LogTrackII Analysis Software User Manual

Table of Contents

1 Introduction

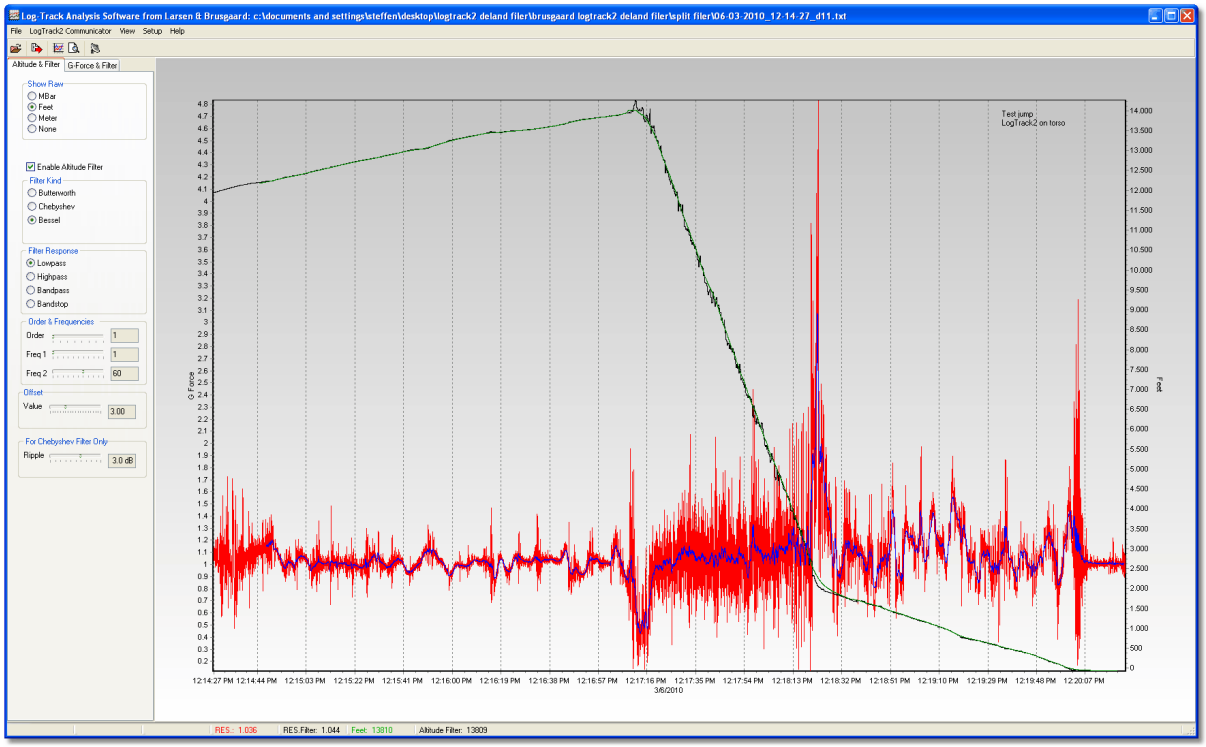
LogTrackII Analysis Software is designed to interpret data collected from the LogTrackII device

Using the LogTrackII Data Analysis software, recorded data can be downloaded to a PC. All information logged by the unit can be displayed in a fast, clean and concise charting format and can be archived for later data research and comparison.

LogTrackII analysis software is specifically designed for parachute testing, skydiving and other barometric pressure relevant environments where 3-axis acceleration data can be examined relative to barometric pressure and altitude.

Among the features are:

- Displays barometric pressure, altitude and 3-Axis g-force data over time in chart format
- View raw or filtered data
- Zoom to the finer details in the graphical data chart
- Fully printable charts
- Automatic scale can be activated or deactivated
- Date can be exported for other uses as well as shared with other LogTrackII users



2 System Requirements

Windows XP/XP64, Vista/Vista x64, Windows 7/Windows 7 x64
CD-ROM drive
One unoccupied USB port

3 Installation

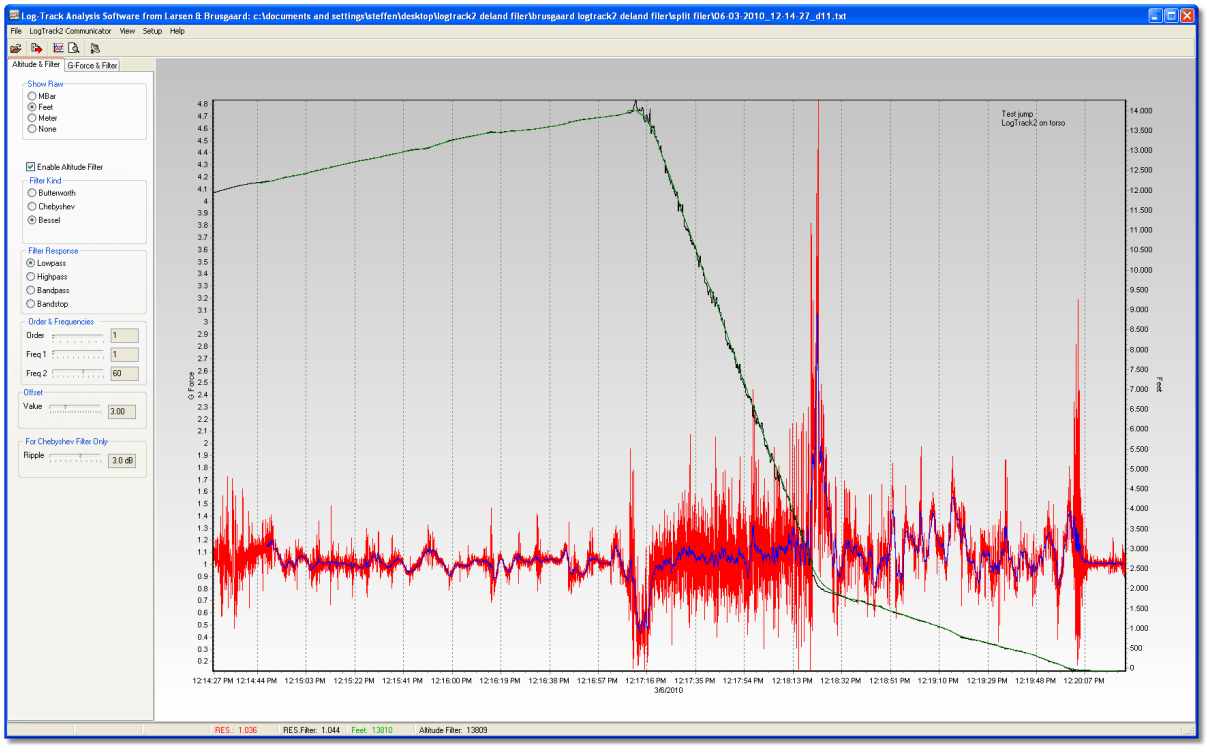
1 Insert the CD Rom into the CD-ROM drive of your computer. Wait for the CD-ROM to auto start, and install the software

2 If the CD does not auto start choose START -> RUN
Type D:\install (Substitute drive letter of your CD-ROM drive if necessary)
Click "OK"

3 Follow the instructions on the screen

4 The Setup program will create the following program group on the Start Menu during installation

4 Getting Started



The LogTrackII main window is your starting point for viewing your recorded data in a graph

From this window you can:

View raw altitude data, enable a filter on altitude data and select different filter parameters.

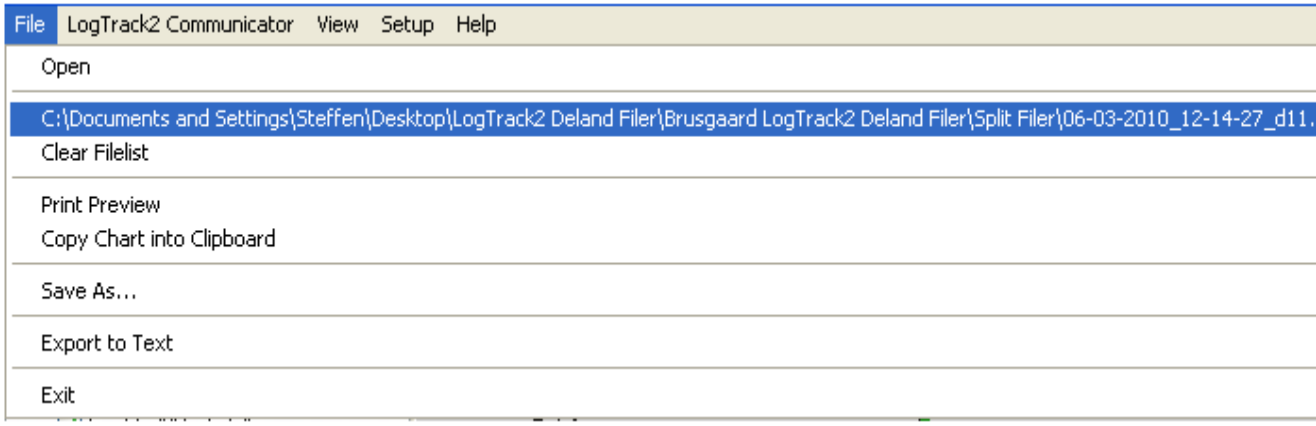
View raw and resultant g-force data, enable a filter on g-force data and select different filter parameters

Select options from the main menu.

