

# Using the USB port with the GrassMasterII

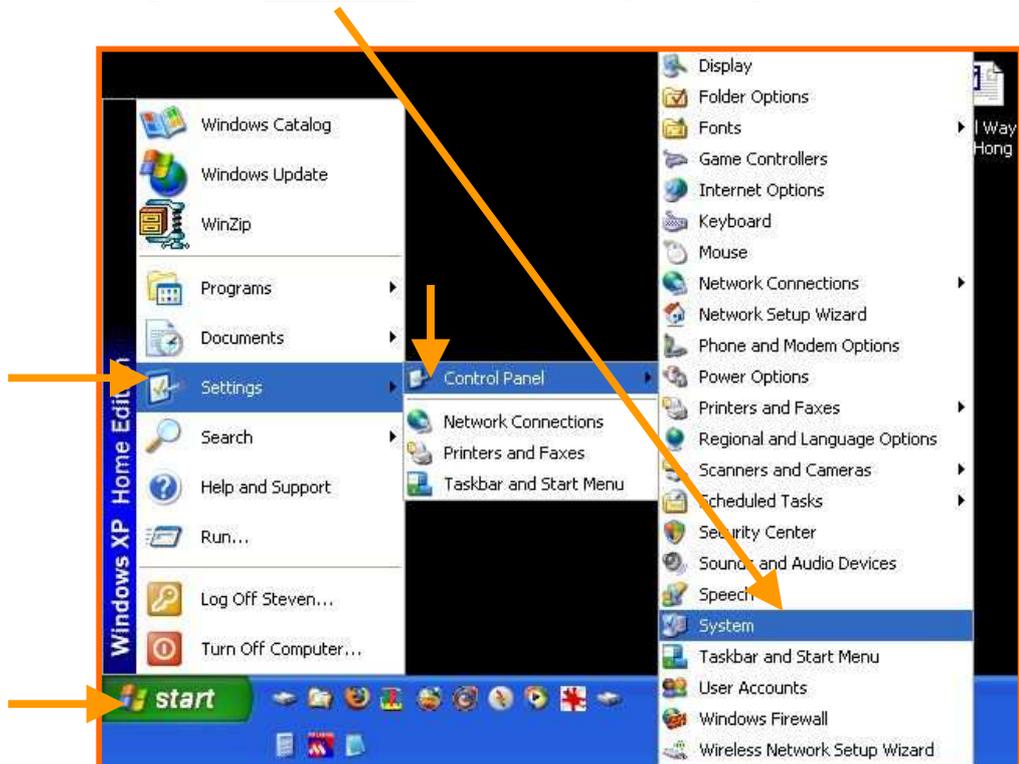
If you are have trouble downloading data from your GrassMasterII into your PC or Laptop via the Serial to USB converter, then here are some steps to follow to try and get comms working.

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 **SYSTEM** window. In Windows XP the **START** menu can have two different modes, classic and standard.

