STARLAB

Manual

Getting started, every page, every key.



Version 0.1.30
Farwick StarLab

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Always the newest manual

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Online manual

StarLab manual

From the installer to your first beat, then every page, pad and key of StarLab, in the words the plugin uses itself.

Written for StarLab 0.1.30 (November 2026). In a DAW, StarLab follows the DAW's tempo and transport; the standalone app has its own Play button and tempo. Point at anything in StarLab and the help line at the bottom says what it does. Looking for prices and editions? They are on the StarLab page.

1 · Getting started

From the installer to your first beat.

Install

One installer, four parts.

Download the installer from your account (or the trial from the StarLab page), open it and follow it. It puts four things on your Mac: the StarLab app, the AU plugin, the VST3 plugin and **StarLab Base**.

StarLab Base is our own sound library: 10,483 sounds (8,491 one-shots and 1,992 loops), about 3 GB, made with StarLab's own synthesis. The installer lists it as its own item: untick it if you want to work with your own samples only. Its sounds show in the Galaxy once StarLab is activated.

An older StarLab, including one from the time it was called Astrolab, is replaced: your projects, beats, presets and settings open as before. In your DAW, StarLab is an instrument called **Farwick StarLab**; if it doesn't show, let the DAW rescan its plugins. In Applications, StarLab's icon is a white planet with its ring on black; the top bar shows the same mark.

What gets installed

StarLab app	Applications
AU · VST3	The Mac's plugin folders
StarLab Base	10,483 sounds, about 3 GB
Needs	macOS 12 or later, Apple silicon or Intel

Activate

Activate, or start the trial.

The first time, StarLab shows its activation card. Until you activate or start the trial, StarLab stays silent.

Activate in browser opens farwickaudio.com: sign in with the link we email you, and StarLab unlocks by itself. **License file** installs a license file from your account and works offline. **Machine ID** copies this computer's ID, for activating by hand or for support.

Start 14-day trial gives you every feature and every genre. Until you buy, a soft noise plays about once a minute, live and in files you export. The trial runs online, so keep the Mac connected; StarLab Base sounds arrive one by one as you reach them. A bought license works offline.

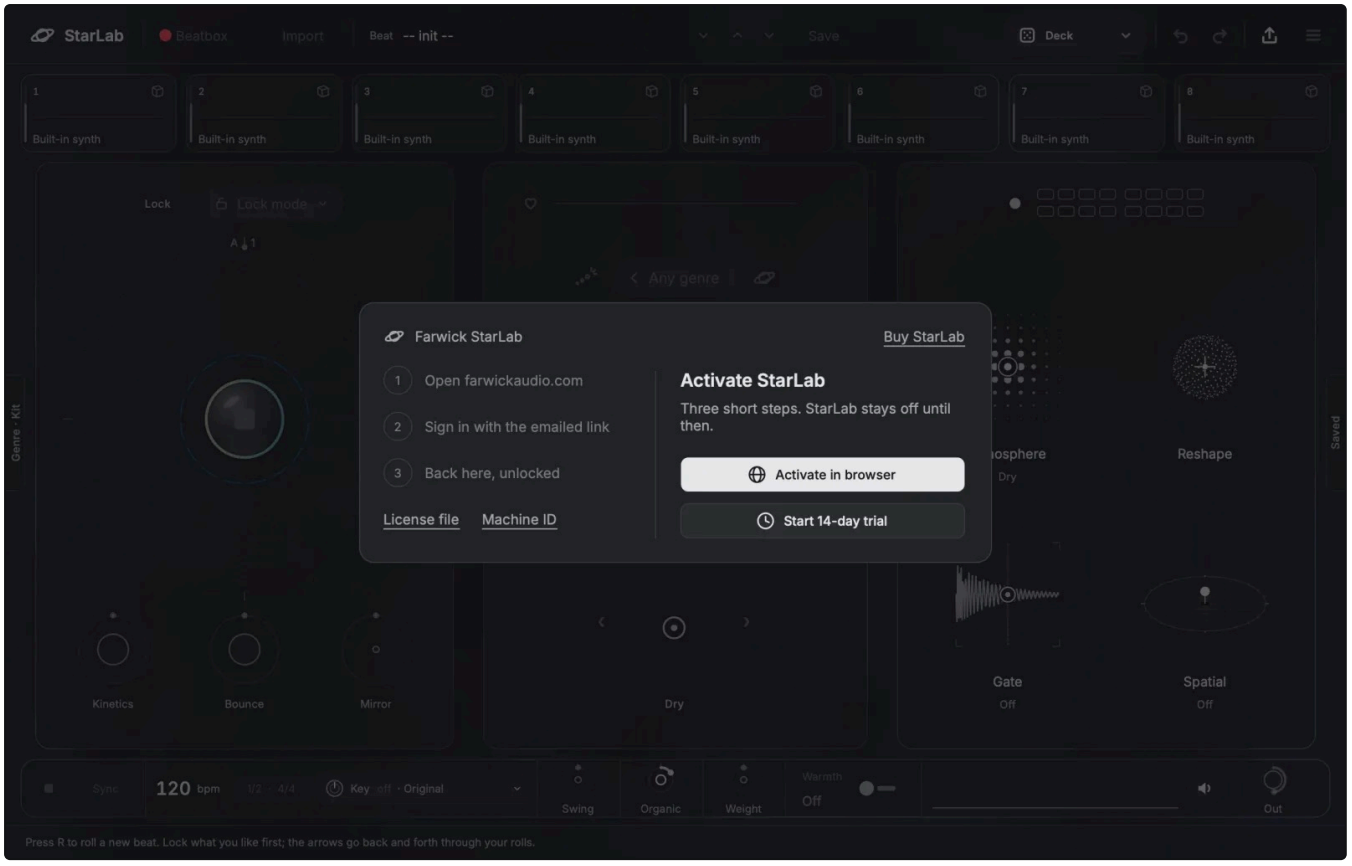


Fig. 1.1 The activation card. A license works on two computers.

First beat

Your first beat in five steps.

1 Press play.

In the app, click the round play button in the middle of the beat circle, or press Space. In a DAW, start the DAW: StarLab follows its tempo and transport.

2 Roll a beat.

Click the dice, or press R. Every roll is a new beat, new sounds and a new rhythm. The arrows beside the dice bring earlier rolls back.

3 Pick a genre.

Click the genre line over the dice, or press G. A drawer opens on the left; a click on a genre rolls in it at once.

4

Shape the sound.

Drag the dot on the **Atmosphere** pad: the angle picks the effect, the distance sets how much. For a finished sound, rest the mouse on the preset pad under the dice (a ring, two arrows and the preset's name), or press P, and pick a preset.

5

Keep it.

The heart keeps the beat in your **Saved beats**. **Save** (top bar) names it and puts it in your library. To use it in a song, drag **Bounce** (the arrow in the top bar) into your DAW.

Help

Help is one look away.

Point at any control: the help line at the bottom of the window says what it does and which keys work there.

The first time, the welcome offers three ways in (**Generate a beat**, **Drop a folder**, **Record a beatbox**), **Take the tour** or **Skip**. The tour has five steps on the real controls: try each one as often as you like, then **Next** moves on, and **Show me** plays a step for you. **Learn StarLab** adds five short chapters of three steps each. The tour's cards are glass and sit beside the control they explain; the welcome and Learn StarLab stay in the middle of the window.

Help at hand

Any control	Point at it: the help line explains
Welcome & tour	Menu (≡), bottom section
Keyboard shortcuts	Menu · Setup
Next · end the tour	Return · Skip or Esc

2 · The screen

Five pages, a bar on top, a bar below.

Overview

The same frame on every page.

The top bar, the kit strip under it and the control bar at the bottom stay on every page; the middle shows the page you pick. Two tabs on the window's edges open drawers: **Genre · Kit** on the left, **Saved** on the right. On the Lab the edge tabs open its side cards instead: **Fills and builds** on the left, **Breaks and stops** on the right.



Fig. 2.1 StarLab 0.1.30 on the Deck.

1. **Beatbox**: record a rhythm with your voice; ⌄ for its menu (chapter 13).
2. **Import**: add a folder of drum samples.
3. **Beat**: the beat's name; click it for the Beat Browser.
4. **Saved beats**: the list, and the previous or next one.
5. **Save**: name the beat and keep it in your library.
6. **Init**: clear the beat, the sounds and every effect.
7. **Page pill**: Deck, Galaxy, Lab, Console, Dream.
8. **Undo** and **Redo**.
9. **Bounce**: drag the beat into your DAW.
10. **Menu**: settings, library, MIDI and help.

11. **Kit strip**: eight lanes, one sound each.
12. **Genre · Kit**: the drawer on the left (G).
13. **Saved**: your saved beats on the right (S).
14. **Control bar**: tempo, feel, key, the beat's sound.
15. **Help line**: what the control under the pointer does.

Page pill

Five pages, one pill.

The pill in the top bar names the page you are on. Click it, or press it and let go over a page, for the row of five: **Deck** rolls, locks and shapes; **Galaxy** shows every sound as a star; **Lab** places every hit, and its side cards play the beat live (chapter 6); **Console** drives and glues the lanes; **Dream** forms new sounds from yours. While the Console is on, a small white dot sits on the pill. **Init**, just left of the pill, clears the beat, the sounds and every effect, like a new session: patterns A to D (only A stays, empty), the arrangement, every lane's sound and layers, the recordings, and every effect and lane setting, on locked parts too (locks guard rolls, not Init). Every sound goes back to its own pitch: nothing follows the key and fine tune is gone, while the key, scale and octave stay. The name reads "-- init --". Tempo, meter, genre, Out, the locks and your library stay. One **Undo** (Cmd+Z) brings it all back. While Record, a Beatbox take or a pad-steps take runs, Init is greyed out.

Pages

Deck	Cmd+1
Galaxy	Cmd+2
Lab	Cmd+3
Console	Cmd+4
Dream	Cmd+5
Lab side cards	Cmd+6

Kit strip

Eight tiles, one per lane.

Click a tile to hear its sound and open its sound panel: Pitch, Length and Tone, and with **More** also Pan, Chance, the Organic controls, Nudge, When (which bars it plays in) and Choke (sounds in one choke group cut each other off, like open and closed hats).

Drag a tile up or down for its volume, or sideways onto another tile or into your DAW. A tile shows a lock only when its sound is locked (a small grey mark). Hover it for the row with its lock button, the previous and next sound in its history, **Next similar sound**, **Roll this lane** and mute (Option-click to solo; muted lanes still roll). Right-click it to **Print to library**: its sound as it plays, saved next to the

source and added to your library. A small mark shows a mutated sound; click it for Mutate. While Weight is up, each tile shows its own Weight bar in a row of its own, under the sound's name, to trim it (chapter 9); it slides out when Weight comes up and back when it goes down.

A kit tile

Hear · sound panel	Click
Volume	Drag up or down
Move · into your DAW	Drag sideways
Mute · solo	Click · Option-click
Mute while held	Hold 1–8
Print to library	Right-click

Control bar

Tempo, feel, key and the beat's sound.

Play plays or stops in the app (Space); in a DAW, playback follows the DAW and **Sync** lights. Play and Sync sit in the same place on every page. **Record** (the round button) records your moves and the notes you play (chapter 6): on the Deck it sits left of the pad steps' title, on every other page right after Sync. **Tempo**: drag up or down, or scroll. The **Feel** chip, for example "1× · 4/4", sets the feel and the time signature (chapter 5). **Key** opens the tuning panel, and the **Swing** chip beside it picks the swing type.

Swing sets how much of the swing type beside Key plays. At **As rolled** each lane plays its own type, as the roll gave it, and the Swing chip shows, dimmed, the type most lanes play (**Mixed** on a tie, or the type the whole beat swings as when no lane has its own); click it for the 16 swing types (Swing16, Swing8, Triplet, Lazy, Ahead and more) and pick one for the whole beat, or scroll over it. With Swing16 at 100 % the beat plays a dotted 16th feel, and 75 % is a triplet feel. At As rolled, straight lanes follow the beat's swing too. A project, preset or beat saved with an older StarLab keeps its old swing until the next roll of a new rhythm. On the circle, the moons stand where each hit really plays. **Organic** makes every hit a little different, like a real player: a new session starts at 20 %, a double-click goes back there, and holding Option over it plays the beat dry. On the circle, a thin tail on each moon shows how much earlier or later it plays, and dragging a hit shows its velocity. **Weight** puts a sub under every Kick and 808 lane, tuned to each hit, and in a new session gives every other sound more of its own body too (more weight, not louder; chapter 9). **Warmth** adds rich low harmonics and

a softer top on the whole beat. It starts at 100 % in a new session and after Init, and is level-matched: 100 % plays as loud as off. A double-click switches it off. **Out** is the output level; the spectrum line shows the whole beat after Out.

Control bar, left to right	
Play · Record · Sync	Space · Shift+R
Tempo	Drag or scroll
Feel	Auto · ½ · 1× · 2× and the meter
Key	The tuning panel
Swing · Organic · Weight	Double-click: default or off
Warmth	100 % at first · double-click: off
Out	Output level, in dB

Key

Tune the kit to one key.

The **Key** chip opens the tuning panel: the song's key, the scale, the tuning presets and which sounds follow the key. A sound that follows the key goes to its note in the key and moves when the key does. **Key off** lets every sound play at its own pitch plus its fine tune; **Back to own pitch** stops every sound from following.

Follow MIDI chords (behind the panel's fold): send chords or a bassline to StarLab on MIDI channel 2, and the 808 and the sounds that follow the key move to each chord's root from the next hit. Channel 2 never plays a drum. **Save current** keeps the tuning as your own preset, for every project.

Tuning panel	
A lane's note	Drag; Shift for cents
Its own pitch	Double-click the note
Chords on channel 2	Follow MIDI chords
Your preset	Save current; right-click to rename

3 · The Deck

Roll, lock, and shape the sound.

Overview

The page StarLab opens on.

The Deck is three glass boxes that mirror each other about the window's middle. On the left, **the beat** drawn as rings, with **Lock mode** above it and three macros under it: **Kinetics**, **Bounce** and **Ratchet**. In the middle, the roll history with the heart, the genre line, the **dice** with its arrows, the frequency range under it, and the preset pad for the effect presets (a ring, two arrows and the preset's name; click it to open the presets, and the arrows step through them without opening). On the right, the pad steps with their Record ring, and four pads: **Atmosphere**, **Reshape**, **Gate** and **Spatial**.

Deck keys

Roll	R
The genre drawer	G
Saved beats	S
Presets · motions	P · Shift + P
What makes the genre	Hold ?

Moving light

A nebula that follows your pointer.

The Deck sits on a dark nebula in three layers that drift against your pointer, and the die's light leans toward it. Leave the window alone and the light drifts slowly, and now and then a soft sweep crosses the glass; after a minute without a move, everything holds still until you move again. Moving light never changes the sound.

It is on by default; **Moving light** in the settings (Appearance) turns it off, for the plain dark look. With macOS Reduce motion, or **Animations** off, the nebula and the die's light stay still. The glass lens over the beat circle, the pads' depth and the preset chooser's light follow the same switch.

Moving light

On · off	Settings · Appearance
Off	The plain dark look
Reduce motion	The nebula and the light stay still
The sound	Never changes

Roll

The dice, and the roll history.

Click the dice, or press R, to roll new sounds and rhythm; whatever you locked stays. Option+R rolls similar sounds only. Spin the dice, Shift-click it, or click and hold it (about half a second) to switch it to the Motion die, which rolls motions (chapter 14); the same again brings the Beat die back. A quick click still rolls.

The arrows beside the dice, or ← →, walk through your rolls; the counter shows where you are. Right after a roll, **Undo the roll** takes it back. The heart keeps the beat in your Saved beats. In the settings you choose when a new roll lands: **On the next bar**, so the groove never stumbles, or **Immediately**.

Roll

Roll	Dice or R
Similar sounds only	Option+R
Previous · next roll	← →
Undo the roll	The button, or Cmd+Z
Beat die · Motion die	Hold, spin or Shift-click the dice

Lock mode

Keep what you like, roll the rest.

Lock mode (top left) lists what rolls keep, in nine rows: **Sounds**, **Rhythm**, **Motion**, then **Atmosphere**, **Preset**, **Filter**, **Tuning**, **Mix** and **Pad steps**. Lock any of them and the dice changes only the rest. A small lock mark shows where a lock is on. Unlocked, a new beat starts with the filter off; **Tuning** keeps each lane's note (a new sound moves onto it); **Mix** keeps each lane's level and pan. Filter, Tuning and Mix are off at first.

Point at a row and a die appears on it, for example **Roll sounds** or **Roll mix**: it rolls only that part, even while it is locked, as one undo step. A right-click on any die learns a MIDI note. Every kit tile has its own lock too, and in the Lab each lane locks its sound and its pattern apart.

