



S2USB485

USB to RS-485 and RS-232 Converter

Introduction

The S2USB485 is a USB to full-duplex RS-232 and half-duplex RS-485 serial converter integrated into a single device. In essence the S2USB485 is a single USB serial port that has two electrical interfaces available to it (RS-232 and RS-485).

This document documents the process to download and install the S2USB485 device drivers from our website. The images provided are from a Windows 10 computer and so these images will be different for Windows 7 or 8 operating systems, but the procedure will be the same.

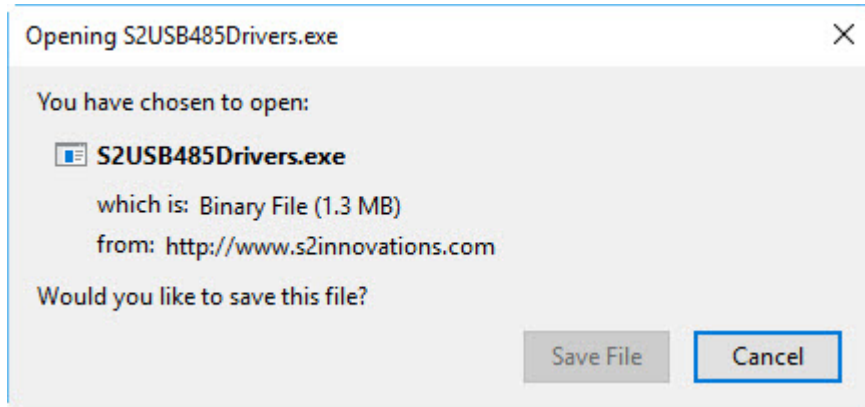
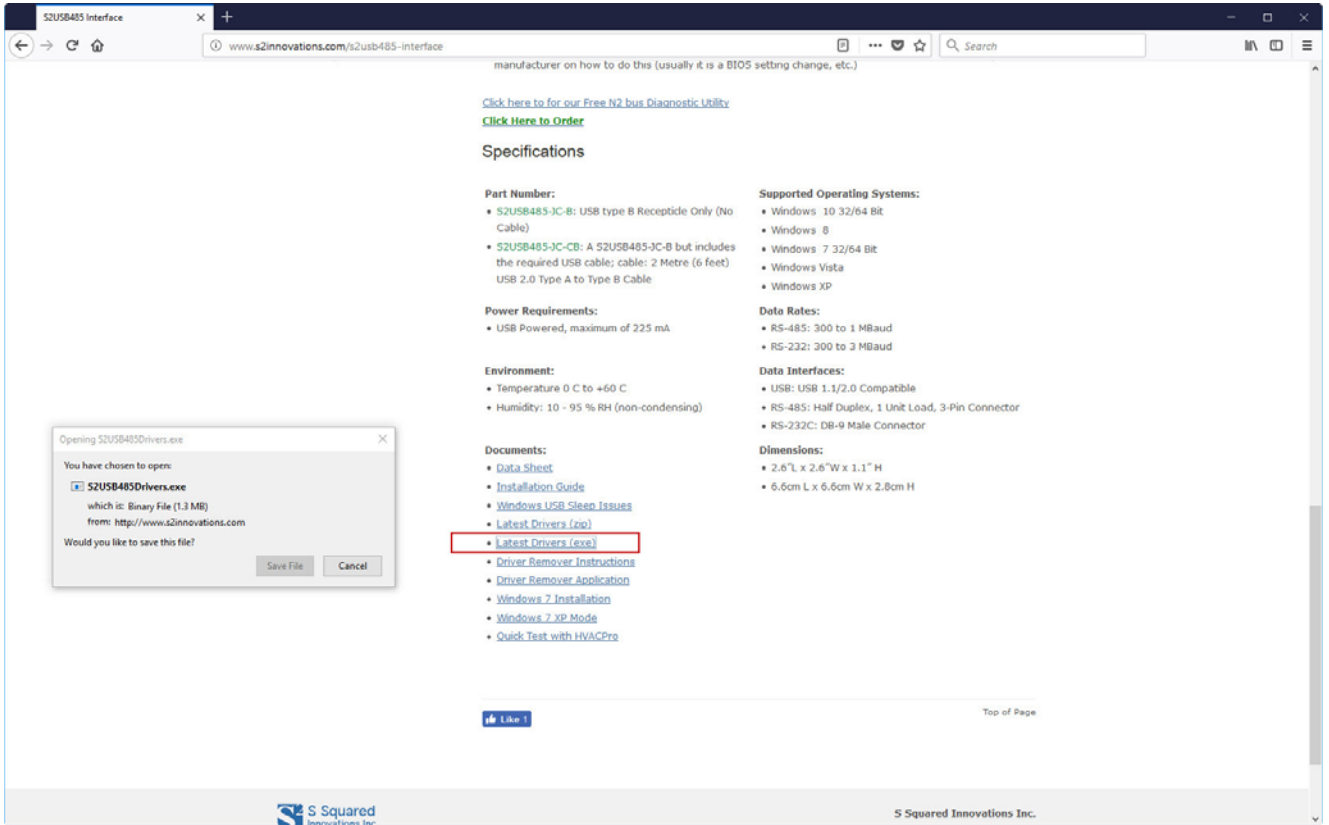
From Windows 7 and up the device drivers need to be installed manually, as Microsoft wants all device drivers to be hosted on their website. This is problematic, as it limits our ability to support our products in the field (e.g. we have no ability to e-mail you a driver fix, etc). Consequently, we decided to pursue this driver installation approach.

Download Drivers from Website

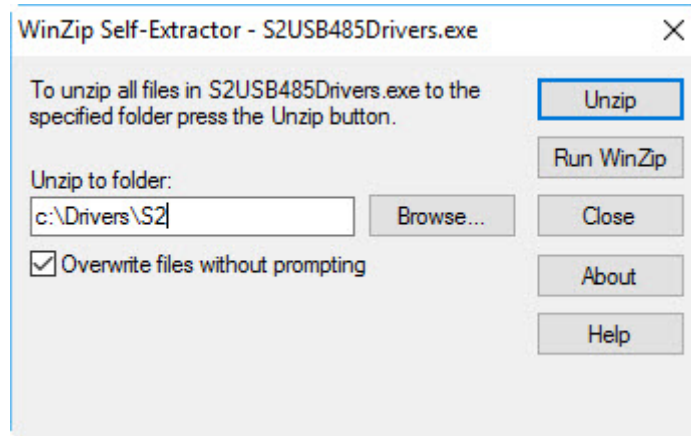
If you do not have the CD included the S2USB485 or if you wish the latest device drivers, use the browser of your choice and navigate to the S2USB485 product page on our website:

<http://www.s2innovations.com/s2usb485-interface>

The bottom left of the product page includes several links where one of them is the latest drivers in both a self extracting exe format and a zip format. If you do not have a zip extracting application or you are unfamiliar with zip files, then simply select the self extracting exe link (see picture). Clicking on the link will popup a dialog box asking you to save the file. Select "Save File" and note where the file is to be saved. Be advised that the file save location will vary with your computer's setup as well as your browser.

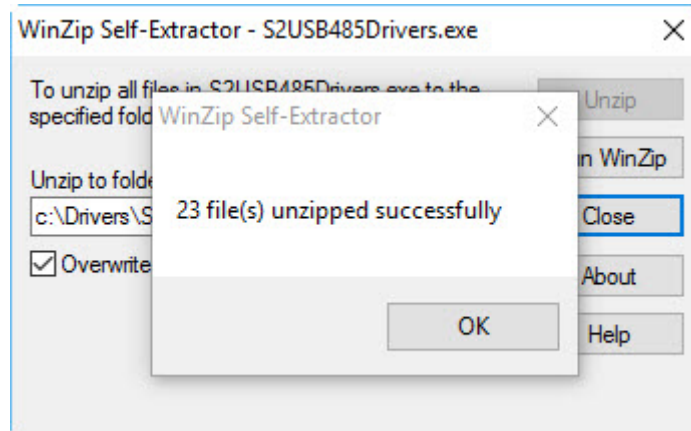


Once downloaded you can now run the self extracting exe application and the following dialog will appear:



The "Unzip to folder" field will default to your computer's default location. Please modify this, as the default location is usually long and cryptic and will be difficult to remember, as this location will be needed for the driver installation. I typically recommend to use a simple path like that shown in the above picture (C:\Drivers\S2).

