

Corruption Device

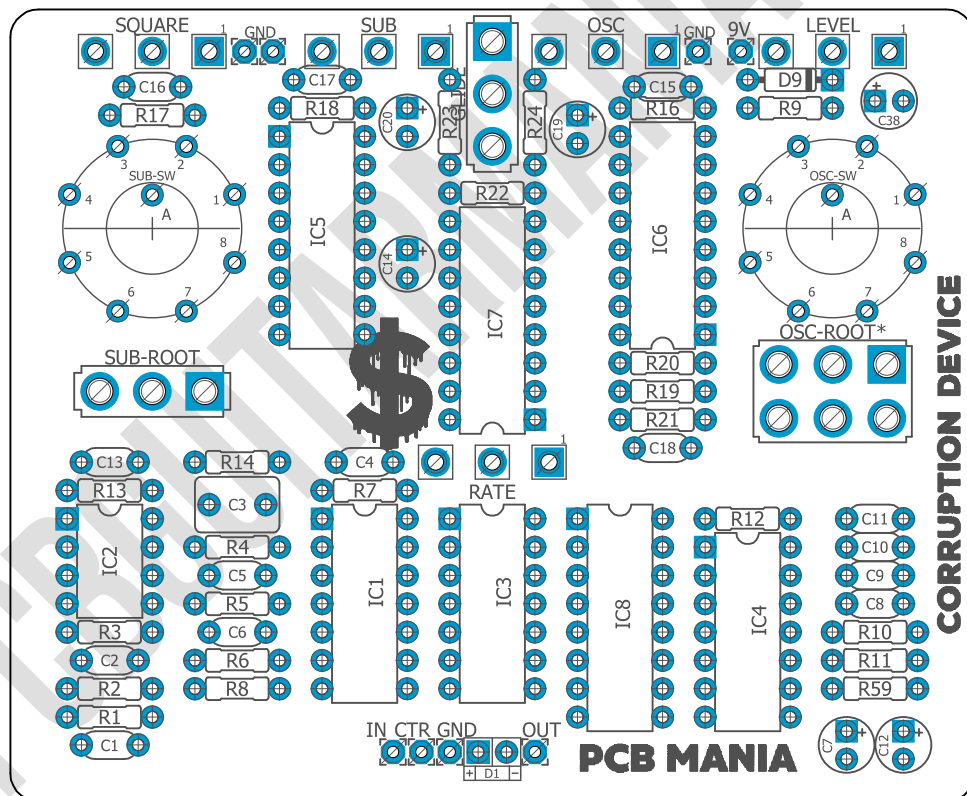
Based on:
EQD Data Corrupter
Effect type:
Synth & Bitcrusher Fuzzes
Build difficult:
Intermediate

Number of parts:
Average, total 69 components
Power consumption:
9V
Enclosure type:
1590bb

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

Project overview:

This temporary Building Doc has all the information you need to build your pedal. In a couple of days, I will upload the complete document with some insides about the PCB and extra information you may find interesting.



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Introduction

Corruption Device will take your input signal and mercilessly amplify it into a massive square wave fuzz tone. After that, the wave will be multiplied, divided and modulated to create an untamed yet repeatable, three-voice guitar synthesizer.

Controls

Potentiometers

- Level
- Rate
- Square
- Sub

Switches

- Osc-Root
- OSC-SW
- SUB-SW
- SUB-Root
- Glide

Bill of materials

Resistors	
Part	Value
R1	1m
R2	1k
R3	1m
R4	470k
R5	1m
R6	470k
R7	10k
R8	10k
R9	10r
R10	47k
R11	47k
R12	10r
R13	10k
R14	1k
R16	10k
R17	10k
R18	10k
R19	1m
R20	10m
R21	100r
R22	47k
R23	100r
R24	10k
R59	4k7

Capacitors	
Part	Value
C1	100p
C2	100n
C3	1u
C4	100n

C5	22n
C6	100n
C8	100n
C9	100n
C10	100n
C11	100n
C13	470p
C15	1u
C16	1u
C17	1u
C18	100n

Electrolytics Capacitors	
Part	Value
C7	100u
C12	10u
C14	1u
C19	22u
C20	2u2
C38	100u

Potentiometers	
Part	Value
LEVEL	100K A
OSC	100K B
RATE	500K A
SQUARE	100K B
SUB	100K B

IC	
Part	Value
IC1	4069N

IC2	TL072
IC3	40106N
IC4	4024N
IC5	4017N
IC6	4017N
IC7	4046N
IC8	4046N

Switches	
Part	Value
OSC-ROOT	Type-2 DPDT (On/On/On)*
OSC-SW	Mini 1P8T rotary switch**
SUB-SW	Mini 1P8T rotary switch**
SUB-ROOT	SPDT (On/On)***
GLIDE	SPDT (On/On)***
-	3PDT Stomp foot

