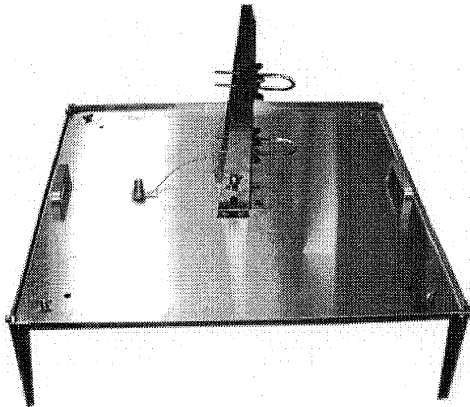


MFJ

Portable Antenna Base

Model MFJ-1901



INSTRUCTION MANUAL

CAUTION: Read All Instructions Before Operating Equipment !

MFJ ENTERPRISES, INC.

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INTRODUCTION

The MFJ Ground-Coupled Portable Antenna Base gives you a stable way to mount your vertical antenna and provides an effective ground by just setting the base down and standing on it to push the legs firmly into the ground. It will support many multi-band verticals.

You can operate 160 Meters thru 2 Meters and above almost anywhere with an effective signal. It is perfect for traveling or for semi-permanent summer or winter homes. You can easily set up and take down your vertical antenna for stealth operation if you live in an antenna-restricted area.

The base can support a lightweight multi-band like the MFJ-1795, Hy-Gain 18AVS, or Hy-Gain 14 AVQ. A screwdriver antenna can also be used with the base. This will provide a semi-permanent installation. You can even hide the base by covering it with dirt.

The base is also equipped with a 3/8" stud for mounting the MFJ HF Mobile Ham-tenna™ whips. The whips can be mounted either on the antenna base or on the vertical bracket.

The MFJ-1910 Telescoping Fiberglass Mast is well supported by the Antenna Base. This provides a simple support for wire antennas.

A built-in antenna mount with two U-bolts lets you mount most standard and even many homemade vertical antennas. A SO-239 coax connector is attached to the mount for easy connection.

TOOLS AND SUPPLIES

Construction area: This kit requires a large, clean, well-lighted area where you can easily organize and handle all the included hardware. Safety is always important! Use a suitable high temperature stand for your soldering iron, and keep the work area free of clutter.

The following common bench items are recommended for assembly of this kit:

- Soldering Iron (grounded-tip and temperature-controlled preferred)
- High-temperature Iron Holder with Cleaning Sponge
- Solder, 60/40 or 37/63 with rosin or "no-clean" flux
- 1 set Standard Size Wrenches or Crescent Wrench
- Flat-tip Screwdriver
- Phillips-tip Screwdriver
- Regular Pliers
- 1/4" Wrench

PARTS LIST

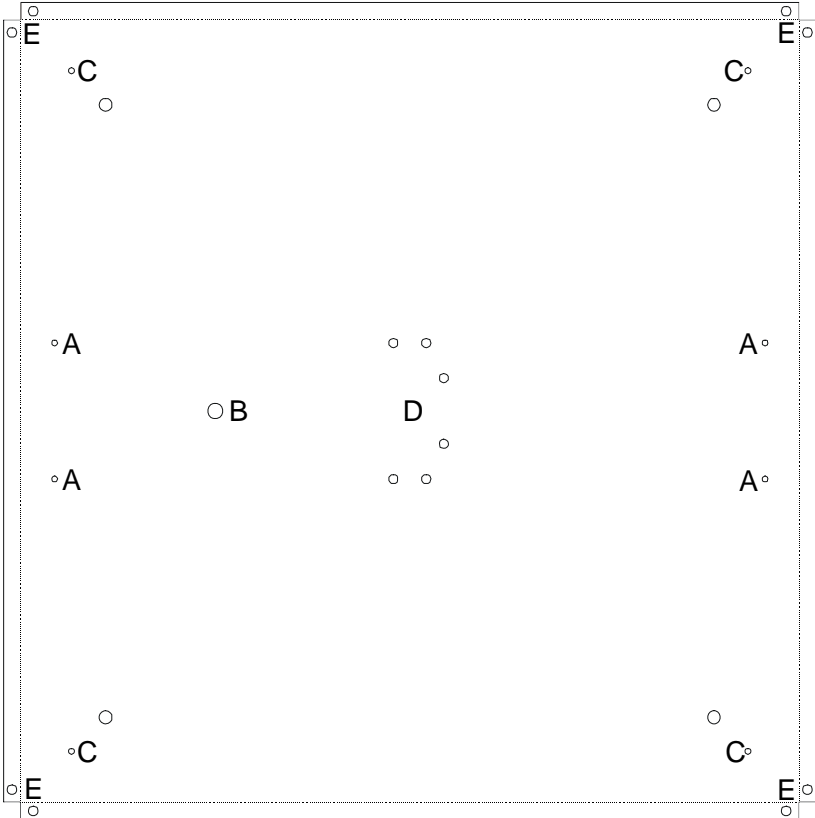
Your kit should contain all of the parts listed below. Please identify and inventory each item on the checklist before you start building. If any parts are missing or damaged, refer to the manual's warranty section for replacement instructions. If you cannot positively identify an item, set it aside until all other items are checked off. You may then be able to identify it by process of elimination. Finally, your Portable Antenna Base will go together easier if parts are organized by type. Use this inventory as an opportunity to sort and arrange parts so you can identify and find them quickly.

