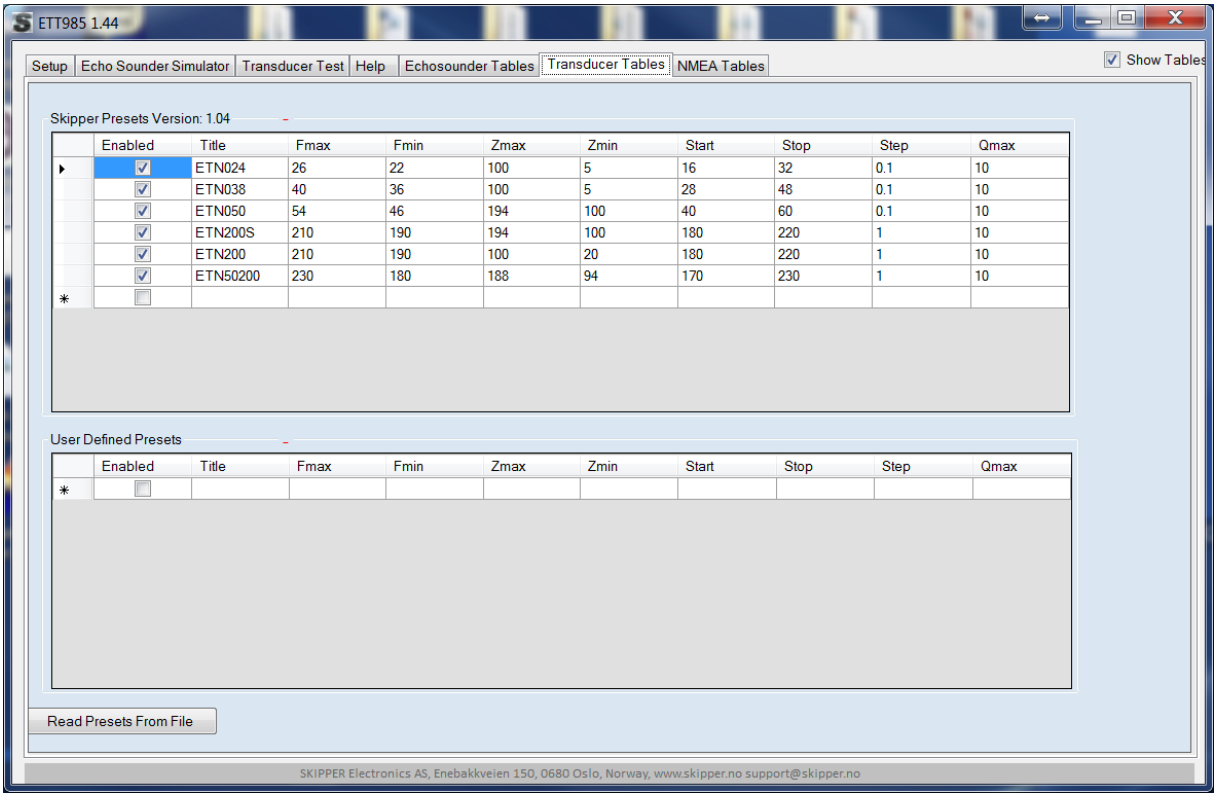
SKIPPER DATA BULLETIN		Number	SDB_ETT985_03
For System	ETT985	Date	5.02.13
Serial from / to	ALL	Author	PC

