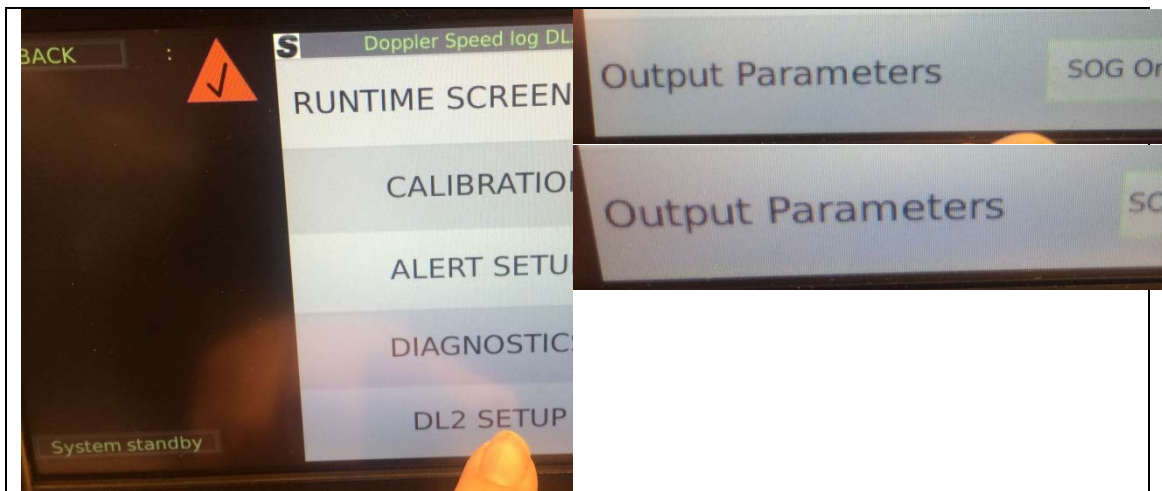


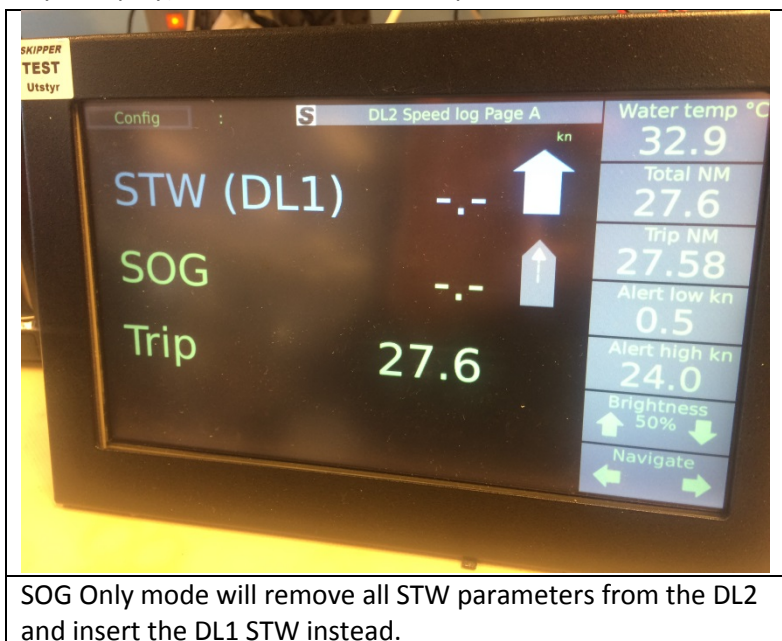
## 1 Configuration of the system with software 1.0.11 or greater

The system is made up of 2 independent systems DL2 SOG+STW and DL1 STW only. Due to problems with the STW parameters in the DL2 system, it is decided to temporarily configure the system to show only SOG 2 axis from the DL2 and STW 1 axis from the DL1. This is performed by:

- Check cabling is correct such that Data comes from DL1 (middle pcb in JB 70D21-SA unit) for STW and from DL2 (lower pcb) for the SOG. Alarm should also be from these pcbs
- Ensure the software on the DL2 units is 1.0.11 or higher (go to Config JB70 and config CU-M001 in the menus on the 9" display).
- In menu DL2 setup , there is a button labelled 'SOG only or SOG+STW' ensure this is on 'SOG only' ( you may have to enter a configuration password 'service' to change this.)