<input checked="" type="checkbox"/>	Qty	Part Description
<input type="checkbox"/>	8	Bolt – 1/4-20 x 3/8"
<input type="checkbox"/>	4	Bolt – 10-24 x 5/8"
<input type="checkbox"/>	4	Screw – 8/32" x 1/2"
<input type="checkbox"/>	4	Screw – 8/32" x 3/8"
<input type="checkbox"/>	6	Bolt – 1/4-20 x 1/2 "
<input type="checkbox"/>	4	Wing Nut – 10-24"
<input type="checkbox"/>	4	Nut – 10-24"
<input type="checkbox"/>	14	Nut – 1/4-20"
<input type="checkbox"/>	4	Nut – 6/32"
<input type="checkbox"/>	14	Lock Washer – 1/4"
<input type="checkbox"/>	8	Lock Washer – 3/16 "
<input type="checkbox"/>	2	Coax Connector – SO-239
<input type="checkbox"/>	1	3/8"-24 bolt
<input type="checkbox"/>	1	Shoulder Washer
<input type="checkbox"/>	1	Flat Fiberglass Washer
<input type="checkbox"/>	1	Antenna Coupling Nut 3/8"-24"
<input type="checkbox"/>	1	Solder Lug
<input type="checkbox"/>	1	Ground Plate – 2' x 2'
<input type="checkbox"/>	1	Tower
<input type="checkbox"/>	4	Foot
<input type="checkbox"/>	2	Bushing
<input type="checkbox"/>	2	U-Bolt Assembly
<input type="checkbox"/>	2	Handle
<input type="checkbox"/>	1	Wire

GROUND PLATE DIAGRAM

The following diagram shows the hole locations on the ground plate.

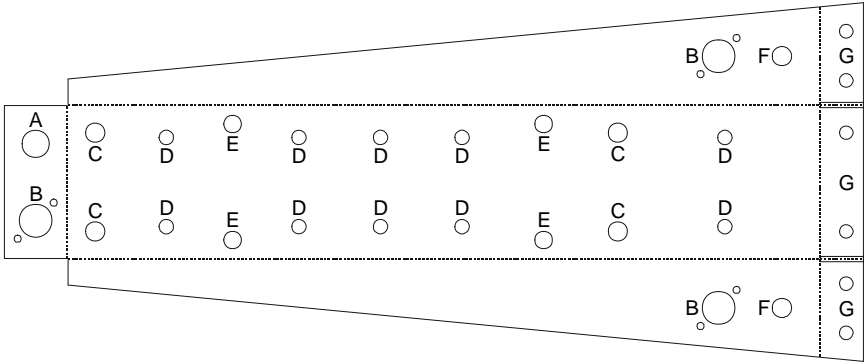
Note: This is a flat drawing of the ground plate before bending.



TOWER DIAGRAM

The following diagram shows the hole locations on the ground plate.

Note: This is a flat drawing of the ground plate before bending.



STEP-BY-STEP ASSEMBLY INSTRUCTIONS

WARNING: SHARP EDGES! *Be careful not to get cut. The metal contains sharp edges that may cut you if you are not careful.*

Before attaching any hardware to the ground plate, tower, or feet, be sure to remove the protective plastic film that is attached to the surface of these items. It is recommended to use a clean cloth and degreaser to wipe all surfaces clean of dirt and grime prior to assembly.

Note: The lip on the ground plate should be oriented upward during assembly.

