# MFJ-1045C RF Preselector

### **Introduction**

The MFJ-1045C RF Preselector let's you copy weak signals, while rejecting out-of-band signals. It's a high gain tuned RF amplifier that covers 1 to 54 MHz in four bands. The MFJ-1045C also features dual gate MOSFET, bi-polar transistors for low noise, high gain. The minimum gain is 20dB and is typically 30-40 dB across the tuning range.

#### **Installation**

1. To install the battery, remove the two screws near the top rear. Slide the cover toward the back andremove it. Connect a 9V battery to the battery snap then insert the battery into the holder. An external 9-18V DC may be plugged in. Use a 2.1mm coaxial plug with the center conductor of the plug positive and the sleeve ground. An optional AC adapter, the MFJ-1312B, may be purchased from MFJ Enterprises, Inc.

- 2. Connect a cable from the receiver antenna connector to the receiver terminal on the MFJ-1045C. You may use either RCA phono connectors or PL-259 connectors on the MFJ-1045C.
- 3. Connect the antenna to the antenna terminal of the MFJ-1045C. You may use either RCA phono connectors or PL-259 connectors.

# **Operation**

1. With the MFJ-1045C turned OFF, set the receiver to the desired frequency.

Note: The MFJ-1045C is bypassed when it is turned off.

- 2. Set the GAIN to maximum.
- 3. Turn the MFJ-1045C ON and set the band switch to the proper frequency range.
- 4. Turn the TUNE knob for maximum signal.
  - **Note**: The tuning dial and receiver should be close to the same frequency. If the dial is much different you may be tuned to a receiver image. Tune the preselector tuning dial to where the receiver dial's frequency is close to the same frequency when tuned for maximum gain. The scale on the TUNE control is an approximate marking. It may not indicate the exact frequency shown on the receiver, however it should be relatively close.
- 5. Decrease the gain control (counter-clockwise) if the signal overloads the receiver.

### **Technical Assistance**

If you have any problem with this unit first check the appropriate section of this manual. If the manual does not reference your problem or your problem is not solved by reading the manual, you may call *MFJ Technical Service* at **601-323-0549** or the *MFJ Factory* at **601-323-5869**. You will be best helped if you have your unit, manual and all information on your station handy so you can answer any questions the technicians may ask.

You can also send questions by mail to MFJ Enterprises, Inc., 300 Industrial Park Road, Starkville, MS 39759; by Facsimile (FAX) to 601-323-6551; or by email to techinfo@mfjenterprises.com. Send a complete description of your problem, an explanation of exactly how you are using your unit, and a complete description of your station.

# **Schematic**