Adding and adjusting the tables in the ETT985 device and software

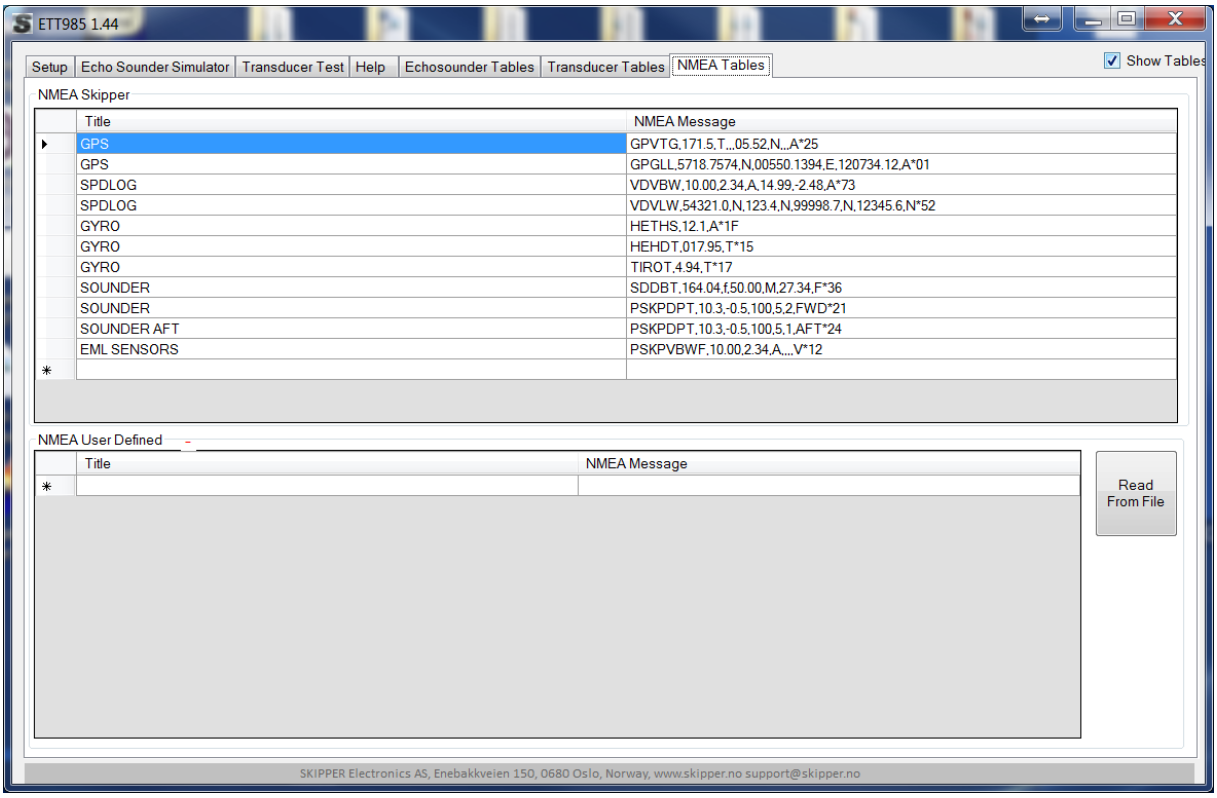
The ETT985 tester has a set of transducer test parameters in its internal memory, these are initially set by SKIPPER to reflect our current transducers range, and consist of max and min values of impedance and frequency. As well as some guidelines for bandwidth (Q). These cannot be adjusted by the customer, but can be removed if not relevant.

Transducer Tester parameters



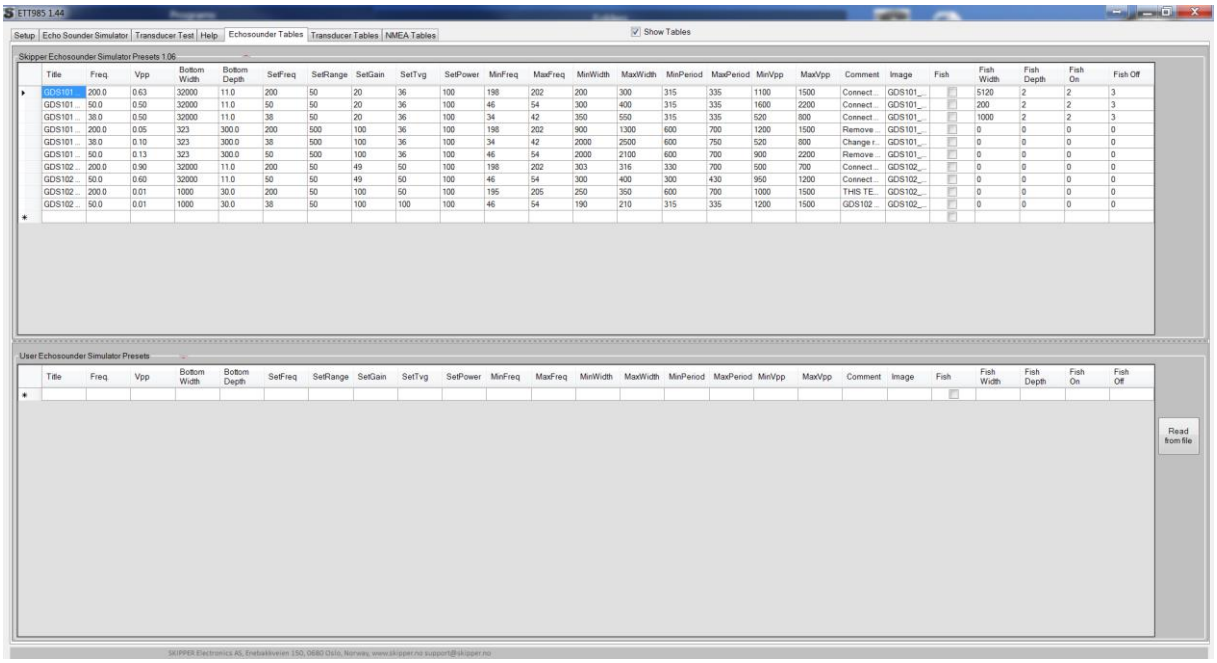
The NMEA tester of the ETT has a set of preprogrammed sentences. These cannot be changed, however there are some lines allowing the user to program their own sentences and these are downloaded to the unit.

