

Love Cheese

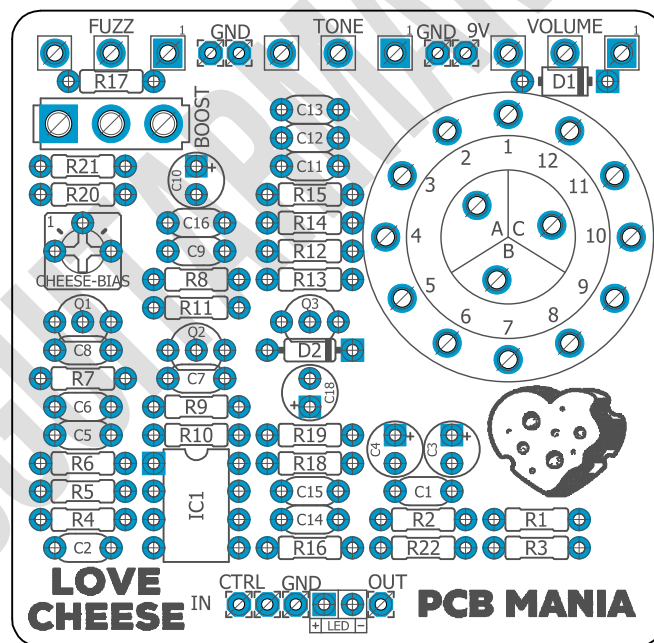
Based on:
Lovetone Big Cheese
Effect type:
Harmonically rich Fuzz
Build difficult:
Intermediate

Number of parts:
Average, total 51 components
Technology:
Op Amp
Power consumption:
9V

Enclosure type:
125b
Get your board at:
[Love Cheese](#)
Get your kit at:
[Das Musikding \(Europe\)](#)

Project overview:

Try this classic, tasty, busy, and beautiful, harmonically rich fuzz inspired by Big Cheese. Made in the UK for only a short time in the mid to late 1990s, it offers many of the classic characteristics that every fuzz fan will relate to, and it goes beyond creating an absolutely distinct character of its own.



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Introduction

Versatile doesn't even begin to describe this pedal. Its control set will let you achieve just about any fuzz tone you can imagine, from violin-like sustain to red-hot buzz to spitty grind and so on.

Volume, Fuzz, and Tone knobs give you plenty of tone-sculpting power, while the Boost switch lets you control the volume that comes out of your amplifier. Last but not least, we have the 4-position tone switch that unlocks all of the different flavors that Love Cheese can offer.

Controls

Potentiometers

- Fuzz
- Tone
- Volume

Switches

- Boost

Bill of materials

Resistors	
Part	Value
R1	100r
R2	22k
R3	22k
R4	2m2
R5	1k
R6	330k
R7	100k
R8	100k
R9	470r
R10	470k
R11	10k
R12	47k
R13	1k
R14	47k
R15	47k
R16	330k
R17	4k7
R18	33k
R19	470r
R20**	10k or more
R21	4k7
R22	4k7

Capacitors	
Part	Value
C1	100n
C2	47n
C5	1n5
C6	47n
C7	47n
C8	47p
C9	47n
C11	2n2
C12	6n8
C13	10n
C14	47n
C15	100p
C16	100n

Electrolytics Capacitors	
Part	Value
C3	100u
C4	47u
C10	4u7
C18	4u7

Potentiometers	
Part	Value
FUZZ	1K B
TONE	100K B

VOLUME	10K A
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Trim pots	
Part	Value
CHEESE-BIAS	1k

IC	
Part	Value
IC1	TL072

Switches	
Part	Value
MODE	3P4T rotary
BOOST*	SPDT On-On

Transistors	
Part	Value
Q1	BC550
Q2	BC549C
Q3	BC549C

Diodes	
Part	Value
D1	1N5817
D2	1N914

Shopping list

Resistors		
Qty	Value	Parts
2	100k	R7, R8
1	100r	R1
1	10k	R11
1	10k or more	R20**
2	1k	R5, R13
2	22k	R2, R3
1	2m2	R4
2	330k	R6, R16
1	33k	R18
1	470k	R10
1	470r	R9
1	470r	R19
2	47k	R12, R15
1	47k	R14
2	4k7	R17, R21
1	4k7	R22

Capacitors		
Qty	Value	Parts
2	100n	C1, C16
1	100p	C15
1	10n	C13
1	1n5	C5
1	2n2	C11
1	47n	C9
4	47n	C2, C6, C7, C14
1	47p	C8
1	6n8	C12

Electrolytics Capacitors		
Qty	Value	Parts
1	100u	C3
1	47u	C4

2	4u7	C10, C18
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Potentiometers		
Qty	Value	Parts
1	100K B	TONE
1	10K A	VOLUME
1	1K B	FUZZ

