

Users Guide to GPSgrabber

Main Screen



The main screen of GPSgrabber gives the following choices :

1. Capture Data
2. Delete Data
3. Synchronise
4. Setup

1. Capture Data Screen



Before you start to capture some GPS data, you have to decide what type of data you want to capture. The choices are:

1.1.1 Marker

Markers are used to enter series of single points which will be displayed on the map as small crosses with a name next to it. It is used to mark the location of objects. The software will prompt you for a name for each marker.

1.1.2 Track

Tracks are used to capture a sequence of points which will be displayed a single line on the map. Use this to capture fences, roads, rivers etc.

1.1.3 Area

Areas are used to capture areas of land where the start and end points are connected. It is not necessary to go right back to the start point. The software will automatically assume the last and first point are

connected. GPStmapper will allow you to display acreage information for area captured as areas. Use it to capture fields, plots or any other land area.

1.2 Name

You have to provide a unique name for each log file. If the log file name you provided is not unique, then you will be asked if you want to replace or append to it when you click the GPS button. You can also search for existing filenames by clicking on the browse button. (Notice that the program differentiates between files that were saved as Markers, Tracks or Areas. Therefore when you change the type, you will also see a different list of names.)

1.3 GPS Button

After you choose the Type and Name of your log file, you can click on the GPS button in order to go to the GPS view. The button is sometimes hidden when you have not yet selected the name and type.

2. GPS View



Auto Off Field - Allows you to enable or disable the Auto-Off feature of the PDA. By default this Auto-Off feature is always disabled.

Sat Field: This field just shows how many satellites are involved in the GPS fix. It is for interest sake only.

Program field - In the right hand corner is a small indicator to show activity of the program. While it shows "\" it means the GPS are busy receiving data. When it shows "/" it means the program is busy trying to interpret the GPS data. When it shows "-", it means the program is not in the loop that handles the communication with the GPS. If it stays too long in the "-" mode, then it means that the program has frozen. In this case you might need to click on the Man or Auto selectors to start it again.

Status field - This shows the status of the GPS fix. If it shows warning, then it means that the GPS can not yet get a fix and you need to stop and wait until it shows "Ok"

Data field - This shows which type of NMEA sentence is currently received from the GPS. It is a useful indicator to see if there is still GPS activity. If this field stops changing, then it means that the program has frozen. In this case you might need to click on the Man or Auto selectors to start it again.

Waiting for GPS fix - This flag shows that the GPS is not yet ready. Wait until this flag disappears before proceeding. It might sometimes take up to 15 minutes for the GPS to get a fix.

Lat field - Shows the latitude

Long field - Shows the longitude

Point field - This counter gets incremented each time a GPS measurement is saved. In automatic mode this counter will automatically increment. In manual mode it only increments each time when you press the "Add Point" button.

Man selector - Puts the program in manual mode. In manual mode the users has to manually press the "Add Point" button to save a GPS location. You can switch between manual and automatic mode as required.

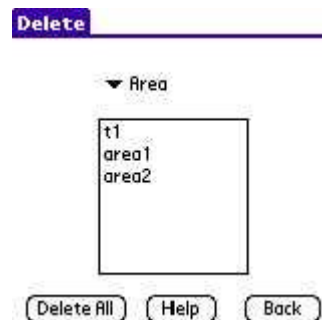
Auto selector - Puts the program in automatic mode. In automatic mode the program will save a GPS location every few seconds. You can switch between manual and automatic mode as required. It is recommended that you monitor that the Point field continuously increment while in automatic mode. If it stops incrementing, then stop and wait until it starts incrementing again.

Add Point button - This button is used in the manual mode to save a GPS location.

Reset button - This field lets you start over with a GPS scan. It resets everything back to zero and deletes all saved data in the current log file.

Back button - When you click the back button it assumes that you are finished with the current GPS log and takes you back to the main screen. However, you may always append to an existing log file again by reselecting it again in the choose track screen.

3. Delete Data Screen



Select the type (Marker, Track or Area) first. This will display all log files of this type. Next click on the file name itself to delete it. You can also click on "Delete All" to delete all the files of a particular type currently displayed.

It is important to delete old log files regularly. They clog up valuable memory space and also causes the synchronisation process to take much longer. This is because each log file that is not deleted will be loaded back to the PC each time you do a synchronisation.

3. Synchronisation Screen



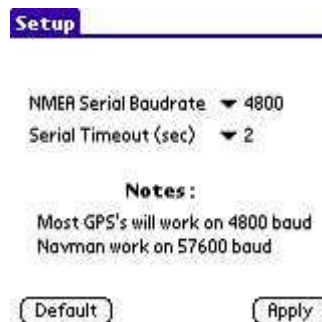
The synchronisation screen allows you to upload all GPS log files to your PC. See the section on synchronisation in the GPStmapper users manual for required actions .

It is possible to change the synchronisation baudrate from the default 9600 baud to another value. However, if you change the baudrate in GPStgrabber, then you must also change it in GPStmapper to the same value.

When you are ready, click on the synchronise button on the PDA more or less at the same time when you activate synchronisation in GPStmapper. The program gives you a 30 second period to activate synchronisation on GPStmapper before it times out.

If synchronisation is working will see a message "sending <filename>" on the PDA and "receiving <filename>" on the PC.

4. Setup Screen



The setup screen allows you to change NMEA serial baud rate and timeout settings. Once you changed the serial baudrate, the program will remember your new settings for all future sessions. The default values for baudrate is 4800 baud and 2 seconds timeout. If you click the "Default" button it will reset your settings back to 4800 and 2 seconds timeout. Click "Apply" to return back to the main screen.)

NB : Most GPS devices work on 4800 baud, but there are some devices (for example the Rand McNully NavMan) that works on 57600 baud.

If you want to know where you can buy a cable to connect your particular GPS to your Palm device then try <http://www.thepilotshangar.com/ala.htm>

In case of problems, please contact me Werner Terreblanche at <mailto:wt@imagnet.co.za>