



# Dolby Atmos Production Suite v3.2

## Release Notes

23 May 2019

# Notices

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# 1


## Introduction to the release notes

This documentation covers installation steps, software changes, and known issues for Dolby Atmos Production Suite v3.2.

- [About this documentation](#)
- [New in version 3.2](#)
- [New in previous versions](#)
- [Dolby Atmos Production Suite software package](#)
- [Contacting Dolby](#)

## 1.1 About this documentation


This documentation is for engineers, sound designers, and others who install or use Dolby Atmos Renderer software for editorial, pre-mix, and sound design workflows when authoring sound for digital home theater or VR, and creating Dolby Atmos masters.

 **Note:** This documentation also includes a list of features and improvements added in recent previous versions. For complete information about v3.x features, see the *Dolby Atmos Renderer Guide*.

## 1.2 New in version 3.2

Dolby Atmos Renderer v3.2 includes new features, improvements, and fixes for using Dolby Atmos Renderer software to author content in Dolby Atmos.

- Ability to open and export IMF IAB *.mxf* files
- Array mode (Dolby Atmos Mastering Suite only):
  - Enables Home Theater content to be created in rooms that have small speaker arrays. This mode can be activated in the **Room Setup** window.

 **Note:** When working in array mode, you can monitor the physical layout (which you define in the **Speaker setup** page in the **Room setup** window). Additionally, the Renderer provides channel-based renders for monitoring. These are based on the physical layout. For example, with a physical layout using all speakers and arrays, these channel-based renders are available: 7.1.2, 7.1, 5.1.2, 5.1, and 2.0.

- Includes control of EQ, delays, and gains of arrays (when in array mode)
- Downmix settings

The 5.1 downmix type is now contained within the master. It can be written using Dolby Atmos Mastering Suite or read by both Dolby Atmos Mastering Suite and Dolby Atmos Production Suite.

- With Dolby Atmos Mastering Suite, these settings can be accessed and changed in the **Trim and Downmix Controls** window.
- With Dolby Atmos Production Suite, these settings are read-only, and can be accessed in the **5.1 Downmix Controls** window.
- Improvements to overall performance and CPU usage
- Smoother transitions between monitoring options.
- Headphone limiter

A limiter is applied to the headphone output. Limiting affects monitoring at the outputs, and is also applied to binaural re-renders. Peak hold can be cleared by clicking on the meter display.

- System settings automatically backed up when upgrading from previous versions of the Renderer. Settings are backed up as an *.atmoscfg* file that is saved on your local drive.
  - On Mac: */Users/username/Library/Application Support/Dolby/Dolby Atmos Renderer/Backups*
  - On Windows: *C:\ProgramData\Dolby\Dolby Atmos Renderer\Backups*
- VR mode removed

VR mode, VR panner plug-ins, and the VR transcoder have been removed from the Dolby Atmos Renderer.

- Playing back DAW audio from the **Speaker calibration** window:

External signal fed into the Renderer can play back when applying gain, delay, or EQ in the **Speaker calibration** window. In previous versions of the Renderer, external audio would be muted when the **Speaker calibration** window was open.

Note: When the **Speaker calibration** window is open, the Renderer input configuration is temporarily set to its default. When the window is closed, the Renderer returns to the previous settings.

1. Set the DAW to output audio (for example, a music track) into the Renderer (based on the Renderer default input configuration). For example, output the audio to Renderer channels 1 and 2 (or 11 and 12) to play back a stereo track.
2. With the **Speaker calibration** window open, play the audio from the DAW.

You can adjust gain, delay, and EQ settings as desired.

## 1.3 New in previous versions

Dolby Atmos Renderer v3.2 includes new features, improvements, and fixes that were included with previous versions.

### 1.3.1 New in version 3.0.2

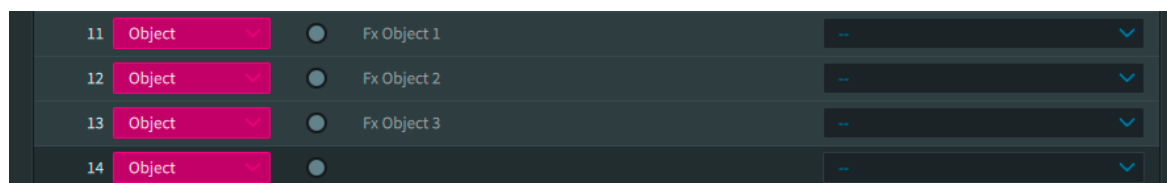
Dolby Atmos Production Suite v3.0.2 includes new features, improvements, and fixes for using Dolby Atmos Renderer software to author content in Dolby Atmos.

- Supports control of level, mutes and dims via an Avid System 5 digital audio system (or other control surface using commslib).
- Binaural rendering performance at 96 kHz improved.
- Improved trim functionality. (Dolby Atmos Mastering Suite only)
- Room EQ can now be used to set bass managed speakers. (Dolby Atmos Mastering Suite only)

### 1.3.2 New in version 3.0.1

Dolby Atmos Production Suite v3.0.1 includes new features, improvements, and fixes for using Dolby Atmos Renderer software to author content in Dolby Atmos.

- Ability to automatically number object descriptions sequentially (in the **Input configuration** dialog **Description** column).



You can select whether the first object description starts with the number 1 or a defined number and the subsequent highlighted objects will update sequentially. You can apply numbering to an empty **Description** field or at the end of a text string in the field.

To automatically number object descriptions sequentially:

1. Choose **Window > Input Configuration**.

Alternatively, you can press Command + I (Mac) or Control + I (Windows)

2. Highlight the desired input rows.

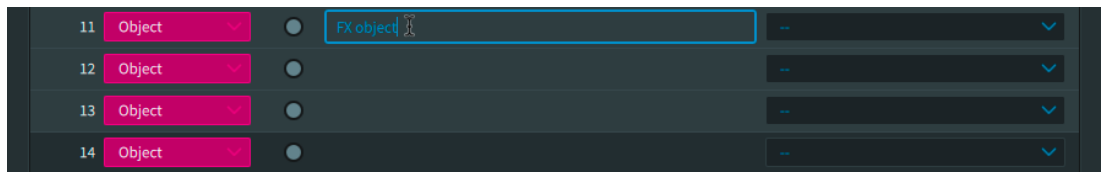
- Shift-click on inputs to select contiguous inputs.
- Command-click on inputs to make noncontiguous selections.

3. Click in the **Description** field for the first object.

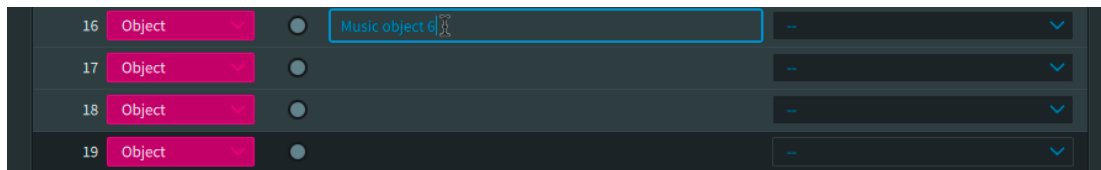
4. Perform one of these tasks:

- a. If you want the sequence of numbers to start with the number 1, do not include a number at the end of the text string.

Alternatively, you can type the number 1 (or 01) at the end of the text string.



- b. If you want the sequence of numbers to start with a specific number, type the desired number at end of the text string.



5. Press Command + Alt + Enter (Mac) or Control + Option + Enter (Windows).

The description fields are updated with sequential numbering.

6. When done making changes, click **Accept**.

- **5.1 downmix** drop-down menus include two **Direct render** options: **Direct render** and **Direct render without warp**.
- In the **Record in/out** section, ability to use the Tab key to move the cursor between the **In** point and **Out** point settings.
- Improved re-render naming when creating re-renders offline (with **File > Export Re-renders**).

Each mono *.wav* file is now named with the channel number and then the channel type at the end of the file name (before *.wav*). This better prepares the files for importing into a digital audio workstation (DAW).



**Note:** In Renderer v3.0, channel numbers were prepended to the file name. Because of this, the files needed to be manually re-ordered after they were brought into a DAW.