Trim pots		
Qty	Value	Parts
1	1k	CHEESE-BIAS

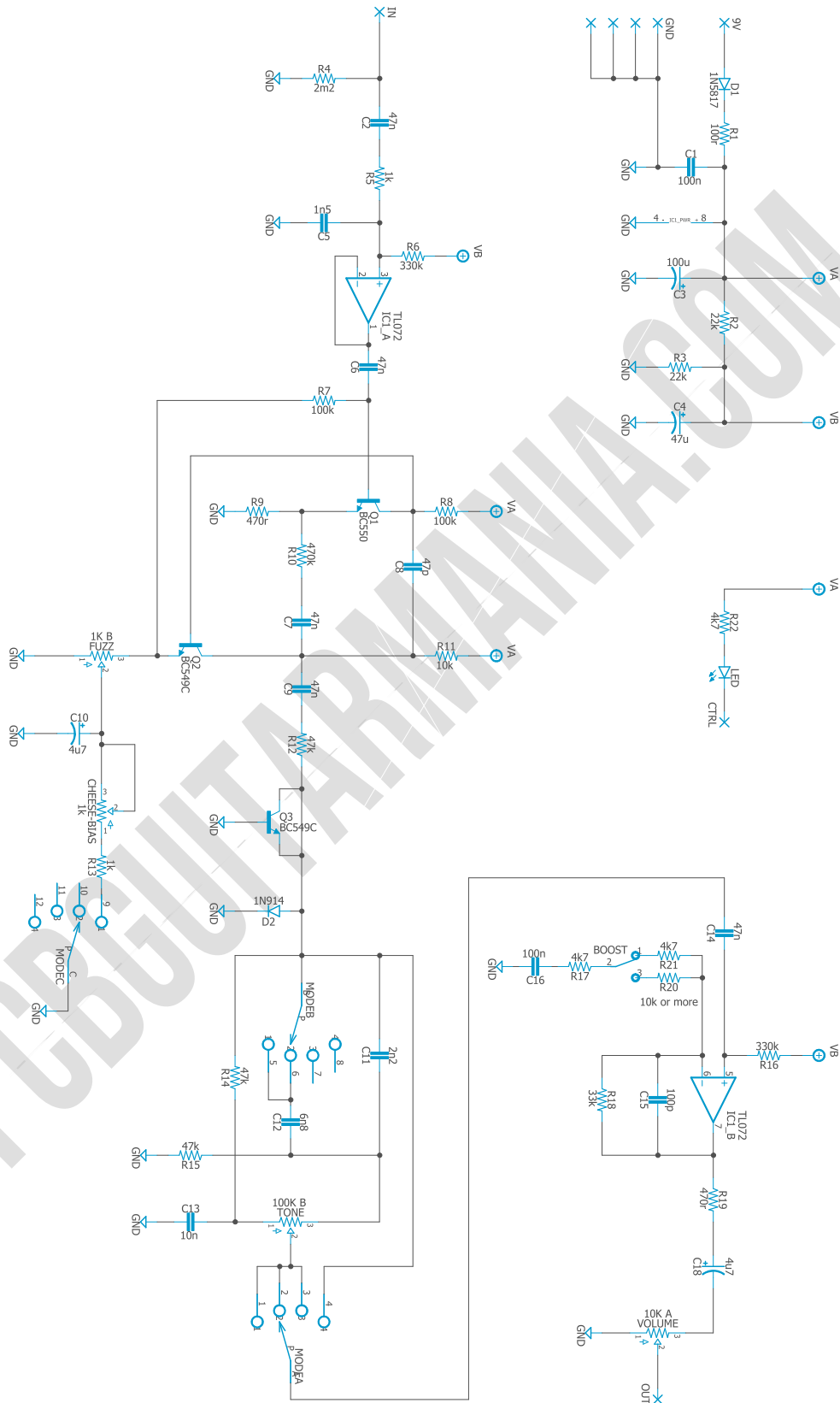
IC		
Qty	Value	Parts
1	TL072	IC1

Switches		
Qty	Value	Parts
1	3P4T rotary	MODE
1	SPDT On-On	BOOST*

Transistors		
Qty	Value	Parts
2	BC549C	Q2, Q3
1	BC550	Q1

Diodes		
Qty	Value	Parts
1	1N5817	D1
1	1N914	D2

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

Boost Switch*

Allows you to choose between the original version and a modded one according to your preference.

R20**

Add a bigger value for more boost. I used a 22k with excellent results. For that value, it could be placeable to rather use a second Footswitch instead of the SPDT boost toggle.

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.

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