

## MFJ-1763 Instruction Manual

Thank you for purchasing the MFJ-1763 portable beam antenna. This antenna is designed for operation throughout the 2-meter band.

The MFJ-1763 is shipped partially assembled, you should have received the following parts (Please contact us if any parts are missing):

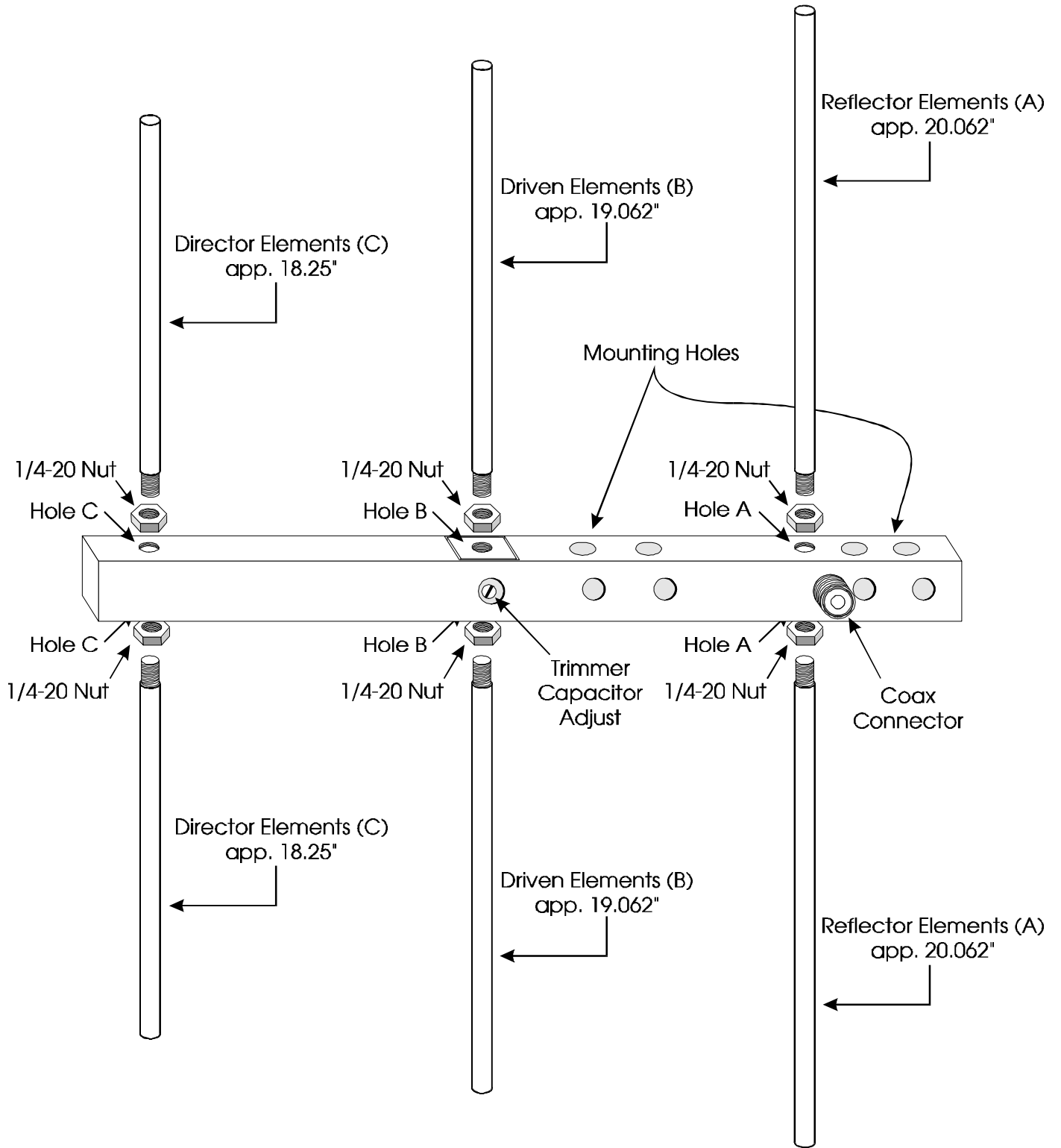
### MFJ-1763 Parts List

Items	Quan.	Description
A	2	Reflector Elements (app. 20.062")
B	2	Driven Elements (app. 19.062")
C	2	Director elements (app. 18.25")
D	1	Chassis Assembly
	6	1/4-20 Nuts
	1	U-bolt Assembly

### SAFETY PRECAUTIONS

#### **WARNING:**

- This antenna is an electrical conductor contact with power lines can result in death, or serious injuries.
- Do not install this antenna where there is any possibility of contact with power cables or service drop to buildings.
- The antenna supporting mast and/or tower should not be close to any power lines during installation or removal in the event the system should accidentally fall.
- Follow the guidelines for antenna installation recommended by the U.S. consumer product safety commission.
- Keep this antenna out of reach of adults, children, and animals. Any contact with this antenna while transmitting will cause severe RF burns, and voltages that KILL. The ends of the elements can cause eye injuries, serious RF burns or both.
- Keep the antenna away from you to prevent exposure to high levels of electromagnetic field radiation. Especially if you are using more than 20 Watts of RF power.
- Never operate this antenna near RF sensitive medical devices such as pacemakers.
- Be careful while climbing and carrying the antenna. It is heavy enough to cause you to lose your balance if it is handled too casually.



