

## CS750 / CS800 / 800D COMPUTER CONNECTION ISSUES

### SUGGESTED METHODS FOR RECONNECTING THE RADIO AND COMPUTER

We occasionally receive reports of radios and computers not connecting properly via the USB cable. Some of these can be traced back to failed or damaged programming cables, a very few have occurred due to damage incurred to the USB circuitry built into the radio, but the majority seem to be a result of updates or changes to the OS by Microsoft. These problems have been seen in both Windows 7 and Windows 10.

The first step in resolving the problem is correctly identifying the source. Depending on the system reports and characteristics of the radio connecting or not, the cause can be isolated to the radio, the cable, or the computer. To assist in this diagnosis, please make some temporary changes to your computer setup if the following are not already enabled:

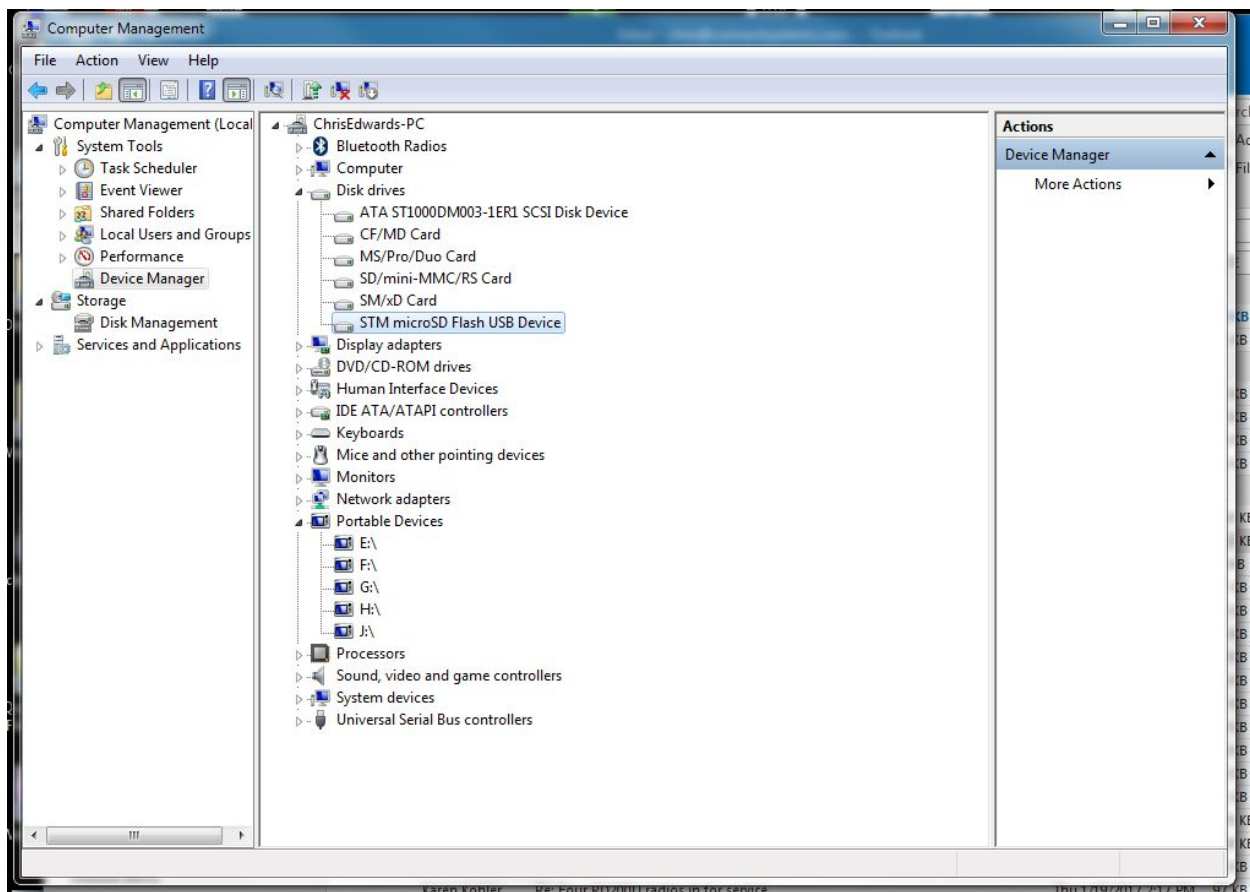
1. Make sure that your sound is on and the volume is up
2. Confirm that when you connect and disconnect USB devices (such as a thumb drive) that the computer makes a sound for that connection and disconnection
3. Temporarily pause your antivirus and antimalware software, including Windows Defender, to insure that it is not preventing the connection of external drive devices
4. Temporarily disconnect any additional USB devices attached to the computer, and perform the testing by connecting directly to the computer and not through a hub device

The first step is to check the cable. Turn the radio off, connect the cable to the radio and the computer, then turn the radio on normally. The computer should make a connection sound and no warnings or alerts should pop up. If no connection sound is heard, confirm that the radio did turn on, then try flexing the cable gently near where it connects to the radio and then where it connects to the USB port on the computer. If a connection is made and then lost while flexing the cable, then the cable has failed and needs to be replaced. If the radio still does not connect, try a different USB port, or try another computer if one is available. If the radio never makes a connection with the computer, then the problem may be either a bad cable or a problem with the internal USB circuitry in the radio. The only way to isolate further is to either try another radio with the same cable, or another cable with the same radio.

If you confirm that the cable is good, the next item to look for is the 'USB Device Not Recognized' message that appears in the lower right of most screens.

