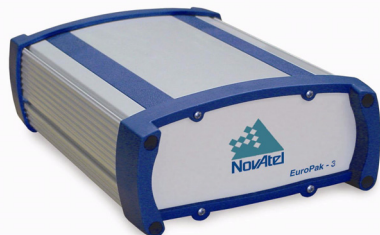


## EuroPak™ - 3/3T

### 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.com/support/firmware-software-and-manuals/>.

### 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® (CRR Version)*
  - Product documentation, including user 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 <sup>1</sup>
- A quality GPS antenna, like the GPS-702 from NovAtel

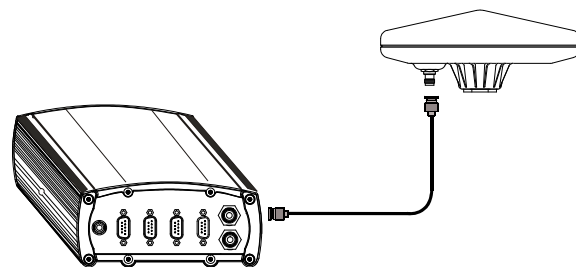
1. If an alternative power source is preferred, the automobile power adapter can be cut off from the power cable. The exposed wires (red and orange for positive, brown and black for negative) can then be tied to a supply capable of at least 5 W. The use of a 3 A slow-blow fuse is recommended.

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

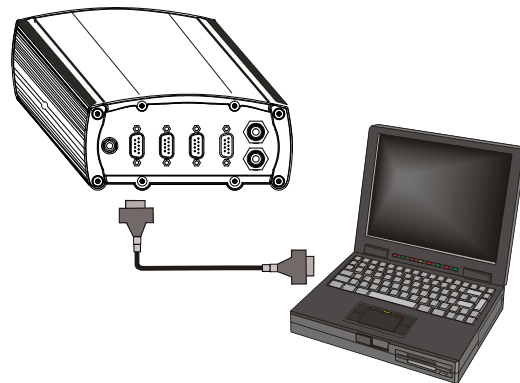
### SETTING UP YOUR EUROPAK

Complete the steps below to connect and power your EuroPak.

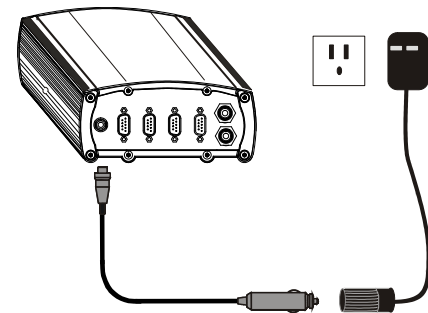
1. Mount the antenna to a secure, stable structure with an unobstructed view of the sky.
2. Connect the antenna to the receiver's *GPS* port using high-quality coaxial cable.



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* port. 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.

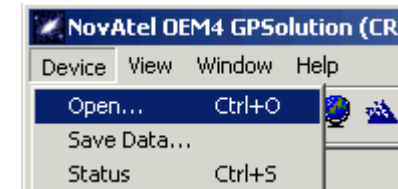
### ESTABLISHING COMMUNICATION WITH THE RECEIVER

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

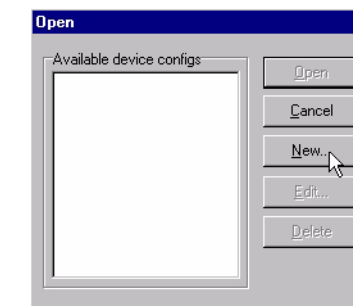
1. Launch *GPSolution* from the *Start* menu folder specified during the installation process. The default location is *Start | Programs | OEM4 PC Software | gpsolution4 -crr*.

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

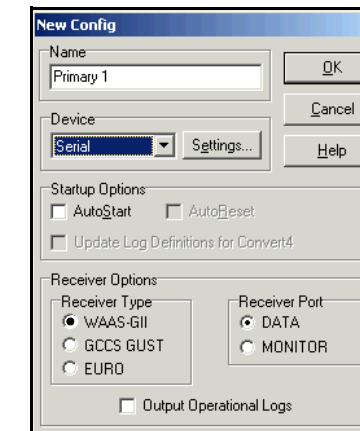
2. Open the *Device* menu and select *Open...*



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



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



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.

