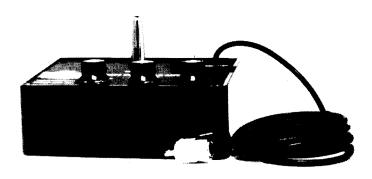


MFJ-1621 PORTABLE ANTENNA



WARNING:

- 1. Never touch the telescoping whip while transmitting. It can cause severe RF burn.
- 2. Never place the MFJ-1621 in rain or expose to adverse weather conditions.

NOTE:

- 1. The telescoping whip must be fully extended for proper operation.
- 2. The coax cable must be fully stretched out and not coiled up or crossing.

OWNER'S MANUAL

CAUTION: Read All Instructions Before Operating Equipment.

MFJ ENTERPRISES, INC.

P. O. BOX 494, MISSISSIPPI STATE, MS. 39762, USA

Thank you for purchasing the MFJ-1621 Portable Antenna. This antenna will operate on 7, 10, 14, 21, 24 and 30 MHz. Maximum input power is 200 watts. In addition a field strength meter is built-in for ease of tuning. With the MFJ-1621, you can enjoy operating your rig in remote locations (camping, motels, field day, etc). where a regular antenna may be difficult to set-up and it does not require a ground plane. Keep in mind that this antenna is not intended to permanently replace or out perform a regular full size antenna (dipole, beam, etc). It is designed to allow you to operate when no other antenna is available.

GENERAL INFORMATION

The inductor of the MFJ-1621 is tapped to match the telescopic whip supplied when it is fully extended. SWR below 2:1 can be obtained in most cases. Note that although the BAND switch is labeled for certain bands of operation, there will be cases where you will find that the minimum SWR occurs with the BAND switch set to a different band. This condition is normal.

Fifty feet of RG-58/u cable is provided to allow you to locate the antenna where it is best for operation. Keep the antenna clear from metallic objects and other obstacles which may interfere with operation. Since RF is presented at the antenna, it is important that the plastic tubing be placed over the whip to avoid RF burns to bystander. Also, it is a good idea to anchor the unit when it is windy.

INSTALLATION

Connect the transceiver to a SWR/Wattmeter with a short piece of RG-58/u coax cable. Connect the 50 feet coax cable of the MFJ-1621 to the SWR/Wattmeter. See Figure 1. Install the telescopic whip to the MFJ-1621. Secure the whip with the two set of screws.

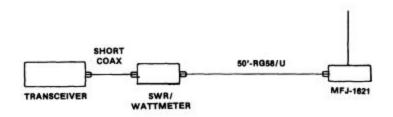


Figure 1

OPERATION

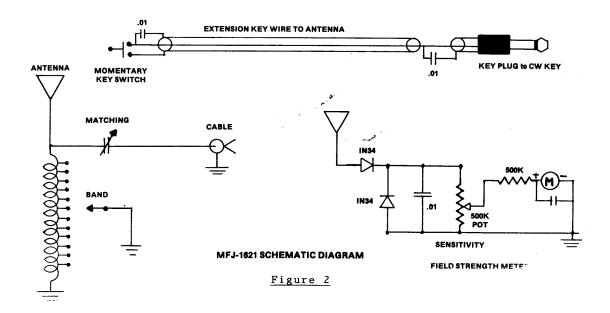
CAUTION: Don't touch the antenna when operating. It will cause an RF burn.

- 1. Connect the MFJ-1621 as described above.
- 2. Extend the telescopic whip fully and install the plastic tubing over the whip. Locate the MFJ-1621 close to the transceiver.
- 3. Set the transceiver to the desired band and frequency.

- 4. Set the BAND switch on the MFJ-1621 to the desired band.
- 5. Transmit at low power.
- 6. Tune with the MATCHING control on the MFJ-1621 to obtain minimum SWR. Note that the BAND switch on the MFJ-1621 is marked with more than one position per band. Try all positions to achieve the best SWR. If minimum SWR still is not found, try all band switch positions. If more than one setting gives the same SWR, use the setting which gives maximum field strength.
- 7. After obtaining minimum SWR, relocate the MFJ-1621 to a desirable location for operation. <u>CAUTION</u>: Keep antenna away from high traffic area. Avoid area where children may be present. The Antenna may be placed on the ground.
- 8. The 50 feet coax cable must be stretched. out. It must not be coiled. The coax cable must not cross itself.
- 9. After properly locating the antenna. Check SWR again at low power. If SWR is high, final touch-up to get lower SWR may be necessary. This may be done by tuning the MATCHING control so that maximum deflection on the field strength meter occurs. Adjust the SENSITIVITY control to get desired meter deflection. When minimum SWR is obtained with antenna at the remote site, maximum power up to 200 watt may be applied.

OPERATION HINTS

Keying the transmitter may be present a problem when you are tuning the antenna at the remote site. We suggest that you use a pair of wires long enough to extend from the antenna to the transceiver. One end of the wire connects to the CW KEY jack on the transceiver and the other end to a momentary SPST switch. See Figure 2. This will allow you to key the transmitter at the antenna when you are tuning the MFJ-1621. Use a .01uf disc capacitor across the key jack end of the wire and one across the switch. DO NOT TOUCH ANTENNA WHILE KEYING THE TRANSMITTER. IT CAN CAUSE SEVERE RF BURN.



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 \$7.00 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.
- 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.