# My Bloody Pumpkin Blender

Based on: Amount of parts: Enclosure type:

Fender Blender Average, 61 components 125b

Effect type: Technology: Get your board at:

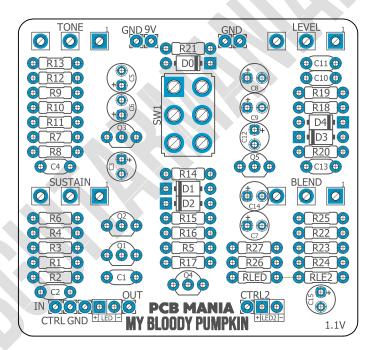
Old-school style fuzz NPN Silicon transitors My Bloody Pumpkin Blender

Build difficult: Power consumption: Get your kit at:

Intermediate 9V <u>Das Musikding (Europe)</u>

#### **Project overview:**

Inspired by Fender Blender. One of the best-sounding old-school style fuzz out there. Don't miss this germanium-based fuzz box that produces pretty vintage sounds that are utterly feral at the same time.



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### Introduction

When Fender released their Fender Blender in 1968, it seemed like they were entering late in the game. The war of fuzz pedals had already begun in '62, and after all, what could they bring to the table? The fuzz fiver that started with the Maestro FZ-1 Fuzz-Tone by Gibson rose through the '60s and brought numerous incarnations of Fuzz Face, Tonebenders, Shin-ei / Univox Superfuzzes, Mosrite Fuzzrite, and a big etcetera.

It seemed that it was pretty late to release a game-changing fuzz pedal...but history has many plot twists. If Fender was a latecomer to the scene, it had to offer a really good fuzz. And it did it with its impressive octave blend that delivered a total new tonal option!

The rest is well known; bands like My Bloody Valentine and The Smashing Pumpkins popularized the board and his unique sound.

We recreated this historical pedal with all modernizations up to date. The topology is pretty darn close to the Superfuzz, including Germanium diodes, Transistor splitter, and switchable tone control. It sounds awesomely bass-heavy, and we really dig its low end. If you're not a fan of this, switch the tone control on and get new tonal options.

Become part of history and try this old-school, hard-to-find fuzz that will never go out of style.

## **Controls**

### Potentiometer

- BLEND
- LEVEL
- SUSTAIN
- TONE

#### Switches

SW1

## **Bill of materials**

Resistors		
Part	Value	
R1	15K	
R2	150K	
R3	560K	
R4	1K5	
R5	47K	
R6	120K	
R7	10K	
R8	680R	
R9	220K	
R10	150K	
R11	8K2	
R12	8K2	
R13	27K	
R14	27K	
R15	100K	
R16	10K	
R17	820R	
R18	27K	
R19	3K9	
R20	47K	
R21	100K	
R22	10K	
R23	150K	
R24	18K	
R25	3K9	
R26	10K	
R27	820R	

RLE2	4K7
RLED	4K7

Capacitors		
Part	Value	
C1	100n	
C2	47n	
C4	100n	
C10	100n	
C11	3n	
C13	1n	

Electrolytic Capacitors		
Liectionytic capacitors		
Part	Value	
C3	10u	
C5	10u	
C6	10u	
C7	10u	
C8	10u	
<b>C9</b>	10u	
C12*	10u	
C14	10u	
C15	10u	

Potentiometers		
Part Value		
BLEND	100K B	
LEVEL 50K A		

SUSTAIN	10K A
TONE	25K B

Transistors		
Part	Value	
Q1	2N5088	
Q2	2N5088	
Q3	2N5088	
Q4	2N5088	
Q5	2N5088	

Switches	
Part	Value
SW1	ON-ON

Diodes		
Part	Value	
D0	1n5817	
D1	1n34a	
D2	1n34a	
D3	1n34a	
D4	1n34a	
LED	3mm LED	
LED2	3mm LED	

# **Shopping list**

Resistors		
Qty	Value	Parts
2	100K	R15, R21
4	10K	R7, R16, R22, R26
1	120K	R6
3	150K	R2, R10, R23
1	15K	R1
1	18K	R24
1	1K5	R4
1	220K	R9
3	27K	R13, R14, R18
2	3K9	R19, R25
2	47K	R5, R20
2	4K7	RLE2, RLED
1	560K	R3
1	680R	R8
2	820R	R17, R27
2	8K2	R11, R12

Capacitors		
Qty	Value	Parts
3	100n	C1, C4, C10
1	1n	C13
1	3n	C11
1	47n	C2

Electrolytic Capacitors		
Qty	Value	Parts
9	10u	C3, C5, C6, C7, C8,
		C9, <b>C12*</b> , C14,
		C15

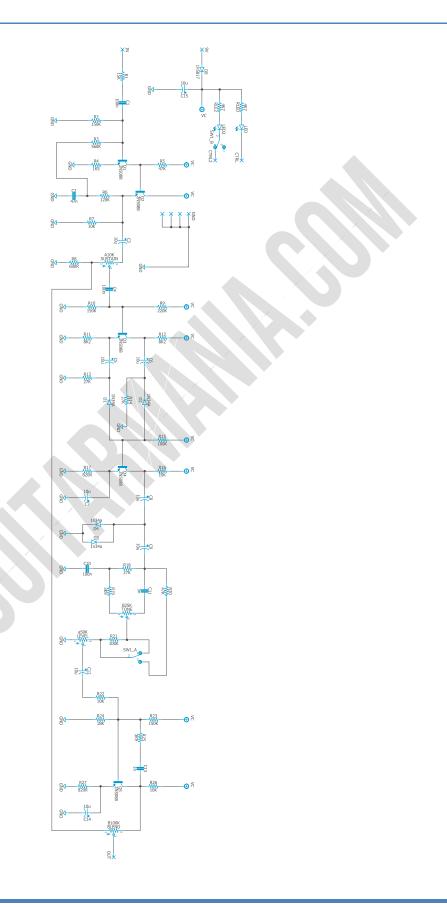
Potentiometers				
Qty	Value	Parts		
1	10K A	SUSTAIN		
1	100K B	BLEND		
1	25K B	TONE		
1	50K A	LEVEL		

