



# SEA 7157

## VHF/FM DSC Radiotelephone



- **Marine VHF/FM and DSC Radiotelephone**
- **GMDSS Compliant Class A**
- **24 VDC or 12 VDC versions**
- **Distress key with mandatory protective cover**
- **NMEA 0183 interface for automatic position sending from GPS or Loran**
- **Alpha numeric keypad for ease of operation**
- **Large graphic display that is sunlight viewable**
- **Full 25 Watts power output with 1 Watt function**

The SEA 7157 is a new Class A DSC VHF/FM marine radiotelephone that represents a new and modern generation of marine communications products. It is not only a superb radiotelephone within the line of other SEA top quality VHF marine products, it also incorporates the capability for Digital Selective Calling. SEA is one of the leading manufacturers of GMDSS equipment worldwide, and the SEA 7157 is a next generation product in our GMDSS product line. As a result of SEA's capabilities as a leading manufacturer of GMDSS products and systems, we are among the first to offer a VHF radiotelephone based on future Ship to Shore telephone services.

Digital Selective Calling in the radiotelephone is not only GMDSS compliant, but also supports direct dial for ship to shore telephone calls through automated marine coastal stations, an International marine radiotelephone service. By using DSC, automated distress calls can be activated and transmitted directly to Coast Guard and other GMDSS equipped vessels within range. Your distress call will be automatically received with an automated message of your position and type of distress.

Users of SEA products have always relied upon and received true quality, world-class radiotelephones. The SEA 7157 continues this 24-year tradition. The design of this radiotelephone incorporates the most up-to-date technology in RF architecture, LCD displays, and other wireless componentry.

SEA has a worldwide service network to support all of its GMDSS products. This ensures back-up support no matter where in the world your ship is operating.

# Specifications

## GENERAL

### Frequency Range:

155 to 163.6 MHz

### Number of Channels:

All US, Canada, International and 10 weather channels.

### Input Voltage:

24 Vdc +30% -10%

12 Vdc ± 15%

### Current Drain:

Standby: 24V .25A, 12V .5A

Receive: 24V .3A, 12V .6A

Transmit: 25W 24V 3A,

12V 6A

Transmit: 1W 24V .75A,

12V 1.5A

### Compliance:

FCC Part 80, 15. GMDSS

(Para 80.1101). EIA RS

204C, RS 152B, IMO

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

ETS 300 338, Y2K

### FCC ID:

BZ6SEA7157

### Safe Compass Distance:

1 meter

## TRANSMITTER

### Frequency Range:

155 to 159 MHz

### Frequency Stability:

±5ppm, -30 to +60°C

(FCC, EIA)

### Power Output:

25W, 1W into 50Ω

### Audio Response:

6dB per octave pre-emphasis 300 – 3000 Hz

### Audio Distortion:

Less than 10% (EIA)

### Spurious & Harmonic

#### Radiation:

At least 60dB below rated carrier

### Spurious Emissions

#### (Radiated):

-60dB or better

### Spurious Emission

#### (Conducted):

-60dB or better

## PRIMARY RECEIVER

### Frequency Range:

155 to 163.6 MHz

### Sensitivity:

Less than .3uV for 12dB

SINAD

### Selectivity:

-80dB at 25 KHz

-85dB at ≥ 50 KHz (EIA)

### IM Ratio:

At least 80dB

### Spurious and Image

#### Rejection:

At least 80dB

### Audio Output:

4W, less than 10% distortion into 4Ω

### Channel 70 Watch

#### Receiver:

Conforms to ETS 300 338 and IEC 1097-8

## DCS OPERATION

### Navigation Interface:

NMEA 0183 Version 2.0 compatible with Loran, GPS, and Transit equipment. Reads RMA, RMC, GLL, and GGA sentence formats.

### Clock:

Date and time of day, battery backed

### Calling Formats:

All formats per ITU-R M493-8 Class A

### ITU Recommendations:

498-8 and 541-6

### IMO Resolutions:

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

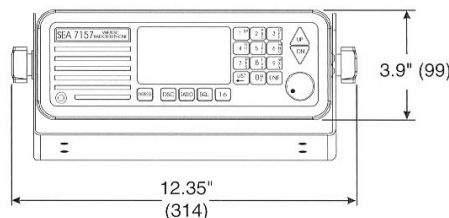
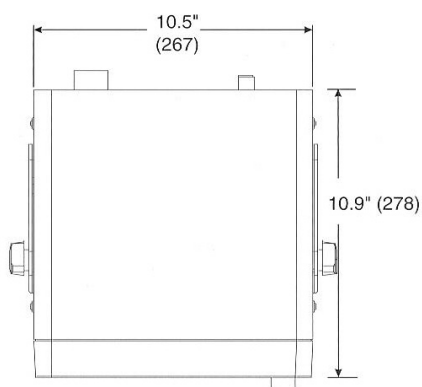
### Memory:

Nonvolatile memory for unit's DCS individual and group ID's. Nonvolatile memory for 49 frequently called DSC ID's and 49 telephone numbers with associated alphabetic names. Nonvolatile memory log for 40 most recent distress and urgency calls and 40 other calls.

## Dimensions

In. (mm)

7.75 lbs (3.5 kgs)



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