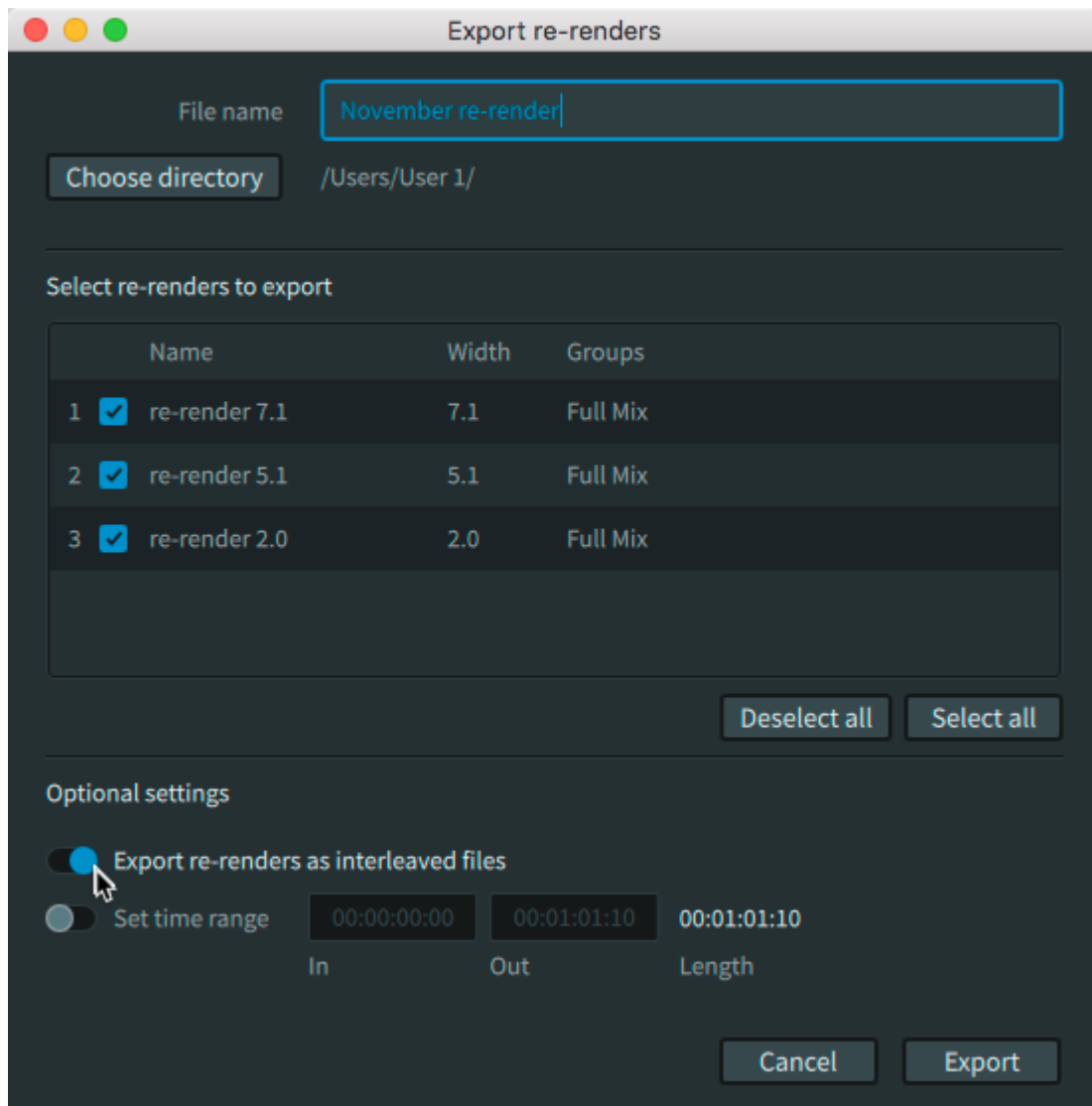
The naming convention for an exported re-render *.wav* file is `<export_file_name>_<re-render_name>_<channel_number>.<channel>.wav`, where


- `<export_file_name>` is the name prepended to all exported re-renders. This is defined in the **Export re-renders** dialog, in the **File name** field.
- `<re-render_name>` is the name of the re-render (such as re-render 7.1), as set in the **Properties** dialog for the re-render strip, in the **Name** field.
- `<channel_number>` is the channel number for the multichannel layout (such as 01, 02, and so on).
- `<channel>` is the channel for the multichannel (such as L, R, and so on).
- Exported re-renders timestamped in accordance with the Broadcast Wave Format (BWF) format standard.

Each re-render *.wav* file is timestamped with the start time. This lets you import the files into a DAW and have them appear in the correct position on the timeline.

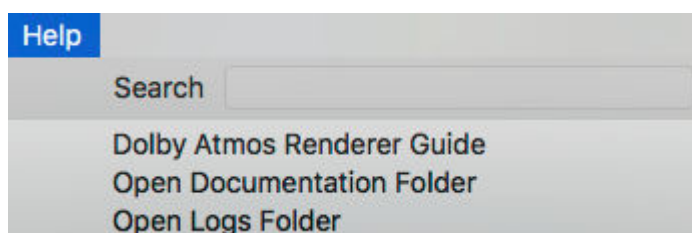
- Ability to export re-renders as interleaved multichannel *.wav* files.

When creating re-renders offline, if you want to create re-renders as interleaved files, click (enable) **Export re-renders as interleaved files** in the **Optional** settings section of the **Export re-renders** dialog before starting the export.



 **Note:** If your DAW or non-linear editor does not import multichannel interleaved files in the desired order, use multi-mono files.

- Access to log information via the **Open Logs Folder** command in the **Help** menu.



You can view log information in the `.log` file for your Renderer application.

- `RemoteApp.log`: Provides log information for the Dolby Atmos Renderer Remote
- `RendererApp.log`: Provides log information for the Dolby Atmos Renderer

These files are automatically archived to your local drive. The information in the logs can be of value when debugging or reporting issues.

To access Renderer or Renderer Remote log information:

1. Choose **Help > Open Log Folder**.




2. Double click the log.

## 1.4 Dolby Atmos Production Suite software package

The Dolby Atmos Production Suite package includes the Dolby Atmos Renderer, which provides the software components required to monitor and play back Dolby Atmos content in a premix or editorial workflow.

This suite is for engineers, sound designers, and others who install or use Dolby Atmos Renderer software for editorial, premix, and sound-design workflows when authoring sound for digital home theater, and creating Dolby Atmos masters.

The Dolby Atmos Production Suite provides access to one license for running the suite on a supported Mac central processing unit (CPU).

 **Note:** The Dolby Atmos Renderer Remote application, included as an option when installing the Renderer, is used for Dolby Atmos Mastering Suite workflows only. If you are working with the Dolby Atmos Production Suite only, you do not need the Dolby Atmos Renderer Remote.

### 1.4.1 Dolby Atmos Renderer installer components

The Dolby Atmos Renderer installer provides software for mixing and recording Dolby Atmos content.

Component	Description
Dolby Atmos Renderer	This application is required to render audio and Dolby Atmos metadata from a supported DAW. The software supports various tasks, including monitoring a Dolby Atmos mix, and recording or playing back a Dolby Atmos master.
Dolby Renderer Send plug-in (Mac only)	This optional Pro Tools plug-in is installed with the Dolby Atmos Renderer and can be used to send object or bed source audio to the Dolby Atmos Renderer from Pro Tools. The Send and Return plug-ins are designed for in-the-box workflows with the Dolby Atmos Production Suite, and can be used instead of the Dolby Audio Bridge.
Dolby Renderer Return plug-in (Mac only)	This optional Pro Tools plug-in is installed with the Renderer and can be used to receive Dolby Atmos audio from the Dolby Atmos Renderer, and then route the rendered mix to Pro Tools outputs. The Send and Return plug-ins are designed for in-the-box workflows with the Dolby Atmos Production Suite, and can be used instead of the Dolby Audio Bridge.
Dolby Atmos Renderer Remote (Dolby Atmos Mastering Suite workflows only)	This optional application enables remote control of a Dolby Atmos Renderer that is running with a Dolby Atmos Mastering Suite license and is located on the same network. In this configuration, the Dolby Atmos Renderer Remote on the DAW machine controls the Dolby Atmos Renderer on the rendering and mastering workstation.
Dolby Audio Bridge (Mac only)	This optional Core Audio driver enables the rendering application to act as a virtual Core Audio device. It supports routing audio (beds and objects) to or from a DAW configured to use the bridge. Installing this component requires restarting your computer.
Dolby Atmos Panner plug-in (Mac only)	This optional Pro Tools plug-in enables you to position audio objects in a three-dimensional audio field in a Dolby Atmos home theater mix in Pro Tools.  The panner is used primarily to provide compatibility with Pro Tools sessions with Dolby Atmos content created prior to Pro Tools v12.8. Dolby Atmos Panner plug-in automation can be duplicated as Pro Tools native panning automation for use with Pro Tools v12.8 and later.

