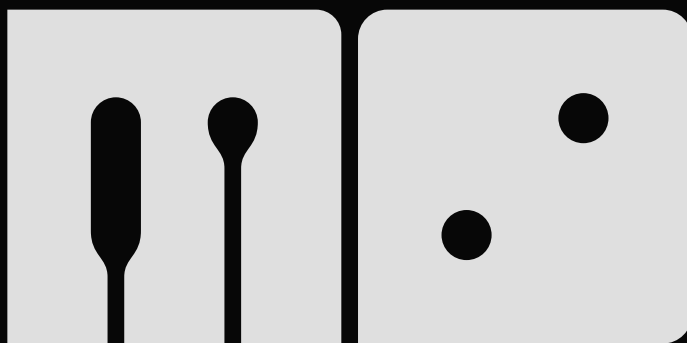




Mono Two

Monophonic Synthesizer
for Ableton Live

v1.0

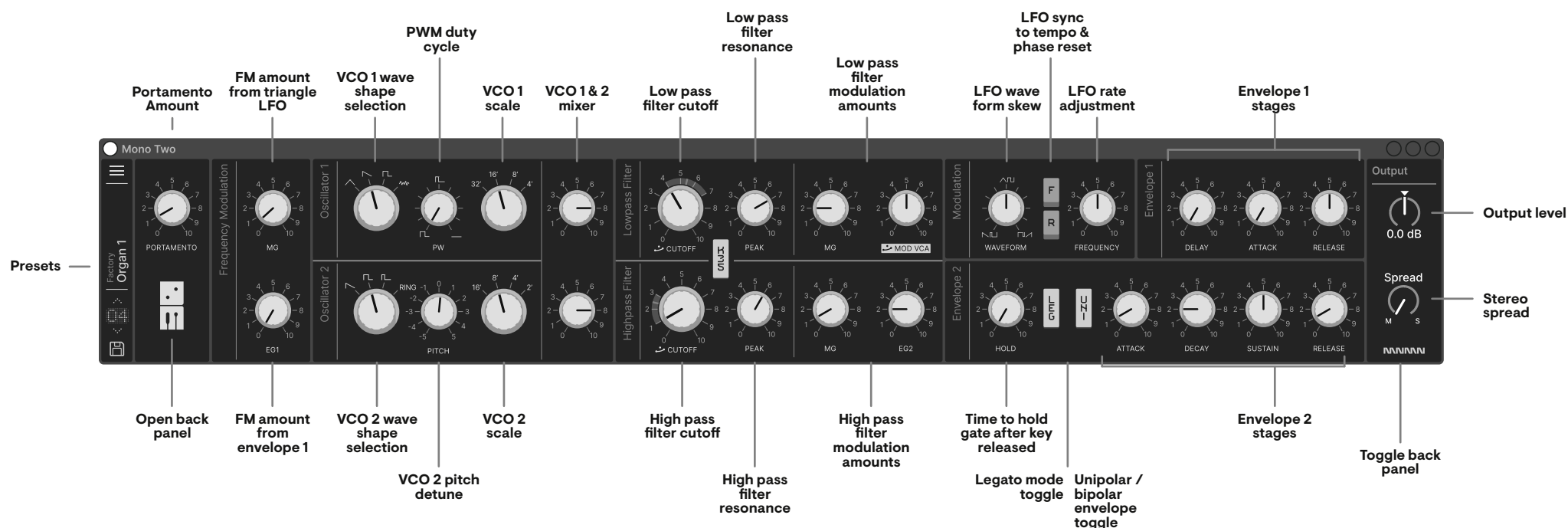
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Quick Reference

Mono Two is a monophonic synthesizer that takes the expressive, semi-modular spirit of early 1980s analog design as its starting point. Built around two oscillators and a patchable signal path, it covers everything from deep, rumbling bass lines and slicing leads to animated textures that shift and evolve with every connection made.

The sound engine pairs a resonant lowpass filter with a highpass, both capable of subtle harmonic coloring or full self-oscillation. A morphable LFO, two envelope generators, an onboard patchbay, and stereo spread give it a depth and flexibility that rewards exploration — from simple, direct patches to complex, living sounds.



Portamento

Portamento creates a smooth gliding effect between notes, causing the pitch to slide between played notes rather than jumping instantly from one to another. When enabled, this function produces a continuous transition

through all the intermediate frequencies between two notes. This classic synthesizer effect adds expressiveness to leads and bass lines, allowing for fluid melodic transitions in your music.



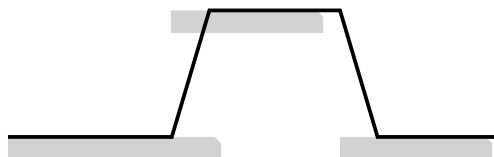
OFF

Disables the portamento effect completely.



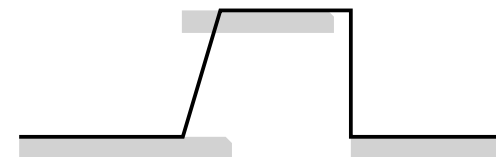
ALL NOTES

Enables portamento continuously, creating a glide between all played notes.



LEGATO

Activates portamento only when playing legato (pressing a new key while holding the previous one).



This allows you to control the glide effect through your playing style — connected notes will glide, while separated notes will play instantly.

