

APN-033

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Running GPSolution4 to Record OEM4 Data to a File

Here is a simple set of instructions to run GPSolution4 to record raw data to a file on your hard disk. The examples in this bulletin are for the OEM4 family of GPS receivers.

- 1. Prepare the Receiver so that it is complete with mounting and wiring interfaces and ready for operation. If you purchased your receiver an enclosure, it is ready for immediate operation.
- 2. Connect your antenna to the antenna port of the enclosure, or the RF connector on an OEM4 Card, using an interconnecting coaxial cable.
- 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 GPSolution4 on your PC.
- 6. Click on **Device | Open** from the main menu. The Open Configuration dialog will appear. The example below shows an Open Configuration dialog with two possible configurations already set up. Your configurations may be different or you may have none to start with, in which case-the Open Configuration window would be empty.

com1 57600	<u>O</u> pen
com2 57600	<u>C</u> ancel
	<u>N</u> ew
	<u>E</u> dit
	<u>D</u> elete

7. Select the previously set up configuration for your receiver (skip to *Step #12*) or click on the **New** button to add a new configuration. The New Configuration dialog will appear.

Name OEM4	<u></u> K
Device	<u>C</u> ancel
Serial Settings	<u>H</u> elp
Startup Options Auto <u>S</u> tart CAuto <u>R</u> eset Update Log Definitions for Conve	rt4

- 8. Give your new configuration a name in the Name field (30 characters maximum, for example OEM4 as above).
- 9. Click on the Settings button. The OEM Card dialog will appear.

PC Port: Com1	OK
Baud Rate: 57600	<u>C</u> ancel
Use hardware handshaking 🔽	Help

In the PC Port section, select the port on your PC that your serial cable is plugged into (COM1 in this example).

- 10. In the Baud Rate section, you must select 57600. This will ensure you will be able to use the logs described later in this document. Accept all other defaults and click on the **OK** button to bring you back to the New Configuration dialog (see *Step #7*).
- 11. Click on the **OK** button to save your new configuration and return you to the Open Configuration dialog (see *Step #6*).
- 12. Select your configuration by highlighting it in the list and then click on the **Open** button. A message similar to the following will appear while GPSolution4 searches for your receiver.



13. If the card is found, you will get a blank GPSolution4 window or the console window as shown below. Go on to *Step #14*. If the card is not found, check your cables, power supply and COM port settings and try again.

📉 Console - DEM4	<u>_ D ×</u>
+<0K	
< <uk <0K</uk 	
[COM1]	
	T
1	
	<u>E</u> nter

14. Select View | Logging Control Window from the main menu or click on the LOGGING CONTROL icon:



15. Click on the EDIT SELECTION button (upper right):

🔁 Logging Control - OEI	Μ4		
Current Log Selection Com Save 1 2 3 to file Log	Name Trigger	Description	Edit Selection
Target File	Browse	Time Windowing Start: Stop:	Clear Submit Cancel Max File Size 0 KB Start Log Close Start Log Help
Trigger Type On New On Changed On Time On Next On Next Once On Mark	On Time Details Period: 4 Offset: 4 Click on Trigger co	lumn of Log Selection List to apply	 ▶ 1 Seconds ▶ 0 Seconds this trigger ► Hold

16. Checkmark the box to "View All Logs"

- 17. To select a log first select the trigger from the **Trigger Type** option provided on the bottom left corner of the window. If you have selected the "ON TIME" trigger, specify the **On Time Details** provided on the bottom right corner of the window.
- 18. Then select the log by clicking on the log name. Specify the com port on the receiver where this log will be output by clicking on the appropriate column for that log (for this example ensure that the box in the com1 column is selected). Ensure the "Save to File" column for that log indicates YES.
- 19. Repeat steps 17-18 for every log that you want to record data for. Then click on the **Submit** button.
- 20. Click on the **Browse** button in the Logging Control dialog box. This opens the Save As dialog box. Enter a file name in the File Name field. The default file type is GPS. Click on the **Save** button. You can now see the path of the file in the Target File field. Your chosen logs will be saved to this file. Your screen should look similar to the following.

	Save As					? X
	Save in: 🖳	, My Computer	•	0 E	•	
	3½ Floppy	(A:)				
	Local Disk	. (C:)				
	Compact L	Disc (D:)				
l	Els serves					
l	File name:	jmtdata.gps			Sav	e
l	Save as type:	GPS Files (*.gps)		-	Cano	el
1						

You can also browse for the directory where you want your data file to go by selecting the dropdown file list as shown below:

Save As	? X
Save in: My Computer Save in: My Documents Local Comp Co	
File name: mtdata.gps Save as type: GPS Files (*.gps)	Save Cancel

	ing Con	trol - OEM4			
Curren	t Log Se	election			Logs
Com 23	Save to file	Log Name	Trigger	Description	Edit Selection
< < < < < < < < < < 	YES F YES F YES F YES V	BESTPOSA ONUTCA BANGEA BAWEPHEMA ÆRSIONA	Once OnChanged OnTime 15 0 Nohold OnChanged Once	(A) Position log (A) Ionospheric and UTC data (A) Range log (A) Raw Ephemeris Information (A) Outputs version information	View all logs Clear Submit Cancel
Targe	t File			Time Windowing	Max File Siz
Targe c:\myd	t File — data.gp:	\$	<u>B</u> rowse	Time Windowing	Max File Si:
Targe c:\myo Writter	t File data.gp: n:	s Size:	<u>B</u> rowse	☐ Time Windowing Start: Stop:	Max File Siz 0 K Start Log <u>C</u> lose Stop Log <u>H</u> elp

- 21. When you are ready, click on the **Start Log** button to begin logging data to a file. An indication that the data is being stored is the **Written** and **Size** fields will be increasing.
- 22. When you wish to stop logging data click on the Stop Log button.
- 23. Click on the Close button.
- 24. Click on Device | Exit from the GPSolution main menu.
- 25. The data will now be available in the file you specified in the Logging Control window.

Final Points

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

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