Looking at raw data from a DL1 sensor

In some cases a DL1 may show a wrong speed on one of the beams. This may be due to a noise source either within the system or via the cabling.

To verify this, a function is included within sensor to allow a frequency data plot to be shown. This information will show if there are noise issues, and using this it may be possible to make changes to remove or reduce this.

1- Connect a PC with NMEA adapter directly to the sensor. Power (black white) can be supplied from the existing wiring, but connect your NMEA adapter input to the orange(-)/white(+) cable pair, and the NMEA adapter output to yellow(+)/black(-)



Skipper recommend the Actisense USG-2 NMEA adapter.

2- Download and install the skipper service software from skipper.no (<u>http://www.skipper-service.no/skipdoc/skipdoc.php?showdir=data///Software//SkipperServiceSoftware</u>) Go to DL1 multi tab.



Click on advanced and show RS232

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Click on tab Raw data NMEA

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For DL1 upgrade, connect directly to unit to prevent comption										
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Select the correct com port, and if all is connected correctly, the system should show a frequency curve.

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Mute Transmit	O Mute N	lormal												
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10 20 30														_
40 50 60									_					_
70 80 90														_
110 120 130														_
140	~													
180	-7,8kHz	-5,9	kHz	-3, -20	9kHz)kn	-2kH -10k	z n	714,3kHz 0kn	2kHz 10kn	3.9kHz 20kn	5,9kHz 30kn	7.8kHz 40kn		

The top of the spikes in the frequency should reflect the speed of the vessel. When not sailing these should be in the center of the screen, as shown. If the system has noise it wil be seen as a spike at another point, that does not move with speed changes. Noise spikes should not be higher than the main spike,

The red and the blue curves show forward and aft beams.

Note: the main spike becomes smaller when the sea bed is out of range. (ca. >12m) if you are in shallower water changing the Pulse length to 1ms will show an extreme case.

If you are unsure, or wish to send data to SKIPPER, use the save to file function. Or take screen shots.

It is also possible to get raw data via the LAN connection, although this is slightly less stable.

- Connect your PC directly to the JB70D1 unit.
- Change the local IP address on your PC to match the JB70 unit domain. E.g. 172.16.1.200
- Use the service software tab Raw via ethernet.