FM, VCOs & Mixer

Oscillators, frequency modulation & mixing signals together



FREQUENCY MODULATION

Two dials — MG and EG 1 — set how much the Modulation Generator (LFO) and Envelope 1 sweep the pitch of both oscillators together, before anything reaches the Mixer. At default, EG 1 is off (0) and MG is at its midpoint.

The VCOs are the sound source. Two independent oscillators generate raw waveforms, a Frequency Modulation section lets the LFO and Envelope 1 sweep their pitch, and the Mixer blends them into a single signal before it reaches the filter.



OSCILLATOR 1

Wave Form switches between triangle, sawtooth, PWM square, and noise. Scale sets its footage (32'–4', i.e. pitch octave range). PW shapes the pulse width when PWM is selected.

OSCILLATOR 2

Wave Form switches between sawtooth, square, pulse, and ring modulation (against Osc 1). Pitch detunes it up to ± 12 semitones relative to Oscillator 1. Scale sets its footage (16'–2') — one octave higher range than Osc 1, reflecting its role as the higher/detuning voice.

Oscillators output a variety of basic wave shapes as well as the noise. On top of that, VCO two offers an option of ring modulation.

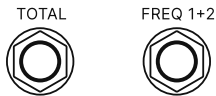


OSCILLATOR MIXER

Osc 1 and Osc 2 dials set each oscillator's level into the blend (both default to 8/10). Mixer Link ties the two together so raising one raises the other proportionally, preserving their balance.

Frequency Modulation

MG produces a smooth, cyclical pitch wobble — vibrato at slow rates, a siren-like warble as MG Rate climbs. EG 1 gives each note a percussive pitch snap on attack that settles back to pitch — the classic analog "blip" used in drum and pluck sounds.



PATCH BAY OPTIONS

TOTAL sums a source into VCO pitch and both filter cutoffs at once. Patch here and the MG dial switches roles too — from LFO pitch depth to attenuating the TOTAL signal into the oscillators (the filter section's own MG dials do the same for the cutoffs).

FREQ 1+2 sums an external modulation source directly into both oscillators' pitch. Patch a cable here and the EG 1 dial stops driving Envelope 1 — it becomes the attenuator for whatever's now plugged into FREQ 1+2.



PATCHING IDEAS

Pitch pluck

No cable needed — just raise EG 1. A fast attack/release EG 1 setting gives every note a short downward pitch snap, the classic analog drum/pluck trick.

Trill

Patch LFO SQR → FREQ 1+2. The square wave alternates pitch between two fixed offsets at the MG rate — a mechanical trill. EG 1 sets the interval width, MG Rate sets the speed.

Per-note random detune

Patch S/H OUT → FREQ 1+2. Each note-on samples a new random pitch offset (S/H's default clock is the key trigger) — instant "wrong note" generator or subtle per-note humanization, depending on how far you push EG 1.

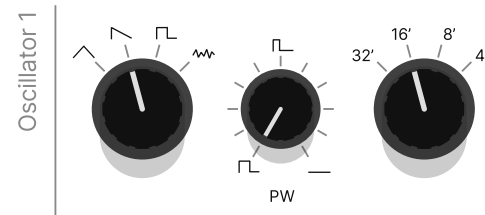
Pitch + filter dive

Patch EG2 REV → TOTAL. Because this signal goes negative as EG2 rises, pitch and both filter cutoffs dip together on each note and spring back as the envelope releases — a resonant "boing" that's hard to get any other

VCO 1

Voltage controlled oscillator 1

Oscillator 1 covers Mono Two's core tonal palette — four waveforms running from soft and simple to bright and textured, with PW opening up a further range of pulse tones within that.



On their own, the four waveforms already cover a wide tonal range. PW adds a whole extra axis within PWM alone — one dial sweeping from a full square down to a thin, buzzing sliver.

VCO 1 PWM

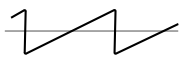
Patch bay input allows you to modulate the duty cycle of the PWM waveform. It can add a lot of fantastic timbres as well as opens incredible options for rhythmical modulations.

VCO 1 PWM



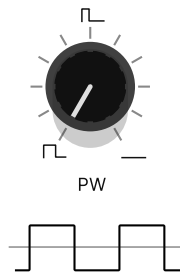
TRIANGLE

Soft and pure, almost flute-like. Few harmonics, ideal for sub-heavy tones or gentle pads that sit quietly under other sounds.



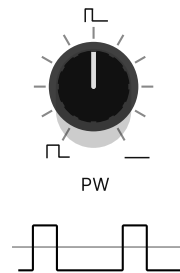
SAW

Bright and buzzy, rich in harmonics. The default starting point for leads, basses, and anything that needs to cut through a mix.



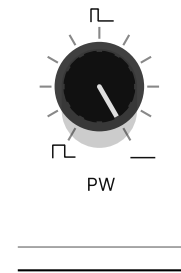
PWM 0

At its widest, PW produces a symmetrical square wave — hollow, reedy, clarinet-like.



PWM 0.5

At the midpoint, the pulse has narrowed noticeably — a thinner, brighter tone with more edge than a plain square.



PWM 1

At full, the pulse thins to a sliver — a bright, buzzy, almost clicky spike, the richest in high harmonics of any PW setting. And at full dial the sound of the oscillator disappears as it turns to DC.



NOISE

Broadband hiss with no pitch — closer to white noise in response. Layer it under a waveform for breath and grit, or use it alone for percussion and wind effects.

