

# Fuzz Fixer

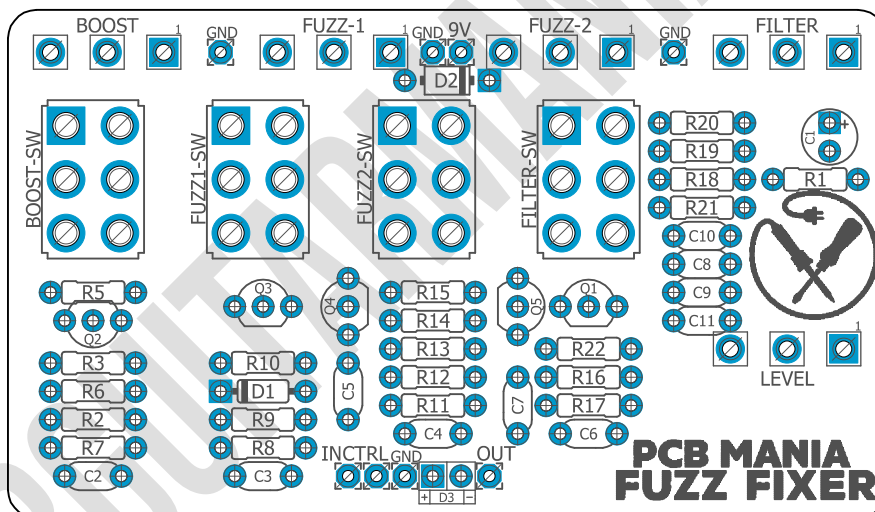
**Based on:**  
Blackout Effectors Fix'd Fuzz  
**Effect type:**  
Versatile Fuzz  
**Build difficult:**  
Intermediate

**Number of parts:**  
Average, total 71 components  
**Technology:**  
Darlington, Bipolar and NPN Transistors  
**Power consumption:**  
9V

**Enclosure type:**  
1590bb  
**Get your board at:**  
[Fuzz Fixer](#)  
**Get your kit at:**  
[Das Musikding \(Europe\)](#)

## Project overview:

Inspired by Fix'd Fuzz Deluxe, one of the most versatile fuzz out there. This pedal is a perfect tonal tool that features two very different sounding fuzz circuits, a full range clean boost and a wide tone sculpting stage



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## Introduction

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People say that Fix'd Fuzz is the hydra-headed dragon of fuzz, capable of yielding almost any fuzz-tone imaginable. And let me tell you, there is no better description than that. Based on the new Blackout Effectors Fix'd Fuzz Deluxe, this board offers all the limitless fuzzed fun of the original with the bonus of an extended panel control set that brings even more to the table.

Fuzz Fixer features two very different sounding fuzz circuits, one provides everything from medium gain overdrive to high gain fuzz. The other can go from vintage raspy fuzz to super gated sputter. Both can be activated and suppressed via independent switches. It also has a switchable full-range clean boost and a switchable filter that offer tons of tonal control and fuzz options.

Fuzz Fixer delivers a large myriad of sounds and features a clever set of controls that will allow you to tame them all. The perfect tool for a tone builder like you.

## Controls

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### *Potentiometers*

- Boost
- Fuzz-1
- Fuzz-2
- Filter
- Level

### *Switches*

- Boost-SW
- Fuzz1-SW
- Fuzz2-SW
- Filter-SW

# Bill of materials

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Resistors	
Part	Value
R1	2m
R2	470k
R3	10k
R5	3k9
R6	47k
R7	2m
R8	10k
R9	2m
R10	10k
R11	2m
R12	100k
R13	1k
R14	33k
R15	100k
R16	2m
R17	39k
R18	100k
R19	100r
R20	10k
R21	470k
R22	39k

Capacitors	
Part	Value
C2	100n
C3	100n
C4	220n
C5	100n
C6	100n
C7	3n3
C8	47p
C9	10n
C10	100n
C11	100n

Electrolytics Capacitors	
Part	Value
C1	220u

Potentiometers	
Part	Value
BOOST	1K B
FILTER	100K B
FUZZ-1	1K A
FUZZ-2	10K A
LEVEL	100K A

Transistors	
Part	Value
Q1	2N5089
Q2	2N5089
Q3	MPSA13
Q4	MPS2222
Q5	MPS2222

Switches	
Part	Value
Boost-SW	DPDT On-On
Fuzz1-SW	DPDT On-On
Fuzz2-SW	DPDT On-On
Filer-SW	DPDT On-On
-	3PDT Stomp foot

