

Seanet System Sub-Bottom Profiler Annotation Supplement

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Warranty Statement

Tritech International Limited herein after referred to as **TIL**

TIL warrants that at the time of shipment all products shall be free from defects in material and workmanship and suitable for the purpose specified in the product literature.

The unit/system warranty commences immediately from the date of customer acceptance and runs for a period of 365 days. Customer acceptance will always be deemed to have occurred within 72 hours of delivery.

Note: Any customer acceptance testing (if applicable) must be performed at either TIL premises or at one of their approved distributors unless mutually agreed in writing prior to despatch.

Conditions:

These include, but are not limited to, the following:

- 1 The warranty is only deemed to be valid if the equipment was sold through TIL or one of its approved distributors.
- 2 The equipment must have been installed and commissioned in strict accordance with approved technical standards and specifications and for the purpose that the system was designed.
- 3 The warranty is not transferable, except or as applies to Purchaser first then to client.
- 4 TIL must be notified immediately (in writing) of any suspected defect and if advised by TIL, the equipment subject to the defect shall be returned by the customer to TIL, via a suitable mode of transportation and shall be freight paid.
- 5 The warranty does not apply to defects that have been caused by failure to follow the recommended installation or maintenance procedures. Or defects resulting from normal wear & tear, incorrect operation, fire, water ingress, lightning damage or fluctuations in vehicles supply voltages, or from any other circumstances that may arise after delivery that is out with the control of TIL.
(**Note:** The warranty does not apply in the event where a defect has been caused by isolation incompatibilities.)
- 6 The warranty does not cover the transportation of personnel and per diem allowances relating to any repair or replacement.
- 7 The warranty does not cover any direct, indirect, punitive, special consequential damages or any damages whatsoever arising out of or connected with misuse of this product.
- 8 Any equipment or parts returned under warranty provisions will be returned to the customer freight prepaid by TIL
- 9 The warranty shall become invalid if the customer attempts to repair or modify the equipment without appropriate written authority being first received from TIL.
- 10 TIL retains the sole right to accept or reject any warranty claim.
- 11 Each product is carefully examined and checked before it is shipped. It should therefore be visually and operationally checked as soon as it is received. If it is damaged in anyway, a claim should be filed with the courier and TIL notified of the damage.

Note: TIL reserve the right to change specifications at any time without notice and without any obligation to incorporate new features in instruments previously sold.

Note: If the instrument is not covered by warranty, or if it is determined that the fault is caused by misuse, repair will be billed to the customer, and an estimate submitted for customer approval before the commencement of repairs.

F167.1

Safety Statements



Caution!

Throughout the manual certain safety or operational related comments and requirements will be highlighted to the operator by indications identified by the adjacent symbol and text.

Technical Support

Contact your local agent or Tritech International Ltd

	Mail	<i>Tritech International Ltd.</i> Peregrine Road, Westhill Business Park, Westhill, Aberdeen, AB32 6JL, UK
	Telephone	++44 (0)1224 744111
	Fax	++44 (0)1224 741771
	Email	support@tritech.co.uk
	Web	www.tritech.co.uk

An out-of-hours emergency number is available by calling the above telephone number

If you have cause to use our Technical Support service, please ensure that you have the following details at hand **prior** to calling:

- System Serial Number (if applicable)
- Fault Description
- Any remedial action implemented

Due to the expansion of equipment capabilities and the fact that new sub-modules are continually being introduced, this manual cannot detail every aspect of the operation.

The name of the organisation which purchased this system is held on record at *Tritech International Ltd*. Details of new software and hardware packages will be announced at regular intervals. Depending on the module, free upgrades will be offered in keeping with our policy of maintaining the highest levels of customer support.

Tritech International Ltd can only undertake to provide software support for systems loaded with Operating System and Tritech Seanet software in accordance with the instructions given in the System Re-installation section of this manual. It is the customers responsibility to ensure the compatibility of any other package that they may choose to load unless with the prior consent of *Tritech*.

