

No-noise Gate SMD

Based on:
MXR Noise Gate

Effect type:
Noise Gate

Build difficult:
Easy

Amount of parts:
Low, total 14 components

Technology:
Dual Op Amp

Power consumption:
9V

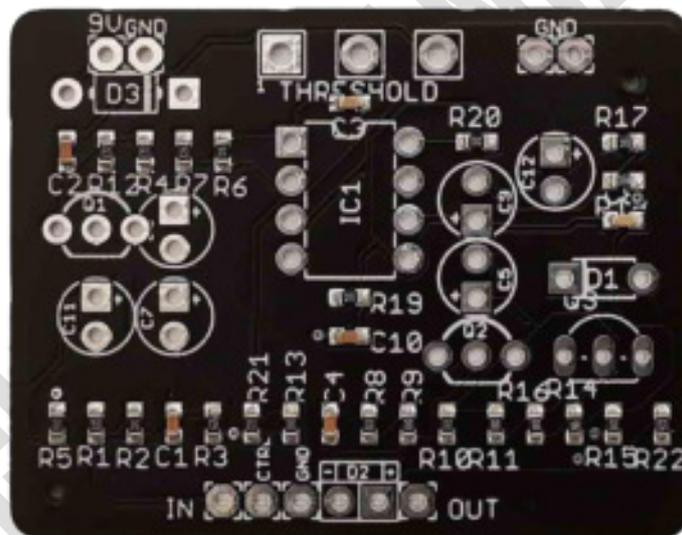
Enclosure type:
1590b / 125b

Get your board at:
[No-noise Gate SMD](#)

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

Project overview:

The No-noise gate has been designed based on the classic MXR Noise Gate. Tame down all the unwanted noises of your signal chain, hum, hiss, and all those uncomfortable noises usually associated to the high gain drives.



About The Pedal Creators

Everyone can build excellent boutique guitar **pedals**.

Everything **we do** is to make that **experience** more accessible and **user-friendlier**.

The **Pedal Creators** series are the **best and easiest to build PCBs** ever. Including most **resistors** and **capacitors** already **soldered** on board as SMD components, leaving the key values for you to **experiment** and craft **your own tone**.

Now you can **build** a pedal you are **proud** of in **less than an hour** without any previous experience.

What are you waiting for to **become a Pedal Creator**?

The Pedal creators - key features:

- **Easy to build**, no previous experience required. It's like Lego for musicians.
- **Fast assembly** finish a pedal in less than an hour. Play your favorite record and enjoy the ride along.
- **100% mistake-proof**. Even my grandma can build one while she cooks.
- **Build** your own boutique pedal. Experiment with different values and make the **pedal you always dreamed of**.
- Easy to scale. **Turn your passion into a money-making machine**.

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Introduction

Tame your hissing high-gain amp or silence your string of stomptboxes with this ingenious pedal that comes in a tight fit, designed for a 1590B enclosure, yet small enough to fit in the same enclosure after a high gain drive.

Equipped with three selectable types of noise reduction, the No-noise gate is ready to handle virtually any kind of signal. It bites down on sizzle and hum but lets the smallest detail of your playing through. With its uncanny ability to sense precisely when—and how fast—to engage, this little genius will never get in your way, so you can wring every last bit of sustain out of that chord without being cut off.

