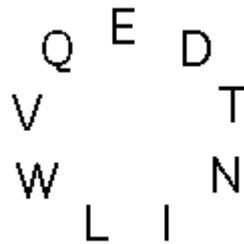


Experiment HP-26: Spatial Location and Visual Attention

General Directions:

- Subjects will be shown a series of 36 images.
 - They will each have nine letters arranged in a circle (see image below)



- The subject will be shown a fixation “+” for 1 sec
- Then the image will be shown for 100 msec
- After the image is shown, the subject will type in the Mark box:
 - The **1st curved letter** they remember (**D, G, O or Q**)
 - Then, any other letters they can remember from the image
 - Click the “Mark” button to record their answer on the screen
- There is no time limit
- Once they record their answer, press the event marker to advance to the next image.

Note – the event marker is only used to advance to the next image. It is important for the subject to mark the recording with his or her answers.

Exercise 1: Spatial Location of Attention

Procedure

1. Click the **Directions** sequence on the toolbar.
2. Click the **Record** button.
3. Follow the general directions as outlined in the Directions sequence and above.
4. Click **Stop**.

5. When the subject is ready, click the **SpatialLocation** sequence and click Record.
6. The data will look like: ([HP-26-L1](#)).
7. When all 36 trials are completed, click Stop to halt recording.
8. Click on the Save button to save the data file.

