

Futronic MKII

TEST BOX MANAGER PC SOFTWARE

User Manual

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TEST BOX MANAGER PC SOFTWARE

The free PC software TEST BOX MANAGER allows you to

- View all test results and save them to a PC
- Compose custom-made DSC messages
- Compose custom-made AIS messages
- Perform test box settings that cannot all be done on the test box itself
- Perform PC-controlled EPIRB tests and generate complete finished EPIRB Test Reports
- Upgrade your test box with new facilities purchased from Danphone

How to download and install

- 1) Download the PC software from Danphones' website:
<http://danphone.com/futronic-gmdss-testers/futronic-mkii/>
- 2) Open the zipped file.
- 3) Double click on the file **Installation guide** and follow the instructions.

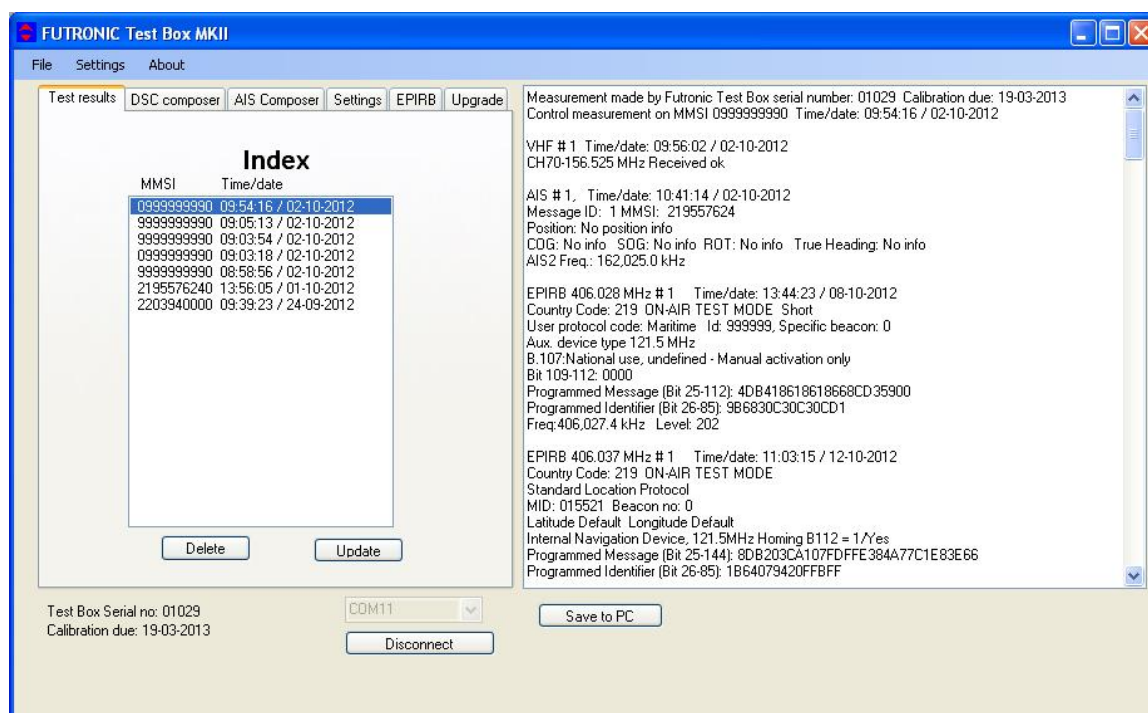


- 4) Once installed, the PC program will open a 6-tabbed dialogue box on your PC screen:

Test Results - DSC Composer - AIS Composer - Settings - EPIRB - Upgrade

The tabs are explained on the following pages.

Test results



The “Test Results” tab provides access to all the tests and test results stored in the test box.

Tests are organized with a header in the Index window to the left, under which the individual test results are displayed in the window at the right hand side.

Headers are indexed in time order with the latest test on top.

Please note: In order to view a test result, you must select its header first.

