Technical Note 34: USB to Serial Converter Connection Instructions



Introduction:

The CropScan and MultiScan range or NIR analysers have a RS232 Serial Port for uploading and downloading files from a PC. Since most modern PC's have USB rather than RS232 ports, then a USB to RS232 Converter is required to get connection between the analysers and a PC. The following instructions are provided as a guide to set up the PC to accept the USB to RS232 Converter.

Descritpion:

Step 1: Install USB/RS232 Driver as provided with converter hardware.

Step 2: Connect USB/RS232 Converter

Step 3: Select Start>Control Panel>Systems

Step 4: Select Systems>Hardware>Device Manager

Step 5: Click on the Ports(Com&LPT). Select the USB-Serial-Converer Com Port. Double Click to open.

🚚 Devic	e Manage	r					
<u>File A</u> ct	ion ⊻iew	Help					
\leftrightarrow	📧 🎒	ß	2				
	P375D9A Batteries Computer Disk drives Display ad DVD/CD-R IDE ATA/A IEEE 1394 Keyboards Mice and o Monitors Network a Other dev Cher dev Ethern Multim PCMCIA a Ports (COI PCMCIA a Ports (COI Processors Sound, vid System de Universal S	490 apters OM driv TAPI co Bus ho ther po dapters ces et Con edia Au rk Cont odem dapters 4 & LPT unicatio inter Po USB-to s eo and vices Serial Bu	es ontrollers st controllers inting devices troller dio Controller roller) ns Port (COM1 ort (LPT1) -Serial Comm F game controlle us controllers	ort (COM2)			

Select Port Settings:

Prolific USB-to-Serial Comm Port (COM3) Properties 👘 💽 🔀							
General	Port Settings Dri	ver Details					
Ĵ	Prolific USB-to-Serial Comm Port (COM2)						
	Device type:	Ports (COM & LPT)					
	Manufacturer:	Prolific					
	Location:	Location 0 (USB-Serial Controller)					
Devic	e status						
This	This device is working properly.						
If you are having problems with this device, click Troubleshoot to start the troubleshooter.							
		Iroubleshoot					
Device usage:							
Use this device (enable)							
		OK Cancel					

Select the Baud Rate, Bits per Second 38400 from the list. Select Advanced...

Prolific USB-to-Serial Comm Port (COM2) Properties 💦 [? 🔀
General Port Settings Driver Details
Bits per second: 38400
Data bits: 8
Parity: None
Stop bits: 1
Elew central: Nerro
Advanced <u>R</u> estore Defaults
OK Cancel

Select the COM Port Number list.

Advanced Settings for COM3	? 🛛
✓ Use FIFO buffers (requires 16550 compatible UART) Select lower settings to correct connection problems. Select higher settings for faster performance. Heceive Buffer: Low (1) Iransmit Buffer: Low (1) Iransmit Buffer: Low (1)	OK Cancel Defaults
COM <u>P</u> ort Number: COM2	

The list will show the designation of each Coms Port. NTAS only checks Coms 1, 2 and 3. As such, you need to force the UBS port to be either of these three ports. If the ports are designated to other devices, then remove them. Press OK and go back to NTAS.

Select Scan and Display> Scanning>Preferences. The following screen should appear.

Scanning Preferences					
General Directories Instruments Data Conversion					
Specify the scan type Seguential					
Serial <u>P</u> ort: COM1 COM2	Baud Rate 38400 ▼ Number of Samples	<u>O</u> K Set Default			
Connect to instrum	5	Save Defaults Cancel			

Now Com2 is designated for the USB-Serial connector.

NIR Technology Systems 366 Edgar Street, Condell Park, NSW, 2200, Australia Tel: 612 9708 5068, Fax: 612 9708 5537 Email: <u>nirtech@nirtech.net</u>, Web: www.nirtech.net