BACKSPIN

and

BACKSPIN+

by

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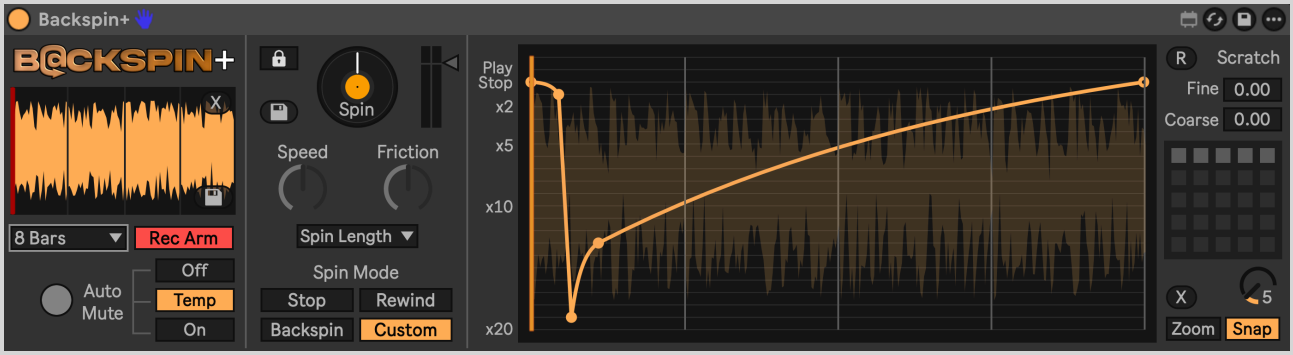


Manual

Requirements

- Windows / MacOS
- Ableton Live 12 Suite, or Ableton Live Standard with Max for Live installed.

Backspin Versions

Backspin (Free Version)

Includes:

- Stop effect
- Rewind effect
- Backspin effect
- Speed & Friction controls
- Spin Length controls
- Auto live audio recording
- Auto Mute options
- Clip Quantize integration

Backspin+ (Paid Version)

Includes everything in Backspin, plus:

- **Custom Mode** (editable playback-speed envelope)
- **Audio Import** (drop samples directly into the buffer)
- **Preset** save & recall (envelope + buffer contents)
- **Scratch Mode** (manual scrubbing controls)

1. Introduction

Backspin is a Max for Live audio effect that recreates a set of classic vinyl-style effects: quick stop, wind-down, rewind, and backspin.

These effects are common in DJ sets—typically used as a dramatic transition between tracks—but can also be used in music production to create more subtle changes inside a project (eg., performing a backspin with a single instrument or with drums). Backspin is designed to work equally well for both live DJs and studio producers.

Backspin continually captures your track's audio into a looping buffer then generates the effect in real time from the audio that's been recorded. Because the buffer is constantly recording, every backspin or rewind starts from the exact moment currently playing in the track, then moves backwards through the material that was just heard (like an actual backspin would if you were doing this on a turntable or jog wheel).

This makes **Backspin** far more natural and authentic sounding than using generic backspin samples from a sample pack — and much easier than setting up and recreating the effect with a real turntable or with Live's Sampler instrument.

The three effects behave as follows:

- **Stop** — Audio plays at normal speed before gradually slowing to a halt. This can be a short tape-stop–style effect (eg., ¼–½ bar in length) or a long, 'powered-down' turntable wind-down over many bars.
- **Rewind** — From a stopped position, audio plays backwards, starting slowly and accelerating over time.
- **Backspin** — From a stopped position, audio plays backwards very rapidly before decelerating to silence.

With **Backspin+**, there's also a **Custom** area where playback speed follows a user-drawn envelope, ideal for detailed or experimental effects (see **8. Custom Mode**).

2. Recording Audio Into the Buffer

Before we can create a spin effect, there first needs to be audio present in the buffer. This can be automatically recorded directly from the track where **Backspin** is placed. Or in **Backspin+**, samples (or clips from your track) can also be dragged & dropped into the buffer (see **9. Import Audio**).

