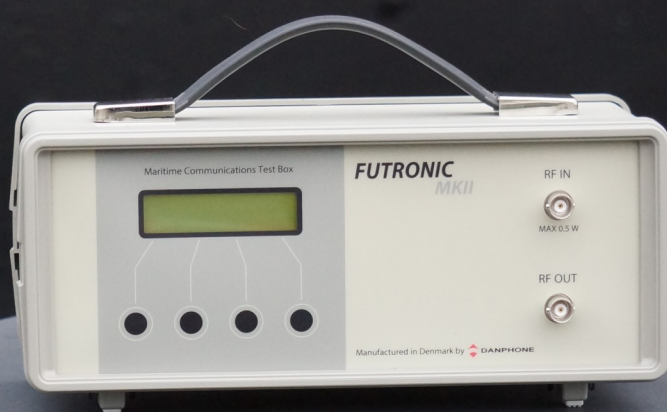


# MARITIME RADIO TEST BOX FUTRONIC MKII

The world's leading multi-functional test equipment for maritime radio surveys



MADE IN DENMARK

WE ENSURE SAFE MARITIME COMMUNICATION WORLDWIDE

# THE NEW GENERATION OF **TEST EQUIPMENT**

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The Futronic test box is the result of a development project with the national telecom authorities in 1995. The test box fulfilled the increasing need for test and verification of various maritime radio and safety equipment.

The fundamental design requirement was to develop a device that held all functions in one single unit.

Since then, Danphone has continually developed the Futronic platform to meet the latest IMO requirements and improve test efficiency.

The workmanship and profound knowledge that went in to the original design is preserved in the new generation.



# DANPHONE'S ALL-IN-ONE MARITIME RADIO TEST BOX

For more than 25 years, Danphone has developed and manufactured radio communication equipment. Today, Danphone supplies radio surveyors all over the world with the only test box on the market capable of multiple test functions and a proven operational lifetime of more than 20 years — **FUTRONIC MKII**



## ALL-IN-ONE TESTING AND MEASURING

Futronic MKII brings fast and simple testing of communication and safety equipment to radio inspectors all over the world.

Based on the ALL-IN-ONE concept, Futronic MKII is capable of testing all radio and safety equipment obligated by IMO to undergo mandatory inspections. Test results conform to the survey reports for easy reporting with the easy-to-use Futronic MKII PC software.



# MANDATORY RADIO INSPECTIONS

Futronic MKII enables testing of all communication and safety devices required onboard vessels.

## TEST

### VESSEL RADIO EQUIPMENT



VHF radio



NAVTEX



AIS



MF/HF radio



GMDSS



Pilot plug



## RADIO INSPECTIONS TODAY

*"Telenor Coastal Radio, Radio Inspection department, have 11 radio surveyors in Norway. Myself, being a user of the Futronic Box for more than 7 years. I started in this job with the previous Futronic model - and the new one since it's first release. The Futronic MK II is performing flawlessly every day ! - It is very comfortable to have everything I need to perform the complete radio survey in such a small box. The Futronic MK II has a user-friendly interface and is very easy to use. In my daily work I perform radio surveys on behalf of the Norwegian Maritime Authority and all the different Class societies (i.e. DNV-GL, BV, RINA, ABS, Lloyds, NK Class and more)"*



# SCOPE

## VESSEL SAFETY DEVICES

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EPIRB



RADAR SART



AIS SART



Personal Locator  
Beacon



Man over Board



## TEST SPECIFICATIONS

Faster testing is achieved through simultaneous AIS-SART tests, where all eight AIS-bursts are measured in one single test. Faster testing is also achieved through simultaneous test of frequency, data and power in AIS and VHF tests.

### AIS Transponders

Measuring AIS data, frequency, power and VSWR simultaneously on:

- Class A & B transponders
- AIS base stations
- Aircraft Search and Rescue transponders
- Aids to Navigation devices (AtoN)

### Search and Rescue transponders

Measuring data & frequency simultaneously on:

- EPIRB
- Man over Board (MoB) devices
- AIS SART beacon data & frequency
- Radar SART beacon level & frequency

### VHF radios

DSC data, ATIS, frequency, power, VSWR and deviation.

Measuring frequency and power simultaneously

### MF/HF radios

Measuring DSC data and frequency simultaneously

### NAVTEX receivers

Reception of transmitted NAVTEX messages

# DIGITAL MANAGEMENT OF TEST RESULTS

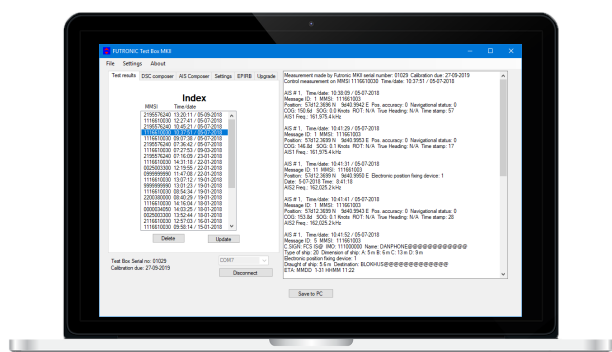
Futronic MKII test box comes with a PC software that allows the user to view and save all test results collected by the test box during inspection. The software imports all test and measurement data from the test box by USB connection. The intuitive design ensures excellent user experience and enables upgrades of the latest facilities straight from Danphone's factory in Denmark.

## Test results and data analysis

Futronic's test box generates exact test results providing technical insight into the unit under test. A comparison of results will determine the unit's condition. If certain results are aggravating the unit can be repaired or replaced before failing. Stored results can be reclaimed for further analysis.

