

ADA-10A & ADA-20A

Operation Manual



Contents

ADA-10A or ADA-20A display adaptor box.



RJ45 twisted cable



Parallel cable (25pin)



Software for your specified PSA or MSA unit Includes Operating Manual



Initial Setup

1. Plug the parallel cable into the back of your PC.
2. Connect the other end of the parallel cable to the ADA box.
3. Insert the RJ-45 modular plug into the back of spectrum analyzer as shown below:



Figure 2-1

4. Insert the other end of the RJ-45 into the ADA box.
5. Turn on the Spectrum Analyzer, then turn on the computer.
6. Once the computer has booted up, insert Disk 1 into the 3 ½ Floppy drive. If your software is on a CD-ROM, move directly to “Setup Using a CD-ROM.”
7. Go to “My Computer” and click on the 3 ½ floppy drive.
8. Double-click on the setup file to begin the installation.
9. When the disk finishes loading, follow the prompt to insert Disk 2.
10. After you are prompted that the loading is complete, remove Disk 2 and move on to “Running the Program.”

Setup Using a CD-ROM

1. Insert the CD into the CD-ROM drive.
2. On your startup screen click on “My Computer” and select your CD-ROM drive (normally D drive).
3. When the CD opens, double-click on the folder of the model of PSA or MSA that you have as shown below:

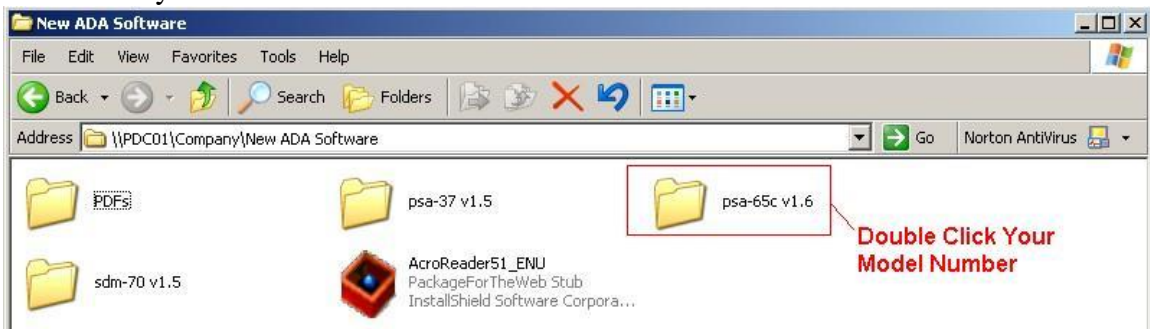


Figure 3-1

4. Once the Folder is open, double-click on the setup file as shown below:

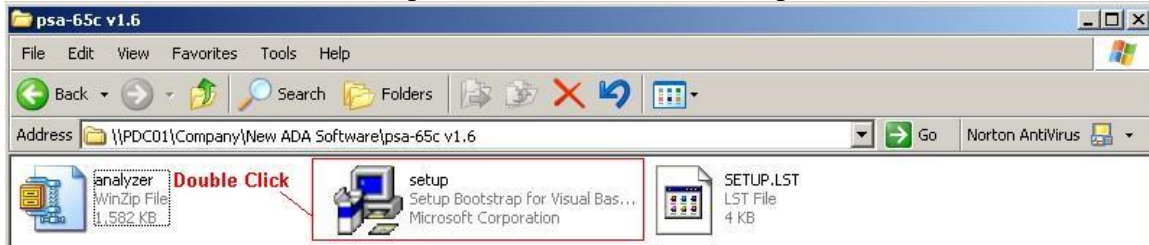


Figure 3-2

5. Follow the Setup prompts through the installation.
6. After the installation is complete, move on to “Running the Program.”

Running the Program

1. With all equipment connected and turned on, go to START.
2. Select Programs on your Desktop and find the model number of your PSA or MSA.
3. Double-click on the program box as shown below:

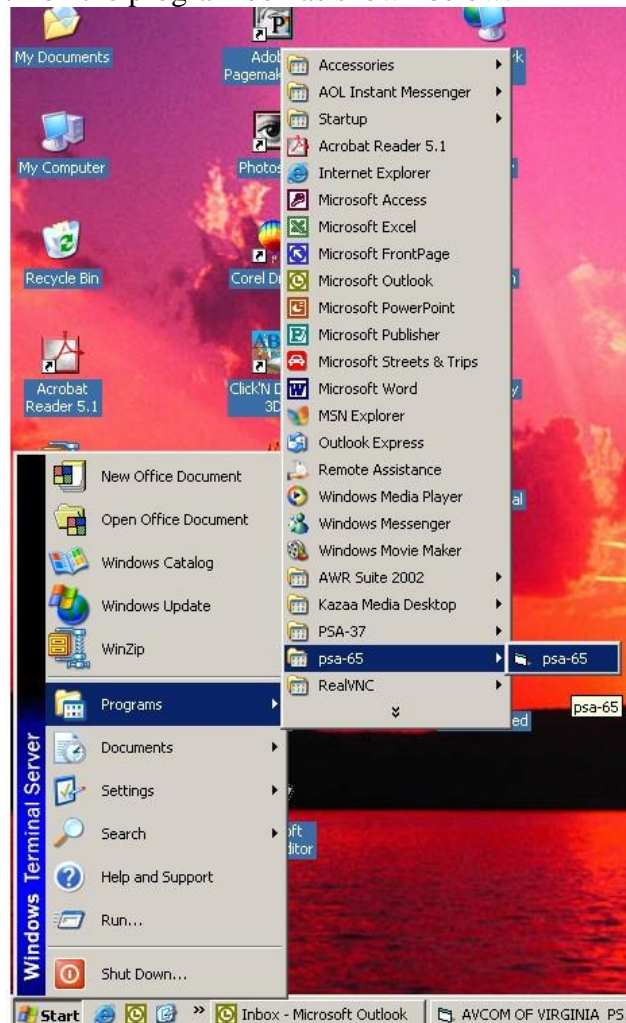


Figure 4-1

4. The program will launch to reveal a screen as in figure 5-1.



Figure 5-1

5. When the screen if Fig. 5-1 appears, click on the RUN PROGRAM button.
6. When screen 5-2 appears, you are ready to use the display adapter.