Select options from the toolbar menu.

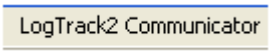
5 Main Menu

Refer to the explanations below and use the links for details about the functions of each of these menu items.



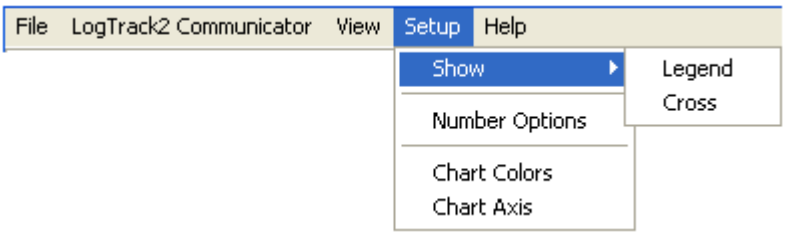
From the file menu there are following options:

Open	Open an existing split file from LogTrackII. Please read section " Receive Data from LogTrackII"
Clear file list	Clears the files that have been opened in the history list (if any)
Print Preview	Preview a report prior to printing
Copy Chart to Clipboard	Copy chart to clipboard then paste into another application
Save As	Save your jumps in a new file
Export to Text Export	Export LogTrackII data to a comma-delimited or tab-delimited text file for use in other applications
Exit	Exits the LogTrackII application

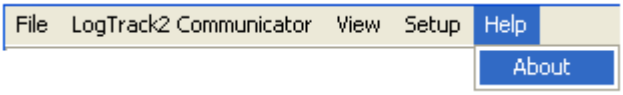


LogTrackII Communicator	This will open the LogTrackII communicator window to receive data from the LogTrackII device. LogTrackII communicator is also used to setup different options in LogTrackII device

Comments	Open Comments dialog box to view graph "Read only" data and edit comments



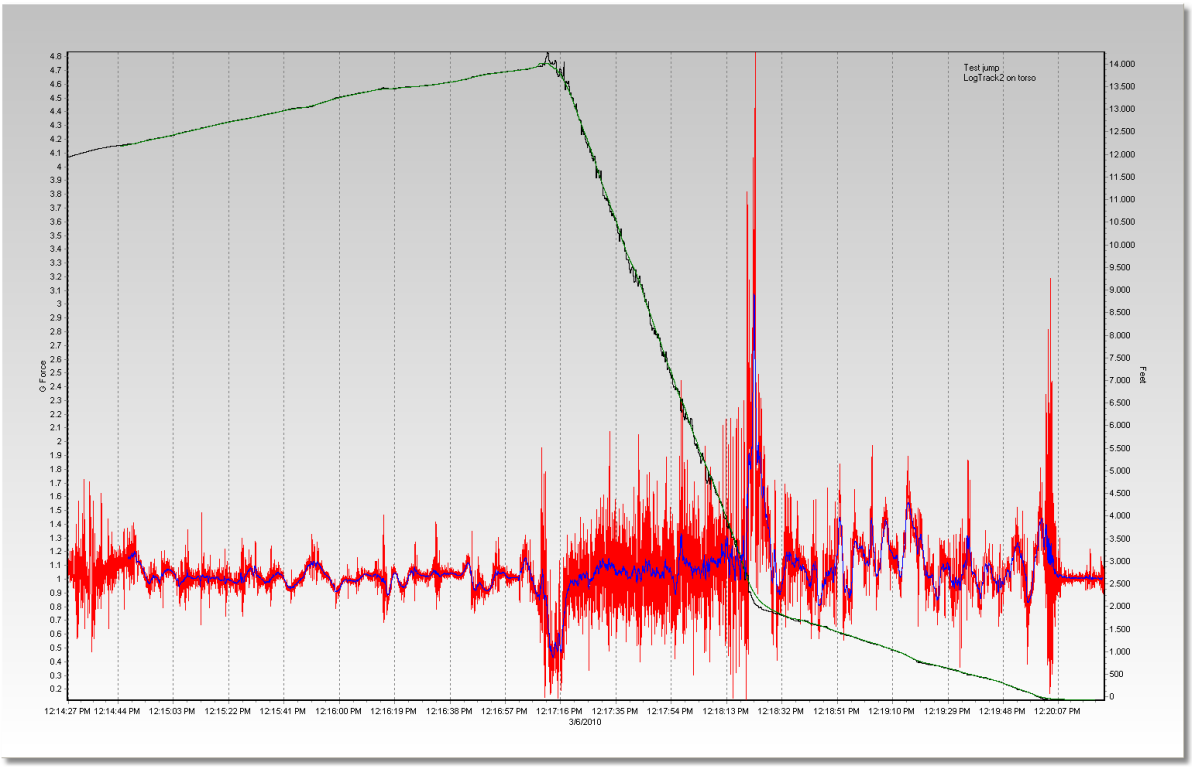
Show Legend	Enable or disable chart legend
Show Cross	Show or hide "drag" cross on chart
Number Options	Open Number Options dialog box
Chart Colors	Contains functions for adjusting the software color settings to your individual preference
Chart Axis	Contains functions for adjusting the chart axis and grid



About	Open About dialog box to view software version

6 Profile Graph

The Profile Graph displays a visual analysis of g-force curve with respect to the left Y-axis and an altitude curve with respect to the right Y-axis.
Both G-Force and altitude curves are plotted against elapsed time along the X-axis.



To zoom into an area of the graph, press and hold the left mouse button and drag the mouse down and to the right. You will see a rectangle around the selected area. Release the left mouse button and the zoom will be executed. You can continue zooming again and again.

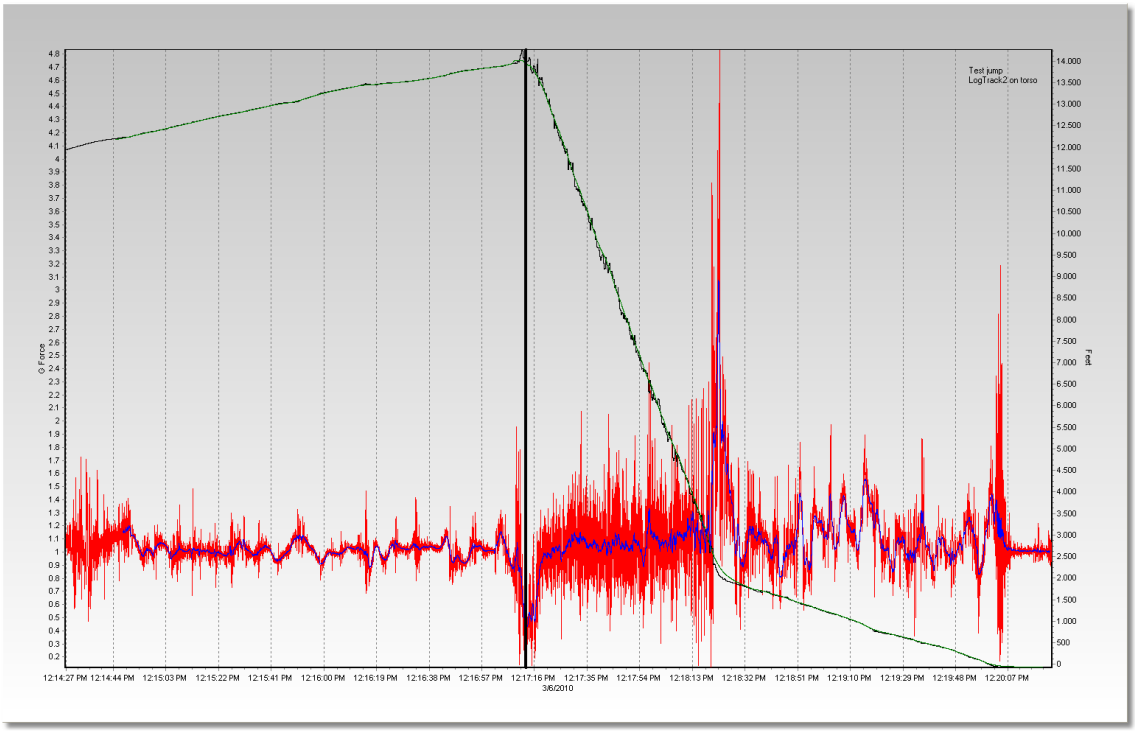
To restore (or undo) the zoom, press the left mouse button and drag in the opposite direction (up/ left). Press and hold the right mouse button in the graph area to drag the chart in any direction.

The right chart legend depends on the selection of units of altitude (feet/meters/mbar)

To move comments, click on comments, drag and then click to place.