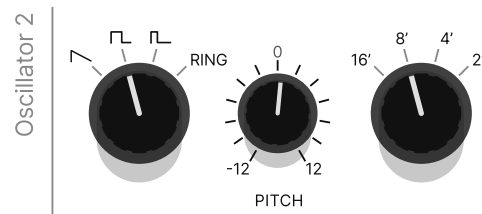
VCO 2

Voltage controlled oscillator 2

Oscillator 2 brings its own set of textures to the pair — square, pulse, and ring modulation — plus Pitch, which lets it move independently against Oscillator 1, from subtle detuning to full harmonic intervals.



Pitch controls Oscillator 2's detuning only. A small amount creates a lush phasing/chorus effect; detune by several semitones and a single note starts to sound like more than one voice.



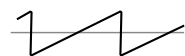
On their own, the four waveforms already cover a wide tonal range. PW adds a whole extra axis within PWM alone — one dial sweeping from a full square down to a thin, buzzing sliver.

VCO 2 CV



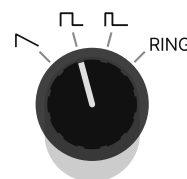
VCO 2 CV

Patch bay lets you drive Oscillator 2's pitch independently of Oscillator 1. Patch S&H in and every note triggers a new random pitch on Oscillator 2 alongside the one you played — an instant generative harmonizer. Patch Mod Wheel in instead and you can dial a second pitch in by hand, playable in real time.



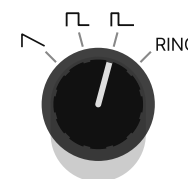
SAW

Bright and buzzy, rich in harmonics — the same core tone as Oscillator 1's saw, ready to detune against it for thickness or dissonance.



SQUARE & PULSE — 0.5 & 0.3 DUTY CYCLE

Two fixed pulse widths, switched rather than swept. At 0.5 it's a hollow, reedy square, clarinet-like. At 0.3 the pulse narrows into a thinner, brighter tone with more edge.



RING MODULATION

Multiplies Oscillator 1 and Oscillator 2's for a clangorous, bell-like, inharmonic texture.

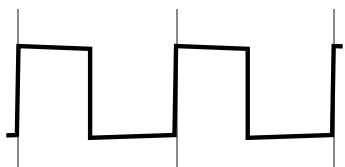
Oscillator Mixer

The Mixer blends Oscillator 1 and Oscillator 2 into a single voice. Two dials set each oscillator's level in the blend, and Mixer Link ties them together so you can push both up or down while keeping their balance.



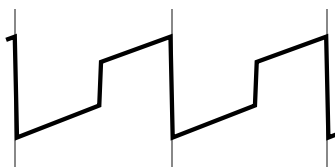
SQUARE

Hollow to buzzy tones depending on its Pulse Width setting



SQUARE + SAWTOOTH

Brighter, sharper resulting wave shape rich in harmonics



NOTE

Output level will vary depending on the mixer settings. Single wave will sound quieter, than combination of waves.



WHY LEVELS MATTER?

It's not just a balance between oscillators — how hard you drive the mix matters too. The combined signal goes straight into Mono Two's filter, and pushing it harder drives the filter's own saturating stage, adding extra harmonics and coloring the tone further.

HP & LP VCF

Resonant Low Pass Filter & High Pass Filter

Mono Two runs two resonant filters — a High Pass and a Low Pass — shaping the timbre of your sound by controlling which frequencies pass through. Each has its own CUTOFF and PEAK: CUTOFF sets the frequency point the filter acts on, PEAK emphasizes the frequencies right around it.

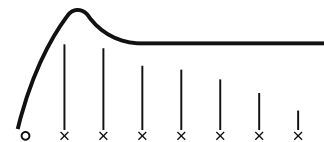


DUAL FILTER TOPOLOGIES

Mono Two features two distinct filter topologies side by side: a more aggressive, distorted filter modeled on the original hardware's earlier Korg35-chip design, and a cleaner, more tamed filter modeled on the OTA circuit introduced in later production.

HIGHPASS FILTER

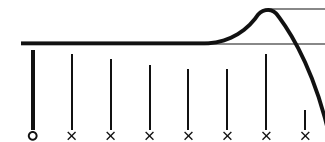
CUTOFF sets the frequency point below which harmonics are attenuated. At its lowest position the sound passes unchanged; raise it and the low end rolls off, thinning the tone until only the highest frequencies remain.



Frequency (Hz)

LOWPASS FILTER

CUTOFF sets the frequency point above which harmonics are attenuated. At its highest position the sound passes unchanged; lower it and the top end rolls off, darkening the tone until only the lowest frequencies remain.



Frequency (Hz)



EG2 MODULATION

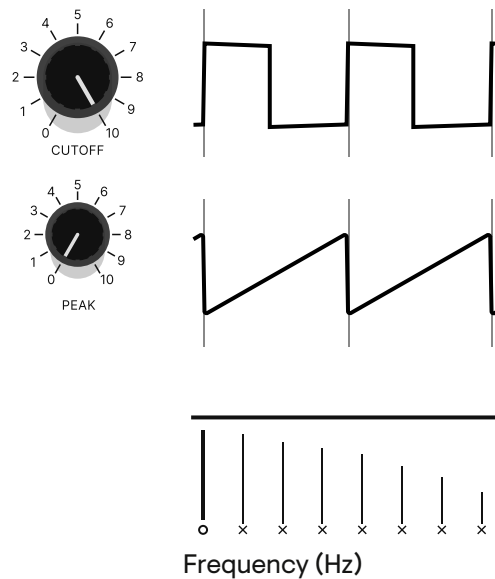
Sets how much Envelope 2 sweeps the cutoff point.



