

MFJ-913/919 4:1 CURRENT BALUNS

1.8-30 MHz

INTRODUCTION

MFJ 4:1 current baluns are designed to replace the center insulator of a dipole antenna. They are made up of two large low-permeability ferrite cores. The MFJ-913 is rated at 300 watts and the MFJ-919 is rated at 1500 watts. Their SO-239 coax connectors have Teflon™ internal insulation for maximum insulation and extended life of the product. Unlike some other baluns, the MFJ-913 and MFJ-919 make direct electrical connections to the antenna with #14 stranded copper wire and are enclosed in Schedule-40 PVC for maximum strength and support of a dipole antenna.

A current balun can reduce or eliminate stray RF often found on coax. This stray RF can cause burns and other problems with electronic equipment while reducing antenna radiation. Installation of an MFJ-913 or MFJ-919 current balun can increase the efficiency of any amateur station.

WARNING

- **NEVER install an antenna where contact with power lines is possible. Death or serious injury can occur if contact is made.**
- **ALWAYS install antennas out of reach. Serious RF burns can occur if someone comes in contact with an antenna during transmissions.**

INSTALLATION

1. Place the balun on a suitable work surface.
2. Place approximately 4 inches of the antenna wire through one of the eye bolts on the sides of the balun.
3. Loop the end of the wire back to itself.
4. Wrap the wire around itself 4 or 5 times to ensure it is secure.
5. Repeat steps 2-5 for the opposite side of the antenna.
6. Wrap the lead wire from the side of the balun around the antenna 3 or 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 pull of the antenna is exerted 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 cord to the eye bolt on the top of the balun. Make sure the cord is strong enough to support the weight of the antenna.
11. Always orient the balun so that the SO-239 coax connector is pointed down and water will drain properly from the drain hole.

