

Apollo Module Fuzz

Based on:
Skreddy Lunar Module

Effect type:
Aggressive Fuzz

Build difficult:
Average

Amount of parts:
Average, total 39 components

Technology:
NPN - Silicon Transistors

Power consumption:
9V

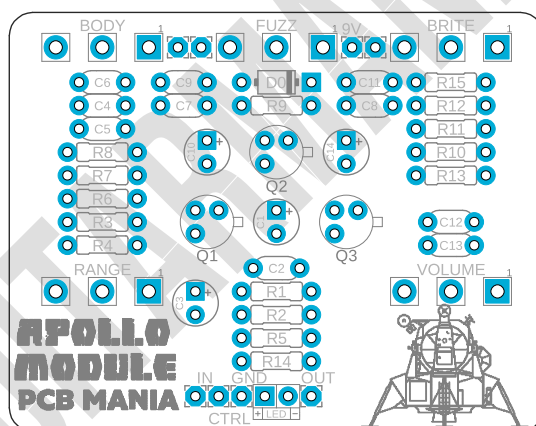
Enclosure type:
125b

Get your board at:
[Apollo Module Fuzz](#)

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

Project overview:

Inspired by Skreddy Lunar Module, a boutique fuzz that combines a treble booster in front of the fuzz face circuit resulting in edgy, timeless solos.



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Introduction

Houston, we have a... FUZZ! The Apollo Module Fuzz was inspired by the legendary and timeless solo's sound in 'Time' (pun intended) by Pink Floyd. Of course, you can use it to play anything you like, and we can't wait to hear the results.

The Apollo Module Fuzz is a silicon transistor-based pedal, and if you have any experience with those, you might know that those can sound quite thin at times. Well, not this one! The Apollo Module Fuzz is as thick as they come and can be darkened even more with the on-board controls. You'll lose the sense of gravity with this vintage-sounding fuzz, and you won't want to get down. Trust us!

Inside the control room, we have 5 potentiometers - VOLUME, FUZZ, BODY, BRITE, and RANGE. The VOLUME knob allows you to set the loudness of the pedal to your liking - make it barely audible, set to unity gain', or blast it way up for a thick boost. The FUZZ control balances the amount of dirt in the tone - it can go from basically a clean sound to a never ending sustain. Be careful, though; it can get really noisy at high settings. Next in the line is the BODY dial. With this control, you can decide how much of the bass is going into the fuzz section. You can set this knob to go from a tight overdrive to a full-on nasty fuzz with anything in between. Like with the FUZZ knob, be careful as it may get really noisy, this time at the low settings. BRITE lets you choose between more of a 'hairy' fuzz or a darker, smoother one. With this one, it all depends on your personal taste, as well as the amp you're using. Last in the line is RANGE. This control sets the gain of the input transistor. What that means is when you turn it to the max, the sound will become more aggressive, fuzzy, but also the noise floor will get drastically elevated. Lower settings will provide a darker sound with a tamer response. You can experiment with the RANGE control as you wish, but around 80% of the max is an excellent place to start the fun with.

If you miss the times when humankind set their first steps on the moon while Mr. Gilmour provided the perfect musical landscape, then look no further. You have arrived at your destination...The eagle has landed!

Controls

- BODY
- BRITE
- FUZZ
- RANGE
- VOLUME

Bill of materials

Resistors	
Part	Value
R1	1m
R2	56k
R3	470k
R4	10k
R5	100k
R6	180r
R7	820r
R8	100r
R9	100k
R10	56k
R11	56k
R12	2k7
R13	10k
R14	4k7
R15	100r

Capacitors	
Part	Value
C2	100p
C4	4n7
C5	5n6
C6	220n
C7	500p
C8	220p
C9	220p
C11	15n
C12	3n3
C13	2n2

Electrolytics Capacitors	
Part	Value
C1	10u
C3	100u
C10	100u
C14	100u

Potentiometers	
Part	Value
BODY**	100k a
BRITE	100k b
FUZZ*	1k c
RANGE	2k b
VOLUME	100k a

Transistors	
Part	Value
Q1	bc109c
Q2	bc109c
Q3	bc109c

Diodes	
Part	Value
D0	1n5817
LED	3mm Red LED

Shopping list

Resistors		
Qty	Value	Parts
2	100k	R5, R9
2	100r	R8, R15
2	10k	R4, R13
1	180r	R6
1	1m	R1
1	2k7	R12
1	470k	R3
1	4k7	R14
3	56k	R2, R10, R11
1	820r	R7

Capacitors		
Qty	Value	Parts
1	100p	C2
1	15n	C11
1	220n	C6
2	220p	C8, C9
1	2n2	C13
1	3n3	C12
1	4n7	C4
1	500p	C7
1	5n6	C5