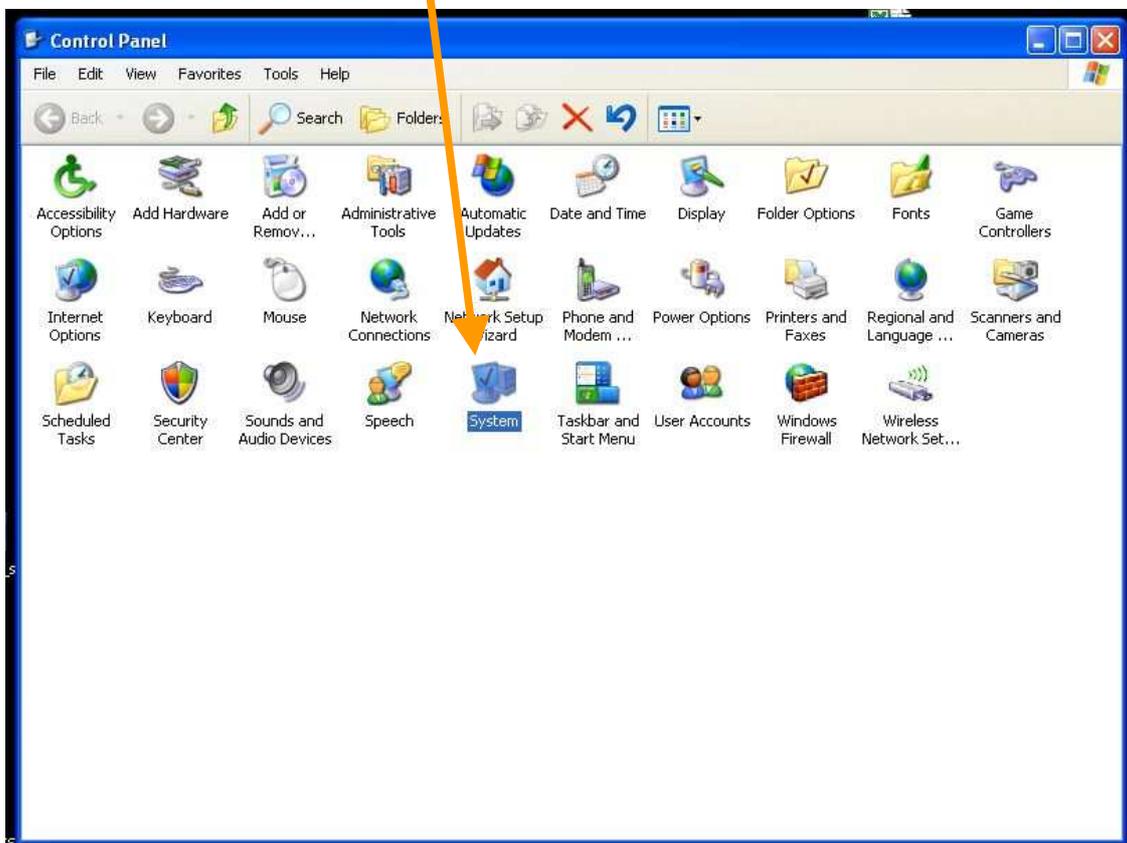
If you click on **START** and the following windows appear, use this procedure to open the **SYSTEM** window then go to Step 2



**Step 1B** - If your START menu looks like below double click on **Control Panel**



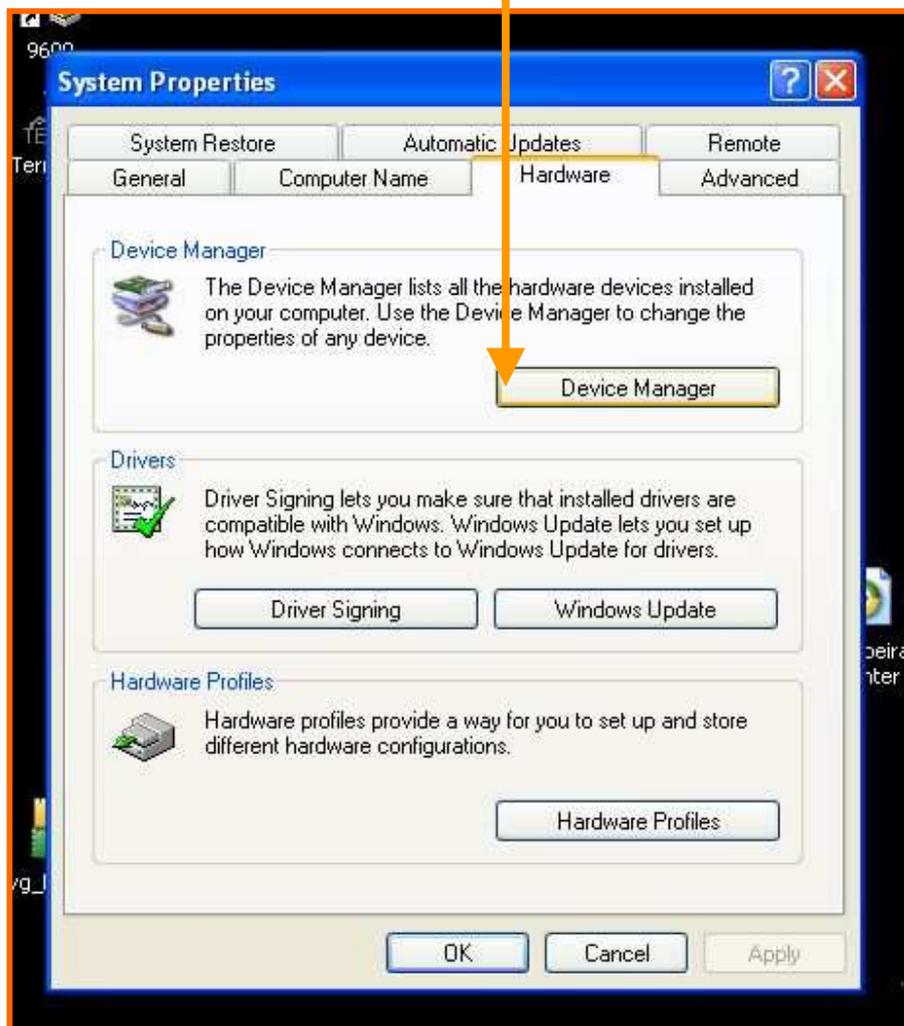
Then double click on **SYSTEM** icon.



