

Love.45

Based on:
Lovepedal JTM

Effect type:
Classic British preamp

Build difficult:
Easy

Amount of parts:
Low, total 16 components

Technology:
NPN Transistor

Power consumption:
9V

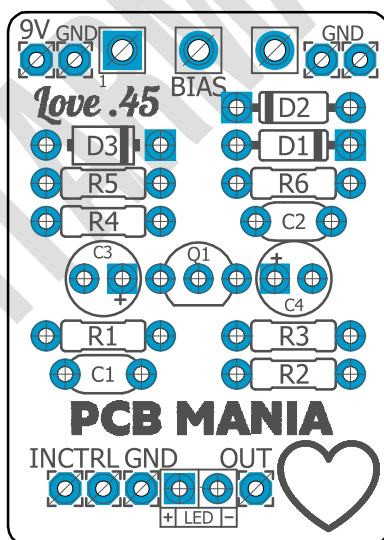
Enclosure type:
1590a or bigger

Get your board at:
[Love.45](#)

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

Project overview:

Inspired by the classic and timeless Lovepedal JTM, an authentic representation of the JTM45 tone “vintage amp” flavor, excellent for stacking with fuzzes and overdrives,



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Introduction

The Love.45 is a one-knob wonder as simple to use as it gets, an Amp-in-a-box incredibly dynamic and responsive to your unique playing style. It delivers those classic, touch-sensitive, British tones only reachable by a circuit with the perfect balance of touch, tone, feel, reliability, and grace.

Having the sounds of the venerable Marshall JTM45 is a big deal. We are talking about one of the most iconic mid-60's British era type tones here. Eric Clapton chose this amp because he could fit in the boot of his car, creating the combo that became remembered as the "Bluesbreaker" that later was responsible for the era-defining tones of the "Beano" album. With the Love.45, you can fit it in the palm of your hand, turn it on, turn it up and rock out!

Controls

- Bias

Bill of materials

Resistors	
Part	Value
R1	1m
R2	2m2
R3	3k3
R4	330r
R5	3k3
R6	4k7

Capacitors	
Part	Value
C1	47n
C2	100n

Electrolytics Capacitors	
Part	Value
C3	47u
C4	47u

Potentiometers	
Part	Value
BIAS	5k B

Transistors	
Part	Value
Q1	2N5089

Diodes	
Part	Value
D1	bat46
D2	bat46
D3	1n5817
LED	3mm red LED

Shopping list

Resistors

Qty	Value	Parts
1	1m	R1
1	2m2	R2
1	330r	R4
2	3k3	R3, R5
1	4k7	R6

Capacitors

Qty	Value	Parts
1	100n	C2
1	47n	C1

Electrolytics Capacitors

Qty	Value	Parts
2	47u	C3, C4

Potentiometers

Qty	Value	Parts
1	5k B	BIAS

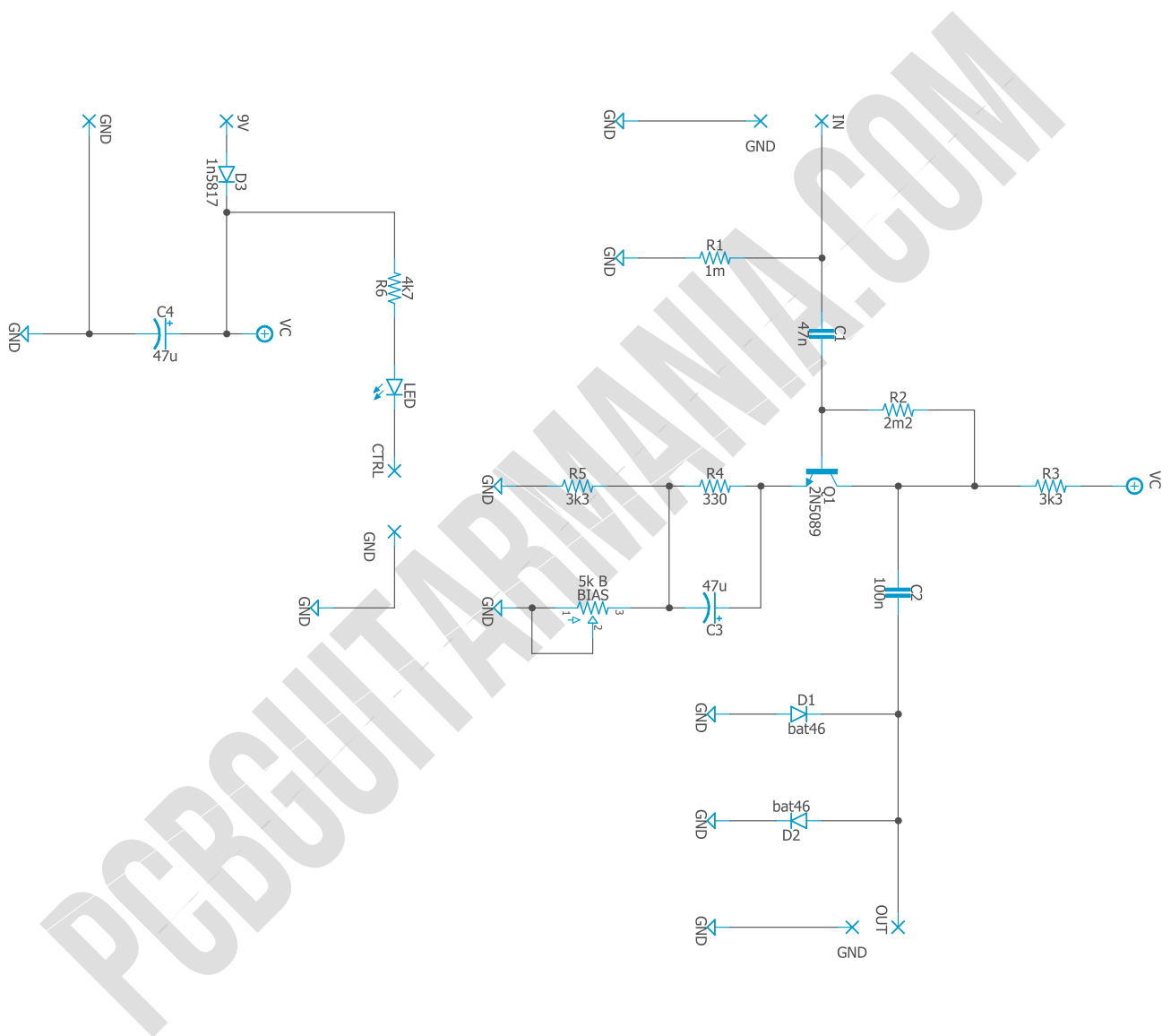
Transistors

Qty	Value	Parts
1	2N5089	Q1

Diodes

Qty	Value	Parts
1	1n5817	D3
2	bat46	D1, D2
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.

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!