

INTRODUCTION

Thank you for purchasing the MFJ-802B. A field-strength meter (or FSM) is one of the most practical pieces of ham test equipment you can own, and the MFJ-802B has some special features we think you'll like. For example, it has a huge high-resolution meter with a robust 0-100 scale that's easy to read from several feet away. It also combines a balanced pick-up antenna with a RF-insulated enclosure to eliminate hand-capacitance errors typical of older-style meters. There's a high-Z balanced decoupling network that ensures top efficiency over a wide frequency range and provides complete isolation between the detector and metering circuits. And, there's a uA-type meter movement with a wide-range sensitivity control to handle signals from the milliwatt to kilowatt level. Add the MFJ-802R remote pickup, and you can monitor field strength from anywhere you wish in the comfort of your shack. Inexpensive low-voltage dc wire connect the two units together. Like most field-strength meters, the MFJ-802B is extremely simple to operate. However, as with any piece of RF test equipment, it has limitations you should know about--and we urge you to read the manual carefully before using it.

YOUR METER'S CONTROLS



- 2. Easy-to-Read Meter Scale:** Bold 0-100 scale is readable for several feet--may be set up at any convenient location near your operating site. High-quality meter movement resolves even small changes in the RF field.
- 3. Remote Detector Jack:** Standard phone jack accepts monaural 1/4" plug when MFJ-802R remote detector is used.
- 4. Wide-Range Sensitivity Control:** Adjusts your meter for a wide range of power levels and distances to the RF source. To prevent damage, always begin measurements with the sensitivity control set at minimum (fully counter clockwise).

USING YOUR METER

The MFJ-802B is useful anywhere a hand-held or stationary field-strength meter is needed. For example, it's perfect for resonating critical HF mobile antennas, adjusting tuning networks, optimizing antenna arrays for highest ERP, and tuning transmitter circuitry for maximum output. Remember to exercise caution when working near transmitting antennas.

Important Safety Warning: Never work in close proximity with any energized transmit antenna. Even at low power, antennas may develop dangerous RF-voltage levels that can cause painful burns and permanent injury.

5. Try to keep test antennas--and your meter's pick-up antenna--well separated from nearby cables, masts, or other metallic structures that could act as a parasitic element and effect your results.

Important Warning: Never place your MFJ-802B close to any antenna radiating transmitter-level power, or permanent damage may result.

REMOTE PICKUP (MFJ-802R)

The MFJ-802R is an optional antenna/detector unit that is identical to your MFJ-802B--minus the meter and sensitivity control. The MFJ-802R can be plugged into your primary meter and located remotely to provide optimum monitoring positioning. For example, to obtain station antenna measurements uncolored by household wiring and RF leakage, install the MFJ-802R remote outside of the building and connect it to your MFJ-802B in the ham shack. Or, for accurate-antenna range measurements, install the MFJ-802R remote several wavelengths down-range and locate the MFJ-802B meter at your antenna test site. The MFJ-802B meter and remote pickup require only low-cost 2-conductor dc wire for interconnection. The remote pickup is a great way to increase the versatility and usefulness of your MFJ-802B.

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 **662-323-0549** or the *MFJ Factory* at **662-323-5869**. 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 Fax to 662-323-6551; 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.

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