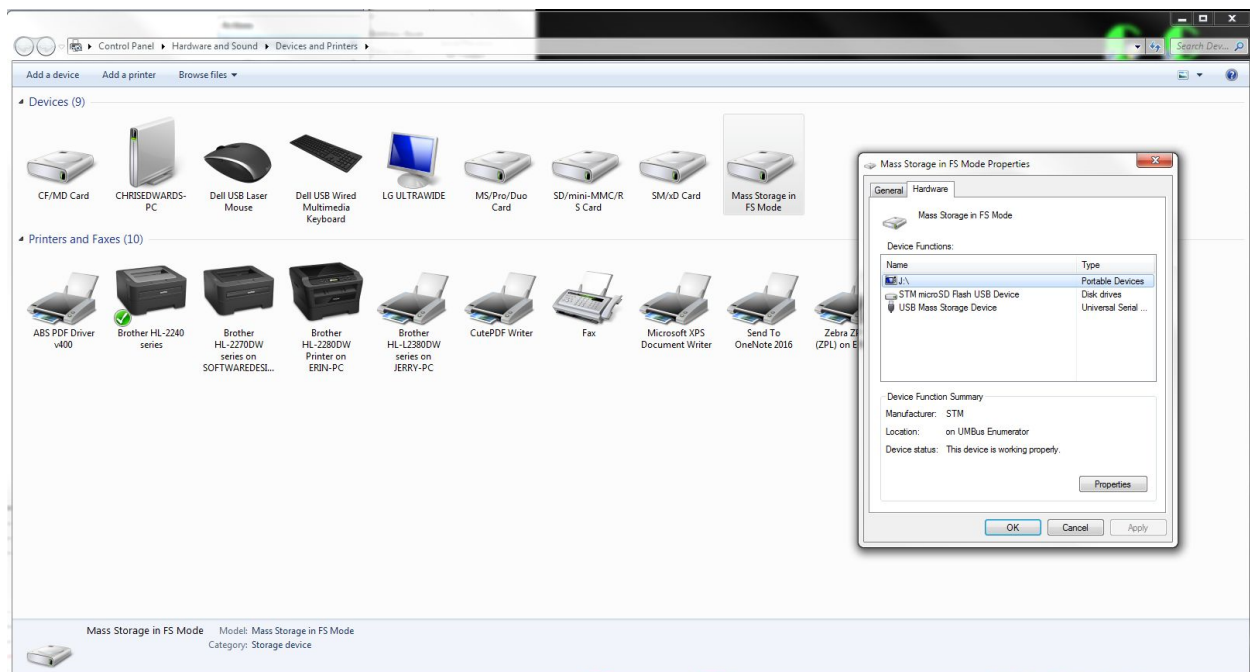
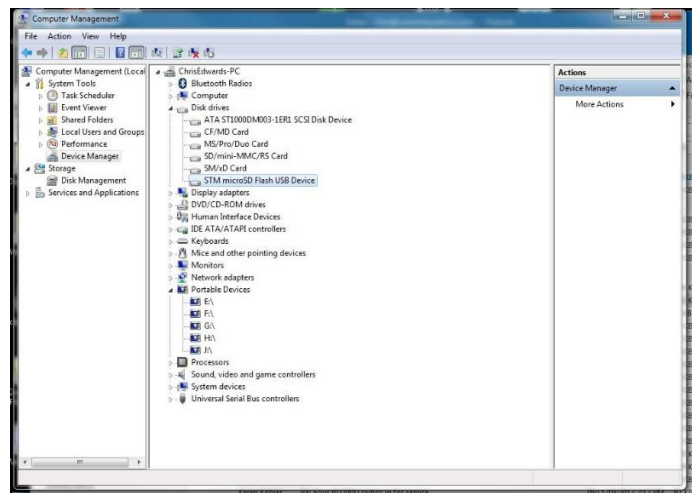
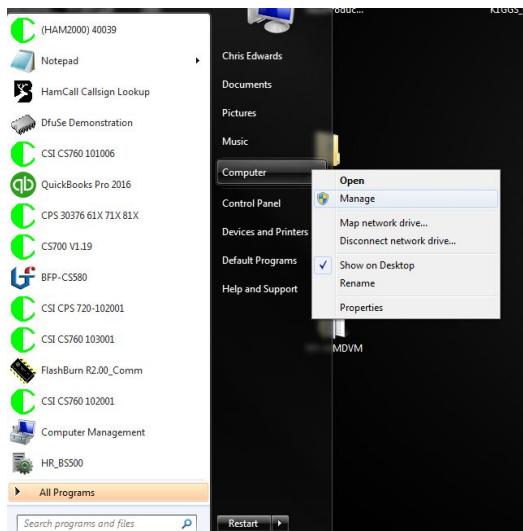


This message indicates that either the computer is not properly setting up the radio as an external device or that the internal USB circuitry in the radio has failed or been damaged. All current CSI radios will appear in Device Manager under Disk drives as 'STM microSD FLASH USB Device.'



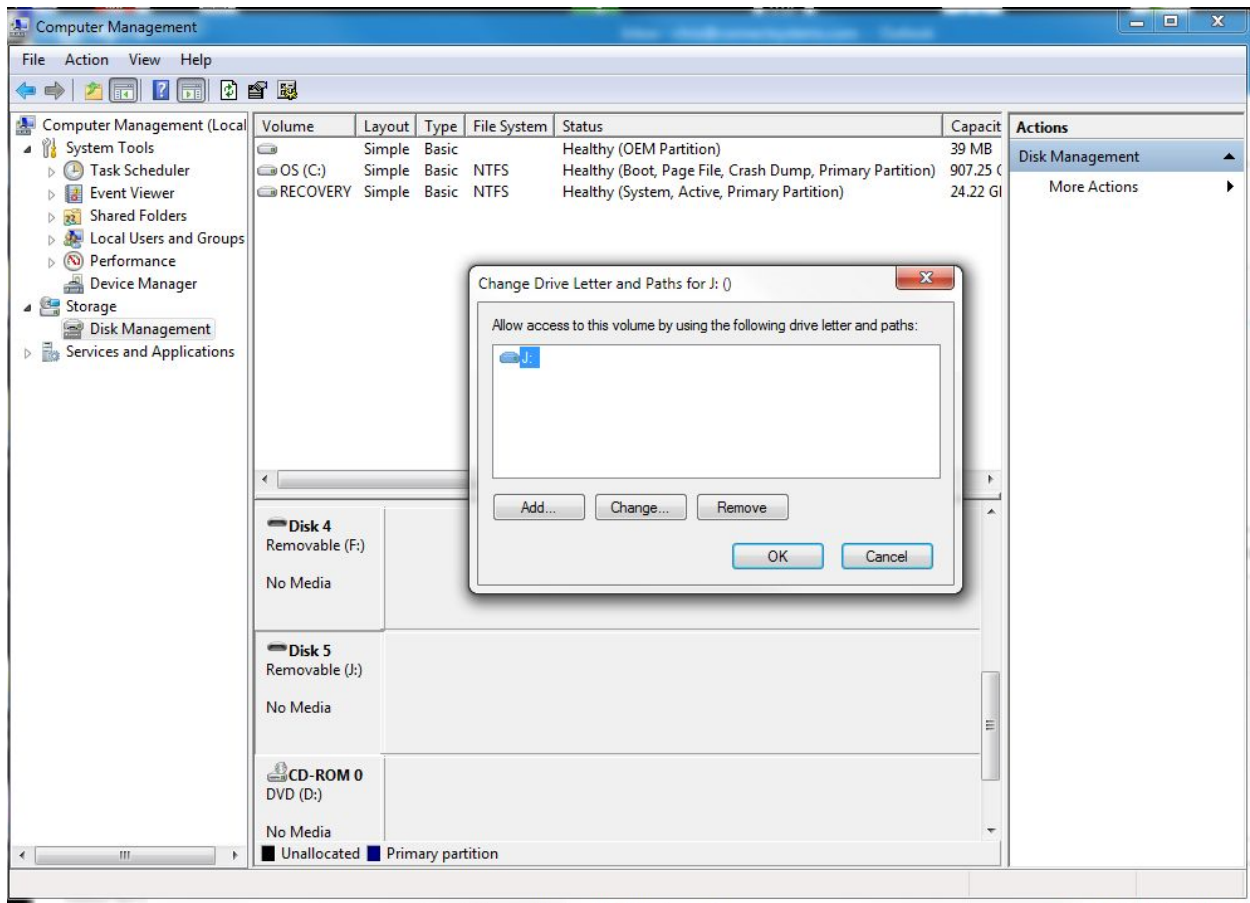
If the 'USB Device Not Recognized' message appears but Device Manager shows the radio connecting elsewhere in the system tree (such as 'Digital Radio'), the procedure is to verify the device in Device Manager (turn the radio on and off a couple of times and confirm which item appears and disappears), then right click on that device and select 'Uninstall'. Follow the prompts to remove the device, turn the radio off and disconnect it, reboot the computer, then reconnect the radio and turn it back on. This procedure solves most of these problems and once the computer properly recognizes and connects to the radio then CPS read and write functions will return. If the 'USB Device Not Recognized' message appears and the radio does not show up at all in Device Manager, then the problem lies on board the radio and it will need to be returned for repair or replacement.

