

SEA 1630

Automatic Antenna Tuner

- State-of-the-art microprocessor-based
- Usable with any SSB transceiver
- Interactive with SEA 330 transceiver
- SEA 1631 interactive with SEA 235 or SEA 245
- Automatic self tuning
- Compensates for antenna
- No presets or adjustments
- Reduces installation costs



Designed and built by SEA, a Marine industry leader in high technology, the SEA 1630 automatic tuner combines the sophistication of advanced microprocessor techniques with high order practicality and operational reliability.

The SEA 1630 tuner is housed in a weatherproof molded case designed to withstand environmental conditions encountered aboard ship when mounted on the weather decks.

The SEA 1630 was designed specifically as a companion for the SEA 330 radiotelephone but is also capable of independent operations with other radio brands. When used with SEA 330 radiotelephone, the 1630 resides on the SEABUSS™ and functions as a peripheral of the radio's central CPU system.

The SEA 1631 version incorporates the SEA SEABUSS™ protocol for use with SEA 235 or SEA 245 radiotelephones. In this interactive mode, the coupler receives information from the radio containing the operating frequency. If previously tuned, the coupler will preset to the stored configuration automatically, before RF power is applied.

Information can also be sent from the radio to set the coupler for Voice, DSC, Telex/ Data functions. Demand tune is also supported in the interactive mode.

The SEA1630 is a fully automatic, microprocessor-based antenna tuner. First impulse from the transceiver initiates a rapid microprocessor search and match procedure that determines antenna characteristics and optimizes antenna match power transfer. This information is also stored in CPU memory for instant recall whenever a frequency is again selected. The SEA 1630 also re-learns and compensate for changes in the antenna system.

The SEA 1630 coupler tunes properly on low power inputs (25 to 50 watts) and supports an infinite number of channels within its specified frequency range (see specification). The SEA 1630 is rated for HF operations at 300 Watts RF power.

To learn more about this model or other SEA products, contact your local Marine Electronics Dealer or call SEA COM CORP at (425) 771-2182, or email sales@seacomcorp.com

Specifications

Frequency Range:

1.6 to 30 MHz

RF Power Handling Capability:

150 watts PEP maximum below 4MHz
300 watts PEP maximum above 4MHz

RF Tuning Power range:

75 watts PEP maximum below 4MHz
150 watts PEP maximum above 4MHz

Minimum RF Tuning Power range:

25 to 50 watts PEP

Tuning Time: "Learn" mode

Less than 5 seconds (typical)

Tuning Time: "Recall" mode:

Less than 20 milliseconds (typical)

Internal Matching Networks:

Microprocessor controlled, "Pi" or "L"

Input Impedance:

50 ohms

VSWR:

<2:1

Antenna:

End fed type (Marconi) of 7 to 50 m (23 to 165 ft.)
with suitable RF ground

Power Requirements:

13.6 VDC @ 300ma typical,
2.0 amps maximum

Control Cable:

CAB-1630-XXX

Environmental Temperature Range:

-30°C to +70°C

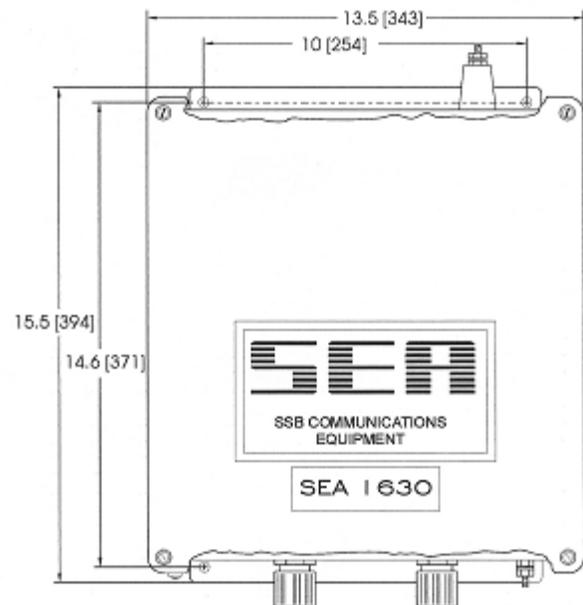
Dimensions:

Inches: 15.5 x 13.5 x 5.9

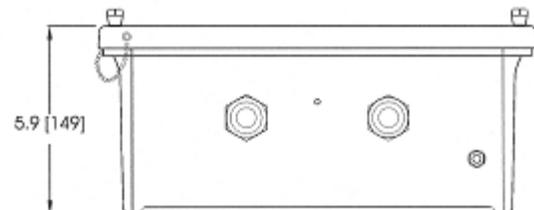
MM: 394 x 343 x 150

Weight:

10 pounds / 4.5 Kg.



Dimensions are inches and (mm)
NOT TO SCALE



SEA COM CORPORATION

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