

Instructions on How to Change or Readdress COM Ports

Introduction

A COM port (aka Communication Port) is the MS-DOS designation for a serial port. Serial ports are, in turn, a serial communication interface which transfers data in or out one bit at a time. It was the preferred communication standard for connecting peripherals to a PC. As technology evolved COM ports have been replaced by Ethernet and USB which send data in streams; a much faster way of communicating. Computers today are often sold with no serial ports at all - think "Old School".

Even though they've fallen out of use, all connections by either USB or FireWire are termed COM ports as the designation still applies. Since there are many kinds of peripherals one can attach to a computer, COM port assignment is carried out by software and, because the COM port is virtual and not hardware, the assignment of COM port numbers can extend for any number of digits (COM255 for example). Programs that manage microcontrollers however, usually search for these peripherals between COM1 and COM8 (the original allotment for hardware serial ports for PCs). If you connect a microcontroller to a PC via a serial-to-USB interface, the computer will assign it the next available virtual COM port which, as stated before, can be well above COM8. Given this, the program that manages said device will be unable to find it unless you manually reassign the COM port numbers.

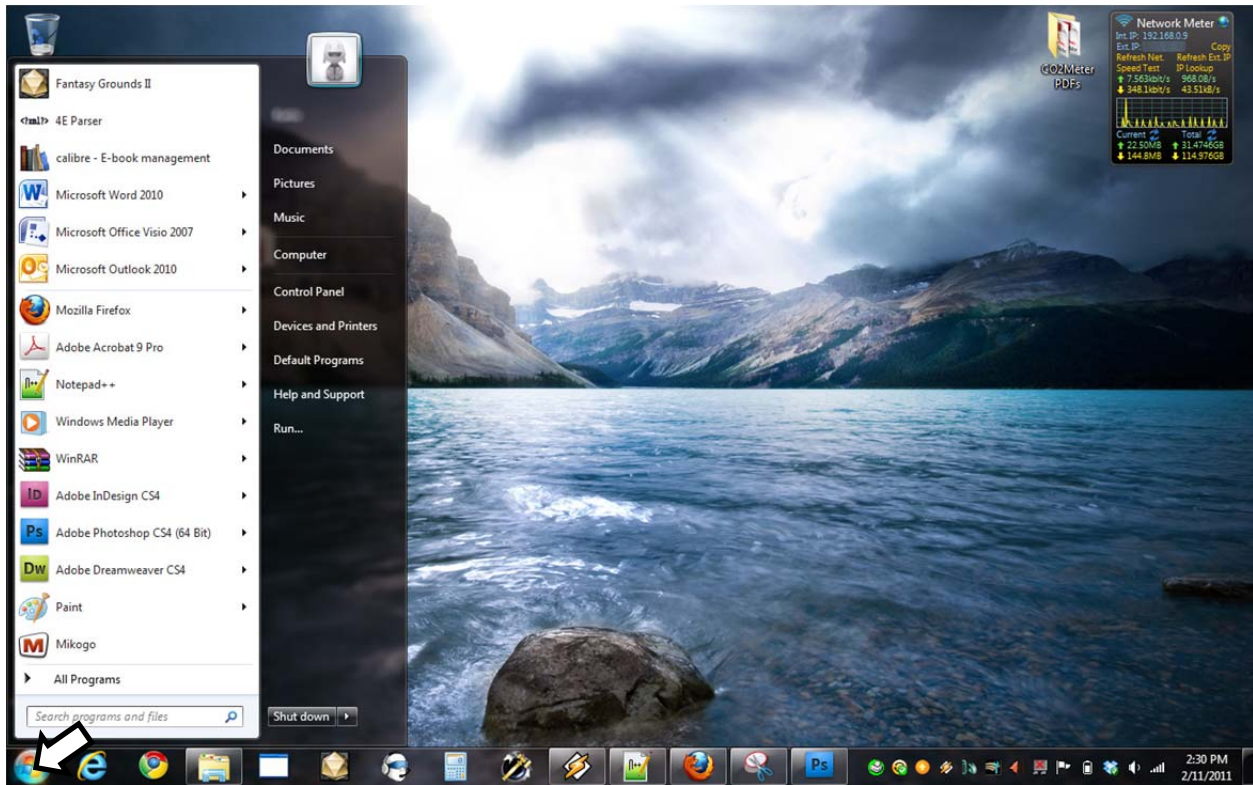
Reassigning COM port numbers

To change the COM port numbers simply follow this guide.

