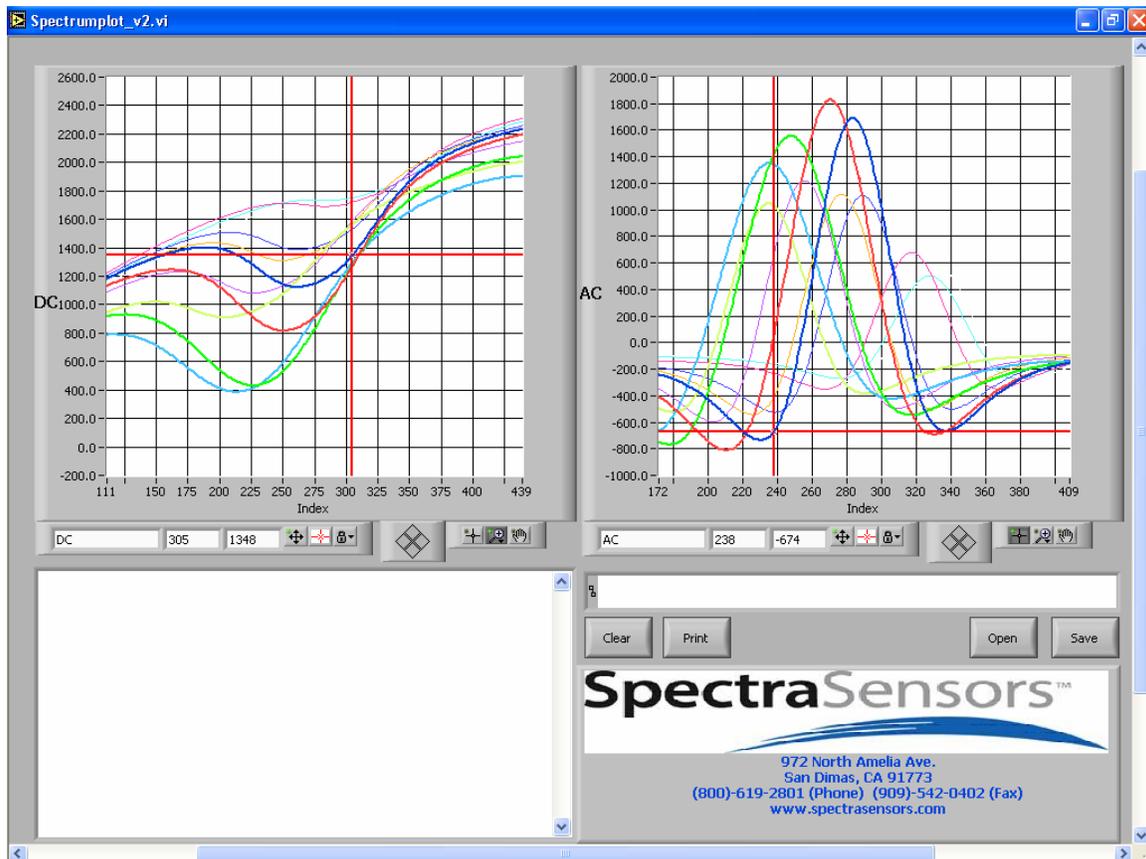


SpectraSensors™



Operation Manual for SpectrumPlot Software



Introduction

SpectrumPlot II allows the operator to perform all of the diagnostic functions for SpectraSensors moisture analyzers with a single program. Those functions include continuous viewing of the serial output stream, capture of downloaded data, viewing and saving of the captured data, and viewing of previously archived data.

System Requirements

1. Windows 98, 2000, XP Operating System
2. Serial Com Port
3. 1024 x 768 screen resolution

Installation

1. Load SpectrumPlot CD-ROM into computer
2. Open CD-ROM drive and double click the “Installer” folder
3. Run setup by double-clicking “setup.exe”
4. Installation screen should appear on the screen
5. Choose where you would like the program to install. The default is C:\Program Files\SpectrumPlot_v2
6. Click on Finish.