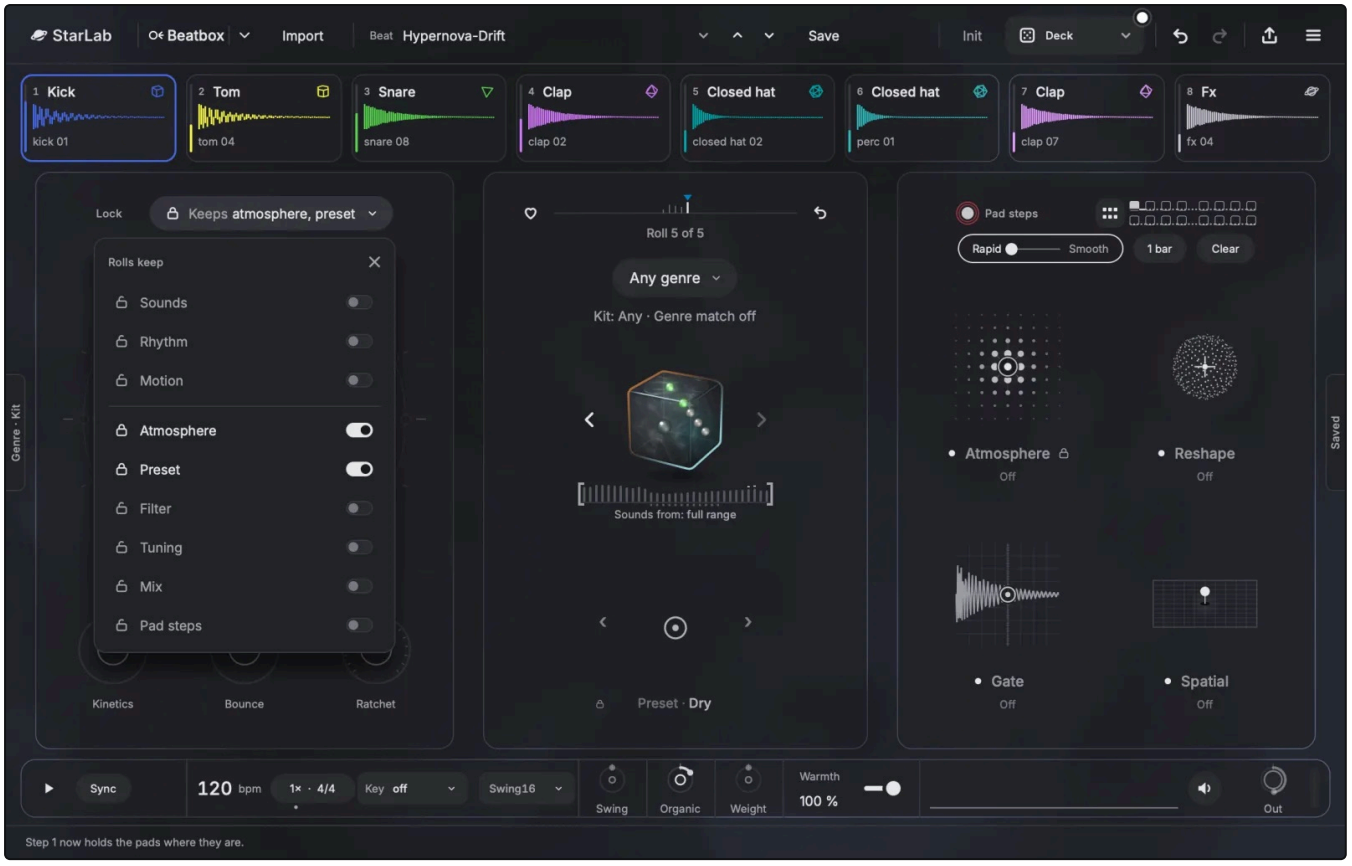


Fig. 3.1 Lock mode: nine things a roll can keep.

Genre line

Genre, Genre match and the range.

The genre line over the dice names the genre the dice rolls in, with the kit line under it, for example "Kit: Any · Genre match off". Click the genre, or press G, for the drawer (chapter 4); click the kit line's parts to change them. Point at the genre and the help line says what makes it, and only what really plays. When your tempo is far from the genre's own, a quiet hint says so, for example "Best at 82–104 bpm, you're at 120."; your tempo stays. **Genre match** (a switch in the drawer's Genre tab, and on the kit line): on, rolls pick the genre's own sounds first and keep two sounds from masking each other; off, the range alone chooses.

The **frequency range** under the dice is where rolls look for sounds. Drag an end, drag the middle to move both, or double-click for the genre's own range. Letting go fits the kit: sounds outside swap for ones inside, or get a gentle mutate. Hold ?, or point at the genre, and the circle lights the steps that make the genre.

Genre and range

The drawer	Click the genre line, or G
Genre match	A switch in the drawer
Range: move an end	← → a third of an octave
With Shift · Option	An octave · both ends
The genre's own range	Double-click, or ⌫

The beat

Rings, moons and the edge.

Each ring is one lane; a lit moon is a hit, the fuller the louder. Click a ring to add or remove a hit, drag up or down for velocity, and Option-click for a ratchet (2, 3 or 4 quick hits). The button in the middle plays and stops the beat in the app. A moon stands where its hit really plays, so swing moves it off the grid line; Organic shows as a thin tail. While nothing plays, the moons and the die go dim and grey, and the selected lane keeps its colour; Play brings the colour back.

The circle's edge is a turntable: drag it to scratch (chapter 6). Option-drag the edge to turn the beat around the circle, step by step, so another step lands on the one: it drives **Ratchet**, as one undo step (Esc cancels).

The circle is glass: point over the Deck and a lens follows, bending the nebula, the stars and the ring lines under it. It snaps to a nearby step, which lifts, and it swells over the die. Controls never bend, and at rest the Deck looks exactly as before. The lens follows the Moving light switch.

On the rings

Add · remove a hit	Click the ring
Velocity	Drag up or down
A ratchet	Option-click
Scratch	Drag the edge
Turn the beat	Option-drag the edge

Pads

Atmosphere, Reshape, Gate, Spatial.

Atmosphere: the angle picks an effect family (Character, Space, Motion, Speaker), the distance sets how much. **Reshape**: the same beat, a bit different; further out means more change. Its four edges say what each way changes in the beat that is playing, such as More kick, Ghost notes, Busier hats or

Simpler; an edge stays empty when that way changes little.

Gate: the angle picks the character (Tight, Punch, Drive or Ambient), the distance how much; the center is off. **Spatial**: the edges read Wide, Scatter, Orbit and Depth, and the readout names where you are, for example "Orbit 40 % · binaural". Its extras, **Smart split**, **Drift** (the puck wanders slowly by itself) and **Lows centered**, appear while the pointer is over the pad.

The edge words fade in while you touch a pad. The pad you are working on, or one Record is waiting on, gets four corner brackets. **Spatial** draws its floor as a square, with Orbit as a dashed rectangle and its dot going round. A slider beside each pad mixes the dry sound back in. On every pad the arrow keys nudge the puck, a double-click brings it back to the middle, and a right-click learns a MIDI control. The pads have depth: only the pad nearest the pointer turns toward it, once the pointer is within half a pad of it, and fully while the pointer is over it. Move away and it springs back flat; the other pads stay still, and at rest nothing moves. With Reduce motion every pad stays flat; labels, handles and click areas never move.

The four pads

Atmosphere	Character · Space · Motion · Speaker
Reshape	Words from the beat you hear
Gate	Tight · Punch · Drive · Ambient
Spatial	Wide · Scatter · Orbit · Depth
Back to the middle	Double-click
MIDI learn	Right-click the pad

Macros

Kinetics, Bounce, Ratchet, Balance.

Kinetics: fewer or more hits; the kick and snare backbone stays until the far left. **Bounce**: right pushes hits ahead of the beat, left pulls them onto it. **Ratchet** turns the beat around the circle; the knob shows a tick for each whole turn, and a double-click brings it back to the middle.

Press B for **Balance**: StarLab finds the kit's biggest clash or gap and fixes it with the smallest change to one sound. Shift+B puts the original sounds back.

Knobs come alive on hover: a knob grows out to its ring, then breathes slowly while the pointer stays on it. It holds still while you turn it; with Reduce motion it only grows.

Macros

Kinetics	−100 to +100 %
Bounce	−100 to +100 %
Ratchet	Turns the beat; double-click: the middle
Balance · undo it	B · Shift+B

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4 · Genres and fills

What the dice rolls in.

The drawer

Genre, Kit and Limits.

Click the genre line, or press G: a drawer opens on the left with three tabs. **Genre** lists one family's genres and subgenres, each with the tempo it lives at; the menu beside **Any genre** picks the family (Hip-hop & R&B, Electronic, Pop, Rock & Jazz, Caribbean & Latin, African, Percussion & World, Beyond 4/4). A genre's subgenres open in place under it; closing the group rolls nothing.

A click on a genre rolls in it at once, and the drawer stays open. **Any genre** gives a surprise each roll. The search field finds genres and subgenres; Return picks the first match. Which genres you can pick depends on your edition; the trial has all of them.

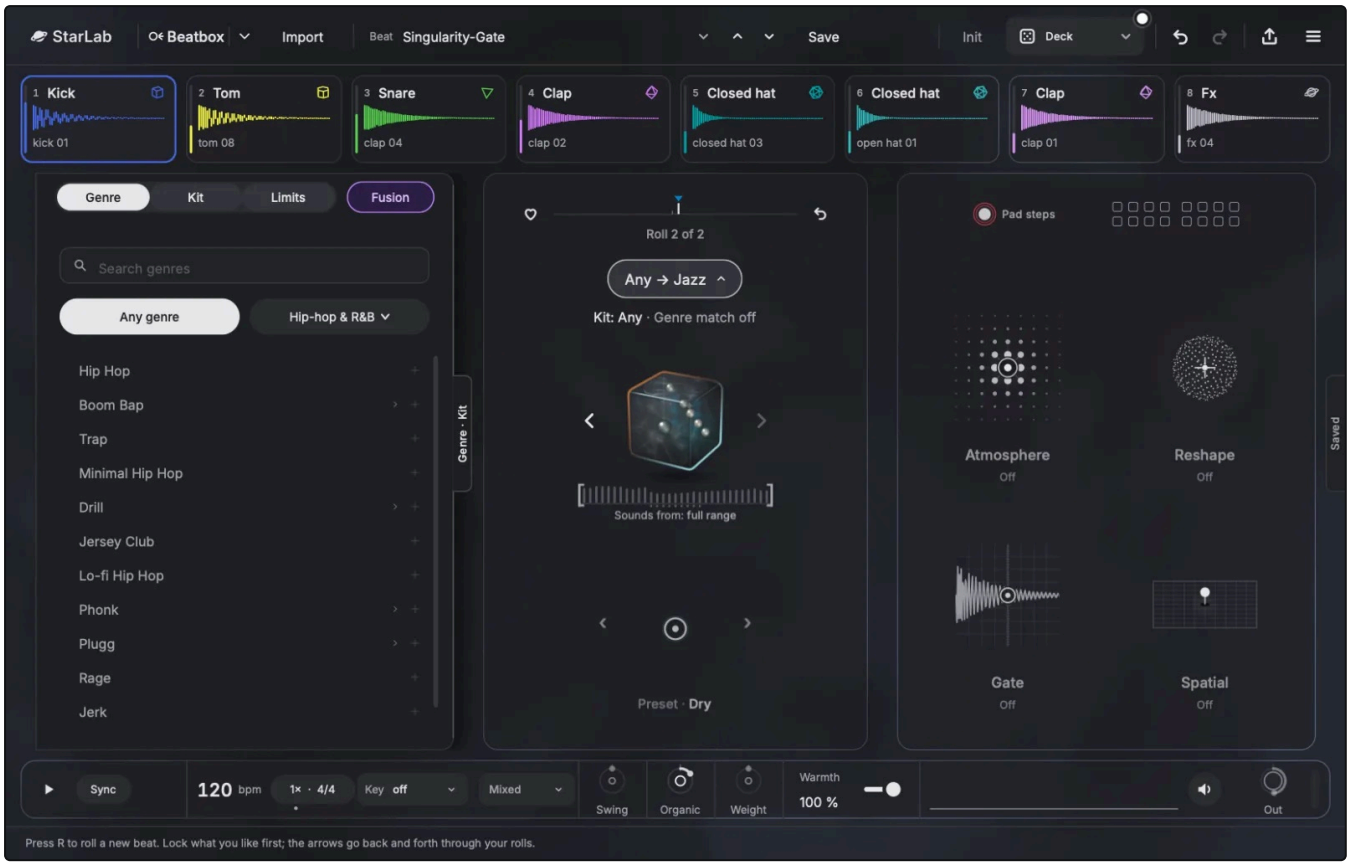


Fig. 4.1 The drawer on its Genre tab, with the Fusion pill.

Fills

Fills, and a new one when you want it.

A new session starts with fills off. Fills live on the Lab's left side card: switch it to **Vary and fills**, and **The beat plays** sets how often the beat's own fill plays: **Off**, **4**, **8** or **Here and there** (now and then, never two in a row), with **Long fills** (a phrase fill now and then runs over the whole bar) and **Crash**

after (chapter 6). The fill itself you can draw and edit in the Lab (chapter 8). A session saved with fills on keeps them.

New fill (Shift+F) rolls only the fill bars; locked lanes keep theirs, and Cmd+Z takes it back. In a DAW loop, the crash after a fill is skipped when the loop jumps back to its start.

Fills	
How often	Lab · Vary and fills: Off · 4 · 8 · Here and there
Long fills	A whole bar, now and then
New fill	Shift+F

Mixes

A mix of genres, and Fusion.

The **+** at the end of a genre row (or Cmd-click) adds it to a mix: the chip then reads "Any of 3", and after a roll, for example, "Any of 3 → Drill". The × on the Any row ends the mix.

Fusion, the violet pill beside the drawer's tabs (and in the Beat Browser; making a fusion comes with Ultimate), fuses two or more genres and subgenres into one beat, with a live preview. Add genres, drag their points on the pad, and work through the steps: energy, bounce, sounds and chops. **Ideas** offers twelve fusions that work; **New take** (R) plays another take of the same fusion; **Cancel** puts back the beat you had. The **New genres** die rolls a new mix of genres; a right-click learns a MIDI note.

Mix and fuse	
Add a genre to the mix	+ or Cmd-click
End the mix	× on the Any row
Fusion	The violet Fusion pill
Another take	New take, or R

Genre Fusion

Two stars, one beat.

Point at a genre row in the drawer and a small **× Fuse** pill shows in its corner (or press X on the row). The Any row then reads, for example, "Trap × ..." and waits for a second star; pick any genre and the two stars fuse on the next bar. Esc or the row's × stops the wait.

On the Deck the chip reads both names, for example "Trap × Afrobeats", and a blend line takes the kit line's place under it. Drag its dot toward a star to lean the beat that way; the help line shows the share, for example "Trap 15 % · Afrobeats 85 %", and Undo goes back. The lighter star stays audible along the whole line: where it would lead no lane, its strongest part keeps a lane of its own. The **Fusion** pill in the drawer still opens the full window.

Genre Fusion comes with Ultimate (and the trial). On StarLab and Constellation, a fused beat keeps playing exactly as it was made, in every session; the Fusion window opens to look (it shows the fusion's cast, and only **Close** works), and **× Fuse**, the **Fusion** pill and the blend line show a small lock. The dice then roll the heaviest genre alone and end the fusion (Undo brings it back); a lane's dice roll that lane in the heaviest genre and the fusion stays. The Beat Browser's blend of two genres works in every edition.

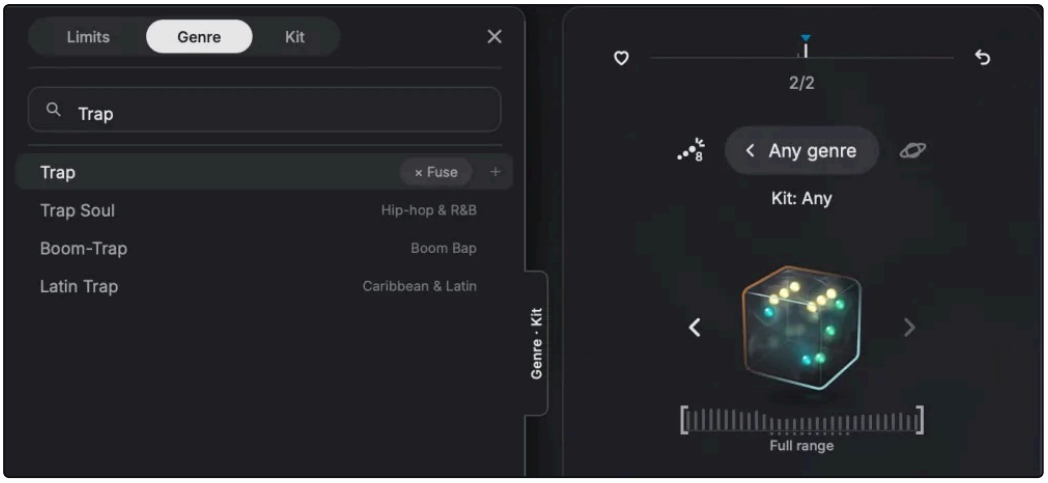


Fig. 4.2 × Fuse on a genre row.

