

MFJ

Mobile Big Stick

Model MFJ-1652



INSTRUCTION MANUAL

CAUTION: Read All Instructions Before Operating Equipment

MFJ ENTERPRISES, INC.

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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-1652 *Mobile Big Stick*[™] High Q Mobile Antenna

Introduction

Congratulations on the purchase of your MFJ-1652 Mobile antenna. MFJ's "Mobile Big Stick" is a ¼-wave monopole design featuring an exceptionally rugged 8-foot stainless-steel collapsible whip plus a tapped high-Q loading coil that extends coverage to 20 MHz.

The 8-foot radiator collapses to 2 feet for easy transport or clearance. The MFJ-1652 is easy to install on a 3/8-24 Base Mount. Use Standard Lip mount, Trunk mount, Mag mount or Pipe Mount.

Specifications

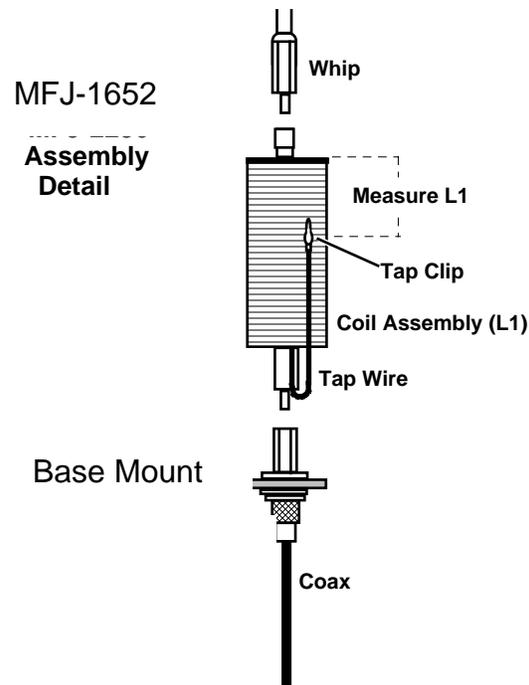
Frequency Coverage	14 MHz to 50 MHz, Up to 148MHz without Loading Coil
Element Length	Up to 8 feet, vertically polarized
Transport Length	24 Inches
Weight	1.5 Pounds

Assembly

NOTE: Before installing on a mount, check the area to confirm the whip is well clear of wires and metallic structures.

The MFJ-1652 comes with two major components (Base Mount not included):

- [] Loading Coil Assembly
- [] Stainless Steel Collapsible Whip (8')



- [] Install coil assembly with tap-wire end toward the Base Mount.
- [] Install the whip on the outboard end of the coil assembly.
- [] Connect your 50-Ohm coax feed to the SO-239 connector on your base mount.

Tighten coil assembly and element by hand (avoid applying excessive torque).

Warning: Never assemble or install your antenna in close proximity to power lines or entrance cables. Accidental contact with utility lines can result in serious injury or death.

Warning: The MFJ-1652 has been tested to 300-Watts PEP, but at portable operating sites where people or animals may be in close proximity to the element and radials, we strongly recommend limiting power in accordance with FCC RF-exposure guidelines.

Tuning Procedure

The MFJ-1652 is a ground-mounted monopole, so tuning dimensions and SWR are highly dependent on the electrical characteristics of the counterpoise connected to the base block. To adjust for 14 MHz and higher, simply set the element length by adjusting the whip and the tap on the loading coil -- then increase or decrease it until resonance falls in-band. The actual length required to achieve resonance may vary significantly, at the frequency of interest. To adjust for 144-148MHz, Simply remove the loading coil assembly and reattach the antenna to the Base Block and adjust the SWR by telescoping the antenna out and in.

In Case of Trouble

If you are unable to obtain low SWR, if settings deviate widely from the chart, or if SWR jumps intermittently, check the following:

- Are the coil assembly and whip fully seated?
- Is there damage to the coil or tap wire?
- Is your coax feed shorted, open, or intermittent?
- (Above 20-M) Are all of L1's turns bypassed by the slider?
- Is your feedline "hot"? If so, add ferrite beads or install an unun.

Care and Maintenance

The MFJ-1652 is constructed from non-corrosive and UV-resistant materials. Although not designed for permanent outdoor installation, no maintenance should be required other than periodic cleaning and inspection of the coil assembly and collapsible element. Store in a sheltered location when not in use.

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 reading the manual does not solve your problem, 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.

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 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.

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 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.



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