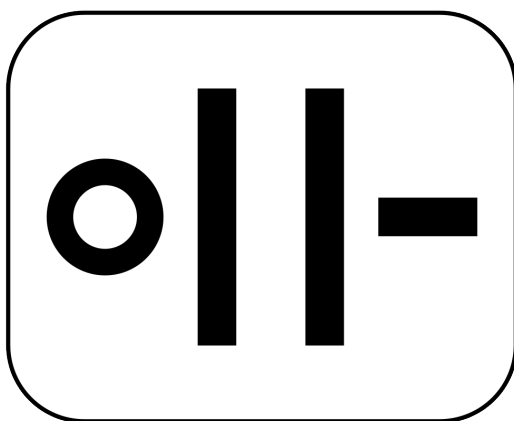




WESTMONT
S O U N D



LIVE BREAKER

Audio Circuit Breaker for Ableton Live

Version 1.0.0

Table of Contents

Overview	3
Installation	4
Controls	5
Trip and Reset Behavior	6
Recommended Use	7
Compatibility	8
Troubleshooting	9
Release Notes	10
Safety Notice	11

1. Overview

Live Breaker is a transparent audio circuit breaker for Ableton Live.

It continuously monitors both stereo channels while leaving audio unchanged during normal operation. If either channel exceeds the selected **Threshold**, Live Breaker fades the output to silence, enters a latched **TRIPPED** state, freezes the detected peak value, and displays a track-aware operating-system alert.

Audio remains disconnected until the unsafe condition is corrected and a safe manual reset succeeds.

Live Breaker is not a limiter, compressor, clipper, or loudness processor. It does not continuously reshape the signal or attempt to make a dangerous signal usable. It behaves like an electrical circuit breaker: normal audio passes, unsafe audio disconnects, and recovery requires intentional user action.

2. Installation

Place `Live Breaker.amxd` in your Ableton Live **User Library** or another folder that Ableton Live scans for Max for Live devices.

Open Ableton Live, locate Live Breaker in the **Browser**, and drag it to the end of the signal chain you want to protect. For most users, the recommended placement is as the final device on the **Main track**. Live Breaker can also be used on group tracks, return tracks, individual tracks, feedback-processing chains, and experimental routing.

Set the **Threshold** slightly above your intended working peaks. Before relying on the device in a production Set, test its trip and reset behavior at a low monitoring level.

When using the included device with Ableton Live 10 and Max 8.1.11, Max may display a warning that the device was created with a newer version. This warning is expected. Runtime testing confirmed that Live Breaker opens and operates correctly in the validated Live 10 configuration.

3. Controls

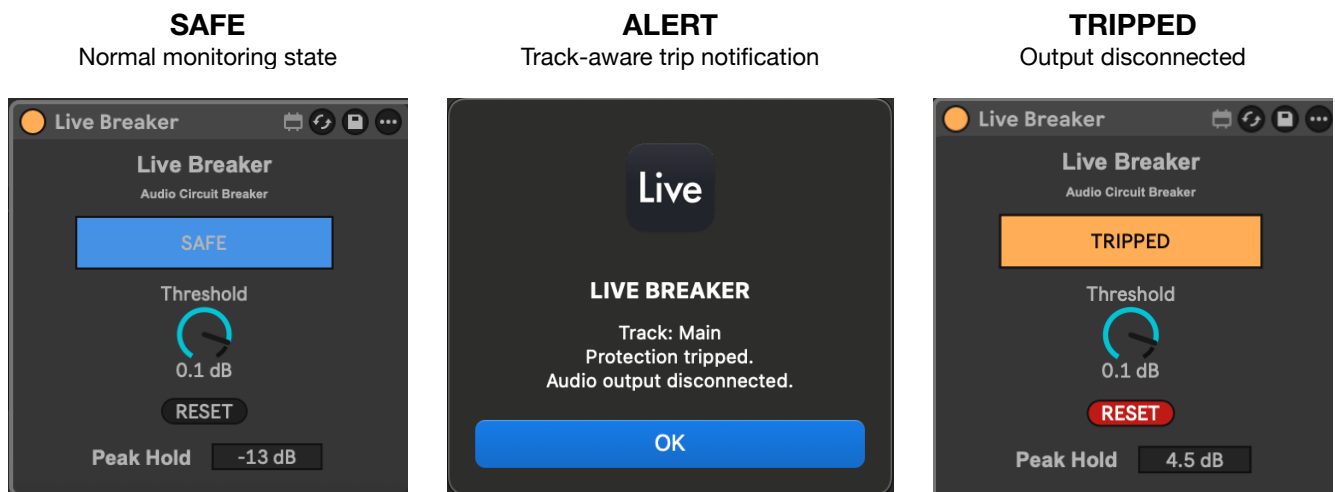
Live Breaker has four primary interface elements: the **SAFE** / TRIPPED status display, the **Threshold** control, the **RESET** button, and **Peak Hold**.

The status display shows **SAFE** while audio is passing normally. If either stereo channel exceeds the selected **Threshold**, the device enters the **TRIPPED** state and disconnects the output.

The **Threshold** control sets the trip level from -18 dB to $+3$ dB. The default value is $+0.1$ dB. Set the **Threshold** above your intended working peaks while keeping enough margin to catch unexpected level spikes.