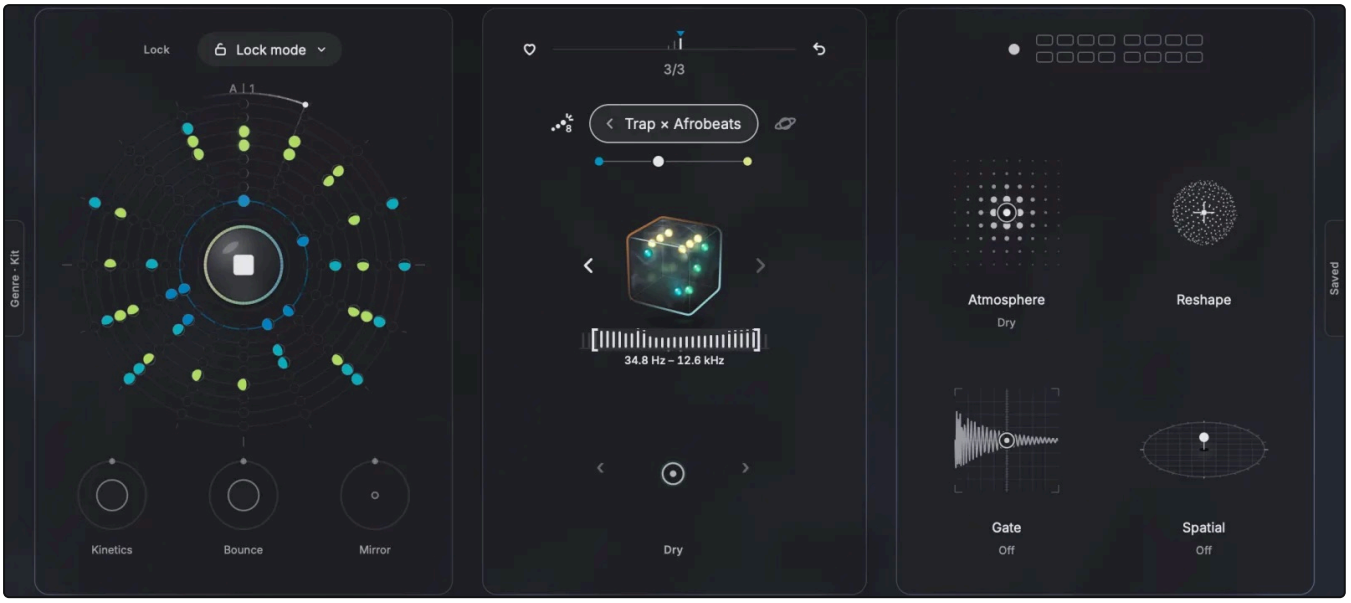


Fig. 4.3 Two stars on the Deck: the chip and the blend line.

Kit and Limits

Which sounds a roll may pick.

Kit picks the sounds' character: characters lean gently, presets lean stronger (such as One family, Only toms or No 808s), and sources are rules: sounds from **one-shots**, from **loops** (each roll slices a drum loop from your library into a kit and its groove) or from **both**. A pick rolls new sounds at once.

Limits sets what a roll may pick, for the whole kit or for one lane: types, frequency, length, choppiness and energy. While limits are on, a badge shows on the tab. **Clear** goes back to everything.

Kit · Limits	
Characters	A gentle lean
Presets	A stronger lean
Sources	One-shots · loops · both
Limits	Types · frequency · length · choppiness · energy

Browse

The Beat Browser, and your own style.

Click the beat's name in the top bar for the **Beat Browser**: every genre, a page of beats at a time. A click plays a beat in place; **OK** keeps it (Return), **Cancel** puts back the one you had (Esc). **Custom** invents a new beat in the genre; a blend mixes in a second genre.

In your Saved beats, **Make style** turns 3 to 8 saved beats, with your edits, into a genre of your own. It rolls like any genre and shows under **Yours** in the genre list and the Beat Browser. Sessions carry it to other Macs, and a dropped .genre file joins Yours.

Beat Browser	
Open it	Click the beat's name
Pages	← → · Random page
Keep · put back	Return · Esc
Your style	Make style, in Saved beats

---

5 · Time signatures

4/4, and beyond.

Feel

One chip for the feel and the meter.

The chip in the control bar, for example "1× · 4/4", holds both. The feel: **Auto** plays each roll half-time, as written or double-time, whichever brings the genre's own tempo nearest yours (your tempo stays); or pick **½**, **1×** or **2×**.

The time signature: **4/4**, **3/4**, **6/8**, **7/8**, **5/4** or **12/8**, for the whole session. A bar then has as many steps as the meter needs. StarLab keeps its own time signature; it doesn't follow the DAW's, and a hint says so.

Meters

4/4	16 steps
3/4 · 6/8	12 steps
7/8	14 steps, counted 2+2+3
5/4	20 steps, counted 3+2
12/8	24 steps, four long pulses

Beyond 4/4

Nineteen genres in other meters.

The family **Beyond 4/4** in the genre list holds the genres written in other meters. Picking one sets its meter.

- **3/4**: Waltz, Jazz Waltz, Folk Waltz, Hip-hop Waltz, Bossa Waltz.
- **6/8**: 6/8 Ballad, 6/8 Gospel, Afro 6/8, Blues 6/8, R&B 6/8, Chacarera 6/8.
- **7/8**: Rock 7/8, Neo-soul 7/8, Rachenitsa 7/8.
- **5/4**: Jazz 5/4, Rock 5/4.
- **12/8**: Blues 12/8, Gospel 12/8, Afro 12/8.

The genres in 3/4, 6/8 and 7/8 come with every edition. Afro 6/8 sometimes plays the long bembé bell over two bars; the beat then plays its patterns A and B in a row.

In other meters	
Genres written in them	Beyond 4/4
Every other genre	Rolls in the meter too
Afro 12/8	The long bell in one bar

Everything follows

Every part counts in the meter.

The trained genres, such as Hip Hop, Trap or House, roll in every meter too, each meter from its own groove model. In 4/4 that model learned from the Groove MIDI Dataset: drummers' own performances, published under CC BY 4.0 and named in the third-party notices that come with StarLab. The models for the other meters learned only from our own data. And everything that counts beats follows the bar: the grid and the rings, the fills, Record's count-in, the timing X-ray, the dice, Beatbox, loop and MIDI file import, Moves, scratching, Dream Loop, Fusion, the MIDI export (with its time signature) and Bounce.

Saved beats show their meter, for example "Rock 7/8 · 132 · 7/8", and the library search finds beats by meter.

Follows the meter	
Rolls	Every genre, trained ones too
Edit	Grid, rings, X-ray, fills
In	Beatbox, loops, MIDI files
Out	MIDI export, Bounce

6 · Side cards, record, moves

Play the beat while it plays.

Side cards

Play the beat live, from the Lab's side cards.

On the Lab, the tabs on the window's edges fold out two side cards that mirror each other; Cmd+6 opens both from any page, and again folds them. On the left, **Fills and builds**: the rows **Fill**, **Build-up** and **Drop**. On the right, **Breaks and stops**: **Breakdown**, **Tape stop** and **Repeat**. Each row shows three cards, the one in the middle being the one it plays (for example Snare roll, Kick out or Hats only), with "n of N", a heart and a die. A click on the middle card plays it in time: a Fill at the end of this bar, then the groove comes back; the others for the bars a tap plays, and holding the key keeps them going until you let go. The Fill row also has **New fill**, which rolls this beat's End, Short and Long fills, and **Edit**, which opens the End fill in the grid.

The arrows, the dots and the wheel choose another card; the row's die picks one at random (never the one it plays). With **Preview while browsing** off (off at first) they only choose; switch it on and they play what they pick, in time. The heart keeps a card for every session. Right-click a row for **Step through my hearted ones only**, **Use ... as this beat's fill** (the beat's own fill then plays it, in your exports too; one undo step) and MIDI learning.

A switch heads each card. The left one turns to **Vary and fills**: what Vary changes, where the Fill row's fills come from, how often the beat plays its own fill, and how long a tap plays (1, 2 or 4 bars). The right one turns to **Scenes**: your kept beats; a click, or 1–8, starts one on the bar **Scenes start** says, and the next free row reads **+ Add this beat**. A scene brings its own meter.

While a side card is open, the bottom bar shows the bar you are in, **Vary beat** (changes the beat from the next bar) and **Undo Vary** (Z); Cmd+Z stays your session's undo. In a DAW the cards follow the host ("In sync with the host"); the app keeps its own clock ("Own clock · 120 bpm").

MIDI channel 16 plays the side cards: notes 36 to 43 the scenes, 44 to 49 Fill to Repeat, 50 Vary beat, 51 Undo. **Hand perform** (on the Hands plate, chapter 16): with hand tracking on, a fist plays the top row, an open hand the middle row and pointing the bottom row, each hand on its own card.

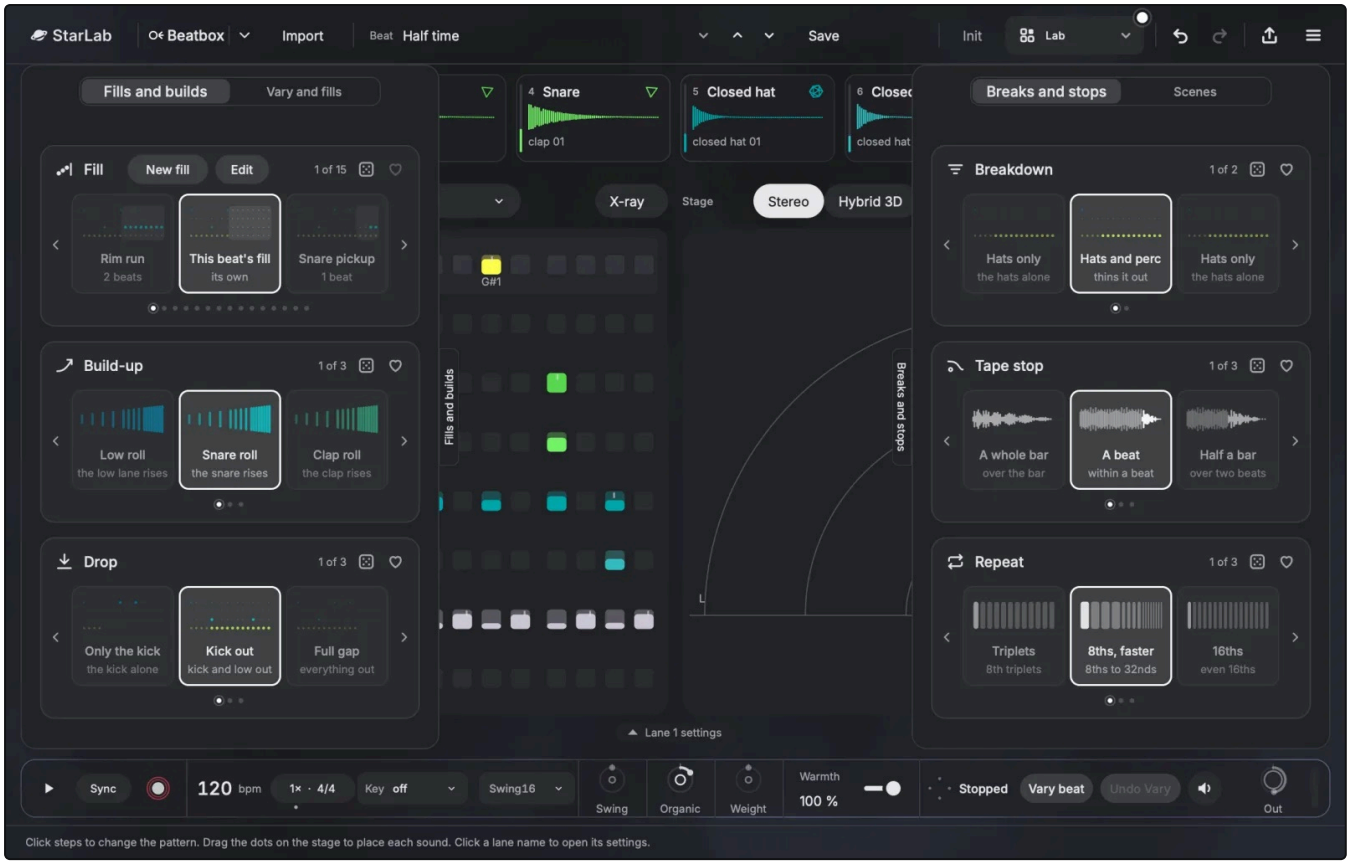


Fig. 6.1 The Lab's side cards, both open.

Side card keys

Open both · fold	Cmd + 6
Scenes	1–8, with a side card open
Fill	F, once
Build-up · Drop	U · D
Breakdown · Tape stop	K · T
Repeat	E
Undo Vary	Z
MIDI	Channel 16, notes 36 to 51

Record

Record what you move.

Record (Shift + R, or the round button: left of the pad steps' title on the Deck, after Sync on the other pages) records at once, with no count-in, and writes almost any control you move into the steps of the pattern playing: the pads, knobs and faders, the Console pad, every dry/wet slider and

the Filter; the bottom bar (Swing, Organic, Weight, Warmth, Out) is not recorded. While the song is stopped it waits, armed, until it rolls, and it is red while it records. Press it again to stop and keep; Esc cancels while armed, and a right-click clears.

The notes you play on pads or a keyboard go into the pattern too, with your own timing (**Record MIDI notes**, on at first). Afterwards a toast offers **Tighten**, which pulls the take's hits half way to the grid. Notes wait for the beat: press Play first. The tour's chapter "Build your own beat" walks you through it.

Recording again only touches the steps you move. One Undo takes the whole take back. A small × by a recorded control clears just its steps; **Lock motion** in Lock mode keeps your moves when you roll.

Record	
Record · stop and keep	Shift + R
Cancel while armed	Esc
Undo the take	Cmd + Z, once
Keep moves across rolls	Lock motion

Pad steps

The pads, step by step.

On the Deck, the 2 × 8 cells at the top right hold the pads' steps. Press Record (the ring left of the **Pad steps** title) and move a pad, or click a step to save where your pads are now. Open the row for **Rapid** to **Smooth** (how the pads move between steps), the loop length (1 bar: each step a sixteenth; 4 bars: each step a beat, for builds and sweeps) and **Clear**.

Steps switches the recorded moves off and on again; they are kept. **Lock pad steps** in Lock mode keeps them when you roll; unlocked, a new roll clears them (Undo brings them back).

Pad steps	
Save the pads here	Click a step
Glide	Rapid to Smooth
Loop length	1 to 4 bars
Keep across rolls	Lock pad steps

Moves

Build, drop, breakdown.

On the Deck or in the Lab, U Build-up, D Drop, K Breakdown, T Tape stop and E Repeat play the card the side cards pick (chapter 6); V plays Reverse. A tap plays to the next bar line; held, it plays as long as you hold. MIDI notes 21 to 26 play them too. Record records them; Bounce plays them.

Hold 1–8 to mute that lane while you hold it.

Moves	
U · D	Build-up · Drop
K · T	Breakdown · Tape stop
V · E	Reverse · Repeat
MIDI	Notes 21 to 26
Mute a lane	Hold 1–8

Scratch

Scratch the beat circle.

Grab the edge of the beat circle and spin it; let go and it lands on the next step. Hold 1–8 while you drag to scratch only that lane. Record records your scratches; a right-click on the edge clears them.

Scratch	
Scratch	Drag the edge
One lane only	Hold 1–8 + drag
Clear the scratches	Right-click the edge

Filter

The Filter, under the presets.

Open the presets (click the preset pad, or P) and pick **Filter** at the top: **Off**, a die, a map of filters and the groups Darker, Thinner, Peaks, Moving and One part, plus **Yours**. A click loads a filter, a drag across the map blends two. While a filter plays, the Deck shows "Filter · *name*" under the preset line; click it to come back here.

Set filter manually, at the foot of the list, opens the filter itself: drag the dot left for a high-cut, right for a low-cut, up for a peak, down for a softer slope; the center is off. Flick it to throw it; under it pick a motion, the lanes (or F + 1–8, F + 0 for the whole kit) and dry/wet. **+ Save** keeps it as your own. A new beat starts with the filter off unless **Filter** is locked in Lock mode.

Filter	
Open it	Presets · Filter
Left · right	High-cut · low-cut
Up · down	A peak · softer slope
Lanes	F + 1–8, F + 0

7 · The Galaxy

Every star is one of your sounds.

Map

Hear a star, try it, keep it.

Every sound in your library is a star, placed by how it sounds: similar sounds sit close together. Hover a star to hear it; its card shows the type, the folder and how calm or intense it is. Click it to put it on the selected lane; a toast says so, with Undo.

Drag a star onto a kit tile, or press 1–8, to put it on that lane: the star flies as a comet with a trail back to its place, and lands in the tile with a ring. Let go anywhere else in the window ("Release to cancel") and it flies back.



Fig. 7.1 The Galaxy: filters, the map, the similar sounds and the globe.

Filters

Types, Favorites, History, Loops.

The chips above the map show every sound (**All**) or one type: Kick, Snare, Hat, Clap, Perc, Tom or FX. **Favorites** shows the sounds you hearted, **History** the ones you heard last, **Loops** your loops and MIDI grooves (chapter 12). **New** appears when sounds arrive in your folders while StarLab is open. A switch shows only StarLab Base or only your own sounds. The search finds sounds by name, folder

or type.

Filters	
Types	All · Kick · Snare · Hat · Clap · Perc · Tom · FX
Favorites · History	Your hearts · heard last
New	Just arrived in your folders
Search	Name, folder or type

Folders

Folders on and off.

Folders lists your sample folders with a tick each. Untick a folder to leave it out for now without removing it: its sounds stay out of the map, rolls, kit picks, Dream and loop suggestions, while kits that already use them keep playing. The chip says how many are on, for example "3 of 5 folders". **Use all** and **Only** are one click; Cmd+Z undoes.

Add folder... picks a folder of drum samples, and StarLab maps them by sound; you can also drop a folder onto StarLab. **Remove a folder** takes it out of the library; its files stay on disk. StarLab Base is built in and can't be removed.

Folders	
Leave out for now	Untick it
All · one	Use all · Only
Add	Add folder..., Import, or drop it
Remove	Files stay on disk

StarLab Base

Our own sounds, next to yours.

StarLab Base shows in the Galaxy once StarLab is activated. In the trial, each Base sound comes from our server the first time you reach it, so it needs the internet. If Base is installed but can't open, the Galaxy says so where its stars would be.

Bounces, stems and kits with Base sounds are always free to use. Single Base sounds saved as files, such as a star dragged out or Print to library, are limited to 100 a day.

StarLab Base	
Sounds	8,491 one-shots, 1,992 loops
Shows	Once StarLab is activated
Single sounds as files	100 a day

Learns from you

Favorites and "Treat as".

Press F over a star, or right-click it, to add it to your favorites. Right-click a star for **Treat as**: tell StarLab what the sound really is (Kick, 808, Snare, Rim, Clap, Closed hat, Open hat, Shaker, Cymbal, Tom, Perc or FX), or **Automatic** to let it decide again. The same menu puts the star on any lane and opens Mutate for it.

