

SEA 157SA Class A VHF/FM DSC Marine Radio



Preliminary Specifications:

The new SEA 157SA VHF/FM DSC Marine Radio models are compliant to ITU and IMO standards for ITU/IMO Class A GMDSS marine radios. These S series transceivers are built on the widely accepted and proven model 157 platform and its 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 technical performances and operational requirements of today's professional Maritime Operators and fleet services.

Significant new features include a modular high-resolution display, transmitter/receiver bandwidth encompasses all USA/Int'l channels and limited private channel access (FCC license required), automated Public Coast Station calling operations, dedicated DSC receiver/controller (Channel 70), plus software expandable user/operator interfaces and control features.

These radios can be programmed to support Fleet Management operations like automated position broadcasting and external PC applications for asset tracking, data messaging and programming command and control functions. Critical functions can be programmed in advance as "set and forget" radio operations. With all the new features, 157S models remain easy to operate and to program.

The 157SA/R (Remote) features unique Remote Control capability for up to four stations (requires SEABUSS II junction box). Commercial and Public Safety SEA 157S model versions are anticipated for production by February 2010.

Other new 157SA radio features include:

- Channel 70 and Working Channel DSC capability
- Class A GMDSS Distress Call Management
- Optional Data Modem
- Automatic position reporting or polling
- Selective ID and Group Calling
- Automated DSC Coast Station calling
- Software programmed special features and updates

- Dual Watch and Priority Scan
- Voice Encryption
- Data Encryption option
- I/O ports for GPS/Plotter/PC
- DSC calling directories and menus
- Call Waiting Log
- VDR recorder line output

...designed for Commercial Fleets and special versions for Public Safety Operators

Preliminary Specifications for 157SA [pending FCC type certification]

GENERAL:

Frequency Range:
155 to 163.6 MHz

Number of Channels:

All US, Canadian, and International Channels
10 weather channels & expansion channels

Input Voltage:

12 VDC +30% - 10% (13.8V nominal) negative ground
Isolated 24VDC and 120VAC Power options

Current Drain:

Standby 0.5A
Receive 0.6A
Transmit 6.0A (25W) 1.5A (1W)

FCC ID:

BZ6SEA157

Warranty:

Two Year - Limited

Navigation Interface:

RS-232 Serial I/O and current NMEA 0183 compatible

Clock:

Date and time of day, battery backed

Calling Formats:

All formats per U.S.FCC, ITU-R & IMO for Class A GMDSS, EXTENDED DSC, Specified value added options

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, nonvolatile memory for Emergency Calls, frequently called DSC ID numbers, Call Groups and Coast Stations by ID and names.

RECEIVER:

Frequency Range:
155 to 163.6 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 @ 4 Ohms

VDR and Audio Line Output:

600Ohm Balanced or Un-balanced TX and RX line out @ 0.775V RMS

TRANSMITTER:

Frequency Range:
155 to 162.7 MHz

Frequency Stability:

±5ppm, -30 to +60°C

Power Output:

25W. 1W into 50 Ohms

Audio Response:

6dB per octave pre-emphasis
300 to 3000 Hz

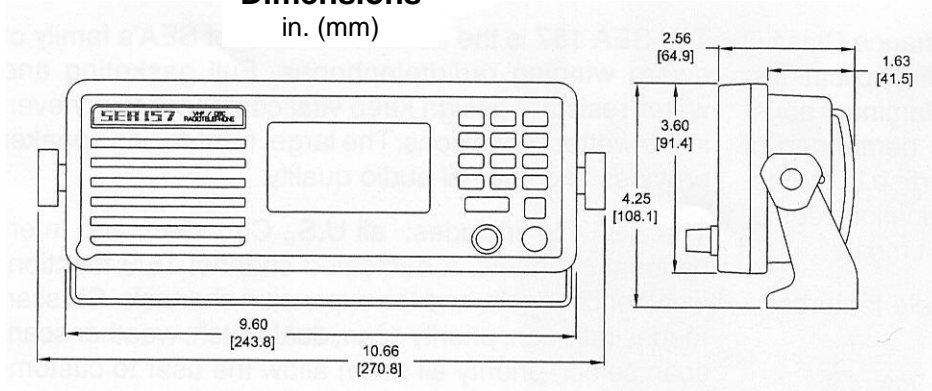
Audio Distortion:

Less than 10%

Spurious and Harmonic Radiation:

At least 60dB below rated carrier

Dimensions
in. (mm)



SEA 157
3 lbs (1.4 kg)

SEA COM CORPORATION

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