# MFJ-460X Series RF Feed-Through Panels

## **INTRODUCTION**

The MFJ-460X series of RF Feed-Thru Panels consist of weather-proof feed-thru panels designed for windowsill mounting. These versatile feed-through panels allow you to feed coax cables, balanced lines, long wires, DC and AC voltage, ground and remote-control cables outside without having to drill through walls. Attractive brushed stainless steel plates on both sides of the feed-thru panels bond all coax shields together, and the stainless steel ground posts bring your outside ground connections inside. Teflon-insulated SO-239 and N-connectors, ceramic balanced line and random wire feed-thru insulators provide excellent insulation. The cut-to-length high quality pressure treated <sup>3</sup>/<sub>4</sub>" wood base plate is painted with a heavy coat of white outdoor paint.

## MODELS

The MFJ-460X series of feed-thru panels consists of the following six models:

- 1) **MFJ-4600:** Four balanced line connectors, two coax connectors, plus a common ground connection point.
- 2) MFJ-4601: Six SO-239 coax connectors plus a common ground connection point.
- 3) **MFJ-4602:** Three SO-239 coax connectors, one ceramic balanced line connector, and one ceramic long-wire feed-thru connector as well as a common ground connection point.
- 4) MFJ-4603: Four SO-239 coax connectors, one N-connector, one F-connector, one ceramic balanced line connector, one ceramic long-wire feed-thru connector, and a pair of 5-way binding posts for feeding up to 32VAC RMS/50VDC at 15 amps for remote auto tuners, relays or switches. Also included is MFJ's exclusive weather-proof *Adaptive Cable Feedthru<sup>™</sup>* which adapts to virtually any cable size up to 1-1/4"x1-5/8". A common ground connection point is also provided.
- 5) **MFJ-4604:** Includes five weather-proof *Adaptive Cable Feedthrus*<sup>TM</sup> two for cables up to 1-1/4"x1-5/8" and three for UHF/N connectors, as well as a common ground connection point.
- 6) **MFJ-4605:** A double height feed-thru panel, which includes all the capabilities of both the MFJ-4603 and MFJ-4604.

### SUPPLIED COMPONENTS

- 1. MFJ-460X RF Feed Through Panel with Connectors (4 ft. Cut to Fit)
- 2. Weather Stripping (8ft Cut to Fit)
- 3. Window Stopper (3 ft. Cut to Fit)

#### **INSTALLATION**

- 1) Check the tightness of all connectors on the MFJ-460X Feed-Thru Panel. Also verify that RF connector lengths on opposite sides of the feed-thru are equivalent lengths. If the connector lengths on opposite feed-thru sides are not approximately the same, loosen the mounting nuts and re-adjust so the connectors protrudes approximately the same distance on each side.
- Measure the width of your window. This defines the length of your MFJ-460X RF Feed-Thru Panel. Using a wood saw, cut the MFJ-460X to the measured window width.
- 3) Install the weather-stripping completely around the edges of the MFJ-460X Feed-Thru Panel.
- 4) Now install the MFJ-460X Feed-Thru Panel in the windowsill by simply placing the Feed-Thru Panel in the windowsill and closing the window on top of it.
  - *Note:* The stainless steel panel is not centered vertically on the wood base to allow for different depths of window sills. The Feed-Thru Panel can be flipped over to use the edge that best matches the windowsill depth. The labeling is symmetrical so it reads correctly and right side up either way.
- 5) Measure the distance from the top of the window frame to the top of the open window. Using a wood saw, cut the Window Stopper so that it just fits within this distance. Place the Window Stopper on the side of the window so that the window cannot be opened further.
- 6) Create an insulating barrier along the top of the open window with the remainder of the weather stripping. The easiest way to do this is to place one piece of weather stripping glued horizontally to the fixed rear window right at the level of the top of the open window. Next, install a second weather strip by attaching it to the top of the open window making sure it is firmly up against the weather strip on the rear window. See Figure 1 on the next page.



Figure 1: Window Overlap Weather-strip Installation

- 7) You can now connect your antenna coax cables, balanced lines, long-wire antenna, ground, DC power, etc through your Feed-Thru Panel.
  - **Note:** When feeding voltages through the Feed-Thru panel, do NOT exceed 32VAC RMS or 50VDC at 15 amps.

### Adaptive Cable Feedthru<sup>TM</sup> Cable Installation

The MFJ-4603/4/5 Feed-Thru Panels all include MFJ's exclusive weather-proof Adaptive Cable Feedthru<sup>TM</sup> which adapts to virtually any cable size up to 1-1/4"x1-5/8". A large grommet is supplied for each Adaptive Cable Feedthru<sup>TM</sup>. To install a cable through the Adaptive Cable Feedthru<sup>TM</sup>, proceed as follows:

- 1) Using a pair of scissors, snip the grommet and slip it around the cable. Observe the excess grommet material when the grommet is fit tightly around the cable, and cut off this excess grommet material. I.e., you are snipping the grommet such that it fits the circumference of the cables used.
- 2) Slide the cable and grommet into the panel such that the edge of the panel slides into the groove of the grommet thus sealing the weather out.
- 3) Adjust the sliding panel on the *Adaptive Cable Feedthru*<sup>TM</sup> to hold the cable/grommet securely, and tighten the adjustment screw.
- 4) When the sliding panel is tight around the grommet, this makes a very good weather seal. However, you may choose to add RTV or putty around the cable for improved sealing.
- 5) When mounting RF connectors in the *Adaptive Cable Feedthru*<sup>™</sup>, no grommet is used. Place the RF connector in the *Adaptive Cable Feedthru*<sup>™</sup>, slide the adjustable panel tight against the RF connector and tighten the adjustment screw. Finally tighten the connector mounting nuts on either side of the Feed-Thru Panel. Add RTV or putty around the connector for improved sealing.

#### FULL 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, money order receipt, etc.) describing the product to establish the validity of the warranty claim and submit the original of machine reproduction or 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 terns immediately.
- 2. MFJ Enterprises, Inc. agrees to repair or replace at MFJ's option without charge to the original owner any defective product under warranty provided the product is returned postage prepaid to MFJ Enterprises, Inc. with a personal check, cashiers check or money order for \$10.00 covering postage and handling.
- 3. MFJ Enterprises, Inc. will supply replacement parts free of charge for any MFJ product under warranty upon request. A dated proof-of-purchase and an \$8.00 personal check, cashiers check, or money order must be provided to cover postage and handling.
- 4. This warranty is NOT void for owners who attempt to repair defective units. Technical consultation is available by calling (662) 323-5869.
- 5. This warranty does not apply to kits sold by or manufactured by MFJ Enterprises,
- 6. 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, cables, etc. sent to MFJ Enterprises, Inc. will be returned at the owner's expense unrepaired.
- 7. Under no circumstances is MFJ Enterprises, Inc. liable for consequential damages to person property by the use of any MFJ products.
- 8. 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.
- 9. This Warranty is given in lieu of any other warranty expressed or implied.
- 10. 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.
- 11. 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-purchase and a telephone number.
- 12. This warranty gives you specific rights, and you may also have other rights, which vary from state to state.