

12 MONTH LIMITED 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, cashiers check, or money order for \$7.00 covering postage and handling.
3. MFJ Enterprises, Inc. will supply replacement parts 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 (662) 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 unrepaid.
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 repaired units will be shipped COD to the owner. Repair charges will be added to the COD fee unless other arrangements are made.
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.

MFJ-1456

Multi-Band Mobile Antenna Instruction Manual

Thank you for purchasing the MFJ-1456, Multi-Band Mobile Antenna. Please read this instruction manual completely and thoroughly before using the MFJ-1456.

Specifications:

- Bands: 40-Meter, 20-Meter, 15-Meter, 10-Meter, 6-Meter, 2-Meter, and 440 MHz
- Maximum Power
HF – 200W SSB
6M – 200W SSB/100W FM
2M/70cm – 100W FM
- SWR
HF – 1.6:1 or less
6M-70cm – 1.5:1 or less
- Gain and Phasing
HF – 0 Gain, $\frac{1}{4}$ Wave
6M – 0 Gain, $\frac{1}{4}$ Wave
2M – 2.15 dBi Gain, $\frac{1}{2}$ Wave
70cm – 5.5 dBi Gain, $\frac{5}{8}$ Wave X 2
- Connector: PL-259
- Fold-over feature with threaded collar.

Installation Instructions:

- Select a suitable mount for the MFJ-1456. The MFJ-345S and MFJ-348S trunklip mounts or the MFJ-336S Goliath triple mag-mount are recommended.
- **Be sure the mount has a good connection to ground (this is most important).**
- Select the loading coils for the bands you want to operate. You can operate 6-Meters, 2-Meters, and 440 MHz with no loading coils. You can install one, two, three, or all four loading coils.
- It is recommended that the loading coil for the lowest frequency band be installed vertically. If only using one loading coil, it is recommended that the loading coil be mounted vertically. Simply screw the loading coil into the top collar and tighten with a wrench.
- Up to 3 loading coils can be attached horizontally. Simply screw the desired loading coils into the horizontal mounting collars and tighten with a wrench.
- Screw the MFJ-1456 onto your mount.
- For added support, it is strongly recommended that you guy the top of the antenna.

Tuning

- The bandwidth on the HF bands is very narrow. Tuning may be required depending on the part of the band you want to operate.
- To adjust the frequency, each loading coil has a whip that can be adjusted.
- For operating at the top of the band, it may be necessary to cut one or both stubs.
- Use the hex key supplied to loosen the setscrew, and adjust the whip length.
- Tighten the setscrew securely after tuning is complete.

Notes:

- Tuning this antenna for one band will affect the tuning on all other bands. It is suggested to start the tuning process with the 10-Meter coil, 15-Meter coil, 20-Meter coil, and finally the 40-Meter coil in this order. Then go back and recheck the tuning on the other coils.

It may take 2 or 3 passes of checking and re-checking before achieving the perfect tuning you desire.

- Be careful if you have to cut the whips to tune this antenna, it is recommended not to exceed increments of 0.1 inches.
- This antenna is very sensitive. You may find that switching vehicles adversely affects the operation. It may be necessary to re-tune the antenna when switching vehicles.
- You will need a duplexer or triplexer between your transceiver and the MFJ-1456.

Fold-Over Feature

- Unscrew the threaded collar at the base of the antenna.
- Lift the antenna up until the hinge is revealed.
- Gently fold the antenna over in a suitable position for temporary storage.

Warning:

- Do not touch the antenna while in use.
- Place the antenna in a location away from people. Serious RF burns may occur if a person comes in contact with the antenna.
- **NEVER INSTALL AN ANTENNA IN A LOCATION WHERE CONTACT WITH POWER LINES IS POSSIBLE. DEATH OR SERIOUS INJURY MAY OCCUR.**