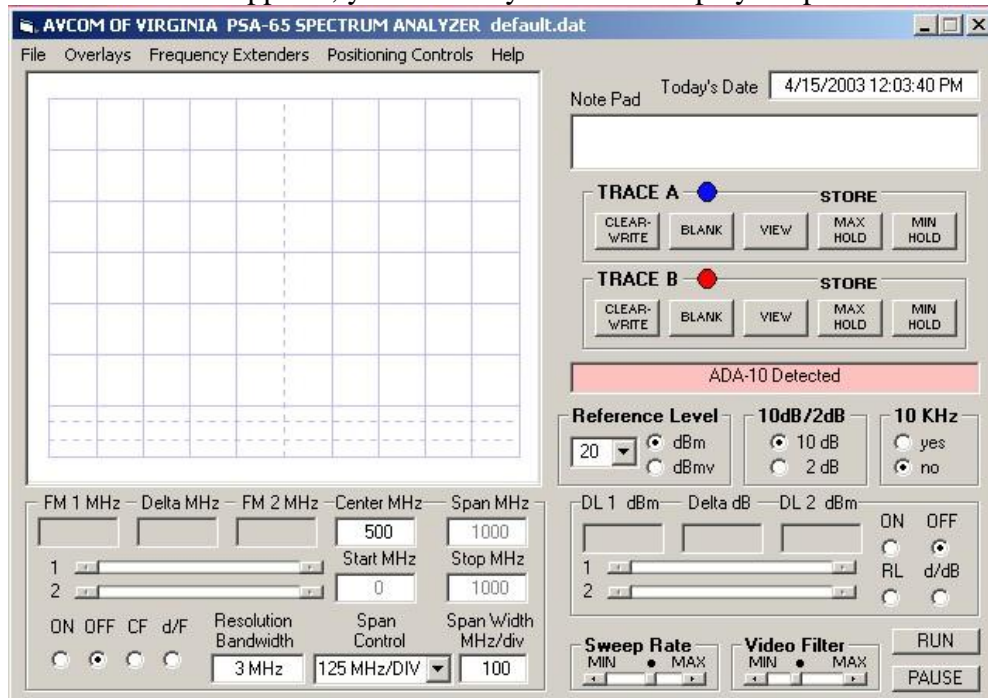


Figure 5-2

To start the display adapter and allow you to view the trace on your computer, click on the CLEAR WRITE button as shown in Figure 6-1, followed by RUN.

