Death By Fuzz II

Based on:
Death by Audio Fuzz War II

Amount of parts:
Average, total 47 components

Enclosure type:
125b

Effect type:
Fuzz

Technology:
Silicon transistors

Get your board at:
Death by Fuzz II

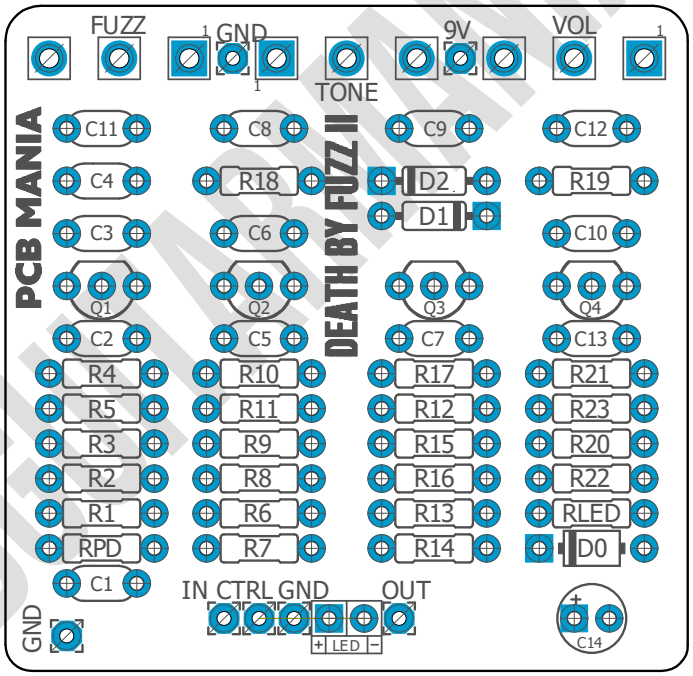
Build difficult:
Average

Power consumption:
9V

Get your kit at:
Das Musikding (Europe)

Project overview:

The first version of the Death by Fuzz and the second one have only one thing in common: Both are heavy saturated fuzzes that will blow your face off. Besides that, we are talking about 2 totally different circuits. The Death By Fuzz II isn't a direct update over the original model, but rather a complementary model that includes a total different set of features.



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Introduction

The Death by audio Fuzz war ™ is a monster but V1 was basically turn it on and make some noise. Because with seven transistors there was no ‚low gain' and no ‚slightly settings' so DBA made a second version and went back to the roots by keeping it closer to the all mighty and well known Big Muff ™. They added some germanium diodes for aggressive clipping and a way more radical tone control that has a little bit of a wah feeling to it. In my personal build I added a momentary footswitch to pad 1 and 2 of the tone control potentiometer for some intro riffs with no treble at all. Even known what it's based on this is a pedal you not just add to your collection in shelf and I can't wait hearing you guys riffing with it.

Controls

- Fuzz
- Vol
- Tone

Bill of materials

Resistors	
Part	**Value**
R1	1k5
R2	100k
R3	390r
R4	470k
R5	15k
R6	1k
R7	8k2
R8	100k
R9	100r
R10	470k
R11	15k
R12	8k2
R13	100k
R14	390r
R15	470k
R16	15k
R17	43k
R18	33k
R19	6k8
R20	430k
R21	10k
R22	100k
R23	2k2
RLED	4k7
RPD	1m

Capacitors	
Part	**Value**
C1	100n
C2	470p
C3	100n
C4	100n
C5	470p
C6	100n
C7	100n
C8	680p
C9	2n2
C10	6n8
C11	100n
C12	100n
C13	100n

Electrolytics Capacitors	
Part	**Value**
C14	100u

Potentiometers	
Part	**Value**
FUZZ	100k B
TONE	100k B
VOL	100k B

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

Diodes	
Part	**Value**
D0	1n5817
D1	1n34a
D2	1n34a

Shopping list

Resistors		
Qty	Value	Parts
4	100k	R2, R8, R13, R22
1	100r	R9
1	10k	R21
3	15k	R5, R11, R16
1	1k	R6
1	1k5	R1
1	1m	RPD
1	2k2	R23
1	33k	R18
2	390r	R3, R14
1	430k	R20
1	43k	R17
3	470k	R4, R10, R15
1	4k7	RLED
1	6k8	R19
2	8k2	R7, R12

