

MFJ Deluxe DC Multi-Outlet Strips

INTRODUCTION

Thank you for purchasing an MFJ Deluxe DC Power Outlet. These are very versatile for channeling power from one DC power supply to HF or VHF radios as well as multiple accessories at the same time, using Anderson *Powerpole*[®] connectors and 5-way binding posts. This alleviates the problems in making multiple connections to the same DC power supply terminals.

The **MFJ-1124**, **MFJ-1126**, **MFJ-1128** and **MFJ-1129** have various complements of DC output terminals. All but the basic **MFJ-1124** have both some outlets unswitched, for radios, and some switched, for station accessories. All the **MFJ-1124** outlets are *unswitched*. In all models, every outlet is individually fused. All connections are RF bypassed to reduce line noise. The following table illustrates the four models' configurations.

All models have a master 40-amp input fuse, limiting the combined total current draw of the outlet strip. All models except the **MFJ-1124** have a meter that monitors output voltage from the power supply.

POWER RATING

Each *unswitched* outlet can handle up to 40 amps, but all unswitched outlets combined **should not** have a total of more than 40 amps. Similarly, switched accessory outlets **should not have** a combined total of more than 20 amps. It is the operator's responsibility to ensure that the equipment connected to these power strips is within these power ratings.

On all models the *unswitched* outlets are best used for power connections to high-current draw devices, i.e., radios.

A range of different color-coded fuses are supplied with each power strip. You may move around any of these fuses, but remember to stay within the maximum current limitations above. Check the specifications for each accessory you connect to an unswitched outlet and match the accessory's power draw (in amps) with a fuse of the same value. Standard ATC/ATO automotive fuses are used and readily available.

These power strips cannot be used for AC applications. They do not regulate voltage or power in any way. The output to equipment depends on the input to the strip from the power supply. Maximum voltage is 24 volts at 20 amps for unswitched outlets and 10 amps for switched accessory outlets.

INSTALLATION

Choose a convenient location close to your radios and accessories, especially those that draw larger amounts of current. Make sure that the location you have chosen is cool, dry, and well ventilated.

Connect the two heavy leads from the power strip to your DC power supply. The red (+) cable should be connected to the positive (+) terminal and the black (-) cable should be connected to the negative (-) terminal of the power supply. A ground wire should be connected from the station ground bus to the ground terminal on the case of the power strip. Due to the high current involved, the ground wire should be of appropriate length and gauge for safety to equipment and the operator – a good rule of thumb is the ground wire should be as short and as large as practical.

Model	Maximum Current (amps)	PowerPole pairs	Binding post pairs	Un-switched pairs	Switched pairs	DC volt meter	On-Off switch	Main fuse
MFJ-1124	40	4	2	6 FUSED		NO	NO	YES
MFJ-1126	40	8	0	3 FUSED	5 FUSED	YES	YES	YES
MFJ-1128	40	12	0	3 FUSED	9 FUSED	YES	YES	YES
MFJ-1129	40	7	3	3 FUSED	7 FUSED	YES	YES	YES

POWERPOLE® CONNECTOR ASSEMBLY

These units use Anderson *Powerpole*® connectors (the **MFJ-1126** and **MFJ-1128** use *Powerpole*® connectors exclusively). Your power strip package includes both plastic connector housings and terminals for making *Powerpole*® plugs. The terminals accommodate wires from 12 to 16 gauge.

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 *Powerpole*® 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.

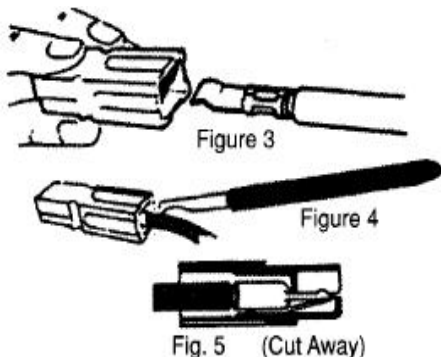
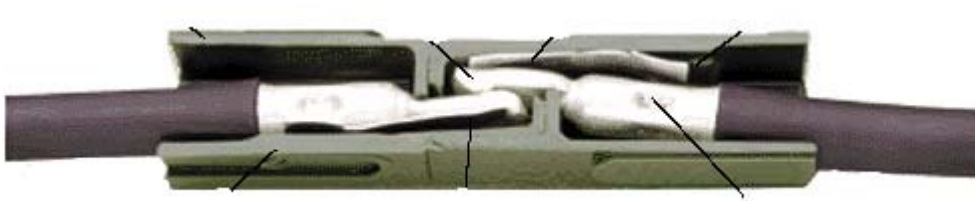


Fig 3: Correct orientation of terminal and housing.

