

Boogie Buster

Based on:

Mesa Boogie Tone Buster

Effect type:

Transparent boost

Build difficult:

Intermediate

Amount of parts:

Average, total 40 components

Technology:

Opamp

Power consumption:

9V

Enclosure type:

125b

Get your board at:

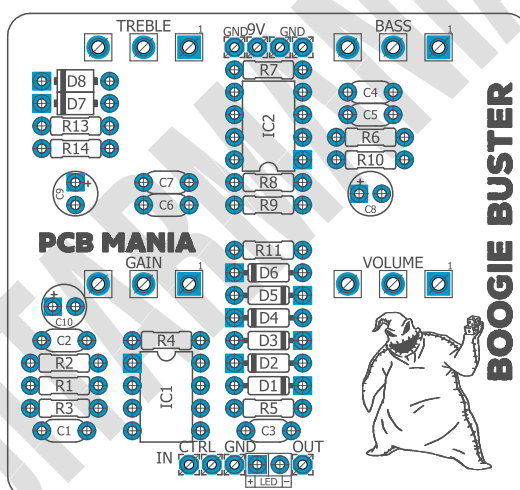
[Boogie Buster](#)

Get your kit at:

[Das Musikding \(Europe\)](#)

Project overview:

Transparent boost pedal with plenty of headroom and gain. This Mesa Boogie Tone Buster-inspired pedal can take your guitar to the limit of saturation and beyond!



Index

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

Introduction

It's incredible how a gain boost without any additional overdrive can affect amplifiers in very different ways, and this superb booster pedal is proof of that.

The Boogie Buster preamp is perfect if you need to give some blast to your favorite amp or want more gain and volume for your solos! The bass and treble controls assure versatility to fulfill any need, and it can also provide some subtle cream overdrive sounding to your wave if desired.

Controls

- Bass
- Gain
- Treble
- Volume

Bill of materials

Resistors	
Part	Value
R1	2m2
R2	15k
R3	1m
R4	47k
R5	4k7
R6	33k
R7	10k
R8	4k7
R9	470r
R10	100k
R11	5k6
R13	10k
R14	10k

Capacitors	
Part	Value
C1	100n
C2	100n
C3	51pf
C4	33n
C5	33n
C6	4n7
C7	4n7

Electrolytics Capacitors	
Part	Value
C8	10u
C9	47u
C10	47u

Potentiometers	
Part	Value
BASS	50K B
GAIN	100k B
TREBLE	50k B
VOLUME	100k B

IC	
Part	Value
IC1	JRC4558D
IC2	TL072P (TI)

Diodes	
Part	Value
D1	1n4148
D2	1n4148
D3	1n4148
D4	1n4148
D5	1n4148
D6	1n4148
D7	1n4744
D8	1n5817
LED1	3mm red LED
LED2	3mm red LED

Shopping list

Resistors		
Qty	Value	Parts
1	100k	R10
3	10k	R7, R13, R14
1	15k	R2
1	1m	R3
1	2m2	R1
1	33k	R6
1	470r	R9
1	47k	R4
2	4k7	R5, R8
1	5k6	R11

