Stoner NFT

Based on:
Catalinbread SFT

Amount of parts:
Average, total 55 components

Enclosure type:
125b

Effect type:
Overdrive, Preamp

Technology:
JFET silicon transistors

Get your board at:
Stoner NFT

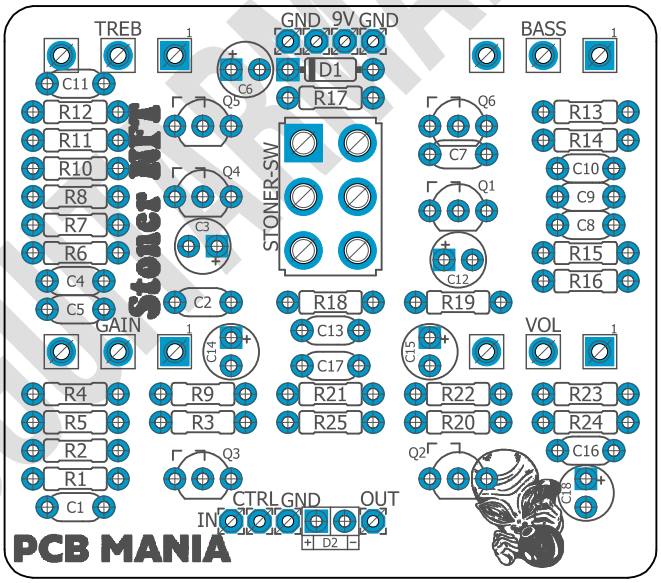
Build difficult:
Intermediate

Power consumption:
9V

Get your kit at:
Das Musikding (Europe)

Project overview:

Imagine that you've found an NFT. Not just any NFT, but one created in the 70s that gives you the power to create earthquakes within your eyesight. The Stoner NFT is exactly that - it turns everything on your way into rubble... and it's not a bubble! This pedal is worthy of a Klon Centaur price, but today you can create your own copy and just watch the stonks go through the roof!



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Introduction

The Stoner NFT is based on the legendary 70s Ampeg sound that we all know and love. The tubes were replaced by JFET transistors for minimum size and maximum tone. This little beast runs on 18 volts internally through a charge pump to provide extra headroom.

The circuit comes with 4 knobs and a switch. GAIN, VOL, TREB and BASS are the knobs and STONES/STONER is the switch's name. GAIN is the pot that allows you to dial in the amount of saturation in your signal. With VOL you can set how loud the pedal will get. TREB and BASS is the EQ section of the pedal, giving you control over high and low frequencies, respectively. The cherry on the top is the STONES/STONER switch. This selector is an extension to the GAIN pot, and it lets you switch from a verge of breakup tone to a near fuzz experience with a single flip.

Don't miss out on the next big thing. You don't need to sell your house, car, or a kidney to invest this time - an iron, a few components, and a bit of solder is all it takes for your portfolio to go to the moon!

Controls

Potentiometers

- Bass
- Gain
- Treb
- Vol

Switches

- Stoner-SW

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Bill of materials

Resistors	
Part	**Value**
R1	470k
R2	100k
R3	470k
R4	1m
R5	10k
R6	1k
R7	1m
R8	1m
R9	22k
R10	100k
R11	4k7
R12	1k
R13	1m
R14	1m
R15	100k
R16	4k7
R17	120k
R18	10k
R19	1k8
R20	1k
R21	1m
R22	1m
R23	3k9
R24	2k2
R25	4k7

Capacitors	
Part	**Value**
C1	100n
C2	4n7
C4	68n
C5	150p
C7	100n
C8	680p
C9	1n
C10	4n7
C11	4n7
C13	47p
C16	4n7
C17	4n7

Electrolytics Capacitors	
Part	**Value**
C3	1u
C6	1u
C12	1u
C14	22u
C15	2u2
C18	100u

Potentiometers	
Part	**Value**
BASS	1m A
GAIN	1m A
TREB	1m A
VOL	250k A

Transistors	
Part	**Value**
Q1	J201
Q2	J201
Q3	J201
Q4	J201
Q5	J201
Q6	J201

Switches	
Part	**Value**
STONER-SW	DPDT Toggle (On/On)

Diods	
Part	**Value**
D1	1n5817
D2	3mm red LED

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Shopping list

Resistors		
Qty	**Value**	**Parts**
3	100k	R2, R10, R15
2	10k	R5, R18
1	120k	R17
3	1k	R6, R12, R20
1	1k8	R19
7	1m	R4, R7, R8, R13, R14, R21, R22
1	22k	R9
1	2k2	R24
1	3k9	R23
2	470k	R1, R3
3	4k7	R11, R16, R25

