Now, what's tomorrow's challenge?
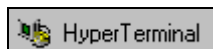
APN-024 Rev 1   October 24, 2000
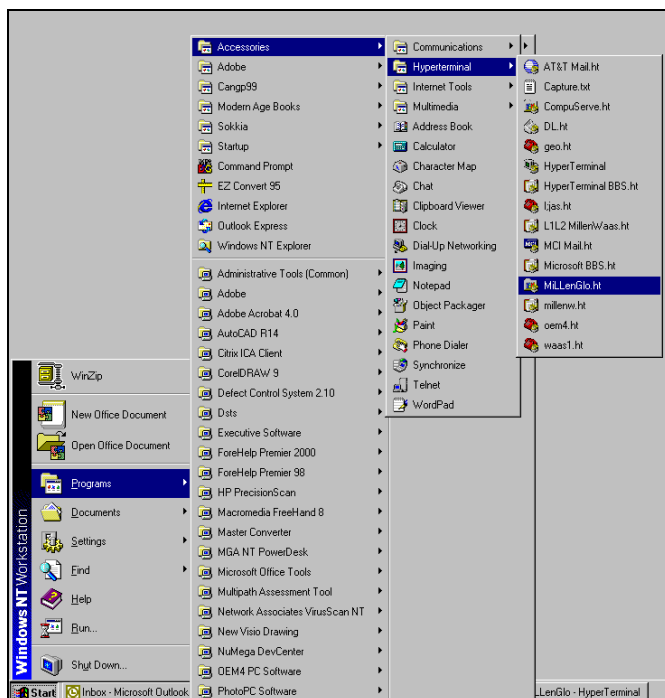
Running HyperTerminal to Record Data to a File

Here is a set of instructions to run HyperTerminal to record raw ASCII data to a file on your hard disk. The examples in this bulletin are for Millennium (OEM3) cards but they can be adapted for use with OEM2 cards.

1. Prepare the GPSCard so that it is complete with mounting and wiring interfaces and ready for operation. If you purchased your GPSCard in a PowerPak or ProPak enclosure, it is ready for immediate operation.

2. Connect your antenna to the antenna port of the enclosure, or the RF connector on a GPSCard, using an interconnecting coaxial cable.

3. Connect a null-modem serial cable from your GPS receiver COM1 port to your PC COM1 port.

4. Connect a power supply to your receiver.

5. Run HyperTerminal on your PC. The example below shows the HyperTerminal program icon but you may see the program Hyperterminal.exe or a folder that you have to open to select the HyperTerminal program. Click on the HyperTerminal program or its icon to create a new configuration.

Alternatively, select an icon representing a previously set up configuration for your receiver (skip to *Point #12*). You may have different configurations than in the example below or none at all.
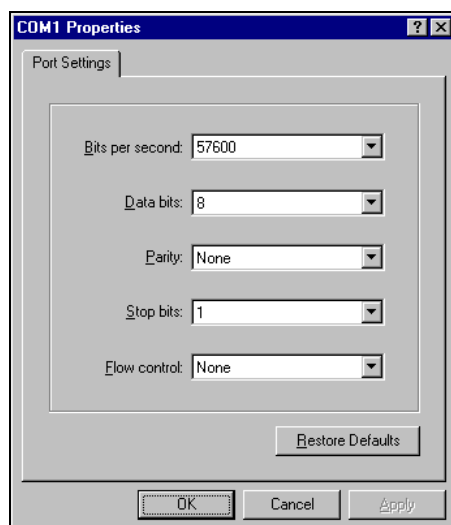
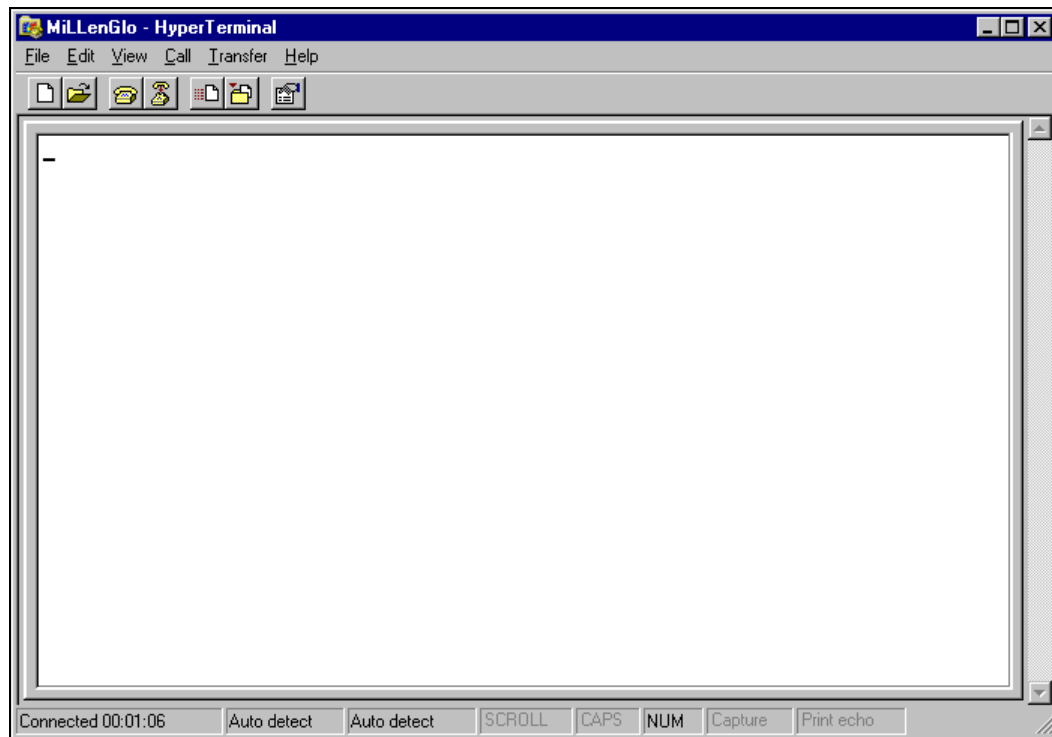6. The Connection Description dialog will appear:

