

# ZYLIA 6DoF HOA Renderer for Wwise

## Reference manual

2022-10-04

v1.1

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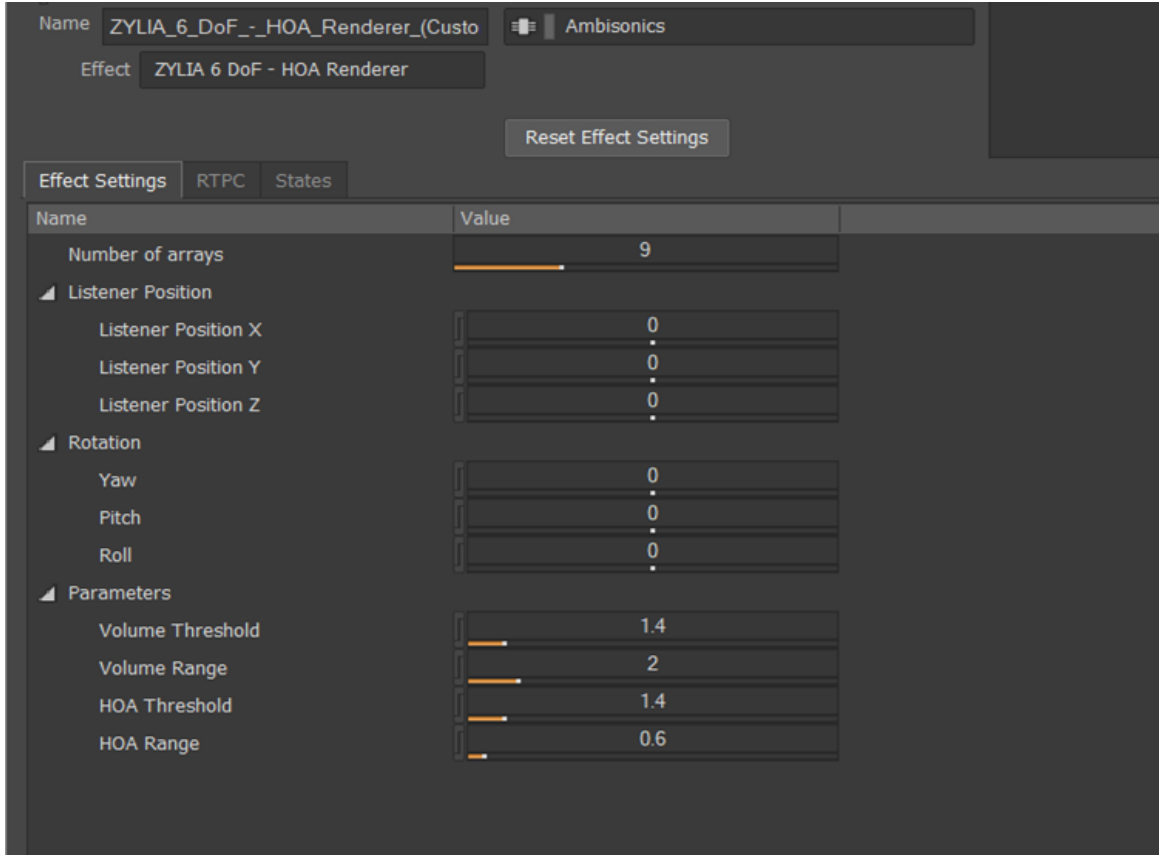
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## Overview

**ZYLIA 6DoF HOA Renderer for Wwise** is a Wwise plugin that allows for processing and rendering ZYLIA Navigable 3D Audio content. With this plugin, developers can use ZYLIA Navigable Audio technology in various game engines.



## Compatibility

**ZYLIA 6DoF HOA Renderer for Wwise** is available for Wwise from version 2019.2.0.7216 to version 2019.2.15.7667.

Authoring part of the plugin is available for Windows only.

