



L3HARRIS™
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N4-4 ANTENNA SYSTEM

The N4-4 Antenna System has been designed to minimize bearing errors in the reception of very high frequency omnidirectional range (VOR) and instrument landing system signals. It provides considerably more gain at the horizon (particularly during banks) than fuselage mounted “deerhorn” or “vee” antennas. It has substantially greater discrimination against vertically-polarized signals and when properly installed on helicopters, it provides much greater rejection of rotor modulation than can be obtained with these other antennas. As a result, it provides better signal-to-noise ratios and smaller errors than is otherwise available.

The N4-4 Antenna consists of two (approximately semicircular) center-fed half loops and a cable harness. In use, the half loops are horizontally mounted opposite each other on the sides of an aircraft (usually the vertical stabilizer) or on the sides of a helicopter tail boom. They are connected by the cable harness to provide a single low voltage standing wave ratio 50-ohm input. Because the N4-4 has been designed specifically for light planes and helicopters, lightweight rugged construction has been stressed. It is built from round magnesium tubing. Because the N4 series antennas have been tested both in the model range and in service on many aircraft (including FAA flight inspection, i.e., SAFI aircraft), L3Harris engineers have a large reservoir of experience and data to bring to the selection of the best locations if requested.

ELECTRICAL	
Frequency range	108–122 MHz
VSWR	<5.0 to 1
Gain	0 ± 2 dB
Impedance	50 ohms
Polarization	Horizontal
Radiation patterns	Omnidirectional in the azimuth plane. Approx cos. q in the vertical plane.
Efficiency	95%
Power handling	Receive only
MECHANICAL	
Connector	BNC
Mounting	On opposite vertical surfaces of aircraft.
Weight (without cable)	2 lbs
ENVIRONMENTAL	
Military	MIL-E-5400, MIL-T-5422
FAA	TSO-C40a



KEY FEATURES

- > Antenna system consists of two half-loop elements and a cable harness
- > Ideal for rotary- and fixed-wing commercial applications
- > Extremely lightweight (less than 2 pounds)
- > Federal Aviation Administration qualified (TSO-C40a)

For further details and specifications, contact the factory at antenna.info@L3Harris.com

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Nonexport-controlled Information

L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers’ mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.



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