**STEP 2** After you have the System Properties window open click on Hardware tab



Then Click on Device Manager



### **STEP - 3**

Double click on **Ports(COM & LPT)** to view the information about the COM ports.

You can see **USB Serial Port (COM3)** is set to COM 3. If your COM number is within 1 to 4 you do not need to change anything. You can now proceed to STEP - 5.

If your COM number is higher than COM4 then double click on **USB Serial Port (COM?)**

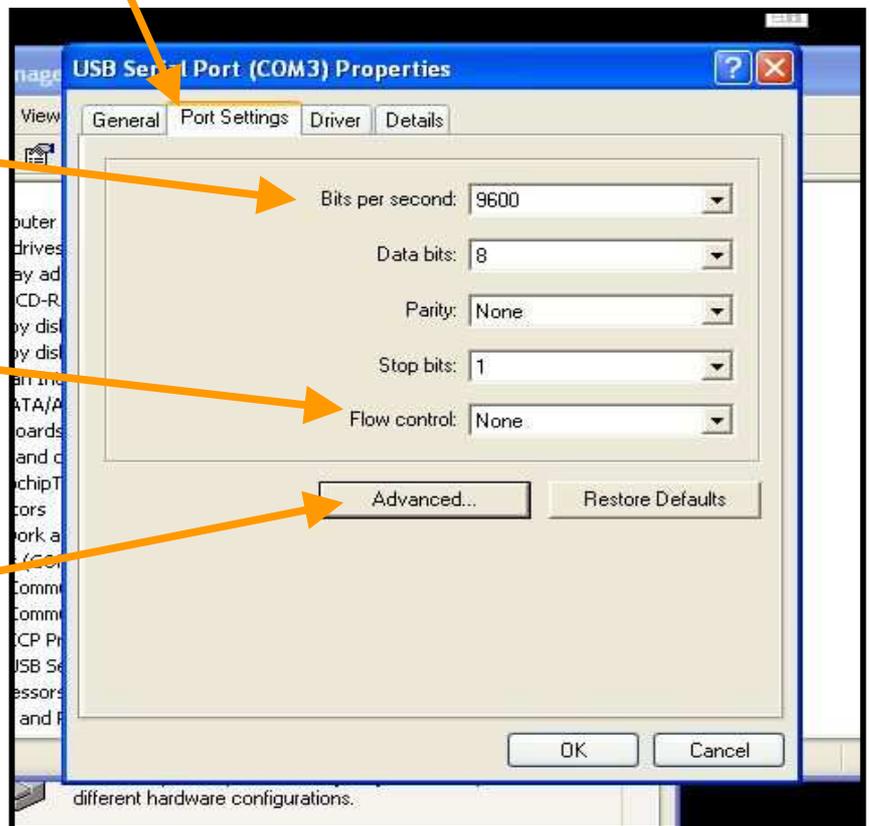


The following window will open, click on the **Port Settings Tab**

Make sure Bits per Sec is **9600**

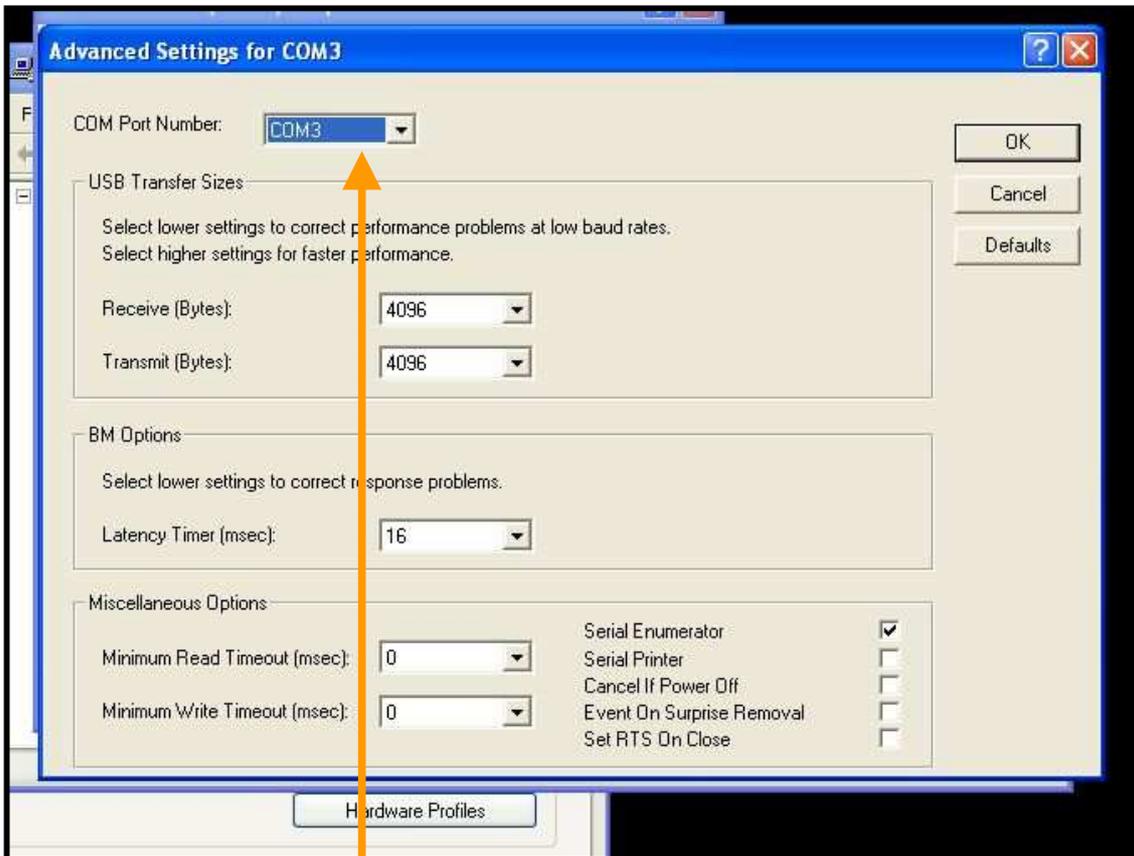
and Flow Control is **None**

Then click on **Advanced** button



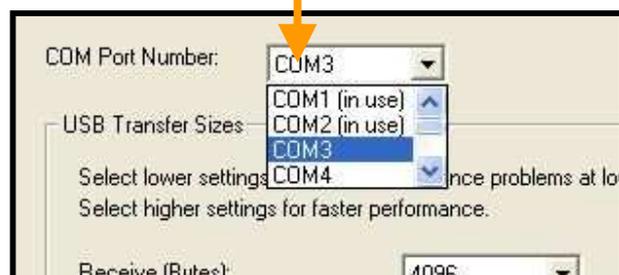
## STEP - 4

The Advanced Settings window will open. In the window we can change the COM port number.