Component	Description
Documentation	The installer includes user documentation for working with Dolby Atmos home theater content.
Session templates (Mac only)	The installer includes DAW session templates for creating a session that is configured and ready for Dolby Atmos authoring. Dedicated Pro Tools and Nuendo templates are provided and installed separately.

Additionally, users can download the Dolby Atmos Conversion Tool (from <https://developer.dolby.com/forms/dolby-atmos-conversion-tool>). This tool enables you to convert one Dolby Atmos media file format to another, or perform other conversion tool operations (such as changing the frame rate of a Dolby Atmos media file).

## Dolby Atmos authoring documentation

The Dolby Atmos Renderer installer includes supporting documentation.

When selected during installation, documentation for Dolby Atmos Production Suite and Dolby Atmos Mastering Suite on Mac is installed at `~/Applications/Dolby/DolbyAtmosRenderer/Documentation`. For Dolby Atmos Mastering Suite on Windows, documentation is installed at `C:\Program Files (x86)\Dolby\DolbyAtmosRenderer\Documentation`.

After installation, installed documentation is also available in the Renderer. You can access an HTML version of the Renderer guide via the **Help > Dolby Atmos Renderer Guide** menu command. You can access all Renderer documentation via the **Help > Open Documentation** menu command.

Dolby Atmos Production Suite and Dolby Atmos Mastering Suite on Mac include the entire documentation set. Dolby Atmos Mastering Suite on Windows does not include the documentation noted as Mac only.

### **Dolby Atmos Renderer Guide**

This documentation provides information for using the Dolby Atmos Renderer and other Dolby Atmos software to create or play back a Dolby Atmos master, listen to a Dolby Atmos mix, and pan audio objects in a Dolby Atmos mix.

### **Suite release notes**

Refer to this documentation for installation instructions, new features and improvements, and known issues. There are separate release notes for the Dolby Atmos Production Suite and Dolby Atmos Mastering Suite.

### **New in Dolby Atmos Renderer**

This documentation provides a list of what is new in the release. For releases with major user interface (UI) changes, this documentation details these changes as a primer to the main guide.

### **Dolby Atmos Production Suite Quick Start Guide (Mac only)**

This documentation introduces you to the Dolby Atmos Production Suite components and provides the steps needed to install the suite and then verify your setup by playing audio from a supported DAW session.

### **Dolby Atmos Panner Plug-in Guide (Mac only)**

This documentation provides reference and task information about the Dolby Atmos panner plug-in that can be used for Dolby Atmos authoring in a home theater workflow.

### **Dolby Atmos Renderer Third-Party Software**

This documentation provides the third-party software licensed under open-source or proprietary licenses that are incorporated into the Dolby Atmos Renderer software along with the required notices.

### **Dolby Atmos Plug-ins Third-Party Software**

This documentation provides the third-party software licensed under open-source or proprietary licenses that are incorporated into Dolby Atmos plug-ins (Dolby Atmos Panner, Dolby Renderer Send, and Dolby Renderer Return plug-ins) along with the required notices.

### **Dolby Atmos Renderer DAW templates**

The Renderer installer includes DAW templates for Dolby Atmos Production Suite workflows. Use the installer to install templates on the computer running the DAW.

#### **Pro Tools session templates**

Pro Tools session templates are installed in a Pro Tools session templates folder (*~/Documents/Pro Tools/Session Templates/Dolby Atmos Production Suite*).

Template names are based on the system setup and number of Renderer channels the session supports.

- Templates designed for systems using Send and Return plug-ins
  - *Dolby Atmos Renderer Send Return 32*
  - *Dolby Atmos Renderer Send Return 64*
  - *Dolby Atmos Renderer Send Return 128*
- Template designed for systems using the Dolby Audio Bridge
  - *Dolby Atmos Renderer Dolby Audio Bridge 32*

#### **Nuendo project template**

Nuendo session templates are installed in a Nuendo project templates folder, based on the version of Nuendo.

- *Dolby Atmos Production Suite - 128 channels* for Nuendo 10 is installed at *Users/username/Library/Preferences/Nuendo 10/Project Templates/Dolby Atmos Production Suite*
- *Dolby Atmos Production Suite - 128 channels* for Nuendo 8 is installed at *Users/username/Library/Preferences/Nuendo 8/Project Templates/Dolby Atmos Production Suite*

## **1.5 Contacting Dolby**

You can contact Dolby regarding this product and its supporting documentation.

If you have technical questions about this product, contact your reseller and visit <https://developerkb.dolby.com/support/home>.

If you have questions or comments about this documentation, please send an email to [documentation@dolby.com](mailto:documentation@dolby.com).

# 2

## **Dolby Atmos Production Suite system configurations (Mac only)**

The Dolby Atmos Production Suite license supports three primary Renderer system configurations (or setups). Each configuration includes a single CPU and DAW qualified by Dolby, required licenses and software, and a choice of which Renderer driver and panners to use. System requirements, installation steps, and setup are based on the configuration you use.


- [Renderer and Pro Tools on a Mac \(using Send and Return plug-ins\)](#)
- [Renderer and Pro Tools on a Mac \(using Dolby Audio Bridge\)](#)
- [Renderer and Nuendo on a Mac \(using Dolby Audio Bridge\)](#)

## 2.1 Renderer and Pro Tools on a Mac (using Send and Return plug-ins)

CPU	DAW	Input/output (I/O)	Suite license	Renderer installer components (required)	Renderer driver (Renderer setting)	Panners
Mac	Pro Tools	In the box	Dolby Atmos Production Suite	Dolby Atmos Renderer, and panners	Send/Return plug-ins (for up to 128 channels of I/O)	Pro Tools

## 2.2 Renderer and Pro Tools on a Mac (using Dolby Audio Bridge)

CPU	DAW	I/O	Suite license	Dolby Atmos Renderer installer components (required)	Renderer driver (Renderer setting)	Panners
Mac	Pro Tools	In the box	Dolby Atmos Production Suite	Dolby Atmos Renderer, Dolby Audio Bridge	Core Audio (Dolby Audio Bridge, for up to 32 channels of I/O)	Pro Tools

 **Note:** The Dolby Audio Bridge is not compatible with an Avid HDX system. When Pro Tools is running, the HDX system cannot be used as a Core Audio device. If you are running Dolby Atmos Production Suite on an HDX system, use the Send/Return plug-ins driver.

## 2.3 Renderer and Nuendo on a Mac (using Dolby Audio Bridge)

CPU	DAW	I/O	Suite license	Dolby Atmos Renderer installer components (required)	Renderer driver (Renderer setting)	Panners
Mac	Nuendo	In the box	Dolby Atmos Production Suite	Dolby Atmos Renderer, Dolby Audio Bridge	Core Audio (Dolby Audio Bridge, for up to 128 channels of I/O)	Nuendo

# 3

## Installing Dolby Atmos Renderer components on a single CPU system

The Dolby Atmos Renderer installer package includes the components needed for a Dolby Atmos single CPU system. Installation steps are dependent on your system configuration.

- [Requirements for a Dolby Atmos Production Suite system](#)
- [Installing the Renderer and Pro Tools on a Mac \(using Send and Return plug-ins\) overview](#)
- [Installing the Renderer and Pro Tools on a Mac \(using Dolby Audio Bridge\) overview](#)
- [Installing the Renderer and Nuendo on a Mac \(using Dolby Audio Bridge\) overview](#)
- [Installation tasks](#)

### 3.1 Requirements for a Dolby Atmos Production Suite system

The Dolby Atmos Renderer with a Dolby Atmos Production Suite license has been tested in these configurations.

