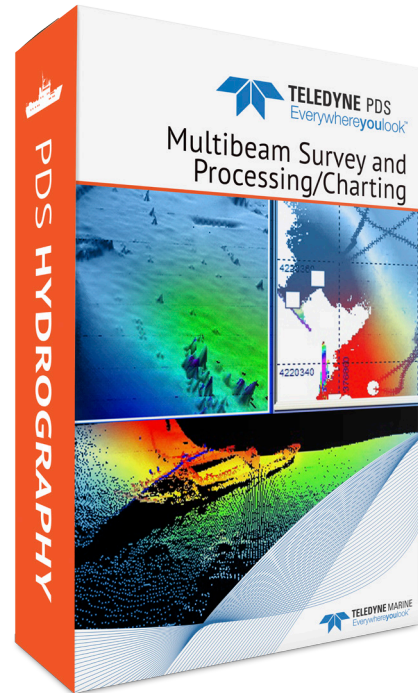
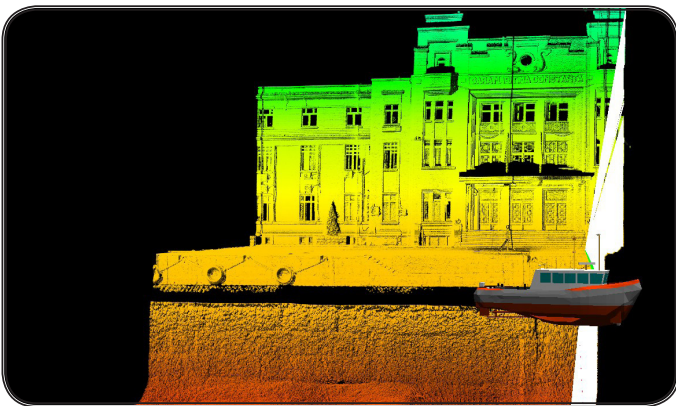


# Multibeam Survey and Processing/Charting

Teledyne RESON's in-house developed Teledyne PDS Multibeam is designed to efficiently create high quality, fast results - whether it is for multibeam surveys, singlebeam surveys, construction or dredging works.

Teledyne PDS for Multibeam Surveys provides the functionality for survey planning, data acquisition, data processing, editing, volume calculations and chart production. This turnkey solution offers the surveyor and helmsman a strong tool to carry out the Multibeam survey efficiently. Progress is shown realtime in 3D views and topviews using a color-coded Digital Terrain Model. Various filter settings can be applied to the Multibeam data online, thus providing real time data processing. QC displays reassure the operators that the data is of the desired quality.



The 3D editing module combines 3D swath editing, MB and Laser calibration, DTM modeling and editing, CUBE modeling, WCD data visualization and SVP editor. Combining all these features in to ONE module saves a lot of time for the data processor. While cleaning swath data your CUBE and DTM models are updated on the fly!

After data processing the data can be used for volume calculations and charting. The chart model offers the operator quick plot results especially when repeated surveys are to be plotted. The plot module has proven to be one of the best available on the market! Optionally data can be exported to a GIS database for more efficient data management.

## FEATURES

### Teledyne PDS MULTIBEAM

- Complete software suite for acquisition, processing and charting
- The tool for efficient and accurate results
- Capable to handle large data sets
- Powerful and fast Multibeam calibration tool, combined in processing module or stand-alone
- 3D MB data editor combined with 3D DTM and CUBE editor
- Integrated SVP Editor
- Water Column data Visualization
- Strong integration with Seabat 7K series
- Easy to extend to other Teledyne PDS applications



### PROCESSING

Data ready to process directly after data acquisition. MBES data processing module includes:

- Integrated 3D area MB editor with automatic filtering functions against CUBE or DTM model.
- CUBE and DTM modeling with 3D edit and interpolate function
- CUBE and DTM models are updated on the fly while editing swath data.
- Add/change applied MB filters.
- SVP-Editor with instant correction in profile box.
- Dedicated fast and reliable MBES/Laser calibration function.
- Water Column Visualisation
- Quick calibration function for check on large data sets.
- 3D boxes for closer inspection/detailed editing.
- All editors have a multiple UNDO/REDO function.
- Position editor shows position with navigationchart in background.
- Tidal data editor.
- All editors show the validated data and/or the original data.
- SSS and Snippet views.

All editors in one screen layout: Synchronised processing DTM data shows the following items color coded: depths, minimum, maximum, standard deviations and hits per cell.

### SURVEY OPERATION

- Acquisition, time stamping and logging of all sensors in a single file. Navigation charts: DXF files, C-MAP, S57 import, Tresco charts, Geotiff, User defined Charts.
- Shows DTM colour-coded for depths and differences with design or previous survey.
- Profile displays show Multibeam data.
- 2D and 3D Planview with progress of survey.
- TPE error view.
- Display for SSS and Snippet data.
- Status views of equipment, logging and alarms.
- Multibeam data online flagged for Filter settings.

### INTERFACING

- Positioning systems, Compass - Motion sensors.
- PPS interfacing.
- SSS and snippets data from SeaBat systems.
- Sound velocity probe.
- Singlebeam echosounders.
- Laser Scanners.
- Tidal information.
- Magnetometers.
- Configurable input/output. Other equipment on request

### PLANNING

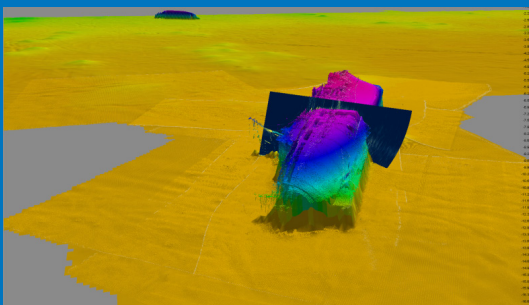
- Interactive Runline editor, Routes, Waypoints.
- Multiple DXF charts can be read simultaneously.
- Digital Terrain models.
- 3D design TIN models.
- 3D design models creation from polygons and 3D-DXF files.
- Use another DTM as design.
- User defined Charts.

### CHARTING

- Powerful tool for generating charts.
- Multiple planviews Multiple profiles possible.
- Depth contouring.
- Text, descriptions and images.
- Plot profiles

### VOLUME COMPUTATION

- Compute volumes and generate reports Volumes computed from DTM gridmodel
- Design model can be:
- Profile design
- 3D TIN model from 3D dxf format
- Digital Terrain Model



### WHY CHOOSE Teledyne PDS MULTIBEAM?

- Reliable hydrographic software for shallow and deep water applications
- Fast Multibeam and laser data calibration/verification module
- The tool for efficient surveying, processing and charting
- Teledyne PDS flexible software, tuned for standard and special projects.

For more details visit [www.teledyne-pds.com](http://www.teledyne-pds.com) or contact your local Teledyne RESON Office. Teledyne RESON reserves the right to change specifications without notice. 2015©Teledyne RESON

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