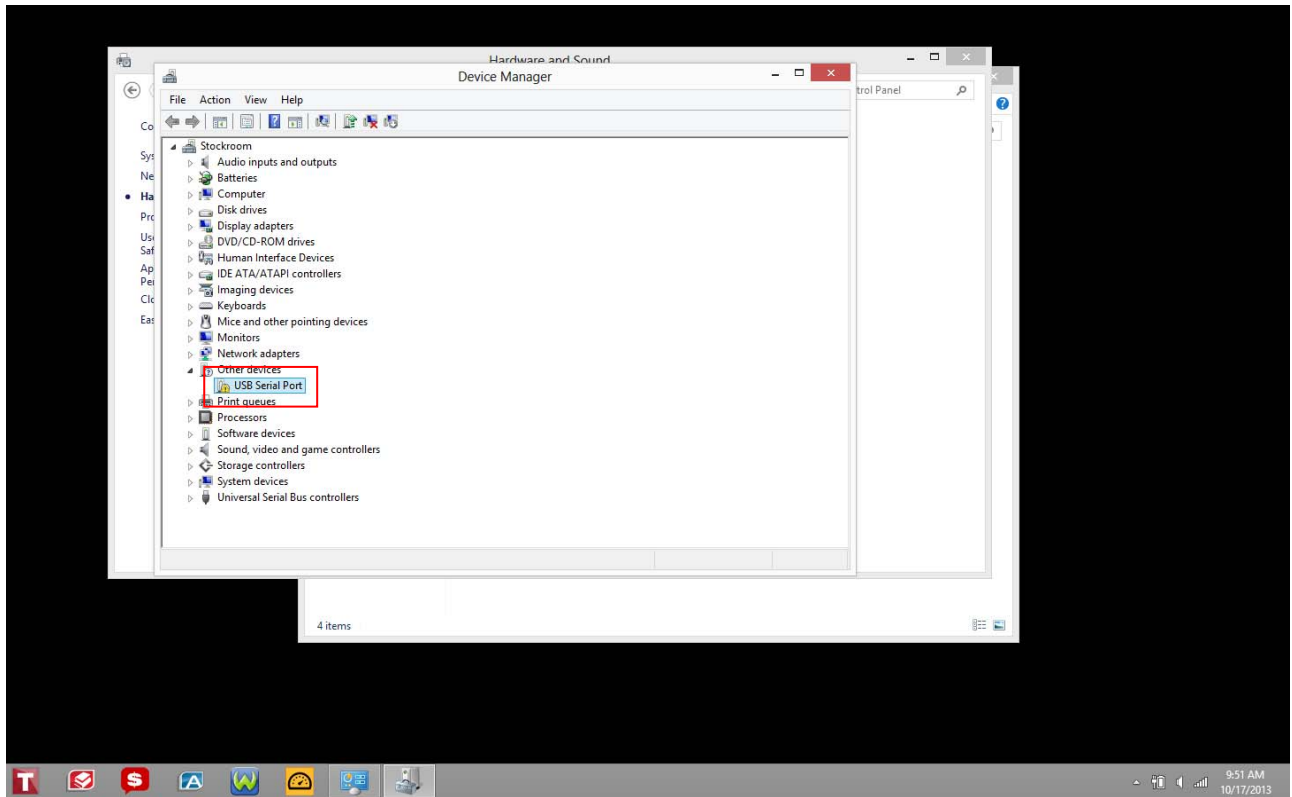


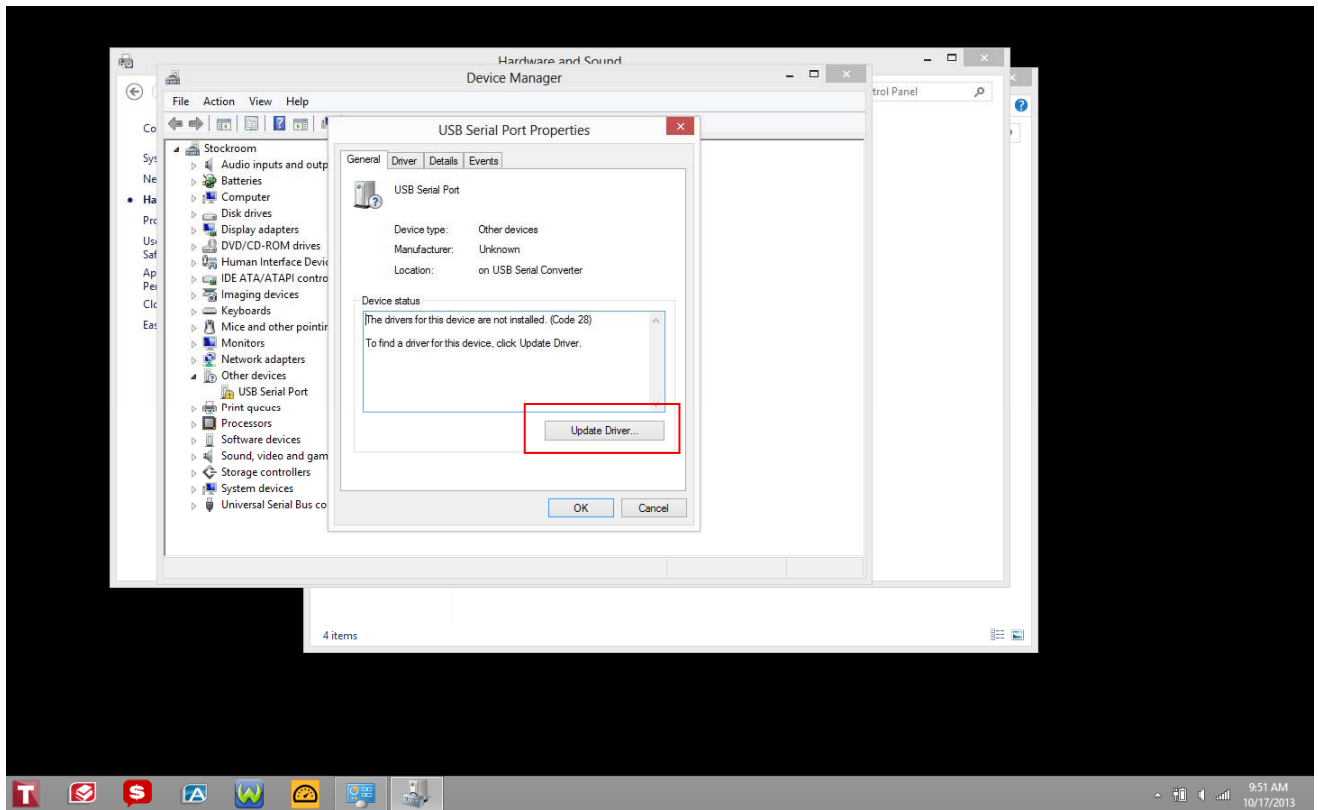
INSTALLING THE DRIVERS FOR VANGUARD FT232R USB UART

The Vanguard DigiTMR S2, DigiTMR PC S2, CT-3500 S2, ATRT-03 S2 with serial number 20500 and above, TRM-20/40/203/403, EZCT-2000C, CT-7000 S3, and CT-8000 S3 feature a USB PC interface that uses an internal USB to serial converter. In some cases, manual installation of drivers may be necessary. Follow the steps below to manually install the drivers for the FT232R USB to serial converter:

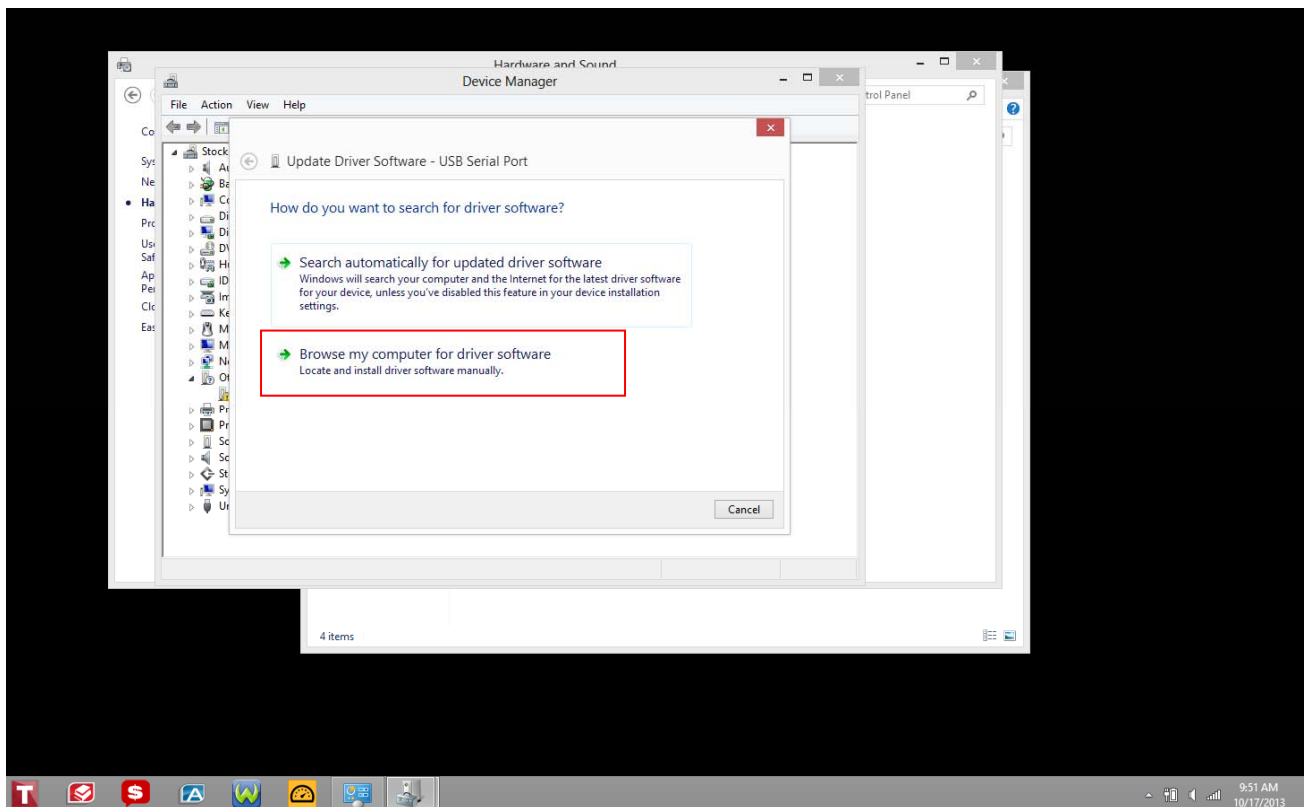
1. If the PC is running Windows 8 or earlier with no internet connection and has never been upgraded through Windows Upgrade, chances are that Windows cannot find the driver for this adapter when connected to the Vanguard unit. In this case, the drivers must be installed manually. The drivers are provided on the software CD that was furnished with the unit and are located in the folder called "Vanguard USB Serial Drivers".
In the example image shown below, a Vanguard ATRT-03B S2 was connected a PC running Windows 8. Although Windows detected the hardware, it was unable to locate the drivers. The unit is listed as "USB Serial Port" under "Other devices" in the Windows Device Manager. A yellow exclamation mark is displayed next to the name showing that there was a problem finding drivers for this interface:



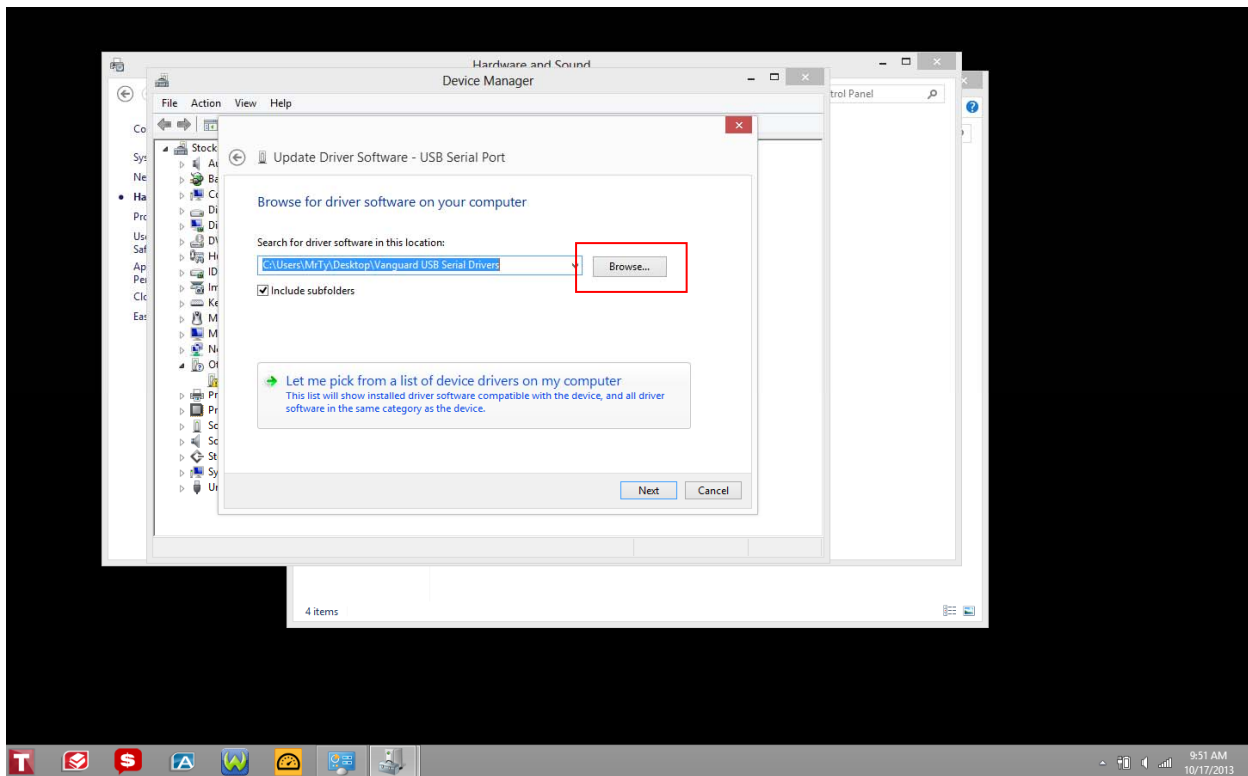
- From Windows Device Manager, click on "Other Devices" and then double click on "USB Serial Port". Click on the "General" tab and then click on the "Update Driver..." button as shown below:



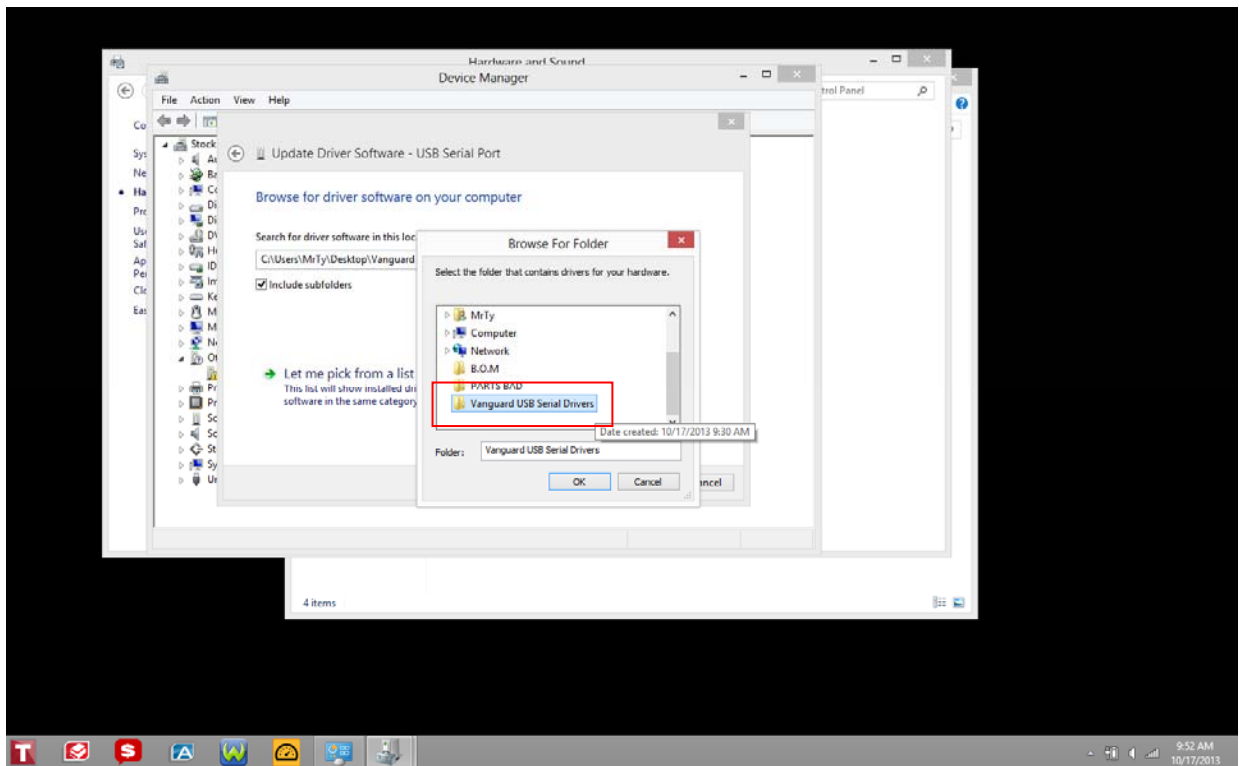
- Select "Browse My Computer for Driver Software":



