Experiment HP-27: Spontaneous Imagery Scanning - Finke & Pinker Paradigm

Equipment Required

PC or Mac Computer

IXTA, USB cable, power supply

1 – RPD-320 4-Button Response Pad

Sensor Setup

1. Locate the RPD-320 4-Button Response Pad. Plug the connector in the RPD and into the Digital Input on the back of the IX-TA.

Figure HP-27-S1 RPD-320 4-Button Response Pad.

Set the Viewing Distance

1. Click "**Viewing Distance**" on the Macros list on the LabScribe toolbar.

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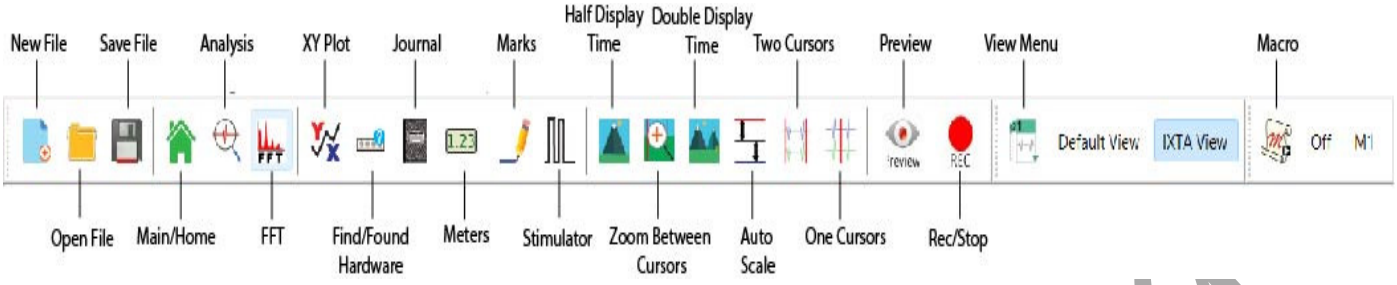

Figure HP-27-S4: LabScribe toolbar

2. Click Record and run the **Viewing Distance** macro.
3. Follow the directions on the prompt for setting the proper viewing distance for your subjects for this lab. It is important to sit the correct distance away from the monitor.
4. One the viewing distance is set, continue to the Lab directions for completing the Spontaneous Imagery Scanning test.

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General Directions:

All Tests will follow the same general directions. These directions are also found in the **ImageryDirections** Macro in LabScribe.

- Subjects will be shown a series of 8 images for each four dot pattern (named Scanning1, 2, 3, or 4).
- Each image will stay on the screen for 5 sec
  - After the image is shown:
    - The subject will be shown a white square for 1 sec
    - Then an image with an arrow either pointing directly at or totally missing one of the dots
      - The subject will press the letter "**A**" on the response pad for "**YES**" if the arrow points to a dot
      - The subject will press the letter "**D**" on the response pad for "**NO**" if the arrow misses a dot

Exercise 1: Scanning 1

Procedure

Warning: In this exercise, it is important to remember to quickly press the button A or D for answering YES or NO. The object is to have as few errors as possible.

1. Click on the Record **button**.
2. Click the **Scanning 1** macro on the toolbar and run the macro to begin the macro of images. There will be 8 images shown.
3. Follow the general directions as outlined above.
4. After the images are shown make sure to press the "**A**" or "**D**" button on the response pad to answer Yes if the arrow pointed directly to a dot previously shown or No if the arrow misses the dot. None of the arrows will be a "near miss".
5. Click Stop to halt recording.
6. Click on the Save button to save the data file.

