



# SEA 330

## 300W HF/MF SSB Radio System



- **GMDSS compliant for SEA Areas A3/A4.**
- **300 watts of output power providing a strong signal under the most difficult conditions.**
- **Advanced operating system are user friendly**
- **Compact remote control unit.**
- **Large easy to read backlit display.**
- **High quality audio from large up-front speaker.**

SEA long recognized as the leader in design and production of high quality NMEA award winning MF/HF Single Side Band radios introduces the SEA 330. The SEA 330 is an affordable 30MHz 300W (150W below 4MHz) SSB radio system comprised of the 3301G Remote Transceiver Unit, 3300 Remote Controls (up to 4) and SEA 1630 antenna tuner, operating @ 24 VDC.

The American designed and manufactured SEA 330 SSB radio is compliant to FCC and CEPT requirements. Designed or extended transmit duty at high power levels, its innovative design makes the 330 a high performance radio system that also incorporates maximum features into minimum space.

The durable and attractive SEA 330 is pre-programmed with 1,000 stored channels with capacity for up to 90 user-programmed frequencies. Built-in features include telex compatibility; voice and telex scan modes, a built-in distress alarm, Nocode ScanStop accessibility, intercom capability between multiple stations and self-diagnostic troubleshooting.

Utilizing the SEABUSS interconnection system, the SEA 330 has been designed with ease of operation in mind. Intra-system communication, accessed via simple control terminal keypad entry, allows all system components to talk back and forth. The result is instant recall of data and frequency information, with display annunciators clearly indicating radio status throughout the process.

To learn more about the advanced 330 radio or other products in the SEA product lines, contact your local Marine Electronics Dealer or call SEA COM CORP at (425) 771-2182, or email [sales@seacomcorp.com](mailto:sales@seacomcorp.com).

# SEA 330 Specifications

## General

**Compliance:**.....FCC Part 80, 87, 90, GMDSS (Para 80.1101)  
IMO A.806, IMO A. 804, ITU-R.493,CEPT

**FCC ID:**.....BZ68RISEA330

**Frequency Range:**.....Receiver: 490 KHz to 30 MHz  
Transmitter: 1.6 MHz to 30 MHz

**Frequency Generation:** PLL Synthesizer/Multi-Loop

**Frequency Selection:** ...Direct by keyboard. Up to 1000 pre-programmed channels. 90 user programmable channels (each channel is an RX/TX frequency pair). Single key selection of 2182 KHz. Scanning facility.

**Frequency Stability:** ..... Better than 0.4 ppm in the temperature range -30°C to +50°C

**Operating Modes:** ..... Simplex and semi-duplex. USB: J3E, R3E, H3E. LSB: J3E. AME (AM): A3E (reception). Telex: J2B.

**Other Facilities:** ..... Two-tone alarm generator. Built-in self-test program. Nocode scan facility. Voice and telex scan mode.

**Supply Voltages:** ..... 24 Vdc  $\pm$  15%

**Current Drain:** ..... Receive Standby: 1A. Receive Full Audio: 1.5A  
Transmit Voice: 11A. Transmit Two-Tone: 15.5A

## Operating Temperature

**Range:**.....-30°C to +60°C

## Radiotelephone Output

**Impedance:** ..... 50 Ohms. Automatically matched by antenna tuner.

## Receiver

**Receiver Principle:** ..... Double Conversion, 1<sup>st</sup> IF 70 MHz. 2<sup>nd</sup> IF 10.7 MHz

**Frequency Range:** ..... 490 KHz to 30 MHz

**Frequency Resolution:** 10 Hz, 100 Hz by keyboard entry

**IF Selectivity:** ..... J3E (SSB): 350 Hz to 2.7 KHz  
H3E (AME): 350 Hz to 2.7 KHz.  
Telex:  $\pm$ 250Hz

**Sensitivity:** ..... J3E (SSB): <1  $\mu$ V for 12 dB SINAD  
H3E (AME): <4  $\mu$ V for 12 dB SINAD

## Adjacent Signal

**Selectivity:** ..... Better than 60 dB @ -1 KHz

**Blocking:** ..... At Max Sensitivity: Better than 70 dB.  
At +60 dB/ $\mu$ V: Better than 100 dB

## VDR and Audio Line Output

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

**Cross-Modulation:** ..... Better than 90 dB

**Spurious Response:** ..... Better than 70 dB

**Spurious Emissions:** ..... Less than 1 nW

**Intermodulation:**..... Better than 80 dB

**AGC:** ..... Less than 6 dB audio level change for 10  $\mu$ V to 100 mV RF change. Fast attack slow recovery time.

**Clarifier:**.....  $\pm$ 200 Hz in 10 Hz steps.

**Squelch:**..... Voice-controlled squelch. Opens for SINAD > 5 dB

**Audio Output:**..... 4 watt in 4 ohm at less than 10% distortion

## Transmitter

**Output Power:** ..... Below 4 MHz: 150W PEP +0 dB/-1.4dB  
4-30 MHz: 300W PEP +0 dB/-1.4 dB

**Power Reduction:**..... Medium Power: 75W PEP in MF band  
150W PEP in HF band  
Low Power: 40W PWP in MF band  
60W PEP in HF band

**Intermodulation:**..... Better than 32 dB below PEP

**Spurious Emissions:** ..... Better than 68 dB below PEP

**Harmonic Suppression:**... Better than 68 dB below PEP

**Carrier Suppression:** ..... Better than 55 dB below PEP

**Undesired Sideband**

**Suppression:**..... Better than 60 dB below PEP

**AF Bandwidth:**..... 400 Hz to 2600 Hz at -6 dB

## SEA 1630 Antenna Tuner

**Frequency Range:**..... 1.605 KHz to 30 MHz

**Power Output:** ..... MF: 150W PEP  
HF: 300W PEP max

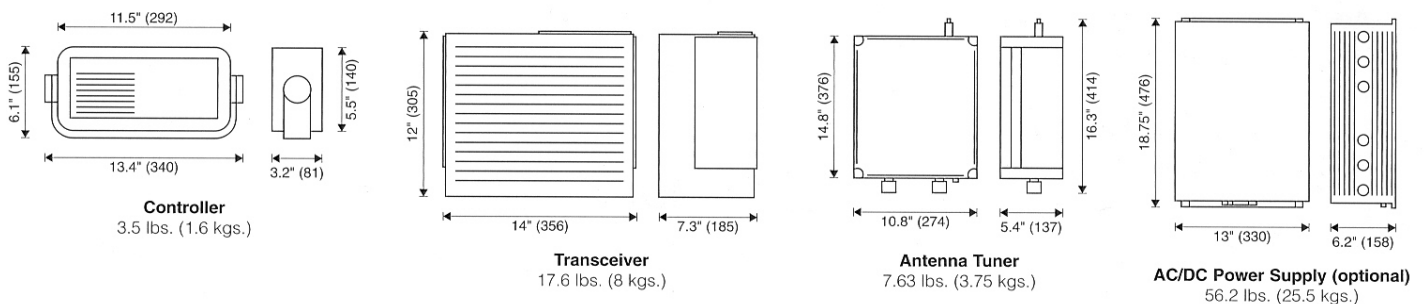
**Antenna:** ..... 7-50m



The SEA 330 transceiver and controller and the SEA 1630 antenna tuner.

## SEA 330

Dimensions in inches (mm)



## SEA COM CORPORATION

7030 - 220<sup>th</sup> S.W., Mountlake Terrace, Washington 98043, 425.771.2182 Fax: 425.771.2650 [www.seacomcorp.com](http://www.seacomcorp.com)