

# 3DX Documentation

## Getting Started

### Introduction

3DX delivers unparalleled immersion through the use of 3D audio technology, including

- 360° ambisonic system that captures omnidirectional space
- 3D panner that allows you to freely place sound in 3D space
- binaural that reproduces the sound that reaches the eardrum using headphones

3DX consolidates all the functions required for 3D sound production into one convenient package.

Its unique sound quality and sophisticated workflows inspire creators.

3DX goes beyond high-quality sound field reproduction to establish cutting-edge sound production.



## Features

- Transparent, high-resolution sound without unwanted artifacts.
- Newly designed 3D panner for dynamic sound movement.
- Binaural processor optimized for music production that does not upset your mixing balance.
- Carefully designed Ambisonic processor for precise space reproduction.

## Supported formats

OS	VST3	AU	AAX
macOS	✓	✓	✓
Windows	✓	—	✗

# Quick Start

## Download

Download the latest version of 3DX from [novo-notes.com](https://novo-notes.com).

## Installation

More detailed instructions are available in the [Installation Guide](#).

### VST3

[macOS](#)   [Windows](#)

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1. Double-click the downloaded `.zip` file
2. Move `3DX.vst3` in the unzipped folder into the `/Library/Audio/Plug-Ins/VST3` folder

### AU

[macOS](#)

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1. Double-click the downloaded `.zip` file
2. Move `3DX.component` in the unzipped folder into the `/Library/Audio/Plug-Ins/Components` folder

### AAX

[macOS](#)

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1. Double-click the downloaded `.zip` file

2. Move `3DX.aaxplugin` in the unzipped folder into the `/Library/Application Support/Avid/Audio/Plug-Ins` folder

## License Activation

Once you have purchased, you will receive a license by email. Press the `Activate` button.

If you have not yet purchased, press `Start Trial`.

See the [License Activation](#) page for details.



## Get started with 3DX Mix!

When you have finished the activation, you are ready to enjoy the world of 3DX sound.



TIP

If you would like specific examples, see [examples page](#) in this document.

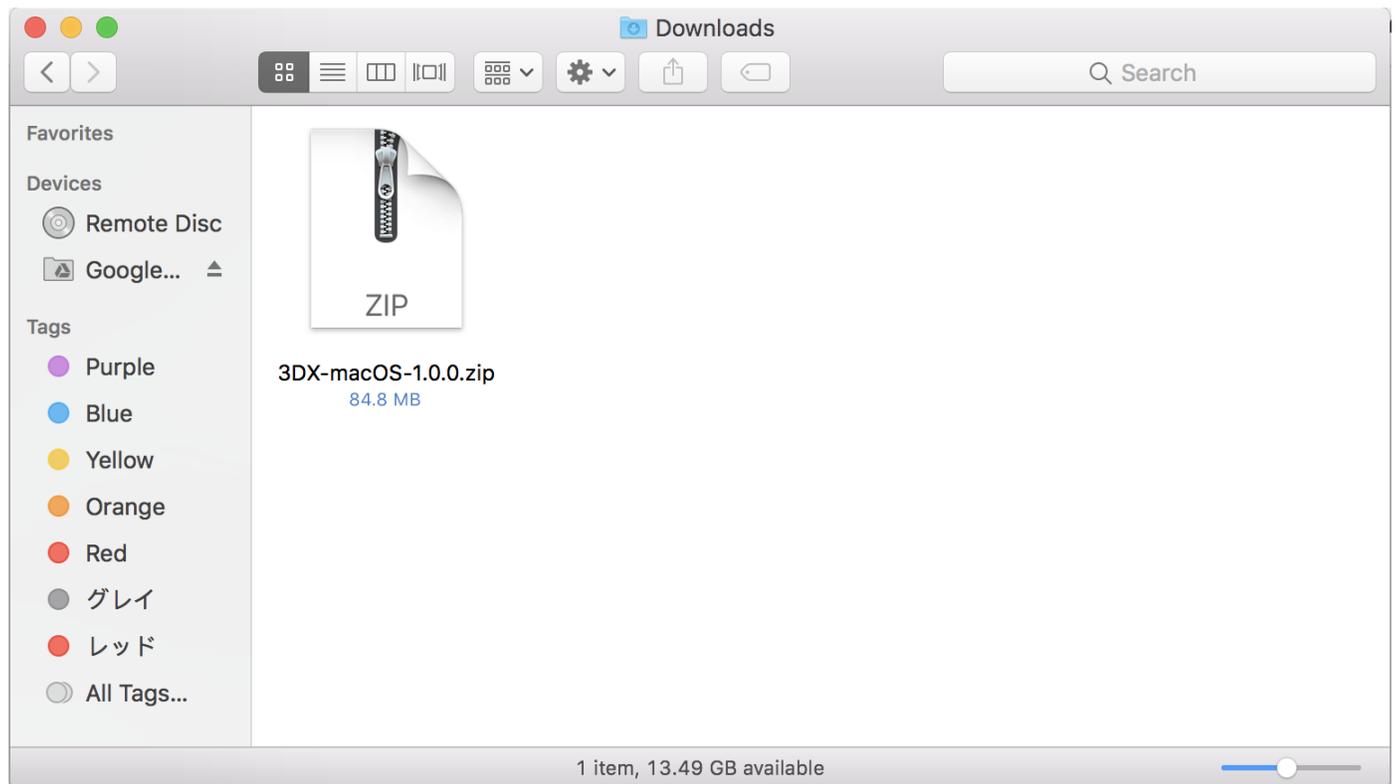
# Installation

## macOS

The following is a guide on how to install vst3. You can install AU and AAX in the same way, but the installation folder is different.

