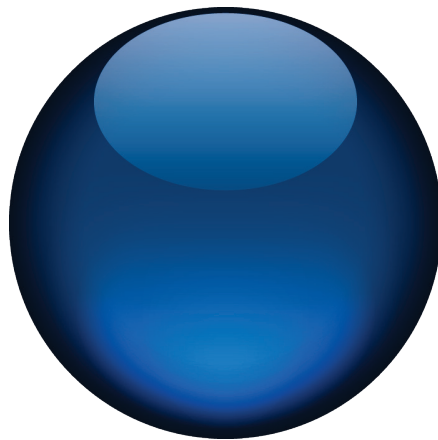




QUICK START
GUIDE

DELPH INS

NAVIGATION & POSITIONING

CONVENTIONS

The following conventions are used in this guide

- The ► symbol leads you through nested menu items and/or dialog box options to a final action.
Example:
Tools ► Export... means "Select **Export...** option from the **Tools** pull down menu".
- bold** Bold text is used for items you must select or click in the software.
It is also used for the field names used in the dialog boxes.
- Courier* Text in this font denotes text or characters that you should enter from the keyboard, the proper names of disk Drives, paths, directories, programs, functions, file names and extensions.
- italic* Italic text indicates the result of an action in the procedures.

RECOMMENDED PC CONFIGURATION FOR DELPH INS SOFTWARE

The minimum PC configuration must be:

- An Intel Pentium® IV or faster CPU running on a Microsoft® Windows®-based computer (Windows XP SP2, Windows Vista or Windows 7)
- 1 GB of RAM (excluding the memory required by your operating system)
- 50 MB hard drive space
- Enough storage space to hold all data

INSTALLATION

Insert DELPH INS CD-ROM and follow the procedure to install the software.



DELPH INS

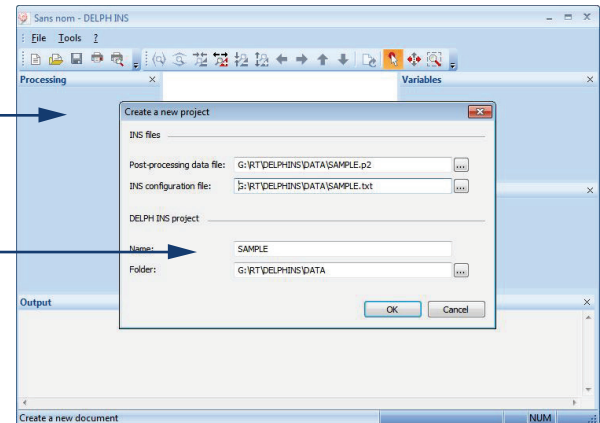
Starting a new project

Step 1: Launch DELPH INS

Double click on . DELPH INS window opens.

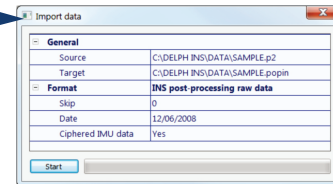
Step 2: Select data files

In the **Create** new project window, select your input files (Post-processing data file and INS configuration file). Enter the name of your project and select the storage folder. Click on **OK** to create the project.



Step 3: Convert the input file

When the input data file is an INS post-processing data file, the **Import data** window opens to convert the input file to the DELPH INS input data file format (.popin). Enter the date of the survey and then click on **Start** to begin the conversion process.

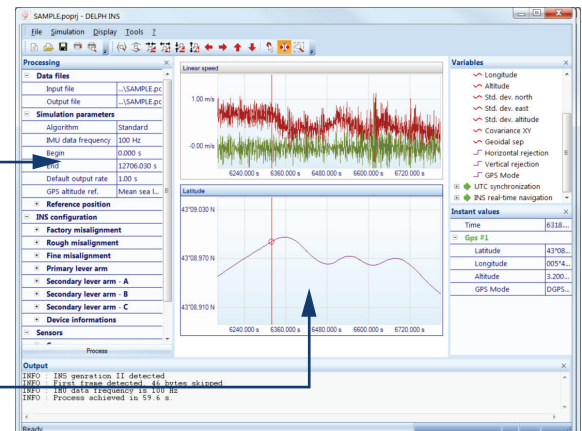


Step 4: Browse the project contents

At the end of the conversion, the project contents are displayed in the **Processing** panel.

The **Variables** panel shows the contents of the data files for each sensor.

To display graphically the data, drag a dataset from the **Variables** panel and drop it into the display area of the main window.



