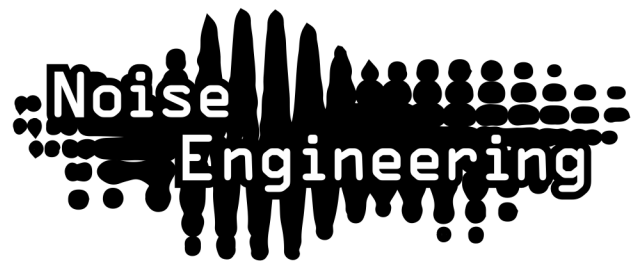
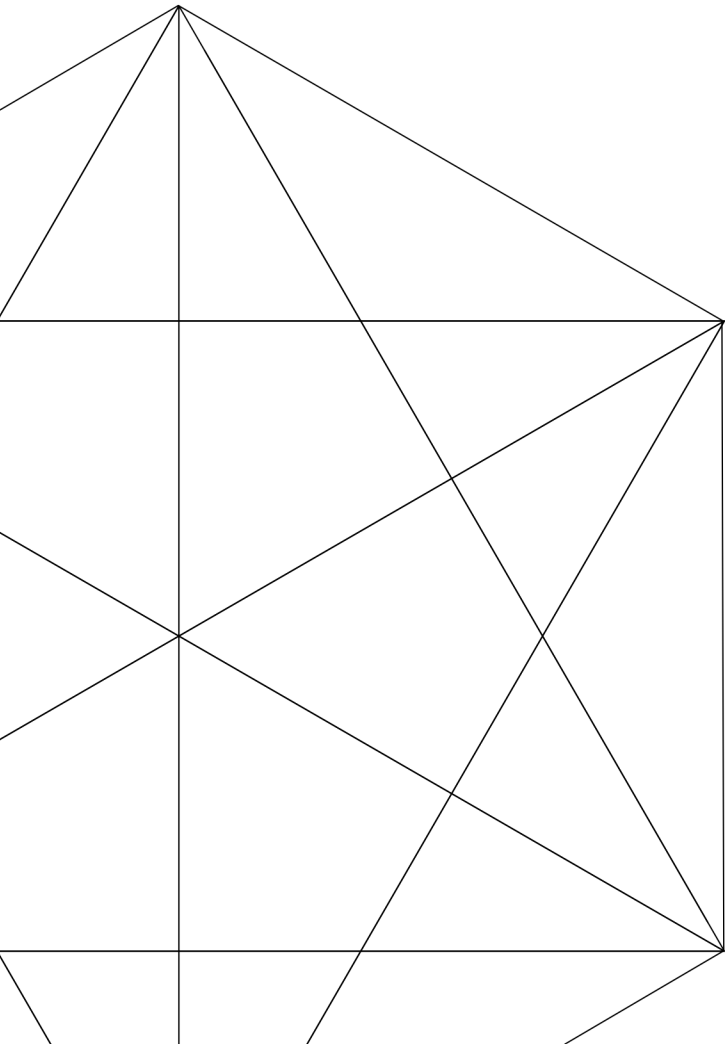
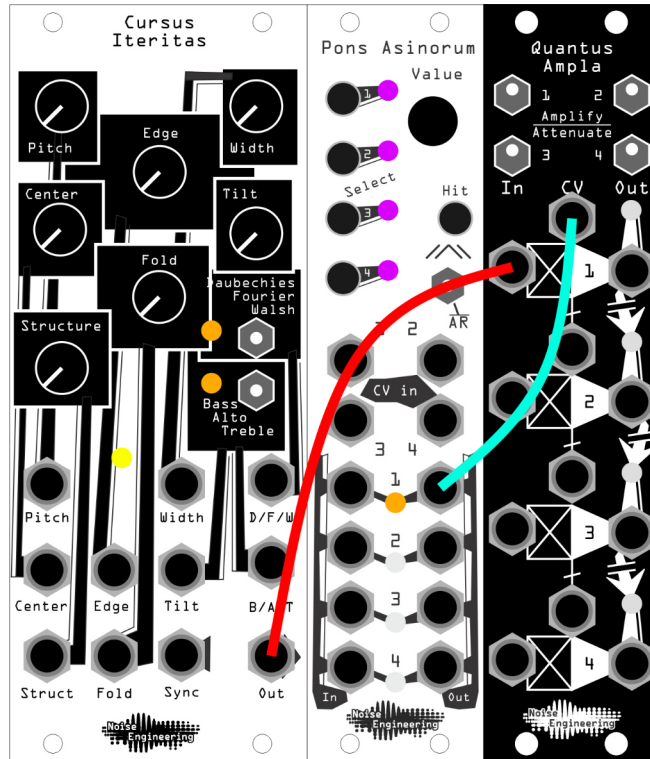