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

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



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

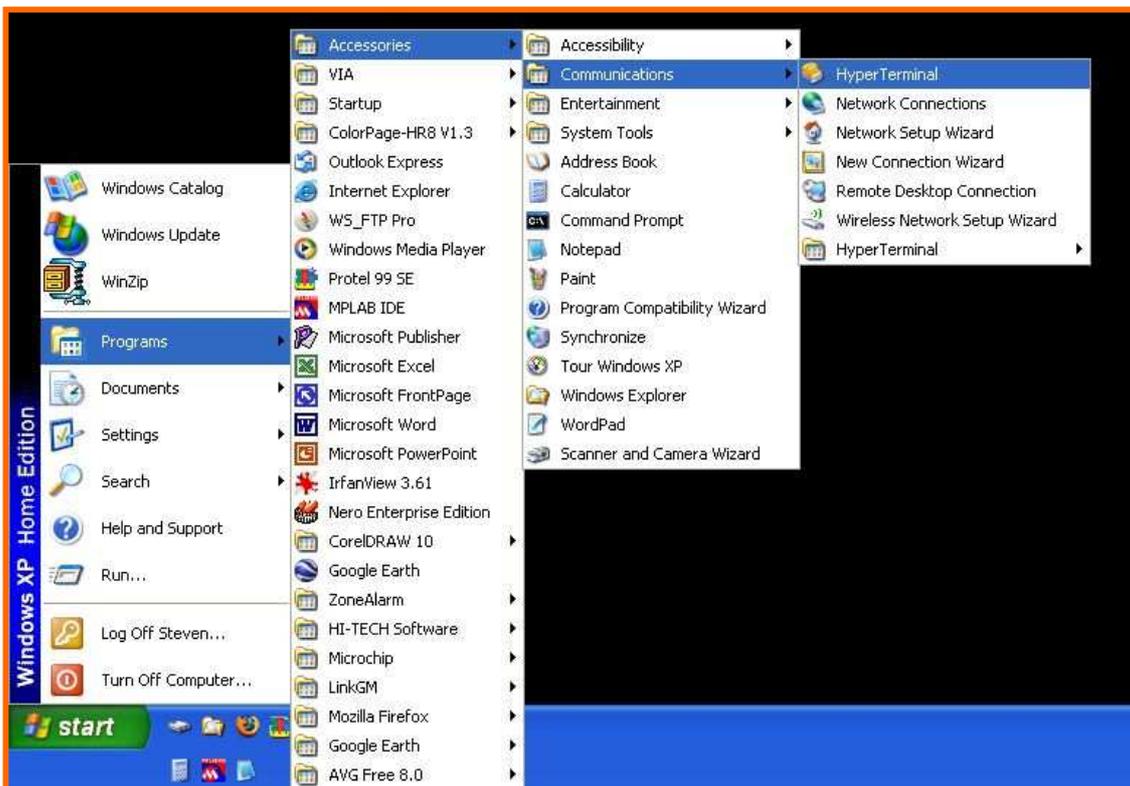
We can now test to see if the GrassMastrerII will download its data.  
Go to STEP - 5

## 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.

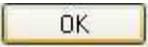
To open Hyper terminal click on the following buttons

