

Calcinatio

Seeded harsh-noise feedback.

A stereo harsh-noise effect. Put it on an audio track and play a clip to process a sample, or leave the input silent for seeded feedback generation: a continuous noise seed keeps the loop running even with nothing coming in. **Mute Input** removes the track audio while keeping the seed and feedback alive.

The final output is clamped to the selected Ceiling even if Output trim is raised, and the quantizer has its own dither so low bit depths cannot swallow the seed.

SIGNAL PATH

```
input + noise seed -> DC block
  -> core: Fold / Fuzz / Degrade (selectable order)
  -> DC block
  -> short modulated comb delay (tanh guard in the feedback path)
  -> limiter -> Output trim, hard-clamped to Ceiling
```

QUICK START

- 1 Load on an audio track. Play a clip, or leave it silent: with Feedback above 1 the loop generates from the seed.
- 2 Pick an **Order** for the three nonlinear stages.
- 3 Shape the harshness with **Fold**, **Bias**, **Bits** and **Hold smp**.
- 4 Set the pitch of the comb with **Delay ms**; push **Feedback** past 1 for self-generation.
- 5 This is loud by design. Output starts at -12 dB and the Ceiling at -1 dB; start there and trim before pushing.

CONTROLS

INPUT

CONTROL	RANGE	WHAT IT DOES
Input dB	-36 to +24 dB	Track input trim. Default 0.
Mute Input	Input / Mute	Removes track audio; seed and feedback keep running.
Seed dB	-120 to -60 dB	Level of the always-on noise seed. Default -100.

CORE

Order	3 orders	Fold > Fuzz > Degrade, Degrade > Fold > Fuzz, or Fuzz > Degrade > Fold.
Stereo	Mono / Stereo	Stereo uses independent seeds and drift/modulation phases. Mono sums the input and runs the left core on both channels.

Fold	0-12	Fold depth. Default 4.
Stages	1-6	Number of folds applied. Default 2.
Bias	-0.8 to +0.8	Fuzz asymmetry (even harmonics). Slowly wanders around the set value. Default 0.15.
Drift Hz	0.001-0.3 Hz	Rate of that bias wander, independent per channel. Default 0.027.
Bits	2-16	Degrade quantizer bit depth. Default 14.
Hold smp	1-64	Holds each quantized value for N samples.
FEEDBACK		
Delay ms	0.5-40 ms	Comb delay time. Default 7.
Feedback	0-1.7	Loop gain into a tanh guard. Values above 1 are the point; the guard bounds the loop. Default 1.08.
Mod ms	0-5 ms	Delay modulation depth. Default 0.3.
Mod Hz	0.001-5 Hz	Delay modulation rate. Default 0.13.
OUTPUT		
Dry/Wet	0-100 %	Default 100.
Ceiling dB	-24 to 0 dB	Hard output clamp. Default -1.
Output dB	-36 to +12 dB	Output trim, applied before the clamp. Default -12.

NOTES

Banks (Live Push)

Calcinatio: Input dB, Seed dB, Order, Fold, Bits, Feedback, Dry/Wet, Output dB. **Core:** Mute Input, Stages, Bias, Drift Hz, Hold smp, Stereo. **Feedback:** Delay ms, Mod ms, Mod Hz, Feedback, Ceiling.

STATUS

A structural check validates the collective, parameter graph, embedded assets and deterministic output. That does not establish that Max compiled the Gen code or that Live produced audio; those need an active audio engine and real recordings.