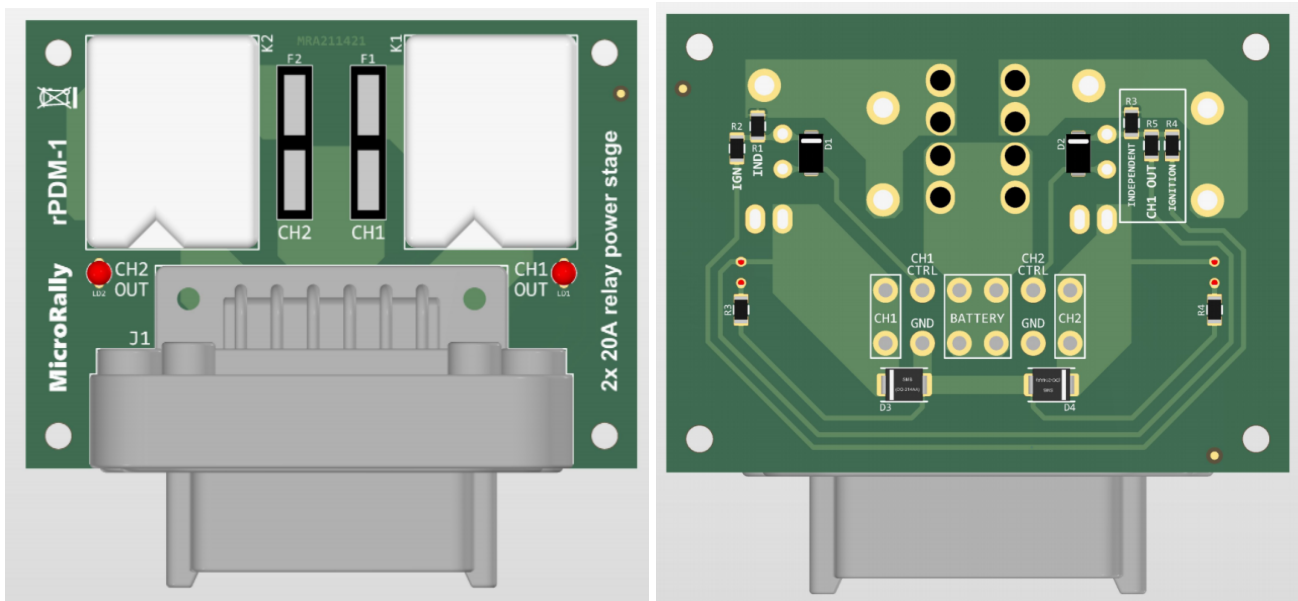


rPDM-1

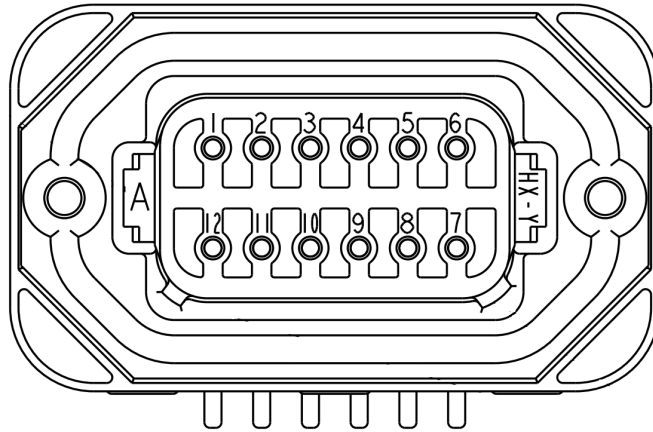
User manual

Introduction

MicroRally rPDM-1 is a simple relay based power distribution module, but it still offers some options for advanced logic and control. It has 2 high power, high side outputs for switching power to various devices, like fuel pumps and fans. Each output has its own control input, and it has one optional master enable input. Internal logic can be set with 0 ohm resistors. Outputs have integrated flyback diodes to protect connected loads from negative voltage spikes during relay turn-off. Overcurrent protection is done by integrated fuse holders that use standard blade fuses. Relay coils have flyback diodes, so that it is safe to control them with ECUs. For user convenience outputs have optional status indicator LEDs.



Connector pinout



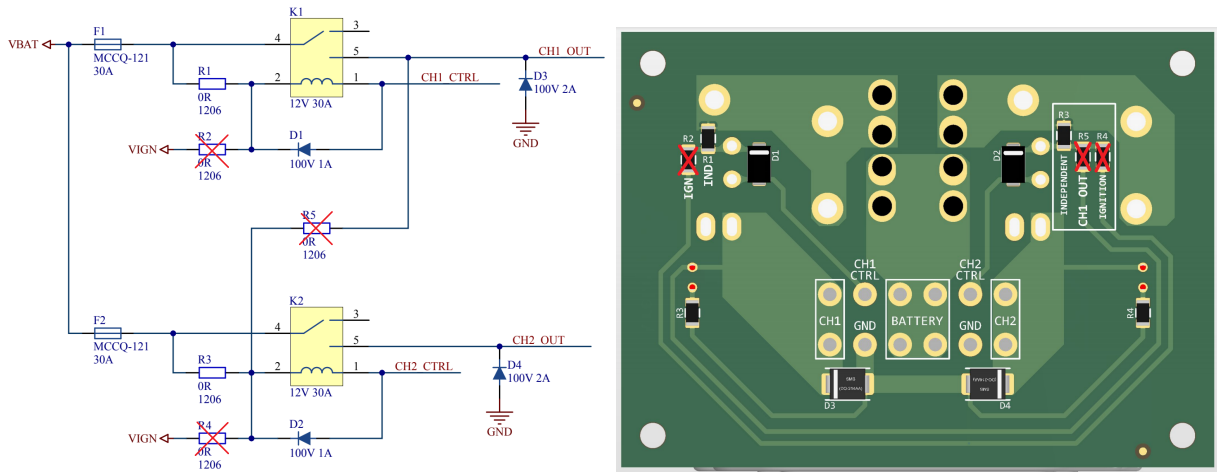
Connector: TE DT 12 pin. (DT13-12Px)

#	Name	Function	Installation notes
1	CH2 OUT	CH2 power output	
2	CH2 CTRL	CH2 control input	
3	VBAT	Battery positive supply	
4			
5	CH1 CTRL	CH1 control input	
6	CH1 OUT	CH1 power output	
7			
8	GND	Power ground	
9	VBAT	Battery positive supply	
10			
11	VIGN	Ignition (Master enable) power input	
12	CH2 OUT	CH2 power output	

Application examples

Independent channels

Following is a configuration for two independent, battery power enabled channels:



Staged fuel pumps

This configuration is useful for controlling two fuel pumps - CH1 is the lift pump and CH2 is the main pump. This schematics allows the main pump (CH2) to be activated only when the lift pump is running (CH1). If CH1 is deactivated or it's fuse is blown, then CH2 will also shut down, so that main pump doesn't run dry. For more safety both channels can be activated only when there is a 12V ignition source.