1. Prepare tower for installation.

- Locate the tower, and the parts bag containing two small black bushings, two SO-239 coax connectors, and four 4-40" x 3/8 " screws with kep-nuts and fiberglass washer.
- Press the bushings into the small holes on either side of the tower near the base. The holes are labeled F on the Tower Plate diagram page 4.
- Locate four 4-40 x 3/8" screws and four 4-40 hex nuts. Insert the SO-239 connectors in holes B on the Tower Plate diagram (page 4). Secure the connectors in place with the screws and nuts.

Note: The feed-point can be positioned on top of the tower if needed using hole B shown on the tower diagram (page 4).

2. Attach handles.

- Locate two handles, four 8/32 x 1-2" screws, and 2 3/16 lock washers.
- Place a lock washer on each screw.
- Insert the 8/32 x 3/8" screws from the bottom of the base plate through the holes marked A on page 3. Place the handles over the screws on top of the base plate and secure them using a flat head screwdriver.

3. Attach mobile antenna mount.

Note: A mobile whip may be attached to the base plate or the top of the tower.

- Decide if the mount will be placed on the base plate (hole B page 3). or the tower (hole A page 4) Follow the appropriate instructions below.

• Attaching a mobile whip to the base plate

- Locate the 3/8"-24 x 16mm" bolt, lock washer, shoulder washer, coupling nut, fiberglass flat washer, and solder lug.
- Place the lock washer, and shoulder washer onto the bolt
- Insert the bolt from the bottom of the base plate through hole **B** (page 3)
- Place the fiberglass flat washer, solder lug, 3/8" int. lock washer onto the bolt and secure the assembly in place with the 3/8- 24" coupling nut. Tighten the coupling nut to secure the assembly in place.

• Attaching a mobile whip to the tower

- Locate the 3/8"-24 x 16mm" bolt, coupling nut, fiberglass flat washer, shoulder washer, lock washer, and solder lug.
- Place the lock washer, solder lug, and shoulder washer onto the bolt
- Slide the bolt through the bottom hole **A** (page 4)
- Place the fiberglass flat washer, 3/8 int. lock washer onto the bolt and secure the assembly in place with the 3/8- 24" coupling nut. Tighten the coupling nut to secure the assembly in place.

Note: It is imperative that the shoulder washer be seated inside the hole to insure that the bolt is insulated from the base.

4. Attach radial wire mounts.

- Locate four 10-24 x 5/8" bolts, nuts, lock washers, and wing nuts.
- Place the bolts through the bottom of the holes labeled C (page 3) near the four corners of the ground plate.

- Place a lock washer over each of the bolts and secure them in place with a 10-24" nut.
- Place a wing nut onto each of the bolts and hand-tighten.

5. Attach tower.

- Locate prepared tower
- Locate six 1/4-20 x 1/2" bolts, nuts, and lock washers.
- Align tower with holes labeled **D** (page 3) in center of ground plate.

Note: Tower may need to be adjusted by hand for holes to align. This can be done by putting the six bolts in before tightening.

- Place bolts through the top holes labeled **D** (page 3), place lock washers on, and tighten with nuts.

6. Attach Feet.

- Locate four feet, eight 1/4-20 x 3/8 " bolts, nuts, and lock washers.
- Align holes in feet with holes labeled **E** (page 3) at the corners of the lip on the ground plate.

Note: Feet may need to be adjusted for holes to align. This can be done by putting the two bolts in before securing the feet in place.

- Place a 1/4-20 x 3/8 bolt through each of the holes attaching the feet to the base plate. Place a 1/4" lock washer and a 1/4 " nut on each of the bolts and tighten them securely.

7. Attach wire.

- Locate wires.
- Solder one end of the wire to the solder lug, and the other end to the center pin of one of the SO-239 connectors.

Note: If adding a vertical tower, the pole can be attached to the back of the tower with the U-Bolts, and a wire can be attached to the free SO-239 connector.

8. Antenna Installation.

- Locate all of the hardware needed to mount the antenna to the tower such as u-bolts.
- Using the diagram on page 4 identify the proper holes to be used.

The following is a list of the holes and their intended use. Refer to the tower diagram on page 4 of this manual.

- A. 3/8" Mobile Whip Mount
- B. SO-239 Coax Connector
- C. Hy-Gain 14AVQ and 18AVS
- D. MFJ 1795
- E. MFJ 1910 Telescoping Fiberglass Mast
- F. Plastic Bushing
- G. Ground Plate Attachment Points

Note: The holes marked C on the diagram (page 4) are fitted to enclose the plastic bushing supplied in the parts. This may be needed on some antenna installations.

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 your problem is not solved by reading the manual 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 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.

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 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 unrepared.
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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