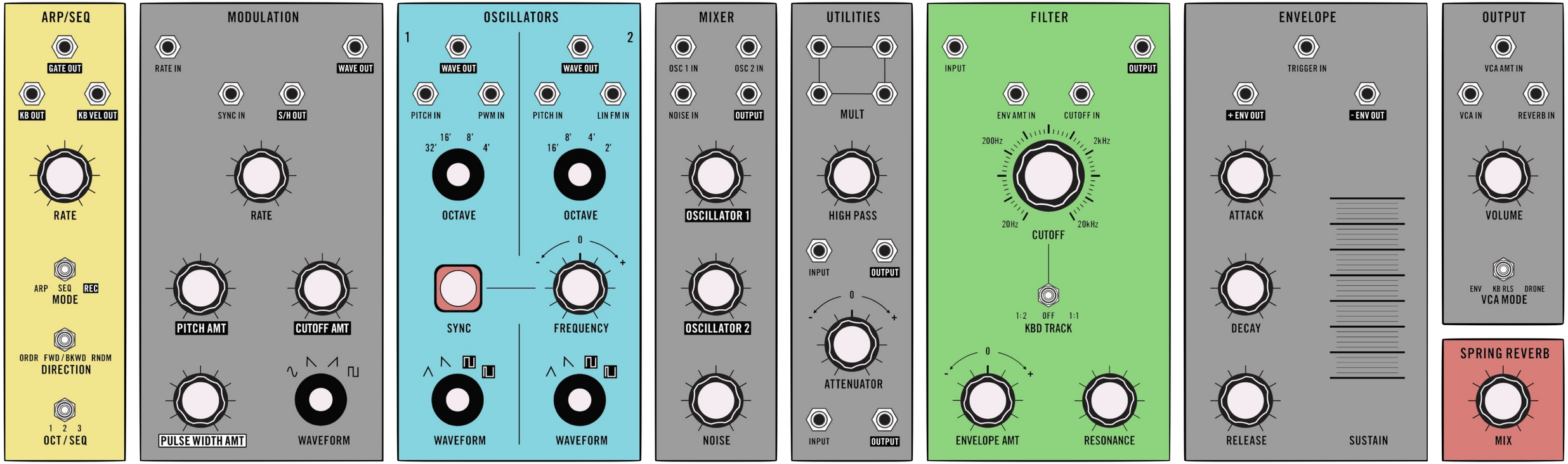
EVOLUTION

20 patches for Moog Grandmother



BY ANTON ANRU

INFORMATION ABOUT THE SOUNDSET

Welcome to the soundset for the semi-modular synth Moog Grandmother.

«Evolution» is a collection of 20 advanced patches: 10 Generative Sequences and 10 Complex Arpeggios. The bank covers a wide range of tones: warm, deep, bright, metallic, mallet, soft, expressive, dreamy, dark, evolving, detuned, inharmonic, noisy, distorted and others. Generative-style patches have complex modulations and movement, featuring both long and short steps, dark and bright tones, as well as tempo variation, unexpected and unpredictable splashes of sound… Generative timbres may be a good addition to (or a lead part of) ambient or techno tracks, jams and performances. You may also record fragments into your DAW or sampler, slice it to one-shots or make loops - you'll get a unique material for further processing.

All my audio examples were created using the built-in ARP/SEQ with the internal clock. Some presets involve ARP/SEQ rate modulation, and in such cases, using the internal ARP/SEQ is mandatory. If CLOCK IN is not modulated, you may use an external clock. The external clock is suitable for most Arps in the soundset but may not work well with the generative sequences due to their inherently "random" nature, which doesn't sync to a straightforward rhythm.

The soundset is presented in the form of PDF-Document. Each page contains notes that explain how the patch works, what parameters are worth tweaking during playback, and how to develop the timbre during a performance. If you make all the settings consciously and try the things mentioned in the notes, you will learn a lot about the synth and discover its true depth.

Each patch has an audio example, it helps to understand how a patch is supposed to sound.

To recreate these patches you need up to 9 patch cords.

You should also install firmware v1.1.3 or higher to have access to all settings used in this soundset.

INFORMATION ABOUT THE SOUNDSET

Here is some technical information to assist you in recreating the timbres more accurately.

The sequence patches don’t contain information about notes, rests, ties. You should program the sequences on your own. My general recommendation is the following: Use a wide range of notes, as in many cases, keyboard tracking is used as a modulation source. A sequence should contain many rests/pauses (in my sequences there are almost 50% notes and 50% rests). Otherwise, a sequence may sound too busy.

I always use HOLD mode to run a sequence or an arpeggio to free my hands and tweak the knobs.

There are patches where the Modulation Oscillator (LFO) is used as an audio-rate oscillator (it produces notes identical to regular Oscillators 1 and 2). Adjust the frequency using the Rate knob; for fine-tuning to a specific note, press and hold the SHIFT button while tweaking the RATE. Note that after fine-tuning, the final position of the Rate knob may not accurately represent the "true" frequency due to potential shifts during fine-tuning.

In such patches, you should avoid recreating the position of this knob. To give an objective target, I present information in notes, like: «*MOD OSC is tuned an octave higher than OSC 1*». This means that you should temporary leave only OSC 1 in MIXER, play the C note on the keyboard, look at the tuner and see, for example, ~130 Hz. Then turn OSC 1 down, connect MOD OSC WAVE OUT to MIXER OSC 1 IN, raise its volume. Play the same key, and tune/fine tune MOD OSC frequency with the RATE knob so that you see ~260 Hz on the tuner.

When MOD OSC is tuned, you may continue recreating the timbre according to the picture. If you are experienced enough, you may tune the third oscillator by ear, not by a tuner.

INFORMATION ABOUT THE SOUNDSET

A significant portion of the collection consists of arpeggio patches. There are also some important details about this category.

In most arpeggio modules/generators, there is a Gate parameter. Generally, it sets the note length. However, a high Gate value doesn't always mean that the final sound will be long; envelope settings also play a crucial role. Attack, Decay, and Sustain occur within the Gate time, while Release comes into play when the Gate is over (or when lifting a finger from the keyboard/note off, in the case of regular performance rather than Arp mode). For instance, if there is a slow Attack and Decay in an Arp patch, a higher Gate is needed to allow enough time. If the Gate is set low in this case, you might not hear any sound, as the Attack doesn’t have sufficient time to rise from zero to the maximum.

Here's another example: If the Attack is set to 0, Decay is short, providing a pluck-like effect, Sustain is 0, and Release is 80% (long), a high Gate will result in a short sound. This is because the Decay drops from the maximum to zero, Sustain holds it at zero, and when the Gate is over, we won't hear the Release as it falls from the actual level to zero, and the actual level is also zero.

With the same envelope but a very low Gate value, you will hear a longer sound. In this case, Decay doesn’t have enough time to completely fall to Sustain/zero before the Gate is over. As a result, you will hear a long release that starts from some middle level (where Decay is over).

Grandmother has a Gate Length parameter, but it’s not available from the front panel. It’s set via MIDI CC, which can be sent to the synth from your DAW or hardware MIDI Controller. The CC number is 106. Another parameter that can significantly influence the arp groove is the Swing amount. This can also be set via MIDI, with the CC number being 14. You will find the recommended Gate and Swing amounts in all Arp patches in this soundset.

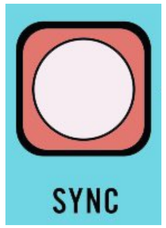
I made a detailed video tutorial about using MIDI to streamline the workflow with Grandmother. Additionally, there’s another video where I demonstrate creative techniques with MIDI parameters: https://www.youtube.com/antonanru

INFORMATION ABOUT THE SOUNDSET

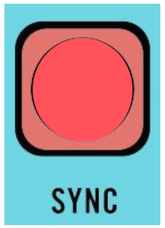
Menu settings also allow you to change VCO 2 FREQUENCY range. In my case, it was set to ±7 semitones (default value). So, to recreate the patches, you should set it to ±7 as well.

I didn't depict SPRING REVERB MIX and VOLUME knobs, as I believe that's a matter of taste and the situation you're working in. You may add any portion of reverb as needed.

There's a SYNC button in oscillators section.

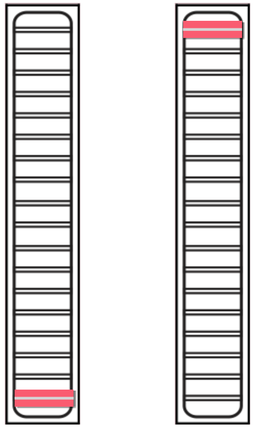


- OFF



- ON

You will also find ModWheel start position.
In all presets in this soundset, the default position is max.
If the ModWheel is fully up, this means that the changes it gives are already an important part (starting point) of the patch, but, of course, you may try turning it down.



