

Hopper catches the notes you play and drops them into a tank. The tank drains in time — one note per step, at the rate you choose — so a chord you hold comes out as a line, a flurry comes out even, and a phrase played once keeps coming back in whatever order you like.



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| 1 ON — device on/off | 2 Tank display — every note held | 3 In / out lamps and fill meter |
| 4 Patch browser | 5 VOICE — velocity, transpose, odds | 6 MAIN / TRIGGER — MODE THRESH |
| 7 ENGINE — RATE ORDER LOOP | 8 LOOP lamp | 9 PATTERN SEGMENTS — 8 steps |
| 10 STOCH RATE — rate dice | 11 Roll countdown and offset | |

FIRST NOTES IN SIX STEPS

- 1 INSERT IT ON AN INSTRUMENT**
Hopper is a Player: add it to any instrument device and it feeds that instrument. A short, clear sound shows the drain most plainly — a pluck, mallet or piano.
- 2 PLAY A HANDFUL OF NOTES**
With **MODE** on **DIRECT** they come straight back out at the **RATE** setting, one per step. The tank display fills as you play and empties as they leave.
- 3 HEAR ONLY HOPPER**
THRU is on by default, so you hear your own playing too. In **DIRECT** mode that means your notes pass through untouched — switch **THRU** off and the tank takes over.
- 4 FILL FIRST, EMPTY LATER**
Set **MODE** to **ACCUM**: now the tank collects everything you play and waits. Tap **PLAY** to let it run, or hold **PLAY** to spill only while you hold.
- 5 CHANGE THE ORDER**
ORDER decides who leaves first: oldest, newest, lowest, highest, random, random without repeats, or alternating ends. **LOOP** keeps everything circulating instead of consuming it.
- 6 EMPTY IT**
FLUSH clears the tank and closes anything still sounding. Changing **CAPAC** empties it too.

READING THE TANK

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|---|---|
| ■ Slots — one per stored note, oldest at the bottom. Alternating shades mark chords captured together. | ■ Surface — the top of the pile, and the count against the capacity in the header. |
| ■ Threshold line — in THRESH mode only. Drag it to set the level; double-tap to reset it. | ■ Playhead — in LOOP mode, the slot being read right now. The note below the tank is the last one drained. |

NOTHING COMING OUT?

In **ACCUM** the tank waits for **PLAY**; in **THRESH** it waits until the pile reaches the line. In **DIRECT** with **THRU** on, what you hear is your own playing passing through.

THE TANK

Every note you play takes one slot, oldest at the bottom. **CAPAC** sets 25, 50 or 100 slots; changing it empties the tank. When the tank is full, **OVFLOW** decides: **REPLACE** drops the oldest note to make room, **FREEZE** protects what is stored and turns new notes away.

Notes played together are stored as a chord and stay together as a block on the display.

RATE AND GRID

RATE sets the step, from a whole note to a 1/32, dotted and triplet included. **GATE** sets how much of each step the note actually sounds.

QUANT locks the drain to Reason's grid while the transport plays; with the transport stopped Hopper runs free at the same rate.

DICE ON THE RATE

The STOCH RATE section rolls every few notes: set how often, how likely, how long the jump lasts, and how much weight each of the six offsets (**W -3** to **W +3**) carries.

PROB at 0 switches the whole section off, and its strip goes dark.

THREE WAYS TO TRIGGER

DIRECT — drains as you play, an even stream at the set rate.

ACCUM — fills and waits. Tap **PLAY** to latch it running, hold **PLAY** for a momentary spill, tap again to stop.

THRESH — fills until the pile reaches the line you drag on the display, then tips out on its own until empty.

TWO ENGINES

SEQ drains at one rate. **PATTERN** walks eight segments, each with its own rate and its own note count (1–8); switched-off segments are skipped, and a lamp shows which one is sounding.

PRESS bends the rate with how full the tank is — fuller means faster, or slower, up to three ladder steps either way.

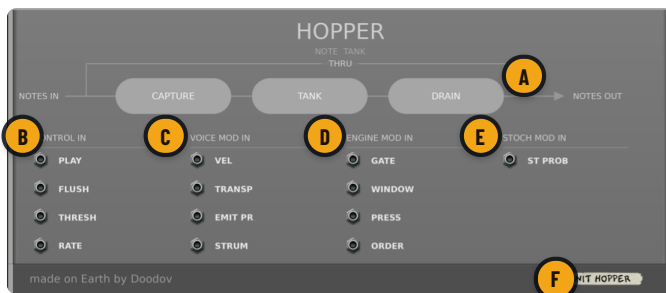
VOICE AND CHORDS

VEL SRC plays notes as you played them, at a fixed velocity, scaled, or randomised. **TRANSP** shifts ± 24 semitones and **EMIT PR** silently skips a share of the steps.

CHORD decides how a stored chord leaves: **SPLIT** one note per step, **CHORD** all at once, **STRUM** spread across the step by **STRUM** amount.

OUT OF THE BOX **THRU ON** **QUANT OFF** **MODE DIRECT** **THRESH 50%** **CAPAC 100** **RATE 1/8** **GATE 50%** **WINDOW 20 ms** **ORDER FIFO** **CHORD SPLIT** **CONSUME** **PRESS centre** **ENGINE SEQ** with all eight segments off **AS PLAYED** velocity, **TRANSP 0**, **EMIT PR 100%**, **OVFLOW REPLACE**, **STOCH PROB 0** (section off).

BACK PANEL



- A** **Signal flow** — notes in, captured, held, drained, out. The THRU arc is the path your own playing takes when THRU is on.
- B** **Control in** — trigger Play and Flush, and modulate Threshold and Rate.
- C** **Voice mod in** — velocity amount, transpose, emit probability, strum.
- D** **Engine mod in** — gate length, chord window, pressure, drain order.
- E** **Stoch mod in** — stochastic probability.
- F** **Patch name**. Hopper ships with 21 patches in seven categories.

THREE TO TRY

ECHO TANK

DIRECT, **THRU OFF**, **RATE 1/16**, **ORDER FIFO**, **GATE** short. Play a fast, uneven flurry: it comes back out perfectly even.

CHORD SPILL

ACCUM, **CHORD SPLIT**, **ORDER PITCH UP**, **RATE 1/8**. Hold a chord, release, then tap **PLAY**: it climbs out one note at a time.

TIP THE BUCKET

THRESH, **CAPAC 25**, threshold around 60%, **RATE 1/16**. Feed it notes and it empties itself in bursts whenever the pile reaches the line.