
SignalVu-PC read this first

This document describes how to install SignalVu-PC, how to activate SignalVu-PC, how to connect to an oscilloscope with SignalVu-PC (requires Option CON), and provides a brief introduction to the application. For full operating information on SignalVu-PC, access the SignalVu-PC online help in the application software under Help > User Manual.

PC requirements

The PC on which SignalVu-PC is installed must meet the following minimum requirements:

- One of the following Windows operating systems:
 - Windows 8
 - Windows 7 (32-bit or 64-bit) with Service Pack 1
 - Windows XP with Service Pack 3
- 6 GB free space on the C: drive
- 1 GB RAM (4 GB recommended)
- Internet connection for software activation

Activation can be automatic or manual. Automatic activation requires that the PC on which SignalVu-PC is installed have internet access. Manual activation can be performed using a second PC with internet access if the PC on which SignalVu-PC is installed does not have internet access.

Live Link connection requirements (Option CON only)

In addition to the PC requirements, use of Live Link (Option CON) with SignalVu-PC also requires the following:

- An MDO4000B Series instrument
- One of the following:
 - PC with USB connector and cable
 - PC with LAN connector and cable or a wireless connection
- TekVISA (recommended for optimal performance)



TekVISA Tektronix Virtual Instrument Software Architecture (TekVISA) is a Tektronix VISA solution. It is a collection of software and documentation that allows for remote control of instruments regardless of instrument brand and physical connection. TekVISA includes a VISA driver, VISA libraries, documentation, USB Device Driver, VXI-11 server, and connection management/debug software.

The most recent version of TekVISA is optimized for Live Link (Option CON) and for control through the programmatic interface. When you download the SignalVu-PC software from the CD or from www.tektronix.com/downloads, you will have the option to install the most recent version of TekVISA.

If you have an older version of TekVISA already installed, you will need to uninstall that version before installing the most recent version.

NOTE. *If you want to control SignalVu-PC from another PC by using a programmatic interface, you must use TekVISA.*

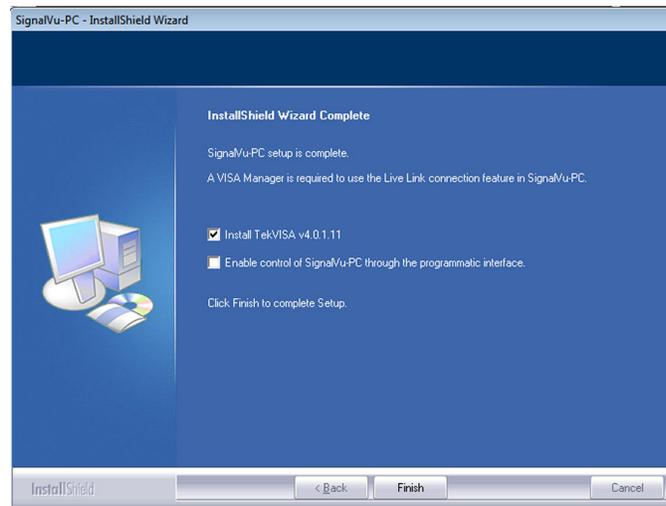
Installing SignalVu-PC

SignalVu-PC can be downloaded from the web or ordered as a CD.

1. If you downloaded SignalVu-PC from the web, unzip the archive on the PC where SignalVu-PC will be installed.
2. If you purchased SignalVu-PC as a CD, insert the CD into the CD drive of the PC on which the software will be installed.
3. Use Windows Explorer to navigate to the folder you extracted from the archive or to the SignalVu-PC CD.
4. Double-click **Setup.exe**. Follow the on-screen instructions to install the software.

5. When installation is almost complete, the following dialog box will appear. Verify that the **Install TekVISA** box is checked. TekVISA is optimized for SignalVu-PC, especially for instrument searching, and is the recommended VISA application. You may also use another VISA application, such as NIVISA. To bypass TekVISA installation, uncheck the box.

NOTE. To control SignalVu-PC with the programmatic interface, check the second box also.

