GOMA

USER MANUAL

Thank you

GOMA stand for Generator, Offset, Mixer, Attenuverter.

The idea behind GOMA was to make an improved version of the classic 3 Attenuator/Attenuverter modules.

We wanted to design high-end but small module so it could fit in any case. We want it to be ergonomic and easy to use despite is size. But we also wanted to pack as much features as possible to make of it a "swiss knife module".

The result is GOMA a 4HP modules made of high-end components for max precision (low tolerance resistors, low noise/distortion opamps).
Each channel can be set as Attenuator or Attenuverter using the dedicate switch.
Each channel can be normalised to +5 or +10V using the dedicate switch.
We've taken great care in the design and choice of switches to make sure to avoid switching by mistake when tweaking the knobs.
We've add LEDs to make it easy to use in dark environment.
We've add feedback LED on each channel so you can spot at anytime the state of the output.

And we add which is maybe the best feature, daisy chain !
You can easily daisy chain multiples GOMA module to create virtually infinite mixer/offset generator.

GOMA is so flexible that we use in all our patchs, we are very please about it and we hope you'll like as much as we are.

Summary

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1

Unplug you rack power from the main.

2

As shown on the sketch on the right, align the red line from the power ribbon cable with the line draw next to the power connector.

3

Check twice the alignment of the ribbon cable.

4

Plug you rack power to the main and power you rack.

5

Set each channel to Polarizer / 10V
Use feedback LED to test each channel
Set each knob to 0% feedback LED should be red
Set each knob to 100% feedback LED should be Green

6

If the feedback LED light up like they should do you module is ready, if not please contact us at : contact@blacknoisemdodular.com