Setup	CPU	Operating system	DAW
Renderer and Pro Tools on a Mac (using Send and Return plug-ins)	MacBook Pro 15,1; Intel Core i7 2.6 GHz 16 GB	macOS Mojave (version 10.14.2)	Pro Tools Ultimate 2018.10
	MacBook Pro 15,1; Intel Core i7 2.6 GHz 16 GB	macOS High Sierra (version 10.13.6)	
	MacBook Pro 11,5; Intel Core i7 2.8 GHz, 16 GB RAM	macOS Sierra (version 10.12.6)	
	Mac Pro 6,1; 6-Core Intel Xeon E5, 3.5 GHz, 32 GB RAM	macOS High Sierra (version 10.13.4)	
Renderer and Pro Tools on a Mac (using Dolby Audio Bridge) <sup>[a][b]</sup>	MacBook Pro 15,1; Intel Core i7 2.6 GHz 16 GB	macOS Mojave (version 10.14.2)	Pro Tools Ultimate 2018.10
	MacBook Pro 15,1; Intel Core i7 2.6 GHz 16 GB	macOS High Sierra (version 10.13.6)	
	MacBook Pro 11,5; Intel Core i7 2.8 GHz, 16 GB RAM	macOS Sierra (version 10.12.6)	
	Mac Pro 6,1; 6-Core Intel Xeon E5, 3.5 GHz, 32 GB RAM	macOS High Sierra (version 10.13.4)	
Renderer and Nuendo on a Mac	MacBook Pro 15,1; Intel Core i7 2.6 GHz 16 GB	macOS Mojave (version 10.14.2)	Nuendo 8.3, Nuendo 10
	MacBook Pro 15,1; Intel Core i7 2.6 GHz 16 GB	macOS High Sierra (version 10.13.6)	
	MacBook Pro 11,5; Intel Core i7 2.8 GHz, 16 GB RAM	macOS Sierra (version 10.12.6)	
	Mac Pro 6,1; 6-Core Intel Xeon E5, 3.5 GHz, 32 GB RAM	macOS High Sierra (version 10.13.4)	

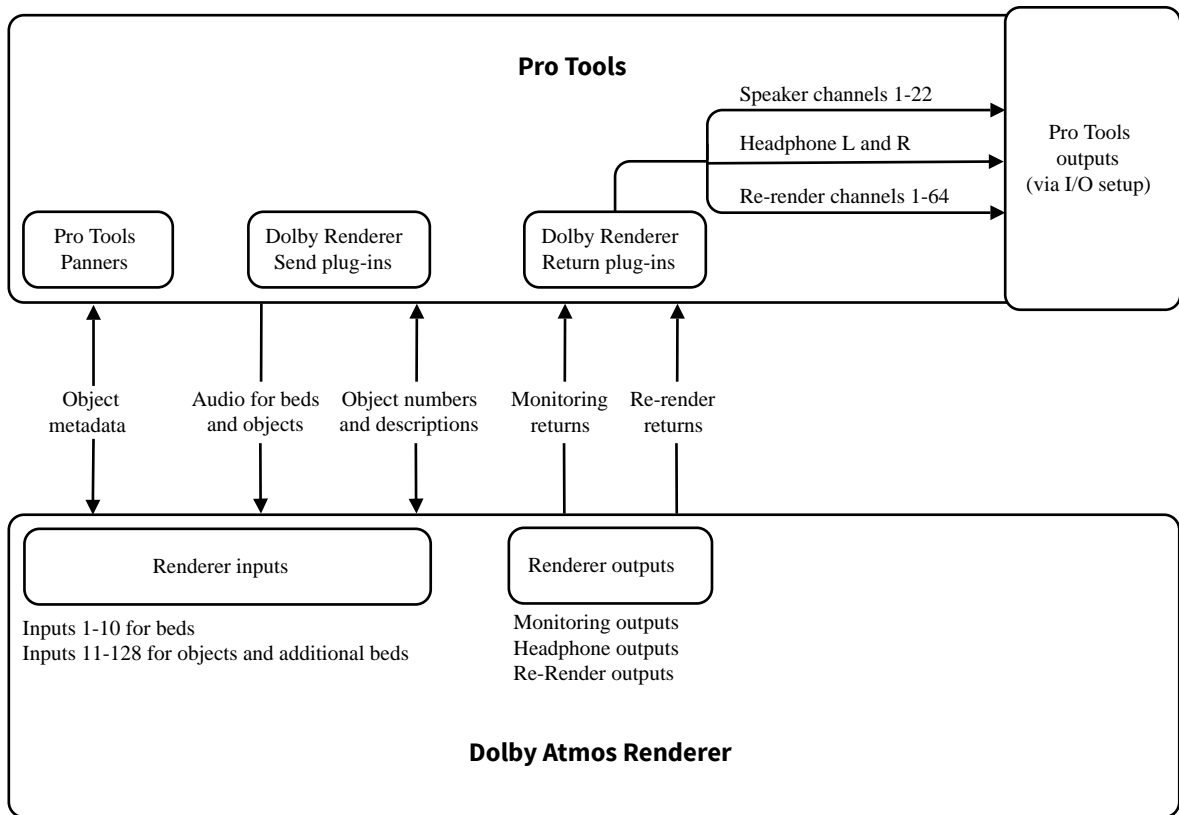
a The Dolby Audio Bridge is not compatible with an Avid HDX system. When Pro Tools is running, the HDX system cannot be used as a Core Audio device. If you are running Dolby Atmos Production Suite on an HDX system, use the Send/Return plug-ins driver.

b Supports sending up to 32 channels of audio (beds and objects) from Pro Tools to the Renderer using the Dolby Audio Bridge driver.

### 3.2 Installing the Renderer and Pro Tools on a Mac (using Send and Return plug-ins) overview

#### Prerequisites

Ensure that your system configuration meets the requirements.



**Note:** The Renderer supports 64 re-render channels. The channel number where re-renders begin is customizable in the Renderer.

The Dolby Atmos Renderer with a Dolby Atmos Production Suite license has been tested in these configurations.

Setup	CPU	Operating system	DAW
Renderer and Pro Tools on a Mac (using Send and Return plug-ins)	MacBook Pro 15,1; Intel Core i7 2.6 GHz 16 GB	macOS Mojave (version 10.14.2)	Pro Tools Ultimate 2018.10
	MacBook Pro 15,1; Intel Core i7 2.6 GHz 16 GB	macOS High Sierra (version 10.13.6)	
	MacBook Pro 11,5; Intel Core i7 2.8 GHz, 16 GB RAM	macOS Sierra (version 10.12.6)	
	Mac Pro 6,1; 6-Core Intel Xeon E5, 3.5 GHz, 32 GB RAM	macOS High Sierra (version 10.13.4)	


**Procedure**

1. Activate the Dolby Atmos Production Suite license for the Mac that is running your DAW.
2. Install Dolby Atmos Renderer components on the Mac.

