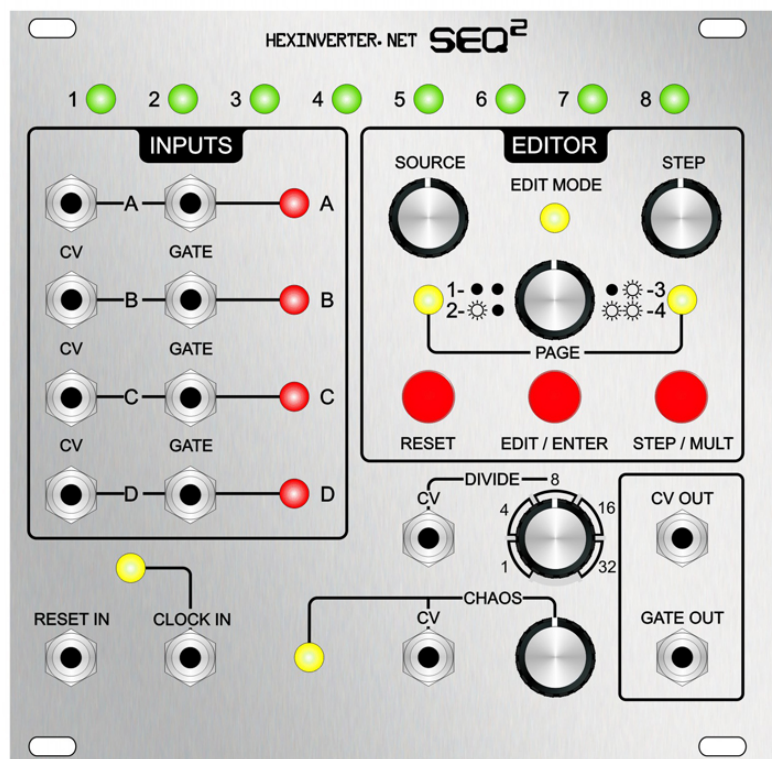


SEQSQUARED

The Analogue Pattern Generator



CUSTOM PANEL DESIGNING GUIDE

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About This Guide

This guide was created to help builders lay out a custom panel for their seqSQUAREDS.

It will tell of a number of things that you should take into consideration as well as supply printable drill templates for the eurorack version.

Before you go about making your own panel, might I suggest Re:Synthesis as an excellent source for custom panels! Ben has no minimum quantities and charges a very nice price: [click here to visit his shop](#).

I am quite certain he would be delighted to make a one-off panel for you!

Re:Synthesis is also providing ready-made panel designs for eurorack and MU (coming soon), so there is no need to make your own if using these formats, unless you really want a different design, I suppose!

Anyhow, on with the guide!

Points You Must Consider

Now, before we delve into this, I recommend reading the [USER MANUAL](#) to understand what each control does (as I'm not explaining it again, here).

Polarity of Potentiometer Controls

seqSQUARED's firmware is programmed such that when you turn the SOURCE and STEP controls, the LEDs on the display will advance in a certain direction. Depending on how you orient your LED displays, it may be that you have to reverse the leads on the pots which generate the 0 to 5V voltage signal for that particular control. For example, if you find that your cursor goes left on the STEP display when you turn the knob right, you have to reverse the outermost leads on the potentiometer connections.

Do NOT alter the location of the middle pin on the pots. This stays the same.

One of the outer pins is connected to ground, and the other to 5V, forming a voltage divider. You simply swap these pins to change the direction in which the cursor travels.

By default wiring, the STEP indicator moves LEFT when turned LEFT.

By default wiring, the SOURCE indicator moves RIGHT when turned LEFT.

You must take these facts into consideration when designing your panel! (or just use trial and error and be ready to swap them if need be)

Changing the Names of Controls

Once again, I highly recommend reading the [USER MANUAL](#) so you know what each control does.

