

## Portable Folded Dipole Antenna

#### **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-177X Portable Dipole Antenna**

MODEL NUMBER	BAND COVERAGE	ANTENNA LENGTH
MFJ-1770C	10-Meters	16' 4"
MFJ-1770B	15-Meters	22'
MFJ-1771B	17-Meters	25' 10"
MFJ-1772B	20-Meters	33'
MFJ-1773B	30-Meters	46' 2"
MFJ-1774B	40-Meters	65' 5"
MFJ-1776B	6-Meters	9'

#### Introduction

Thank you for purchasing the Portable Folded Dipole Antenna. The antenna is a no-comprimise, full-size folded dipole antenna designed to give your QRP station real on-air "punch". Fabricated almost entirely from tough 300-Ohm twinlead, this antenna is lightweight, easy to transport, and simple to erect. Best of all, you'll never need an antenna tuner; a 50-Ohm matching network is built right into the antenna's feed system. A random length of 50-Ohm coax from your rig to the antenna feed can be added if you need more feedline.

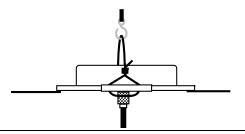
#### **Installing Feedline**

Use any good quality 50-ohm coaxial cable capable of handling the maximum amount of power you intend to run. Losses are minimal at 40 and 80 meters, so a lighter weight cable such as RG-58 or RG8X may be used for power levels up to several hundred watts safely. However, if your amplifier runs maximum legal power, or if you plan to mount the antenna an extended distance from your operating location, a heavier RG-8 style cable is recommended. No external balun is needed at the

feedpoint – one is already built into the Match-Maker™ network (for some installations, you may choose to install a second in-line current choke such as the MFJ-915 where the coax enters your building to eliminate RF induced onto the cable along its run). The coax connection at the feed block should be protected against water incursion with Coax-Seal™ or a high-quality water-sealing tape.

#### Installation

This antenna is very light in weight; inexpensive nylon "sash" cord is all you need to support it. Simply tie you end-lines through the end-holes provided. Do not use conductive wire for end-lines because this will detune the antenna.



For best results, find supports that are high and clear. If you have a choice, run your end-line over the crown of a tree rather than attaching it to a low branch. If you have only one high support, set the antenna up as a sloper or iverted "V". Run the feedline at a right angle to the antenna for at least 30 feet.

Although designed for QRP rigs, the antenna will handle full RF output from a 100-Watt transceiver. (DO NOT EXCEED 100 W)

WARNING: CONSTRUCTING OR ERECTING AMATEUR RADIO ANTENNAS IN LOCATIONS WHERE THEY MAY COME INTO CONTACT WITH ELECTRICAL POWER MAY RESULT IN ACCIDENTAL INJURY OR DEATH.

#### **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.

#### **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 662-323-5869.
- **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 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.** 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.