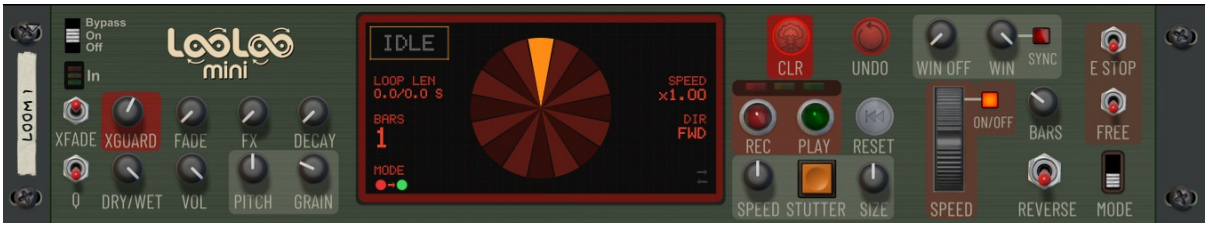
OPERATION MANUAL

LooLoo Mini

2U single-track stereo looper for Reason — record, loop, reshape, perform.

Doodov Digital Design · Rack Extension · Version 1.1



The LooLoo Mini front panel.

What LooLoo Mini Is

LooLoo Mini records a stretch of live audio into a tempo-synced loop — and then hands you a small set of controls for reshaping that loop while it plays. It is a looper first, but the things it does after the loop is captured are where it earns its place: a movable window that lets you hear any slice of the recording, a stutter section for rhythmic repeats, and a spring-loaded bend wheel for real-time pitch and speed.

Everything in this manual assumes LooLoo Mini is wired so that audio passes through it — either as an insert effect on a channel, or on a send. It does not generate sound on its own; it captures and replays what you feed it. It is a single-track device: one loop at a time. *For more loops, run more instances — a pattern this manual returns to later, because it turns out to be one of the most musical ways to use it.*

This is the readable manual. It covers everything you need to use LooLoo Mini well, in the order you are likely to need it. It is not exhaustive — the **Full Reference** goes deeper into every parameter and the complete CV map. If you just want to get looping, the **Quick Start** card is a one-minute path.

Making Your First Loop

The recording flow is built to stay out of your way: arm it, and it locks itself to the bar grid, records the length you asked for, and starts looping — all without you touching it again.

1. **Start Reason's transport playing.** LooLoo Mini reads your song tempo and bar positions; recording is locked to them.
2. **Set BARS** to the loop length you want. The range runs from a quarter-bar up to eight bars, in eleven steps — fractional values (1/4, 1/2, 3/4) for short rhythmic cells, whole numbers for phrases.
3. **Press REC.** The State box reads ARMED. At the next bar line, recording begins on its own and the box turns to REC.
4. **Feed in your audio.** LooLoo Mini records for exactly the BARS length you set, then stops by itself and begins looping. The State box turns to PLAY.

5. **That is your loop.** PLAY stops and restarts it. CLR empties the buffer and returns to IDLE so you can start again.

Two recording shortcuts

FREE removes the wait for the bar line — recording starts the instant you press REC. The loop is still trimmed to the BARS length you set, so it stays the right length; it simply does not wait for the grid. Useful when you are capturing something that does not begin on a downbeat.

E STOP (Early Stop) lets you end a recording before it reaches the full BARS length. With it on, pressing REC again during recording stops the loop at the next quarter-note. The loop becomes however long you actually recorded, snapped to the nearest beat.

One more behaviour worth knowing: if you press REC with Reason's transport *stopped*, LooLoo Mini records immediately for the pre-calculated BARS length. Most of the time you will record with the transport running so everything stays grid-locked, but the option is there.

