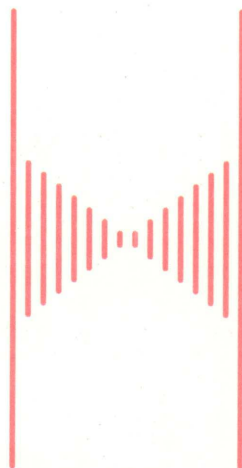


MINI NAV



Navigation Positioning Software FOR THE PC

- Easy to Use
- Portable
- Inexpensive
- Efficient
- Compact



Surveyors
Dredge Masters
AHV-Tug Boat Skippers
Environmental Scientists
Oceanographers

MINI NAV

Application: MiniNAV is a PC based navigation and positioning software package especially designed for small boats. It is quick and easy to set up, incorporating a function key driven user interface with both graphical and text work displays. These features make MiniNAV a useful offshore navigation tool for oceanographers and anchor handling vessel skippers as well as surveyors.

SOFTWARE

MiniNAV is DOS based written in a combination of Quick Basic and 'C'. The programme is divided into two distinct stages, off line and on line. In the off line stage the user can set up all the system parameters required for navigation. On line, the system navigates as well as allowing many of the off line parameters to be altered if necessary.

CAPABILITIES

Line Running

- 50 Lines at a time may be stored in memory
- Straight Line running is supported

Targets

- 50 Target positions may be set in memory at any one time.
- 1 target at a time may be set current. When set current MiniNAV displays distance and bearing information to the target from the ships position.
- 6 different choices for graphics target display.

Echo Sounders

- Sounders currently supported are:
 - Deso 20
 - Odom EchoTrack
 - Simrad 300P
 - Deso 22
 - Odom Digitrace for Raytheon echo sounders
- Any other echo sounder with a serial output may be interfaced by BTW Associates Ltd.

VESSELS

- MiniNAV supports 1 vessel.
- The vessel outline may be defined by up to five points.
- A scaled vessel outline may be used on the display.

SYSTEMS

- MiniNAV supports one primary system. The type of system depends on the navigation equipment being used.
- The currently supported navigation systems are:
 - DDMU 540 or 542
 - RACAL Microfix
 - Syledis MR3
 - Del Norte 1005 GPS
 - Ashtech XII GPS
 - Trimble 4000 series GPS
 - Trimble Delta NAV GPS System (both versions)
 - Argo
 - DDMU 542 using Rho/Theta option
 - Trimble Navtrack GPS
 - Trimble Transpac II GPS

STATIONS

- MiniNAV stores up to 12 stations in memory at a time.
- Up to 4 stations may be used in a system.

GRAPHICS DISPLAYS

- Half screen graphics display. Shows textual information on other half of screen.
- Full screen graphics display. Shows large numeral line running information and minimum of textual information.
- Coastline may be displayed.
- Current line is displayed.
- Current target is displayed.
- All defined symbols displayed.

CALIBRATION SOFTWARE

- MiniNAV will perform transit calibrations.
- Dual system comparison supported.

PLOTTING

- MiniNAV plots track to HP7475 or equivalent plotters.
- 50 Charts can be stored in MiniNAV at one time.

PRINTING

- Single line format of fix information printed.
- Dual Comparison print out.
- Full information print out.

LOGGING

- All data is logged to disk if required.
- Data logged in readable ASCII format.
- Format may be converted in post processing to any other format required (optional extra).

FIXING

- Manual fixing at any time.
- Automatic fixing by time.
- Fixout signal provided for external equipment mark.
- User selectable ratio of fix to fixout signal. This allows less fixout marks on echo tracks etc. when fixing is being done at relatively high rate.

INPUTS

- All inputs are RS232C format
- Up to 3 serial ports (COM1, COM2 & COM3)

GYRO

- Most synchro or stepping type gyros may be interfaced via a gyro repeater with a NMEA 0183 standard output converted to the RS232 protocol.

SMOOTHING

- Speed and Course made good smoothed over last 10 cycles.
- GPS data corrected for any time lag.

SYMBOLS AND COASTLINE FEATURES

- Various symbols may be defined to represent known features at sea. These are shown on the graphics display and are used mainly as a visual aid.
- Up to 36000 points of coastline feature can be in memory at one time.

LINE GENERATION

- MiniNAV has the ability to generate survey lines automatically for the user using a stand-alone utility.

EXTERNAL OUTPUT

- A serial data string may be output to provide information to other computers or for a telemetry link.
- A special output is supported to provide support for BTW's Barge Management System.

MANUAL DATA PROCESSING

- Navigation data may be entered manually if required.

OFFSETS

- One offset from the antenna may be defined.
- The user may steer by the offset position or the antenna position.

SPHEROID AND PROJECTION

MiniNAV supports the following spheroids:

1. International
2. Revised Everest
3. WGS 84
4. WGS 72
5. BESSEL 1841
6. User Defined

MiniNAV supports the following projections:

1. Flat Earth (no scale factors)
2. Universal Transverse Mercator
3. Transverse Mercator
4. New Zealand Map Grid
5. Malaysian Rectified Skew Orthomorphic
6. Borneo Rectified Skew Orthomorphic

HARDWARE

Recommended Minimum Configuration

- IBM PC 100% compatible computer with the following:
 - EGA
 - 80286 12Mhz Processor
 - Maths coprocessor strongly recommended with 286 processors
 - 640Kb base memory
 - 20Mb HDD

For more information contact:



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