Capacitors		
Qty	**Value**	**Parts**
2	100n	C1, C7
1	150p	C5
1	1n	C9
1	47p	C13
5	4n7	C2, C10, C11, C16, C17
1	680p	C8
1	68n	C4

Electrolytics Capacitors		
Qty	**Value**	**Parts**
1	100u	C18
3	1u	C3, C6, C12
1	22u	C14
1	2u2	C15

Potentiometers		
Qty	**Value**	**Parts**
3	1m A	BASS, GAIN, TREB
1	250k A	VOL

Transistors		
Qty	**Value**	**Parts**
6	**J201***	Q1, Q2, Q3, Q4, Q5, Q6

Switches		
Qty	**Value**	**Parts**
1	DPDT Toggle (On/On)	STONER-SW

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

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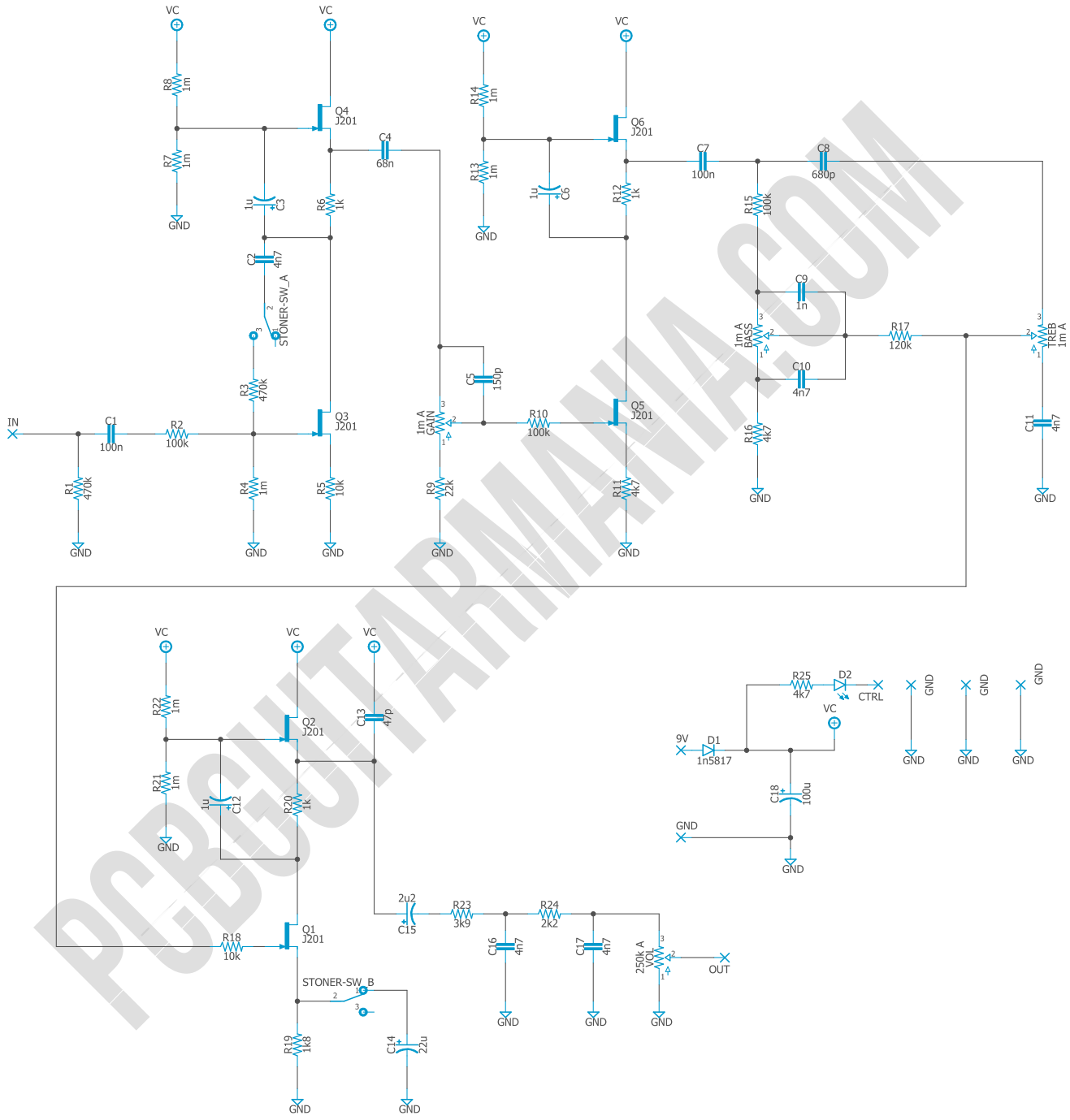
Schematic



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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

J201*

J113 is a good replacement that is similar in spec to the rare ones that Catalinbread used. Thanks, Adam Varady, for suggesting this change.

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.

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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.

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