## Fast and easy reporting

The classification societies issue the official survey reports for inspections. The Futronic all-in-one concept provides a complete set of test results aligned with the survey reports for faster reporting. EPIRB reports are generated automatically by the PC software, ready for sign-off. The PC software is continually updated in relation to the latest IMO requirements and is always available for download at [www.danphone.com](http://www.danphone.com).



TestBoxDump16032018 - Notesblok	
Filer Rediger Formater Vis Hjælp	
Measurement made by Futronic MKII serial number: 01003 Calibration due: 27-02-2020	
Control measurement on MMSI 099999999	
AIS # 1, Time/date: 12:03:40 / 22-02-2018	
Message ID: 21 MMSI: 3405	
Position: 63425.6830 N 10d06.4266 E	
Name of Aton: ATON_TEST0000000000	
Type of Aton: 7 Type of position fix: 0	
AIS1 Freq.: 161,974.9 kHz Fwd.: 10.6	
AIS # 1, Time/date: 12:19:36 / 22-02-2018	
Message ID: 4 MMSI: 2500330	
Position: No position info Electronic	
No UTC date info No UTC time info	
AIS1 Freq.: 161,974.8 kHz Fwd.: 11.6	
AIS # 1, Time/date: 12:28:34 / 22-02-2018	
Message ID: 4 MMSI: 2500330	
Position: 57d12.3379 N 9d40.7059 E	
Date: 8-06-2098 Time: 11:28:39	
AIS1 Freq.: 161,974.6 kHz Fwd.: 12.0	
AIS # 1, Time/date: 12:36:32 / 22-02-2018	
Message ID: 1 MMSI: 219557624	
Position: 57d12.3712 N 9d40.9938 E	
COG: 109.7d SOG: 0.1 knots ROT: N	
AIS1 Freq.: 161,975.3 kHz Fwd.: 9.7	
AIS # 1, Time/date: 12:46:43 / 22-02-2018	
Message ID: 5 MMSI: 219557624	
C.SIGN: XP8863 IMO: 987654321 Name: XP8863	
Type of ship: 20 Dimension of ship: 20	
Electronic position fixing device: 1	
Draught of ship: 7.5 m Destination: ETA: MDD 12-31 HHMM 23:59	
AIS1 Freq.: 161,975.0 kHz Fwd.: 9.6	
NAVTEX # 1 Time/date: 13:27:27 / 22-02-2018	
Send 490 kHz Received ok	
NAVTEX # 1 Time/date: 13:28:35 / 22-02-2018	
Send 518 kHz Received ok	

Particulars of Ship	
Name of Ship:	XP8863
Call sign:	XP8863
Port of Registry:	Denmark
Maritime Mobile Service Identity:	219557624
IMO Number:	987654321
Installation	
1.1 AIS Transponder type	Class B
1.2 AIS Type approval certificate. Recognizing the following:	
Performance standard: IEC 61992-2	
Test Standard: IEC 61992-2	
1.3 Drawings provided: Antenna-, AIS-arrangement and block diagram	
1.4 Main source of electrical power	Battery
1.5 Emergency source of electrical power: (110/230VAC / 24VDC)	
1.6 Capacity to be calculated if battery is emergency source of electrical power (ref. SOLAS 1978 Reg.42, 3.2 or Reg.43, 3.2)	
1.7 Pilot flag to be visible near the Pilot's operating position	
1.8 Panama Canal and St. Lawrence require a receptacle for 120VAC power supply (emergency) close to the pilot flag	
AIS programming - Static information	
2.1 Name of Ship	XP8863
2.2 Call sign	XP8863
2.3 Maritime Mobile Service Identity (MMSI)	219557624
2.4 Radio call sign	XP8863
2.5 Ship length	20
2.6 Ship beam	7.5
2.7 Type of ship	20
2.8 Location of position fixing antenna on the ship	
(off of bow, port or starboard)	
AIS programming - Dynamic information	
3.1 Ship position with accuracy and integrity status. Chart datum WGS84. (Source: GNSS)	
3.2 Time in UTC (Source: GNSS)	
3.3 Course over ground (with fluctuate at dockside) (Source: GNSS)	
3.4 Speed over ground. (Zero at dockside) (Source: GNSS)	
3.5 Heading. (Source: Gyro)	
3.6 Manoeuvring status. - Manual report	
3.7 Rate of turn. -Where available	
3.8 Angle of heel, pitch and roll. -Where available	
AIS programming - Voyage related information	
4.1 Ship's voyage	

Futronic AIS test results

Example of survey report



# HIGH PERFORMANCE MEASUREMENT

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Maritime safety has been an international focal point since 1912. Since then, the marine industry has focused on developing a uniform standard of safety equipment to avoid delay in distress situations. Danphone is a key partner for all certified surveyors.

# Delivery **WORLDWIDE**

Danphone supplies radio surveyors all over the world with Futronic test boxes and we have been doing so since 1996.



## **2000+** test boxes sold in **84** countries

### CONTACT DANPHONE

✉ [danphone@danphone.com](mailto:danphone@danphone.com)

☎ +45 96 44 44 44

🌐 [www.danphone.com](http://www.danphone.com)

### ABOUT DANPHONE

Danphone is a global partner and supplier within the maritime sector providing coastal radio, NAVTEX, AIS systems and test equipment for radio inspections.

Since 1990 the development and manufacturing of Danphone products and systems have been located under the same roof in Northern Denmark.