

SEA 157SA Class A VHF/FM DSC Marine Radio



CONFIDENTIAL PRELIMINARY DOCUMENT:

The new SEA157SA 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 communications capabilities and new feature sets will enhance operator safety and efficiency for individual vessel and fleet operators. These features will 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), supports 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 integration to external PC applications for asset tracking or to program command and control functions. Critical functions can be programmed in advance as "set and forget" radio operations. With all the new features, 157S models still remain easy to operate and to program. A unique Remote Control capability of the 157SA allows operators to have up to four stations, via a setup function as the Primary or as a Remote station (non transmitter) Commercial SEA157S model versions are anticipated for production by March 2007 and Public Safety versions soon after.

Other new 157SA radio features also include:

Channel 70 and Working Channel DSC capability
Class A Distress Call Management
Data Modem option
Automatic position reporting or polling setup
Selective ID and Group Calling
Automated DSC Coast Station calling

Dual Watch and Priority Scan setup
10 Code Voice Inversion Scrambler
Data Encryption Option
I/O ports for GPS/Plotter/PC
DSC calling directories and menus
Call Waiting Log

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

Preliminary Specifications for 157SA: Pending FCC – GMDSS ID

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) 24VDC option and 120VAC Option
Negative ground (U.S. version)
Isolated chassis (C.E.P.T. version)

Current Drain:

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

FCC ID:

BZ6SEA157

Warranty:

Two Year - Limited

DSC OPERATION:

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 SOLAS. EXTENDED DSC, Specified Options

ITU Recommendations:

Current ITU R. 493 and 541

IMO Resolutions:

A.694(17), A.609(15) and A.803(19)

Memory:

Nonvolatile memory for unit's DSC individual ID number. Nonvolatile memory for Emergency Calls, frequently called DSC ID numbers, Call Groups and Coast Stations with associated alphabetic 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 into 4 Ohms

TRANSMITTER:

Frequency Range:
155 to 159 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

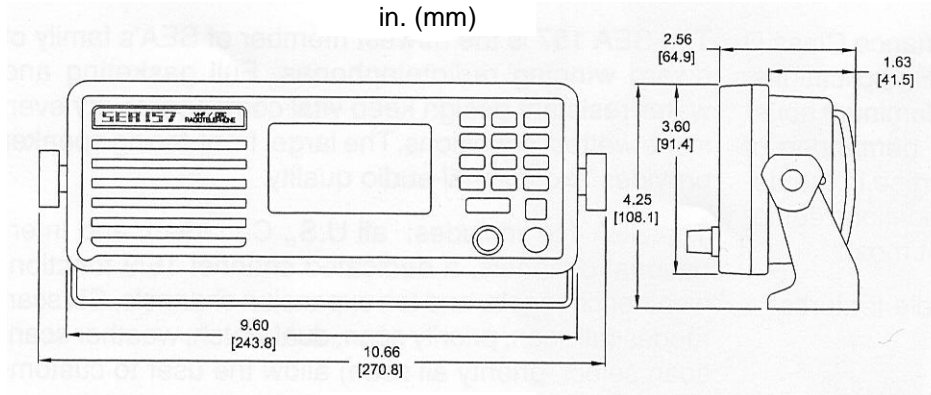
Audio Distortion:

Less than 10%

Spurious and Harmonic Radiation:

At least 60dB below rated carrier

Dimensions in. (mm)



SEA 157
3 lbs (1.4 kg)



American technology that talks to the world.

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