What happens when recording ends — the MODE switch

The MODE switch decides what the device does the moment a recording finishes and playback begins. It is the single most important setting to understand, because it changes the character of the device entirely:

CONTROL	WHAT IT DOES
Stop › Play	The loop plays back. Your live input continues to pass through on top, dry. This is ordinary looping — the loop is a finished thing you play over.
Loop › Overdub	The loop plays and keeps recording. New input is layered onto what is already there, building the loop up pass by pass. UNDO removes the most recent layer.
Loop › Solo	The loop plays alone — your live input is muted during playback. Use it to audition the loop by itself, or to hand the output over entirely to the loop.

The Audible Window

The window is LooLoo Mini's signature. Once a loop is recorded, you do not have to hear all of it. The window is an adjustable opening onto the recording — you choose how much of the loop is audible, and where in the loop that audible part sits.

The recording itself never changes. The window only changes what you *hear* of it. Move the window and you are moving through the same captured audio, listening to different parts of it.

CONTROL	WHAT IT DOES
WIN	Window size — how much of the loop is audible, as a fraction of the whole recording. At 100% you hear the entire loop. Turn it down to narrow in on a slice.
WIN OFF	Window offset — where the audible slice begins within the recording. At 0% the window starts at the loop's beginning. As you turn it up, the slice slides forward; past the end, it wraps around.
SYNC	Window quantize — snaps both window size and offset to quarter-note boundaries, so the slices you carve out stay musically aligned. A small red triangle appears on the display's window arc when SYNC is on.

Shrink WIN far enough — below roughly five percent of the loop — and the window collapses into **pulse mode**: a single short beat, repeating. The display's ring stops showing a pinwheel and shows a single pulse instead. It is a different instrument at that setting — less a loop, more a tuned rhythmic tick you can move around with WIN OFF.

> **TRY THIS**
>
> Record a two- or four-bar phrase in Stop › Play. Turn WIN down to about a quarter and slowly sweep WIN OFF while the loop runs. You are scrubbing through the recording in real time — the same audio, re-sequenced by hand. Turn SYNC on and the same sweep lands only on beat boundaries.

Stutter

Stutter takes a small piece of what is currently audible and repeats it. Where the window decides what you hear, stutter decides how that slice is chopped and re-fired — from a gentle doubling to a hard glitch roll.

CONTROL	WHAT IT DOES
STUTTER	Switches the stutter engine on and off. When it is active, a golden lamp lights at the top-right of the display and a golden arc appears on the ring.
SIZE	The length of the stuttered slice. It is measured relative to the current window — so the window sets the playground, and SIZE chooses how much of it gets repeated. SIZE cannot exceed the window length.
SPEED	The playback rate of the stuttered slice. At 0 the slice is held frozen; at 1 it plays at normal speed; at 2 it plays at double speed. Between those, anything in-between.

Because SIZE is measured against the window, stutter and the window work together rather than independently. A wide window with a small SIZE gives you a short repeat inside a long phrase. A narrow window with SIZE near its maximum stutters nearly the whole of a small slice. It is worth setting the window first, then reaching for stutter.

Speed Bend & Direction

The bend wheel is a performance control — it is spring-loaded, meant to be pushed and released rather than set and left. It bends pitch and speed together, the way tape does.

CONTROL	WHAT IT DOES
SPEED (wheel)	The spring-loaded bend wheel. Push it up or down for real-time pitch and speed bend; let go and it springs back to centre, and the loop recovers cleanly to normal speed. It is built for gestures — dips, rises, wobble — not static detune.
BEND	Bend Active. When this is off, the wheel and its CV input are both ignored, and the loop holds rock-steady at normal speed. Turn it off when you want guaranteed stable playback and no chance of accidental bend.
REVERSE	Flips the playback direction. It works while the loop is playing, overdubbing, or even recording — the buffer is fully available in both directions.

When you bend, the display shows a small dot just outside the ring. That dot is the *canonical position* — where the loop would be if you had not touched the wheel. As the wheel springs back, the playhead recovers smoothly toward that dot, so a release never causes a jump. The dot is only visible while you are bending or recovering; the rest of the time the loop has no “should-be” position to show.

Tone & Shaping

These controls colour and condition the loop. None of them are destructive on their own — they shape what comes out, while the recording in the buffer stays as it was, unless you are overdubbing or have DECAY working.