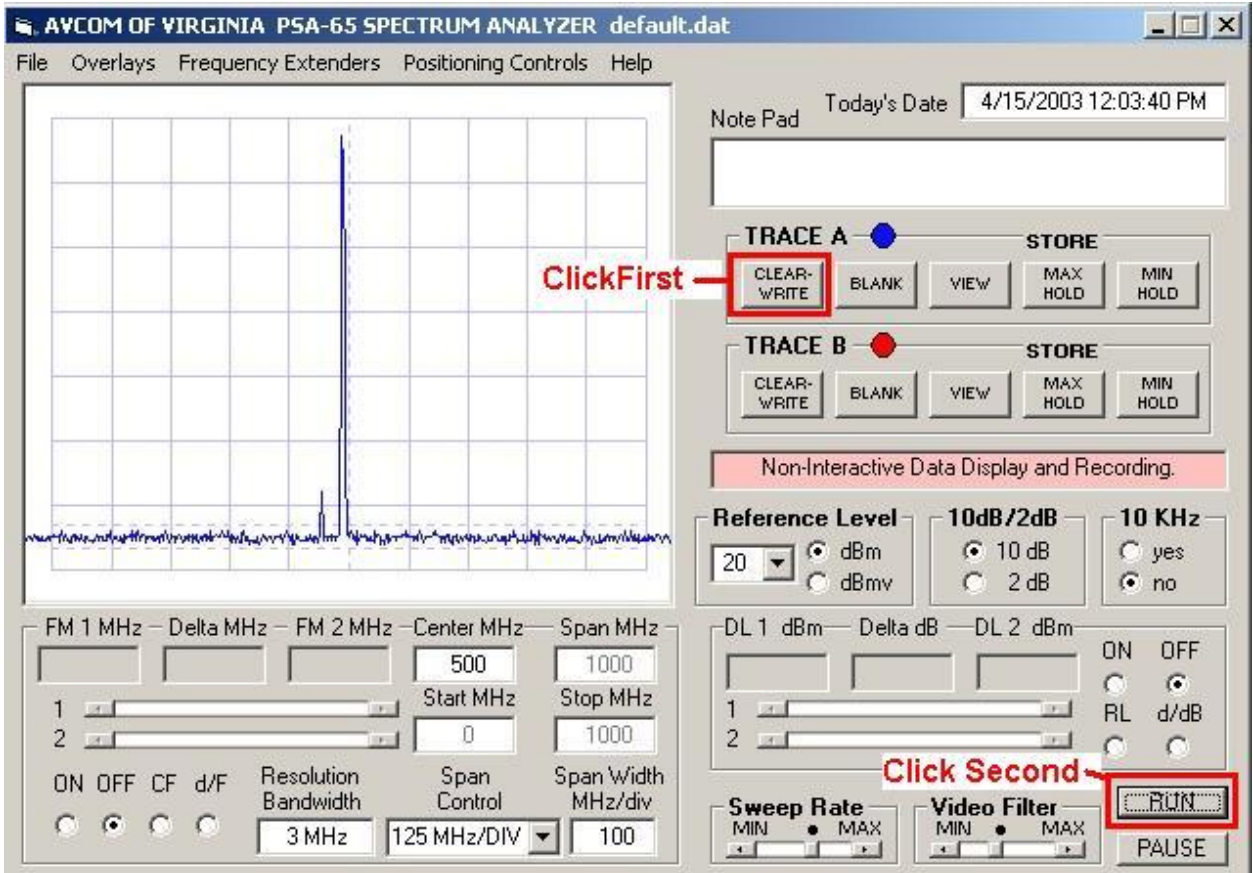


Figure 6-1

Follow the instructions on the following pages to save a trace and perform various other tasks with your ADA spectrum display adapter.

Changing Settings

NOTE: Because this is a non-interactive display adaptor, you must manually change the settings on your computer screen to match those on the analyzer to save correctly-identified screen shots.

1. Figure 7-1 shows the areas that may be changed to match the analyzer. Simply click on the box, delete the current value, and key in the new information.

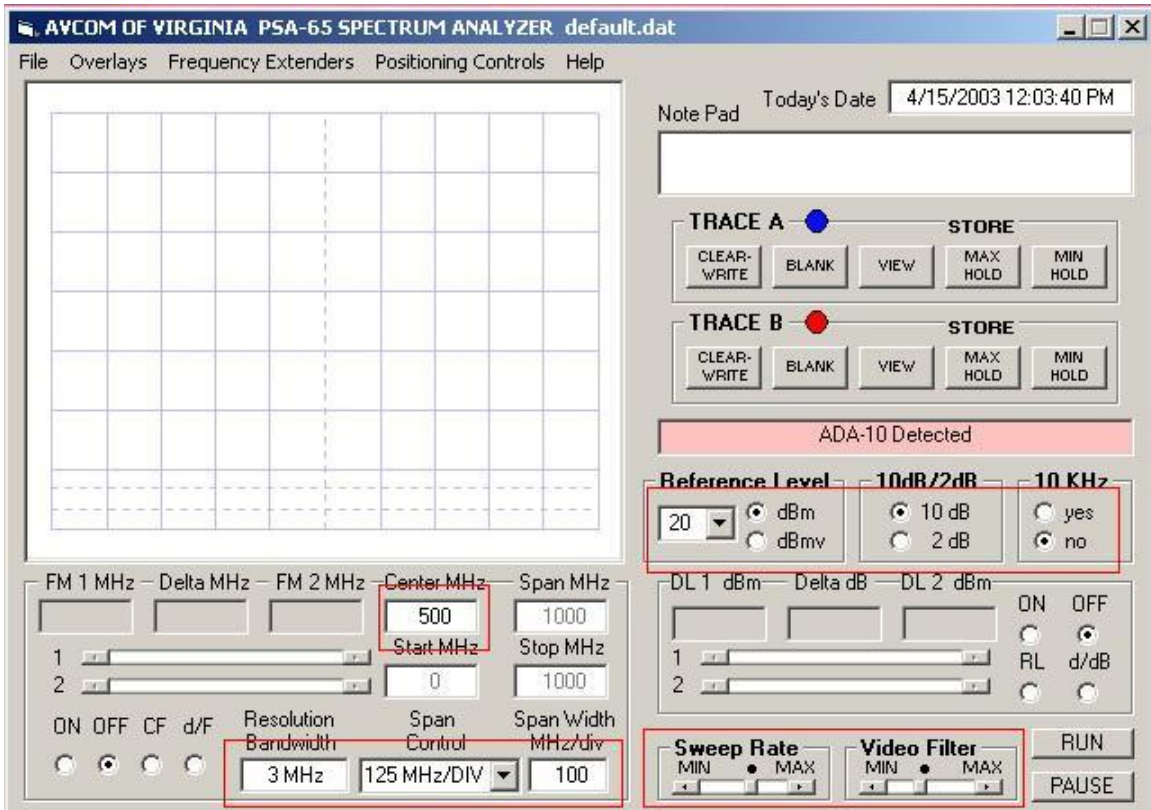


Figure 7-1

Changing Trace or Display Line Colors

1. Click on FILE, then CONFIGURE, then choose TRACE A or TRACE B (Neither trace needs to be present to change its color). The same procedure is used to change display line color by selecting that final option. A color chart like Figure 8-1 will appear.



Figure 8-1

2. Click on the trace color of your choice.
3. Next run your program to utilize the new trace color.

NOTE: You may also change the display line color as in steps 1 and 2.

To save these new settings, select FILE, then SAVE AS. The next time you run the program you will have to go to FILE, then OPEN, then TRACES FILE (or DISPLAY LINE FILE) and choose the file that you saved.

You may set up as many different files as you need to accommodate all of your applications.

Overlays

There are several different tasks that can be done with the Overlay feature.

