

**The following features have been added since V2.22**

- Added new interface for Micron INS into MicronNav application
- Added Version 3 BSB (.KAP) Chart import to MicronNav application
- Added boat image marker auto-load for MicronNav chart display. Added handler for CDL TOGS data string processing as part of compass device input
- Utilities menu – can now display separate Ship and Sub compass inputs (rather than one only)

**Seanet Pro V2.21 (20-01-14)****The following features have been added since V2.2**

- Installer is Windows 8 ready. Minor program modifications necessary for Windows 8 compatibility
- Sonar can be geo-referenced from 2 marker positions
- Logging modifications: 20GB maximum V4Log file limit; auto generate multi-file log sets when user max logfile size is reached – replay of file sets also possible by selecting 'Continuous' loop in replay dialog
- Added real time input of ChesaPeake target marker strings from COM port (new 'Marker Input' device in Channel Setup); import of ChesaPeake target files
- Handling of Aux serial data stream (strings include: \$HCC compass, \$DBS Depth, \$PCIT Camera Tilt, \$PCIPR Attitude); added Compatt POSII and NMEA \$xxTTM string inputs
- Gemini cursor co-ordinates reporting – added serial output feature into REMV4
- MicronNav modifications: Option to force Relative co-ordinates in serial output strings – previously this was auto switched between world & relative co-ords and dependent on GPS input availability; Ship Outline on chart now shows the dunking transducer position as well as ship center – to clarify when taking screen measurements as to where the datum was; Option to display and serially output relative position data from a ship center datum or dunking transducer datum
- Added 'Status' notification into Seanet Setup if Surface PC IP Address and Gemini IP Address not on same subnet

**Seanet Pro V2.2 (26-07-12)****The following features have been added since V2.1**

- Addition of Altimeter form and its inclusion in the Application Wizard
- MicronNav chart – option to display serial vehicle data inputs such as depth, heading, pitch & roll. A vehicle data display panel has been added to the chart corner for this
- MicronNav marker Load/Save with new simplified CSV marker format added
- MicronNav/Chart/Gemini integration extended to include target marking and import/export features.
- Remote beacon positions can now be received serially and displayed on MicronNav chart
- Side scan data can now be geo-referenced to USBL position updates
- TSS1, \$PSXN input strings and \$PPTIROV output string added
- Max Log Size setting limit, for .V4Log files, increased to 1.9GB
- Gemini NBI support

**Seanet Pro V2.1 (06-01-12)**

The following features have been added since V2.

- Hammerhead Sonar features added; including Sonar image Snapshot, Snapshot area marked on MicronNav chart, North Aligned image correction, Geo-referencing from GPS data / MicronNav USBL / Fixed Position entry
- Control and display of up to 4 Gemini Sonar heads possible. Multiple Gemini windows can be created in Application Wizard. Gemini head selection available from a drop-down control added to the Gemini settings bar
- Gemini Sonar can be Geo-referenced from GPS data / MicronNav USBL / Fixed Position entry Heading alignment can be applied from an External compass input or a Fixed heading entry
- New Logging features added; selection of UTC or Local time stamping, Max AVI size setting for AVI file-set recording (2GB limit), Gemini log optimization for faster playback, .V4Log files in excess of 2GB now possible
- Toolbar modifications; new button designs, large button option for larger screen resolutions, Print to File button renamed Snapshot button
- Device windows can now be docked into Sidebar
- MicronNav features added; includes Load/Save Markers, Save snail trail positions to File, Sonar PPI range overlay added to indicate sonar area coverage, 'L' keyboard hotkey for laying marker on chart at current Sub position, GPS Heading data can be applied for dunking transducer heading reference

