

Antenna



MYA-30

SPECIFICATIONS

Frequency Range Power Rating Input Impedance VSWR (Typical)

Connector Length 2-30 MHz 150 Watts PEP 50 ohms

2:1 from 2 to 8 MHz, 3:1 above 18 MHz UHF Female

25 meters (83 feet)

HF Series

MYA-30 broadband dipole antenna is designed to provide optimum performance over a wide frequency range. The usual requirements for multiple antennas or an antenna tuner between the transceiver and antenna are eliminated by the unique broadband design.

INSTALLATION

Refer to the drawings on the right for suggested installations. For best performance, the antenna should be installed with the radiating elements in a horizontal ("Flat Top") configuration, and as high as possible. Theoretically, the directions of maximum radiation and reception are at right angles to the radiating elements, and this should be considered when planning installation. However, this radiation pattern is based on an ideal antenna in free space, and may be considerably different in a practical situation near the ground and adjacent to other structures and power lines: some experimentation with mounting and orientation can significantly improve performance. Proximity of ground and nearby structures may also effect the feed point impedance of the antenna, so rearrangement of the antenna could be required to achieve a good VSWR.

PERFORMANCE VERIFICATION

The impedance match of the antenna should be verified prior to using the antenna with a transmitter, or if there is doubt about performance.

Install a directional wattmeter between the antenna and the transceiver. Key the transmitter with a steady carrier and adjust the forward output power for approximately 20 watts. Switch the wattmeter to read reflected power, which should be in the range of 1 to 2 watts for a proper impedance match. If reflected power measures in excess of 5 watts, the problem should be corrected before attempting to use the antenna.

TROUBLESHOOTING

First, check for broken, shorted or twisted wires, ground leads or faulty connections in the feedline and connectors. Then consider reconfiguring or reorienting the antenna relative to the ground or nearby structures.



Figure 1 Maximum radiation



Figure 2 Sloper



Figure 3 Inverted "V"

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