

ILLUSONIC

ILabdecoder

Illusonic AB decoder plugin

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1 ILabdecoder - Plugin

The plugin is available in the following plugin formats:

- Mac OS
 - AAX
64 bit architecture
 - VST3
64 bit architecture
 - AU
64 bit architecture

Installation: use the provided installer package.

- Windows
 - VST3
32 and 64 bit architecture

Installation: unzip the delivery package and copy the plugin file (.vst3) into the folder:

C:\Program Files\Common Files\VST3

2 ILabdecoder - Parameters



Decoding

- Rotation
rotation of sound image
- Elevation
elevation of sound image
- Center focus
beam former focus for the center channel
- Front focus
beam former focus for the front channels

- Surround focus
beam former focus for the surround channels
- Rear focus
beam former focus for the rear channels
- Front elevated focus
beam former focus for the front elevated channels
- Surround elevated focus
beam former focus for the surround elevated channels
- Front angle
angle between left and right front channels
- Surround angle
angle between left and right surround channels
- Rear angle
angle between left and right rear channels
- Front elevated angle
angle between left and right elevated front channels
- Surround elevated angle
angle between left and right elevated surround channels
- Diffuse gain
beam former diffuse sound gain
- Diffuse de-correlation
beam former diffuse decorrelation

Outputs

- Center gain
gain for center channel
- Front gain
gain for front channels
- Surround gain
gain for surround channels
- Rear gain
gain for rear channels
- Front elevated gain
gain for elevated front channels
- Surround elevated gain
gain for elevated surround channels
- LFE gain
gain for LFE channel
- Back delay
delay on surround channels
- Back shelving frequency
cut-off frequency of high-shelving filter applied to surround channels
- Back shelving gain
gain of high-shelving filter applied to surround channels

Omni Microphone Bass

- variable crossover for use with A.1-Format's .1 signal
- "A.1-Format": A-Format plus an omni mic signal

Channel ordering

- Channel Test
Run channel ID test signal to confirm channel ordering.

3 ILabdecoder - Changelog

Version 1.10.0: December 04, 2019

- add Windows VST3 versions

Version 1.11.0: December 19, 2019

- add 'cube' and 'cube+center' formats
- improvements for LFE (add 10 dB overhead / add 'mute' state / fix slider)
- fixes and improvements for HRTF handling

Version 1.12.0: February 21, 2020

- redesign plugin interface
- add AU version
- sundry gui and usability updates

Version 1.13.0: June 02, 2020

- new Test Channels function to conveniently check input and output multi-channel channel ordering
- changed channel ordering of Cube format to 5.1 (C and LFE are silent)
- added new Cube & Center & Sides format
- many other small changes, additions and improvements

Version 1.14.0: August 27, 2020

- improve beam display
- improve output mixing processing
- many other small changes, additions and improvements
- add "notarization" for all Mac versions

Version 2.0.0: December 14, 2020

- add new input format "A.1-Format", which is A-Format plus an omni mic signal
- variable crossover for use of A.1-Format's .1 signal
- remove hard limiter at 0dB output

Version 2.1.0: March 05, 2021

- fix issue where Reaper could use only 8 channels

Version 2.2.0: March 15, 2021

- fix issue where signals were not properly muted

Version 2.3.0: March 31, 2021

- improve diffuse sound handling, this improves overall quality significantly
- change default parameters to be more optimal for all formats
- improve binaural rendering and add headphones equalization

Version 2.4.0: July 28, 2021

- add A-Format as output option
- new output format: Cube + Center + Side + Rear

Version 2.4.1: July 28, 2021

- improve signal processing performance

Version 2.5.0: October 18, 2021

- bug fixes in algorithm core
- change "Cube+Center+Side+Rear"
 - edit handling of surround channels "..+Back"
 - put rear center to LFE position
- macOS: add support for 'arm64' (based on beta version of AAX SDK)

Version 2.6.0: December 09, 2021

- fix issue where 2nd and 3rd order B-Format output formats were disabled
- fix issue with the new cube+center+side+back format

Version 2.6.1: December 10, 2021

- fix for v2.6.0

Version 2.7.0: April 13, 2022

- enable bass panel for all input formats (= bass management with W signal as bass)
- cube formats: fixed bug with channel type assignments
- now show expiration date in plug-in
- set expiration date to end of 2023

Version 2.8.0: May 25, 2022

- add level meters for input and output audio
- add 'alt' versions for 7.1.x audio formats