**Seanet Pro V2.0 (07-03-11)**

The following features have been added since V1.18

- Update for Windows 7, includes new Look and Feel
- Splitter Panel has been replaced with a Docking control. Multi-App windows can now be dragged, docked and repositioned or left floating
- Application Wizard added so that custom Applications can be created
- Screen Capture to AVI facility added
- Latest Video codecs added for compressing video and screen capture files
- Bathy window has been revamped
- Enhanced MicronNav Charting features added
- MicronNav Chart Setup and Job Setup wizards added
- Profiler Windows scan indicators now show transducer sweep position
- Geo-referenced Sonar data. An Installation menu item added to enter a fixed position or use GPS fix data updates
- GPS Setup has facility to enter user defined Datums for Geodetic Shift
- Enhanced Sonar display for new Hammerhead Sonar. Includes translucent Compass/Attitude widget displays
- Sonar auto dynamic range adjustment for improved plug 'n' play. Added software RAT control to manually adjust dynamic range Sensitivity
- Added interface to new head firmware for devices with Auto-comms switching ability
- Added Overlay menu item to Profiler display

**Seanet Pro V1.17 (17-10-07)**

The following features have been added since V1.16

- Now installs and runs on Windows Vista OS
- Supports SCU5 SeaHub interface and SeaNav100 interface (i.e. SeaHub with daughter card for MicronNav ops)
- Supports the MicronNav, MiniModem and MiniAttSen. You will see this in any Application that includes "Nav" in the title
- Added Lat/Lon to OSGB projection (OSTN02 transform) for GPS data input
- New interfaces for YSI and Sea&Sun CTD serial Sensors. Connection is via Sonar Aux port
- Conductivity display added to Bathy panel. Now has option to toggle between display of Salinity or Conductivity data
- Roll Sensor enhancement in Profiler display. Roll Sensor can now be mounted at any location on vehicle and angle corrections applied to profiles relative to this point. This centre of rotation point is set in the Profiler display
- Added interface for Turns counter to serial input list. This is brought in as 'Aux Device' data in 'Utilities' - 'Com Setup' and displayed in Sidebar
- Created Sidescan Aux Port interface of Altimeter and DigiQuartz devices. This data is automatically displayed in the Sidescan Toolbar when Aux Altitude / Depth data is received
- Refined the Video panel Log Options. Addition of Resolution settings for adjusting captured video size. Addition of a 'Log Enabled' check-box which adds/removes video data to a Log session. Previously, active video was always recorded during logging
- DST heads are up to V8 Bin files. New set of SeaHub FTDI USB drivers to support SeaNav100 i/f box
- Added a 15m Range Scale to the Profilers. Added a 400m Range Scale to the Sidescan for the Deep 150kHz fish - also added 150m Range
- Removed any Baud Rates that are below 4800 from drop-down lists in Comms Setup page and such like

**Seanet Pro V1.16 (29-12-06)**

The following features have been added since V1.15.

- Load and Save Settings on toolbar has been improved. Now includes ability to save and name up to 8 different configurations. Previously this only allowed 1 configuration to be saved and loaded
- The Colour Setup option for each Sensor on the toolbar has been developed. This now allows unlimited user schemes to be created and deleted whilst protecting the 7 factory schemes (Colour1..Colour7) from change or deletion
- The Sub Bottom 'Altitude' is now available on a serial port through the REMV4 program interface. This can either be through Node 15 Sub Bottom or via Globals (Node 248). N.B. in Seanet Pro, in 'App Setup' for Sub Bottom there is a 'SBP is Global Altimeter' check-box
- Imaging Sonar with compass and GPS input. When compass and GPS input data is valid, the 'Cursor' display in the Sonar application will now report Lat/Lon or E/N when the mouse pointer is moved over the target on the Sonar plotter. This was already available with the Sidescan and Sub Bottom applications

