EuroPak[™]- 3M/3MT

QUICK START GUIDE

This guide provides the basic information you need to setup and begin using your new EuroPak. More detailed information on the installation and operation of your receiver, may be found in the user manuals provided on the accompanying CD. The most



up to date revisions of these manuals can be found on our website at http://www.novatel.ca/support/docupdates.htm.

BOX CONTENTS

In addition to this Quick Start Guide, the following is provided:

- 1 12V power adapter cable
- 2 DB-9 serial cables (1 straight through, 1 null modem)
- 1 I/O cable
- 1 CD containing:
 - An installation program for NovAtel's Aviation PC utilities, including *GPSolution*®
 - Product documentation, including user manuals
- User Manuals card for requesting printed manuals

ADDITIONAL EQUIPMENT REQUIRED

The additional equipment below is needed for a basic setup:

- A Windows-based PC or laptop with an RS-232 DB-9 port
- A standard 12 VDC power outlet, or a 9-18 VDC power supply, and a power cable with a 4-pin LEMO plug (LEMO part number FGG.0B.304.CLAD52Z) at the receiver end ¹
- A quality GPS antenna, like the GPS-702 from NovAtel

• A coaxial cable with a TNC male connector at the receiver end, such as NovAtel's C016 model

SETTING UP YOUR EUROPAK

Complete the steps below to connect and power your EuroPak.

- 1. Mount the antenna to a secure, stable structure with an unobstructed view of the sky.
- 2. Connect the antenna to the receiver's *GPS* ← port using high-quality coaxial cable.



3. Connect *COM1* on the receiver to a DB-9 serial port on your PC or laptop using the null modem cable provided.



4. Line up the red mark on the power cable's connector with the red mark on the receiver's *PWR* connector. Insert the power cable connector in the *PWR* port.



5. Plug in the adapter and/or connect and turn on the power supply. The LED above the PWR port glows red when the EuroPak is properly powered.

INSTALLING THE PC UTILITIES

Once the EuroPak is connected to the PC, antenna, and power supply, install NovAtel's *Aviation PC Utilities*.

- 1. Start up the PC.
- 2. Insert the accompanying CD in the CD-ROM drive of the PC.
- 3. Select *Install the Aviation PC Utilities* from the window that is automatically displayed. If the window does not automatically open when the CD is inserted, select *Run* from the *Start* menu and select the *Browse* button to locate *Setup.exe* on the CD drive.
- 4. Install the PC utilities by advancing through the steps provided in the *NovAtel Aviation PC Utilities* setup utility.

ESTABLISHING COMMUNICATION WITH THE RECEIVER

To open a serial port to communicate with the receiver, complete the following.

1. Launch GPSolution from the Start menu folder specified during the installation process. The default location is Start | Programs | OEM4 PC Software | gpsolution4 -crr. 2. Open the Device menu and select Open...



3. Select the *New...* button in the *Open* dialog box.

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- 4. Enter a name for the new device configuration in the *Name* field of the *New Config* dialog box.
- 5. Select the Settings button.

	New Config	×			
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	Startup Options				
е	Update Log Definitions for Con Receiver Options	vert4			
ır-	Receiver Type © WAAS-GII © GCCS GUST © EURO	eiver Port DATA MONITOR			
	🔲 Output Operational Logs				

- 6. Select the PC serial port the EuroPak is connected to from the *PC Port* drop-down list.
- 7. Select 115200 from the Baud Rate list.

^{1.} If an alternative power source is preferred, the automobile power adapter can be cut off from the power cable. The exposed wires (red and orange for positive, brown and black for negative) can then be tied to a supply capable of at least 5 W. The use of a 3 A slow-blow fuse is recommended.

You must use *GPSolution4 -CRR*. The OEM4 version of *GPSolution* does not work with the EuroPak receiver.

- 8. Uncheck the Use hardware handshaking checkbox.
- 9. Select OK to save the settings and return you to the New Config dialog.

Serial Device Settings					
PC Port: Com1	ОК				
Baud Rate: 115200 💌	<u>C</u> ancel				
Use hardware handshaking 🥅	Help				

- 10. Select Euro from the Receiver Type choices in the Receiver Options section.
- 11. Select the OK button to close and create the new device configuration.
- 12. Select the new configuration from the Available device configs list in the Open dialog box.
- 13. Select Open to open communications with the EuroPak.



USING GPSOLUTION

GPSolution provides access to key information about your receiver and its position. The information is displayed in windows accessed from the View menu. For example, select View | Position Window from the menu to display the antenna position. To

show details of the GPS and geostationary (SBAS) satellites being tracked, select Tracking Status Window from the menu.

