# 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 50-ohm coaxial cable and can be used in fixed station and mobile applications. It is rated at full legal SSB power.

The RF Isolator 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-915** RF Isolator can increase the efficiency of any amateur station.

The **MFJ-915** is made up of 50 ferrite core beads placed on a 13-inch length of RG-303 coaxial cable. The coax and SO-239 connectors have Teflon insulation for maximum insulation and life of the product. The RF Isolator is enclosed in a Schedule 40 PVC pipe for strength and protection.

## THEORY OF OPERATION

The RF Isolator can reduce the amount of RF radiating from coax feeding an antenna. Stray RF can result in a loss of radiated power from the antenna, which will lead to a reduction in signal strength. This loss of power is critical when using a short or otherwise inefficient antenna, and/or using very low power.

## **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 length of coax.
- 3. Check to see that the connections are secure.
- 4. Check the SWR of the antenna using a very small amount of power (less than 10 watts) and an SWR meter. An SWR analyzer such as the MFJ-269 also may be used.

#### 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.

