HoaLibrary

High Order Ambisonics Library

These VST plugins allow to spatialize up to 16 sources for several loudspeakers systems :

- **HoaQuadra** – 4 loudspeakers (45°, 135°, 225°, 315°).

- **HoaFiveDotOne** – 5 loudspeakers in a 5.1 Surround configuration (0°, 30°, 110°, 250°, 330°).

- **HoaHexa** – 6 loudspeakers (30°, 90°, 150°, 210°, 270°, 330°).

- **HoaOcto** – 8 loudspeakers (22,5°, 67,5°, 112,5°, 157,5°, 202,5°, 247,5°, 295,5°, 337,5°).

- **HoaHexaDeca** - 16 loudspeakers (11,25°, 33,74°, 56,24°, 78,75°, 101,25°, 123,75°, 146,25°, 168,75°, 191,25°, 213,75°, 236,25°, 258,75°, 281,25°, 303,75°, 326,25°, 348,75°).

- **HoaBinaural** - Binaural headphones restitution.

Commands :

- Change the number of sources : The number box.
- Change source's radius and angle : Click and drag.
- Change source's radius : Click and drag with *alt* + *shift*.
- Change source's angle : Click and drag with *alt*.
- Zoom : *shift* + mouse wheel

Version : Beta 0.1 for Windowns 64bit

The plugins has been tested on Windowns 7 with reaper v4.62. compatible with the softwares supporting VST plugins

Install :

Drag all the *dll.* files, in the main folder, to the VST custom folder,

Drag *cblas.dll,* located in *cblas* folder, to **C:\\Windows\system**

The HOA Library :

Sound space is one of the principal dimensions of the contemporary musical thought, especially in the electroacoustic music domain but also in intermedia arts. In this context, the CICM has made spatialization its principal research axis. This project's aim is to give to musician saptialization models based on high order ambisonics and sound fields synthesis.

You can visit the official website : HoaLibrary. This project is developed in a part of the Paris 8 University LABEX arts H2H.

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