If the cable is good, you hear the connection sound, and no error messages pop up, yet you still cannot read or write between the radio and the CPS, then you have encountered the latest issue between Windows and our radios. We do not have a good answer on why this is happening, but we do have a reliable solution to the problem. With your computer set up as instructed earlier in this document, open either Device Manager by right clicking on a 'Computer' icon or selection in the Start Menu, or by entering the Devices and Printers window from the Start Menu.

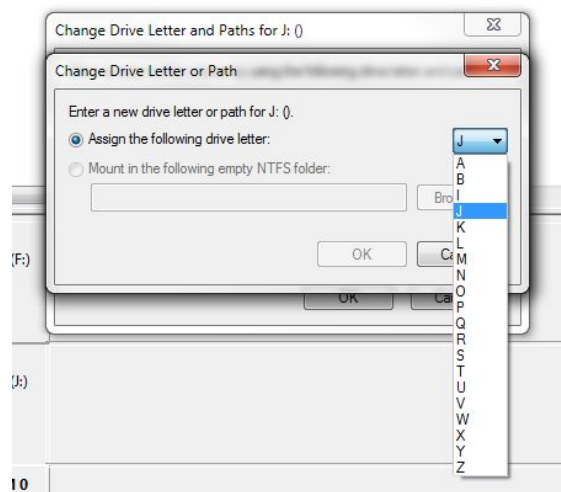


You need to confirm that the radio is connected as 'STM microSD FLASH USB Device' under Disk drives and also determine which drive letter has been assigned to the radio. In these examples, you can see under 'Portable Devices' that the drive is set to letter 'J'. This next step requires that you open the Device Manager window as seen in the second picture above. You need to reassign the drive letter of the radio so that the computer will properly recognize it again.

In the Computer Management window, look for the 'Storage' selection near the bottom of the options stack in the left part of the window. If it is not already expanded to show 'Disk Management', click the small arrow to the left of Storage and then click on 'Disk Management'. A pair of windows will open in the mid-section to show system drives and removable drives. You are interested in the lower pane of this window set, and you'll need to scroll down until you find the drive letter associated with the radio as determined earlier.

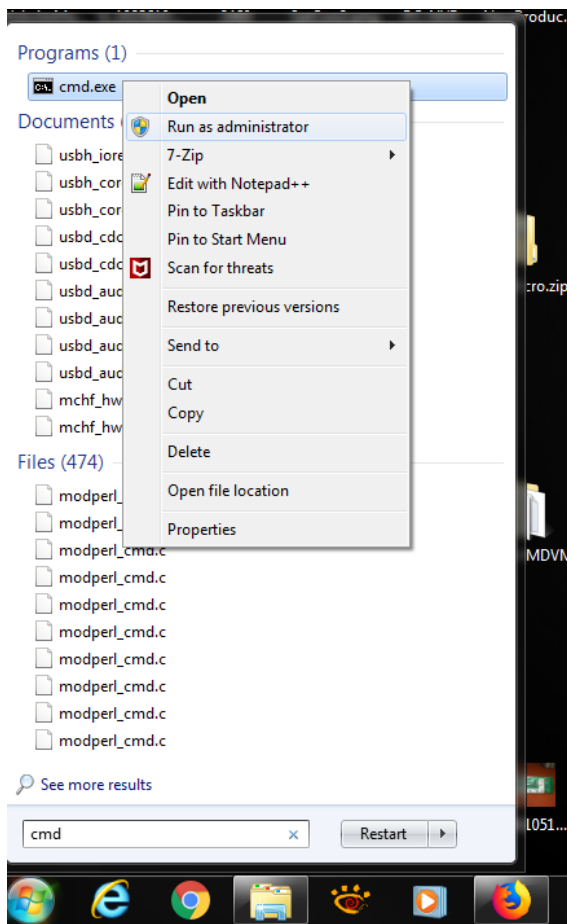


In this example, we are still working with Removable drive, letter J. Right click on the panel for the drive assigned to the radio, then select 'Change Drive Letter and Paths...' This will open a window as shown above. Click the 'Change...' button, and then the letter selection pulldown menu as shown below.