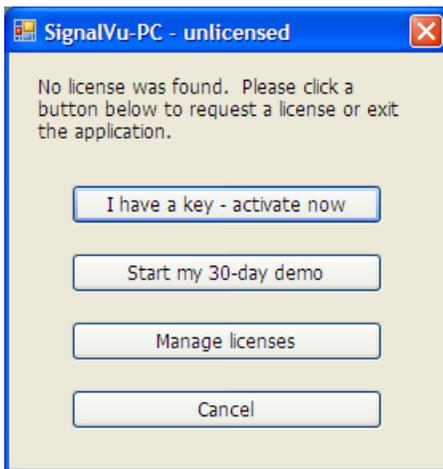


Activating evaluation mode

To use SignalVu-PC, you must activate the software over the internet or enable the evaluation mode, which activates SignalVu-PC for 30 days.

To activate the evaluation mode in SignalVu-PC:

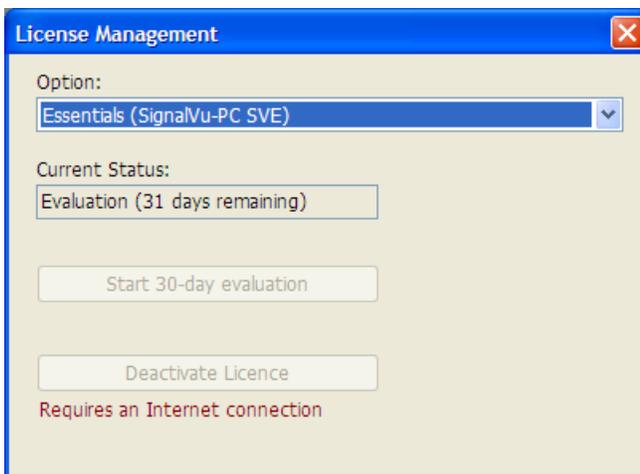
1. Launch **SignalVu-PC**. A window will be displayed stating that no license was found.



2. Click **Start my 30-day demo**.

The Current Status box will change to display the number of days remaining for evaluation. Repeat this procedure for each of the SignalVu-PC options you wish to evaluate. (The available options are SVP, SVM, SVT, SVO, SV23, SV24, SV25, SV2C, CON, and SVA.)

3. To verify that the demo has started, select **Tools > Manage Licenses**. This will display the License Management window.



4. From the **Option** drop-down list, select the option for which you wish to verify evaluation has been enabled. Check the **Current Status** box. When demo mode has been enabled, the Current Status box will display **Evaluation (XX days remaining)**.

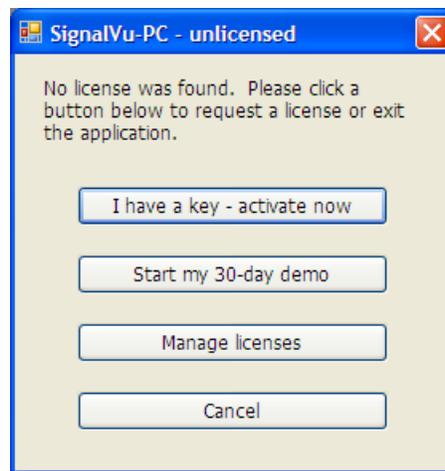
Activating SignalVu-PC

Activating SignalVu-PC requires internet access. However, you can activate SignalVu-PC on a PC that does not have internet access by using a second PC that does have internet access to contact the license server and use it to download a license file. The license file can then be transferred to the PC on which SignalVu-PC is to be activated.

