

## Running HyperTerminal to Record Data to a File

## 1 Overview

This document explains how to set up a HyperTerminal connection to a NovAtel OEMV receiver. It describes the connection settings as well as program configuration recommendations for ease of use. This document also describes how to set up HyperTerminal to record data from a receiver to a text file in ASCII format.

# 2 How to Run HyperTerminal to Record ASCII Data

This section contains instructions on how 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. Connect your antenna to the RF input of the enclosure using an interconnecting coaxial cable.
- 2. Connect a null-modem serial cable from your GPS receiver COM1 port to your PC COM port of choice.
- 3. Connect a power supply to your receiver.
- 4. Run HyperTerminal on your PC. The figure 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.

#### 🥦 HyperTerminal

5. 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. You may have different configurations than in the example below or none at all.



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Connection Description	?×
New Connection	
Enter a name and choose an icon for the connection:	
<u>N</u> ame:	
DL-V3	
lcon:	
🔊 🍪 🍣 🍪 😼	8
OK Ca	ncel

- 6. Give your new configuration a name in the *Name* field and select an icon to represent your receiver from the *Icon* field. You can use the *Icon* scroll bar, or the arrows to see the selection of icons.
- 7. Click *OK*. The Connect To dialog box appears. 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 and select *COM1*.

Connect To	? 🛛
🗞 dl-v3	
Enter details for	the phone number that you want to dial:
<u>C</u> ountry/region:	Canada (1) 💽
Ar <u>e</u> a code:	1
Phone number:	
Co <u>n</u> nect using:	СОМ1 🗸
	OK Cancel

8. Click OK. The COM Properties dialog box appears.

COM1 Properties		? 🗙
Port Settings		
<u>B</u> its per second:	115200	
<u>D</u> ata bits:	8	
<u>P</u> arity:	None	
<u>S</u> top bits:	1	
Elow control:	None	
	<u>R</u> estore Def	aults
	K Cancel	

- 9. Select a rate of 115200 in the *Bits Per Second* field to ensure you can use the logs described later in this document. If you know that the receiver COM port is set to something different, then connect at that baud rate and use the COM command to change the port baud rate. If you are not sure what rate the port is at, start with 9600, as this is the receiver default.
- 10. Click OK. The main HyperTerminal window appears.



- 11. Select File | Properties in the main HyperTerminal window, from the main menu (to see what you are typing) or click the icon.
- 12. Select the *Settings* tab in the Properties dialog box.

DL-V3 Properties		?×
Connect To Settings		
Function, arrow, and	ctrl keys act as	
Ierminal keys	○ Windows keys	
Backspace key send	8	
⊙ <u>C</u> trl+H O <u>D</u> el	Ctrl+ <u>H</u> , Space, Ctrl+H	
Emulation:		
Auto detect	✓ Terminal <u>S</u> etup	
Tel <u>n</u> et terminal ID:	ANSI	
Backscroll buffer lines:	500 😂	
Play sound when co	onnecting or disconnecting	
Input Translation	. <u>A</u> SCII Setup	
	ОК Са	ancel

13. Click ASCII Setup.... The ASCII Setup dialog box appears.

ASCII Setup 🔹 🛛 🔀
ASCII Sending
Send line ends with line feeds
Echo typed characters locally
Line delay: 0 milliseconds.
Character delay: 0 milliseconds.
ASCII Receiving           Append line feeds to incoming line ends           Eorce incoming data to 7-bit ASCII           Wrap lines that exceed terminal width
OK Cancel

- 14. Check the Echo Typed Character Locally and the Wrap Lines That Exceed Terminal Width boxes.
- 15. Click *OK* to return to the Properties dialog box and then click *OK* again to return 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.

16. Select Transfer | Capture Text... from the main menu to save your data to a file. The Capture Text dialog box appears.

Capture	Text ?X
Folder: <u>F</u> ile:	C:\Documents and Settings\Administrator [ind Settings\Administrator\CAPTURE.TXT] Browse
	Start Cancel

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.

- 17. Click *Start* when you have entered a file name and location for your captured data. Your data is sent to this file until you select Transfer | Capture Text► | Stop from the main menu.
- 18. Type the following command in the main HyperTerminal window and press Enter:

log version

19. Type these logs in the main HyperTerminal window and press Enter after each one:

log rxstatus
log bestpos ontime 1
log rangecmp ontime 5
log rawephem onchanged
log trackstat ontime 30

- 20. Watch the window to ensure the output is being logged. If the data is being logged, go to step 40 to stop data logging. If it is blank or interaction is not possible then you may not have set the correct baud rate so continue with the next steps.
- 21. Select Call | Disconnect from the main menu or click on the icon.
- 22. Select File | Properties from the menu or click on the  $\square$  icon.

23. Select the Connect To tab in the Properties dialog box.

DL-V3 Properties	?
Connect To Settings	
DL-V3 Change lcon	
Country/region: United States (1)	
Enter the area code without the long-distance prefix.	
Arga code: 1	
Phone number:	
Connect using: COM1	
Configure	
✓ <u>U</u> se country/region code and area code <u>R</u> edial on busy	
ОК С	ancel

- 24. Click *Configure...* and the COM Properties dialog box appears.
- 25. Reconnect at the card's current baud rate.

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

The default receiver setting is 9600 but your receiver may be set to another Baud rate so trial and error is your best way of finding the current BPS setting.

COM1 Properties		<b>?</b> ×
Port Settings		
<u>B</u> its per second:	115200	
<u>D</u> ata bits:	110 300 1200 2400 4800	
<u>P</u> arity:	9600 19200	
<u>S</u> top bits:	38400 57600 115200 230400	
Elow control:	460800 921600	
	<u>R</u> estore Defau	lts
OK Cancel Apply		

- 26. Click *OK* to return to the Properties dialog box.
- 27. Click OK again to return to the main HyperTerminal window.
- 28. Select Call | Connect from the main menu or click on the 2 icon.
- 29. Type in the following command:

com1 115200 n 8 1 n on

- 30. Press Enter.
- 31. Select Call | Disconnect from the main menu or click on the icon.

- 32. Select File | Properties in the main menu or click on the icon.
- 33. Click *Configure*... in the Properties dialog, box.
- 34. Select 115200 in the *Bits Per Second* field.
- 35. Click *OK* in the COM properties dialog box button.
- 36. Click *OK* to return to the terminal window.
- 37. Select Call | Connect from the main menu or click on the 😰 icon:
- 38. Repeat steps 16 to 18. The data should now be logging.
- 39. Continue to record data for at least 30 minutes.
- 40. Select Transfer | Capture Text ► | Stop from the main menu to stop data logging.
- 41. Select Call | Disconnect from the main menu or click on the icon to end the session.
- 42. Select File | Exit from the main menu. You are asked if you want to save this session as the name and icon you chose in step 6.

The data is now available in the file you specified in the Capture Text dialog box in step 16.

## 3 Final Points

If you require any further information regarding the topics covered within this application, please contact:

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