GMDSS MULTI TESTER
MRTS-7M
FOR MARITIME RADIO SURVEYS

ONE PORTABLE DEVICE
Complete Radio Inspection Scope
MRTS-7M is modern GMDSS Multi Tester designed on basis of latest radio engineering technologies.

We took the best from all the testers of previous generation and put it into MRTS-7M, applying all the latest engineer technologies allowing to make this device comfortable in use. Its user-friendly interface, lightweight and small dimensions assure ease of periodic surveys of GMDSS equipment in accordance with IMO standards.

And using the new cutting-edge software a surveyor can manage the test results on any PC with minimum efforts.

**Don’t change your OS to fit your GMDSS Tester!**

MRTS-7M software complies with Windows, MAC OS X and Linux. Downloading of results is automatic, through USB interface.

The test reports for all the range of tested equipment is also automatic. No need to compose test reports manually, just press the button and report is automatically generated. All you need is to print it and sign. And finally, surveyors are able to select their native language in software, it’s multi language now!

All the test procedures are provided in accordance with international standards, such as:

- IMO A.948 (23) or A.997(25), A.1020(26) resolutions (for marine radio stations);
- The circular letter MSC.1/Circ.1252 (for AIS stations);
- IMO Circular MSC.1/Circ.1039, 1040 (for C/S beacons).
- IMO Resolution A.802(19) and SOLAS - 74/88

**The smallest GMDSS Tester with the same functionality**

**Main unit dimensions:** 100 x 200x 45 mm  
**Total dimensions with box:** 303 x 268 x 116 mm

**Very compact and lightweight**

**Main unit weight:** 0.4kg  
**Total weight with box:** 2.5kg
1. Main unit (MRTS - 7M)
2. Power supply unit
3. Telescopic antenna
4. Power sensor VSWR meter (VHF PS1) 60W
5. NMEA IN/OUT cable (089 fem - open wire 1.5m)
6. USB-A - USB-B cable
7. SART testing unit
8. USB cable
9. Watertight & crushproof plastic box
11. Calibration Certificate
12. MF/HF Attenuator 200W
MRTS-7M ENABLES TESTING OF THE FOLLOWING EQUIPMENT:

— **VHF transceivers**:  
  - operation tests on any simplex channel including 6, 9, 13 and 16 channels;  
  - measurement of carrier frequency and frequency deviation;  
  - measurement of antenna VSWR, forward and reflected power;  

— **VHF transceivers with DSC**:  
  - test of correct transmission/reception of DSC messages by means of transmission/reception, routine or test calls to particular MMSI number and Distress (to all ships) messages;  
  - check the MMSI code programmed in equipment without any broadcast emission;  
  - measurement of carrier frequency and frequency deviation;  
  - measurement of forward and reflected power, VSWR;  

— **MF/HF radiotelephone equipment**:  
  - measurement of frequency in range (1600 – 30000) kHz;  
  - measurement of output power;  
  - operation tests in frequency range (1600 – 30000) kHz;  

— **MF/HF radiotelephone equipment with DSC**:  
  - test of correct transmission/reception of DSC messages by means of transmission/reception of Selective Test call to particular MMSI number and Distress (to all ships) messages on any of 6 distress channels;  

— **NAVTEX equipment**:  
  - operation tests by means of sending test messages;  

— **VHF equipment of duplex radiotelephony (portable)**:  
  - operation tests on channels 6, 9, 13, 16 (at least);  
  - measurement of output power, carrier frequency and frequency deviation;  

— **SART**:  
  - signal level measurement;  
  - counting the number of sweeps;  
  - verify signal in frequency range of 9140...9560 Mhz;  

— **VHF equipment of duplex radiotelephony with airplanes including operating on 121.5MHz and 123.1MHz**:  
  - operation tests by transmission/reception of modulated signal;  
  - measurements of frequency, output power level and frequency modulation depth;  

— **VHF radiotelephone stations operating in range (300 - 337) MHz (intended for river-sea vessels)**:  
  - measurement of output power, carrier frequency and frequency deviation;  

— **AIS mobile stations Class A and Class B and AIS-SARTs working in the Marine-VHF band**:  
  - receiving and decoding of the AIS messages;  
  - sending data/messages to AIS stations;  
  - passing the DSC polling information (channel 70);  
  - checking AIS respond to so called “virtual vessel”.  

— **COSPAS-SARSAT radio beacons operating on 406MHz 121.5MHz and 243MHz frequencies**:  
  - reception, demodulation and decoding of the emergency information transmitted on channel 406MHz;  
  - frequency measurement of 406MHz, 121.5MHz and 243MHz signals;  
  - audio-control of the sweep 121.5MHz and 243MHz signals presence;  
  - power level measurement on 406MHz, 121.5MHz and 243MHz channels;  
  - measurement of total transmission time of 406MHz signal;  
  - measurement of unmodulated carrier duration of 406MHz signal;  
  - estimation of the equivalent radiated power of 406MHz signal through broadcast.
WIDE TARGET RANGE

- MF/HF
- MOB device
- RADAR SART
- AIS
- NAVTEX
- VHF
- PLB
- AIS SART
- GMDSS
- EPIRB

MRTS-7M TEST SCOPE
The GMDSS Multi Tester is supplied with special software, which enables fast and simple processing of test results, making test reports and data storage.

Don’t change your OS to fit your GMDSS Tester!

MRTS-7M software complies with Windows, MAC OS X and Linux. Downloading of results is automatic, by USB cable. The drivers are not required.

The test reports for all the range of tested equipment is also automatic. No need to compose test reports manually, just press the button and report is automatically generated. All you need is to print it and sign.

And finally, surveyors are able to select their native language in software, it’s multi language now!

Our new exclusive function «Ship ID» will let you group all test results from one ship and process them all together, issuing test reports for all the GMDSS equipment of the vessel.

Using the new cutting-edge software a surveyor can manage the test results on any PC with minimum efforts.
AEROMARINE SRT PROFILE

**Aeromarine SRT** is a global supplier of GMDSS Testers for radio surveyors and inspectors.

**Our mission** is to design, manufacture and supply the most efficient equipment that a radio surveyor estimates as a comfortable and reliable tool of his everyday work. Inheriting the best from the pioneers in GMDSS test design and saving the reliability tradition, Aeromarine SRT pursues the idea of the most user-friendly Testers for comfortable survey operations. That’s why we equip our testers with intuitive interfaces and automatic modes for easy and prompt testing of each type of equipment. **Our dream** is to supply Testers that do all job automatically, and we are half way.

We know that when all the tests are done, the surveyors job isn’t finished yet and his paper work is a big part of it. Thus our MRTS-7M progressive Software enables easy and fast auto-reporting.

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**We supply professional test devices to check a range of GMDSS equipment:**

- AIS, AIS-SARTs
- Cospas-Sarsat beacons
- MF/HF and VHF GMDSS radios with DSC
- GMDSS stations
- 9GHz Radar SART
- NAVTEX
- Man Over Board (MOB) devices
- SSAS
- S-VDR capsules
- AtoN
- Base Stations

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**Some of world leading companies already using our solutions in their business**
Companies and firms worldwide are currently working with Aeromarine SRT products

Our customers are leveraging the power of Aeromarine SRT solutions to grow their business

20+ years of engineering experience 3 000 testers sold to 72 countries worldwide users


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