Ballooper

Kinetic ball looper — Quick Manual



Ballooper records your audio into up to four loops and gives each loop to a ball. The balls bounce around an arena: a ball's speed is the playback speed of its loop, and every wall it hits can change what the loop does — reverse it, restart it, double its speed, record a fresh take and more. Play notes and the arena turns any input into moving, evolving loops.

This short guide covers the essentials. Every control also shows its name and value in Reason's tooltip.

Quick start

- Create Ballooper in Reason (it gets its own note track), and connect an audio source to **IN A** on the back.
- Play and hold a note: a ball appears, records the next **LENGTH** of the input, then plays it back while it bounces.
- Play more notes: up to four balls, each with its own loop. A fifth note replaces the oldest ball.
- Turn a wall knob to give that wall a function (see *Walls*), then listen to what happens each time a ball hits it.
- Release the note to let the ball fade out (HOLD mode), or switch **LIFE MODE** to LIFE to let balls live on their own.

How the sound is made

Each ball's loop is played at a rate set by how fast the ball moves (relative to **SPEED**), times the **RATE** knob. Collisions between balls and some wall functions change that speed, so the pitch and timing of each loop drift and jump as the balls move. In **TAPE** mode the pitch follows the speed like a tape machine; in **LOCK** mode the loop plays faster or slower but keeps its pitch.

Two playback modes:

- **ROLL** — every ball plays its loop continuously.
- **HIT** — balls are silent in flight; each wall hit fires a one-shot of the loop from its start.

Walls

Each of the four walls (top, left, right, bottom) has a knob that picks what happens to a ball's loop when it hits that wall. The readout next to the knob shows the function.

BNCE Bounce	Nothing changes — the ball just bounces.
FLIP Reverse	Flips the loop's playing direction (with a short smooth turn).
FWD Forward	Sets the loop to play forward.
REV Reverse	Sets the loop to play backward.
PEND Pendulum	Toggles pendulum playback (back and forth) on and off.
RSTA Restart	Jumps the loop back to its start (ROLL mode).
HALF Half	Halves the ball's playback rate (an octave down in TAPE).
DBL Double	Doubles the ball's playback rate (an octave up in TAPE).
RSET Reset	Back to normal rate and the ball's own direction.
RAND Random	Jumps to a random point in the loop (ROLL) or starts the shot there (HIT).
CHOK Choke	Releases the ball — it fades out with the release time.
RCAP Recapture	The ball records a fresh take of the input and carries on with it.

Tip: mixed walls are where Ballooper comes alive — for example FLIP, HALF, DBL and RSTA on the four sides with RATE below centre. RCAP on one wall keeps the loops following a changing input.

Front panel



LOOP

LENGTH	Length of each recorded loop, 0.1 to 5 seconds.
TAPE / LOCK	TAPE: speed changes pitch. LOCK: pitch stays put whatever the speed.
IN A / B meters	Input level of the two stereo inputs.

MOTION

RATE	Overall playback speed, 0 to 8x (unity at the centre).
SPEED	How fast new balls are launched (0.10 to 2.50 arena crossings per second). Affects the next balls, not the ones already flying.
VEL	How much note velocity changes the launch speed.
RECOV	Recovery time: how quickly a ball pushed by a collision drifts back to its own speed (50 ms to 5 s).

KEY

TRANSP	On: the note you play transposes the loop relative to ROOT (a note an octave up plays an octave up).
ROOT	The note that plays the loop at its original pitch.
KICK	Sends every ball off in a new random direction.

Output strip and MODE

ATK / REL	Attack (up to 2 s) and release (up to 10 s) of each ball's envelope.
DRY	Adds the unprocessed input to the main output.
PAN	Spreads the four balls across the stereo field.
BALLS	Level of the balls (main output and ball outputs).
VOL	Main output volume.
MODE	ROLL (continuous loops) or HIT (one-shots on wall hits).

BALLS (one row per ball)

Ball lamp	Click the coloured numbered ball to switch that ball on or off. A switched-off ball takes no notes and its loop fades out.
A/B	Which input this ball records: IN A or IN B.
FWD / REV / PEND	Loop direction: forward, reverse, or pendulum (back and forth).
LIFE	How long the ball lives in LIFE mode: from half a second to over half a minute; near the top the clock slows right down, and fully up the ball never dies. Turning it acts on balls already in flight.
LIFE MODE	HOLD: a ball lives while its note is held. LIFE: note-offs are ignored and each ball lives for its LIFE time. Switching back to HOLD releases balls whose key is already up.

Back panel



Audio

IN A, IN B	Two stereo inputs. Each ball records A or B (its A/B switch).
OUT	Main stereo output (balls + dry).
BALL 1-4	A separate stereo output per ball, for individual processing.

CV inputs

SEQUENCER NOTE / GATE	Play Ballooper from a CV sequencer, like MIDI notes. Any gate above zero triggers; its level is the velocity.
BALL GATES 1-4	Launch a specific ball. Any non-zero gate fires; the gate level is the ball's velocity. In HOLD mode the gate falling releases the ball; in LIFE mode it is ignored.
BALL NOTES 1-4	Optional pitch for each ball gate (read when the gate rises). Unpatched, the ball plays at ROOT.
KICK	A rising CV kicks every ball in a new direction.
SPEED	Raises the launch speed of new balls, up to 2x.
RATE	Adds to the RATE knob.

CV outputs

BALL POSITION X1-4, Y1-4	Each ball's position in the arena (0 to 1), to drive other devices.
WALL GATES	A short gate each time a ball hits that wall (level follows the ball's speed).

Patches

Use the patch browser at the top right to load, browse and save patches. Ballooper comes with a set of factory patches that are a good starting point; all panel settings are stored in a patch (the recorded loops are not).

Tips

- Sustained or rhythmic material makes the most obvious loops; drums with HIT mode give bouncing rhythmic hits.
- Use the ball outputs to send each ball to its own effect, and the BALL POSITION CV to move filters or pans with the balls.