Required components:

- Dolby Atmos Renderer
- Dolby Renderer Send and Return plug-ins

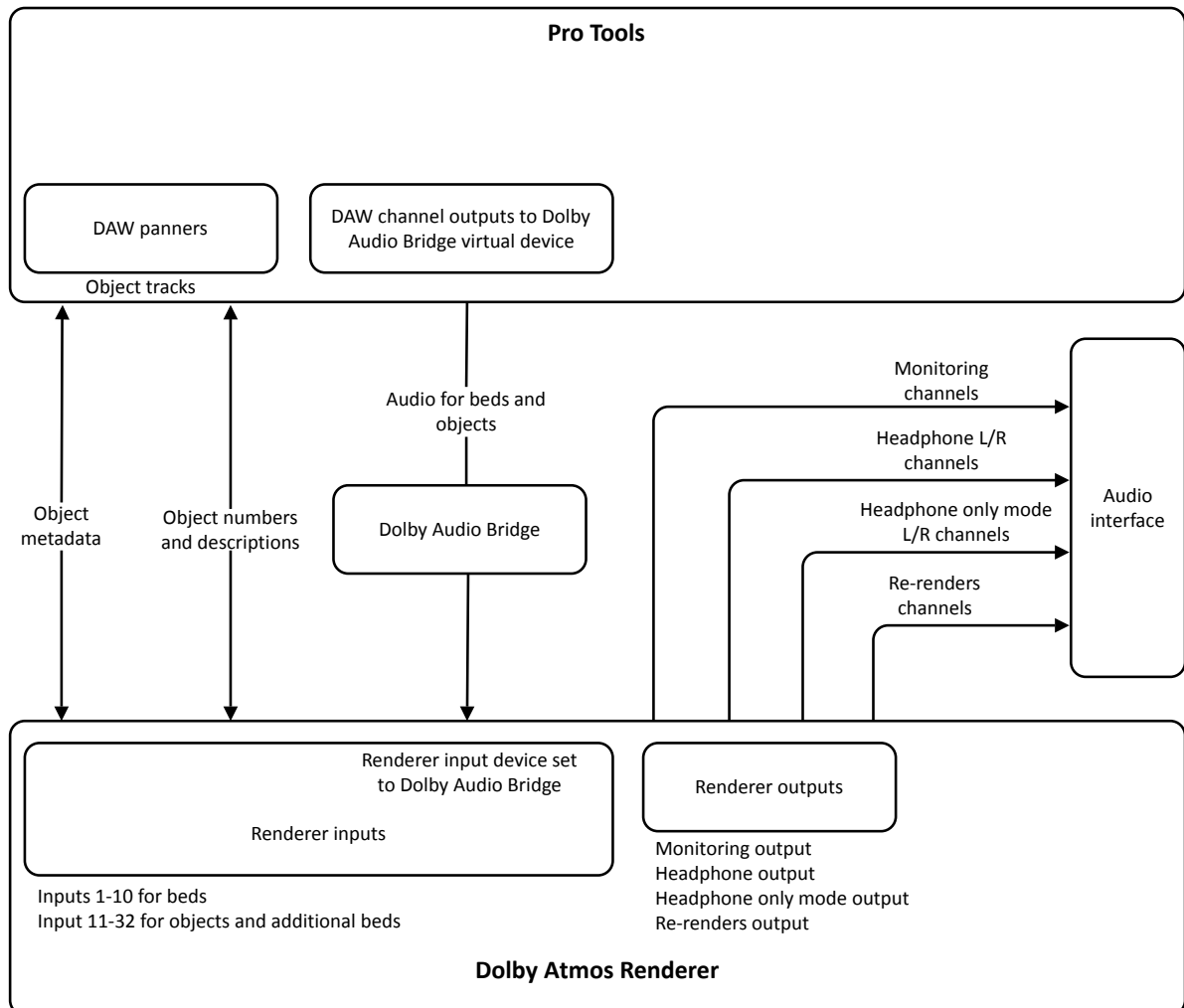


 **Note:** The Renderer install option also installs Dolby Renderer Send and Return plug-ins.

### 3.3 Installing the Renderer and Pro Tools on a Mac (using Dolby Audio Bridge) overview

#### Prerequisites

Ensure that your system configuration meets the requirements.



The Dolby Atmos Renderer with a Dolby Atmos Production Suite license has been tested in these configurations.

Setup	CPU	Operating system	DAW
Renderer and Pro Tools on a Mac (using Dolby Audio Bridge) <sup>[a]</sup> <sup>[b]</sup>	MacBook Pro 15,1; Intel Core i7 2.6 GHz 16 GB	macOS Mojave (version 10.14.2)	Pro Tools Ultimate 2018.10
	MacBook Pro 15,1; Intel Core i7 2.6 GHz 16 GB	macOS High Sierra (version 10.13.6)	
	MacBook Pro 11,5; Intel Core i7 2.8 GHz, 16 GB RAM	macOS Sierra (version 10.12.6)	
	Mac Pro 6,1; 6-Core Intel Xeon E5, 3.5 GHz, 32 GB RAM	macOS High Sierra (version 10.13.4)	

a The Dolby Audio Bridge is not compatible with an Avid HDX system. When Pro Tools is running, the HDX system cannot be used as a Core Audio device. If you are running Dolby Atmos Production Suite on an HDX system, use the Send/Return plug-ins driver.

b Supports sending up to 32 channels of audio (beds and objects) from Pro Tools to the Renderer using the Dolby Audio Bridge driver

**Procedure**

1. Activate the Dolby Atmos Production Suite license for the Mac that is running your DAW.
2. Install Dolby Atmos Renderer components on the Mac.

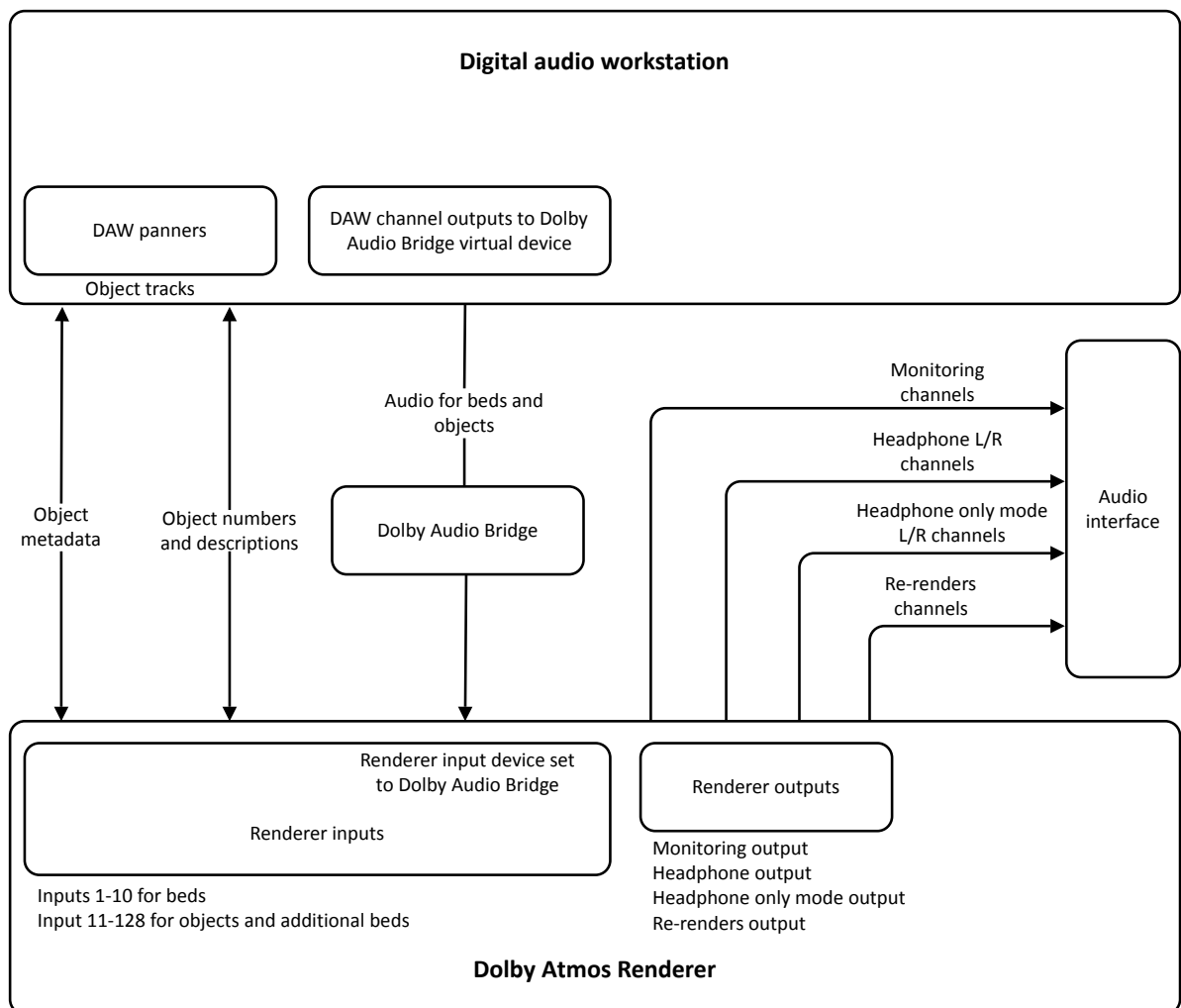
Required components:

- Dolby Atmos Renderer
- Dolby Audio Bridge

### 3.4 Installing the Renderer and Nuendo on a Mac (using Dolby Audio Bridge) overview

**Prerequisites**

Ensure that your system configuration meets the requirements.



