

CONDOR V1.1C

Runoffgroove's famous cabinet simulator

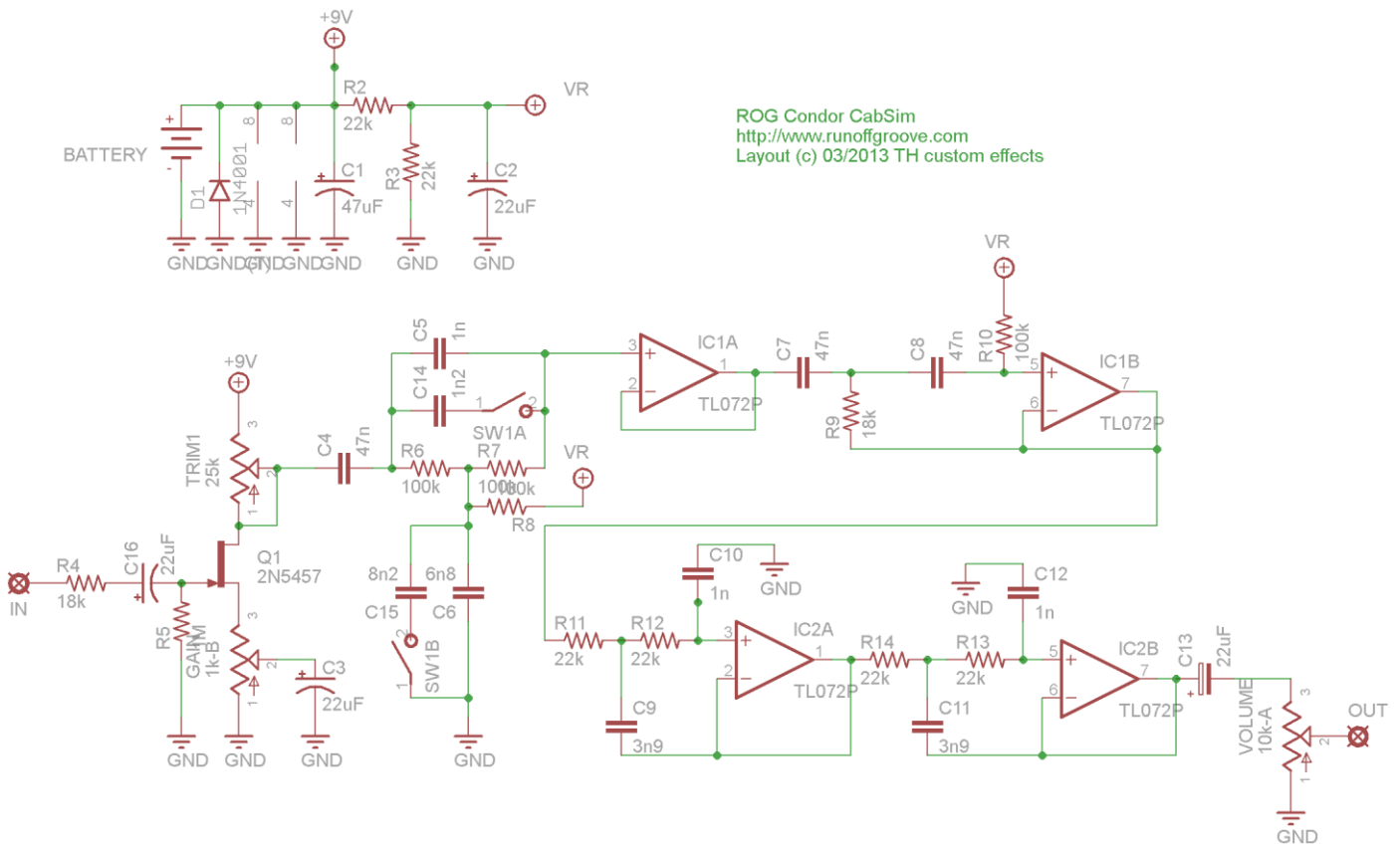
OVERVIEW

All credit for the circuit goes to <http://runoffgroove.com>. You will also find a lot of [sound samples](#) and [documentation](#) on their website.

