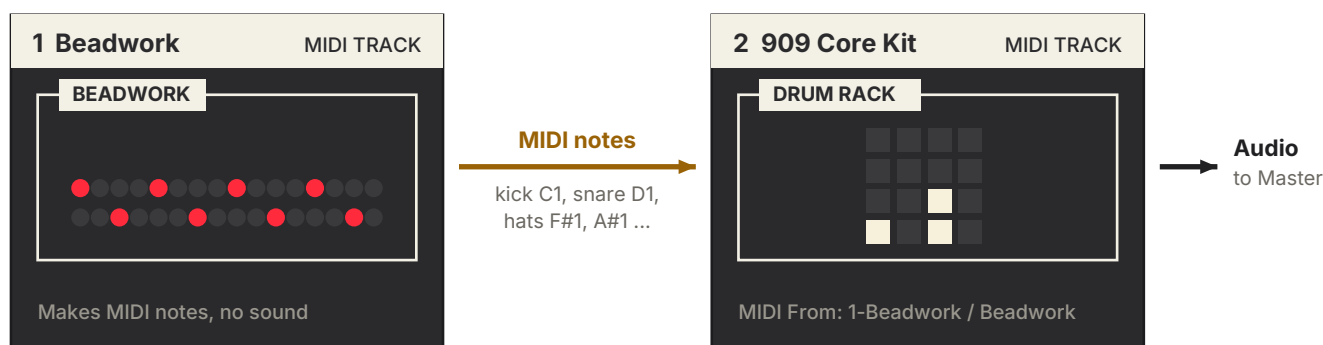


BEADWORK

E(5,16) rotated 10: the bossa nova clave

Getting started: wiring a drum kit in Ableton Live

Beadwork is a drum sequencer that makes MIDI, not sound. It plays a drum rack on another track, the same way a hardware sequencer plays a drum machine down a cable. This guide wires it to a 909 kit in about five minutes, then shows you round the panel.



Two MIDI tracks. Beadwork plays; the drum rack listens to it and makes the sound.

You'll need

- Ableton Live 11 or 12 (any edition that has Drum Rack and can load VST3 plug-ins).
- Beadwork built and installed. Building it copies **Beadwork.vst3** into `~/Library/Audio/Plug-Ins/VST3` for you.
- A Drum Rack. Live's **909 Core Kit** is used here, but any kit works.

Why two tracks? In Live, a plug-in's MIDI output can't feed an instrument further along the same track. So Beadwork gets a track of its own, and the drum rack's track listens to it.

Set up

1 Let Live see Beadwork

Open Live → **Settings** (⌘,) and choose the **Plug-Ins** tab. Turn on **Use VST3 Plug-In System Folders**, then press **Rescan**.

In the browser, open **Plug-Ins**. Beadwork is under **Taddei**.

2 Make the Beadwork track

Insert a MIDI track (**Create** → **Insert MIDI Track**, or ⌘⇧T). Drag **Beadwork** from the browser onto it. Renaming the track "Beadwork" makes the next step easier to read.

Beadwork opens with the General MIDI kit map, twelve lanes named for a drum kit, and the Init Groove, a simple pattern already threaded on the kick, rim, snare and hats.

3 Make the drum track

Insert a second MIDI track. In the browser, open **Drums** and drag **909 Core Kit** onto the new track. Leave it unarmed.

Tip Name the tracks after what they do ("Beadwork", "909"). Live shows track names in the routing choosers, so you'll pick the right one first time.

4 Route Beadwork into the drums

Show the mixer's In/Out section if it's hidden: **View → In/Out** in Live 11, **View → Mixer Controls → In/Out** in Live 12 (⌘⇧I). Then, on the drum track:

- A set the first **MIDI From** chooser to the Beadwork track (1-Beadwork),
- B set the second chooser underneath it to **Beadwork**, the plug-in itself,
- C set **Monitor** to **In**.

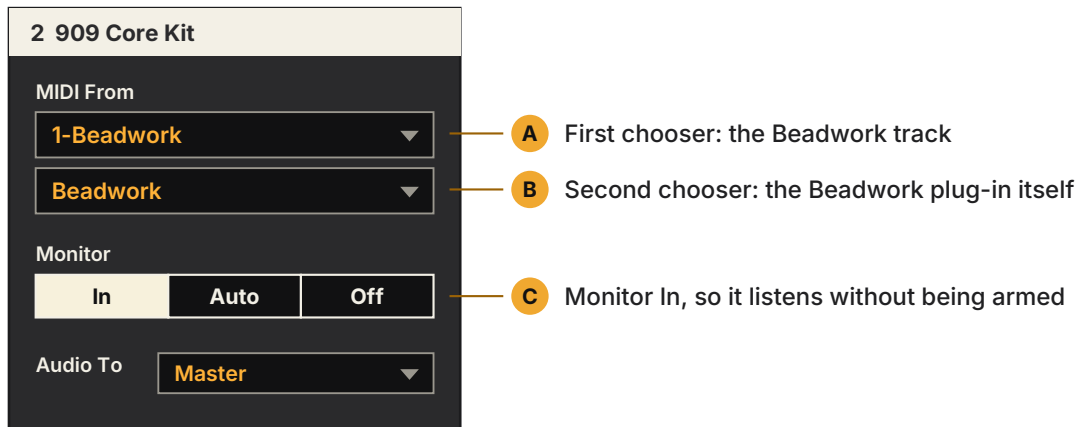


Illustration of the drum track's In/Out section, not a screenshot. Live's own look differs.