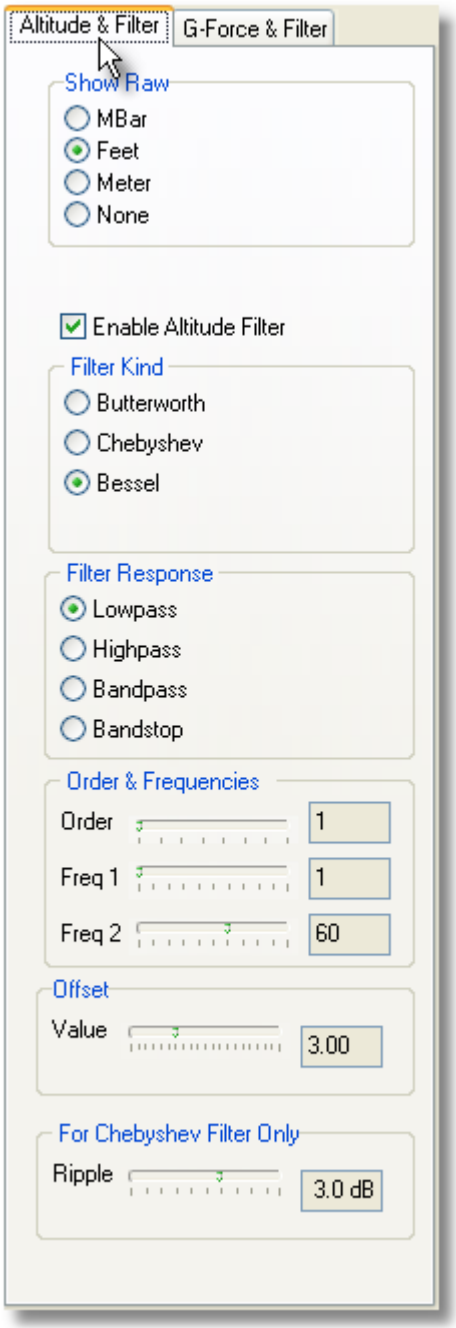
To edit comments, right click on comments and select 

To run realtime simulator, right click on graph and select 



The realtime simulator runs a black line on the graph moving 1 second on the time line each second.

7 Altitude & Filter

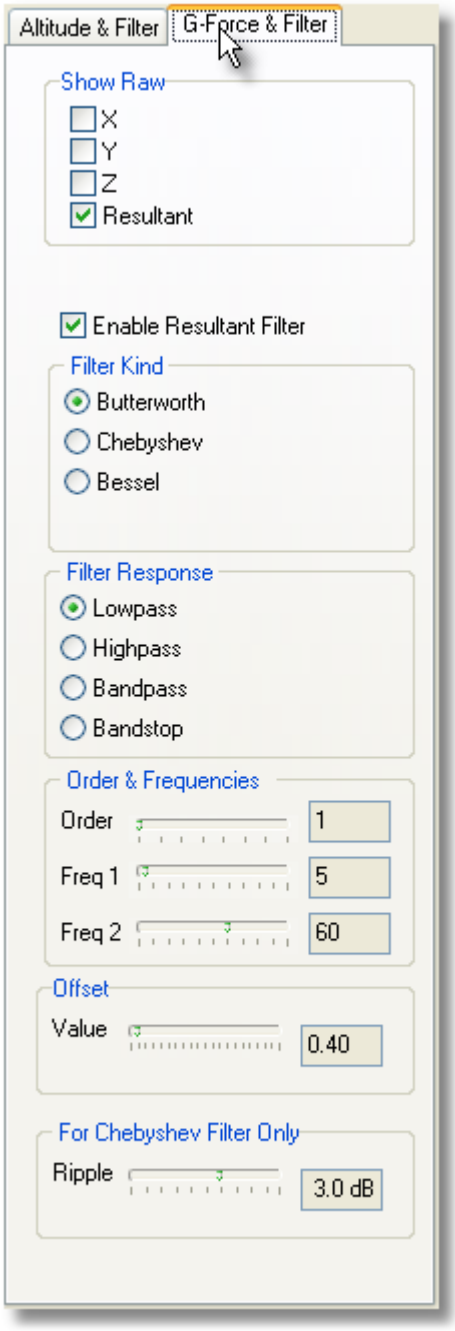


Show Altitude graph in Mbar / Feet / Meters or don't show

Enable filter on Altitude and select options for the filter

Note.:
Use the offset value to offset the filter to match the raw data

8 G-Force & Filter

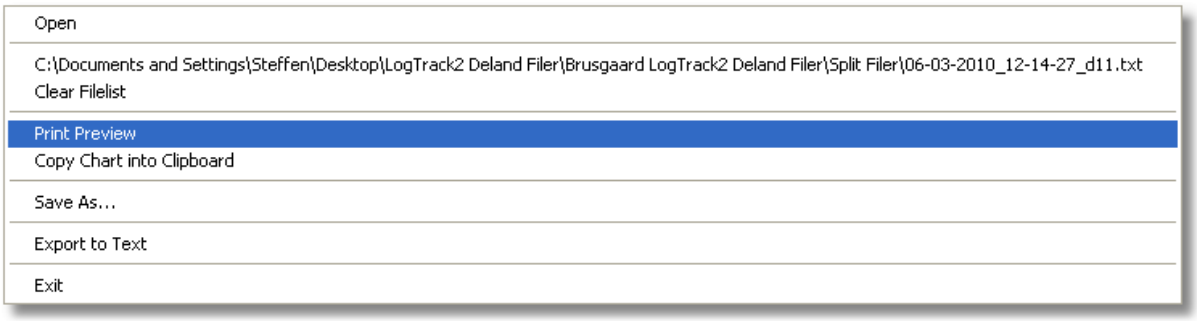


Show X,Y,Z or Resultant G-Force graph

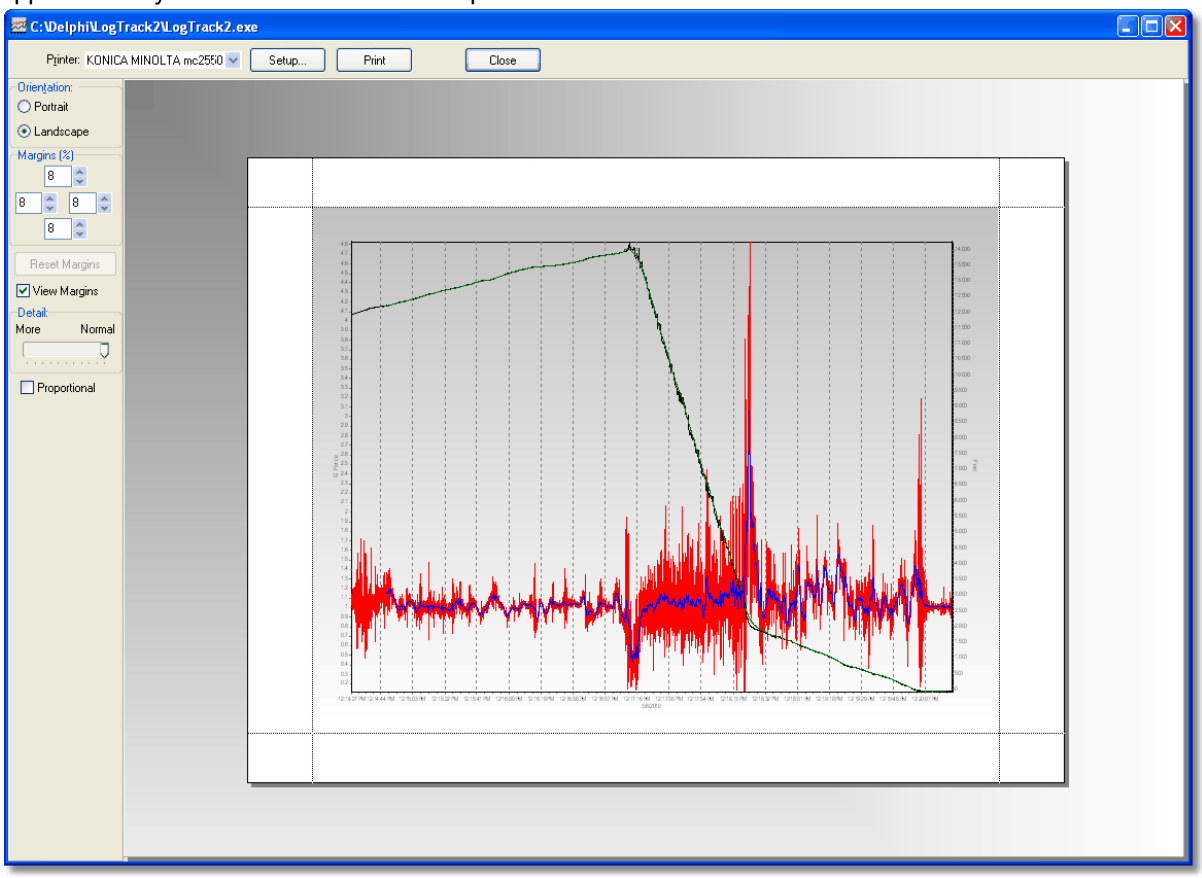
Enable filter on G-Force and select options for the filter

