

LF Engineering Co.

# VLF/LF Active Antenna Model ML-420

*For NAVTEX / LORAN / NDB / DGPS Marine Applications*

The ML-420 is a compact low frequency active antenna that is designed to cover the longwave band (10 kHz - 550 kHz).

One antenna to cover all marine listening requirements for NAVTEX Weather Service, DGPS, NDB Navigational Aids, Time Standards, and LORAN.

The amplified antenna is omni directional allowing for various installation configurations. The ML-420 has a high desense immunity from RF overload, including AM BC/VHF/UHF and radar.

Designed with harsh marine requirements in mind, the antenna probe consists of a fully sealed PVC housing with a shrouded base containing a BNC output connection. Standard 1"-14 marine mounts may be used with the ML-420.



## Features -

**Broad-band coverage from 10 kHz to 550 kHz.**

**Multiple services: NAVTEX, DGPS, NDB, LORAN**

**Compact design for easy placement. Fully sealed.**

**High signal handling including extended ESD and RF protection.**



## Specifications

Antenna Probe	27 inches long, 1 inch dia.
Mounting Thread	1"-14 NPT
Probe Construction	PVC, color white
Coupler Size	4.4" L x 2.3" W x 1.3" H
Operating Frequency	10 kHz to 550 kHz
E Field Sensitivity	-6 dB
Third-Order Intercept	35 dBm
Max. Linear Output	15 dBm
Output Impedance	50 to 75 ohms
Input/Output Jacks	BNC
Operating Temperature	25°F to +130°F (-30° to 50°C)
Weatherproofing	2 atmospheres (-66 ft)
DC Power (ML-420/DC)	12-15 volt, 30-40 mA
AC Power (ML-420/AC)	120 VAC / 12 VDC power pack

The ML-420 is based upon the 20 year proven performance of the L-400B VLF/LF research antenna.

Standard marine base mounting.

Fully sealed coaxial output with BNC interface.



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Marine Products Data Sheet  
VLF/LF Active Antenna  
Model ML-420 1-06