Controls

- Threshold

Bill of materials

Electrolytic Capacitors

Part	Value
C5	1uf
C6	2uf2
C7	10uf
C9	10uf
C11	10uf
C12	10uf

Potentiometers

Part	Value
Threshold	500k Log*

IC

Part	Value
IC1	lm4558

Transistors

Part	Value
Q1	2N3904
Q2	2N3904
Q3	2n5485*

Diodes

Part	Value
D1	5v1
D2	3mm LED
D3	1n5817

Jacks

Part	Value
-	DC JACK
-	AUDIO JACK
-	AUDIO JACK

Switches

Part	Value
-	3PDT Stomp foot

Shopping list

Electrolytic Capacitors

Qty	Value	Parts
1	1uf	C5
2	2uf2	C6
4	10uf	C7, C9, C11, C12

Potentiometers

Qty	Value	Parts
1	500k Log	Threshold*

IC

Qty	Value	Parts
1	lm4558	IC1

Transistors

Qty	Value	Parts
1	2n5485	Q3*
2	2N3904	Q1, Q2

Diodes

Qty	Value	Parts
1	5v1	D1
1	3mm LED	D2
1	1n5817	D3

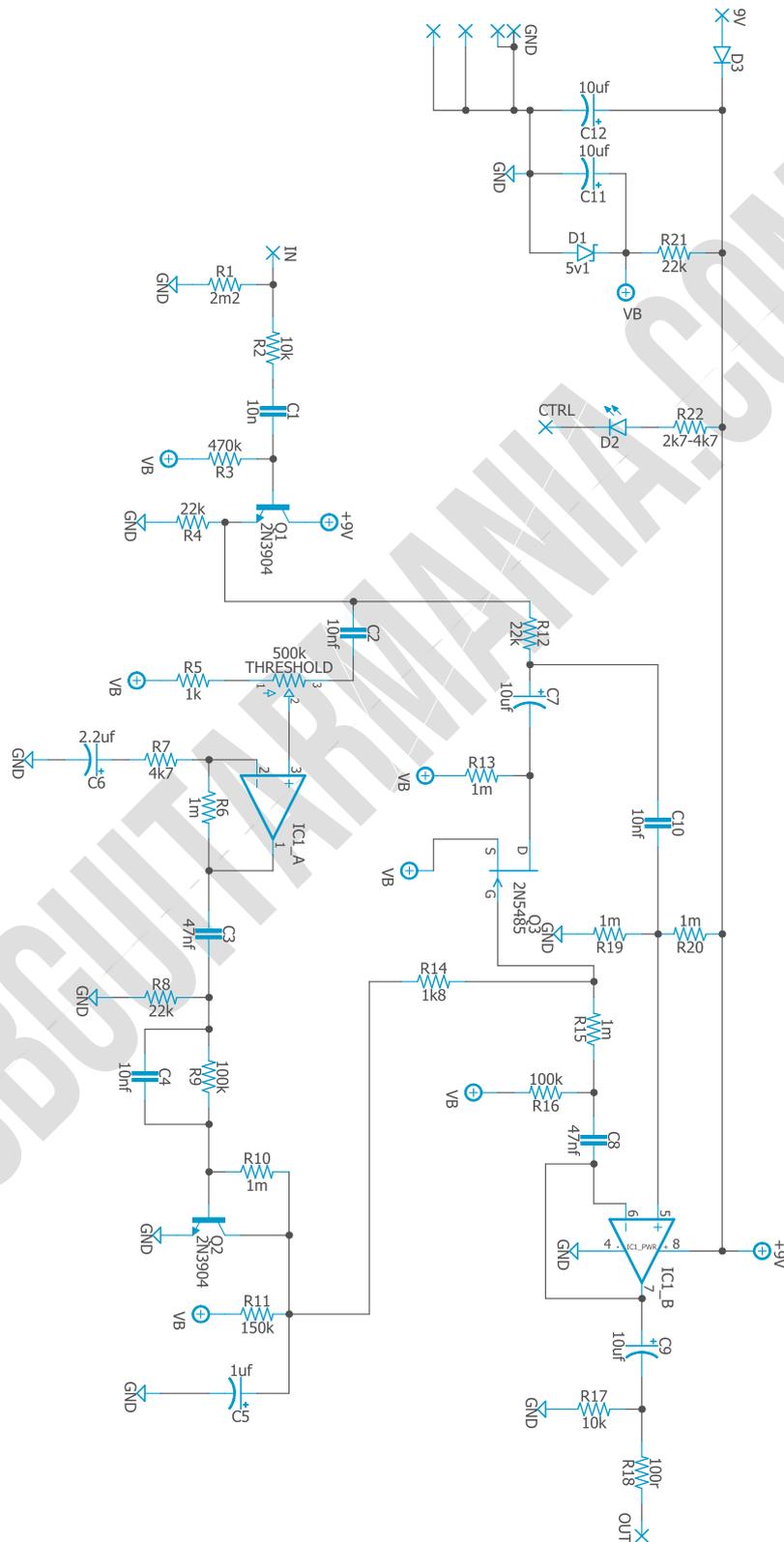
Switches

Qty	Value	Parts
1	3PDT Stomp foot	-

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

Q3*

The 2n5485 isn't the easiest to find transistor out there, some people reported using a 2n5457 without any problem. Also, you can use a 2n5952 reversed to the silkscreen

Threshold**

The original build uses a 500k logarithmic pot, although some people prefer to use a lineal one.

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 1590b 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!