4. Click on the "Browse" button:

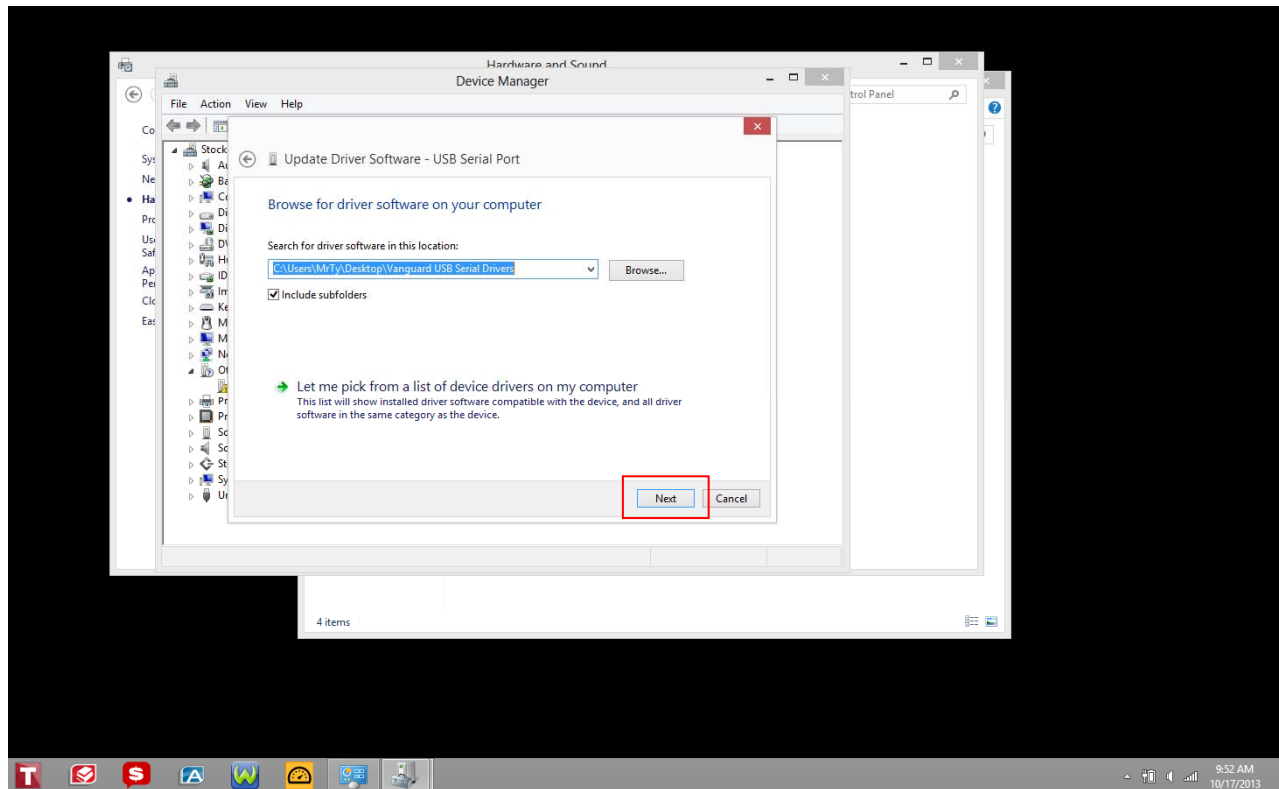


5. Navigate to the "Vanguard USB Serial Drivers" folder on the Vanguard software CD:

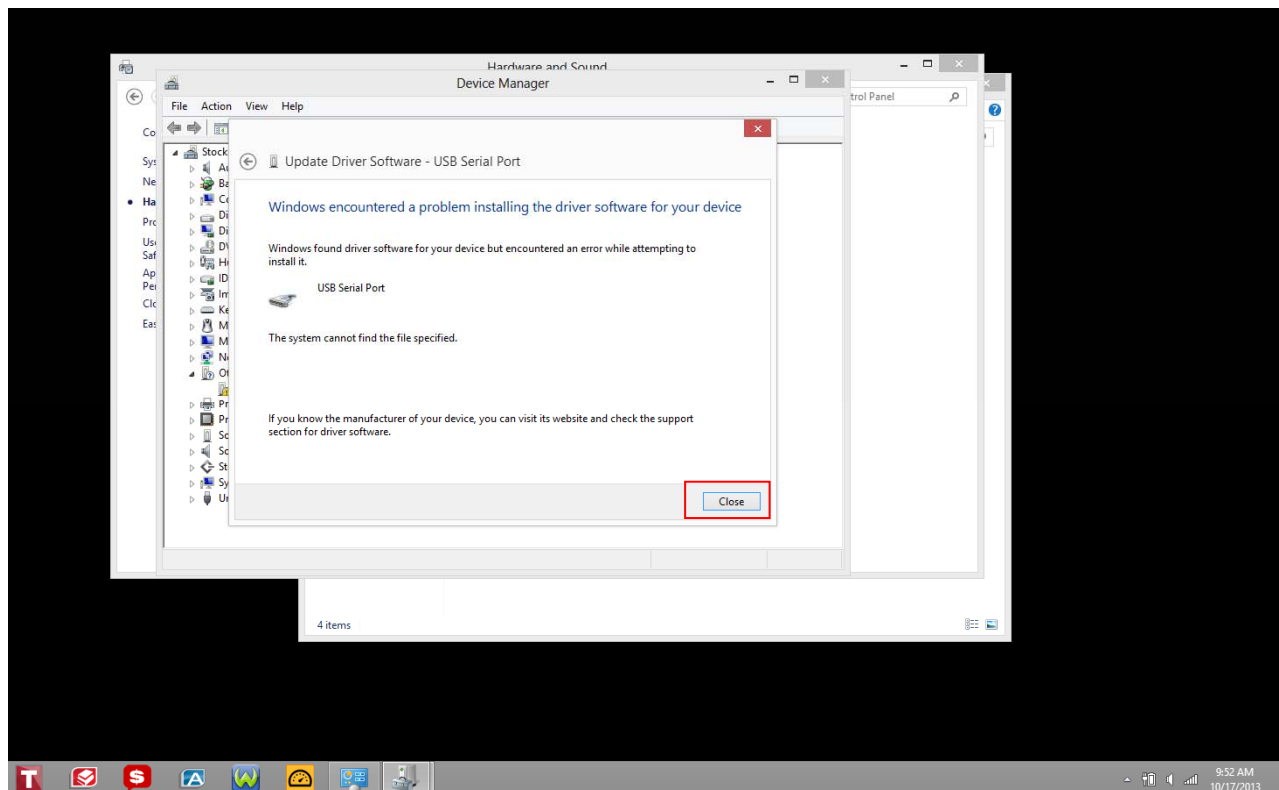


Click on the OK button.

