MFJ-1736 Six-Meter Roll-up J-Pole Antenna

INTRODUCTION

The MFJ-1736 was designed for fixed or portable six-meter FM operation. Despite its light weight and simplicity, the J-pole is a time-proven design that radiates efficiently and exhibits low VSWR. When correctly installed, your antenna's resonant frequency should fall around 52.5 MHz and exhibit a VSWR of less than 2:1 over most FM segments of the band.

THEORY OF OPERATION

The MFJ-1736 consists of a 1/2-wave radiator which is voltage-fed by a matching stub. Coax is tapped onto the stub at the correct low-impedance feedpoint to provide a 50-ohm match. Both sides of the radiating portion are tied together to increase apparent element diameter and improve operating bandwidth.



A special water-proof sealant has been applied to the coax braid and to all solder connections to prevent water migration into the cable. Heat shrink has been applied to provide more durability to the connections. The MFJ-1736 comes ready to use. However, be sure to seal all coaxial connectors against weather and moisture in normal fashion.

INSTALLATION

The coax cable makes it possible to connect directly to an SO-239 connector or an extension of any length needed. The antenna may be supported over any convenient tree limb or non-metallic structure with inexpensive nylon string. Avoid installing the MFJ-1736 near wires, other feedlines, or large metallic surfaces that could distort the radiation pattern or detune the element.

WARNING:Never install near power lines.

Since the J-pole must also support its feedline, use light-weight cable. RG-58 is satisfactory for runs less than 30 feet. RG-8M is recommended for longer runs. This cable has low loss at 50-MHz, is relatively inexpensive and light-weight. As with most VHF antennas, the higher you raise the J-pole, the better it will perform.

The bottom 2 to 3 inches of the stub (below the feedpoint) should be bent away from the coax to prevent detuning by the coax shield.



TECHNICAL ASSISTANCE

If you have any problem with this unit first check the appropriate section of this manual. If the manual does not reference your problem or your problem is not solved by reading the manual, you may call *MFJ Technical Service* at **662-323-0549** or the *MFJ Factory* at **662-323-5869**. You will be best helped if you have your unit, manual and all information on your station handy so you can answer any questions the technicians may ask.

You can also send questions by mail to MFJ Enterprises, Inc., 300 Industrial Park Road, Starkville, MS 39759; by Facsimile (FAX) to 662-323-6551; or by email to techinfo@mfjenterprises.com. Send a complete description of your problem, an explanation of exactly how you are using your unit, and a complete description of your station.