Change Color

1. You must change the color before you can use the overlay, otherwise the default color will be used and cannot be changed.
2. To change the color of the overlay, first click on OVERLAYS, then click on OVERLAY COLOR. The color chart in figure 9-1 will appear and you will need to choose the color that you would like to use.



Figure 9-1

3. Once you have chosen your color you are ready to create an overlay.

Create Overlay

4. To create an overlay, click on OVERLAYS (figure 10-1), then CREATE OVERLAY. A "Save As" screen appears and you need to type in a file name. The trace that is in the active screen will be saved so you may pull it up later for reference.

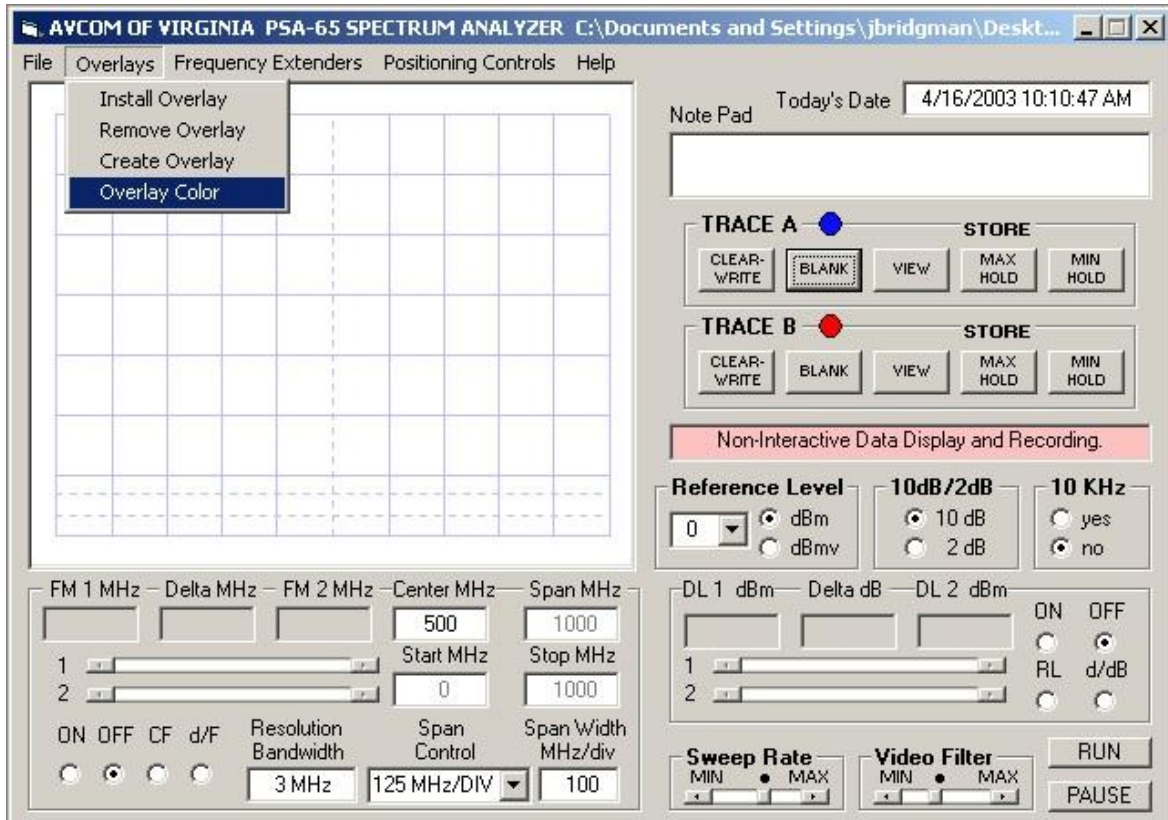


Figure 10-1

Install Overlay

1. To install an overlay, click on OVERLAYS, then click on INSTALL OVERLAY.
2. Find the file name of the overlay that you saved and double-click on it.
3. With the active trace going and the overlay on the screen you should see something like figure 11-1.