Note.:
Use the offset value to offset the filter to match the raw data

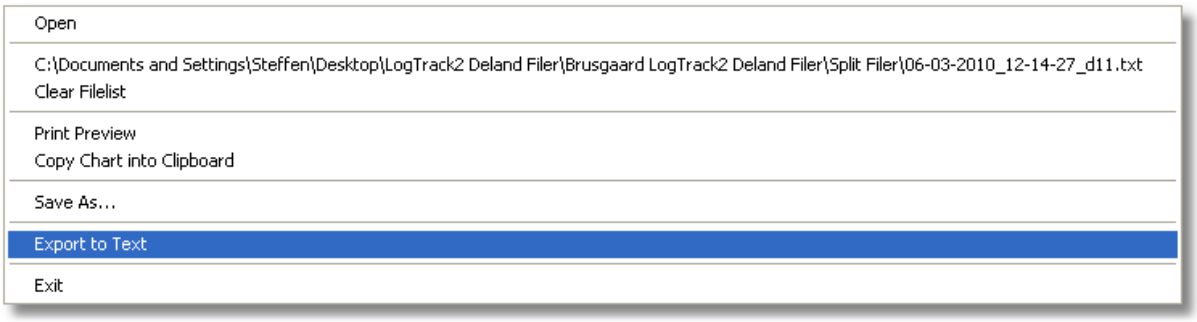
9 Print Preview



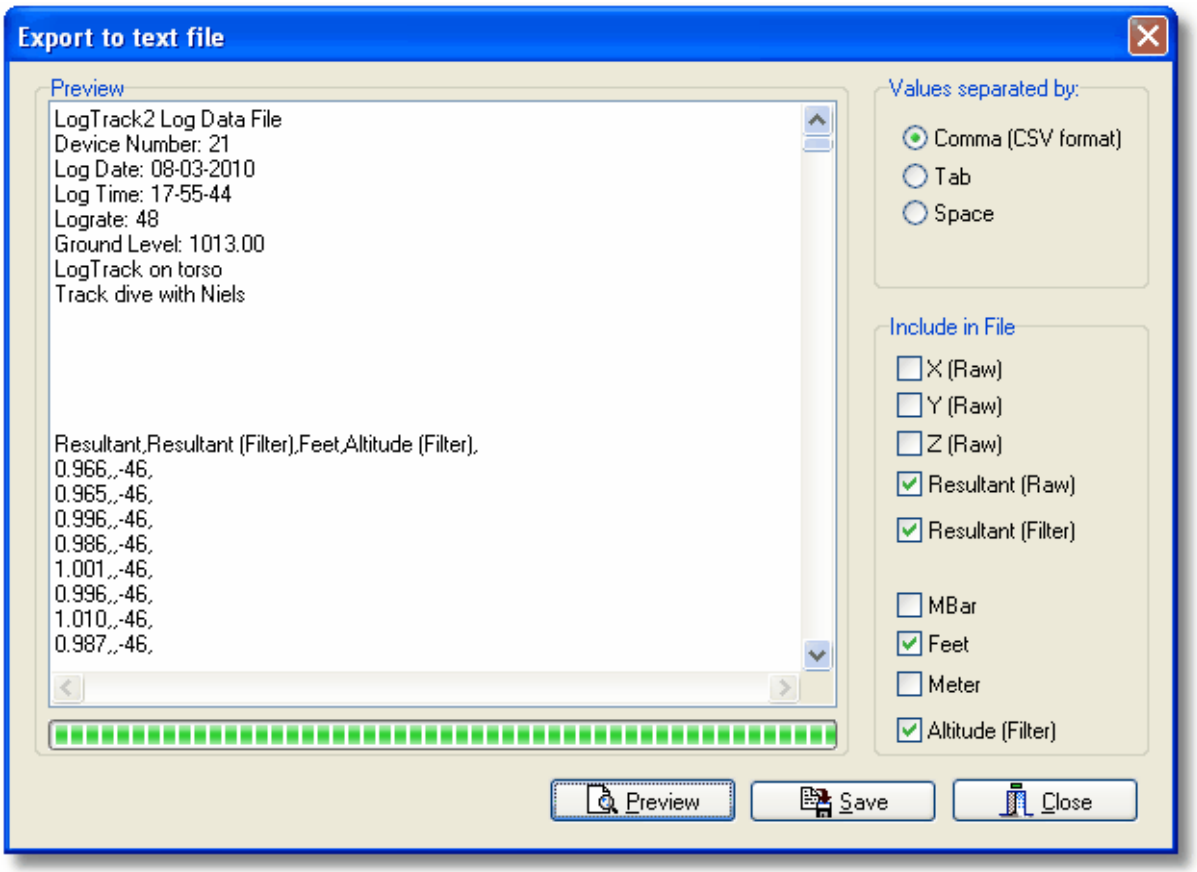
The Preview Report function lets you choose a particular report and see exactly how your report will appear when you send it to the selected printer.



10 Export Data



The Export Data function allows you to export selected items of data from the graph to a text file in either a comma-delimited (CSV format), tab-delimited or space-delimited format.