**QUESTIONS OR COMMENTS**

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

Email: support@novatel.ca

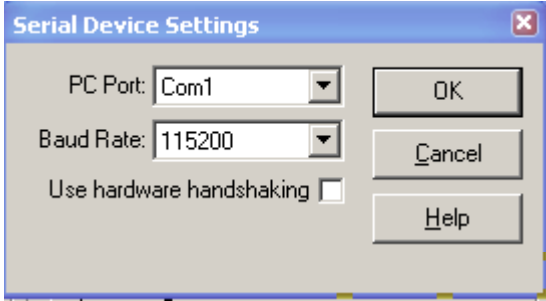
Phone: 1-800-NOVATEL (U.S. & Canada)  
403-295-4900 (International)

Fax: 403-295-4999

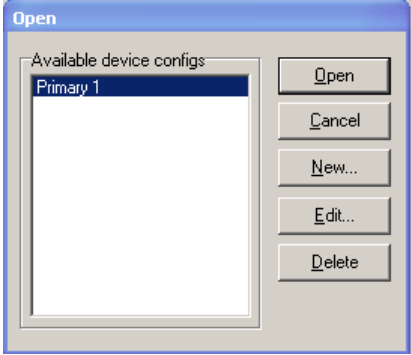
Web: www.novatel.com



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



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.

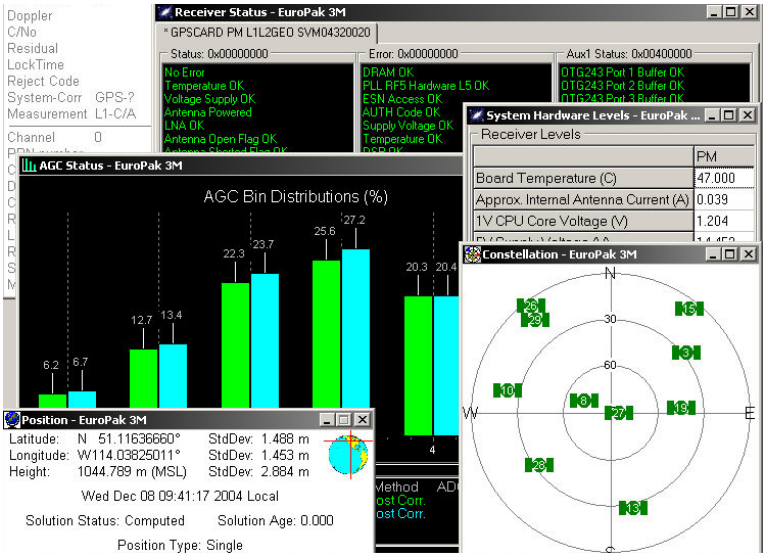
Channel	1A	2A	3A	4A	5A	6A	7A	8A	9A	10A	11
PRN number	7	25	5	21	1	20	30	14	Idle	Idle	11
Chan State	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock
Doppler	-384.3	1448.6	-777.3	-3286.6	3274.2	2697.9	1151.1	-2341.1			-971.8
C/No	38.72	50.97	42.12	41.30	39.59	47.04	43.96	49.65			34.56
Residual	1.23	8.10	-0.45	-2.66	1.73	-2.32	1.98	-0.23			0.00
LockTime	2521.8	5527.6	1297.9	5548.1	119.4	4678.6	3899.9	5545.4			5550.9
Reject Code	Good	Good	Good	Good	Good	Good	Good	Good			NoEphm
System-Corr	GPS-P	GPS-P	GPS-P	GPS-P	GPS-P	GPS-P	GPS-P	GPS-P			Geo-S
Measurement	L1-C/A	L1-C/A	L1-C/A	L1-C/A	L1-C/A	L1-C/A	L1-C/A	L1-C/A			FEC

Channel	1B	2B	3B	4B	5B	6B	7B	8B	9B	10B	12
PRN number	7	25	5	21	1	20	30	14	Idle	Idle	122
Chan State	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock
Doppler	-299.6	1128.6	-605.8	-2561.1	2551.1	2257.9	896.8	-1824.4			-757.4
C/No	23.96	46.65	28.05	53.31	30.25	39.89	34.24	43.45			34.24
Residual	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00
LockTime	2517.5	5512.0	1297.9	5514.5	112.0	4674.0	3891.5	5512.0			27.52
Reject Code	L2	L2	L2	L2	L2	L2	L2	L2			L2
System-Corr	GPS-P	GPS-P	GPS-P	GPS-P	GPS-P	GPS-P	GPS-P	GPS-P			GPS-P
Measurement	L2-Y	L2-Y	L2-Y	L2-Y	L2-Y	L2-Y	L2-Y	L2-Y			L2-Y

**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.



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.