Quantus Ampla Patchbook

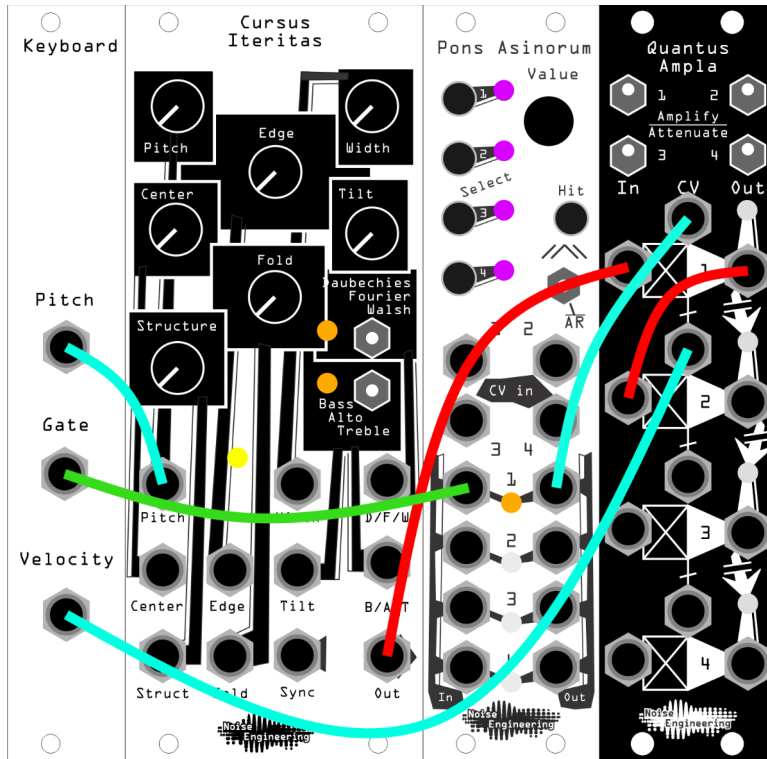




Volume control

Requirements: oscillator and envelope generator

Patch an oscillator like Loquelic Iteritas to In 1. Patch an envelope generator to the CV jack, then monitor Out 1. Set switch 1 to the upper “Amplify” position. The envelope now controls the volume level of the oscillator.