**Figure 1**

## Assembly Instructions

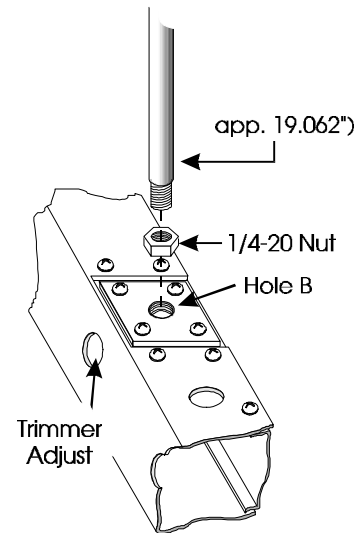
- 1- Separate the elements according to length.
- 2- Screw a 1/4-20 Nut onto each of the elements. Once the antenna is assembled and tuned these nuts will lock the elements in place.

### Refer To Figure 1 For The Following Assembly Procedures

- 3- Screw the Reflector Elements (Items A) into their designated holes labeled "Hole A" on Figure 1.

- 3- Screw the Driven Elements (Items B) into their designated holes labeled "Hole B" on Figures 1 and 2.

- 5-3- Screw the Director Elements (Items C) into their designated holes labeled "Hole C" on Figure 1.



**Figure 2**

**NOTE** All elements should be screwed completely into the chassis and then backed out a 1/4 turn.

- 6- Lock the elements in place by tightening the 1/4-20 Nut against the chassis.
- 7- Mount the U-bolt assembly in the appropriate mounting holes as shown in Figure 1. Keep in mind the polarization of the antenna (See Fig. 1).
- 8- The assembly is now completed and the antenna can be mounted on a mast to be tested for SWR before transmitting.

## INSTALLATION INSTRUCTIONS

The MFJ-1763 can be mounted on any 1" to 1 1/2" diameter mast. The mast may be a conductive (metal) or a non-conductive (fiberglass) material.

**WARNING: DO NOT MOUNT ANTENNA NEAR POWER LINES.**  
**Death or serious injury can result!**

For optimum performance the antenna should be mounted as high as possible. However, if the mast itself is located on a high elevation, such as a hill or mountain, the need for a tall mast will not be as critical.

The MFJ-1763 may be mounted horizontally or vertically. The antenna should be mounted horizontally for SSB and vertically for FM operation.

**NOTE:** The antenna can be center or end mounted.

Once you have mounted the antenna, you are ready to hook up the coax. The coax connector is a SO-239, so the connection should be fast and easy.

## TUNING INSTRUCTIONS

Your MFJ-1763 has been preset for low SWR throughout the 2 meter band. However, the location of the antenna might have a slight effect on its tuning. In this case it is necessary to tune the antenna. Tuning the antenna requires an SWR analyzer such as the MFJ-208/MFJ-259 or a transceiver and SWR/Wattmeter. This can be done in two different methods. The first method is more effective and usually guarantees the lowest SWR.

**Method 1- Trimmer Capacitor:** Adjust the trimmer capacitor a little at a time until it yields a minimum SWR. This adjustment is very coarse  
(See Fig. 1 for location of Trimmer location).

**NOTE:** Do not use method 2 unless method 1 failed

**Method 2- Elements Length:** Adjust the length of the elements by screwing them in and out until minimum SWR is reached. If the SWR is not satisfactory then go back to Method 1 for adjustment.

## 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 following the manual you may call MFJ toll-free at 1-800-647-TECH (8324) or FAX to 601-323-6551, or Internet: 76206.1763@Compuserve.com. Outside of the continental U.S.A. 601-323-5869. You will be best served 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 to MFJ Enterprises, INC., P.O. Box 494, Mississippi State, MS 39762. Send a complete description of your problem, an explanation of exactly how you are using your unit and a complete description of your station

## FULL 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 no 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, cashiers check, or money order for **\$7.00** covering postage and handling.
3. MFJ Enterprises, Inc. will supply replacement charges free of charge for any MFJ product under warranty upon request. A dated proof of purchase and a **\$5.00** personal check, cashiers check, or money order must be provided to cover postage and handling.
4. This warranty is **NOT** void for owners who attempt to repair defective units. Technical consultation is available by calling (601) 323-5869.
5. This warranty does not apply to kits sold by or manufactured by MFJ Enterprises, Inc.
6. 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 unrepai red.
7. Under no circumstances is MFJ Enterprises, Inc. liable for consequential damages to person or property by the use of any MFJ products.
8. **Out-of-Warranty Service:** MFJ Enterprises, Inc. will repair any out-of-warranty product provided the unit is shipped prepaid. All charges will be shipped COD to the owner.
9. This warranty is given in lieu of any other warranty expressed or implied.
10. 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.
11. 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.
12. This warranty gives you specific rights, and you may also have other rights which vary from state to state.