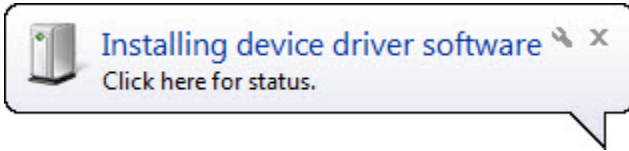
Once you enter the path select the "Unzip" button located in the upper right corner of the dialog box. This will "unzip" the files and the following picture will be displayed:



At this point the drivers are not installed, but simply downloaded and are located in the C:\Drivers\S2 folder or the location that you specified. You will need to install the drivers which is in the following section.

Driver Installation Procedure

1. Connect the S2USB485 to the computer's USB port
2. If this is a first time installation, the following Message will appear along the task bar:



next, the following message will also appear

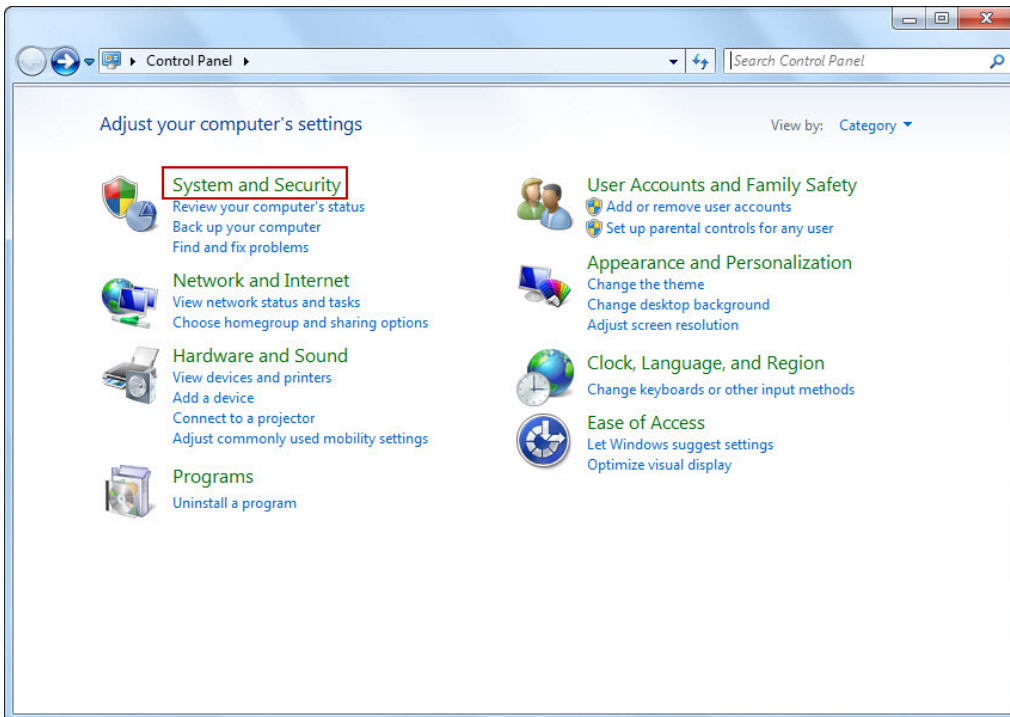


These messages are Windows 7 specific and so the messages displayed may be different for Windows 10. Regardless of the messages, you will need to install the drivers manually. There will be two drivers to install where one is the USB driver and the other the COM or Serial Port Driver.

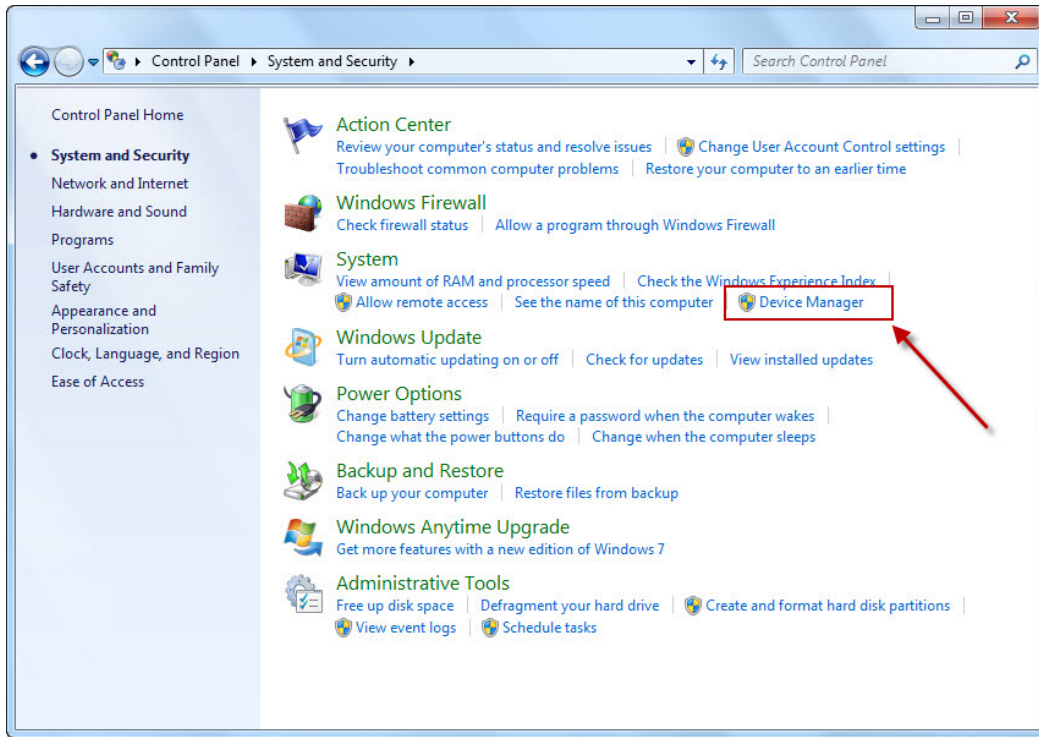
Installation of the drivers is the same for Windows 7 and Windows 8 and 10. The only difference is that navigating to Window's Device Manager screen is different. Below are images for accessing device manager from Windows 7 and Windows 8 and 10

Windows 7 Device Manager Navigation

Once these messages disappear, you must navigate to Device Manager. There are several approaches to do this. The first approach is to go to "Start-Control Panel"



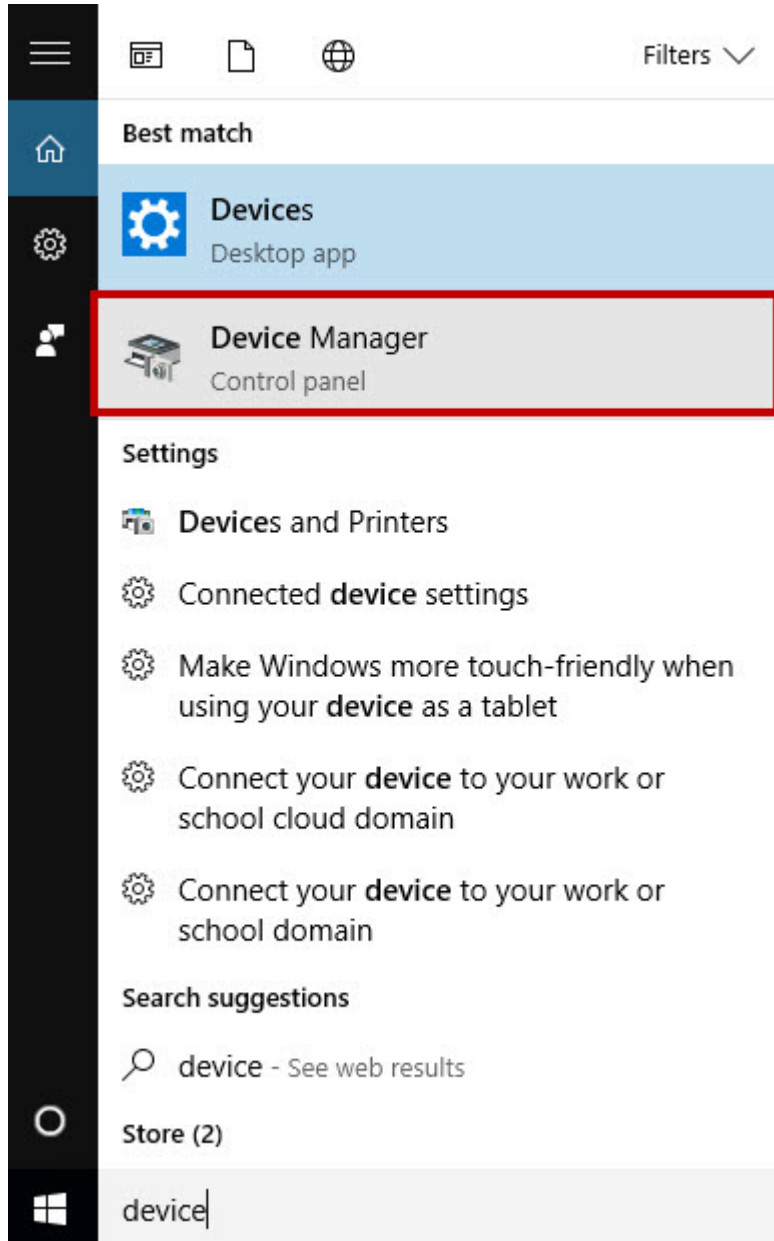
Now, select the "System and Security Item" to go to the next screen



