

BallRoomX

Kinetic ball looper — Quick Manual



BallRoomX records your audio into up to six loops and gives each loop to a ball. The balls start in a centre arena: a ball's speed is the playback speed of its loop, and every arena wall it hits can change what the loop does. Open the doors and the balls travel through a ring of cells that change their speed, direction and pitch, record a fresh take, or reset them. Three FX cannons fire effect balls that infect the loops they touch.

This short guide covers the essentials. Every control also shows its name and value in Reason's tooltip; the Operation Manual has the full details.

Quick start

1. Create BallRoomX in Reason (it gets its own note track), and connect a stereo audio source to **IN** on the back.
2. Play and hold a note: a ball appears in the arena, records the next **LEN** of the input, then plays it back while it bounces.
3. Play more notes: up to six balls (set by **VOICES**), each with its own loop. A further note replaces the oldest ball.
4. In the **ROOM** section, push the TOP, L, R and BTM door levers to the middle (OPEN): balls leave the arena and pass through the cells of the ring.
5. Turn the four wall knobs around the small room map to give the arena walls functions, and listen to each hit.
6. Release the notes to let the balls fade out (HOLD), or switch **LIFE / HOLD** to LIFE to let them live on their own.
7. Click **FIRE** in FX 1: an effect ball shoots out of the top-left corner and infects the balls it touches.

How the sound is made

Each ball plays its loop at a rate set by how fast it moves (relative to **SPEED**), times the **RATE** knob. Collisions, **SPEED** cells 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.

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

Walls

Each of the four arena walls has a knob that picks what happens to a ball's loop when it hits that wall — from inside the arena or from the ring outside. The readout shows the function.

BNCE	Nothing changes — the ball just bounces.
FLIP	Flips the loop's direction (with a short smooth turn).
FWD / REV	Sets the loop to play forward / backward.
PEND	Toggles pendulum playback (back and forth).
RSTA	Jumps the loop back to its start (ROLL mode).
HALF / DBL	Halves / doubles the ball's rate (an octave in TAPE).
RSET	Back to normal rate and the DIR lever's direction.
RAND	Jumps to a random point of the loop.
CHOK	Releases the ball — it fades out.
RCAP	The ball records a fresh take of the input.
BUMP / DAMP	Speeds the ball up 1.6x / slows it to half; RECOV brings it back (a pitch swoop or dip).
CURE	Removes the ball's effects.
KICK	Sends the ball off in a new direction.

The room

The centre arena is surrounded by a ring of ten cells. A ball entering a cell is changed; eight doors (dashed) connect the arena to the ring and the corridors to the columns.



S1, S2, S3	SPEED cells: the ball takes the cell's speed (SPD 1-3 knobs) and its loop rate follows.
FWD, PEND, REV	Set the loop direction: forward, pendulum or reverse.
PIT A / PIT B	Shift the rate by the PIT A / PIT B interval (-12 / +12 semitones by default) while the ball is in the column.
RECAP	The ball records a fresh take of the input.
HOME	Back to the base state: normal rate, the DIR lever's direction, effects cured.

Doors

Each door has a lever: **CLOSED** (down), **OPEN** (middle) or **AUTO** (up). An AUTO door opens at random — **CHANCE** sets how often, **HOLD** how long — and while its DOOR GATE CV input on the back is high. A door never closes on a ball. With every door closed, the balls stay in the arena.

FX balls

Each FX slot has a cannon in a corner of the arena (FX 1 top-left, FX 2 top-right, FX 3 bottom-left). While **FIRE** is on, its FX ball is in play. A loop ball it touches is **infected**: its sound goes through the slot's effect for the slot's **TIME**, shown by a ring of dots around the ball. A ball can carry all three effects.

TYPE	DRIV drive, FOLD wavefolder, CRSH bitcrusher, GRAN granular, STUT stutter, COMB comb filter, RING ring modulator, SWEP resonant filter, ECHO delay, CHOP tremolo gate. Each one follows the ball's motion (speed, position, wall hits).
AMT	Amount of the effect, live on every ball carrying it.
TIME	How long an infection lasts: 0.5 to 60 s; fully up, permanent.
FIRE	Puts the FX ball in play, or removes it.
CONTAGION	On: infected balls pass their effects to the balls they collide with (with the time they have left).