**Seanet Pro V1.16 (29-12-06)...Continued...**

- In the 'Channel Setup' page (Utilities - Com Setup), a seventh column has been added to indicate serial channel type. A legacy COM Port or I/O adapter card will be displayed as type 'Generic'. USB to Serial converters displayed as 'USB' and SeaHub ports displayed as 'SeaHubA' (PortA) .. 'SeaHubD' (PortD) and 'SeaHubMain' (connection to PC USB)
- In the 'Channel Setup' a popup dialog has been added to prompt user to Auto Enable an "Aif" device when the SeaHub connection is detected on a USB port
- During log replay the Logfile name is now displayed on the top bar of the Log Replay Control
- The GPS Processor has been updated to handle NMEA V3.0 type messages. This will now accept GPS data such as NMEA V3.0 RTK types with quality indicators of "4" and "5"
- The data from Log files replayed in Seanet Pro will now be available for REMV4 output to allow for post-job data collection and processing from recorded data
- Sidescan and Sub-Bottom Display 'Scroll'. Included a facility to enable auto-adjustment of this depending on vehicle/boat velocity. Auto adjustment is applied when incoming GPS data updates are valid
- Added serial barometer interface for a COM Port connection. A Barometer device can now be configured in the 'Channel Setup' page (Utilities - Com Setup) with compatible devices being Airflow DB2, Vaisala PTB220 and Digiquartz
- Compass display forms have been enhanced
- Added capability to correct Profiler display with incoming 'Global' attitude data from a Gyro

**Seanet Pro V1.15 (03-05-06)****The following features have been added since V1.14**

- New digital CHIRP range of SeaKing Sonar heads added. Previous versions will not fully support these new head types
- Auto Logging ('Log' – 'Setup') has been revised. This will now auto-name log files with a BaseName or a Date/Time. Also ensured that disk space available on certain drive types and network paths are now correctly reported
- Profiler – Roll Correct form. This will now display Pitch and Roll text in addition to the artificial horizon display
- Sidescan – Added L & R Chan Slope controls. These can be found in the 'Sidescan' item in the Tools popup menu
- Added a Log 'Stop' button. Previously the activated Record button would have to be clicked to deactivate and stop recording
- Fixed the Windows separator to be a ',' for the scope of running Seanet. This will ensure that data string decoding (such as GPS, Aux Gyro) is not affected when different Regional Settings are applied to the Windows platform
- The Low Frequency Sub Bottom display time scale has been changed from 'time to target' to 'two-way time'. The popup hint will now indicate this for extra clarification
- The RAT/Keyboard 'F7' button can now be used to Start and Stop Logging. The "RAT F7 Activate" check-box in 'Log' | 'Setup' is used to enable this extra functionality
- Added extra Annotation functionality for Sidescan/Sub-Bottom plotter. Will now annotate GPS position/time, remote text, manual text and PC time
- Changed resolution of spin edit control for the Bathy manual Density value ('Environment' page) from 3 to 4 decimal places

- Extended the data resolution with an extra decimal place for the Marker and Elastic Band measuring tools in the sonar display.

### Seanet Pro V1.14 (18-01-06)

#### The following features have been added since V1.13

- Due to enhanced video capabilities Seanet Pro is no longer compatible with Windows 95 or 98
- Serial Port input of Aux Device. Such devices as Diqiquartz Pressure Sensor, Trittech PA Altimeter and NMEA Altimeter are included in this. This extends serial input of devices such as Compass, GPS and Pipetracker. The Aux Device is selected in the 'Utilities' menu within Seanet Pro with data displayed in a popup or in the Sidebar. Data is logged and can also be forwarded out another serial port using REMV4
- Retain Node frequencies for downgrading heads for SONV3 use. Previously the frequencies had to be re-entered in SONV3 using the V3SETUP utility. This is no longer necessary as Seanet will no longer over-write these
- Roll Sensor interface. A 'Roll Correct' item is now available in the Profiler Tools menu to apply roll correction angles from the Trittech Attitude Sensor (Node 60) to the output profiles. Also, REMV4 will append these roll angles to the end of the standard Profiler serial output messages when the Roll Sensor is connected and active. Whenever Roll Sensor is disconnected and the 'Roll Correct' option is enabled then the appended data will revert to ping times (for each point within the profile)