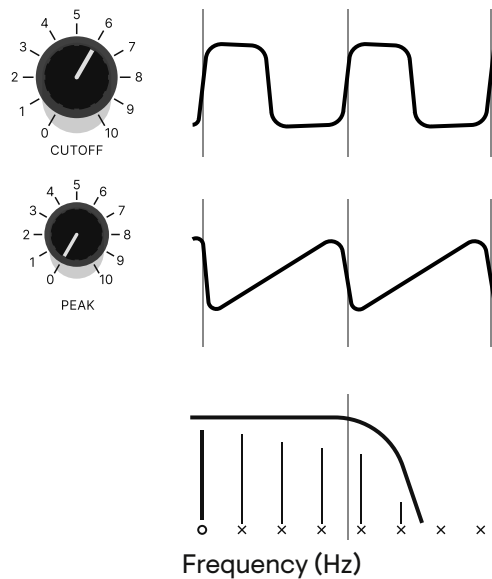
MG MODULATION

Sets how much the LFO sweeps the cutoff point.

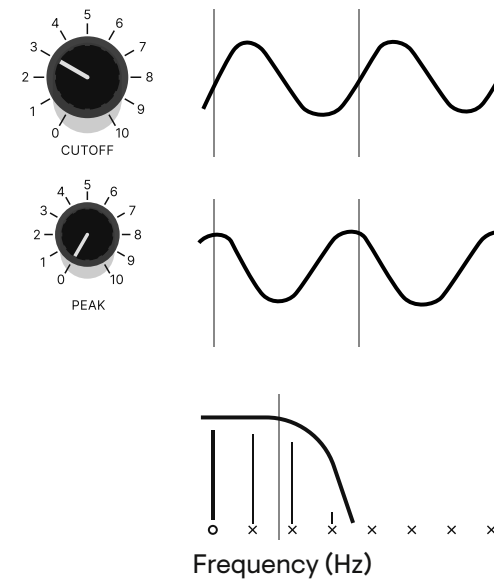
FREQ 10



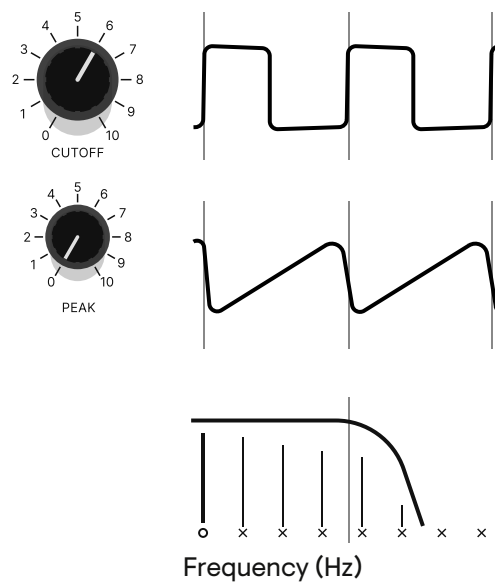
FREQ 6



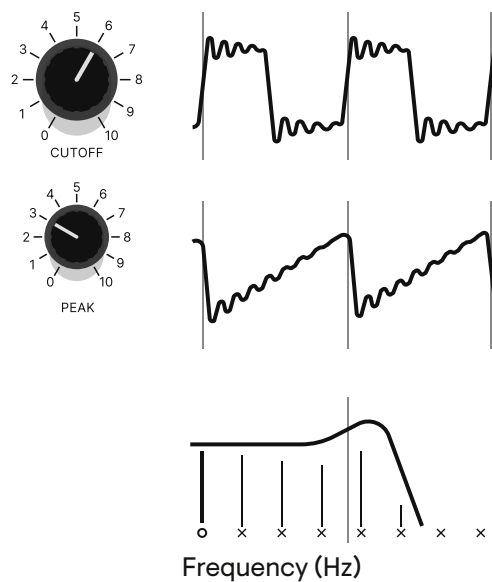
FREQ 3



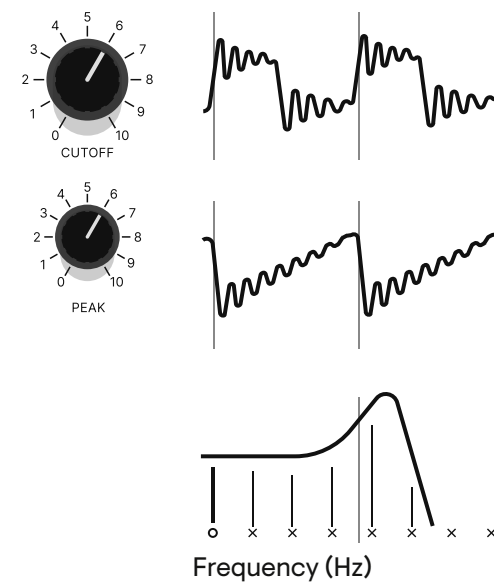
RES 0



RES 3



RES 6



Modulation Generator

The Modulation Generator's Waveform dial continuously morphs a single shape — from a falling sawtooth, through triangle, to a rising sawtooth — rather than switching between fixed types.

