



# Dolby Atmos Production Suite v3.2

## Quick Start Guide

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# Notices

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# 1

## Introduction to the quick start guide

This guide 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 back audio from a supported digital audio workstation (DAW).


- [Dolby Atmos Production Suite software package](#)
- [Contacting Dolby](#)

## 1.1 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.

### 1.1.1 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.
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***

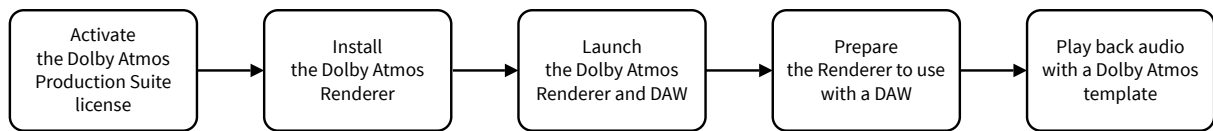
This documentation provides the third-party software licensed under open-source or proprietary licenses that are incorporated into the Dolby Atmos Renderer software along with the required notices.

### ***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.

## 1.1.2 Installation workflow

This documentation provides the steps to install the suite and then verify your setup by playing back audio from a supported DAW.



For detailed information on creating and editing Dolby Atmos content, see the *Dolby Atmos Renderer Guide*.

## 1.2 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

## Installing the Dolby Atmos Production Suite main components

The Dolby Atmos Production Suite components are installed via a single Dolby Atmos Renderer installer. The suite includes access to a single license for running the suite on a supported CPU. Additionally, users can download the Dolby Atmos Conversion Tool.

- [Activating a Dolby software license](#)
- [Installing the Dolby Atmos Renderer on Mac](#)
- [Launching the Dolby Atmos Renderer and supporting software](#)



## 2.1 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

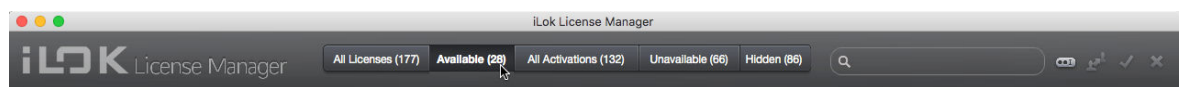
This task is performed in the iLok License Manager.

### 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.

## 2.2 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

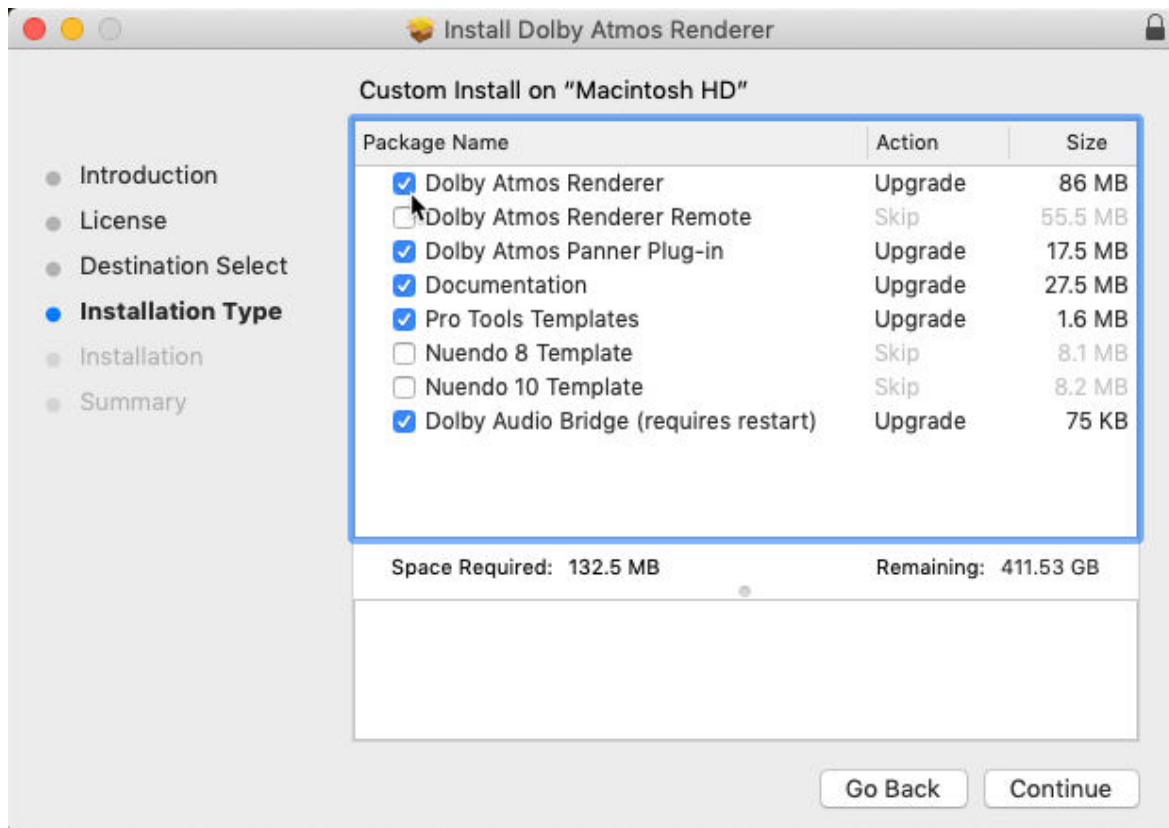
- Ensure that the machine meets system requirements, including any required software. (See the *Dolby Atmos Renderer Guide* or the release notes for your Dolby Atmos suite.)
- Ensure that you have activated the license for your software.

