

# Tweed Bassman 59

**Based on:**  
Fender Bassman pre amp

**Effect type:**  
Pre amp Emulator

**Build difficult:**  
Average

**Amount of parts:**  
Average, total 60 components

**Technology:**  
Jfet Buffer + pickup simulator in front of a fuzz Silicon Fuzz face

**Power consumption:**  
9V(9mA)

**Enclosure type:**  
125b

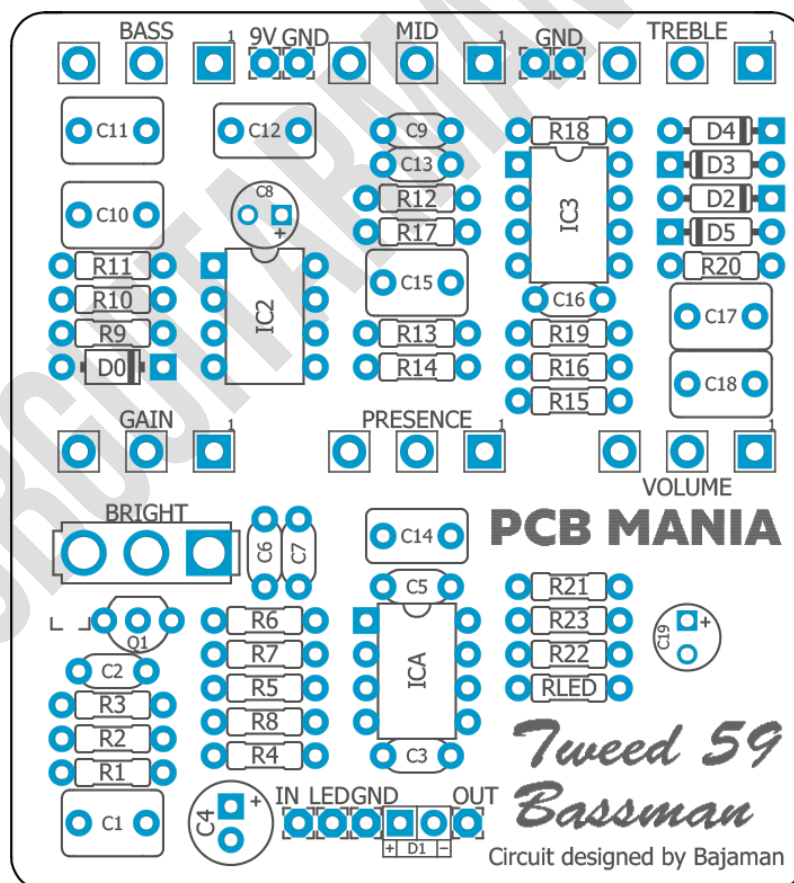
**Get your board at:**  
[Tweed Bassman 59](#)

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

## Project overview:

The Tweed Bassman 59 emulator is part of a series of preamps in a box emulating the tone of some of the most iconic amplifiers.

For this occasion we have not only the preamp section but we have also included the tone stack and the power section of this all time classic.



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## Introduction

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The Fender 1959 Bassman™ was originally designed (as the name says) to be a Fenders first dedicated Bass Amplifier that delivers a lot volume without getting distorted. Over the year guitar players started to fall in love with it as well because of its massive headroom that provides you with the famous F-cleans and that's one of the reasons why it's being build with a small time out from 1951 till now. Bajaman did a great job on emuluation this amplifiers preamp and we made a pcb for you to join the party.

Because the EQ is massive part of the overall tone it's included in the pcb, as well as the power section after it, so prepare yourself cause this little thing can get pretty loud!

Side note 2.5nf are pretty hard to source. You can use a 2.7nf and still have more then just decent sounding emulation of the amp and it works best in the return of a FX loop. But I still had great results to shape clean channel when used in front of my amps.