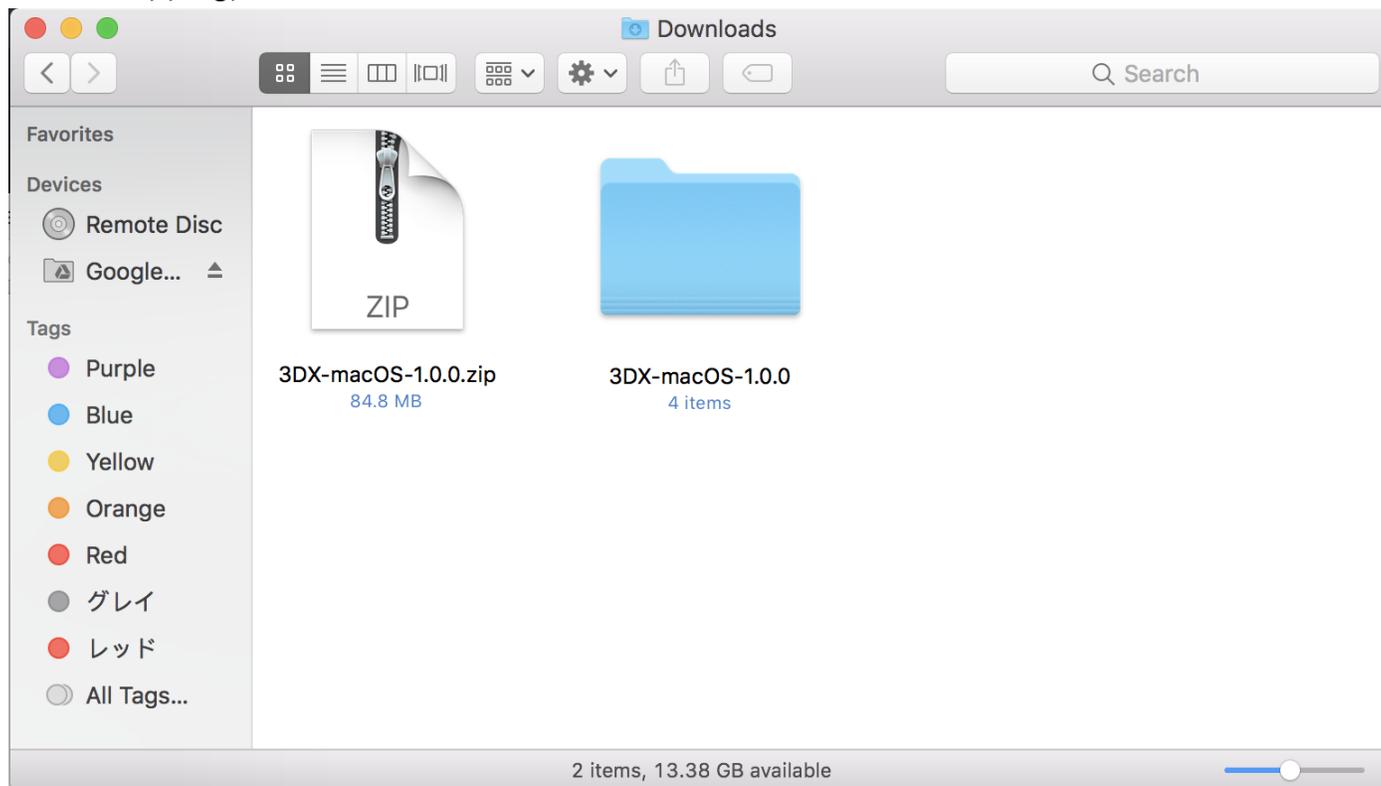
### Install the VST3 plug-in

#### 1. Unzip the downloaded zip file

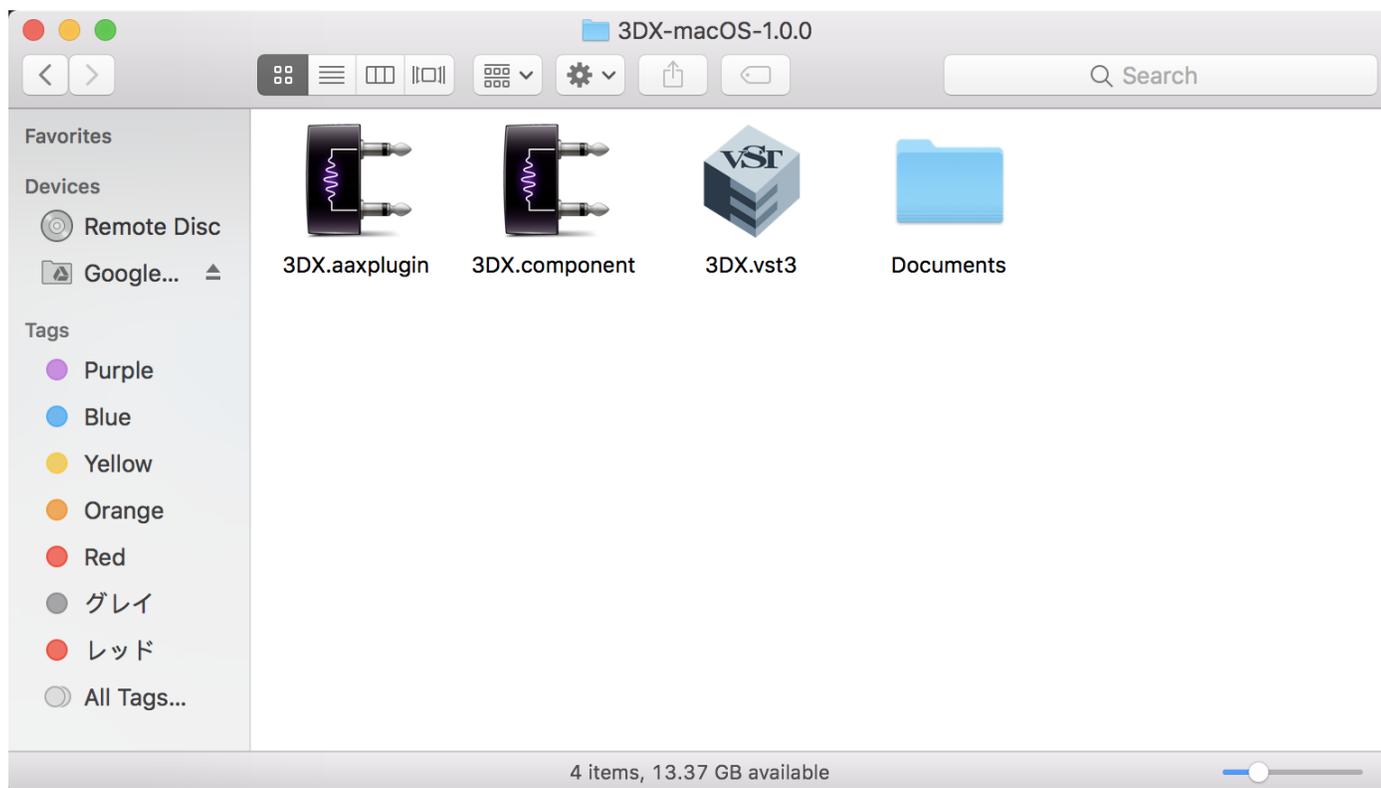


Double-click to unzip it.

After unzipping, double-click the folder to check the files inside.