INTRODUCTION

Seanet Pro V1.15 software onwards has been revised with the inclusion of annotation 'events' for the Sub-Bottom Profiler system. Annotation 'events' include PC date & time, manually entered text, position data from a GPS device and data from any 'Aux' device connected to a serial com port of the Seanet Surface Control Unit (SCU).

Serial 'Aux' device data can be any ASCII character data up to a maximum of 100 characters in length and terminated with a <carriage return><line feed>.

When enabled, all annotation event text will be plotted on the Sub-Bottom Profiler display and will be included with the Sub-Bottom Profiler data when printing to a thermal printer.

SUB-BOTTOM APPLICATION DISPLAY

The **Seanet SBProfiler** application can be run from the 'Programs' group in the Windows 'Start' menu or from the desktop by double clicking on the shortcut icon as shown below...



The Seanet Sub-Bottom Profiler screen display is shown below...

The screenshot shows the SaaNet V4 application window. The interface includes a menu bar at the top with options like File, Settings, Applications, Utilities, View, Sub-Bottom, Log, Window, Sound, and Help. Below the menu bar is a settings bar with various controls for HF and LF data display, including sliders for gain and depth. The main display area is divided into two sections: 'HF Data Display' (High Frequency Echo-sounder display) and 'LF Data Display' (Low Frequency Sub-Bottom display). The HF display shows a depth profile from 0M to 30M. The LF display shows a time profile from 0ms to 20ms. A status bar at the bottom displays system information such as date, time, and system status.

Menu Bar

Sub Bottom Settings Bar

High Frequency Echo-sounder display

Low Frequency Sub-Bottom display

Status Bar

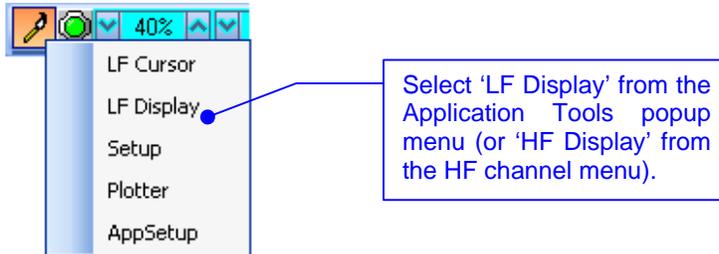
**** Refer to the main System Manual for details on the Menu and Status Bars ****

(Sub-Bottom application selected via 'Applications' | 'SBProfiler')

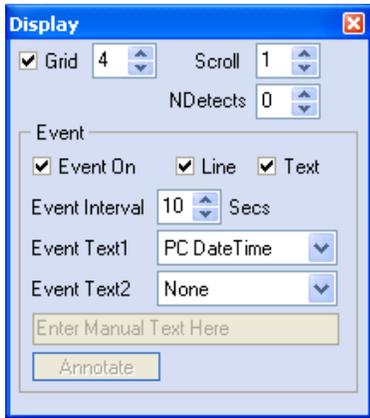
SUB-BOTTOM DISPLAY OPTIONS

Click on the Tools icon on the left of the Sub-Bottom Settings Bar to open the popup menu which includes all the Application Tools for the main LF (Low Frequency, 20kHz) sub-bottom channel.

Note: Right click on the LF and HF displays to open the popup menu for Low and High Frequency channels.



↳ **LF Display** – Sets up LF 20kHz Sub-Bottom display (or 'HF Display' for HF channel menu)



'Grid' – Display the set number of range lines.

'Scroll' – Zoom the waterfall plot on the time axis (i.e. accommodates different vehicle speeds).

'NDetects' – Number of detects (see 'Setup' below).

'Event On' – Toggle annotation event on/off.

'Line' – Toggle annotation event line on/off.

'Text' – Toggle annotation event text on/off.

'Event Interval' – Set a time interval of 1-60secs between annotation events. This is not applicable for 'Manual Text' events which display immediately.

'Event Text1' – Select an event type from the list for annotation on the **bottom** of the Sub-Bottom Profiler display. Options are...