7. Give your new configuration a name in the Name field and select an icon to represent your receiver from the Icon field. Using the Icon scroll bar, drag the bar or click the arrows at either side to see the whole selection of icons.

8. Click on the **OK** button. The Connect To dialog will appear. Your default may be a modem but you are connecting to a receiver and the only field you must enter is the Connect Using field. Use the down arrow to the left of the Connect Using field and select COM1:

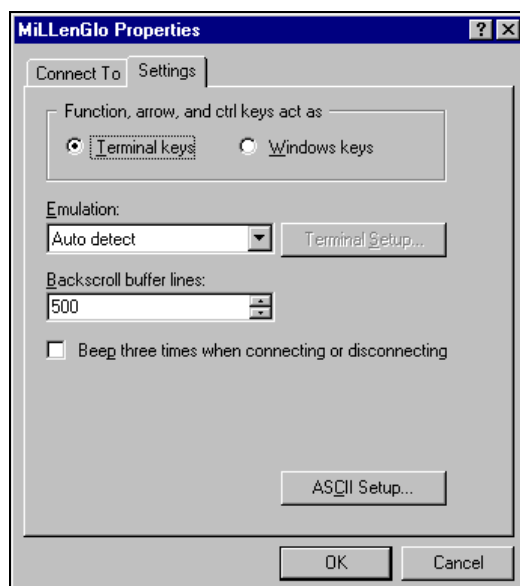9. Click on the **OK** button. The COM Properties dialog will appear:

10. In the Bits Per Second field, you must select at least 57600. This will ensure you will be able to use the logs described later in this document. The other communication parameters should be 8, None, 1 and None respectively.

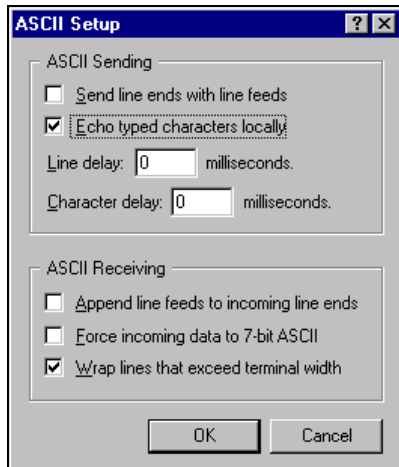11. Click on the **OK** button to bring you to the main HyperTerminal window:

12. In the main HyperTerminal window, select File | Properties from the main menu (to see what you are typing) or click on the Properties icon:

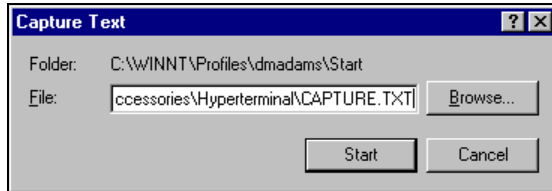Then select the Settings tab in the Properties dialog:

13. Click on the **ASCII Setup…** button. The ASCII Setup dialog will appear:

Check the Echo Typed Character Locally and the Wrap Lines That Exceed Terminal Width check boxes. Click on the **OK** button to return you to the Properties dialog and then click on the **OK** button again to return you to the main HyperTerminal window.