Capacitors		
Qty	Value	Parts
2	100n	C1, C2
2	33n	C4, C5
2	4n7	C6, C7
1	51pf	C3

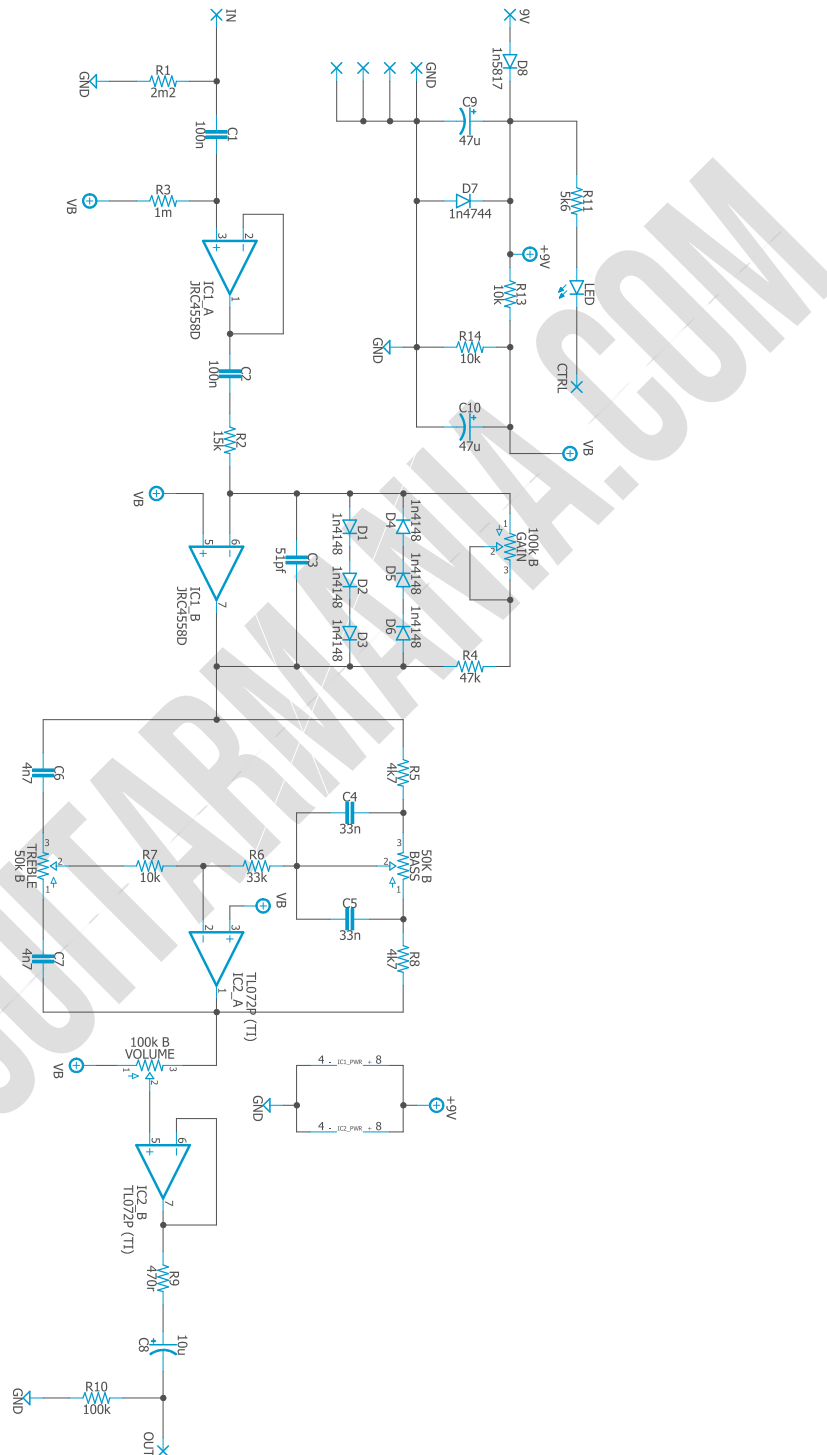
Electrolytics Capacitors		
Qty	Value	Parts
1	10u	C8
2	47u	C9, C10

Potentiometers		
Qty	Value	Parts
2	100k B	GAIN, VOLUME
1	50K B	BASS
1	50k B	TREBLE

IC		
Qty	Value	Parts
1	JRC4558D	IC1
1	TL072P (TI)	IC2

Diodes		
Qty	Value	Parts
6	1n4148	D1, D2, D3, D4, D5, D6
1	1n4744	D7
1	1n5817	D8
2	3mm red LED	LED1, LED2

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 [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!