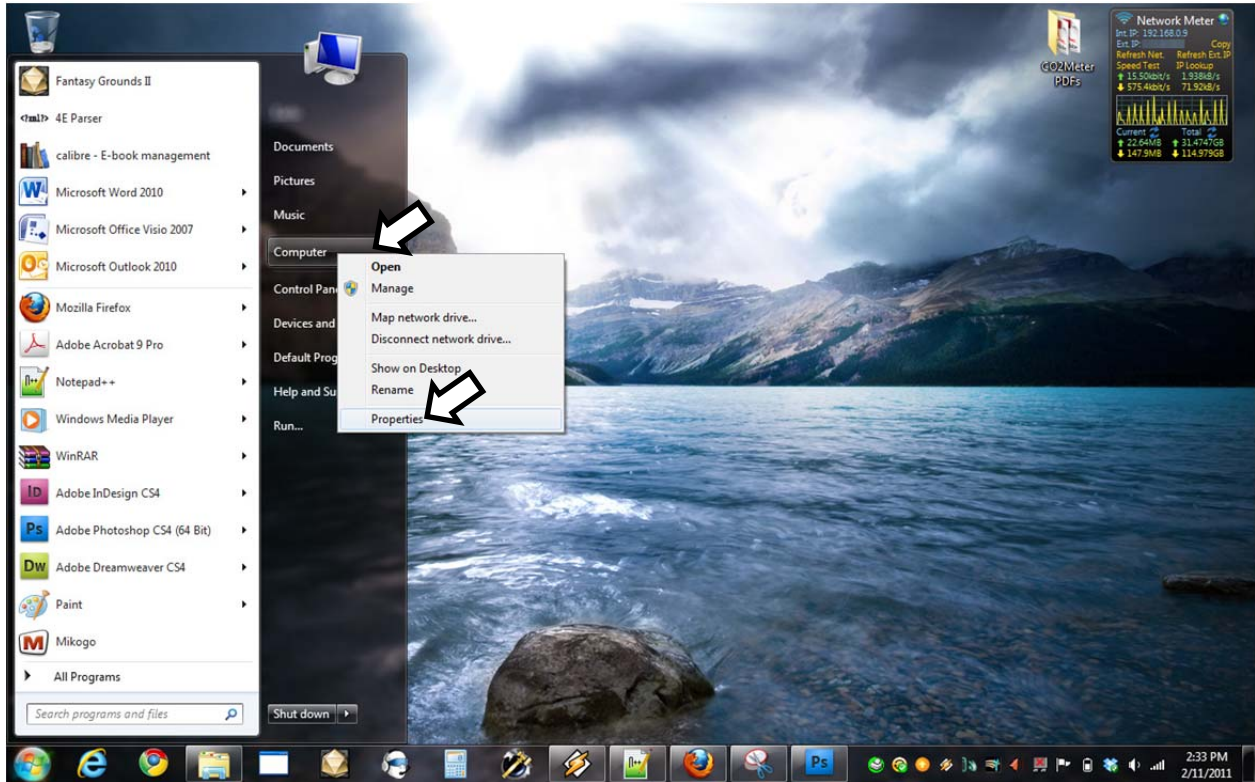
WARNING!

Manually changing a COM port number to one that is already assigned and/or occupied may cause damage to the device that is currently occupying that port. For safety, disconnect all other peripherals before manually reassigning a COM port number.

