

Doom Boom

Based on:
FuzzHugger Doom Bloom

Effect type:
Wide Range Fuzz

Build difficult:
Easy

Amount of parts:
Low, total 27 components

Technology:
NPN Silicon Transistors

Power consumption:
9V

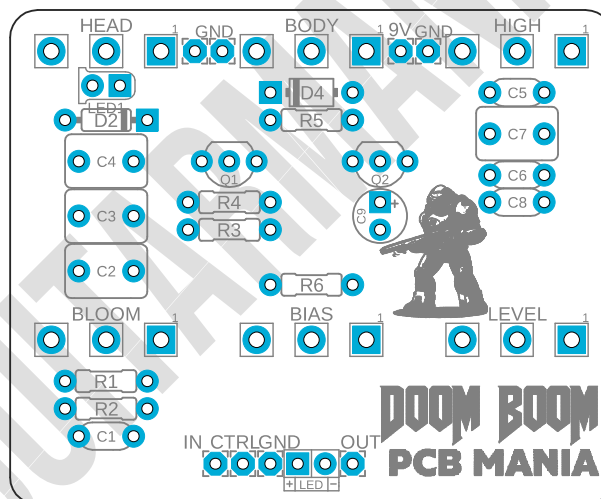
Enclosure type:
125b

Get your board at:
[Doom Boom](#)

Get your kit at:
[Das Musikding \(Europe\)](#)

Project overview:

This model is inspired by FuzzHugger Doom Bloom, which at the same time is an improved design of the Algal Bloom. This board delivers some very unique, harmonically rich, wide-range tones that will appeal to any lover of fuzz!



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Introduction

Six interactive controls open a portal into a world of highly textured harmonically rich fuzz tones with a wide range that goes from flourishing, striking blasts to muddle super-fuzz, conjuring up all sorts of electric fuzzing in between. Doom Boom comes with a vast gain stage without losing one of its most notable aspects: a precise note definition and texture.

Now, let's check some of the controls that make this pedal work the way it does:

Bloom control creates fuzz+gain+definition. It increases gain and note separation. It holds together pretty nicely when cranked, allowing it to hold up well with lower tuning.

Head control is a headroom. If you turn it right, the headroom goes up and increases the loudness, massiveness, and openness of the pedal, making it less clipped in the process.

Body shifts a considerable amount of lows in/out of your sound, leaving highs intact. Body also gives you control over fuzziness.

High controls highs (unsurprisingly), but it works separately from Body. So, you can set your lows and fuzziness where you want and then adjust your highs independently.

Bias biases the first transistor gain stage controlled by the Bloom knob, allowing to have an additional boost and character control. This is what we are talking about when we say Massive Boosting Power!

Controls

- Bias
- Bloom
- Body
- Head
- High
- Level

Bill of materials

Resistors	
Part	Value
R1	1k
R2	1m
R3	2m2
R4	47k
R5	100k
R6	4k7

Capacitors	
Part	Value
C1	470p
C2	1u
C3	1u
C4	1u
C5	33n
C6	4n7
C7	1u
C8	47n

Electrolytics Capacitors	
Part	Value
C9	100u

Potentiometers	
Part	Value
BIAS	1k B
BLOOM	100K A
BODY	100k A
HEAD	100k A
HIGH	100K A
LEVEL	100k A

Transistors	
Part	Value
Q1	2N5089
Q2	2N5089

Diodes	
Part	Value
D2	1n914
D4	1n5817
LED	3mm Red LED
LED1	3mm Red LED

Shopping list

Resistors		
Qty	Value	Parts
1	100k	R5
1	1k	R1
1	1m	R2
1	2m2	R3
1	47k	R4
1	4k7	R6

Capacitors		
Qty	Value	Parts
4	1u	C2, C3, C4, C7
1	33n	C5
1	470p	C1
1	47n	C8
1	4n7	C6

