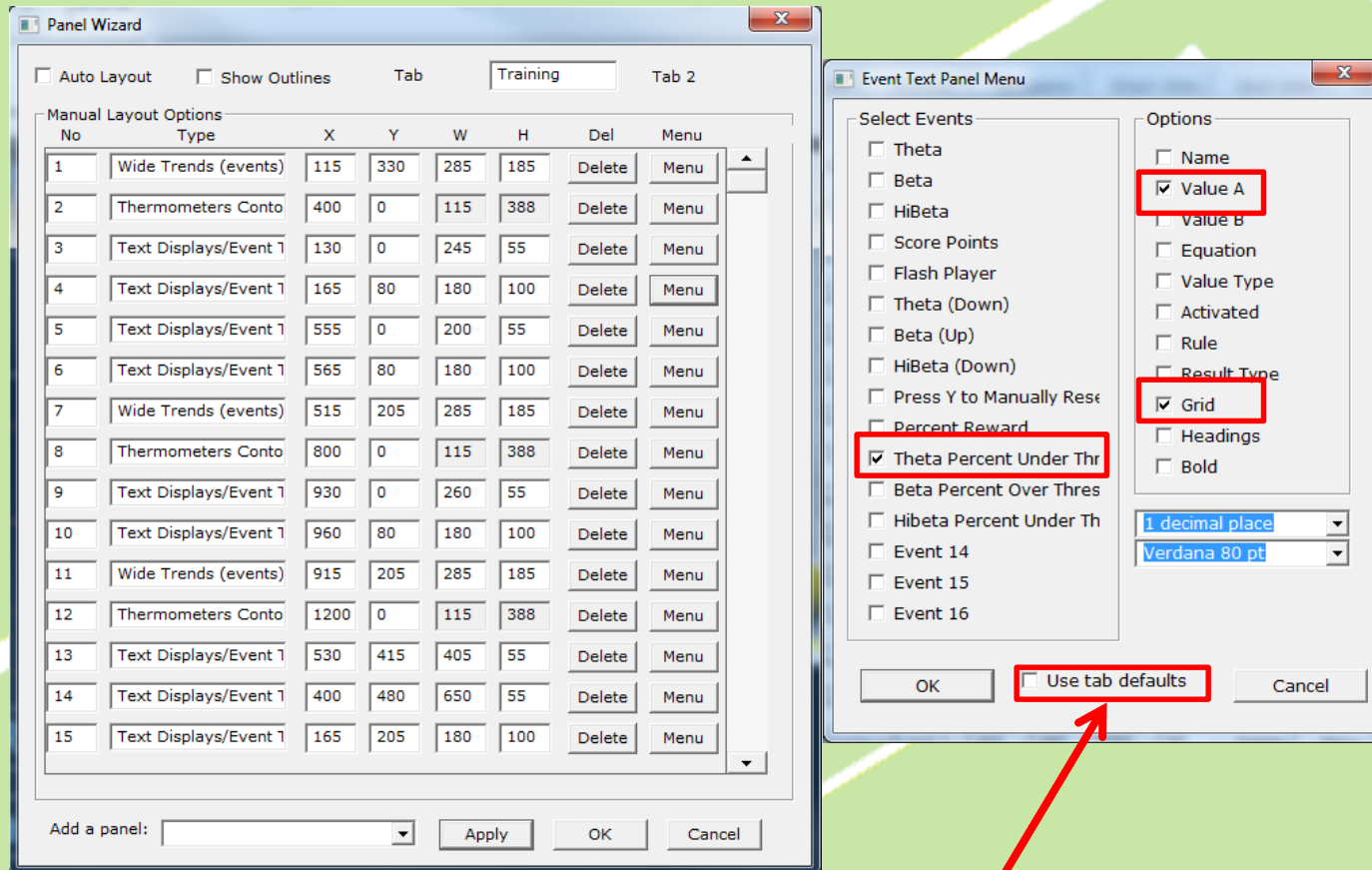
No	Type	X	Y	W	H	Del	Menu
1	Wide Trends (events)	115	330	285	185	Delete	Menu
2	Thermometers Conto	400	0	115	388	Delete	Menu
3	Text Displays/Event 1	130	0	245	55	Delete	Menu
4	Text Displays/Event 1	165	80	180	100	Delete	Menu
5	Text Displays/Event 1	555	0	200	55	Delete	Menu
6	Text Displays/Event 1	565	80	180	100	Delete	Menu
7	Wide Trends (events)	515	205	285	185	Delete	Menu
8	Thermometers Conto	800	0	115	388	Delete	Menu
9	Text Displays/Event 1	930	0	260	55	Delete	Menu
10	Text Displays/Event 1	960	80	180	100	Delete	Menu
11	Wide Trends (events)	915	205	285	185	Delete	Menu
12	Thermometers Conto	1200	0	115	388	Delete	Menu
13	Text Displays/Event 1	530	405	405	55	Delete	Menu
14	Text Displays/Event 1	400	480	650	55	Delete	Menu
15	Text Displays/Event 1	165	205	180	100	Delete	Menu

Add a panel:

- To calculate the y coordinate we start with the coordinate for the top left corner of the Text Display for Theta Amplitude, or 80 pixels. To this we add the height of the object or 100 pixels. Then, to this we add the size of the space between objects or 25 pixels. Thus the y coordinate becomes $80 + 100 + 25 = 205$. You may enter that now. We are not quite done yet.