### About this task

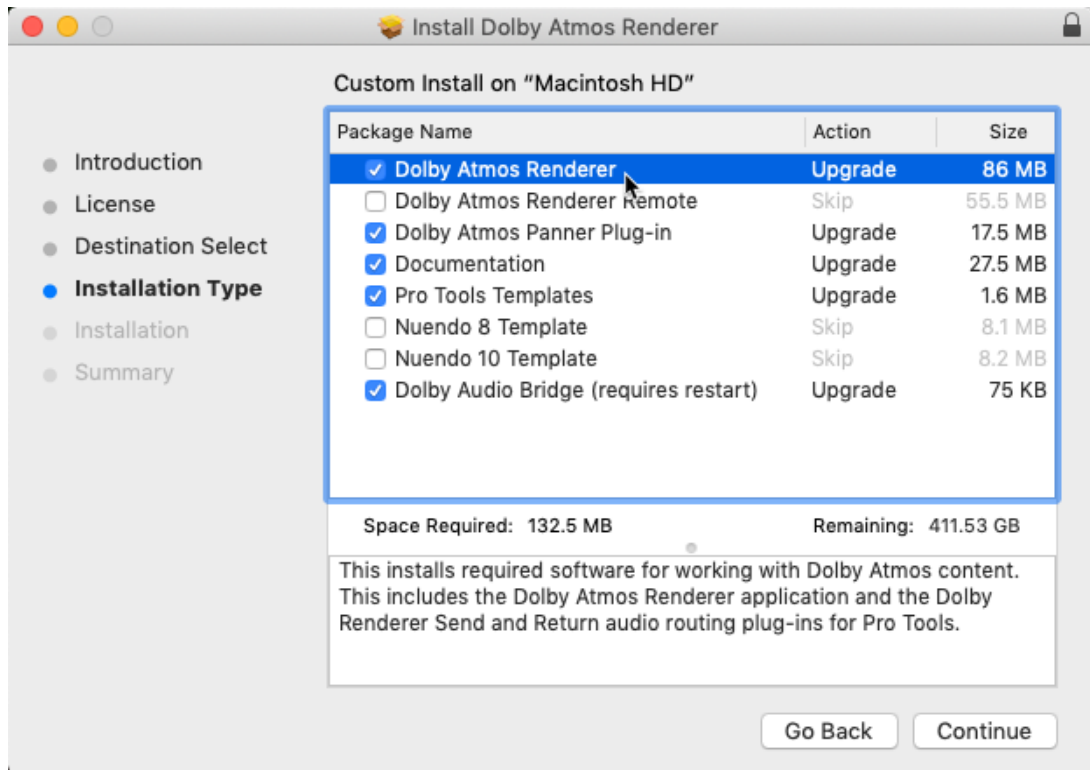
- When selecting which components to install, select the components that are required for your system configuration.
- The installer also includes optional components (such as the Dolby Audio Bridge, documentation, and templates). Choose optional components based on your Dolby Atmos Renderer configuration 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.