Diodes	
Part	Value
D1	1n914
D2	1n5817
D3	3mm red LED

# Shopping list

Resistors		
Qty	Value	Parts
3	100k	R12, R15, R18
1	100r	R19
4	10k	R3, R8, R10, R20
1	1k	R13
5	2m	R1, R7, R9, R11, R16
1	33k	R14
2	39k	R17, R22
1	3k9	R5
2	470k	R2, R21
1	47k	R6

Capacitors		
Qty	Value	Parts
6	100n	C2, C3, C5, C6, C10, C11
1	10n	C9
1	220n	C4
1	3n3	C7
1	47p	C8

Electrolytics Capacitors		
Qty	Value	Parts
1	220u	C1

Potentiometers		
Qty	Value	Parts
1	100K A	LEVEL
1	100K B	FILTER

1	10K A	FUZZ-2
1	1K A	FUZZ-1
1	1K B	BOOST

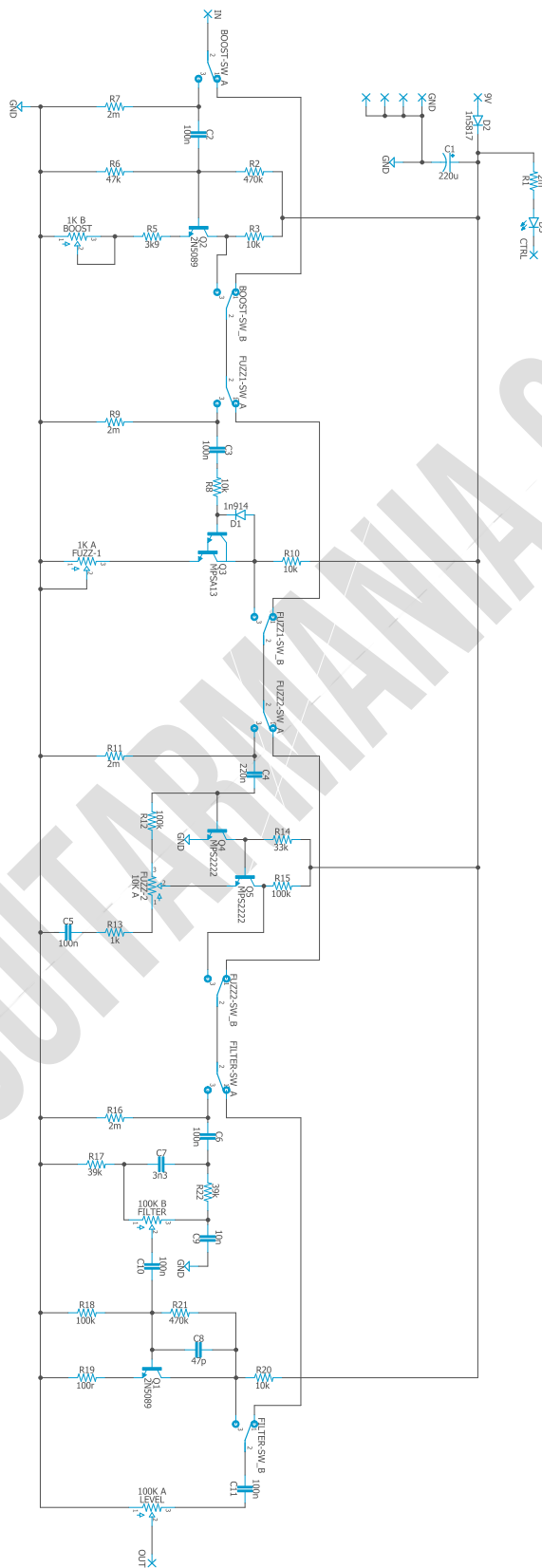
Transistors		
Qty	Value	Parts
2	2N5089	Q1, Q2
2	MPS2222	Q4, Q5
1	MPSA13	Q3

Switches		
Qty	Value	Parts
4	DPDT On-On	BOOST-SW, FILTER-SW, FUZZ1-SW, FUZZ2-SW
1	3PDT Stomp foot	-

Diodes		
Qty	Value	Parts
1	1n5817	D2
1	3mm red LED	D3
1	1n914	D1

Jacks		
Qty	Value	Parts
1	DC Jacks	-
2	Audio Jacks	-

# Schematic



# Components Recommendations

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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

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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

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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

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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 on an A4 page.

## Licensing and Usage

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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.

Follow us on [Instagram](#) and [Facebook](#) to stay in tune with the latest projects!