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.

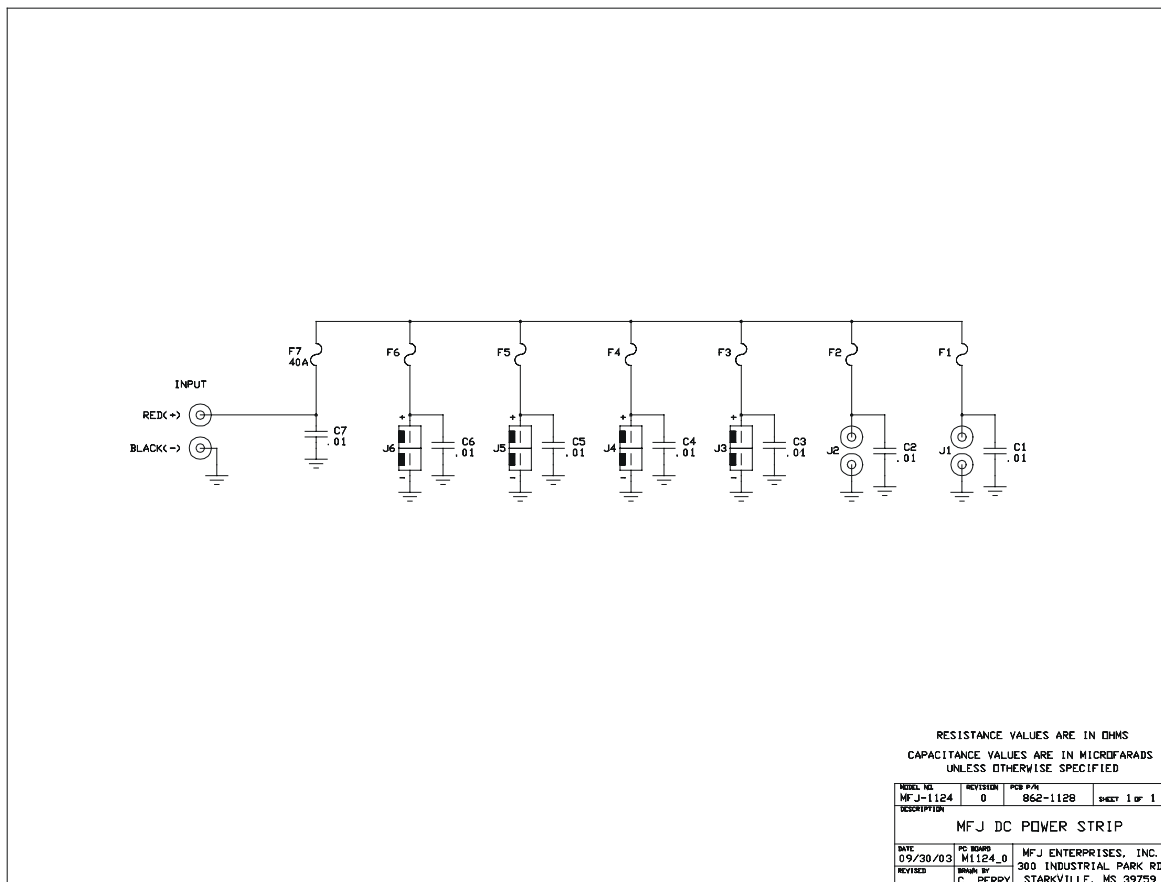


Internal view of two *Powerpoles*® connected.
 (Anderson Power drawings; www.andersonpower.com)

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.