## 2.3 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.

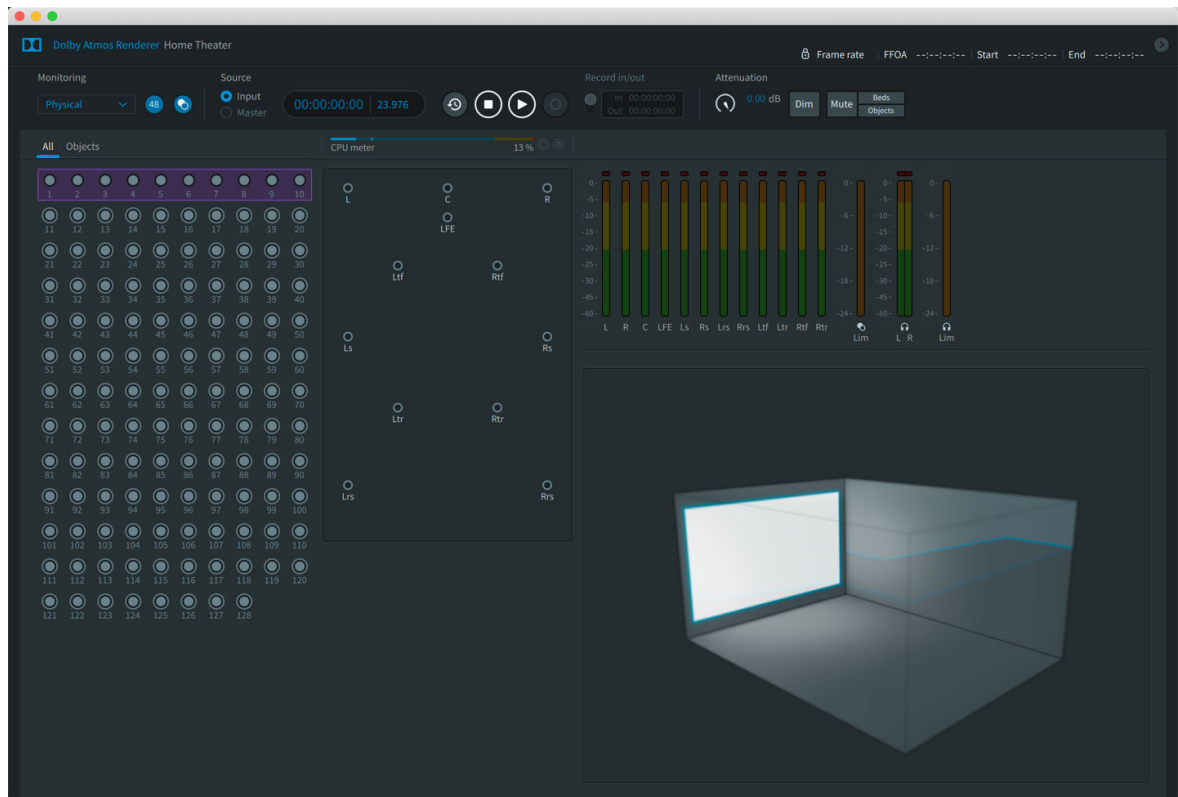
Figure 1: **Dolby Atmos Renderer** icon



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*.

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# 3

## Getting started with Nuendo

To use Dolby Atmos Renderer with Nuendo, both the Renderer and Nuendo must be configured to work together. After completing configuration, you can use the Nuendo template provided by Dolby to confirm playback of audio.

- [Configuring drivers for a Renderer and Nuendo setup](#)
- [Setting up Nuendo to communicate with the Dolby Atmos Renderer](#)
- [Playing back audio in Nuendo with the Dolby Atmos project template](#)

### 3.1 Configuring drivers for a Renderer and Nuendo setup

If you want to author Dolby Atmos in Nuendo, you must set the Renderer to use the Core Audio driver, and then select the Dolby Audio Bridge as your input device in the Renderer, and as the VST Audio System driver in Nuendo. This ensures the routing of audio between Nuendo and the Renderer.