CONTROL	WHAT IT DOES
DRY/WET	The balance between your live input and the loop at the main outputs. Fully wet is loop only; fully dry is input only.
DECAY	Gradually fades the loop's contents on each pass. At zero the loop repeats unchanged forever. Turn it up and each repeat is a little quieter than the last — the loop evolves and eventually thins out. DECAY is also the control that keeps the FX loop in check (see the next section).
FX MIX	How much of the FX send/return signal is folded back into the loop. See "FX Send & Return" below — this control is part of a feedback path and is covered in full there.
XGUARD	FX Guard. A soft limiter on the FX return signal. Covered in the FX section; in short, it is a safety net for the FX loop, and you should keep it turned up.
PITCH / GRAIN	Independent pitch shifting. PITCH sets the shift amount; GRAIN sets the grain size the shifter works with — smaller grains for tighter, larger for smoother, each with its own character.
FADE	The length of the fades applied when the loop starts and stops. At zero, starts and stops are abrupt; turn it up for smoother, gentler transitions.
XFADE	Loop crossfade. Blends the loop's end into its beginning so the wrap point is seamless rather than clicky. Generally best left on.
VOL	The output level of the loop at the main mix outputs.

FX Send & Return

LooLoo Mini has a built-in send and return pair on its back panel. This lets you route the loop out through any external effect chain in your rack — a reverb, a filter, a distortion, a delay — and fold the result back in. It is a genuinely powerful feature. It is also a feedback path, and it needs to be treated like one.

Here is what actually happens. The FX send taps the loop and sends it out of the SEND jacks. Whatever you patch it through, you bring back into the RETURN jacks. That returning signal is then **written back into the loop buffer** — mixed in by the amount you set with FX MIX. The returned, processed audio becomes part of the loop's content on the next pass.

That write-back is the whole point — it is how the effect becomes part of the loop rather than just sitting on top of it. But it means the FX path is a loop within a loop. If your external chain adds any level — and many effects do: a reverb tail, a delay with feedback, a resonant filter, any boost — that added level is written back in, and then sent out again, and comes back larger. Without something to counteract it, the loop builds on itself and grows, fast.

> ⚠️ **CAUTION — THE FX LOOP CAN RUN AWAY**
>
> The FX send/return writes the processed signal back into the loop. If your external effect chain adds gain, that gain compounds on every pass and the loop can build very quickly — the same runaway behaviour as any high-feedback device.
>
> Use it with the same prudence: **apply DECAY** so each pass loses a little of what built up — medium DECAY is usually enough to hold the FX loop stable. Bring **FX MIX** up gradually while listening, rather than setting it high and hoping. And keep **XGUARD (FX Guard)** turned up: it is a soft limiter on the return signal, a backstop that catches a hard blow-up — but it is a safety margin, not a substitute for DECAY and a careful hand on FX MIX.

Treated with that care, the FX loop is one of the most expressive things on the device: a loop that slowly dissolves into reverb, a phrase that filters itself further every pass, a rhythm that grows grit over time. The danger and the appeal are the same mechanism — understand it, and it is yours to use.

Reading the Display

The display is dense but consistent — every element means one thing, and once you know them you can read the loop's whole state at a glance.

CONTROL	WHAT IT DOES
State box	Top-left. Shows IDLE, ARMED, REC, PLAY, DUB, or SOLO. Its border pulses while recording or overdubbing, and its inner glow is colour-matched to the state.
The ring	The pinwheel at the centre, sixteen wedges. The bright wedge is the playhead, moving through the loop. Below the pulse-mode threshold the ring collapses to a single pulse instead of a pinwheel.
Window arc	An orange arc outside the ring, marking the audible window when WIN is below 100%. It previews live even while the device is idle or stopped, so you can set the window before you play.
Stutter arc	A golden arc just outside the window arc, showing the position and length of the stuttered slice. Visible only when stutter is active.
Canonical dot	A small dot just outside the ring, visible only while bending or recovering — it marks where the loop "should" be at normal speed.
Q triangle	A small red triangle at the window arc's midpoint, pointing inward. It means window quantize (SYNC) is on.
Mode icon	Lower-left: a REC circle, an arrow, and a mode-coloured circle — green for Play, red for Overdub, blue for Solo. It shows what recording will hand over to.
Decay disc	A contracting disc in the lower area, its colour shifting from blue through orange to red as DECAY rises. Invisible when DECAY is zero.
FX arrows	Two horizontal arrows pointing opposite ways. They alternate brightness with the loop, and glow brighter overall as FX MIX is raised.
Side readouts	Left column: BARS and the loop length in seconds. Right column: SPEED (×0.5 to ×2.0) and direction (FWD or REV).

