

# Setting up FieldGenius 2004 and the Rascal

## 1) Datum Grid Files

You first need to install the Datum Grid Editor. You can download it from our website or install it from the CD that was included with FieldGenius. Once you have the datum grid files created, you can copy them to your FieldGenius Tracker. Please refer to the help menu in the Datum Grid Editor for more information.

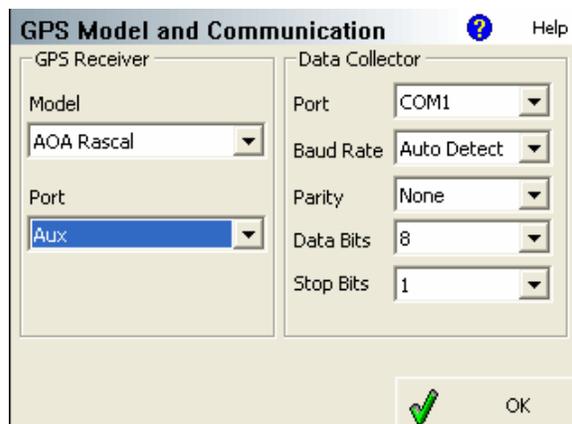
## 2) Create a FieldGenius Profile

You can now start FieldGenius, create a project and select GPS as an instrument type. When you define the project units, **please make sure to select US Survey Feet, not International feet**. Since you don't need to connect to the base receiver, you can ignore the Configure Reference button. All you need to do is press **Configure Rover** which will display the following screen.

	<p>In the Rover Profile screen, press <b>Add Profile</b>, enter a name such as AOA and press <b>Save</b>.</p> <p>After you've done this, you can press <b>Edit Profile</b> to edit your GPS settings.</p>
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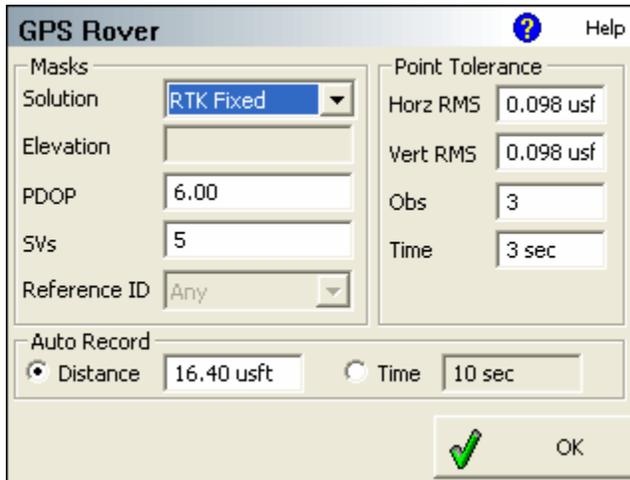
## Model and Communication

To start, setup you communication parameter to equal the following. If you set the Baud Rate to Auto Detect it will automatically check to see what baud rate the Rascal is set to. If you know what the parameters are equal to, then enter them now.



## Configure Rover

The only solution type you can select with the Rascal is RTK Fixed, but you can adjust the other values to meet your specifications. Refer to the manual for more information about these settings.



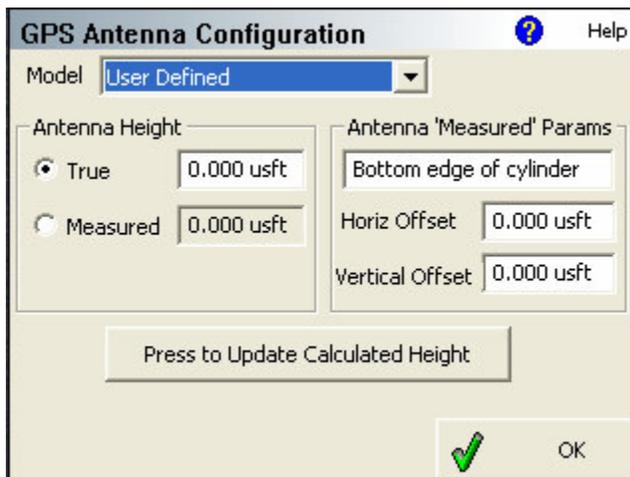
The screenshot shows the 'GPS Rover' configuration dialog box. It has a title bar with a question mark icon and the word 'Help'. The dialog is divided into several sections:

- Masks:** A dropdown menu for 'Solution' is set to 'RTK Fixed'. Below it are input fields for 'Elevation', 'PDOP' (set to 6.00), 'SVs' (set to 5), and 'Reference ID' (set to 'Any').
- Point Tolerance:** A section with input fields for 'Horz RMS' (0.098 usf), 'Vert RMS' (0.098 usf), 'Obs' (3), and 'Time' (3 sec).
- Auto Record:** A section with two radio buttons: 'Distance' (selected) and 'Time'. The 'Distance' option has an input field set to '16.40 usft', and the 'Time' option has an input field set to '10 sec'.

At the bottom right, there is a green checkmark icon and an 'OK' button.

## GPS Antenna Height

If you have specified your antenna heights on the Rascal unit, then you should leave the antenna height fields set to zero. If you want to have FieldGenius use antenna heights, then select the antenna model and enter in your measured distance. Note, the offset distances are derived from published values in your AOA manual.



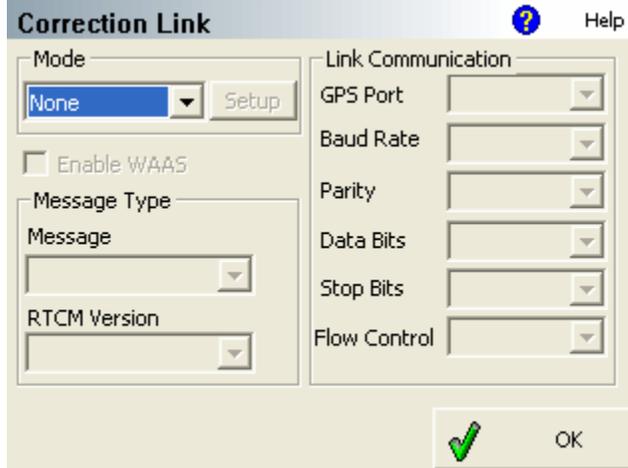
The screenshot shows the 'GPS Antenna Configuration' dialog box. It has a title bar with a question mark icon and the word 'Help'. The dialog is divided into several sections:

- Model:** A dropdown menu set to 'User Defined'.
- Antenna Height:** A section with two radio buttons: 'True' (selected) and 'Measured'. Both have input fields set to '0.000 usft'.
- Antenna 'Measured' Params:** A section with a dropdown menu set to 'Bottom edge of cylinder', and input fields for 'Horiz Offset' (0.000 usft) and 'Vertical Offset' (0.000 usft).

At the bottom, there is a button labeled 'Press to Update Calculated Height' and a green checkmark icon next to an 'OK' button.

## Correction Link

Because you're not receiving correction link through a radio, there is nothing to set in this screen.



## Datum Settings

**This is very important!** You need to match both the horizontal and vertical datum settings to those you are using on your Rascal.

## **3) Please Test before you go to the job site**

For your first attempt at connecting, please do so at your office before going to the field. It is easier to do this in your parking lot where you can call someone at our office if you have problems.

To confirm your rover position you can press the  icon on the GPS toolbar. Doing so will show you the N, E, and Orthometric height. If you press it again it will display Lat, Long and Ellipsoid height.

