

# Ash Device

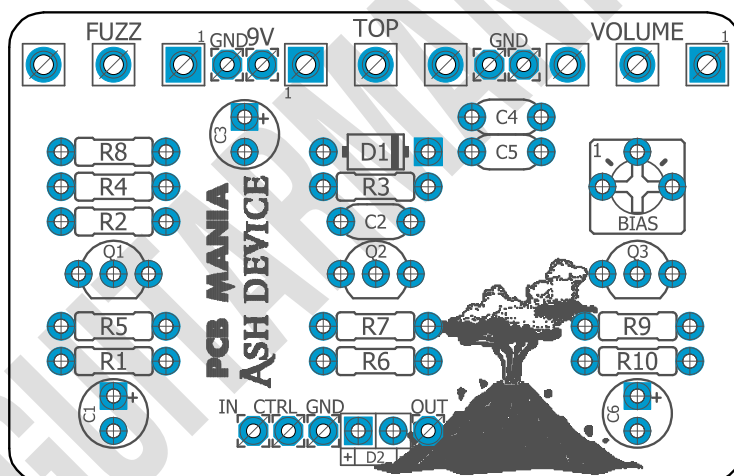
**Based on:**  
EQD Black Ash  
**Effect type:**  
Vintage Fuzz/Overdrive  
**Build difficult:**  
Easy

**Amount of parts:**  
Average, total 25 components  
**Technology:**  
NPN Silicon Transistors  
**Power consumption:**  
9V

**Enclosure type:**  
125b  
**Get your board at:**  
[Ash Device](#)  
**Get your kit at:**  
[Das Musikding \(Europe\)](#)

## Project overview:

The Ash Device is based on a limited edition fuzz, so there's a good chance that you won't be able to put your hands on one of the 1500 original copies made. Fear not, as with our help, you'll become a true fuzz trainer with even such a unique model in your collection.



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## Introduction

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The Ash device comes with 3 easy to manage controls - FUZZ, LEVEL, and TOP. FUZZ lets you set the amount of fuzzy goodness in your signal, while LEVEL is your volume control over the engaged unit. The special TOP knob is a treble control that allows you to select the emphasized frequencies between 2kHz and 10kHz. No matter the pickups you're using, you'll find a tone to cut through the mix.

Don't let this endangered fuzz miss out on rocking out with you. Gotta catch 'em all!

## Controls

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- Fuzz
- Top
- Volume

# Bill of materials

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Resistors	
Part	Value
R1	470k
R2	100k
R3	10k
R4	4k6
R5	1m
R6	46k
R7	1k
R8	100k
R9	22k
R10	4k7

Transistors	
Part	Value
Q1	2N3904
Q2	2N3904
Q3	2N3904

Diodes	
Part	Value
D1	1n5817
D2	3mm red LED

Capacitors	
Part	Value
C2	100n
C4	100n
C5	2n2

Electrolytics Capacitors	
Part	Value
C1	4u7
C3	4u7
C6	100u

Potentiometers	
Part	Value
FUZZ	5K B
TOP	25K B
VOLUME	100K A

Trim pots	
Part	Value
BIAS	10 k

# Shopping list

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Resistors		
Qty	Value	Parts
2	100k	R2, R8
1	10k	R3
1	1k	R7
1	1m	R5
1	22k	R9
1	46k	R6
1	470k	R1
1	4k6	R4
1	4k7	R10