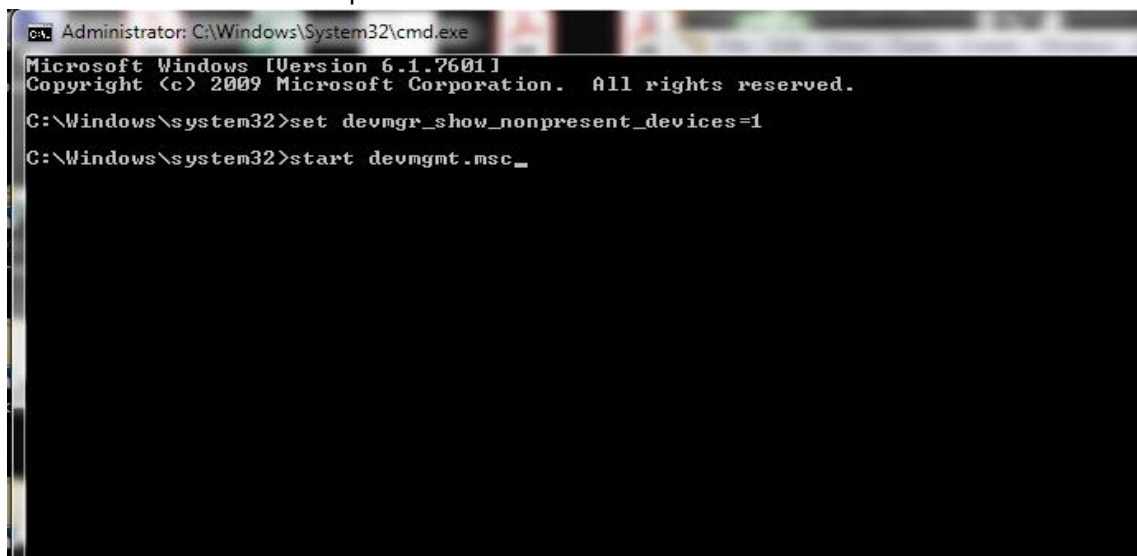


Select a new drive letter for the radio and click OK. You will see a question box asking if you want to continue, select 'Yes'. The change will occur immediately. You can try reading with the CPS, but if it does not work immediately, reboot the computer and try again. The assignment should retain your selection.

Another option is to remove any old traces of previous connections in Device Manager.

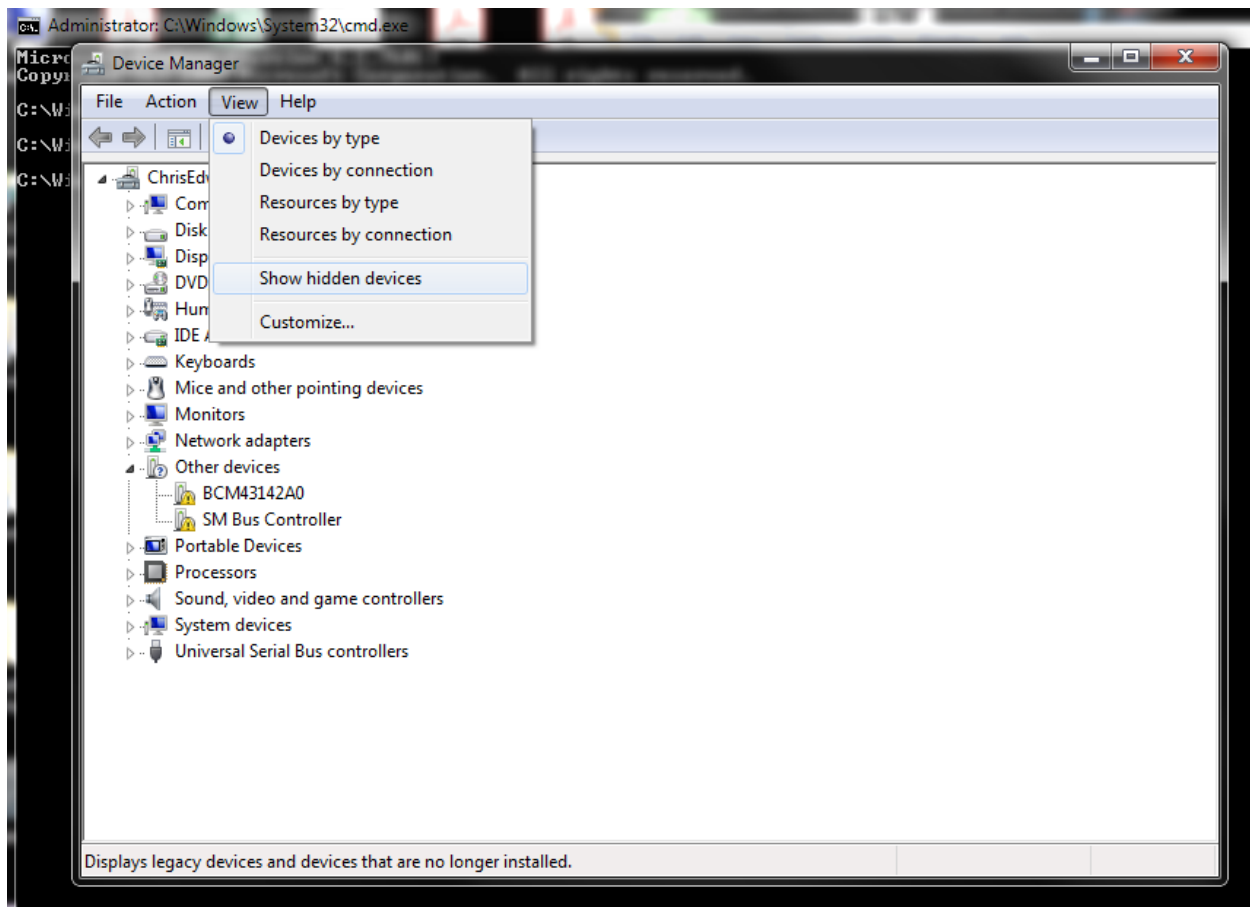


Click the 'Start' button and open a command window as administrator.



Enter 'set devmgr\_show\_nonpresent\_devices=1' (without the quotes).

Then enter 'start devmgmt.msc'.