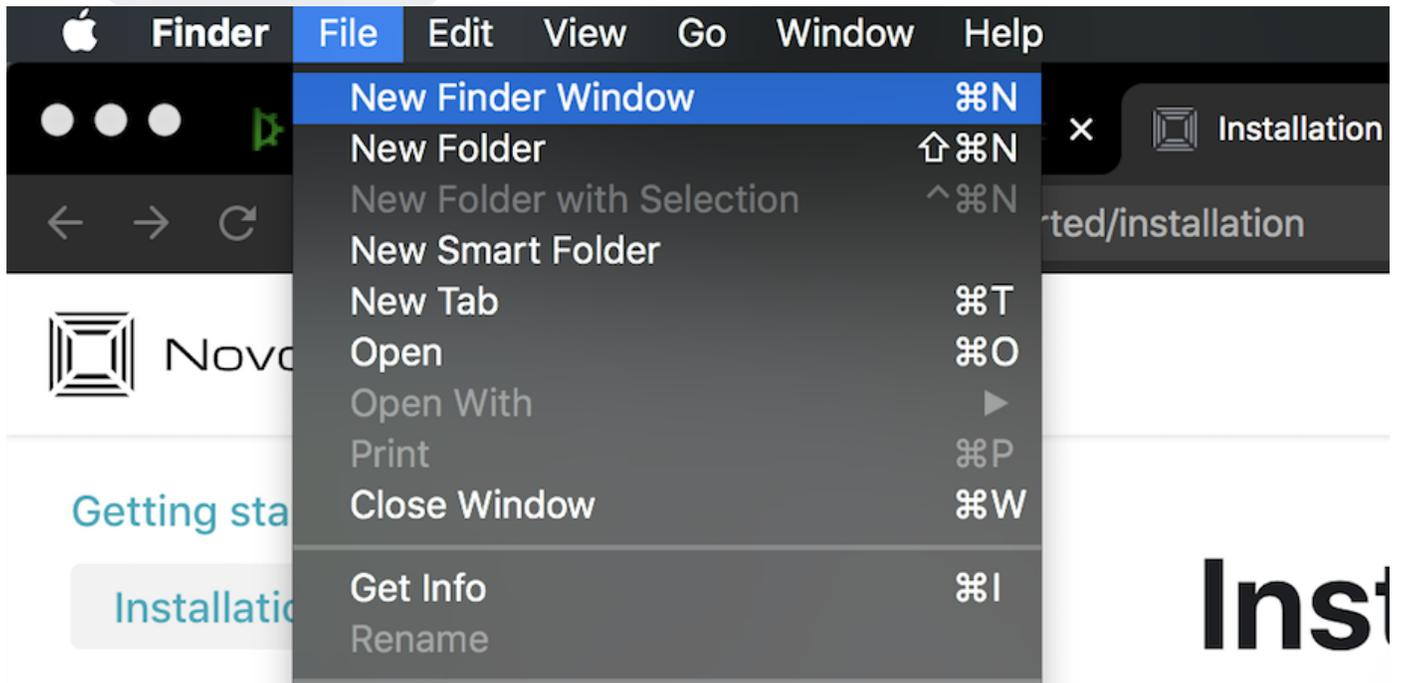
There is a 3DX.vst3 file in the folder.



Move this `3DX.vst3` file to the installation folder (see steps 2 - 4).

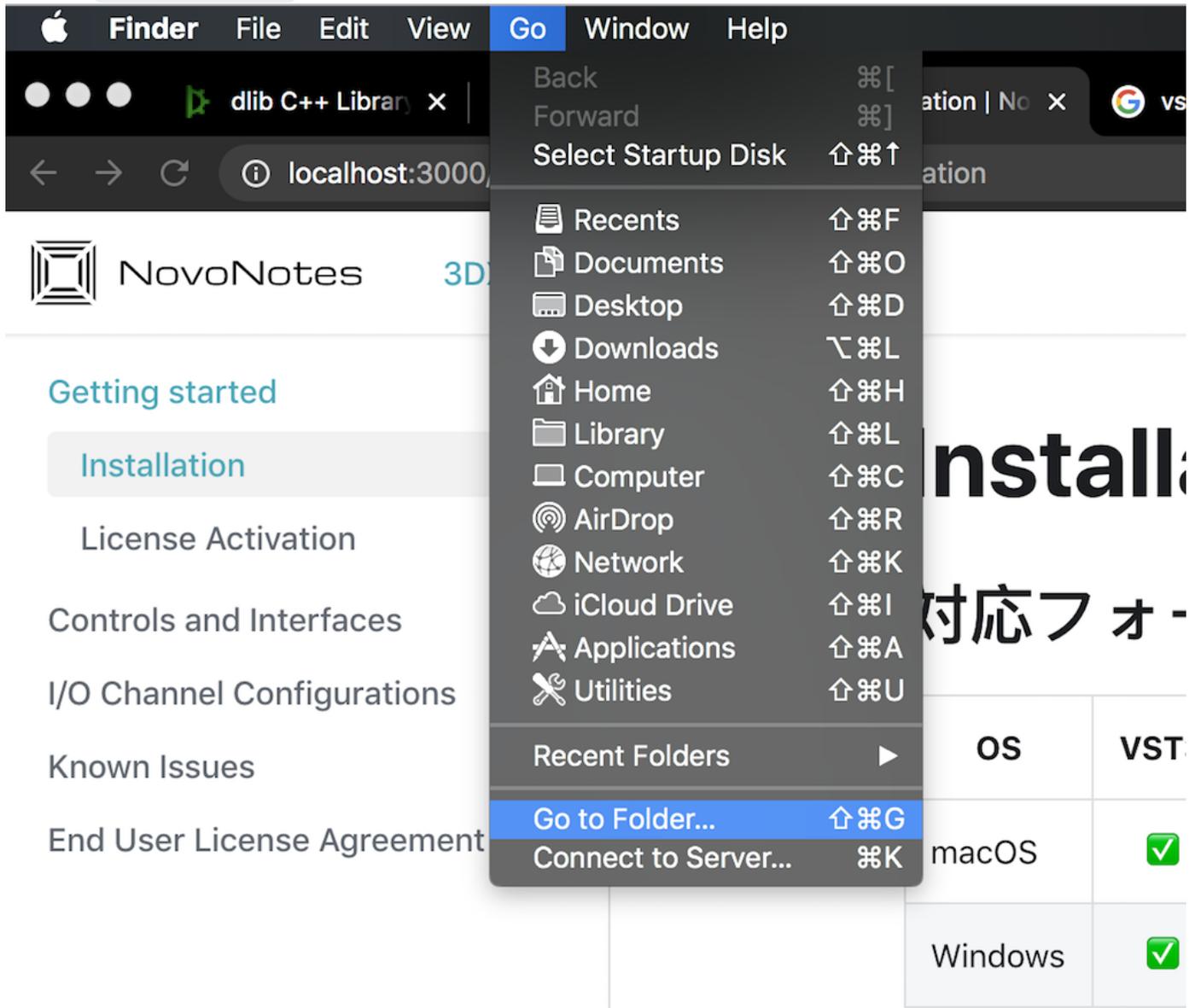
## 2. Display another Finder Window

Select **New Finder Window** from the menu bar at the top of the screen.



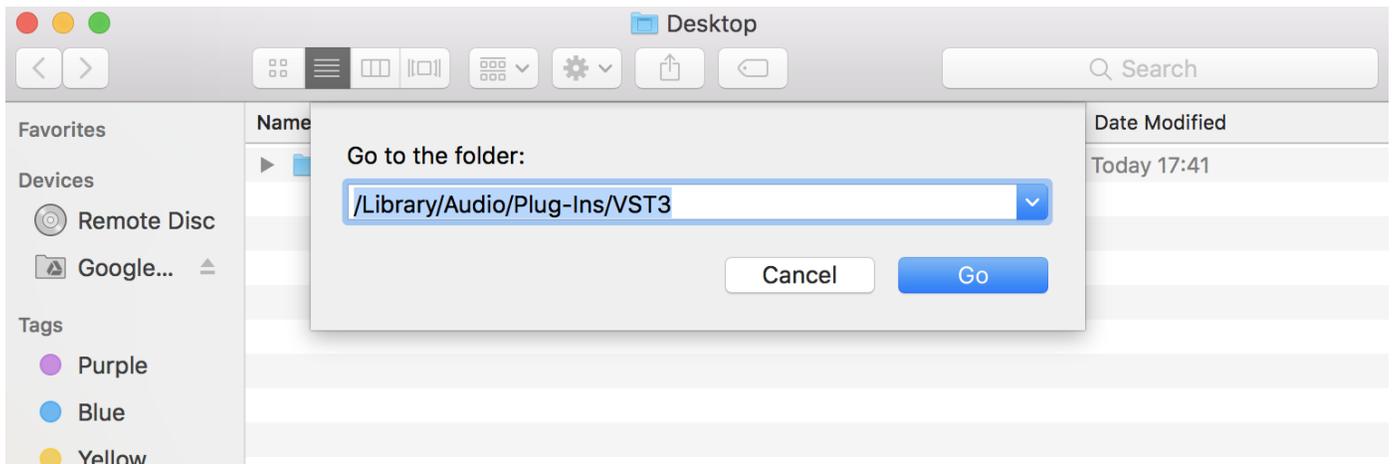
### 3. Move to the installation destination folder

Select **Go to folder** from the menu bar at the top of the screen.