General Specifications

Power Consumption
+12V : 33mA
-12V : 33mA
+5V : 0mA

Panel Width
4HP

Module Depth
20mm - skiff friendly

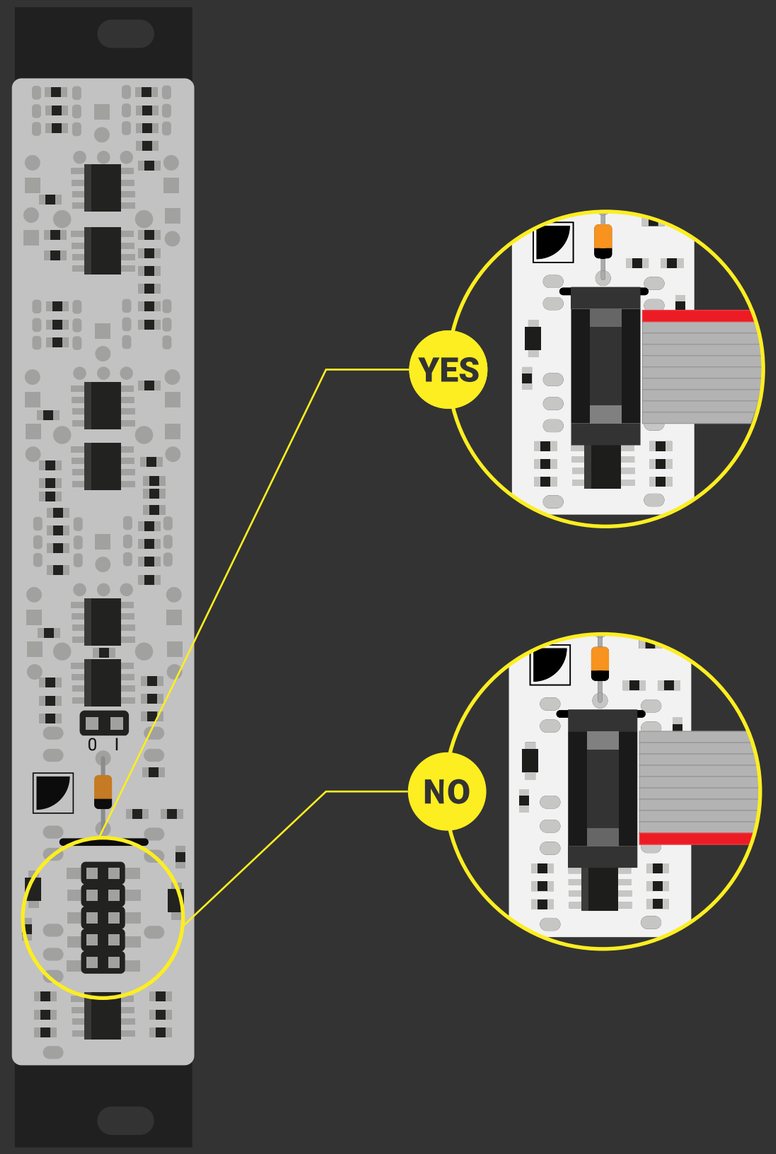
Warranty

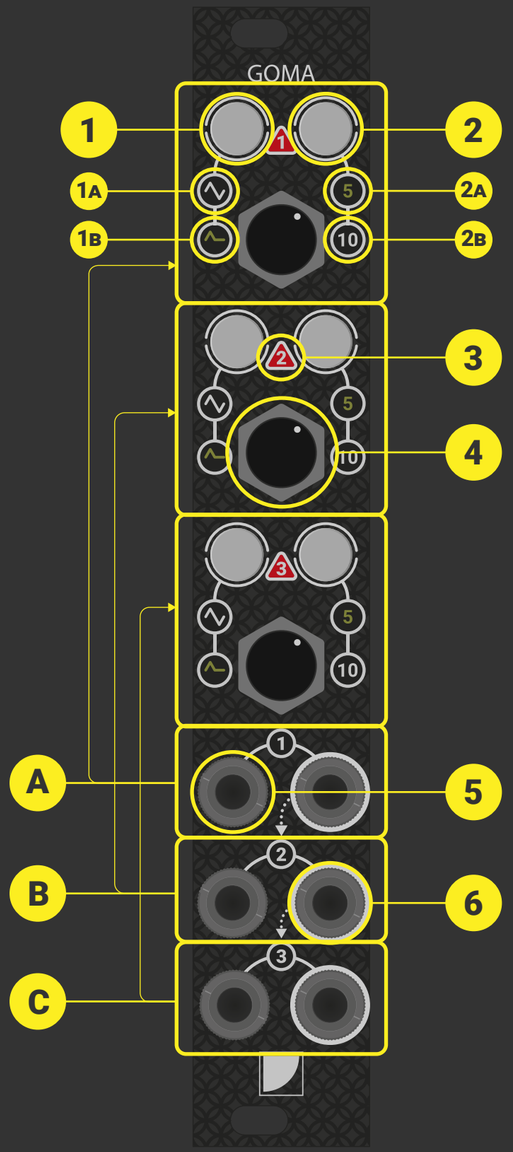
BLACK NOISE warrants is products to be free of defects in materials or workmanship and to be conform with the specifications at the time of shipment for a period of two years from the date of purchase.

During that period any malfunctionning or damaged units will be repaired, service and calibrated into your workshop. This warranty does not cover any problems resulting from damages during shipping, incorrect installation or power supply, abusive treatement, or any other obvious user-inflicted fault.

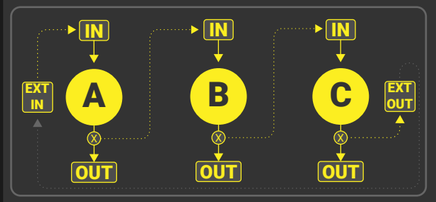
If your product warranty is passed, it still can be serviced as long as parts are available in our workshop. We reserve the right to charge for labor, parts and transit expenses where applicable.

Before sending your product to our workshop please contact us for RMA and details. Any unsolicited parcel will be rejected and or returned. The postage to our workshop is on the customer. The return of your module is on us. BLACK NOISE can not take any responsability for damages caused during transport.