NMEA tester parameters



The SKIPPER service software contains tests for echosounders containing test parameters for the return pulse, setup parameters for the sounder under test (for the user to set), limits of the measured pulse, and an expected picture of the screen. Also a comment field that allows an explanation of how to do the test.

Simulator Parameters



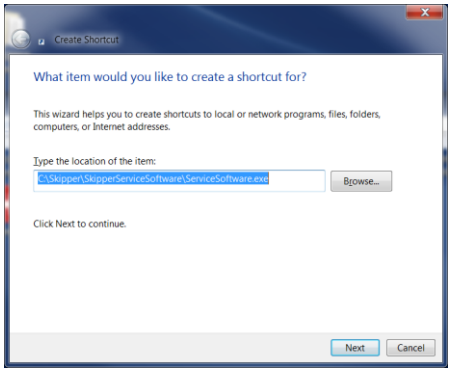
Adding new NMEA messages

Most tables are initially locked for change, however the NMEA is open to all Users. Simpley write in the NMEA command, giving a short title (max 13 characters) to be displayed on screen. And The actual message to be transmitted. Ensure the checksum is correct.

Once programmed, click on the send to ETT button to program the ETT. If something goes wrong, try restarting over again. In the worst case, if the ETT locks or stops working correctly, do a master reset (turn on ETT with ESC pressed)

Adding new Transducers/Echosounders

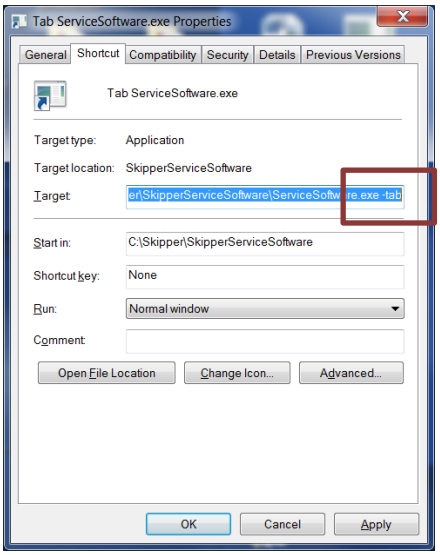
The Transducer tables is initially locked, as it should not be necessary to update these. If you wish to add another transducer, make a short cut to the software, and right click on that. Go to properties and add the following test –tab to the end of the shortcut.



Right click on the desktop and NEW - shortcut.

Add the shortcut to the Service software

Right click on the new icon, and add –tab at the end of the target line.



Click ok, Now when you click on that shortcut you will have access to add new lines to the tables.