That shape can be routed to multiple destinations: VCO frequency for pitch effects, pulse width for timbral variation, and filter cutoff for spectral movement.



FREE / SYNC

Sync toggle switches LFO rate synchronization with Live session tempo. In addition, the phase of the modulator resets when the Live transport starts. Changing the rate midway will adjust the phase to match the play position.

In Sync mode the rate is locked to your Live tempo and won't respond to modulation.



RESET PHASE

When active resets the LFO phase to starting point on key press

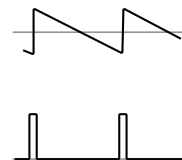
FREQUENCY

Adjust the frequency of the modulation LFO or if Sync is on — LFO rate is set in measures. In free mode the rate goes from 0.1 Hz to around 20 Hz.



WAVEFORM 0

A quick snap up, a slow fall away — percussive, urgent.

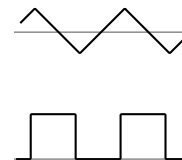


Square output is not routed anywhere by default.



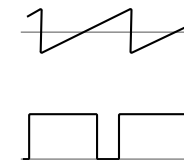
WAVEFORM 5

Even, breathing — the classic wobble.



WAVEFORM 10

A slow build, a sudden drop — sounds like a tape reversed.



MG WAVE & RATE

Patch into MG WAVE to sweep the morph externally, or MG FREQ to modulate rate — rate modulation only works in Free mode, since Sync mode stays locked to tempo.



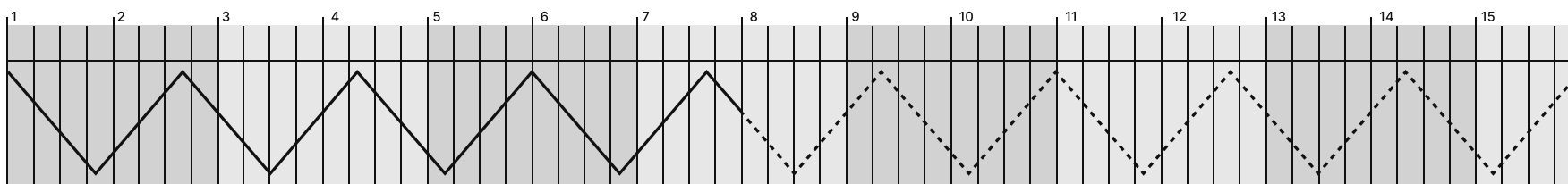
MG OUTPUTS

Both modulation outputs provide access to triangle and square waveshapes.



These outputs can be connected to inputs for modulation.

FREE RUNNING MODULATOR



ON START

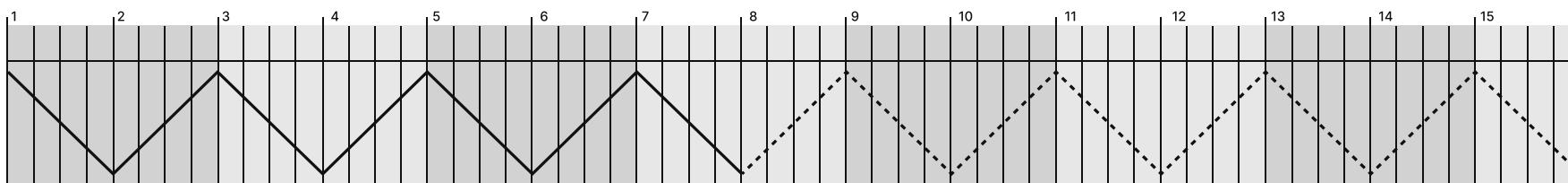
Modulator phase is reset



ON STOP

Modulator keeps running at set rate

SYNCED RATE MODULATOR



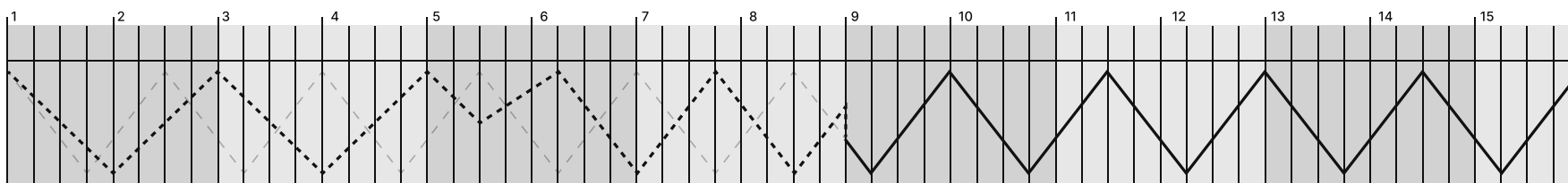
ON START

Modulator phase is reset and is perfectly synced to measures



ON STOP

Modulator keeps running at set rate



ON STOP

Modulator keeps running

ON RATE CHANGE

Modulator rate is synced to tempo



ON PLAY

Modulator phase is reset to run in sync with measures as it was run from start.

Envelope Generators

Two envelopes shape how a note evolves — EG1 a fast three-stage shaper, EG2 a full five-stage one. Between them you can make a sound explode with instant presence, bloom in slowly, or anything in between.

