MFJ-4275MVnstruction Manual

Thank you for purchasing the MFJ-4275MV Switching Power Supply. The MFJ-4275MV is designed to deliver output current up to 75 Amps intermittent or 70 Amps continuous at 13.8 Vdc.

Five types of output terminals are provided – 2 sets Anderson ***Powerpole***®, 2 sets of 5-way binding posts, 2 sets of quick connect terminals and a cigarette lighter socket. The variable output control adjusts output from 4 Vdc to 16 Vdc. Output control has a pre-set detent position, which sets the output at 13.8Vdc. The battery charger provides charging current up to 20 Amps peak and 5 Amps continuous.

The total combined output current for this power supply is 75 Amps intermittent or 70 Amps continuous at 13.8 Vdc. Each output connection has its output current limit as shown by the following chart. Do not draw current over the rated limited.

Output Connections	Maximum combined output current is 75 Amps, Intermittent
Gold 5-way binding posts	75 Amps
Black and Red binding Posts	40 Amps
Anderson Power Poles	35 Amps
Quick Connect Terminals	10 Amps
Cigarette Lighter Socket	10 Amps

Installation

Before plugging the MFJ-4275MV in an AC outlet make sure that the proper input AC voltage is set to the correct AC voltage you are using. Select 115 for 100/110/120 AC operation or select 230 for 200/220/240 ac operation. 115V is the default factory setting. Do not connect any device to the power supply yet. Turn the power supply ON. Set the output voltage by adjusting the variable output control in front of the power supply. The MFJ-4275MV has variable output adjustment from 4 Vdc to 16 Vdc. The control will set the same output voltage for all output connectors. The detent position on the output control sets the output voltage at 13.8Vdc. Turn OFF the power supply after setting the output voltage.

Connect the loads to the any of the output connectors. Positive to positive terminal and negative to negative terminal. Reversed connection will damage your equipment. For Anderson ***Powerpoles***® connection, please refer to "the assembly instruction" for detail assembly instructions. Connect the devices to the power supply then turn ON the power supply.

Protection

The MFJ-4275MV has fault protection for output terminal short or overload (over 75 Amps), over voltage (pre-set at 16 Vdc) and component over heated. If any the above conditions occur, the warning LED will come on. Under fault condition, the power supply will automatically shut off. To reset, turn the unit OFF and wait 20 seconds, then turn the unit back on.

Battery Charger

MFJ-4275MV has built-in battery charging circuit. Battery to be charged must be connected to the charger output binding posts on the back of the unit. Charging output is set at 13.8 Vdc fix. Maximum charging current is 20 Amps for 20 seconds and 5 Amps continuous. When the battery reaches its capacity the charging circuit will reduce charging current to trickle charge at 30 mA.

***Powerpole*® connector assembly**

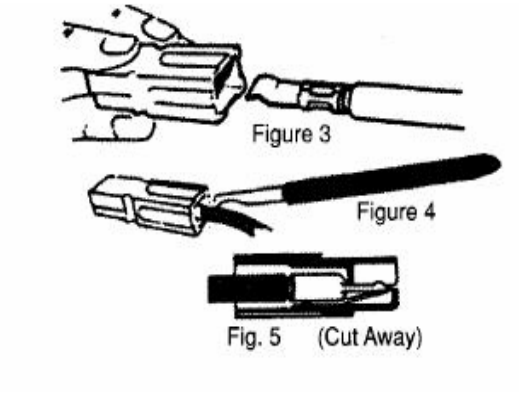
Two sets of Anderson ***Powerpoles***® connectors are provided. The terminals accommodate wires from 12 to 16 gauge.

Follow the following instructions to assemble the connectors.

First, slide two connector housings together to match the configuration of the corresponding connectors on your power strip. It's easier to do this now rather than after the wired terminals have been inserted in the housings.
You can install the *Powerpoles*® connectors on your wires by either soldering or crimping, as long as you make sure you have good, solid connections. Wires smaller than 12 gauge will ***not*** allow for crimping, and must be soldered to the terminals.

To crimp, first strip the wire, making sure not to damage the wire strands. Insert the wire into the terminal and crimp. ***Be careful not to deform or squash the terminal body***. If you do, crimp again to return it to its original shape. Otherwise, the terminal may not fit inside the housing. Be sure that you have a good firm connection to reduce resistance.

If you solder wires to the terminals, tin them lightly first. When soldering, flow solder only into the hole in which the wire is inserted. Be careful not to get any solder around the outer body of the terminal.



F ig 3: Correct orientation of terminal and housing.

Fig 4: Using an insertion tool to snap terminal in place. A very small, flat-blade screwdriver will work.

Fig 5: Assembled terminal and housing.

Then insert the flanged end of the terminal into the contact housing through the open, square end of the housing (Figs. 3, 4 and 5). The terminal will snap into place when correctly oriented.

Internal view of two *Powerpoles*® connected.
(Anderson Power drawings;
www.andersonpower.com)

MFJ 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 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 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 warranty, 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 (662) 323-0549.

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 on 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 un-repaired.

6. Under no circumstances is MFJ Enterprises, Inc. liable for consequential damages to person 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.