

AN258

TDR Serial-to-USB Communications

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Abstract

With serial ports on PC's extinct and legacy TDR PC Vision software still being shipped the need for serial-to-USB communications interface is required.

General

TDR PC Vision software has a provision in the COMM PORT tab to select USB Communications and set up USB-to-Serial COMM ports in the PC. However, the application of this option and the adapter requires some guidance to set up correctly. This application note applies to using the Keyspan USB-to-serial adapter accessory available from AEA Technology, Inc. (P/N 0070-1216) The following steps are helpful in setting up other adapters, but not all steps apply in the same manner so their manufacturer's instructions should be consulted.

Set Up and Establishing TDR to PC Communication

20/20 TDR USB-to-Serial interface instructions

- 1.) Install the Keyspan USA-19HS driver. This driver is available on the Web and downloaded to the computer as a ZIP file.
www.tripplite.com/en/products/model.cfm
- 2.) Plug the Keyspan USA-19HS USB-to-Serial converter into a USB port on the PC.
- 3.) The computer will search for the appropriate USB driver and report the device is connected and functioning.
- 4.) Make sure the TDR PC Vision software is installed on the computer and the TDR is on and at the Measurement Screen.
- 5.) When opened, PC Vision software is designed to scan the standard serial ports for any attached TDR but it will not scan the USB ports.
- 6.) When the PC Vision is unable to find a TDR it will go directly into the COMM Port setup tab or display the error message with the options ABORT, RETRY, IGNORE. Press IGNORE to get to PC Vision's tabs and/or select the COMM port tab.
- 7.) Make sure the baud rate is set to the highest speed (57600) on both the PC and the TDR, then at the PC check the USB box and select a COMM

- port for the converter's connection. Generally the selected port will be COM3 or higher. This is PC configuration dependent.
- 8.) If the proper COMM port is not found the computer will display an error message box giving you the ABORT, RETRY, or IGNORE options.
 - 9.) Select IGNORE to get back to the COMM port select tab. Chose another COMM port and select the CONNECT PORT/ POLL TDR button on the computer screen to retry the connection.
 - 10.) Once the proper COMM port has been found save the settings by selecting the SAVE PORT SETTINGS option in the COMM port tab.
 - 11.) After these actions, TDR PC Vision will cause the TDR to beep and the progress bar will display on the computer and the GET PLOT tab will display with all buttons enabled..

Conclusion

The 20/20 TDR models will all be superseded with the new enhance version – “E20/20 TDR” in 2011. The new models will all have USB-2 communications.