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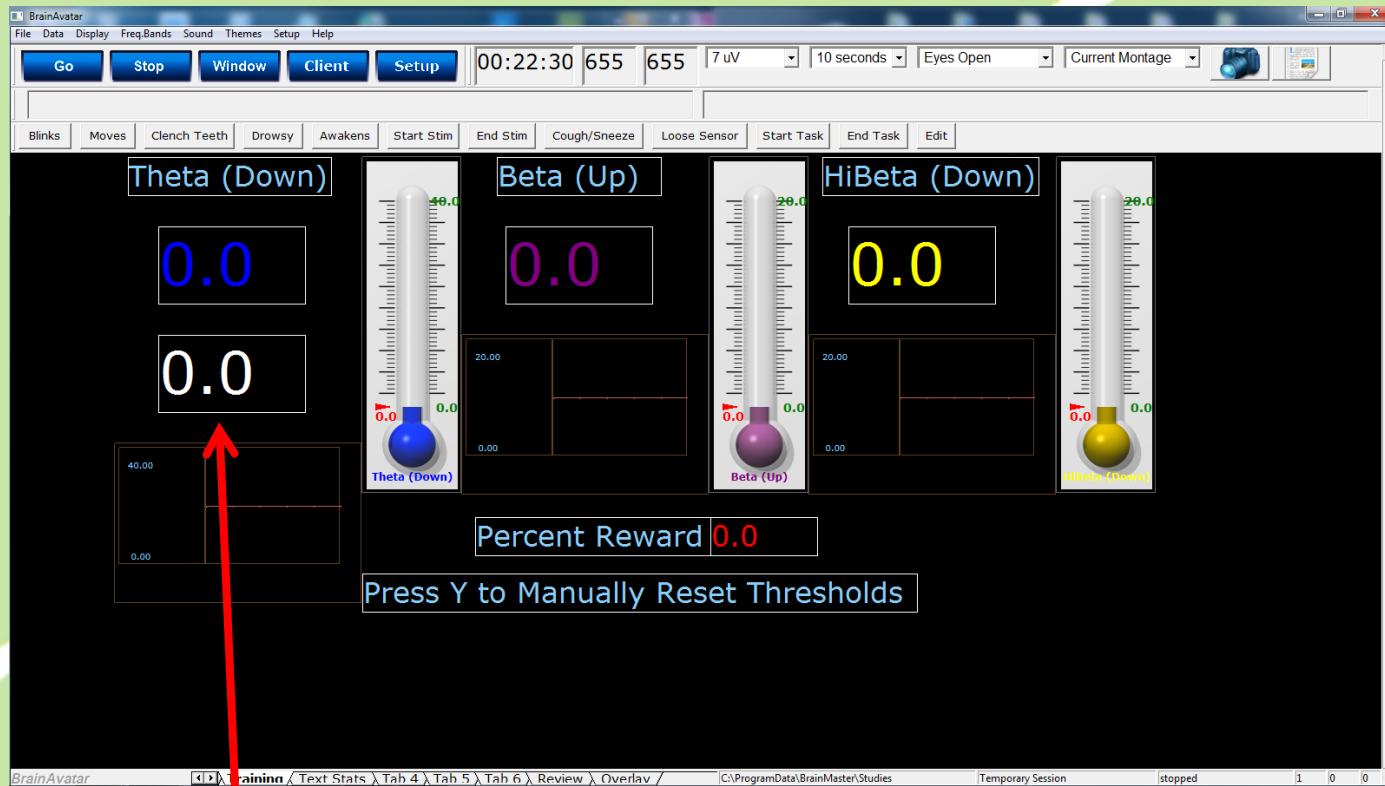
ALERT



- We must now tell BrainAvatar what to place into the new Text Display. To do this click on the Menu Key. First click off the “Use tab defaults” checkbox to enable options. Next, click off all checkboxes except Event 11 – “Theta Percent Under Threshold”, Value A and Grid. Also, change the Font to Verdana 80pt to match the theta amplitude Text Display. You may now click “OK” on the “Event Text Panel Menu and Apply and OK on the Panel Wizard to save changes.