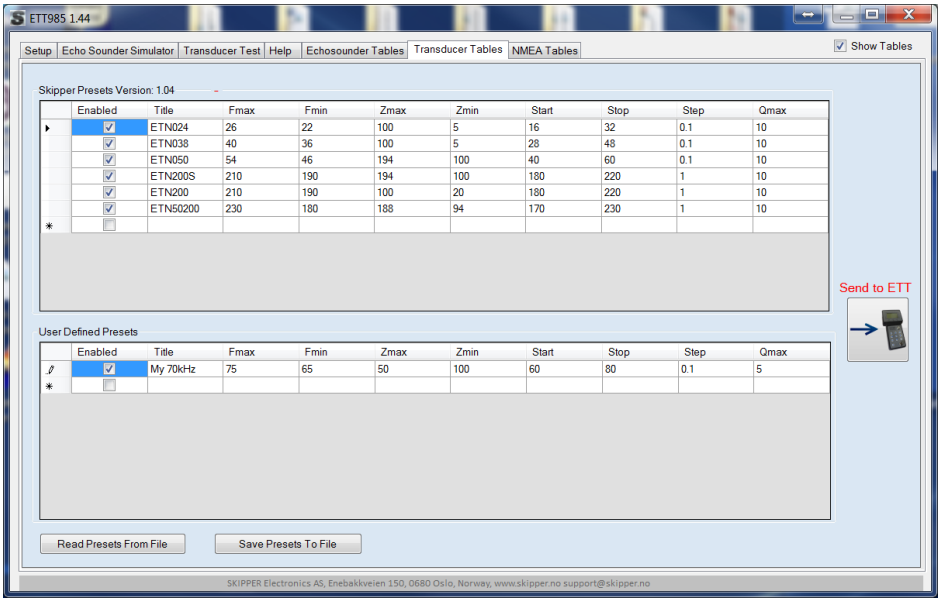
Adding new Transducers

You can now enter your own User defined preset you must enter the following:

- **Test range** for the sweep of the analysis (make sure this sweep only encompasses the resonance of interest, making it too wide will maybe make the system find other resonances. *The tester will scan in the range you set, and present data at the resonant point (lowest Z) and at the mid point between Start and Stop, it is assumed this point is the desired manufactrers frequency. So make the scan equal above and below that frequency*

- **Max / Min impedence (Z)** usually provided in the manufacturers spec sheet
- **Title** max 8 characters
- **QMAX.** The max bandwidth Q this to make sure the system has a proper resonance,1 is widest.

Once you have entered the new device, you can save the values and / or load the values to the ETT.



The file you have made can be saved and used by any other tester, even without software activation.