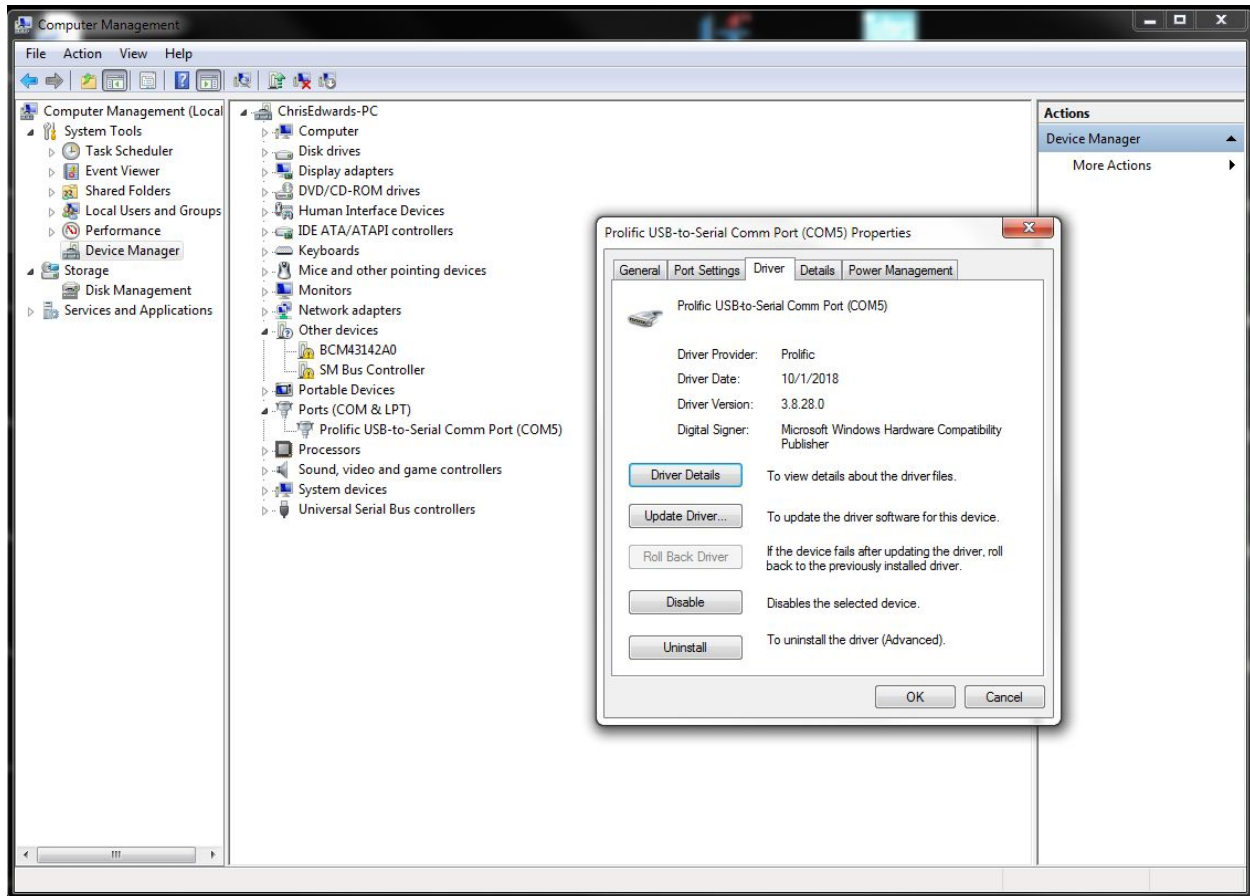
When the Device Manager window opens, select View and then Show Hidden Devices from the pulldown menu. Look under 'Disk Drives' and 'Ports COM and ' and remove any that are greyed out and not currently in use. Reboot your machine. Now when you connect your radio or front panel cable, the computer should report that it is installing the new hardware or any device drivers, and it should properly interface with the CPS, FlashBurn, or Front Panel Update Tool.

If your front panel update cable is not connecting properly to the computer, or is not recognized by the FPUT.exe program, there are a few things to try. The front panel cable makes use of a Prolific USB to Serial chip in the cable, and your computer should produce a connection sound when the cable is inserted into the USB port. If the cable has not been inserted before, the computer should also indicate that it is installing or updating the driver software. As described earlier, Device Manager is the best place to determine whether the cable is working properly and what driver is in use. For most of these cables, the current version automatically installed by Windows will work properly. Some of the earlier cables may require a manual rollback to an earlier version of the driver. We have found that the automatically installed Prolific version 3.8.28.0, dated 10/1/2018, works for the cable and the FPUT program. Older cables may require an install and rollback to 3.3.11.152, dated 3/12/2010. This is available for download from our website here:

[http://www.connectsystems.com/software/CS800\\_software/PL2303\\_Prolific\\_DriverInstaller\\_v1\\_11\\_0.zip](http://www.connectsystems.com/software/CS800_software/PL2303_Prolific_DriverInstaller_v1_11_0.zip)

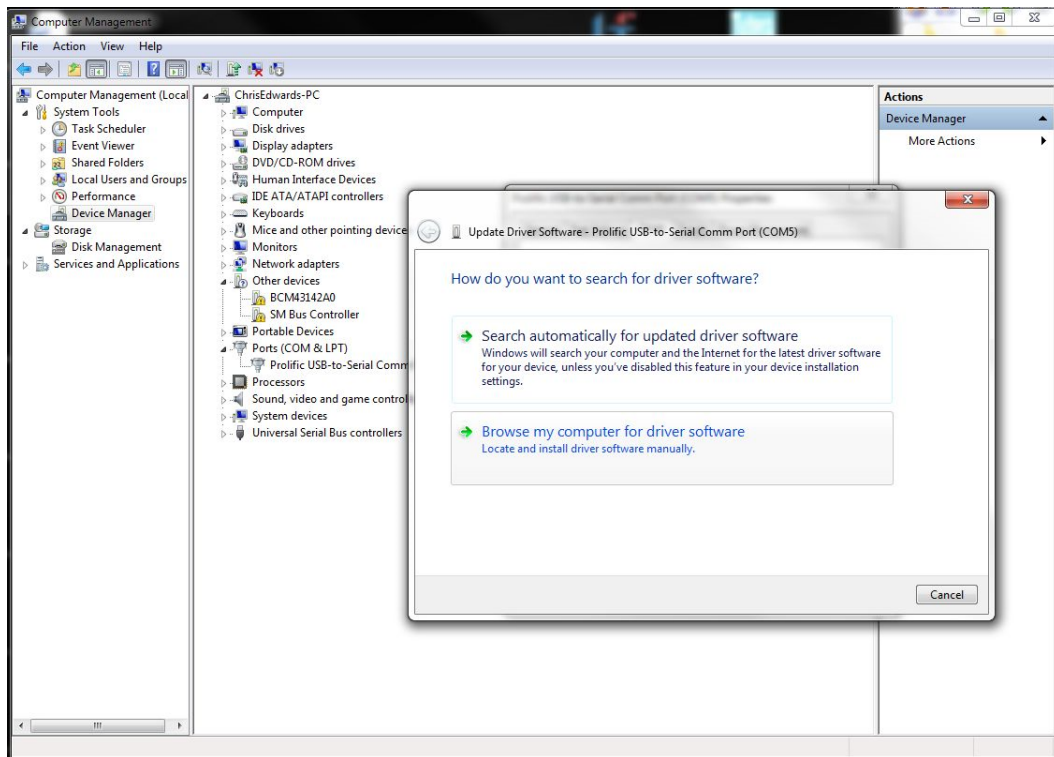


If you need to roll the driver back, download the installation package, unzip the folder, and run the 'PL2303\_Prolific\_DriverInstaller\_v1.11.0.exe' application as an administrator. Reboot your computer after the install, connect your cable, and open Device Manager. Open Ports (COM & LPT), then right click on the Prolific USB-to-Serial device. Open the Driver tab, then choose 'Update Driver'.