ANTON ANRU

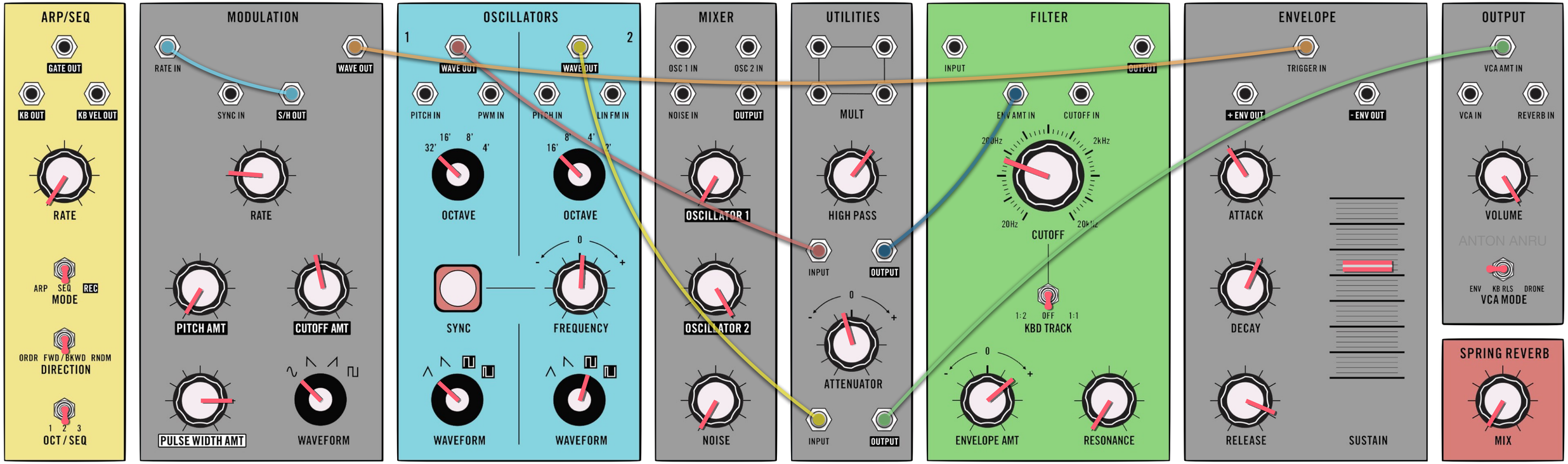
Ableton Certified Trainer, music producer, sound designer.

Author of the presets for software and hardware synths and effects that include: Moog Mother-32, DFAM, Subharmonicon, Sound Studio, Grandmother, Matriarch, Sub Phatty/Subsequent 25, Sub 37/Subsequent 37, Mavis, Minitaur/Sirin, Novation Peak/Summit, Arturia Matrixbrute, Minifreak, Microfreak, Dreadbox Nymphes, Typhon, Erebus V3, Korg Minilogue XD, Opsix, Modwave, Wavestate, Behringer Pro-800, Crave, Edge, 2600, Neutron, TD-3, Elektron Digitone, Syntakt, Analog Four, Make Noise 0-coast, Strega, Akai MPC/Force, ASM Hydrasynth, Akai MPC/FORCE, PWM Malevoleent, U-He Repro, Spectrasonics Omnisphere, Xfer Serum, NI MassiveX, Soundtoys, ROLI Equator.

The full list of soundsets is available on the website: antonanru.sellfy.store

LINKS: Instagram Youtube Soundcloud Facebook VK

Elevatia



GLIDE

MOD

Trigger Mode

SINGLE MULTI

Legato Glide

ON **OFF**

Gate 89

Swing 31

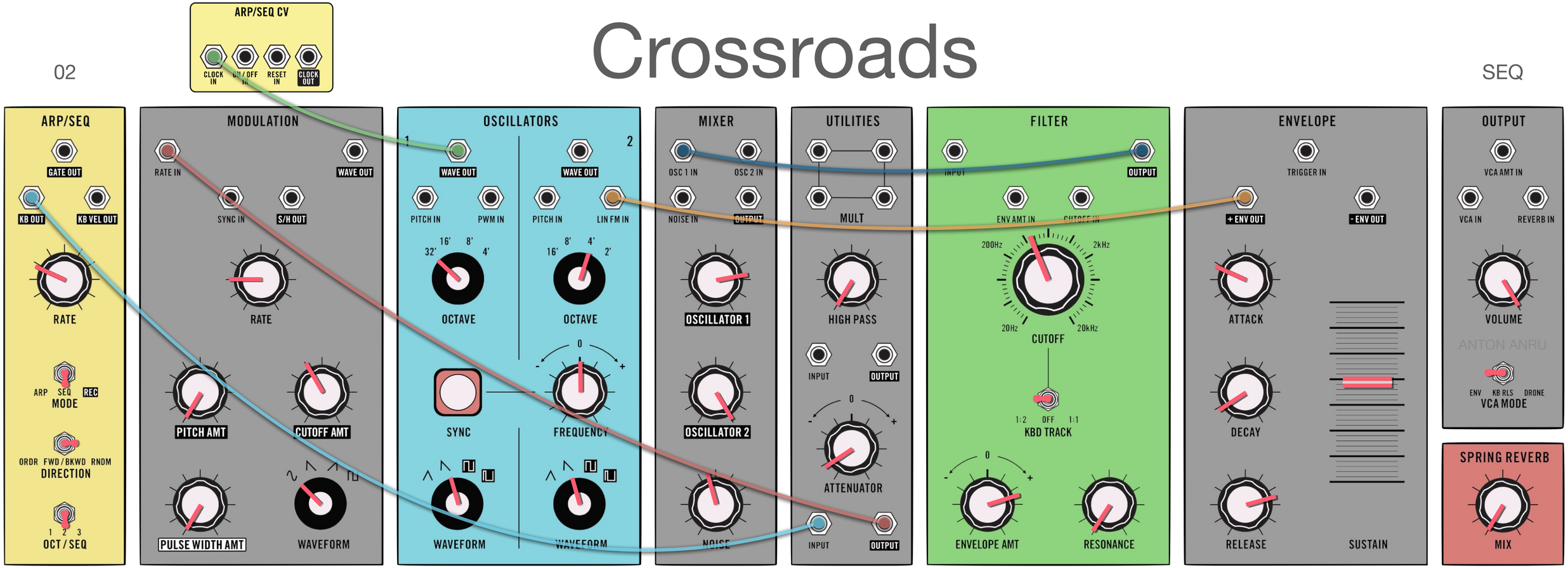
The ENVELOPE is triggered by MOD OSC (its RATE is modulated by S/H). As a result, the ENVELOPE is triggered independently from notes/sequencer steps.

OSC 1 LEVEL is turned down in the MIXER, but we can still hear it «indirectly» - it modulates the FILTER. Tweak OSC 2 FREQUENCY to detune it and create the beating effect.

OSC 2 modulates VCA AMT; this adds a metallic tone. Control the depth of the modulation with ATTENUATOR.

As ENVELOPE is triggered by the external source, it produces the sound even if the sequencer isn't active. To stop the sound break the connection or turn the master VOLUME down.

Crossroads



Trigger Mode

SINGLE MULTI

Legato Glide

ON **OFF**

Gate 64

Swing 64

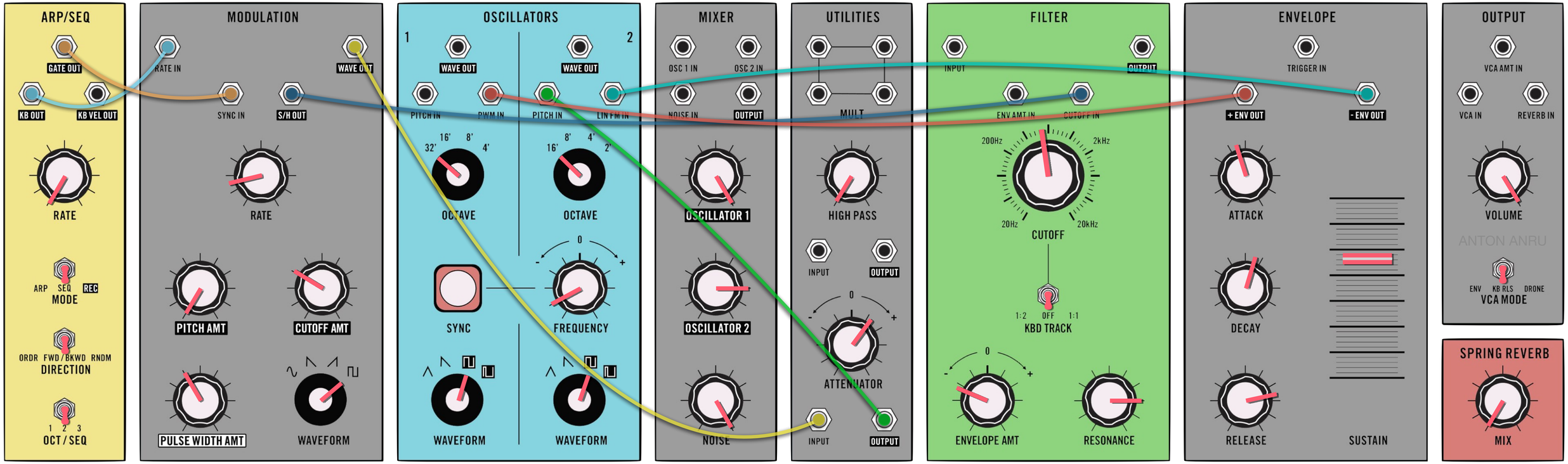
Make a sequence with a wide range of notes, and use a low keyboard octave to run the sequence.

