

# Seanet System Sidescan 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.)

- The warranty does not cover the transportation of personnel and per diem allowances relating to any repair or 6 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**



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**

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	Email	support@tritech.co.uk
	Web	www.tritech.co.uk
An	out-of-hours e calling the	mergency number is available by 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 Sidescan 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 Sidescan 'waterfall' display and will be included with the Sidescan data when printing to a thermal printer.

## SIDESCAN APPLICATION DISPLAY

The <u>Seanet Sidescan</u> 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...





(Sidescan application selected via 'Applications' | 'Single Sonar')

### SIDESCAN DISPLAY OPTIONS

Click on the Tools icon on the left of the Sidescan Settings Bar to open the popup menu which includes all the Application Tools.

<u>N.B.</u> The popup menu can also be accessed by a right button click on the Sidescan waterfall display.



Display – Sets up Sidescan waterfall display options.

×
Scroll 1 🤤
NDetects 0 😂
🗹 Line 🗹 Text
10 🤤 Secs
PC DateTime 💌
None 💌
fext Here

'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 **left** side of the sidescan waterfall 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 **right** side of the sidescan waterfall display. This provides the option of annotating on either side of the waterfall 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 Sidescan waterfall display.

a) Open the Display form from the Sidescan 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 (left side) or Event Text2 (right side) or both. The current date and time will now be plotted on the Sidescan waterfall display at the frequency set by Event Interval.

01-May-2006 09:51:10	
	Display 🛛 🔀
01-May-2006 09:51:00	NDetects
01-May-2006-09:50:50	✓ Event On ✓ Line ✓ Text . Event Interval 10 ♀ Secs
	Event Text1 PC DateTime
01-May-2006 09:50:40	Enter Manual Text Here
	Annotate
01-May-2006 09:50 30	

## **CONFIGURING A 'MANUAL TEXT' ANNOTATION EVENT**

A 'Manual Text' annotation event enables the user to quickly add customised text to the sidescan waterfall 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 Sidescan 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 (left side) or Event Text2 (right side) 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 Sidescan 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 (...).

1	Channel Setup							×
N	lew Delete							
	Device	COM P	ort	Enabled	Baud Rate	Settings	Status	
	Aif	4	• •		115200		Available	
	Aux Device	1	• •		9600		OK	
	Compass	1	• •		9600		Available	
	GPS	1	4 >		9600		Available	
	PipeTracker	1	• •		9600		Available	
Lie	l Histo Ta Dalata way averta aleat tha anno 20 ant Davian at the Case Twee							
<u> </u>	it . To Delete you hiu	st select	ule	Flow or Last L	vevice of the	oame ryp	0	

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.

🚺 Communic	ation Settings		×
Common Settin Comm Port Baud Rate Stop Bits	gs 1 ↓ 9600 ↓ 1 ↓	Data Bits Parity	8 🔹 None 🗢
Flow Control Rts input flov Disable Enable Handsha Toggle	v control	Cts outpu	ut flow control ut flow control i output flow control i input flow control
Dtr input flow Disable Enable Handsha	control	Hardwa Hardwa Softwar C	are (Rts/Cts) are (Dtr/Dsr) re (Xon/Xoff) ilear all
		OK	Cancel

- 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 Sidescan Plotter.
- h) Open the Display form from the Sidescan 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 (left side) or Event Text2 (right side) or both. The remote event text will now be plotted on the Sidescan waterfall display at the frequency set by Event Interval.

\$GPRMC,144509.48	11,A,7748.9742,N,0	630.7	647,VV,04.2,344.0,	280406,05,\A	¢41	
			Display		Ð	3
\$GPRMC,144459.48	1,A,6736.6292,N,0	5656.9	🗹 Grid 🛛 🗲	Scroll NDetects	1 🔹	
			Event —			1
\$GPRMC,144449.48	1,A,5753.9122,N,0	4642.4	🗹 Event On	🗹 Line 🛛	🗸 Text	
			Event Interval	10 🤤 Sec	s	
			Event Text1	Remote Tex	t 🗸	
\$GPRMC,144439.48	1,A,8541.5672,N,0	3627.8	Event Text2	None	*	
		·	Enter Manual 1 Annotate	ext Here		
\$GPRMC,144429.48	1,A,7558.8502,N,0	2654.0				

## **CONFIGURING A 'GPS' ANNOTATION EVENT**

To display GPS Position or UTC Time data as an annotation 'event' on the Seanet Sidescan 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**...

Utili	ties
	<u>G</u> PS
	Compass
	Aux Device
Ī	Com Setup
	GPS Diag
	Compass Diag
	Aux Device Diag

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 (...).

😒 Channel Setup				_		×
New Delete						
Device	COM Port	Enabled	Baud Rate	Settings	Status	
▶ Aif	1 🚺		115200		Available	
Aux Device	4 ()		9600		Available	
Compass	3 🚺		9600		Available	
GPS	1 🕕	· ·	4800		OK	
PipeTracker	1 🕕		9600		Available	
int : To Delete you must select the row of Last Device of the Same Type						

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.

🚼 Communic	ation Settings		×
Common Settin Comm Port Baud Rate Stop Bits	ngs 1 ▲ 9600 ⊅ 1 ♀	Data Bits Parity	8 🔹 None 🗢
Flow Control Rts input flow Disable Enable Handsha Toggle	v control	Cts outp Dsr outp Xon/Xof	ut flow control ut flow control f output flow control f input flow control
Dtr input flow Disable Enable Handsha	v control	Hardw Hardw Softwa	are (Rts/Cts) are (Dtr/Dsr) re (Xon/Xoff) Clear all
		ОК	Cancel

- 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 Sidescan 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 (left side) or Event Text2 (right side) or both. The GPS event text will now be plotted on the Sidescan waterfall display at the frequency set by Event Interval.

53°58.850"N 017°54.072"W	
	Display 🔀
	🗹 Grid 4 🤤 Scroll 1 📚
81°46.505"N 007°39.505"W	NDetects 0 😂
	Event
71°34.160"N 174°24.938"W	Event Interval 10 Secs
	Event Text1 GPS Lat/Lon
	Event Text2 None 💌
61°51.443"N 164°51.159"W	Enter Manual Text Here
	Annotate
89°39.098"N 154°36.592"W	

## SIDESCAN PLOTTER ANNOTATION

When enabled, annotation 'events' will be plotted with the Sidescan Sonar data to a thermal printer.

To enable and configure a thermal printer for the Sidescan Sonar...

a) Click on the Tools icon on the left on the Sidescan Settings Bar to open the popup menu which includes all the Application Tools. (N.B. The popup menu can also be accessed by a right button click on the Sidescan waterfall display).



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

Sidescan Printer 🛛 🛛 🔀				
• EPC	Enabled			
O Alden	Alden Setup			

**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).