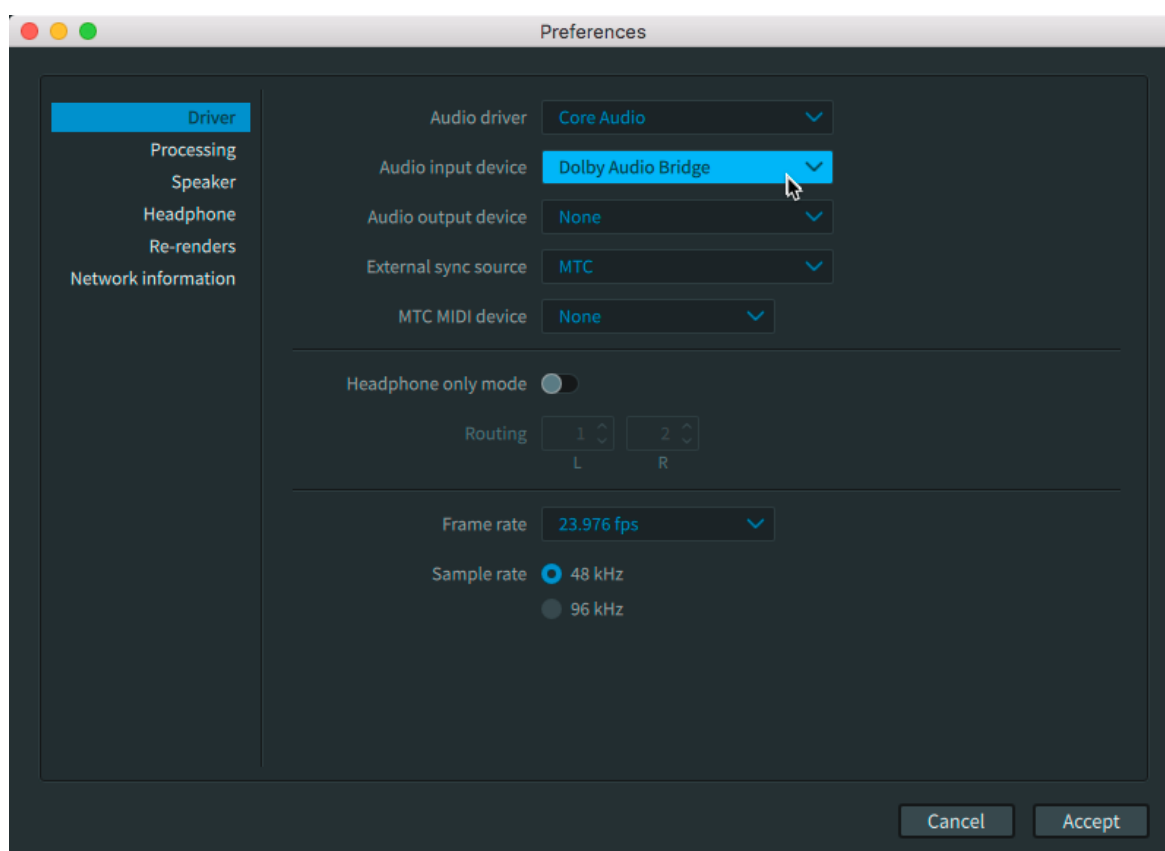
#### About this task

You perform this task with the Dolby Atmos Renderer using a Production Suite license.

Additionally, in Nuendo, you will configure the VST Audio Driver engine to use the Dolby Audio Bridge.

#### Procedure

1. Launch the Dolby Atmos Renderer.  
The Renderer window is displayed.
2. Choose **Dolby Atmos Renderer > Preferences** to open the **Preferences** window.
3. Select (highlight) **Driver** to navigate to the **Driver** preferences.
4. Click the **Audio Driver** drop-down menu, and select **Core Audio**.
5. In the **Audio input device** drop-down menu, select **Dolby Audio Bridge**.



6. In the **Audio output device** drop-down menu, select the desired Core Audio output device.
7. (Optional) Set the **External sync source** and its supporting settings.
8. Set the **Frame rate** and **Sample rate** to match the rates of your Nuendo mix.
9. Click **Accept**.
10. For Mac configurations on Mojave, click **OK** if prompted for permission for the Renderer to access the Mac microphone.