STARTING A NEW PROJECT - STEPS IN DETAILS

Step	Action
1	Launch DELPH INS Double click on  . <i>The DELPH INS window opens.</i>
2	Select data files Browse and select the input data file and the configuration file using the button  . The post-processing data file can be either an INS post-processing data file directly output by the INS or a DELPH INS input data file (.popin). The INS configuration file is not mandatory but it helps to initialize the project with all the INS settings (lever arms, misalignments...).
3	Convert the input file When the input file is a post-processing data file logged from the INS, the Import data window automatically opens to convert the file to the DELPH INS input data file format (.popin). Enter the date of your survey and then click on Start to begin the conversion process.
4	Browse the project contents At the end of the conversion, the Processing panel and the Variables panel display the contents of the project. The Processing panel display the settings of the simulation; the Variables panel displays available data from all channels of the data files. The contents of this panel are updated automatically when new data becomes available. To display the values in a graphic, drag and drop an item from the Variables panel to the display area of the main window.



DELPH INS

Post-processing data

Step 1: Select the simulation parameters

Simulation parameters can be updated in the **Processing** panel. You can edit:

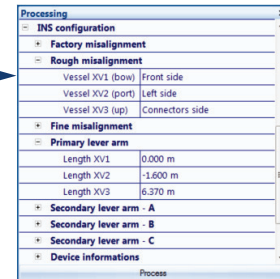
- The algorithm to use
- The time frame of the simulation
- The rate of the data in the output file
- The reference position to initialize the INS
- The GPS altitude reference



Step 2: Update the INS configuration

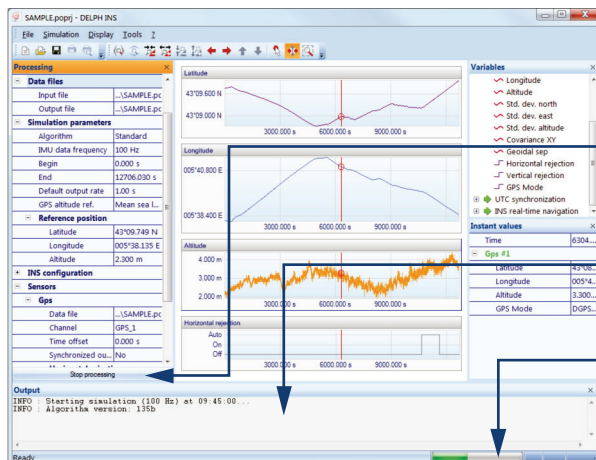
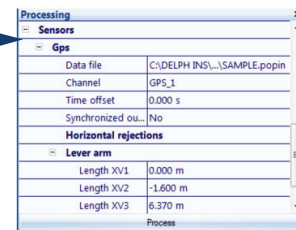
If necessary the INS settings can be edited in the **Processing** panel:

- Rough misalignment
- Fine misalignment
- Primary and secondary lever arms



Step 3: Add and configure a sensor

Select the **Simulation ► Add Sensor** menu to add new sensor(s) to the simulation. The sensor settings are displayed in the Processing panel and can be updated at anytime.



Step 4: Start the simulation

To start the simulation, click on **Process** at the bottom of the **Processing** panel

The simulation is performed as a background task. Notifications (informations, warnings or errors) are displayed in the **Output** panel

The completion status of the processing is displayed in the progress bar.

POST-PROCESSING DATA - STEPS IN DETAILS

Step	Action
1	Select the simulation parameters To enter a value in the Processing panel, click on the line to be edited then click a second time to open the editing mode. To save the modifications, press [ENTER], to cancel the modifications press [ESC]. Using the keyboard, you can use [UP] and [DOWN] arrows to navigate between the fields and press [F2] to open the editing mode. Simulation parameters are initialized from the configuration file (if provided) and the data file. To enter the reference position you can enter the latitude and longitude using different notations: • Decimal degrees: 43.508 N • Degrees, minutes: 43°30.5 N • Degrees, minutes, seconds: 43°30'30.0 N To enter an altitude you can also use several units: • Meters: 2.3 m • Centimeters: 230 cm • Foot: 7.546 ft Select the Tools ► Settings... menu to change the default settings to display values in the Processing panel.
2	Update the INS configuration The INS configuration is loaded from the configuration file when available. Please refer to the INS User Manual for precise details on these parameters.
3	Add and configure a sensor Sensors are extracted from the configuration file when available. To add a new sensor, select the Simulation ► Add sensor menu or use the context menu from the Processing panel.
4	Start the simulation Click on Process in the Processing panel to start the simulation. If the simulation parameters are not correct, a message is displayed and the parameters appear in red in the Processing panel. To start the simulation all the parameters must appear in blue. The simulation runs as a background process. Information is displayed in the Output panel and the progress of the processing is displayed in the right part of the status bar. Click on Stop processing in the Processing panel to abort the simulation.