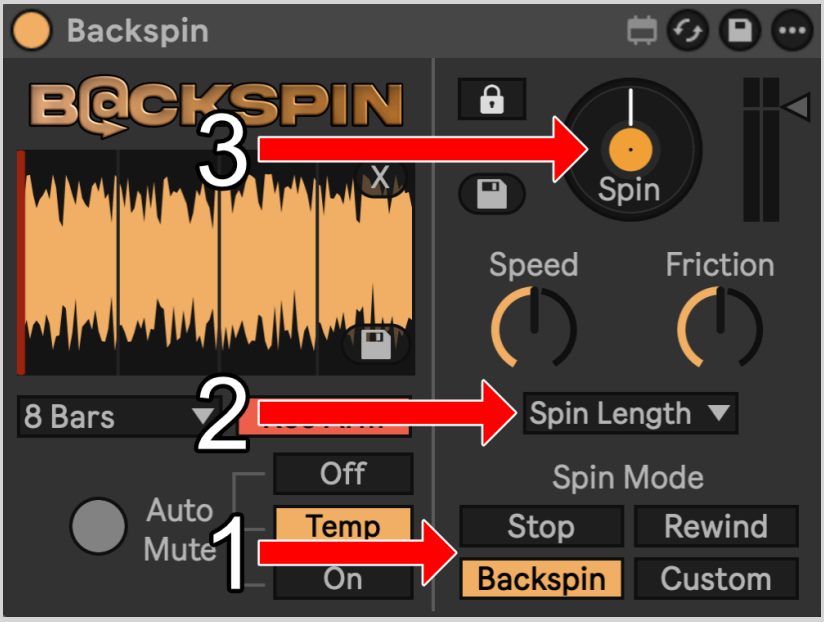
To record from the current track in either **Backspin** or **Backspin+**:

1. Enable **Record Arm** on the device (not the track).
2. Set the desired **Record Length** (buffer duration).
3. Start Live's transport.

Backspin now continually records into the buffer, looping back when it reaches the end so the device always contains the last *X* bars of audio (determined by **Record Length**) *before* the current point in your track's playback.

3. Spin Modes & Spin Length

Now that we have audio stored in the buffer, we can perform a spin effect. To do this:



1. Select a **Spin Mode**
2. Choose a **Spin Length**
3. Press **Spin**

The **Spin** button can be:

- clicked with the mouse
- MIDI mapped to a controller button
- activated in Push
- automated in Ableton Live via the **Spin** parameter (On/Off)

Note: The **Spin** button will not trigger until a **Spin Length** is selected.

3.1 Stop Mode

When Spin is activated while in **Stop Mode**, audio in the buffer plays back from the start of the buffer at normal speed, then slows to a complete stop. The **Spin Length** parameter determines how long this process takes:

- **Short (¼–½ bar):** tape-stop effect
- **Long (4–16 bars):** gradual vinyl wind-down

Note: The **Speed** control is disabled in **Stop Mode**. When **Spin** is triggered in **Stop Mode**, audio playback always begins at normal speed, thereby rendering the **Speed** control unnecessary.

3.2 Rewind Mode

Plays the buffer backwards, starting slowly and accelerating over time. Ideal for classic “rewind” / “pull-up” effects.

3.3 Backspin Mode

Starts at the end of the buffer, plays backwards very quickly, and gradually slows to silence. Perfect for DJ transitions when making a sudden change in genre or mood.

4. Speed, Friction & Spin Length

These three parameters define the behaviour of the spin.

Speed

Controls the force of the spin.

- Higher = faster playback / higher pitch
- Lower = slower, gentler movement / lower pitch

Friction

Controls how quickly the spin slows down.

- Low friction = longer, more sustained spins at higher speeds
- High friction = earlier slowdown

Spin Length

Defines the total duration of the spin effect in bar length (linked to project tempo).

5. Auto Mute Options

Auto Mute controls what happens to the track's audio while the spin plays.

- **Off** — Incoming audio is still audible during the spin
- **Temp** — Incoming audio is muted during the spin, then un-muted again when the spin ends
- **On** — Incoming audio is muted during *and after* the spin (ideal for live DJ transitions where the spun-back track should stay silent)

The Auto Mute LED lights red whenever muting is active.

