Triple Wicked

Based on:

Wampler's Triple Wreck

Effect type:

High Gain Distortion with Contour Dual Operation Amplifiers +

booster

Build difficult:

Advanced

Number of parts:

High, total 90 components

Technology:

Silicon transistor

Power consumption:

9٧

Enclosure type:

125b

Get your board at:

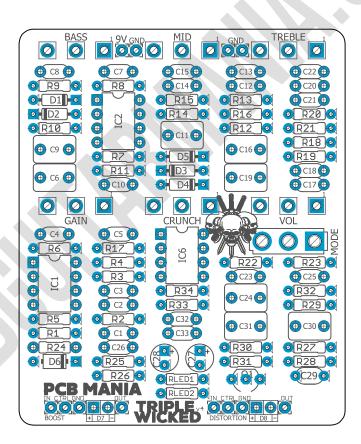
Triple Wicked

Get your kit at:

Das Musikding (Europe)

Project overview:

The Triple Wicked is one the best solutions out there for those ones who are looking for a high gain unit in their board. Especially great for metal players.



Index

- Project overview
- 2. Index, Introduction & Controls
- 3. Bills of Materials, BOM
- 4. Shopping Lists

- 5. Schematic
- 6. Components, Build Notes, Wiring Diagram
- 7. Drill Template, Licensing and Usage

Introduction

The Triple Wicked all the heavy modern high gain chunk your pedalboard needs, is time to get all those rectified amp tones right to your amp! This board is inspired by the Wampler Pedals Triple Wreck distortion, a pedal part of Wampler's Amp-in-a-Box series.

Triple Wicked has two distinct voicings. One setting adds a warmer thump to your tone, and the othersetting adds a high-end sparkle for a more full-spectrum sound. The footswitchable Boost features a control that lets you tweak your gain to higher and heavier or to a fuzzy mess.

Our 4th version of this PCB fits comfortably in a 125b enclosure.

Controls

Potentiometers

- Bass EQ for the bass frequencies.
- Mids EQ for the mids frequencies.
- Treble EQ for the treble frequencies
- Countour boost Controls the contour booster.
- Volume Controls the output volume
- Gain Controls the amount of gain

Switches

- Sw1
- Distortion
- Boost

Bill of materials

Resistors	
Part	Value
R1	1M
R2	1K
R3	470K
R4	10K
R5	470K
R6	1K
R7	10K
R8	470K
R9	1K
R10	47K
R11	100K
R12	1K
R13	4.7K
R14	10K
R15	1K
R16	470K
R17	470K
R18	47K
R19	47K
R20	33K
R21	33K
R22	680K
R23	10K
R24	jumper
R25	10K
R26	10K
R27	1M
R28	100R
R29	1M
R30	100K
R31	1K
R32	47K
R33	47K
R34	100K
RLED1	4.7K
RLED2	4.7K

Capacitors Part	
Part	Value
C1	220pF
C2	220nf
C3	33n
C4	560pF
C5	220n
C6	1uF
C7	220pF
C8	220n
C9	1uF
C10	220pF
C11	1uF
C12	4.7n
C13	47n
C14	47n
C15	100n
C16	1uF
C17	470pF
C18	47n
C19	1uF
C20	100n
C21	1n
C22	47n
C23	330pF
C24	1uF
C25	4.7n
C26	10n
C29	100pF
C30	1uF
C31	2.2uF
C32	10n
C33	10n

Electrolytic Capacitors		
Part	Value	
C27	100uF electro	
C28	10uF electro	

Semiconductors		
Part	Value	
IC1	LM4558N	
IC2	LM4558N	
IC3	LM4558N	

Transistors	
Part	Value
Q1	2N5089

Potentiometers		
Part	Value	
BASS	100K C	
CRUNCH	100K A	
TREBLE	50K A	
GAIN	100K A	
VOL	100K A	
MID	100K A	

Switches		
Part	Value	
SW1	SPDT ON-ON	
Distortion	3PDT Stomp foot	
Boost	3PDT Stomp foot	

Diodes		
Part	Value	
D1	1N4148	
D2	1N4148	
D3	1N4148	
D4	1N4148	
D5	1N4148	
D6	1N5817	
DLED	RED LED	
BLED	GREEN LED	

