

SEA 157SA

VHF/FM DSC Class A Marine Radio



The new SEA 157SA VHF/FM DSC Marine Radios are compliant to ITU and IMO standards for DSC Class A GMDSS radios. These new VHF transceivers are built on the widely accepted and proven model 157 platform and award winning DSP technology. Several advanced communication capabilities and new feature sets enhance operator safety and efficiency for individual vessel and fleet operators. These features meet the demanding technical performances and operational requirements of today's professional Maritime Operators and fleet services.

Significant new features include a high-resolution display; transmitter/receiver bandwidth covers all USA/Int'l channels and selective private channel access (with FCC license), Public Coast Station calling operations, dedicated DSC receiver/controller (Channel 70), plus software expandable user/operator interfaces and operator setup functions.

These radios can be programmed to support Fleet Management operations such as automatic position broadcasting and external PC applications for asset tracking, text and data messaging and command and control functions. Critical functions can be programmed in advance as "set and forget" radio operations.

* Note; certain features require an external PC Application.

The 157SA/R (Remote) features SEABUSS interconnection with unique Remote Control capability. With all the new features, 157S models remain easy to operate and to program. Professional and Commercial SEA 157S model versions are in production and available for delivery.

New SEA 157SA radio features include: (* certain features require an external PC App)

- | | |
|---|----------------------------------|
| Channel 70 and Working Channel DSC capability | Selective ID and Group Calling |
| Distress Call Management | Missed Call Log |
| Dual Watch and Priority Scan | Encryption |
| VDR Output | Automatic Position Reporting * |
| Working Channel Security | Text & Short Messaging Options * |
| Excellent Audio Quality | I/O ports for PC & GPS |
| Extensive Calling & ID Directories | Text Message and Data options* |

...designed for Professional Operators, Commercial Fleets and Public Safety

SEA 157SA Specifications

GENERAL

Frequency Range:

155 to 163 MHz

Number of Channels:

Marine US, Canada & International
10 NOAA weather channels
Optional Part 90 @ 12.5 kHz *

Input Voltage:

12 VDC +30% - 10% (13.8VDC nominal) negative ground

Current Drain:

Standby 0.5A
Receive 0.9 A
Transmit 6.0A (25W) 1.5A (1W)

FCC ID:

YIBSEA157S

FCC Type Certifications:

Includes Part 80 and Part 90

Warranty:

Two Year - Limited

Models and Order Numbers:

SEA157SA for standard radio
SEA157SA/R for Remote version

Navigation Interface:

RS-232 Serial I/O & NMEA 0183

Clock:

Date and time of day, battery backed

Calling Formats:

All formats per U.S.FCC, ITU-R & IMO for GMDSS Class A, Extended DSC, GMSK Option, CTCSS option

DSC OPERATION

ITU Recommendations:

Current ITU R. 493 and 541

IMO Resolutions:

A.694 (17) and A.803 (19)

Memory:

Nonvolatile memory for unit DSC ID, Emergency Calls, frequently called DSC ID numbers, Call Groups, Coast Stations by ID and Missed calls.

RECEIVER

Frequency Range:

155 to 163 MHz

Sensitivity:

Less than .3uV for 12dB SINAD
Less than .4uV for 20dB quieting

Selectivity:

At least 80dB at 25 KHz
85dB at 50 KHz or greater

IM Ratio:

At least 80dB

Spurious and Image Rejection:

At least 80dB

Audio Output:

4W, less than 10% distortion across 4 Ohms

VDR and Audio Line Output:

0.775V RMS on 600 Ohm Balanced or Unbalanced TX and RX line out

TRANSMITTER

Frequency Range:

155 to 163 MHz

Modulation types:

25 kHz and 12.5 kHz Voice/Data

Frequency Stability:

Exceeds 2.5ppm @-30 to +60°C

Power Output:

25W. 1W into 50 Ohms

Audio Response:

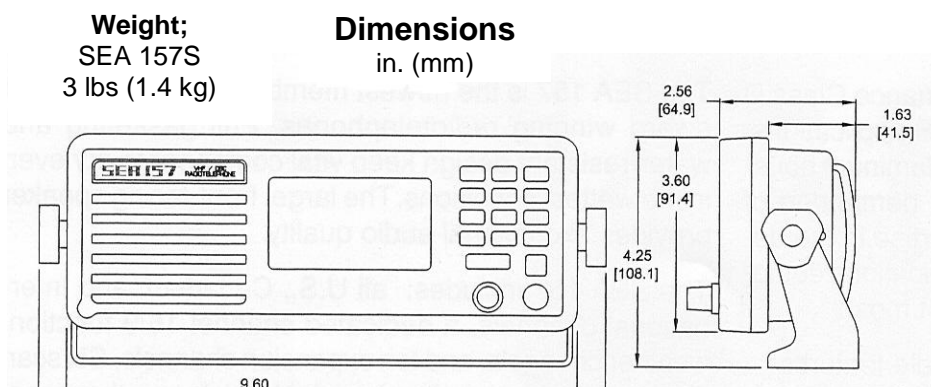
6dB per octave pre-emphasis
300 to 3000 Hz

Audio Distortion:

Less than 10%

Spurious and Harmonic Radiation:

At least 60dB below rated carrier



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