

Doepfer — A-119

- [Manual PDF](#)
-

[Manual PDF](#)

Doepfer A-119 Ext. Input / Envelope Follower — using it for melodic patching

The attached manual is for the **Doepfer A-119 External Input / Envelope Follower**.

This module is not a pitch source by itself, but it is very useful for building **melodic components** when combined with oscillators, filters, VCAs, envelopes, slews, comparators, sequencers, quantizers, and clocking modules.

What the A-119 does

The manual describes three main functions:

- **Preamp**
- **Asym. In** for line-level signals
- **Symm. In** for mic/instrument-level signals
- **Envelope follower**
- Creates a CV proportional to input amplitude at **Env. Out**
- **Comparator / gate extractor**
- Creates a gate at **Gate Out** when the signal exceeds the **Threshold**

It also provides:

- **Audio Out** of the amplified incoming signal
- **Overload LED**
- Envelope and gate indication LEDs

Why this matters melodically

In a Eurorack system, melody usually needs some combination of:

- **pitch CV**
- **gates/triggers**
- **dynamic articulation**
- **timbral movement**

The A-119 directly gives you:

- **gates** from external sound events
- **dynamic CV** from external amplitude
- **amplified audio** that can enter the modular signal path

That means it can convert an external performance source into control information for melodic patches.

Core melodic uses

1. Turn external rhythm into note triggers

The manual explains that **Gate Out** goes high whenever the input envelope exceeds the threshold.

This is the most immediate melodic use.

Patch idea

- Plug voice, drum loop, guitar, or percussion into **Asym. In** or **Symm. In**

- Set **Gain** so the signal is healthy but not constantly overloading
- Adjust **Threshold** so only desired events produce gates
- Send **Gate Out** to:
 - an envelope generator gate input
 - a sequencer clock/advance input
 - a sample-and-hold trigger
 - a logic module driving melodic events

Melodic result

Each transient or phrase in the external audio can:

- trigger a note
- advance a sequence
- articulate a bassline
- create call-and-response between external performer and modular voice

This is one of the strongest ways to make melody from the A-119:
the external source becomes the phrasing engine.

2. Use the envelope follower as melodic expression CV

The **Env. Out** follows the loudness contour of the input signal. That gives you a continuously varying CV based on how hard you sing, play, or feed audio.

Good destinations for melody-related modulation

Patch **Env. Out** to:

- **VCO pitch FM attenuated lightly** for expressive pitch bend
- **quantizer input** for stepped melodic motion
- **filter cutoff** to shape note brightness
- **VCA CV** for dynamics
- **wavefolder amount** for intensity-linked harmonics

- **sequencer transpose input**
- **precision adder / offset + quantizer** chain for controllable note generation

Melodic result

Your input dynamics can become:

- note accents
- melodic rises and falls
- transposition gestures
- phrase-based modulation

Because the envelope is tied to amplitude rather than pitch, it works especially well for **expression, contour, and phrase shaping**.

3. Build melodies from speech or singing contours

The A-119 does **not** track pitch.

But the manual's "singing synth" example shows that it works well with voice as a control/audio source.

Practical melodic strategy

Use a microphone into **Symm. In**:

- **Gate Out** triggers an envelope or sequencer advance
- **Env. Out** modulates:
 - quantizer input
 - sequencer transpose
 - filter or VCA
- **Audio Out** can be mixed, filtered, ring modulated, or otherwise processed in parallel

Result

Your voice controls the **shape and articulation** of a melody, even if the actual pitch is generated elsewhere.

This is ideal for:

- vocal-controlled synth lines
 - talking synth patches
 - phrase-synced arpeggios
 - responsive lead patches
-

Best companion modules for melodic patching

Since you asked how these modules can be used together to create melodic components, here are the most effective pairings with the A-119.

A-119 + VCO

Use the A-119 to control when and how notes happen, while the VCO provides the actual pitch.

Patch

- External source -> **A-119 input**
- **Gate Out** -> ADSR gate
- ADSR -> VCA CV
- VCO -> VCF/VCA -> output
- **Env. Out** -> slight pitch modulation or filter cutoff

Melodic role

The external source becomes the articulation layer for the oscillator melody.

A-119 + Quantizer

This is one of the best melodic combinations.