### Seanet Pro V1.13 (04-10-05)

#### The following features have been added since V1.12

- Compass data now displayed in an Artificial Horizon instrument control. The previous text box display of the heading, pitch and roll data is maintained also
- New DirectShow Video Capture component added to replace previous VfW equivalent. This will provide support for more capture devices
- Added Amber LED state to Bathy form; i.e. Cond, Temp, Press, Baro LEDs.  
States are now:
  - Grey: Device not connected
  - Amber: Device connected but data Invalid
  - Green: Device connected and data Valid
- Added Logging notification when disk is approaching full. Notify when available disk space reaches 100KB and automatically close log file
- Profiler "Mean Seabed" output: Innovatum message type added and output is now displayed in one of the 8 Sidebar Text Boxes (N.B, this is set in REMV4)
- Seanet Pro can now be installed on a PC and run with Basic User rights. Previously, Administrator rights were required. This will facilitate installing Seanet Pro on an 'office' network PC for purpose of log playback or demonstration
- Change to Bathy Altimeter Offset. A negative (-ve) Altimeter Offset value will now reduce the output Altitude whereas in earlier version it would 'add to' the Altitude value. This now follows SONV3
- Added NMEA "TRO" and "TRH" messages for input interface to an Octans gyro compass
- Profilers with V5 boardsets (i.e. Super SeaKing) were reported to be running at near maximum Gain setting when operated over soft bottoms. This has been adjusted and V5 heads will now operate at a lower Gain allowing for more Gain increase when over softer seabeds

**Seanet Pro V1.12 (24-08-05)**

The following features have been added since V1.11

- New control to synchronise Log file playback speed to mimic real-time
- "Sniffit" methane sensor has Sonar Aux port interface. Data is displayed within Sonar display window
- iGC Compass has Sonar Aux port interface. Data is displayed within Sonar display window. iGC internal switches must be set with Mode 202 output
- Trittech "MultiComm" Junction Box now supported. The Aux port on the MultiComm is also active and allow 3rd party serial device data to be throughput. The data can be displayed in the Seanet Pro software and also output from a serial port on the surface via the "REMV4" program
- Added Digilog/OceanTools Gyro message to "Aux Compass" serial input option. Also added MDL Gyro message and an 'HDM' NMEA message for KVH Compass compatibility
- Displayed Video input data can be logged alongside Sonar or other Trittech sensor data. The video frames are logged into an .AVI file which is separate from the main ".V4Log" sensor log file. The .AVI is given the same filename in order to be detected and opened whenever the .V4Log is selected for playback

**Seanet Pro V1.11 (28-01-05)**

This is the first multi-sensor version of Seanet Pro software. If you are familiar with Trittech survey systems then it is likely you will have operated past software packages such as Winson or SONV3. Seanet Pro is a successor for the SeaKing SONV3 software package and will operate the SeaKing / SeaPrince network of Trittech Sensors.

Seanet Pro software includes many of the features of SONV3 along with new ones including:

- Integration into latest Windows Operating Systems (2000/XP)
- New and intuitive look and feel
- Faster and more powerful program interface
- Supports large screen resolutions with unlimited colours
- Window resizing and multi-display capability
- LAN interface options for network remote access.
- On-screen toolbars with quick access buttons for Logging, Printing etc
- On-screen hints and integrated help and support features
- On-screen "elastic-band" target measurements and markers
- Video interfacing
- Sonar scan enhancement tools
- Sonar true acoustic zoom function
- New Parametric Sub-Bottom Profiler application
- Improved serial device input and display
- Integration and conversion of position data input
- As new Sensors and features are added from time to time, updated versions of the Seanet Pro software will be available from Trittech's Support Centre, visit: [www.tritech.co.uk](http://www.tritech.co.uk).

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