The RESET button requests recovery after a trip. While **TRIPPED**, the button turns red and remains red until a safe reset succeeds. Pressing **RESET** does not immediately reconnect audio if the incoming signal is still unsafe.

Peak Hold displays the highest detected level since the last successful reset. When the device trips, the displayed peak freezes so the event can be inspected before recovery.



4. Trip and Reset Behavior

Live Breaker begins in the **SAFE** state and passes audio unchanged while monitoring both stereo channels.

If either channel exceeds the selected **Threshold**, the device fades the output to silence over 2 ms, enters the latched **TRIPPED** state, freezes the detected peak value, turns the **RESET** button red, and displays a track-aware operating-system alert.

The output remains disconnected until the unsafe condition is corrected. Pressing **RESET** submits a recovery request, but it does not immediately reconnect audio.

For recovery to succeed, the incoming signal must remain continuously below the selected **Threshold** for 250 ms. If the signal rises above the **Threshold** during that period, the timer restarts and the device remains **TRIPPED**.

After the safe-input condition succeeds, Live Breaker reconnects the output using a 5 ms recovery ramp, returns to **SAFE**, clears the red **RESET** state, and begins a new **Peak Hold** measurement period.

5. Recommended Use

Place Live Breaker as the final device on the signal chain you want to protect.

For most users, the recommended placement is at the end of the Main track so it can disconnect the final stereo output before audio reaches the interface, monitors, or headphones.

Live Breaker can also be placed on:

- Group tracks
- Return tracks
- Individual tracks
- Feedback-processing chains
- Experimental sound-design routing

Set the **Threshold** slightly above your intended working peaks. The goal is to leave normal production levels untouched while still catching unexpected feedback, runaway resonance, unstable routing, controller faults, or software glitches.

The best outcome is that Live Breaker never trips. Before using it in a working Set, test its behavior at a low monitoring level and confirm that you understand the **RESET** process.

6. Compatibility

Live Breaker 1.0.0 has been validated on the following configurations:

macOS / Apple Silicon

Ableton Live 12.4.3 with Max 9.1.4 on macOS Sequoia 15.7.7 using an Apple M2 Mac mini.

macOS / Intel

Ableton Live 10 with Max 8.1.11 on macOS Catalina.

When opened in Max 8.1.11, the device may display an expected warning that it was created with a newer version. Runtime testing confirmed that Live Breaker opens and operates correctly in the validated Live 10 configuration.

Windows

Ableton Live 12.4.2 with Max 9.1.4 on Windows 11.

Ableton Live 11 has not yet been separately validated.

The device uses only standard Max and Max for Live objects. It does not require JavaScript, Node for Max, Gen, RNBO, or third-party externals.

7. Troubleshooting

The device trips during normal playback

Raise the **Threshold** slightly above your intended working peaks. Confirm that no device earlier in the signal chain is producing unexpected spikes, feedback, or unstable output.

RESET stays red

The incoming signal has not remained continuously below the selected **Threshold** for 250 ms. Correct or mute the source, then press RESET again. Audio will reconnect only after the safe-input condition succeeds.

Pressing RESET does not restore audio

Check whether the source is still above the **Threshold**. RESET requests recovery; it does not bypass the safety guard.

The Peak Hold value does not change after a trip

This is expected. **Peak Hold** freezes the detected trip peak while the device remains TRIPPED. It begins measuring again after a successful safe reset.

A warning appears in Max 8

This is expected because the device was authored and saved in Max 9. Runtime testing confirmed correct operation in the validated Live 10 / Max 8.1.11 configuration.

The device does not appear in Ableton Live

Confirm that `Live Breaker.amxd` is stored in the Ableton Live User Library or another location available in Live's Browser. Rescan or reopen the Browser location if necessary.

8. Release Notes

Live Breaker 1.0.0 is the first public release of Westmont Sound's audio circuit breaker for Ableton Live.

Highlights

- Transparent stereo monitoring
- Adjustable Threshold from -18 dB to $+3$ dB
- Default Threshold of $+0.1$ dB
- 2 ms trip ramp to silence
- Latched SAFE / TRIPPED protection state
- Manual reset with a 250 ms continuous safe-input guard
- 5 ms recovery ramp
- Red RESET-button feedback while TRIPPED
- Peak Hold with frozen trip-peak display
- Track-aware operating-system alert
- 0 samples / 0 ms reported device latency
- No Plugin Delay Compensation introduced
- Negligible performance impact

Notes

- The canonical device is authored and saved in Max 9.
- Max 8.1.11 may display an expected newer-version warning.
- Runtime testing confirmed correct operation in the validated Ableton Live 10 configuration.
- Ableton Live 11 has not yet been separately validated.
- Ableton may briefly show its native pressed-state highlight when RESET is clicked. This does not indicate a breaker-state change.

9. Safety Notice

Live Breaker is an additional protection layer and is not a substitute for responsible monitoring levels, hardware volume control, hearing protection, or proper gain staging. It only monitors and controls audio that passes through the Ableton Live signal path containing the device, so it cannot protect against audio generated outside Ableton Live, signals that bypass the device, hardware faults after the audio interface output, or direct-monitoring paths routed through an interface or mixer. Always test the device at a low monitoring level before relying on it in a working Set, keep a physical volume or mute control within reach, and remember that no software device can guarantee complete protection from every failure condition.