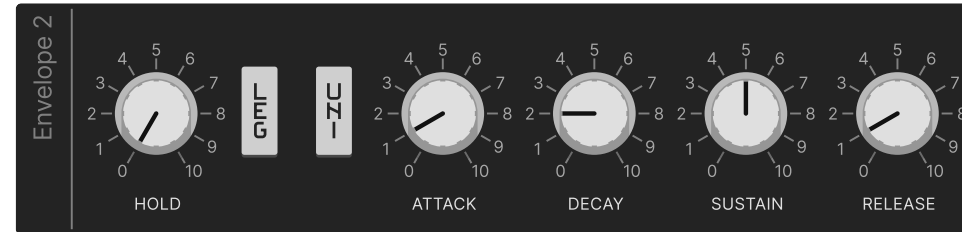


DELAY

A held silence after the gate opens.

NOTE

Sustain on envelope is always at max.



ATTACK

How fast the sound rises to full strength.

DECAY

The fall from peak down to sustain.

HOLD

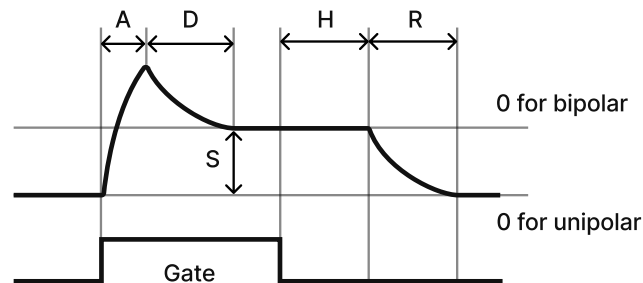
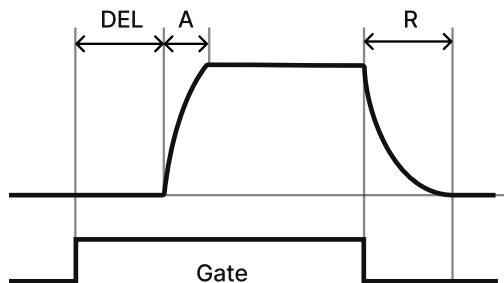
Keeps the note held after you release the key, before Release begins.

SUSTAIN

The level held while the key stays down.

RELEASE

How the sound fades once you let go.



TRIG IN & EG 1 TRIG

TRIG IN fires both envelopes together, just like pressing a key. EG1 TRIG fires EG1 on its own — for pitch or filter hits independent of the main envelope.



EG 1 OUTPUTS

EG1 — the raw envelope.
EG1 REV — its inverted counterpart.

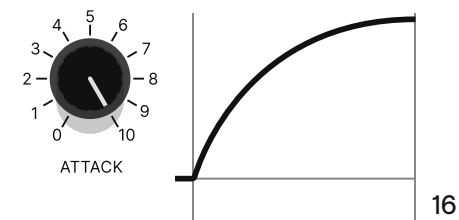
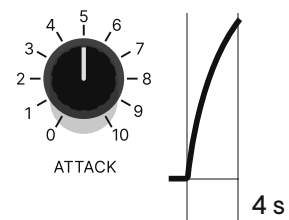
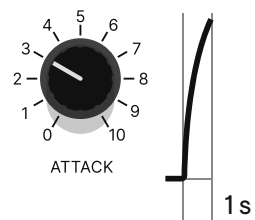
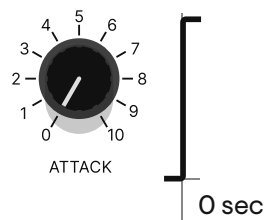
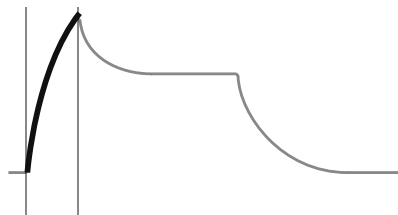


EG 2 OUTPUTS

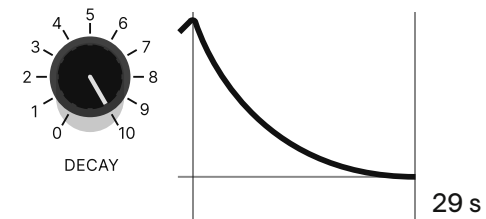
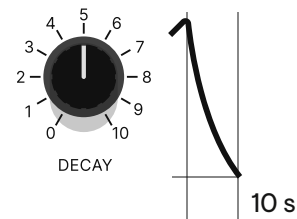
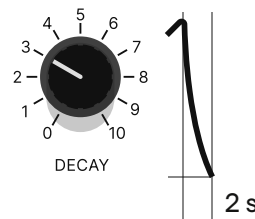
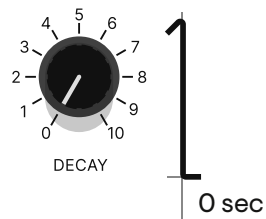
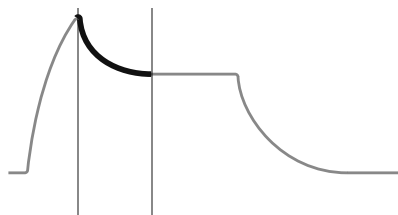
By default, EG2 feeds MULT IN — so MULT 1/2 give you a free copy of the envelope. EG2 REV outputs its inverse.



