

# MFJ

## *Resistor-Capacitor Box*

*Model MFJ-5902*



### INSTRUCTION MANUAL

CAUTION: Read All Instructions Before Operating Equipment

## MFJ ENTERPRISES, INC.

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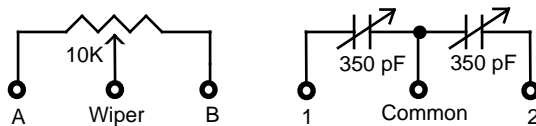
## MFJ-5902 Resistor–Capacitor Box

### Introduction:

The MFJ-5902 Resistor-Capacitor Substitution Box combines a ½-Watt 10-K potentiometer and a two-section 350-pF variable capacitor into one handy hand-held package. Insulated terminal posts accept standard test probes, patch cables, or hookup wire. The MFJ-5902 is a great tool for experimenters, RF designers, and service techs alike.

### Operation:

The MFJ-5902 front-panel markings are self-explanatory with schematic labeling for all terminal posts.



### Potentiometer Range:

When rotating the 10K potentiometer fully counter-clockwise, *note that the terminal resistance drops to zero ohms -- not the lower (1K) value appearing on the calibrated scale.* Always remove power when setting up dc circuits if reducing the potentiometer setting to zero could cause a short! Also, note that the power rating for the potentiometer is ½ Watt. Never connect to circuits that will cause dissipation to exceed the specified rating.

### Capacitor Range:

The two-section capacitor is approximately 10-350 pF per section. Three capacitive ranges are possible, depending on configuration:

- [ ] **175 pF:** Connect to terminals **1** and **2** (series). Divide scale reading by 2.
- [ ] **350 pF:** Connect to terminal **1** or **2** and **Common**. Read scale x1.
- [ ] **700 pF:** Jumper **1** and **2**, connect to **1** and **Common**, multiply scale x2.

The capacitor's rotor and stator are RF and DC isolated from the aluminum front panel. Limit RF application to QRP range (< 10-W) and dc application to 50 volts to ensure breakdown voltage levels will not be exceeded.

### Technical Assistance:

If you have any problem with your MFJ-5902, first reread this information sheet. If it doesn't reference the problem or fails to solve it, you may call *MFJ Technical Service* at (662) 323-0549 or the *MFJ Factory* at (662) 323-5869. You will be best helped if you have the unit, manual, and all other pertinent information handy so you can answer any questions the technicians may ask.

You may also submit questions by mail to MFJ Enterprises, Inc., 300 Industrial Park Road, Starkville, MS 39759, or by email to [techinfo@mfjenterprises.com](mailto:techinfo@mfjenterprises.com). Send a complete description of your problem along with an explanation of exactly how you are using your substitution box.

## LIMITED 12 MONTH WARRANTY

MFJ Enterprises, Inc. warrants to the original owner of this product, if manufactured by MFJ Enterprises, Inc. and purchased from an authorized dealer or directly from MFJ Enterprises, Inc. to be free from defects in material and workmanship for a period of 12 months from date of purchase provided the following terms of this warranty are satisfied.

1. The purchaser must retain the dated proof-of-purchase (bill of sale, canceled check, credit card or money order receipt, etc.) describing the product to establish the validity of the warranty claim and submit the original or machine reproduction of such proof of purchase to MFJ Enterprises, Inc. at the time of warranty service. MFJ Enterprises, Inc. shall have the discretion to deny warranty without dated proof-of-purchase. Any evidence of alteration, erasure, or forgery shall be cause to void any and all warranty terms immediately.
2. MFJ Enterprises, Inc. agrees to repair or replace at MFJ's option without charge to the original owner any defective product under warrantee provided the product is returned postage prepaid to MFJ Enterprises, Inc. with a personal check, cashiers check, or money order for **\$7.00** covering postage and handling.
3. This warranty is **NOT** void for owners who attempt to repair defective units. Technical consultation is available by calling the Service Department at 662-323-0549 or the MFJ Factory at 662-323-5869.
4. This warranty does not apply to kits sold by or manufactured by MFJ Enterprises, Inc.
5. Wired and tested PC board products are covered by this warranty provided **only the wired and tested PC board product is returned**. Wired and tested PC boards installed in the owner's cabinet or connected to switches, jacks, or cables, etc. sent to MFJ Enterprises, Inc. will be returned at the owner's expense unrepaired.
6. Under no circumstances is MFJ Enterprises, Inc. liable for consequential damages to person or property by the use of any MFJ products.
7. **Out-of-Warranty Service:** MFJ Enterprises, Inc. will repair any out-of-warranty product provided the unit is shipped prepaid. All repaired units will be shipped COD to the owner. Repair charges will be added to the COD fee unless other arrangements are made.
8. This warranty is given in lieu of any other warranty expressed or implied.
9. MFJ Enterprises, Inc. reserves the right to make changes or improvements in design or manufacture without incurring any obligation to install such changes upon any of the products previously manufactured.
10. All MFJ products to be serviced in-warranty or out-of-warranty should be addressed to:

**MFJ Enterprises, Inc.,  
300 Industrial Park Road  
Starkville, Mississippi 39759 USA**

and must be accompanied by a letter describing the problem in detail along with a copy of your dated proof-of-purchase.

11. This warranty gives you specific rights, and you may also have other rights which vary from state to state.



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