Transistors				
Qty	Value	Parts		
5	2N5088	Q1, Q2, Q3, Q4,		
		Q5		

Switches				
Qty	Value	Parts		
1	ON-ON	SW1		

Diodes				
Qty	Value	Parts		
2	1N34A	D1, D2		
2	1n34a	D3, D4		
1	1n5817	D0		
2	3mm red LED	LED, LED2		

# **Schematic**



## **Components Recommendations**

As many people like to experiment with some pedals with higher voltage, always ensure your **electrolytic capacitors'** max tolerance is over 25v.

This board has been tested using Film box capacitors for most of the values over 1nf and ceramics discs for those under 1nf. However, high-quality components such as Wima's Capacitors and Panasonic's electrolytics can deliver a better performance.

All the resistors used for testing this project are 1/4W Metal Film.

The BOM and Shopping list are exclusive regarding this project. It doesn't include all the hardware like the 3PDT bypass switch, audio/dc jacks, enclosure, etc.

## **Build Notes**

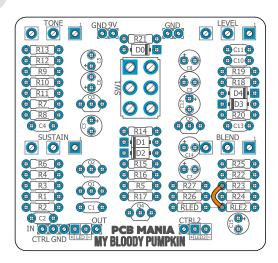
If this is one of your first projects, I recommend you to take a look at our Pedal Building Guide.

For a successful and tidy build, it's recommended the following order:

- 1. Resistors & diodes
- 2. Capacitors, starting with the smaller ones and the ceramic ones.
- 3. Electrolytic capacitors (always check the polarity)
- 4. Transistors
- 5. Wires
- 6. Potentiometers and switches
- 7. Off-board wiring

#### Important:

In the first version (giveaway) you will need to add one wire between R23 and RLE2, as shown in the picture below. This issue is fixed from the 1.1 version onwards.



### C12\*

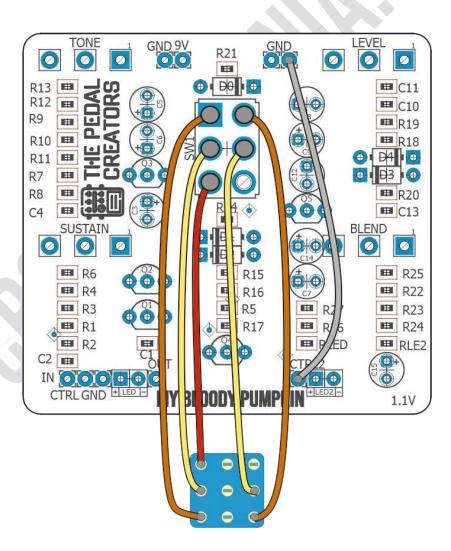
In the 10 and 1v1 versions, flip C12 when placing it. This is no longer needed from 1v2 onwards.

## **Wiring Diagram**

All our projects include a free 3PDT Board to make the wiring easier and tidier. Also, all of our PCBs feature the status LED on board.

The pad named "Ctrl" or "LED" is the one that controls the status of the led; wire it to the "LED" pad on the 3PDT board or in the control slug of your 3PDT.

This board has been designed to match our EZ 3PDT PCB; check it here to access our Pedal Wiring Guide.



## **Drill Template**

This Project has been planned to fit into a 125b enclosure type.

Check the Attached "Drilling templates" to drill the box properly. The files are on Scale 1:1, ready to print on an A4 page.

## **Licensing and Usage**

We really appreciate your trust and support in buying this PCB, as well as your will to dive into the DIY electronics world. For us, that's why you can make this project work properly and enjoy not only the building process but also experiment and play with it on your rig.

We try to reply to every question we receive on our email or our social media. Still, we try to encourage all our customers to join our <u>PCB Guitar Mania – Builders Group</u> on Facebook to post all your doubts, issues, suggestions, or requests, share your builds, and have some feedback from other fellow builders and us!

We tested all our projects following this same guide on their standard configurations. Although, not all of the variations and mods have necessarily been checked. These are suggestions based on the schematic analysis and the experiences and opinions of others. Feel free to share with us your views and recommendations regarding the mods your personal experimentation.

These boards may be used for commercial endeavors in any quantity unless expressly noted. No attribution is necessary, though accreditation or a link back is always much appreciated. If you are a builder planning to make your own run of pedals, we also offer the service of custom-made boards with your brand and logo, design according to your specifications.

The only usage restrictions are that, first, you cannot resell the PCB as part of a kit without prior arrangement with us, and second, you cannot scratch off the silkscreen or other way of trying to hide our logos and the source of the PCBs. Like it's written above, if you want to have your designs with your brand and logo, we could undoubtedly reach an agreement.

Follow us on <u>Instagram</u> and <u>Facebook</u> to stay in tune with the latest projects!