Select the “Device Manager” selection to reveal the Device Manager Window. Please Proceed to the Device Manager Section.

Windows 8 and 10 Device Manager Navigation

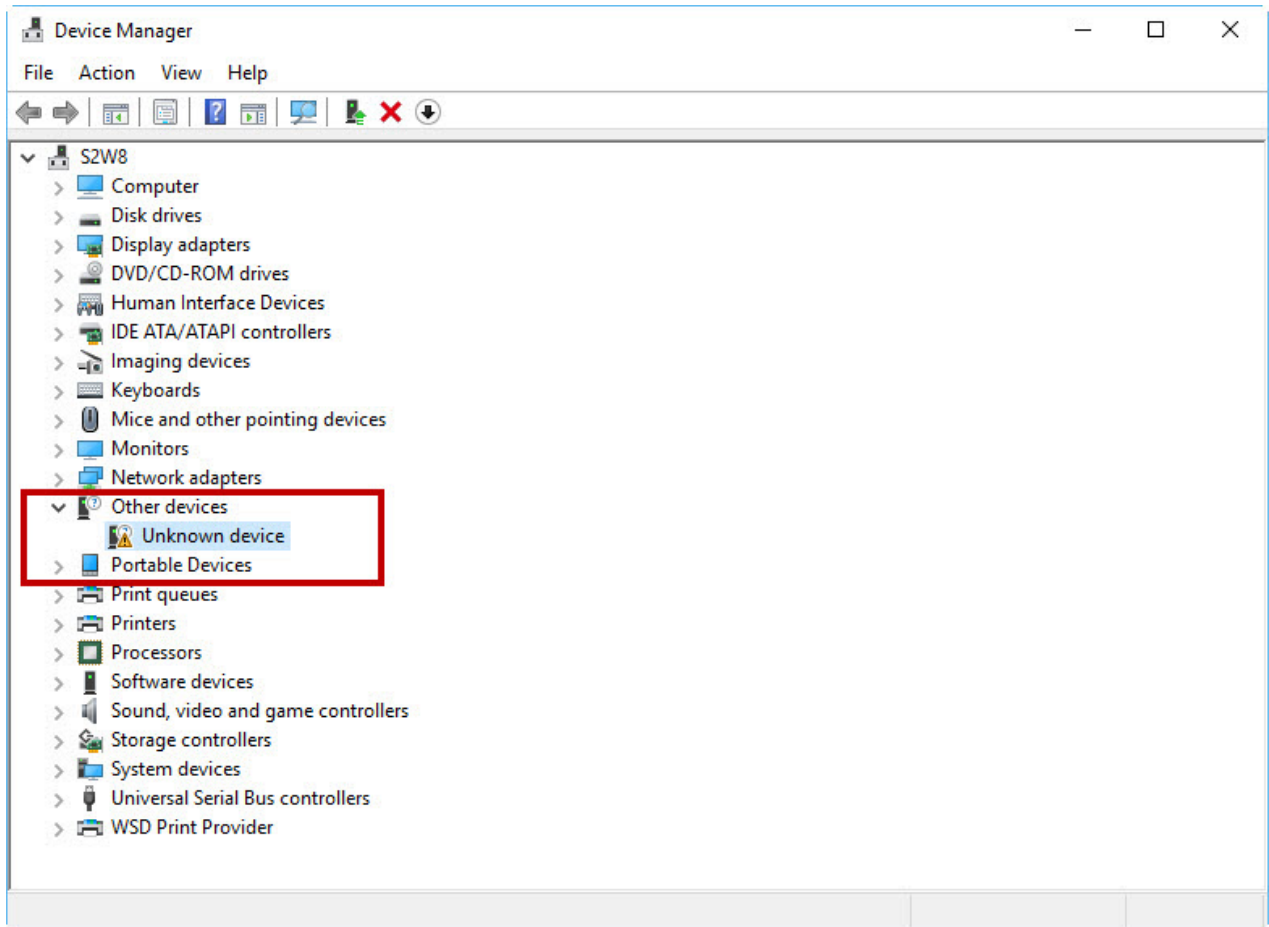
To find Windows Device Manager under Windows 8 or 10 it is easiest to simply use the search field located on the bottom portion of the Windows Desktop. here simply type "Device Manager" and Windows will display the following:



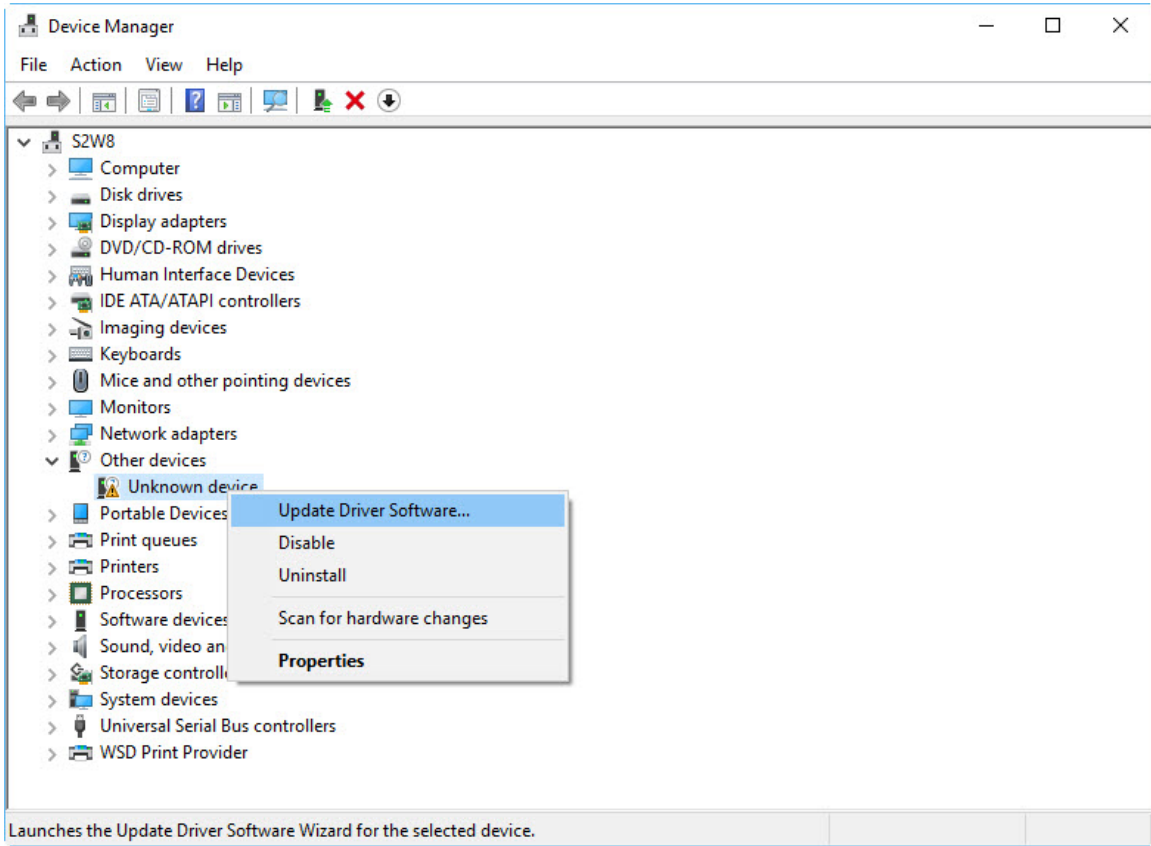
Select the "Device Manger" and the Device Manager Dialog Box will be displayed

