Using the USB port with the GrassMasterII

If you are have trouble downloading data from your GrassMasterII into your PC or Laptop via the Serial to USB converter, then here are some steps to follow to try and get comms working.

Before we start, make sure your USB to Serial converter is plugged in to your PC/Laptop and always use the same USB port. If you use a different USB port your PC may change the COM port number again.

Step 1 - First thing we need to do is make sure the Serial to USB converter is assigned to COM 1,2,3 or 4. This is done because the Link GM program will only let you select COMS 1 to 4. When the Drivers for the Serial to USB converter are installed it may assign a COM number that is higher than 4.

To check or change the USB port number we need to open the **<u>SYSTEM</u>** window. In Windows XP the START menu can have two different modes, classic and standard.

If you click on <u>START</u> and the following windows appear, use this procedure to open the <u>SYSTEM</u> window then go to Step 2



<u>Step 1B</u> - If your START menu looks like below double click on <u>Control Panel</u>



Then double click on \underline{SYSTEM} icon.

			<u> </u>					angl 😁		
👺 Control I	Panel									
File Edit	View Favorite	s Tools He	lp							1
G Back	0.0	Search	h 😥 Folder:	B\$ B	×9	•				
Ġ.	Ń	to 1	-	2	P	-	I	d	and a start	
Accessibility Options	Add Hardware	Add or Remov	Administrative Tools	Automatic Updates	Date and Time	Display	Folder Options	Fonts	Game Controllers	
9	1	C						۲	3	
Internet Options	Keyboard	Mouse	Network Connections	Net work Setup	Phone and Modem	Power Options	Printers and Faxes	Regional and Language	Scanners and Cameras	
B	۲	O,	2	K		93				
Scheduled Tasks	Security Center	Sounds and Audio Devices	Speech	System	Taskbar and Start Menu	User Accounts	Windows Firewall	Wireless Network Set		

<u>STEP 2</u> After you have the <u>System Properties</u> window open click on <u>Hardware tab</u>



Then Click on Device Manager

Sustem	Bestore	Automat	ic Indates	Bemote						
General	Comp	uter Name	Hardware	Advanced						
Device M	lanager									
Z	The Device M on your comp properties of a	lanager lists all t uter. Use the De iny device.	ne hardware devic vie e Manager to c	es installed hange the						
			Device M	anager						
Drivers										
	Driver Signing lets you make sure that installed drivers are compatible with Windows. Windows Update lets you set up how Windows connects to Windows Update for drivers.									
1	Driver	Signing	Windows l	Jpdate						
Hardware	e Profiles									
Hardware profiles provide a way for you to set up and st different hardware configurations.										
			Hardware	Profiles						

<u>STEP - 3</u>



Advanced button

Comm Comm CP Pr JSB Sc essors and F

different hardware configurations.

OK

Cancel

<u>STEP - 4</u>

The <u>Advanced Settings</u> window will open. In the window we can change the COM port number.

COM Port Number:	-			÷
Jeomo				OK
USB Transfer Sizes	1			Cancel
Select lower settings to correc Select higher settings for faste	t performance problems a r performance.	it low baud rates.		Defaults
Receive (Bytes):	4096 💌			
Transmit (Bytes):	4096 💌			
BM Options				
Select lower settings to correc	t r <mark>e</mark> sponse problems.			
Latency Timer (msec):	16 💌			
Miscellaneous Options		A 115		
Minimum Read Timeout (msec): 0 💌	Serial Enumerator Serial Printer		
Minimum W/rite Timeout (msec		Cancel If Power Off	E	
manumum write rimeout (msec	× 10 <u>*</u>	Set RTS On Close	F	
1				_

Click on <u>COM Port Number</u> and select a new number within 1 to 4. <u>Do not select a number</u> <u>that has (in use) next to it.</u>

After selecting the new COM number, Write it down as we need it for Step - 5

COM Port Number:	СОМЗ	-	
- USB Transfer Sizes -	COM1 (in use) COM2 (in use)	^	ļ
Select lower setting	sCOM4	Y	nce problems at lo
Select higher setting	gs for faster perfo	orm	ance.

