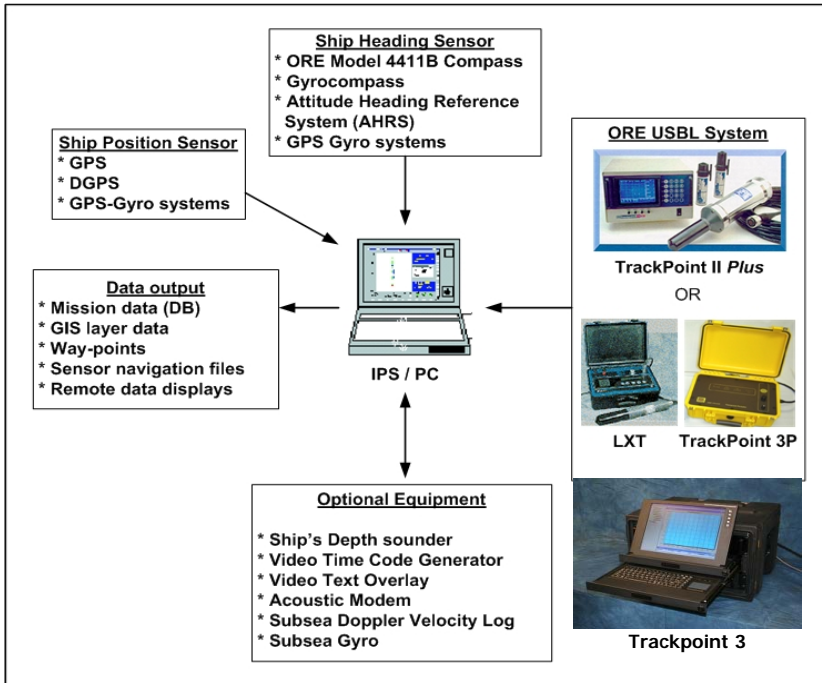


IPS

Integrated Positioning System (Software)

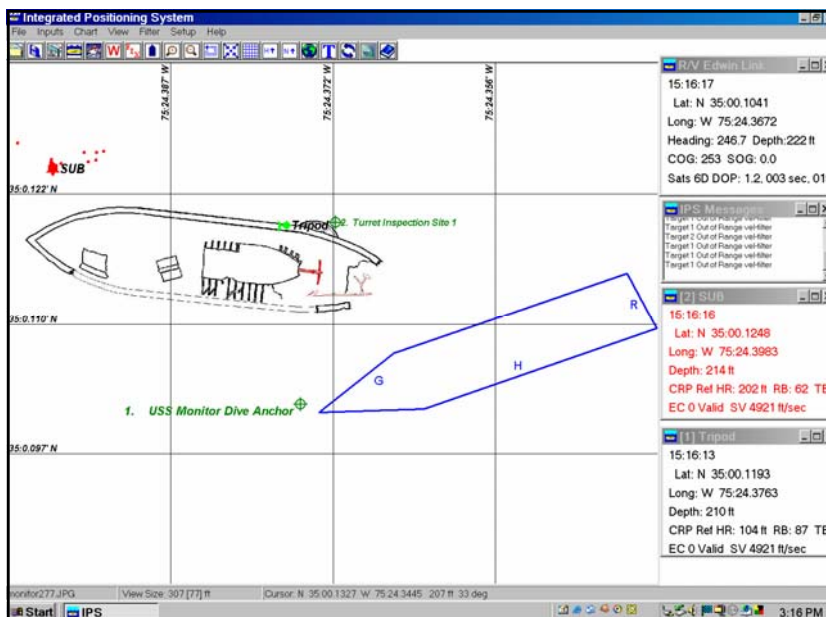


The Integrated Positioning System (IPS) is a PC based software package specifically designed for tracking and navigation of a surface vessel and multiple submerged targets (e.g. AUV, ROV, submersible, tow fish, diver etc.) The IPS software supports the integration of an ORE acoustic tracking system (TrackPoint 3, 3P, TrackPoint II Plus, or LXT), a ship's GPS, heading sensor (magnetic, gyrocompass, GPS- Gyro) and if available a motion sensor (VRU, AHRS).

The position of the submerged targets relative to the support vessel is determined by an ORE TrackPoint or LXT system and sent to a PC via an RS-232 or Ethernet link. The actual position (latitude / longitude / depth) of the submerged target is then calculated based upon the range and true bearing relative to the ship's position as supplied by a GPS receiver. The results are then graphically displayed on the PC. The data may be stored and retrieved for later processing.

Applications

- ROV tracking including support for Doppler Velocity Log (DVL) based navigation
- Manned Submersible Tracking including DVL based navigation
- UUV/AUV tracking including Acoustic modem support
- Survey / Towfish Tracking
- Initial site Location
- Pipeline Survey



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Specifications

IPS Software

IPS Software Features

- Easy to use graphical user interface
- 3D sensor calibration and display tool
- Online help
- Navigation of the support ship or a submerged target relative to any other target or known location
- Multiple display modes (GIS layers, Lat/Long, UTM, North-Up, Heading-up)
- GIS data support (display, conversions & output)
 - * Vector formats (.SHP, MIF, .BML, .DWG, .DXF, .DGN, VPF)
 - * Image formats (.BMP, .TIF, .JPG, .PCX, .TGA, BSB/.KAP) with Image geo-referencing file (ESRI World, Blue Marble .RSF, Geo Tiff Header) and map transformation model (none, Affine, 1st and 2nd order polynomials)
 - * Supports 12,000 pre-defined coordinate systems (165 Ellipsoids, 630 Datums)
 - * Create custom coordinate systems
- UTC Time synchronization
- Geodetic conversion utility
- Survey line generator
- Variety of data output formats. Ready for interfacing with other data acquisition and positioning systems
- Supports video text overlay and time code generators
- Playback mode and data post processing
- USBL and sensor calibration support
- Real time and post processing data filtering (Kalman filtering)
- Doppler Velocity Log based navigation support

PC Requirements

- Processor: Pentium or Higher (800 MHz)
- OS Version: Windows 98SE / ME / W2k / XP
- Minimum 256 MB RAM
- Minimum Screen Resolution 1024 x 768
- One available RS-232 serial (com) port used with a serial Multiplexer or USB port for RS-232 to USB converter or Ethernet for UDP connection for TP3



***What you do underwater is your business...
... Helping you do it better is ours***

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