# VisiRAIL

Track & Vehicle Analysis Software

The Visual Track & Vehicle Analysis Software (VisiRAIL) has been designed to meet the requirements of today's Civil and Permanent Way Engineers. Data collected with the range of Donfabs & Consillia's railway measurement equipment can be displayed, stored, manipulated and reports can be easily produced. In addition to journey ride data, custom information such as annotations or distance markers can be overlaid.
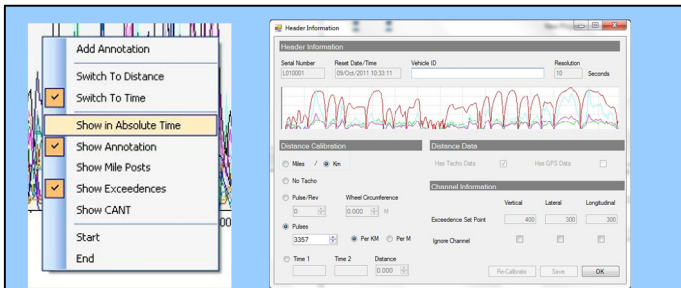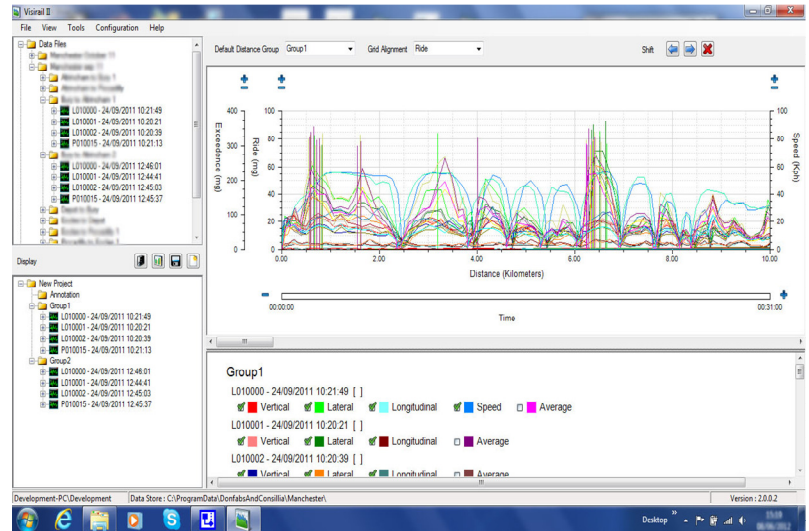
Features

- **Journey Visualisation**
- **Graphical and Tabular**
- **Superimpose Journeys**
- **Time or Distance Mode**
- **Exceedence Display**
- **Import / Export Functions**
- **Custom Plug-ins**
- **Specific Reporting**
- **Single user or network**
- **Annotation Overlays**

User Interface

The screen layout provides a global overview of all the data collected with specific views available to display areas of interest. To ensure ease of use, a familiar "explorer" view displays three different views of the data, the tree view, chart view and data view, enabling easy selection of data for detailed analysis.

Distance or Speed

When an "L" model Macminder or Mactrack system has been used with a tacho input, VisiRAIL can display the data set against distance. Using a simple setup wizard the distance calibration can be added. Speed will also be generated from a "G" model GPS data.

Annotation Overlay

An important feature of VisiRAIL is the ability to overlay an Annotation file. This allows text to be added to a chart to identify actual position on the track with respect to track side markers and places.

Comparision

Data files from multiple tests can be overlaid to allow comparisons of ride quality. When used in distance mode over the same route this gives a direct synchronised comparison.

Data Import and Export

Data is imported via direct connection to the measuring instrument using an import wizard. It is displayed as a folder in the tree view, enabling easy selection of the data set for further analysis or reports. Data stored within the VisiRAIL database can be exported in a CSV format. Custom reports can be compiled upon request. Data can be backed up and shared over a company network with the correct permissions

PC Requirements

Its multi-tier system with built-in scalability allows VisiRAIL to run from any laptop or multi-user system that utilises the standard Windows 7 package.

PC Requirements

Laptop
- Pentium 2GHz processor (minimum)
- 4GB RAM (Recommended)
- 100MB free Hard Disc space or data store (Recommended)
- Microsoft Windows 7
- Net 4.0 (Microsoft free download)

Reports

Utilises special integrated reporting algorithms to provide visualisation of data providing -
- Custom reports can be programmed for the customers specific requirements. Enquire for more information
- Print / Print Preview report
- Email / export report

Database

VisiRAIL utilises a "DataStore" technique for storage of all data sets for easy retrieval and reporting.
- Storage of all data sets
- Delete single or multiple data sets
- Rename, Move, select for Display, Archive and Multiple Selection facility
- Generation of journey projects and annotation files
- Multiuser and datastore sharing
- Auto backup across a network
- Multiple datastores may be generated to allow isolation if data from non-authorised users

Data Display

Alphanumeric readout of captured data providing -
- Export of selected data values or complete file
- Copy / Paste data as XML or CSV into a variety of compatible programmes
- Printing to any windows compatible printer or plotter

Chart Display

Data visualisation and analysis tool providing -
- Multi channel overlaid trace display in horizontal scrolling window, Zoom In and Out, Pan facility
- "Datatip" technology allowing visual feedback of actual accurate data values
- User friendly tree structure for easy selection of traces and data sets
- Overlay and building of grouped traces, "Journey"
- Histogram statistics modes
- Printing of total or part of a journey to any windows compatible printer

GPS Data

- Exporting of GPS data from the data file in nmea format for display in Google Earth or other mapping software

Hardware Interface

- USB for direct download to PC