

Users that want to get the fastest response time to a command from the ProScan III controller can adjust the setting on their computer. The communication speed of the ProScan can be increased from the default setting of 16 ms to as fast as 1 ms. This is important for those who need faster signaling and to be able to control the system as quickly as possible.

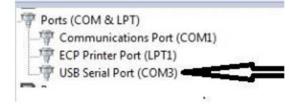
Note that this is only applicable to USB connections with Rev. F boards that use the FTDI chip. Also, DLL users have the baud rate automatically set to highest rate of 115K. For users not using the DLL, it is incumbent on them to change the baud rate from the 9600 default rate.

Increasing the communication speed is very easy and is detailed below:

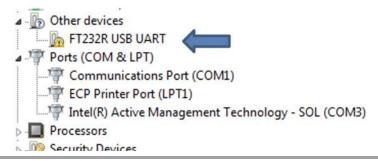
The ProScan III controller has had an upgrade/change to the USB connection hardware. The company, FTDI Ltd., manufactures the hardware and constantly updates the associated Windows USB Driver. The new USB hardware and interface driver is Windows Hardware Quality Labs (WHQL) tested and will automatically download the latest drivers when connected to a PC with internet access. The Driver Software Installation Window shown below will alert the user that the USB driver installation is complete and the Port is ready to use.

Driver Software Installation		
Your device is ready to use		
USB Serial Converter USB Serial Port (COM4)	Finished, restart required Finished, restart required	
		(Jose)

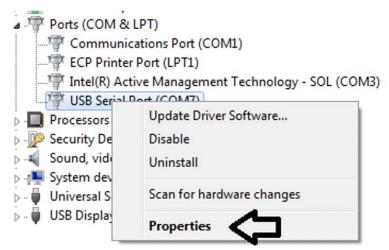
When a PC is not connected to the internet and an older or no FTDI driver is installed onto the PC there can be problems communicating via USB. The driver can appear to have installed correctly and yet not communicate. The image below is from the Device Manager of a PC where the ProScan III FTDI USB driver has set up COM3 on the PC, but USB communications is still unavailable.



Alternatively on some installs the USB connection can show up under "Other devices" as FT232R USB UART



Right clicking on the ProScan3 USB port in Device Manager will allow you to click on the Properties menu.



In the Properties window, click on the Driver tab and view the Driver Date: If it is older than 2016 or if the Driver Provider is not listed as FTDI, see the image below, a new driver needs to be installed. If the PC does not have internet access the files can be loaded onto the PC via a USB stick.

General	Port Settings	Driver	Details		
1	USB Serial Po	rt (COM	(3)		
	Driver Provide	r. F	TDI		
	Driver Date:	7/	/12/2013		
	Driver Version	2.	.8.30.0		
Digital Signer:			licrosoft Windows Hardware Compatibility ublisher		
Driver Details		Tov	To view details about the driver files.		
Update Driver			To update the driver software for this device.		
Roll Back Driver			If the device fails after updating the driver, roll back to the previously installed driver.		
Disable		Disal	Disables the selected device.		
	Jninstall	Tou	ininstall the driver (Advanced).		

It is recommended to uninstall the existing FTDI drivers. There is an uninstaller tool that can be accessed from:

http://www.ftdichip.com/Support/Utilities.htm#CDMUninstaller

From the website download the CDM Uninstaller as shown below:

CDM Uninstaller 1.4 - Windows Device Driver Uninstaller
CDM Uninstaller is a free application that can selectively remove Windows device drivers from the user's system as specified by the device Vendor ID and Product ID.
The readme for the command line version is available here and the readme for the GUI version can be viewed here.
Both applications come as a zipped executable that needs to be extracted prior to running. Please refer to the readme for running the application
Download CDM Uninstaller (command line version + GUI version)

Extract all the files and run the CDMuninstallaerGUI.



Click the Add button on the right and the Vendor ID and Product ID will be populated inside the blank area.

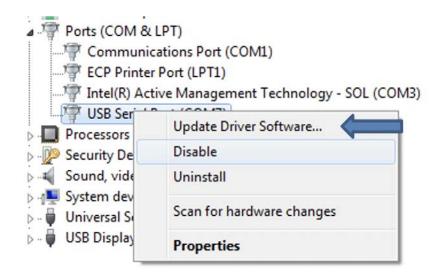
CDM Uninstaller	23
Vendor ID 0403 Product ID 6001	
VID_0403 PID_6001	Add
	Remove
	Clear
🔲 Generate uninstall log file	
Ready	
Remove Devices	Cancel

Click Remove Devices to remove the existing drivers, then close the Uninstaller.

