QUICK REFERENCE GUIDE

Purpose

This guide provides general information on how to use the **Simrad ITI** and its appropriate sensors in a twin rig configuration.

The functionality described in this document is only valid with ITI SW version 5.30 and later.

Language

The menu language is set from the main menu using this command sequence: System setup \rightarrow Language

Trawl setup

The mode is changed to **Twin rig** by the following command sequence: $Main \ menu \rightarrow System \ setup \rightarrow Trawl$ $setup \rightarrow Trawl \ gear \rightarrow Dual.$

In the *Trawl setup* menu, the values for *Trawl width*, *Spread1* and *Spread2* should be set to their actual values in order to achieve correct graphical presentation.

In the same menu, the *Offset* value must be changed if the clump will not be on line between the doors. The intention is to bring the blue clump value to zero when the trawls are going correctly through the water. An increase of the value will apparently "shorten" the middle warp.

The *Filter* is implemented to smoothe the same blue clump value in the **Normal** and **Trawl eye** modes.

The value for the *Trawl height* will be set automatically if only height sensors (no trawl eye) is used. If the trawl eye is in use, alone or together with the *Height* 2 sensor, its value must be programmed under the **Trawl eye** setup. Refer to the Trawl eye manual.

Slant h(orizontal) view must be switched on if you want the horizontal range to the trawl to be presented in the upper half of the trawl eye and in the normal picture. This function requires an active depth sensor on the trawl.If the *Slant h*.

TRAWL SETUP		
TRAWL WIDTH	30m	
TRAWL HEIGHT	8m	
TRAWL TYPE	BOTTOM	
TRAWL GEAR	DUAL	
SLANT H. VIEW	OFF	
SPREAD1	45m	
SPREAD2	45m	
OFFSET	0.Om	
FILTER	0	

view is switched off, or there is no depth sensor on the trawl, the slant range will be presented instead.

Active sensors

The sensors to be used on the trawl are chosen using this command sequence: Main menu \rightarrow Active sensors

Sensors that are not in use, or have no battery power, should be switched off in order to maintain the desired the update rate.

Example: A sensor setup for twin rig would include the following sensors: Two Spread sets, two Temp/Depth, Trawl eye and Catch 1&2&3.

ACTIVE SENSORS			
TEMP-DEPTH	1:1		
GRID	OFF		
HEIGHT	OFF		
HEIGHT2	1:1		
SPREAD1	1:1		
SPREAD2	1:1		
TRAWL EYE	1:1		
CATCH	1:3		
CATCH AVAIL	1&2&3		
TEMP-DEPTH	CENTER		
HEIGHT2	STARB		
SPREAD1	PORT		
SPREAD2	STARB		
TRAWL EYE	PORT		
CATCH 1	PORT		
CATCH 2	STARB		
САТСН З	STARB		

All sensors must be fitted correctly to the trawl. The Spread 1 & 2, Temp/Depth, Trawl eye and Height 2 sensors must be set to an update rate of 1:1. Choosing Catch 1&2&3 in the same menu must correspond to the actual sensors placed on the trawl. The update rate of the Catch sensors is then for example set to 1:3 for update every third interrogaton lap. On which trawl the different catch sensors are fitted (port or starboard) are thereafter set in the same menu. The location of the Temp-Depth sensor is also chosen here. The remaining sensors have fixed locations.

No. of Concession, Name

Update rate

When the sensors are correctly set up, they can be turned on using the following command sequence:

Main menu \rightarrow Rate \rightarrow On

This sequence controls the complete system's update rate. With the rate set to maximum, the update speed will only depend on the number of sensors in use. When the rate is switched off, all transmitters in the system will be inactive.

RATE			
MAX			
0.5	MIN		
1.0	MIN		
1.5	MIN		
OFF			

Max range

In order to achieve the best possible update rate, the maximum range to the trawl is set using the following command sequence:

Main menu \rightarrow System setup \rightarrow Max range You can choose any value between 400 and 4000 meters. If this range is set too low, the communication with the sensors beyond this distance will cease. If it is set too high, the system might use more time than necessary searching after sensors.

MAX RANGE 2500m

Date setting

Date and time is normally read directly from the GPSs. If it is necessary to adjust, observe the following command sequence:

 $\begin{array}{l} \textit{Main menu} \rightarrow \textit{System setup} \rightarrow \textit{Zone} \rightarrow \textit{Date \& time} \end{array}$

If the local time is adjusted, set the offset from GMT/UTC in hours and minutes in the two top lines on this menus. Use negative offset <u>east</u> of Greenwitch. In most cases, only the upper line (hours) needs to be changed if a GPS is connected to the ITI. To accept the changes when a GPS is not connected, set the last line, *Set*, to *Yes*.

DATE SETTING					
UTC = LOCAL + h	0				
+ - m, sign of h	0				
YEAR	2005				
MONTH	2				
DATE	23				
HOUR	15				
MINUTE	14				
SECOND	0				
SET	NO				

Units

Units are set using the following command sequence:

Main menu \rightarrow System setup \rightarrow Units Choose between meter; fathoms; yards; brazzia horizontally, and meter; feet; fathoms; brazzia vertically.

Changing from twin to single

The Spread 2 sensor placed in starboard door during twin trawl must be replaced with a Spread Remote 1. This is the sensor placed in port side of the clump during twin trawling.

Using the sensors menu, deactivate the sensors that are no longer in use. This will

typically be the Depth/Temp, Spread 2, Height 2 and Catch 3 sensors. Notice that the Spread 1 sensor is set to *port* in the same menu (if it is used).

Set the mode to **Single trawl** using the following command sequence:

 $\begin{array}{l} \textit{Main menu} \rightarrow \textit{Trawl setup} \rightarrow \textit{TrawlGear} \\ \rightarrow \textit{Single} \end{array}$

When you shoot the trawl, do remember to turn the rate on.

Changing from single to twin

Move the sensor Spread Remote 1 from the starboard door to port side of the clump. Place a Spread 2 sensor in the starboard door.

Set the mode to **Dual** using the following command sequence: Main menu \rightarrow Trawl setup \rightarrow TrawlGear \rightarrow Dual

Activate all the sensors using the following command sequence: Main menu \rightarrow Active sensors Sensors in use will typically include the Depth/Temp, Spread 2, Height 2, and Catch 3 sensors.

When you shoot the trawl, do remember to set the rate on.

Twin rig seen from above

(A) = Port trawl

(B) = Starboard trawl

 $(C) = Spread \ 1 \ sensor \ on \ port \ trawl \ door.$ The sensor is protected in a dedicated housing and by means of a steel cage $(D) = Spread \ Remote \ 1 \ sensor \ mounted$ on the clump. The sensor is protected in a dedicated housing and by means of a steel cage.

(E) = Spread Remote 2 sensor

(F) = Spread 2 sensor on starboard trawl door

(G) = Depth, Temperature or a Temp/ Depth sensor

(H) = Towing direction of the trawl



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