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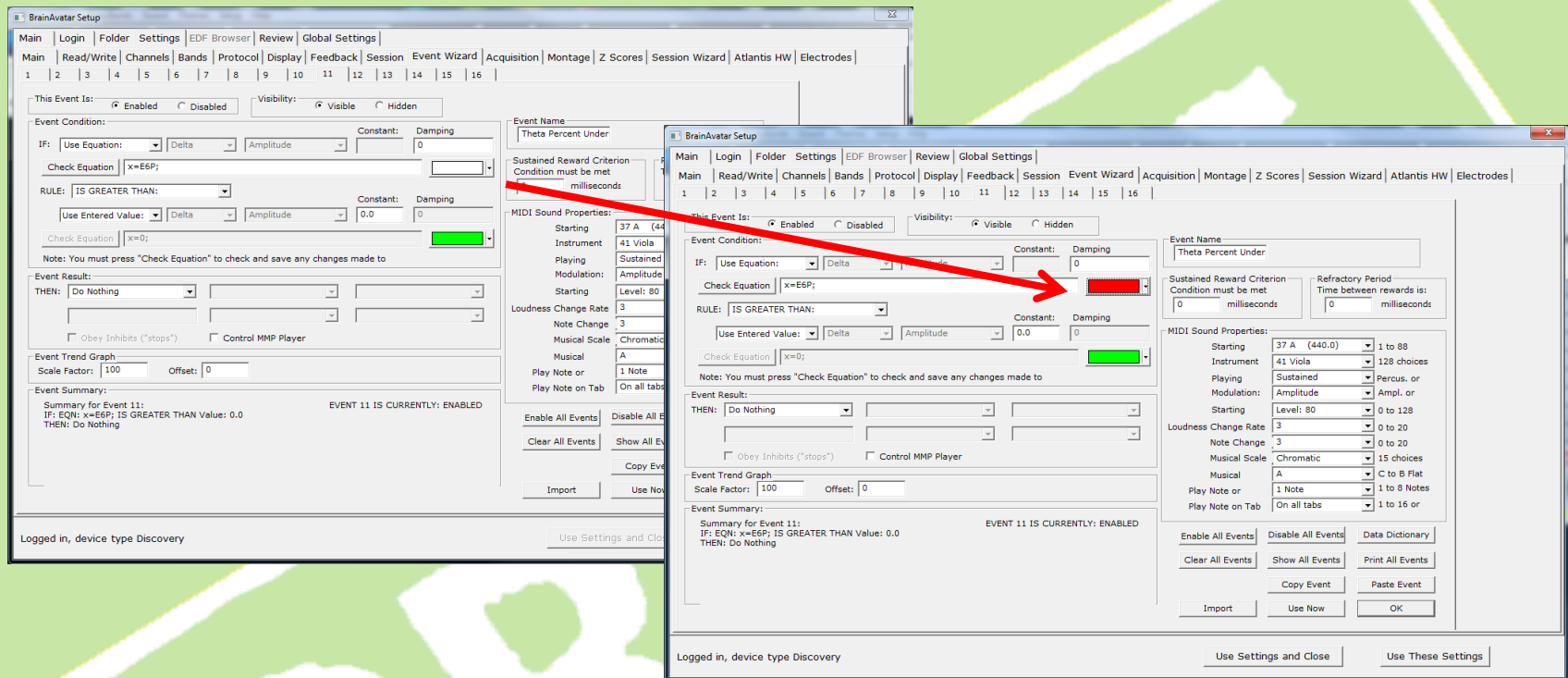
ALERT



- As you can see, the text display has been placed perfectly and is the correct size. But perhaps we would like this display to be in red. To do this we must go to the Event Wizard and move to Event 11. Tap Ctrl-e to open the Event Wizard.

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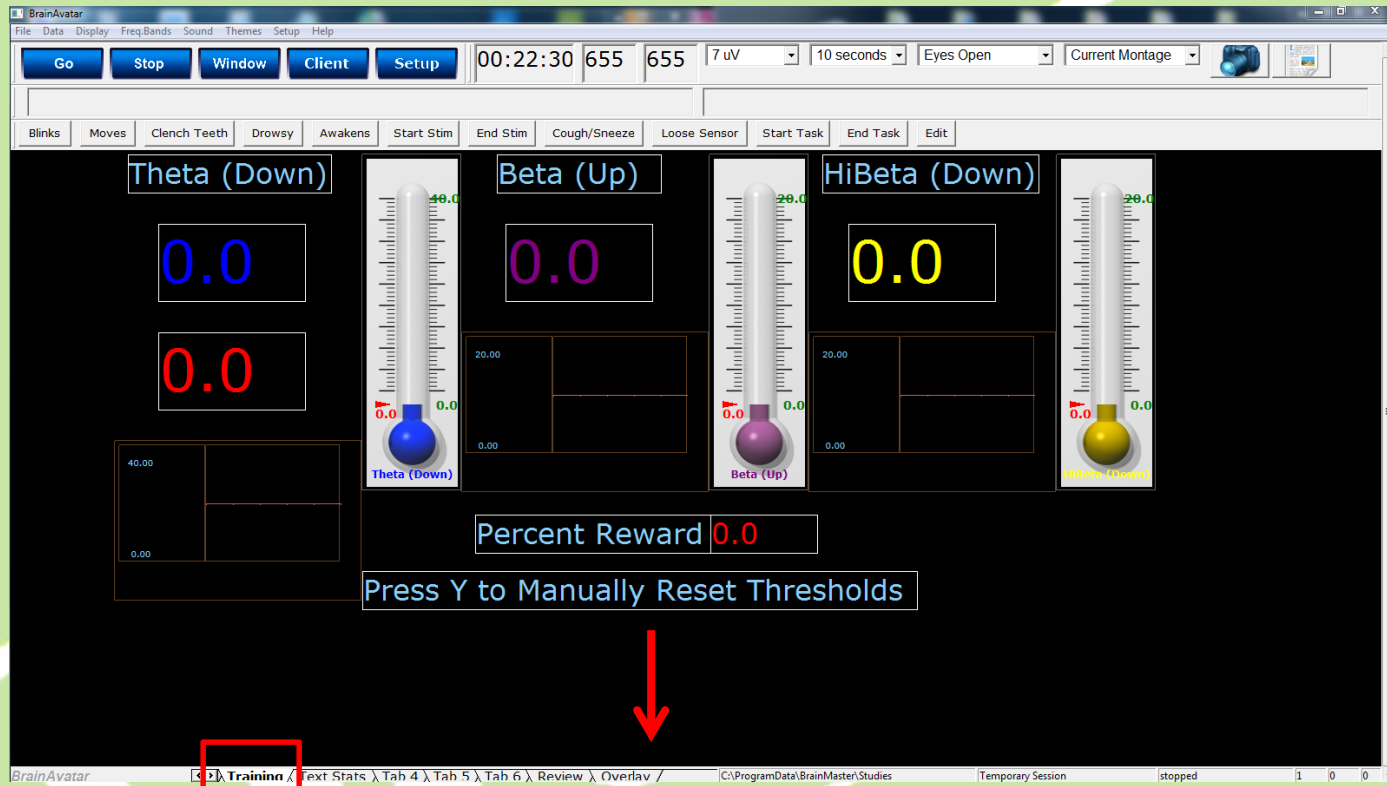
ALERT