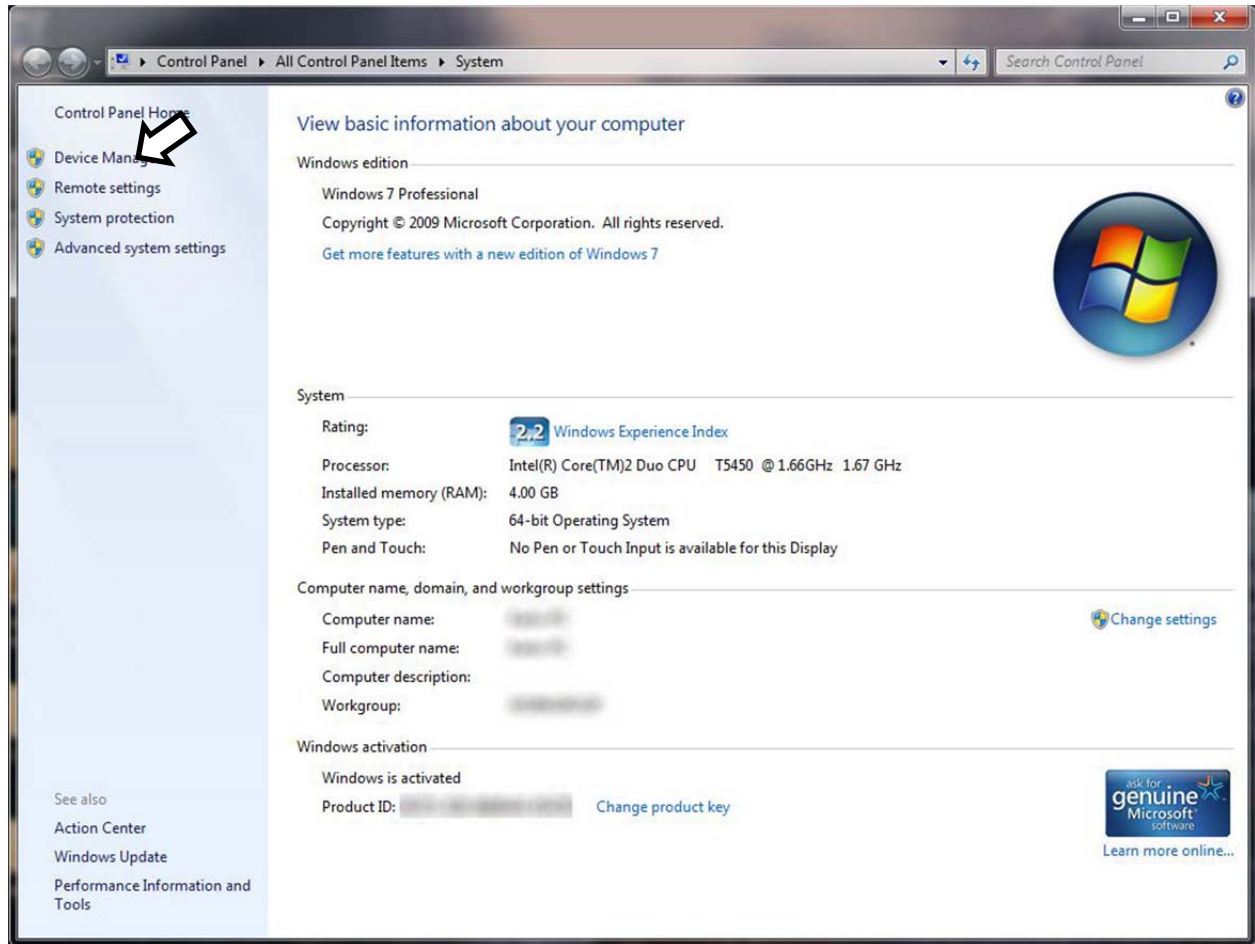
Open Start Menu




Right-click on Computer