GENERAL

This is my attempt on an easy-to-use PCB for this great circuit. There are a lot of cabinet simulators out there but I think the Condor is one of the best. And using the Marshall mod makes it very versatile.

SCHEMATIC

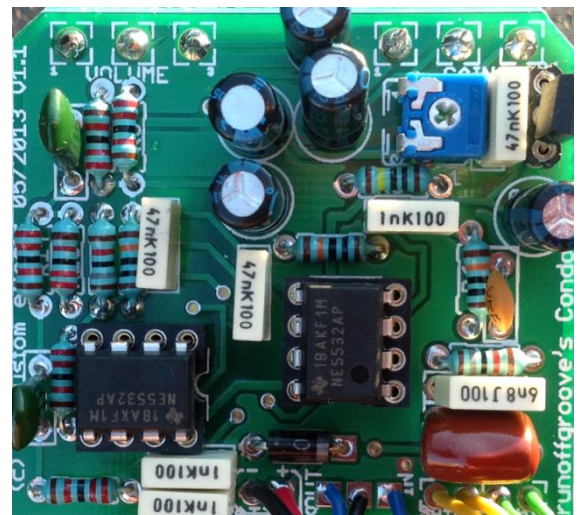
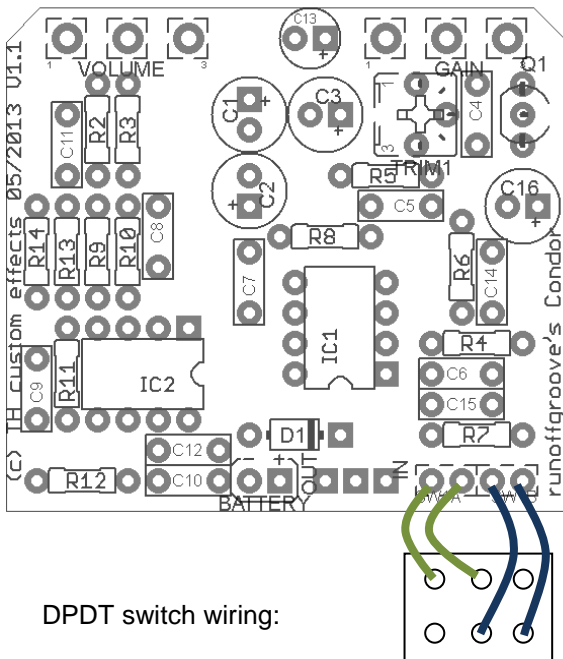


BILL OF MATERIALS

	Device#	Qty	Value	Comment	
Resistors	R2,R3, R11,R12,R13,R14 R4,R9	6	22k		
	R5	2	18k		
	R6,R7,R8,R10	1	1M		
	Capacitors	C1	4	100k	
		C2,C3,C13,C16	1	47u	polarized elektro
C4,C7,C8		4	22u	polarized elektro	
C5,C10,C12		3	47n	film	
C6		3	1n	film	
C9,C11		1	6n8	film	
C14		2	3n9	film	
C15		1	1n2	film	
Diodes	D1	1	1N4001		
Transistors	Q1	1	2N547	JFET	
Trimmer	TRIM1	1	25k/50k	6mm	
Pots	GAIN	1	1k-lin	16mm right-angle print	
	VOL	1	10k-log	16mm right-angle print	
ICs	IC1,IC2	2	TL072		
Other	SW1	1	DPDT		

BUILDING

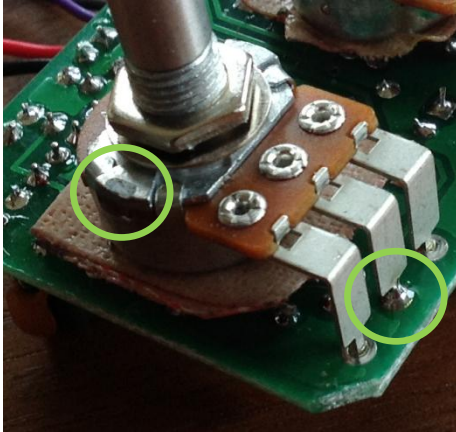
Start populating the diode and resistors and solder them. Then IC sockets and capacitors. Put in ICs and transistor last. You may want to socket the transistor as well.