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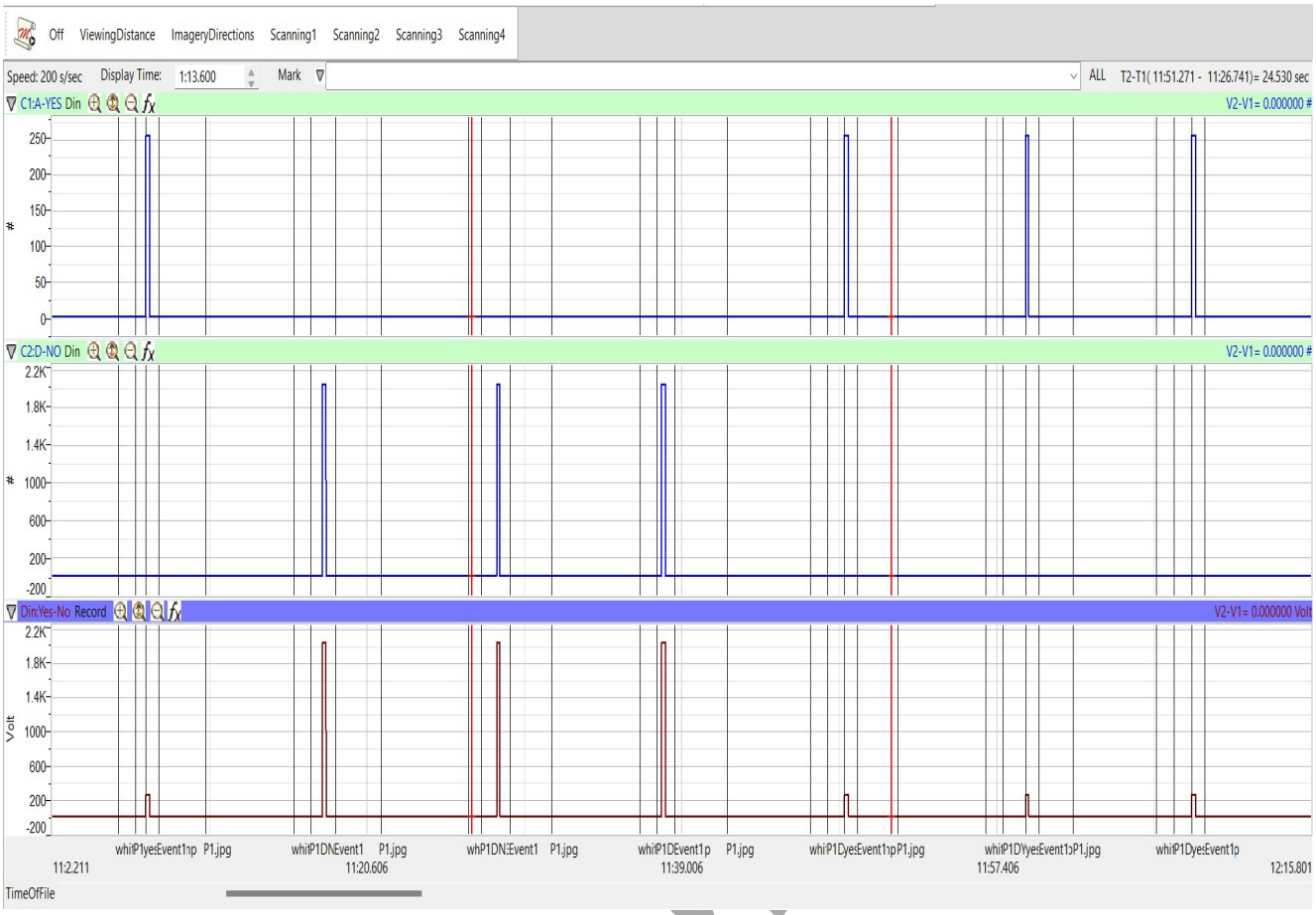

Figure HP-27-L1: Sample of what the data may look like.

Data Analysis

NOTE: The name of the images are such that they will be easy to analyze, but difficult for the subject to know what they are by name.

Images that miss a dot totally will be named like this – P1D**N**1 (N stands for "No")

Images that point to a dot will be named like this – P1D**Y**4BL (Y stands for "Yes")

4 is the distance away in cm (other options will be 6, 8, 10 or 12)

BL stands for bottom left

UR – upper right

BR – bottom right

UL – upper left

Work Sa

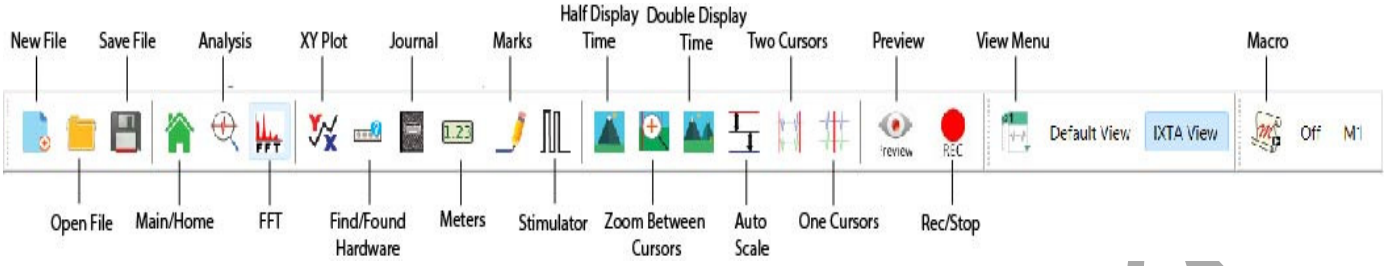

Figure HP-27-L2: LabScribe toolbar.