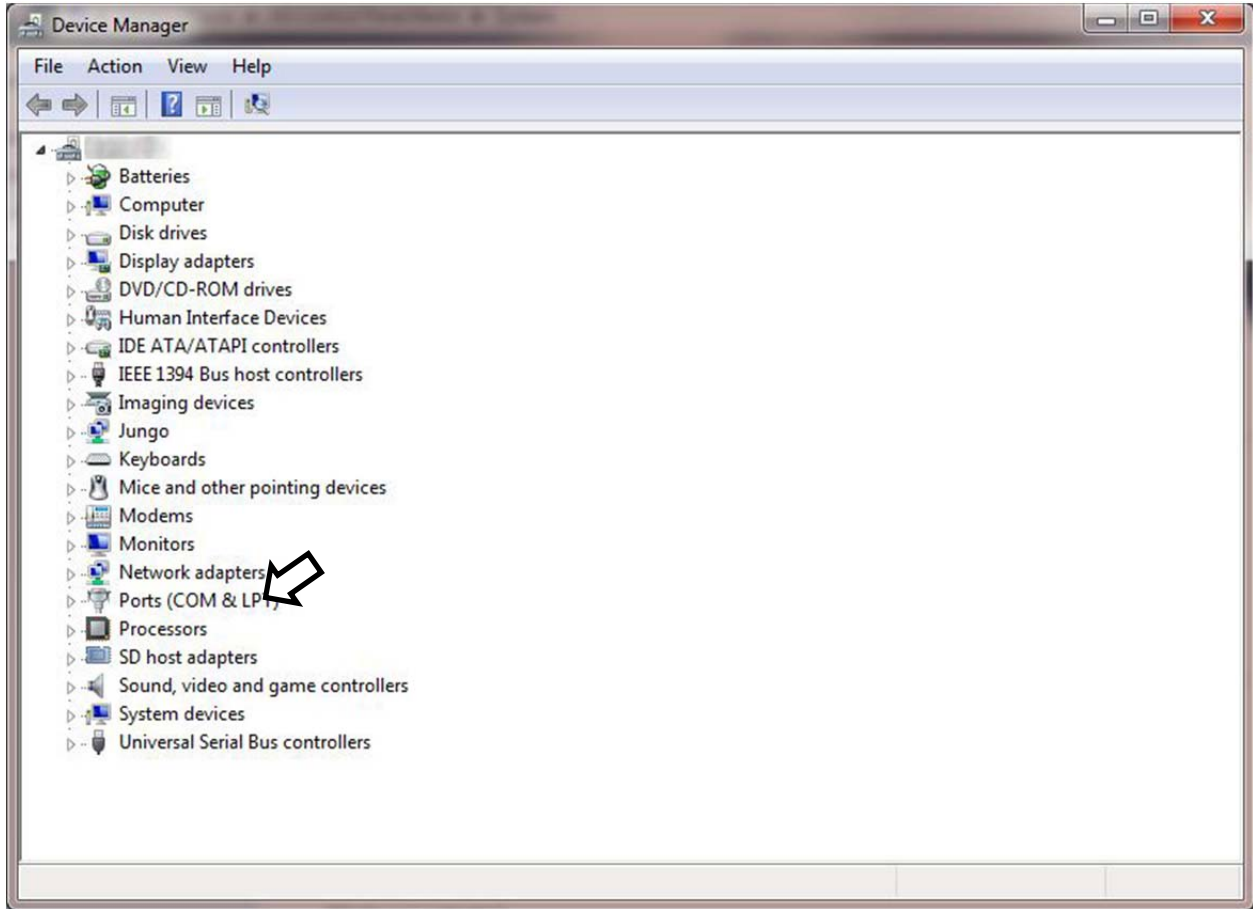


Click on Properties in the sub-menu; this window will appear (Win Vista & 7)