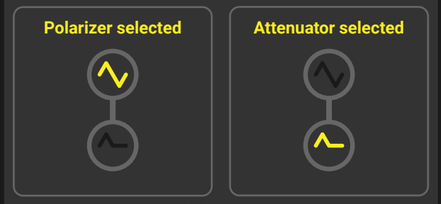


Sections



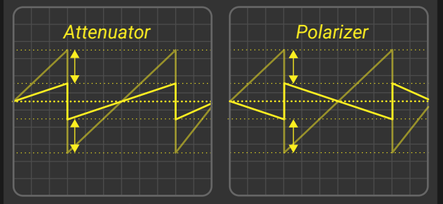
GOMA can be use as a flexible mixer with virtualy infinite channels. The modules is made of 3 identical sections. If nothing is plug into the output of a section the signal flow into the next section. You can also you the extension port on the backside to daisy chain multiples modules allowing to create infinite mixer.

1 Mode Selector



GOMA can be use as a Polarizer also known as attenuverter or as Attenuator. The dedicate switch allow to switch between each mode.

1A 1B Attenuvator/Polarizer



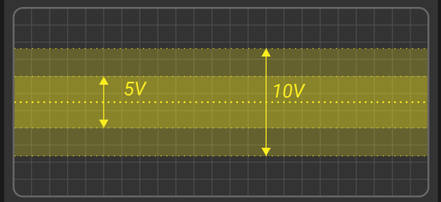
Attenuator mode
Attenuator mode allow to attenuate the input signal.

Polarizer mode
The polarizer also known as Attenuverter allow not only to attenuate the signal but also to invert it.

2 Range Selector

The input of each sections is normaled to either +5V or +10V. The dedicate switch allow to switch between each mode.

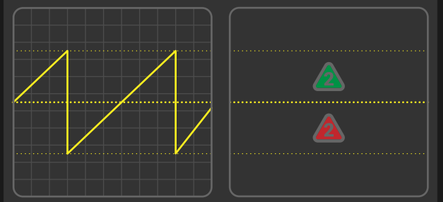
2A 2B +5V/+10V



Attenuator mode
In attenuator mode and according to the selected voltage mode you can generator voltage from 0V up to +10V.

Polarizer mode
In polarizer mode and according to the selected voltage mode you can generator voltage from -10V up to +10V.

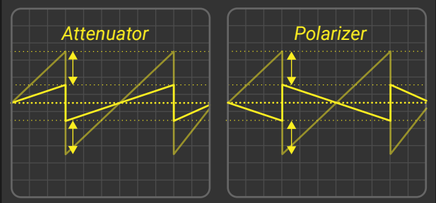
3 Signal Feedback



Each section features is own feedback LED. The LED display the processed signal going into the output.

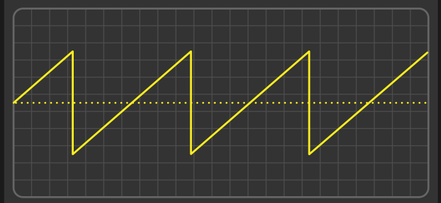
For positive voltage the LED light up in green, negative voltage are displayed in red.

4 Mode Control



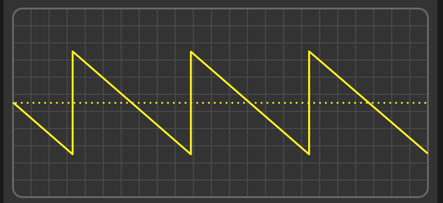
According the selected mode, the control knob allow you to attenuate or inverter the input signal.