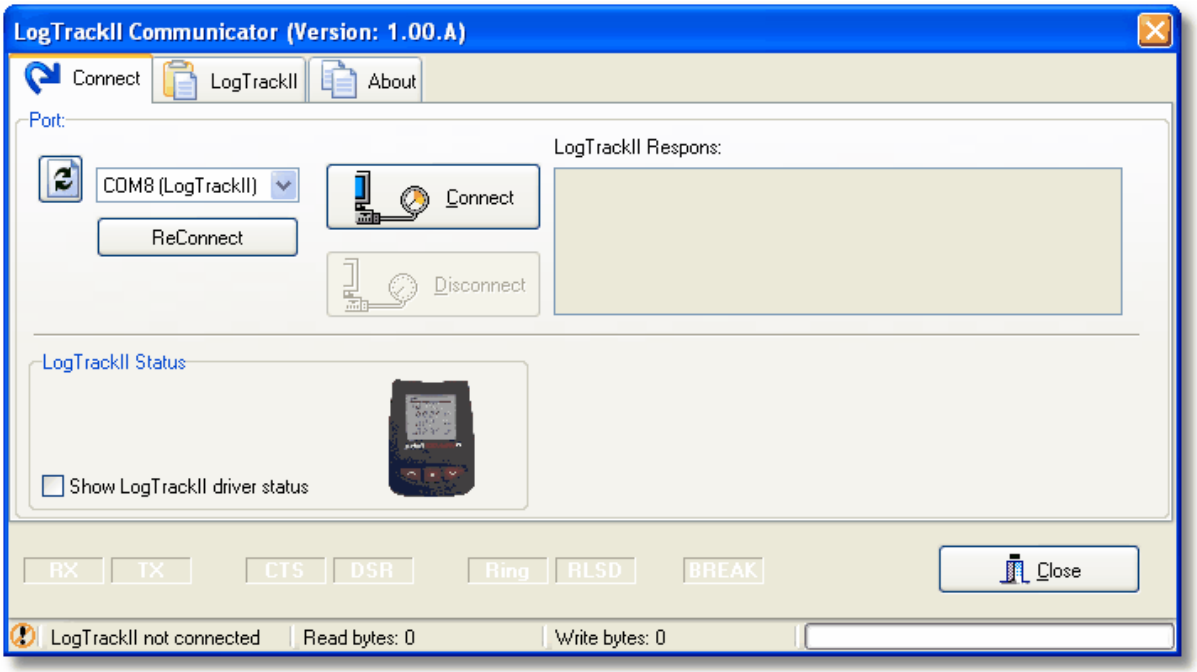


Note: Always run a preview before saving

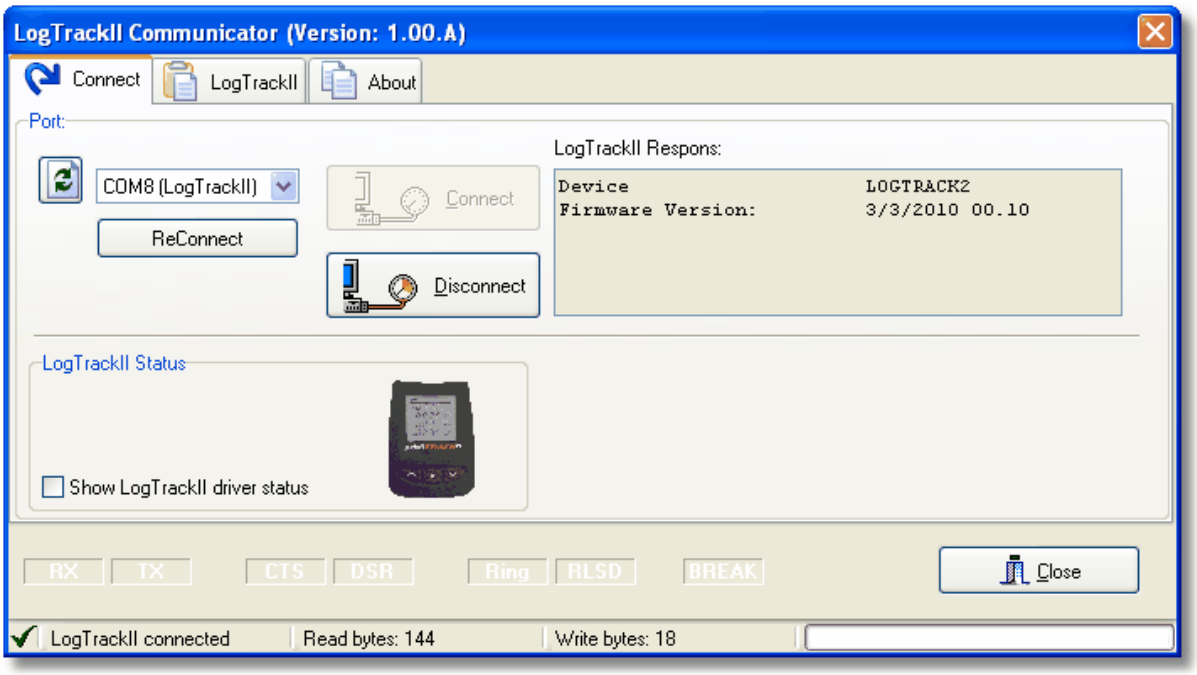
11 LogTrackII Communicator

LogTrack2 Communicator

This will open up the LogTrackII Communicator window to receive data from the LogTrackII device. LogTrackII Communicator is also used to setup different options in LogTrackII.



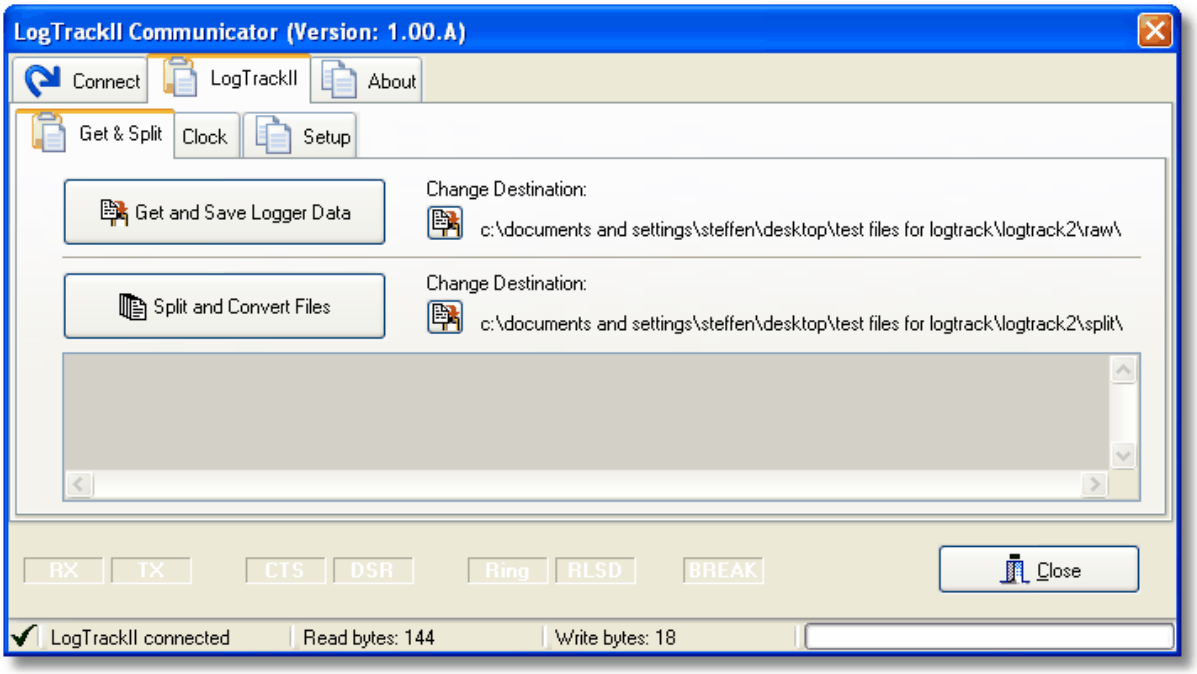
Communications port:	Use this option to choose the port for connecting the LogTrackII device to the computer
Connect button:	Use this button to open the selected port and connect to the LogTrackII device

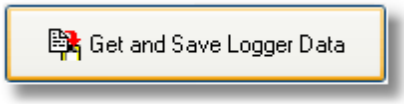


When connected the bottom of the window shows that the LogTrackII device is connected, it will display the LogTrackII device response detailing the firmware number.
This will also show that the LogTrackII drivers have been installed correctly.

12 Receive Data from LogTrackII

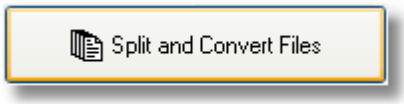
After successful connection to the LogTrackII device, select the "Get & Split" page to receive data. This is the main page to receive log data and split the data into separated files.





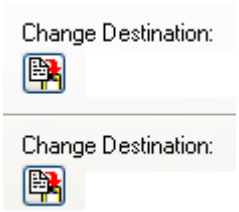
Click on this button and the Communicator will start to receive all data stored in the LogTrackII.
It may take some time depending on the amount of stored data in the memory.
When finished, save the raw file to a user selected location.

Please note: Raw files consist of all data from the LogTrackII, even if the LogTrackII includes multiple logs.

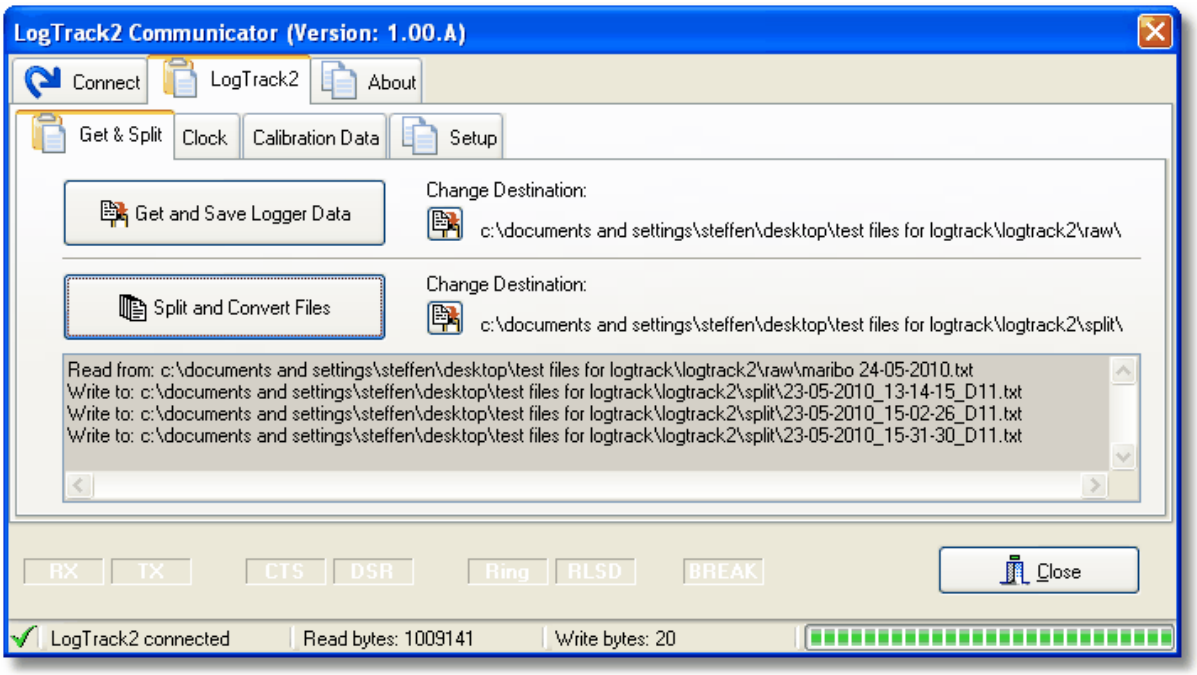


Click on this button and the Communicator will ask for a raw LogTrackII file, then split any logs into separated files.