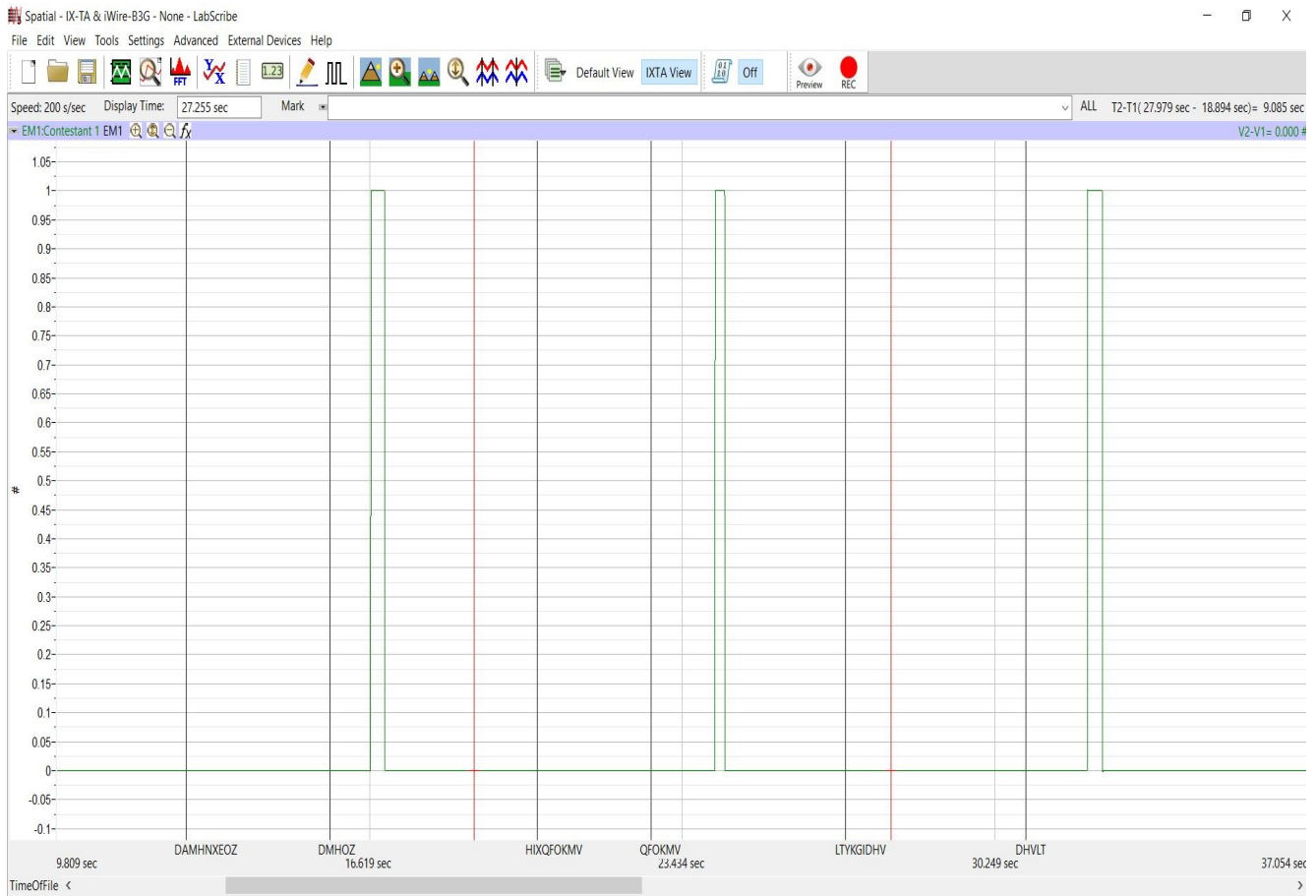


Figure HP-26-L1: Sample of what the data may look like. This sample shows the two marks – one made as the image is shown and the 2nd made by the subject. The green square wave is the event marker advancing to the next image.

NOTE – when recording the subject will not see the mark made when the image is shown. This will only show during analysis.

Data Analysis

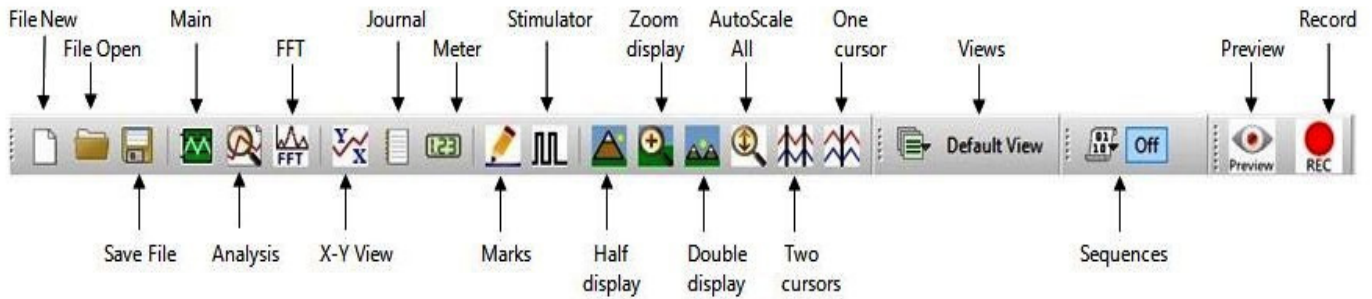


Figure HP-26-L2: LabScribe toolbar.

1. Move to the beginning of the recording and place both red cursors before the onset of the first image being shown, but after the directions.
2. Click View → Marks → Display Image Marks ([HP-26-L3](#)). This will display the marks automatically made when the image was shown.

