Death by Octaver

Based on: Death by Audio Octave Clang Effect type: Low-fi Octave Up Fuzz Build difficult: Easy Amount of parts:

Low, total 16 components Technology: OpAmp Power consumption: 9V Enclosure type: 125b Get your board at: Death by Octaver Get your kit at: Das Musikding (Europe)

Project overview:

Octave up fuzz, clang, ring modulation, and sitar drone sounds. Based on currently out of production this DBA Octave Clang, this circuit has roots on the classic Octavia and delivers rich and pure analog octave up sounds.



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Introduction

Warning: the Death by Octaver can get extremely loud. The spectaculars blasting overtones and burrings atmospheres that create have no comparison. This thing gets LOUD!

Once the signal enters this pedal, it travels through a specially selected transformer and matched germanium diodes delivering a rich and pure analog octave-up sound.

The gain control goes from harmonically rich and smoothy to a strenuously chaotic fuzz leaving you in a semi-catatonic state.

The Death by Octaver is an easy-to-build project that delivers a newness take on the octave fuzz effect. Don't be fooled by its size; this tiny, deadly weapon produces unheard sounds that will blow your mind.

Controls

- Gain
- Tone
- Volume

Bill of materials

Resistors	
Part	Value
R1	1M
R2	910K
R3	62K
RLED	4K7

Capacitors		
Part Value		
C1	100n	
C4	1n	

Electrolytics Capacitors		
Part Value		
C2 47u		
C3 4.7u		

Potentiometers	
Part Value	
GAIN B1M	
TONE B25K	
VOLUME A10K	

IC	
Part	Value
IC1	LM741

Transform	ner
Part	Value
XFM1	42TM002

Diods	
Part	Value
D0	1n5817
D1	3mm LED
D2	Germanium
D3	Germanium

Shopping list

Resistors		
Qty	Value	Parts
1	1M	R1
1	4K7	RLED
1	62K	R3
1	910K	R2

Capacitors		
Qty	Value	Parts
1	100n	C1
1	1n	C4

Electrolytics Capacitors			
Qty	Value	Parts	
1	4.7u	C3	
1	47u	C2	

Potentiometers		
Qty	Value	Parts
1	A10K	VOLUME
1	B1M	GAIN
1	B25K	TONE

IC			
Qty		Value	Parts
	1	LM741	IC1

Transformer		
Qty	Value	Parts
1	42TM002	XFM1

Diods		
Qty	Value	Parts
1	1n5817	D0
1	3mm LED	D1
2	Germanium	D2, D3

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 <u>here</u> to access our <u>Pedal Wiring</u> <u>Guide</u>.

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.

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