MFJ-912 W9INN BALUN BOX INSTRUCTIONS

INTRODUCTION

The MFJ-912 W9INN BALUN BOX is a broadband (1.8-30 MHz) toroidal balun. It provides a convenient method of feeding balanced line transmission lines remotely without actually bringing the line into the house.

The MFJ-912 is basically a 1:4 impedance transformer which converts an unbalanced output to a balanced output.

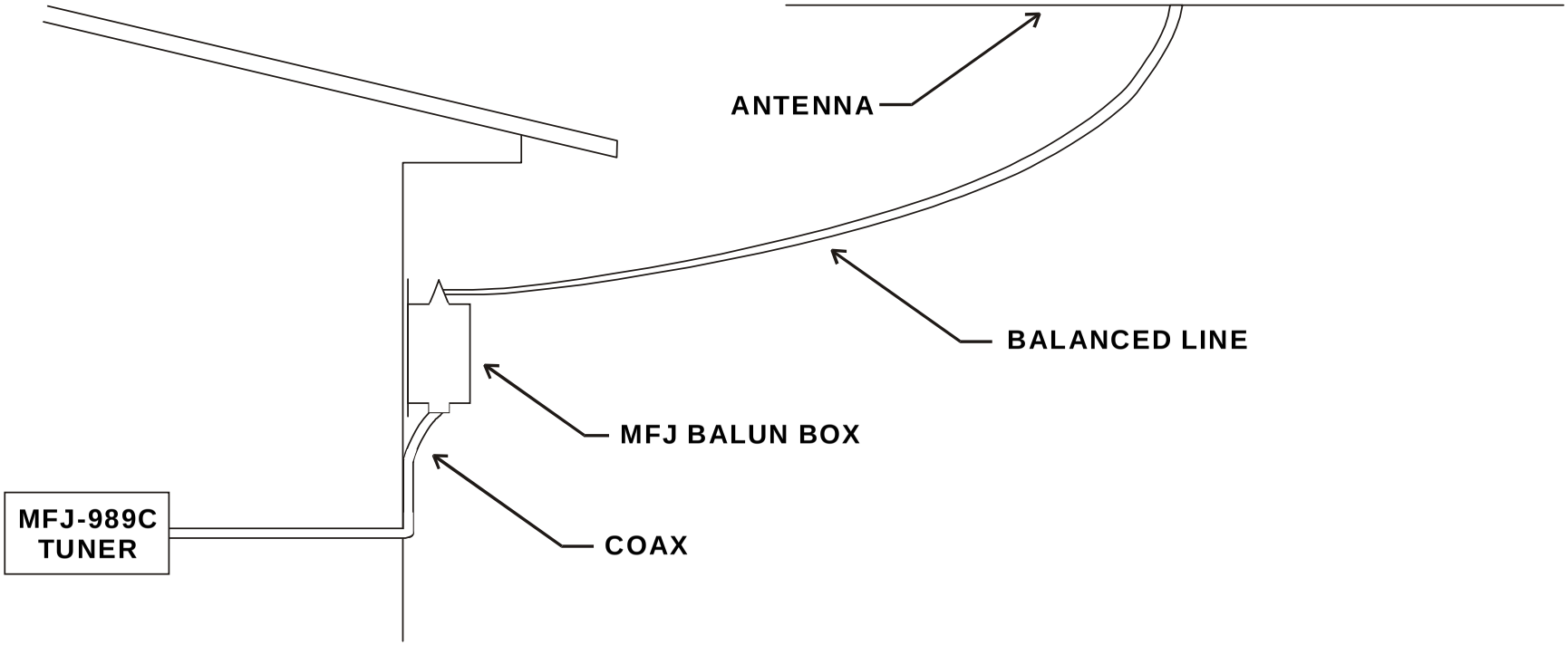
The impedance present at the balun where the balanced line is attached can be extremely high depending on the frequency of operation and the length of the transmission line. In light of this fact, use as large of coax as possible, at least RG-8/U or RG-8X/U. Keep the ends of the ceramic standoffs at least two inches away from any conducting surface.

Another thing about the coax is that almost all losses will be within it. The beauty of running ladder line is its extremely low loss. There will still be impedance mismatches in the coax and thus, high losses. Use as short a length of coax as possible, 50 feet or less. With 50 feet or less of RG-8/U or RG-8X/U, losses at the lower frequencies are negligible.

INSTALLATION

1. Mount the remote balun in a convenient location. The MFJ-912 is not waterproof, so under eves of a house would be a good location. This places it out of the way of children, but still serviceable without any trouble.
2. Connect the balanced line to the two ceramic standoffs. That is, connect one side of the balanced line to one standoff, and the other side to the other standoff.
3. Connect the coax to the SO-239 connector on the balun.
4. Connect the other end of the coax to your tuner.
5. Tune the tuner in the normal way for minimum SWR.
6. Use the grounding wing nut at the bottom of the balun to ground of the balun. Both sides of the balanced line have continuity to ground so grounding the box will ground the system.

NOTE: This system requires a wide-range tuner such as the T-network MFJ tuners. If you need a tuner, MFJ has a complete line of T-network tuners suitable for use with the MFJ-912.



TYPICAL INSTALLATION