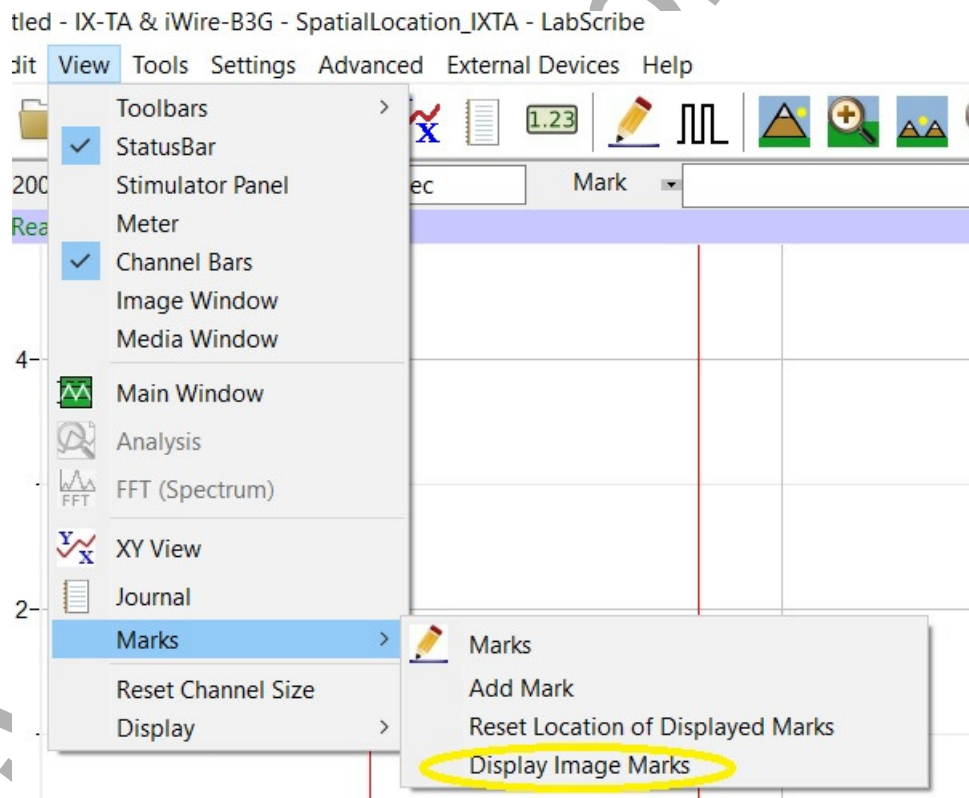


Figure HP-26-L3: Display Image Marks

3. Click the Marks icon on the toolbar. It is the “pencil” icon ([HP-26-L2](#)).
4. Click Export → All Marks → OK ([HP-26-L4](#)).

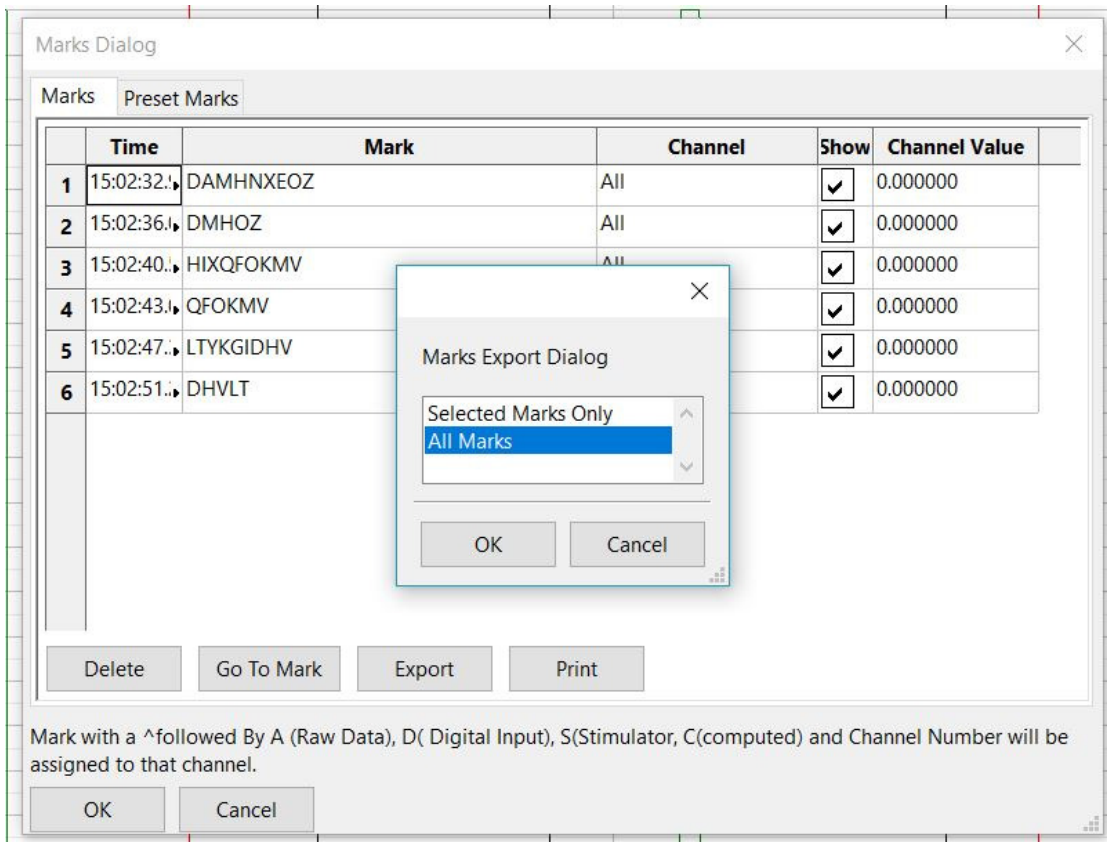


Figure HP-26-L4: Marks dialog to export marks to Excel.

