RUNNING THE SOFTWARE

Use the following instructions only after you have completed the software installation procedure described above in the INSTALL SOFTWARE section of this document. Connect your detector probe to the hardware device you plan to use. Depending on which particular device you use, you should connect it to the computer by following the procedure outlined in the appropriate Spectrum Techniques setup manual. Spectrum Techniques setup manuals for models ST160, ST260, ST360, ST365, and ST475.

Run the ST365 software application. One way of doing this is by double-clicking the ST365 icon located on the computer Desktop. It looks like this:



After a brief initialization delay the main application window appears on screen. This window should look similar to Figure 11.

Spectrum Techniques Ultra - ST365								
Data Plot Window Help								
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No device connected. Click S	T MODELS button	Quick Commands 🔀	CONTROL OUTPUTS					
within Command Toolbar to s	select a device.	ST MODELS						
Once the device is connected	you may configure							
it from the main menu view	> Configure Device .							
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X		Þ						
Copy Run Results Clear Run Results	Pause Collecting Save Run Results	.:						
10:40 AM 10/11/2017 Spectrum Techniques Ultra SpecTech No Device Selected								



Note in Figure 11 that the status bar contains a red text block that says *No Device Selected*. When you see this red text block in the status bar, it is telling you that the ST365 software application is not presently controlling a Spectrum Techniques hardware device. At runtime the ST365 application will attempt to determine how many Spectrum Techniques devices are turned on and are USB-connected to the computer. If there is only one device turned on and USB-connected, then the ST365 application will automatically attempt to connect to it. If there is more than one device connected or the application does not automatically connect, you should click the ST MODELS button within the Quick Commands toolbar. This button allows you to manually connect to a Spectrum Techniques device.

Clicking the ST MODELS button causes the application to pop up a *Select Spectrum Techniques Device* window as shown in Figure 12.

	Select Spectrum Techniqu	ies Device	x			
	Select Local USB Device:	No Device Selected Refresh Local USB List	Connect			
	or		Cancel			
S	elect LAN Device IP address:	No IP Address Selected Refresh LAN IP Address List				
	or					
E	nter a known LAN Device IP a	ddress:				
(N Us	(Note: Make sure the LAN Device at IP address you enter is not already in use by another application.)					

Figure 12

This window offers three different ways to connect to a device. The first way is by using the dropdown menu located next to the label *Select Local USB Device*. Note that by default this dropdown box says *No Device Selected*. Click the down arrow to see more connection options. Each option shown is for a particular Spectrum Techniques device that is currently turned on and USB-connected to the local computer. If for some reason this dropdown box does not contain the model and serial number of a USB-connected device that you want to use, click the *Refresh Local USB List* button. This causes the contents of the dropdown box to refresh. Click the *Select Local USB Device* dropdown box again and see whether it now contains the device you want to use. If it does, then select the device and click Connect. If the dropdown box does not contain the device, then try turning the USB-connected device off, wait a few seconds, and turn the device back on. Then click the *Refresh Local USB List* button again and see whether the device name now appears and is selectable within the Select Spectrum Techniques Device dropdown box. If all else fails, click the Cancel button to dismiss the window. Then click the ST MODELS button again to try again to connect.

With the device now turned on and USB-connected, again click the *Select Local USB Device* dropdown box. This time it should display a list of all USB-connected devices. See Figure 13. The example shown here is for the case where there is only one Spectrum Techniques device available from which to choose. The device is named *st365 4998, COM8*. This means that the device is a Spectrum Techniques model ST365 using serial number 4998 and that it is connected to the host computer using COM port 8. Click the *Connect* button.

🖳 Select Spectrum Techniqu	es Device	—
Select Local USB Device:	No Device Selected Refresh Local USB List	Connect
or	No Device Selected st365 4998, COM8	Cancel
Select LAN Device IP address:	No IP Address Selected Refresh LAN IP Address List	
or		
Enter a known LAN Device IP a	ddress:	
(Note: Make sure the LAN Devic use by another application.)	e at IP address you enter is not already in	h.