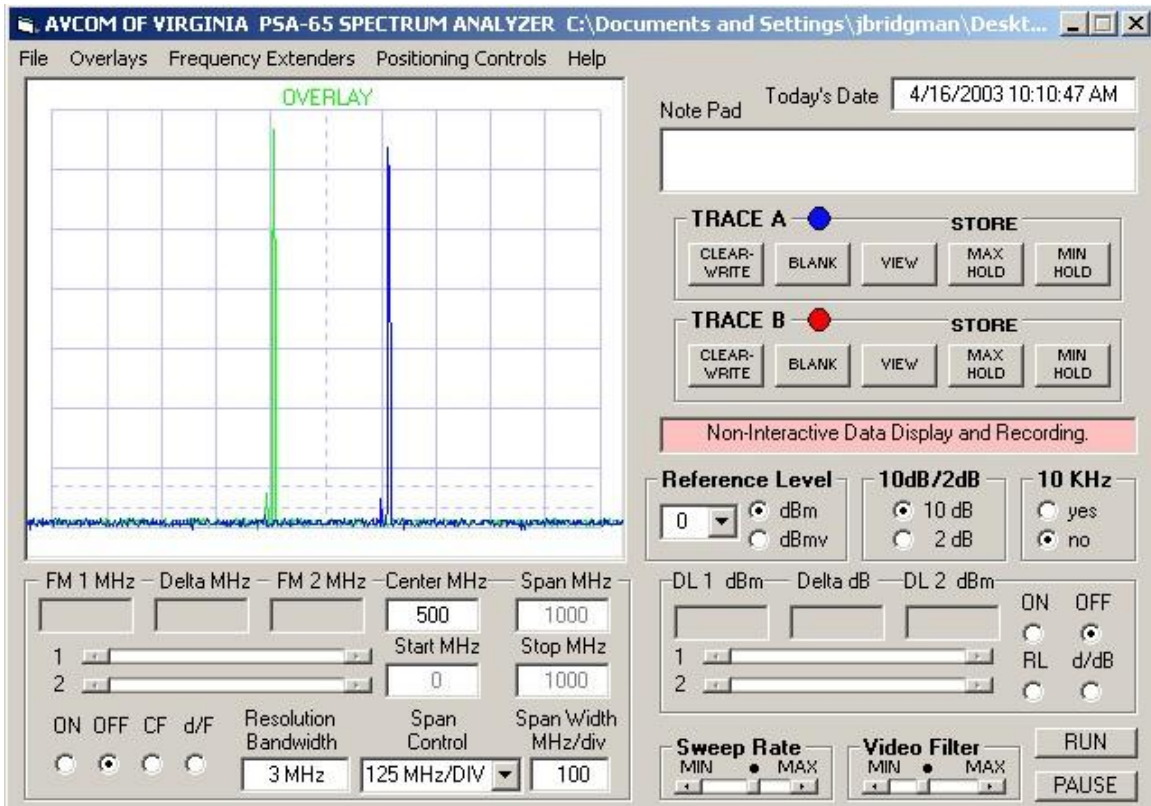


Figure 11-1

Remove Overlay

Once you have finished using the overlay you may remove it and keep the active trace on the screen.

1. Click on OVERLAYS, then click on REMOVE OVERLAY.
2. You should be back to your normal screen with just the active trace.

Setting up ADA for use with Frequency Extenders

1. Click on FREQUENCY EXTENDERS, then click on the frequency range of the extender that you are using (See Figure 12-1).
2. If you do not see your frequency range in the drop list, you may click on CUSTOM EXTENDER and enter the start frequency of your extender.

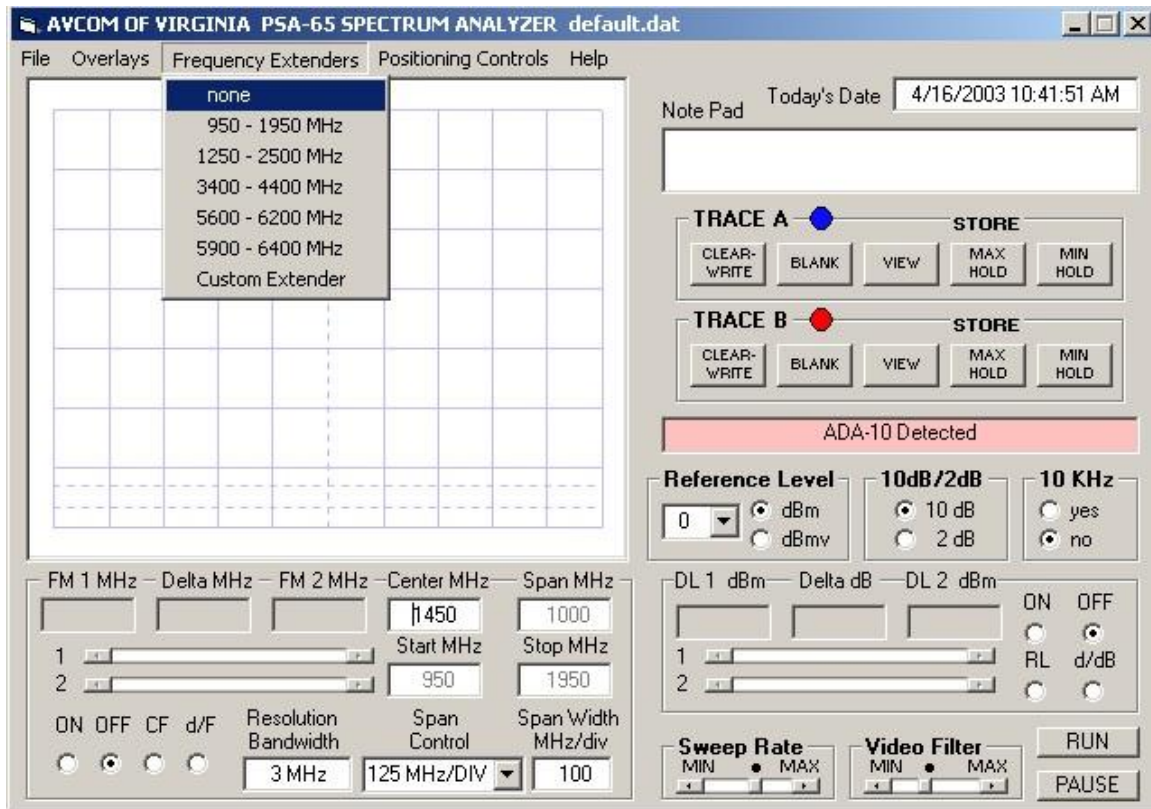


Figure 12-1

Using Reference Level Lines

There are several different options when using the reference level lines. You may use one reference level line or you may use two at the same time. Refer to figure 13-1.

1. To turn on only one line, click on the ON circle; to turn on two lines, click on the d/dB circle.
2. If you would like to reset the Ref level to 0, click on the RL circle.
3. To turn off Ref lines, click the OFF circle.
4. To adjust the Ref line levels, place the cross-hair over the line, then click and drag the line to the desired position. You may also move the slide bars 1 and 2 to accomplish the same task.