Shopping list

Resist	Resistors		
Qty	Value	Parts	
6	10K	R4, R7, R14, R23, R25, R26	
3	100K	R11, R30, R34	
1	100R	R28	
6	1K	R2, R6, R9, R12, R15, R31	
3	1M	R1, R27, R29	
2	33K	R20, R21	
3	4.7K	R13, RLED1, RLED2	
5	470K	R3, R5, R8, R16, R17	
5	47K	R10, R18, R19, R32, R33	
1	680K	R22	

Capac	Capacitors		
Qty	Value	Parts	
1	470pF	C17	
1	1n	C21	
7	1uF	C6, C9, C11, C16, C19, C24, C30	
1	2.2uF	C31	
2	220n	C5, C8	
1	220nf	C2	
1	560pF	C4	
2	4.7n	C12, C25	
1	330pF	C23	
3	220pF	C1, C7, C10	
1	33n	C3	
2	10n	C32, C33	
1	10n	C26	
2	100n	C15, C20	
1	100pF	C29	
4	47n	C13, C14, C18, C22	

Electrolytic Capacitors		
Qty	Value	Parts
1	10uF	C28
1	100uF	C27

Semiconductors		
Qty	Value	Parts
3	LM4558	IC1, IC2, IC3

Transistors		
Qty	Value	Parts
1	2N5089	Q1

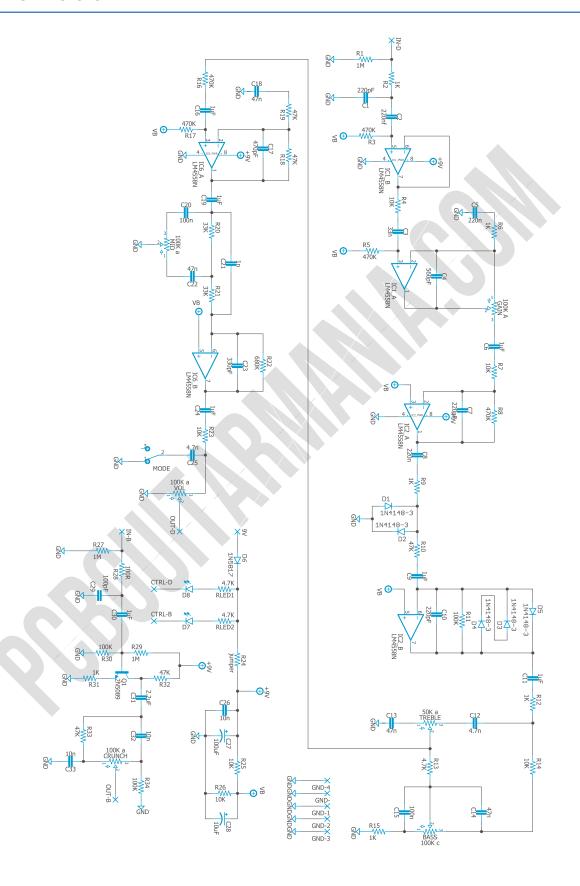
Pots		
Qty	Value	Parts
1	100K A	GAIN
3	100K A	CRUNCH, MID, VOL
1	100K C	BASS
1	50K A	TREBLE

Switches		
Qty	Value	Parts
1	SPDT ON-ON	SW1
2	3PDT Stomp foot	Distortion, Boost

Diodes		
Qty	Value	Parts
1	1N5817	D6
5	1N4148	D1, D2, D3, D4, D5

Jacks		
Qty	Value	Parts
1	DC JACK	-
2	AUDIO JACK	-

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

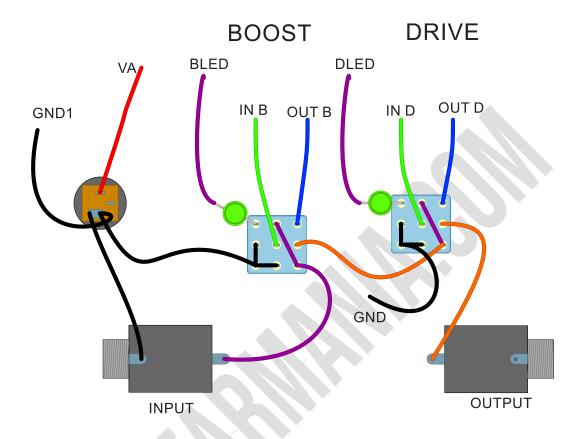
Wiring Diagram

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.

Off Board Wiring



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 <u>PCB Guitar Mania – Builders Group</u> 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 <u>Instagram</u> and <u>Facebook</u> to stay in tune with the latest projects!