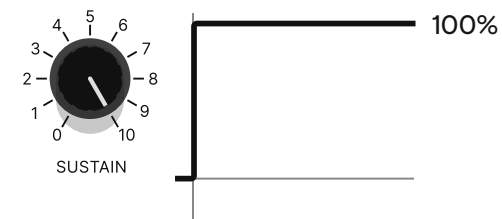
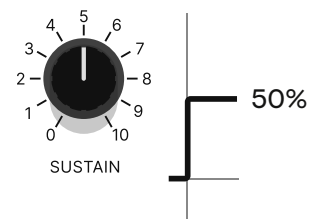
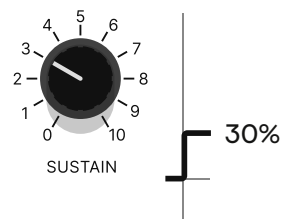
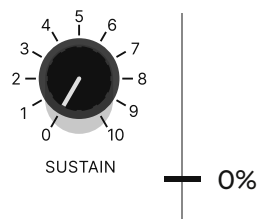
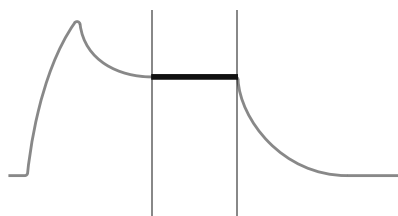
ATTACK



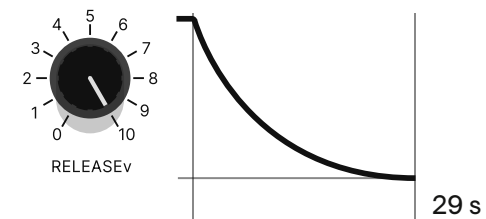
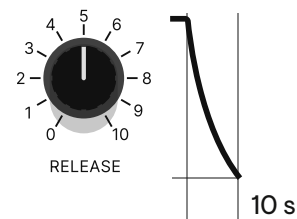
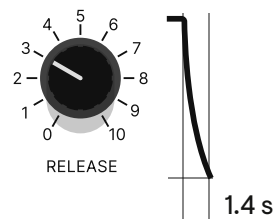
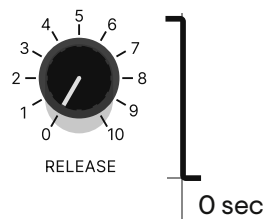
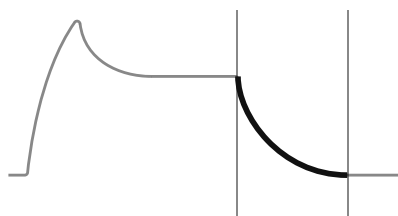
DECAY



SUSTAIN



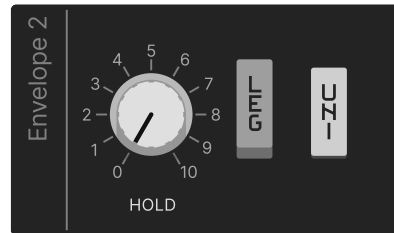
RELEASE



Envelope Trigger Modes

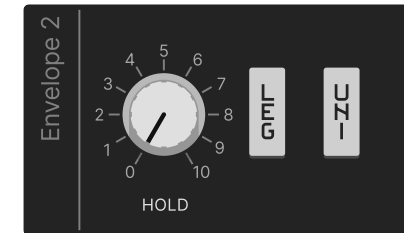
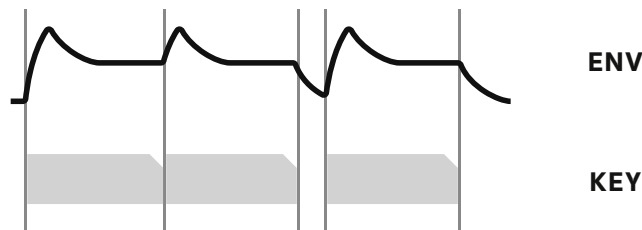
Legato controls whether overlapping notes restart the envelopes or let the sound glide through unbroken — a difference you'll feel most in fast runs and held chords.

With Legato off, every note pops with a fresh envelope — tight, percussive playing. Switch it on and a legato phrase becomes one continuous shape, more like a held breath than a sequence of strikes.



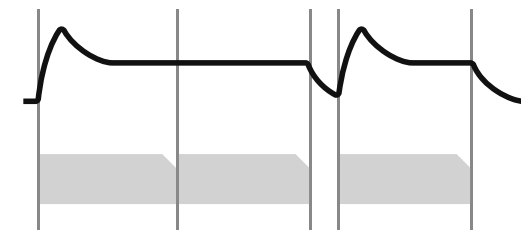
LEGATO OFF

The envelope is triggered by any key press even on connected notes.



LEGATO ON

Envelope is triggered only on unconnected notes — legato mode.



KBD TRIG

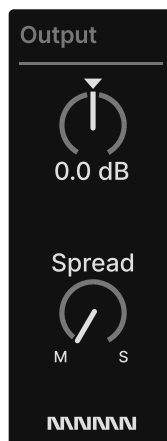


In legato mode, only the first trigger resets both envelopes, any other notes played on top change the note, but doesn't trigger the envelope anymore. Same also applies to trigger outs on the patch bay.

Output, Spread & Back Panel

The Output section provides two essential controls for shaping your final sound. The Output level knob allows you to precisely adjust the overall volume of your synthesizer, helping you balance it perfectly in your mix.