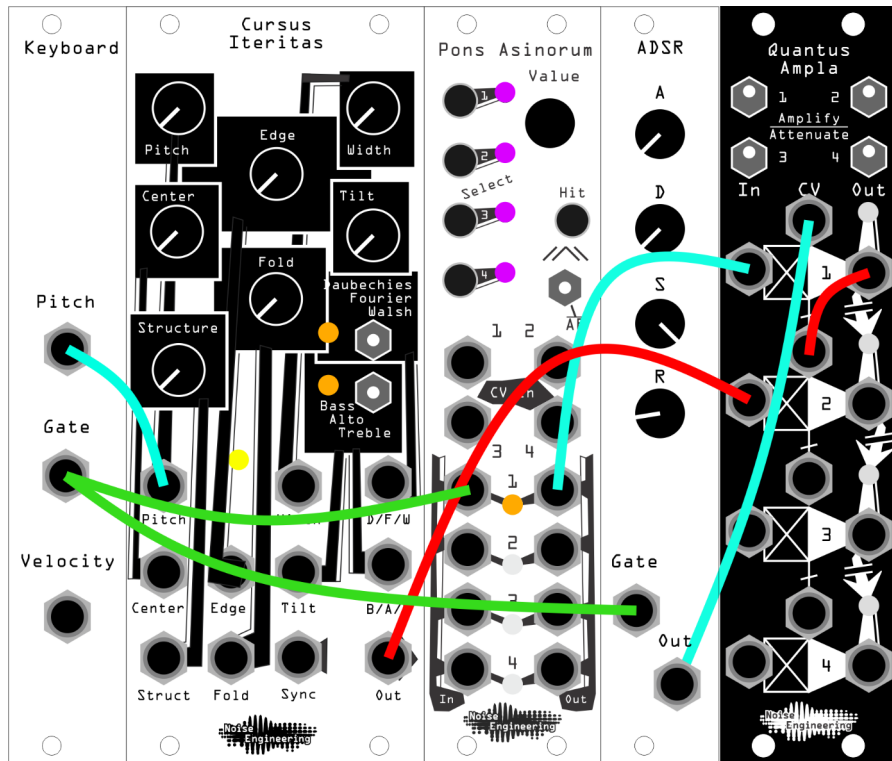


Velocity

Requirements: oscillator, envelope generator, and a keyboard/sequencer with velocity CV output

Patch an oscillator to In 1 and set the switch to Amplify. Patch your envelope generator to CV 1. Patch Out 1 to In 2. Patch your keyboard's pitch CV to your oscillator, its gate out to your envelope generator, and its velocity CV to CV 2. Monitor Out 2.

This allows the volume level of your voice to be controlled by the velocity CV, responding to how you play.



Piano envelope

Requirements: oscillator, ASR/ADSR envelope, decay envelope, and a mult

A more dynamic envelope can be patched together with the help of a VCA and two envelope generators. This patch takes inspiration from the dynamic characteristics of a piano: when the gate is high, the note will be sustained, but its level will slowly decay. As soon as the gate goes low again, though, it will be cut short immediately.

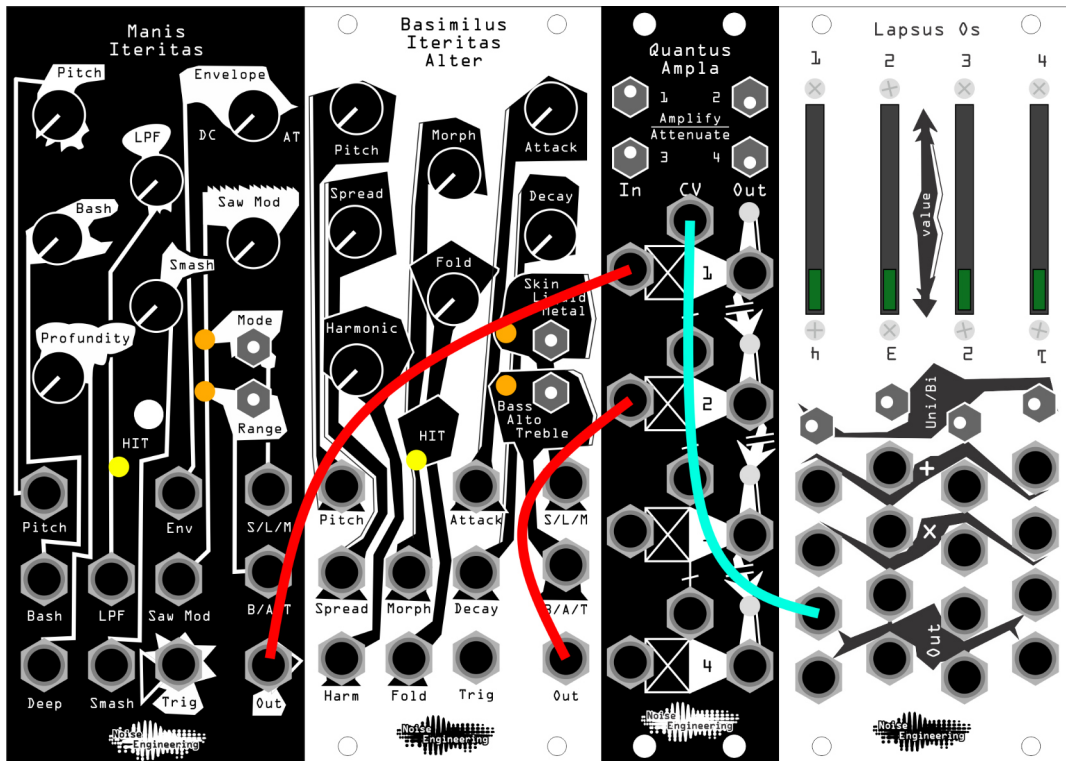
Set channels 1 and 2 to Amplify. Patch your decay envelope to the In jack of channel 1, and set its decay time to be very long. Set your ASR/ADSR envelope to have short attack and release time with sustain at maximum, and patch it to CV 1. Mult your gate to both the decay envelope and the ADSR/ASR envelope. Patch Out 1 to CV 2, and patch your oscillator to In 2. Monitor out 2.