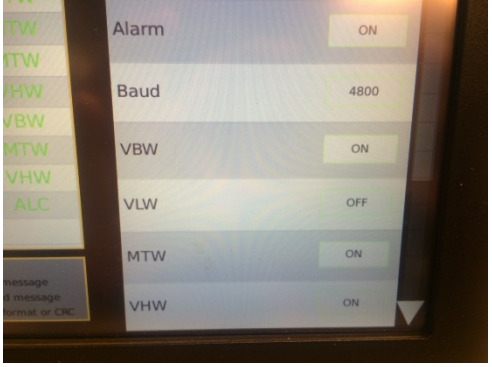
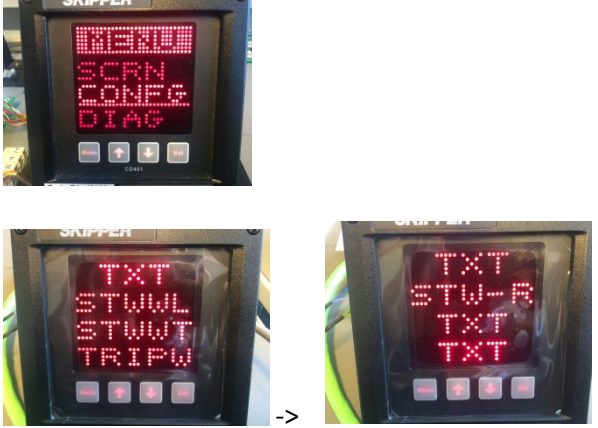


This will change the screen setup to show STW from the DL1 unit (The same as the Repeater style display) and SOG from the DL2 part.



SOG Only mode will remove all STW parameters from the DL2 and insert the DL1 STW instead.

d) **Repeaters**, can be connected to either DL1 part or DL2 part. If connected to the DL2, part both parameters STW and SOG can be shown. With the default setup of CD401 multi-repeater, the STW will, in this case show error, but SOG will show. This is correct as the default NMEA sentence (\$VDVBW) does not contain STW information. To show the STW information from DL1 turn on the sentence VHW on the DL2 system (Graphic screen communication setup). And then on the Multi repeater do the following

On DL2 screen in Communications, turn on VHW for DL1 STW speed	On The Compact multi repeater change CONFIG 1 from STWL to STW-R
	 <p style="text-align: center;">Original                      -&gt;                      After change</p>

Enter menus, config, on Screen 1 change STW-L,STW-T to STW-R, TXT.

You should now have DL1 STW on the first screen and SOG on the second.

**Some points to note:**

- Daily trip and total come from the STW parameters and should be taken from the DL1 system
- The STW system and SOG system are now independent and this will result in.
  - The SOG will need to be calibrated on the Graphic display (this can be done manually)
  - The STW will need to be calibrated by the 2 leg method on the repeater style display.

## 2 Further Software upgrades of the system:

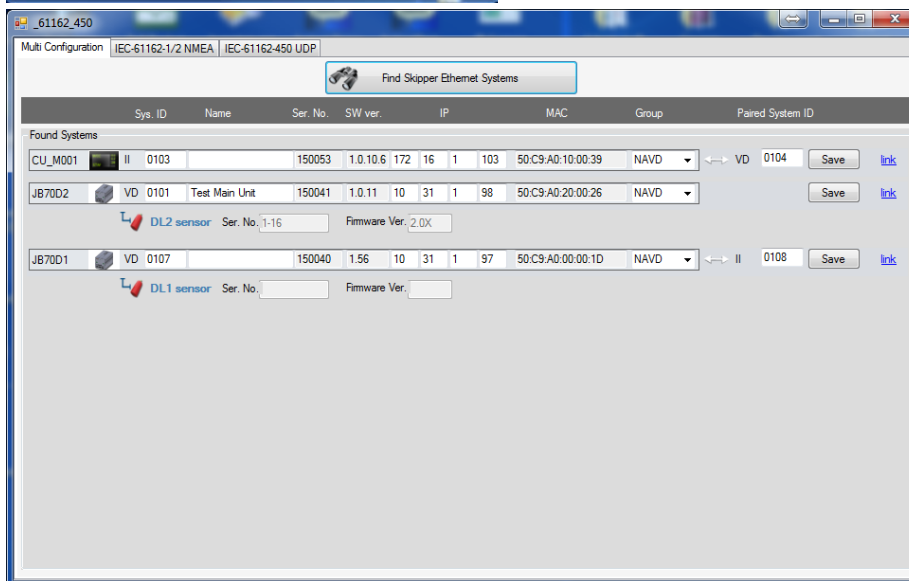
All the supplied electronics contains software of some sort, and all of these can be upgraded from a PC. To do this connect your PC by LAN cable to the Unit in question, or connect all units to a switch and open the skipper service software available at

