Configuring Windows USB Virtual COM Ports

The various USB interface modules made by Technological Arts are based on the popular FTDI chip, FT232RL. Usually, Windows will recognize them when you plug them into a USB port on your computer. If it doesn't, you will need to download and install the appropriate driver from the FTDI website (<u>www.ftdichip.com</u>). Drivers are provided for various versions of Windows. Download and install the correct version for your computer's configuration before proceeding. This article will assume you are using XP.

Now connect a USB cable between a USB port on your PC and the USB interface module you are using. Windows should report a new device has been found and proceed to initialize it.

To determine which virtual COMport it has been assigned to, right click the *MyComputer* icon on your Windows desktop, and select *Properties* from the popup menu. Next, click on the **Hardware** tab, and click on the **Device Manager** button.



Click on the + sign next to *Ports* (*COM & LPT*). The list of available ports will be revealed. You will see one entitled *USB Serial Port*, with the assigned COM port number identified in brackets.



To work with most of the tools you are likely to use with microcontrollers, the COM port should be 1, 2, 3, or 4. If it is higher than COM4, you'll probably want to change it. Do this by right-clicking the line *USB Serial Port* and select *Properties* from the popup menu.

General	Port Settings Du	river Details			
	T on Seangs P				
Į	USB Serial Port (COM7)				
	Device type:	Ports (COM & LPT)			
	Manufacturer:	FTDI			
	Location:	on USB Serial Converter			
Devid	ce status				
This If you start	device is working p u are having proble the troubleshooter.	properly. ms with this device, click Troubleshoot to			
This If you start	device is working proble u are having proble the troubleshooter.	properly. ms with this device, click Troubleshoot to			
This If you start	device is working proble u are having proble the troubleshooter.	properly. ms with this device, click Troubleshoot to Iroubleshoot			
This If you start	device is working p u are having proble the troubleshooter. usage:	properly. ms with this device, click Troubleshoot to			
This If you start Device Use th	device is working p u are having proble the troubleshooter. usage: is device (enable)	properly. ms with this device, click Troubleshoot to Troubleshoot			
This If you start Device Use th	device is working p u are having proble the troubleshooter. usage: is device (enable)	properly. ms with this device, click Troubleshoot to Iroubleshoot			

Click on the **Port Settings** tab, and then click the **Advanced...** Button.

General	Port Settings	Driver Details		
		<u>B</u> its per second:	9600	~
		<u>D</u> ata bits:	8	~
		<u>P</u> arity:	None	~
		<u>S</u> top bits:	1	~
		<u>F</u> low control:	None	~
		<u>A</u> dv	vanced	estore Defaults

Select the COM port Number dropdown box and select a COM port number 2, 3, or 4 (usually COM1 is already in use).

COM Port Number:		×	ОК
USB Transfer Sizes			Cancel
Select lower settings to correct perf	ormance problems at lov	v baud rates.	Defaulte
Select higher settings for faster per	formance.		Derdaids
Receive (Bytes):	4096 💌		
Transmit (Bytes):	4096 💌		
BM Options		Miscellaneous Options	
Select lower settings to correct resp	oonse problems.	Serial Enumerator	
Latency Timer (msec):	16	Serial Printer	E
		Cancel If Power Off	E
Timeouts		Event On Surprise Removal	E
Minimum Read Timeout (msec):	0 🗸	Set RTS On Close	
		Disable Madeir Children Charles	Ξ.

The port number may be reported as *in use* but you can disregard that at this point, if you know that nothing is currently using it.

COM <u>P</u> ort Number:	COM7	~		ОК
	COM1 (in use)			-
USB Transfer Sizes	COM2			Cancel
Select lower settings to co	COM3 (in use)	d	rates,	Defaults
Select higher settings for f	as COM5 (in use) COM6 (in use)			Dordalo
Receive (Bytes):	COM7 COM8			
Transmit (Bytes):	COM10 COM11			
	COM12			
BM Options	COM13	N	Aiscellaneous Ontions	
Diri opcionis	COM14		inconditional operation	
Select lower settings to co	rre COM15		Serial Enumerator	5
	COM18	1.00		-
6 S	COM12		Serial Printer	Г
Latency Timer (msec):	COM18			
	COM29	0	Cancel If Power Off	L. L. L.
The second second	COM21	19		
Imeouts	COM22	E	Event On Surprise Removal	1
	COM23			
Minimum Read Timeout (m	se COM24	9	5et RTS On Close	1
	COM25			
percent of the second strain the second strain second strain second strain second strain second strain second s	COMOC)isable Modem Ctrl At Startun	

Click *OK*, and if Windows warns you about a duplicate, ignore the warning and click *Yes*. Click *OK* and then *OK* to the port settings. Then close the **Device Manager** window. If you want to confirm the port change has indeed been made, click on **Device Manager** again and check the listed Ports. Now close the **System Properties** window.

At this point, you are ready to use the virtual COM port in any application!

Note that, if you unplug the USB device and plug it back in later, Windows will still remember the COM port assignment, so you won't need to go through this procedure again.



www.TechnologicalArts.com Rev. 0