OSC 1 works as an LFO. It runs at a very low frequency that is modulated by pitch/note. The higher the note, the faster the rate. OSC 1 modulates ARP/SEQ CLOCK. Thus, the sequencer's speed is constantly changing.

MOD OSC modulates CUTOFF, and it also has the modulated RATE by note/pitch, but in the opposite direction: the higher the note, the slower the RATE.

FILTER's output goes back to the MIXER, thus creating a feedback loop. This creates a bigger and a more aggressive sound. MIXER OSC 1 knob controls the level of the feedback. If you raise it higher than 3 o'clock, the sound will begin to destroy. You may carefully use this knob to add some dirt.

Overflow



GLIDE

MOD

Trigger Mode

SINGLE MULTI

Legato Glide

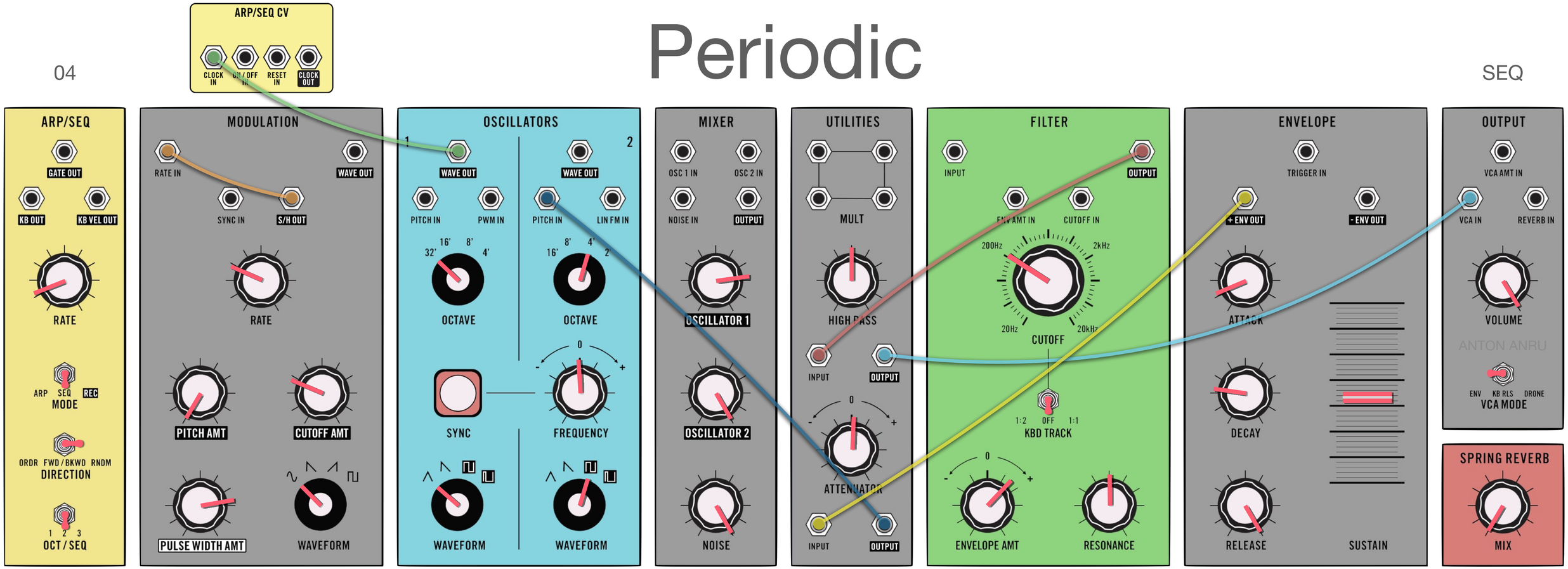
ON **OFF**

Gate 88

Swing 64

OSC 2 pitch is modulated by MOD OSC PULSE through ATTENUATOR. Set ATTENUATOR level to get pure octaves between the lowest and the highest MOD OSC PULSE states. Push note C on the keyboard and slowly raise ATTENUATOR knob until you get octaves. The overall tone may be shifted to some different note, F# for example. Compensate this shift and set the OSC 2 pitch to C with the FREQUENCY knob.

Periodic



Trigger Mode

SINGLE MULTI

Legato Glide

ON **OFF**

Gate 64

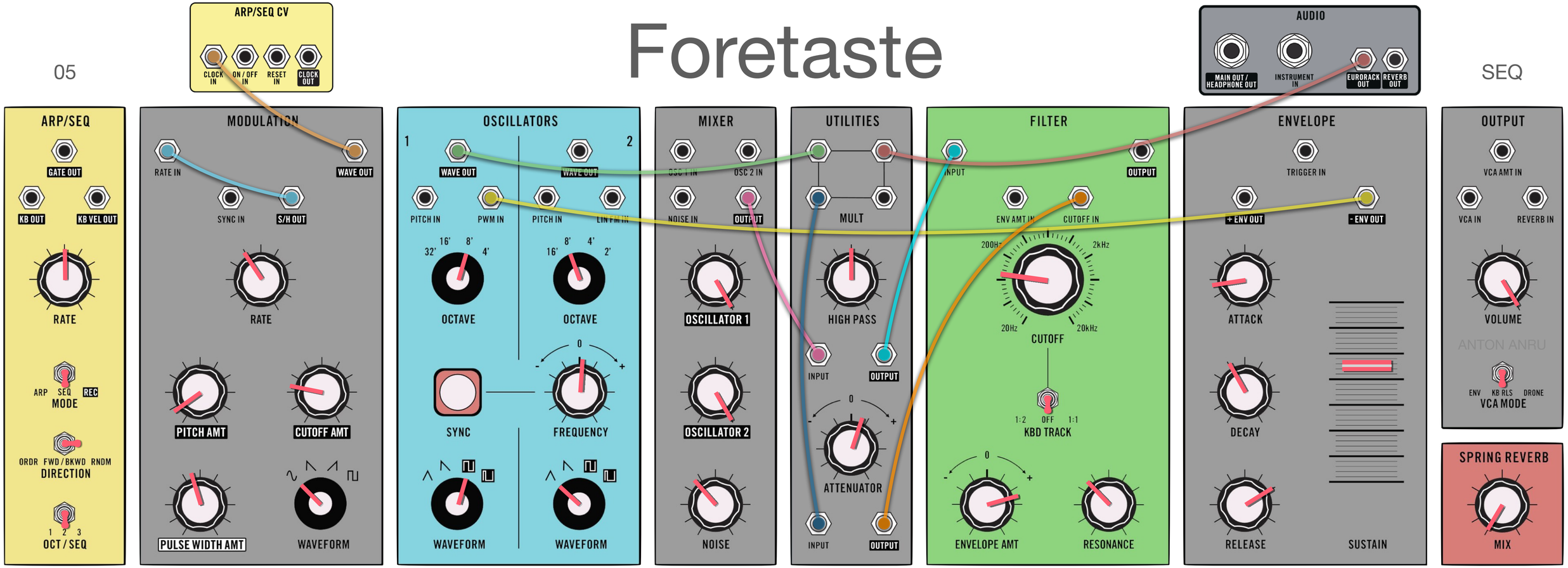
Swing 64

Make a sequence with a wide range of notes, and use a low keyboard octave to run the sequence. OSC 1 works as an LFO. It runs at a very low frequency that is modulated by pitch/note. The higher the note, the faster the rate. OSC 1 modulates ARP/SEQ CLOCK. Thus, the sequencer's speed is constantly changing.

As OSC 1 works at low frequencies and its signal is used in the timbre, it creates a distorted sound with overtones. You may make the timbre cleaner by turning down MIXER OSC 1 LEVEL.

OSC 2 has a slight pitch modulation via ENVELOPE. ATTENUATOR controls the depth of the modulation. Set the lowest possible modulation level