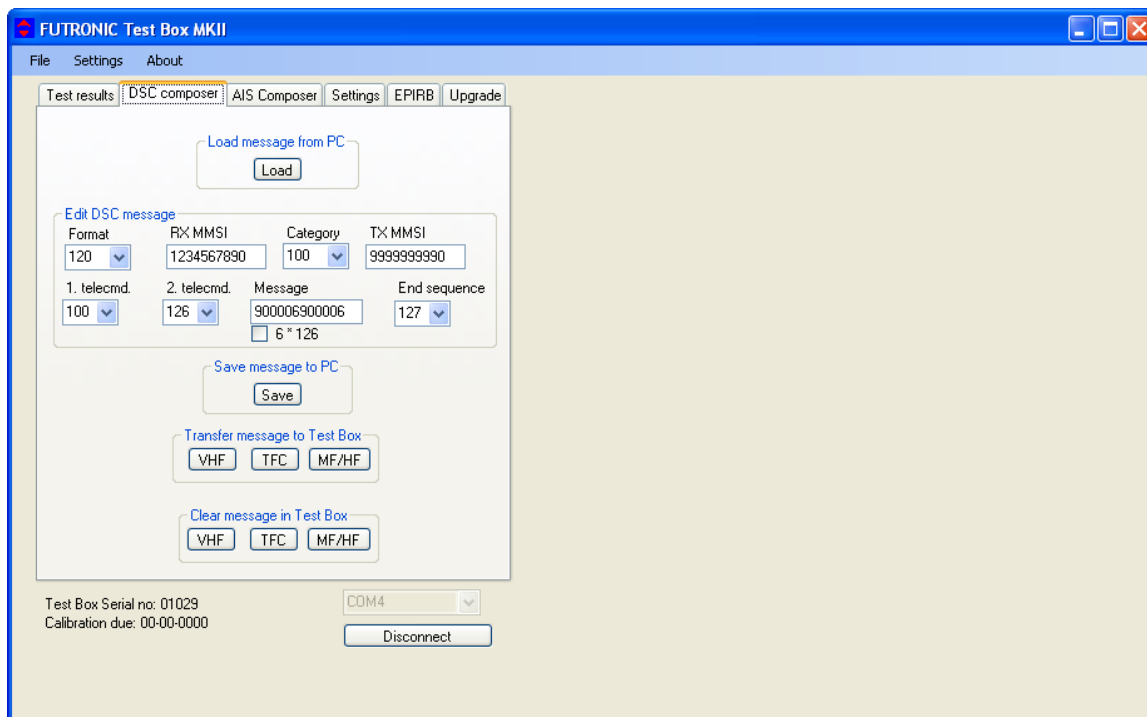
Press **Save to PC** in order to save the test results on your PC and to bring them into your own test report format, if so wished.

Press **Update** to update the Index list with new tests performed after you opened the PC program.

Press **Delete** to delete a test from the Index list.

Press **Disconnect** to disconnect the test box from your PC.

DSC Composer



Under the “DSC Composer” tab you can compose your own custom-made DSC messages and transfer them to the test box accordingly.

The test box can contain one DSC message for VHF, MF and HF respectively.

Custom-made DSC messages can also be saved on your PC for later use.

AIS Composer

The screenshot shows the 'AIS Composer' tab of the 'FUTRONIC Test Box MKII' software. The interface includes a menu bar with 'File', 'Settings', and 'About'. Below the menu is a tabbed interface with 'Test results', 'DSC composer', 'AIS Composer' (selected), 'Settings', 'EPIRB', and 'Upgrade'. The 'AIS Composer' panel contains the following elements:

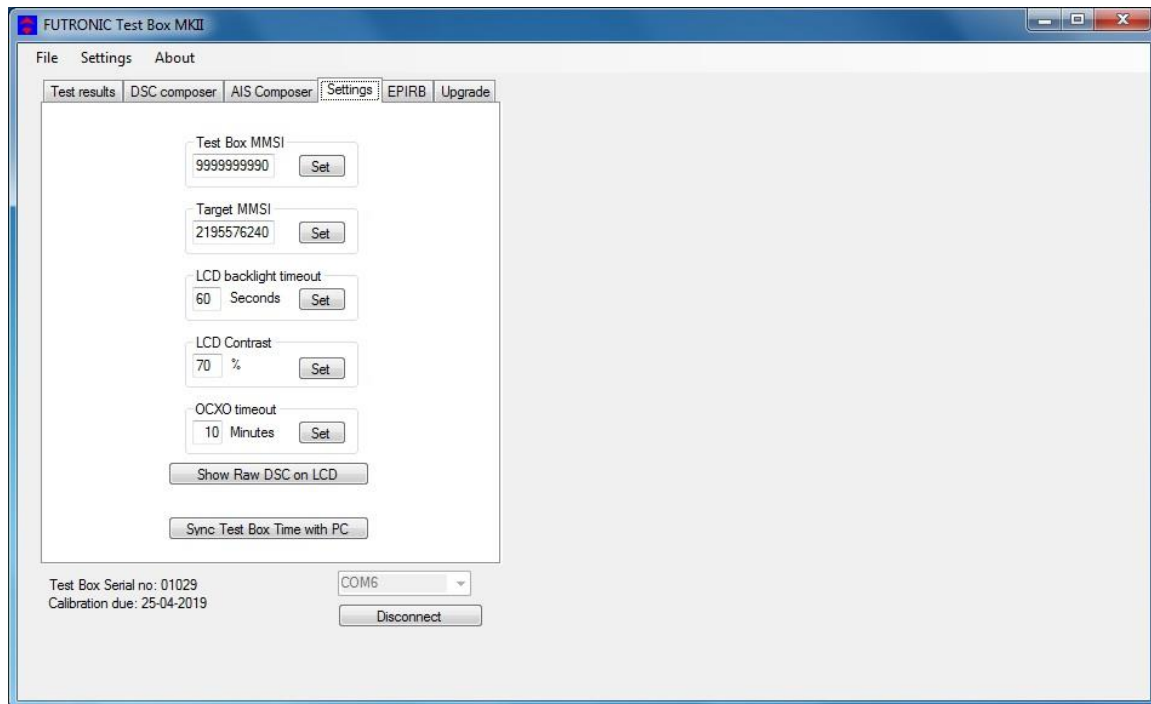
- A 'Load message from PC' section with a 'Load' button.
- An 'Edit AIS message' section with input fields for:
 - Message ID: 1 (dropdown)
 - MMSI: 999999999
 - ROT: 0
 - SOG: 1023
 - COG: 3600
 - HDG: 511
- A 'Position' section with:
 - Latitude: 45 " 0 0000
 - Longitude: 45 " 0 0000
 - Directional radio buttons: North (selected), South, East, West.
- A 'Save message to PC' section with a 'Save' button.
- Two buttons at the bottom: 'Transfer message to Test Box' (containing 'Transfer and transmit') and 'Clear message in Test Box' (containing 'Return to default message').

At the bottom of the window, it displays 'Test Box Serial no: 01029', 'Calibration due: 19-03-2013', a 'COM11' dropdown menu, and a 'Disconnect' button.

Under the “AIS Composer” tab you can compose and save your own custom-made AIS messages.

When transferred to the test box, the AIS message will be transmitted on both AIS channels, AIS1 and AIS2.

Settings



The “Settings” tab allows you to change the test box settings.

Test box MMSI: Write and set new MMSI number for the test box here.

Target MMSI: Write and set MMSI number of the device to be tested here.

LCD backlight time out: Write and set backlight time out between 0 and 200 seconds here.

LCD contrast: Write and set contrast between 0 and 100% here.

OCXD time out: Write and set OCXO time out between 0 and 99 minutes here.

Show raw DSC on LCD: Click here to have raw DSC data presented in the display along with clear text.

Sync Test Box Time with PC: Click here to synchronize the current date and time in the test box with the date and time in your PC.

EPIRB Test Report Generator

The “EPIRB” tab offers two options:

1. Generation of complete EPIRB test reports out of test results from the test box,
2. PC-controlled EPIRB testing and simultaneous generation of test reports.

