

Revolution II

Based on:

Revv G2™

Effect type:

High gain preamp

Build difficult:

Advanced

Amount of parts:

High, total 76 components

Technology:

Dual OpAmp

Power consumption:

9V (22mA)

Enclosure type:

125b

Get your board at:

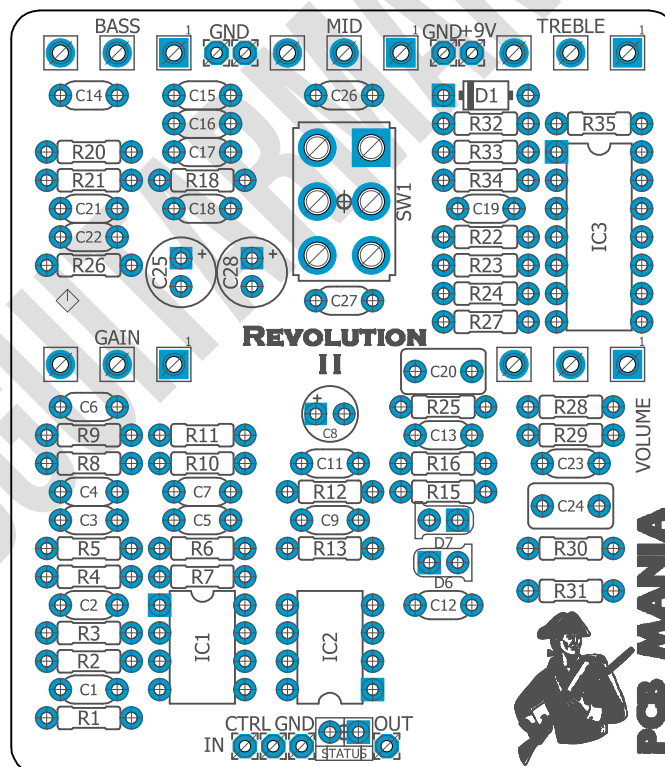
[Revolution II](#)

Get your kit at:

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

Project overview:

Here we have the Revolution II to complete the Revv inspired trilogy, and for sure the most versatile of the tree of them! It covers a wide gain spectrum that allows you to go from a clean transparent boost to a tight high gain overdrive!



Index

1. 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

To finish up the Revv™ pedal line up here comes the revolution two based around the G2. Supposed to be pedal with the lowest amount of gain for everything between slightly grit to hard rock. But don't get confused by that, when cranking the volume and the gain it's still pretty hot and can make some metal guys out there happy. Well at least it makes me very happy and I could totally crank it without getting oscillation or the need to add a buffer before to get rid of that. Actually it's the one I expected the less from what heard before in demos and surprised me the most once I had it in my hands. So you are not just building this to have all three but because it provides you with a lot of useful tones.

For the guys that have trouble with designing their own artworks but don't want to have bare enclosures - ask for a faceplate, we already offering the, for the revolution three and four.

Controls

Potentiometers

- Gain
- Volume
- Bass
- Treble
- Mids

Switches

- SW1

Bill of materials

Resistors	
Part	Value
R1	1m
R2	470k
R3	10k
R4	47k
R5	82k
R6	33k
R7	10k
R8	82k
R9	22k
R10	33k
R11	56K
R12	10k
R13	22k
R15	4k7
R16	56k
R18	2k
R20	4k7
R21	100k
R22	470k
R23	10k
R24	22k
R25	1m
R26	22k
R27	1k5
R28	470k
R29	15k
R30	2k
R31	4k7
R32	10R
R33	20K

R34	20K
R35	1K5

IC	
Part	Value
IC1	TL072
IC2	TL072
IC3	TL074

Capacitors	
Part	Value
C1	22n
C2	47p
C3	4n7
C4	2n2
C5	1n
C6	220nf
C7	120p
C9	120p
C11	22n
C12	10n
C13	1n
C14	47n
C15	100n
C16	2n2
C17	47n
C18	10n
C19	2n2
C20	220nf
C21	10n
C22	10n

C23	47p
C24	220nf
C26	100n
C27	100p

Electrolytics Capacitors	
Part	Value
C8	4u7
C25	100u
C28	22u

Potentiometers	
Part	Value
BASS	A100K
GAIN	B1M
MID	B100k
TREBLE	A50k
VOLUME	A50k

Switches	
Part	Value
SW1	DPDT ON-OFF-ON

Diodes	
Part	Value
D1	1N5817
D6	RED LED 3MM
D7	RED LED 3MM
LED	3mm Green LED

Shopping list

Resistors		
Qty	Value	Parts
1	100k	R21
1	10R	R32
4	10k	R3, R7, R12, R23
1	15k	R29
1	1K5	R35
1	1k5	R27
2	1m	R1, R25
2	20K	R33, R34
4	22k	R9, R13, R24, R26
2	2k	R18, R30
2	33k	R6, R10
3	470k	R2, R22, R28
1	47k	R4
3	4k7	R15, R20, R31
1	56K	R11
1	56k	R16
2	82k	R5, R8