Sound Engine part is available for:

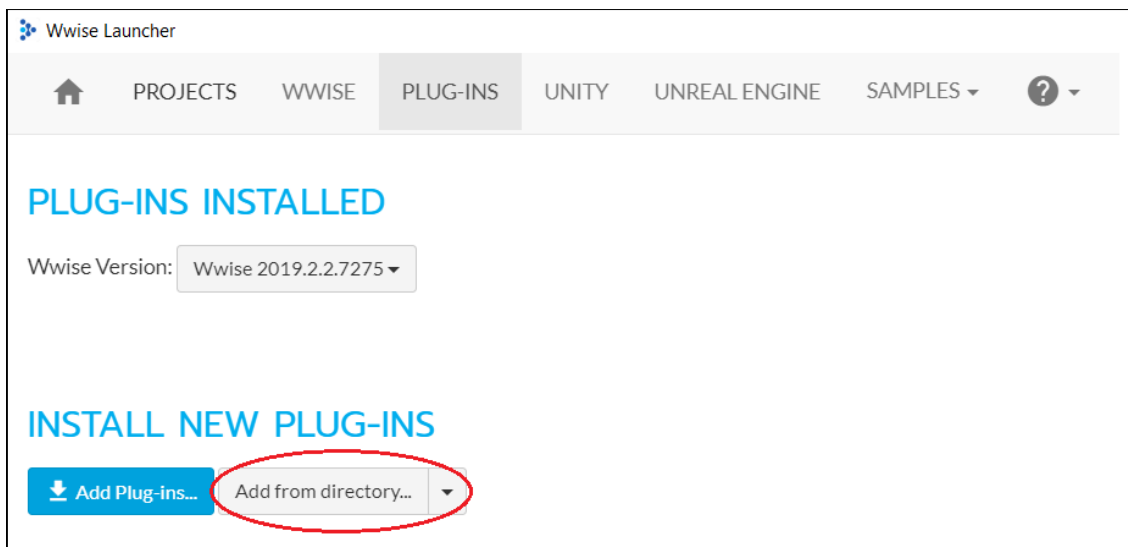
- Windows (vc140, vc150 and vc160)
- Mac
- IOS
- Android (x86\_64, x\_86, armeabi-v7a and arm64-v8a)

## Installation

- 1) Open Wwise Launcher.
- 2) Go to Plug-Ins tab.

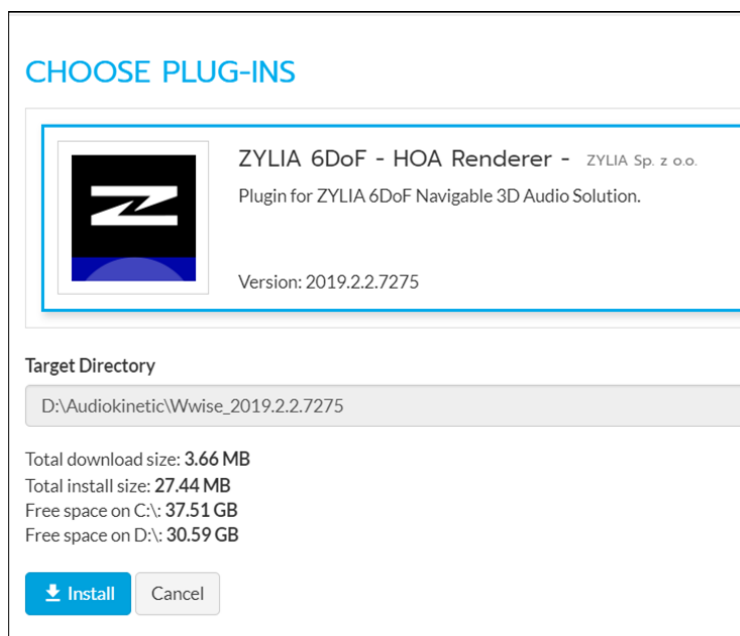


- 3) Click on Add from directory button.



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- 4) Go to the you package plugin "Select
- 5) Click on button.



folder when unpack the with the and click Folder".