5. Choose Comma Separated File from the drop down menu ([HP-26-L5](#)).

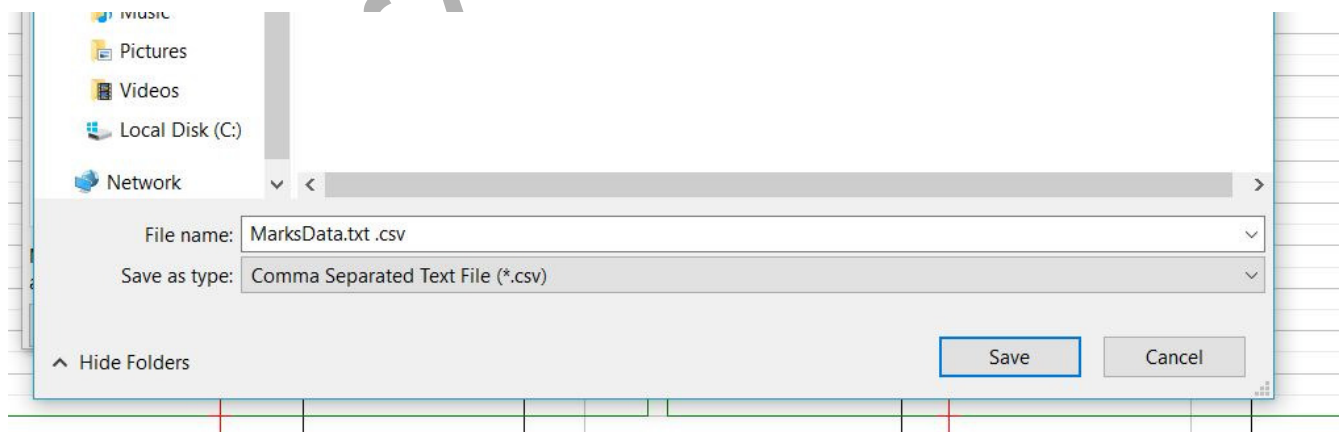


Figure HP-26-L5: Save as a Comma Separated file.

6. Open the new file you created in Excel. You will see a list of Marks in the first column.
 - The first Mark will be the one created when the image one shown and will always have 9 letters in it. The letters are in “clock” order with the first letter being at the 12:00 position. Shown in yellow in the image.
 - The second Mark will be the one made by the subject (shown in light gray).
 - The 1st letter in the answer should always be either a **D, G, O** or **Q**.
 - The next set of letters will be whatever letters the subject remembered for that image.

	A	B	C	D	E	F
1	MarkValue	File Time	Real Time	Channel	Ch Value	
2	DAMHNXEOZ	12.625	15:02:32.9	All	0	
3	DMHOZ	15.755	15:02:36.0	All	0	
4	HIXQFOKMOV	20.265	15:02:40.9	All	0	
5	QFOKMOV	22.755	15:02:43.0	All	0	
6	LTYKGIDHV	26.99	15:02:47.3	All	0	
7	DHVLT	30.91	15:02:51.1	All	0	
8						

Figure HP-26-L6: Excel file of the exported Marks.

7. Manually count the number of letters for each mark that the subject got correct. If the first letter is not a “rounded” letter, do not count that trial at all.
8. Note if the letters remembered are clustered near to the rounded letter or not. **This is important!**

Questions:

1. Was the subject always able to come up with a rounded letter as his/her first answer?
2. Was the subject ever able to remember all 9 letters? If so, how often did this happen?
3. What was the percentage of times the subject put a rounded letter first? All 9 letters?

4. Did the subject remember letters that were close to the target letter or farther away from the target letter more often?
5. Why do you think this happened?
6. Was the target letter actually helpful in identifying the other letters around it? Why or why not?

iWorx Sample Lab