

# SEA 330

## 300W HF/SSB Radio System



- ▶▶ GMDSS compliant.
- ▶▶ 300 watts of output power providing a strong.
- ▶▶ signal under difficult conditions.
- ▶▶ Advanced operating system, making for user.
- ▶▶ friendly operation.
- ▶▶ Compact remote control unit.
- ▶▶ Large easy to read backlit display.
- ▶▶ High quality audio from large up-front speaker.

From SEA, long recognized as the leader in design and production of high-quality, NMEA award-winning single sideband radios, comes the SEA 330. The SEA 330 is an affordable 1.6-30 MHz 300W\* SSB radio system comprised of a transceiver, the SEA 1630 antenna tuner and up to four control terminals, all operating from a 24 Vdc power source. Meeting stringent FCC and CEPT specifications, the SEA 330 is a high-power, high performance SSB radio.

The American-made SEA 330's innovative design incorporates maximum features into minimum space. The durable and attractive SEA 330 comes programmed with 1,000 stored channels, yet leaves room for up to 90 user-programmed frequencies. Built-in features include telex compatibility, voice and telex scan modes, a built-in distress alarm, Necode ScanStop accessibility, intercom capability between multiple stations, and self-diagnostic troubleshooting software.

Utilizing SEA's unique "SEAbuss" operating system, the SEA 330 has been designed with ease of operation in mind. Intrasystem 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.

The SEA 330 radio system is more than simply interconnected hardware, it is proven expertise in worldwide marine communications. To learn more about the most advanced radio equipment on the water, contact your local marine electronics dealer or call (425) 771-2182.

\* 150W output 1.6-3.9 MHz



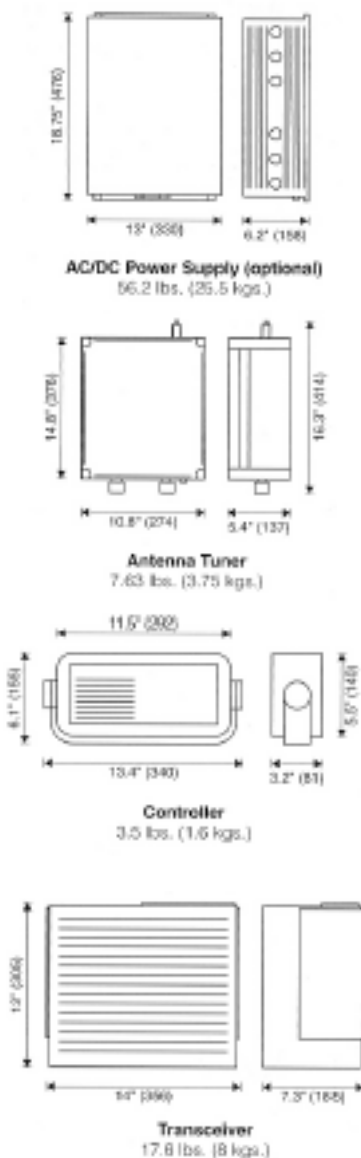
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# SEA 330 SPECIFICATIONS

## General

- Compliance**  
 FCC Part 80, 87, 90, GMDSS (Para 80.1101)  
 IMO A.613(15). 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. Necode 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.

## Dimensions in (mm)



## Receiver

- Receiver Principle**  
 Double Conversion, 1st IF 70 MHz. 2nd IF 10.7 MHz
- Frequency range**  
 490 KHz to 30 MHz
- Frequency Resolution**  
 10 Hz. 100 Hz by keyboard entry
- IF**  
 J3E (SSB): 350 Hz to 2.7 KHz  
 H3E (AME): 350 Hz to 2.7 KHz.  
 Telex:  $\pm$ 250Hz
- Sensitivity**  
 J3E (SSB): <1uV for 12 dB SINAD  
 H3E (AME): <4 uV for 12 dB SINAD
- Adjacent Channel Selectivity**  
 Better than 60 dB @ -1 KHz
- Blocking**  
 At Max Sensitivity: Better than 70 dB.  
 At +60 dB/uV: Better than 100 dB
- 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 10uV to 100 mV RF change. Fast attack slow recovery time.
- Clarifier**  
 +/-200 Hz in 10 Hz steps
- Squelch**  
 Voice controlled squelch. Opens at SINAD >5dB
- Audio Output:**  
 4 watt in 4 ohm at less than 10% distortion

## 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

## Transmitter

- Output Power**  
 Bellow 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 68dB 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 – 2600 Hz at -6 dB