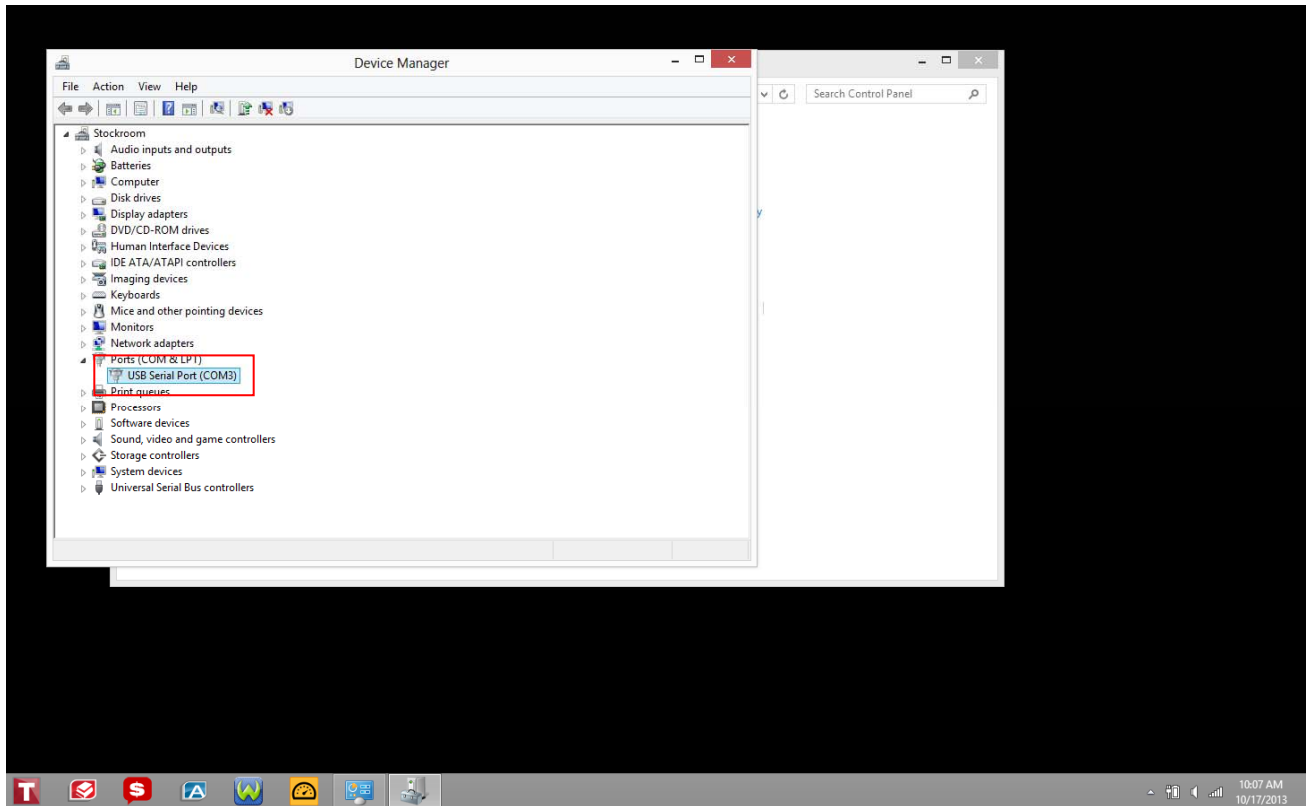
- Click the “Next” button to continue, and at this point the Windows will try to install the drivers from the selected folder.



