SKIPPER L	DATA BULLETIN	Number	SDB_ETT985_03
For System	ETT985	Date	5.02.13
Serial from / to	ALL	Author	PC
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ETT98	5 device and	softwai	ce de la companya de
0	5 device and	0	

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.

Show Table

S ETT985 1.44 Setup Echo Sounder Simulator Transducer Test Help Echosounder Tables Transducer Tables NMEA Tables Skipper Presets Version: 1.04 Zmax Enabled Title Fmax Fmin Zmin Start Stop Step Qmax \checkmark ETN024 26 22 100 5 16 32 0.1 10 1 ETN038 40 36 100 5 28 48 01 10 V 100 ETN050 54 46 194 40 60 0.1 10 V ETN200S 210 190 180 220 10 194 100 1 **v** ETN200 190 220 100 20 180 10 210 1 1 ETN50200 230 180 188 94 170 230 1 10 User Defined Presets Enabled Title Fmax Emin Zmax Zmin Start Stop Step Qmax

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.

SKIPPER Electronics AS, Enebakkveien 150, 0680 Oslo, Norway, w

NMEA tester parameters

Read Presets From File

tup Echo Sounder Simulator Transducer Test	Help Echosounder Tables Transducer Tables NMEA Tables
MEA Skipper	
Title	NMEA Message
GPS	GPVTG,171.5, T., 05.52, N., A*25
GPS	GPGLL,5718.7574,N,00550.1394,E,120734.12,A*01
SPDLOG	VDVBW,10.00,2.34,A,14.99,-2.48,A*73
SPDLOG	VDVLW,54321.0,N,123.4,N,99998.7,N,12345.6,N*52
GYRO	HETHS,12.1.A*1F
GYRO	HEHDT.017.95,T*15
GYRO	TIROT,4.94,T*17
SOUNDER	SDDBT,164.04,f;50.00,M,27.34,F*36
SOUNDER	PSKPDPT, 10.3, -0.5, 100, 5, 2, FWD*21
SOUNDER AFT	PSKPDPT.10.3,-0.5,100,5,1,AFT*24
EML SENSORS	PSKPVBWF,10.00,2.34,A,,V*12
	NMFA Messane
MEA User Defined	NMEA Message
MEA User Defined	

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

Skipper Echo Sounder Simulator Presets 106	000 400 315 555 550 450 450 5000 2550 450 6000 2550 450 6000 2510 450 600 316 450 2100 450 450 210 315 210 315 210 315 210 315 210 315	MePariod MarP 315 335 315 335 315 335 600 700 600 700 600 700 330 700 330 700 330 700 330 337 335 35 335 35 337 700 330 700 330 700 335 35 337 700 337 700 337 700 337 700 337 700 337 700 337 700 335 35 335	Period Mir/Vpp 1100 1600 520 1220 520 520 500 950 1000 1200	MaxVpp 1500 2200 800 1500 800 700 700 700 1200 1500	Connect Connect Connect Connect Remove Connect Connect GDS102	Image GDS101 GDS101 GDS101 GDS101 GDS101 GDS102 GDS102 GDS102 GDS102 GDS102	Fish	Fish Width 5120 200 1000 0 0 0 0 0 0 0 0	Fish Depth 2 2 2 0 0 0 0 0 0 0	2 2 0 0 0	Fish Off 3 3 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0
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		MinPeriod MaxP	Period MinVpp	MaxVpp	Comment	Image	Fish	Fish Width	Fish Depth	Fish On	Fish Off

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

Create Shortcut	×
What item would you like to create a shortcut for?	
This wizard helps you to create shortcuts to local or network programs, files, folders, computers, or Internet addresses.	
Iype the location of the item: Browse CSSkipper(SkipperGeniceSoftware/ServiceSoftware.exe Browse	
Click Next to continue.	
Next C	Cancel

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

Tab ServiceSoft	ware.exe Properties
General Shortcut	Compatibility Security Details Previous Versions
Tal	b ServiceSoftware.exe
Target type:	Application
Target location:	SkipperServiceSoftware
<u>T</u> arget	er\SkipperServiceSoftware\ServiceSoftw re.exe -tab
Start in:	C:\Skipper\SkipperServiceSoftware
Shortcut key:	None
<u>R</u> un:	Normal window 💌
Comment:	
Open <u>F</u> ile Lo	cation Change Icon Advanced
	OK Cancel <u>Apply</u>