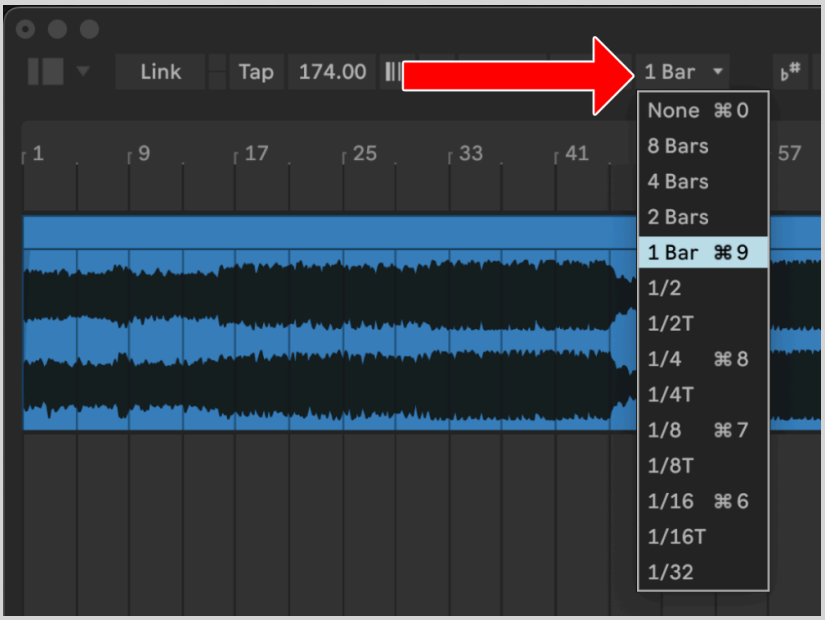
6. Saving Spins to Disk

At any time (other than when a spin is currently playing), you can click the **Save** icon to export the last spin as an audio file.

7. Lock to Quantize

When Live's transport is running and the **Lock** button is enabled, pressing **Spin** will always wait for the next quantisation boundary (based on Live's **Global Quantisation** setting) before triggering, much like triggering a clip in

Live's **Session Mode**.



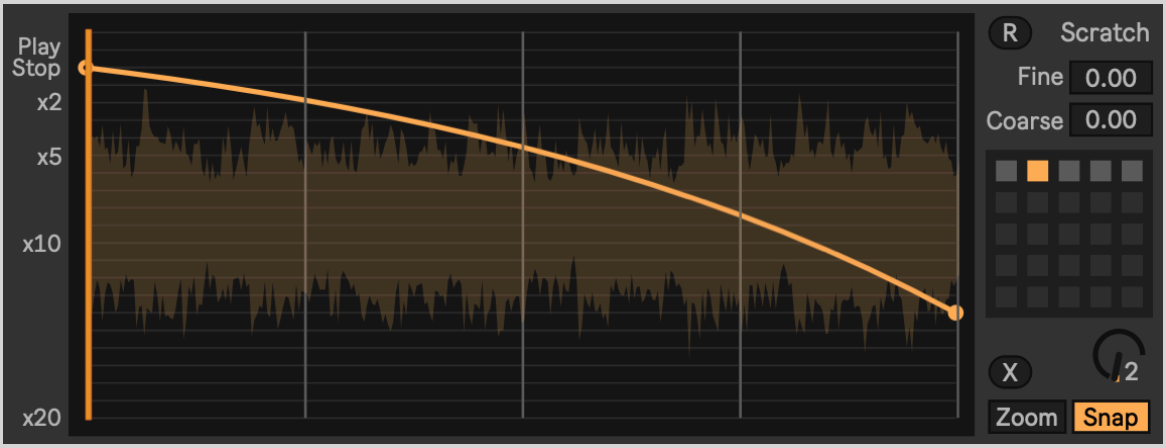
This ensures spins always trigger perfectly in time while triggering manually.

8. Custom Mode (Backspin+ Only)

Backspin+'s **Custom Mode** offers much more precise control over playback speed.