Patch

- **Env. Out** -> attenuator/offset -> quantizer input
- quantizer output -> VCO 1V/oct
- **Gate Out** -> envelope trigger or sample-and-hold clock

Melodic role

The amplitude contour of the external sound becomes stepped notes in a scale.

Tips

- Use attenuation before the quantizer for musically useful note ranges
- Add offset so the melody sits in the right register
- Use slower source material for more stable notes

This turns the A-119 into a kind of **gesture-to-melody converter**.

A-119 + Sample & Hold

This creates cleaner discrete melodies from complex audio.

Patch

- **Env. Out** -> sample & hold input
- **Gate Out** -> sample & hold trigger
- sample & hold output -> quantizer -> VCO pitch

Melodic role

Whenever the input crosses threshold, the current envelope level is sampled as a note value.

Result

- Percussive input produces stepped melodies
- Speech produces irregular melodic phrases
- Guitar attacks can generate playable note patterns

This is one of the most musically useful ways to derive melodic material from the A-119.

A-119 + Slew limiter

The manual specifically mentions using an **A-170 slew limiter** for smoothing.

Two important melodic uses

A. Smoothing low-frequency envelope artifacts

The manual notes that with input frequencies below 50 Hz, extra smoothing may help.

B. Turning stepped CV into legato melodic movement

If you sample/hold the envelope and then slew it slightly before quantizing or after quantizing, you can get:

- portamento-like motion
 - softer melodic transitions
 - fewer clicks when using gate-derived articulation
-

A-119 + Envelope generator + VCA

This is the most direct “play the modular from external sound” setup.

Patch

- External signal -> A-119
- **Gate Out** -> ADSR gate
- ADSR -> VCA CV
- VCO -> VCF -> VCA
- **Env. Out** -> VCF cutoff or oscillator FM amount

Melodic role

The melody source may be a sequence or keyboard, but the external signal determines **when** the notes speak and **how expressive** they are.

This is great for: - rhythm guitar driving synth notes - drum loop articulating a sequence - speech opening melodic stabs

A-119 + Sequencer / clocked melody source

Use gate extraction to advance notes from any sequence.

Patch

- **Gate Out** -> sequencer clock
- sequencer CV -> VCO pitch
- A-119 **Env. Out** -> transpose / filter / accent

Melodic role

External audio becomes the timing source for melody.

Result

- Beatboxing can drive a bassline
- picked guitar can advance an arpeggio
- chopped vocal can clock a lead line

This produces very musical “humanized” melodies.

A-119 + Ring mod / audio processor in a melodic chain

The manual gives a ring modulator example and explains using the envelope to “squelch” the ring mod output via a VCA.

Melodic takeaway

Even though ring modulation is often timbral rather than melodic, you can use the A-119 to keep note articulation tied to the external signal.

Patch

- External audio -> A-119
- A-119 audio out -> ring mod input
- VCO sine -> other ring mod input
- A-119 envelope or smoothed gate -> VCA controlling ring mod output

Melodic role

The VCO can be tuned melodically while the external sound provides dynamic articulation.

This is good for: - tuned metallic leads - voice-controlled melodic textures - hybrid acoustic/synth phrases

Patch recipes for melodic components

1. External percussion to quantized melody

A very effective melodic patch.

Patch

- Drum loop -> A-119 Asym. In
- Set threshold so kicks/snare produce clear gates
- **Env. Out** -> attenuator -> sample & hold input
- **Gate Out** -> sample & hold trigger
- sample & hold -> quantizer
- quantizer -> VCO 1V/oct
- VCO -> VCA
- **Gate Out** -> envelope -> VCA CV

What happens

Each detected hit generates: - a new note - a matching articulation

Sound

A groove-derived melody tightly connected to the source rhythm.

2. Voice-controlled lead synth

Patch

- Mic -> **Symm. In**
- **Gate Out** -> ADSR gate
- ADSR -> VCA CV
- **Env. Out** -> attenuator -> quantizer -> VCO pitch

- VCO -> filter -> VCA
- A-119 **Audio Out** optionally into a parallel effect path

What happens

Your singing loudness and phrasing shape the synth line.

Sound

Organic, vocal-like melody generation.

