

SEA 235R

150 Watt HF/SSB Digital Radiotelephone



- Very first MF/HF SSB radiotelephone utilizing Digital Signal Processing (DSP) technology as its fundamental architecture.
- DSP end-user benefits include:
 - Digital transmitter provides more talk power than radiotelephones with equal power ratings
 - Superior gain control (AGC) provides virtually error free transition between voice and data
 - Clean clear audio with enhanced clarity and reception
 - Installed SEA 235s may receive future enhancements and improvements through software upgrades
 - Uniquely flexible with special application filters (sitor, telex, modems, etc.) may be configured through software
 - Much higher reliability than competitive radios using dated analog circuits
- E-mail compatible
- Amateur bands with "ham" operating system built-in
- Most frequently used channels are pre-programmed from factory in common alpha-numeric names
- True AM receiver for clear undistorted reception of AM frequencies

- Large easy to read LCD
- Backlit silicone keypad
- Works with SEA1612C and SEA1635 newly designed state of the art automatic antenna tuners

The SEA 235R HF/SSB DSP radiotelephone is the latest addition to the SEA 235 product group. The SEA 235R offers all of the standard features of the SEA 235 in a versatile system configuration consisting of the SEA 2350 Remote Controller, 2351 Remote Transceiver Unit, and SEA 1612C (or 1635) automatic antenna tuner.

The SEA 235R system allows for greater ease of installation in areas where space is at a premium. The compact SEA 2350 remote controller is less than three inches deep and may be mounted up to 300' from the SEA 2351 transceiver. Up to four SEA 2350 remote controllers may be included. An intercom function allows communications between controller locations.

SEA SSB radiotelephones have consistently won the National Marine Electronic Association's (NMEA) award for excellence in SSB radiotelephone over several years.

Specifications

GENERAL:

Compliance:
FCC Parts 80, 87, 90

FCC ID:
BZ6SEA235

Frequency Range:
Tx: 1.6 to 30 MHz
Rx: .49 to 30 MHz

Frequency Resolution:
Tx: 100 Hz
Rx: 10 Hz

Frequency Stability:
± 10 Hz (-30°C +60°C)

Operating Modes:
J3E (USB) H3E, J2B (AFSK)
R3E, AIA (CW)

Supply Voltages:
13.6 Vdc ± 15%
(11.6 – 15.6 V)

Current Drain:
Tx 17 Amps (two-tone)
Tx 11 Amps (voice)
Rx 1 Amp (stand-by)
Rx 1.5 Amps (full-audio)

Operating Temperature Range:
-30°C to 60°C

Antenna Impedance:
50 ohms

Channels:
1176 Total
200 Programmable
242 ITU SSB Duplex
72 ITU SSB Simplex
662 ITU FSK Duplex

Scan Channels:
200

Display:
LCD 3.2" x 1.85" (W x H)
(81.2mm x 46.9mm)

Metering:
S-Meter

RECEIVER:

Frequency Range:
490 KHz to 30 MHz

Frequency Resolution:
10 Hz

Intermediate Frequencies:
45 MHz, 455 KHz

Sensitivity:
≤ 1.0 uV for 12 dB SINAD

Adjacent Channel Selectivity:
>60db at -1 KHz

Blocking:
At max. sensitivity: Better than 70 dB at +60dB/uV:
Better than 100 dB

Cross Modulation:
Better than 80 dB

Spurious Response:
Better than 70 dB

Spurious Emissions:
Less than 1 nW

Intermodulation:
-80 dB

AGC, JE3:
Fast attack, slow release,
10 dB audio level change
from 10 uV to 100 mV input

Clarifier:
+/-200 Hz in 10 Hz steps

Squelch:
Voice controlled, opens at
SINAD >5dB

Audio Output:
4 Watt into 4 ohms at less
than 10% distortion

Computer I/O:
RS-232

Warranty:
Two Year - Limited

TRANSMITTER:

Output Power:
150 Watt into 50 ohms

Power Reduction:
-3dB/-6dB from PEP

Intermodulation:
-34 dB below PEP

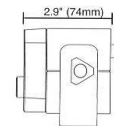
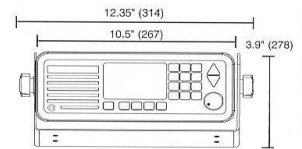
Spurious Emissions:
-65 dB below PEP

Carrier Suppression:
Better than 50 dB
below PEP

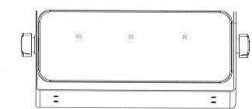
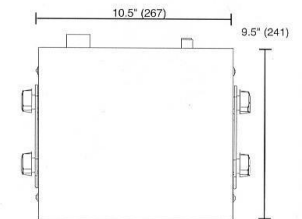
Undesired Sideband Suppression:
Better than 50 dB
below PEP

AF Bandwidth:
400 – 2500 Hz at -6 dB

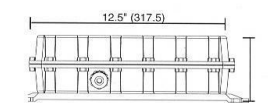
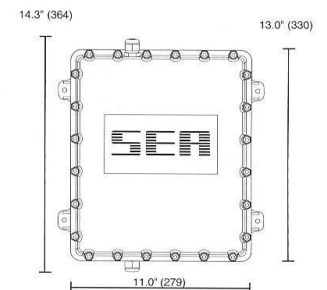
Dimensions in. (mm)



**SEA 2350
Controller**
2.8 lbs (1.27 kg.)



**SEA 2351
Remote Transceiver**
7.0 lbs (3.18 kg.)



**SEA 1635
Antenna Tuner**
4.5 lbs (2 kg.)

SEA COM CORPORATION

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