5 Signal Input



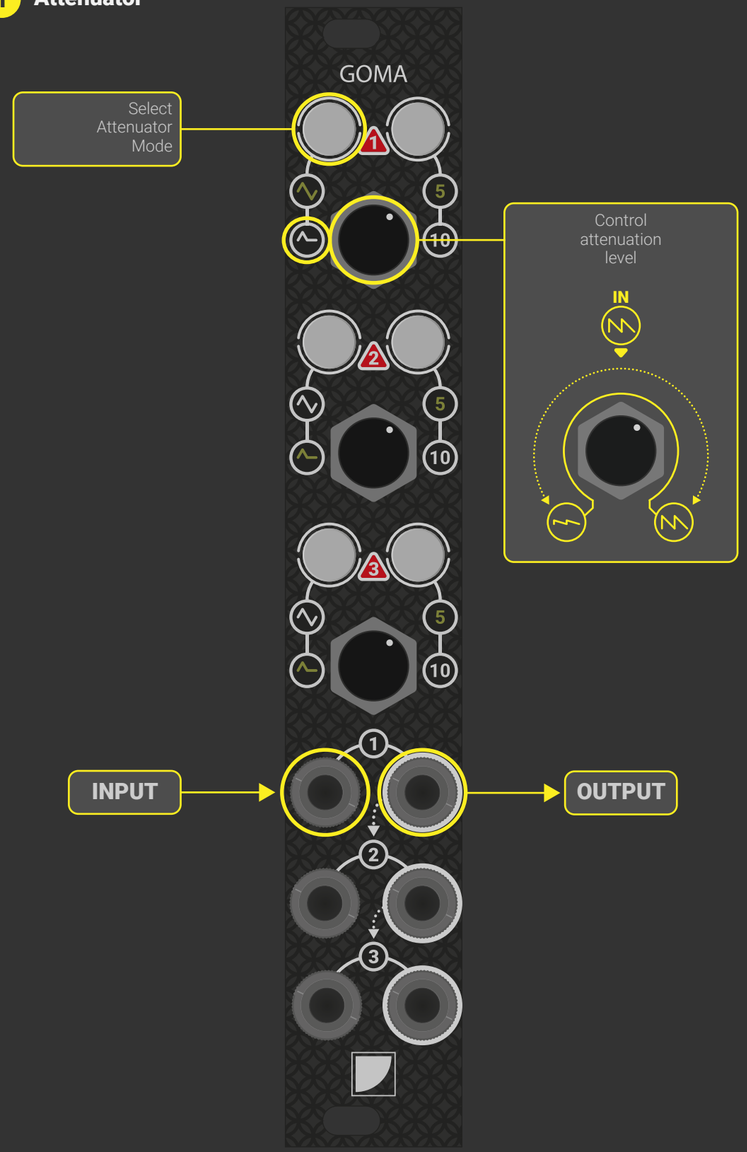
Input for your signal to process. Each input is normaled to +5V or +10V according to the selected mode.