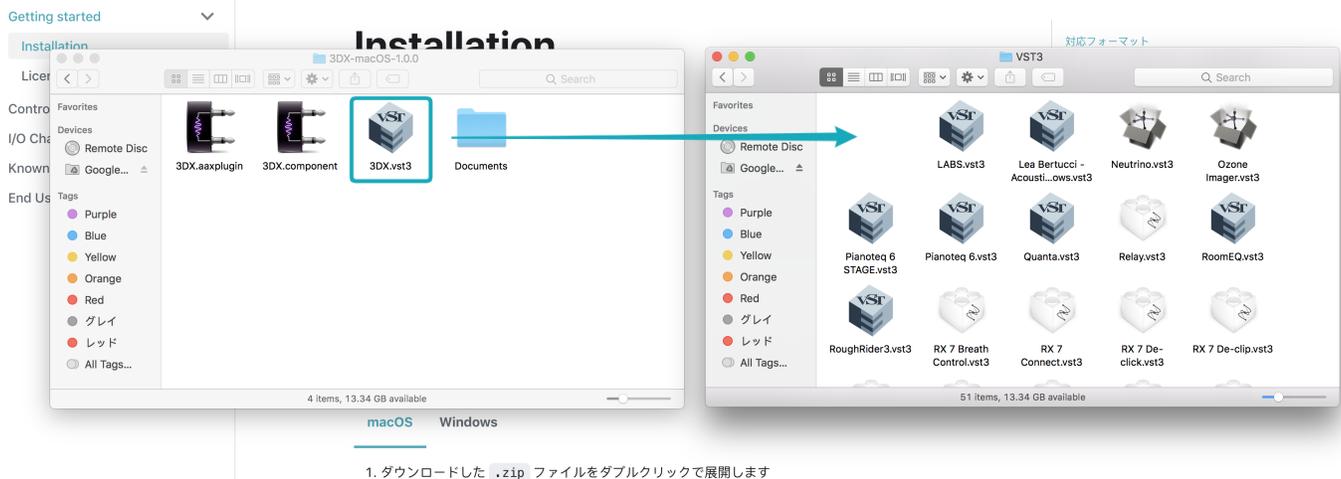
A screen like the one below will appear. Copy the installation destination below and enter it to the textbox.

```
/Library/Audio/Plug-Ins/VST3
```

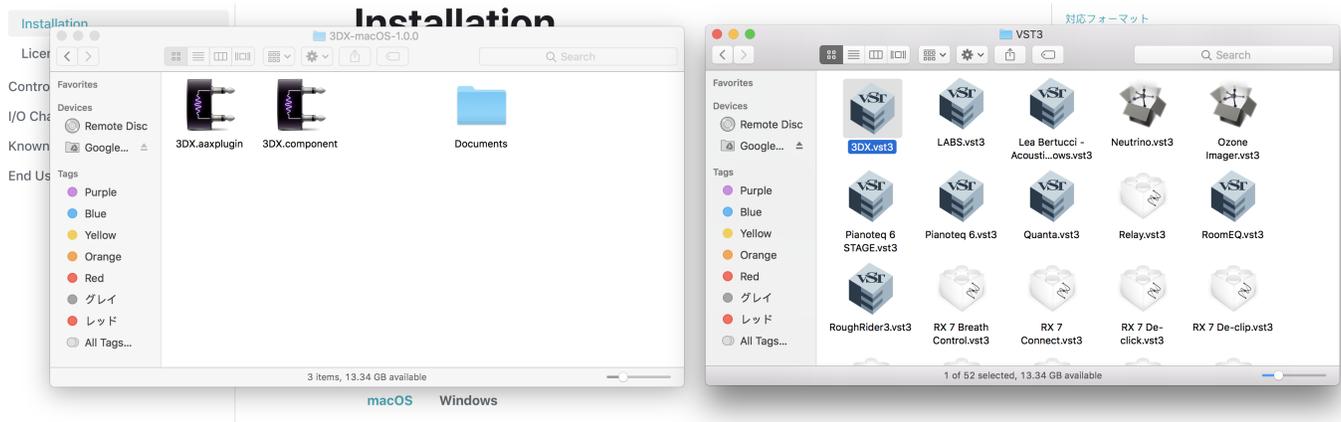


#### 4. Moving the 3DX.vst3 file

Drag-and-drop the `3DX.vst3` file to the newly displayed destination folder.



If the files move as shown below, the installation is complete.



## Install the AU plug-in

Follow the same procedure to move the `3DX.component` file to the following folder.

/Library/Audio/Plug-Ins/Components

## Install the AAX plug-in

Follow the same procedure to move the `3DX.aaxplugin` file to the following folder.

/Library/Application Support/Avid/Audio/Plug-Ins

### CAUTION

#### If the plug-in fails to load in ProTools

macOS 10.15 Catalina or later may require execution permission due to `security and privacy` in System Preferences. Click `Open` as is in the screen below.



## For Windows

Right-click the downloaded `.zip` file and select `Extract All`.

Copy `3DX.vst3` to the installation folder below.

```
C:\Program Files\Common Files\VST3
```

## License Activation

Purchasers will receive a license key by email.

Enter the license key on the Activation screen that appears when you start 3DX, and press the `activate` button.

### NOTE

If you have not yet purchased the product, you can still try the trial version by pressing the `Start Trial` button. The trial version has all the features of the purchased product, but noise output will end 5 minutes after startup. You will have to reload the plug-in to use it again for a further 5 minutes.