Foretaste



Trigger Mode

SINGLE MULTI

Legato Glide

ON **OFF**

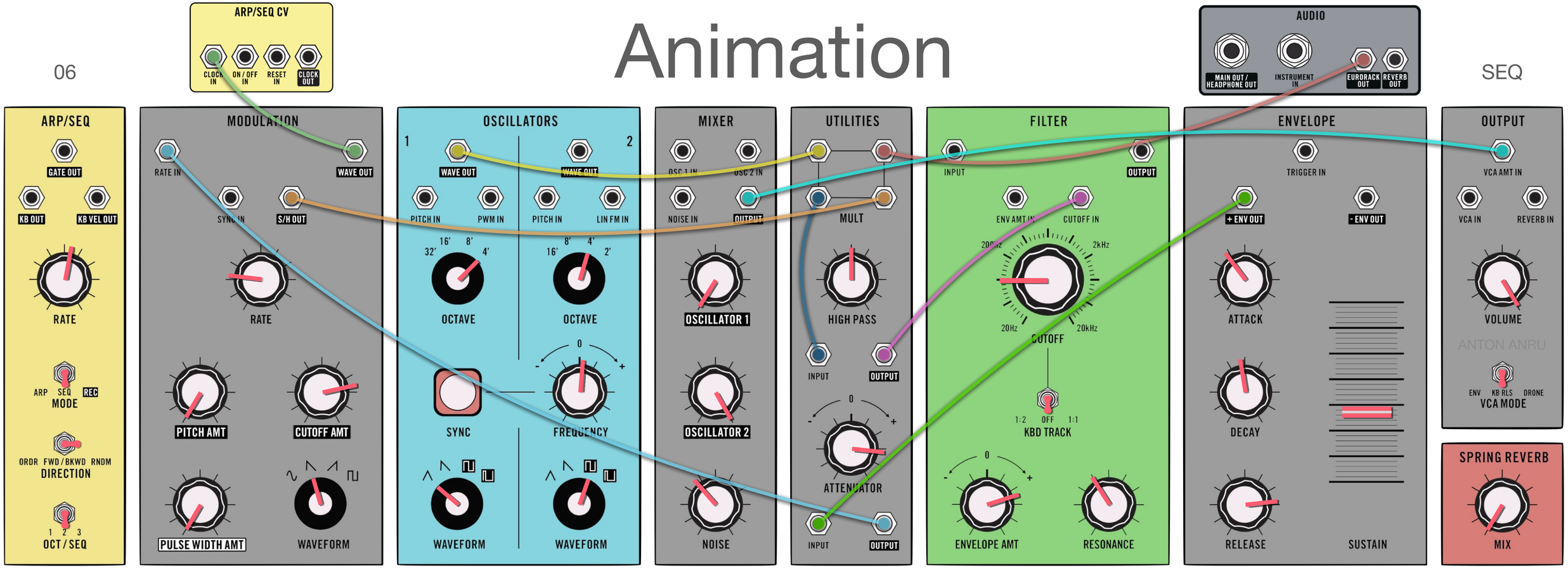
Gate 106

Swing 25

OSC 2 FREQ, MOD OSC PULSE WIDTH, and PITCH modulations create a detuned timbre. The signal is passed through the HIGH PASS filter to create a cold, distant sound.

ATTENUATOR controls the FILTER modulation, with higher values resulting in a brighter sound.

Animation



Trigger Mode

SINGLE MULTI

Legato Glide

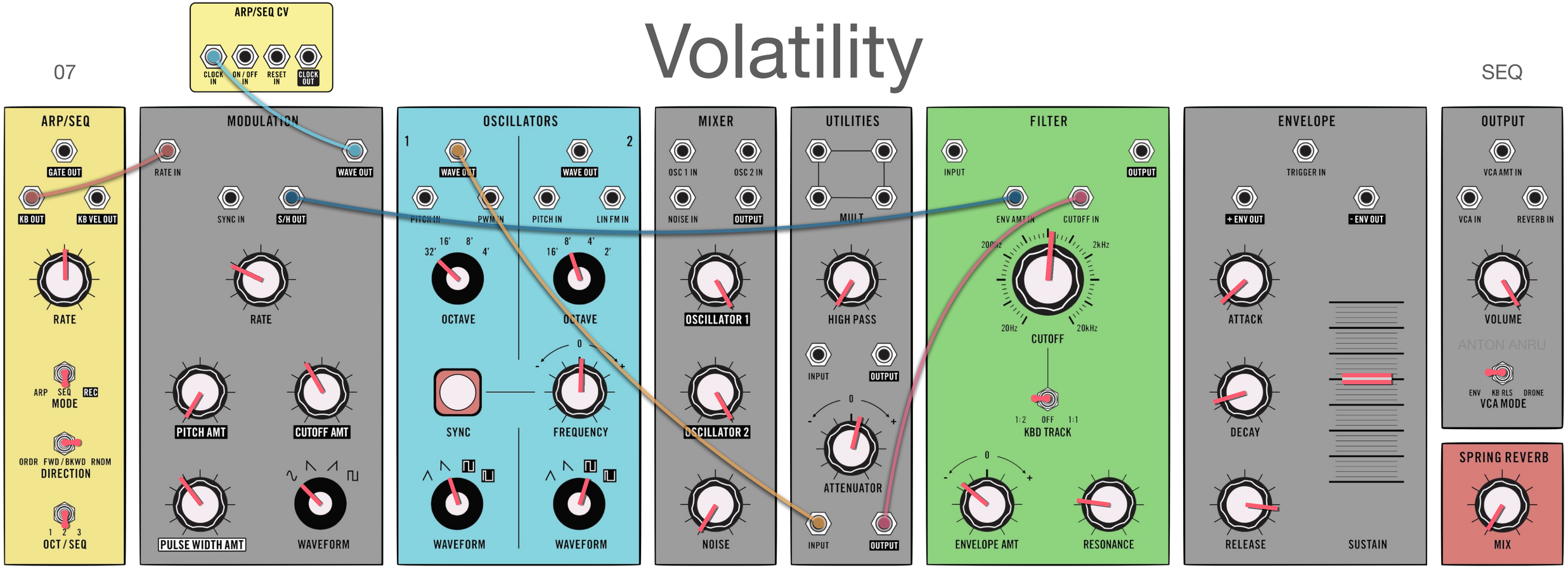
ON **OFF**

Gate 117

Swing 59

The patch produces accelerated plucks due to MOD OSC RATE modulation by ENVELOPE. Control the depth of the modulation/acceleration with ATTENUATOR. Try different MOD OSC WAVEFORMs to change articulation.
MOD OSC and ARP/SEQ have complex modulations, and sometimes the sequencer may freeze as it doesn't receive a clock signal for a long time. Tweak ARP/SEQ or MOD OSC RATEs manually for some time to "re-launch" the playback.
CUTOFF is modulated by several signals. They pass through the HIGH PASS FILTER. Tweak HIGH PASS to change the color of the timbre.

Volatility



Trigger Mode

SINGLE MULTI

Legato Glide

ON **OFF**

Gate 64

Swing 64

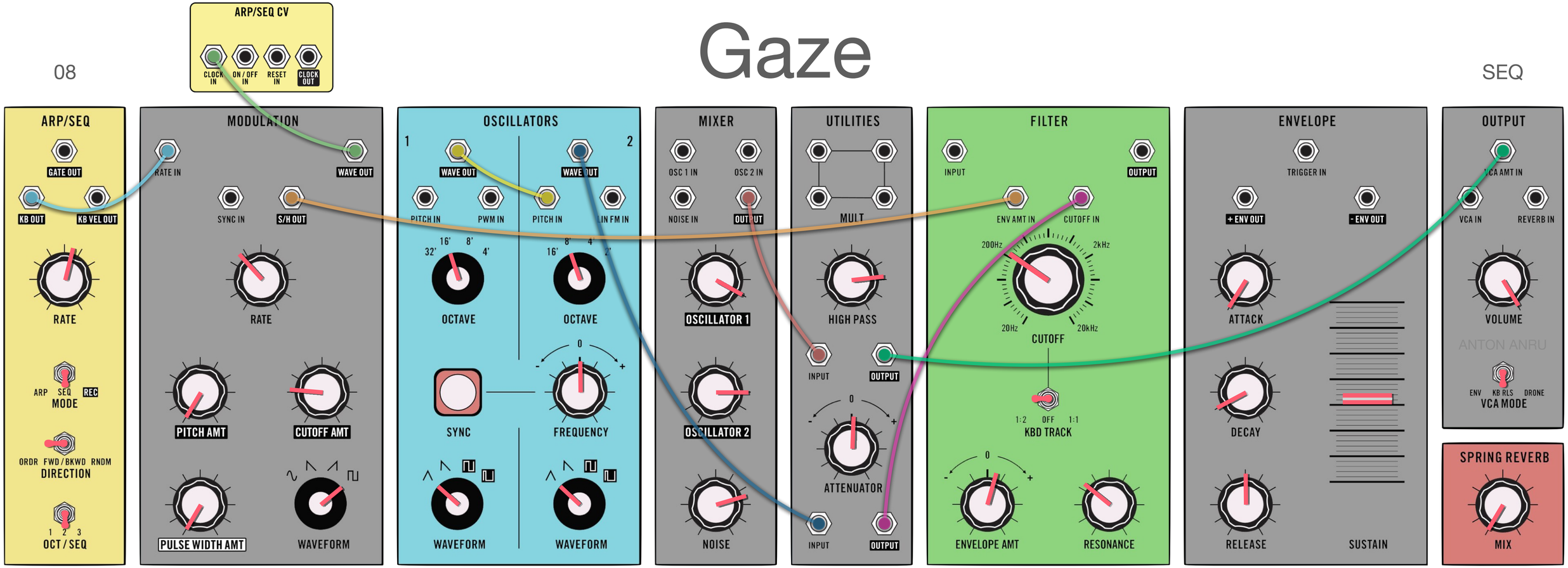
Make a sequence and use RNDM DIRECTION.

MOD OSC modulates ARP/SEQ CLOCK, while MOD OSC RATE is modulated by KB OUT (the higher the notes, the faster the RATE).

Control the overall speed of the seq with ARP/SEQ and MOD OSC RATEs.

OSC 1 modulates FILTER CUTOFF through ATTENUATOR. This creates a bright aggressive tone. Control the depth of the modulation with ATTENUATOR level.