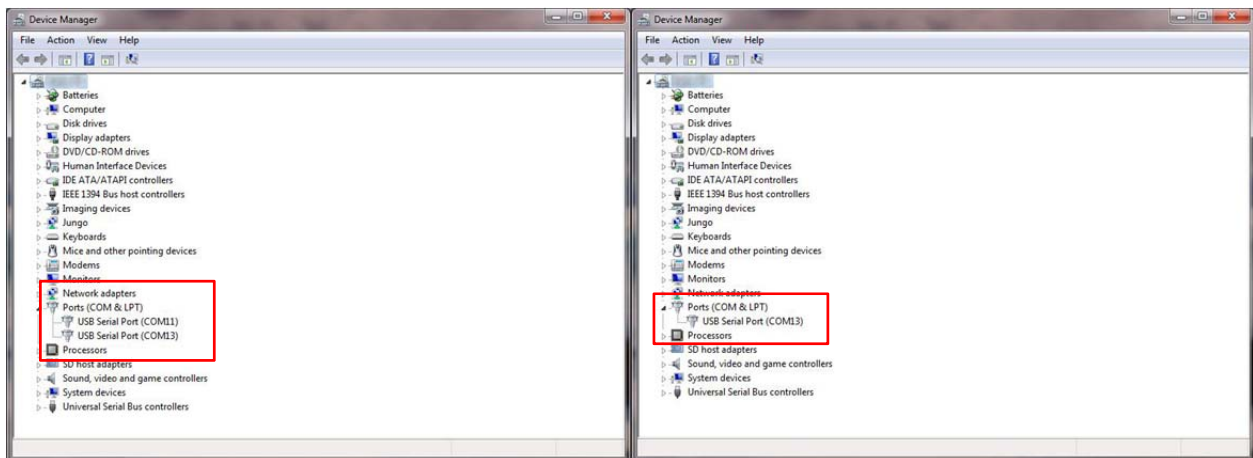


On the left hand side of the window click on Device Manger, this window will appear:

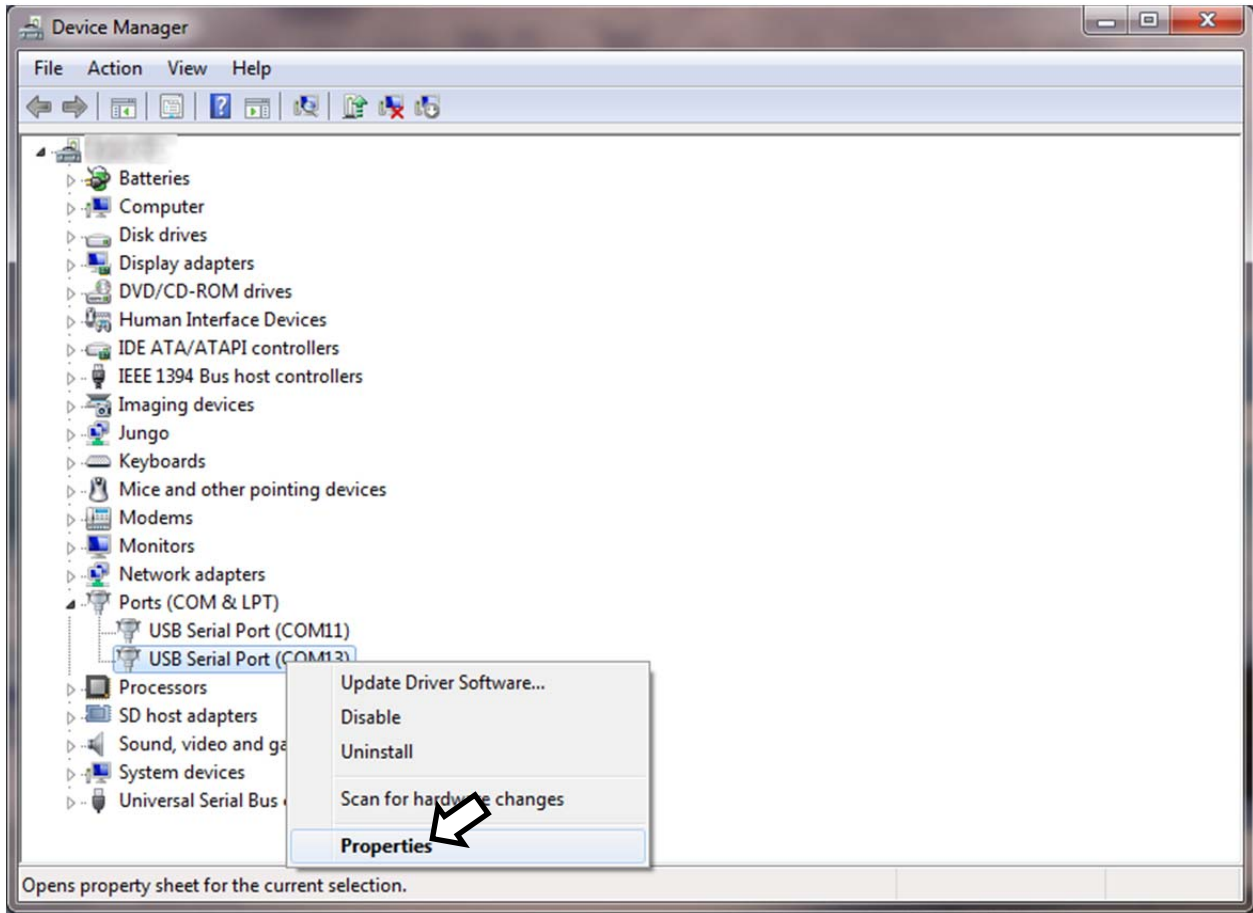
(Alternatively, you can: open the Run command window (Start Menu -> Run... or press  + R) and type "devmgmt.msc" without the quotation marks.)



