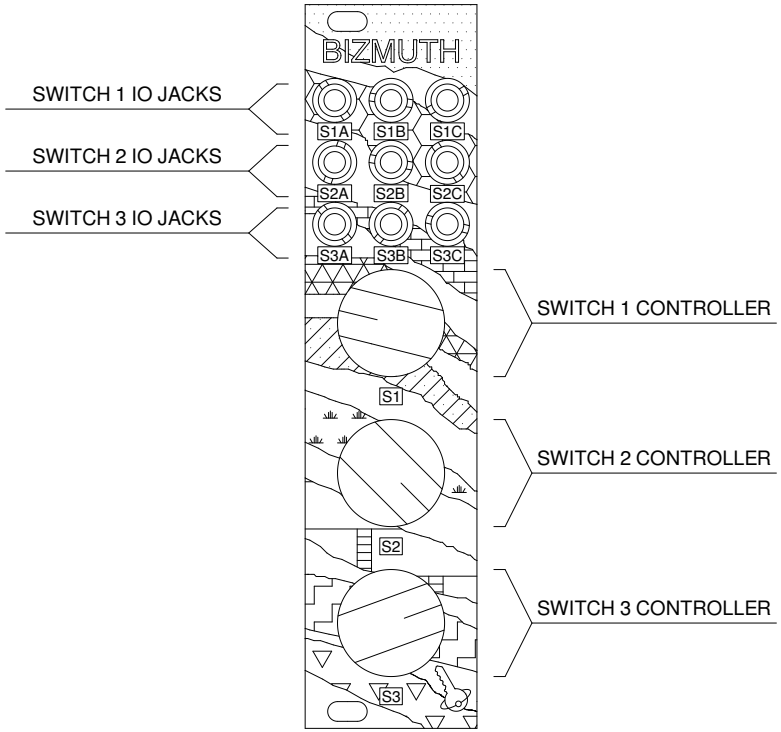


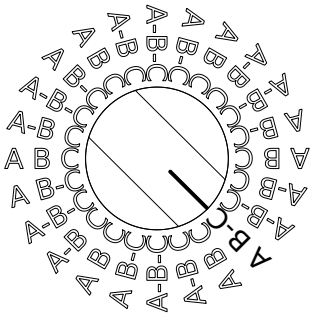

Bizmuth is a gesture based chaotic signal router and gate generator. You can route switch or combine up to six signals, or generate up to six gates by turning three endless knobs with one hand. Small tweaks can have large effects on routing or gates, giving the module a very tactile and chaotic feel. If you are into noise, glitch, sound design, or chaos, Bizmuth is a great tool for you on stage or in the studio.

The module has three identical switches with three IO Jacks each: A, B and C. All operate according to the same four step connection sequence: A B C, A-B C, A-B-C, A B-C, A dash (-) indicates a connection between two IO jacks of the same switch.

As you turn a knob, the connection sequence of the corresponding switch advances and new connections appear between the three IO jacks. The connection sequence repeats 24 times in one full 360 revolution. That means you have a different patch every 3.7°.

All jacks are bi-directional, which means you can use them as inputs and outputs as well. For example, you can route a signal from the B IO jack to A, A+C, or just C, just like you can route two signals from A/C to B.

# THE CONNECTION SEQUENCE*



* in the graphic the sequence is shown in quarter resolution for clarity. In the actual sequence there are 96 positions total.

## NORMALIZATIONS

Bizmuth has three preexisting connections also known as normalisations, which help you to realise more complex routing and to generate gates.

All B IO jacks are normalised from top to bottom, and if a 16 pin power connector is plugged in, 5V* is normalised to the top switches B IO jack.

That means, that as long as you don't plug a cable in a B IO jack, it will be connected to the B IO jack abowe, or 5V if it's the top one.

## SENDING GATES

Try leaving all B IOs empty and patch any A or C IO to a gate or trigger input! Turn the knob of the switch and notice the gates! A total of 6 gates can be generated if you use all A and C IOs.

to send gates, Bizmuth must be connected to the power rail of your Eurorack system, and your power supply has to provide 5V.
* The gate output voltage is 4.8V.

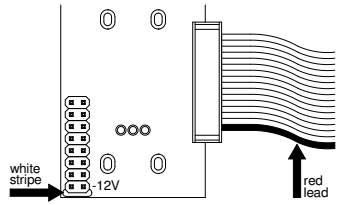
If you only want to use the routing features, the module can be used in passive mode, so no connection to the busboard is needed.

However if you have a free power outlet on your busboard, you probably want to hook up Bizmuth anyway.

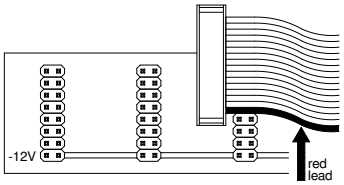
## WARNING

Take special care to connect your 16 pin ribbon cable (included) the right way:

**The red lead facing towards the white stripe at the bottom of module.**




Also check the orientation of the cable on your busboard! The red lead has to face towards the bottom as well.




Bizmuth is not responsible for any damage occurring in the module or other modules due to false power cable orientation, or non standard conditions.