Capacitors		
Qty	Value	Parts
2	100n	C15, C26
1	100p	C27
4	10n	C12, C18, C21, C22
2	120p	C7, C9
2	1n	C5, C13
1	220nf	C6
2	220nf	C20, C24
2	22n	C1, C11
3	2n2	C4, C16, C19
2	47n	C14, C17
2	47p	C2, C23
1	4n7	C3

Electrolytics Capacitors		
Qty	Value	Parts
1	100u	C25
1	22u	C28
1	4u7	C8

Potentiometers		
Qty	Value	Parts

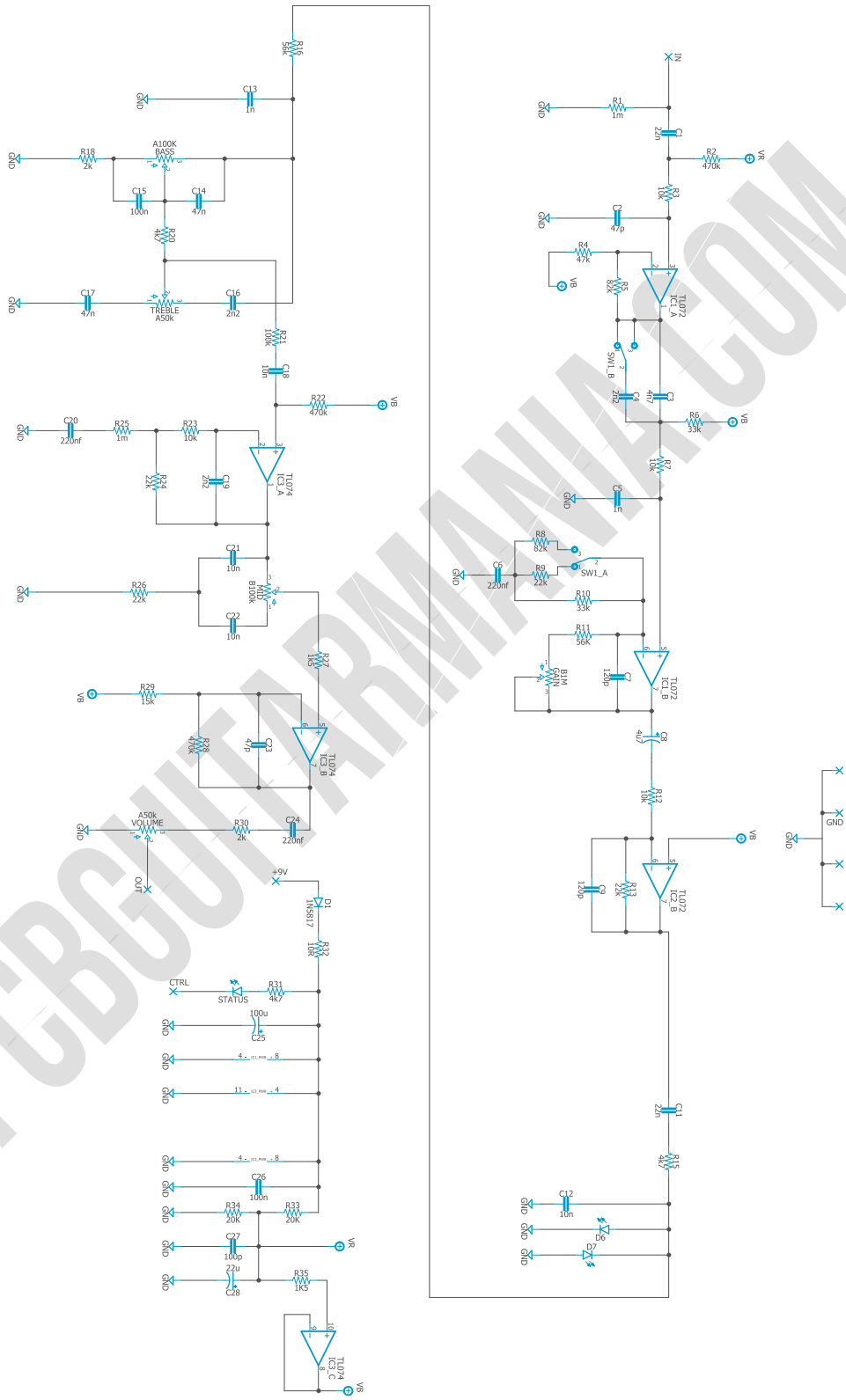
1	A100K	BASS
2	A50k	TREBLE, VOLUME
1	B100k	MID
1	B1M	GAIN

IC		
Qty	Value	Parts
2	TL072	IC1, IC2
1	TL074	IC3

Switches		
Qty	Value	Parts
1	DPDT ON-OFF-ON	SW1

Diodes		
Qty	Value	Parts
1	1N5817	D1
2	RED LED 3MM	D6, D7
1	Green LED 3mm	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!