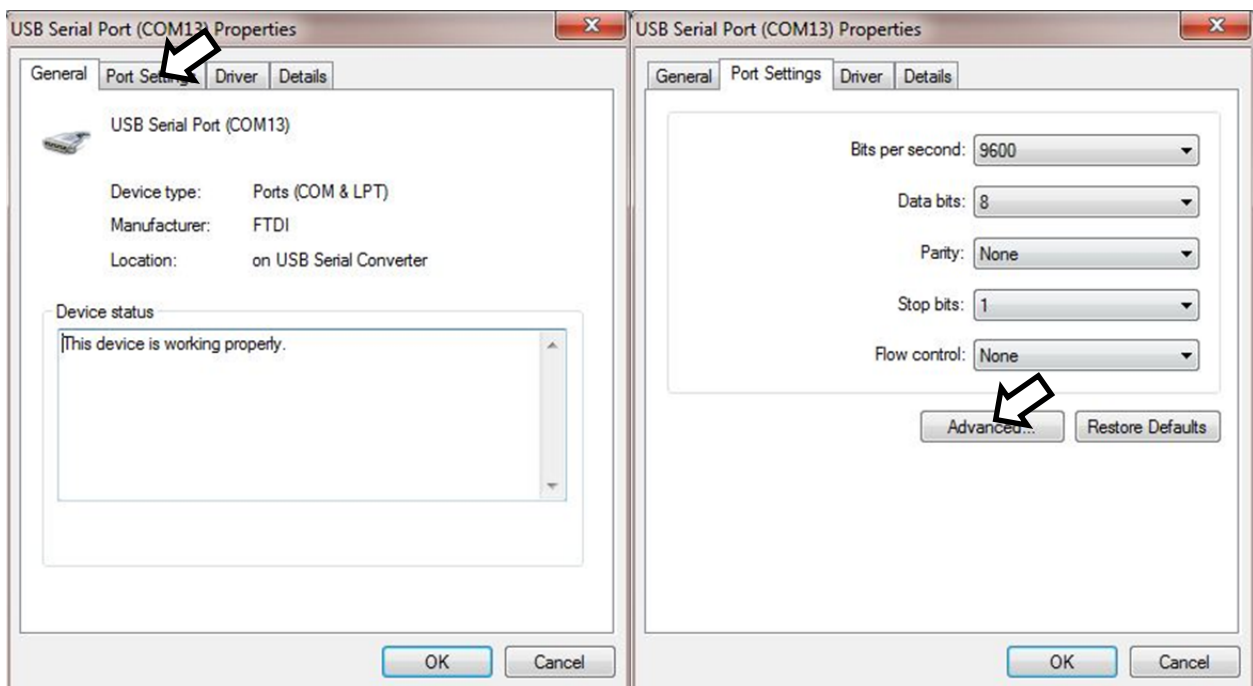
Click on the arrow to the left of Ports “(COM & LPT)” to expand the listing. These are the devices currently connected to the COM ports. If more than one appears, disconnect and reconnect your device. You will notice the screen refreshing both when you disconnect it and then again reconnect it. This will identify which COM port your device is at.