1. Generating reports out of stored test results

The screenshot shows the 'FUTRONIC Test Box MKII' software window with the 'EPIRB' tab selected. The interface is divided into several sections:

- Frequency tolerance:** A dropdown menu set to '+/- 5 KHz' and a 'Level limit' field set to '190'.
- Beacon information:** A form with fields for 'Beacon name', 'Beacon model', 'Beacon manufacturer', 'Beacon serial number', 'Bracket type', 'Bracket serial number', 'Attached lanyard test', 'Hydrostatic release expiry', 'Battery expiry', and 'Vessel name'.
- Test Performed By:** Fields for 'Name' and 'Company'.
- Test Report Template:** A text field containing 'c:\EPIRB\DP_EPIRB_Template.html' and a 'Get template' button.
- Buttons:** 'Generate Report' and 'Start PC-controlled Test'.
- Status:** 'Test Box Serial no: 01029' and 'Calibration due: 19-03-2013'.
- COM Port:** A dropdown menu set to 'COM11' and a 'Disconnect' button.
- Test Results List:** A list of test results on the right side of the window, including entries like 'EPIRB 406.028 MHz #01 13:44:23 08-10-2012'.

This window allows you to generate complete EPIRB test reports out of the test results stored in the test box.

- 1) Select the EPIRB test from the list at the right hand side. If there is no list, go to the “Test results” tab and select from the Index a header that contains the relevant EPIRB test. Then return to the “EPIRB” tab.
- 2) Fill in the beacon information form in the EPIRB dialogue box at the left hand side.
- 3) Press “Generate Report” to create the EPIRB Test Report (HTML format).

See example of an EPIRB Test report on the next page.

During the installation of the Test Box Manager PC software, a default report template has been placed in C:\EPIRB\ on your PC. Feel free to use this HTML document as the basis for creating your own layout or design, if so wished. Then, press “Get template” and select the new one from your file system instead of the default template.

Please note: Default limits of the frequency tolerance and minimum signal level are +/- 5 kHz and 190 respectively. Other limits may be inserted in accordance with specifications. Should the limits be exceeded during test, the report will write “Failed” in the status line.

Example of Test Report based on the default HTML design:

EPIRB Test Report	
Beacon Data	
Beacon manufacturer:	Litebeacon Ltd.
Beacon name:	Litebeacon
Beacon model:	L-987
Beacon serial number:	123456
Beacon frequency:	406.028 MHz
Bracket type:	Fix
Bracket serial number:	6789
Hydrostatic release expiry:	13 June 2014
Battery expiry:	26 August 2015
Attached lanyard test	ok
Beacon Location	
Vessel name:	Mary Celeste
Test Results	
Frequency measured:	406.027,4 MHz
RF level measured:	202
Status:	Passed
Message decoding:	BCH code check ok
Hex message:	FFED04DB418618618668CD35900
Message format:	Short format
Protocol:	Maritime User Protocol
Country code:	219
Unique ID:	9B6830C30C30CD1
Decoded message:	MID: 999999 Specific beacon: 0 Aux. device type: 121.5 MHz
Test Instrument	
Serial number:	Futronic MKII Test Box 01029
Calibration due:	19-03-2013
Test Performed	
Time / Date:	13:44:23 08-10-2012
Company:	Testco
Test responsible:	Martin Smith
Signature:	
Futronic MKII Maritime Communications Test Box manufactured by 	

2. PC-controlled EPIRB tests

The screenshot shows the 'FUTRONIC Test Box MKII' software window. The 'EPIRB' tab is selected in the top menu. The left panel contains several input fields for beacon information, including frequency (406.025 MHz), tolerance (5 KHz), level limit (190), beacon name, manufacturer, model, serial number, bracket type, bracket serial number, attached lanyard test, hydrostatic release expiry, battery expiry, vessel name, test performed by name, company, and test report template. The right panel displays a list of EPIRB test results, including frequency, time, and date. The bottom of the window shows the test box serial number (01029), calibration due date (19-03-2013), a COM11 dropdown, and a 'Disconnect' button.