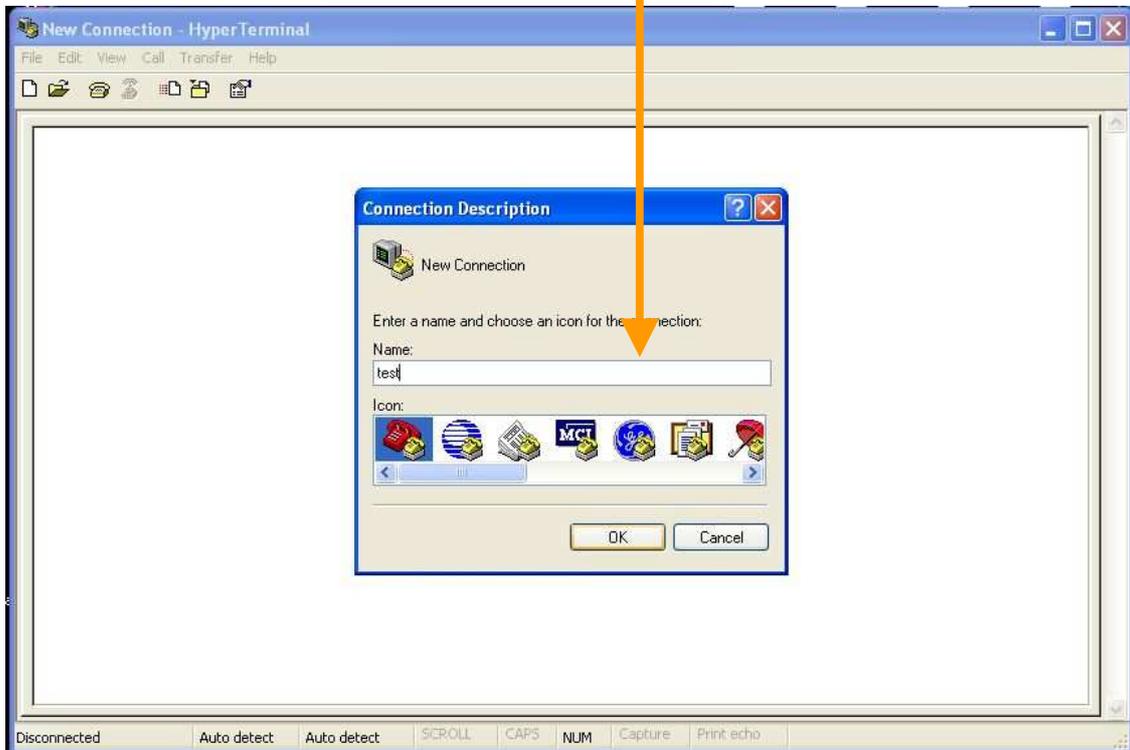
- 1    START**
- 2    PROGRAMS**
- 3    ACCESSORIES**
- 4    COMMUNICATIONS**
- 5    Hyper Terminal**



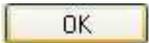
(Windows XP Classic view)

## STEP - 6

When Hyper Terminal has opened, enter a name (e.g. test) and click 

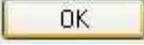


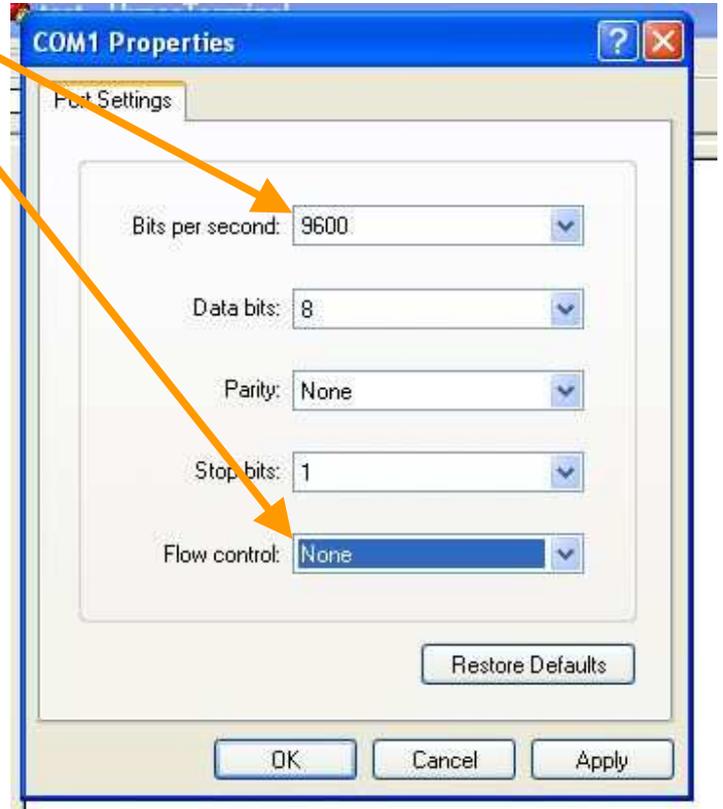
## STEP - 7

Select the COM PORT number that we found in steps 3 and 4. and click 



STEP - 8

Change *Bits per second* to **9600**  
and change *Flow control* to **None**  
then click 



### STEP - 9

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.

