



***30-60 Meter OCFD
Wire Antenna***

Model MFJ2013

INSTRUCTION MANUAL

CAUTION: Read All Instructions Before Operating Equipment

MFJ ENTERPRISES, INC.

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VERSION 1A

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DISCLAIMER

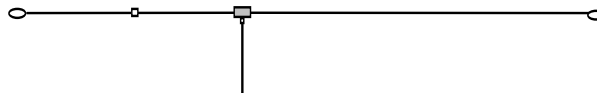
Information in this manual is designed for **user purposes only** and is *not* intended to supersede information contained in customer regulations, technical manuals/documents, positional handbooks, or other official publications. The copy of this manual provided to the customer will *not* be updated to reflect current data.

Customers using this manual should report errors or omissions, recommendations for improvements, or other comments to MFJ Enterprises, 300 Industrial Park Road, Starkville, MS 39759. Phone: (662) 323-5869; FAX: (662) 323-6551. Business hours: M-F 8-4:30 CST.

MFJ-2013 Off-Center Fed Dipole for 30/60 meters

Introduction

The MFJ-2013 is a "no-compromise" OCFD designed to deliver low SWR, wide bandwidth, and high efficiency on both bands. On 60 Meters, it functions as a $\frac{1}{2}$ -wave dipole and delivers the same gain as a dipole for purposes of calculating ERP. On 30 Meters, it develops a full-wave cloverleaf pattern that provides significant gain in many directions over a conventional dipole (great for QRP). Note that the center frequencies for 30 and 60 Meters do not fall in a direct even-harmonic relationship, resulting in an offset of a few hundred kHz. A coil installed in the shorter leg compensates for this offset and ensures the lowest SWR at both band centers.

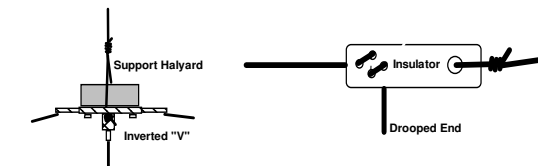


Installing Feedline

Feed the MFJ-2013 with lightweight coax such as RG-58 or RG-8X to limit wire strain and to minimize visibility. A transition to larger low-loss cable at ground level is suggested for long coax runs. Allow the feedline to drop straight down at a right angle to minimize stray coupling.

Installation

Best mounting height is between 40 and 70 feet, with 50 feet being ideal. Where possible, locate away from parallel wires that might de-tune the element. If a high support is available near the feed point, attach a halyard to the feed block for added support (see below). Jacketed wire makes the antenna nearly invisible and also allows some incidental contact with branches and leaves. However, avoid routing through dense vegetation as it will degrade performance and alter tuning. The MFJ-2013 spans roughly 86 feet. If your end supports are too close together, note that the friction-locking end insulators allow you to "droop" one or both legs. Feed excess wire through the retention holes and allow it to dangle below (drop longer leg first). You may also install the MFJ-2013 as an inverted "V".



Power Rating

The MFJ-2013 matching network can handle up to 300-Watts PEP on SSB or CW (50% of that level for RTTY and other high power-density modes).

Directivity

The MFJ-2013 has a "dipole" pattern at 5.35 MHz and a full-wave cloverleaf pattern on 10.1 MHz. For best 30-Meter DX, consider mounting the antenna 45-degrees off axis rather than directly broadside to your favored direction.

Other Bands

Efficient operation is also possible on 15 Meters with a tuner connected in the line. Resonance typically falls slightly above the 21-MHz band, but the

antenna still exhibits substantial gain in several directions on the 21-MHz band.

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 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.

In Case of Difficulty

MFJ warrants that your MFJ-2013 will be shipped complete and free from defect. If your antenna is missing parts or contains damaged items, contact the factory by phone at (662) 323-5869 to arrange for replacement items, or write. Our mailing and shipping address is: MFJ Enterprises, 300 Industrial Park Road, Starkville, MS 39759. Please *do not* return any items to MFJ unless explicitly authorized to do by MFJ Customer Service.

NOTES:

LIMITED 12 MONTH WARRANTY

MFJ Enterprises, Inc. warrants to the original owner of this product, if manufactured by MFJ Enterprises, Inc. and purchased from an authorized dealer or directly from MFJ Enterprises, Inc. to be free from defects in material and workmanship for a period of 12 months from date of purchase provided the following terms of this warranty are satisfied.

1. The purchaser must retain the dated proof-of-purchase (bill of sale, canceled check, credit card or money order receipt, etc.) describing the product to establish the validity of the warranty claim and submit the original or machine reproduction of such proof of purchase to MFJ Enterprises, Inc. at the time of warranty service. MFJ Enterprises, Inc. shall have the discretion to deny warranty without dated proof-of-purchase. Any evidence of alteration, erasure, or forgery shall be cause to void any and all warranty terms immediately.

2. MFJ Enterprises, Inc. agrees to repair or replace at MFJ's option without charge to the original owner any defective product under warranty provided the product is returned postage prepaid to

MFJ Enterprises, Inc. with a personal check, cashier's check, or money order for **\$10.00** covering postage and handling.

3. This warranty is **NOT** void for owners who attempt to repair defective units. Technical consultation is available by calling the Service Department at 662-323-0549 or the MFJ Factory at 662-323-5869.

4. This warranty does not apply to kits sold by or manufactured by MFJ Enterprises, Inc.

5. Wired and tested PC board products are covered by this warranty provided **only the wired and tested PC board product is returned**. Wired and tested PC boards installed in the owner's cabinet or connected to switches, jacks, or cables, etc. sent to MFJ Enterprises, Inc. will be

returned at the owner's expense unrepaid.

6. Under no circumstances is MFJ Enterprises, Inc. liable for consequential damages to person or property by the use of any MFJ products.

7. **Out-of-Warranty Service:** MFJ Enterprises, Inc. will repair any out-of-warranty product provided the unit is shipped prepaid. All repaired units will be shipped COD to the owner. Repair charges will be added to the COD fee unless other arrangements are made.

8. This warranty is given in lieu of any other warranty expressed or implied.

9. MFJ Enterprises, Inc. reserves the right to make changes or improvements in design or manufacture without incurring any obligation to install such changes upon any of the products previously manufactured.

10. All MFJ products to be serviced in-warranty or out-of-warranty should be addressed to:

**MFJ Enterprises, Inc.
300 Industrial Park Road
Starkville, Mississippi 39759 USA**

and must be accompanied by a letter describing the problem in detail along with a copy of your dated proof-of-purchase.

11. This warranty gives you specific rights, and you may also have other rights which vary from state to state.



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