Capacitors		
Qty	Value	Parts
8	100n	C1, C3, C4, C6, C7, C11, C12, C13
1	2n2	C9
2	470p	C2, C5
1	680p	C8
1	6n8	C10

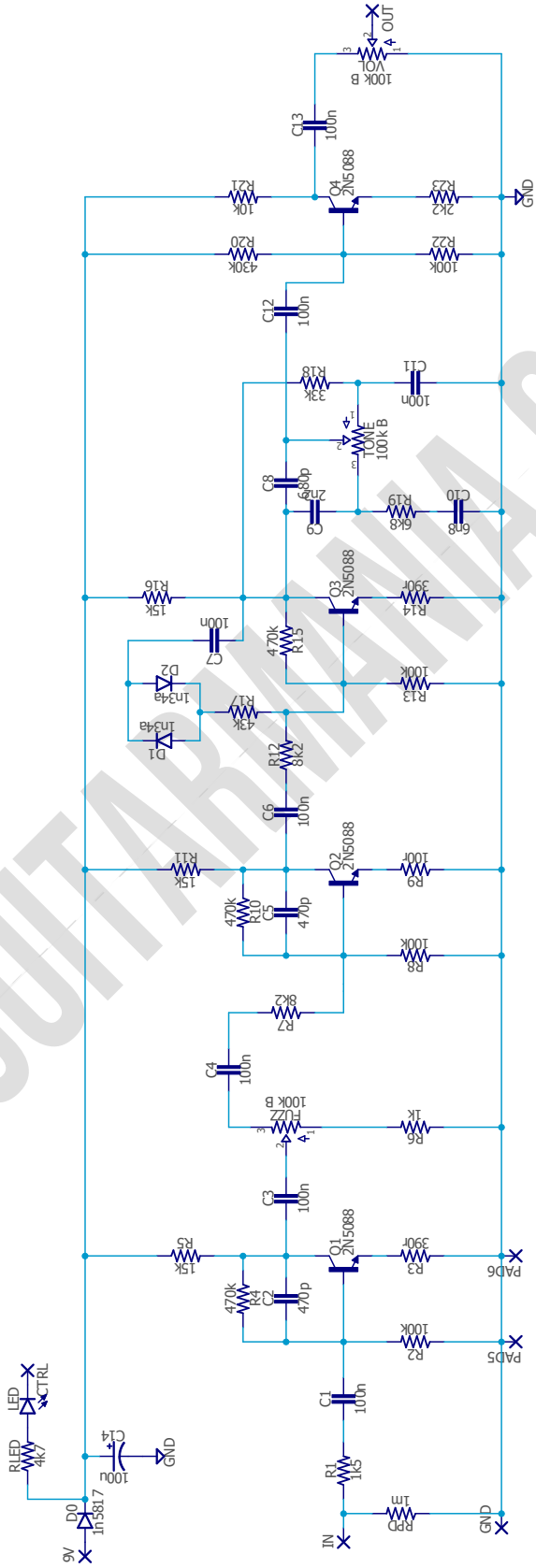
Electrolytic Capacitors		
Qty	Value	Parts
1	100u	C14

Potentiometers		
Qty	Value	Parts
3	100k B	FUZZ, TONE, VOL

Transistors		
Qty	Value	Parts
4	2N5088	Q1, Q2, Q3, Q4

Diods		
Qty	Value	Parts
2	GERMANIUM	D1, D2
1	1n5817	D0

Schematic



Components Recommendations

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

This board has been tested using Film box capacitors for most of the values over 1nf, and ceramics discs for the ones 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 exclusively 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 on 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 control slug of your 3PDT.

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

Drill Template

This Project has been planned to fit into a 1590bb enclosure type.

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

Licensing and Usage

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

We try to reply to every question we receive on our email or in our social media, but we try to encourage all our customers to join our PCB Guitar Mania – Builders Group on Facebook, in order to post all your doubts, issues, suggestions or request, as well to share your builds and have some feedback from us and other fellow builders!

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

These boards may be used for commercial endeavors in any quantity unless specifically noted. No attribution is necessary, though accreditation or a link back is always greatly 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 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 silk screen, 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 own designs, with your brand and logo we could certainly reach an agreement.

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