Unity mixing

Requirements: Up to four voices to mix

Set all channels to Amplify. Patch your voices to the In jacks. Out 4 will output a mix of all 4 channels. The switches for each channel can act as mutes.

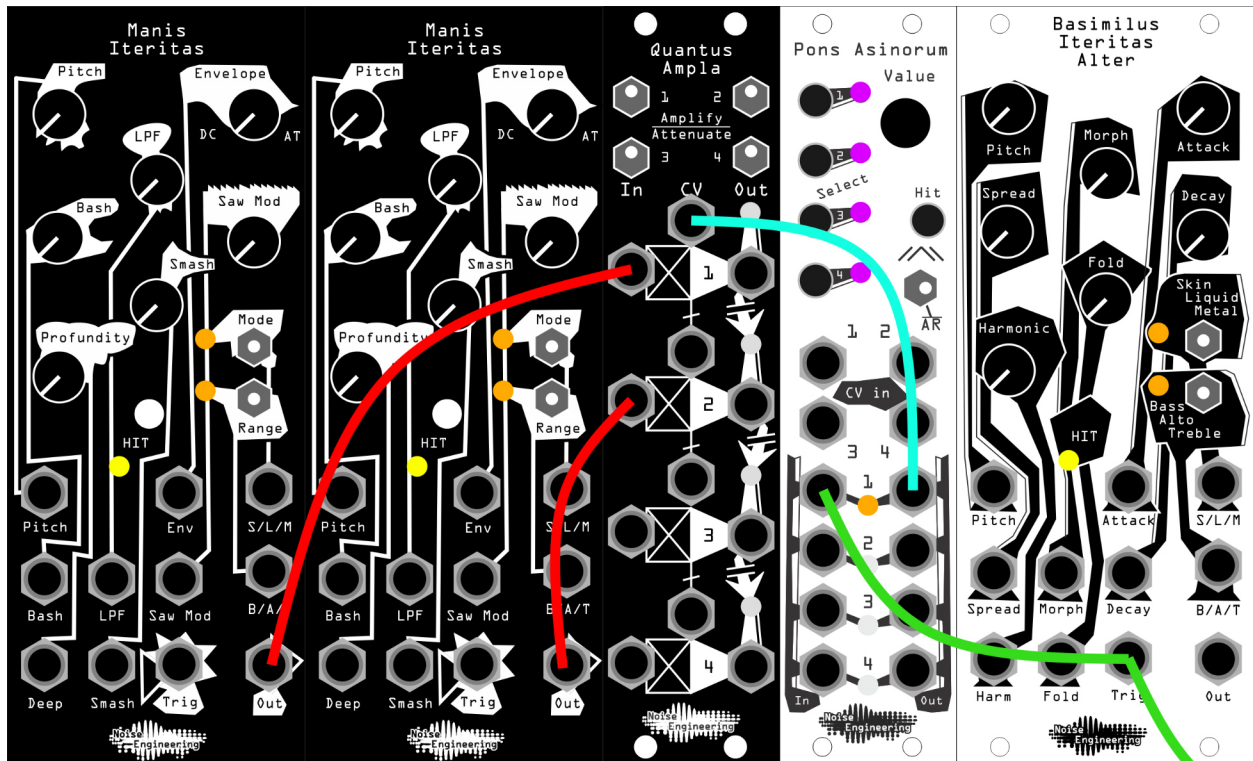


Crossfading

Requirements: 2 sounds to crossfade between and a CV controller like Lapsus Os

Set channel 1 to Amplify and channel 2 to Attenuate. Patch your sounds to In 1 and 2, and your CV controller to CV 1. Monitor Out 2. Use your CV controller to fade between the two audio sources.