- Change the white color in the A box to red as shown above and then tap “Use Settings and Close to save the change.

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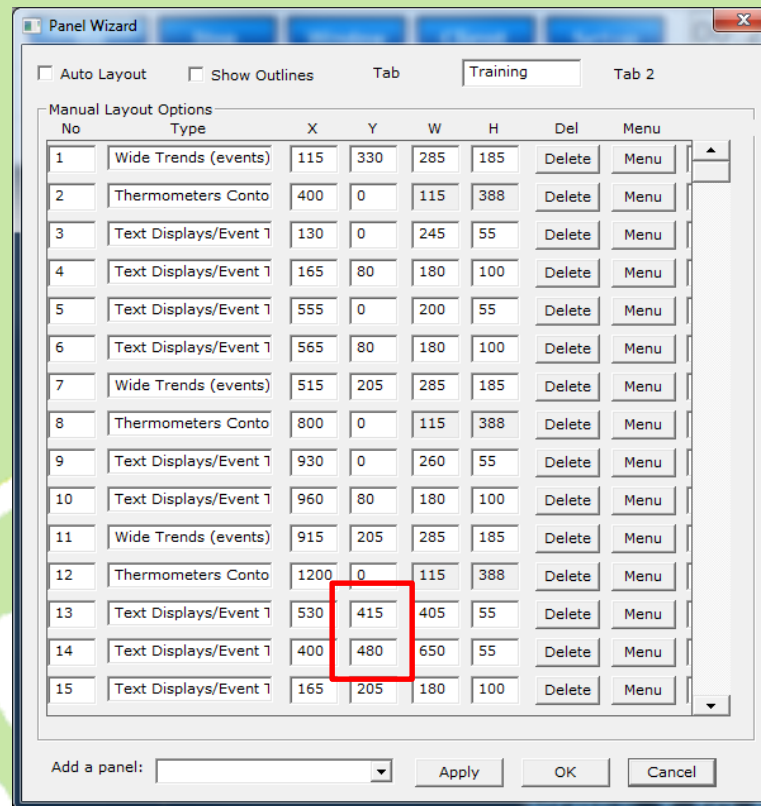
ALERT



- As you can see, the text display has been turned to red as desired. Next, we shall work on the center column. All steps to accomplish this are the same as the left column except we must first make room by moving the Percent Reward and Press Y to Manually Reset Threshold Text displays down. Right-click the Training Tab to open the Panel Wizard.

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- First let's identify which Text Displays are the two we need to move. Obviously they are the two with the largest y components because they are the furthest down the page. It should be rather simple to figure out what we need to add to these y components to move them properly down the page. Since we moved the last Text Display by 100 pixels + an extra 25 pixels to add some spacing it comes to reason that we need to move these by 125 pixels.

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Panel Wizard

☐ Auto Layout ☐ Show Outlines Tab Training Tab 2

Manual Layout Options

No	Type	X	Y	W	H	Del	Menu
1	Wide Trends (events)	115	330	285	185	Delete	Menu
2	Thermometers Conto	400	0	115	388	Delete	Menu
3	Text Displays/Event 1	130	0	245	55	Delete	Menu
4	Text Displays/Event 1	165	80	180	100	Delete	Menu
5	Text Displays/Event 1	555	0	200	55	Delete	Menu
6	Text Displays/Event 1	565	80	180	100	Delete	Menu
7	Wide Trends (events)	515	205	285	185	Delete	Menu
8	Thermometers Conto	800	0	115	388	Delete	Menu
9	Text Displays/Event 1	930	0	260	55	Delete	Menu
10	Text Displays/Event 1	960	80	180	100	Delete	Menu
11	Wide Trends (events)	915	205	285	185	Delete	Menu
12	Thermometers Conto	1200	0	115	388	Delete	Menu
13	Text Displays/Event 1	530	415	405	55	Delete	Menu
14	Text Displays/Event 1	400	480	650	55	Delete	Menu
15	Text Displays/Event 1	165	205	180	100	Delete	Menu

Add a panel:

Panel Wizard

☐ Auto Layout ☐ Show Outlines Tab Training Tab 2

Manual Layout Options

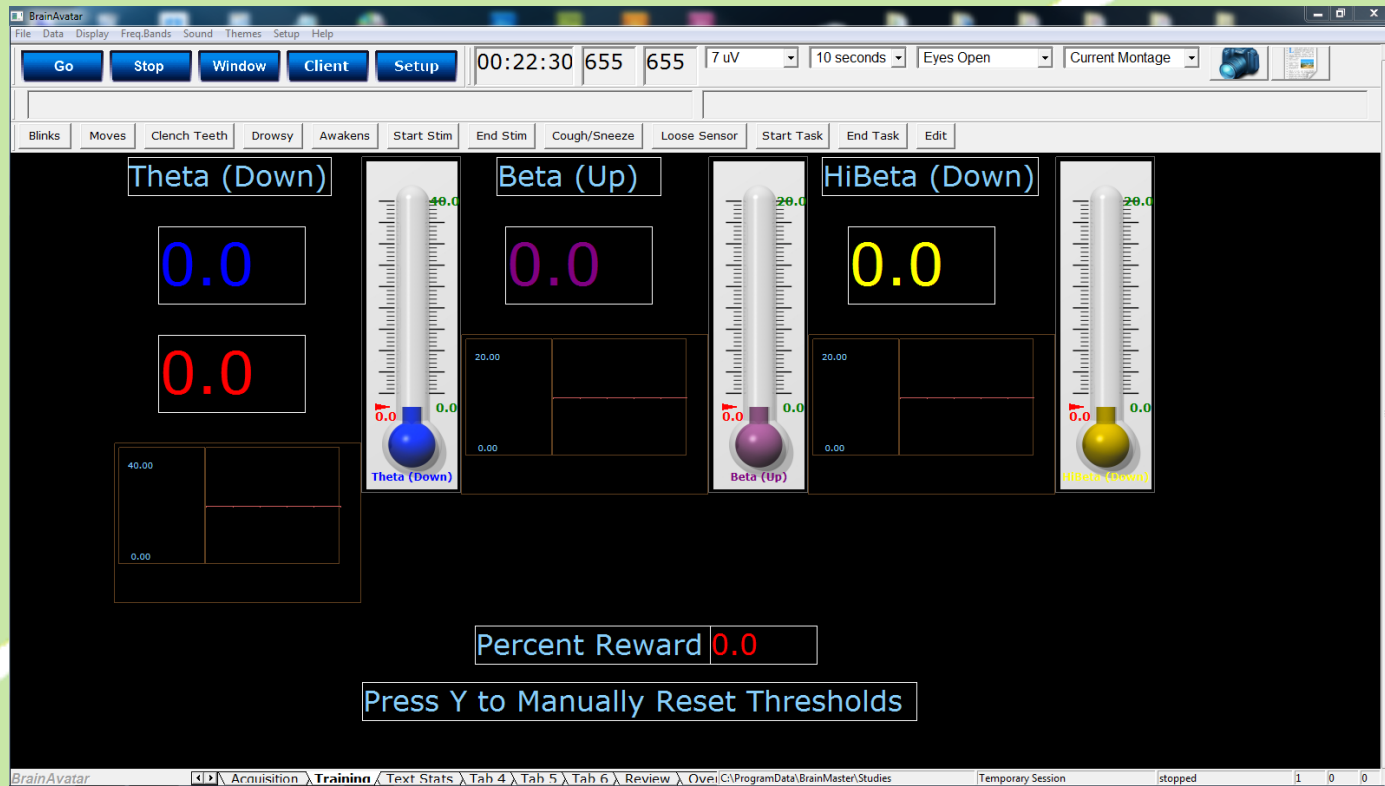
No	Type	X	Y	W	H	Del	Menu
1	Wide Trends (events)	115	330	285	185	Delete	Menu
2	Thermometers Conto	400	0	115	388	Delete	Menu
3	Text Displays/Event 1	130	0	245	55	Delete	Menu
4	Text Displays/Event 1	165	80	180	100	Delete	Menu
5	Text Displays/Event 1	555	0	200	55	Delete	Menu
6	Text Displays/Event 1	565	80	180	100	Delete	Menu
7	Wide Trends (events)	515	205	285	185	Delete	Menu
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12	Thermometers Conto	1200	0	115	388	Delete	Menu
13	Text Displays/Event 1	530	540	405	55	Delete	Menu
14	Text Displays/Event 1	400	605	650	55	Delete	Menu
15	Text Displays/Event 1	165	205	180	100	Delete	Menu

Add a panel:

- We now add $415 + 125 = 540$ to move the first object and then $480 + 125 = 605$ to move the second one. Press Apply and OK to save the changes.