File naming of split files are always built based on the logging start time and the LogTrackII device ID in the format:
Day-Month-Year_Hour-Minute_Seconds_Device number



To preselect destination for raw and split files, click and select the directory

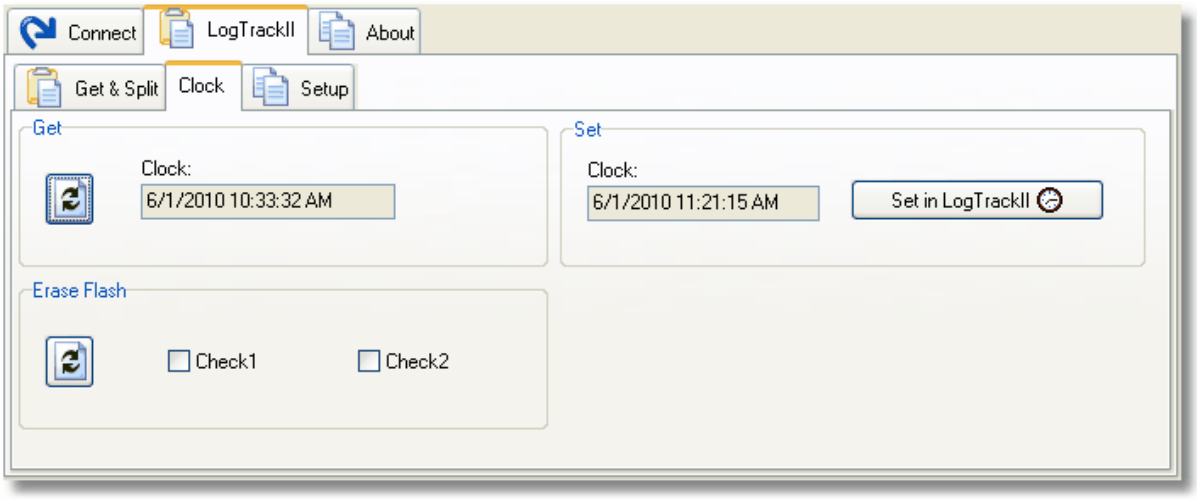


File naming of split files are always built based on the logging start time and LogTrackII device ID in the format:
Day-Month-Year_Hour-Minute_Seconds_Device number

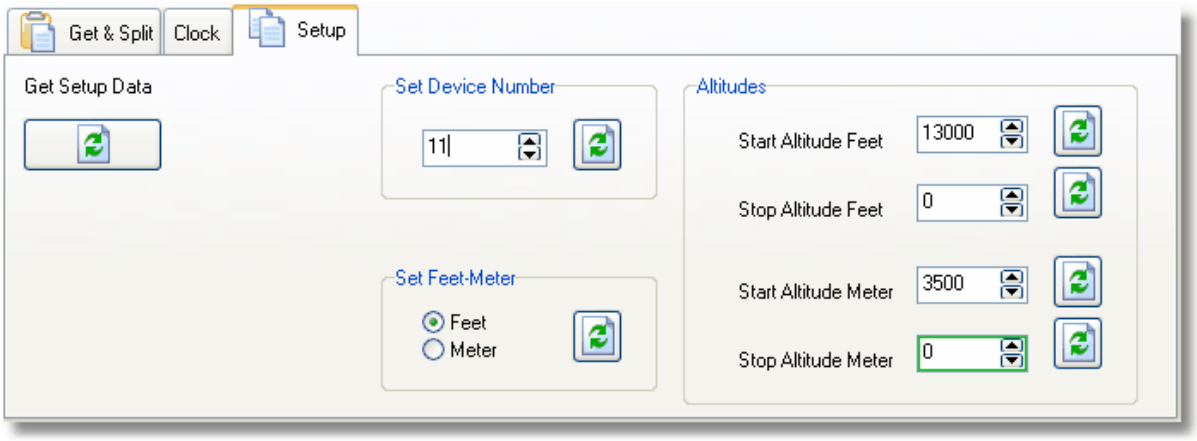
This screen shows the "Maribo 24-05-2010.txt" raw file split into 3 separated log files.
The split filename informs the user that there are 3 different logs in "Maribo 24-05-2010.txt" raw file starting at shown data and time from LogTrackII device 11.
23-05-2010_13-14-15_D11.txt
23-05-2010_15-02-26_D11.txt
23-05-2010_15-31-30_D11.txt

Please note:
From the main menu, open split files to examine data. LogTrackII analysis software cannot open and handle raw LogTrackII files.

13 Setup Options in LogTrackII



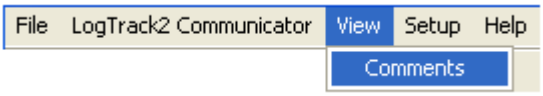
Get clock from LogTrackII	Receive the date and time
Set clock in LogTrackII	Set date and time to the PC date and time
Erase Flash	Check both checkboxes and click. PLEASE NOTE: THIS WILL ERASE ALL LOGGED DATA IN THE LOGTRACKII



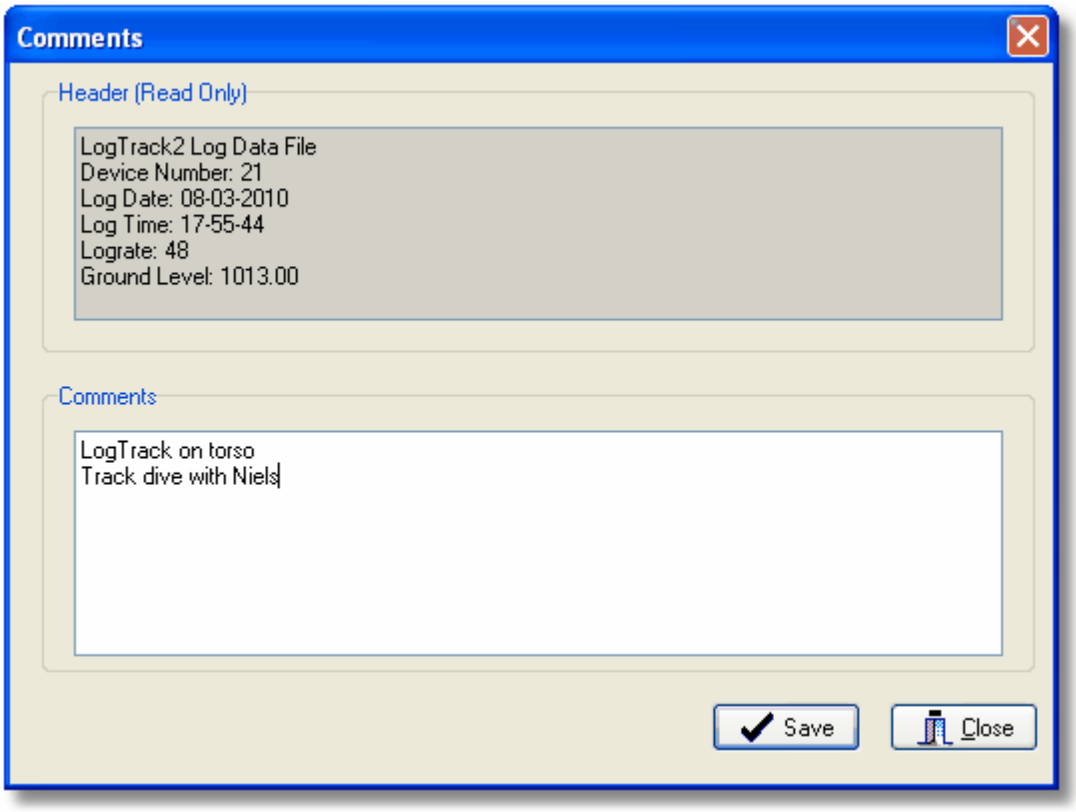
Set device Number	Set a device number. Used when creating split files
Set Feet / Meters	Used to show altitude values in either feet or meters
Altitudes:	Used to set trigger logging altitude points
	In this screen example, LogTrackII will automatic start logging at 13000 feet and stop logging at 0 feet, (if set to feet). In this screen example, LogTrackII will automatic start logging at 3500 meter and stop logging at 0 meter, (if set to meter). If all 4 altitudes are 0, automatic start and stop logging is disabled.

Please read the LogTrackII device manual for more information regarding trigger altitudes.

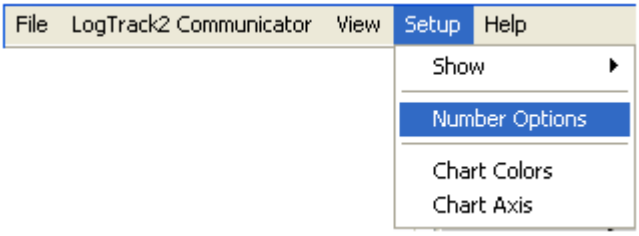
14 Comments



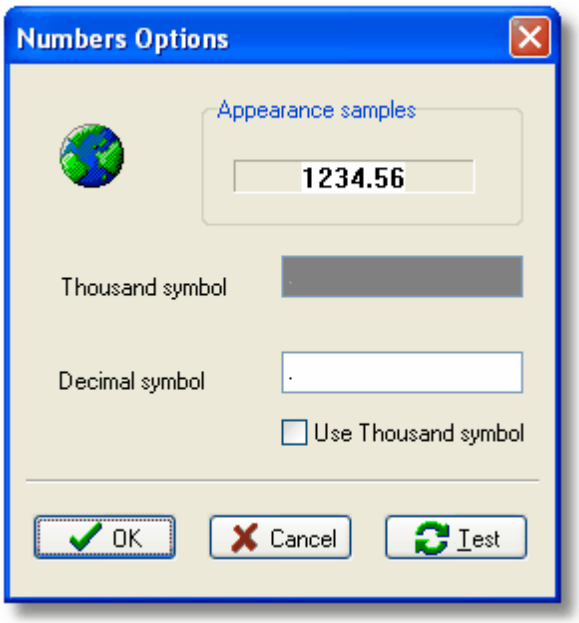
Max. 8 lines comments can be stored together with the header information and saved in the split file.