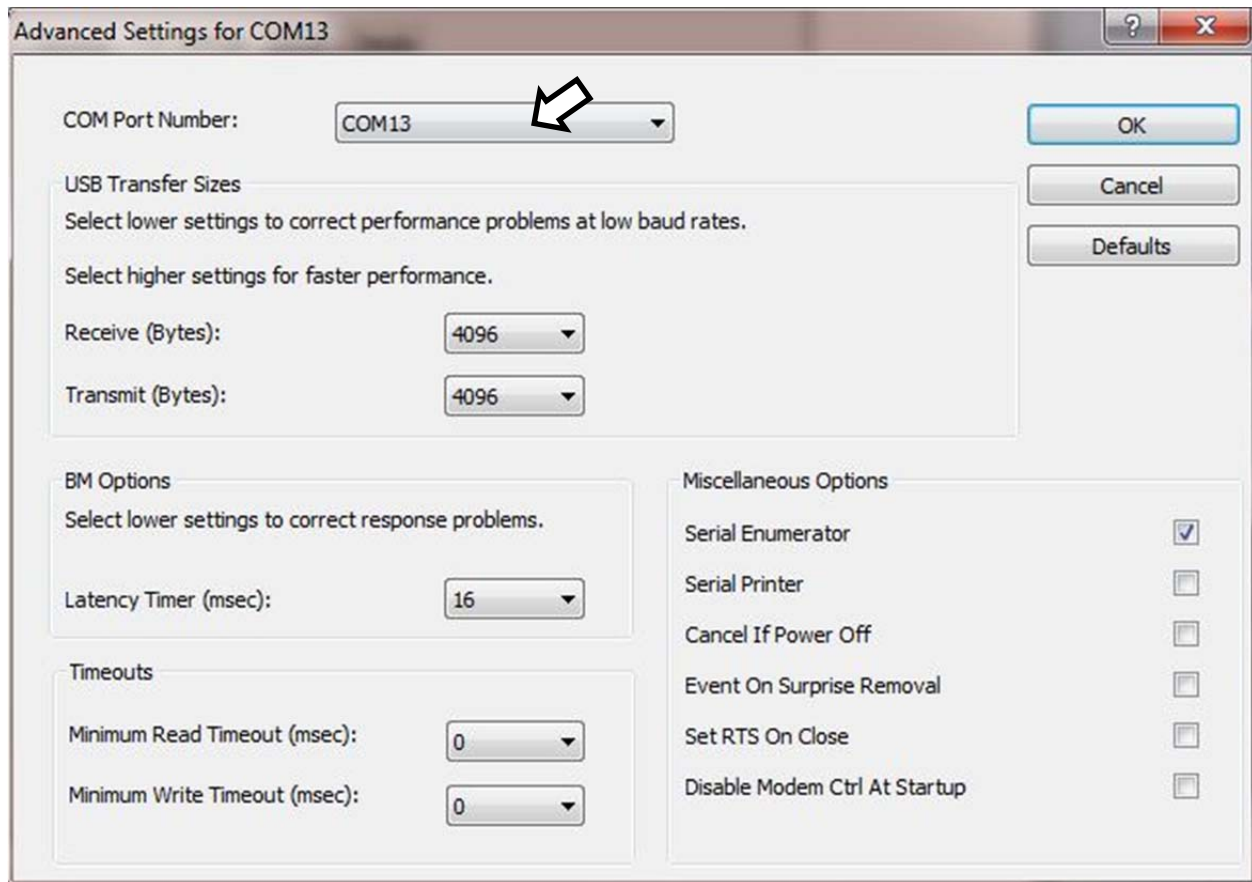
Once identified, right click on the correct COM port and click on Properties in the sub-menu that pops up