Gaze



GLIDE

MOD

Trigger Mode

SINGLE MULTI

Legato Glide

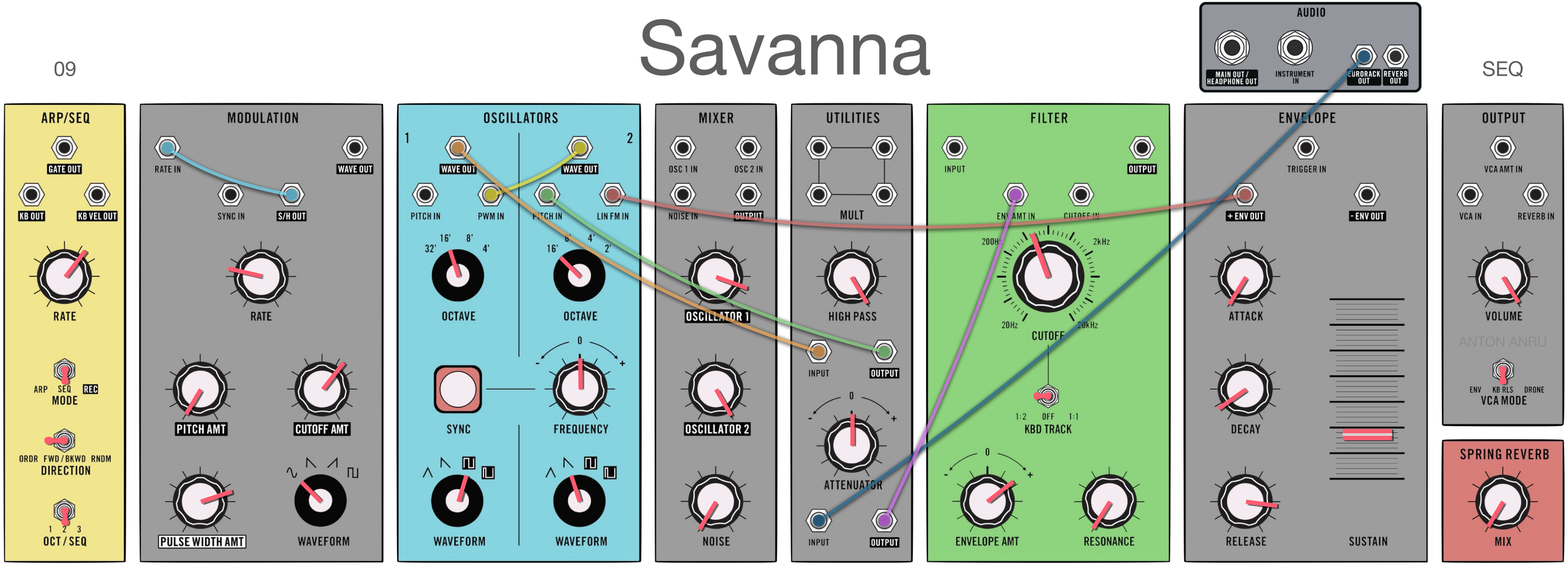
ON **OFF**

Gate 57

Swing 47

The timbre is noisy, metallic, and distorted primarily because of OSC 2 PITCH modulation by OSC WAVE OUT. The sequence playback isn't stable due to ARP/SEQ CLOCK IN and MOD OSC RATE modulations. ATTENUATOR controls distortion. MIXER OUT -> VCA AMT IN connection (through HIGH PASS) adds extra noise/hiss. Shape the noise with HIGH PASS. Break the connection to cut the noise and get a dull sound.

Savanna



GLIDE

MOD

Trigger Mode

SINGLE MULTI

Legato Glide

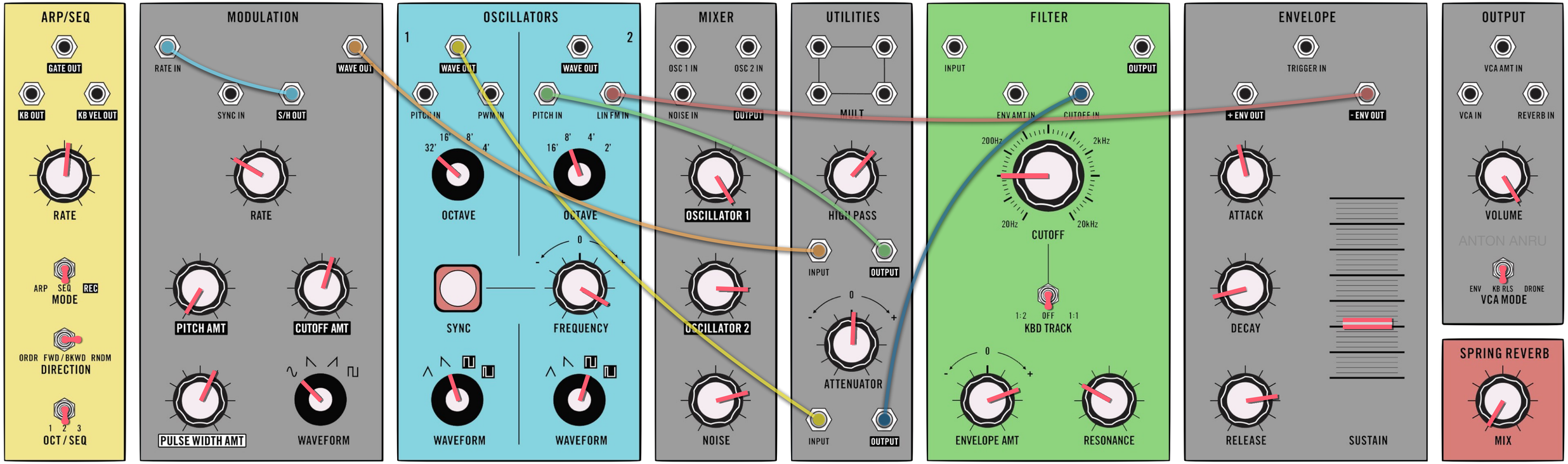
ON **OFF**

Gate 113

Swing 64

Oscillators have inter-modulations. OSC 1 modulates OSC 2 PITCH through HIGH PASS.
While HIGH PASS has the max value, the modulation is subtle. But if you turn HIGH PASS down, you will get much detuning, noise, distortion, and lots of other tones.
OSC 2 modulates OSC 1 PWM, the most noticeable effect is detuning. But if OSC 2 gets noisy (due to HIGH PASS tweaking), OSC 1 gets distorted as well.
Tweak ATTENUATOR to add saturation.

Delta



GLIDE

MOD

Trigger Mode

SINGLE MULTI

Legato Glide

ON **OFF**

Gate 119

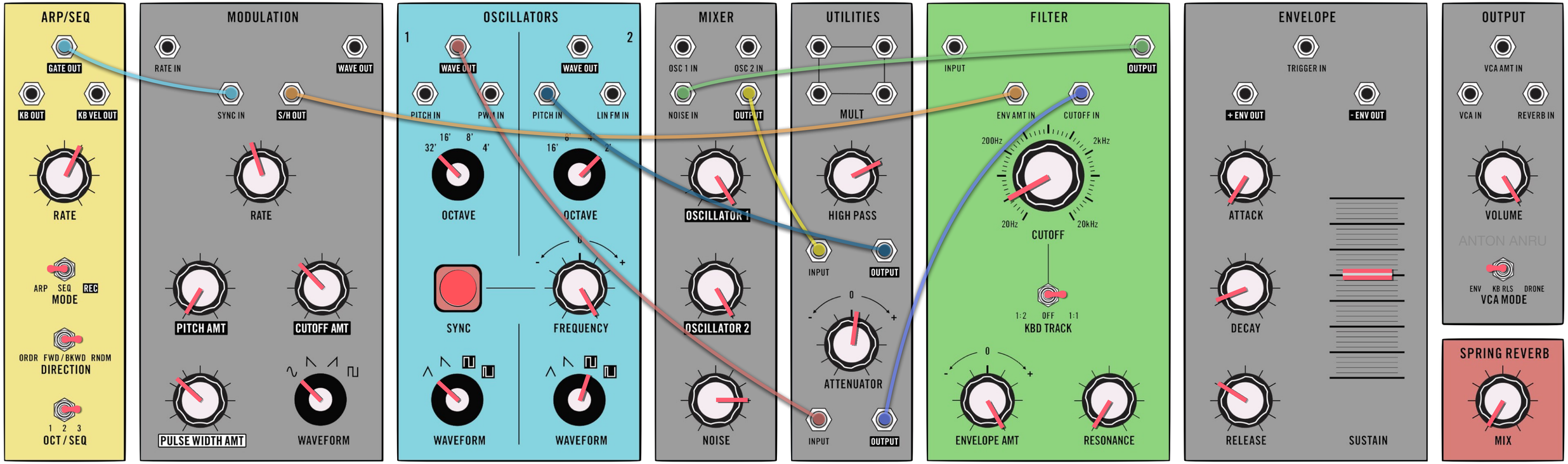
Swing 64

OSC 2 FREQ is set to +6 semitones. The sequence also contains this interval. The result is the dark distorted "duophonic" (gives an illusion of chords) sequence.

Tweak ATTENUATOR to add distorted metallic tone.

MOD OSC modulates OSC 2 PITCH through the HIGH PASS FILTER. It works like an attenuator. High values cut the sound, and the modulation is subtle; lower values "open" the signal, and OSC 2 PITCH gets higher modulation depth.

Network



GLIDE

MOD

Trigger Mode

SINGLE MULTI

Legato Glide

ON **OFF**

Gate 78

Swing 64

ARP/SEQ GATE OUT resets MOD OSC each time a new note is introduced. Thus, each arp-step gets a new (random) FILTER CUTOFF value as S/H OUT modulates FILTER ENV AMT.