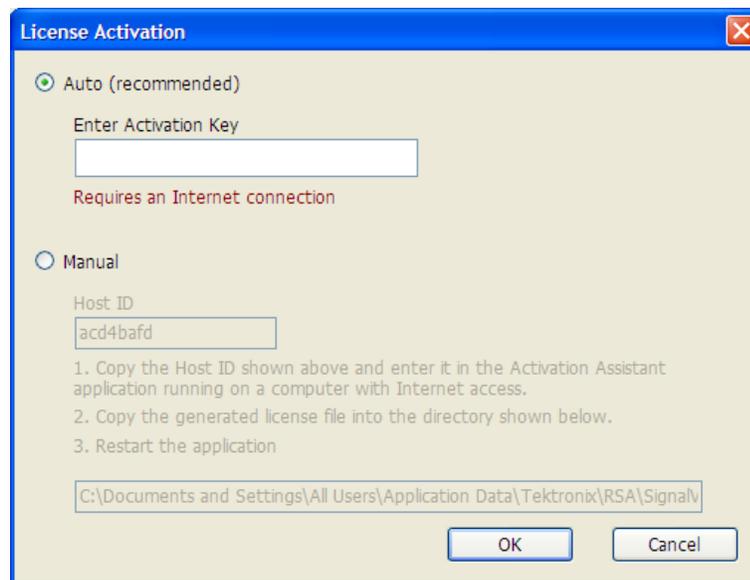
NOTE. *In order to use any options you have purchased with the main application, you must activate each option in addition to activating the main application.*

Activating SignalVu-PC on a PC with Internet Access. To activate SignalVu-PC:

1. Launch **SignalVu-PC**. A window will be displayed stating that no license was found.



2. In the dialog, select **I have a key – activate now**.



3. In the **Enter Activation Key** text box, enter the activation key for SignalVu-PC SVE you received with the software (if you ordered the CD) or in an email you received from Tektronix (if you downloaded the software from the Web).
4. Click **OK** in the License Activation window.

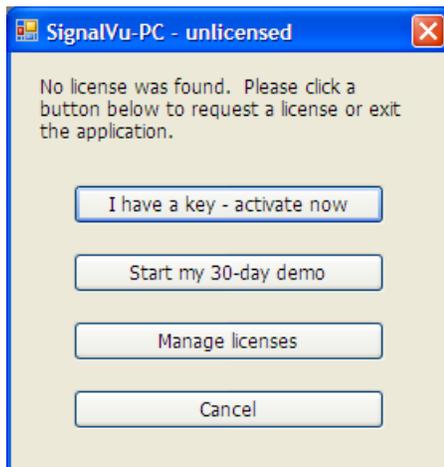
SignalVu-PC will contact the license server and install a license file provided by the license server.

5. Repeat the steps above to activate each option, using the activation key specific to each option.

Activating SignalVu-PC on a PC without internet access. To activate SignalVu-PC on a PC without internet access, you need to download a program from www.tektronix.com/downloads. You will install the downloaded program on a PC with internet access and use the program to access the Tektronix license server and generate an activation file. You will then copy the activation file to the PC on which you want to activate SignalVu-PC.

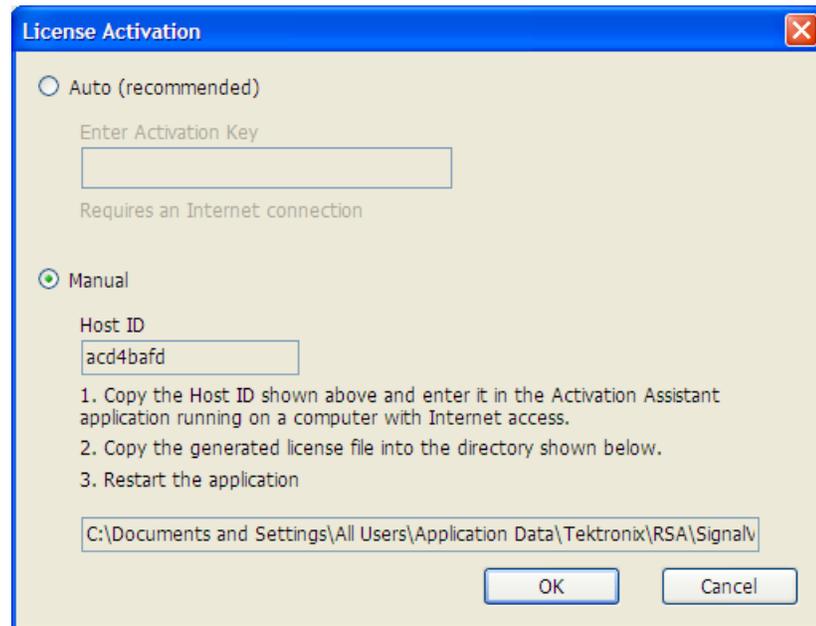
To activate SignalVu-PC using a second PC to access the Internet:

1. Launch **SignalVu-PC**. A window will be displayed stating that no license was found.



2. In the dialog, select **I have a key – activate now**.

3. In the **License Activation** window, select **Manual**.



4. Write down the **Host ID** shown. Click **Cancel** to close the License Activation window.

If you ordered SignalVu-PC on a CD, the Activation Assistant application is located on the CD. If you downloaded SignalVu-PC from the Web, use a Web browser to go to www.tektronix.com/downloads and search for SignalVu-PC. Download the Activation Assistant software.

You will also need the activation key you received with the software (if you ordered the CD) or in an email you received from Tektronix (if you downloaded the software from the Web).

5. Install the **Activation Assistant** software on a PC that has internet access.
6. Launch the Activation Assistant application. Follow the instructions to generate a license file. If you purchased SignalVu options, repeat this step for each option that you have purchased.

Activation keys are specific to each option, therefore you must acquire a license file for each option purchased.

7. Copy the license file (or files) to the following location the PC on which SignalVu-PC is to be activated (by USB flash drive, CD, or a network connection):

C:\ProgramData\Tektronix\RSA\SignalVu-PC\License

8. Restart SignalVu-PC.

This completes the SignalVu-PC activation process.

Moving SignalVu-PC to a different PC

SignalVu-PC is licensed for use on a single PC. However, you can move SignalVu-PC from one PC to another PC by deactivating the current installation and reactivating SignalVu-PC on another PC.

NOTE. *If your SignalVu-PC installation has options installed, you will need to deactivate each option.*

To deactivate SignalVu-PC:

1. Launch SignalVu-PC and select **Tools > Manage Licenses** from the menu bar.
2. Use the drop-down list under Option to select one of the SignalVu-PC options that is activated on the PC. For example: **OFDM Measurements (SignalVu-PC SVO)**.

NOTE. *If your SignalVu-PC installation has options installed, be sure to deactivate all options before you deactivate the base software (Essentials (SignalVu-PC SVE)). Once the base software is deactivated, you cannot deactivate the options without reactivating SignalVu-PC SVE first.*

3. Starting with each installed option (other than Essentials (SignalVu-PC SVE)) click **Deactivate License**. Continue selecting options and clicking Deactivate License until all the SignalVu-PC options have been deactivated.

SignalVu-PC is now deactivated. You can now install SignalVu-PC on another PC and activate the new installation.