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 the Double Display time button until approximately 10 responses show on the screen.
3. Click the Analysis Window button on the toolbar to move into the analysis screen.
4. Set up your AutoFind to make analyzing the data easier.
    - Click Tools
    - Click AutoFind
    - Set up the AutoFind
        - Find Mode – Advanced
        - NewCursor1 Position – Mark
            - Mark – Y or N (for the image with the letter Y or N in the name)
        - NewCursor2 Position – NextMax
            - Adjust the horizontal cursors so they go through the smaller peaks as shown in Figure HP-27-L3.
        - Put a check mark in "Add Mark to Cursor2 Position" and name the mark (in the example - "Yes" or "No")
        - Repeat Until – Block Limits
        - Make sure to Export to Journal
        - Click "Find"

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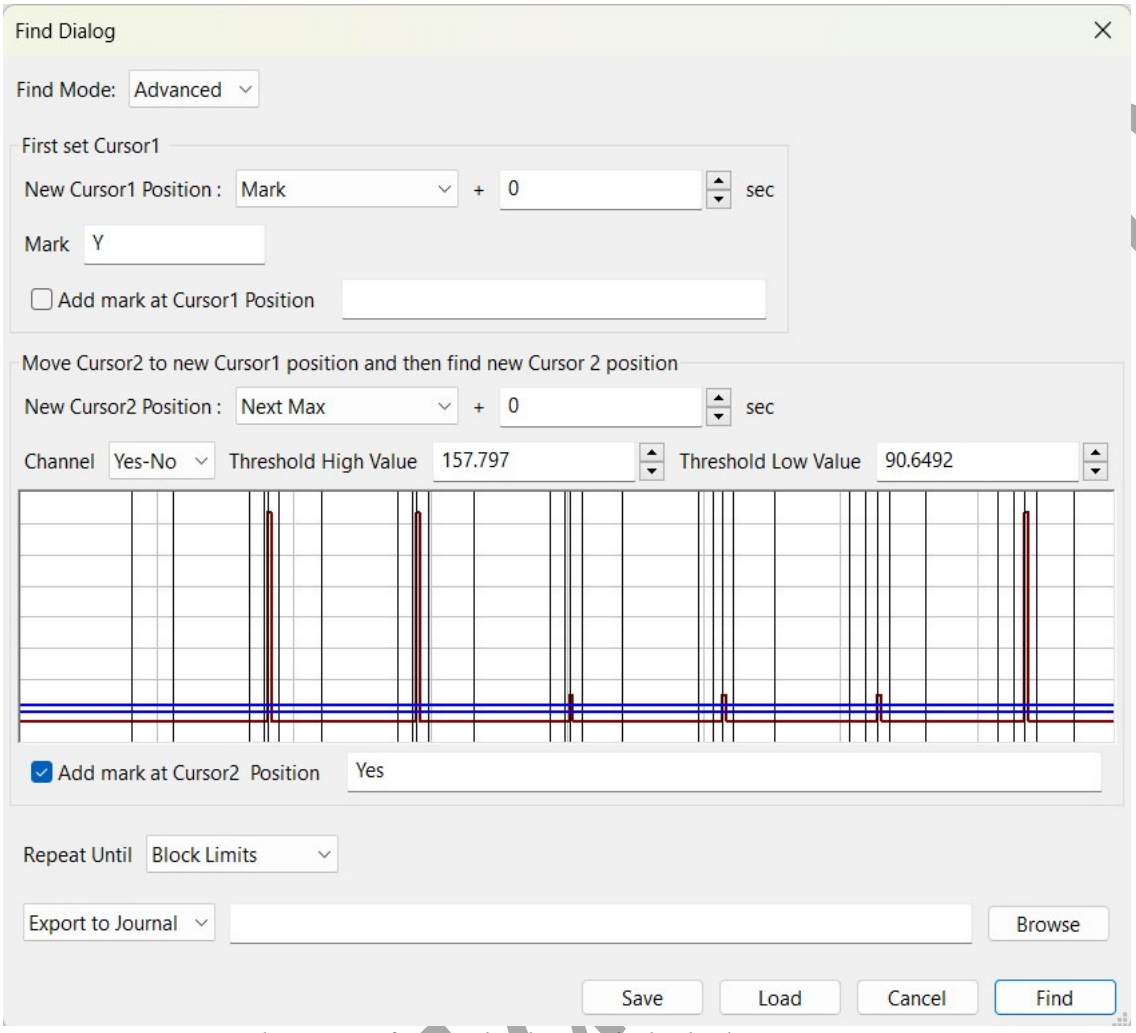

Figure HP-27-L3: AutoFind Settings for marks that include the letter "Y".

5. The AutoFind will automatically find all the marks for the images that include a "Y" in its name (the arrow pointing to the dot) and the answer made by pressing the "A" button on the response pad.
6. The value T2-T1 will be exported to the Journal for all responses to the "Y" images.
7. Click the Journal icon to open the Journal to see the timing for all answers to the "Yes" responses.
    - Delete the "No" column (the values will be the same as for the "yes" column)
8. Repeat this procedure for the "N" images (for the arrow not pointing to the dot). You will use the letter N (instead of Y) and No for your mark. Delete the "Yes" column.
9. Save your file after performing the AutoFind.