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

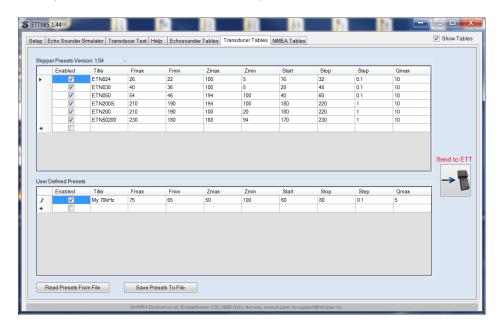
Adding new Transducers

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 manufacters 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.

ripp	er Echo	sound	ler Sim	ulator F	resets	1.06			-																		
	Title	Freq.	Vpp	Botto Width	Botto Dept	SetFr	SetR	SetG	SetT	SetP	MinF	MaxF	MinW	MaxV	MinP	MaxF	MinV	Max\	Com	Imag	Fish		Fish Deptl		Fish Off		
	GD	200.0	0.63	320	11.0	200	50	20	36	100	198	202	200	300	315	335	1100	1500	Co	GD		5120	2	2	3		
	GD	50.0	0.50	320	11.0	50	50	20	36	100	46	54	300	400	315	335	1600	2200	Co	GD		200	2	2	3		
	GD	38.0	0.50	320	11.0	38	50	20	36	100	34	42	350	550	315	335	520	800	Co	GD		1000	2	2	3	-	
	GD	200.0	0.05	323	300.0	200	500			100	198	202	900	1300	600	700	1200	1500		GD		0	0	0	0	=	
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	GD		0.13		300.0		500							2100				2200		GD		0		0	0		
		200.0				200							303		330				Co	GD		0		0	0	_	
	GD		0.60			50	50				46				300			1200		GD		0	-	0	0		
	GD	200.0		1000		200	50 50			100	195	205	250		600 315	700 335		1500		GD		0	0	0	0	-	
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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.



Scho Sounder Simulator										
er Presets Version: 1.04 Enabled Title	Fm		Finin	Zлак	Zeie	Start	Step	Step	Gmax	1
2 ETN			22	100	5	16	32	0.1	10	-
Z ETN	350 54		26 45	194	130	40	60	01	10	
2 ETN	2005 210		190	194	130	183	220	1	10	
Z ETN	200 210 50200 230		190	100	20	153	220 230	1	10	
Defined Prosets Enabled Title	Fm		Fmin	2мая	Znin	Start	Stop	Step	Gmax	-
	_									
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Drivers						WEDLAND C	DIN OI			0012 19:20
L Intel					🗼 Fax					2012 16:37
Licences					🗼 Insta					2012 09:19
					👢 MAT					2012 15:43
PerfLogs					🖄 My S	hapes			27/08/3	2012 16:33
🗼 Program Files					🗼 Proj				23/08/2	2012 06:43
🗼 Program Files	3 (x86)				👗 Scar	ned Docum	ents			012 09:24
🗼 Skipper					Visu	al Studio 20	18		30/07/2	012 13:37
🛛 👢 Skipper						al Studio 20				013 08:23
 SkipperServ 	riceSoftwar	e .			my7		10			2013 10:01
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F	ile game:							• Sk	ipper.tp (*.tp	
									Open	Cance
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step Echo Sounder Sin Skipper Presets Versio		Aucer Teat	Help Echae	ounder Tables	Transducer Ta	Dies NMEATS	bha			₹ 68
Enabled	Tido	Frax	Finin	Znax	Znie	Start	984	Step	Gwax	
• 2	ETN024 ETN038	26 40	22	100	5	16	32	01	10	
2	ETN050	54	-45	194	130	40	60	01	10	
2	ETN2005 ETN200	210	190	194	100	183	220	1	10	
	ETNS0000	230	100	108	54	130	230	1	10	
•										-
										-
User Defined Presets	Téo	Frax	Frein	Zwan	Znie	Start	580	9 Stag	Gmax	-h -
Enabled	My 70kHz	75	6	50	130	60	80	0.1	5	
Enabled										
Enabled										

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

	Enabled	Title	Fmax	Fmin	Zmax	Zmin	Start	Stop	Step	Qmax	
	✓	ETN024	26	22	100	5	16	32	0.1	10	
	1	ETN038	40	36	100	5	28	48	0.1	10	
	v	ETN050	54	46	194	100	40	60	0.1	10	
	v	ETN200S	210	190	194	100	180	220	1	10	
	v	ETN200	210	190	100	20	180	220	1	10	
	v	ETN50200	230	180	188	94	170	230	1	10	
<u> </u>											
			Emax	Emin	Zmax	Zmin	Start	Stop	Step	Qreax	
	Enabled	Title	rmax								
	Enabled	Title	Finax								
6		Title	rmax								
•		Title	Pmax								
•		Title	P max								