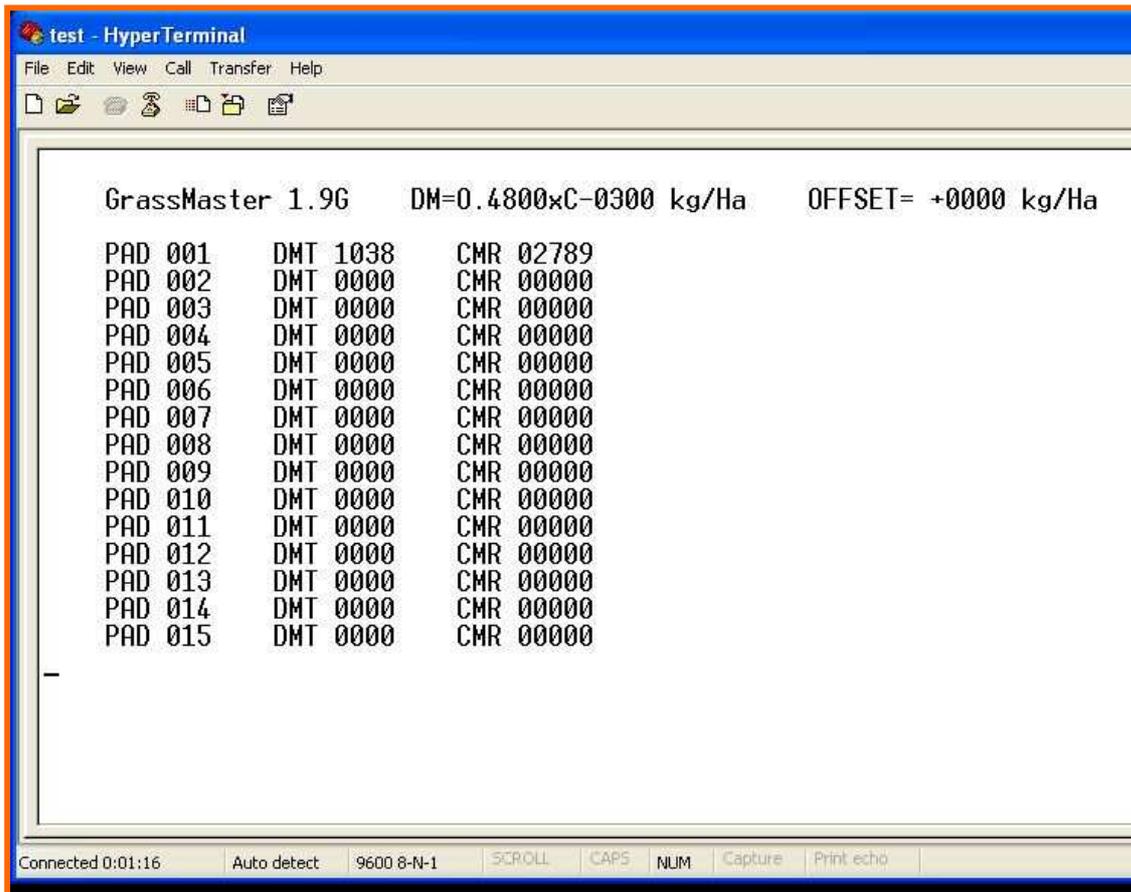


Now type letters on the keyboard and the letters will show on the screen.

## STEP - 10

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.



```
test - HyperTerminal
File Edit View Call Transfer Help
GrassMaster 1.9G    DM=0.4800xC-0300 kg/Ha    OFFSET= +0000 kg/Ha
PAD 001    DMT 1038    CMR 02789
PAD 002    DMT 0000    CMR 00000
PAD 003    DMT 0000    CMR 00000
PAD 004    DMT 0000    CMR 00000
PAD 005    DMT 0000    CMR 00000
PAD 006    DMT 0000    CMR 00000
PAD 007    DMT 0000    CMR 00000
PAD 008    DMT 0000    CMR 00000
PAD 009    DMT 0000    CMR 00000
PAD 010    DMT 0000    CMR 00000
PAD 011    DMT 0000    CMR 00000
PAD 012    DMT 0000    CMR 00000
PAD 013    DMT 0000    CMR 00000
PAD 014    DMT 0000    CMR 00000
PAD 015    DMT 0000    CMR 00000
Connected 0:01:16    Auto detect    9600 8-N-1    SCROLL    CAPS    NUM    Capture    Print echo
```

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.