## Controls

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- Gain
- Presence
- Bass
- Mids
- Treble
- Volume
- Bright switch

# Bill of materials

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Resistors	
Part	Value
R1	1M5
R2	1M
R3	100K
R4	1M
R5	3K3
R6	2K7
R7	3K3
R8	1K8
R9	2K7
R10	2K7
R11	3K9
R12	180K
R13	5K6
R14	120R
R15	680R
R16	2K7
R17	3K9
R18	18K
R19	2K2
R20	1M
R21	1K
R22	10K
R23	10K
RLED	4K7

Potentiometers	
Part	Value
BASS	B50K
GAIN	B100K
MID	B1K
PRESENCE	B10K
TREBLE	B10K
VOLUME	B100K

Transistors	
Part	Value
Q1	J201*

Capacitors	
Part	Value
C1	1u
C2	100n
C3	1n5
C5	220n
C6	1n
C7	1n
C9	2n5
C10	1u
C11	1u
C12	560n
C13	220n
C14	680n
C15	1u
C16	330p
C17	1u
C18	1u

Electrolytics Capacitors	
Part	Value
C4	47u
C8	10u
C19	1u

IC	
Part	Value
ICA	TL072
IC2	TL062
IC3	TL062

Diodes	
Part	Value
D0	1N5817
D1	LEDSTATUS-LED
D2	1N4148
D3	1N4148
D4	1N4148
D5	1N4148

# Shopping list

Resistors		
Qty	Value	Parts
1	100K	R3
2	10K	R22, R23
1	120R	R14
1	180K	R12
1	18K	R18
1	1K	R21
1	1K8	R8
3	1M	R2, R4, R20
1	1M5	R1
1	2K2	R19
4	2K7	R6, R9, R10, R16
2	3K3	R5, R7
2	3K9	R11, R17
1	4K7	RLED
1	5K6	R13
1	680R	R15

Capacitors		
Qty	Value	Parts
1	100n	C2
2	1n	C6, C7
1	1n5	C3
6	1u	C1, C10, C11, C15, C17, C18
2	220n	C5, C13
1	2n5	C9
1	330p	C16
1	560n	C12
1	680n	C14

Electrolytics Capacitors		
Qty	Value	Parts
1	10u	C8
1	1u	C19
1	47u	C4

Potentiometers		
Qty	Value	Parts
2	B100K	GAIN, VOLUME
2	B10K	PRESENCE, TREBLE
1	B1K	MID
1	B50K	BASS

IC		
Qty	Value	Parts
2	TL062	IC2, IC3
1	TL072	ICA

Transistors		
Qty	Value	Parts
1	J201*	Q1

Diodes		
Qty	Value	Parts
4	1N4148	D2, D3, D4, D5
1	1N5817	D0
1	LED (your choice)	D1

Switches		
Qty	Value	Parts
1	SPDT ON-ON	Bright

# Components Recommendations

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As many people like to experiment some pedals with higher voltage, always ensure the max tolerance of your **electrolytic capacitors** is over 25v.

This board has been tested using Film box capacitors for most of the values over 1nf, and ceramics discs for the ones 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 exclusively regarding this project. It doesn't include all the hardware like the 3PDT bypass switch, audio/dc jacks, enclosure, etc.

**J201\* In this project you can choose either use the SMD version of this transistor or the standard through hole. IT'S STRONGLY RECOMMENDED TO USE THE SMD DUE THE AMMOUNT OF COUNTERFEITS OF THE THROUGH HOLE VERSION.**

## Build Notes

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If this is one of your first projects I recommend you to take a look on 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

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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 control slug of your 3PDT.

This board has been designed to match our EZ 3PDT PCB check it [here](#) to access to our [Pedal Wiring Guide](#)

# Drill Template

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This Project has been planned to fit into a 1590bb enclosure type.

Check the Attached “Drilling templates” to drill the box properly. The files are on Scale 1:1, ready to print in an A4 page.

# Licensing and Usage

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We really appreciate your trust and support buying this PCB, as well as your will to dive into the DIY electronics world. That’s why for us is really important that you can make this project work properly and to enjoy not only the building process, but also to experiment and play with it on your rig.

We try to reply to every question we receive on our email or in our social media, but we try to encourage all our customers to join our [PCB Guitar Mania – Builders Group](#) on Facebook, in order to post all your doubts, issues, suggestions or request, as well to share your builds and have some feedback from us and other fellow builders!

All of our projects have been tested following this same guide on their standard configurations. Although, not all of the variations and mods have necessarily been tested. These are suggestions based on the schematic analysis, and on the experiences and opinions of others. Feel free to share with us your opinions and suggestions regarding the mods your own personal experimentation.

These boards may be used for commercial endeavors in any quantity unless specifically noted. No attribution is necessary, though accreditation or a link back is always greatly 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 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 silk screen, 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 own designs, with your brand and logo we could certainly reach an agreement.

Follow us on [Instagram](#) and [Facebook](#) to stay in tune with the latest projects!