Stereo crossfading is also possible: set channels 3 and 4 to Amplify and Attenuate, and patch your L signals to In 1 and 3 and your R signals to In 2 and 4. Out 2 is the left output, and Out 4 is the R output. QA's CV inputs are circularly normalised, so your CV controller at CV 1 will control crossfading for all channels.

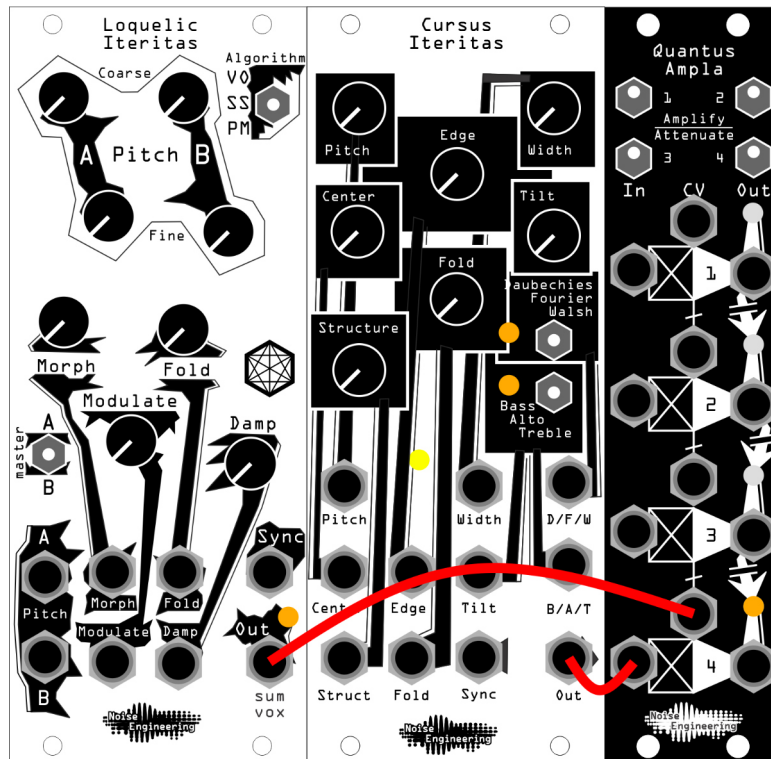


Ducking

Decay envelope, sound(s) to duck, and a mult

Patch a decay envelope to the CV jack of channel 1 of QA, and set the switch to the lower Attenuate setting. Patch a sound source to In 1, and monitor Out 1. Mult a trigger to the decay envelope and to a kick drum. The audio through the VCA will now duck each time the kick is triggered.