□ 1. GEO channels must be assigned manually using the ASSIGN command. Select an SV channel number to apply the command to where 0 is the first SV channel and 17 is the last:

0 to 7 for GPS and 8 for GEO (MEDLL models) or.

0 to 13 for GPS and 14 to 17 for GEO (non-MEDLL models) Examples:

ASSIGN 0 ACTIVE 29 0 2000

ASSIGN 15 120 -250 0

ASSIGN 11 28 -250 0

The first example sets the first SV channel to acquire satellite PRN 29 in a range from -2000 Hz to +2000 Hz until the satellite signal has been detected. SV channel 11 is set to acquire satellite PRN 28 at an offset of -250Hz only in the third example.

Refer also to the ASSIGN and CHANCONFIG commands in the EuroPak User Manual for more details.

2. The Channel Tracking Status Window automatically resizes based on the number of channels tracking.

🗶 Channel Tr	acking Ste	itus - Power	Pak									_ = ×	
Channel PRN number Chan State Doppler C/No Residual LockTime Reject Code System-Corr Measurement	0A 7 -384.3 38.72 1.23 2521.8 Good GPS-P L1-C/A	1A 25 Lock 1440.6 50.97 6.10 5527.6 Good GPS-P L1-C/A	2A 5 Lock -777.3 42.12 -0.45 1297.9 Good GPS-P L1-C/A	3A 21 Lock -3286.6 41.30 -2.66 5546.1 Good GPS-P L1-C/A	4A 1 Lock 3274.2 39.59 1.73 119.4 Good GPS-P L1-C/A	5A 20 Lock 2097.9 47.04 -2.32 4678.6 Good GPS-P L1-C/A	6A 30 Lock 1151.1 43.96 1.99 3899.9 Good GPS-P L1-C/A	7A 14 Lock -2341.1 49.65 -0.23 5545.4 Good GPS-P L1-C/A	BA Idle GPS-P L1-C/A	9A Idle GPS-P L1-C/A	10A 11 Lock -971.0 48.63 -0.07 5550.9 Good GPS-P L1-C/A	11 134 Lock 6.9 34.56 0.00 24.4 NoEphm Geo-S FEC	
Channel PRN number Chan State Doppler C/No Residual LockTime Reject Code System-Corr Measurement	08 7 Lock -299.6 23.96 0.00 2517.5 L2 GPS-P L2-Y	18 25 Lock 1128.6 46.65 0.00 5512.0 L2 GPS-P L2-Y	28 5 Lock -605.8 28.06 0.00 1297.9 L2 GPS-P L2-Y	38 21 Lock -2561.1 33.31 0.00 5514.5 L2 GPS-P L2-Y	48 1 Lock 2551.1 30.25 0.00 112.0 L2 GPS-P L2-Y	5B 20 Lock 2257.9 39.89 0.00 4674.0 L2 GPS-P L2-Y	6B 30 Lock 896.8 34.24 0.00 3891.5 L2 GPS-P L2-Y	78 14 Lock -1824.4 42.45 0. Pos 55 Latitud C Longit G Height	88 Idle ition - Pow de: N 5 ude: W11- t: 1062 Wed	98 Idle 1.11641175 4.03831967 566m (MS I.Jul 24 15:	108 11 Lock -757.4 41.02 7° StdD C) StdD 22.04 2002	12 122 Lock -7.3 -7.2 -7.3 -7.2 -7.2 -7.2 -7.2 -7.2 -7.2 -7.2 -7.2	
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AVIATION STATUS WINDOWS

Aviation's GPSolution offers three additional status windows for your receiver: AGC Status, Receiver Status and Receiver Hardware Status



ENTERING COMMANDS

The EuroPak uses a comprehensive command interface. Commands can be sent to the receiver using the Console window in GPSolution, which is opened from the View menu. Enter commands in the text box at the bottom of the window.

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The following information is important when entering commands: Commands must be entered in Abbreviated ASCII format.

- Press the Enter key to send the command string to the receiver.
- The commands are not case sensitive.

Your EuroPak user manual provides all the available commands and the parameters they use for the Abbreviated ASCII format.

☑ The Console window displays Abbreviated ASCII output. To view ASCII output you must open the ASCII Messages window.

QUESTIONS OR COMMENTS

If you have any questions or comments regarding your EuroPak, please contact the NovAtel Aviation Group using any one of the following methods:

Email: support@novatel.ca

Phone: 1-800-NOVATEL (U.S. & Canada) 403-295-4900 (International)

Fax: 403-295-4999

Web: www.novatel.com



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