HYDRO*pro* Navigation

Hydrographic Survey Software

Trimble's HYDRO*pro*™ Navigation software is an easy to use software solution for today's hydrographic surveyor. Designed with superior performance and efficiency in mind, it allows for significant improvements in productivity on even the most complex marine survey application.

Superior performance and productivity

The HYDRO*pro* Navigation software operates on Windows operating systems. It provides an easy to understand graphical interface and flexible configuration that enables immediate gain with minimal training. The software supports multiple sensor inputs, ranging from heading sensors to tide gauges and echosounders. Combined with Trimble's DGPS, RTK, or Total Stations it provides precise 3D positioning in real-time.

The HYDRO*pro* Navigation software uses advanced time-stamping techniques for precise data synchronization. All data is stored in a single Microsoft Access database file to allow for more efficient file management activities.

The software's flexible operation provides multiple 'steerby' capability, allowing guidance of multiple vessels and offsets to multiple guidance objects such as targets, lines, or routes. Guidance between mobile vessels is available. Any number of vessels can be monitored from a single location or across a network. Background files can be displayed graphically to show position in relation to guidance objects, coastal features, and so on. All of the displays, including the Remote Helmsman display, are available on seperate screens throughout a vessel.

A Coordinate Calculator is included, so you can convert single points and entire files to different datums and projections.

Graphical data editing with the HYDRO*pro* NavEdit software

The HYDRO*pro* NavEdit software integrates seamlessly with the HYDRO*pro* Navigation software. With it, you can graphically filter and edit depth and tide data. The optional Trimble Terramodel® HDMS Windows processing software for volumes and 3D visualizations is also available. This market leading sofware offers rapid data processing (contouring, plotting, etc) for large hydrographic projects.

You can upgrade from the HYDRO*pro* Navigation software to HYDRO*pro* Construction, designed specifically for rig positioning, barge work, piling, and dredging, as well as hydrographic surveying.

The HYDRO*pro* series builds on over a decade of development and industry-based experience. The name 'HYDRO*pro*' has become synonomous with productivity, quality, and flexibility—a complete solution for your marine surveying application.

Key features and benefits

- Easy to learn and use
- Supports multiple sensor inputs
- Vessel to vessel and multiple 'steerby' guidance
- Data is stored directly into a single database
- Graphical data cleaning
- A complete 'field to finish' system

Trimble

HYDRO*pro* Navigation

Hydrographic Survey Software

Applications
- Port and harbor surveys and maintenance
- General hydrographic surveys
- Environmental surveys
- Cable and pipe maintenance surveys
- Mooring buoy installation
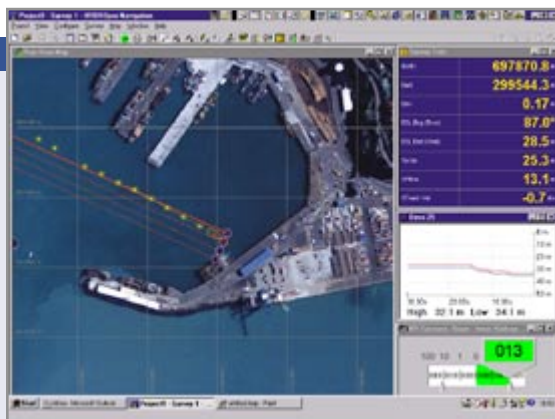- Industrial marine applications

Features
HYDROpro Navigation software
- Operates on Windows operating systems for simple point-and-click operation
- Fully configurable geodetic database with many pre-defined ellipsoids and coordinate systems
- Coordinate Calculator for points and files
- Built-in site calibration and adjustment
- Graphical vessel shape editor
- Automatic switching to backup (secondary) position and attitude sensors
- Powerful multiple 'steerby' facility and vessel to vessel guidance
- Multiple vessels and guidance objects (targets, runlines, routes)
- Interactive, real-time Plan View Map with rotation including Line Up
- DXF and raster image background display files supported
- Configurable survey text displays (data from Data Tree)
- Log of operator's notes and system alarms
- Multiple sensor inputs (limited by hardware only)
- Heave and tide data from RTK
- Real-time depth profile and channel cross section display
- User-defined echosounder annotation
- Navigation data output to multibeam systems
- Project information and survey data all stored in a single Microsoft Access database file
- Heading from dual positioning devices
- Fully configurable equipment timing (latency, pulse-per-second, 'timeouts')
- Time stamping to 1-millisecond precision
- Output of data to printer, file, or serial ports in real-time
- On-line help and training

HYDROpro NavEdit software (included)
- Position, depth, heave, and tide editing by interactive graphics or batch processing
- Graphical displays show both the raw and composite data on same screen

- Sounding Selection to reduce processed data volume
- User-definable ASCII format and proprietary data files for postprocessing (import and export)

Terramodel HDMS software (optional)
- Rapid contouring, plotting, cross sections, and volumes

Technical Specifications
Minimum Configuration

Processor . . . . Pentium II 300 MHz
RAM . . . . 128 MB
Hard drive. . . . . 4 GB
Monitor. . . . . SVGA color 1024 × 768
Data devices. . . . . CD-ROM drive
Operating system . . . . Windows NT, 2000, or XP Professional

Options
Components such as radio telemetry can be ordered through Trimble.
- Fix box for triggering and receiving events
- Training

Ordering Information
HYDRO*pro* Navigation software is available standard with quick reference guide, security key, and software manuals on CD.

HYDRO*pro* Navigation . . . . Part Number 44292-00
HYDRO*pro* Construction upgrade . . . . Part Number 44266-00
Terramodel HDMS . . . . Part Number 44260-00
Terramodel Channel Design . . . . Part Number 45164-00
Terramodel Visualizer. . . . . Part Number 44261-00

For further information contact your local Trimble office or representative. You may also visit our website at http://www.trimble.com.

Specifications subject to change without notice.

YOUR LOCAL TRIMBLE OFFICE OR REPRESENTATIVE

www.trimble.com

Trimble.