6 Signal Output

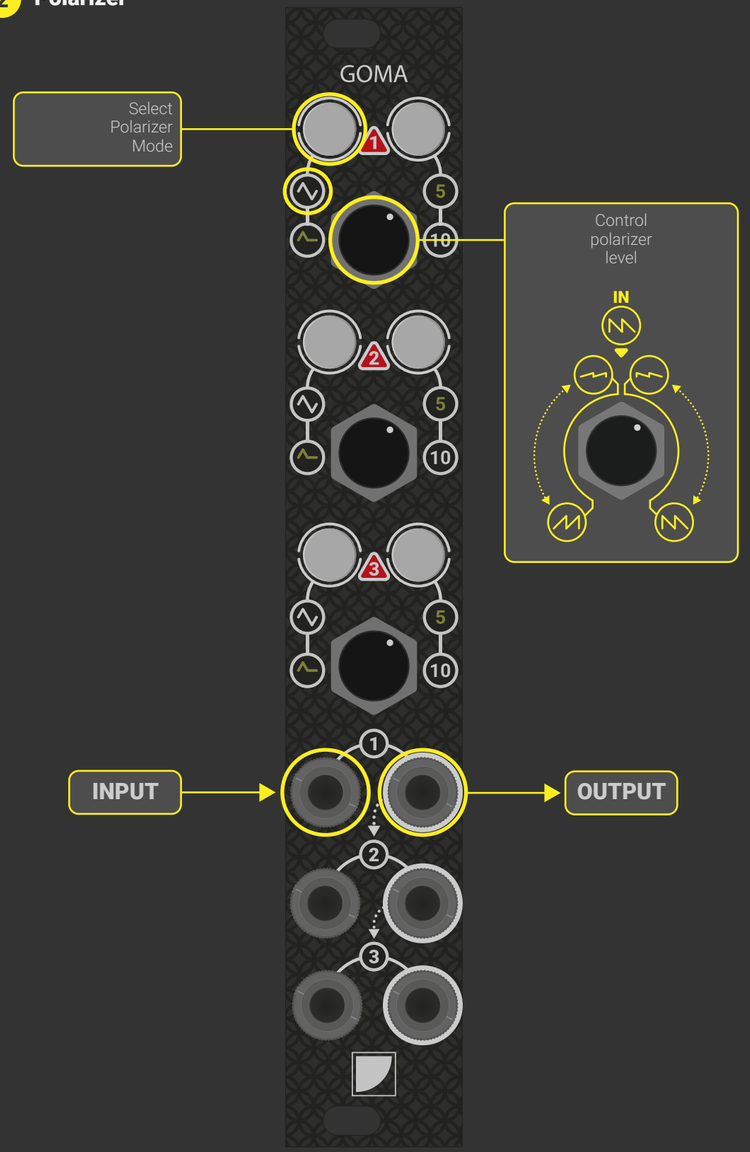


Output of the processed signal. If no jack is plugged the signal go into the next section allowing for offsetting or mixing signals.