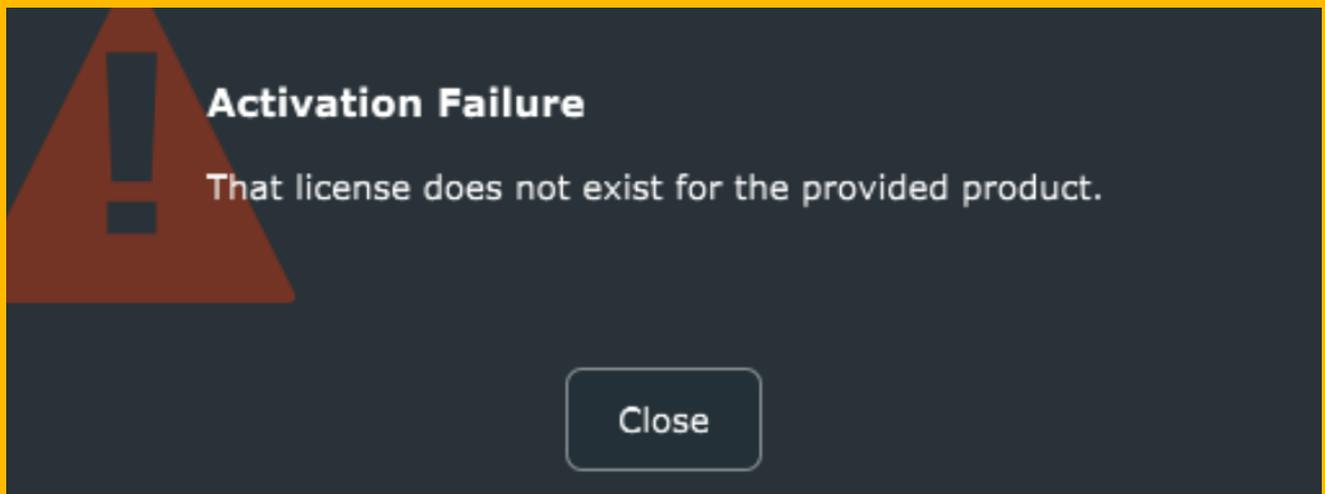


## CAUTION

If activation fails and the following error is displayed, check the following and try again.

- Has the full license key been entered correctly?
- Have extra characters such as white space been included in the license key?

If the problem persists, please contact us at [support@novo-notes.com](mailto:support@novo-notes.com).



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# Controls And Interfaces

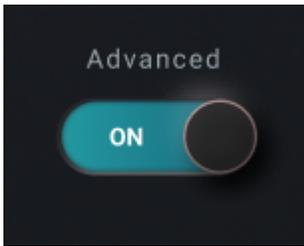
## Overview



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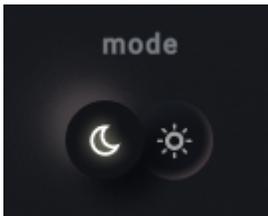
## Mode

Normal/Advanced mode switch



Switch between normal mode and advanced mode.

## Light/Dark mode switch

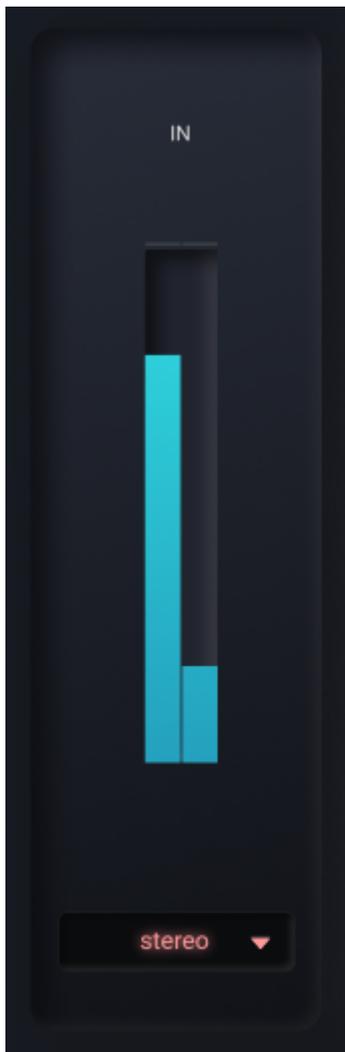


Select UI color theme from either light or dark mode.

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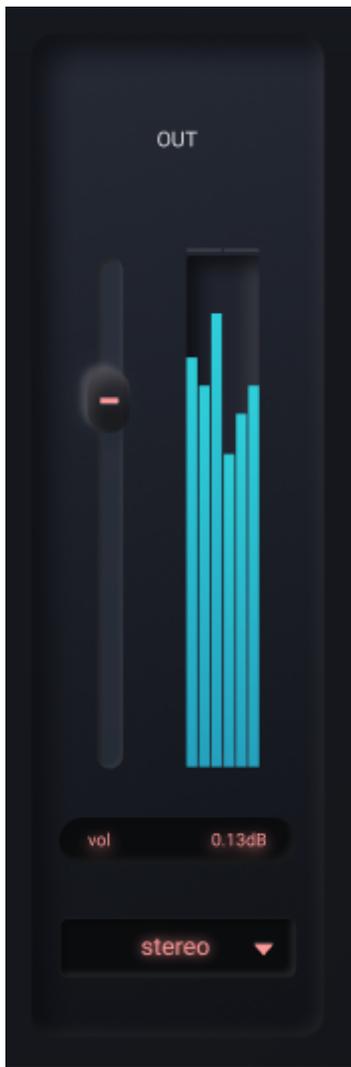
# LevelMeter

## Input



Input level meter. You can change the input channel settings.

## Output



Output level meter. You can change the output channel settings. Control the output level with the slider.

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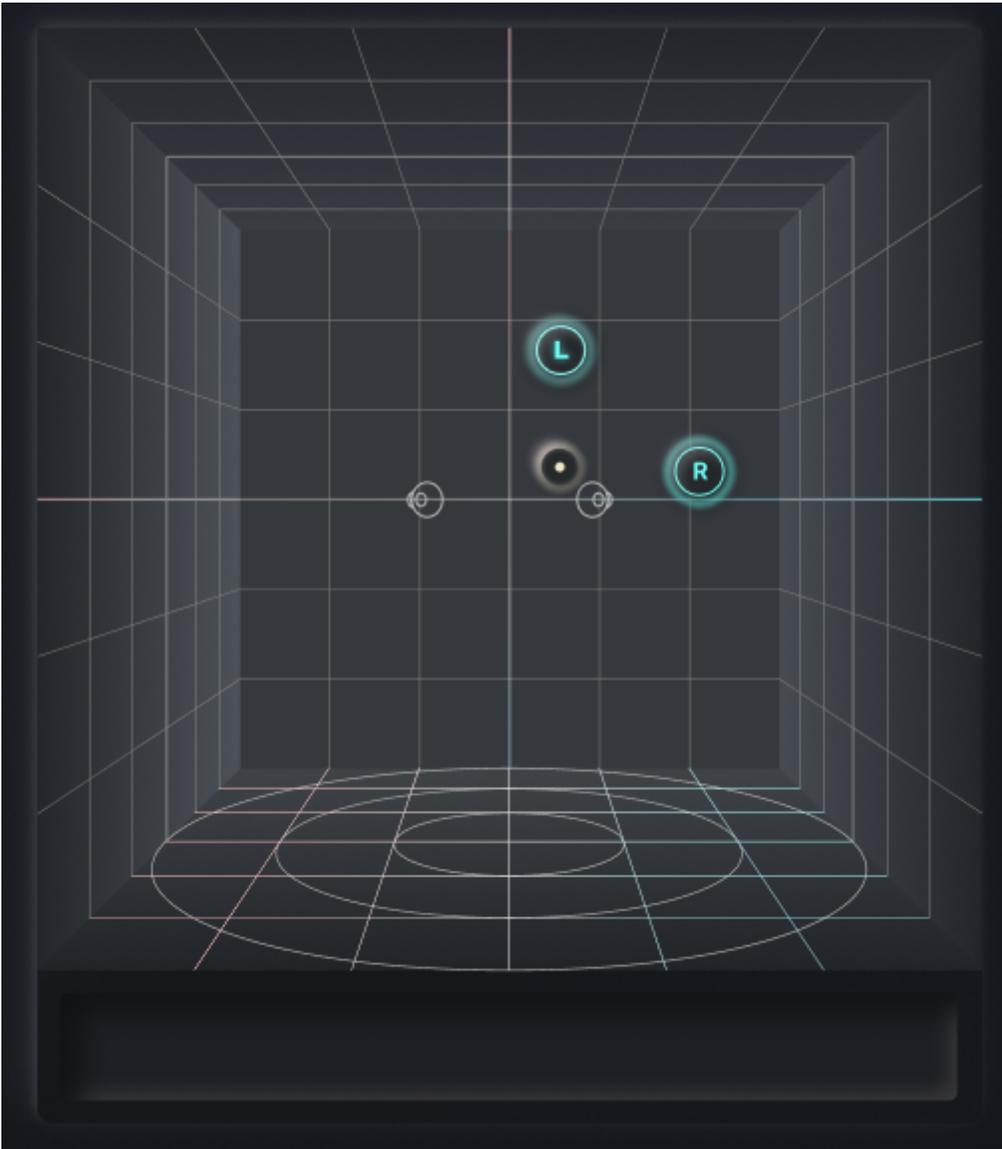
# LeftPan