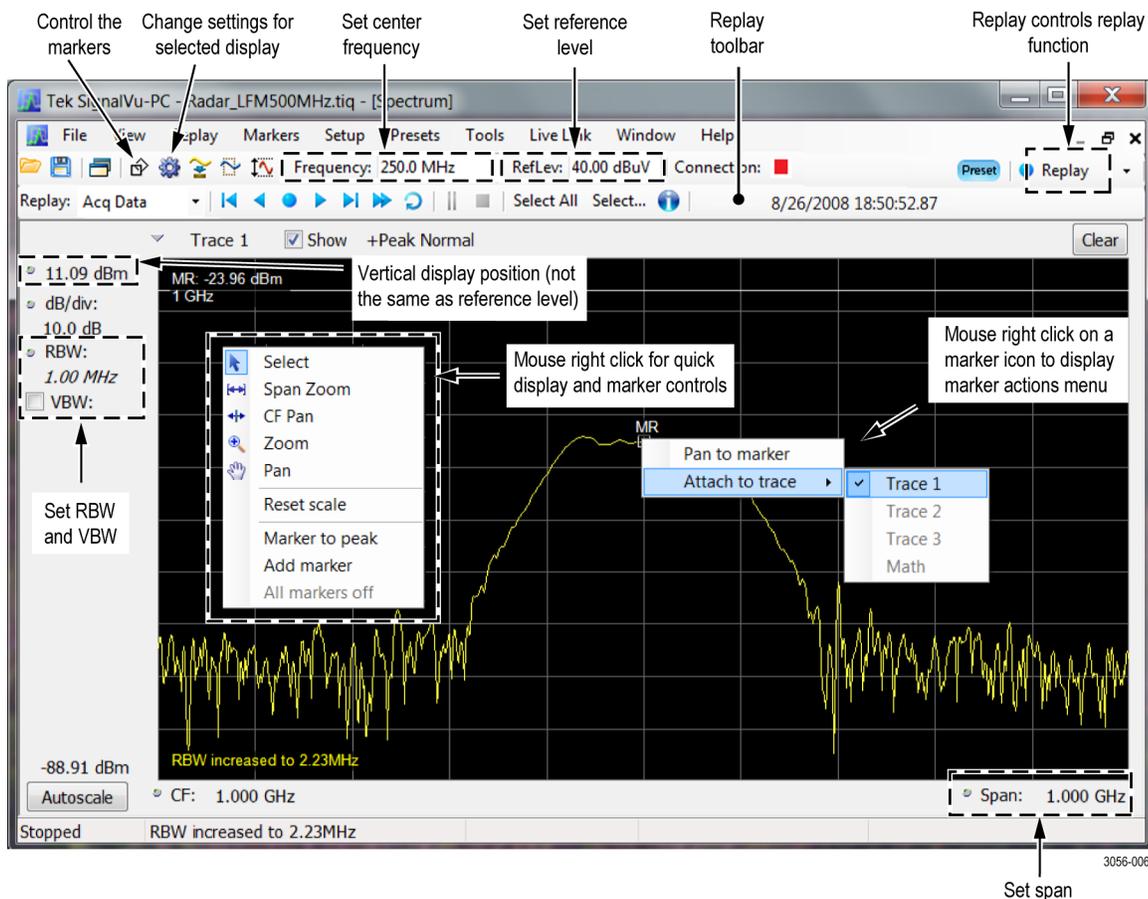
Getting Started with SignalVu-PC

SignalVu-PC displays

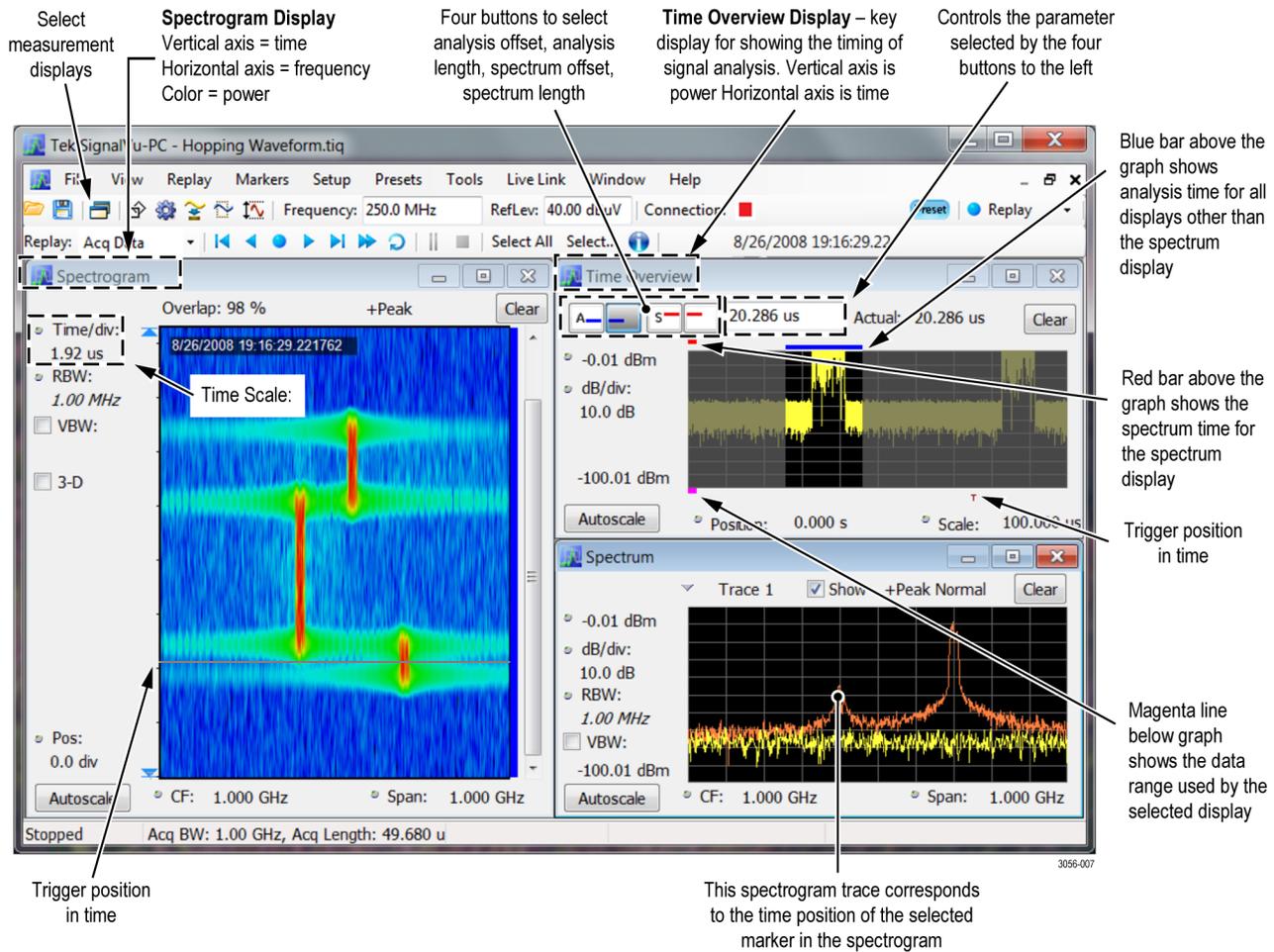
The SignalVu-PC Vector Signal Analysis software enables a desktop PC to perform vector-signal analysis on waveforms acquired by Tektronix oscilloscopes and Real-Time Signal Analyzers. Capture the waveform once on an oscilloscope or real-time signal analyzer and make repeated measurements on the PC without recapturing the waveform. SignalVu-PC utilizes the same analysis capabilities found in the RSA6000 Series and RSA5000 Series Real-Time Analyzers.