A star's right-click menu

Add to favorites	Or F
Mutate this sound	Opens Mutate
Put it on lane 1–8	Or 1–8
Treat as	Automatic, or one of 12 types

Similar sounds

The list and the globe.

Beside the map, the sounds most like the one you picked. Click one to try it on the selected lane; double-click to keep it. ← → step through the list (with Shift, five at a time). The **globe** shows the selected lane's sounds: drag to turn it, click a lit star to try it. **Random** spins the globe and picks a sound that fits; **Next similar** tries the next sound in the list; **Mutate** opens Mutate for the sound.

Similar sounds

Try · keep	Click · double-click
Step the list	← →, Shift for 5
Random	A sound that fits

---

8 · The Lab

Every hit, on a grid and in a room.

Pattern

Rings or Grid, A and B.

Rings shows the pattern as rings; **Grid** as a step grid, best for velocity and ratchets. Click a step to add or remove a hit, drag it up or down for velocity, Option-click for a ratchet (2, 3 or 4 quick hits).

Each beat has two patterns, **A** and **B**; the buttons choose which one you edit. The **Play** chip (for example "Play: A") sets which patterns play and in what order, and copies or clears a pattern. A click on a lane's name opens its settings underneath. The tabs on the window's edges open the side cards (chapter 6).

Under the lanes, the **fill row** shows the pattern's fill (End, Short or Long). Click it to edit the fill in the grid, which then shows the fill's bar; Done or Esc goes back. While fills are off it says so: they play once you turn them on in the side card's **Vary and fills** (chapter 6). **Clear pattern** asks whether to clear the fills too; Return keeps them.

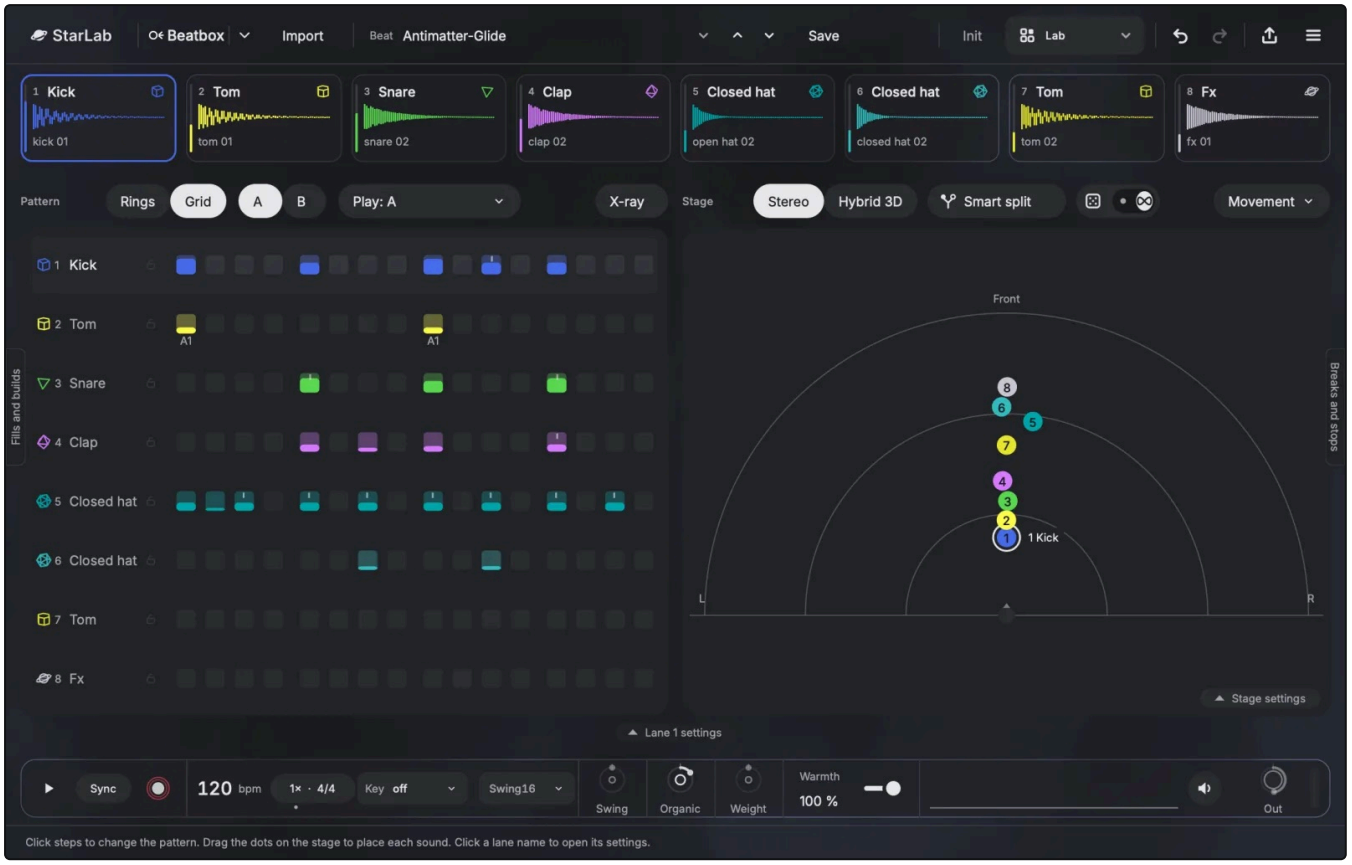


Fig. 8.1 The Lab: the grid, the stage and the side-card tabs.

X-ray

When each hit really plays.

Hold X, or click **X-ray**, for one bar in true time: each hit's timing in ms (+ late, – early) and its velocity (1–127). The faint band is Organic's spread. Point at a hit to see what moves it: Swing, Nudge, the genre's feel, Organic.

Tighten pulls the hits toward the grid: one click half way, the next all the way, the next back to the groove. Click a lane's name to tighten only that lane. Undo brings the groove back.

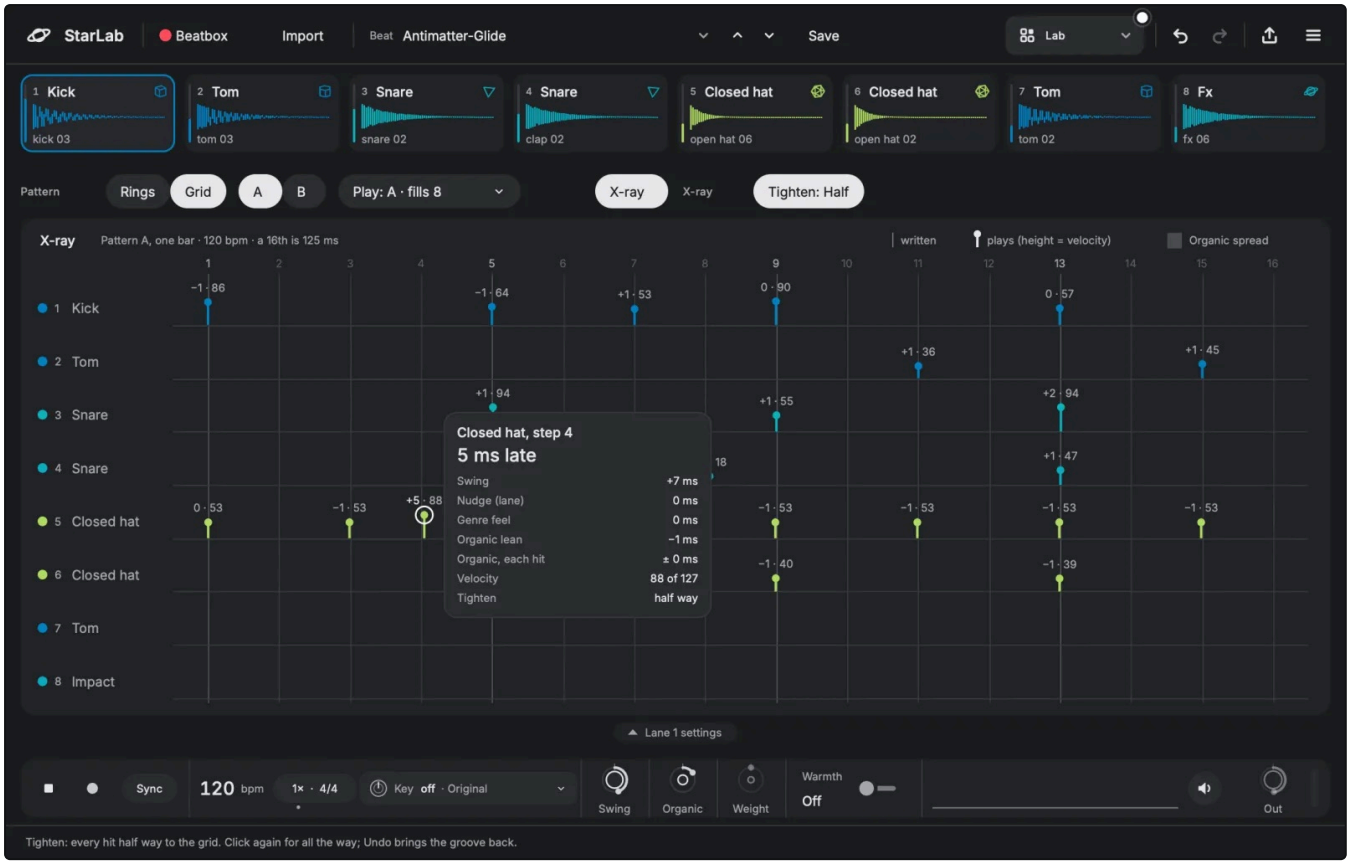


Fig. 8.2 X-ray, with Tighten at half.

Notes on hits

Melodic lanes show their notes.

A melodic lane (an 808, toms, a perc with a clear pitch, or a lane that follows the key) shows each hit's note under it. Point at a hit: ▲ and ▼ move it one note in the key per click (a semitone with Key off; Shift for a tenth). Drag an arrow or scroll for more; double-click the note to go back to the lane's note. Every change plays the hit. Dragging a hit up or down still sets its velocity.

Hold a hit for a moment and it stays held (a white frame): the rack's Pitch, Tone, Length and Pan then change that hit alone. A tweaked hit has a small white dot; double-click a knob to put the hit back. Esc lets go.

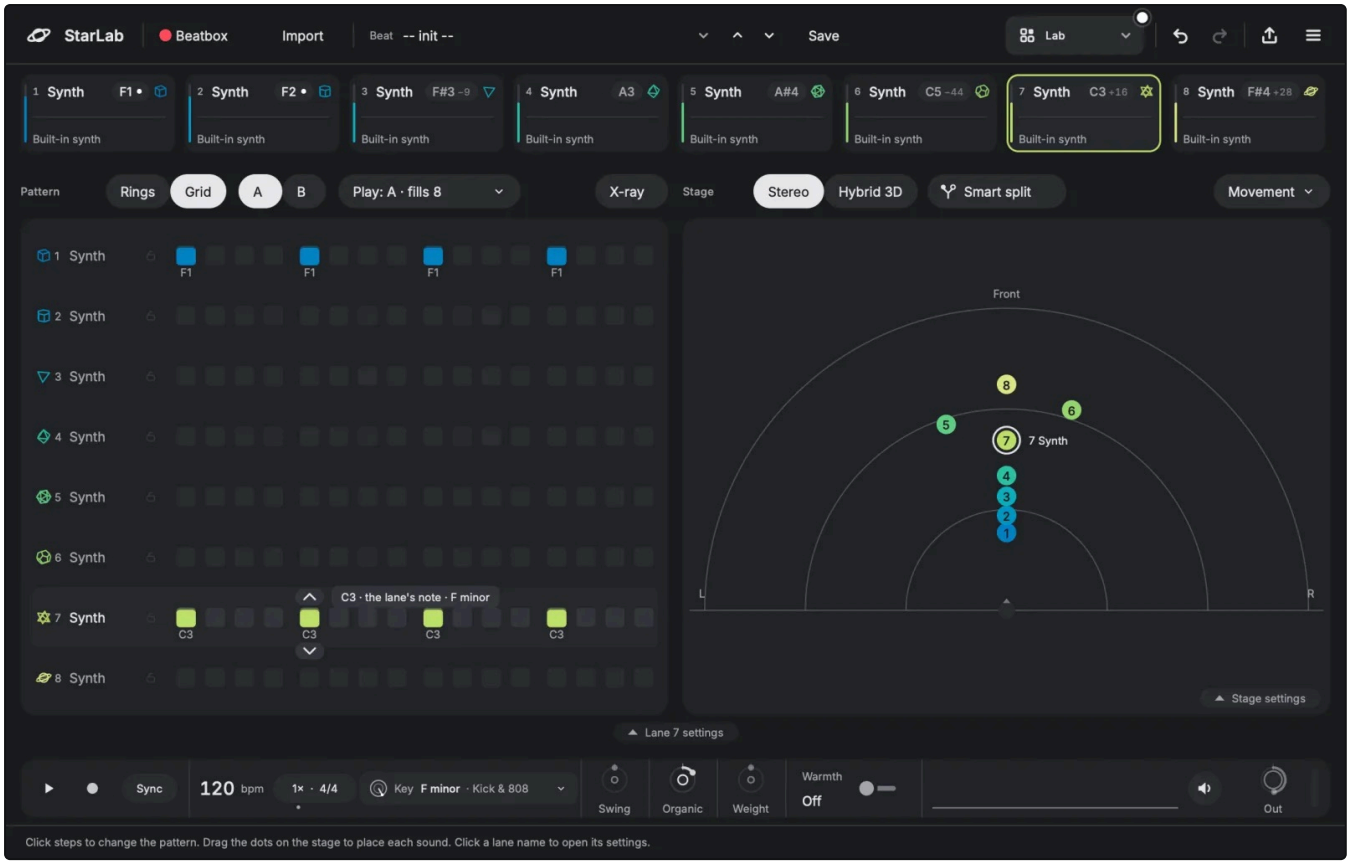


Fig. 8.3 Notes on the hits, with the arrows on lane 7.

Lane settings

One lane, in the order its sound travels.

The lane's settings open under the grid: **Hit** (Chance, Nudge), **Sound** (Pitch, Tone, Length), **Place** (Pan and the motion pad), **Level**, then the beat's **Beat FX** and the **Master**. Each unit's turn button shows its back with more settings. Fold the settings with the handle or Esc.

On the left: the previous and next sound, **Roll this lane** (the die), the **Sound** and **Pattern** locks, Mute and Solo, and a **Layer**, a second sound on the lane, stacked or alternating. Drag the lane out into your DAW for its audio, or Option-drag for its MIDI. Kick and 808 lanes show their Weight bar here too, and while Weight is up so does every other lane (chapter 9).



Fig. 8.4 The lane's settings, left to right.

Beat FX

Three effect slots, on one lane or all.

Beat FX has three slots. Each takes an effect from one list, by family (Space, Character, Speaker, Motion), with Amount and an on switch. Turn the unit around for each slot's **Target** (the selected lane, or all lanes), Routing (Parallel or Insert), Wet and Motion. A slot stays on its lane when you select another one.

Drag a slot's effect onto another slot to swap them; the order you see is the order they play in. **Grain** (under Space) makes a cloud of short grains from what the kit just played: Amount makes it denser, Motion sweeps it, and the reach (1/4, 1/2 or 1 bar) sets how far back it takes them from. The dice roll the other effects, never Grain; **Roll the effects** and **Clear the effects** work on all three slots.

An effect slot

Families	Space · Character · Speaker · Motion
Target	Selected lane · all lanes
Routing	Parallel · Insert
Swap two slots	Drag one onto the other
Grain's reach	1/4 · 1/2 · 1 bar

Master

Make room.

The swing type is the Swing chip's, in the control bar (chapter 2); a lane can keep a type of its own, which plays while the chip reads As rolled. **Make room** works in a DAW: send a vocal or a bass to StarLab's sidechain input, and the kit dips where it plays, the lows under a bass, the top under a voice. How deep is automatic. It is on in new sessions.

Make room

Input	StarLab's sidechain (mono or stereo)
Under a bass	The lows dip
Under a voice	The top dips

Stage

Stereo or Hybrid 3D.

Stereo places sounds left to right and near to far. **Hybrid 3D** adds binaural placement for headphones, including behind you and above: drag a dot up or down in Height. Drag a dot to place its sound; drag empty space to tilt the stage into a globe, and double-click to look from above again.

Smart split sets each lane by its type, as one undo step: kick, snare, clap, rim and 808 in stereo, the hats, percussion, toms and textures in 3D around your head (it turns on Hybrid 3D). **Stage settings** unfolds each lane's Stereo or 3D, **Lows centered** (the lows of every 3D sound stay in the middle) and

Speaker check (the output in mono through a small speaker, for listening only). **Movement** lets the selected sound drift around its spot, with Amount and Chance.

The die beside Smart split (**Roll positions**) gives every lane a place by its sound and the genre, as one undo step: the kick and bass in the middle, the stage balanced, locked sounds where they are. Its switch picks **Still** (places only) or **Moving** (places, and two or more of the airy sounds, such as effects, cymbals, shakers and percussion, circle slowly on the stage you chose).

Stage	
Place a sound	Drag its dot
Height (Hybrid 3D)	Drag up or down
Tilt · from above	Drag empty space · double-click
More	Stage settings · Smart split · Movement

Texture

A long sound under the beat.

Drop a long, even recording (a room, rain, a field recording; 4 seconds or longer, without clear hits) on the **Texture** lane and it runs under the beat as a seamless loop from bar 1, at the lane's level, placed by its stage dot. The grid row says "Runs under the beat" and the tile shows the long waveform.