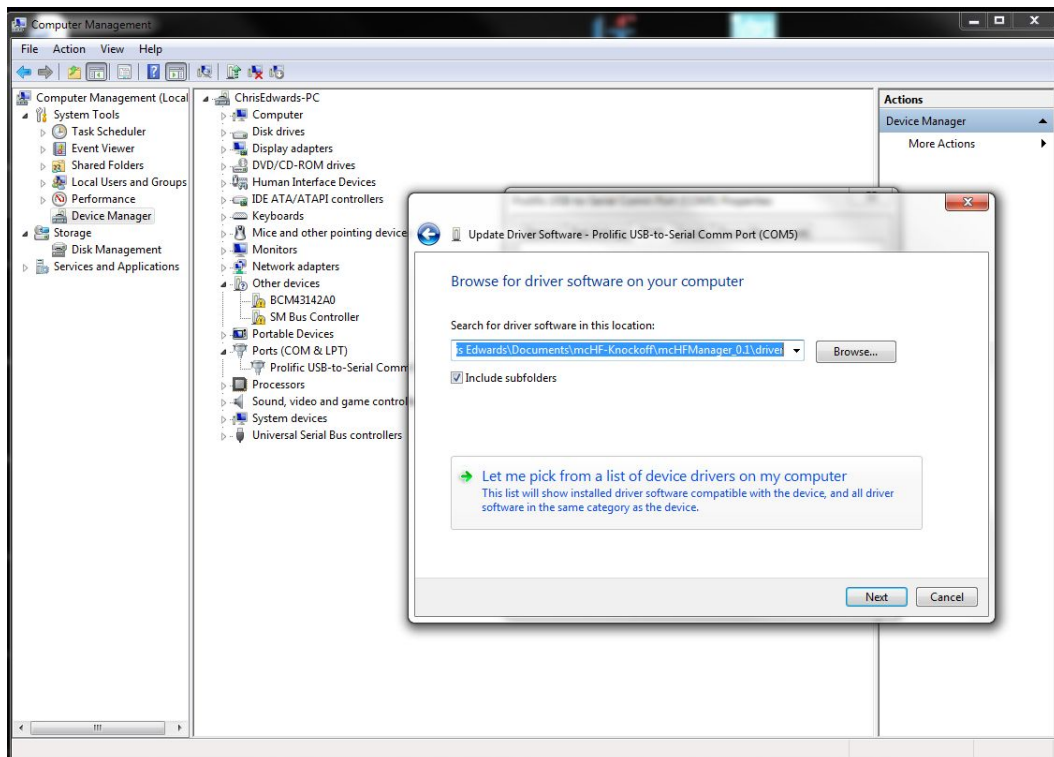


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Choose 'Browse my computer for driver software'

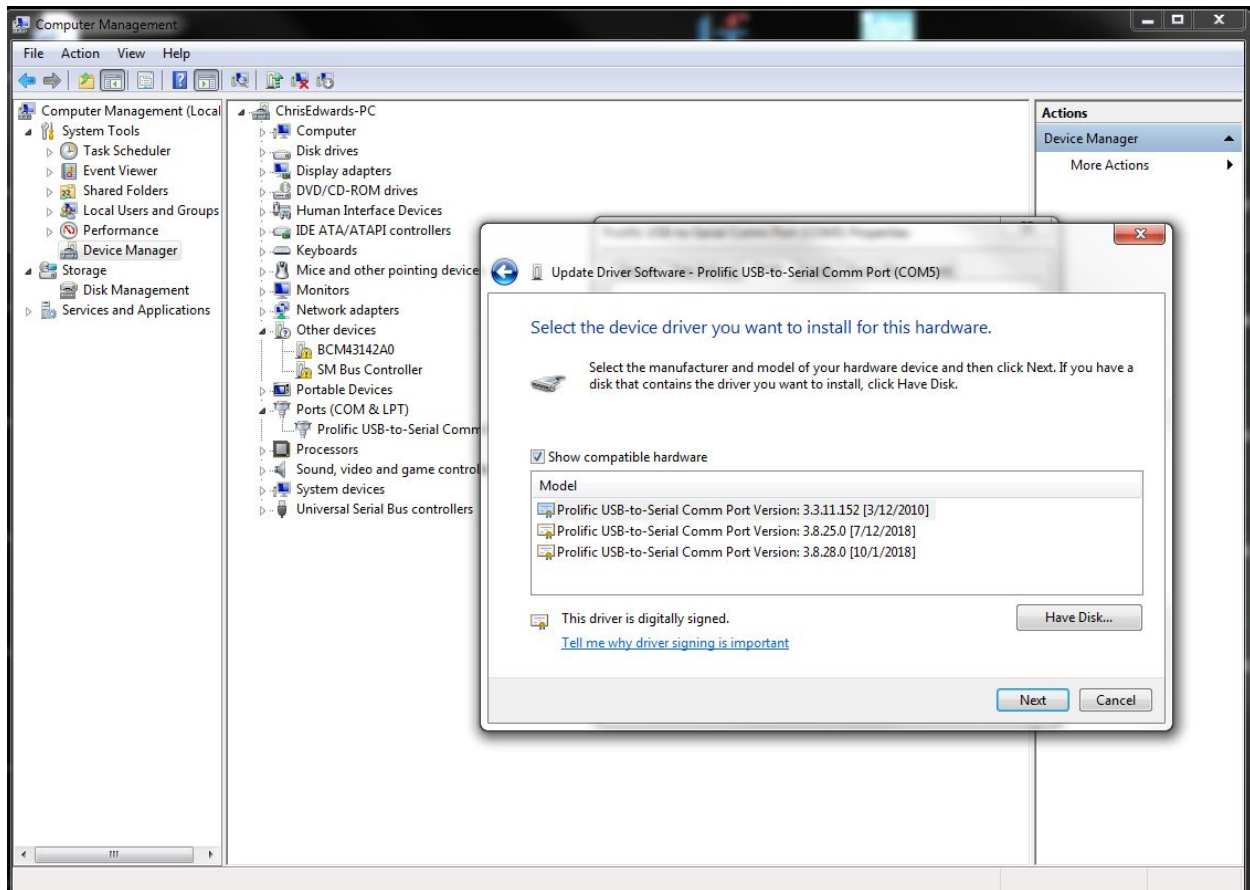


Then choose 'Let me pick from a list of device drivers on my computer'.