Windows Device Manager

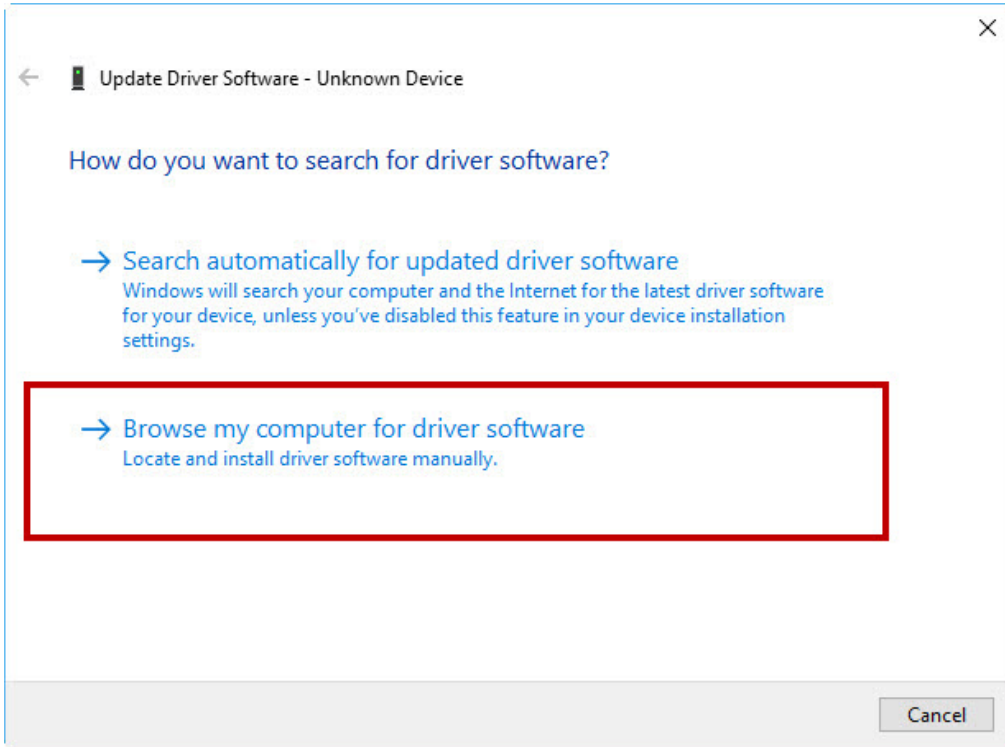
If the S2USB485 was not installed before you will see an "Unknown Device" entry within the Device Manager List:



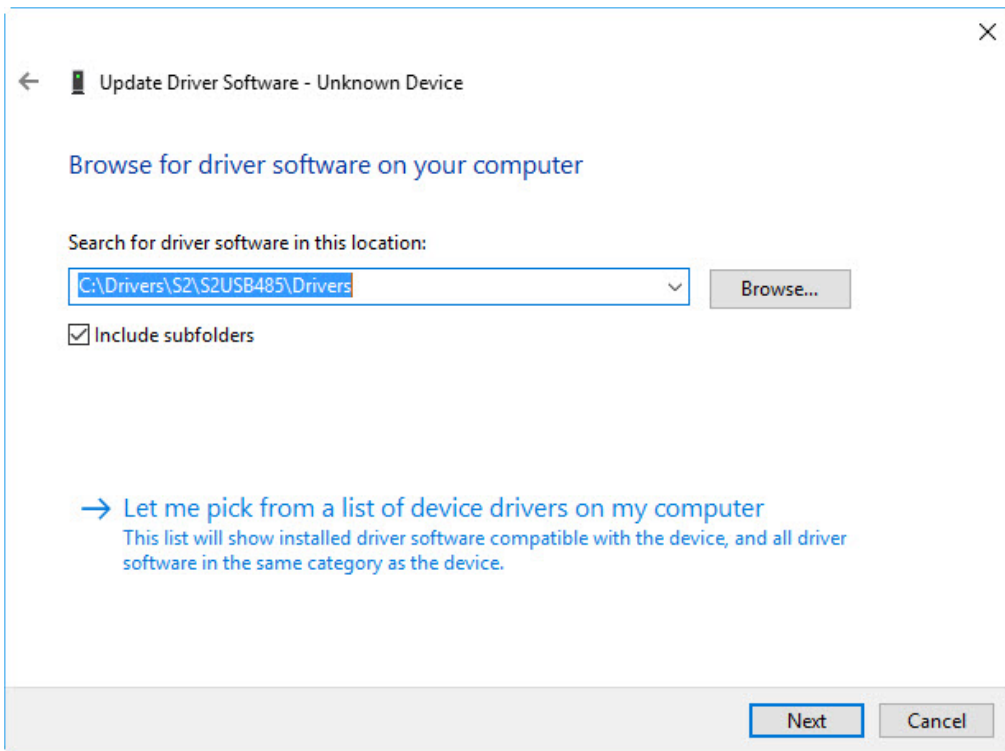
Left mouse-click on the "Unknown Device" entry and right mouse-click on "Update Driver Software..." selection:



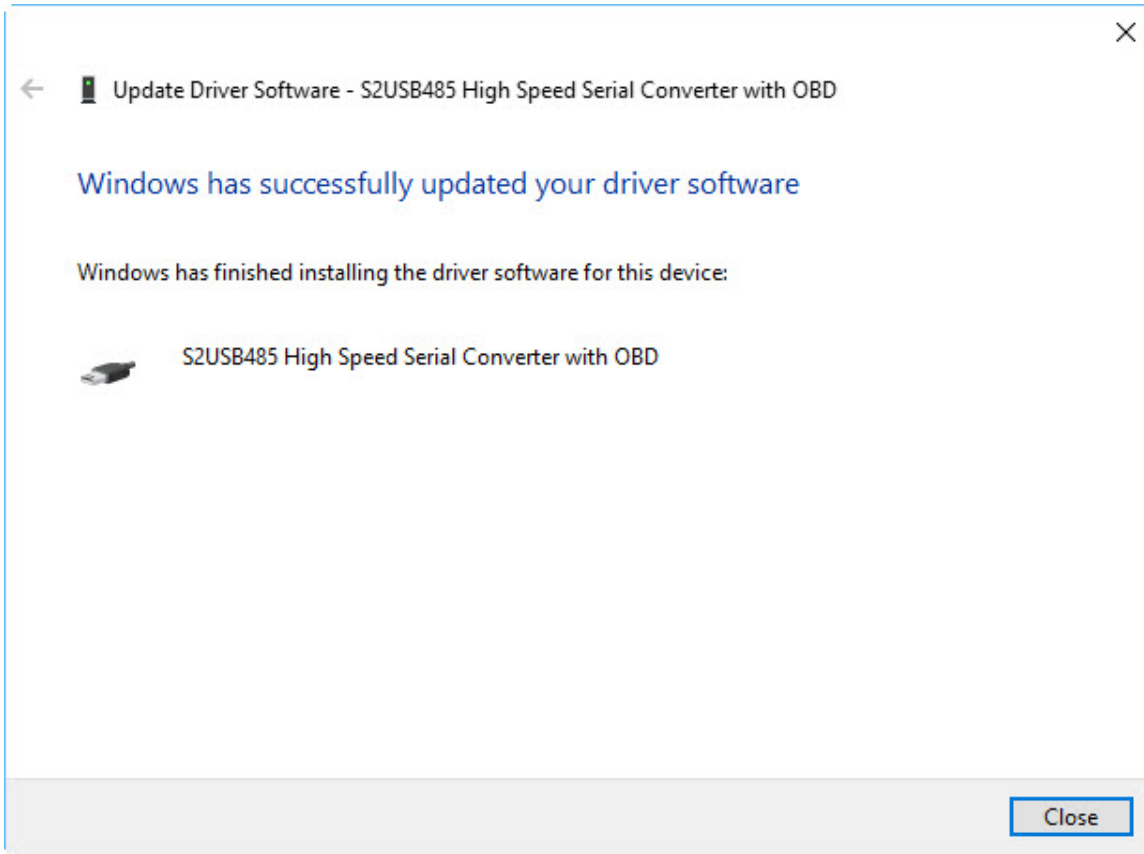
The Next screen will display the following and here you will select "Browse My Computer for driver software":



