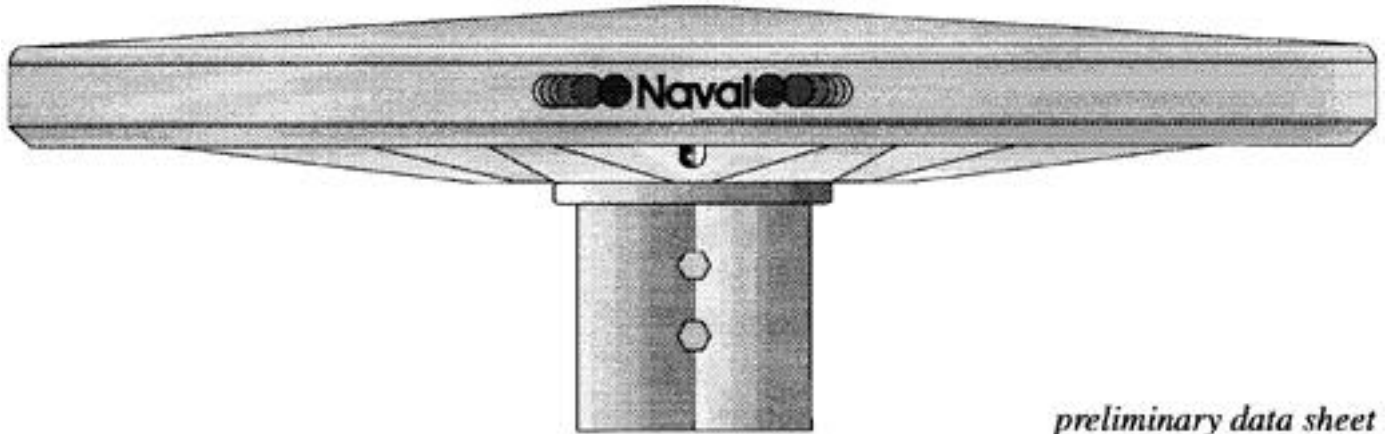


# PR-411 Marine TV Antenna for Fine Yachts



*preliminary data sheet*

## For Color VHF, UHF TV and FM Stereo Reception at Sea

The Naval PR-411 is a high performance, omni-directional, active TV antenna for Maritime use. It is ideal for use on craft equipped with one or two TV sets such as fishing boats, work boats, yachts and tugs.

**PERFORMANCE:** The PR411 is an all-channel, wide band, active antenna that brings in beautiful color pictures on both VHF and UHF television and provides for FM stereo reception at sea. A special built-in, filtered low noise amplifier with 5 microwave transistors, boosts signal in all 3 bands. Eleven filters, each hand tuned with an HP spectrum analyzer and tracking generator, reject possible out of band interference.

**CONVENIENT AND RELIABLE:** The PR411 is omni-directional and does not require a rotor as others do and which is prone to failure in a marine environment. The PR-411 has no moving parts other than the stainless steel mounting bolts on the alloy base. It never needs adjusting and provides for reception regardless of the vessel's heading.

**QUALITY:** The PR411 antenna is designed strictly for marine applications by Naval Electronics, recognized specialists in marine TV antennas and distribution systems. As a result of it's rugged and improved design, the PR-411 will easily withstand high winds and ice loading, salt water spray, and the continuous shock and vibration that only a marine environment can inflict.

**LONG LIFE:** The PR-411 is completely weather proof and is of stable, compact and robust construction. The antenna's exterior is manufactured in thick, tough white UV protected ABS plastic which requires no maintenance. The upper shell is chemically bonded, not glued, to the ribbed bottom shell. All inner parts including the low noise amplifier are imbedded in solid polyurethane foam which is injected during the final manufacturing process in Tampa, Florida. All metal parts including the cast 1.5 inch pipe mount are of special corrosion resistant marine alloys.

**SIMPLE INSTALLATION:** The PR411 is supplied complete with 50 ft. of RG-6U industrial grade low loss cable and a power box to supply 2 television sets or FM radios. The universal power supply accepts 12-40VDC or 115/220VAC. An economical DC only supply is also available.

**Options:**

- External gold plate "P" connector with Rubber coax weather boot.
- 50 Ft attached low loss RG-6U coaxial cable or custom lengths

antenna • 1.5 inch pipe mount • Economical DC only power supply with Ground Isolation mount. • 1 inch 24 thread mounting flange (1998) • Integral Transmitting whip Antenna (I 998)

**Specification:**

• Frequency Range: 40-860 MHz • Average VHF Gain: 25 dB (amp) • Average UHF Gain: 20 dB (amp) • VHF Noise Figure: 3.5 dB (amp) • UHF Noise Figure: 3.0 dB (amp) • Max Output Level: 98 dBuV min (2 signals - 60 DBIM) • Third Order Intermod Products: > 18dB IP3 • Antenna Factor:  $K_a = 0.12 \text{ AM}$  • Filters: Band pass 100 kHz-30 Mhz., 47-108 MHz., 174-230 MHz., 470-860 MHz. • Broadband Rejection Filter: 140-165 MHz. • Return Loss: >8 dB with optional output connector • Polarization: Horizontal • Antenna Pattern: Omni-directional • Supply voltage to antenna: 15VDC nominal • Current Consumption: Approx. 90 mA (with LED) • Operating Temperature: -40 to +55 C • Protection Circuits: Static discharge device fires at 65 volts. • Dimensions: Diameter 17.5 in. x Height 6 in. (including mount).

# Naval electronics, inc.