Operation

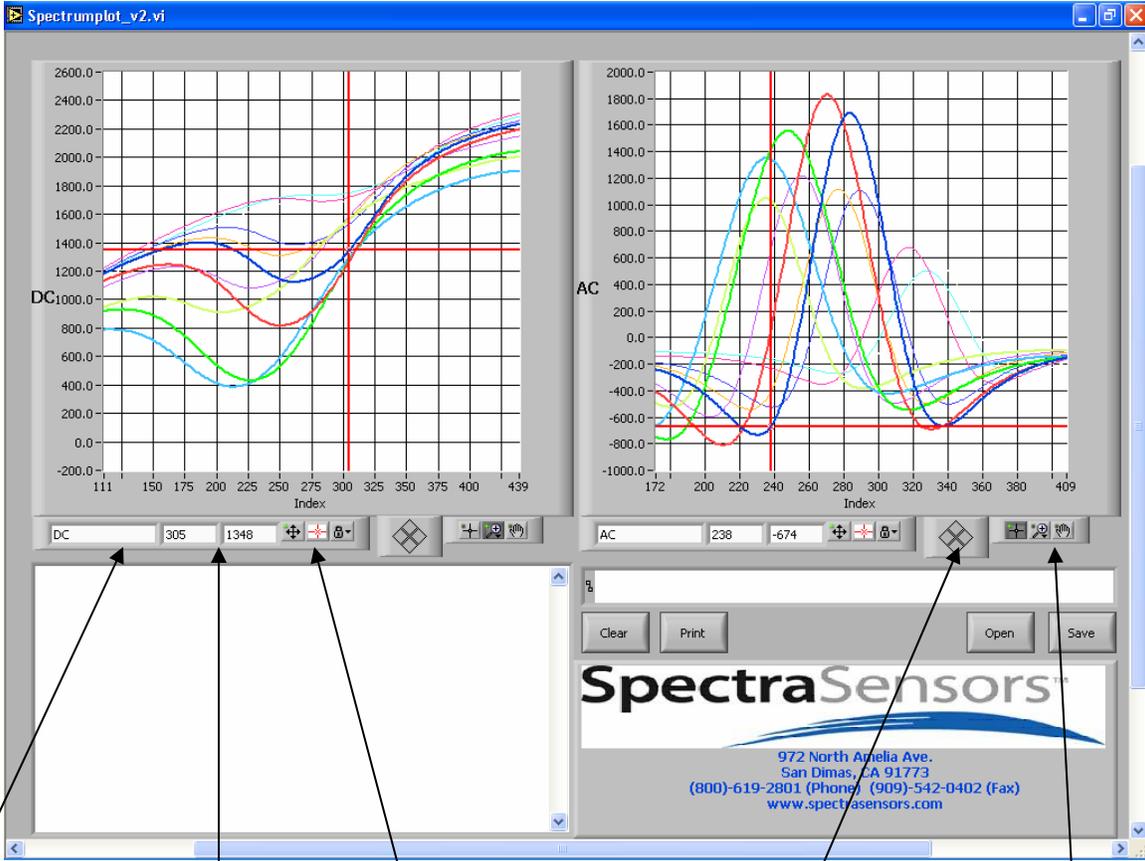
1. Make sure an analyzer is connected via serial cable to your computer if you plan to receive data
 - a. Connect the serial cable wire to the green signal output terminal block in the analyzer. The black wire goes to terminal #1, the red wire to #2, and the bare wire to terminal #3. For a two channel unit, the connections for the second channel are black to #4, red to #5, and bare to #3. Plug the other end of the cable to your computer
2. Go to the SpectrumPlot directory chosen during installation. The application should also add a shortcut to your programs within the start menu.

3. Double-click "SpectrumPlot_v2.exe"
4. Select whether you would like to receive data through the serial port. If you choose yes, the application will prompt you for a COM port; choose no, the application is ready to view previously saved spectrum data.

Note: Application will indicate an error if it can't access the COM port (another program may be using it) or timeout if data isn't received within a certain amount of time

5. If you chose to receive data, streaming data should be visible in the textbox. This data contains both measurement and diagnostic data.
6. To view spectrum clear the graph by pressing clear button and then pressing #6 on the analyzer key pad. You should see two plots on the computer display, DC on the left and 2F on the right. **Go back to normal mode (#1), otherwise the application will timeout if data isn't received with a certain amount of time.**
7. To save the data, press the save button, choose directory, and specify file name
8. To print the graphs, press the print button
9. To open a previously saved spectrum, press the open button and choose file

General Overview



CURSOR LABEL

X-POSITION
Y-POSITION

TOGGLE CURSOR PAD
SET CURSOR PROPERTIES
CURSOR LOCK

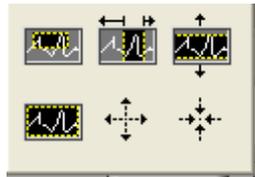
CURSOR PAD

MOUSE FUNCTION
-CURSOR
-ZOOM
-BOX
-X
-Y
-EXTENTS
-ZOOM IN
-ZOOM OUT
-PAN

1. The mouse can be used to navigate and perform many different functions within different modes. The three different modes are cursor, zoom, and pan. Once in a particular mode, only functions within that mode can be performed. Modes can be chosen through the mouse function buttons.

Zoom/Cursor Control

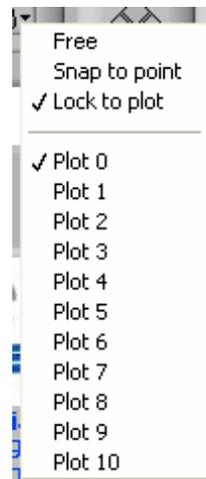
1. The zoom controls are at the bottom right of each graph. Functions available are box zoom, horizontal zoom, vertical zoom, extents, zoom in, and zoom out. By default, the program will auto-scale once a spectrum is displayed.



2. The cursor may be moved about the graph by dragging the cursor point or using the cursor arrow controls. Cursor pad must be enabled in order to move the cursor about the graph. Cursor controls allow for small incremental changes. Cursor may be locked onto the plot, kept free, or snapped to a point. X and Y coordinates for each graph is displayed



Cursor Control



Cursor Modes

Troubleshooting

1. The program terminates when attempting to retrieve data from the computer.
 - a. Another application is currently using the COM port that was chosen.
Terminate the other application and restart the Spectrumplolt software.
2. An error dialogue box appears when you hit cancel when prompted for a file.
 - a. Hit continue and the program should run normally.
3. Program appears to hang during operation.
 - a. Operator chose to receive data and nothing is being received through the COM port. Verify COM port, connections to/from the analyzer, and that the analyzer is in normal mode (# 1).
 - b. Operator actually wanted to open archived data and has nothing hooked to the computer. Restart the program and choose no when prompted to receive data.
4. Archived files do not plot any data when opening a file
 - a. Delimiters have been removed due to changing file types (text to excel).
 - b. There is no spectrum data in files.
5. Application does not fit on screen.
 - a. Change screen resolution to 1024x768
6. If any do problems do arise please contact the factory.