You can adjust the front / back and left / right positions of the sound source. When using Ambisonic for input, the entire sound field can be rotated.

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## RightPan



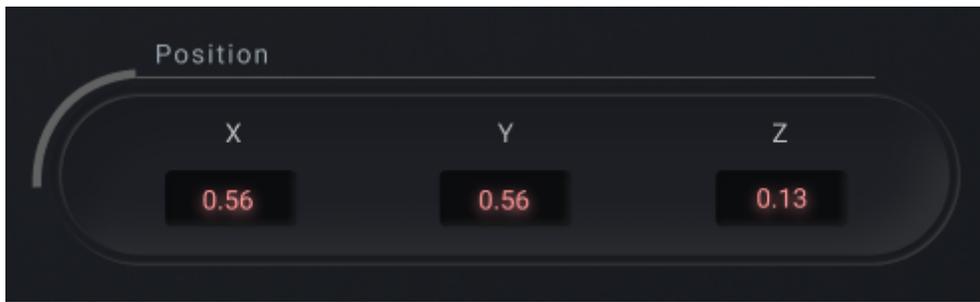
You can adjust the vertical and horizontal positions of the sound source. When using Ambisonic for input, the entire sound field can be rotated.

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# Position

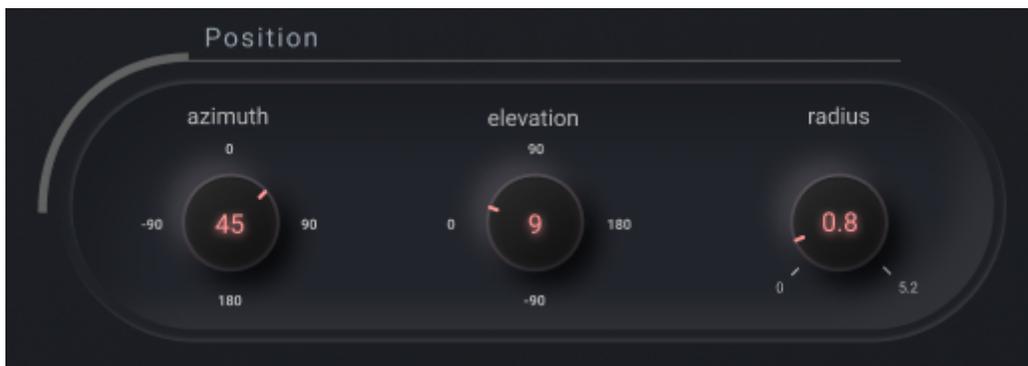
Control the position of the sound source. There are two types of controls, number boxes and knobs.

## Number box



If you need linear control, use the x, y, z number boxes.

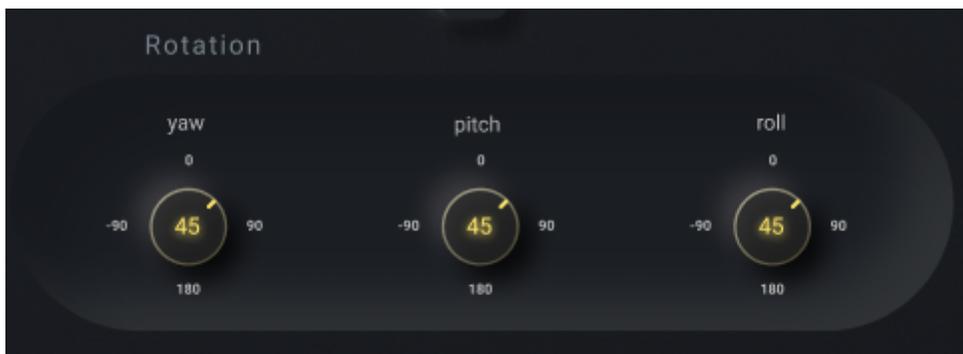
## Knob



If you need circular control, use the azimuth, elevation, radius knobs.

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## Rotation



You can control the rotation of the sound source. When using Ambisonic for input, the entire sound field can be rotated.

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# Scale



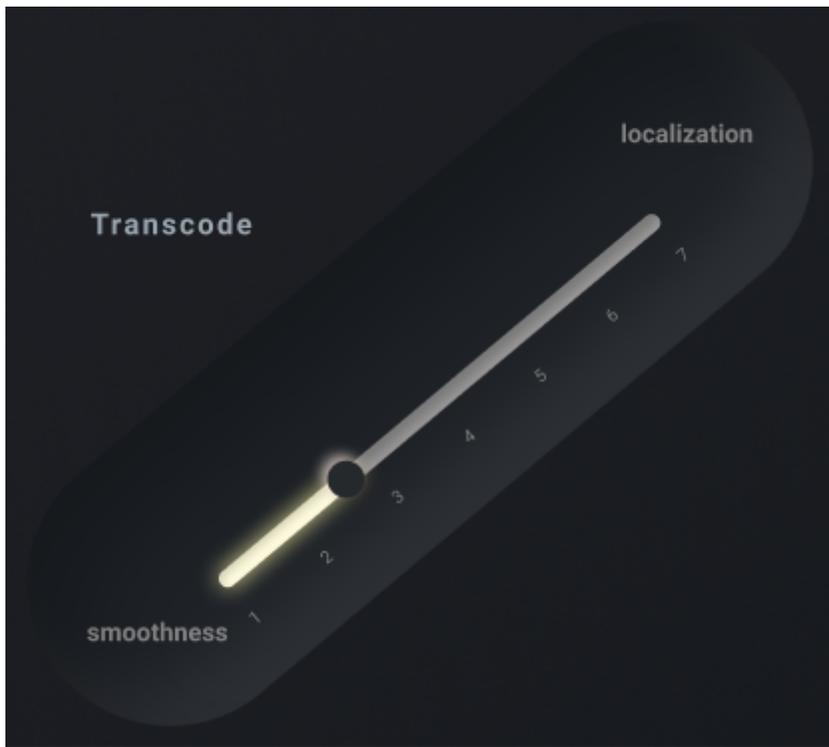
You can control the relative position of each channel source from the handle.