It is in bounces and has its own stem; sessions, undo and saved beats keep it. A help line says what happened, with Undo. Rolling the lane, or giving it another sound, makes it a sound again.

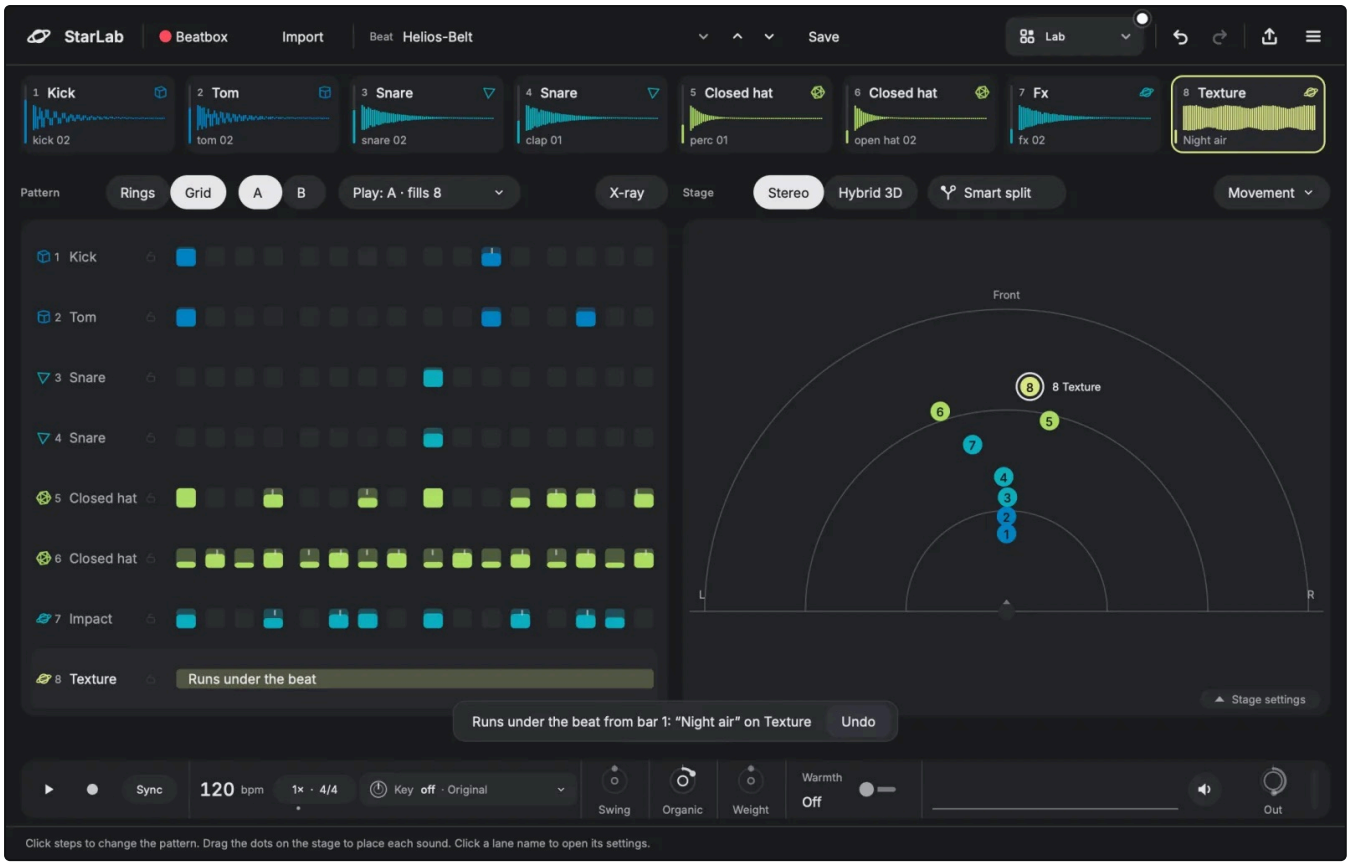


Fig. 8.5 A recording on the Texture lane.

9 · The Console

Drive, glue and weight, lane by lane.

Character

One big pad for the whole mix.

Every new session plays through the Console, at the spot called Clear. The big **Character** pad sets the whole mix: left to right Clean, Console and Tape; up for more drive, from Gentle to Driven. Named spots such as Punch, Snap, Round, Glow and Warm mark the way. Every lane follows by its role (its sparkle).

Double-click the pad: back to Start. Option-drag it to mix in the beat without the Console's color; right-click for MIDI learn.



Fig. 9.1 The Console at Clear.

Lanes

Fine-tune one lane.

The small pads along the top drive one lane each: the angle picks the character (Clean, Vintage, Driven, Soft), the distance how much. The dashed ring shows where the Character pad puts the lane; a double-click goes back to auto. Option-drag a lane's pad for its pan, Cmd-drag for its dry/wet.

The strips on the left hold each lane's pan and level. Click a strip, or press 1–8, to pick its lane: its pad, strip and sparkle light up (Esc lets go).

A lane	
Character · how much	Angle · distance
Back to auto	Double-click
Pan · dry/wet	Option-drag · Cmd-drag
Pick a lane	1–8

Master

Gravity, Compare and Clip.

The **Master** shows the sum: its peak and loudness, and what the glue and the tube tone are doing. **Gravity** is a second glue with its own color: on, it takes the place of the glue and the tube tone, and the Character pad's height sets how much.

Compare flips between **Original** (the beat without the Console, untouched) and **Console**, level-matched, so you hear the color and not a louder mix; with the master Clip up, Console is louder. B flips between the two.

Clip, under Compare, has two knobs. **All lanes** clips each sound the way its role likes it (kicks and 808s soft, snares and claps harder, hats barely), with a trim under each strip's pan. **Master** clips the whole beat into a ceiling (−0.2 dB at first): drag the Ceiling line to move it, Option-drag for softer or harder. A pill shows how much is cut; double-click a knob: off. With both off the sound is exactly as before.

Master	
Gravity	A second glue
Compare	Original · Console, level-matched (Clip off)
Clip	All lanes · Master, into a ceiling
Flip	B

Weight

A sub under the kick, and drive.

Weight in the control bar puts a sub under every Kick and 808 lane, tuned to each hit, in phase and in the middle: more weight, not louder. Each Kick or 808 card on the Console, and its lane in the Lab, has a **Weight bar** that trims it for that lane; double-click: off.

In a new session, Weight gives every other sound more of its own body too: snares, claps, toms, percussion, hats and the rest each get their own, saturated and matched in level, so a sound grows fuller without getting louder. While Weight is up, every sound shows its own Weight bar on every page (Deck, Galaxy, Lab, Dream and Console), so you can trim it where you play it; with Weight down

every page looks as before. A project or session saved before StarLab 0.1.22 keeps Weight on Kick and 808 only, and shows the bars only there; a saved beat from before keeps that too when it brings Weight up.

Drag the bar past 100 % for **Drive**: on a Kick or 808 only the sub is driven, toward a square, at the same loudness; on any other sound its body is saturated harder, denser toward 200 %, at the same loudness. Past 150 % (the small tick) a Kick or 808 turns **Heavy**: the whole kick or 808 distorts with its sub, heavier toward 200 %, with the click on top and at most about 3 dB louder. The **Form** sits beside the bar as a small curve and its word, Sine, Warm or Saw, in the lane's colour: click it to step it, or Option-drag the bar, for overtones at the same loudness, so the weight comes through on laptops and phones too.

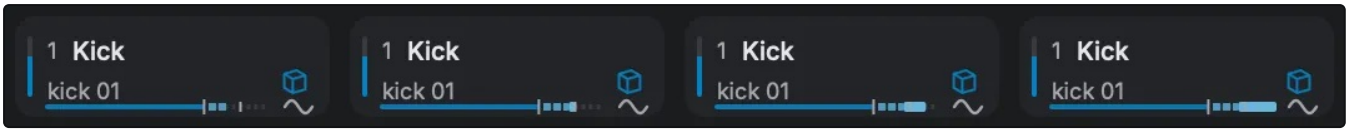


Fig. 9.2 The Weight bar on a Kick card, from trim to Heavy.

10 · Dream

New sounds, grown from yours.

The nebula

Drop sounds in, press Dream.

Dream sits in three glass boxes, like the Galaxy: **In the nebula** on the left, the nebula in the middle with the **Dream** pill under it, **New sounds** on the right. Dream makes new sounds from what is in the nebula: your whole library, or what you drop in. **Add** takes a folder, your hearted Galaxy stars or the kit's lanes. Drag the **how new** handle: close to the core stays near your own sounds, further out is newer; a double-click sets the middle. Then press the **Dream** pill (Return); click it again to stop. Hover a new sound to hear it; click it to put it on its lane.

Dream learns your library in the background while StarLab is open (it holds still while your DAW plays) and at full speed while the Dream page shows. A new sound never comes too close to a sound you own: each one says how far it is from the nearest one.

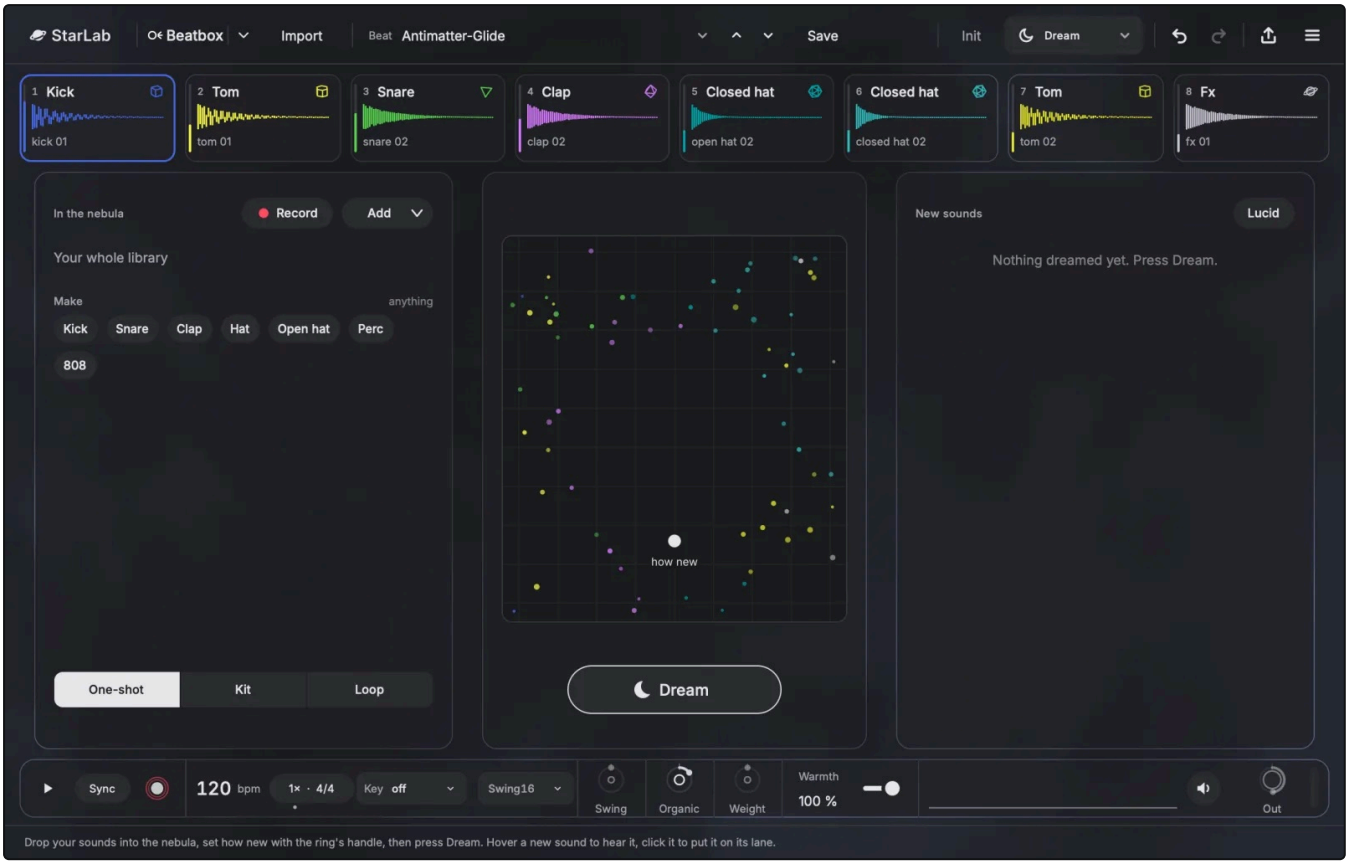


Fig. 10.1 Dream, before the first dream.

From anything

Record any sound; a whole kit forms from it.

Drop a recording of 2.5 seconds or more onto the Dream page, or press **Record** next to **Add** and record up to a minute from your input (macOS asks for the microphone first): your voice, a door, a kitchen, a street. Click Record again to stop. The take shows as a chip under **In the nebula**; click it to hear it again or take it out.

StarLab splits the take into hits and gives each a role: kick, snare, clap, hat, open hat or perc, drawn as six role stars inside the ring. The panel **Your kit from it** lists the six roles: click a word to make that hit another role or to pick another hit of the take, and click a waveform to hear its hit. Then press **Dream** and a whole kit forms from the take.

At a low **how new**, each sound is the hit itself, made into its role (the kick gets its own sub); further out it moves toward a new sound shaped after the hit. **One-shot** works from the take too, and a new take switches Loop to **Kit**. A file you drop counts as a reference for its own dream, so its kit doesn't come out as a near copy of it; your own recordings may stay close. Dream from anything is in every edition.

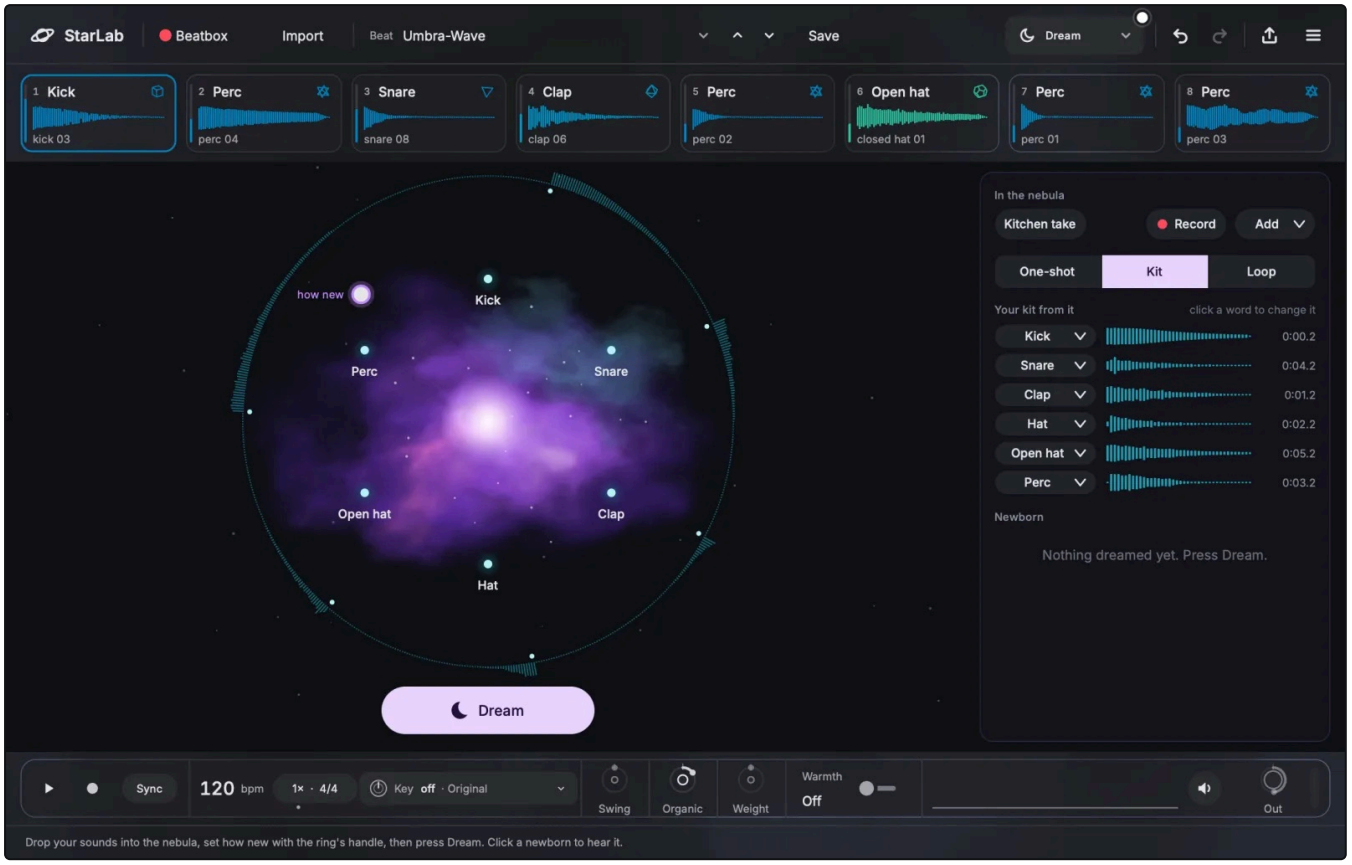


Fig. 10.2 A take in the nebula, and the kit it will form.

Modes

One-shot, Kit, Loop or Chops.

One-shot makes 6 to 8 new single sounds of the types the **Make** chips pick (Kick, Snare, Clap, Hat, Open hat, Perc, 808): hover one to hear it, click it to put it on its lane (undo takes it back). **Kit** dreams a sound for every lane that has a drum role, each in a ticked row: untick a row and that lane keeps

your sound. **Try kit** plays the ticked ones in your beat, Tab switches **Dreamed** and **Yours**, and **Keep** puts them on their lanes in one step. **Loop**, Dream Loop, dreams 1 to 3 new drum loops from your loops, a groove with its kit, in your genres and in your meter.