DELPH INS

Exporting data

Step 1: Open the Export data window
Select the **Tools ► Export...** menu.
The window opens.

Step 2: Select the file to export
Click to activate the **Source** field and click on  to select the file to export.

Step 3: Select the destination file name
Enter the destination file name in the **Target** field.

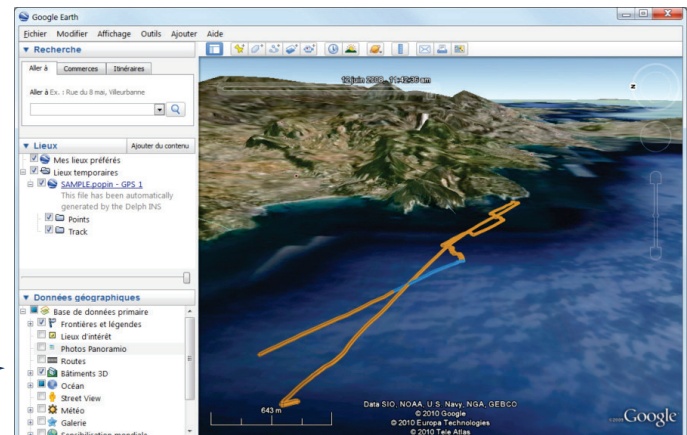
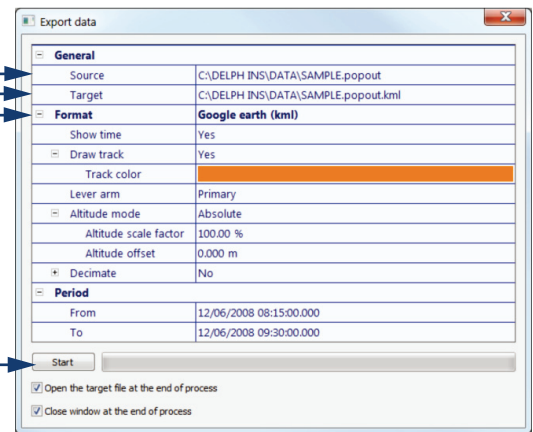
Step 4: Select the format
Five output Formats are available:

- Raw text file
- Google Earth file
- Geographic file
- User defined
- POSPac SBET

For each format, various parameters may be selected to customize the contents of the generated file.

Step 5: Start the process
Click on Start to launch the process

At the end of the process, the result file can be automatically opened and the dialog box closed.



EXPORTING DATA - STEPS IN DETAILS

Step	Action
1	Open the Export data window Select the Tools ► Export... menu. <i>The Export data window opens.</i>
2	Select the file to export You can export input and output data files. Click on the Source field to activate it. Click on . Select the file to export in the dialog box that opens.
3	Select the destination file name Enter the name of the destination file in the Target field. Click on  to browse and select a storage folder.
4	Select the format Five output Formats are available: • Raw text file (.csv) • Google Earth file (.kml) • Geographic file (.shp, .kml) • User defined • POSPac SBET (.out) Depending on the selected format you can select various additional parameters to customize the contents of the result file.
5	Start the process Click on Start. <i>The export process starts, the completion of the export task is displayed in the progress bar.</i>

North America / NORAM

+1 508 975 4640

iXBlue Inc Boston area US

11 Erie Drive, Natick, MA 01760, US

Europe Middle-East Africa Latin-America / EMEA-LATAM

+33 1 30 08 88 88

iXBlue SAS Marly France

34 rue de la Croix de Fer, Saint-Germain-en-Laye, F-78100, France

Asia Pacific / APAC

+65 6747 4912

iXBlue Pte Limited Singapore

15A Changi Business Park Central 1#04-02 Eightrium Singapore 486035

FOR NON-EMERGENCY SUPPORT:

support@ixblue.com

FOR GENUINE EMERGENCIES ONLY;

North America / NORAM

+1 508 975 4640

Europe Middle-East Africa Latin-America / EMEA-LATAM

+33 1 30 08 98 98

Asia Pacific / APAC

+33 1 30 08 98 98