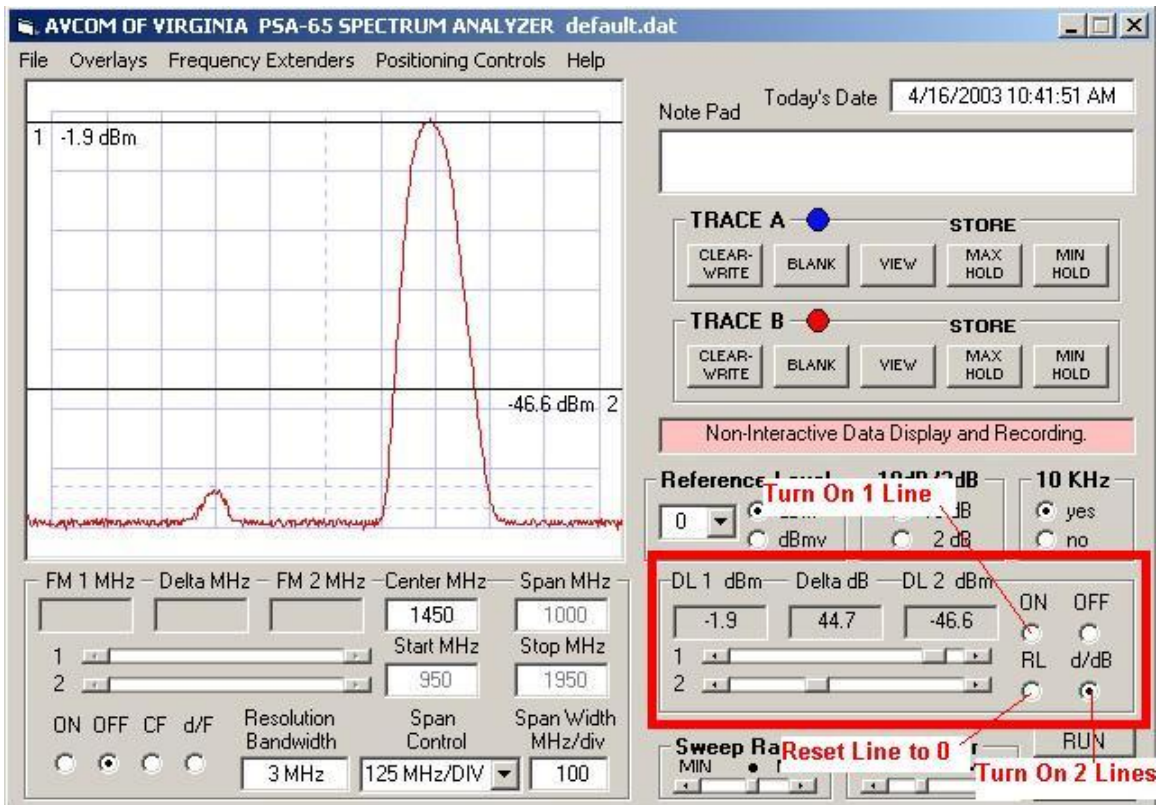


Figure 13-1

Adjusting Positioning Controls

The positioning controls allow you to align the ADA software trace to the same position as shown on the analyzer. You only need to adjust these controls the first time that you run the program.

1. To launch these adjustments, click on POSITIONING CONTROLS at the top of the program (See figure 14-1).
2. Once the positioning controls box is open, you may adjust the levels to get the same view on the computer as you have on your analyzer.
3. After you have finished adjusting, click YES to save your settings.

