## 20W Dummy Load and 40db Attenuator - Assembly Manual

# Version 1.00 - April 9, 2025

### WJ Schmidt - K9HZ

### **INTRODUCTION**

The power distribution kit was designed to be a convenient way to connect several loads to a single power source in an orderly compact manner. The feed rails and the six load wire connections have a current capability of 20 amps continuous.



## **SPECIFICATIONS**

Input voltage: Voltages less than 250 VDC

Operating Current: 20A continuous

Mounting: Four M4 floating mounting holes

Connections: Screw terminals for up to 12 gauge wire.

Size: 1.00" x 1.75"

## **INVENTORY AND PREWORK**

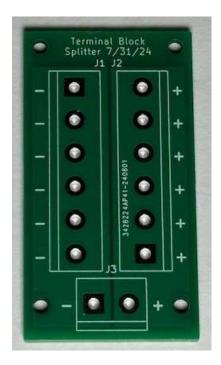
Before you begin, inventory your parts against BOM to make sure you have everything you need to complete the RVP board. The BOM is available on the GITHUB at:

Qty	Ref	Description
6 or 4	J1, J2	SCREW TERMINAL BLOCK 2 or 3 POSITIONS 5MM
1	J3	SCREW TERMINAL BLOCK 2 POSITIONS 5MM
1	Board	Custom Circuit Board

NOTE: The kit may be supplied with six of the two position terminal blocks, or four of the three position terminal blocks depending upon the parts available at the time of shipping.

#### **BOARD AND CIRCUIT**

Refer to the unpopulated circuit board for building the RVP kit:



#### **BUILDING THE BOARD**

1. Find a place where you can spread out your work, including a printouts of the board and BOM. Your workstation should be such that you can leave it overnight without having to

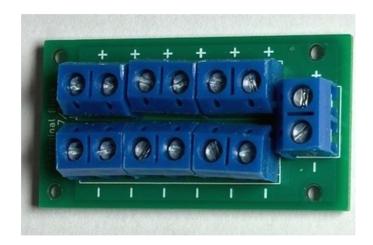
- "clean up". The workspace should also be kid- and cat-proof. If you get tired, stop. Come back to it tomorrow. Rushing the assembly rarely works out saving time.
- 2. Start by cleaning the RVP board with IPA (Iso-propyl or "rubbing" alcohol) to make sure it's clean.
- 3. Mount the 5 or 7 screw terminal blocks on the board. If your kit contains three terminal blocks, they should be placed two on a side with the wire holes facing out.



4. The board should look like this:



5. The board is now complete. Use IPA again to clean the flux off the board.



# **USING THE BOARD**

Connect the source wires (+ and -) to J3. Connect load wires to J1 and J2 minding the polarity as shown on the board.