The Back Panel

The back panel carries the audio connections and the CV system. You do not need any of it to use LooLoo Mini — the front panel is complete on its own — but the back is where it joins the rest of your rack.

The LooLoo Mini back panel — audio I/O, the FX send/return pair, and the CV system.

Audio

Alongside the main stereo IN and OUT, the back panel has the SEND and RETURN pair described in the FX section, and a separate RETURN input path. The main outputs carry the finished loop mix; the SEND/RETURN pair is the external-effects loop. *Note that the master VOL affects the main mix outputs only — it does not change the level at the SEND jacks.*

CV

LooLoo Mini has a set of **CV inputs** — trigger inputs for the transport actions (REC, PLAY, CLEAR, UNDO, RESET, STUTTER), which fire on a rising edge, and continuous inputs for the main performance controls, which sum with their front-panel knob. It also has **CV outputs** that report the loop's state — end-of-loop, play position, and REC and PLAY status — so the loop can drive other devices in time with itself.

This manual keeps the CV overview deliberately short. The **Full Reference** has the complete jack-by-jack map, including which inputs sum and which invert, and exactly what each CV output emits.

Two Ways to Use It

LooLoo Mini is open-ended, but two approaches show off what it is good at — and they pull the device in quite different directions.

1. Building a track, loop by loop

Because LooLoo Mini overdubs cleanly and runs happily in multiple instances, you can build a whole arrangement out of it. Set MODE to **Loop › Overdub**, record a foundation — a drum loop, a chord bed — and then layer parts onto it pass by pass, using UNDO to walk back any layer that does not land.

Then go wider. Drop a *second* instance on another channel for the chorus loop, a third for the bridge, a fourth for a breakdown. Each instance holds one section of the song; muting and unmuting their channels arranges the track. Because every instance is locked to the same transport and bar grid, they stay in phase with each other automatically. It is a looping workflow that scales from a single phrase to a finished structure. One practical note: each instance holds its loop in memory, so a handful for an arrangement is no trouble, but loading very many at once will use significant RAM.

2. As a creative delay

Set MODE to **Stop › Play** so your live input keeps passing through, choose a short BARS value, and turn **DECAY** up to medium or high. Now the loop behaves like a delay line: your input is captured, repeats, and fades a little on each pass — a tempo-locked echo whose length you dial in with BARS.

From there it stops being an ordinary delay. Narrow the window for rhythmic, chopped repeats. Bring in stutter for a delay that glitches. Add the FX send/return — carefully, per the caution above — for echoes that dissolve into reverb or filter themselves down over time. With DECAY doing the work of a feedback control, LooLoo Mini becomes a delay you can play, rather than one you only set.

Ready-Made Combinators

To make both of those approaches — and a few others — quick to reach, a set of Combinator patches is being prepared. These wrap LooLoo Mini together with useful companion devices and sensible starting settings, so you can drop a complete setup into your rack and start playing.

The Combinators will be available from the downloads section of the Doodov website. That section is still being built — keep an eye on it, and the patches will appear there as they are finished.

One Last Thing

There is a small surprise tucked inside LooLoo Mini, waiting to be noticed. We will not spoil it here. *More about it — and what to do when you find it — will be on the dedicated LooLoo family page on the Doodov website soon.*