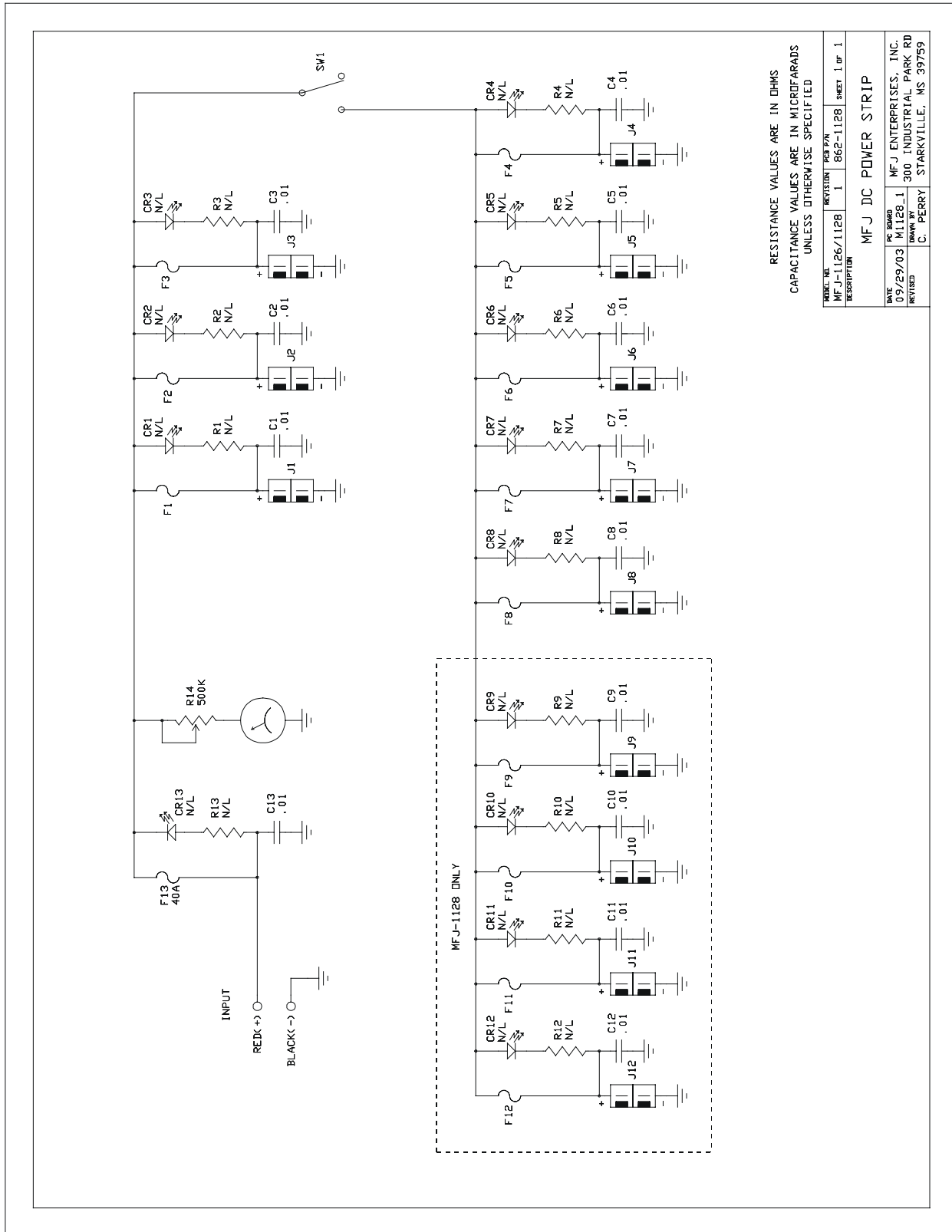
You can also send questions by mail to MFJ Enterprises, Inc., 300 Industrial Park Road, Starkville, MS 39759; by Facsimile (FAX) to 662-323-6551; or by email to techinfo@mfjenterprises.com. Send a complete description of your problem, an explanation of exactly how you are using your unit, and a complete description of your station.



RESISTANCE VALUES ARE IN OHMS
 CAPACITANCE VALUES ARE IN MICROFARADS
 UNLESS OTHERWISE SPECIFIED

MODEL NO.	REVISION	PAGE #/#	SHEET 1 OF 1
MFJ-1124	0	862-1128	
DESCRIPTION			
MFJ DC POWER STRIP			
DATE	PC BOARD	MFJ ENTERPRISES, INC.	
09/30/03	M1124_0	300 INDUSTRIAL PARK RD	
REVISED	DESIGN BY	STARKVILLE, MS 39759	
	C. PERRY		