Figure 13

A second way to connect is by using the dropdown menu located next to the label *Select LAN Device IP address*. The software uses this method of connecting only if the *Select Local USB Device* menu says *No Device Selected*. By default the *Select LAN Device IP address* dropdown box says *No IP Address Selected*. Click the down arrow to see more connection options. Each option shown is an IP address of a particular Spectrum Techniques device that is turned on and is LAN-connected to your computer's local network. If for some reason this dropdown box does not contain the IP address of a LAN-connected device that you want to use, click the *Refresh LAN IP Address List* button. This causes the application to update its list of LAN-connected devices and to refresh the dropdown list. This process might take a few seconds to complete. Once the list has completed updating click the dropdown menu once again and select the desired IP address for the device you want to use. Click the *Connect* button.

A third way to connect is by using the text box located next to the label *Enter a known LAN Device IP Address.* The software uses this method of connection only if the *Select Local USB Device* menu says *No Device Selected* and the *Select LAN Device IP address* menu says *No IP Address Selected.* This text box is useful in the case where you already know the IP address of the LAN-connected Spectrum Techniques device you want to use. Simply type the IP address into the box and click the *Connect* button.

When you click the *Connect* button the *Select Spectrum Techniques Device* window disappears and, after a moment, the Spectrum Techniques Ultra main window updates to look something like Figure 14.

File Edit Setup View Preset Instrument Display Experiments Preferences Window Help Image: Setup Image: Setup <td< th=""><th>Spectrum Techniques Ultra</th><th></th><th></th><th></th></td<>	Spectrum Techniques Ultra			
Number of Counts: Quick Commands CONTROL OUTPUTS ST MODELS ST MODELS Current Run # 0 run CONFIGURE DEVICE 0 run STUSETUP STUSETUP STUSETUP PLATEAU EXPERIMENT PLATEAU EXPERIMENT Preset Time 3 seconds	File Edit Setup View Preset Instrument Display Image: Setup Setu	Experiments Preferences ¥	Mindow Help	×
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Figure 14

Note that the status bar now has a green text block that says something like st365 sn4998, COM8. When you see this green text block in the status bar, it tells you that the ST365 software application is currently in control of a Spectrum Techniques device and what its connection information is. Note that the information displayed here pertains to USB-controlled devices. When the ST365 software application is in control of a LAN-controlled device the green text block will display something similar to this:

st365 sn4998, 10.1.10.128, 70-B3-D5-95-30-02

The text displayed here tells you the model number, serial number, IP address, and MAC address of the Spectrum Techniques device currently under control of the ST365 software application. The MAC address shown corresponds to the MAC address included on a label affixed to the underneath side of each Spectrum Techniques device. This MAC address is unique for all devices manufactured by Spectrum Techniques. By comparing the MAC address displayed on-screen with the MAC addresses of your Spectrum Techniques devices you can determine which physical device the ST365 software application is currently controlling.

The gray text block to the right of this green block shows the firmware version information for the Display, High Voltage, LAN, and WiFi software component within the device. For each software component the version notation is *MajorRevision#.MinorRevision#.Build#*. If you do not see this gray text block try enlarging the width of the main application window until the gray text block appears. If you encounter problems operating your ST365 device and contact Spectrum Techniques for technical support, the technician assigned to help you might ask you to provide them with this information. To the right of the firmware text block is the Channel Gain Multiplier and, when the main application window is set wide enough to display it, the Probe Type. At this point your ST365 software is connected to a device and is ready to use.

USING THE SOFTWARE

Spectrum Techniques provides a user manual to assist you in learning how to use your new system. This user manual is available for download on our website. Open a web browser and navigate to <u>http://spectrumtechniques.com/products/instruments/st365</u>. From here click the Downloads tab. This takes you to a Downloads webpage. Scroll down and find an item that is labeled

View PDF PC – STU ST365 Software User Manual

This user manual is intended for use on Microsoft Windows computers. Click on the **View PDF** text to download the STU ST365 User Manual file. Doing this causes your web browser to download the user manual to your computer.

The user manual is in PDF format. You will need to have Adobe Reader installed on your computer in order to be able to view the user manual. If you do not already have Adobe Reader we provide a link on our Downloads webpage to assist you in getting Adobe Reader.

Once you have the user manual loaded in Adobe Reader, scroll down to the section entitled **USING YOUR SYSTEM**. From here you can learn how to use our Spectrum Techniques Ultra desktop application to control an ST365 device.