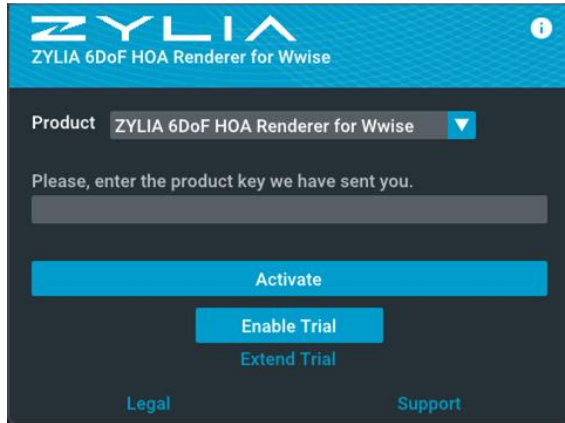
Install



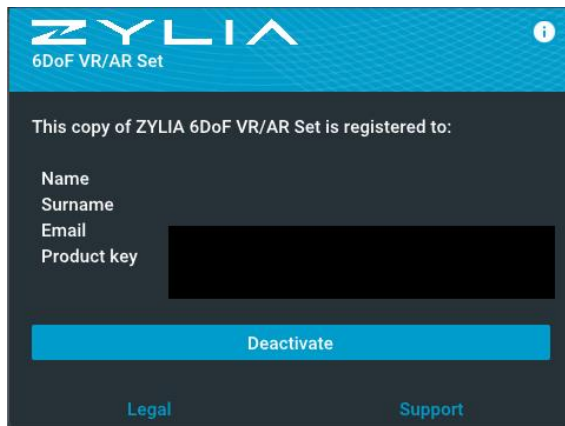
## Activation

**ZYLIA 6DoF HOA Renderer for Wwise** requires activation in order to generate Soundbank which includes the plugin. In order to activate the plugin, use ZYLIA 6DoF HOA Renderer Activation Tool:

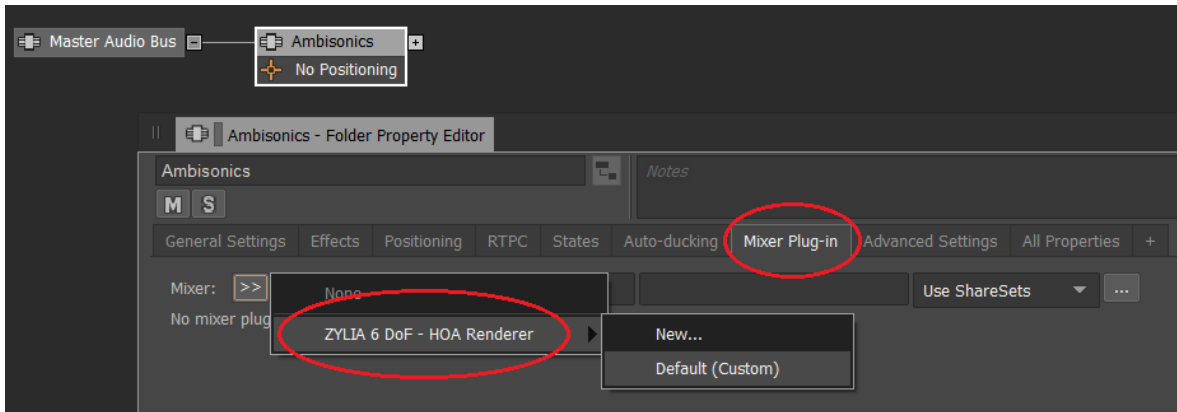
- 1) Open ZYLIA 6DoF HOA Renderer Activation Tool.



- 2) Enter provided product key into text field and click “Activate” button.



You can try the plugin by clicking on **Enable Trial** button. **Without activation, the plugin will act as not installed.**



## Usage

**ZYLIA 6DoF HOA Renderer for Wwise** is a Mixer Plug-In. In order to use the plugin you have to create new Bus with 3th order Ambisonics channel configuration and connect all 6DoF Ambisonics sounds to this bus.

