8-GATES

by jroo

8-GATES is a LYRA-8 trigger converter that allows you to sequence the LYRA-8 with your own sequencer. It's an 8 port 3.5mm V-trig to SOMA-style pole S-trig converter with a ground pole. CV gates from your sequencer will close the circuits that trigger voices on the LYRA-8.

While the patch points work great with the official ORNAMENT-8 adapter for LYRA-8, the adapter isn't required for this to work. You could just tape or affix the alligator cables to the sensors on the LYRA-8 with the same results. Our recommendation would be to buy an ORNAMENT-8 adapter from SOMA, though. It's one of the more beautiful hacks we've seen and it's just a better experience.

It is available fully assembled or as a full kit with SMD components pre-soldered.

Contents

Overview

Jacks

V-trig

8 jacks accept V-trig gates (0V to 10V) from your sequencer.. Anything greater than 0.8V is a "high" gate signal that will open the S-trig gate. The voltage that you send determines how the LYRA will respond.

Poles (screws)

1-8

8 poles output a converted LYRA-8 compatible S-trig gate.

GND

Ground pole for connection to LYRA-8 ground

Getting started

Connecting sequencer to 8-GATES

8-GATES accepts 8 V-trig gates (from 0V to 10V) from your sequencer. Connect the 3.5mm jack from your sequencer to one of the 8 3.5mm jacks on 8-GATES. Ensure that your sequencer is sending V-trigs and is sending *positive voltage of less than 10V.*

Connecting 8-GATES to LYRA-8

The officially supported, preferred method for connecting 8-GATES to LYRA-8 is via the ORNAMENT-8 adapter from SOMA. It's far easier to connect, offers the most stable connections and is just a better experience all around.

If connecting via ORNAMENT-8 adapter:

- place the ORNAMENT-8 adapter on the LYRA-8
- connect alligator clip cable to the GND pole on 8-GATES
- connect the other end of the alligator cable to just one of the two GND poles on the ORNAMENT-8 adapter
- connect as many 8-GATES poles as needed to the poles numbered 1-8 on the ORNAMENT-8 adapter

If connecting directly to LYRA-8:

- connect alligator clip cable to the GND pole on 8-GATES
- connect the other end of the alligator cable to any of the lower contacts on one of the eight LYRA-8 sensors.
- connect as many poles 8-GATES poles as needed to their own upper contact on the LYRA-8 sensor

There are several ways to connect directly to LYRA-8 but all of them are a little bit of a hack which is why we recommend the ORNAMENT-8 adapter. If you choose to connect without an ORNAMENT-8 adapter, the important thing to remember is that the connection between the alligator clips and the touch sensor should be stable and consistent and, *this is important,* when connecting alligator clips to LYRA-8 contacts, be sure that the alligator clip is only touching the contact and not the LYRA-8 enclosure. Failure to do so could result in unexpected results and/or scratches to your LYRA-8.

Adding alligator clips to the top of a sensor with tape, magnets, weights, etc could all work and wouldn't require any modification of your LYRA-8 but they aren't the easiest ways to set up and maintain a stable connection. Alternatively, for a more stable

connection you could clip the alligator clips directly to the side of a touch sensor but you risk making contact with the LYRA-8 enclosure. Also, if clip carelessly, you risk scratching your LYRA-8.

The probably best but totally unsupported solution would be to create more space between a sensor by loosening a touch sensor on the LYRA-8 by twisting it counter-clockwise. Doing so will unscrew the sensor a little, allowing more space for a stable alligator clip connection without touching the LYRA-8 enclosure. This will give you the most stable connection short of having an ORNAMENT-8 adapter but you're modifying the LYRA-8 and ***could scratch the unit or void your warranty with SOMA.*** Seriously, if you loosen these, be careful.

All of this is to say that if you don't have an ORNAMENT-8 adapter, it can still work, it just comes with tradeoffs. As such, ***be aware that modifying your LYRA-8 could result in voiding your warranty with SOMA and we don't support it or take responsibility for any damage done to your LYRA-8 while modifying it or attaching alligator clips directly to your sensors.***

Sending gates

V-trig gates greater than roughly 0.8V sent to an 8-GATES V-trig input (jack) will result in the output (pole) opening a S-trigger that will close the sensor circuit on your LYRA-8 and launch the envelope generator for the LYRA-8 voice. Up to 8 gates (one per channel) can be sent at a time. The voltage of the gate that is sent will determine how the LYRA-8 will respond.

The LYRA-8 manual says: "By varying your touch and technique, you can vary a voice's attack and volume. With a light touch or a series of fast short strokes, you can get a slow attack. Apply less pressure, and you open the envelope generator only partially. The sensor behaviour is affected by skin moisture level, and, in turn, by the performer's emotional state."

In the same vein, sending different voltages to 8-GATES will give different results. **Voltages around 3-5V are most equivalent to higher pressure touches and as the voltage goes further away from 3-4V, up to 10V or down to a little under 1V, the touches are lighter.** Play with different voltages and the LYRA-8 HOLD knob to dial in the envelope to your liking. Even better, make your performance more dynamic by varying the voltages that you use for gates.

Troubleshooting:

No sound:

- make sure the 8-GATES GND pole is connected to LYRA-8 ground (see above on how to do this either directly or via an ORNAMENT-8 adapter)
- make sure that the 8-GATES S-trig pole for the channel that you're receiving gates from your sequencer on is connected to a sensor on the LYRA-8 (see above on how to do this either directly or via an ORNAMENT-8 adapter)
- make sure that your sequencer is sending V-trigs greater than 0.8V (and less than 10V)
- try changing the 3.5mm cable that's connected to the sequencer. Some inexpensive 3.5mm cables have poor shielding which could result in cross-talk.

Constant sound:

- make sure two alligator clips aren't unexpectedly touching each other
- make sure that you're not touching two clips, inadvertently bridging them together
- if connecting directly to LYRA-8, make sure that the alligator clips are only connected to the contact pads and aren't touching the LYRA-8 enclosure
- try changing the 3.5mm cable that's connected to the sequencer. Some inexpensive 3.5mm cables have poor shielding which could result in cross-talk.

Support & latest documentation

yo@jroo.co
https://jroo.co/products/8-gates

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