HOROCYCLE — Quick Guide

Sequoia Synthesizers Co · POINCARÉ DELAY

A granular ping-pong delay whose echoes travel across a Poincaré disk. Where an echo lands decides how loud, how dark and how wide it is, and each echo breaks into a small ring of grains you can watch in the middle of the window. Hover over any control and the help bar at the bottom of the window explains it.

Quick start

1. Pick a **GENERATOR**. **Spiral** fades evenly and is the easiest place to start; **Lattice** wanders.
2. Set **TIME** and **FEEDBACK** like any delay. **LOCK TO BPM** snaps the time to your song.
3. Turn **DECAY** up from the bottom. At the bottom it is a clean delay; turning it up scatters the echoes across time and the stereo field.
4. Shape the colour of the tail with **TONE**, **DARK** and **RESO**.
5. Press **RANDOMIZE** for a new sound. **<** takes you back.

The window

Area	What it does
GENERATOR	The path the echoes follow: **Spiral** (fades evenly), **Orbit** (sustains), **Creep** (very long tail), **Lattice** (wanders), **Never Twice** (never repeats), **Split Worlds** (one field per side).
FIELD	**DECAY** (how far echoes travel), **SPIN** (180° is plain ping-pong), **SPREAD**, **DARK**.
DISK	The live field. Dots are echoes (the brightest is the newest); rings are their grain circles.
WAVEFRONT	The grains: **WAVEFRONT** (circle size), **GRAIN GROW**, **GRAIN SIZE**, **DIFFUSION**.
TRANSPORT	**TIME**, **GLIDE** (tape-style bends), **RATE** and **DEPTH** (wobble), **FEEDBACK**, **MIX**, **WIDTH**.
COLOUR	**TONE**, **RESO**, **DRIVE**, and the **PARTIALS** resonator bank with **TUNE** and **INHARM**.
MACROS	**M1–M4**: one knob that moves many. **TARGETS** shows what each moves; **MATRIX** lists every routing.
HEADER	**< RANDOMIZE >**, presets (< >, SAVE, LOAD, INIT), **MIDI**, **HELP**, **MASTER** and the meter (**CLIP** lights when it clips).
RESIZE	Drag the bottom-right corner; everything scales and stays sharp, and your project remembers the size.

Modulation

The chips along the bottom are the sources: **ENV 1–3**, **LFO 1–3**, **M1–M4**, **VELO**, **WHEEL**, **PRESS**, **KEY** and **RANDOM**.

- **Drag a chip onto a knob.** An arc appears with a dot at each end. Each dot moves on its own and never moves the knob or the other dot, unless you pull it past the knob: then the knob follows. On an LFO the top and bottom dots are separate amounts (far up, a little down); right-click the knob and choose *Mirror*

the two ends to make them even again. The pointer and lit spokes move live, and a small tick marks your setting.

- **Click a chip** to shape it (ENV and LFO open a card) and light up every knob it moves. Hover for a half-strength preview.
- **ENV TRIG**: a MIDI NOTE, the beat (1 BEAT to 4 BARS), or **INPUT** (your sound getting loud). ENV 1 follows the input from the start.
- **LFO**: **MORPH** starts in the middle (the plain shape); with BEND, right curves the wave outward and left inward. **SMOOTH** rounds corners (on S&H it softens each step's edges). **RISE** grows the LFO in after every note.
- **VELO, WHEEL, PRESS, KEY** need MIDI. An audio track has none: put HOROCYCLE on the instrument track, after the synth. **PRESS** is aftertouch: push harder on a key after it is down.
- Right-click any knob for *Modulate with* and *Remove*.

MIDI MAP: play the controls from your keyboard

1. Click **MIDI** in the header. **SOURCE** starts on MOD WHEEL; pick another, or **LEARN** and move a knob on your controller.
2. **+ ADD** a control from the list, or choose **CUSTOM** and just touch any control.
3. Set each one's range with **FROM** and **TO**. Put TO below FROM to make it go the other way.

Shortcut: right-click any knob and choose *Map to MIDI*. Mapped knobs show a small tag (`MW`, `AT`, `CC74`). Mappings are saved with your project, not with presets.

RANDOMIZE

Click **RANDOMIZE** for a new sound; **<** goes back and **>** forward again. Right-click it for **MILD** / **MEDIUM** / **WILD**, or right-click a section name (FIELD, COLOUR…) to lock it. RANDOMIZE never touches MASTER or your MIDI MAP.

UNDO, HELP and presets

Cmd+Z undoes (Ctrl+Z on Windows), **Shift+Cmd+Z** redoes (Ctrl+Y); both are also at the top of every right-click menu. **HELP** shows a tip beside whatever the mouse rests on; close a tip with its × and it stays hidden, right-click HELP to bring them all back.

Nine presets install the first time HOROCYCLE opens. Try **03 Lattice Bloom** and **09 Input Bloom** first. Presets are saved in `~/Music/Sequoia Synthesizers/Horocycle Delay/Presets` (Mac) or `Documents\Sequoia Synthesizers\Horocycle Delay\Presets` (Windows).

Tips

- FEEDBACK above 100% holds the tail and slowly saturates. Great for swells; ride MIX.
- GRAIN SIZE at 2x is smooth; below 1x the echoes break into fragments.
- RESO with FEEDBACK high makes the loop sing at the TONE frequency.
- For a freeze, pick Orbit and push FEEDBACK toward 95%.