The Dolby Atmos Renderer with a Dolby Atmos Production Suite (or Dolby Atmos Mastering Suite) license has been tested in these configurations.

Setup	CPU	Operating system	DAW
Renderer and Nuendo on a Mac	MacBook Pro 15,1; Intel Core i7 2.6 GHz 16 GB	macOS Mojave (version 10.14.2)	Nuendo 8.3, Nuendo 10
	MacBook Pro 15,1; Intel Core i7 2.6 GHz 16 GB	macOS High Sierra (version 10.13.6)	
	MacBook Pro 11,5; Intel Core i7 2.8 GHz, 16 GB RAM	macOS Sierra (version 10.12.6)	
	Mac Pro 6,1; 6-Core Intel Xeon E5, 3.5 GHz, 32 GB RAM	macOS High Sierra (version 10.13.4)	

### Procedure

1. Activate the Dolby Atmos Production Suite license for the Mac that is running your DAW.
2. Install Dolby Atmos Renderer components on the Mac.

Required components:

- Dolby Atmos Renderer
- Dolby Audio Bridge

## 3.5 Installation tasks

Complete the installation tasks for your system configuration.

### 3.5.1 Activating a Dolby software license

On a supported computer or iLok, activate the license that enables your software. We recommend that you activate the license before you install the software.

#### Prerequisites

- Download and install the iLok License Manager from [www.ilok.com](http://www.ilok.com).
- Ensure that you have iLok authorization for the license.

#### About this task

This task is performed in the iLok License Manager.

#### Procedure

1. Launch the **iLok License Manager**.
2. In the **iLok License Manager** window, sign in to your account, and then click (highlight) your account name in the navigation bar.  
Your account name is shown in the upper-left panel. Your host machine and iLok Universal Serial Bus (USB) devices are shown as icons in the panel below your account information.
3. Click the **Available** tab in the **iLok License Manager** header.



If you do not see the **Available** tab, widen the application window until the tab is visible in the header.

The available licenses are shown under the tabs.

4. Locate the license for your software, and then drag and drop it to your host machine icon or to the iLok device icon on the left.
5. Follow any additional onscreen instructions.
6. In the **iLok License Manager** window, repeat these steps if you are installing additional licenses to other machines or iLoks.

### 3.5.2 Installing the Dolby Atmos Renderer on Mac

Depending on your system setup, install the Dolby Atmos Renderer components on the Mac that is running your DAW, on a Mac rendering and mastering workstation, or both.

#### Prerequisites

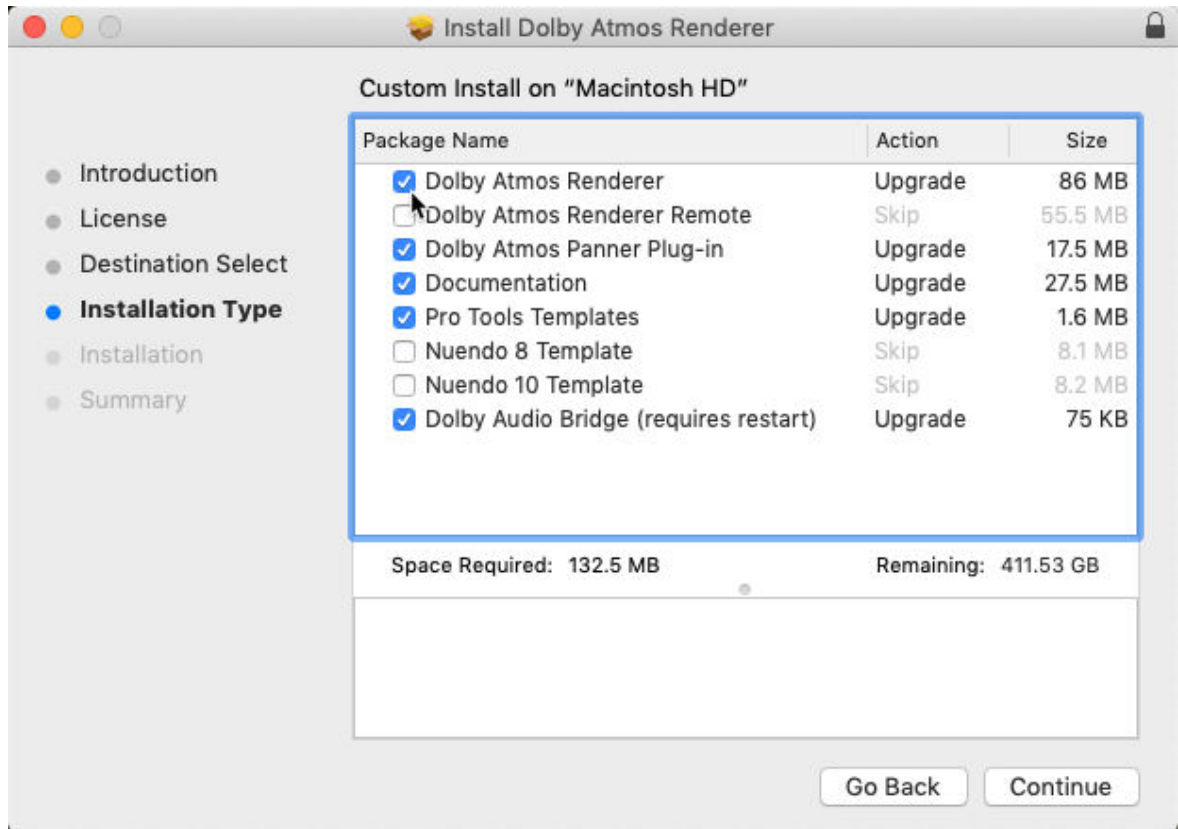
- Ensure that the machine meets system requirements, including any required software. (See the *Dolby Atmos Renderer Guide* or the release notes for your Dolby Atmos suite.)
- Ensure that you have activated the license for your software.

#### About this task

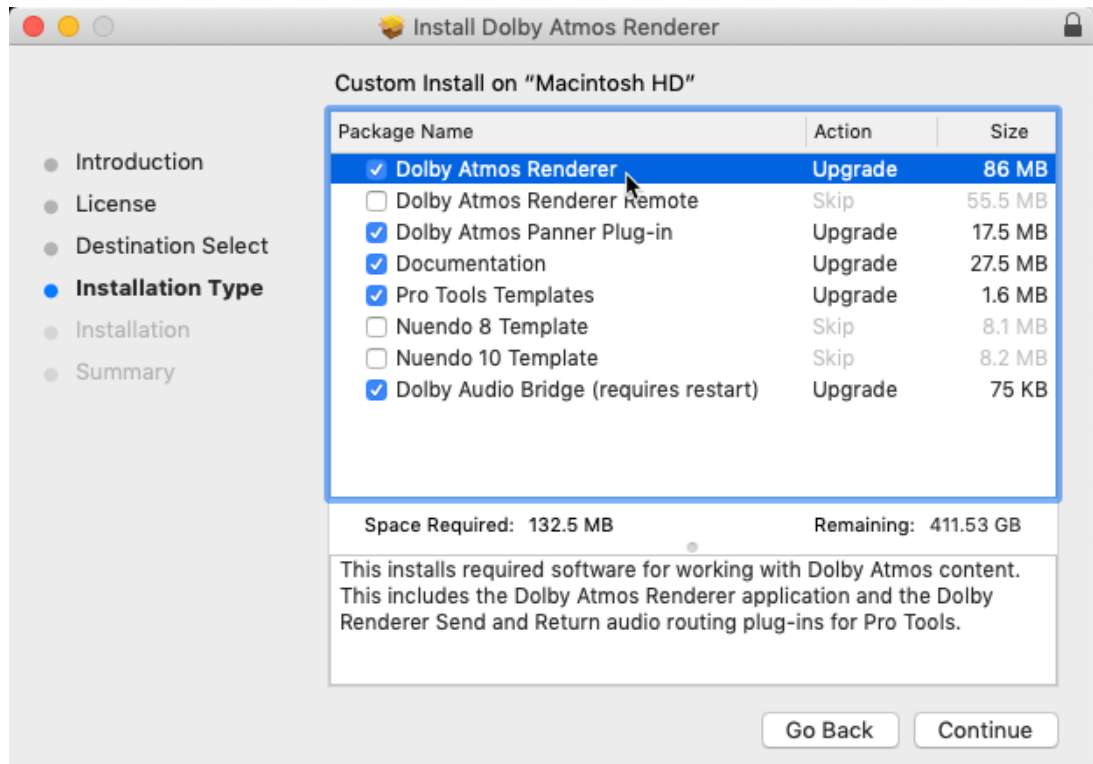
- When selecting which components to install, select the components that are required for your system configuration.
- The installer also includes optional components (such as the Dolby Audio Bridge, documentation, and templates). Choose optional components based on your Dolby Atmos Renderer configuration and needs.
- When the Dolby Audio Bridge option is selected, installation includes a restart of the Mac OS.
- When updating Renderer or Renderer Remote software, the existing Renderer system settings are automatically backed up as an *.atmoscfg* that is saved on your local drive (*~/Users/username/Library/Application Support/Dolby/Dolby Atmos Renderer/Backups*).

