# MFJ-915 RF ISOLATOR

### 1.8-30 MHz

#### INTRODUCTION

The MFJ-915 RF Isolator is a 1:1 Current Balun designed to be placed in-line with a 50-ohm coax. The RF Isolator was designed for fixed or mobile stations.

The RF Isolator will reduce or eliminate Stray RF often found on coax. This stray RF can cause burns and other problems with electronic equipment in ham-shacks and vehicles. Installation of the MFJ-915 RF Isolator will increase the efficiency of all amateur stations.

The MFJ-915 RF Isolator is made up of 50 Ferrite Core Beads placed onto a 13-inch piece of RG-303 coax. The coax and SO-239 connectors have Teflon® for maximum insulation and extended life of the product. The RF Isolator is enclosed in schedule 40 PVC Pipe for maximum strength and protection.

#### THEORY OF OPERATION

The RF Isolator will reduce the amount of RF radiating from coax going to an antenna. Stray RF will result in a loss of radiated power from the antenna, which will lead to a great reduction in signal strength. This loss of power is very critical when an operator is using a short inefficient antenna for a mobile or portable station.

#### **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 RF Isolator should be placed close to the transmitter, in-line with the coax feeding an antenna. This can be done using a coax patch cable such as the MFJ-5803, or MFJ-5806.

- 1. Install the RF Isolator by connecting the coax cable from your antenna to one end of the Isolator.
- 2. Connect the other end of the isolator to the transmitter using a short piece of coax or patch cable.
- 3. Check to see if the connections are secure.
- 4. Check the SWR of the antenna using a very low amount of power (less than 10 watts) and an SWR meter. An SWR Analyzer such as the MFJ-269 may also be used.