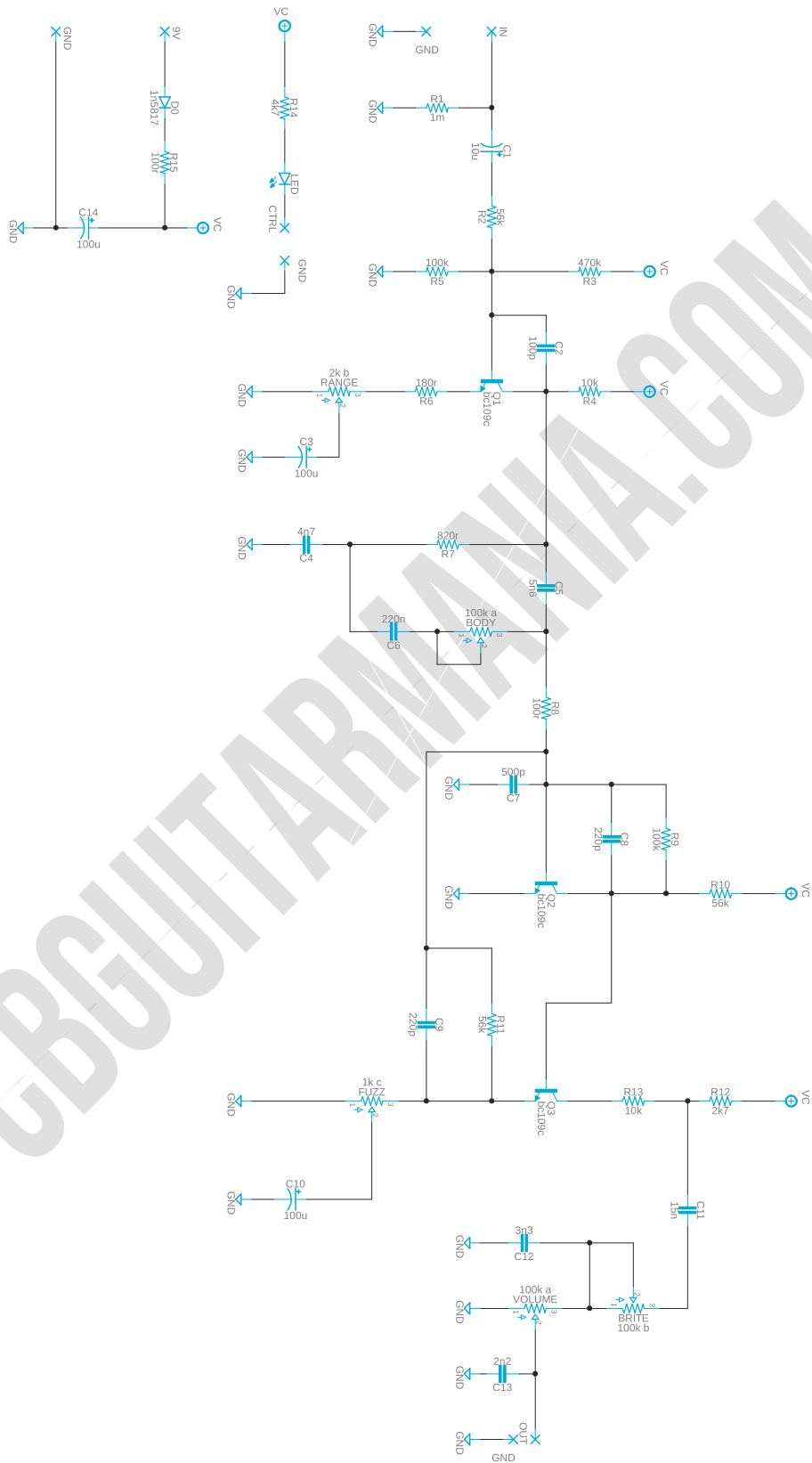
Electrolytics Capacitors		
Qty	Value	Parts
3	100u	C3, C10, C14
1	10u	C1

Potentiometers		
Qty	Value	Parts
2	100k a	BODY**, VOLUME
1	100k b	BRITE
1	1k c	FUZZ*
1	2k b	RANGE

Transistors		
Qty	Value	Parts
3	bc109c	Q1, Q2, Q3

Diodes		
Qty	Value	Parts
1	1n5817	D0
1	3mm Red LED	LED

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.

FUZZ* & BODDY** We found linear pots do a better job than the originals on the BOM. You can experiment with replacing Fuzz and Body pots for 1K B and 100K B.

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!