Chops shows once you recorded a sung take: StarLab finds its notes and puts up to four chops, each as you sang it, on lanes the drums don't use, playing a riff from your melody. **Try chops** plays them in your beat (Tab: Chops or Yours), **Keep chops** keeps them in one undo step. Chops need a sung melody, from your own recording.

A sound is saved as a WAV in your library's Dreamed folder only once you keep it. **Keep loop** puts a loop into your beat as one undo step.

Dream	
Dream · stop	Return · click again
One-shot	6 to 8 single sounds
Kit	Ticked lanes; Tab: Dreamed or Yours
Chops	From a sung take; Tab: Chops or Yours
Loop	1 to 3 drum loops
Stop a loop or a try	Esc

Lucid

Steer the dream.

With **Lucid** on, drag a new sound to steer it: left darker, right brighter, up wider, down tighter. Drop it on another new sound of its type and the two cross. Double-click one to pin it: the next dreams stay near it. Lucid is on at first where your edition includes it (Ultimate, and the trial), and your choice stays when you switch between One-shot, Kit, Loop and Chops.

A new sound you picked shows "(Mutate)" under its name: a click, or M, keeps it on its lane and opens Mutate on exactly that sound.

Lucid	
Steer	Drag: darker · brighter · wider · tighter
Cross two	Drop one on another
Pin	Double-click
On to Mutate	M

11 · Mutate

Spin new sounds off one you have.

Moons

Eight variations around one sound.

Press M to open Mutate for the selected lane, or right-click a star in the Galaxy and choose **Mutate this sound**. Eight new sounds form around the one you started with, like moons. Hover a moon to hear it; click it to use it on the lane. Keys 1–8 try a moon in your beat first, through the lane's Weight and effects as it will play, and **Use moon** (Return) keeps it. **Evolve** moves the moon you picked to the center and forms new moons around it.

A lane that plays a mutated sound shows a small mark on its tile. **Back to original** puts the sound it had before back on the lane, as one undo step.

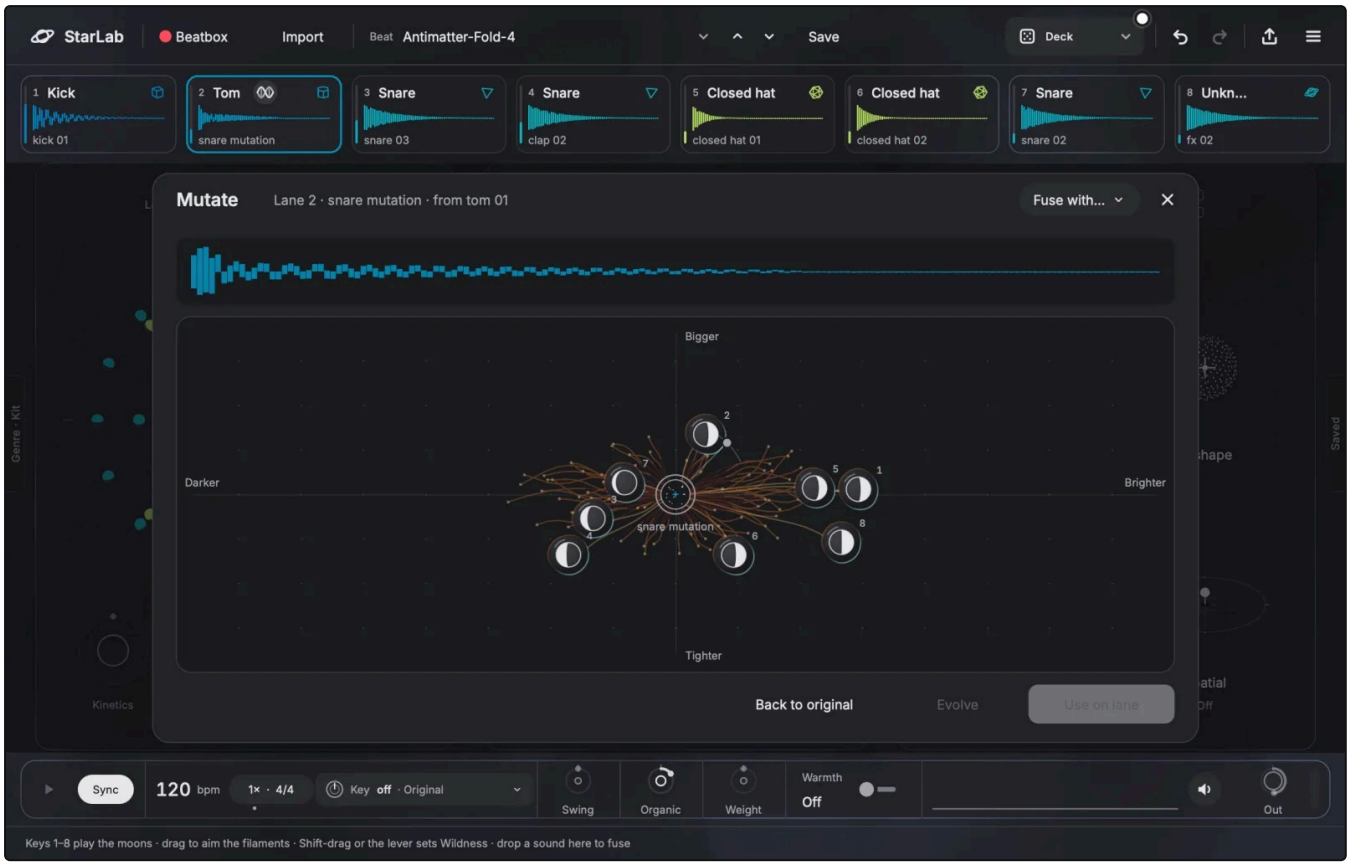


Fig. 11.1 Mutate: eight moons around one sound.

Aim and Wildness

The moons go where you aim.

Drag on the map to aim the moons toward darker, brighter, bigger or tighter, or use the arrow keys; Home or 0 centers the aim again. The moons go the way you drag and sound that way; when a sound can't go further, the help line says so. **Wildness** sets how far they wander: the small lever, Shift-drag or Shift+↑ ↓.

Cross with... forms moons between this sound and another one; you can also drop a sound on the map.

Mutate keys

Play a moon	1–8
Aim	Drag, or the arrow keys
Wildness	Shift + ↑ ↓, or Shift-drag
Use on lane · close	Return · Esc

Missing drums

A drum your library doesn't have.

When a genre asks for a drum your library lacks, such as a surdo, a taiko or a djembe, a roll mutates the sound it would have played into that drum and says so, for example "Surdo, mutated from Tom 03". The tile shows the mutation mark; Back to original gives the first sound back.

Mutated sounds

On the tile	A small mutation mark
Undo it	Back to original
Go further	Evolve

12 · Loops and MIDI files

Drop a break; it slices itself.

The loop sheet

What the loop would give you.

Drop a loop onto StarLab and the loop sheet shows what it would give you, lane by lane. Choose how to use it: **Kit + groove** (your sounds and rhythm become the loop's), **Kit** (only the sounds change), **Groove** (your sounds play the loop's rhythm), **One lane** (one lane takes the loop's sound and hits; 1–8 pick it) or **Feel only** (your hits take the loop's timing and accents).

Preview plays it at your tempo from the next bar, in place. ×2 and ÷2 read it at twice or half the tempo. **Use** (Return) applies it as one undo step; **Not now** (Esc) keeps your beat, and the loop stays in Galaxy, Loops. With the Rhythm lock on, the choices that change the rhythm are off and say why.



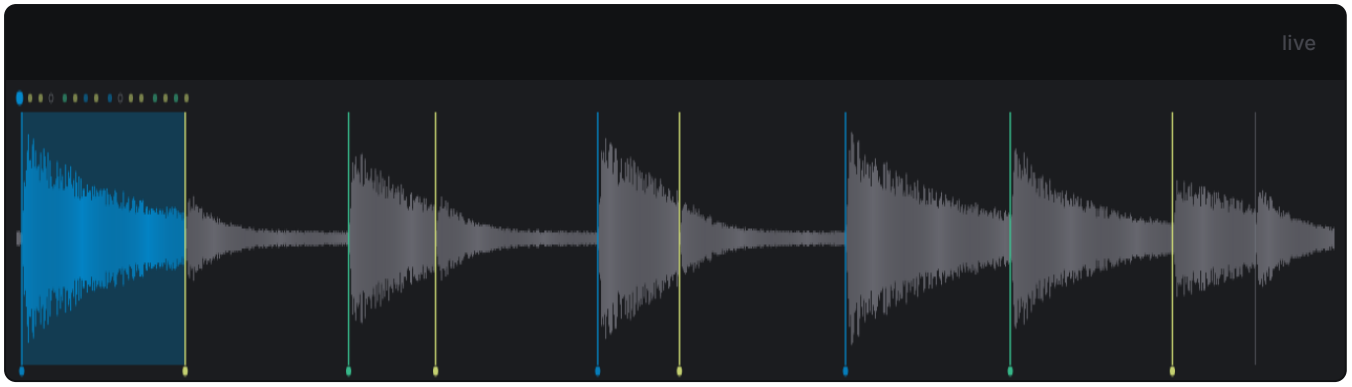
Fig. 12.1 The loop sheet: a two-bar break, sliced onto the lanes.

Loops list

Your loops, off the map.

The **Loops** chip in the Galaxy lists the loops you dropped and the loops in your library; they stay off the map. Click one to hear it on your beat at your tempo, then use it. **Replace all** or **Blend** decides whether the loop's kit replaces your lanes or joins them. The **Drums ↔ Melodic** slider narrows the list; **Random loop** opens a random one.

Get hits keeps a loop's clean hits as one-shots in your library, in the background; **From your loops** then shows only those on the map. When you drop a folder with loops, StarLab can ask to collect them: Yes, Not now or Always.



MIDI files

Drop a MIDI groove in.

A .mid file dropped on StarLab (or picked in the loop sheet) joins the Loops list as a groove. Its notes map to the lanes; use its **Groove**, put it on **One lane**, or take only its **Feel**. A MIDI groove has no sounds of its own. Its lines in the list take the colors of the lanes your MIDI out map puts its notes on.

Using a loop	
Kit + groove	Sounds and rhythm
Kit · Groove	Only the sounds · only the rhythm
One lane	1–8 choose it
Feel only	Timing and accents
Use · keep your beat	Return · Esc

Roll from loops

Let the dice slice loops.

In the Kit tab's sources, choose sounds from **loops**: each roll then slices a drum loop from your library into a kit and its groove, as one roll. With **both**, a roll takes one-shots for kick, snare and clap and a loop's hats and percussion on top. The genre line says "· loops" or "+ loops", and the help line names the loop.

Sources	
One-shots	Single sounds (as always)
Loops	A sliced drum loop per roll
Both	One-shots plus a loop's hats

13 · Beatbox

Beatbox it; it becomes the beat.

Record

A one-bar count-in, then go.

Click **Beatbox** in the top bar. After a one-bar count-in, beatbox for the bars you set, or as long as you like, then click **Stop** (red while it listens; in a DAW it reads **Waiting** until the DAW plays). Esc cancels. StarLab finds the tempo, the bars, your groove, a variation and your fills, in the session's meter.

The take goes straight into a grid in the beat's box: a row each for kick, snare and hat, your voice's wave under them, a bar at a time. **Discard** (Esc) brings your beat from before back, **Tight** pulls the hits onto the grid, **Keep** (Return) keeps the take as your pattern. When you played at another tempo, the tempo field offers yours (Cmd+Z undoes it).

The first time you press **Beatbox** on an input, StarLab asks for a short first take to learn your sounds: one bar in 4/4 on the click, kick, hat, snare, hat (the grid shows b ts k ts), until it hears three clean passes. Nothing goes into your beat. In a DAW it waits for play. **Stop** or Esc keeps nothing, and StarLab doesn't ask again on that input. After that, Beatbox works as above.

⌄ beside Beatbox, or a right-click on it, opens its menu: the length (1 bar, 2 bars, 4 bars or Until stop), the **Click** level, **Teach my sounds...** (the first take again) and **Load a recording...**. In the app, the input is in **Audio settings...**. If StarLab hears nothing, it says so and points you to the input.

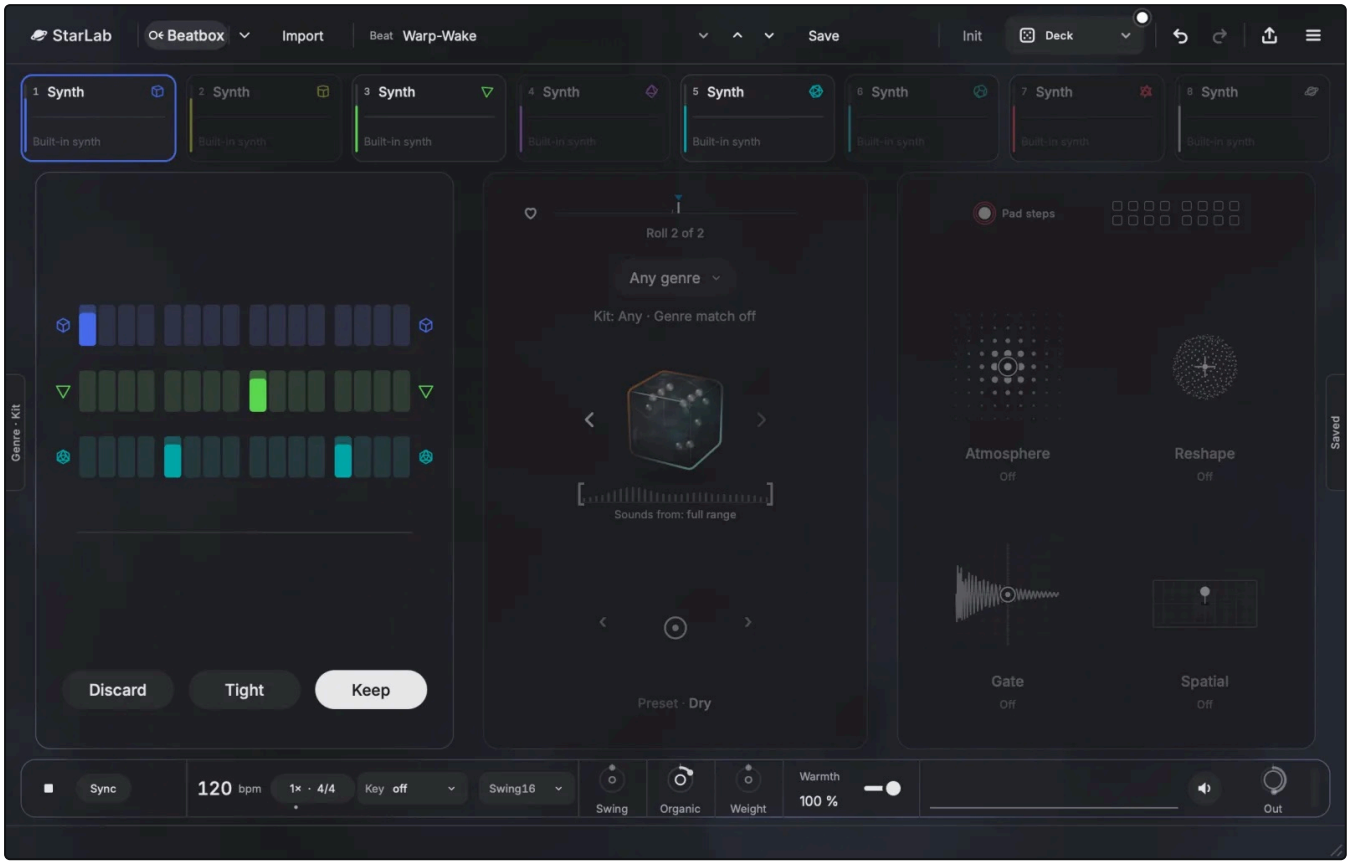


Fig. 13.1 A take, straight in the grid.

Beatbox

Start · stop	Beatbox · Stop
Length · click · a file	⌄ or right-click
Teach your sounds	⌄ · Teach my sounds...
Keep · discard	Return · Esc
Onto the grid	Tight

14 · Effect presets

Named sounds on one map.

The map

Rest the mouse, pick a preset.

The effect presets live in the preset pad under the dice: a ring, the two arrows and the current preset's name, with no field, words or dots around it; the chooser's words show once it opens. Click it or press P, and it opens into the big chooser (the arrows step through the presets without opening it): the map with every preset, named, and a sidebar with **Dry** (no preset), **Map**, **All**, the categories and **Yours**.

A click loads a preset and the pads glide there; the chooser stays open. A drag across the map blends the two nearest presets. The arrow keys move, Return loads, Esc or a click outside closes. All, a category or a search shows the presets as cards.

The chooser is a glass panel lifted above the Deck, with a soft shadow, a deeper Deck behind it and a lit rim; with Moving light on, a cool pool of light falls across it. The closed preset pad stays flat. Rows, dots, words and click areas are the same; with Moving light off it looks as before, and with Reduce motion only the lift and the shadow remain.