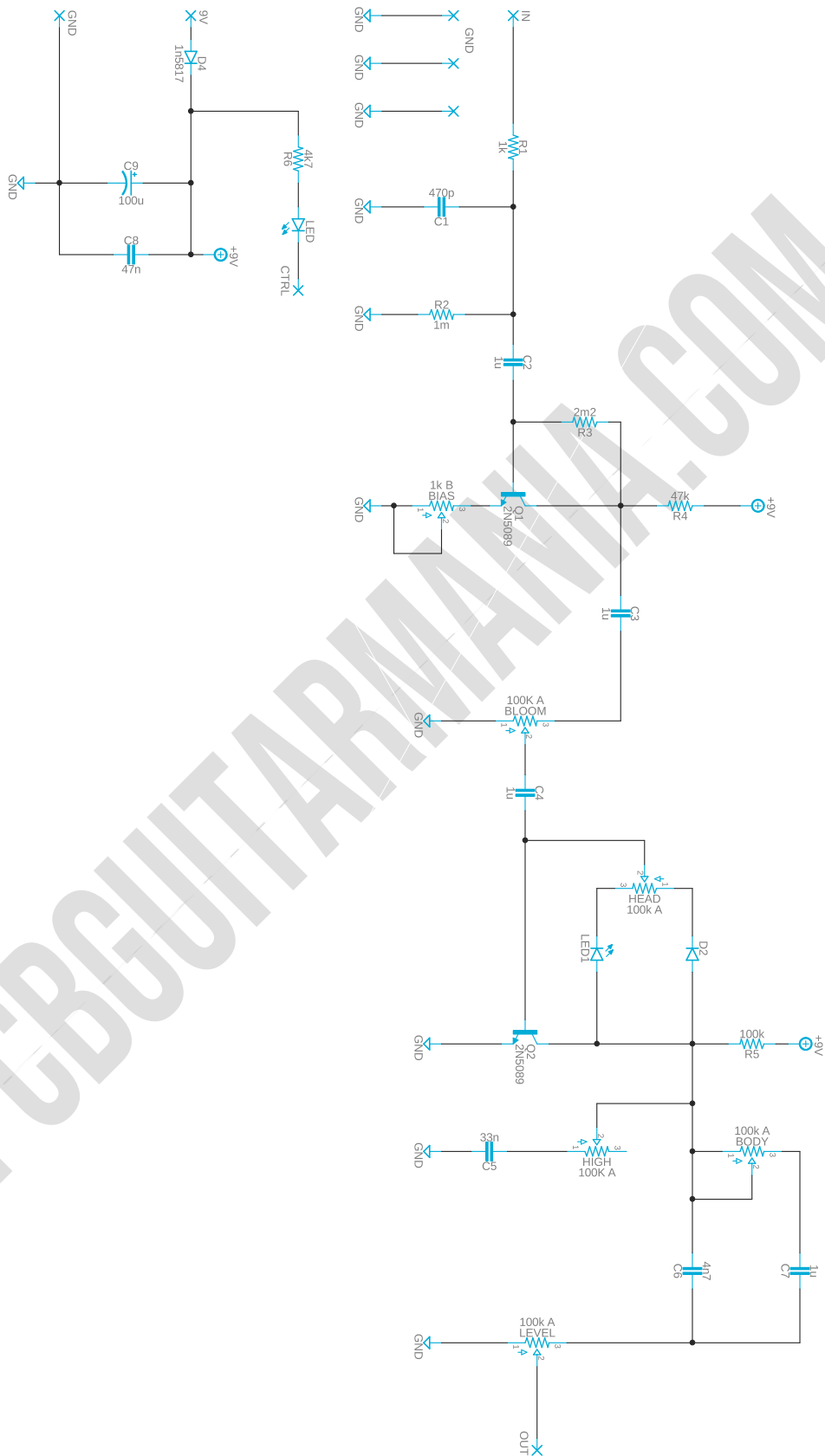
Electrolytics Capacitors		
Qty	Value	Parts
1	100u	C9

Potentiometers		
Qty	Value	Parts
2	100K A	BLOOM, HIGH
3	100k A	BODY, HEAD, LEVEL
1	1k B	BIAS

Transistors		
Qty	Value	Parts
2	2N5089	Q1, Q2

Diodes		
Qty	Value	Parts
1	1n5817	D4
1	1n914	D2
2	3mm Red LED	LED, LED1

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

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 [PCB Guitar Mania - Builders Group](#) 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.

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