RCE200x Series Digital Switches

Mounting

The RCE200 digital switch (D-switch) is small and light enough to be taped to a non-conductive surface or lashed with a tie wrap. A 3/4" piece of clear heat shrink tubing makes an excellent insulative cover.

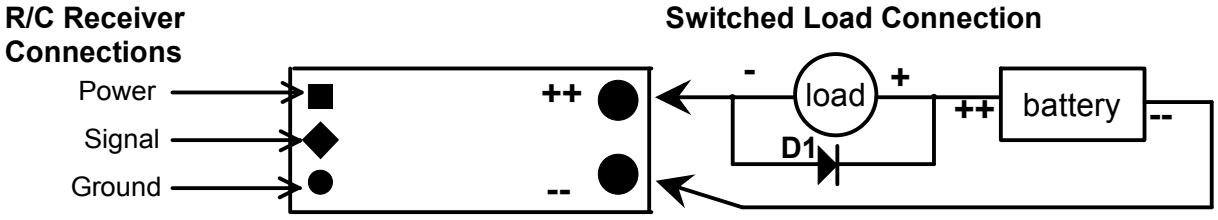
Dimensions

Width: 0.6" (15mm)

Length: 1.6" (41mm) (A,B models)
2.0" (51mm) (C,D models)

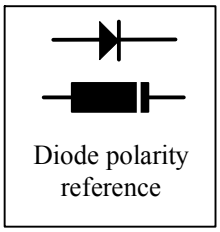
Hook-up And Configuration

You will need to solder a three-wire connector suitable for your R/C receiver to the left side of the RCE200 board. The standard colors of the conductors vary between manufacturers so double check their functions before proceeding. The top of the board has all of the components on it. The power pad is the only square pad and toward the top.



The right side of the board connects to the load you wish to switch on and off. You must connect the D-swich as shown or the switch will not appear to operate properly. Do not exceed the voltage or current specifications of the board or you will destroy it!

Diode D1 is optional but recommended if the load you are switching has high inductance, like a relay coil or motor. The diode will help absorb high voltage transients that often occur when these devices are switched off. A 1N4001 diode is included with your D-switch. The end of the diode with the white stripe goes toward the + end of the load.

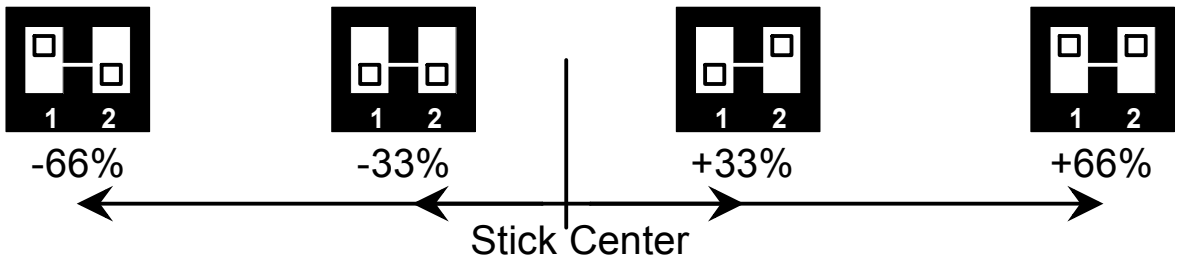

Diode polarity reference

Operation

The onboard LED will aid in switch setup and display the status of your radio link:

○ Off	The board is unpowered	⊛ Slow blink	Valid signal; switch is **OFF**
● On solid	Transmitter fault: no valid signal detected (switch is **OFF** for safety)	⊛ Fast blink	Valid signal; switch is **ON**

Two DIP switches set the transmitter stick threshold for turning the switch on. You may alter the switch configuration "on the fly" to test out the various thresholds. You may need to adjust the trim on your transmitter stick for best operation.



Specifications

Supply voltage:	3.8 - 5.5 vdc (four RX Nicads MAX!)
Supply current:	13ma, "A" and "B" models 20ma, "C" and "D" models
Load rating:	0-20 VDC at 4.5A "A" model 0-60 VDC at 2.0A "B" model 0-20 VDC at 9.0A "C" model 0-60 VDC at 4.0A "D" model
Switching time:	5.0 milliseconds
Switch resistance:	0.040 ohms "A" model, 0.150 ohms "B" model 0.020 ohms "C" model, 0.075 ohms "D" model

Package Contains:

- ☐ "A" model: 0-20 volts, 4.5 amps **MAX** (**one** white PVN012 chip)
- ☐ "B" model: 0-60 volts, 2.0 amps **MAX** (**one** white PVG612 chip)
- ☐ "C" model: 0-20 volts, 9.0 amps **MAX** (**two** white PVN012 chips)
- ☐ "D" model: 0-60 volts, 4.0 amps **MAX** (**two** white PVG612 chips)

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