NOTE. For complete operating instructions, refer to the SignalVu-PC online help.

The following figure shows the spectrum display.



This figure shows the spectrogram, time overview, and spectrum displays.



Use Live Link to connect to an MDO4000B series instrument (Option CON only)

Live Link allows you to connect your PC with SignalVu-PC installed to an MDO4000B Series instrument using a USB or LAN or wireless connection.

NOTE. You can watch a video tutorial about using Live Link at www.youtube.com/user/tektronix. For more information about the Tektronix YouTube channel, click on the Help menu in the SignalVu-PC application, select User Manual, and search for YouTube.

Connect using USB. To establish a Live Link connection using USB, perform the following procedure in the order given.

1. Check that the MDO is on.
2. Connect a USB cable to the MDO.
3. Connect the other end of that USB cable to the PC.

NOTE. Your PC may notify you that it has found a new USB device and has loaded the device drivers. If you see these notifications, wait until the drivers are loaded before continuing to the next step.

4. Double click the SignalVu-PC icon on the Desktop to start the application.
5. Click **Live Link** on the menu bar to view the drop down menu.
6. Select **Connect To Instrument**. You should see the USB connected MDO in the Connect To Instrument list.

NOTE. If the PC is currently connected by LAN or USB to another MDO4000B, that connection will also show in the Connect To Instrument list. You must select **Disconnect From Instrument** to end that connection before connecting to the newly found instrument.

7. If you do not see the USB MDO, click **Search for Instrument**. TekVISA is now searching for instruments. A notification will briefly appear stating that the instrument was found. Check that the newly found instrument now appears in the **Connect To Instrument** list.
8. Select the instrument.
9. A Connect Status dialog box will appear to confirm the instrument is connected.

NOTE. You can quickly verify connection status by looking at the **Connection** indicator square on the menu bar. It is green (■) when an instrument is connected. It is red (■) when it is not. You can also view the name of the instrument that is connected by hovering the mouse indicator over the ■.