The next screen will allow you to enter the location of where the drivers are located. Here you will use the location where you unzipped the drivers. If you used the recommended path then you can enter "C:\Drivers\S2\S2USB485\Drivers" in this field as shown below



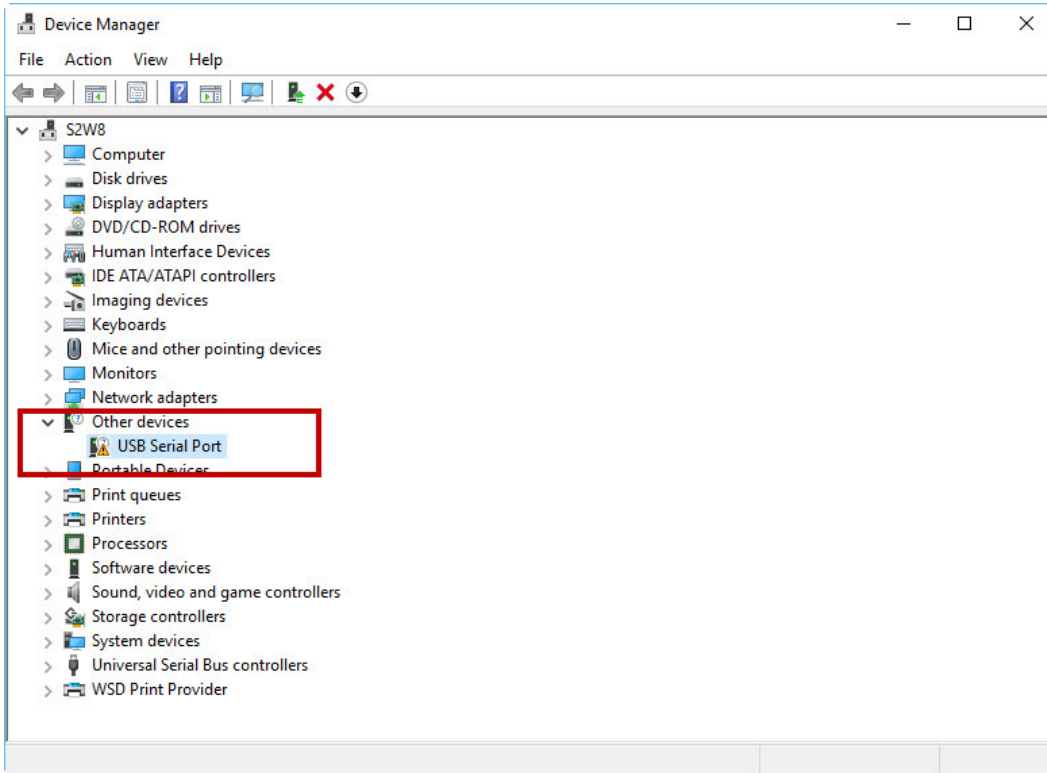
Pressing Next will install the drive and the resulting dialog box should be shown in a few moments:



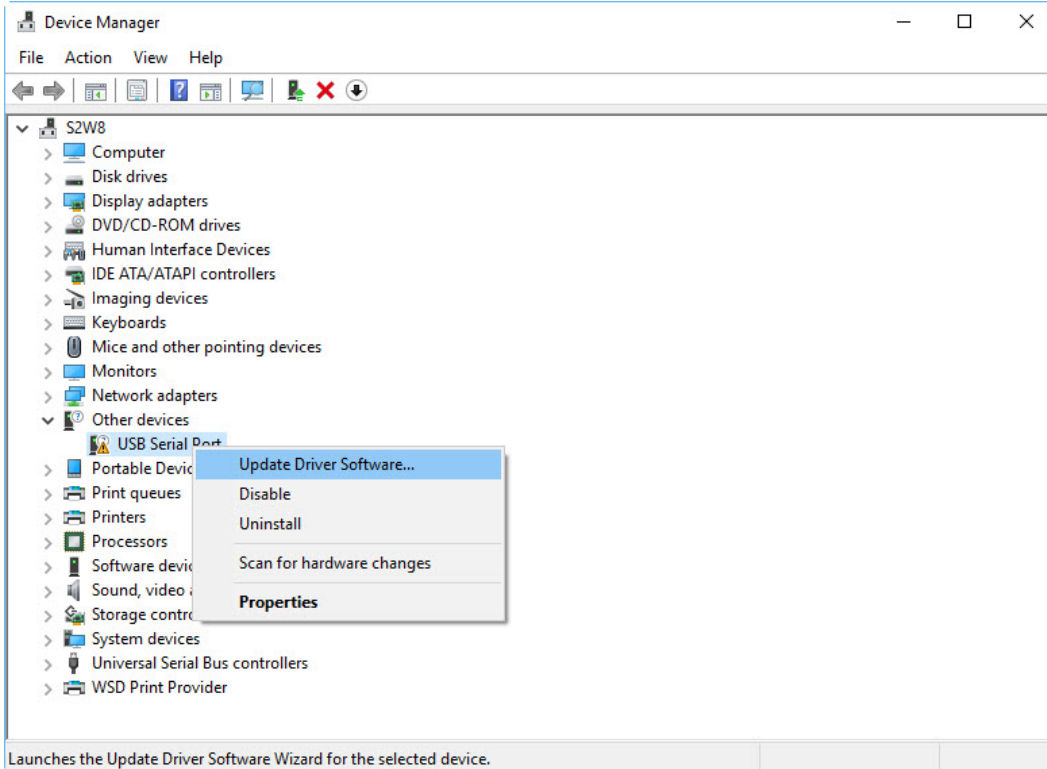
This completes the first driver installation. The next step is to install the COM or Serial port Driver.

COM ort Serial Port Driver Installation

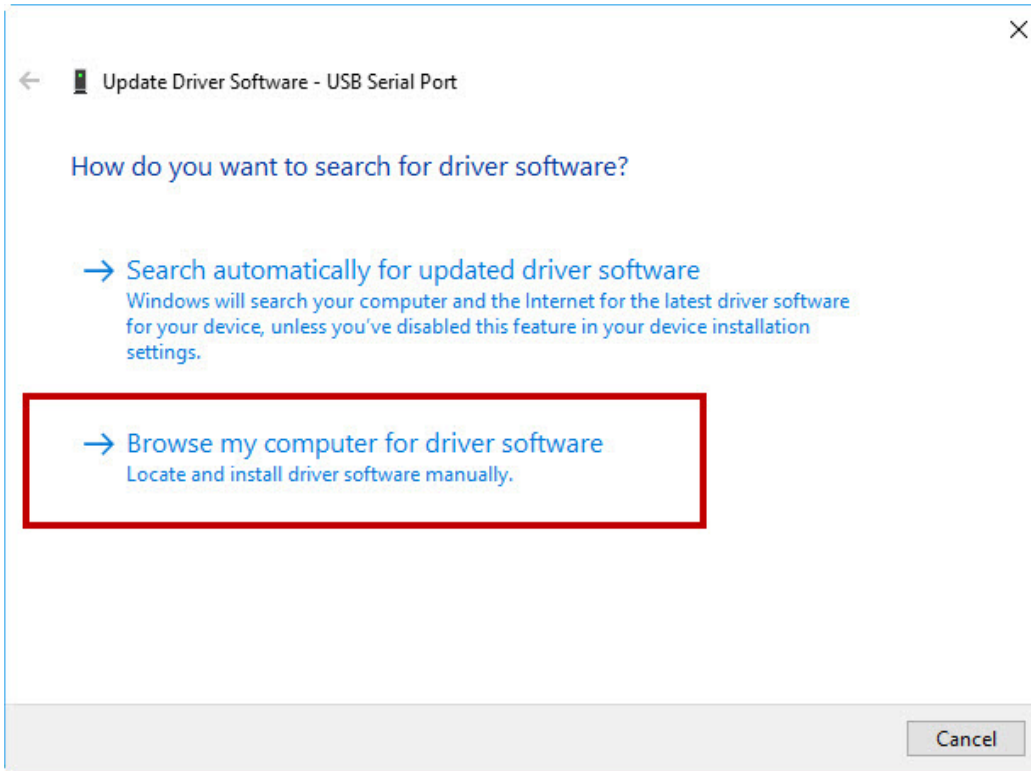
Installing the COM or Serial Port Driver is virtually identical to the First or USB Driver Installation. The first step is to locate the "USB Serial Port" Entry located in the "Other devices" section of Device Manager:



