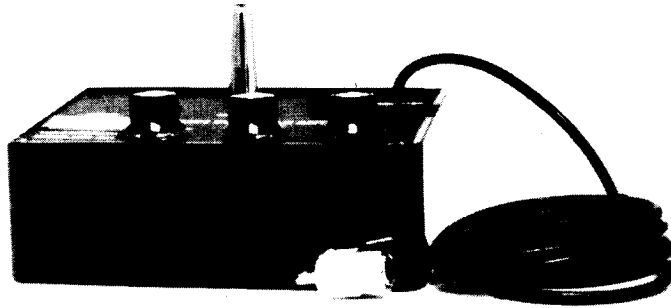




MFJ-1621 PORTABLE ANTENNA



- 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.

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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.

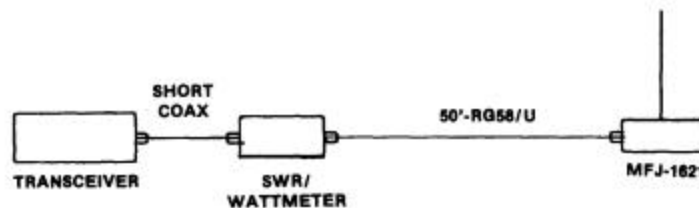


Figure 1

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. **CAUTION** : 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.**

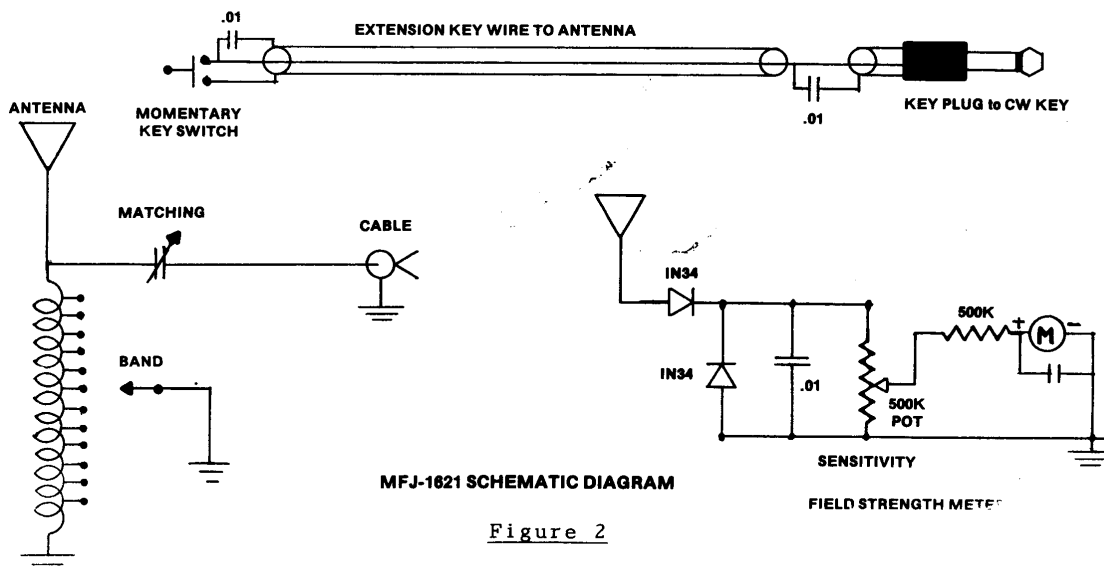


Figure 2