**Note:** On Mojave, using the Renderer with the bridge requires access to the Mac microphone in order to pass audio into or out of the Renderer.

If you do not click **OK** at this time, you can provide permission via **System Preferences**.

1. In System Preferences, choose **Security & Privacy**.
2. Click the **Privacy** tab.
3. Select **Microphone** in the sidebar.
4. On the right side of the window, select (enable) **Dolby Atmos Renderer**.

11. Launch Nuendo.

12. In Nuendo, select the driver by performing these tasks:

- a) Choose **Studio > Studio Setup**.
- b) In the **Devices** section, click **VST Audio System**.
- c) In the **Driver** drop-down menu, select **Dolby Audio Bridge**.

#### What to do next

Set up Nuendo to communicate with the Renderer.

## 3.2 Setting up Nuendo to communicate with the Dolby Atmos Renderer

Before authoring Dolby Atmos with Nuendo, you must set up Nuendo to communicate with the Renderer.

#### Prerequisites

- Required components for a Dolby Atmos system have been installed and configured.
- Drivers for a Dolby Atmos Renderer and Nuendo setup have been configured.
- Nuendo Rendering and Mastering Unit (RMU) Connector for Dolby Atmos is installed on the machine running Nuendo.

This software is included with Nuendo version 8.2. In previous versions, it had its own installer.

#### About this task

Perform the steps for this task on the computer that is running the Dolby Atmos Renderer and Nuendo.

#### Procedure

1. Launch the Dolby Atmos Renderer.
2. Launch Nuendo.
3. In Nuendo, choose **Studio > Object Mapping**.
4. In the **RMU** field, enter the IP address for the Dolby Atmos Renderer (or type *localhost*).

#### What to do next

Create a new project.

## 3.3 Playing back audio in Nuendo with the Dolby Atmos project template

You can use the Nuendo template provided by Dolby to confirm playback of audio.

#### Prerequisites


- Ensure that you have installed the Dolby project template for Nuendo. This template is included in the Dolby Atmos Renderer installer.
- Ensure that Nuendo is set up to communicate with the Renderer.

### About this task

You perform this task with the Dolby Atmos Renderer using a Production Suite license.

Additionally, this task uses Nuendo.

### Procedure

1. Launch the Dolby Atmos Renderer , and then Nuendo, if they are not running.
2. In the Hub, locate the Project section, and select **Templates** in the category bar.
3. Select (highlight) the Dolby Atmos template: **Dolby Atmos Production Suite - 128 channels**.
4. Click **Create** to open the template.
5. Update the project configuration as needed.
6. After the project opens, perform one of these steps to add audio to the project:
  - Open a **Finder** window, and drag and drop a mono audio file from your computer onto the object 11 audio track.
  - Import audio into the Nuendo project using the **File > Import > Audio** file command, and place the audio on track 11.
7. Start playback.
8. Listen to the output of the Core Audio device selected in the **Driver** preferences.
  -  **Note:** If you do not hear audio from your Nuendo output, stop playback and verify that your headphone mapping is correct in input/output (I/O) setup.
9. (Optional) In Nuendo, use object track panners to move objects and listen to the results.
10. Stop playback.



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# 4

## Getting started with Pro Tools

To use Dolby Atmos Renderer with Pro Tools, both the Dolby Atmos Renderer and Pro Tools must be configured to work together. After completing configuration, you can use one of the Pro Tools templates provided by Dolby to confirm playback of audio.

- [Configuring a Dolby Atmos Renderer and Pro Tools setup that uses Send and Return plug-ins](#)
- [Setting up Pro Tools to communicate with the Dolby Atmos Renderer](#)
- [Playing back audio in Pro Tools with a Dolby Atmos session template](#)

## 4.1 Configuring a Dolby Atmos Renderer and Pro Tools setup that uses Send and Return plug-ins

If you want to author Dolby Atmos in Pro Tools and use Dolby Send and Return plug-ins, you must set the Dolby Atmos Renderer to use the **Send/Return plug-ins** as your audio driver. This ensures the routing of audio between Pro Tools and the Dolby Atmos Renderer.