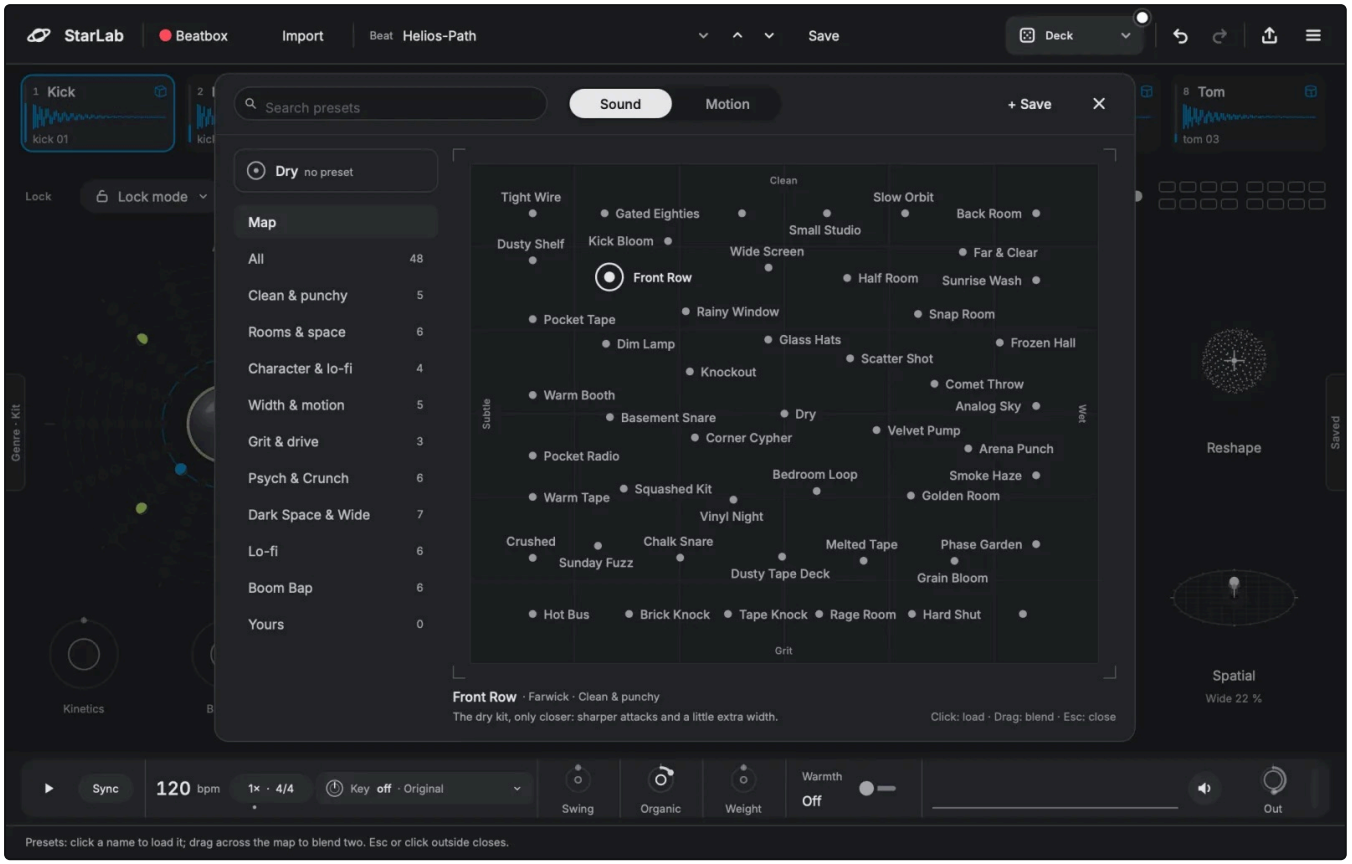


Fig. 14.1 The preset chooser, on its map.

Sound, Motion and Filter.

Sound holds the effect presets: 48 of them on vibe shelves such as Clean & punchy, Rooms & space, Lo-fi or Boom Bap, and a die rolls one for you; **Motion** and **Filter** have a die too, and a right-click on it learns a MIDI note. **Motion** (Shift+P) holds the motions: recorded movement in bars, so a motion fits any beat and tempo. **Filter** holds the filter presets and **Set filter manually** (chapter 6).

+ Save keeps the pads as they are, or your recorded take, as your own (in Yours); right-click one of yours to rename or delete it. A new beat starts from Dry unless **Lock the preset** in Lock mode keeps it.

Effect presets

Open	Click, or P
Motions	Shift+P
Load · blend	Click · drag across the map
Your own	+ Save; right-click to rename
Keep across rolls	Lock mode · Preset

15 · Skins

Eight color ramps.

Skins

Colors for the lane dots and waveforms.

Open the menu and choose **Skins**. In every skin, a lane's colour follows its sound: kicks, snares, hats, claps, percussion, toms and effects each have their own, on the tiles, the circle, the Galaxy, the Lab, the Console and in Loops; a second lane of the same kind gets its own shade. The skin's ramp colours the die.

- **Aurora**: deep blue to pale gold.
- **Uranium**: radioactive greens.
- **Glowing dark**: neon on black. The default.
- **Pastel**: soft chalk colors.
- **Thermal**: bold red.
- **Phosphor**: old terminal amber.
- **Lunar**: moonlit silvers.
- **Dune**: dusk blue to sand.

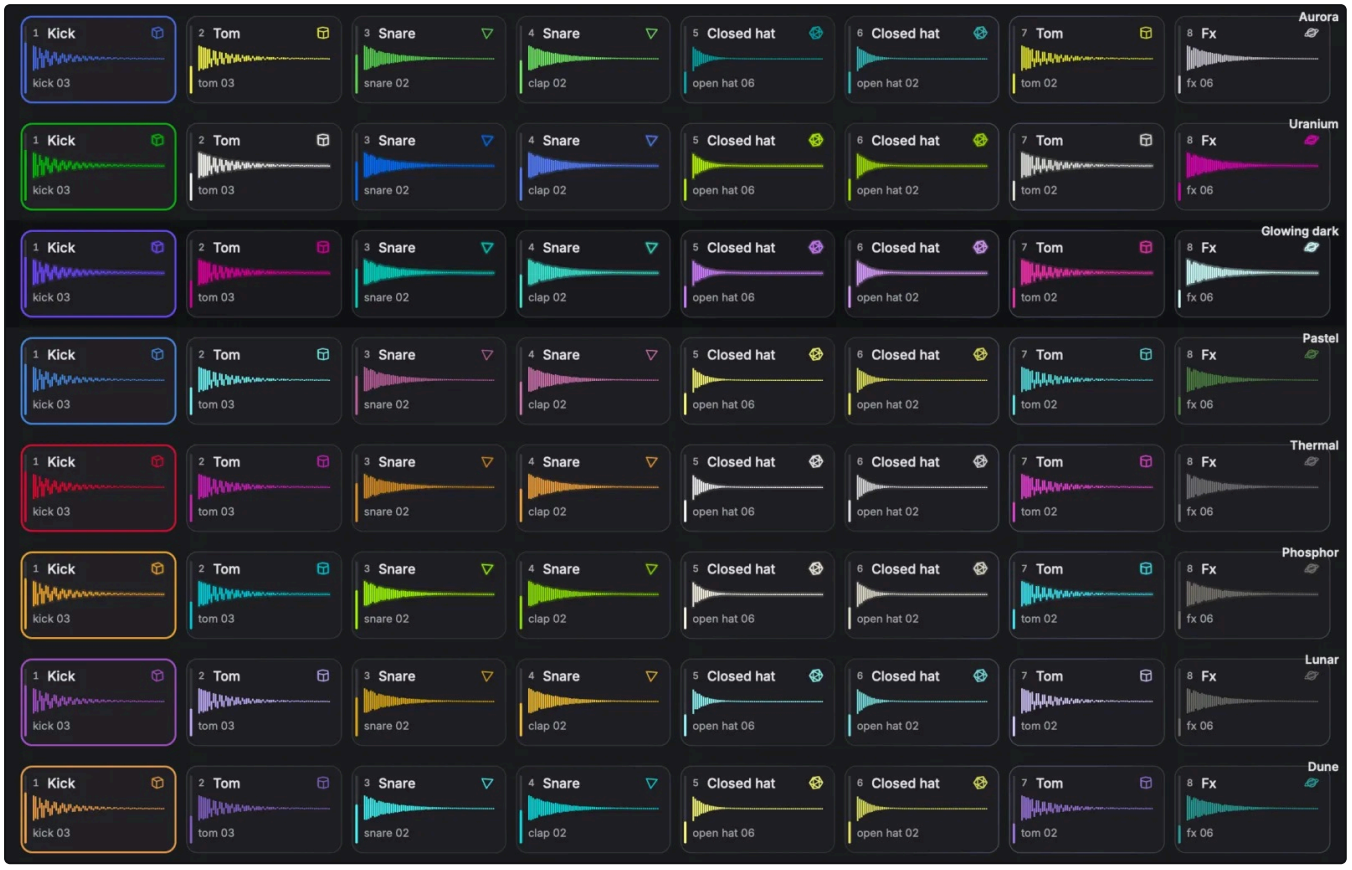


Fig. 15.1 The same kit strip in all eight skins.

16 · Settings, MIDI, license

The menu, top right.

The settings plate

Library, skins, rolls, MIDI and keys.

The menu button (≡) opens the settings plate; Esc closes it. Point at a setting for help.

Library: **Add sample folder...**, **Remove sample folder** (its files stay on disk), **Rescan library**, and a tick for each folder. **Appearance**: the skin, how the die moves between rolls (Slow tumble, Beat nod or Spinning top), **Animations** (off: nothing moves, which saves power on slower Macs) and **Moving light** (chapter 3; off: the plain dark look). **New rolls land**: **On the next bar** or **Immediately**.

At the bottom: **Welcome & tour**, **Your license and computers** (**Visit farwickaudio.com** before you activate) and **About StarLab** (who made it, and the licenses of everything it includes). When a new version is out, **A new version is ready** shows here and opens what's new.

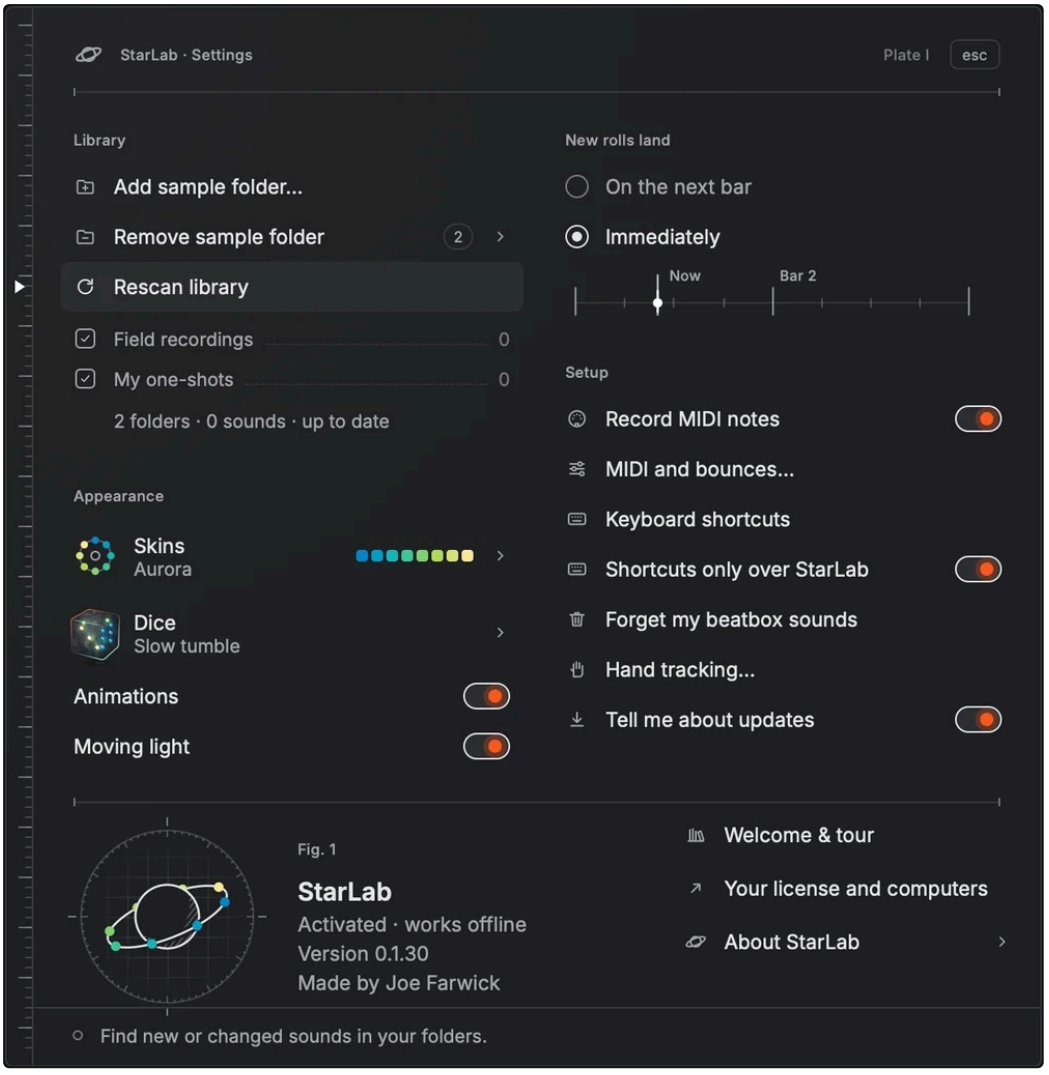


Fig. 16.1 The settings plate.

MIDI & keys

Play it, learn it, send it.

Record MIDI notes: play pads or a keyboard and the notes are written into the pattern. **MIDI and bounces...** holds **Send MIDI out** (every hit as a MIDI note, for hardware or other instruments), its channel and **Note map** (General MIDI, 808, 909 or your own), **Incoming notes pause the beat**, the **Pad controller** row and the **Bounce folder**.

MIDI in: drum notes from your DAW simply play, each General MIDI drum note on a lane, and in new sessions StarLab's own beat steps aside while they come in. A fresh StarLab that gets MIDI before you pick anything plays a ready kit from StarLab Base. Common pad controllers are recognized by name: their knobs move the macros and pads, and in the app their pads play the lanes and the Moves. MIDI learn still wins: right-click a knob or pad; Esc cancels.

Shortcuts only over StarLab: in your DAW, StarLab's keys work only while the pointer is over it. **Audio settings...** (output, sample rate, buffer) is in the app only. **Hand tracking...** lets you play a pad and a knob with your hands through your camera, in the browser; the video stays there.

MIDI

Record MIDI notes	Switch in Setup
Send MIDI out	Channel · note map
Note maps	General MIDI · 808 · 909 · your own
Notes from the DAW	Play the lanes
Chords on channel 2	Follow MIDI chords (Key)
MIDI learn	Right-click a knob or pad

Hand tracking

Play it with your hands.

Hand tracking... (under Setup) opens the Hands plate. **Open camera page** opens StarLab's camera page in your browser, on this computer only; press **Start camera** there, and the browser asks first. The video stays in your browser: only numbers (21 points per hand) reach StarLab. Your open hand moves a pad (**Pad the hand plays**: Atmosphere, Gate, Reshape, Spatial or the Console) and a pinch turns a knob (**Knob the pinch turns**: Kinetics or Organic); **Left-handed** swaps the hands. **Hand perform** (above Left-handed) lets your hands play the rows of the Lab's side cards instead (chapter 6). The camera page keeps tracking while its browser window is in the background.

StarLab moves a control the moment each camera frame arrives. A still hand moves nothing, and a held hand stays steady. The plate shows the camera's frame rate and the whole delay from the camera to StarLab in ms.

Kinetics, Bounce and Ratchet can be played by hand too: right-click one, pick **Learn a hand movement** and move your hand the way it should play; StarLab maps the movement you made to that knob. Esc or **Stop hand learn** cancels, and **Forget the hand** removes it again. Your hand mappings

are saved with the session. The Hands plate lists them under **Also played**: click one for its **Curve**, **Invert**, **Smoothing** (Off (realtime), Light, Medium or Heavy), **Learn the movement again** or **Forget the hand**.

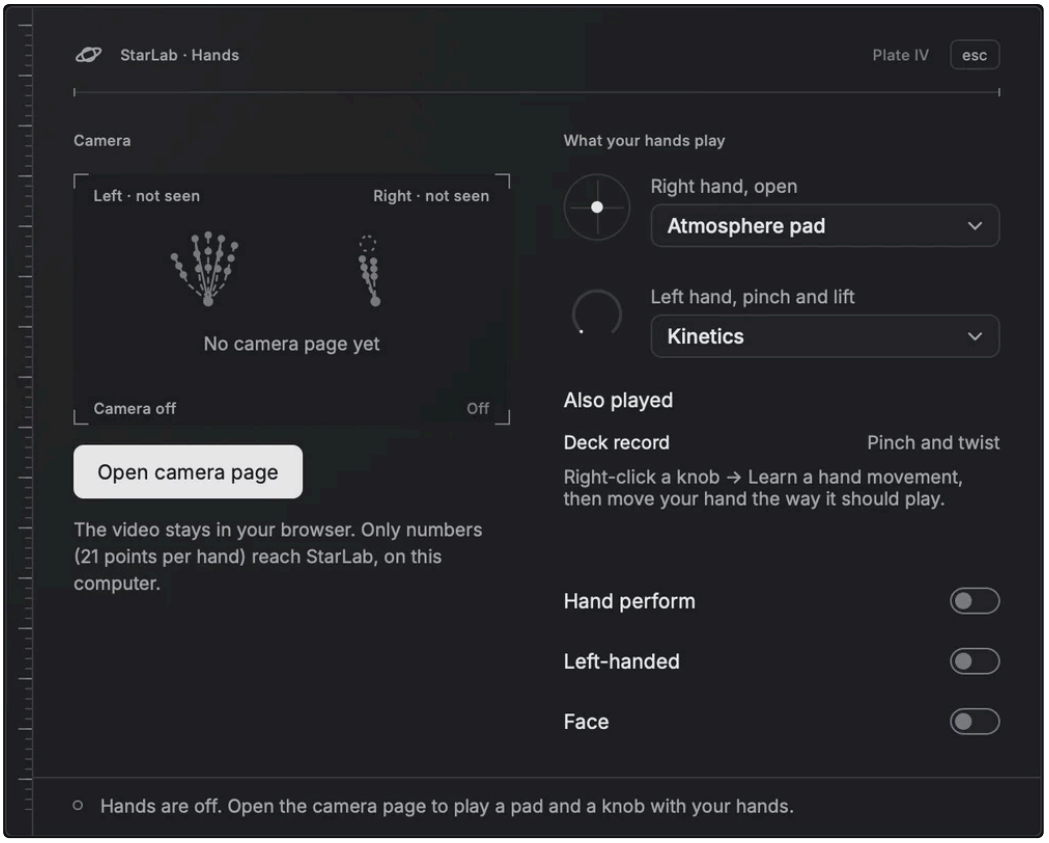


Fig. 16.2 The Hands plate.