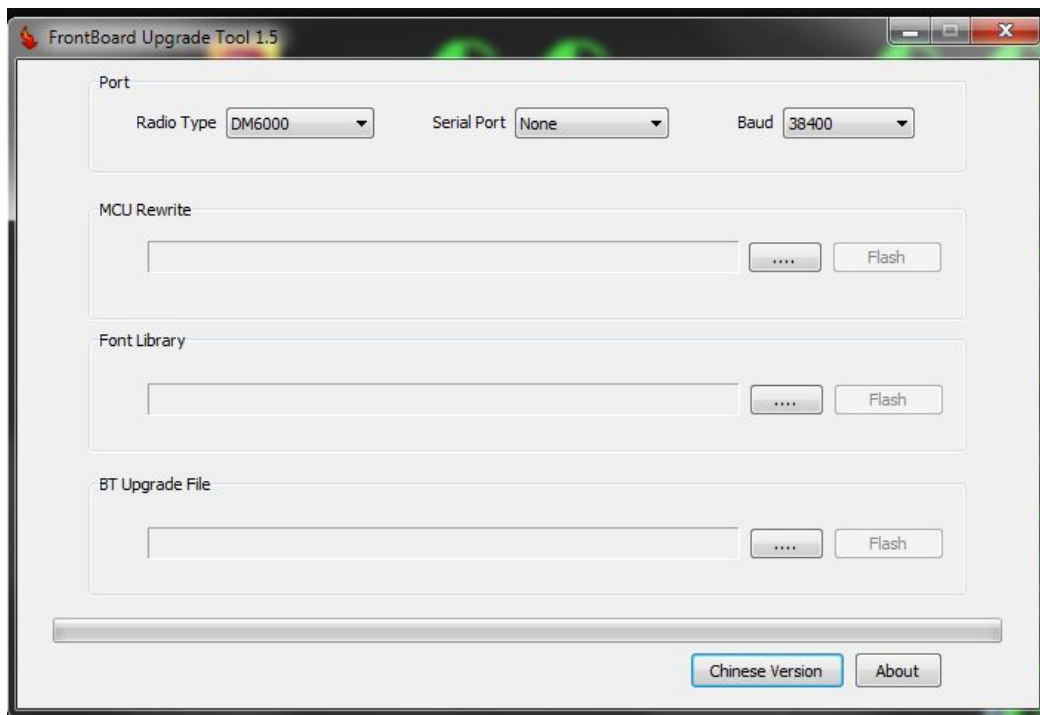




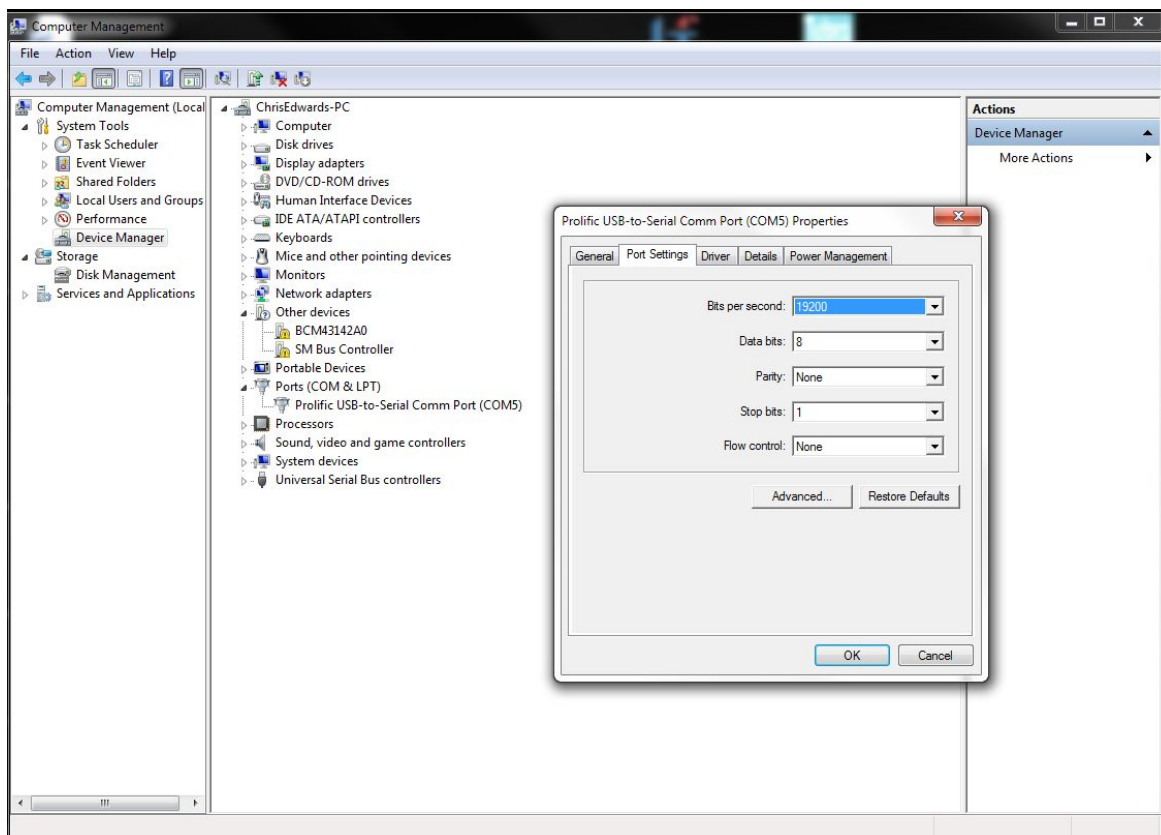
This will open a window that lists the applicable drivers for the Prolific USB device. If your cable and FPUT are not working with version 3.8.28.0, select the 3.3.11.152 from the list and click 'Next'.