Adding new Echosounders

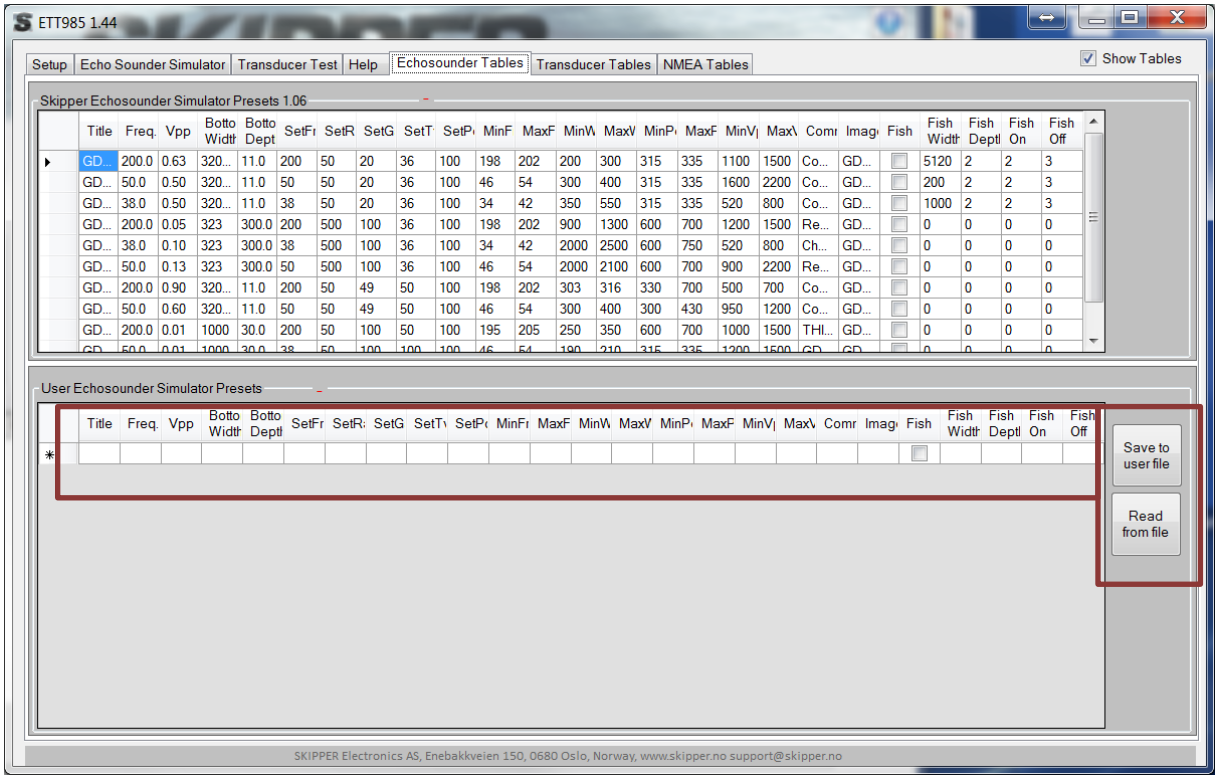
Enter the Echosounder tables tab

The table consists of user settings on the Sounder, settings on the simulator, and max min values for the received pulse. Using the software, set up the simulator to give the results you require. We find the most interesting test is to set up a powerful output pulse, and return ,the smallest return that can be detected. Take a picture of the sounder screen and reduce it to 640x480 fomat.

Enter the following information:

- Title, recommended <30 characters
- Frequency; simulator frequency
- Vpp ; The return voltage (mV)
- Bottom width
- Bottom depth (remember TVG has effect in the shallow range)
- Set FReq, the user setting for frequency on sounder
- Set Range, the screen depth range
- Set Gain, Valuse on screen
- Set TVG, value on screen

- Max Min Freq (the required frequency of the output pulse)
- Max min width, the required pulse width of the output
- Max min VPP Required voltage of the output pulse (note these values should be taken from the simulator, the load is 300 ohms in this unit and the load will change the output value.)
- Comment , the instruction to the user of how to perform the test
- Image, the name of the file in the expected images folder (under the software folder)
- Fish , if you require fish in the water column, these are set here.



Loading in new files from SKIPPER

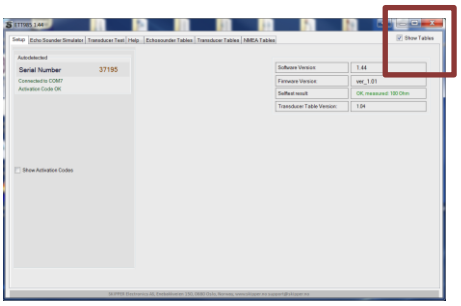
Normal users can load in files and download them into the ETT985

If new files are available from SKIPPER, the software will say this when it is connected to the network.

Click on these files and they will be downloaded to the SKIPPER downloads folder (you can view this using the button on the first page)

Once downloaded if you enter the ETT page and click on the tables tab, you will find a message in the tables , asking if you wish to upgrade.

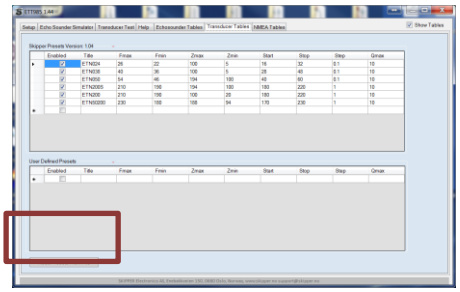
Clicking on this will change the table on the PC and you can then download this to the ETT device

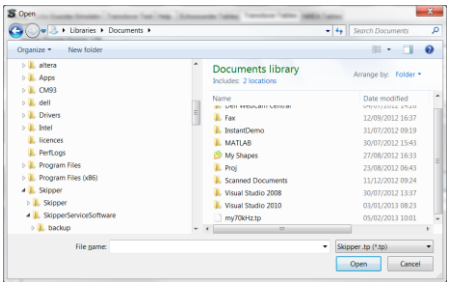


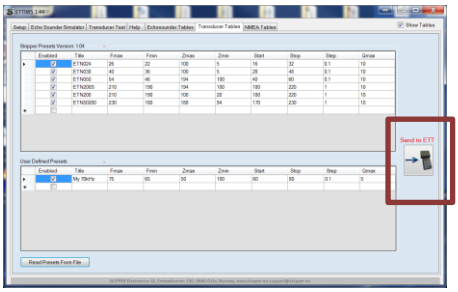
Loading in files not made by SKIPPER

It is possible to load in presets from other manufacturers than SKIPPER.

- Simply start the software,
- Go to the ETT page,
- click on the Tables tab.
- Go to the table you require, press load, find the file
- Download to the ETT if required.







Note , if the SKIPPER values change, you will be given the ption to insert these into your table.

If you have too many extra transducers, The memory will fill up, in this case you must deselect some of the transducers