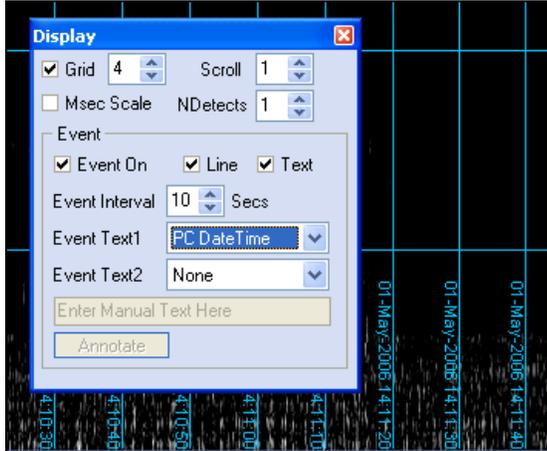
1. None (no event text displayed)
2. PC DateTime (display current date and time from SCU/PC)
3. Manual Text (with keyboard, type text into edit box and press 'Annotate' button)
4. Remote Text (from serial 'Aux' device through Seanet 'Utilities' -> 'Aux Device' menu)
5. GPS E/N (from serial 'GPS' device through Seanet 'Utilities' -> 'GPS' menu)
6. GPS Lat/Lon (As 'GPS E/N' except data is Latitude/Longitude, not Eastings/Northings)
7. GPS UTC Time (from serial 'GPS' device through Seanet 'Utilities' -> 'GPS' menu)

'Event Text2' – As 'Event Text1' except annotation text is plotted on the **top** of the Sub-Bottom Profiler display. This provides the option of annotating on either side of the plotter and also allows two separate event texts to be plotted together.

CONFIGURING A 'DATE & TIME' ANNOTATION EVENT

The current date and time, as set by the SCU / PC, can be used as an annotation event on the Sub-Bottom Profiler display.

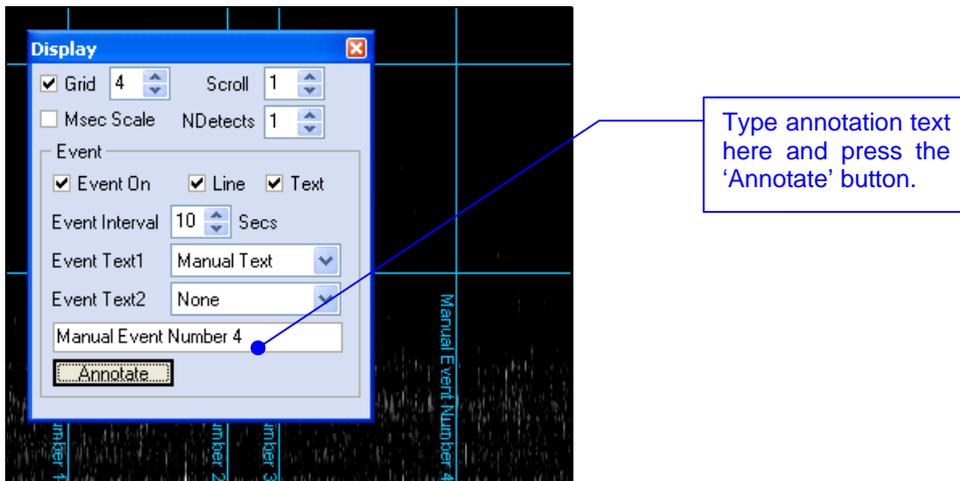
- a) Open the **Display** form from the Sub-Bottom Tools menu (as described earlier), ensure that the **Event On**, **Line** and **Text** checkboxes are all ticked and select **PC DateTime** for either **Event Text1** (bottom) or **Event Text2** (top) or both. The current date and time will now be plotted on the Sub-Bottom Profiler display at the frequency set by **Event Interval**.



CONFIGURING A 'MANUAL TEXT' ANNOTATION EVENT

A 'Manual Text' annotation event enables the user to quickly add customised text to the Sub-Bottom Profiler display. This can be useful to highlight targets while collecting data. Note that the 'Manual Text' event is not logged and hence **should only be used while printing to a thermal plotter**.

