



Bokoodo Lite

User Manual - Version 1.0

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1.1 Device Overview

Bokoodo Lite is a simpler version of the Bokoodo pitch shifter plugin. Bokoodo Lite was created to be a fun, fast and a more musical plugin to counter the more precise and technical Bokoodo plugin. The simpler controls create a different user experience from the Bokoodo, leading to different musical outcomes.

1.2 System Requirements

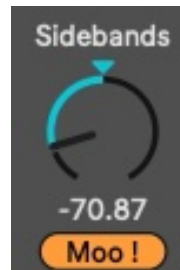
- Ableton Live 11 or 12.
- Max for Live (included with Live Suite).

1.2 Installation

- Double-click the installation file or drag it directly onto an open instance of Ableton Live.
- A dialogue box will appear with a notice and ask if you'd like to continue.
- Click Yes
- The device will now be installed under: Packs > Bokoodo Lite
- Drag the device onto a Audio track or a MIDI track that has an synth or other sound generating device in Live to begin using it.

2.1 Device Structure

- Pitch controls



- Delay / Feedback



- Filter Control



3.1 Pitch Controls

- Sidebands – This controls the blend of the two pitch shifters. Similar to the Bokoodo, there are two pitch shifters. But Bokoodo Lite has less parameters. -100 means only the “lower” pitch shifter or a single pitch shifter is being used. 0 means two pitch shifters are being used and +100 means only the “high” pitch shifter is being used. The hi and low pitch shifters are controlled differently by the Pitch Shift dial (see next).



- Moo! - This button cuts off the incoming audio so whatever sound the plugin is making can ring out without any new input.

- Pitch Shift – This controls the amount of pitch shifting in the signal. The asymmetry of the dial is to make one dial give more options. It’s important to know what the sideband control is set to so one can make sure the desired affect is accomplished. The dial creates a different effect for the negative sideband from the positive sideband. The pitch shift numbers are an approximation of an octave and is affected by the window size.



- Negative Sideband (low pitch): Zero is no effect, just feedback. As you move the dial to 1 the pitch goes down. At 1 there is no signal. After 1 the pitch starts to increase. Please refer to the quick start to understand how the dial works but below is a rough pitch guide for the dial.

- Positive Sideband (hi pitch): Zero has no effect and 1 is an octave. Please refer to the right picture —>

- x1x2x4 – Automatically doubles and quadruples the widow size.

- Window Size – This controls the ‘sample size’ of the pitch shifter. This number is defined in milliseconds. This

is the amount of audio being ‘sampled’ and run through the algorithm.

- 100	+ 100
0 - C4	0 - C4
1 - zero	1 - C5
2 - G4	2 - G5
3 - C5	3 - C6
4 - G5	4 - E6
5 - C6	5 - G6
6 - E6	6 - A#6
7 - G6	7 - C7

4.1 Delay / Feedback

- Feedback – This controls the amount of feedback sent back into the pitch shifter.
- Sat – This controls if a saturation circuit is added to the feedback loop.
- Tube/Tape – The Tube adds more definition to the feedback cycles. Tape gets as close to self-oscillation as possible without redlined distortion.
- Feedback Delay – This adds delay to the feedback signal to produce a delayed affect. The number (0 to 50) is used to multiply the window size (which is in milliseconds). Please note! The window size is directly connected to the Feedback delay! So, if the window size is 100 and the FB delay is set to 2, the delay will be set to 200 milliseconds.



5.1 Filter and Upsampling

- Highpass Filter - This is a highpass filter with the range of 40 to 1000 hertz. The filter is in the feedback loop path so the feedback/delay tails can be contoured.
- Lowpass Filter - This is a lowpass filter with the range of 2 to 20 kilohertz. The filter is in the feedback loop path so the feedback/delay tails can be contoured.
- x1 / x4 - This toggles between no upsampling and four times upsampling. This drastically reduces the aliasing artefacts. This can be heard best when the pitch dial is swept back and forth.