FX balls make no sound and trigger no wall functions. An infection is cured by HOME, a CURE wall, a new note on that ball, or the end of the ball.

Physics and strips

SIZE / GRAV	Ball size, and gravity pulling the balls down.
AIM / SPRD	Launch direction of new balls (random or one of eight), and spread around it.
COLL	A wall function applied when two balls touch (BNCE = nothing).
WALL CHANCE	Per wall: the chance its function fires (else a plain bounce).
PIT A / PIT B	The intervals of the two pitch cells.
KEEP / RSTR	For the SPEED, DIRECTION and PITCH cells: keep the change after leaving, or restore it.
FLOW	A current around the ring, clockwise or anticlockwise.
DOOR	Width of the four centre doors.

Front panel

LOOP, MOTION, KEY

LEN	Length of each recorded loop, 0.1 to 5 seconds.
TAPE / LOCK	TAPE: speed changes pitch. LOCK: pitch stays put whatever the speed.
RATE	Overall playback speed, 0 to 8x (unity at the centre).
SPEED	Launch speed of new balls. Affects the next balls, not the ones already moving.
VEL	How much note velocity changes the launch speed.
RECOV	How quickly a ball returns to its own speed after a collision, or glides to a SPEED cell's speed.
TRSP / ROOT	On: notes transpose the loop relative to ROOT (up to two octaves either way).
MODE	ROLL (continuous loops) or HIT (one-shots on wall hits).

Strip under the display

VOICES	How many balls notes can use, 1 to 6.
DIR	Loop direction of the balls: forward, reverse or pendulum.
LIFE	How long balls live in LIFE mode, from half a second to forever (fully up). Acts on balls in flight.
LIFE / HOLD	HOLD: a ball lives while its note is held. LIFE: balls live for the LIFE time.
KICK / CLEAR	KICK sends every ball in a new direction. CLEAR fades out every ball.

Output row

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 six balls across the stereo field.
BALLS / VOL	Level of the balls; main output volume.

ROOM

SPD 1, 2, 3	The speeds of the three SPEED cells.
Door levers	One per door, placed like the doors: CLOSED, OPEN or AUTO.
Wall knobs	The functions of the top, left, right and bottom arena walls.
CHANCE / HOLD	How often AUTO doors open at random, and for how long.

Back panel

Audio

IN	Stereo input: every ball records from it.
OUT	Main stereo output (balls + dry).
BALL 1-6	A separate stereo output per ball, for individual processing.

CV inputs

SEQUENCER NOTE / GATE	Play from a CV sequencer, like MIDI notes.
BALL GATES / NOTES 1-6	Launch a specific ball, with an optional pitch (else ROOT). The gate level is the velocity.
KICK, CLEAR	Rising CVs act like the buttons.
SPEED, RATE	Raise the launch speed of new balls (up to 2x); add to the RATE knob.
DOOR GATES IN	One per door: an AUTO door opens while its CV is high.
FIRE 1-3, AMT 1-3	Fire the FX balls (while high); add to the AMT knobs.

CV outputs

BALL POSITION X1-6, Y1-6	Each ball's position in the room (0 to 1).
WALL GATES	A short gate each time a ball hits that arena wall (level follows the speed).
ZONE	A short gate each time a ball enters a cell.
INFECT	A short gate on every infection; its level tells the slot.

Patches

Use the patch section at the top right to load, browse and save patches. BallRoomX comes with 18 factory patches in themed folders; every panel setting is stored in a patch (the recorded loops are not).

Tips

- Start with the doors closed, then open one door at a time to hear what each cell does.
- 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 position CVs to move filters or pans with the balls.
- Set an FX TIME around the middle with CONTAGION on, and add a CURE wall: outbreaks spread and die out on their own.