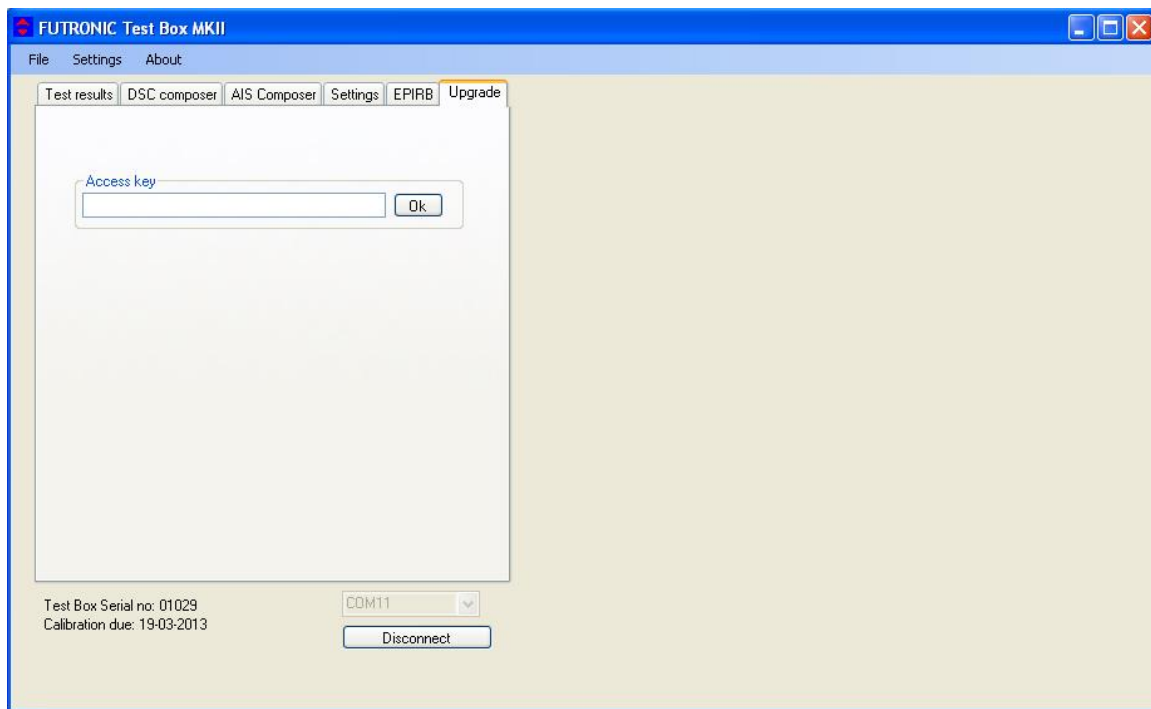
Frequency	Time	Date
EPIRB 406.028 MHz	#01 13:44:23	08-10-2012
EPIRB 406.037 MHz	#01 11:03:15	12-10-2012
EPIRB 406.028 MHz	#01 11:05:03	12-10-2012
EPIRB 406.028 MHz	#01 11:06:05	12-10-2012
EPIRB 406.040 MHz	#02 07:31:36	16-10-2012
EPIRB 406.040 MHz	#03 07:36:37	16-10-2012
EPIRB 406.028 MHz	#02 15:46:09	29-10-2012
EPIRB 406.040 MHz	#02 15:46:33	29-10-2012

In addition to generating test reports from EPIRB tests stored in the memory, this window also enables you to perform PC-controlled EPIRB tests generating test reports automatically. With this, the system will not transfer the test results to the test box, but still generate finished test reports that can be stored in your PC.

- 1) Turn the test box on. No need to select EPIRB tests, your PC will take control.
- 2) Deselect all tests from the header list at the right hand side, if any.
- 3) Select frequency in the EPIRB dialogue box at the left hand side and fill in the beacon information form.
- 4) Press "Start PC-controlled Test" and then activate the EPIRB.
- 5) Wait for the EPIRB Test Report to be automatically generated (HTML format).

See example of an EPIRB Test report on the previous page.

Upgrade



The “Upgrade” tab is used if you are going to upgrade your test box with new additional test software. For instance, if your test box is a GMDSS-only model and you have purchased the additional AIS test facility from Danphone, you will be given an access key to be entered, and the new facility will work immediately.