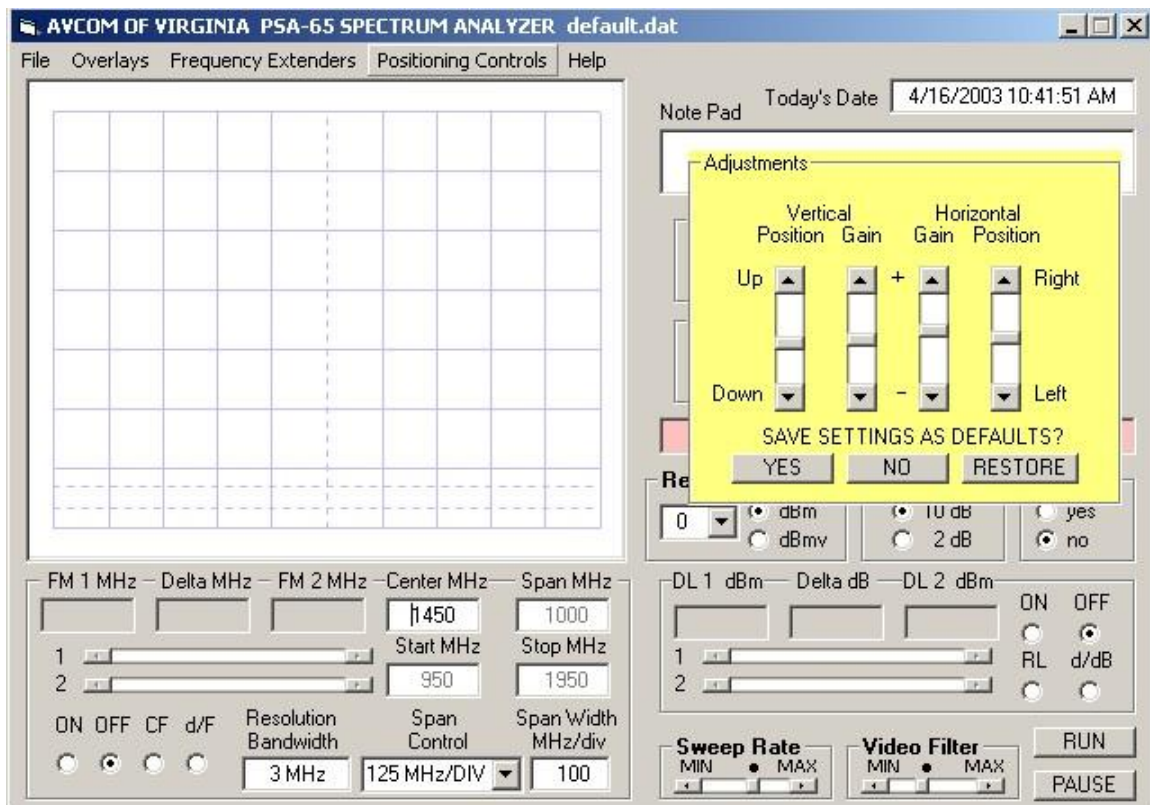


Figure 14-1

Using Max Hold

The Max Hold is a great feature if you are using your analyzer to tune a signal in. With the Max Hold on you are able to see what the highest signal was while adjusting the equipment.

With the Max Hold you may also sweep antennas and other equipment to see if there is roll off or a drop in signal at a certain spot.

In Figure 15-1 you can see what it looks like when the Max Hold feature is used to sweep a certain piece of equipment.

1. To use the Max Hold feature, first click on CLEAR WRITE at trace A, then click on CLEAR WRITE at trace B. It is best to have both traces active when using this feature.
2. Next, click on the MAX HOLD button of trace A. This will allow you to see the peak of a signal tuned in on your analyzer appear as a line across the top of the screen (See fig. 15-1).

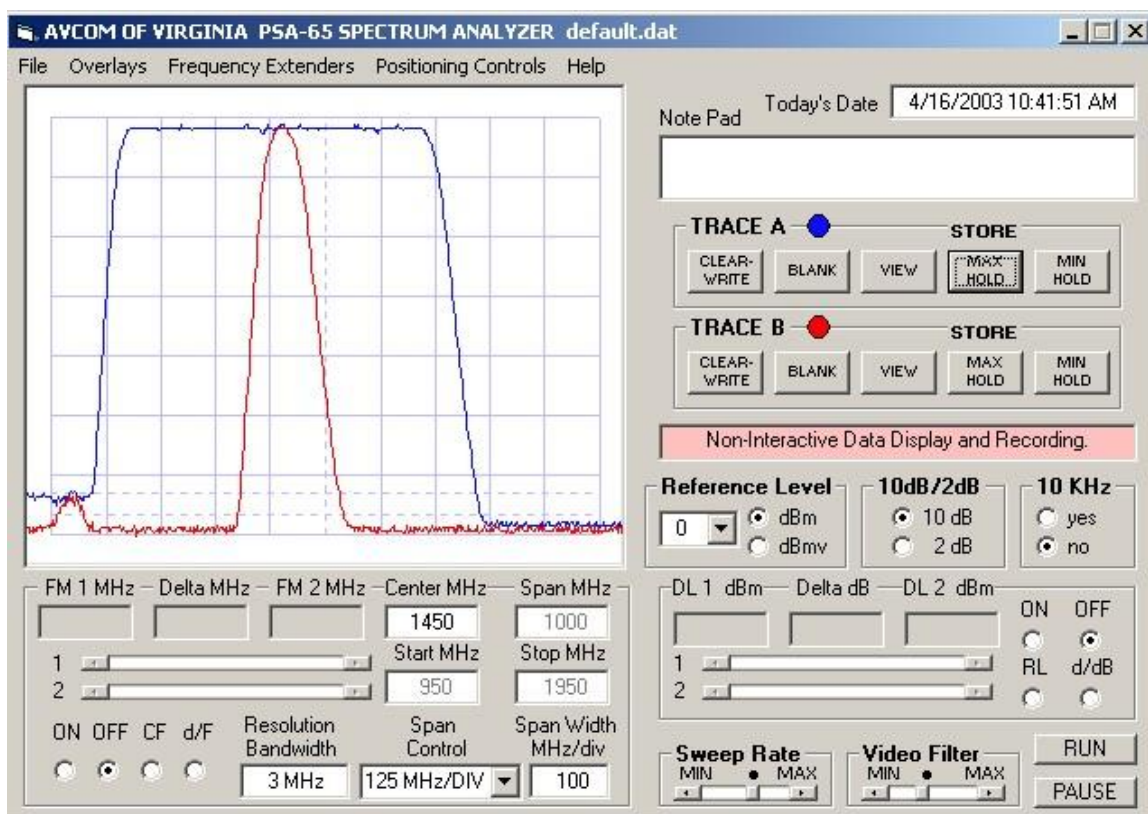


Figure 15-1

Trouble Shooting

1. Computer will not recognize ADA-Display Adapter
 - a. Check and make sure all cables are plugged in.
 - b. Make sure Analyzer is turned on.
 - c. Check settings to make sure computer setting for parallel port is set to LPT1 and ECP configuration.
 - d. Try turning the analyzer off for about 5 seconds and then back on.
 - e. Press the TEST PORT button several times.
2. Weird lines in the display jumping around. Figures TS-1 & TS-2
 - a. Press PAUSE then press RUN.
 - b. Turn the analyzer off and back on.
3. If none of the above work try un-installing the software and re-installing it.

