

160-80 Meter OCFD Wire Antenna

Model MFJ-2016

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) 323-5569; FAX: (662) 323-6551. Business hours: M-F 8-4:30 CST.

MFJ-2016 Off-Center Fed Dipole

for 160-80 Meters

Introduction

Thank you for purchasing the MFJ-2016 160-80M OCFD. The MFJ-2016 Off-Center Fed Dipole is a "no-compromise" DX antenna for the 160 and 80 Meter DX window. On 160 Meters, it functions as a ½-wave dipole, and on 80 Meters, it develops a full-wave cloverleaf pattern to provide a significant gain "boost" in many directions. Center frequencies typically fall in a even-harmonic relationship, but 160 Meters may resonate slightly lower because of ground proximity (1.85 MHz and 3.75 MHz are ideal, but could vary depending on height and ground conductivity).

Installing Feedline

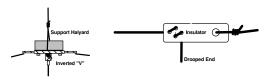
Feed the MFJ-2016 with coax rated for the power level you plan to run (RG-58 for low power or RG-8 for legal limit). Allow feedline to drop straight down at a right angle to the radiator to minimize inductive coupling to the coax shield.

General Installation

The most favorable mounting height is between 50 and 70 feet, with 60 feet being ideal. If a high support is available near the feed point, attach a halyard to the feed block for added support (see below). Avoid routing through dense vegetation as this will degrade performance and alter tuning. The MFJ-2016 spans roughly 258 feet. If you modify its length to change resonant frequency, do so proportionally (long to short leg ratio is ~5.6:1).



If end supports are too close for a full-length installation, 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 the longer leg first).



Power Rating

The MFJ-2016 matching network has been tested at maximum legal power on SSB and CW (de-rate to 50% of that level for RTTY and other high power-density modes).

Directivity

The element has a broadside "dipole" pattern at 1.85 MHz and a full-wave cloverleaf pattern at 3.75 MHz. For best DX results on 80 Meters, mount 45-degrees off axis rather than directly broadside to your favored direction.

Other Bands

The MFJ-2016 should operate on 40 and 20 meters with substantial gain, but a tuner may be required to bring SWR under 2:1.

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, Startiville, 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.

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 warrantee provided the product is returned postage prepaid to

MFJ Enterprises, Inc. with a personal check, cashiers 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. Technicalconsultation is available by calling the Service Department at 662-323-0549 or the MFJ Factory at 662-323-35869.
- 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 unrepaired.

- 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. MFI 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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