Noisefoc v1.1 Build Guide

Thank you for purchasing this DIY module! Building DIY kits happens on your own risk and we cannot give any support. Please make sure you read this building instructions and the user manual enirely before you start, which both are part of the module and can be downloaded via Exploding Shed. Also make sure that your skills meet the difficulty of the DIY kit and you have a basic knowledge about soldering. Watch soldering tutorials and download the manuals here: www.exploding-shed.com/info

Noisefoc is a **chaos oszillator / CV source** for the **Eurorack moduar system**.

DIY Level: Easy. A successful assembly is only possible if you have some basic DIY skills, experience and good tools. The success is based on your skills, besides our workshops we don't offer any support. The DIY kit can be assembled by halfway experienced DIYers in about 1-3h. All bags with parts are labelled very well, you find all needed info there and on the silkscreen print on the PCB. Stuff like polarity of parts etc, all is noted there.

Needed tools: Good soldering iron (min 75W), solder, de-soldering pump, wirecutter, flat-nosed pliers, wirestripper, much light, maybe a multimeter. Recommendations for good tools you can find here www.exploding-shed.com/info and we also sell some tools there (EU only).

Completeness: Despite all care it might happen from time to time, that a part is missing or wrong, because we assemble our kits by hand. In such a case please contact mail@leaf-audio.com or Exploding Shed and we will find a solution.

Power: Like all Eurorack modules, the he Noisefoc is designed to operate on a symmetrical DC voltage of +/- 12V. As it actually only needs positive supply, it runs on +12V DC or also 9V DC battery if you build yourself such an adapter cable.

Connectors and Controls:

Controls:
Skull (Power Starving)
Frequency A (OSC-String 1)
Frequency B (OSC-String 2)
OSC 3 Fix/Light-Control Switch

Connectors:
Pitch influence input
Resistor summed output
Diode summed output

Assembly: For this DIY kit the same rules apply as for any other DIY kit. All the bags with parts are labelled very well, you find all needed info there and on the silkscreen print on the PCB itself. Stuff like polarity of parts etc, all is noted there.

Generally it makes sense to start with the most flat components and then take the next higher ones.

1. Small Resistors
2. Diodes, Resistors

3. Small Capacitors
4. IC holders
5. Big polarized Capacitors (built in in a lying position!!!), Transistor
6. Pin Headers for Bus (placed on the backside)
7. Potentiometers and Audio Connectors
8. LDR – install it that it looks through the frontpanel hole or 3mm below it

In the next step, ICs are placed in their holders. They have a polarity, which is marked on the silkscreen print, the holder (notch) and also the IC itself (notch or dot).

Before you power up the module, please check all solder joints if they look clean, good contact and no short circuits. Additionally you can use a multimeter to check for short circuits between the plus and minus and GND pins on the power conector. Also check the polarity of parts again.

If you are sure that everything was done correctly, you are ready to power it up for testing. Check if it generates audio and all controls work as intended.

Part	Name	Value	#	Notes	Info
Diodes					
LED	LED 1, LED 2	3mm, Low Current	2	Red or Green	
Diode	D1, D2	1N914	2	Polarity!	
Caps					
Electrolytic Capacitor	C1	10uF	1	Polarity!	
Wima MKS-2	C2	100nF / 5mm	1	No Polarity	
Electrolytic Capacitor	C3	2,2uF	1	Polarity!	
Electrolytic Capacitor	C4	180uF Polymer	1	Polarity!	
Resistors					
Light Dependent Resistor	LDR		1	No Polarity	
Potentiometer	R1	100k linear	1	9mm Song Huei	
Potentiometer	R9	1M linear	1	9mm Song Huei	
Potentiometer	R15	1k linear	1	9mm Song Huei	
Resistor (Mini)	R2, R8	2,2k	2	No Polarity	
Resistor (Mini)	R3, R4, R5, R7	100k	4	No Polarity	
Resistor (Big)	R6	68k	1	No Polarity	
Resistor (Big)	R10	330k	1	No Polarity	
Resistor (Big)	R12	6,8k	1	No Polarity	
Resistor (Big)	R13	220 Ohm	1	No Polarity	
Resistor (Big)	R14	470 Ohm	1	No Polarity	
Resistor (Big)	R16	33 Ohm	1	No Polarity	
Resistor (Mini)	R17	1M Ohm	1	No Polarity	
Resistor (Mini)	R18	47k Ohm	1	No Polarity	
ICs					
CMOS 4093	IC1	4 x NAND Gate	1	Polarity!	Notch or Dot
Optocoupler	OC1	H11F1M	1	Polarity!	Notch or Dot
Holder for IC1	IC1	DIL14	1	Polarity!	Notch
Holder for OC1	OC1	DIL6	1	Polarity!	Notch
Transistor	T1	BC 549 (NPN)		Polarity!	
Switch					
Switch	S1	On-On	1	Sub Miniatur	Lugs+Thread
Spacer for Switch	For S1		1		
Diverse					
Printed Circuit Board			1		
Panel			1		
Audio Connector	X1, X2, X3	Thonkiconn	3	Polarity!	
Nuts (knurled)	for X1-X3		3		
Bus Connector	X4	Bus Power 12V	1	2 Row 5 Pins	
Ribbon Cable	10/16-Pole, 20cm	For Power	1		

This module was made by:

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