After trying all of the above and the ADA still does not run please call Tech Support at (804) 794-2500.

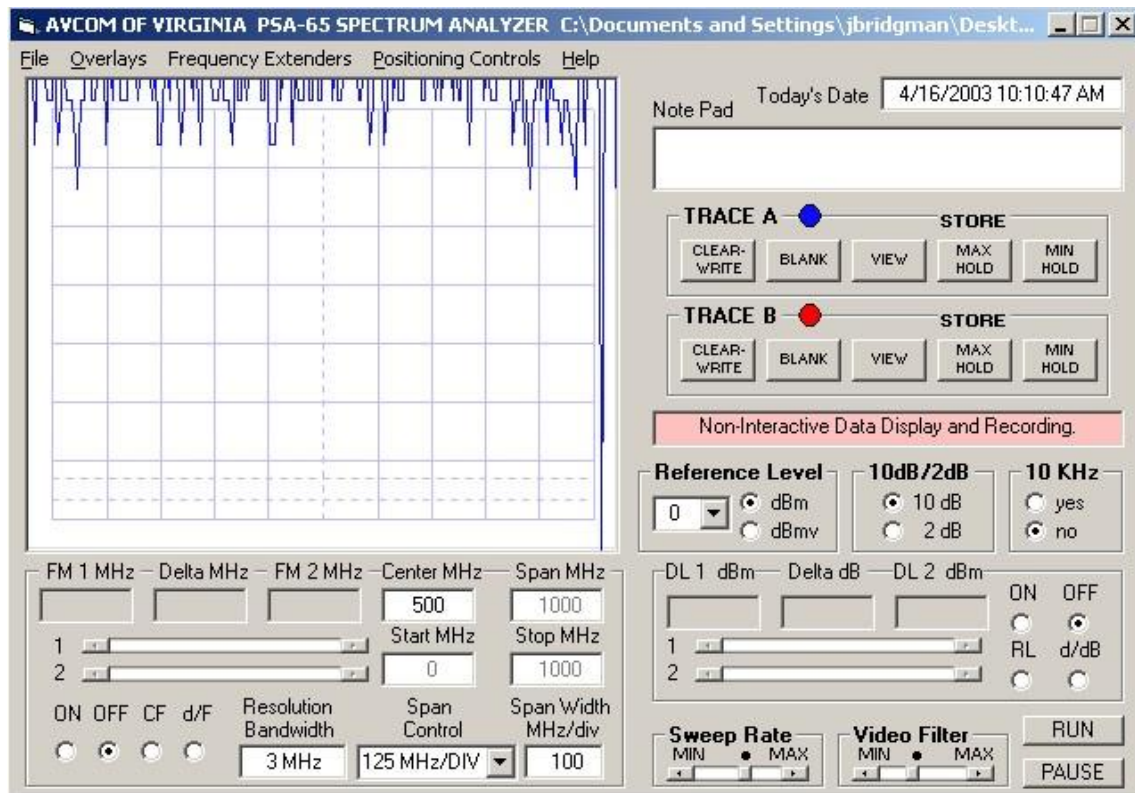


Figure TS-1

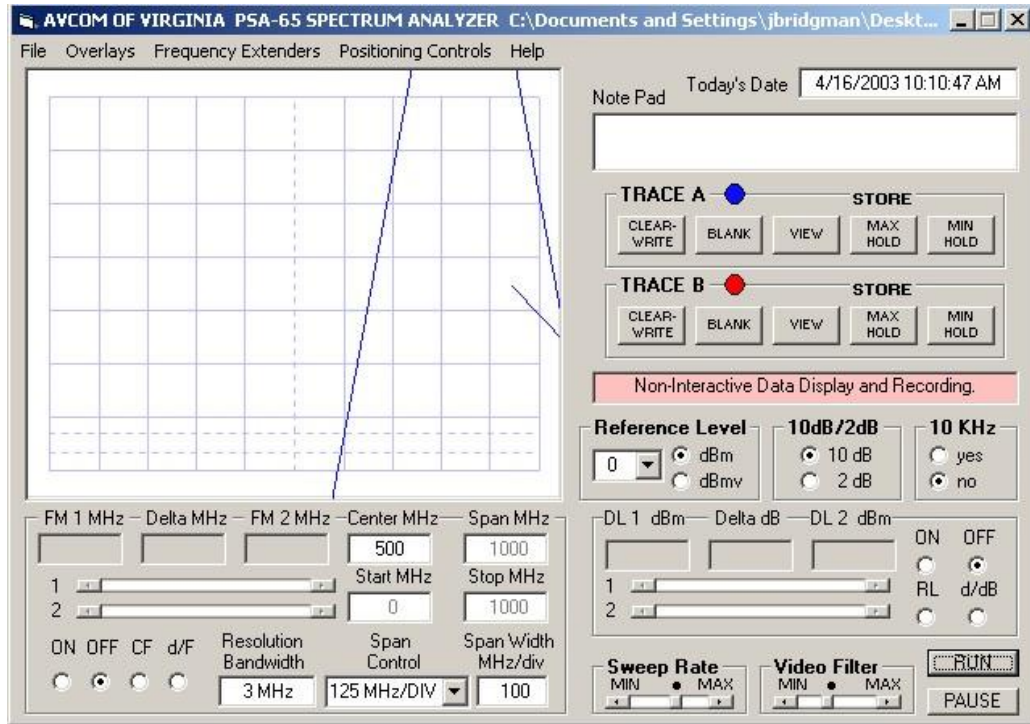


Figure TS-2