10. Connect a DUT (device under test) to the MDO.
11. Use SignalVu-PC to configure the MDO. Frequency, Amplitude, Span, Bandwidth, and Time Scaling parameters for the RF channels can only be changed using SignalVu-PC.

NOTE. Press *F1* on your keyboard to open the SignalVu-PC help for information about configuring and using the application. You can also click on *Help > User Manual* in the SignalVu-PC menu bar to open the help.

12. When you are ready to connect to a different instrument, select **Disconnect From Instrument** to first end the current connection.

NOTE. For more search options using TekVISA, go to the *Visa Resource Manager* (double click in the applications tray).

Connect using LAN or wireless. To establish a Live Link connection using a LAN or wireless connection, perform the following procedure in the order given.

1. Check that the PC has a working LAN or wireless connection.
2. Use an Ethernet cable to connect the MDO to the network.
3. Turn on the MDO and wait for the IP Address to display on the screen. Write down the IP address to help you identify the MDO in the SignalVu-PC application.
4. Double click the SignalVu-PC icon on the Desktop to start the application.
5. Click **Live Link** on the menu bar to view the drop down menu.
6. Select **Search For Instrument**. TekVISA is now searching for instruments.
7. A notification will briefly appear stating that the instrument was found. Check that the newly found instrument now appears in the **Connect To Instrument** list and then click on the instrument name to connect.

NOTE. *If the PC is currently connected by LAN/wireless or USB to another MDO4000B, that connection will also show in the Connect To Instrument list. You must end that connection before connecting to the newly found instrument.*

8. If you do not see the LAN address of the MDO, click **Manually Search for LAN Instrument**. You will then need to enter the IP address of the MDO into the IP Address dialog box and click **Connect**.
9. A Connect Status dialog box will appear to confirm the instrument is connected.

NOTE. *You can quickly verify connection status by looking at the **Connection** indicator square on the menu bar. It is green (■) when an instrument is connected. It is red (■) when it is not. You can also view the name of the instrument that is connected by hovering the mouse indicator over the ■.*

10. Connect a DUT (device under test) to the MDO.
11. Use SignalVu-PC to configure the MDO. Frequency, Amplitude, Span, Bandwidth, and Time Scaling parameters for the RF channels can only be changed using SignalVu-PC.

NOTE. *Press F1 on your keyboard to open the SignalVu-PC help for information about configuring and using the application. You can also click on Help > User Manual in the SignalVu-PC menu bar to open the help.*

12. When you are ready to connect to a different instrument, select **Disconnect From Instrument** to first end the current connection.

NOTE. For more search options using TekVISA, go to the Visa Resource Manager (double click in the applications tray).

SignalVu-PC ordering information

Versions. The following versions of SignalVu-PC are available.

- SignalVu-PC SVE: Vector Signal Analysis Software
- SignalVu-PCEDU: An education only version of SignalVu-PC that has all options enabled.

Options. The following options of SignalVu-PC are available. All of these options require SignalVu-PC-SVE.

- Option SVP: SignalVu-PC Advanced Signal Analysis – Advanced signal analysis software (including pulse measurements); Requires SignalVu-PC-SVE
- Option SVM: SignalVu-PC General Purpose Modulation Analysis; Requires SignalVu-PC-SVE
- Option SVT: SignalVu-PC Settling Time (Phase and Frequency) Analysis; Requires SignalVu-PC-SVE
- Option SVO: SignalVu-PC Flexible OFDM Analysis; Requires SignalVu-PC-SVE
- Option SVA: SignalVu-PC Audio Analysis; Requires SignalVu-PC-SVE
- Option SV23: WLAN 802.11a/b/g/j/p Measurement Application
- Option SV24: WLAN 802.11n Measurement Application (requires Option SV23)
- Option SV25: WLAN 802.11ac Measurement Application (requires Option SV24)
- Option SV2C: Live Link to MDO4000B Series and WLAN 802.11a/b/g/j/p/n/ac measurements (includes options CON, SV23, SV24, and SV25)
- Option CON: SignalVu-PC Live Link to the MDO4000B Series