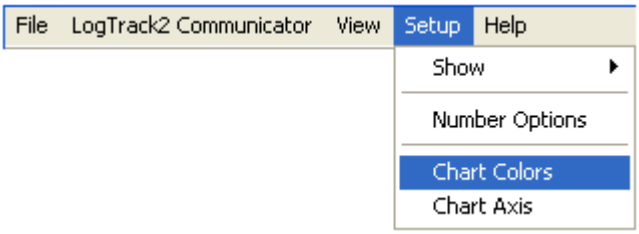
15 Number Options



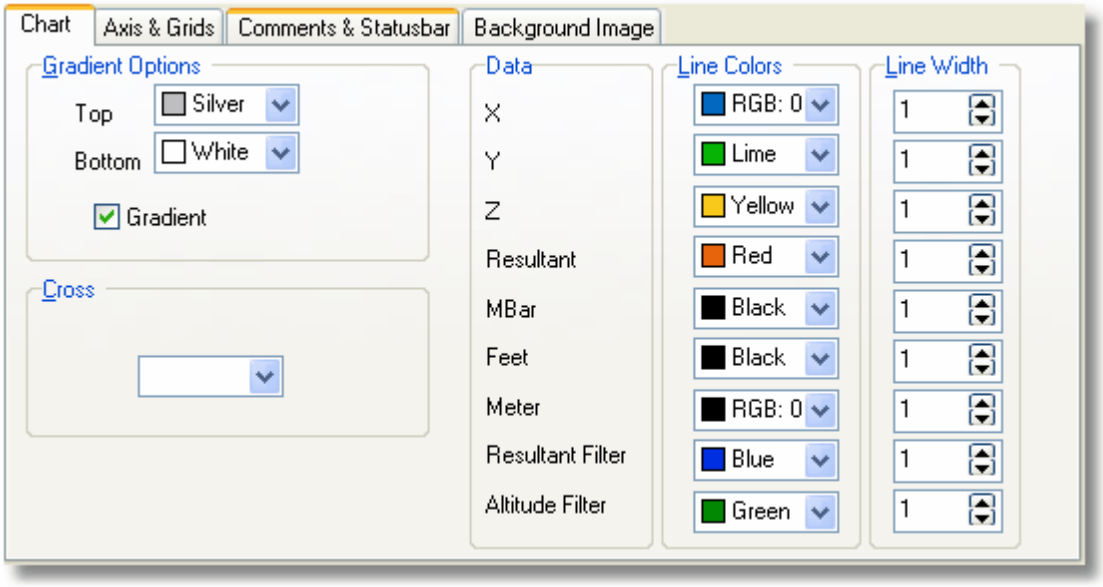
This function allows you to determine the symbol used for decimal and thousands number separation. Settings in this function is also used in the Export Data function.



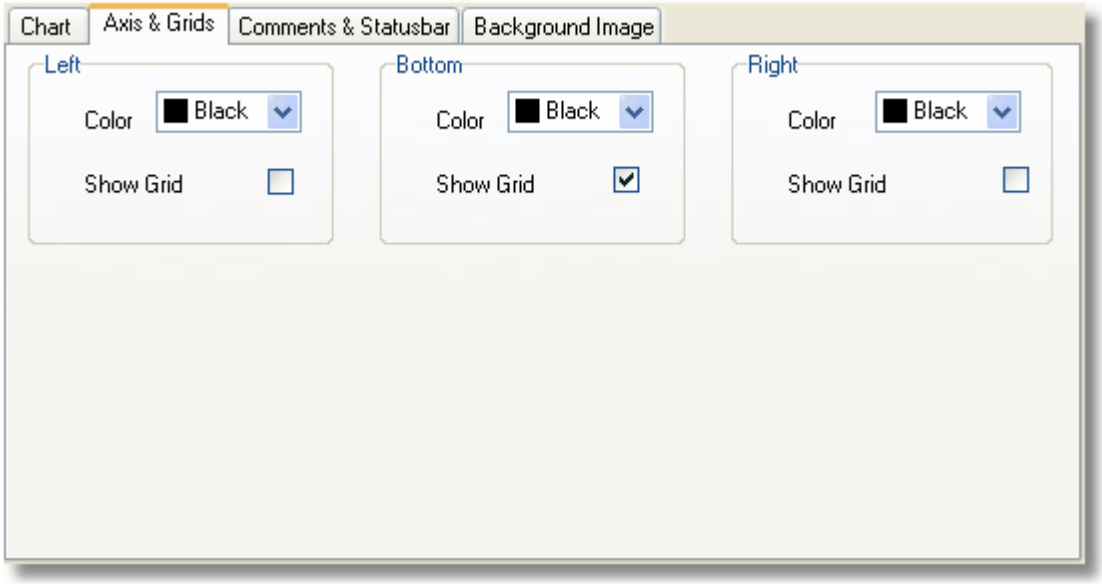
16 Chart Colors



Using this dialog box, you can redefine the colors for the different elements of the graphics screen as well as add a background image of your choosing to display as the background of the Graph.

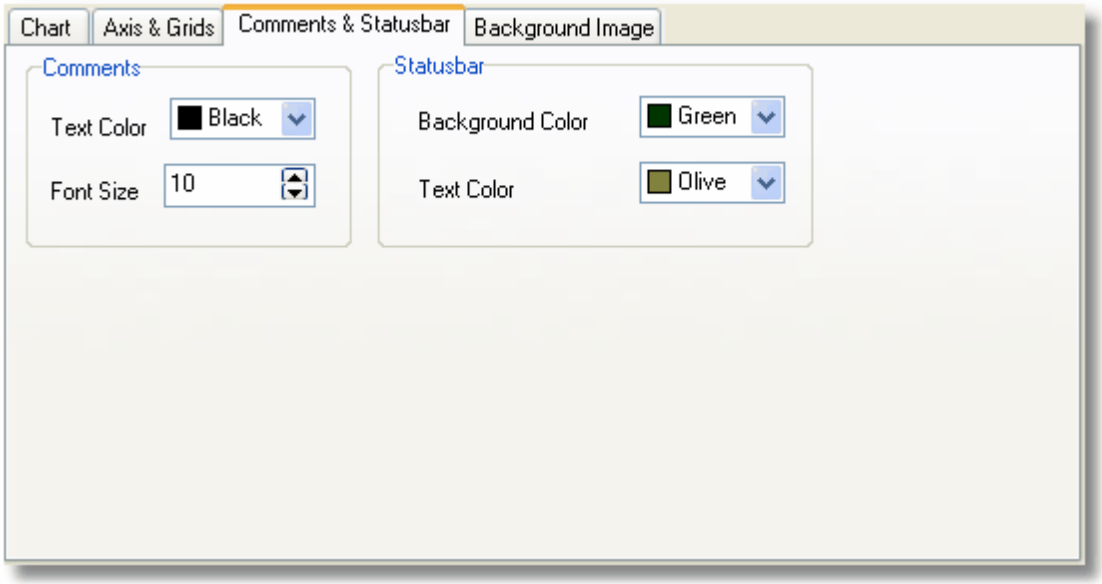


Gradient Options:	Specifies the colors used to fill Chart background
Line colors:	Specifies the line colors in the Chart
Line Width:	Specifies the line width in the Chart

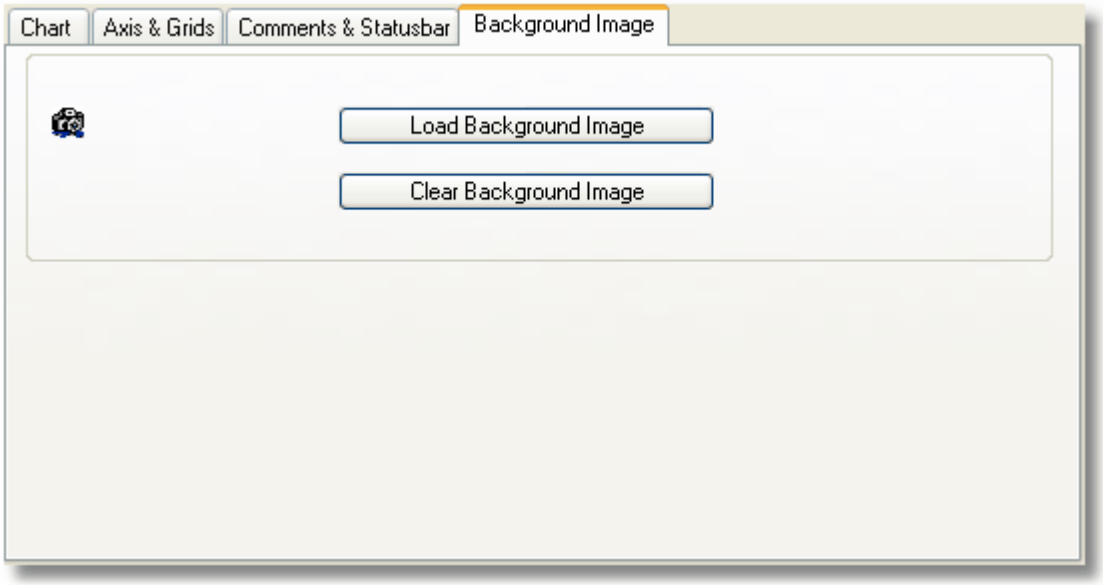


Select color and enable or disable Grid lines on the bottom, right & left sides of the Profile Graph

.