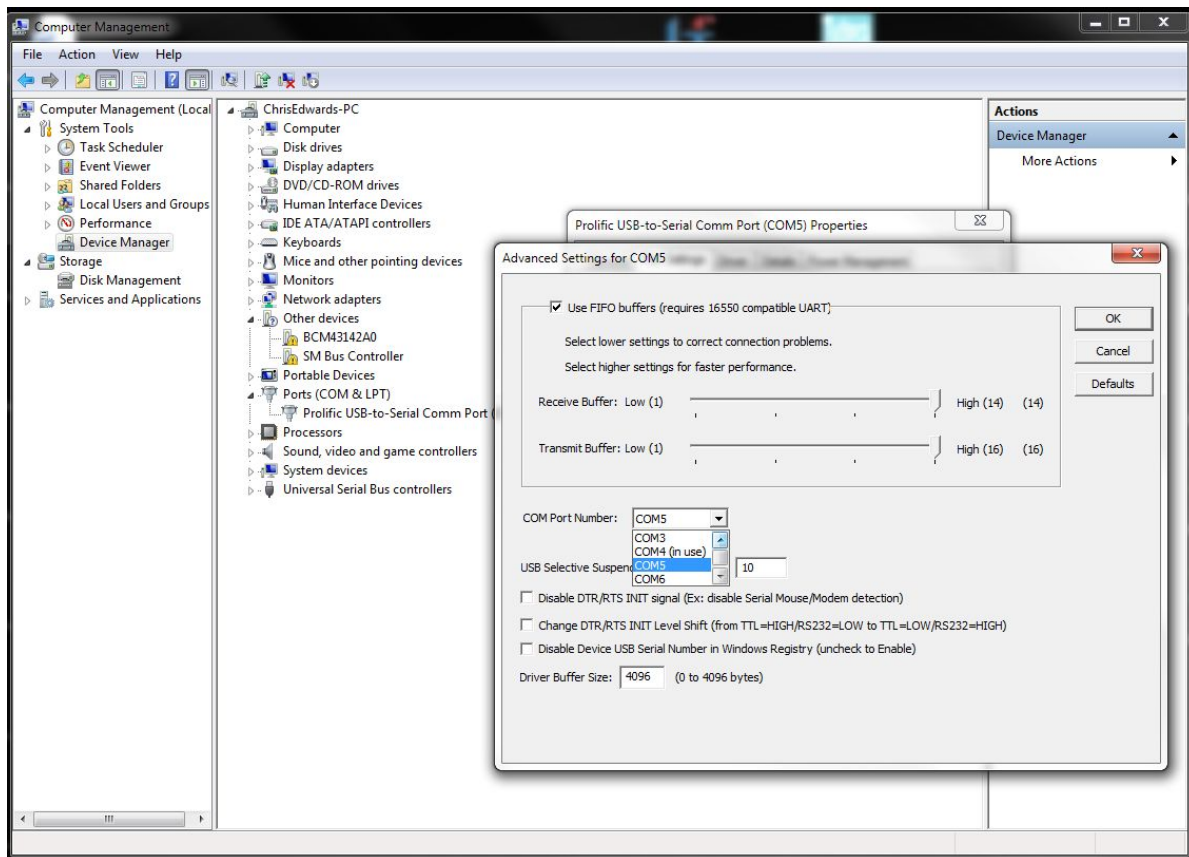
This will assign the older driver to the current USB port and the front panel cable. You will need to reboot your computer once more to complete the reassignment. Leave the cable plugged into the USB port during the reboot.



If FPUT does not recognize the cable, the next remedy is to return to Device Manager, select Properties for the Prolific USB device, and then select the Port Settings tab. Click the 'Advanced' button.

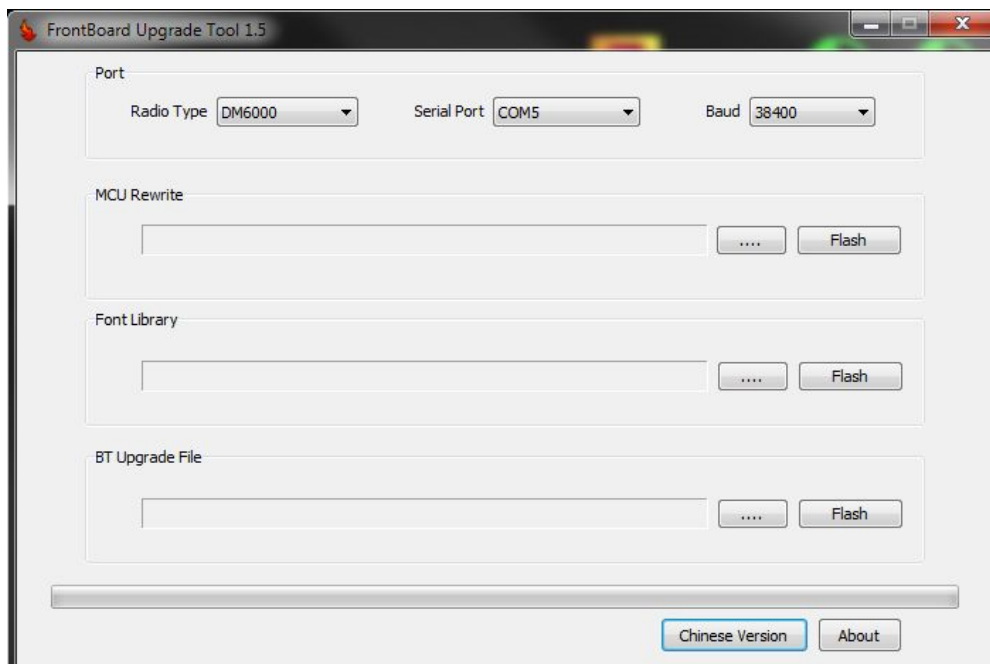


In this window, change the COM Port Number from the current setting to another, unused port.



Click the OK button and exit from Device Manager.

After reassigning the COM port number, open FPUT and confirm that it registers the cable.



Another solution is to run FPUT as an administrator. Right click on the program file and select 'Run as Administrator' from the pulldown menu.

As with all of our support assistance regarding our radios, we have to assume that you have some experience with making changes to your computer system. We cannot accept responsibility for any unexpected consequences that may occur due to changes you make to your system, so please proceed with caution. If you are not comfortable with these suggestions, try to find someone trusted and local who can assist with these changes. We are available for assistance via email and phone call. We can be reached during business hours, Monday through Friday, 9 am until 4:30 pm Pacific time, or via [support@connectsystems.com](mailto:support@connectsystems.com).