



FaceMaster

Based on the Dallas-Arbiter Fuzz Face™

Bill of materials

Resistors		Diode	
R1	100k	D1	1n4001
R2	33k		
R3	470R	Transistor	
R4	200R	U1	Germanium Transistor
R5	1 Meg	U2	Germanium Transistor
Capacitors		Potentiometer	
C1	100nf (104)	Volume	500ka Log
C2	10nf (103)	Tone	100kb Lin
C3	20uf	Fuzz	1ka Log
C4	10uf	Bias	20k (trimmer)
C5	100uf		
C6	10uf	IC	
C7	100nf (104)	IC1	Charge Pump (TC1044scpa)

1590a

The board spacing will fit a 1590a enclosure. You can mount 9mm pots directly to the board.

Gain Pot

The original fuzz face used a 1kb pot. This causes the fuzz effect to 'bunch up' towards the end of the dial turn. Use a reverse log pot ("C") to avoid this. Also, a 2k pot may be better suited to increase the fuzz range (more fuzz).

Tone mod

Changing the values of c1 and c2 will change the frequency range of the Tone Control. Also note c3 will affect the bass output of the circuit as well (increase for more bass, decrease for less). I've found the best combination for this set up is as listed above but you increase c1 and decrease c2 for a wider range or vice versa for a narrower tone range.

Bias Trimmer

Experiment with the value of this trimmer. Depending on your germanium transistors used a 50k trimmer may be better suited. You can also mount this as a pot on the front of your pedal for an external bias control

Charge Pump

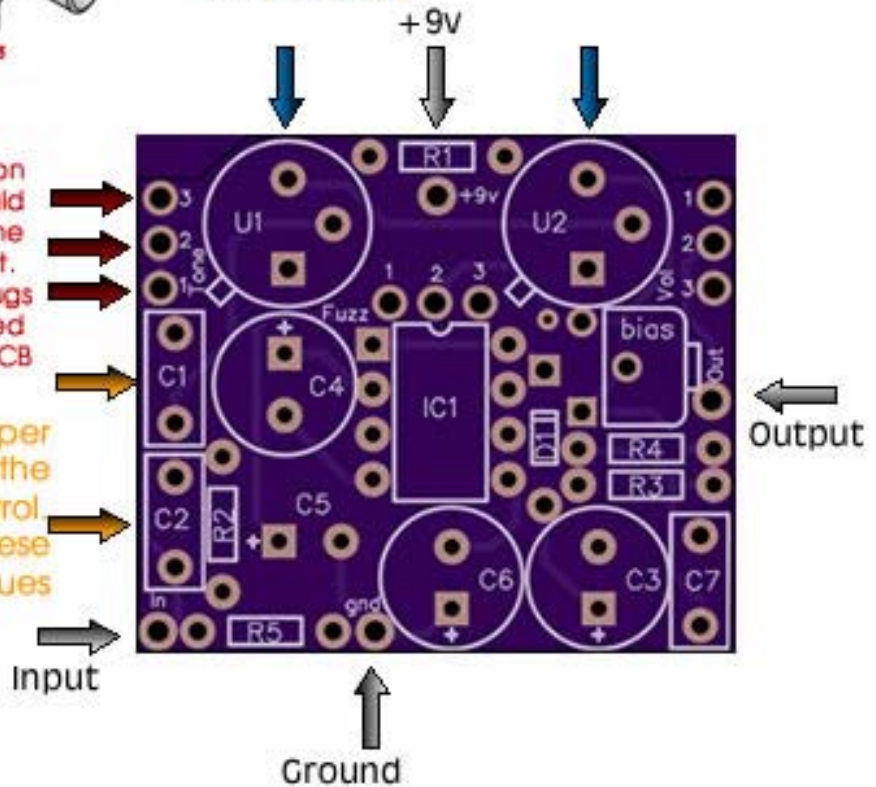
This layout includes the 9v power inverter and associated components for your convenience.



Check the pinout of the transistors you are using. The square pad on the layout indicates the emitter. Use a socket if you plan to experiment!