5 Press play

Start Live's transport. Beadwork follows it, so nothing plays while Live is stopped, and it starts on the beat when you press play. You should hear kick on every beat, the snare on two and four, and hats. On the panel, the RUN light turns green, each lane's light blinks with its hits, and a white ring walks along the beads.

Nothing? The usual culprit is step 4. Check both MIDI From choosers and that Monitor is In. Troubleshooting on the last page has the full list.

Match lanes to pads

Each lane sends one MIDI note, and each Drum Rack pad answers to one note. Beadwork's lanes start on the General MIDI drum notes, which is the layout Live's own kits use for the common pads, so kick, snare and hats usually line up straight away.

Lane	Note	Lane	Note
Kick	C1	Lo Tom	F1
Rim	C#1	Mid Tom	A1
Snare	D1	Hi Tom	C2
Clap	D#1	Pedal	G#1
Cl Hat	F#1	Crash	C#2
Op Hat	A#1	Ride	D#2

If a lane plays the wrong sound or nothing, find which note the pad you want answers to (each Drum Rack pad is tied to one note; the pad's chain shows it as its **Receive** note). Then click that lane's note box on Beadwork, the amber one next to the name, and pick the same note. The menu lists the drum-rack notes by name.

Note names follow Live's convention: middle C (MIDI 60) is C3, so the kick's C1 is MIDI 36.

Double-click a lane's name to label it after its pad. Once every lane matches the rack, save the wiring: click **KIT MAP** → **Save as...** and name it after the rack. A kit map is just the twelve labels and notes (and channels). Next time you use that rack, pick its map, and every groove plays on the right pads: changing groove never changes the map.

Find your way around



1	KIT MAP	Each lane's label and MIDI note, saved per drum rack.
2	GROOVE	The beads, patterns, chains and scenes: factory starting points and your own saves.
3	Note	The MIDI note this lane plays. Match it to a pad.
4	M / S	Mute and solo. A muted lane keeps its place and comes back in time.
5	Beads	The lane's steps. Click or drag to add and remove beads.
6	Necklace	The selected lane up close. Drag round to rotate; scroll for fills, shift-scroll for steps.
7	Pattern controls	Steps, fills, rotate, velocity, accent and more for the selected lane's pattern.
8	EDIT	What a click on a bead does: beads, accents, ratchets, chance, nudge or velocity.
9	Patterns	Sixteen patterns per lane and the lane's chain (CHAIN turns it on).
10	Scenes	Snapshots of every lane's pattern and mute, and the scene chain for a whole song.
11	Transport	What's playing, the RUN light, RESTART, REROLL and MUTE ALL.
12	Scatter	Throw the groove about without changing it. Tap to latch, hold for a throw; TYPE and DEPTH choose how.

First thing to try Click the **Kick** lane, then turn **FILLS** from 4 to 5 and **ROTATE** round. The beads spread as evenly as they can, so every setting is a rhythm, not a random scatter.

Record what it plays

Beadwork plays live; nothing it does is written into a clip unless you record it. To keep a take as an ordinary MIDI clip you can edit:

- **Arm** the drum track. It's already listening to Beadwork, so arming it records what arrives.
- Record into an empty clip slot in Session View, or press **Record** in Arrangement View.
- Afterwards, disarm the drum track and set its **Monitor** back to **Auto** to hear the clip on its own. Set it to **In** again whenever you want Beadwork driving the kit.

Finger-drum along

Beadwork passes incoming MIDI straight through. Arm the Beadwork track and play a keyboard or pad controller: your notes reach the drum rack along with the sequence.

Change patterns from the arrangement

Each lane's pattern is a parameter Live can automate (Lane 1 Pattern to Lane 12 Pattern), and so are mutes, levels, swing, humanise and chance. In Arrangement View, pick Beadwork in the Beadwork track's automation chooser and draw pattern changes where you want fills. Changes land on the next bar unless you change **PATTERN CHANGE** on the panel.

Save your groove

Live saves everything with the set. To use the same patterns, chains and scenes in other sets, click **GROOVE** → **Save as....** The lane labels and notes aren't part of a groove; save those with **KIT MAP** → **Save as....** Both live in ~/Library/Application Support/Beadwork, under Grooves and Kit Maps.

Troubleshooting

Beadwork isn't in the browser	Turn on Use VST3 Plug-In System Folders and press Rescan (step 1). Check Beadwork.vst3 is in ~/Library/Audio/Plug-Ins/VST3.
The panel moves but there's no sound	On the drum track: both MIDI From choosers set (track, then Beadwork) and Monitor on In . Also check the drum track isn't muted and its volume is up.
Nothing moves on the panel	Beadwork only runs while Live's transport is playing. Press play; the RUN light turns green.
One lane is silent or plays the wrong drum	Its note doesn't match a pad. Click the lane's note box and pick the pad's note. Also check M/S and MUTE ALL.
Every lane is silent but the RUN light is on	Something is soloed (S on a lane), MUTE ALL is on, or the lanes have no beads (FILLS at 0).

Everything else, control by control, is in the README.