Changes in software of DL2 from version 1.0.10 to 1.0.14

Changes in 1.0.10 to 1.0.12.0

- 1. Corrections to the GUI and upgrader
- 2. SOG only option added for DL21

Changes from 1.0.12.0 to 1.0.13.0

- 1. Changes for compatibility with SW-M006-2.13
- 2. Added synchronization for DL21 between DL2 and DL1 in DL2 menu
- 3. Fix of NMEA Built in test
- 4. Correction of Depth algorithm
- 5. Filter improvements for bad data
- 6. STW Second installation angle added due to detected difference in STW angle and SOG angle
- 7. Bug fixes
- 8. GPS identifiiers RA GN GP IN added for input
- 9. Hot swapping function added to allow 2 parallel systems to be switched from / To standby using the parallel systems button in CU-M001 Menu and by connecting The NMEA out of 1 screen to NMEA in of the other screen.
- 10. USB logging format improved to include raw data
- 11. Diag button removed from NMEA outputs, kept in UDPM

Changes from 1.0.13.0 to 1.0.14.0

- 1. Div bug fixes and improvements of limits for customer entered parameters
- 2. Added separate low speed average for both SOG and STW
- 3. Improvements in filters of STW parameter
- 4. Improvements in low speed correction
- 5. All NMEA talker IDs allowed except for VD
- 6. Improvement in Depth detection
- 7. Calibration improvements
 - a. Sea test allows user to stop using the GPS input to calculate the distance
 - b. Single leg sea test allowed for SOG only
 - c. Recommended angle changed to averaged angle for Installation angle, Both STW and SOG now have an averaged value
 - d. Controls of good data in sea test calibration improved
- 8. Change of Status LED Flashing, Now
 - a. green flashing is correct values received from sensor
 - b. Yellow flashing is low quality data received
 - c. Constant yellow is no data received
- 9. Aux function, Sync out now verifies the system Mute status, and repeats it out of the unit.
- 10. SOG from GPS is split into longitudinal and transversal if possible.
- 11. SATLOG option added
- 12. Change in bottom detect algorithm

- 13. Method to remotely make systems sleep- \$PSKPSLP,<target SFI>,<sleep value>*hh command added for setting system to sleep or waking up. <target SFI> can be JB's SFI or SFI of a display paired with JB of a particular system, <sleep value> is "1" or "0", "1" sleep and "0" wake up
- 14. Improvements in self test, limits set for network traffic
- 15. Up/down widgets now support long press
- 16. Improvements in dimming features
- 17. Bug fix for loss of dimming after a time
- 18. Water current display not available if less than 3 Sea test calibrations
- 19. Wake up message added if the screen does not get communication with JB70
- 20. Depth calculation changes based on sensor firmware (2.13 2.16 etc.)

Changes from 1.0.14.0 to 1.0.15.0

- 1. Improvements in control of simulator function
- 2. Default settings changed
- 3. Limits of self tests changed

1.0.14.1

- 4. Improved internal communication
- 5. Improvements on communication screen
- 6. upgrade issues fixed
- 7. warning message added if softwares are not compatible in JB70 and CU-M001

1.0.14.2

8. fix to standby functions

1.0.14.3

9. change of defaults specific for DL21

1.0.14.4

- 10. compatibility issues with high frequency sensor fixed
- 11. tilt and temperature compensation activated.

1.0.14.5

- 12. RMC input corrected
- 13. self test updated to include new HF sensor versions
- 14. version numbers added to USB logging

1.0.14.6

15. Bugfix of occasional system error warning due to internal heartbeat timing.

1.0.15.0 Full release of 1.0.14.6

Changes in Sensor firmware 2.13 to 2.16

a) STW processing.

The Doppler spectral magnitude data is averaged in three seperate processes, to maximise the signal to noise of any echoes. Firstly the signals are averaged from ping-to-ping. This data is then averaged along the frequency axis and finally the ping-to-ping averaged, frequency averaged data in averaged along the range axis.

This range averaging needed to be reduced for 2.16(0) because, as the minimum range cut off had been reduced from around 4.5m to 2.5m, there is much less time available from the start of receiving good data to the start of the range bracket.

b) Depth Window.

The start of the depth window was reduced from 4.5m to 2.5m to better cope with shallow water measruements.