Click on to close this window and continue to click until all windows are closed.

We can now test to see if the GrassMastrerII will download its data. Go to STEP - 5

We now know what the USB to Serial converters COM port number is. We can now test the GrassMasterII download function using a program called Hyper Terminal. Hyper terminal will show as the data coming from the GrassMasterII on your PC monitor.

To open Hyper terminal click on the following buttons

START

PROGRAMS

<u>1</u> 2

	ACCESSO	<u>RIES</u>					
	COMMUN	ICATIONS					
	Hyper Ter	<u>minal</u>					
		Accessories	٠		Accessibility	۲	
		VIA	•	(iii	Communications	*	🤣 HyperTerminal
		C Startup	۲		Entertainment	*	S Network Connections
		ColorPage-HR8 V1.3	•		System Tools	•	🧕 Network Setup Wizard
		Outlook Express		6	Address Book		New Connection Wizard
	Windows Catalog	Internet Explorer			Calculator	1	Connection Remote Desktop Connection
at h	Windows Undate	WS_FTP Pro		C:\	Command Prompt	-	🗳 Wireless Network Setup Wizard
2	This opace	😢 Windows Media Player			Notepad		HyperTerminal
	WinZip	🌁 Protel 99 SE		H	Paint		
600		MPLAB IDE		0	Program Compatibility Wizard		
F	Programs	🕨 🈰 Microsoft Publisher		0	Synchronize		
	23. 777	Microsoft Excel		۲	Tour Windows XP		
3	Documents	Microsoft FrontPage			Windows Explorer		
12	Settings	Microsoft Word		0	WordPad		
	Joseffy	Microsoft PowerPoint		3	Scanner and Camera Wizard		
P	Search	🕨 🌉 IrfanView 3.61	18				
0	60 - 1 21 - 14	🁹 Nero Enterprise Edition					
0	Help and Support	CorelDRAW 10					
	Run	Soogle Earth					
_		_ 🛅 ZoneAlarm					
2	Log Off Steven	m HI-TECH Software	+				
-	87	microchip					
0	Turn Off Computer	🛅 LinkGM	+				
I sta	rt 🗢 🖨 😫 .	🖬 🛅 Mozilla Firefox					
JSta		👕 🛅 Google Earth	•				
	🗐 🐻 📓	MVG Free 8.0					

(Windows XP Classic view)

When Hyper Termin	hal has opened, enter a	name (e.g. test) and cl	ick ok
New Connection - HyperTermina File Edit View Call Transfer Help C C C C C C C C C C C C C C C C C C C	I Connection Description		
	New Connection Enter a name and choose an icon for the Name: test Icon: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: Con: C	nection:	
Disconnected Auto detect	Auto detect SCROLL CAPS NUM Ca	apture Print echo	

STEP - 7

Select the COM PORT number that we found in steps 3 and 4. and click $\square K$

lonnect To		?
🧞 test		
Enter details for I	the phone number that yo	u want to dial:
Country/region:	New Zealand (64)	19
Area code:	07	
Phone number:		
Connect using:	СОМ1	×
	COM1 COM2 TCP/IP (Winsock)	

Change <i>Bits per second</i> to <u>9600</u> and change <i>Elow control</i> to None	COM1 Properties
then click	Port Settings
	Bits per second: 9600
	Data bits: 8
	Parity: None
	Stop bits: 1
	Flow control: None
	Restore Defaults
	OK Cancel Apply

We can now do a simple test to see if the USB converter is working. using a small phillips screw driver connect pins 2 and 3 together as shown below. Make sure not to touch the sides of the DP9 housing with the screw driver.





Now type letters on the keyboard and the letters will show on the screen.

Connect your GrassMasterII to the USB to Serial converter and turn it on and press the Download button on the GM2.

You should start to see the info below begin to appear on the screen. If the first line has any odd looking characters, there maybe something wrong with your GrassMasterII and it will need to be returned.

If all the data displayed on the screen looks like the above, the USB converter and the GrassMasterII is working fine.

Open Link GM and follow the instructions, and use the COM port number that we found in steps 3 and 4.