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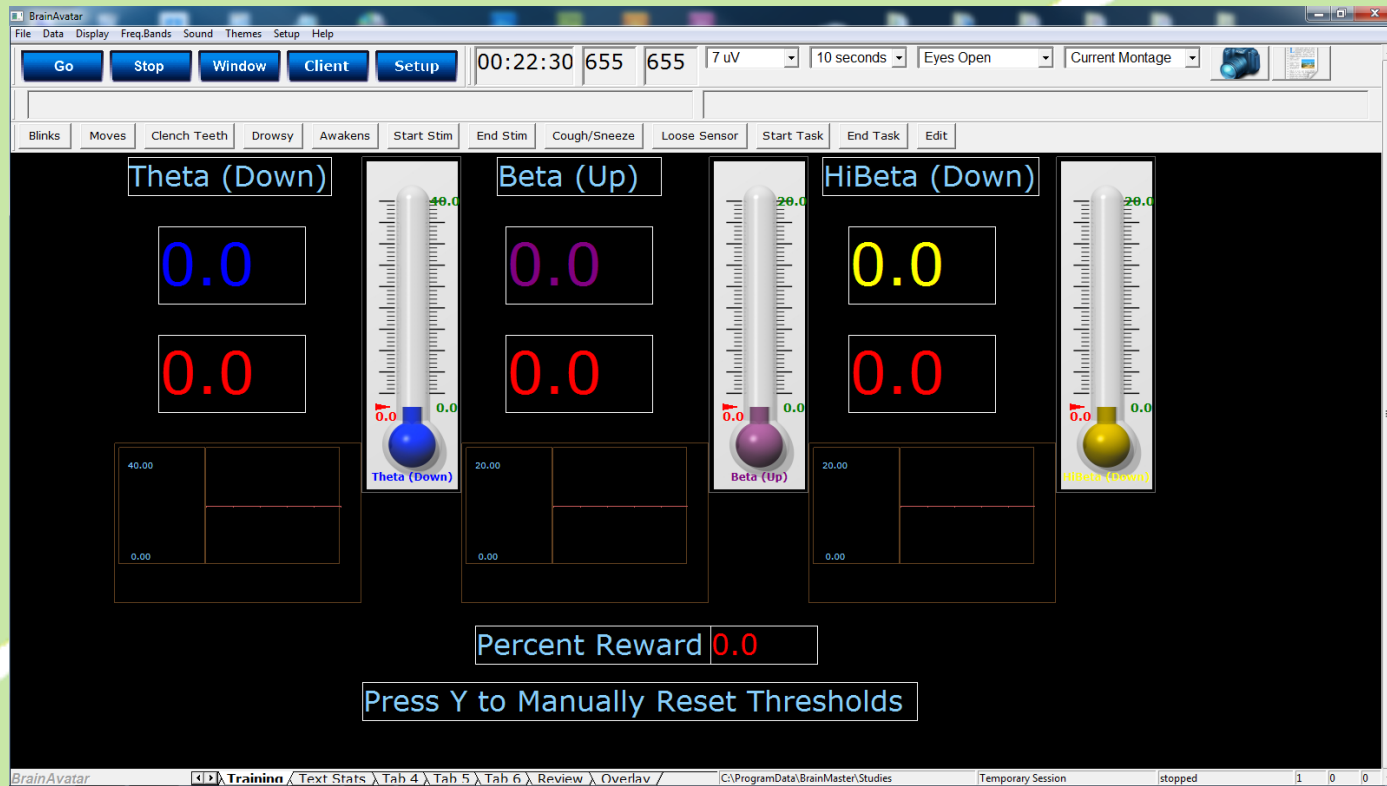
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- Your screen should look like this. And now its your turn to go ahead and add % above/below threshold displays to the screen above using what you've learned.

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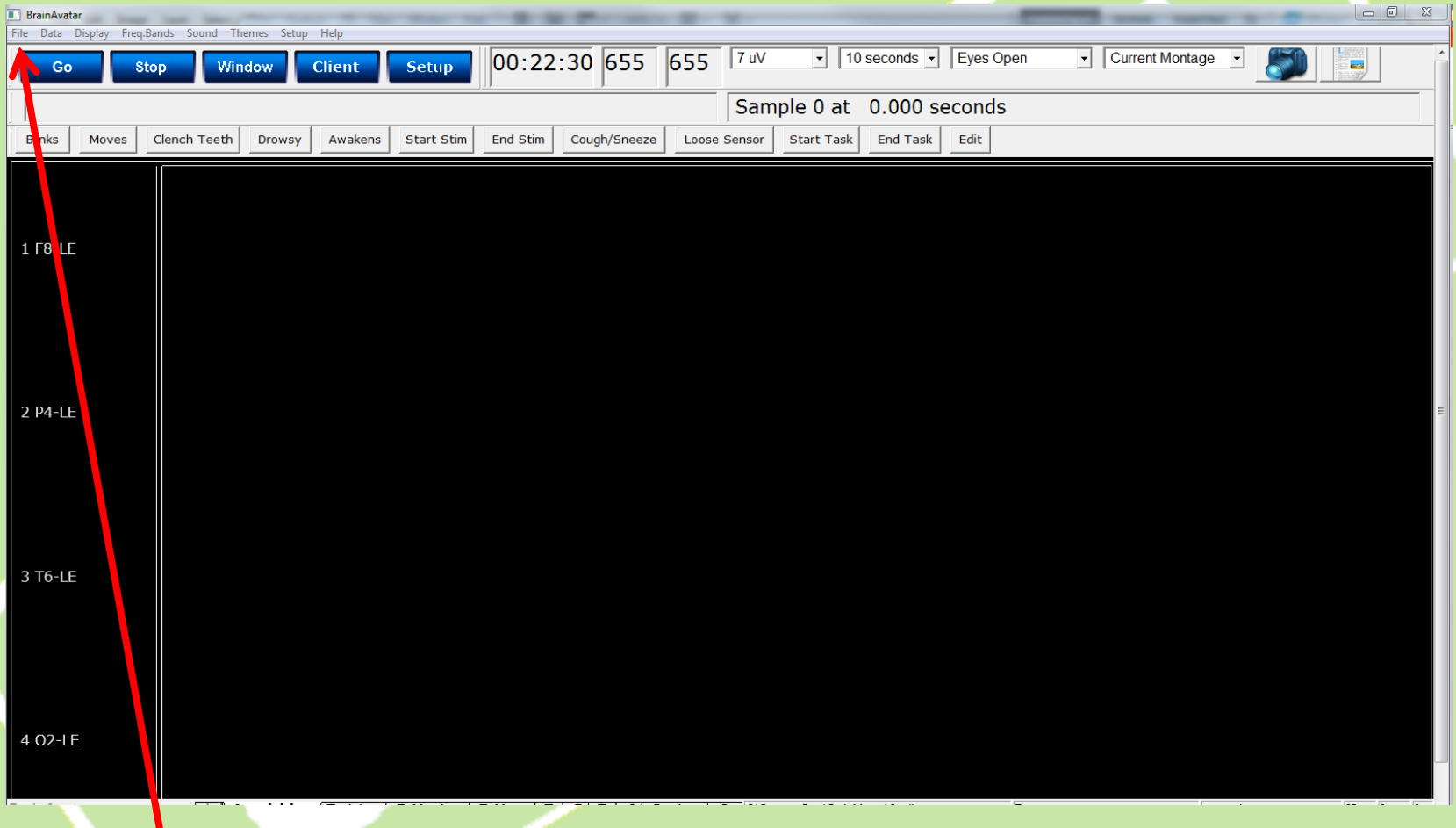
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- After your finished the completed screen should appear as above.