DPDT switch wiring:



If you are unable to source 3n9 capacitors. Use a Mylar 2n7 and a ceramic 1.2 in parallel (yes, they fit through one hole) and you are there.



The board mounted pots need to go onto the other side of the board. Use some (double-sided) tape to make sure the pot cases do not shorten any pins that come through the board. As you solder them it is good practice to apply some solder to the middle pin first, then pull it back or approx. 1mm and let it harden. Then solder the other pins. This will align the pot horizontally in a better way and avoid shortcuts of the wide pot pins and the board.

Don't forget to clip of the small bracket before you mount the circuit.

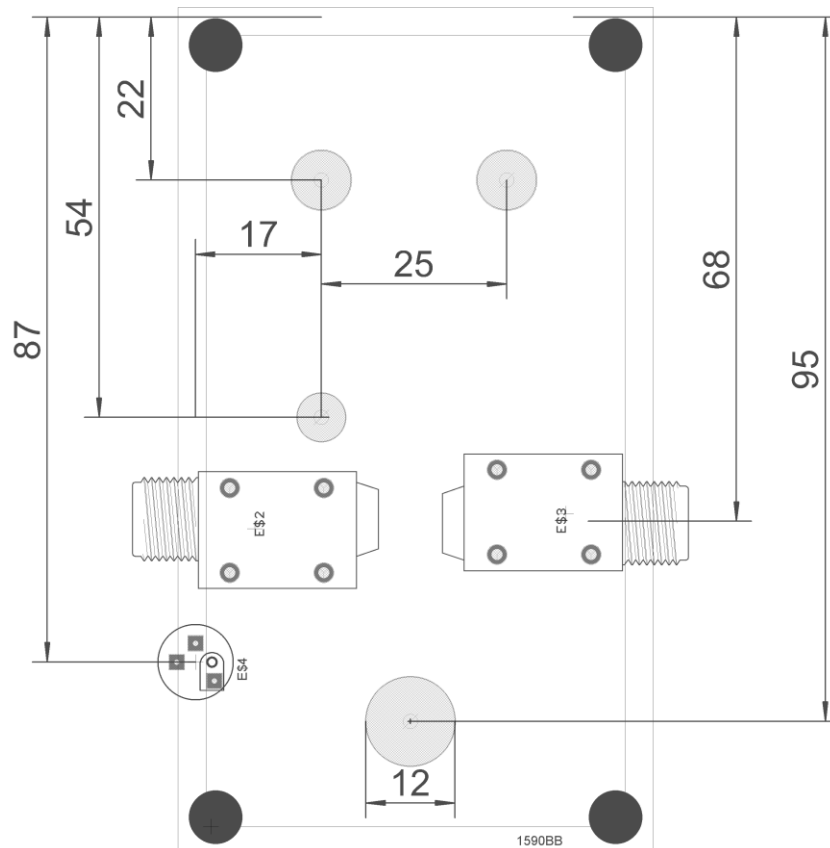
BIASING:

We could measure this, but this time we will do it by ear. Turn the trimmer to the middle position, connect battery and in/out. Set gain and volume to 12 o'clock. Play some notes. You may have distorted, high pitch sound. Turn the trimpot right until the distortion goes away and some bass is coming through. If you have turned it too far (i.e. the volume drops) turn it back left a little until you have a clear audio signal again. That's it.

ENCLOSURE

Drilling a 1590B enclosure (measurements in mm)

Check your printout for correct measurements before drilling!



FINALLY

The ROG Condor is a great cabinet simulator. If you want to use it for recording purposes you might want to replace the OpAmps with TLC 2272 for even lower noise.

DISCLAIMER & LICENSE

PCBs based on runoffgroove circuits purchased from TH custom effects are intended for DIY / non-commercial use only. Any commercial use whatsoever is forbidden. Please contact runoffgroove for further information.