### 2.1 Service software: Download and install the service software.

<http://www.skipper->

[service.no/skipdoc/data////Software//SkipperServiceSoftware/SetupProjectServiceSoftware.msi](http://www.skipper-service.no/skipdoc/data////Software//SkipperServiceSoftware/SetupProjectServiceSoftware.msi)

Connect your open this software and open the 'Com setup' tab. Press 'Find Skipper Ethernet Systems'

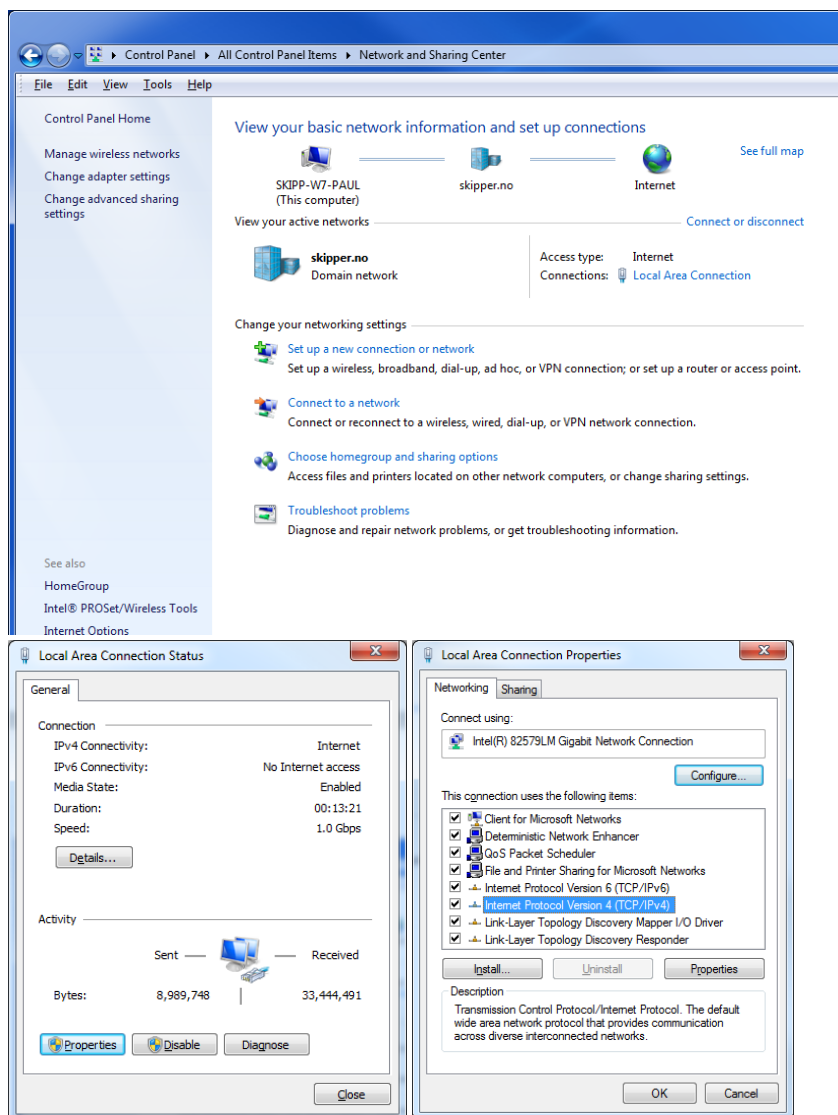


You should see the connected systems and the sensors connected to them. If you do not see this, but are connected. Check your antivirus settings, you may need to temporarily disable.

### 2.2 Ensure TCP/IP is functional

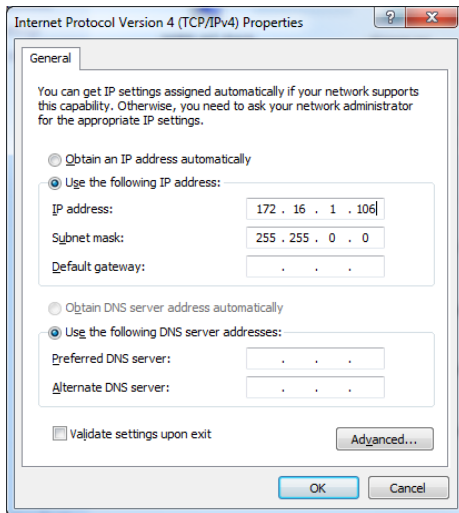
To upgrade a software or firmware you will need to ensure your system is in the same IP domain as the DL21. In the case above you can see that the systems are in 2 domains 10.31.1.98 and 172.16.1.103

Unless you are using a router, To allow the systems to talk using TCP/IP V4 protocol one or the other will have to be changed. And the PC must be set to static. Go to 'network and sharing centre' in 'control panel'



Click on 'local area Connection' -> 'properties' -> select 'Internet Protocol Version 4 (TCP/IPv4' ->properties

Setup the IP address and subnet mask as follows (or use the addresses similar to those used by the boxes if not the below.