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10. For this exercise, notate the time for the different distances.
    - 4 cm ~ 4 times – calculate the mean reaction time
    - 6 cm ~ 4 times – calculate the mean reaction time
    - 8 cm ~ 4 times – calculate the mean reaction time
    - 10 cm ~ 4 times – calculate the mean reaction time
    - 12 cm ~ 4 times – calculate the mean reaction time

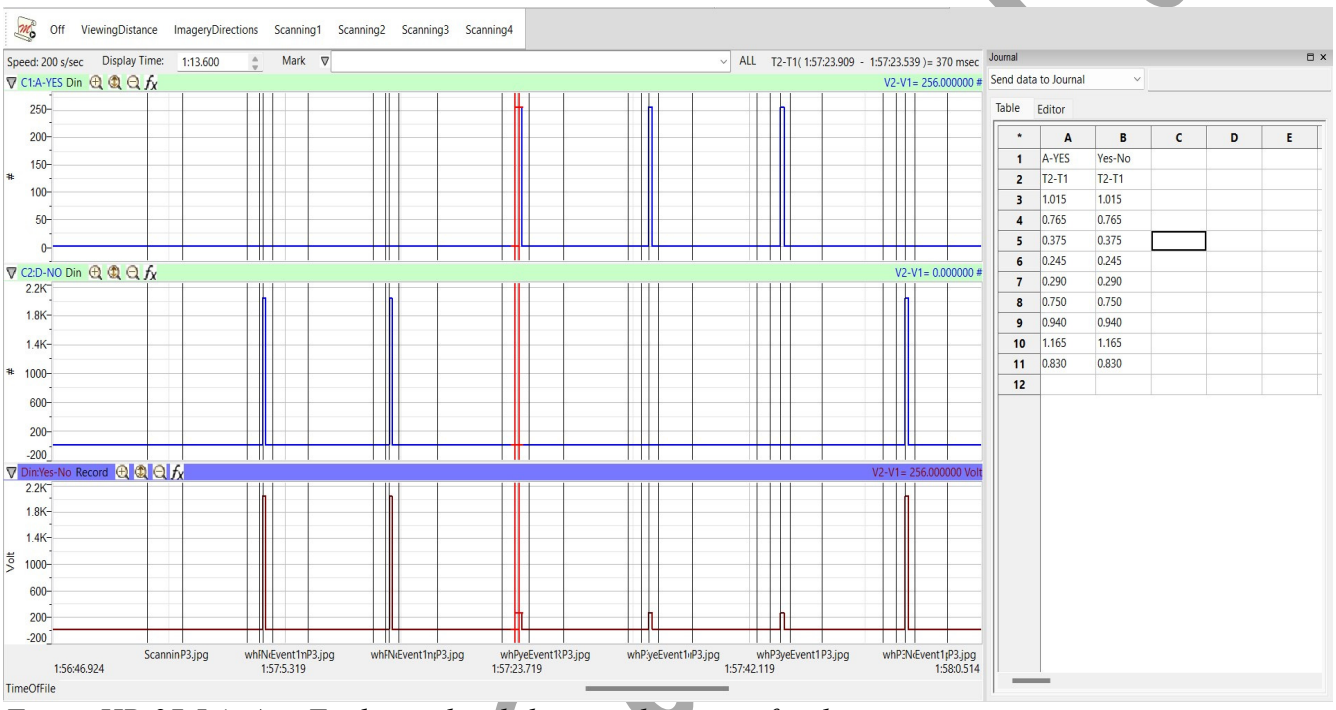

Figure HP-27-L4: AutoFind completed showing the timing for the responses.

Exercises 2, 3 and 4 – Scanning 2, 3 or 4:

Procedure

1. Repeat the same directions from Exercise 1.
2. The subject will be shown 8 images for each of the different sequences.
3. Click **A** for Yes or **D** for No.

Data Analysis

1. Repeat the same directions from Exercise 1.

Remember to notate the time for the different distances.
4 cm ~ 4 times – calculate the mean reaction time
6 cm ~ 4 times – calculate the mean reaction time
8 cm ~ 4 times – calculate the mean reaction time
10 cm ~ 4 times – calculate the mean reaction time
12 cm ~ 4 times – calculate the mean reaction time

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Questions:

1. What was the mean reaction time of the subject for the shortest distance?
2. What was the mean reaction time for the other distances?
3. Does the reaction time correlate with the distance the arrow was away from the dot?
   If so, was it a direct correlation?
4. What was the total percentage correct for the images? Percent incorrect?
5. How accurate was the subject at perceiving when the arrow was not pointing at a dot?

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