#### Procedure


1. If updating Dolby Atmos Renderer and supporting software, ensure that the Dolby Atmos Renderer is not running.
2. Double-click the Dolby Atmos Renderer *.dmg* file (*Dolby\_Atmos\_Renderer-3.xx-xxxxxx.dmg*).  
This provides access to the installer and documentation. Refer to documentation for what is new in this version, release notes (including known issues), and additional information.
3. Double-click the Dolby Atmos Renderer installer package (*DolbyAtmosRenderer.pkg*).
4. Follow the onscreen instructions.
5. When prompted to select which components to install, select the components required for your system configuration, and then click **Continue**.



**Note:** You can click on an item in the **Package Name** column to name to reveal information about the package.



## 6. Complete installation.

 **Note:** If this installation is the first time you are installing Dolby software on the Mac, you may be prompted with a dialog to enable any system extensions signed by Dolby. To use this application, you must enable the Dolby extension. To continue installation, click **Open Security Preferences**, and then enable any Dolby extensions in the **Security and Privacy** window.

#### Results

All items selected for installation are installed.

### 3.5.3 Launching the Dolby Atmos Renderer and supporting software

After Dolby Atmos Renderer software is installed, you can launch the Renderer and DAW.

#### Procedure

1. Locate the Dolby Atmos Renderer application name or icon.

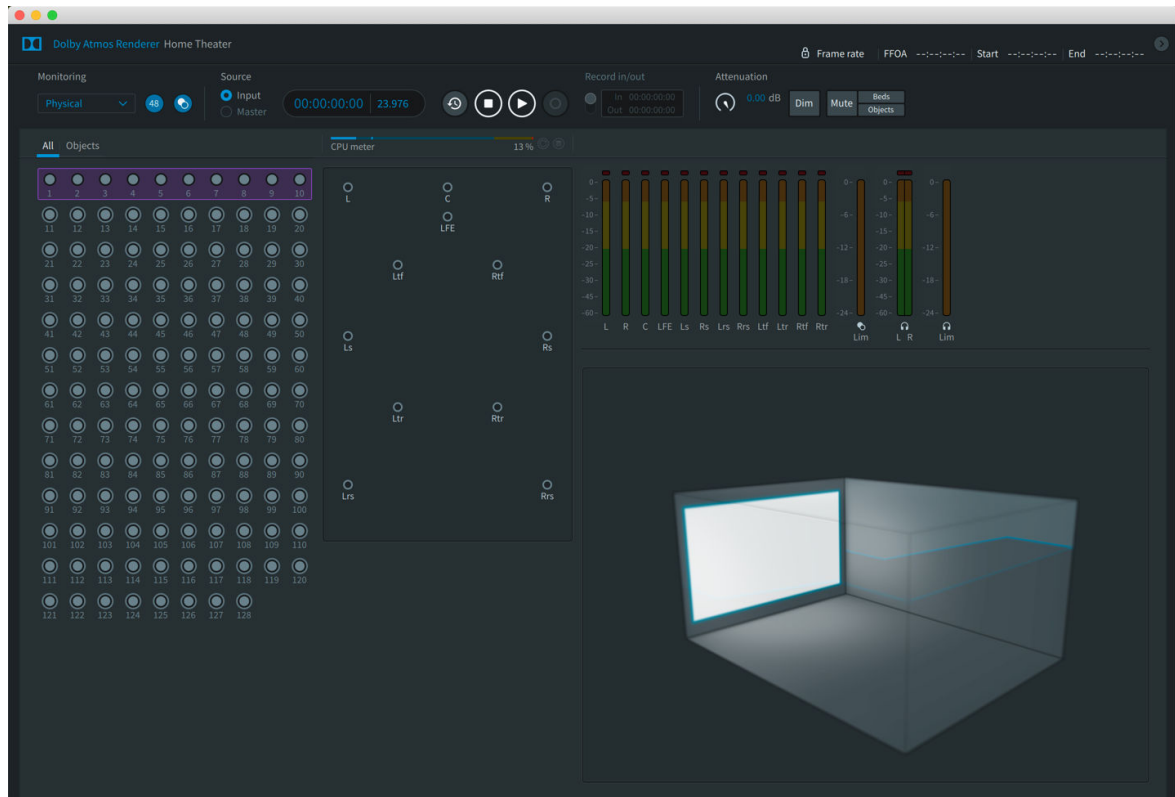
The Dolby Atmos Renderer application is in the *Applications/Dolby/DolbyAtmosRenderer* folder.

*Figure 1: Dolby Atmos Renderer icon*



Dolby Atmos  
Renderer

2. Click the Dolby Atmos Renderer application name or icon.  
The Dolby Atmos Renderer window is displayed.



**3. Launch the DAW.**

**What to do next**

Configure the settings in your Dolby Atmos Renderer and DAW as needed, to support your system configuration.

For additional configuration steps, see the *Dolby Atmos Renderer Guide*.

## 4

## Known issues

This release has some known issues, for which we provide workarounds, comments, and solutions.

- Older versions of the Dolby Atmos Renderer Remote application will not connect to newer versions of the Dolby Atmos Renderer. Install both the Renderer and Remote applications from the same beta installer. [DACT-8989]
- An *.atmos* master file set that has naming differences between the *.atmos*, *.audio*, and *.metadata* files will be corrupted on editing. [DACT-8670]
- Recording a master file over a network HDD is not supported. The recording process will be stopped due to disk underruns produced by low transfer rates. [DACT-8802]
- When the 5.1 downmix is set to Standard (Lo/Ro) or Dolby Pro Logic IIx, and Spatial coding emulation is off, object size is not applied. [DACT-8837]
- When *localhost* is used as the IP address to connect to a Renderer, a double colon (::) is displayed in the **Network information** page of the **Preferences** window. As a workaround, use a valid IP address. [DACT-7996]
- If the Dolby Atmos Renderer Remote application is launched before the Dolby Atmos Renderer, the remote will not auto-connect to the Renderer. As a workaround, connect the Renderer Remote to the rendering and mastering workstation using the IP address drop-down menu or launch the Remote after launching the Renderer. [DACT-8012]
- When opening an IMF IAB *.mxf* master via the Renderer Remote, and the Renderer is in external sync and the transport is running, the master input configuration may not be applied. When opening a master file, ensure that the transport is stopped. [DACT-9251]
- In Windows, the Renderer will fail to initialize if you open the Renderer with a previously loaded master from an encrypted drive that has not been unlocked. As a workaround, make sure the drive has been unlocked before launching the Renderer. Alternatively, close the master before closing the Renderer to avoid reloading the master upon launch. [DACT-8099]
- If the Core Audio input device or Core Audio output device is set to **None**, or if the field is empty, when Core Audio is the active audio driver for the Renderer, an **Audio driver error** message is displayed and the Renderer is not fully operational. Set the devices to available choices other than **None** to make the Renderer fully operational. [DACT-6301], [DACT-8256]
- Connecting an audio device to your system while the Renderer is running may change the device audio settings in your system. This can result in audio drops due to an invalid system setup, and produce a log error (*ERROR RendererExecutive audio device processor overload*). If this occurs, check the settings for the **Audio Driver Configuration** in the Renderer and the Mac Audio MIDI Setup. If the settings are not correct, update them. [DACT-6280]
- Connecting or disconnecting headphones while the Renderer is running and using the Core Audio Built-in output causes an audio driver error. This occurs because the Mac OS system changes the device audio configuration. As a workaround, re-initialize the Renderer to reconfigures the Core Audio driver. For example, choose **Dolby Atmos Renderer > Preferences**, and then click **Accept**. [DACT-7902]
- Pro Tools Aggregate and Built-in output audio devices can intermittently, and without warning, change the sampling rate to 44.1 kHz (typically, after a CPU overload). This sample rate change