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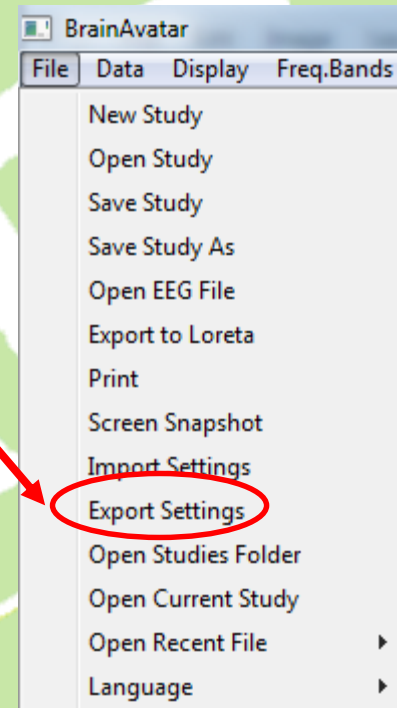
If you would like to save this modified setting Click “File”

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Level 3

Next click “Export Settings”.

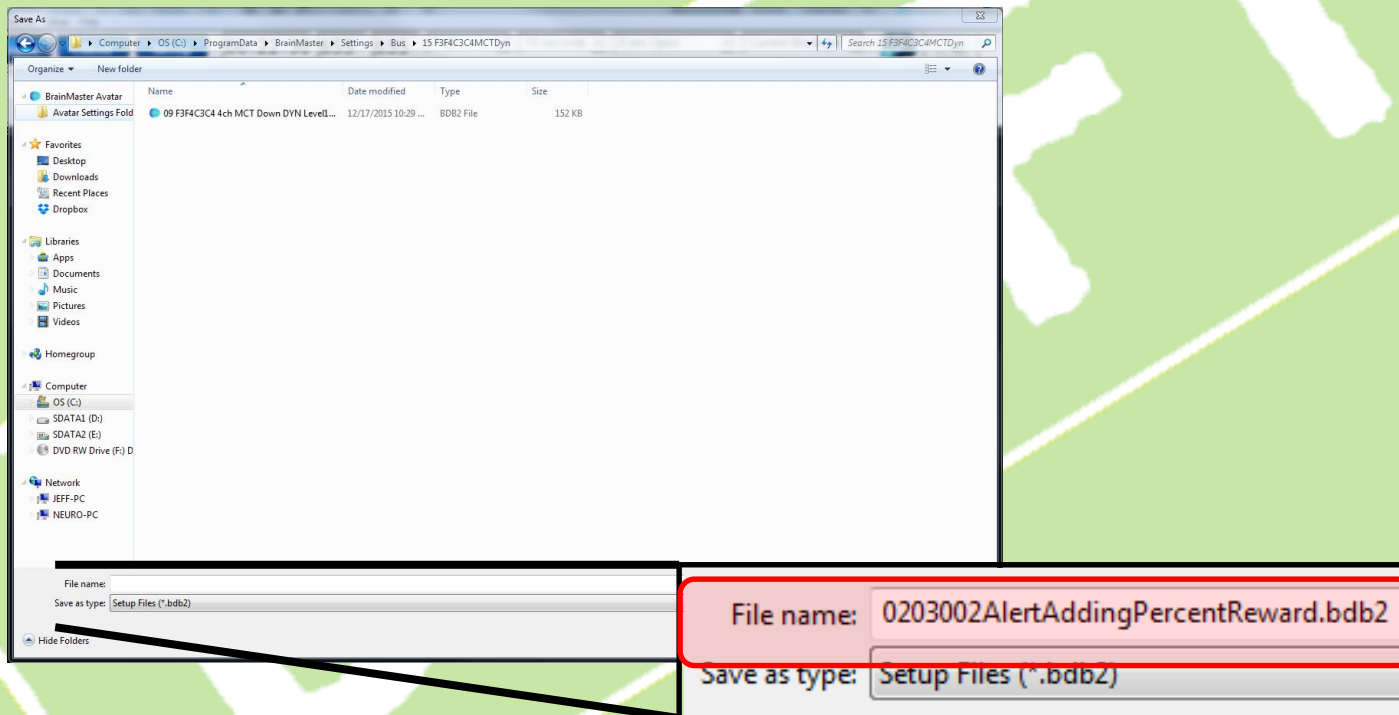


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Level 3

