

Concentrate User Manual



MANY



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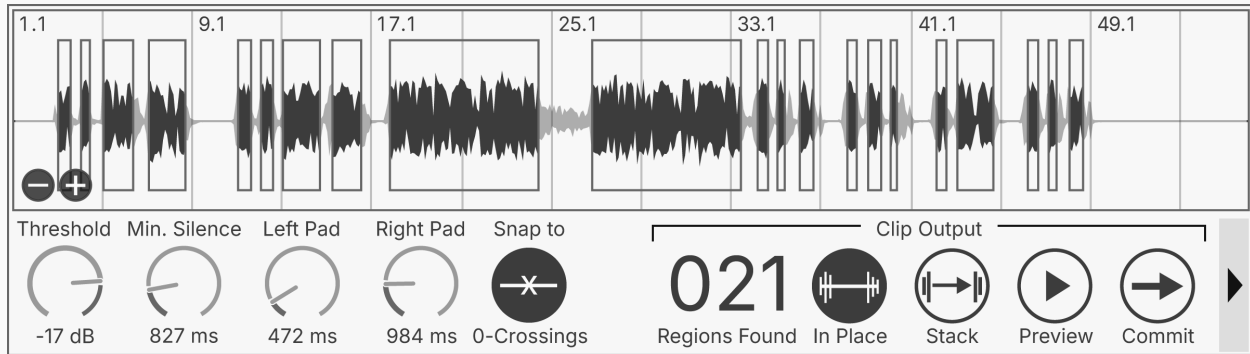
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Concentrate is a silence remover for Ableton Live. Set a threshold, tweak some settings to fit your audio, press a button and you're done.

Concentrate updates a clip on an audio track to only include the parts you want. You can even line up the kept audio in consecutive clips if you are prepping a sample for chopping, or want to create glitchy sounds.

Requirements

- Ableton Live: Version 12.2 or higher (Suite, or Standard with M4L add-on).
- Max: Version 9.0 or higher.
- Operating System:
 - macOS: 11.0 (Big Sur) or later.
 - Windows: Windows 10 (version 22H2) or Windows 11.
- Important: Concentrate is a Max for Live device and only works with Ableton Live. It also uses special features that require Max 9 or higher.

Install Concentrate

Installing the device is easy. Download the file, unzip it anywhere, then copy the **MANY HEADS** folder to your Ableton User Library.

Load Concentrate

If you saved the device somewhere in your User Library, it should show up in the Max for Live folder in the Ableton Browser under **Concentrate.amxd**.

If you don't see it there, you can load it directly from the folder you saved it to in your User Library.

If all else fails, go to the All section of your Ableton browser, and search for "Concentrate.amxd".

Use Concentrate

Concentrate only works in Arrangement View, and only on an audio track. You can drop **Concentrate.amxd** onto any audio track in Arrangement View. Concentrate will automatically load the first clip it finds on the track.

Note: Concentrate analyzes the audio file directly. The audio clip on the track must have **Warp disabled**.

Once Concentrate finishes loading the clip, the waveform appears. Region boundaries update in real time as you adjust the controls. Take a look at the waveform to get a sense of the audio's dynamics, then work through the controls from left to right:

The screenshot shows the Concentrate interface with a waveform and various controls. The waveform is divided into regions with time markers: 1.1, 9.1, 17.1, 25.1, 33.1, 41.1, and 49.1. Below the waveform are control knobs for Threshold (-17 dB), Min. Silence (827 ms), Left Pad (472 ms), and Right Pad (984 ms). There is also a Snap to 0-Crossings button. To the right, there are buttons for Clip Output (021 Regions Found), In Place, Stack, Preview, and Commit. A legend indicates that kept regions are outlined and dropped regions are faded.

Kept regions are **outlined** and dropped regions are **faded**.

Set **Threshold** to separate the audio you want to keep from the audio you want to discard.

Adjust **Min. Silence** to ignore short gaps.

Left Pad and **Right Pad** add breathing room before and after each kept region.

Enable **Snap to Zero Crossings** to reduce clicks at region boundaries.

Choose an output mode: **Keep Clips in Place** or **Stack Clips** (see below).

Press **Preview** to audition the selections without making any changes to the track.

Press the **Commit** button when you are happy with the result.

After committing, Concentrate locks and commits the changes to the audio clip on the track. One clip is added to the track for each audio region you have selected to keep. Each of those clips contains a reference to the full original audio clip, with loop bounds set to the start and end point of each region. The original clip is deleted from the track. Use Undo (Cmd/Ctrl+Z) to restore the original clip — the device returns to its pre-commit state with the waveform and settings intact.

Output Modes



These two buttons control how the resulting clips are placed on the arrangement timeline when you commit. Only one mode can be active at a time.

Keep Clips in Place — Each kept region is placed at exactly the same position it occupied in the original clip. Use this when the original timing of the audio matters, for example when cleaning up a vocal recording so that it stays in sync with the rest of the arrangement.

Stack Clips — All kept regions are placed back-to-back, starting at the position of the first kept region. Use this when you want the audio to play through without gaps, such as when preparing a sample for Simplifier or Sampler, or when creating stuttered, glitchy effects.

Tip: If you output clips in Stack mode, try selecting all of the output clips, then pressing `Cmd/Ctrl-Option/Alt-F` to add a short crossfade between each clip. If you'd like to consolidate the clips into one, use `Cmd/Ctrl-J`.

