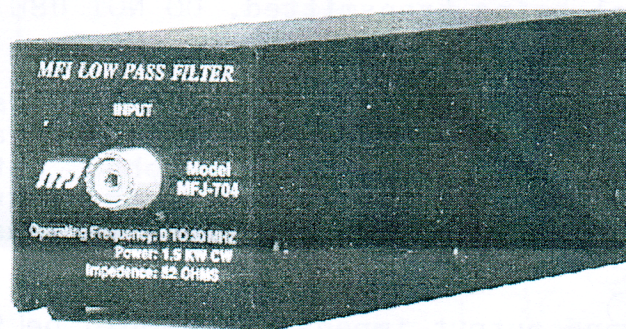


MFJ

Low Pass Filter

Model MFJ-704



INSTRUCTION MANUAL

CAUTION: Read All Instructions Before Operating Equipment

MFJ ENTERPRISES, INC.

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MFJ-704 Instruction Manual

Thank you for purchasing the MFJ-704 HF Low Pass Filter. This low pass filter is designed to accept up to 1.5 KW of power at a frequency of 1.8 to 30 MHz (with 52 ohm input and looking into 52 ohms non-reactive impedance).

The purpose of the Low Pass Filter is to reduce possible interference from your transmitter to television or other services above 30 MHz. This 9-pole Chebyshev filter has a low insertion loss (not more than .5 dB from 1.8 to 30 Mhz.) and has high attenuation above 30 Mhz.

INSTALLATION

1. Connect the output of your transmitter to the input of the MFJ-704 Filter. Use as short a cable as possible between the transmitter and filter. Use 52 ohm coax such as RG-8 or RG-58 depending on the power level being transmitted. DO NOT USE ANYTHING BUT 50 or 52 OHM COAX.
2. Connect the output of the MFJ-704 Low Pass Filter to a 52 ohm load. This can be a linear amplifier, an antenna tuner, or a well matched antenna (52 ohms with no reactance via coax). See Figures 1, 2, and 3 on the following page for various hook-up diagrams.

NOTE: The input and output impedances should be 50 or 52 ohms with no reactance. If the output of the filter is looking into any reactance, the power handling capability of the filter is reduced. This is due to the high reactive voltages which can develop.

CAUTION: Do not operate the filter with a high SWR.

NOTE: Care should be taken when constructing RF cables. Cold solder joints can actually cause rectification harmonics which will defeat the purpose of the filter. Take steps to insure good solder connections at all RF connectors.

The filter should be well grounded. If you have a good RF connection to the transmitter, and the transmitter is well grounded, that is sufficient.

3. Mount the filter in a convenient location. There are four mounting holes provided for mounting if desired or the MFJ-704 can be placed on a desk behind the equipment.

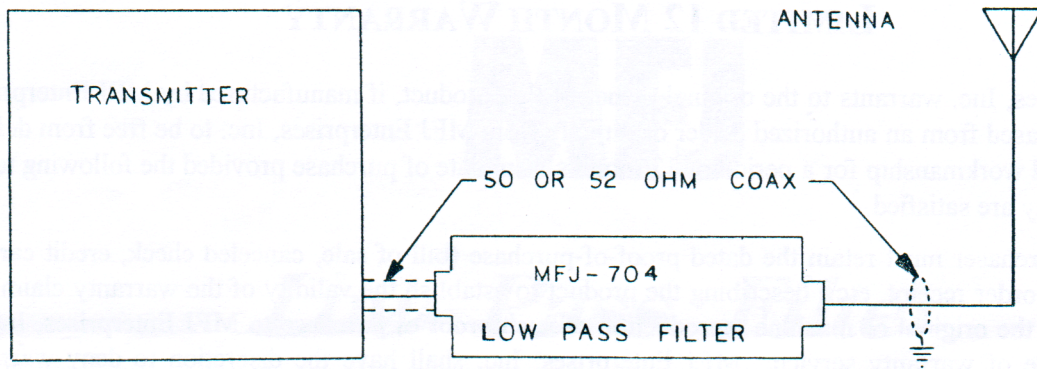


Figure 1 - MFJ-704 with XMTR and Antenna only.