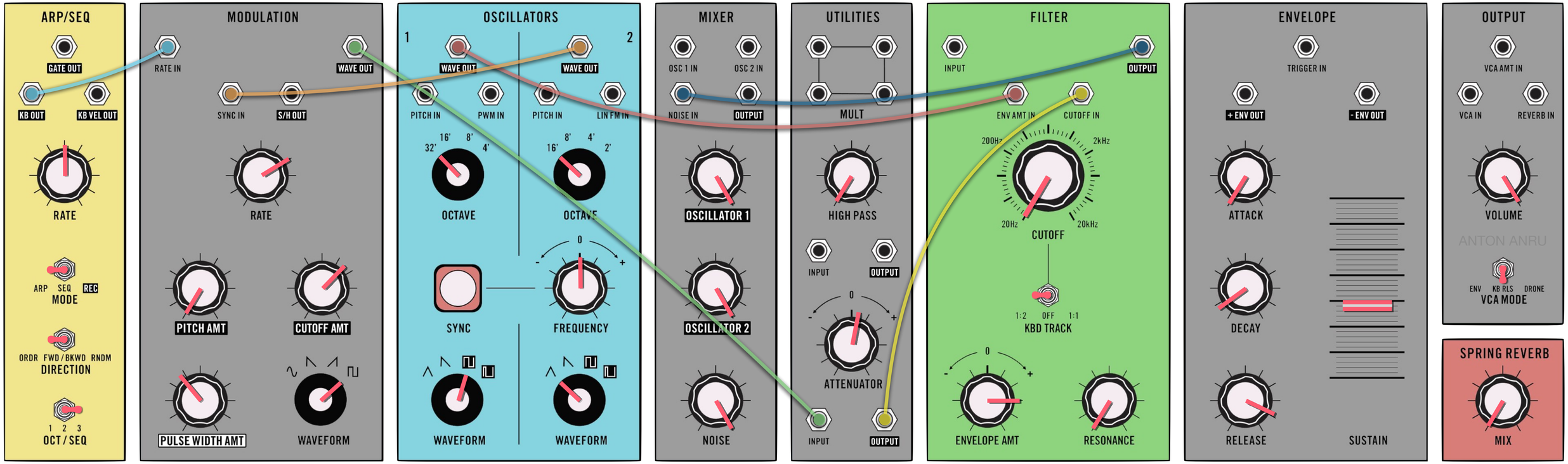
Match MOD OSC RATE manually/by ear to the ARP/SEQ tempo so that it gives a nice groove.

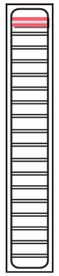
Raise ATTENUATOR to add "digital" dirt.

FILTER OUT goes back to the MIXER to create a feedback loop. This adds power and extra low frequency to the timbre. Turn NOISE down to taste the sound without this feedback.

MIXER OUT modulates OSC 2 PITCH (through HIGH PASS), adding noise to the timbre. Tweak HIGH PASS to get different colors of the noise.

Moderator





Trigger Mode

SINGLE MULTI

Legato Glide

ON **OFF**

Gate 77

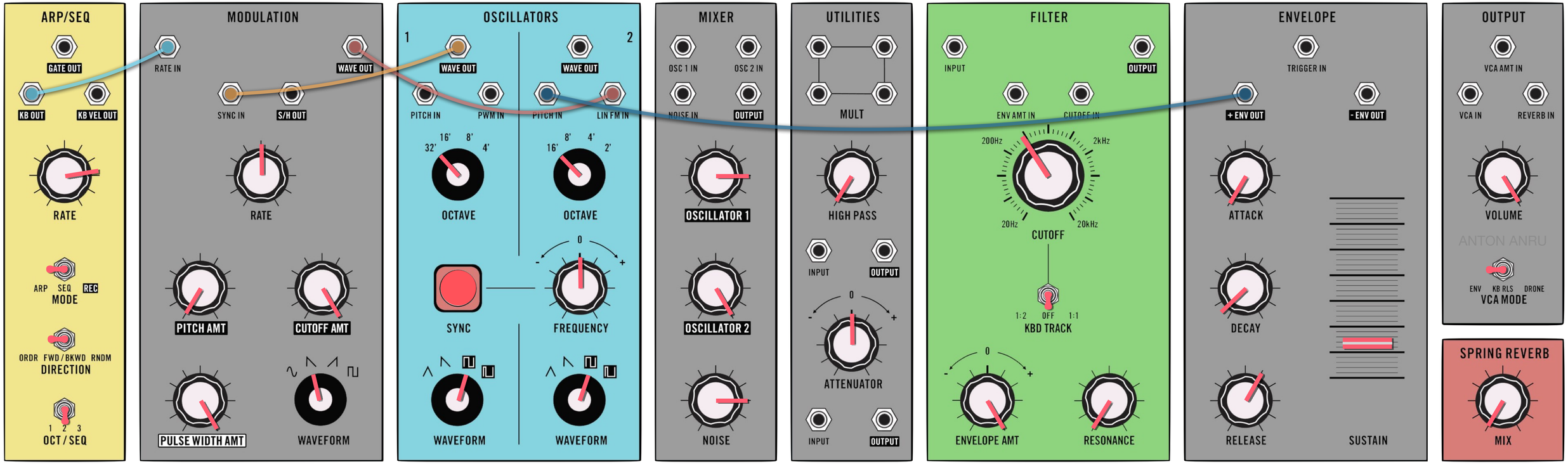
Swing 64

MOD OSC works at an audio rate, producing pitch that follows the keyboard/notes. This tone modulates PULSE WIDTH and CUTOFF, creating an interesting character.

Tweak MOD OSC RATE to get different colors of the timbre. MOD OSC is synced to OSC 2, so OSC 2 settings affect the sound of MOD OSC, thus affecting everything that is modulated by MOD OSC. Play with OSC 2 parameters to get various results.

The FILTER is also modulated by another audio-rate source - OSC 1. As a result, FILTER's sound depends on all three oscillators, giving a space for a huge palette of tones. Tweak oscillators' parameters. ATTENUATOR adds extra dirt and brightness. FILTER OUT goes back to the MIXER to create a feedback loop. This adds power and extra low frequency to the timbre. Turn NOISE down to make the sound cleaner.

Affliction



Trigger Mode

SINGLE MULTI

Legato Glide

ON **OFF**

Gate 22

Swing 64

MOD OSC is tuned in unison with OSC 1.

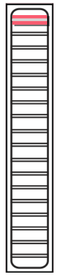
The timbre has many audio-rate modulations. Oscillators modulate each other as well, resulting in some dirt and distortion.

Turn MOD OSC CUTOFF and/or PULSE WIDTH AMT or ModWheel down for a cleaner sound.

Use SUSTAIN as an expression tool; it adds an aggressive, bright, acid tone.

Try different OSC 1 WAVEFORMs for variation.

Woozy



Trigger Mode

SINGLE MULTI

Legato Glide

ON **OFF**

Gate 88

Swing 64

OSC 2 is detuned, and the detuning level is crucial as it creates beating that modulates the FILTER. Control OSC 2 detuning to increase or decrease the beating.

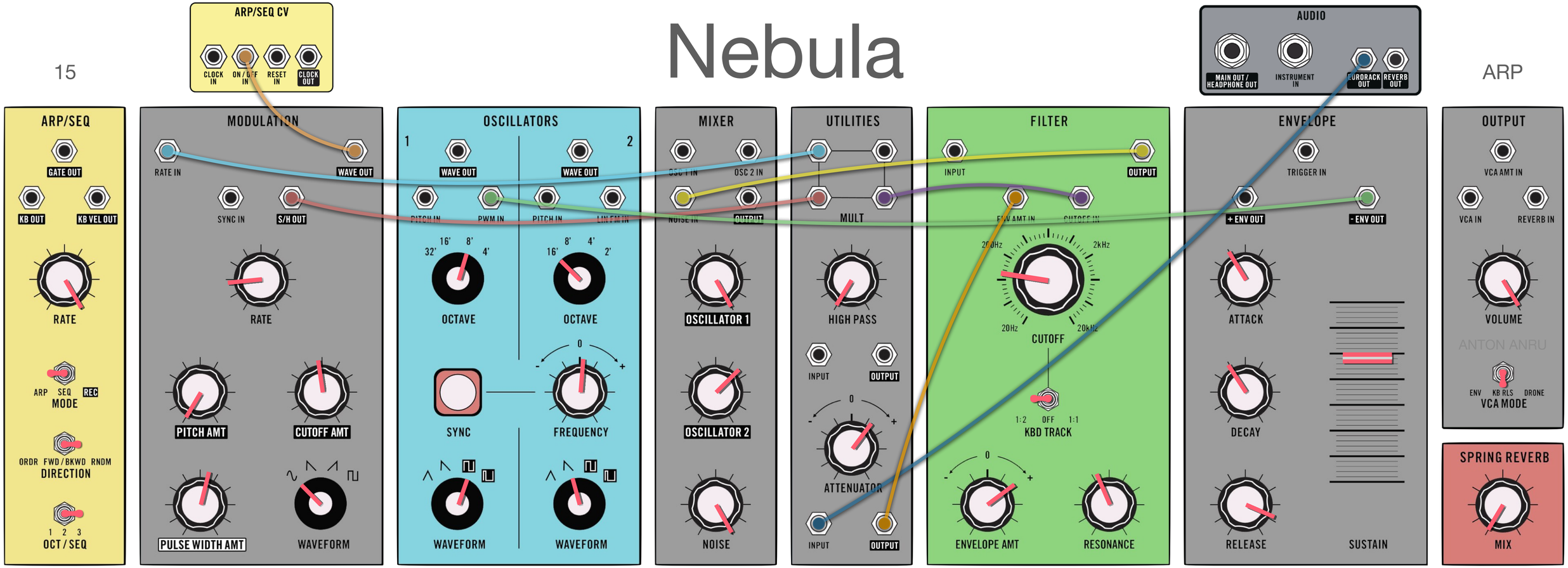
MIXER's output modulates FILTER ENV AMT through the HIGH PASS FILTER. Tweak HIGH PASS to change the tone.

