

# SKIPPER ETT985

*Echo Sounder, Transducer and NMEA tester*

*Transducer tester*

*Echo Sounder tester*

*NMEA tester*

*Manufacturer tests*

*Software*

*Service Reports*



## **The ETT985**

A simple to use, reliable and accurate tester for most Echo Sounders. Preprogrammed with factory tests for Transducers, Echo Sounders and NMEA ports. This unit can be used in a stand-alone mode, or using a connection to a PC to give accurate results and even print/save a status report, this unit eliminates uncertainty of whether a failure is in the Transducer or in the Echo Sounder. An expensive mistake if you get it wrong!

SKIPPER Electronics manufacture marine electronics for the merchant fleet as well as the fishing fleet, based on experience, research and tradition. Our products are known worldwide for reliability, sophistication and good value for money.

### **Features:**

#### **Tester for Transducer of frequencies from 10 kHz to 1 MHz**

##### **Just the tester:**

- Impedance, resistance and phase
- Detection of resonant point and impedance at resonance
- Preprogrammed integrity tests for SKIPPER transducers (and others)

##### **With software AC-ETT985:**

- Graph of impedance, conductance, phase and susceptance
- Detection of resonance, anti-resonance, bandwidth and factory limit check
- Save to .xls format and/or print out for service reports
- Add your own transducer checks and limits (saved in tester for later use)

#### **Simulator for SKIPPER and other continuous wave Echo Sounders**

##### **Just the tester:**

- Detect and measure pulses, frequency, strength, Vpp, width and period
- Generate return pulses with fixed or tracking format, at depth up to 999.9 m
- Simulate fish in the water column

##### **With software AC-ETT985:**

- Check results against factory settings or preset default values
- Add your own Echo Sounder values and checks

#### **NMEA tester**

##### **Just the tester:**

- Monitor NMEA lines, loop back signals from devices, send standard formats for GPS, gyro, Echo Sounders, Speed Logs etc.
- Use the unit as a NMEA to RS232 converter or to USB with included converter

##### **With software AC-ETT985:**

- Insert your own NMEA parameters (can be saved)

**"Serve you further"**

**e-mail: [sales@skipper.no](mailto:sales@skipper.no)**

**[www.skipper.no](http://www.skipper.no)**

**Navigational Speed Logs, Echo Sounders, Sonar and Direction Finders**

# SKIPPER ETT985

Echosounder, Transducer and NMEA Tester



Depth: 6 cm  
Weight: 728 g

## The ETT985

Test the transducer against a preset set of parameters from the manufacturer. Then test the Echo Sounder and compare to an expected screen picture. This will test programmed limitations, noise levels, cabling and Transducer operation.

If the problem is NMEA connections, then simply connect the tester to the NMEA port, using the provided test clips, and monitor the traffic. Alternatively you can loop the incoming signals to the output, and see if the signals appear on the sounder unit. The unit will send standard messages for the Echo Sounder, GPS, gyro, Speed Log, and more. It will allow wiring to be diagnosed. If all else fails, or if you wish to send commands or log data, the ETT985 can be used together with a PC as a simple NMEA converter.

The ETT985 is provided with test cables, power supply and a USB converter, in a soft carry bag, ready to go! The tester can be purchased alone (part number: ETT985-SA) or with activation code (part number: ETT985-SASW) for the extra test functionality within the SKIPPER service software freely downloadable from [www.skipper.no](http://www.skipper.no).

This system is ideal for anyone performing service on Echo Sounders or as a low cost analyser for anyone interested in underwater transducers.



### Simulator parameters

Parameter	Alias	Range	Resolution	Accuracy better than
Input frequency	lfreq	10 kHz - 999.9 kHz	0.1 kHz	±1 kHz
Input width	lwidth	20 us - 60 000 us	1 us	±10 us
Input period	lperiod	1 ms - 6 553.5 ms	0.1 ms	±1 ms
Input amplitude	Vipp	50 V - 2 500 V	1 V	±10 V
Output frequency	Ofreq	10 kHz - 999.9 kHz	0.01 kHz	±0.1 kHz
Output bottom width	Obwidth	20 us - 60 000 us	1 us	±5 us
Output bottom depth	Obdepth	0.2 m - 999.9 m	0.1 m	±0.2 m
Output fish width	Ofwidth	20 us - 60 000 us	1 us	±1 us
Output fish depth	Ofdepth	0.2 m - 999.9 m	0.1 m	±0.2 m
Output amplitude	Vopp	0.02 mV - 599.99 mV	0.01 mV	±0.2 mV
Output fish ratio	Ofr	00:00 - 99:99	N/A	N/A

### NMEA tester Presets

Preprogrammed parameter	On Screen
GPGLL,5718.7574,N,00550.1394,E,120734.12,A*01	GPS
GPVTG,171.5,T,,05.52,N,,A*25	GPS
VDVBW,10.00,2.34,A,14.99,-2.48,A*73	SDPLOG
VDVLW,54321.0,N,123.4,N,99998.7,N,12345.6,N*52	SPDLOG
HETHS,12.1,A*1F	GYRO
HEHDT,017.95,T*15	GYRO
TIROT,4.94,T*17	GYRO
SDDBT,164.04,f,50.00,M,27.34,F*36	SOUNDER
PSKPDPT,10.3,-0.5,100.5,2,FWD*21	SOUNDER
PSKPDPT,10.3,-0.5,100.5,1,AFT*24	SOUNDERAFT
PSKPBWF,10.00,2.34,A,,V*12	EML SENSORS
Programmable from software	<user defined>

### Transducer tester

Parameter	Alias	Range	Resolution	Accuracy better than
Scan frequency	Fs	10 kHz - 999.9 kHz	0.01 kHz	±0.1 kHz
Resonant frequency	Fr	10 kHz - 999.9 kHz	0.01 kHz	±0.5 kHz
Resonant impedance of the transducer	Zr	1 ohm - 65 535 ohm	1 ohm	±10 ohm
Resonant phase of the transducer	Qr	±180 deg	0.01 deg	±10 deg*

\*Better at higher impedances



24 cm



29 cm

Depth: 12 cm  
Weight: 1.6 kg

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