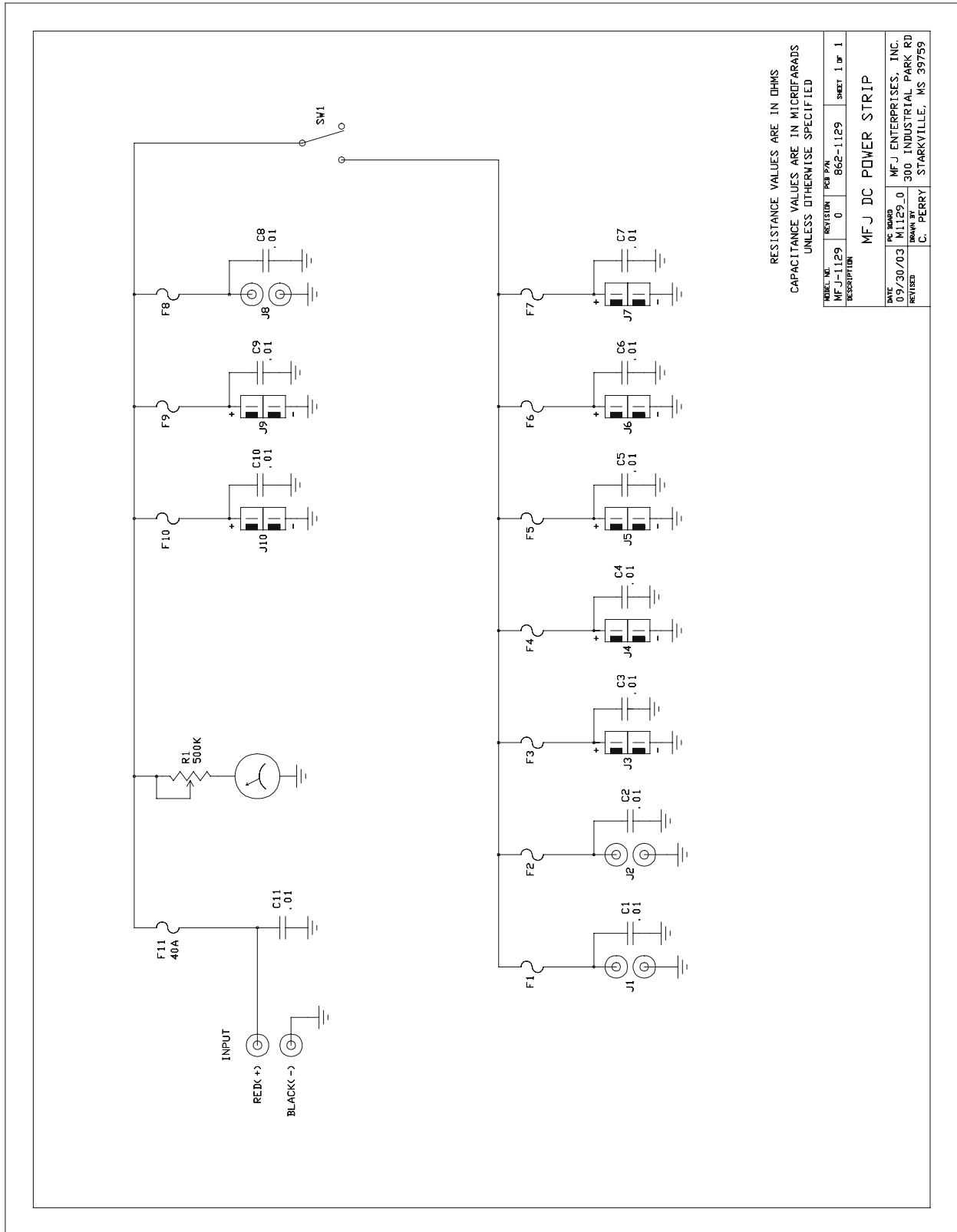
SCHEMATIC: MFJ-1126/1128



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PROJECT NO.	REVISION	DATE	SHEET
MFJ-1126/1128	1	862-1128	1 OF 1
DESCRIPTION			
MFJ DC POWER STRIP			
DATE	PC BOARD	PC BOARD	
07/29/03	11128_1	MFJ ENTERPRISES, INC.	
DESIGNED	BY	300 INDUSTRIAL PARK RD	
C. PERRY		STARKVILLE, MS 39759	

SCHEMATIC: MFJ-1129



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MANUFACTURE	REVISION	PROJ. NO.	SHEET
MFJ-1129	0	862-1129	1 OF 1
DESCRIPTION			
MFJ DC POWER STRIP			
DATE	PC BOARD	MFG ENTERPRISES, INC.	
07/30/03	M1129_0	300 INDUSTRIAL PARK RD	
REVISED	BY	C. PERRY STARKVILLE, MS 39759	