

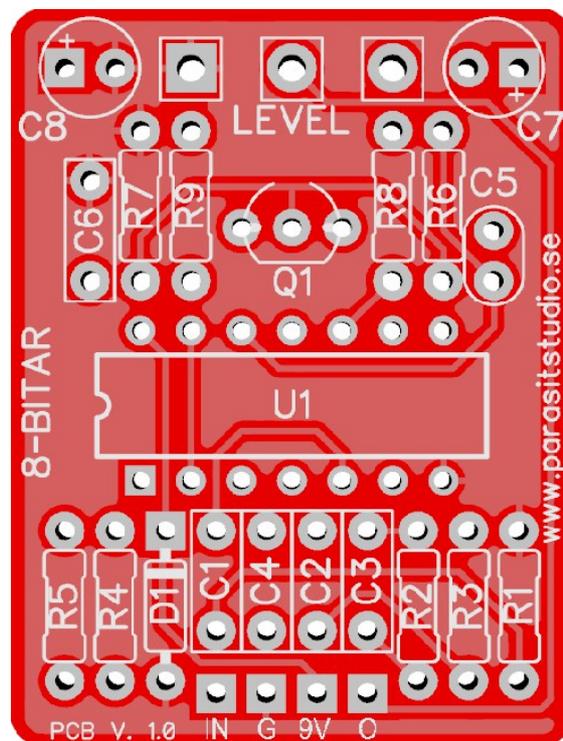
8-BITAR

Build Document last updated march 2018
for PCB version 1.0

The 8-Bitar (Åtta bitar) is a minimalistic octave down pedal.

It does one octave down and has a glitchy and gated sound reminiscent of the 8-bit era of videogaming. It's a very simple one-knob design – a perfect build for a beginner or fans of small simple circuits.

Have fun building!



PCB dimensions: 28mm x 37.5mm

General build tips

- Solder the low profile components first, from short to tall. Recommended order: resistors, diodes, IC socket, film-caps, electrolytics, pots.
- CMOS chips are very sensitive to static charges and can be easily damaged. It's a good idea to wear an anti-static bracelet or at least avoid wearing a wool jumper and petting your cat/dog while building...
- Always use sockets for IC chips and transistors to avoid heating them directly. It also makes it much easier to swap them out if needed.
- Pay special attention to the orientation of the diodes and electrolytics.
- This PCB is designed for a board mounted angled pot, but if you want to use a regular solderlug-pot, the square hole represents pot pin 1.
- The pot is meant to be mounted on the back side (solder side) of the PCB and soldered on the front side (component side).

Wiring

For more info on how to wire up the stompswitch, jacks ect, please visit the Parasit Studio website and download the PDF called "offboard wiring". You can find it here:

<http://www.parasitstudio.se/build-docs.html>

Drilling

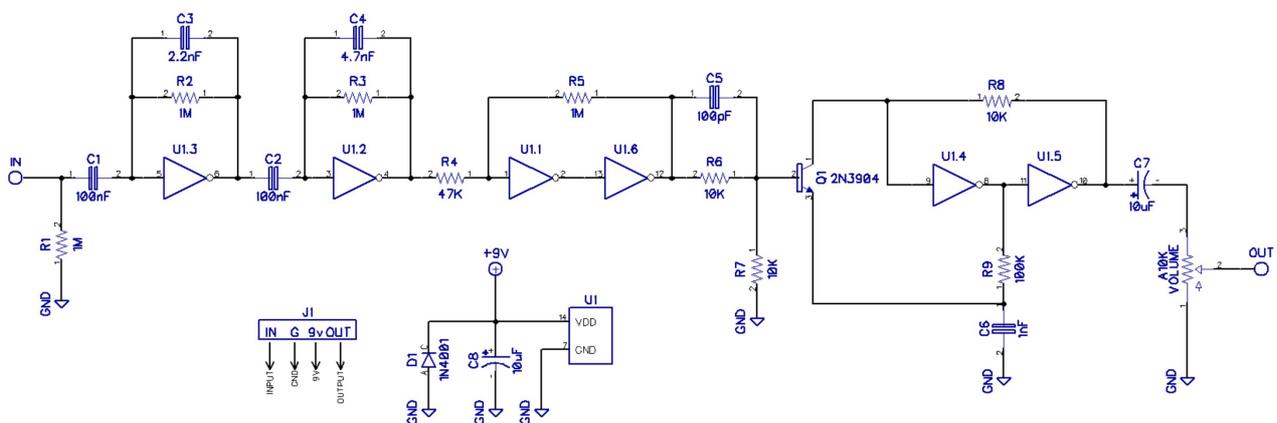
The 8-Bitar has only one knob, so drill at your own preference. It's a good fit for a 1590B enclosure, but it can also fit inside a 1590A with some careful measurement.

8-Bitar Bill of Material (BOM)

Resistors		Capacitors		IC's	
R1	1M	C1	100nF	U1	CD4069UBE
R2	1M	C2	100nF	Transistor(s) Q1 2N3904	
R3	1M	C3	2.2nF		
R4	47K	C4	4.7nF	Potentiometers LEVEL A10K	
R5	1M	C5	100pF		
R6	10K	C6	1nF		
R7	10K	C7	4.7uF		
R8	10K	C8	10uF		
R9	100K	Diodes			
CLR*	4.7K-22K	D1	1N4001		
		1x LED for bypass			

- * = Current Limiting resistor for your bypass LED. This needs to be wired offboard or together with the optional 3PDT board. Choose the appropriate value for your LED. Usually a 4.7K resistor is good for a regular coloured diffused LED and a 15K resistor for a clear superbright LED.
- Other things not included in the BOM but good to have: enclosure, input and output jacks, DC jack, LED holder, 3PDT switch and knobs.

Schematic



Troubleshooting

There's always a chance of running into trouble. To minimize error, follow the BOM and general building tips carefully. Take your time and don't rush. Take a break now and then. Use good solder, and it helps to have a decent soldering station instead of a cheap iron.

If you are still having trouble, please visit the madbean forum Parasit Studio subforum section and ask for help there.

<http://www.madbeanpedals.com/forum/index.php?board=84.0>

If you have bought the Musikding kit and have received a faulty or missing component, please contact musikding directly.

Terms of use

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