

Megalith King

Based on:
Mountainking Megalith

Effect type:
Insanely huge fuzz

Build difficult:
Average

Amount of parts:
Average, total 44 components

Technology:
Silicon NPN transistor

Power consumption:
9V

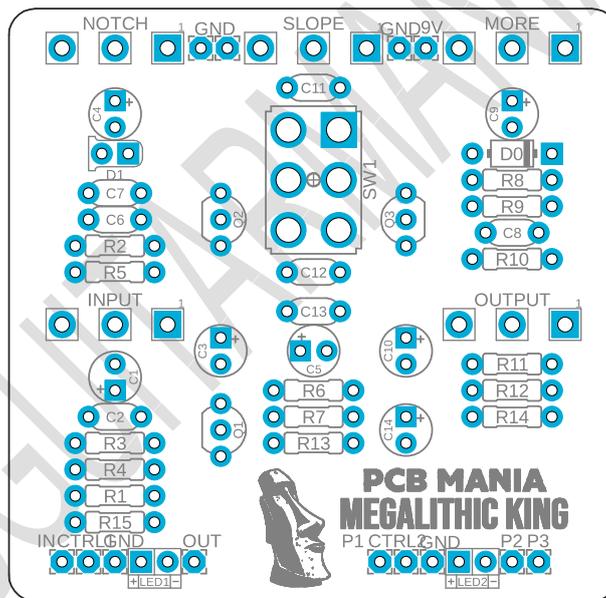
Enclosure type:
125b

Get your board at:
[Megalith King](#)

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

Project overview:

The heaviest fuzz you'd ever heard. The king of doomy fuzzes.



Index

1. Project overview
2. Index, Introduction & Controls
3. Bills of Materials, BOM
4. Shopping Lists
5. Components Recommendations
6. Build Notes
7. Schematic
8. Wiring Diagram
9. Drill Template
10. Licensing and Usa

Introduction

Create an unstoppable wall of fuzz and vibratory energy capable of conquering all in its pathway. Its versatile filter circuitry allows for a wide range of tones and textures.

The insanely huge fuzz that will satisfy all your needs and shake the walls of your house. Don't expect mercy nor chord definition from this monster; this fuzz has been conceived to crush absolutely everything.

The notch filter and slope knobs will give you a nice surprise on how much you can affect the overall tone, but always keeping it in the realm of total tonal annihilation.

We prepared this board for a more compact 125b enclosure, replacing the rotary switch of the original Mountainking pedal for a more practical and convenient DPDT without losing any of the settings you can achieve with it!

Controls

- INPUT
- MORE
- NOTCH
- OUTPUT
- SLOPE

Bill of materials

Resistors	
Part	Value
R1	4k7
R2	100k
R3	47k
R4	10k
R5	47k
R6	51k
R7	33k
R8	330k
R9	51k
R10	4m7
R11	51k
R12	1m
R13	4k7
R14	4k7
R15	1m

Capacitors	
Part	Value
C2	22n
C6	4n7
C7	1n
C8	470n
C11	22n
C12	10n
C13	12n

Electrolytics Capacitors	
Part	Value
C1	10u
C3	47u
C4	47u
C5	47u
C9	47u
C10	47u

C14	100u
-----	------

Potentiometers	
Part	Value
INPUT	1m C
MORE	5k B
NOTCH	50k A
OUTPUT	100k B
SLOPE	100k B

Transistors	
Part	Value
Q1	BC338
Q2	2N5088
Q3	BC338

Switches	
Part	Value
SW1	DPDT Toggle
BYPASS Latching	3PDT Footswitch
HEAVY Latching	3PDT Footswitch

Diodes	
Part	Value
D0	1n5817
D1	3mm Orange LED
LED 1	3mm Red LED
LED 2	3mm Red LED

Shopping list

Resistors		
Qty	Value	Parts
1	100k	R2
1	10k	R4
2	1m	R12, R15
1	330k	R8
1	33k	R7
2	47k	R3, R5
3	4k7	R1, R13, R14
1	4m7	R10
3	51k	R6, R9, R11

Capacitors		
Qty	Value	Parts
1	10n	C12
1	12n	C13
1	1n	C7
2	22n	C2, C11
1	470n	C8
1	4n7	C6

Electrolytics Capacitors		
Qty	Value	Parts
1	100u	C14
1	10u	C1
5	47u	C3, C4, C5, C9, C10

Potentiometers		
Qty	Value	Parts
2	100k B	OUTPUT, SLOPE
1	1m C	INPUT
1	50k A	NOTCH
1	5k B	MORE

Transistors		
Qty	Value	Parts
1	2N5088	Q2
2	BC338	Q1, Q3

Switches		
Qty	Value	Parts
1	DPDT Toggle	SW1
1	3PDT Footswitch	BYPASS Latching
1	3PDT Footswitch	HEAVY Latching

Diodes		
Qty	Value	Parts
1	1n5817	D0
1	3mm Orange LED	D1
2	3mm Red LED	LED1, LED2

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.

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