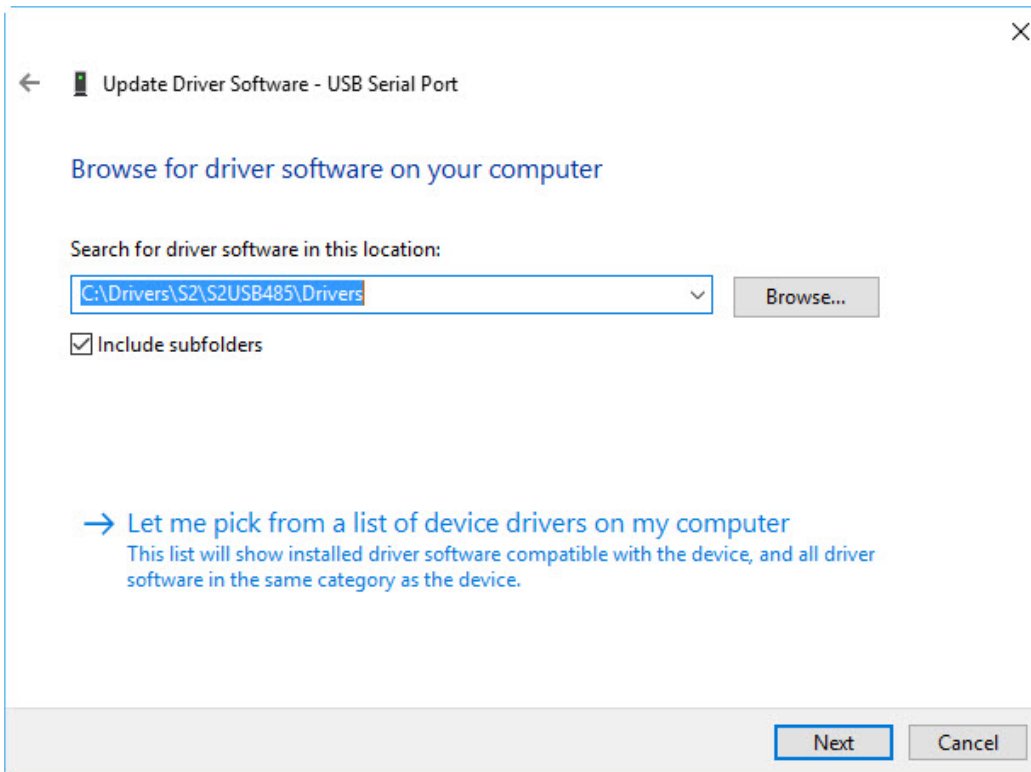
As before left mouse-click on the "USB Serial Port" entry and right mouse-click and select "Update Driver Software...".



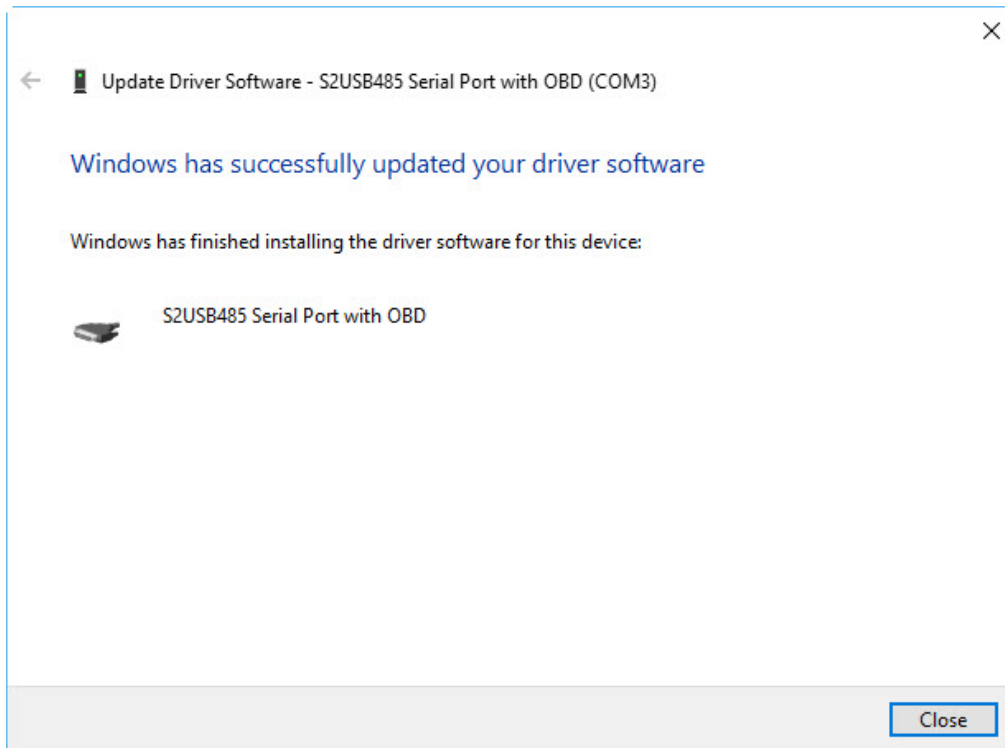
Select the "Browse My computer for driver Software"



Enter in the path of where the drivers are located



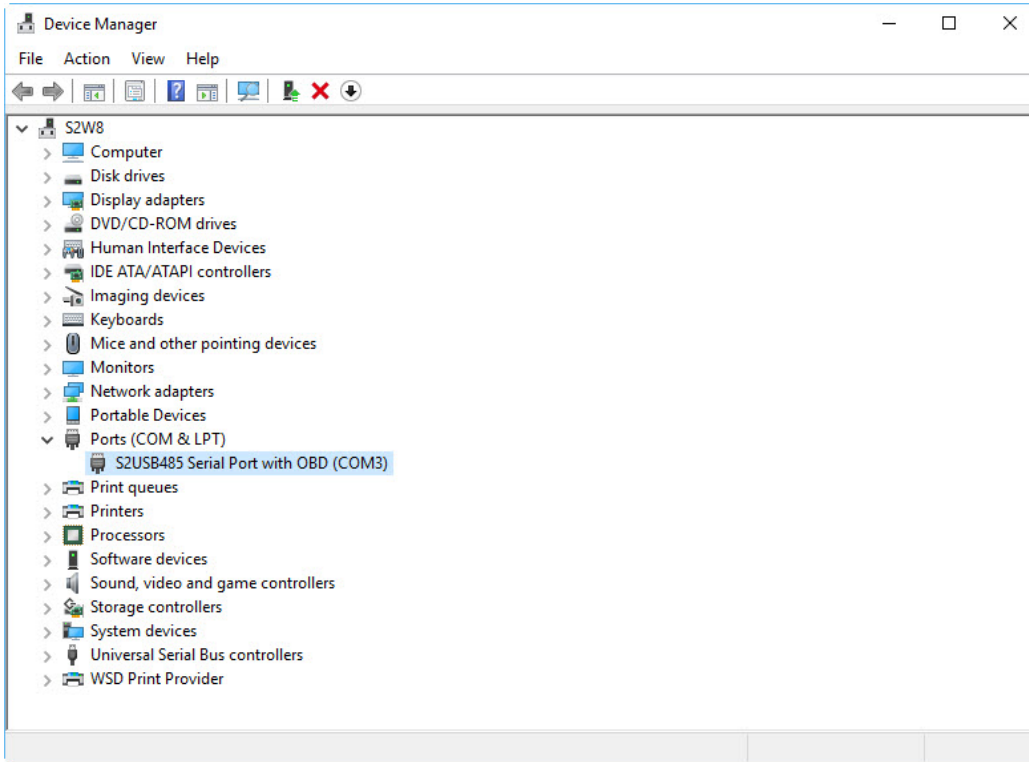
Pressing next will install the 2nd driver:



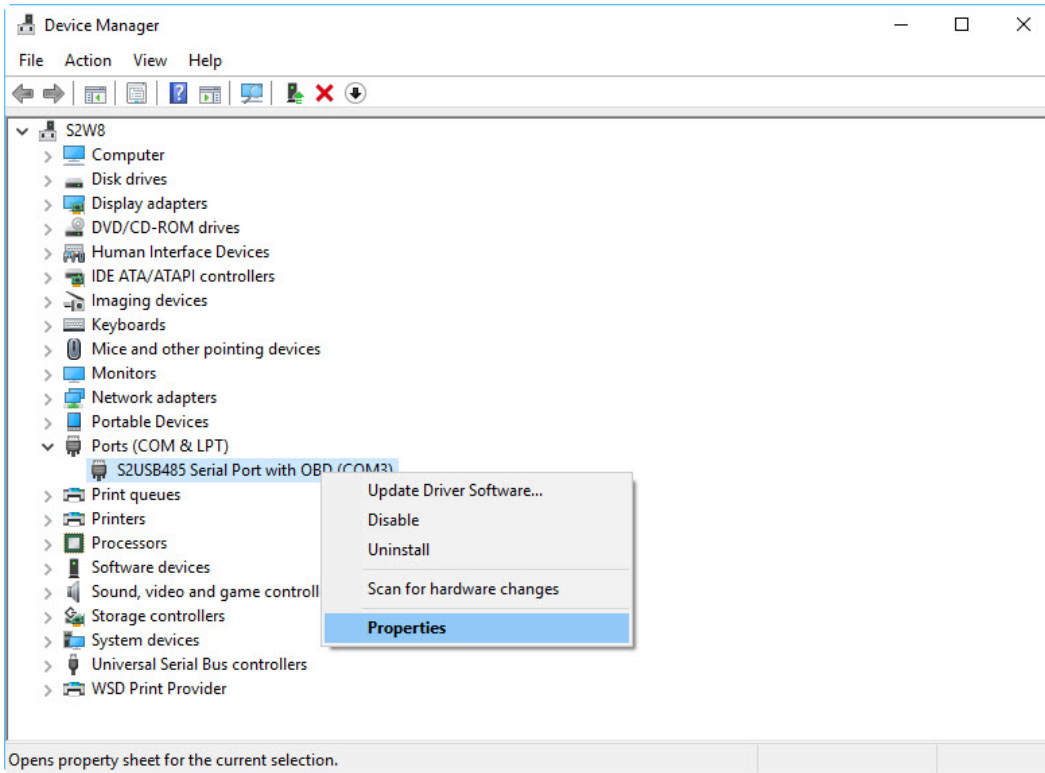
At this point both drivers are installed and the device can be used. The COM port assigned to the S2USB485 will be next COM port defined within your system. This may or may not be what you want and so if you need to change the COM port number proceed to the next section.

Changing COM Port Number

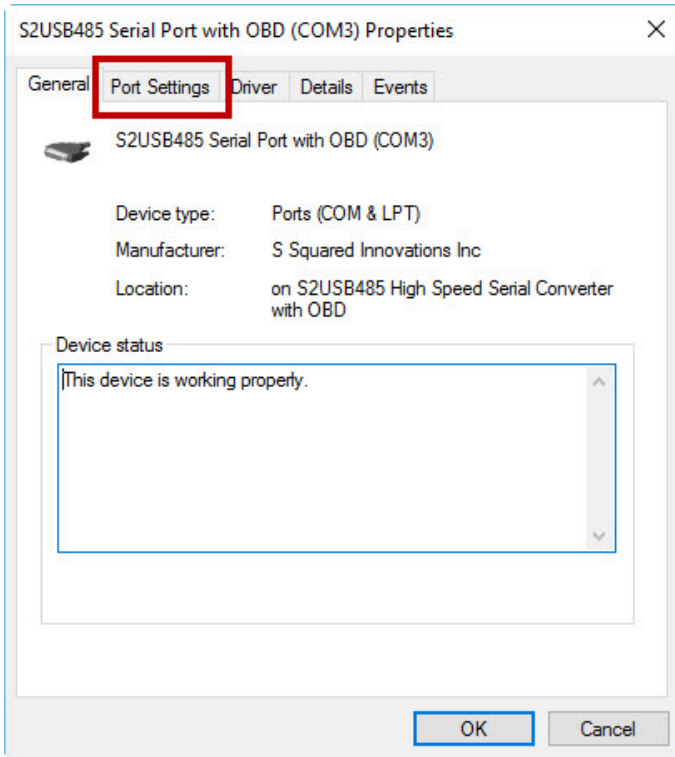
Depending upon the software you wish to use with the S2USB485 you may need to change and/or reassign the COM port number. To do so you need to navigate to Device Manager and locate the S2USB485 device within the "COM & LPT" Section.



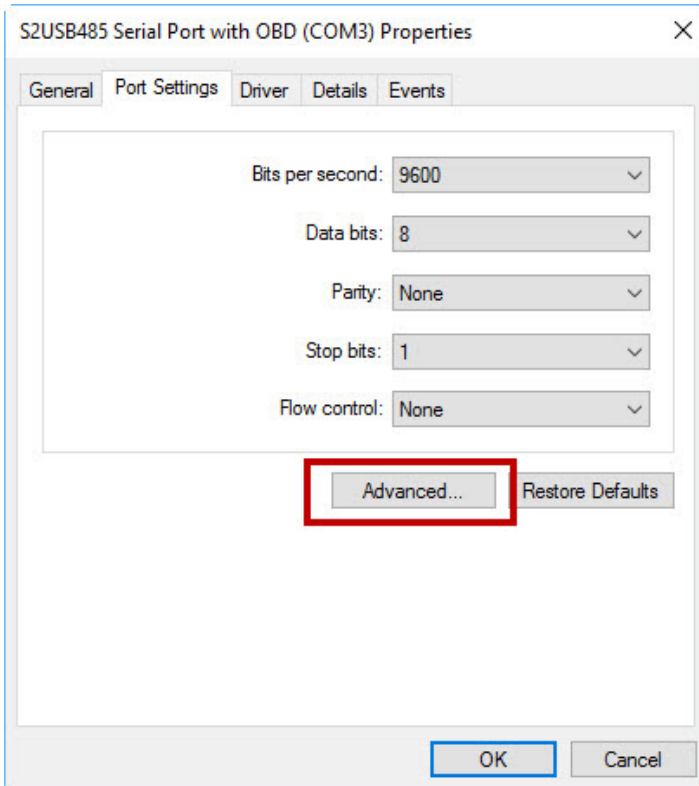
Left click on the S2USB485 entry and right click and select "properties"



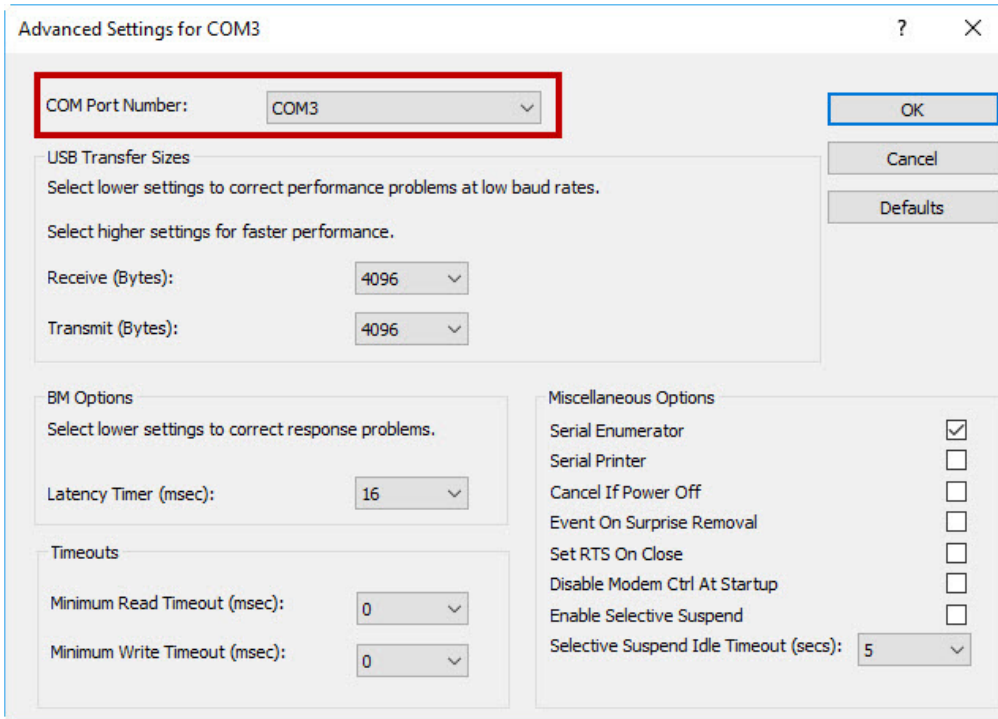
Select the "Port Settings Tab"