Selecting **Custom** from the **Spin Mode** area expands the device to show:

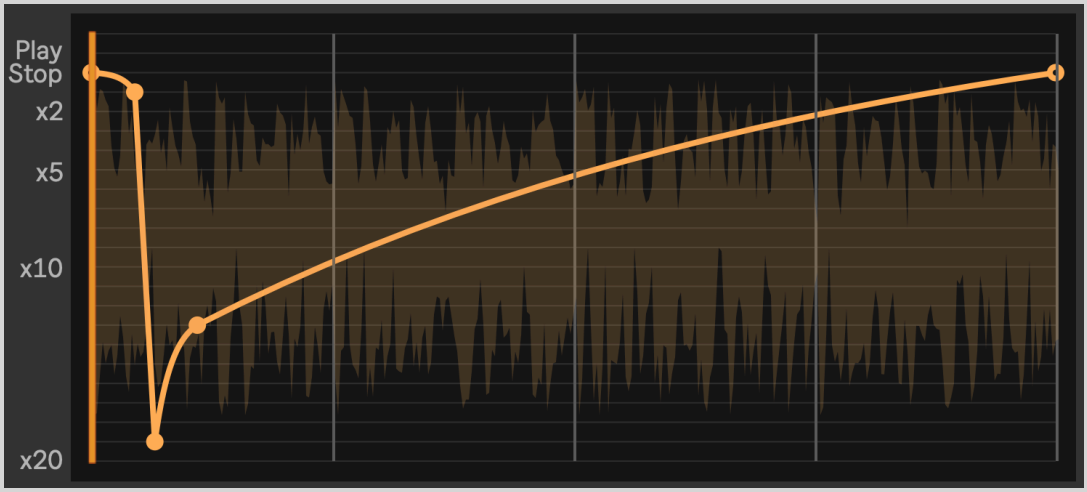
- Buffer waveform
- Large editable envelope editor
- Preset slots
- Zoom & Snap controls
- Scratch Mode parameters (see **11. Scratch Mode**)



Envelope Editing

The envelope defines playback speed over time. The x-axis represents the length in time of the current spin (determined by **Spin Length**). The y-axis represents the spin speed. Using the envelope, you determine exactly how fast the audio is playing (in which direction, forwards, stopped or backwards) at any given time. Speeds range from **2× forwards** to **20× backwards**.

So a more detailed backspin could look something like this:



Here we can see that the audio doesn't start immediately from a full 20x backspin. It instead begins from a stopped position, moving over a short period of time to 20x backwards, quickly decelerates to 13x backwards, then gradually decelerates again to a stopped position. This envelope attempts to recreate what would actually happen if you were to perform this on a real turntable (ie., the 'nudge' in speed you would get just before you released your fingers and the spin starts to decelerate normally).

To create your own spin curves:

- Click to add breakpoints
- Shift-click to remove them
- Drag to move points
- **Alt + Click + Drag** on a line to bend it
- Use **X** to clear the envelope

The orange vertical line moves along the envelope as the spin is playing to show the current playback speed over time. The grey vertical line shows the spin's current playback position in the buffer.

Zoom

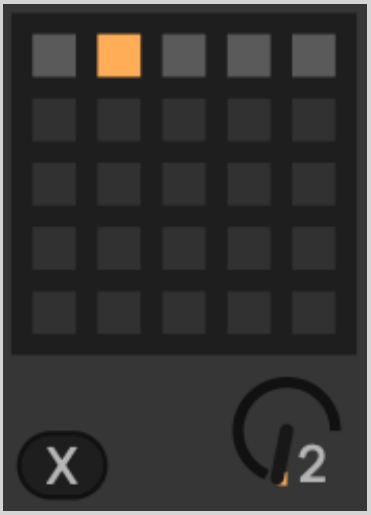
Zooms into the upper section of the envelope for finer editing of movements at very slow speeds.

Snap

Enables or disables snap-to-vertical-grid behaviour.

Presets

Backspin+ includes 5 preset slots, including Stop, Rewind and Backspin replicas, with space for an additional 20 saved presets.



