

MFJ-918 1:1 CURRENT BALUN

1.8-30 MHz

INTRODUCTION

The 1:1 Current Balun was designed to replace the center insulator of a dipole antenna. It is made up of 50 Ferrite Core Beads placed onto a 13-inch piece of RG-303 coax. The coax and SO-239 connector have Teflon® for maximum insulation and extended life of the product. Unlike other baluns the MFJ-918 makes a direct electrical connection to the antenna with #14 copper wire. The RF Isolator is enclosed in schedule-40 PVC Pipe for maximum strength and support of a dipole antenna.

The Current Balun will reduce or eliminate Stray RF often found on coax. This stray RF can cause burns and other problems with electronic equipment while reducing the amount of actual antenna radiation. Installation of the MFJ-918 Current Balun will increase the efficiency of all amateur stations.

WARNING:

1. **Never install an antenna in a location where contact with POWER LINES is possible. Death or Serious injury can occur if contact is made.**
2. **Always install antennas out of reach of adults and children. Serious RF burns can occur if someone comes into contact with the antenna during transmissions.**

INSTALLATION

The design of the MFJ-918 allows it to replace the center insulator of a dipole antenna.

Make sure the load of the antenna is being placed on the eyebolt and not the antenna lead wire.

1. Place the MFJ 1:1 Current Balun on a suitable table or work surface to make assembly of the antenna easier.
2. Place approximately 4-inches of the antenna wire through one of the eye bolts on the side of the balun.
3. Place a bend in the wire so that it loops back to the antenna.
4. Wrap the wire around itself 4-5 times to make sure it is secure.
5. Repeat steps 2-5 for the opposite side of the antenna.
6. Wrap the antenna lead wire from the side of the balun around the antenna 3-4 times. Form a rain loop in this wire to prevent water from entering the balun.
7. Carefully solder the lead wire to the antenna wire. **Excessive heat will damage the PVC pipe so use caution.**
8. Repeat this process for both sides of the antenna.
9. Before the antenna is placed in its final operating location, check to see that the force of the antenna is pulling on the eyebolts of the balun and not on the lead wire. If enough wire is left for the rain loop this will not be a problem.
10. Attach a suitable length of nylon rope or chord to the eyebolt on the top of the balun. Make sure the chord is strong enough to support the load of the antenna.
11. Always orient the balun so that the SO-239 coax connector is pointed downward and water will drain properly from the drain hole.