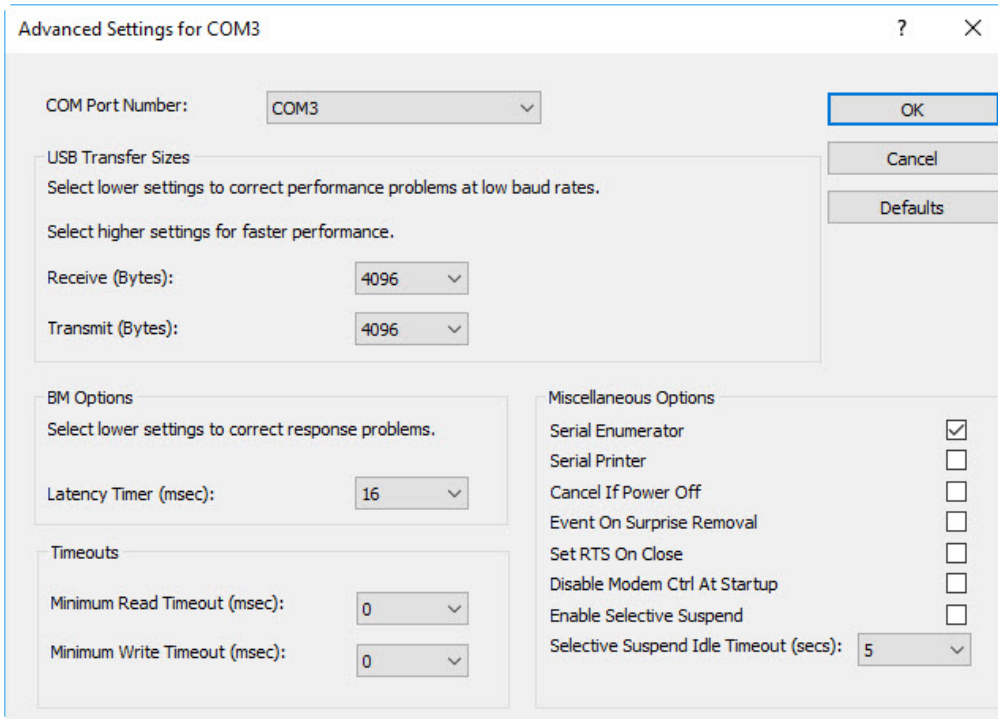
On the next screen select the "Advanced" button



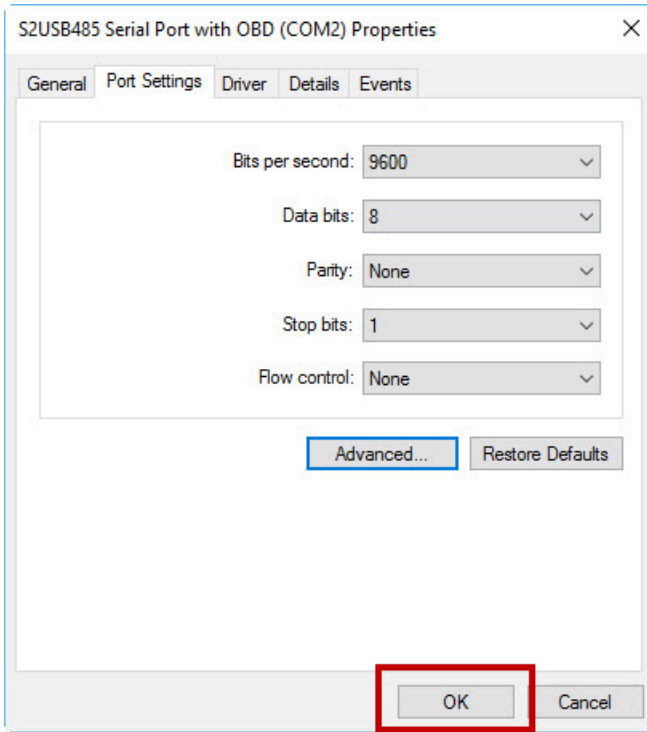
On the upper left screen select the COM Port Number Drop down list. This will reveal a list of choices for the COM port number



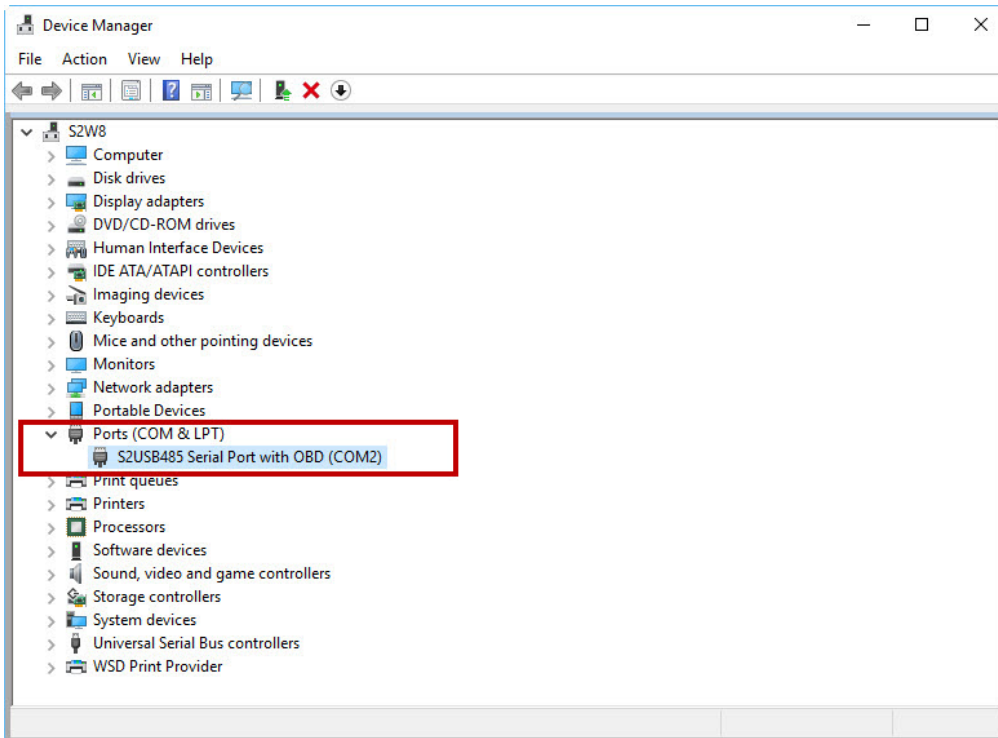
Select the desired COM port Number



Press "OK" button on the upper right side will close the dialog bringing you back to properties where you will press the "OK" button on the bottom



Now the Device Manager Screen will show that the S2USB485 has been reassigned to the new COM Port Number:



You are done. Now you can use the S2USB485 on the new COM port number. Depending upon your software you may need to restart your computer for the changes to take effect.

S2USB485 and Physical USB Ports

The S2USB485 device drivers are specific to the physical USB port that you have connected the S2USB485 to. The reason for this is because the S2USB485 is one of the few USB Serial devices that allow multiple S2USB485 devices to be installed at the same time and all devices will work properly. because of this feature you will need to repeat the above device driver installation for each physical USB port that you intend on using the S2USB485 with. That being said if you always connect the S2USB485 to the same physical USB port then you will not need to reinstall the drivers or change the COM port settings.