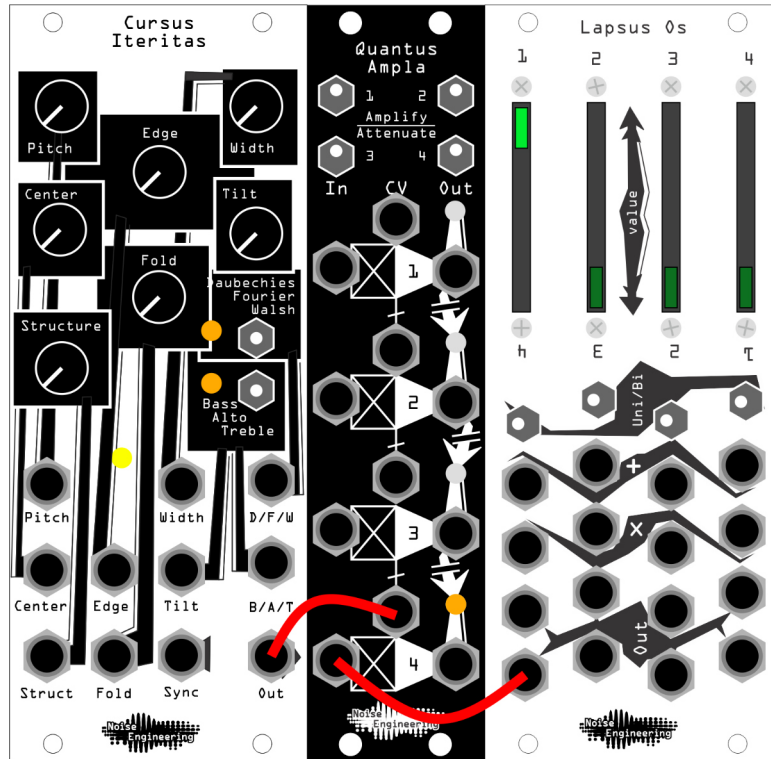
Multiple audio sources can be ducked at the same time with minimal patching: QA's CV inputs are circularly normaled, so a single envelope patched to a single CV input will duck up to 4 channels if they're left unpatched. The outputs can also be mixed together: QA's outputs mix down, so simply patch to the lowest output you want in your mix.



Amplitude Modulation

Requirements: two oscillators

Patch one oscillator to In 1, and the other to CV 1. This will modulate the level of the oscillator at In 1 fast enough that it changes its timbre instead of sounding like a change in volume.

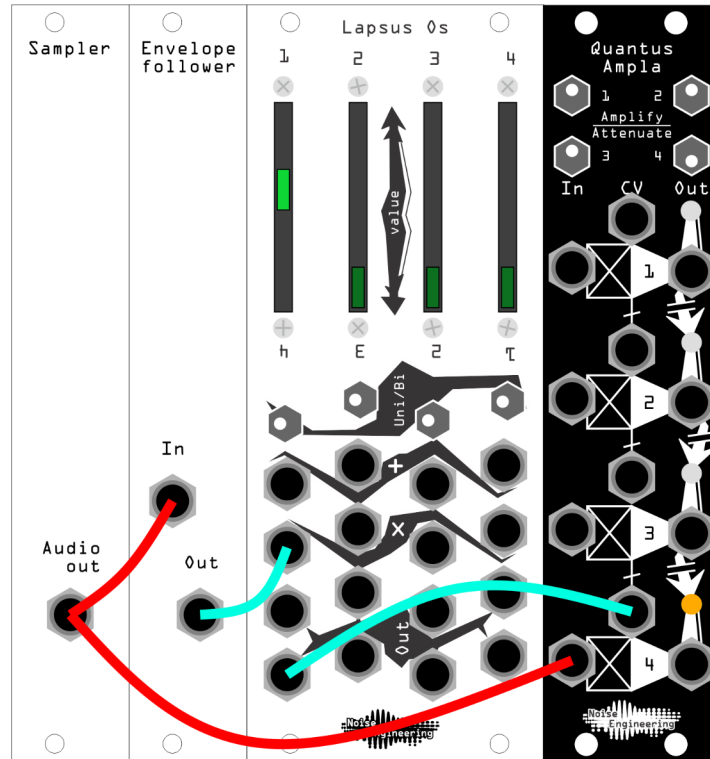


Half-wave rectification

DC offset and a signal to rectify (like an oscillator or LFO)

Half-wave rectification removes any part of a signal below 0v. This can be useful for creating unusual CV shapes, or changing how an oscillator sounds.

Set channel 1 to Amplify. Patch a +5v DC offset to the In 1 jack, and patch the signal to be rectified into the CV 1 jack. The rectified signal will be output at Out 1.



Compressor

Requirements: dynamic audio source (like a drum loop), envelope follower, attenuator, and mult

Mult your audio to your envelope follower and to In 1. Set channel 1 to Attenuate. Patch the output of the envelope follower through your attenuator, then to CV 1. Monitor Out 1. The attenuator controls the amount of compression.