NOTE: *The Echo checkbox may not work with some installations of Windows 98. In this case, you will not be able to see what you type. You will see the data that results if you entered the command correctly.*

14. To save your data to a file you must use the capture utility. Select Transfer | Capture Text… from the main menu. The Capture Text dialog will appear:

You may accept the default name of CAPTURE.TXT or enter a name that has more meaning for your current project. You can search for a location for your file using the **Browse…** button. When you have entered a file name and location for your captured data, click on the **Start** button. Your data will be sent to this file until you select Transfer | Capture Text▶ | Stop from the main menu.

15. Type the following command in the main HyperTerminal window and hit the <Enter> key:

```
version
```

Type these logs in the main HyperTerminal window and hit the <Enter> key after each one:

```
log com1 rcca once
log com1 prtka ontime 1
log com1 rcsa ontime 1
log com1 repa ontime 60
log com1 rgea ontime 1
```

16. Watch the window to ensure the output makes sense (if it does, skip to *Point #30* when you are done for the day). If it is blank or interaction is not possible then you may not have set the correct number of bits per second.

17. Select Call | Disconnect from the main menu or click on the Disconnect icon:

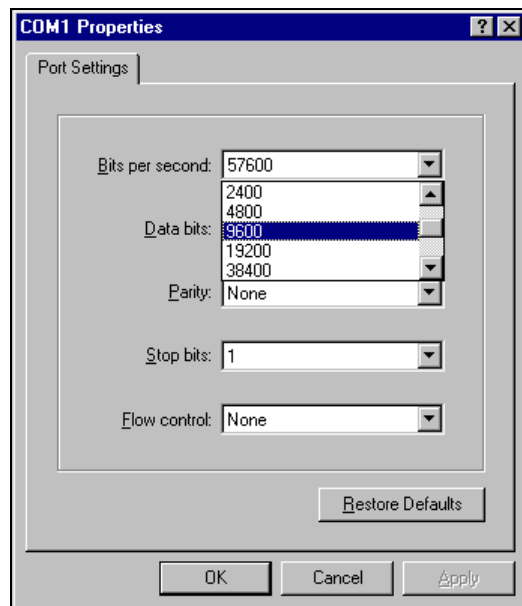18. Select File | Properties from the menu or click on the Properties icon:

Then select the Connect To tab in the Properties dialog:

19. Click on the **Configure…** button and the COM Properties dialog will appear.

20. Reconnect at the card's current baud rate.

NOTE:	The difficulty may be in the COM port selected. Try COM2 and check again.

The example shows 9600 in the Bits Per Second field. The default is 9600 so this would be a good guess however your receiver may be set to another Bits Per Second value (trial and error is your best way of finding the current BPS setting).

21. Click on the **OK** button to return you to the Properties dialog.

22. Click on the next **OK** button to return you to the main HyperTerminal window.

23. Select Call | Connect from the main menu or click on the Connect icon:

24. Type in the following command and hit the <Enter> key: `com1 57600 n 8 1 n on`

25. Select Call | Disconnect from the main menu or click on the Disconnect icon:

26. Select File | Properties in the main menu or click on the Properties icon:

    In the Properties dialog, click on the **Configure…** button. In the COM properties dialog select 57600 in the Bits Per Second field. Click on the **OK** button. Then click on the next **OK** button to return to the terminal window.

27. Select Call | Connect from the main menu or click on the Connect icon:

28. Repeat *Point #14* and *Point #15*. The responses to the logs you type in should now look normal.

29. Continue to record data for at least 30 minutes.

30. Select Transfer | Capture Text▶ | Stop from the main menu to stop data being sent to your file.

31. To end the session, select Call | Disconnect from the main menu or click on the Disconnect icon:

32. Select File | Exit from the main menu. You will be asked if you want to save this session as the name and icon you chose in *Point #7*.

33. The data will now be available in the file you specified in the Capture Text dialog, see *Point #14*.

For more information, please contact the Customer Service Department

NovAtel Inc.
1120 – 68 Ave. N.E.
Calgary, Alberta, Canada, T2E 8S5
Phone: 1-800-NOVATEL (in Canada or the U.S.) or +1-403-295-4500
Fax: 403-295-4501
E-mail: support@novatel.ca
Website: www.novatel.ca