Software upgrades of the DL2 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

1.1 Service software: Download and install the service software.

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'

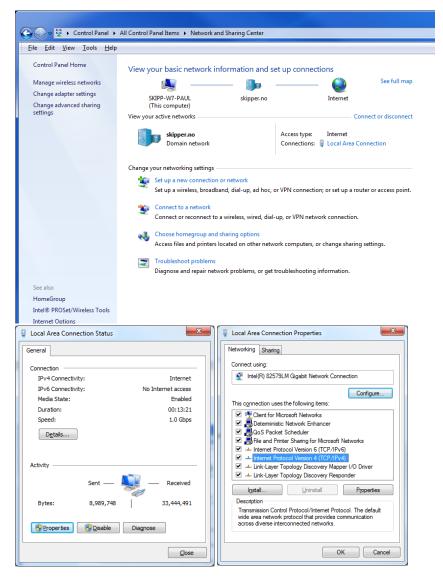


You should see the connected systems and the sensors connected to them. If you do not see this, but are connected. Check your antivirus settings, you may need to temporarily disable.

1.2 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 prototcol 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.

| Interne | t Protocol Version 4 (TCP/IPv4) F | Properti | es | | | ? X |
|---------|--|----------|-------|---|---------------|--------|
| Gene | ral | | | | | |
| this | can get IP settings assigned autom capability. Otherwise, you need to the appropriate IP settings. | | | | | |
| C |) Obtain an IP address automatical | у | | | | |
| -0 | Use the following IP address: | | | | | |
| IJ | P address: | 172 . | 16. | 1 | . 106 | |
| s | ubnet mask: | 255 . | 255 . | 0 | . 0 | |
| ₫ | efault gateway: | | | | | |
| 6 |) O <u>b</u> tain DNS server address autom | atically | | | | |
| | Use the following DNS server addr | esses: | | | | |
| P | referred DNS server: | | | | | |
| A | lternate DNS server: | | | | • | |
| | Validate settings upon exit | | | | Ad <u>v</u> a | nced |
| | | | Oł | < | | Cancel |

Click ok.

You are now ready to update.

1.3 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

| SKIPPER [©] | |
|--|---|
| E11985 CD401-SEI JB270D1/CD JB270D1/CD JB270D2 Lyggsfor status Image: Sei | |
| Get 05 form Service Software upgrade available Open Devertical SMPFER INFO Instruct 602 2016 1.67% 1.67% 2012 2017 Instruct on Using the ET ways both row available on the Fourin 1.67% 50 10 2012 Instruct on Using the ET ways both row available on the Fourin 1.67% 60 10 2012 Instruct on Using the ET ways both row available on the Fourin 1.67% 70 10 2013 New Sonce adhere release. With terms for DL 1. Compact display and reproved EML224 Sensor 1.67% 70 10 2013 New Sonce adhere release. Writh terms for DL 1. Compact display and reproved EML224 Sensor 1.67% 70 10 2013 New Horne werease? Try to invariable and relead from the link. 1.67% 60 50 2013 How to taskile the new dual STM_SOG danded for vessels over SSk GRT from June 2014 1.67% | |
| PormJB70 | |
| Download Firmware Search units connected to ethernet Find JB70 Units | Find CU-M001 |
| Found Systems CU-M001 | |
| Name Ser. No. IP | MAC Firmware |
| CU-M001 150053 [172 16 1 103] 50.CS | FA0:10:00:39 1.0.10.6 Download Firmware |

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 / JB70D2-SA

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

| <u>.</u> | FormJB70 | · | | | - | _ | 70 | |
|----------|------------------|-------------------|----------|------------|-------------------|----------|-------------------|--|
| Do | wnload Firmware | | | | | | | |
| | Search units con | nected to ethemet | Find J | B70 Units | Find CU-N | /001 | | |
| _ | Found Systems | | | JB70 | | | | |
| | | Name | Ser. No. | IP | MAC | Firmware | | |
| | JB70D2 | Test Main Unit | 150041 | 10 31 1 98 | 50:C9:A0:20:00:26 | 1.0.11 | Download Firmware | |

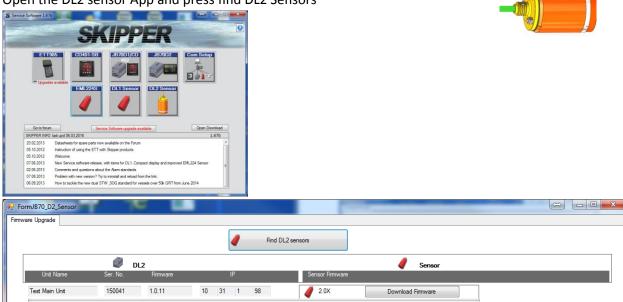
Click on the 'Download Firmware' and search to the latest software. This can be found on the web at

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 DL21SG-SA DL2 part / 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)

| Speed S | imulation: | Off | Simulate fixed speed | STAR |
|---------------------------------------|---|-----------|----------------------|--------|
| | ert output: (| | Simulation source | SENSO |
| Sensor live | | | Fixed speed long | 1.0 kn |
| STW2L -34.8 | STWL QF 9.0 | Values h | oro | |
| STW2T 45.0 | STWT QF 9.0 | values in | peed tra | 1.0 kn |
| SOG2L -13.8 | SOGL QF 9.0 | | | |
| | | ROT | Test Alert output | START |
| SOG2L -13.8 SOG2T -19.9 GPS SOG | SOGL QF 9.0 SOGT QF 9.0 TEMP 39.3 | ROT | Test Alert output | START |
| | Self-test | | | |

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

| <mark>61162_450</mark> | | 6 al | | | | E | | | | | | | X |
|-------------------------------|---------------|--------------------|----------|----------|--------|----|---|-----|-------------------|-------|---------|--------------|-------------|
| Multi Configuration | IEC-61162-1/2 | NMEA IEC-61162- | 450 UDP | | | | | | | | | | |
| Find Skipper Ethernet Systems | | | | | | | | | | | | | |
| | Sys. ID | Name | Ser. No. | SW ver. | | | | | MAC | Group | Paire | ed System ID | |
| Found Systems | | | | | | | | | | | | | |
| CU_M001 | II 0103 | | 150053 | 1.0.10.6 | 172 | 16 | 1 | 103 | 50:C9:A0:10:00:39 | NAVD | ▼ <⇒ VD | 0104 Save | <u>link</u> |
| JB70D2 | VD 0101 | Test Main Unit | 150041 | 1.0.11 | 10 | 31 | 1 | 98 | 50:C9:A0:20:00:26 | NAVD | • | Save | <u>link</u> |
| | L DL2 s | ensor Ser. No. 1-1 | 6 | Firmware | Ver. 2 | DX | | | | | | | |

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