

HIPSTER

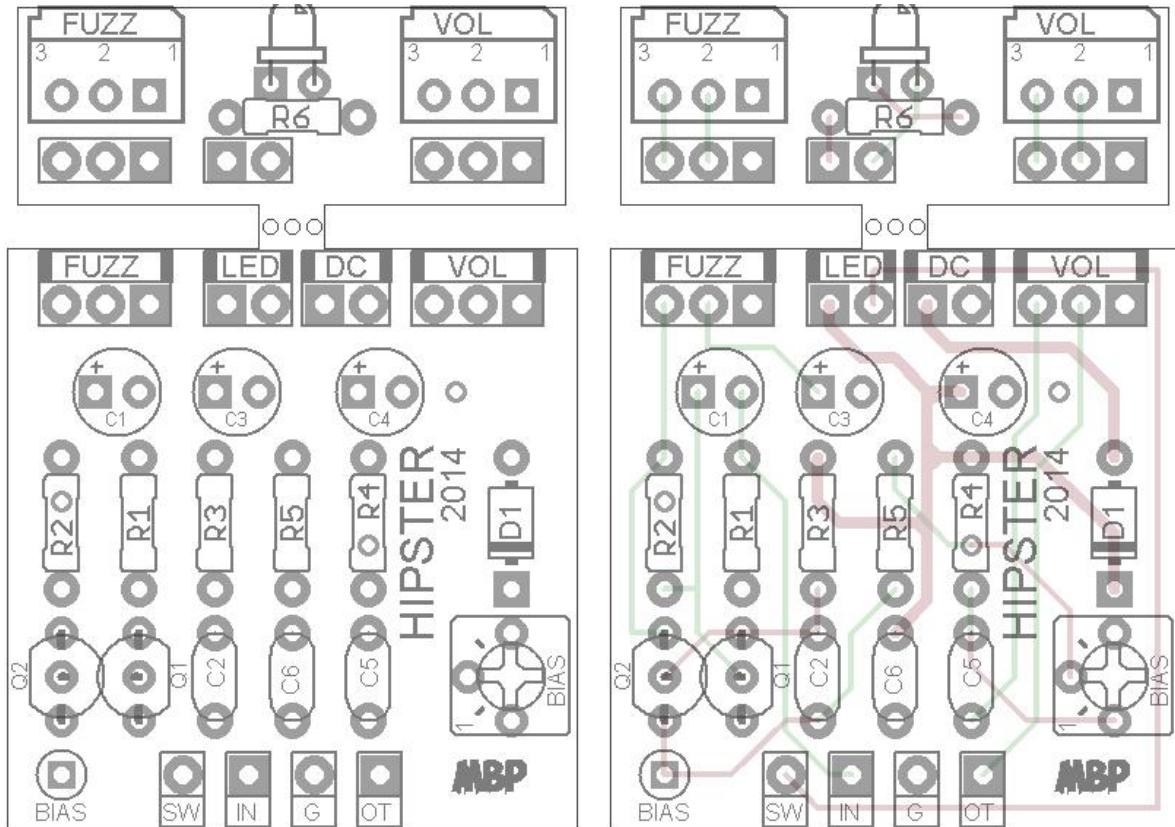
FX TYPE: Fuzz

Based on the Fuzz Face™

© 2014 madbeapedals

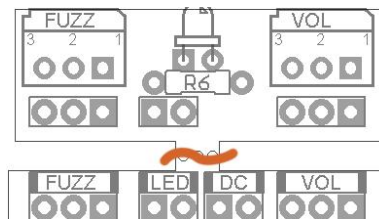
2014 changes: New layout, swapped 1N4001 for 1N5817 polarity protection.

1.3" W x 1.325" H (main board)



The extra small pads on the PCB are vias. You do not need to do anything with them.

Before you start populating, be sure to separate the two boards. The main PCB is for components and the daughter PCB is for the 9mm pots. The indicator LED also mounts to the daughter board.