## **i** NOTE

You can operate each parameter at the same time by using the `link` button between the knobs.

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# Transcode

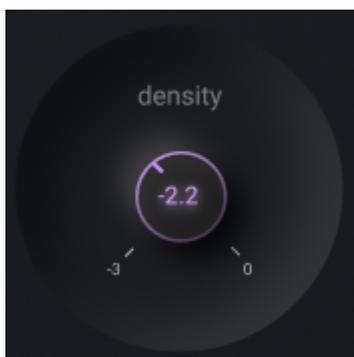


Even if you are using a channel setting other than Ambisonic, you may need to perform Ambisonic encoding / decoding internally. This process is called transcoding, and it is a slider for setting the Ambisonic order used at that time.

 TIP

The lower the Ambisonic order, the smoother and more connected the sound field. The higher the order, the better the localization expression.

# Density



You can adjust the density feeling of space at the time of Ambisonic use.

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# Distance



You can control the curve of distance attenuation. The volume of **Gain** decreases according to the distance from the center. The **EQ** suppresses high frequencies above 4kHz depending on the distance from the center.

## **i** NOTE

By using the **link** button , it is possible to operate the Gain and EQ parameters at the same time.

---

# Parameters

Parameters that can be automated:

Parameter Name
Density
Transcoding Ambisonic Order
Master Gain
X
Y
Z
Yaw
Pitch
Roll
Width
Height
Depth
Width Height Link

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Parameter Name
Height Depth Link
Depth Width Link
Distance Attenuation Link

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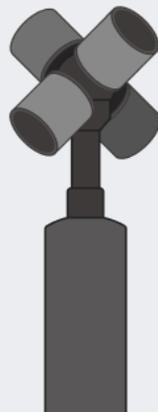
# Examples

## Ambisonic Microphones

### Introduce ambisonic microphones into Mix

To use Ambisonic sound for your Mix, you need 3DX as well as a converter plug-in distributed by microphone manufactures. Convert from A-format to B-format and input to 3DX.

**Mic Input**



A-format

4ch



## A-B Converter



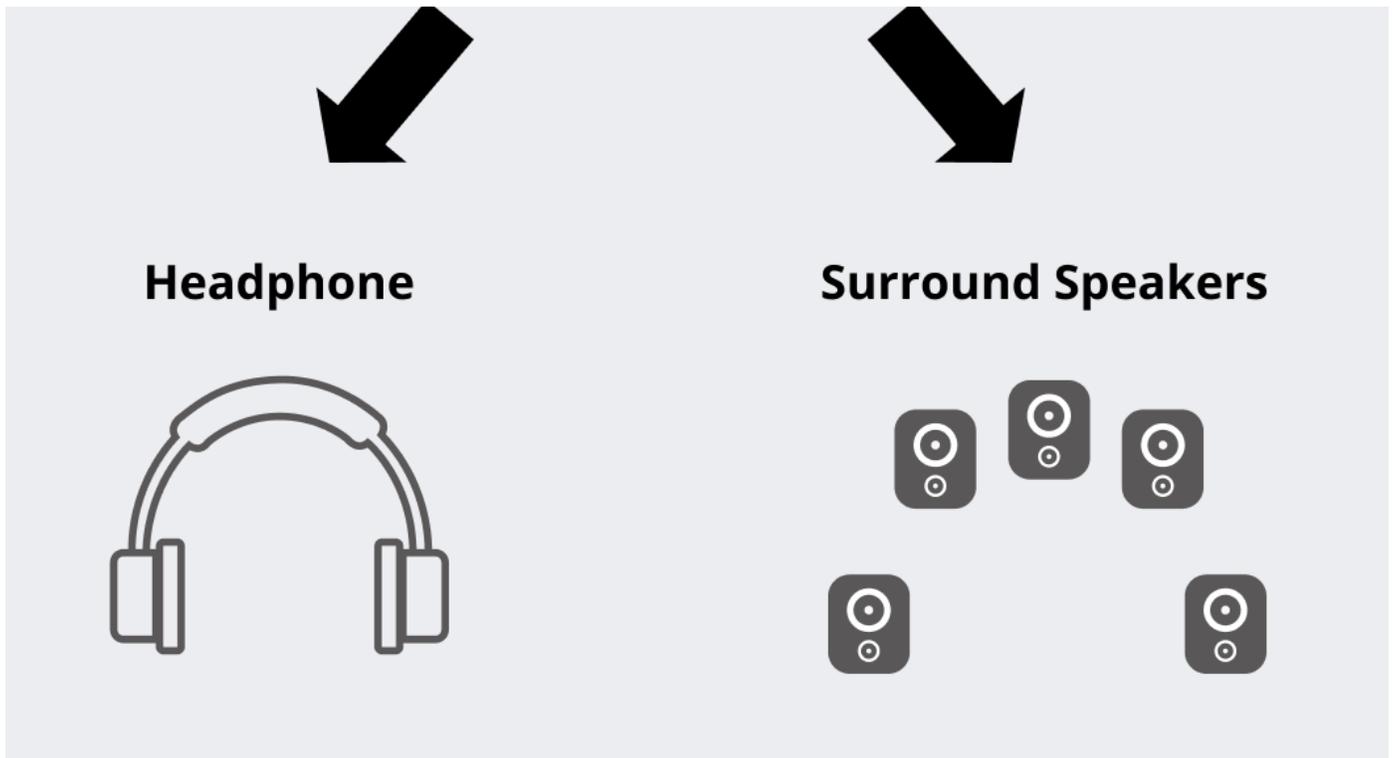
B-format

4ch



## NovoNotes 3DX





See the [list of A-B Converters](#) below for specific configuration examples.

**NOTE**

Signal output from the tetrahedral microphone capsule is called A-format in Ambisonics. On the other hand, 3DX input is called B-format. Since the conversion process from A-format to B-format includes microphone correction processing, the plug-ins of each manufacturer are recommended for accurate spatial reproduction.

## A-B Converter List

Brand	Microphone	A-B Converter	Output setting of Converter	Input setting of the 3DX
SOUNDFIELD	SPS200	<a href="#">SURROUNDZONE2</a>	B-format	1st Order Ambisonic (FuMa)
SENNHEISER	AMBEO VR Mic	<a href="#">AMBEO A-B Converter</a>	AmbiX	1st Order Ambisonic

Brand	Microphone	A-B Converter	Output setting of Converter	Input setting of the 3DX
Rode	NT-SF1	SOUNDFIELD BY RODE PLUGIN	B-format (AmbiX)	1st Order Ambisonic
ZOOM	H3-VR	* No plugin available	-	-

\* If you use the H3-VR, you can substitute by the **AMBISONICS CORRECTION FILTER** of AMBEO A-B Converter to Off.