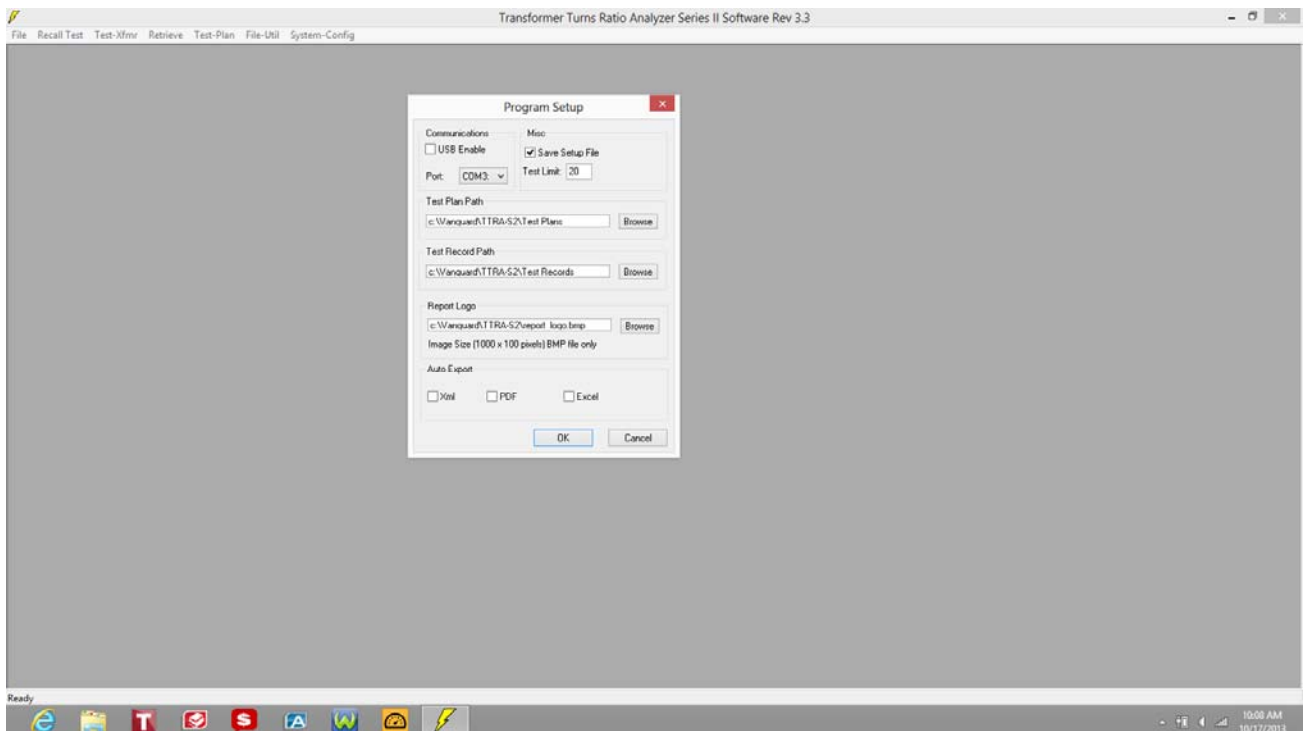
- Windows may display the warning message shown below. Click the “Close” button to continue.



8. Windows will assign a COM port number to the adapter. Now go back to the Windows Device Manager to find out what port number was assigned. In the example below, this particular adapter is assigned to COM 3 or in another word this ATRT03B S2 unit is connecting to the PC via COM 3. If Windows does not assign a COM port number, please restart the PC and check the Device Manager again.



9. Now run the software that came with the Vanguard unit. In this case, we are using the TTRA S2 software. Click on "System-Config" and the "Program Setup" dialog box will be displayed as shown below. It is critically that the "USB Enable" box unchecked and COM 3 is selected under "Communication".



It is CRITICAL to un-check the "USB Enable" check box. Then select the COM port from the "Port" drop-down menu. So in this case, select COM3.

10. Select "Retrieve" from the program menu and the software will attempt to connect to the ATRT03B S2 unit. If the communication is successful, the PC software will show the ATRT Directory and along with "Connected Device: ATRT-03B S2 R1.201" on the title of the PC program.

Note: R1.201 is the firmware revision of the ATRT03B S2 unit.