- a) Open the **Display** form from the Sub-Bottom Tools menu (as described earlier), ensure that the **Event On**, **Line** and **Text** checkboxes are all ticked and select **Manual Text** for either **Event Text1** (bottom) or **Event Text2** (top) or both. Type your annotation text into the text edit box and press the **Annotate** button to plot the text on the display. All manual text events are plotted instantly and are not affected by the 'Event Interval' setting.

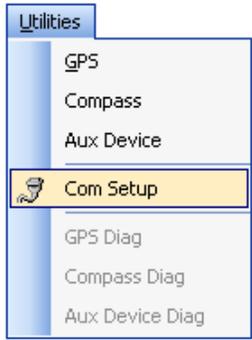


CONFIGURING A 'REMOTE TEXT' ANNOTATION EVENT

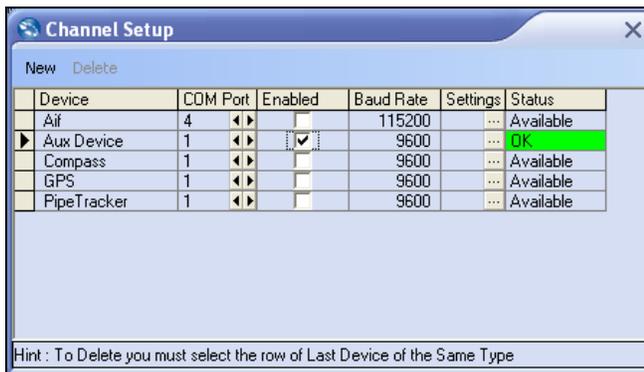
A 'Remote Text' annotation event can be any ASCII character message (up to 100 characters in length and terminated with a <carriage return><line feed>) received through a serial port on the Seanet Surface Control Unit (SCU).

To display a 'Remote Text' annotation event on the Sub-Bottom Profiler plotter, a serial COM port must be enabled and configured as an 'Aux Device' for this purpose.

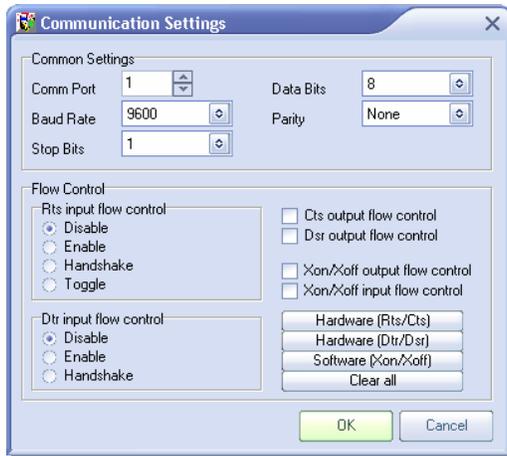
- b) The Seanet Menu Bar contains a menu option named **Utilities**. Click on this and then select **Com Setup...**



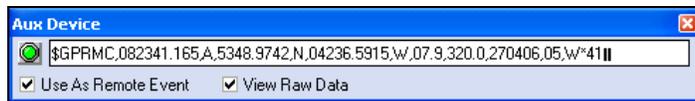
- c) The **Channel Setup** panel will be displayed with options to enable and configure COM Ports for available devices. Find '**Aux Device**' listed in the Device column in the table and select an Available COM port. Ensure that the **Enabled** check-box is ticked (as shown below) and that the **Status** column displays 'OK'. Also check that the **Baud Rate** is set to the correct speed. If you are required to change the port Baud Rate, click on the **Settings** ellipsis button (...).



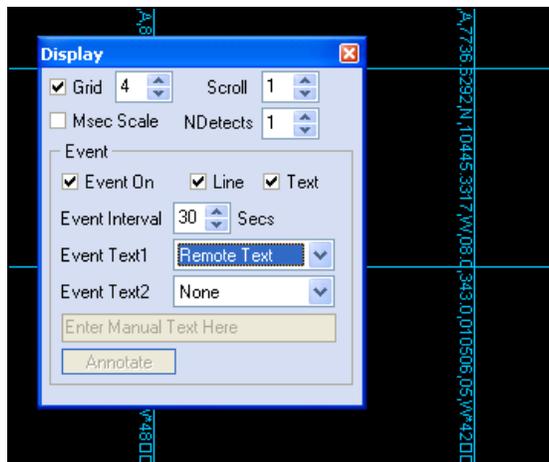
- d) The **Communication Settings** panel can configure all settings for the port. Only the **COM Port** number and **Baud Rate** should ever need to be changed. Once you have changed the required setting press the **OK** button and close the Channel Setup form.



