

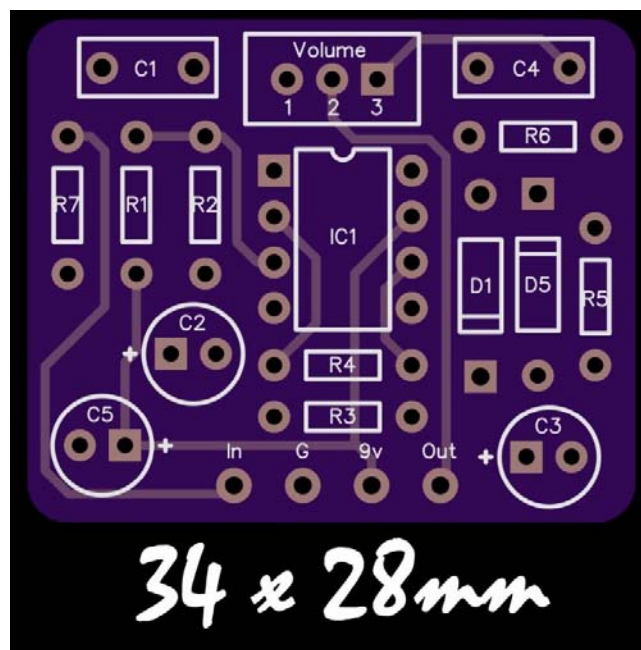


Whipper Clipper

The Whipper Clipper is a faithful reproduction of the Dan Armstrong Blue Clipper. Leave your expectations at the door and take a listen to the sound demo of this surprising ballsy and highly modifiable distortion pedal. Useful as a simple distortion circuit or a booster for a 2 in 1 pedal.

Bill of materials

Resistors		Capacitors	
R1	200k	C1	47nf
R2	240k	C2	4.7uf
R3	2.4k	C3	4.7uf
R4	150k	C4	(33nf) See mods!!
R5	8k2	C5	100uf
R6	10k	IC	
R7	2M2		
Diodes		U1	TL071
		Potentiometer	
D1	1n4148	Volume	100ka
D2	1n4148		



Modifications

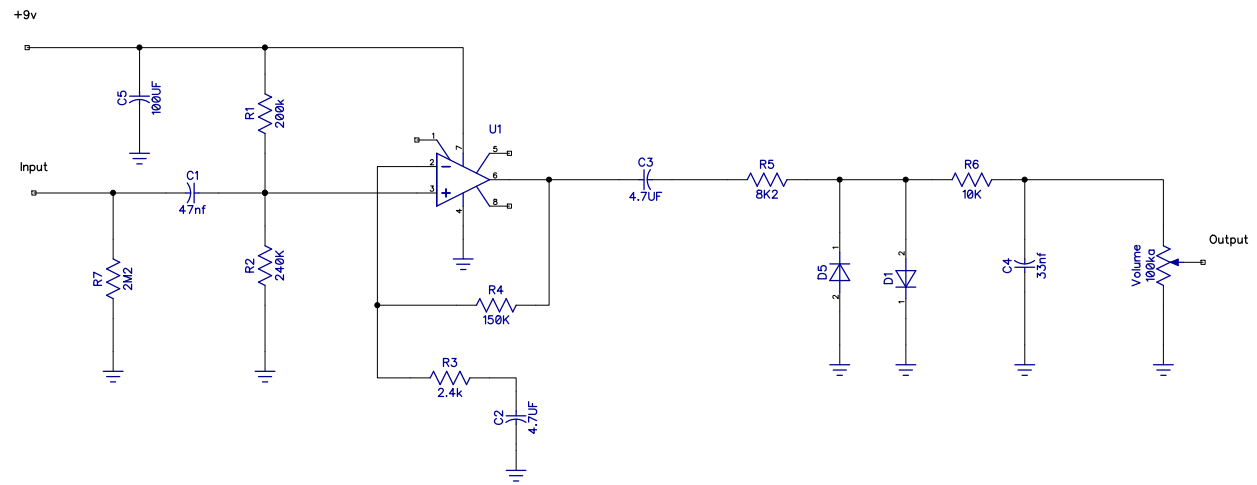
The Blue Clipper is a classic non-inverting opamp amplifier with hard clipping on the output (diodes to ground). Here are a couple of simple but worthwhile modifications to the original circuit.

More Treble

A stock Blue Clipper is a very 'dark' (lacking treble) distortion pedal. In order to correct this we can decrease C4 to allow more treble at the output. I would recommend this as a MUST modification and would not recommend 33nf as a standard value. 3.3nf is a replacement value that has been suggested, but I found this to be too harsh. You really want to socket this capacitor. Experiment in between these values till you find what suits your preference or use a toggle switch to incorporate a 'treble boost' switch!

Gain Control

R4 (in conjunction with R3) sets the gain of the opamp. This resistor could be replaced with a potentiometer for a gain control. Note that you can use your guitars volume control as a pretty effective gain control when the pedal is at the beginning of your pedal chain.