The AUDIO EURORACK OUT modulates CUTOFF, creating a feedback loop, and the sound becomes overdriven and saturated. Control the depth of the modulation with ATTENUATOR.

Add NOISE; it doesn't sound like "normal" noise but adds a kind of bit-crusher effect.

As the ENVELOPE is triggered by an external source, it produces sound even if the sequencer isn't active. To stop the sound, break the connection or turn the master VOLUME down.

Nebula



Trigger Mode

SINGLE MULTI

Legato Glide

ON **OFF**

Gate 99

Swing 64

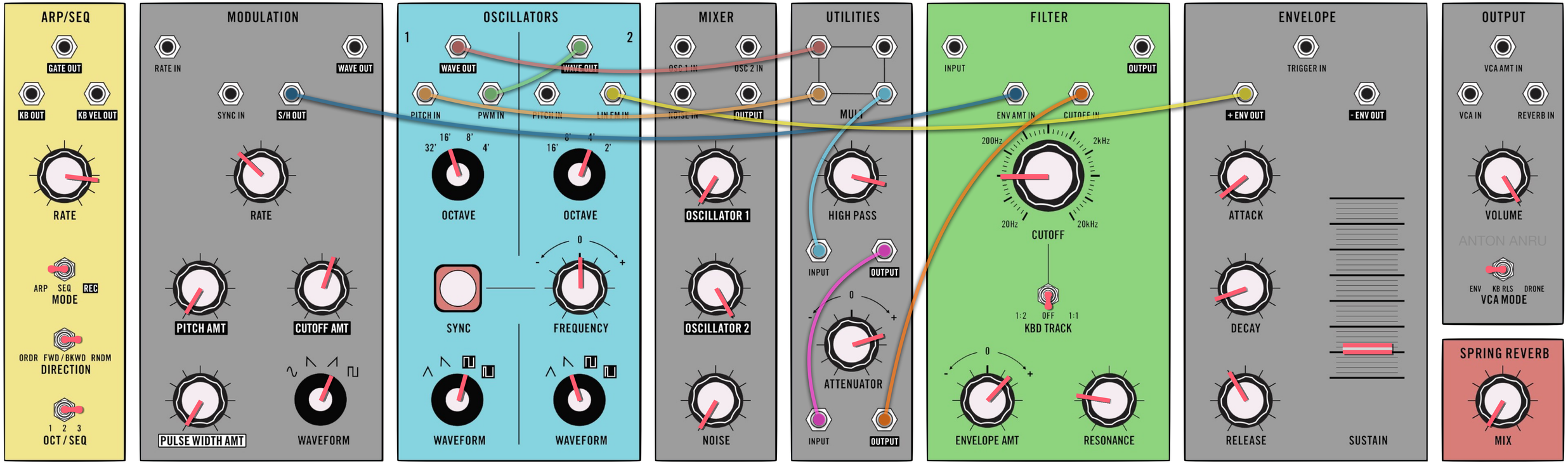
ARP ON/OFF is modulated by MOD OSC, and MOD OSC RATE is modulated by Sample and Hold (S/H). As a result, the arpeggios appear as random splashes of sound.

There are two audio feedback loops: one through the FILTER and the other through the EURORACK OUTs. They make the sound "bigger" and "more powerful." Turn NOISE and ATTENUATOR down to reduce this effect.

Raise ATTENUATOR to add distortion.

Try different OSC WAVEFORMs.

Sour



GLIDE

MOD

Trigger Mode

SINGLE MULTI

Legato Glide

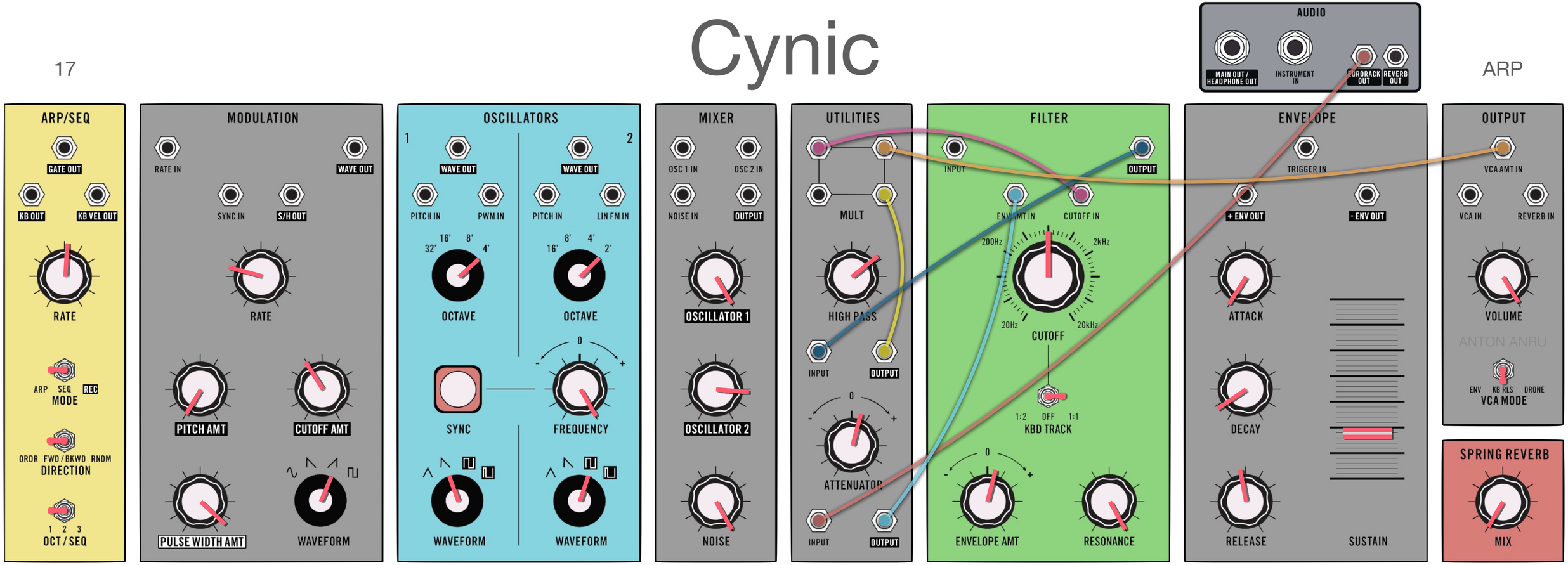
ON **OFF**

Gate 118

Swing 64

OSC 1 is heavily modulated, producing a distorted, noisy tone that serves as a modulation source for the FILTER.
The HIGH PASS FILTER shapes the tone, and ATTENUATOR controls the depth of the modulation.
Set MOD OSC RATE to match the global tempo.
The default timbre is relatively moderate, creating splashes of bright sound.
Play with ENVELOPE parameters to "open" the sound and add expression.