Find the folder where you keep these settings and name the file appropriately in the “File Name:” window.

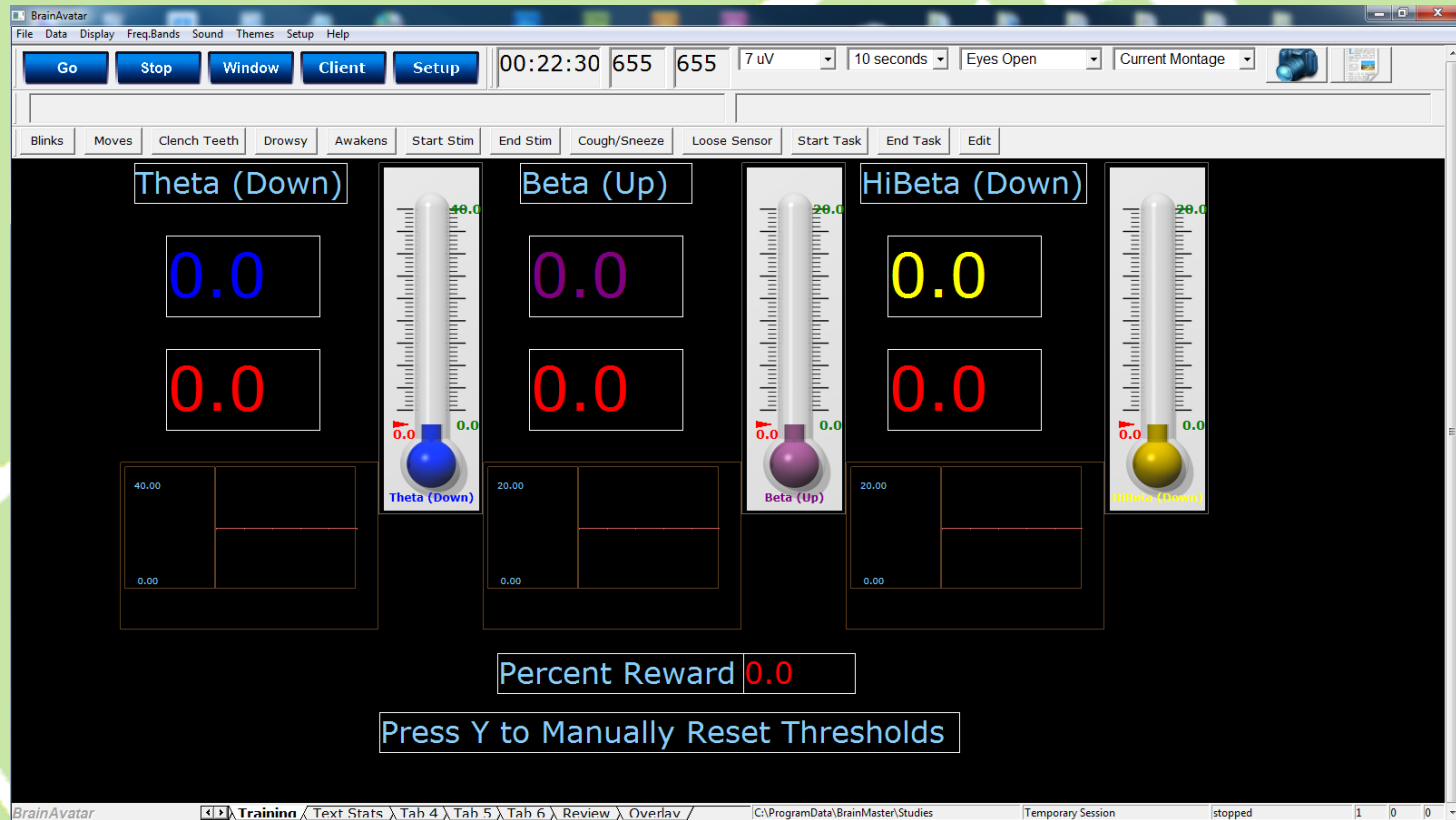


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Level 3

The Protocol is now ready to run with the revisions made.



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Power Point Manual

Get On The
BUS



BrainMaster
Universe
Simplified



“Alert”
level 3