- Click a filled slot to select a preset
- **Shift-click** either a filled or empty slot to save envelope + buffer as a preset
- **Alt + Shift-click** to delete a preset

Presets can also be changed using the **Preset Dial**, which is MIDI-mappable and able to be automated.

9. Import Audio (Backspin+ Only)

Backspin+ can import audio files, and the audio from video files, directly into the buffer.

To import:

1. Determine the sample's bar length
2. Set Backspin's **Record Length** to match
3. Drag the audio file onto the smaller buffer window in the main display (**not** the larger buffer shown in **Custom Mode**).

The imported audio behaves exactly like recorded audio and can be spun immediately.

Backspin+ can load all file types currently supported by Ableton Live. These are: .wav, .aiff, .flac, .ogg, .mp3, .m4a (MacOS only), .rx2, .mov, .mp4 (H.264 with compatible audio). Supported video file formats will be converted to audio.

You may see a 'no entry' icon when hovering a file over the drop area. As long as the file type is supported (see above), this can be ignored.

10. Saving Buffer Contents with Presets (Backspin+ Only)

Backspin+ presets can store:

- The current speed envelope
- The current Buffer contents

If the audio was imported into **Backspin+**, you can save the current envelope and the current contents of the buffer immediately. All presets will be saved along with your Live Set / Project. Note though that if the sample is later moved to somewhere else on your hard drive, the device will lose the folder reference / location and will not load the sample.

Due to restrictions within Max for Live, If the audio was recorded live it's not possible to store the sample as a preset or to save it with your Live Set *without* saving it to disk first. We need to import the sample again (so that the device can find the location of the sample on disk) for it to be stored correctly.

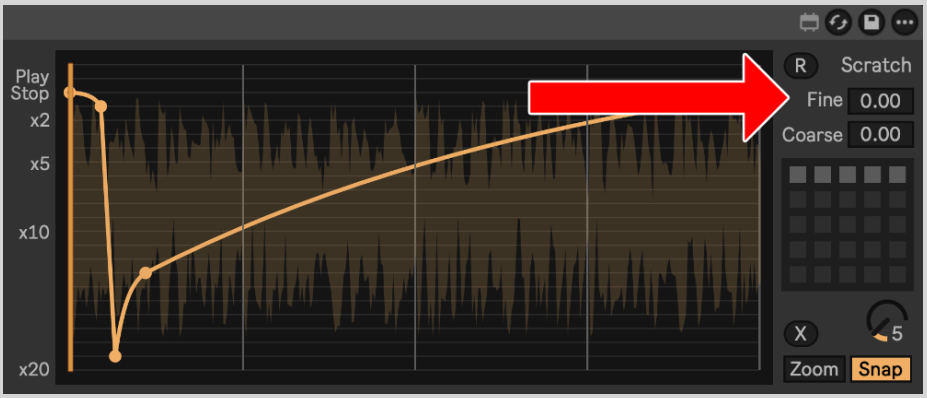
To do this:

1. Click **Buffer Save** to export the buffer's contents to a location on your hard drive (inside the current project's 'Samples' folder is recommended).

2. Drag the saved file back into the buffer from its saved location
3. Shift+Click on an empty preset slot to save the preset

11. Scratch Mode (Backspin+ Only)

Scratch Mode provides live manual control over playback speed.



Controls include:

- **Scratch Fine** (forwards at normal speed to backwards at normal speed: -1.0 to 1.0 range)

- **Scratch Coarse** (20x forwards to 20x backwards for large movements: -20 to 20 range)
- **R** resets the playhead position to the start of the buffer

The Scratch Fine and Scratch Coarse parameters can be:

- controlled manually with the mouse
- controlled with Push
- mapped to a MIDI controller
- automated.

Note: Scratch Mode does not internally record the resulting audio like performing a spin would. To capture it, either automate the **Scratch** controls or resample onto another track.

12. Ableton Push Integration (Backspin & Backspin+)

Backspin and Backspin+ are fully mapped to Ableton Push. All primary parameters are available directly from the Push interface in three sections: Record, Spin and Custom (the custom section appears in **Backspin+** *only*).