- e) In the Seanet Menu Bar, click on the **Utilities** menu and select **Aux Device**.
- f) The **Aux Device** form will now display any data received from the serial COM port configured for 'Aux Device' in Channel Setup. The Diagnostic Led flashes green when there is an incoming Aux packet. A Terminal window can also be opened to display the incoming data strings. This is opened by clicking on the **Utilities** menu and selecting **Aux Device Diag**.



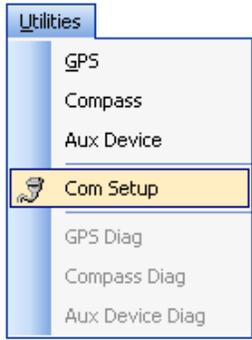
- g) Once you have confirmed that data is received and displayed correctly on the Aux Device form, tick the **Use As Remote Event** checkbox to allow the text to sent to the Sub-Bottom Plotter.
- h) Open the **Display** form from the Sub-Bottom Tools menu (as described earlier), ensure that the **Event On**, **Line** and **Text** checkboxes are all ticked and select **Remote Text** for either **Event Text1** (bottom) or **Event Text2** (top) or both. The remote event text will now be plotted on the Sub-Bottom Profiler display at the frequency set by **Event Interval**.



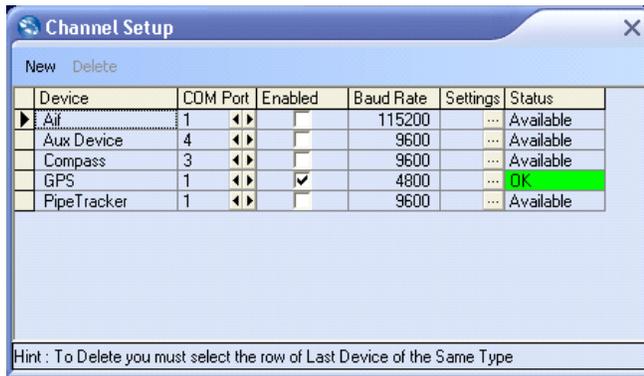
CONFIGURING A 'GPS' ANNOTATION EVENT

To display GPS Position or UTC Time data as an annotation 'event' on the Seanet Sub-Bottom plotter, a serial COM port must be enabled and configured for GPS device input.

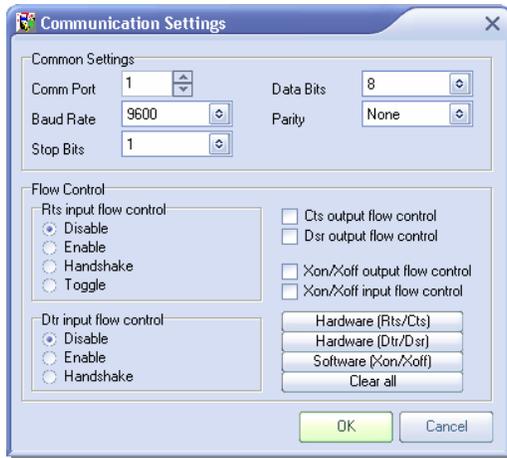
- a) The Seanet Menu Bar contains a menu option named **Utilities**. Click on this and then select **Com Setup...**



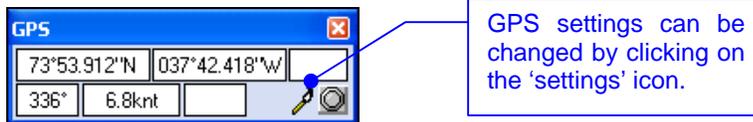
- b) The **Channel Setup** panel will be displayed with options to enable and configure COM Ports for available devices. Find '**GPS**' listed in the Device column in the table and select an Available COM port. Ensure that the **Enabled** check-box is ticked (as shown below) and that the **Status** column displays 'OK'. Also check that the **Baud Rate** is set to the correct speed. If you are required to change the port Baud Rate, click on the **Settings** ellipsis button (...).