# I/O Channel Configs

Details about channel settings are as follows:

Name										
	1	2	3	4	5	6	7	8	9	10
<b>Mono</b>	C									
<b>Stereo</b>	L	R								
<b>Binaural(HPL)</b>	L	R								
<b>LRS</b>	L	R	B							
<b>LCR</b>	L	C	R							
<b>Quad</b>	L	R	Ls	Rs						
<b>LRCS</b>	L	R	C	B						

Name										
	1	2	3	4	5	6	7	8	9	10
Pentagonal	L	C	R	Ls	Rs					
5.0ch	L	R	C	Ls	Rs					
Hexagonal	Ls	Rs	SL	SR	Ls	Rs				
6.0ch(Music)	L	R	Ls	Rs	SL	SR				
6.0ch	L	R	C	Ls	Rs	B				
5.1ch	L	R	C	LFE	Ls	Rs				
7.0ch(SDDS)	L	R	C	Ls	Rs	LC	RC			
7.0ch	L	R	C	SL	SR	Ls	Rs			
6.1ch(Music)	L	R	LFE	Ls	Rs	SL	SR			
6.1ch	L	R	C	LFE	Ls	Rs	B			
8ch Cube	BFL	BFR	BRL	BRR	TFL	TFR	TRL	TRR		
Octagonal	L	R	C	Ls	Rs	B	SL	SR		
7.1ch(SDDS)	L	R	C	LFE	Ls	Rs	LC	RC		
7.1ch	L	R	C	LFE	SL	SR	Ls	Rs		
7.0.2ch	L	R	C	SL	SR	Ls	Rs	TSL	TSR	
5.0.4ch	L	R	C	Ls	Rs	TFL	TFR	TBL	TBR	
Auro 5.1.4ch	L	R	C	LFE	Ls	Rs	TFL	TFR	TBL	TBR

Name										
	1	2	3	4	5	6	7	8	9	10
7.1.2ch	L	R	C	LFE	SL	SR	Ls	Rs	TSL	TSR
5.0.5ch	L	R	C	Ls	Rs	TFL	TFR	TBL	TBR	Top
5.1.4ch	L	R	C	LFE	Ls	Rs	TFL	TFR	TBL	TBR
Auro 5.1.5ch	L	R	C	LFE	Ls	Rs	TFL	TFR	TBL	TBR
7.0.4ch	L	R	C	SL	SR	Ls	Rs	TFL	TFR	TBL
5.1.5ch	L	R	C	LFE	Ls	Rs	TFL	TFR	TBL	TBR
Auro 7.1.4ch	L	R	C	LFE	Ls	Rs	Ls	Rs	TFL	TFR
Auro 5.1.6ch	L	R	C	LFE	Ls	Rs	TFL	TFR	TBL	TBR
7.0.5ch	L	R	C	SL	SR	Ls	Rs	TFL	TFR	TBL
7.1.4ch	L	R	C	LFE	SL	SR	Ls	Rs	TFL	TFR
Auro 7.1.5ch	L	R	C	LFE	Ls	Rs	Ls	Rs	TFL	TFR
7.1.5ch	L	R	C	LFE	SL	SR	Ls	Rs	TFL	TFR
Auro 7.1.6ch	L	R	C	LFE	Ls	Rs	Ls	Rs	TFL	TFR
22.2ch	L	R	C	LFE	Ls	Rs	LC	RC	B	LFE

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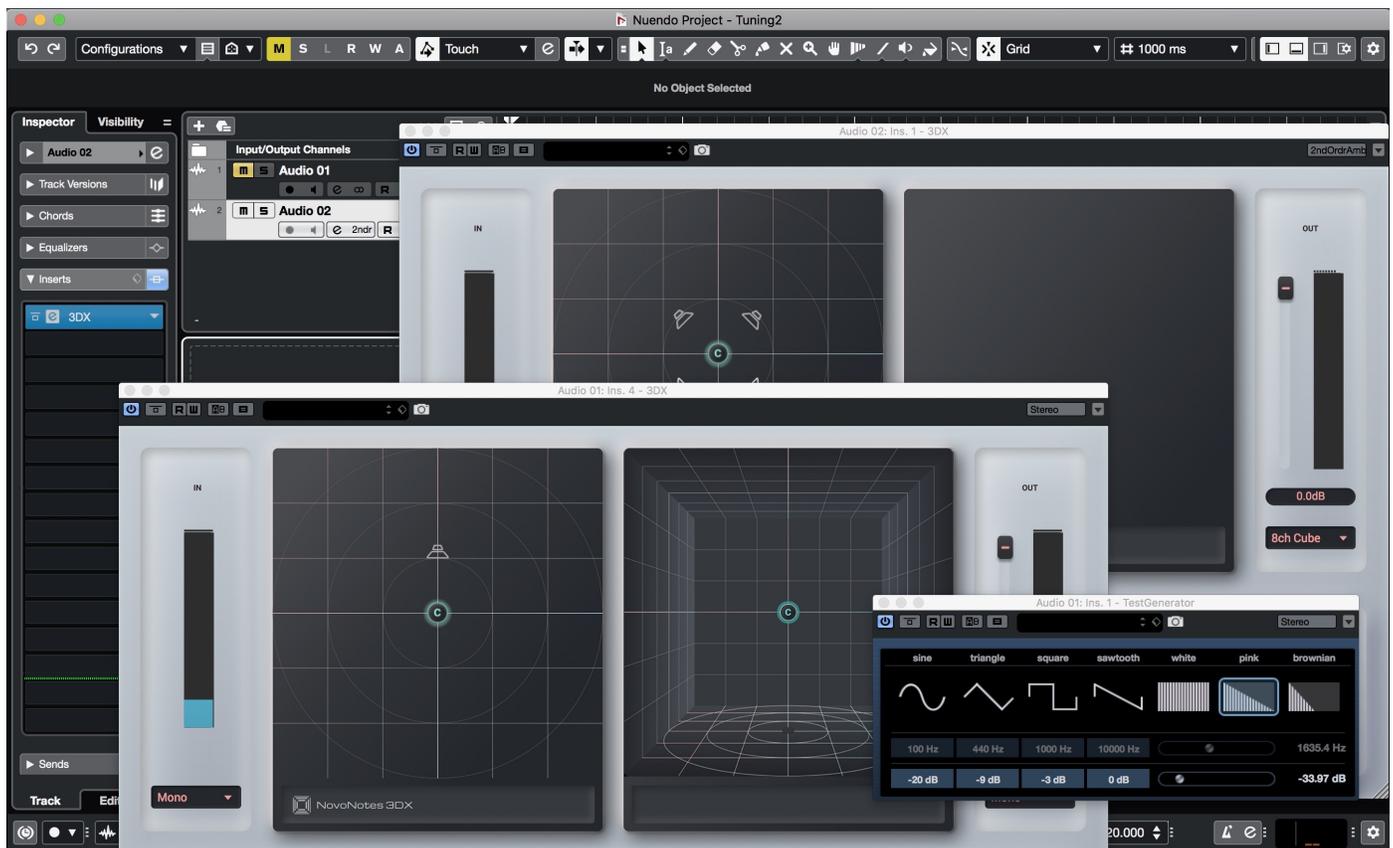
## Known Issues

# Plurality of plug-in window is unavailable

OS	DAW	3DX
macOS 10.13.6	Nuendo 10.3	3DX 1.0.0

If you use 3DX as VST3 in combination with the above version, you cannot see multiple plug-in windows of the [Right Pan Area](#).

The DAW freezes when you operate a plug-in that does not displaying the Right Pan Area.



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Revised on 12/16/2020