Click ok.

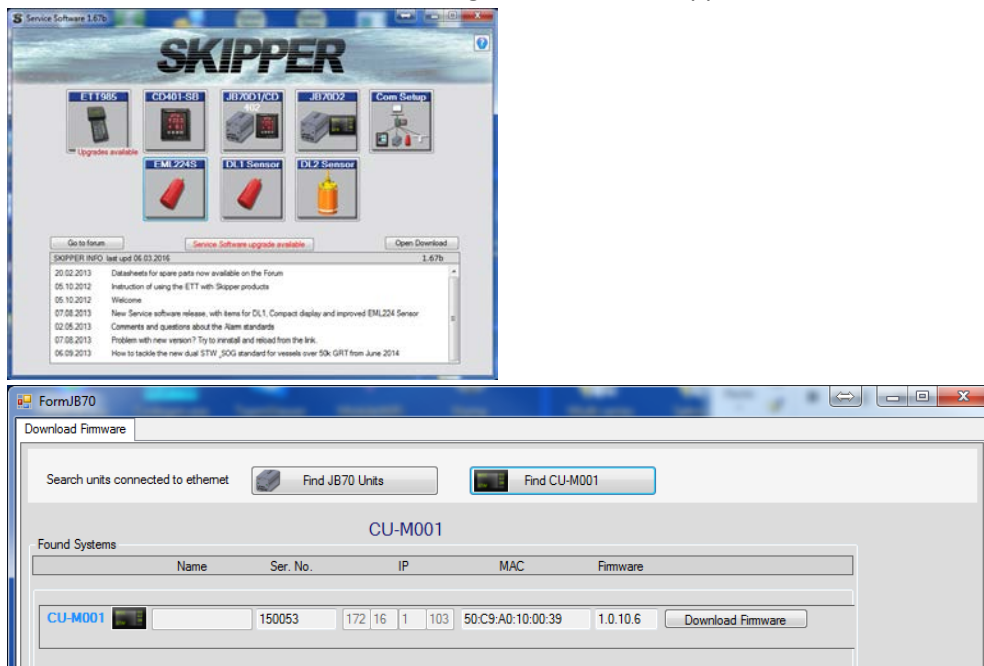
You are now ready to update.

## 2.3 DL2 software update

The DL2 unit has an extra LAN port, so connecting to this will give access to all parts of the DL2 system.

### 1. Update the CU-M001 graphic display

From the service software main menu go to the JB70D2 app, click on find CU-M001



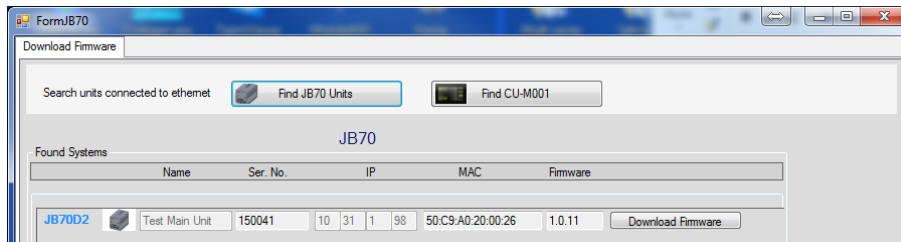
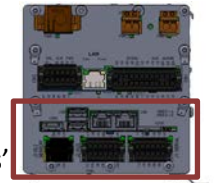
Click on the 'Download Firmware' and search to the latest software. This can be found on the web at

<http://www.skipper-service.no/skipdoc/skipdoc.php?showdir=data////Software//DL2%20-%20Software%20for%20screen%20and%20JB70%20Unit>

This system part will accept software starting with SW\_M005. The screen will reboot after upload and a further search should show the new version after about 1 minute.