### Main plugin parameters description:

- **Number of arrays**  
– number of Ambisonics files connected to the bus
- **Listener position**  
– position of listener in meters, XYZ coordinates
- **Rotation** –
  - **Yaw** – rotation in vertical axis
  - **Pitch** – rotation in transverse axis

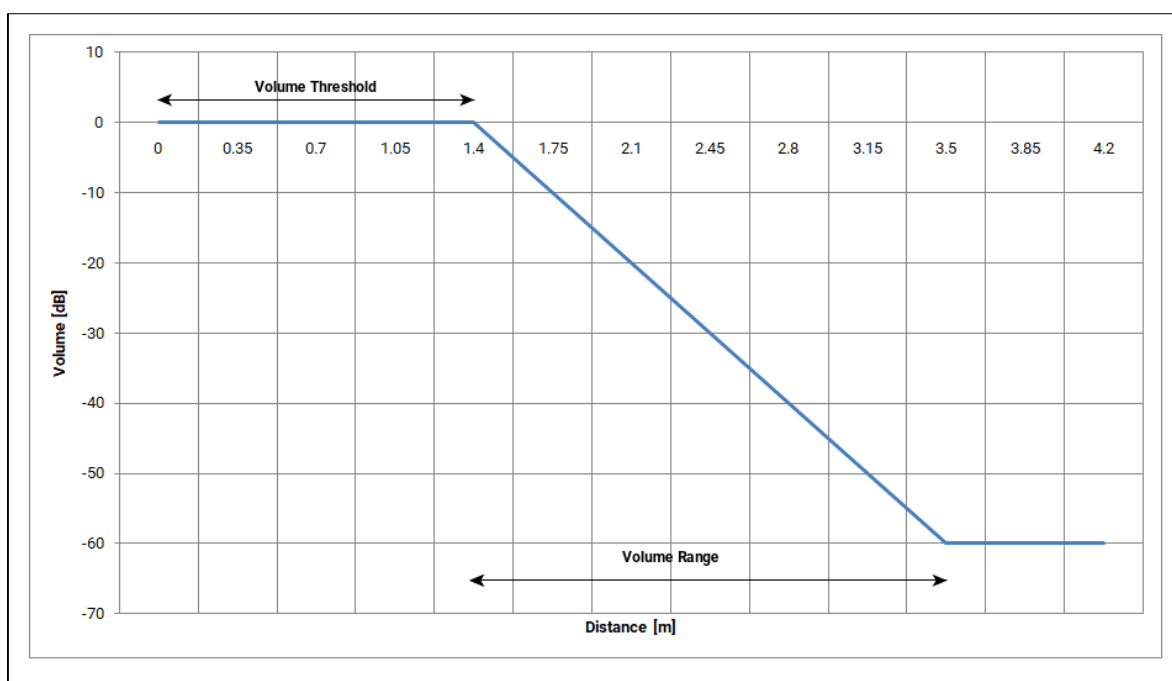


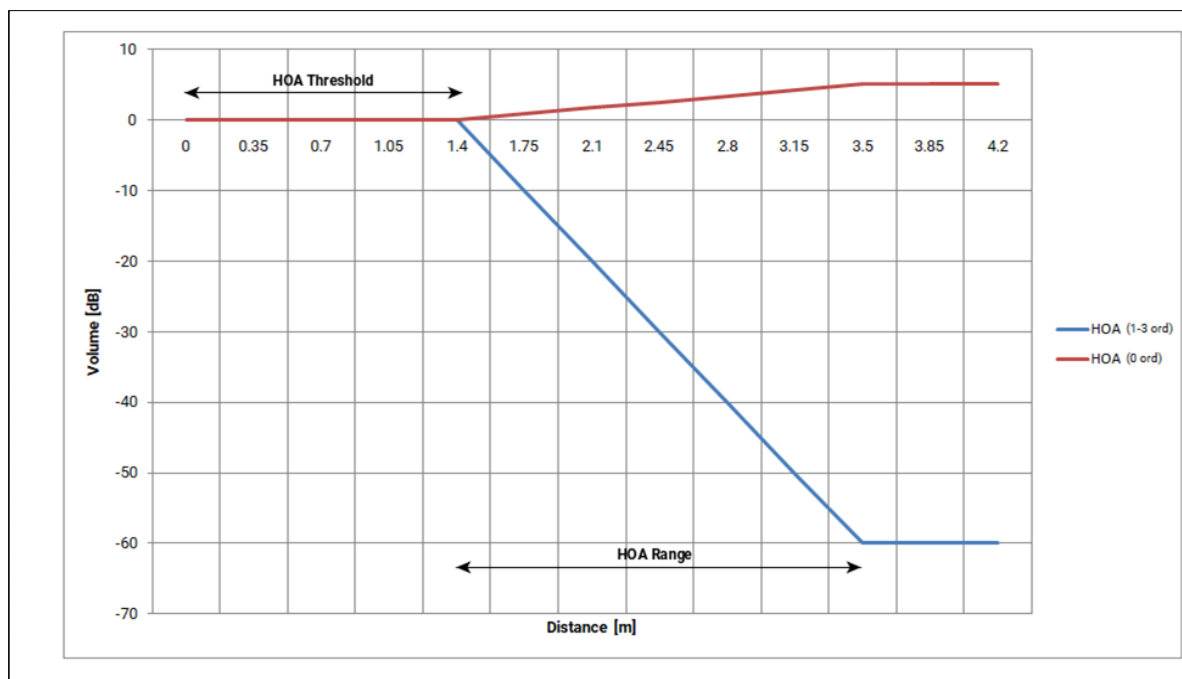


○  
longitudinal axis

**Roll** – rotation in

- **Parameters** – algorithm parameters in meters, see graphs below for details
  - **Volume Threshold**
  - **Volume Range**
  - **HOA Threshold**
  - **HOA Range**

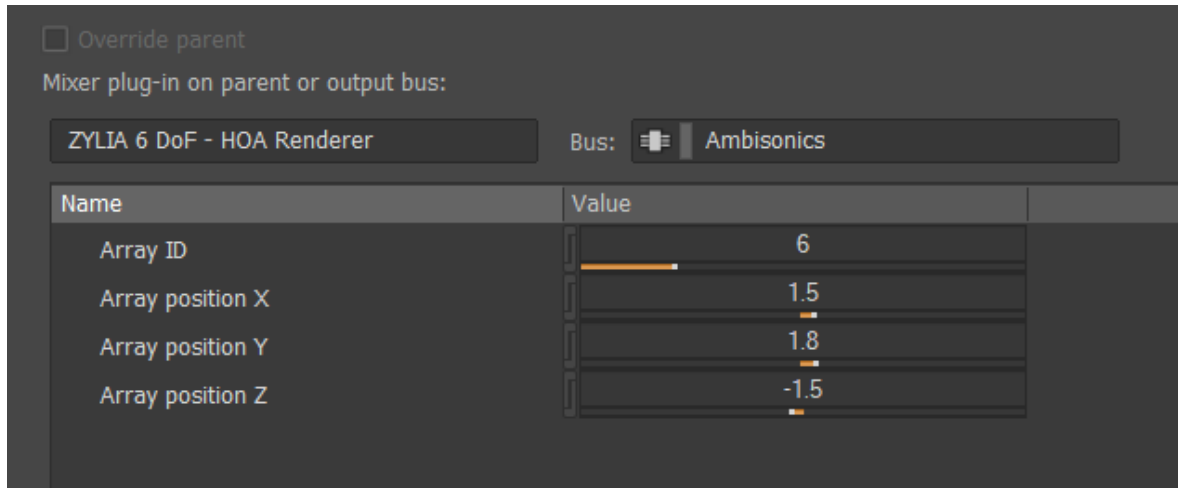




**Attachment plugin parameters description:**

- **Array ID** – number of the array, every Ambisonic file has to have a unique number
- **Array position** – position of array in meters, XYZ coordinates





## Example configuration in Wwise

1. Insert new audio bus as a child bus of Master Audio Bus.
2. In **General Settings** change **Channel Configuration** to **Ambisonics 3rd order**.
3. In **Mixer Plug-in** tab insert new instance of ZYLIA 6DoF HOA Renderer.
4. Import 3rd order ambisonics files into **Interactive Music Hierarchy** or **Actor-Mixer Hierarchy** and set **Output Bus** property of those files to bus created in the first step.
5. In **Mixer Plug-in** tab of audio buses, setup **Array ID** to unique value.
6. Setup **Array position** of audio buses.
7. Change **Number of arrays** parameter in parent bus to number of inserted audio sources.
8. Create new event of type **Play** which starts playback of every audio source.



## Support

In case of any technical problems please check our online support center at [www.zylia.co/support](http://www.zylia.co/support).

If you have any questions regarding ZYLIA 6DoF HOA Renderer for Wwise and its configuration, please contact [support@zylia.pl](mailto:support@zylia.pl).