Cynic



Trigger Mode

SINGLE MULTI

Legato Glide

ON **OFF**

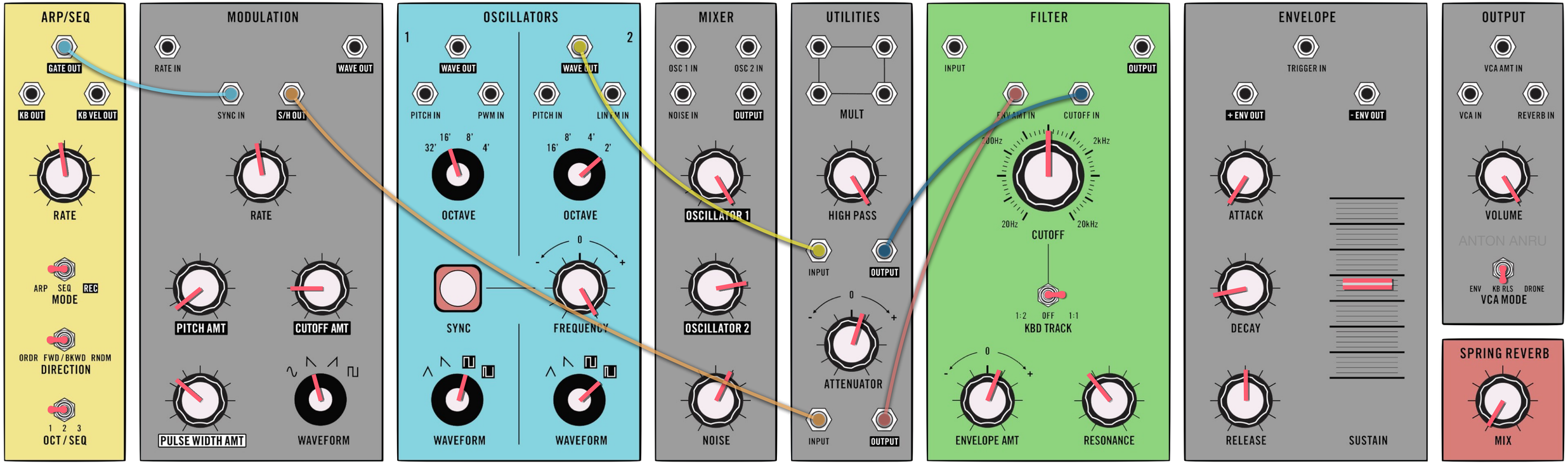
Gate 116

Swing 60

Set MOD OSC RATE to "match" or be in groove with ARP RATE. The timbre contains glides/slides, while GLIDE is off. This is the result of the filter self-oscillation. If you raise RESONANCE fully up, the filter starts to produce a tone/note on the CUTOFF frequency. But if you send oscillators to the filter at a high level, the filter is overdriven, and the self-oscillation effect disappears. By default, in this patch, the FILTER is overdriven and doesn't produce the self-oscillation tone. Still, as OSC 2 PULSE WIDTH is modulated, it gets narrow for a short period, losing volume. For this brief period, the filter isn't driven much, producing the self-oscillation tone. As CUTOFF is modulated by ENVELOPE and MOD OSC, we hear the slide/glide. If you change OSC 2 WAVEFORM to TRI or SAW, you won't hear the slides.

Anyway, try different OSC 1 and 2 WAVEFORMs. Tweak HIGH PASS and ATTENUATOR to control "distorted" modulation.

Cellar



GLIDE

MOD

Trigger Mode

SINGLE MULTI

Legato Glide

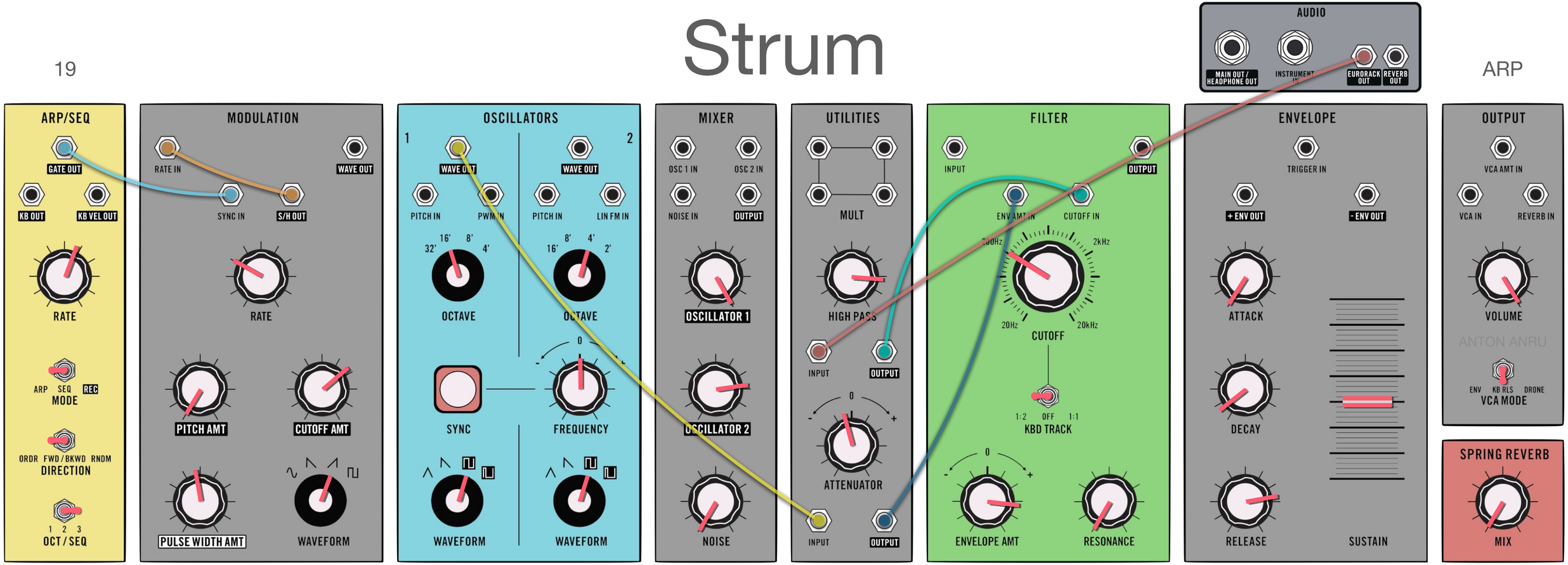
ON **OFF**

Gate 82

Swing 64

MOD OSC creates fast modulations. It's synced to GATE, so each ARP step has a clear attack.
MOD OSC S/H modulates the FILTER, creating random spikes. Control the depth of the modulation with ATTENUATOR.
OSC 2 modulates the FILTER through HIGH PASS. At the highest HIGH PASS values, the sound resembles a bit-crush effect; average values produce distorted sound, while the lowest values result in a dull and soft sound.

Strum



Trigger Mode

SINGLE MULTI

Legato Glide

ON **OFF**

Gate 83

Swing 114

SWING amount is high, and together with other settings, this gives an illusion of strums.

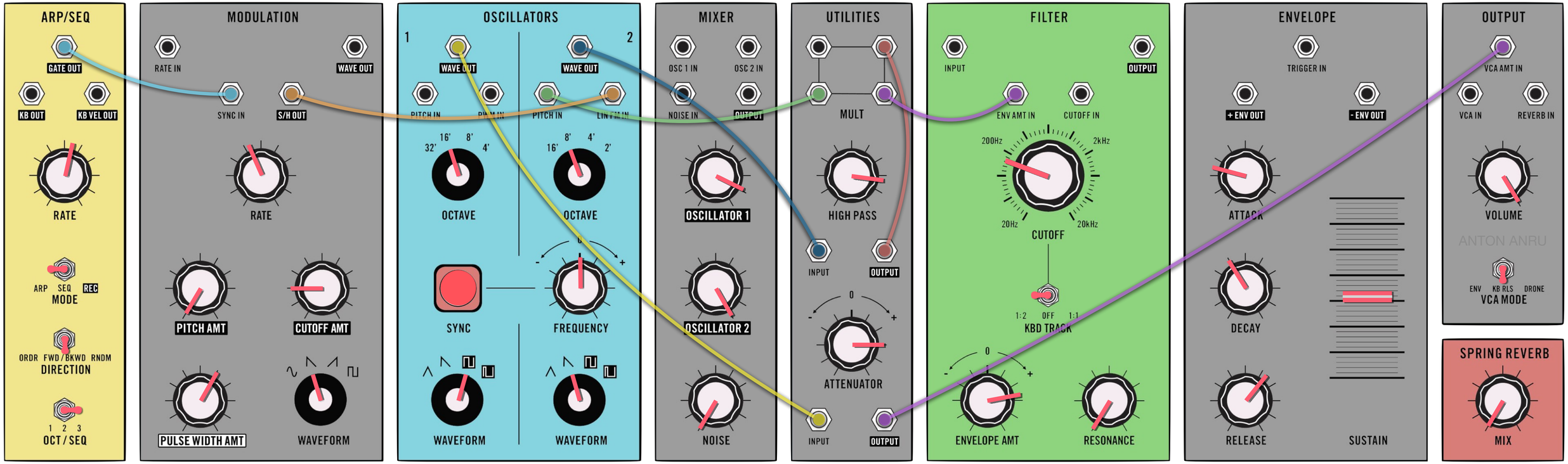
ATTENUATOR makes the sound thinner. Tweak in both directions.

EURORACK OUT modulates CUTOFF, creating an oversaturated sound.

HIGH PASS works as an attenuator of the modulation. Turn it down to add distortion.

Try different MOD OSC WAVEFORMs.

X-Ray



GLIDE

MOD

Trigger Mode

SINGLE MULTI

Legato Glide

ON **OFF**

Gate 106

Swing 64

OSC 1 modulates OSC 2 PITCH and FILTER ENV AMT through HIGH PASS. Turn HIGH PASS down a bit to add detune and brightness.

Try turning SYNC off; it makes OSC 2 sound softer, but it may kill it with detune.

Raise HIGH PASS to reduce detuning.

Raise MOD OSC CUTOFF AMT to increase "attack" and add a pluck character.

Tweak MOD OSC PULSE WIDTH AMT to control the overall detune.

THE END

Thank you for purchasing the catalog.

I hope you enjoyed the work with Grandmother, learned new things, and got inspiration for new tracks and performances.

Follow me on social media not to miss new soundsets and tutorials.

If you like these patches you may also like my other Moog soundsets. You may find the detailed information, video and audio demos on this page:

https://antonanru.sellfy.store/moog/

For any comments or questions contact me: anru.anton@gmail.com

Cheers,

Anton Anru