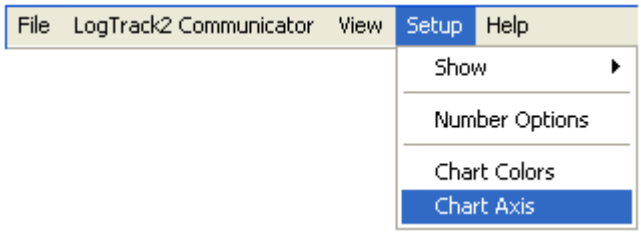


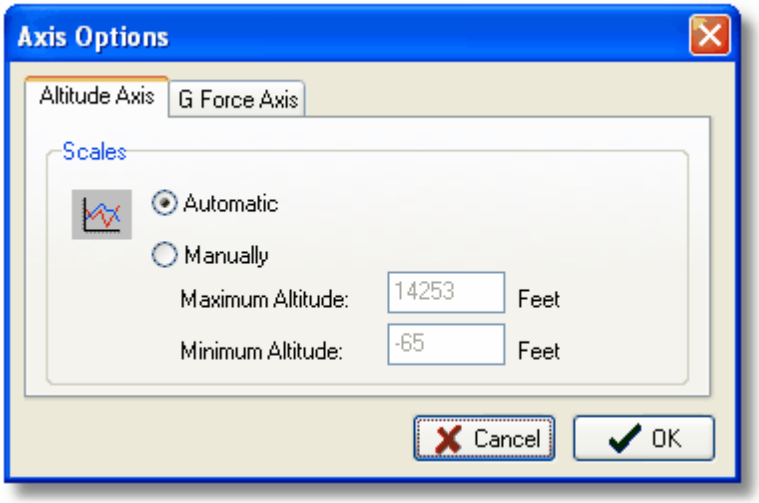
Select color and font for comments



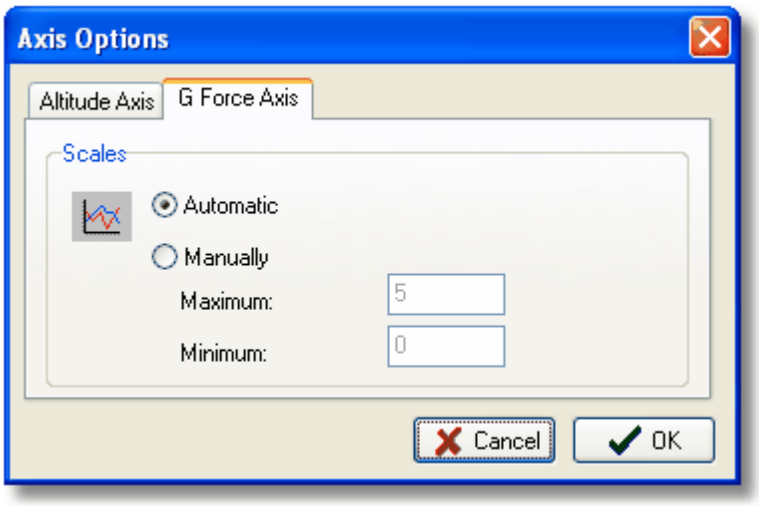
Allows you to choose an image as background for the Profile Graph

17 Graph Axis



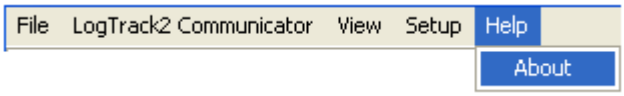


Automatic:	Maximum and Minimum values for the right Axis are calculated automatically, depending on the altitude values
Manually:	(Use this option to compare graphs)
Maximum Altitude:	The highest value displayed on the right vertical (altitude) axis, (Must be higher than the Minimum value)
Minimum Altitude:	The lowest value displayed on the right vertical (altitude) axis, (Must be lower than the Maximum value)



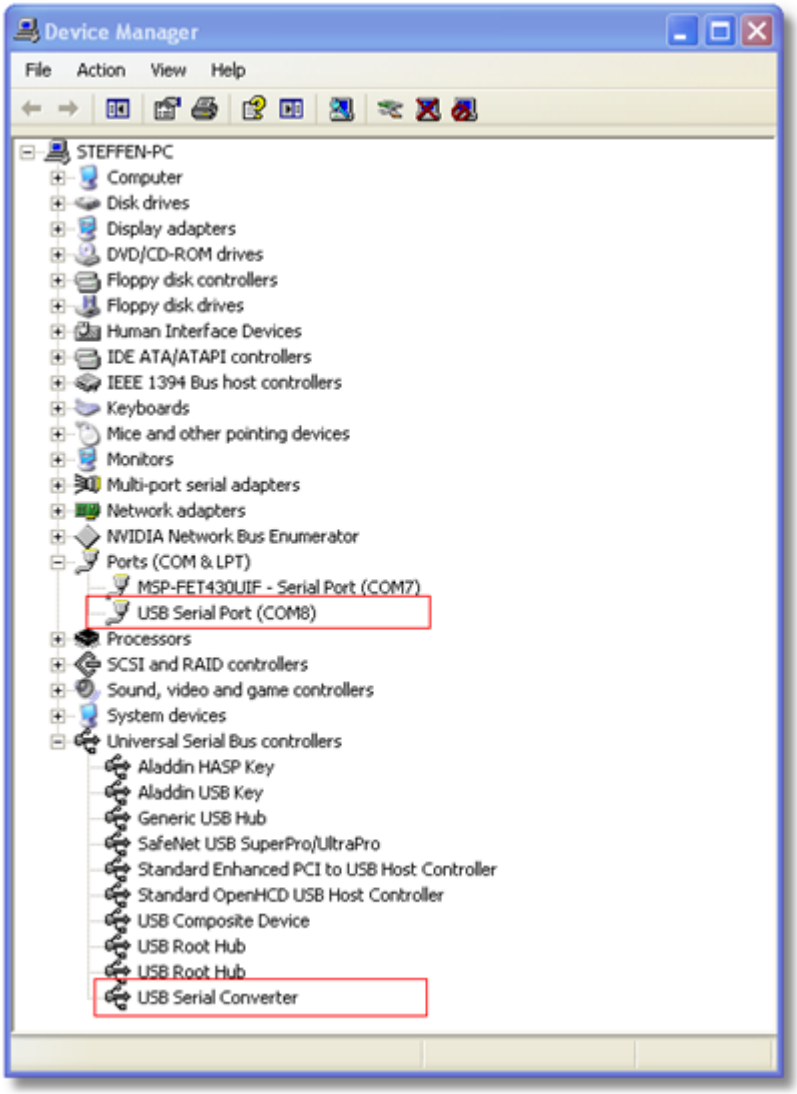
Automatic:	Maximum and Minimum values for the left Axis are calculated automatically, depending on the g-force values
Manually:	(Use this option to compare graphs)
Maximum G-Force:	The highest value displayed on the left vertical (G-Force) axis, (Must be higher than the Minimum value)
Minimum G-Force:	The lowest value displayed on the left vertical (G-Force) axis,. (Must be lower than the Maximum value)

18 About



19 LogTrackII Driver

LogTrackII analysis software is compatible with the LogTrackII device.
With the addition of a Micro USB cable, included in the package, users may download data directly into their PC.



To install the driver please read "LogTrackII Operating Manual.pdf" located on the CD-ROM

20 LogTrackII Introduction

The LogTrackII Data Logger is a very small, thin, low power, easy to use device for measuring barometric pressure, altitude and g-Force data.

LogTrackII can be set to activate/deactivate at different trigger altitudes and can automatically store up to 100 separate jumps or up to 8 hours of recording time without any user input.

This ultra low power consumption device is specifically designed for skydiving, canopy flight-testing, and other pressure relevant environments and applications.
LogTrackII comprises a +/-16 g-force, 3-axis high-resolution accelerometer data recorder. LogTrackII is the perfect data logger where G forces need to be examined relative to barometric pressure and altitude.

Among the features are:

- +/-16 g-force, 3-axis high-resolution accelerometer
- Barometric pressure sensor
- Large storage capacity (up to 8 hours recording time)
- Durable rubberized coating
- Super-thin curved design
- USB port for connection to PC using LogTrackII Data Analysis software
- Long lasting easy to find batteries
- On/off mode
- Built-In mounting holes for various pilot placements.