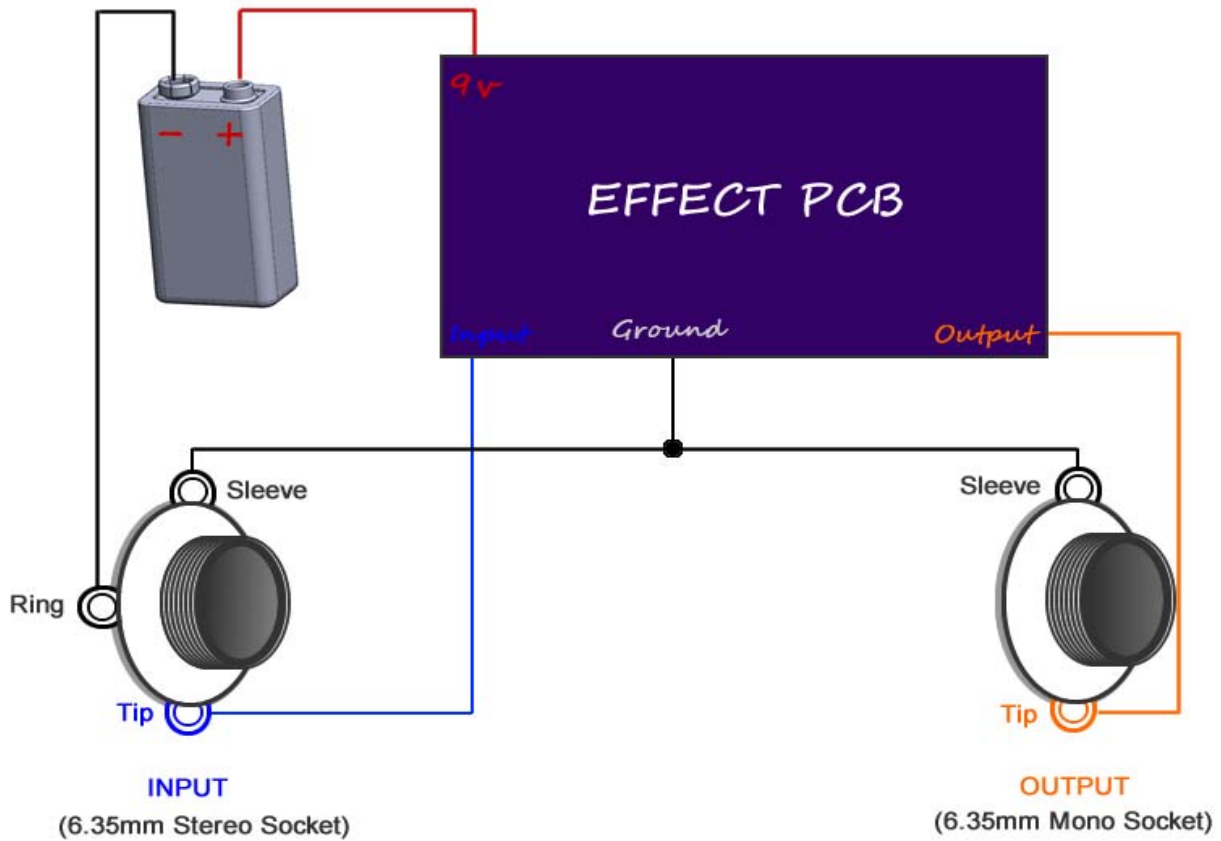


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Whipper Clipper V1.0

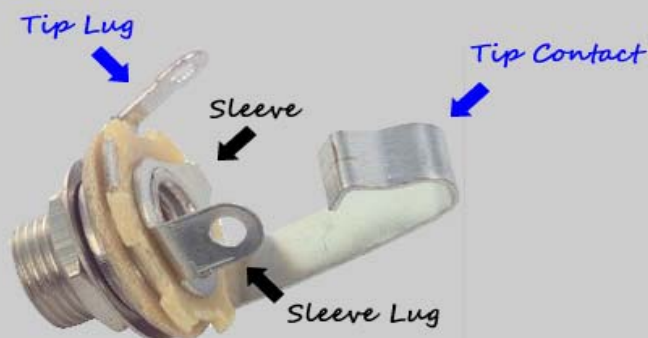
Testing Your Effect

Using aligator clips or soldering directly, wire your effect as in the following...



Input and Output Sockets

Pay close attention to the lugs of your sockets. Look at them side on so that you can distinguish the sockets individual layers. For instance the tip lug is connected to tip contact. The stereo jack looks the same as the socket below except it has an extra lug and contact for "Ring".



Boxing up your effect

Watch my offboard wiring tutorial for information on wiring this effect inside an enclosure (with LED, stompswitch, etc)

http://www.youtube.com/watch?v=z6fpwU8RY_0