causes rendered audio to be jittery. As a workaround, open the Mac OS X Audio MIDI Setup application and select the 48 kHz sample rate. If 48 kHz is already selected, unselect it, and then reselect it. [DACT-5484]

- When importing Dolby Atmos system settings from another computer, Core Audio input and output device settings are not included. After importing system settings, an **Audio driver error** message lets you know that the devices have not been accessed. As a workaround, navigate to **Driver** preferences and add the input and output devices. [DACT-7227]
- Removing speakers in the physical room configuration (in the **Speaker setup** page of the **Room setup** window) results in loss of calibration settings for those speakers. [DACT-8000]
- When in array mode, the output meters in the main Renderer window are post b-chain gain and EQ. [DACT-9249]
- Dolby Atmos system configurations support only one Pro Tools recorder system at a time. For example, if you enable Recorder mode on two Pro Tools systems, and then disable Recorder mode on one of them, trying to record on the system still in Recorder mode results in no recorded automation. To restore Recorder mode on this system, toggle Recorder mode off and on. [DACT-2215]
- Do not use Dolby Atmos panners and Pro Tools object panners in the same session. For example, if a Pro Tools track has an assigned Object Output Path and a Dolby Atmos panner plug-in inserted, the Dolby Atmos panner object metadata will not be sent to the Renderer. The Pro Tools panner metadata will change and overwrite the Dolby Atmos panner plug-in metadata. This can cause unwanted recorded data. [DACT-7167].
- The Pro Tools scrubber tool is not supported when monitoring a Dolby Atmos master file. [DACT-5859]
- Pro Tools offline bounce is not supported with the Dolby Atmos Production Suite. Attempting an offline bounce on Pro Tools HDX systems can cause a crash. Attempting an offline bounce on a Pro Tools native system can cause significant metadata loss. [DACT-6053], [DACT-5743]
- If a Dolby Atmos Pro Tools session connected to a Renderer using the **Send/Return plug-ins** audio driver is closed, the associated input channels in the Renderer remain active. To clear the meters, re-initialize the Renderer (for example, by closing the Renderer and relaunching it). [DACT-5821]
- When using the **Send/Return plug-ins** audio driver, ensure that the Pro Tools transport stops after the recording end time. This ensures that the final master does not have any missing samples at the end time. [DACT-7998]
- When using the **Send/Return plug-ins** driver, the Pro Tools pre-roll feature does not work. Instead, the Renderer will start chasing LTC when the pre-roll period has ended. [DACT-8026]
- The Dolby Atmos Renderer does not support upper case master file extensions (such as *ATMOS*) in its input fields. Files with upper case file extensions fail to load. Change extensions manually to lower case to load them into the Renderer. [DACT-5983]
- Playing back a master file from an external optical drive can result in undesired artifacts or glitches when monitoring. As a workaround, open the master file from a fast SSD drive or from the internal drive of the Renderer machine. [DACT-7969]
- Do not lock a new master before recording any content. Doing so results in a **Master file error** dialog, which reports that the master was not found. When you close the error dialog, the master closes. [DACT-8023]
- If master file content is present at the offset start time, playback without pre-roll may result in the loss of the first buffer. To avoid this, always start playback with at least one frame of pre-roll. For optimum performance, Dolby recommends pre-roll and post-roll of greater than two frames for playback and recording. [DACT-6821]
- Before beginning the workflow to record a master using set in and out points, ensure that the DAW session is open. If you set up the Renderer for recording, and then open a DAW session that has an input configuration conflict with the Renderer, the Renderer will disarm the master when the In point is reached and not provide any warning that this has occurred. [DACT-7132]

- Master files created in Renderer v3.0, v3.0.1, or v3.0.2 that have multi-beds containing binaural render mode data do not play back correctly in v3.2. Beds beyond channel 10 will be muted. As a workaround, manually edit the master file, changing `active: false` to `active: true`. [DACT-9066]
- When two machines are connected to the Renderer and the Renderer is recording audio and metadata from a Pro Tools session on the first machine, opening a Dolby Atmos Pro Tools session on the second machine that has object panners enabled on Object IDs that are being recorded to by the Renderer will send metadata to the Renderer and overwrite metadata in the session on the first machine. This can produce unwanted recorded data. [DACT-7380]
- During a punch in and out of a master recording at set points workflow, the master file audio mutes after you press the record button and start playback, and then unmutes when the out point is reached. This is because the Renderer toggles to Input mode when you press the record button. [DACT-5972]
- With Pro Tools 2018.10 and earlier, when you import a 7.1.2 multichannel interleaved file, the tracks are not imported in Film order. Instead, they are imported as L, C, R, Rrs, Lss, Low-Frequency Effects (LFE), Lrs, Rss, Lts, Rts. As a workaround, use multimonos files. [DACT-8353]
- When exporting re-renders to an external drive, if the drive is unplugged during the export, the export will continue and report a successful operation even if the re-renders were not successfully written to the drive. As a workaround, do not unplug the destination drive when exporting re-renders. [DACT-8006]
- Attempting to use a read-only directory to export re-renders, export an *ADM BWF*, or create a new master does not provide a descriptive error to the Dolby Atmos Renderer Remote application. Instead, the error simply notes that the file was not written. As a workaround, choose a destination directory that is not read only. [DACT-7568]
- When using Remote Desktop to manage installation of the Renderer on a Mac rendering and mastering workstation, the Dolby Audio Bridge will not successfully install on the workstation. As a workaround, install the Dolby Audio Bridge directly on the workstation. [DACT-7721]

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# Glossary

**ADM**

Audio Definition Model. A metadata specification for describing channel-based, object-based, or scene-based audio.

**B-format**

A speaker-independent representation of a soundfield.

**BWF**

Broadcast Wave Format. An extension of the Microsoft Waveform Audio Format (WAV) file format to include metadata important to broadcast applications. This format is specified in EBU Tech 3285.

**CPU**

Central processing unit.

**DAW**

Digital audio workstation. An electronic device or computer software application used to record, edit, and produce audio files.

**EQ**

Equalization. The adjustment of audio frequency responses for practical or aesthetic reasons.

**frame**

In audio, a series of PCM samples or encoded audio data representing the same time interval for all channels in the configuration. Metadata pertaining to the frame can be carried within the frame or separately, depending on context.

**HD**

High definition.

**I/O**

Input/output. The communication between a system and an entity outside the system, such as another system or a human being.

**IP address**

Internet Protocol address. A numerical identifier assigned to a device that is a member of a network that uses the IP for communication.

**LTC**

Linear timecode. A timecode developed by the Society of Motion Picture and Television Engineers (SMPTE) that provides a time reference for editing, synchronization, and identification.

**LFE**

Low-Frequency Effects. A band-limited channel specifically intended for deep, low-pitched sounds.

**object**

An audio signal plus associated object audio metadata.

**rendering**

Processing of audio content to adapt it to specific speaker layouts, such as 5.1- and 7.1-speaker feeds, or headphones and sound bars.

**UI**

User interface.

**USB**

Universal Serial Bus. A standard that defines the cables, connectors, and communications protocols used in connections between computers and electronic devices.

**.wav**

Waveform Audio Format. An audio bitstream file format.

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