3. Guitar attack drives arpeggio

Patch

- Guitar -> **Symm. In**
- **Gate Out** -> clock input of sequencer/arpeggiator
- sequencer CV -> oscillator pitch
- **Env. Out** -> transpose amount or filter cutoff
- oscillator -> VCA
- **Gate Out** -> envelope -> VCA

What happens

Each picked note steps the sequence forward.

Sound

The guitar “plays” the synth melody rhythmically.

4. Ducking-based counter-melody

The manual includes a ducking example. You can adapt it melodically.

Patch

- External audio -> A-119
- Internal melodic voice through VCA
- **Env. Out** -> inverter -> VCA CV for internal melody

What happens

When the external signal is present, the internal melody ducks.

Musical use

This creates: - responsive call-and-response - space for live voice/
instrument - dynamic interaction between melodic layers

5. Singing synth / subharmonic melody

The manual's "singing synth" patch uses the voice with a divider/sub-octave path.

Melodic extension

Instead of only using the source as raw audio: - mic -> A-119 - **Gate Out** -> envelope - **Env. Out** -> filter movement or quantized transpose - A-115/
suboctave or oscillator stack -> VCA/filter chain

Sound

A vocal-driven melodic synth with strong tracking of phrasing, not pitch.

Important operational details from the manual

Input choice matters

- **Asym. In:** line-level/unbalanced
- **Symm. In:** mic/instrument-level/balanced, much more gain available

The manual notes the gain ranges: - unbalanced input: about **0–20** - balanced input: about **0–500**

So for melody extraction from: - drum machines / mixers / line outputs: use **Asym. In** - mic / guitar: use **Symm. In**

Use only one input at a time

The manual explicitly warns there is only one gain control for both inputs. If both are used, they are mixed in a **1:25 ratio**.

For predictable melodic control, use just one source at a time.

Watch the overload LED

If the preamp overloads, your envelope and gate behavior can become less controllable.

For melodic patches, stable tracking is important: - increase gain until response is strong - back off if overload is constant - then set threshold carefully

Threshold is the key to musicality

The **Threshold** control determines what counts as an event.

This affects whether your melody is: - dense - sparse - stable - noisy - rhythmically locked

In practice: - low threshold = more triggers, more chaotic note generation - high threshold = fewer, more deliberate notes

Limitations to understand

It is not a pitch tracker

The A-119 does not extract 1V/oct pitch from incoming audio. So it will not turn singing directly into correctly tracked note CV.

Instead, it gives: - **amplitude-following CV** - **gate extraction** - **audio amplification**

To get stronger melodic behavior, pair it with: - quantizer - sample & hold - sequencer - precision adder - slew - envelope/VCA chain

Envelope output is better for contour than exact notes

By itself, **Env. Out** is not musically scaled. It is a raw control voltage. To use it melodically, shape it with: - attenuation - offset - quantization - sampling - inversion

That is where the real melodic patching comes from.

Most musical combinations, ranked

Best for immediate melody

1. A-119 + Sample & Hold + Quantizer + VCO
 2. A-119 + Sequencer clock input + VCO
 3. A-119 + ADSR/VCA + existing pitch source
 4. A-119 + Ring mod + VCA for tuned textures
 5. A-119 + Inverter/VCA for ducking and counterpoint
-

Practical performance tips

For tighter melodic triggers

Use percussive or clearly articulated input.

For smoother melodic CV

Use slower, sustained sources like: - voice - bowed strings - pads - legato guitar

For controlled note ranges

Always attenuate **Env. Out** before it reaches a quantizer or pitch input.

For expressive phrasing

Use: - **Gate Out** for note onset - **Env. Out** for accent, timbre, or transpose

That combination gives the most natural musical behavior.

Conclusion

The **Doepfer A-119** is best thought of as a **bridge from external sound into melodic control**.

It does not generate pitch on its own, but it is excellent for:

- extracting gates from live or recorded audio
- deriving expressive CV from dynamics
- bringing external sound up to modular level
- making external performance drive melodic sequencing and articulation

If you combine it with standard melodic modules like a **VCO, quantizer, sample & hold, sequencer, ADSR, VCA, and slew limiter**, it becomes a very powerful tool for:

- voice-controlled synth lines
- rhythm-driven melodies
- guitar-triggered sequences
- dynamic transposition
- expressive hybrid acoustic/modular patches

[Generated With Eurorack Processor](#)