The Spread control transforms a pure, straight mono signal into a wider stereo image — turn it toward S for width, keep it at M for a focused, centered presence.



OUTPUT

Allows to adjust the output signal of the synth to ± 24 dB.

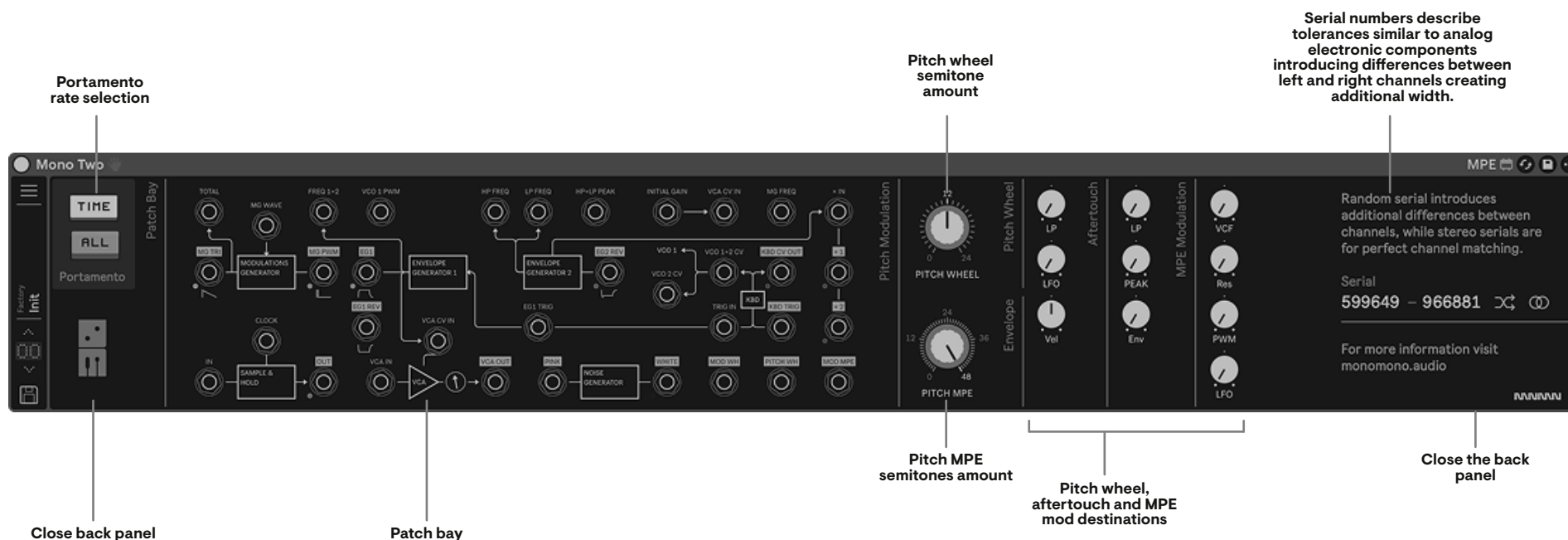
SPREAD

The Spread control transforms a pure, straight mono signal into a wider stereo image — turn it toward S for width, keep it at M for a focused, centered presence.

Back Panel

Additional Controls

Back panel with additional controls can be accessed by clicking the Mono Two Logo or MNMN logo in the output section. It exposes controls built on top of the classic tool set to provide additional range for sound design and MPE playability.



Under The Hood

Monophonic digital synthesizer inspired by a classic late-1970s analog design

Two oscillators — triangle, saw, PWM, and noise on Oscillator 1; saw, square, pulse, and ring modulation on Oscillator 2

Pulse width control on Oscillator 1 — manual dial, or patched from any of 15 modulation sources

Dual resonant filters, high-pass into low-pass, switchable between OTA and Korg35-style topologies, each with circuit-accurate saturation

One continuously morphing modulation source — falling sawtooth through triangle to rising sawtooth — with a duty-cycle-linked companion output

Tempo-synced modulation rates that lock to your Live session

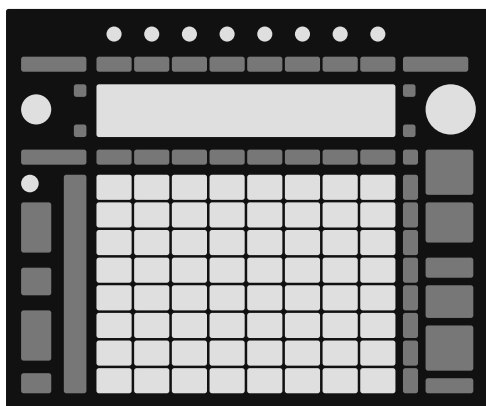
Two envelopes — a fast three-stage EG1, and a full five-stage Hold-Attack-Decay-Sustain-Release EG2

VCA driven by Envelope 2, or overridden by a patched CV source

Variable stereo spread — component-tolerance-style pitch and filter drift between channels, plus chorus

MPE and aftertouch support for expressive playing

4x oversampled filter and output stage for pristine audio quality



**FULL SUPPORT FOR
PUSH 3 STANDALONE
AS WELL AS PUSH 2**

**MONO TWO REQUIRES
LIVE 11+ SUITE**

Release Notes

1.0 — AUGUST 10, 2026
Initial Release