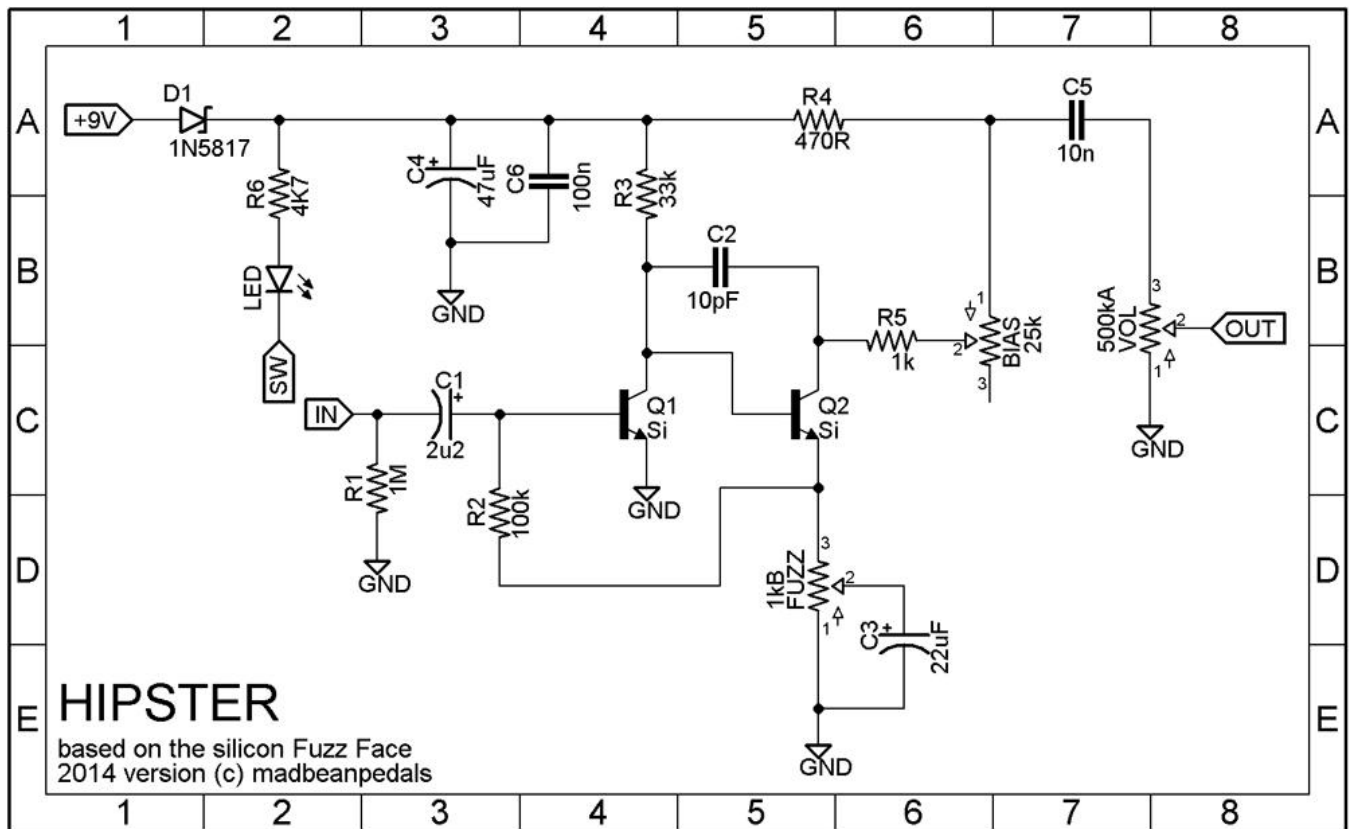
Use an Xacto knife to cut away the excess PCB material, if desired.

Terms of Use: You are free to use purchased **Hipster** circuit boards for both DIY and small commercial operations. You may not offer **Hipster** PCBs for resale or as part of a "kit" in a commercial fashion. Peer to peer re-sale is, of course, okay.

Resistors		B.O.M. Caps		Diodes	
R1	1M	C1	2u2	D1	1N5817
R2	100k	C2	10pF	Transistors	
R3	33k	C3	22uF	Q1, Q2	Si
R4	470R	C4	47uF	Trimpot	
R5	1k	C5	10n	BIAS	25k
R6	4K7	C6	100n	Pots	
				VOL	500kA
				FUZZ	1kB

Value		Shopping List	
Value	QTY	Type	Rating
470R	1	carbon or metal film	1/4W
1k	1	carbon or metal film	1/4W
4K7	1	carbon or metal film	1/4W
33k	1	carbon or metal film	1/4W
100k	1	carbon or metal film	1/4W
1M	1	carbon or metal film	1/4W
10pF	1	ceramic	16v
10n	1	film	16v
100n	1	film	16v
2u2	1	electrolytic	16v
22uF	1	electrolytic	16v
47uF	1	electrolytic	16v
1N5817	1		
Si	2	**see notes	
25k	1	Bourns 2262	
500kA	1	9mm Alpha	
1kB	1	9mm Alpha	

Download the pdf file for the previous version of the Hipster here (before August 2014):
<http://www.madbeanpedals.com/projects/Hipster/Hipster.zip>



The **Hipster** is based directly on the classic Fuzz Face™ and utilizes NPN transistors with a negative ground configuration.