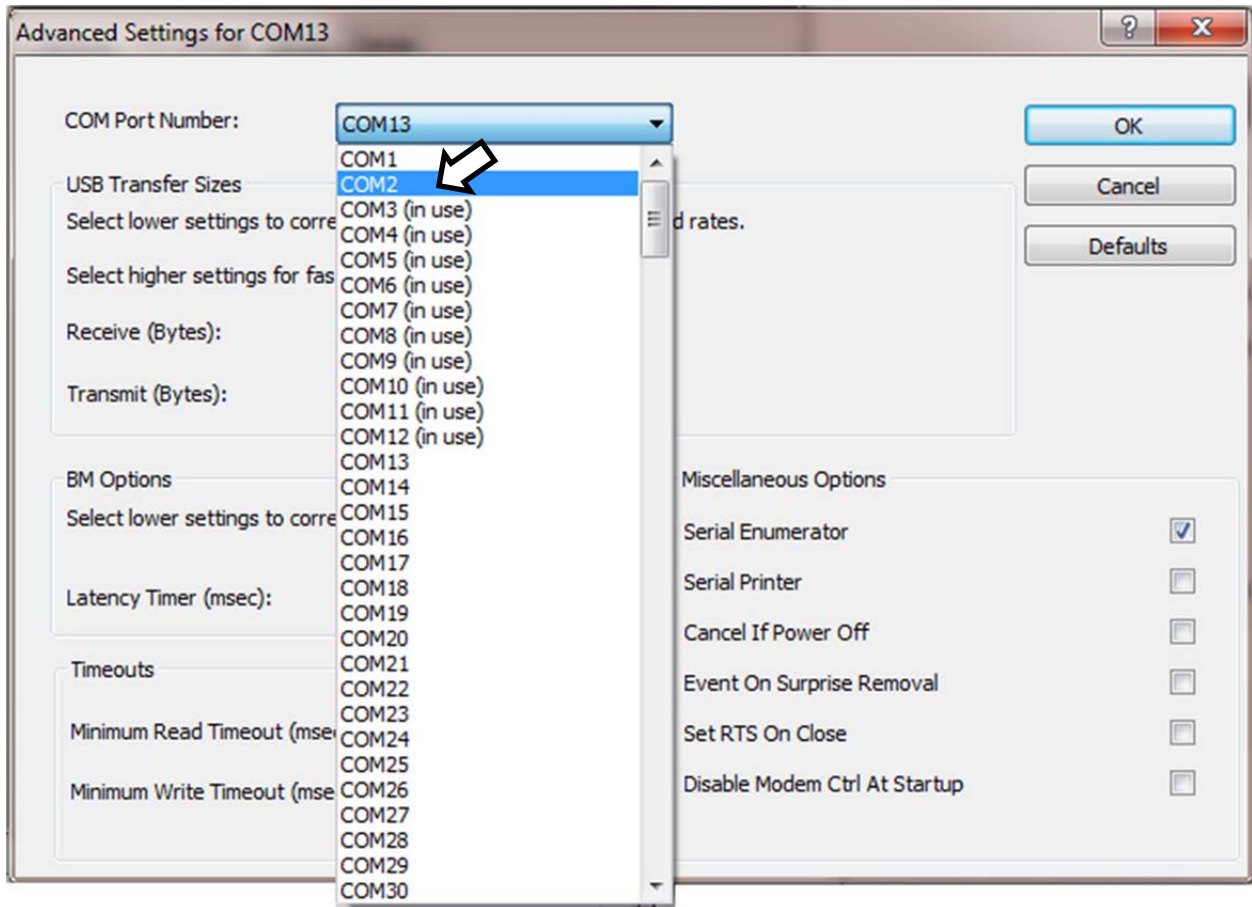
In the window that appears click on the Port Settings tab at the top and the display will change



Click on the Advanced... button to make the following window appear.



Click on the COM Port number list to expand it and click on a COM port number within the range of COM1 to COM8 (preferably one not in use, avoid choosing COM1; if all are in use and there are no other peripherals connected to your PC, assign it no any port between 1 and 8; this will cause the PC to lose the addressing of the last peripheral connected there (a USB printer for example) and will cause the PC to assign it to another number when you reconnect it).



Once the new COM port is chosen, click on OK and again in the USB Serial Port Properties window. Close the device manager.

You're done!