## 2. Update the JB70D21-SA DL2 part

From the service software main menu go to the JB70D2 app, click on 'Find JB70 Units'



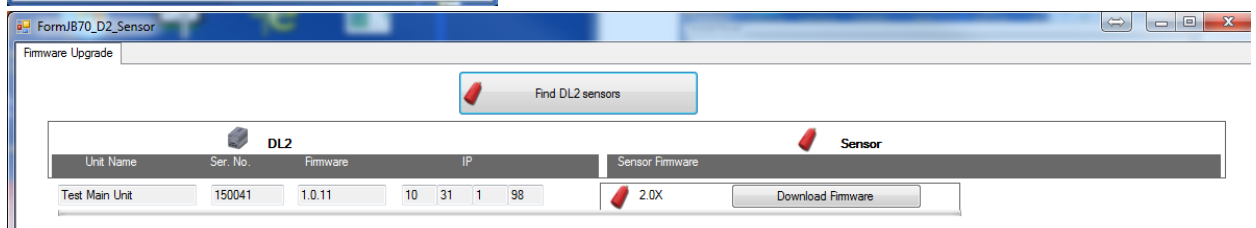
Click on the 'Download Firmware' and search to the latest software. This can be found on the web at

<http://www.skipper-service.no/skipdoc/skipdoc.php?showdir=data////Software//DL2%20-%20Software%20for%20screen%20and%20JB70%20Unit>

This system part will accept software starting with SW\_M004. The screen will reboot after upload and a further search should show the new version after about 1 minute, remove and rapply power if the new version does not show correctly.

## 3. Update the DL2SG-SA sensor rev 1414A or later

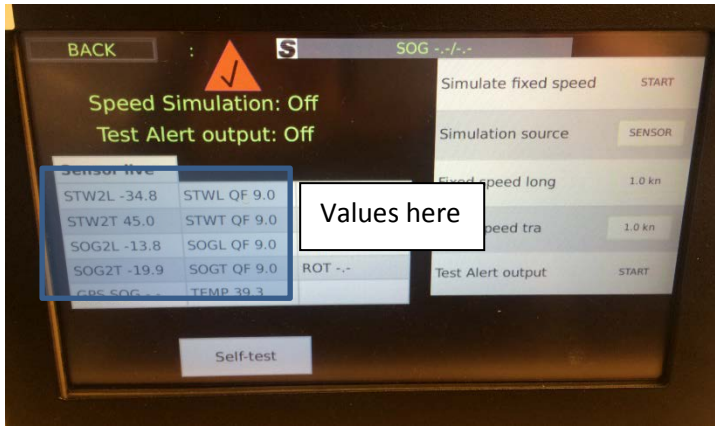
Open the DL2 sensor App and press find DL2 Sensors



Older sensors may show 2.0X, this is because they are not programmed to respond. New softwares in new sensors will respond with the software version (2.13, 2.14 etc.). If in this older case, ensure the sensor is connected and that values are currently being received from the sensor.

On graphic display go to Diagnostics and see values coming on the table to the left (Blue area)

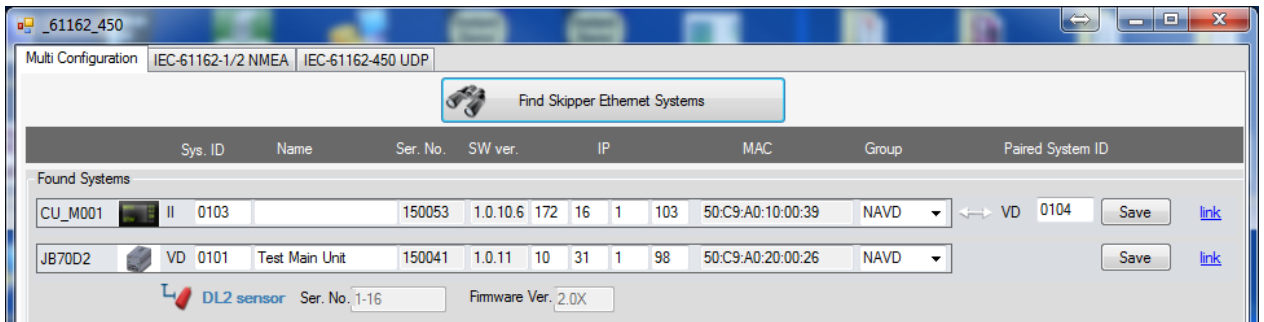




Press Download firmware and search to the latest version This is available on the web at <http://www.skipper-service.no/skipdoc/skipdoc.php?showdir=data////Software//DL2%20-%20Software%20for%20screen%20and%20JB70%20Unit>

and will be labelled SW-M006.

This firmware upgrade will take 2 to 3 minutes. After this process is finished. Restart the system and check using the com setup



You should now see the latest softwares in all units including the DL2 sensor.