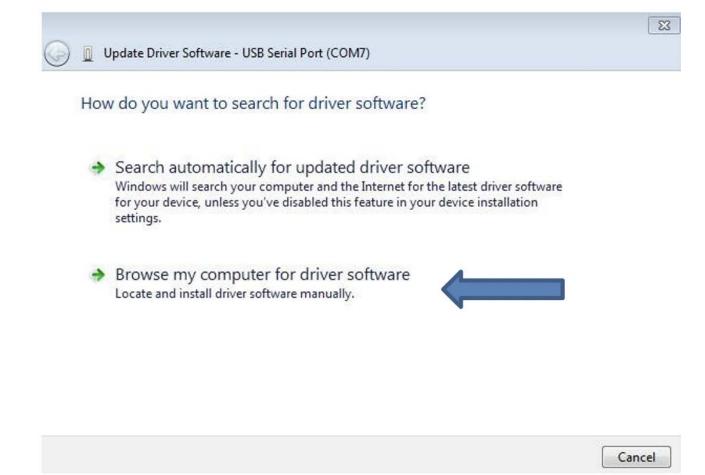
CDM Uninstaller	23
Vendor ID 0403 Product ID 6001	
VID_0403 PID_6001	Add
	Remove
	Clear
🔲 Generate uninstall log file	
Ready	
Remove Devices	Cancel

Download the latest USB Driver version from: http://www.ftdichip.com/Drivers/VCP.htm

Download the proper 32 or 64 bit driver as shown below. Extract all of the files to the desktop or other download folder. In Device Manager right click on the ProScan 3 USB and choose Update Driver Software



Choose Browse my computer for driver software



Browse to the location of the saved Driver and click Next

3	Update Driver Software - USB Serial Port (COM7)	
	rowse for driver software on your computer	
	arch for driver software in this location:	
	Include subfolders	
	Let me pick from a list of device drivers on my computer This list will show installed driver software compatible with the device, and all driver software in the same category as the device.	
	Next Cancel	

Windows will then update the Driver using the downloaded files. A successful installation will show a new date in the USB properties as shown below.

USB Serial Port (COM4) Properties	3		
General Driver Details			
USB Serial Port (COM4)			
Driver Provider: FTDI			
Driver Date: 2/24/2017			
Driver Version: 2.12.26.0			
Digital Signer: Microsoft Windows Hardware Compatibility Publisher			
Driver Details To view details about the driver files.			
Update Driver To update the driver software for this device.			
Roll Back Driver If the device fails after updating the driver, roll back to the previously installed driver.			
Disable Disables the selected device.			
Uninstall To uninstall the driver (Advanced).			
Close Cancel			

If at this point a COM port has not been assigned to your USB connection, retry the "Update Driver Software", as in some instances Windows will not assign a proper COM port the first time the driver is updated.

At this point it is advisable to adjust the USB latency timer from the standard 16ms down to 2ms. Right click on the new COM port and choose Properties. From the Port Settings tab, click on Advanced. In the Advanced tab, change the Latency Timer from 16 to 2.

6 1 Computer		
Disk drives		
🔊 🌉 Display adapte	as	
DVD/CD-ROM	drives	
D - CO IDE ATA/ATAR	I controllers	
> - Keyboards		
. Mice and othe	r pointing devices	
Monitors		
Network adapt	ters	
. The Other devices		
FT2320.00	NALANT)	
# Ports (CC	Update Driver Software	
- T Com	Disable	
- TP ECP I	Uninstall	
Intel(OM3)
Processo	Scan for hardware changes	
> p Security	Properties	
Sound, v	Properties	
System device	\$	
> 🖗 Universal Seria	I Bus controllers	
5 - 🖗 USB Display A	dapters	

General Port Settings	Driver Details		
	Bits per second:	9600	•
		8	•
	Parity:	None	•
	Stop bits:	1	•
	Flow control:	None	•
	Ad	vanced	Restore Defaults

COM Port Number:	COM4		•	ОК
USB Transfer Sizes				Cancel
Select lower settings to	correct performance p	problems at lov	w baud rates.	Defaults
Select higher settings fo	r faster performance.			Delaults
Receive (Bytes):	4096	6 🔻		
Transmit (Bytes):	4096	6 🔻		
BM Options			Miscellaneous Options	
Select lower settings to	correct response prob	olems.	Serial Enumerator	
			Serial Printer	E
Latency Timer (msec):	16	•	Cancel If Power Off	100
			Event On Surprise Removal	
Timeouts			Set RTS On Close	
Minimum Read Timeout ((msec):	•	Disable Modem Ctrl At Startup	<u> </u>
	<u>(</u>		Enable Selective Suspend	<u>ال</u>
Minimum Write Timeout	(msec): 0	_]	Selective Suspend Idle Timeout (secs	s): 5 🔻

Click OK twice to save the Latency Timer change.

Prior Scientific always has sales engineers available to answer any questions you may have regarding our products, your OEM needs or custom applications. If you have any urgent questions or comments regarding any products, applications or manufacturing requirements, please feel free to contact us at info@prior.com or 781-878-8442.