Transistors		
Qty	Value	Parts
3	2N3904	Q1, Q2, Q3

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

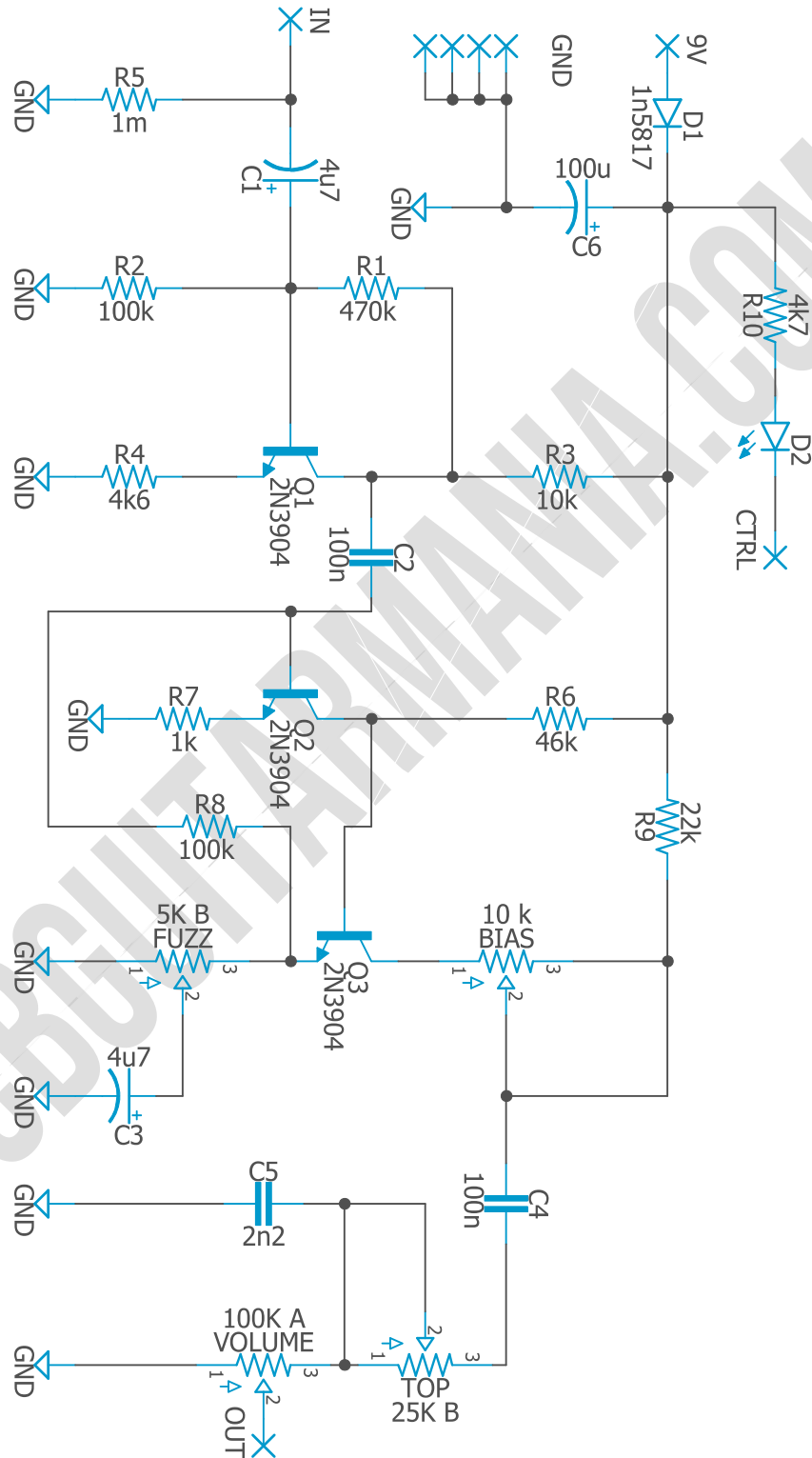
Capacitors		
Qty	Value	Parts
2	100n	C2, C4
1	2n2	C5

Electrolytics Capacitors		
Qty	Value	Parts
1	100u	C6
2	4u7	C1, C3

Potentiometers		
Qty	Value	Parts
1	100K A	VOLUME
1	25K B	TOP
1	5K B	FUZZ

Trim pots		
Qty	Value	Parts
1	10 k	BIAS

# 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 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

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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.

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