Hand tracking

Open it	Hand tracking… (settings)
Start	Open camera page · Start camera
Your video	Stays in the browser
Learn a control	Right-click · Learn a hand movement
Cancel · remove	Esc · Forget the hand
Learned controls	Hands plate · Also played

Ghost hands

See your hands in StarLab.

While hand tracking runs, StarLab draws your hands over its window as clear glass (flat when the graphics can't draw glass), in the app and in the plug-in. There is no switch: they come with hand tracking. They fade when the camera sees no hands and never take a click.

Point (the hand in the top bar, after Save) shows while hand tracking runs. Click it, then point a fingertip at Kinetics, Bounce or Ratchet: it lifts, and an amber ring fills. Hold still until it is full, then move your hand the way it should play and hold it still for a second. Esc ends Point mode.

Face, on the Hands plate, lets your mouth and head play those knobs too: right-click one, pick **Learn a hand movement**, then open your mouth or tilt your head. StarLab tracks your face only while Face is on.

Tracking runs on this computer, in your browser; only points reach StarLab, never the video. Ghost hands, Point and Face come with Ultimate (and the trial).

Ghost hands	
Shows	While hand tracking runs
Learn by pointing	Point (top bar) · hold still
End Point mode	Esc
Mouth · head tilt	Face (Hands plate)
Edition	Ultimate

Updates

Tell me about updates.

Tell me about updates (under Setup, on by default): StarLab can tell you when an update is ready. Switched off, it doesn't look for updates; the line **A new version is ready** on the settings plate still says when a new version is out and opens what's new. A StarLab update installs through the macOS Installer.

Updates	
On · off	Tell me about updates
A new version	A new version is ready (settings plate)
Installs through	The macOS Installer

License

Activation, two computers, support.

A license works on two computers. Activate with **Activate in browser** or a **License file** (chapter 1). To move to a new computer, release the old one in your account, then activate on the new one. During the trial, StarLab shows "Trial · 12 days left" and the like; once you bought StarLab, **Activate** there and the noise goes away.

For support, **Copy support info** (in About StarLab) copies the version, format, macOS, audio settings and library size for an email; never your email or this computer's ID. More on licenses: Questions.

License	
Computers	Two per license
Move to a new Mac	Release the old one in your account
Offline	License file
For support	Copy support info

Editions

A small lock, one sentence.

Every edition plays every beat and every session the same: playing never locks. In 0.1.30, making and editing a **Genre Fusion**, ghost hands, **Point** and **Face** come with Ultimate; Dream from anything and the Lab's side cards are in every edition, and the trial runs as Ultimate for its 14 days.

A control your edition doesn't include stays where it is, with a small lock and the word **Ultimate**. Click it for a short callout: one sentence on what it does, how much more Ultimate costs than your edition, and **Move up to Ultimate**, which opens your licenses. A license installed from a license file shows these locks until the Mac has been online once; the callout says so.

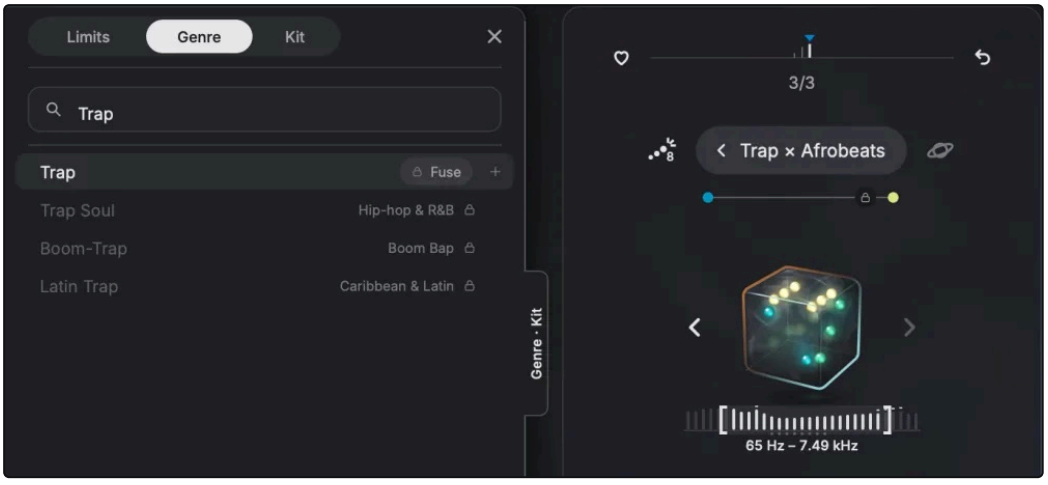


Fig. 16.3 Without Ultimate: the fused beat plays, and Fuse and the blend line show a lock.

17 · Import, save, export

Sounds in, beats out.

Import

Bring sounds in.

Import in the top bar adds a folder of drum samples to your library; dropping a folder anywhere on StarLab does the same. You can also record a Beatbox (chapter 13) or drop a loop or a MIDI file (chapter 12). If a project uses sounds that aren't on this Mac, StarLab says so and offers **Find missing sounds...**: pick a folder that has them, and they are found by file name.

In	
A folder of samples	Import, or drop it
A loop · a MIDI file	Drop it: the loop sheet
A rhythm	Beatbox
Missing sounds	Find missing sounds...

My beats

Saved beats, and a library for every project.

The **Saved** tab on the right edge (or S) opens your saved beats in two parts. **This session** keeps the beats you hearted here. **Library** holds every beat you save, across all your projects, as files on your Mac: make folders, rename them (F2), drag beats into folders, onto This session and back, or out to the Finder or your DAW. Search by name, genre, folder, bpm or meter; sort newest first or by name.

A click opens a beat (one undo step); the play arrow, or P, previews it for two bars, then your own beat comes back. **Remove** sends a beat to the Trash, with Undo while the drawer is open. **Save** in the top bar asks for a name and saves into the library's open folder; it never overwrites. A saved beat's menu also has **Morph to this beat**: your beat slides into the saved one, hit by hit.

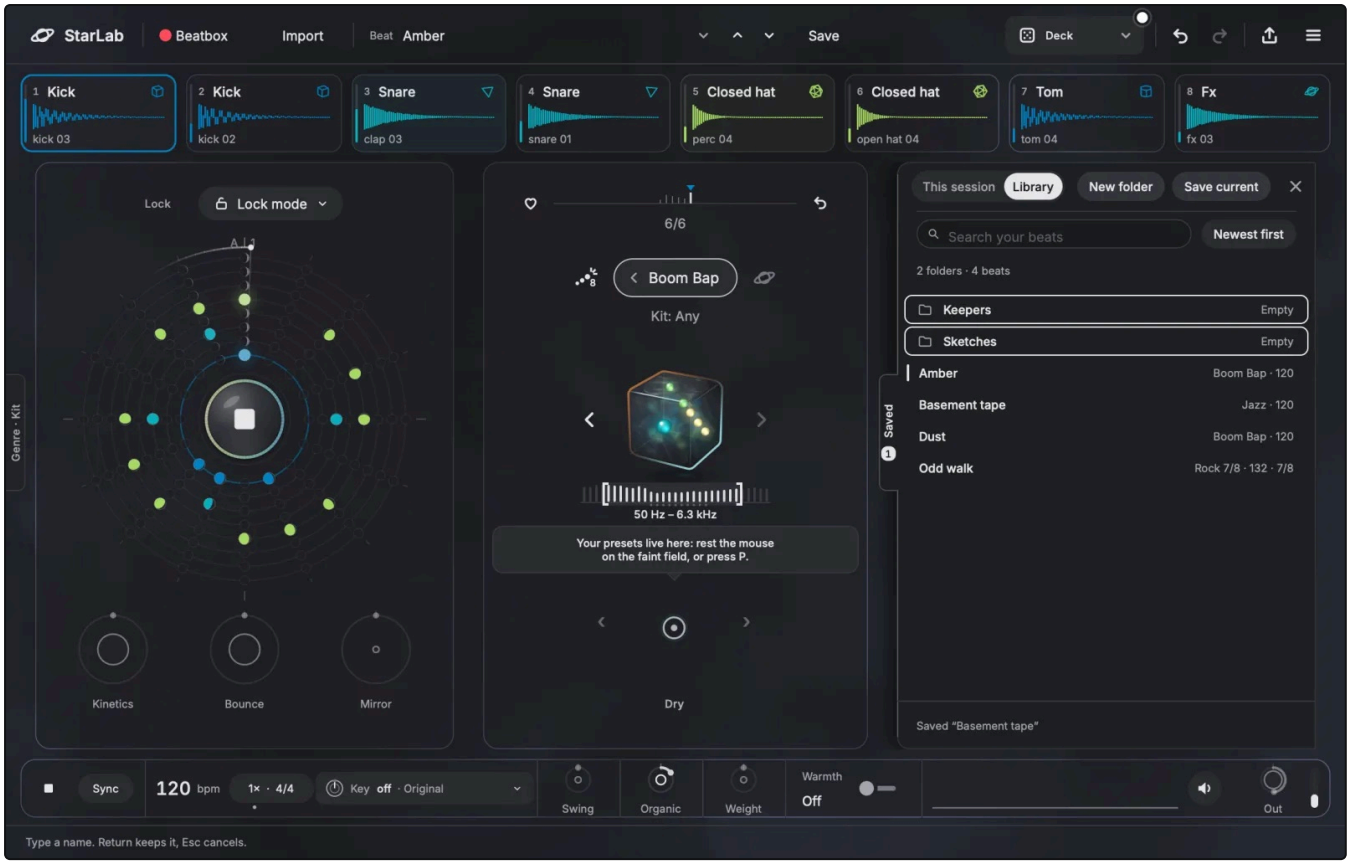


Fig. 17.1 My beats: the Library part of the Saved drawer.

Own outputs

Each lane on its own track.

In your DAW, StarLab has nine stereo outputs: **Main**, and one for each lane. Put your own plug-ins on a lane, or give every lane its own track in your mixer. A lane's output carries the lane after its level, pan and Depth; Room, Beat FX, Glue, Clip and Master are only on Main.

Each lane stays in Main too: a lane you take to its own track still plays in Main, so with both up you hear it twice. To hear the lanes only on their own tracks, turn Main's channel down in your DAW and build the mix from the lane tracks (Room, Beat FX, Glue, Clip and Master then drop out). Turning a lane down or muting it in StarLab turns its own output down too.

Your DAW shows the outputs by fixed names; the kit tiles change with the kit, the outputs never do. In StarLab, open the bounce card (the bounce icon at the top right) and click "Your plug-ins on a lane? Each lane has its own output." to see your kit's lanes against these names.

Logic Pro: load the Multi-Output version of StarLab on a software instrument track; in the Mixer, click + on its channel strip to add an aux channel for each output. **Cubase**: in the VST Instruments window, click Activate outputs next to StarLab and turn on the outputs you want; each gets its own channel in

the MixConsole. **Ableton Live**: make a new audio track, set Audio From to the StarLab track, then pick the output (for example Thump). In a VST3 host the lane outputs are off until you turn them on in the DAW. The StarLab app has Main only.

With Clip on Master, StarLab delays the lane outputs by the same amount as Main, so they stay in time. During the free trial the soft noise plays on every output, Main and lanes.

Outputs in your DAW

Main	The whole beat
Lanes 1 · 2	Thump · Knock
Lanes 3 · 4	Strike · Slap
Lanes 5 · 6	Tick · Spark
Lanes 7 · 8	Glitch · Texture
The app	Main only

Into your DAW

Drag the beat out.

Drag **Bounce** (the arrow in the top bar) into your DAW for a WAV of the beat; Option-drag for MIDI, Shift-drag for stems, Option+Shift-drag for the pocket (the beat's feel, as a groove). Drag a kit tile out for one sound; in the Lab, drag a lane out for its audio, or Option-drag for its MIDI. In the MIDI file, a lane with notes on its hits gets its own track at the real notes.

Right-click Bounce for the length (1, 2, 4 or 8 bars), **Include the tail**, **Dry (no Organic)**, **Bounce all saved beats**, **Export kit** (SFZ, .dspreset, or a StarLab Beat file with its sounds) and **Sources**: every sound in the beat with its pack or folder, to copy or save as text. A StarLab Beat file dropped on StarLab opens the beat.

The last line, **Send to iPhone...**, sends the beat as a StarLab Beat file through AirDrop (without AirDrop, the share sheet opens); a row in My beats has it in its menu too. A Beat file made on an iPhone that reaches this Mac, by AirDrop, Open with or a drop on the window, lands in My beats once and says so ("... came from your iPhone. It's in My beats now"), with **Open** (one undo step). The beat

you hear stays, and nothing is overwritten: the same beat again lands once, and a different beat with the same name lands as "Name 2". StarLab for iPhone and iPad comes with every license (up to 3 devices) and is coming to the App Store: make beats on the way, then send them to your Mac.

Out

The beat, as WAV	Drag Bounce
MIDI · stems	Option-drag · Shift-drag
The pocket	Option+Shift-drag
Length · tail · dry	Right-click Bounce
One sound · one lane	Drag a tile · drag a lane (Lab)
The kit	Export kit: SFZ · .dspreset · Beat file
To your iPhone	Send to iPhone… (AirDrop)

18 · Keyboard shortcuts

Every key that does something.

Table 18.1 · Keys, where they work, what they do

Key	Where	What
R	Everywhere	**Roll** a new beat; locked parts stay
Option + R	Everywhere	**Roll similar sounds only**
Shift + R	Everywhere	**Record moves** and notes: record at once, stop and keep, or cancel while armed
← →	Everywhere	**Back and forth** through your rolls
Space	The app	**Play or stop** (in a DAW, the DAW's transport); during a Beatbox take, stop
Cmd + Z	Everywhere	**Undo** (Shift + Cmd + Z: redo)
Cmd + 1–5	Everywhere	**The pages**: Deck, Galaxy, Lab, Console, Dream
Hold 1–8	Deck, Lab	**Mute that lane** while you hold it
U D K T E, V	Deck, Lab	**Build-up**, **Drop**, **Breakdown**, **Tape stop**, **Repeat** as the side cards pick them; V **Reverse**. A tap plays to the next bar line, held as long as you hold
M	Everywhere	**Mutate** the selected lane's sound
B · Shift + B	Everywhere	**Balance** the kit's biggest clash or gap · the original sounds back
F + 1–8	Deck, Lab	**The Filter's lanes** (F + 0: the whole kit)
Shift + F	Lab	**New fill**: only the fill bars change
Esc	Everywhere	**Cancel** a Beatbox take, a MIDI learn or a hand learn; end Point mode; close a panel, the menu or the tour
S	Deck	**Saved beats**: open or close
G	Deck	**The drawer**: Genre, Kit and Limits
P · Shift + P	Deck	**The presets** (Sound, Motion, Filter) · the motions; in the chooser the arrows move, Return loads, Esc closes
Hold ?	Deck	**What makes the genre**, lit on the circle
Click and hold	The die	**Switch between Beat and Motion** (Shift-click too)
Hold X	Lab	**Timing X-ray**: when each hit really plays, and how hard

Key	Where	What
Hold a hit	Lab	**Tweak that hit alone**: Pitch, Tone, Length and Pan (Esc lets go)
← →	Galaxy	**Through the similar sounds**; with Shift, five at a time
1–8	Galaxy	**Put the sound on that lane**
F	Galaxy	**Favorite**
1–8	Mutate	**Hear that moon**
1–8 · B	Console	**Pick that lane** (Esc: let go) · **Original or Console**
Arrow keys	A pad	**Nudge the puck**; double-click: back to the middle
Return	Dream	**Dream** new sounds from what is in the nebula
Tab	Dream	**Trying the dreamed kit or chops**: switch Dreamed (or Chops) and Yours
Esc	Dream	**Stop** a loop or a try (your sounds come back), or stop dreaming
Return · Esc	Loop sheet	**Use** the loop · **keep your beat**; 1–8 choose the lane for One lane
← → · Return · Esc	Beat Browser	**Pages** · **OK** · **Cancel**
X	Genre drawer	**Fuse** the genre row you are on with the next one you pick (Ultimate)
Cmd+6	Lab	**Both side cards open**, from any page (again: fold them)
F	Lab	**The fill**, once (held: the Filter)
1–8 · Z	Lab	With a side card open: **that scene** · **Undo Vary**

Mouse: **drag the edge** of the beat circle to scratch; **Option-drag** it to turn the beat around the circle; **Option-click** a step or a ring for a ratchet; **hold Option** over Organic to hear the beat dry; **Option-click** a tile's mute to solo; **double-click** a pad, a knob or Warmth to reset it; **right-click** a knob or pad to MIDI learn. In a DAW, StarLab's keys work while the pointer is over it (Shortcuts only over StarLab, in the settings).