# GLE/PDSw PCM Decoding Software

Extension tool for **Heim-Systems FTrans** software: data decoding and parameters extraction from **DATaRec-D®** recorders.

- Extension tool for the **Heim-Systems FTrans** package**.**
- Suitable for data decoding and parameters extraction from data acquired with **DATaRec-D®** recorders.
- Extraction from PCM streams.
- Data storage in various formats: ASCII, binary and Famos..
- *Map Viewer* tool to easily visualize PCM map configuration.
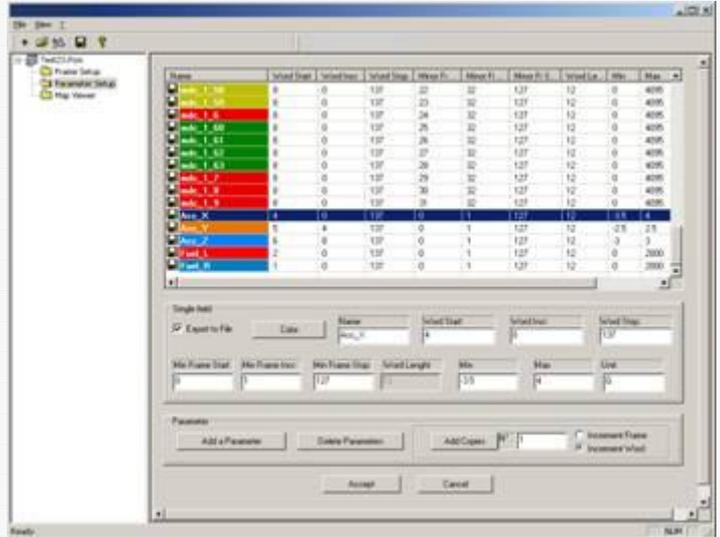
Overview

This software tool is an extension for the **Heim-Systems FTrans** package, supporting data decoding and parameters extraction from PCM streams (accomplished to the IRIG-106 standard) and other digital and avionic buses recorded with the Heim-Systems **DATaRec®-D** family of recording devices.

GLE/PDSw allows to process files transferred to PC via FTrans and to extract an user's defined set of parameters from them.

Selected parameters can then be saved in three different formats: ASCI, Binary or Famos. All the created files are in the XY form, time information and parameter information are saved as well.

It's possible to check the parity bit of the data, and if a single word is fault, a single sample is discard.

A complete data check is performed and in case of incoherent data setup are introduced, a report shows the mistake to the user.

The **GLE/PDSw** program (Irig-106 version) foresees three different sections, each of them easily accessible through a "tree structure" on the left side of the main window. The *Frame Setup* permits quickly define the PCM map properties, the *Parameter Setup* to select the parameters to be extracted and the *Map Viewer* is very useful tool able to summarize the whole program configuration.

More details are depicted in the following:
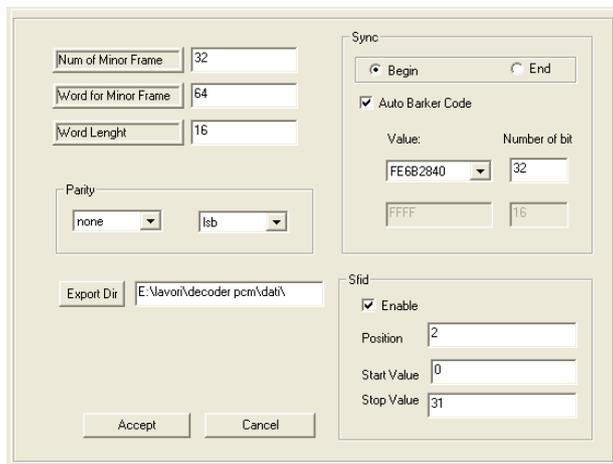
Frame Setup

In this section the main characteristics of the IRIG-106 stream can be defined like the format frame, the word length, the sync words and SFID properties.

Parameter Setup

The word selection and the main characteristics of the physical parameters to be extracted from the map can be set here. This section is mainly formed by a spreadsheet where each row corresponds to a selected channel with the properties describing its position inside the map. The addition of channels which differ only for the start word in the minor frame can be quickly done through the "Add Copies" button. Moreover it is possible to define on single-channel basis the raw data linear conversion in engineering unit.

Map Viewer

This is a very useful tool that summarize the entire map structure and the inner parameters' position as defined in the previous sections. It looks like a common worksheet where the selected channels have different colors and can easily be identified through the zoom buttons.

The extracted parameters on the base of any single channel, can be saved as ASCII, Binary or FAMOS files format with related Engineer Units, different file formats can be implemented on request and as well a lot of other eventual specific and useful features.

Other extensions of this package are available for different digital and avionics buses recorded with the units of the DATaRec®-D family.

A demonstration version is available on request. Please send an email to info@greenlake-eng.com to receive more information.

Due to continuous developments specifications subject to change without prior notice