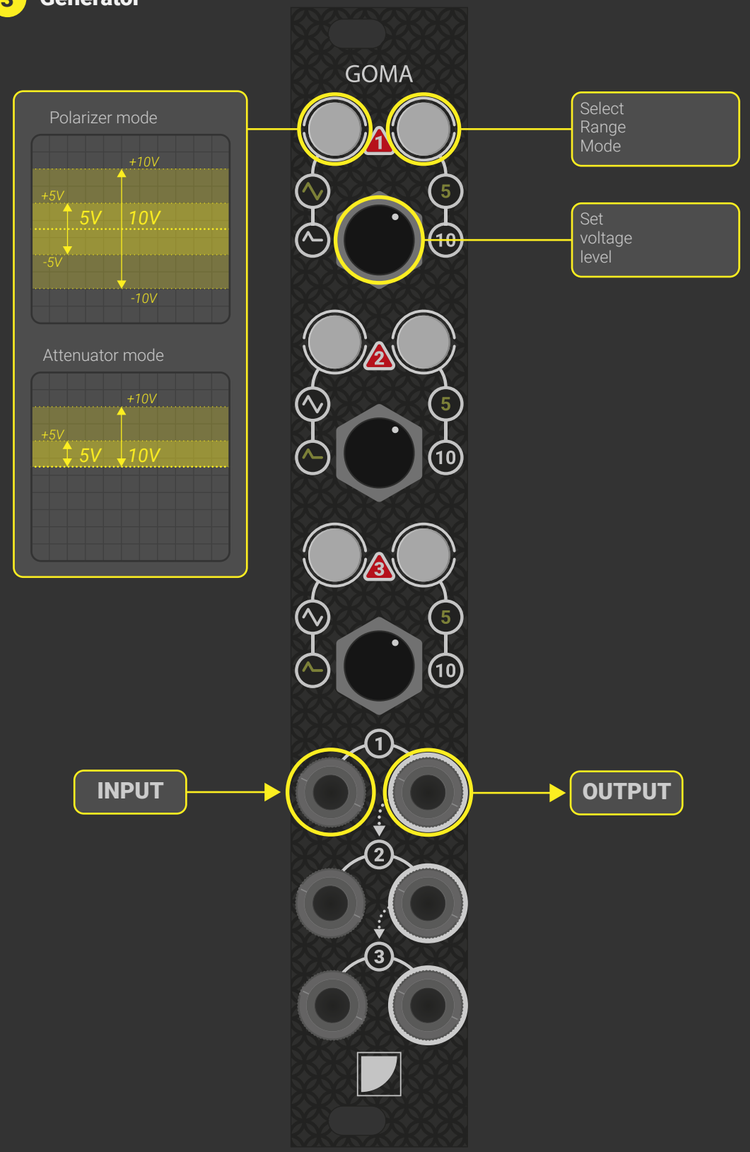
1 Attenuator



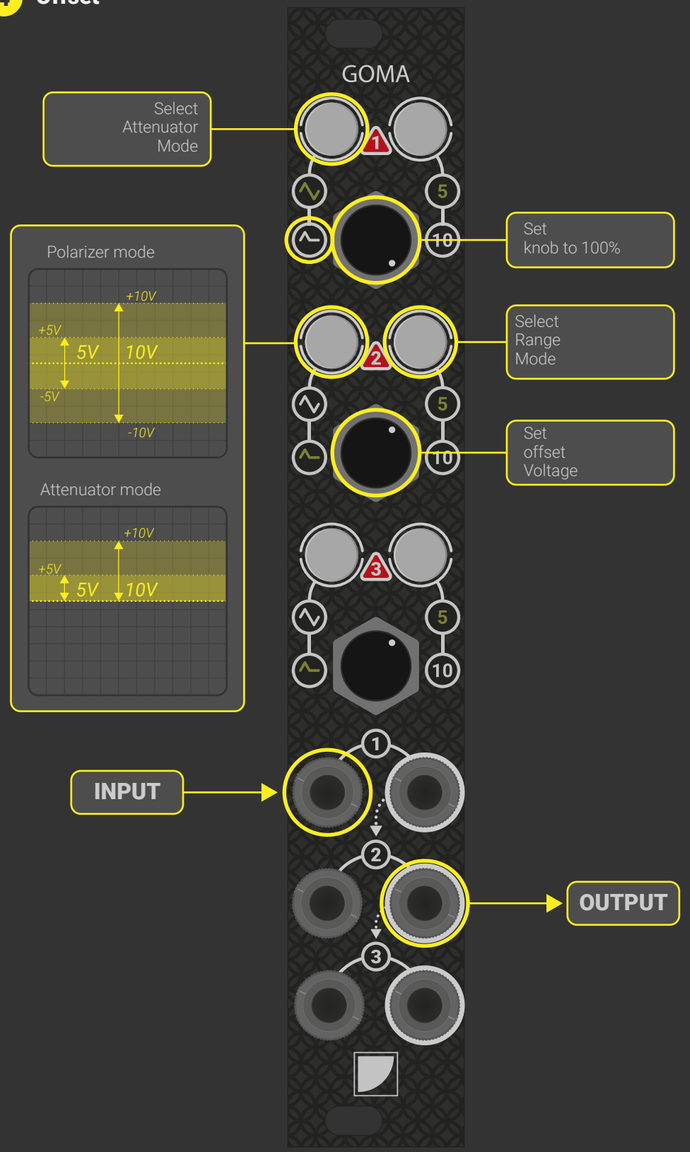
2 Polarizer



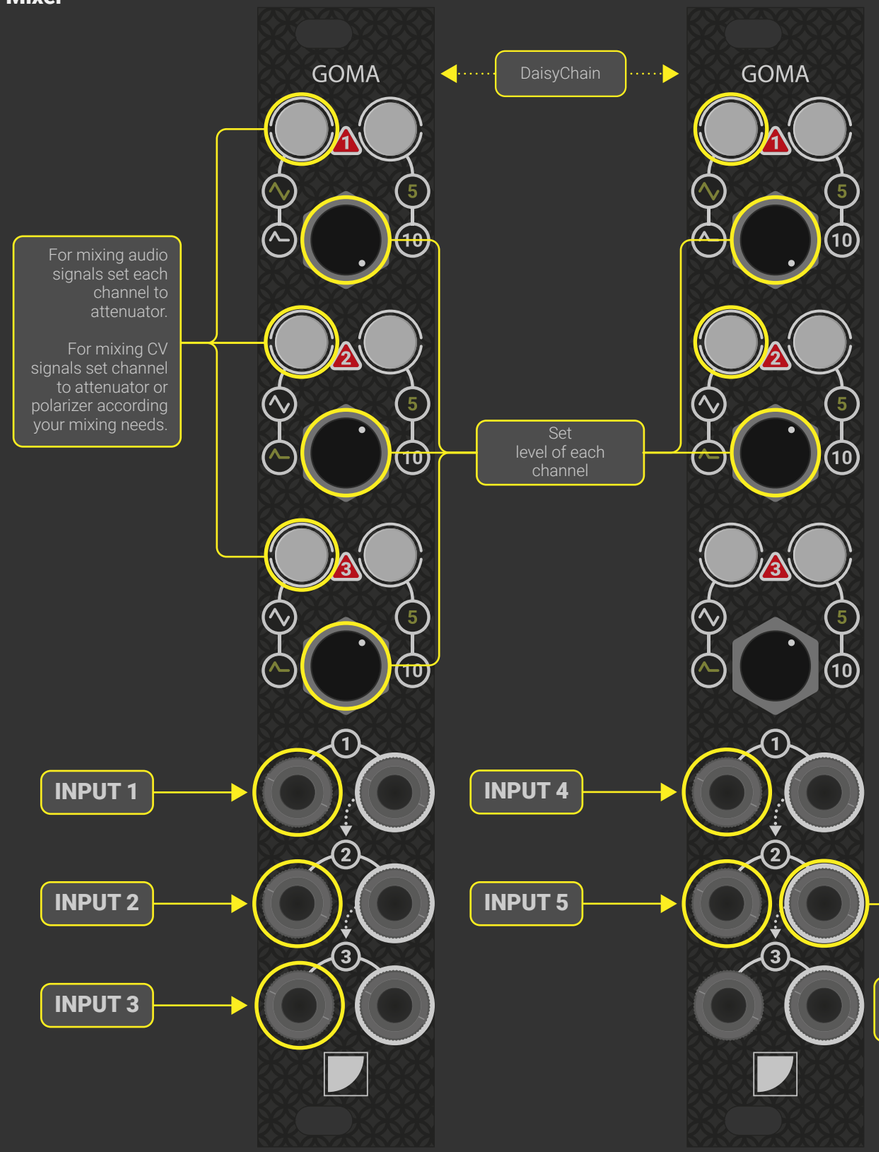
3 Generator



4 Offset



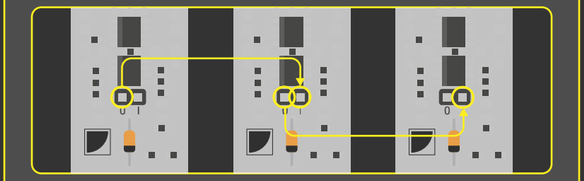
5 Mixer



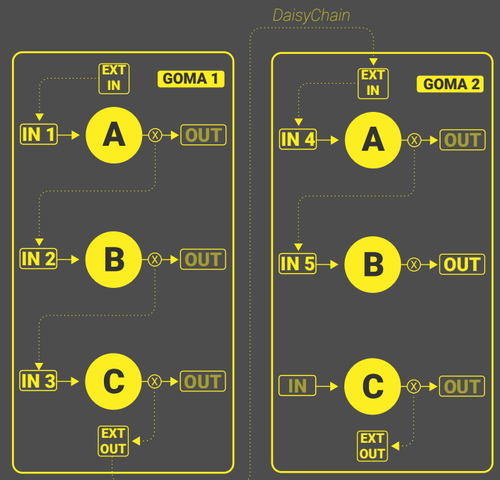
How to daisy chain GOMA modules

GOMA modules can be daisy chain to create virtually infinite mixer/off-set generator.

To daisy chain module simply connect the inclued jumper cable from the "O" pin of the first module to the "I" of the second module. Repeat this procedure to connect each extra modules



Patch overview



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