Parameter details

Threshold — Range: -80 dB to 0 dB. Audio whose RMS energy exceeds this value is kept; audio below it is discarded. The device uses a 1 dB hysteresis band to prevent rapid toggling near the threshold boundary, meaning a region must fall 1 dB below the threshold before it is considered silence, so slight fluctuations near the cutoff do not create a large number of tiny regions. Start with a value around -50 to -40 dB for speech; go lower (e.g. -70 dB) for audio with quieter content you want to preserve.

Min. Silence — Range: 0 to 5000 ms. Determines the minimum duration a gap must hold below the threshold before it is treated as silence and dropped. Gaps shorter than this value are bridged and treated as part of the surrounding audio. Increase this value if you are getting too many small clips caused by brief pauses between words or notes. Decrease it if you want more precise cuts.

Left Pad — Range: 0 to 5000 ms. Extends the start of each kept region backward in time. Use this to capture the attack of a note or the beginning of a word that the threshold may have clipped slightly.

Right Pad — Range: 0 to 5000 ms. Extends the end of each kept region forward in time. Use this to preserve the natural decay or release of a sound after it drops below the threshold. Overlapping padded regions are automatically merged into a single region.

Snap to Zero Crossings — When enabled, the start and end boundaries of each kept region are snapped to the nearest zero crossing within a ± 10 ms search window. This reduces or eliminates clicks and pops that can occur when a cut is made mid-waveform.

Keep Clips in Place — See *Output Modes* above.

Stack Clips — See *Output Modes* above.

Parameter details (continued)

Preview Kept Regions — Plays through all currently selected kept regions in sequence, with a moving playhead on the waveform. Press again to stop. This does not modify the track — it is a preview only.

Commit Changes — Creates a new clip on the track for each kept region, deletes the original clip, and displays a confirmation message. Use Undo (Cmd/Ctrl+Z) to restore the original clip and return the device to its pre-commit state.

Expand Device — Toggles the device width between the default (600 px) and an expanded view (1000 px), giving you a wider waveform display.

Waveform — A scrollable waveform display showing the loaded audio. Kept regions are outlined with a border; discarded regions are filled with the track color. A playhead indicator moves through the waveform during preview. The waveform uses the track's assigned color.

Zoom In / Zoom Out — Zooms the waveform horizontally from 1× (full clip) up to 10×. At higher zoom levels, the waveform becomes scrollable. The device width stays fixed; the waveform canvas expands inside a scroll container.

Clip Counter — A small readout displaying the number of currently detected kept regions (e.g. 007). This updates in real time as you adjust the controls.

How Concentrate Analyzes Audio

Concentrate processes audio in two phases when a clip is first loaded:

Loading: The audio file is read in 65,536-frame chunks. For stereo files, the device computes a mono average for the waveform display and a pre-squared stereo energy value used for analysis. A progress indicator is shown during this phase.

Analysis: When you adjust any parameter, Concentrate scans the pre-squared energy cache using a 2048-frame (≈ 46 ms at 44.1 kHz) sliding window. Each window's average energy is compared to the threshold. The pipeline runs in order:

1. Detect kept and dropped regions based on threshold and hysteresis.
2. Drop any silence that is shorter than **Min. Silence** (those short gaps become kept instead).
3. Apply **Left Pad** and **Right Pad** to each kept region's boundaries.
4. Merge any kept regions that now overlap due to padding.
5. Snap boundaries to zero crossings if **Snap to Zero Crossings** is enabled.
6. Redraw the waveform overlay at up to ≈ 30 fps.

Troubleshooting

"Switch to Arrangement View to use Concentrate." — Concentrate is only able to load and commit clips from the Arrangement View. Switch to Arrangement View in Ableton Live (press Tab if you are in Session View).

"Add a clip to the audio track to use Concentrate." — There is no audio clip on the track. Add a clip to the track's arrangement section and Concentrate will detect it automatically.

"The detected audio clip has Warping enabled. Disable Warping to use Concentrate." — Select the clip in the arrangement, open its Clip View, and turn off **Warp**. Concentrate reads the raw audio file and is not compatible with Live's time-stretching engine.

"The audio clip in this track could not be loaded. Try bouncing the audio clip in place, and then reload Concentrate." — This can happen with clips that reference external files in certain formats, or clips that do not have a resolvable file path (e.g. clips created by certain plugins). Try bouncing or consolidating the clip to create a new audio file, then load that file onto the track.

"Unable to load audio clip. Try loading a new clip, or bouncing the clip in place and reloading Concentrate." — The clip on the track does not have a readable file path. Bouncing or consolidating the clip in place usually resolves this.

Troubleshooting (continued)

No regions are detected / all audio appears dropped. — The Threshold may be set too high. Lower the Threshold value (toward -80 dB) until regions appear outlined in the waveform.

Too many small regions are created. — Increase **Min. Silence** to bridge short gaps between sounds, or raise **Left Pad / Right Pad** so that adjacent regions merge together.

Clicks or pops at the start or end of committed clips. — Enable **Snap to Zero Crossings** so that boundaries land on natural zero points in the waveform. Adding a small **Left Pad** or **Right Pad** can also help avoid abrupt cuts.

Concentrate loads the wrong clip. — Concentrate always loads the first clip on the track (the clip with the earliest start position). If you want to process a different clip, move it to the beginning of the track, or remove other clips from the track first.

Concentrate is on a non-audio track. — If you accidentally drop Concentrate onto a MIDI track or a return track, it will automatically create a new audio track and move itself there.

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