Fuzz – Sets the total amount of fuzz

Vol – Sets the output volume

Notes

There are a variety of transistors that can be used for **Q1** and **Q2**. Suggestions are: BC108, BC109, 2n3904, BC183 (B, C) and/or BC550. The pinout for the Hipster is C-B-E (as in the 2n3904). Make sure you know the pinout of the transistors you are using before soldering them to the PCB---you may need to twist the leads around to accommodate some pinouts.

R1 is an optional pulldown resistor not featured in the classic Fuzz Face™. I generally do not use pulldown resistors with fuzzes unless there is a bad “pop” when switching it on.

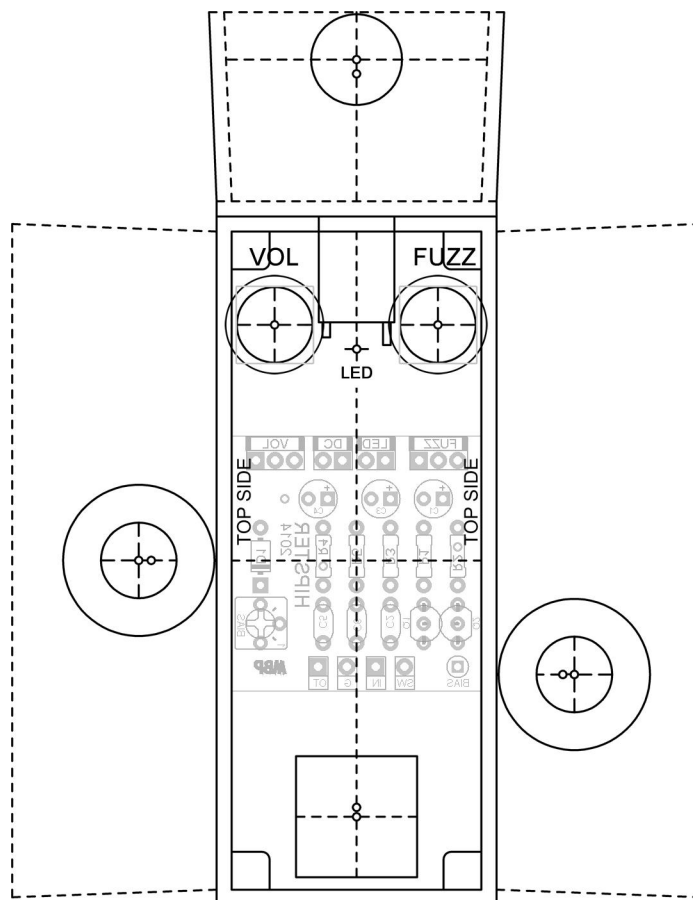
C2 can be increased if oscillation occurs at maximum fuzz (unlikely). Incremental increases in value will result in incremental decreases in treble. Suggested alternate values are 22pF, 47pF and 100pF.

A 1kC (reverse audio) pot can increase the range of the fuzz control and prevent it from “bunching up” at the very extreme.

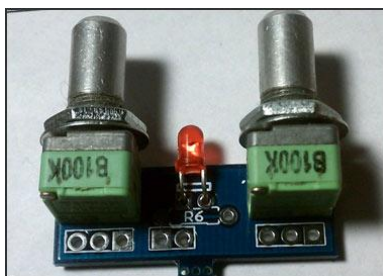
Adjust the **BIAS** trimpot until you read approximately 4.5v on the collector of **Q2** (use the Bias pad on the lower left corner of the PCB with your DMM to set the bias voltage). 3.5v – 5.5v is the nominal range so feel free to experiment with your bias setting. A setting of between 3.0v – 4.0v will be compressed and very squishy sounding similar to some Eric Johnson fuzz tones.

1590A Drill Guide

3.6" W x 4.66" H



Your LED should fold over the daughter PCB so that the bulb extends just beyond its edge. This means you will not need to use an LED bezel. Just drill the appropriate size hole for the 3mm LED. Be sure to check your pots and LED up against this template before drilling your holes to ensure that they line up properly.



Ignore pot values used in photo

Download the Photoshop file used to make the drilling template here:

http://www.madbeanpedals.com/projects/Hipster/Hipster_Drill.zip

Wiring