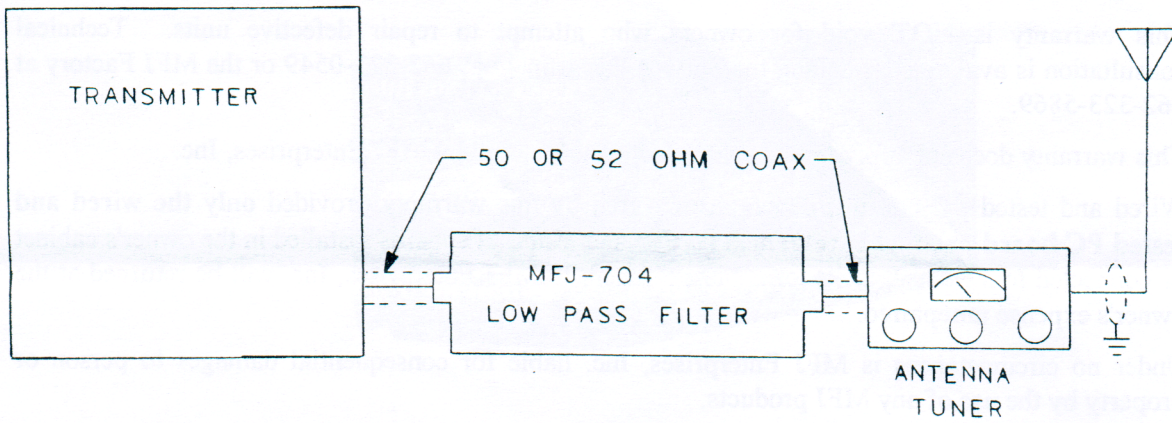


Figure 2 - MFJ-704 with XMTR and Antenna Tuner

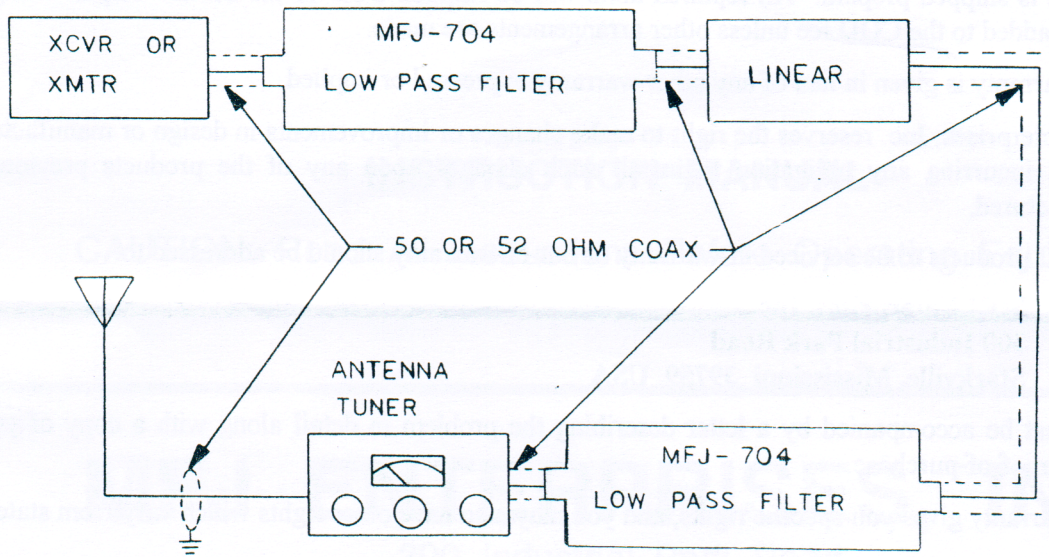


Figure 3 - MFJ-704 with XMTR, Linear, and Antenna Tuner

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.