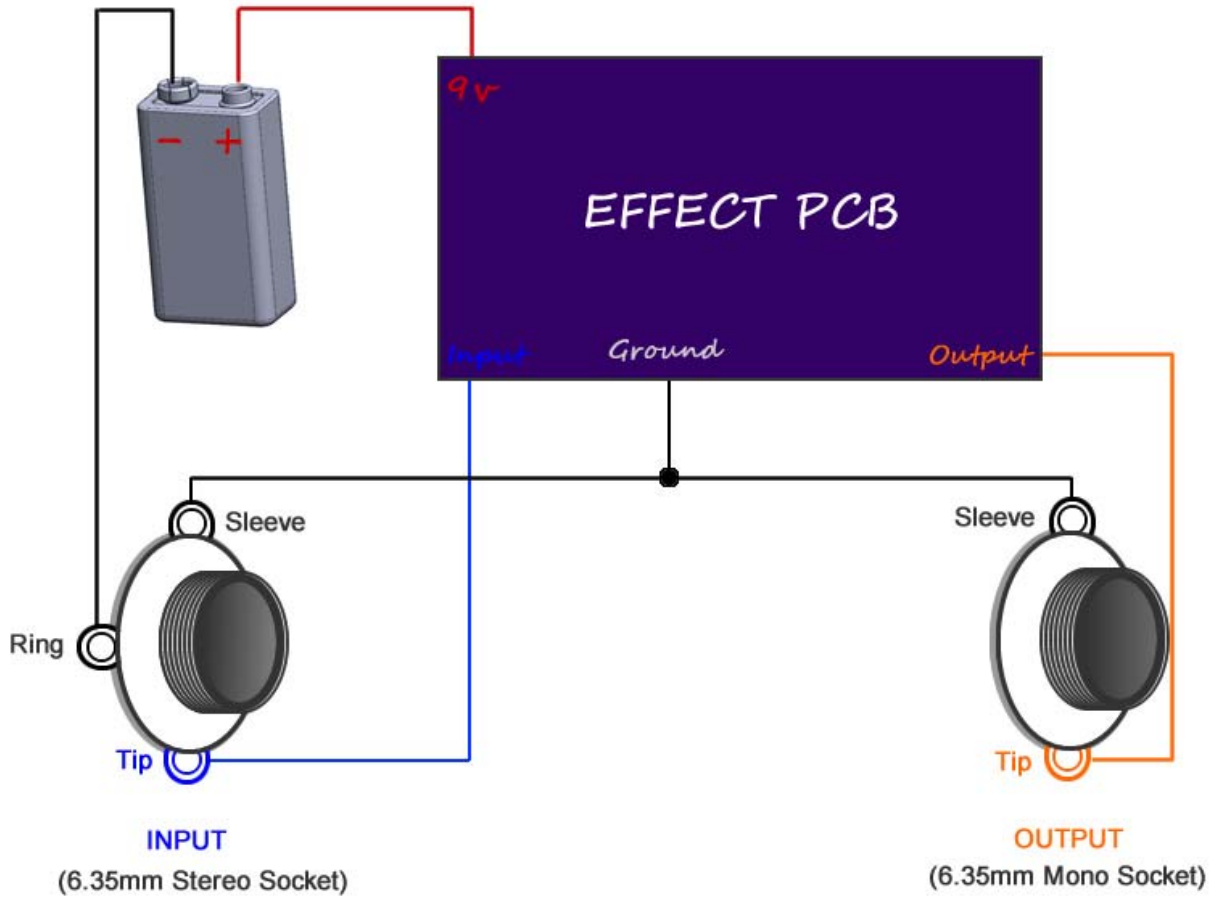
Note the numbers on the PCB (1,2,3) should be matched to the numbers on the pot. Pots with mounting lugs can be soldered directly to the PCB

C1 & C2 set the upper and lower limit of the tone control. Experiment with these values



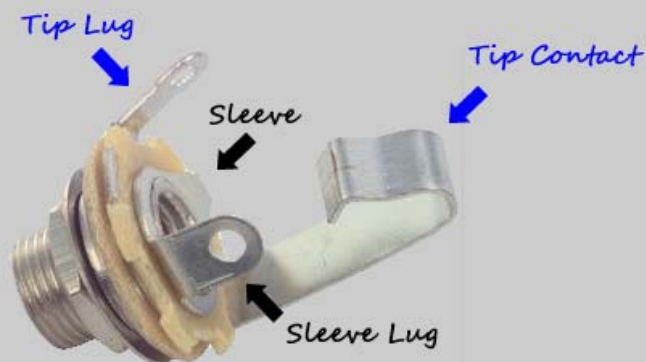
Testing Your Effect

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 up inside an enclosure (with LED, stompswitch, etc)

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