Diodes	
Part	Value
D9	1N5817
D1	3mm Red LED

Jacks	
Part	Value
-	DC JACK
-	AUDIO JACK
-	AUDIO JACK

Shopping list

Resistors		
Qty	Value	Parts
2	100r	R21, R23
7	10k	R7, R8, R13, R16, R17, R18, R24
1	10m	R20
2	10r	R9, R12
2	1k	R2, R14
4	1m	R1, R3, R5, R19
2	470k	R4, R6
3	47k	R10, R11, R22
1	4k7	R59

Capacitors		
Qty	Value	Parts
8	100n	C2, C4, C6, C8, C9, C10, C11, C18
1	100p	C1
4	1u	C3, C15, C16, C17
1	22n	C5
1	470p	C13

Electrolytics Capacitors		
Qty	Value	Parts
2	100u	C7, C38
1	10u	C12
1	1u	C14
1	22u	C19
1	2u2	C20

Potentiometers		
Qty	Value	Parts
1	100K A	LEVEL

3	100K B	SQUARE, SUB, OSC
1	500K A	RATE

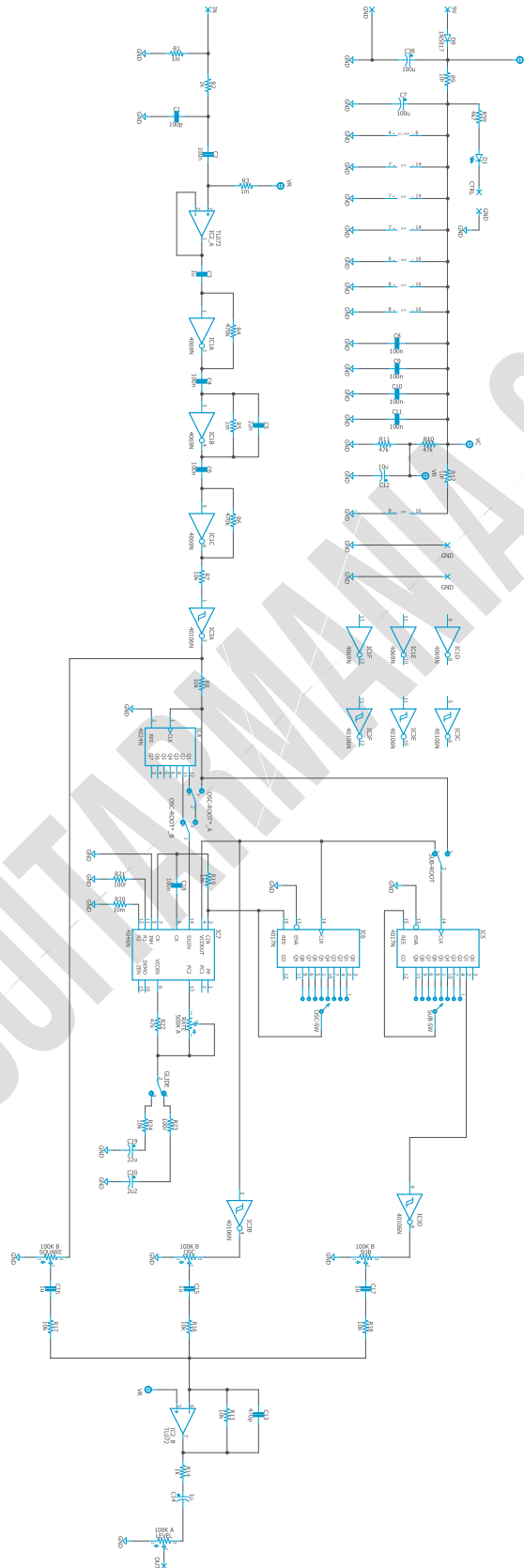
IC		
Qty	Value	Parts
1	40106N	IC3
2	4017N	IC5, IC6
1	4024N	IC4
2	4046N	IC7, IC8
1	4069N	IC1
1	TL072	IC2

Switches		
Qty	Value	Parts
1	Type-2 DPDT (On/On/On)*	OSC-ROOT
2	Mini 1P8T rotary switch**	OSC-SW, SUB-SW
2	SPDT (On/On)***	SUB-ROOT, GLIDE
1	3PDT Stomp foot	-

Diodes		
Qty	Value	Parts
1	1N5817	D9
1	3mm Red LED	D1

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

Type-2 DPDT (On/On/On)*

OSC-ROOT switch MUST be a Type-2 DPDT On/On/On toggle switch.

The following are known to be compatible parts:

[100-DP6-T200B1M1QE \(Short Shaft\)](#) – **Best option** -

[100-DP6-T100B1M1QE \(Long Shaft\)](#)

[1MD6T1B1C0M1QE \(Long Shaft\)](#)

Mini 1P8T rotary switch**

<https://www.musikding.de/Rotary-switch-1-Pole-8-positions>

SPDT (On/On)***

We recommend a short shaft toggle.

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 1590bb 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!