Feel free to name controls differently on your panel than the supplied panel designs. As was mentioned in the [USER MANUAL](#), the “CV” and “GATE” channels are actually just the same thing. Feel free to name them “CH.1” and “CH.2” or anything else you might desire. These are just some ideas.

Get creative, and be sure to share your panel in the [PANEL DESIGN THREAD](#) on Muffwiggler's if you come up with one!

Eurorack Templates

Here are templates that will help you on your way to designing a one-off eurorack panel. You can print these pages yourself from this PDF and they will be the correct size, or you can download the raw .PNG images and use them in your preferred vector art software to trace over/use as measures.

The .PNG images are 300PPI. If you use this as your document setting when laying out a panel, you will be able to simply “place” your drills/components on the crosshairs in the image, making layout breeze.

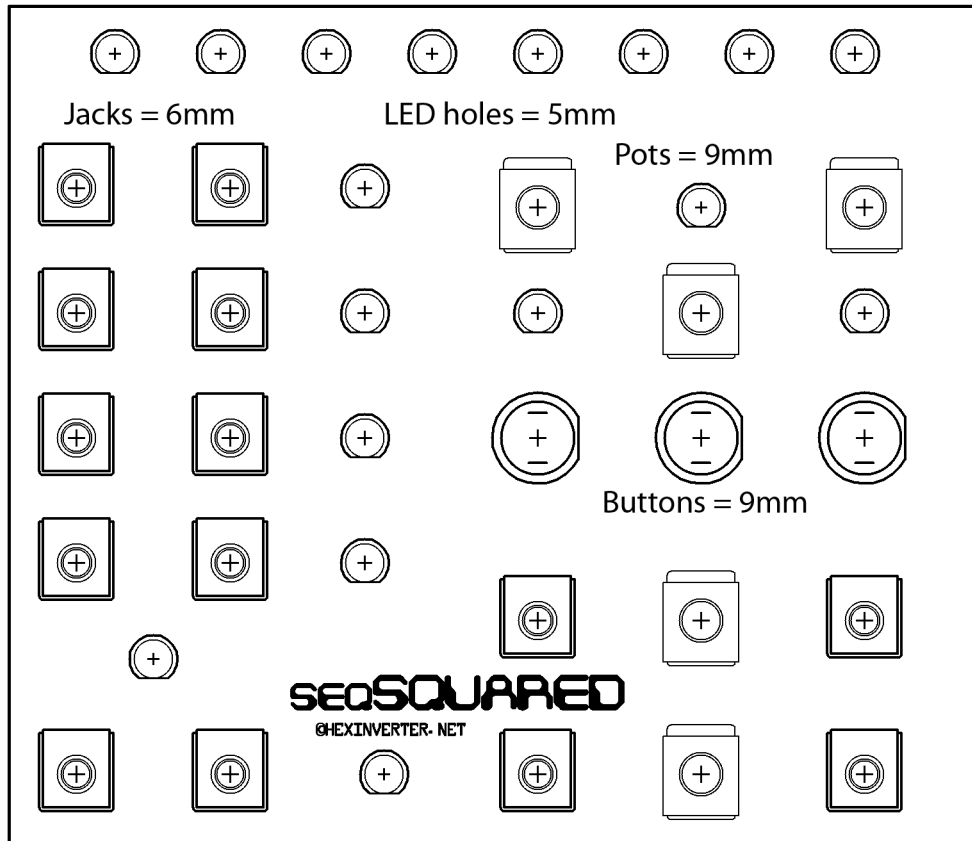
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Drill Template

This template can be printed out and drilled through to match the PCB layout of the seqSQUARED eurorack control board.

[CLICK HERE](#) to download a 300PPI copy of this image.

NOTE: Drill sizes are NOMINAL. In other words, you MUST add a bit for tolerances and building error. ie: 9mm should actually be 9.1 or 9.2mm in size.



Measures Template

This template shows the distance between each eurorack panel component (in mm).

[CLICK HERE](#) to download a 300PPI copy of this image.

