



MFJ ANTENNA BRIDGE
MODEL MFJ-204B
OWNER'S MANUAL

CAUTION: Read All Instructions Before Operating Equipment.

MFJ ENTERPRISES, INC.

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MFJ-204B ANTENNA BRIDGE

Thank you for purchasing the MFJ-204B Antenna Bridge. The MFJ-204B provides an inexpensive and simple way to tune your antenna to match the feed-line and transceiver from 160M thru 10M. The MFJ-204B also can be used to adjust the matching device to the impedance of the feedline and enable you to obtain proper load to your transmitter at any frequency using an antenna tuner without having to key your transmitter while tuning.

A 9V battery or a 12V DC adapter (MFJ-1312) can be used to power the MFJ-204B. To install the battery, remove all screws on both sides of the box and open the case. Place the battery in the holder and connect the battery snap.

The RESISTANCE control is marked with letters from A thru G. These letters correspond to the resistance value on the calibration chart on the bottom of the MFJ-204B. Each mark is individually calibrated for better accuracy. A frequency counter can be connected to the Frequency Output of the MFJ-204B to get an accurate reading.

USING THE MFJ-204B ANTENNA BRIDGE

I. Measure antenna impedance at the antenna feed point.

1. Turn on the MFJ-204B.
2. Set the Band switch on the MFJ-204B to the desired band.
3. Turn your receiver to the desired frequency.
4. Connect a short piece of RG-58U or RG-8U with PL-259 (use your wattmeter patch cable if desired) to the Coax Antenna connector of the MFJ-204B.
5. Hold one end of the coax patch cable close to the antenna input of your transceiver. Do not make physical connection.
6. Tune the TUNE control on the MFJ-204B until the oscillator can be heard on the receiver. Make note of this TUNE control setting on the MFJ-204B. DO NOT re-adjust.
7. Disconnect the patch cable.
8. Relocate the MFJ-204B close to the antenna feed point. Connect the MFJ-204B to the antenna feed point with a RG-8U or RG-58U. Make this cable as short as possible.
9. Turn the RESISTANCE control until a maximum dip on the meter can be achieved. Note that a complete dip to "0" on the meter may not be possible. In any case try to obtain the minimum meter reading.
10. Read the antenna resistance on the RESISTANCE control.

II. Adjust the antenna for resonance frequency.

1. Follow step from 1 thru 9 on section I.
2. If the resistance does not read 50 ohm, set the RESISTANCE control to 50 ohm.
3. Adjust your antenna until the meter of the MFJ-204B reads minimum. At this point the feed point impedance of the antenna is 50 ohm at the frequency which was selected.

III. Using the MFJ-204B to tune an antenna tuner.

1. Turn on the MFJ-204B.
2. Set the Band switch on the MFJ-204B to the desired band.
3. Turn your receiver to the desired frequency.

FULL 12 MONTHS 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 of 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, cancelled check, credit card or money order receipt, etc.) describing the product to establish the validity of warranty claim and must submit the original or a 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 of proof-of-purchase 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 provided the product is returned postage prepaid to MFJ Enterprises, Inc. with a personal check, cashier's check or money order for \$4.00 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 \$4.00 personal check, cashier's 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 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 is returned**. Wired and tested PC boards installed in the owner's cabinet or connected to switches, jacks, cables, etc. sent to MFJ Enterprises, Inc. will be returned at the owner's expense unrepaired.
7. Under no circumstances is MFJ Enterprises, Inc. liable for consequential damages to person or property by the use of any MFJ product.
8. **Out-of-Warranty Service:** MFJ Enterprises, Inc. will repair any out-of-warranty product provided the unit is delivered prepaid. All charges will be shipped COD to the owner.
9. This warranty is given in lieu of any other warranty express or implied.
10. MFJ Enterprises, Inc. reserves the right to make changes or improvement 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., 921A Louisville 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.

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