DL850 software upgrade procedure.

It is possible that some upgrades will write over the present settings.
To be safe, note the calibration and setup settings (Outputs) before upgrade.

If you have received a programmed compact flash, skip stage 1.

1. Locate and download the correct software file from
   http://www.skipper-service.no/skipdoc/skipdoc.php?showdir=data//Software
   May 2014 270 kHz software is "*4 03 07 DL270.EXE*"
   and 540kHz "*4 01 32(1)DL850sw for 540kHz R4.0132.EXE*"
   Store into the root folder of Compact Flash card.
   Also copy the latest version of startup.xxx into the root as startup.exe . This file is to be found on the same download page, further down on the page.

   ☐ Note! Standard Compact Flash Card reader is needed to be attached to the PC.

   ☐ Note: it is possible to use the Compact Flash card, which is already installed in the display unit.

2. Switch OFF the mains of the display unit and insert Compact Flash card with the new software on it.

3. Press the "hidden" button inside the cabinet (Mounted on the solder side of the keyboard). This is the same button, which is used to activate internal settings.

4. Keeping the hidden button pressed, switch ON the mains in the display unit and keep the button pressed while the message **"You may release the hidden button"** appears in the lower part of the screen. If a new startup.exe is to be loaded follow the on screen instructions.

5. Release the hidden button. After few diagnostic text messages, the list of available software versions will appear in the lower part of the screen as in example below.

   ☐ Note, that if the bootloader does not find any file with the software on the Compact Flash, the presently installed version will start automatically. In this case, make sure, that the upgrade has been copied correctly on the Compact Flash and repeat procedure.

04.01.11	04.01.30				
Active	External				
040111. 850	v040130. 850				
KEY 1	KEY 2	KEY 3	KEY 4	KEY 5	KEY 6

6. Select a software version, which you would like to install. Normally, it is possible to choose one out of two: the version, which is currently installed in the internal memory (indicated as **Active**) and the upgrade version (indicated as **External).** The version name is displayed in the upper line of the text lines, located just above the corresponding softkey. In the example above, soft key #2 should be pressed to select the latest software version.

7. Confirm selection by pressing **YES** button (or go back to selection, pressing **NO**)

8. When upgrade completed. Press any button to start the upgraded software.
   (or it will start automatically in 5 seconds)

   ☐ Note. The file with a previous software version will be copied back to the Compact Flash card, so it would be possible to re-install it in the similar manner, if desired.

   ☐ It is possible that some upgrades will write over the present settings. We will try to inform of this, but to be safe, note the calibration and setup settings (Outputs).

DL850 540kHz

The DL850 540 kHz produced before 01.01.2007 have software between 3.27.2-3.27.20 have software located on I/O PCB and is not possible to upgrade by downloading from internet.

The software versions started with 4.01.06 to 4.01.11. and 4.01.30 to 4.01.32

June 2012 we are introducing 4.01.32. This software corrects the problem with software disabling the I/O PCB causing "White screen" at boot up.
All software versions from 4.01.06 to 4.01.31 is recommended to be upgraded to version 4.01.32

DL850 270kHz

DL850 270kHz versions started in 2007 with 4.01.03 to 4.01.06. and 4.01.13 to 4.01.22.

In 2009 we introduced software version 4.02.03. This software, together with a new logic on Receiver PCB delivered an improved performance of the DL850 270kHz speed log system.
- Please note that:
- When upgrading DL850 270kHz software from <4.02.03 we recommend to change the Receiver PCB logic (Part number LG-T001) at the same time to have the improved performance functionality.
- The new logic will not work on software version before 4.02.03.

In 2011 we introduced 4.03.00. This software introduced new diagnostics features and additionally an indicator for speed limits.
Unfortunately this software has proven unreliable. All units with sw 4.03.00 is recommended to be upgraded.

June 2012 we are introducing 4.03.03. This software corrects the unreliability of 4.03.00 and additionally it corrects the problem with software disabling the I/O PCB causing "White screen" at boot up.

May 2014 introduction of 4.03.07. Bugfix for NMEA checksum error.