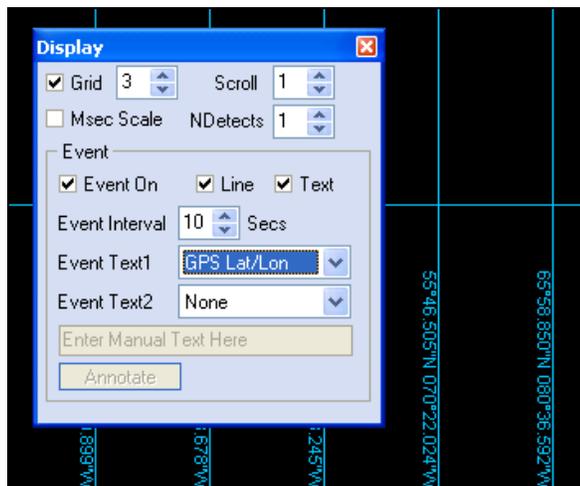
- c) The **Communication Settings** panel can configure all settings for the port. Only the **COM Port** number and **Baud Rate** should ever need to be changed. Once you have changed the required setting press the **OK** button and close the Channel Setup form.



- d) In the Seanet Menu Bar, click on the **Utilities** menu and select **GPS**.
- e) The **GPS** form will now display any data received from the serial COM port configured for 'GPS' in Channel Setup. The Diagnostic Led flashes green when there is incoming GPS data. A Terminal window can also be opened to display the incoming data strings. This is opened by clicking on the **Utilities** menu and selecting **GPS Diag**. Ensure that the GPS data is displayed correctly on the form before continuing.



- f) Open the **Display** options form from the Sub-Bottom Tools menu (as described earlier), ensure that the **Event On**, **Line** and **Text** checkboxes are all ticked and select **GPS E/N**, **GPS Lat/Lon** or **GPS UTC Time** for either **Event Text1** (bottom) or **Event Text2** (top) or both. The GPS event text will now be plotted on the Sub-Bottom display at the frequency set by **Event Interval**.

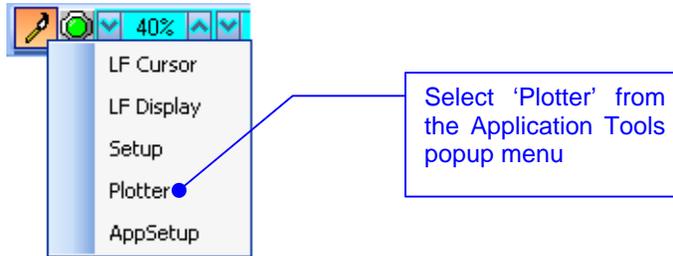


SUB-BOTTOM PLOTTER ANNOTATION

When enabled, annotation 'events' will be plotted with the Sub-Bottom Profiler data to a thermal printer.

To enable and configure a thermal printer for the Sub-Bottom Profiler...

- a) Click on the Tools icon on the left on the Sub-Bottom Settings Bar to open the popup menu which includes all the Application Tools. (N.B. The popup menus for Low Frequency and High Frequency channels can also be accessed by a right click on the LF and HF displays).

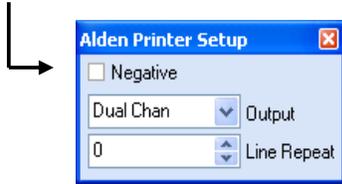


↳ **Plotter** – This is for printout to a parallel port EPC or Alden thermal plotter.



EPC / Alden – Select the desired printer and then tick the 'Enabled' tick-box to open the parallel port connection.

Alden Setup – When Alden is selected this button will become active. Click on this button to setup the Alden interface.



Negative – invert greyscale output.

Output – Dual Channel or Left or Right Channel.

Line Repeat – stretches printout by repeating line printouts (0 = off).