### About this task

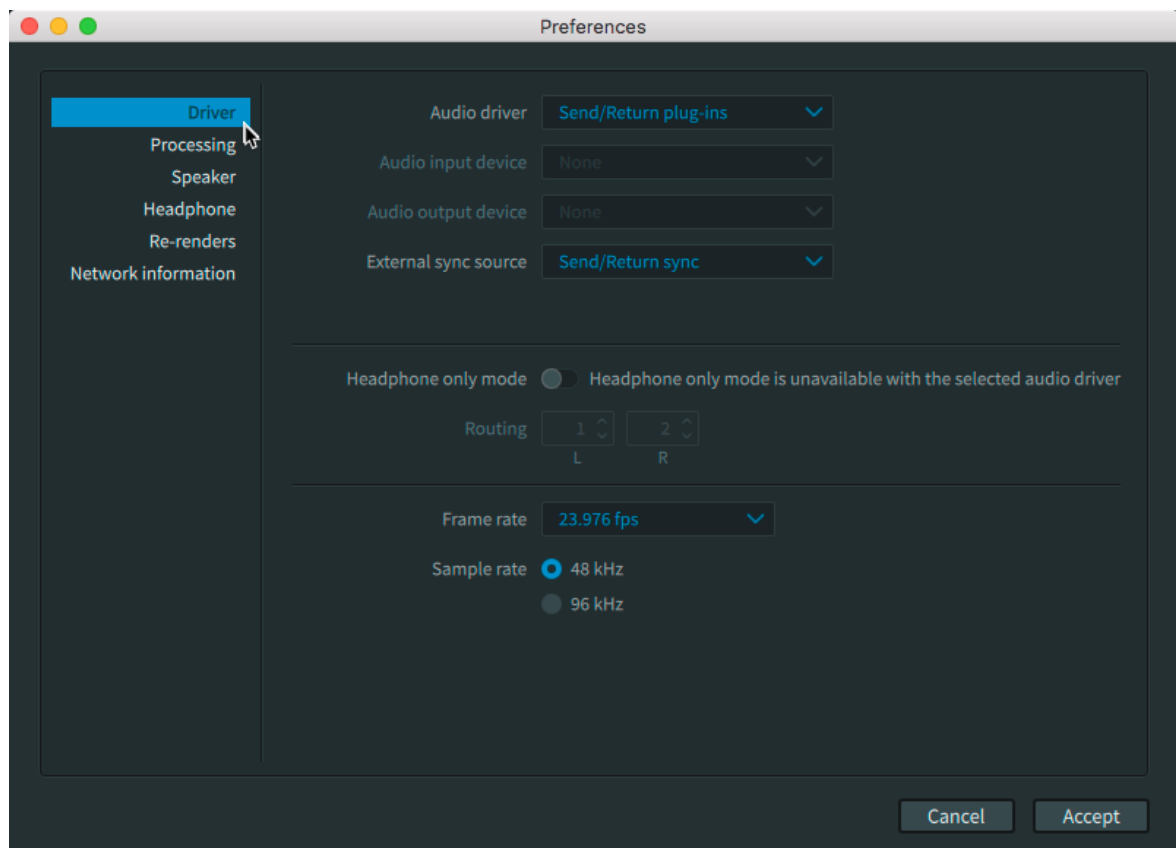
You perform this task with the Dolby Atmos Renderer using a Production Suite license.

Alternatively, you can configure Dolby Atmos Renderer inputs and outputs to use the Dolby Audio bridge and other Core Audio devices.

This task also requires changes to Pro Tools.

### Procedure

1. In the Dolby Atmos Renderer, choose **Dolby Atmos Renderer > Preferences** to open the **Preferences** window.
2. Select (highlight) **Driver** to navigate to the **Driver** preferences.



3. Click the **Audio Driver** drop-down menu, and select **Send/Return plug-ins**.
4. Set the **Frame rate** and **Sample rate** to match the rates of your Pro Tools session.
5. Click **Accept**.
6. Launch Pro Tools.
7. In Pro Tools, set the **Playback Engine** to your output device.
8. Set the **H/W Buffer Size**.
  - For a 48 kHz session, set the **H/W Buffer Size** to **1024 Samples**.

- For a 96 kHz session, set the **H/W Buffer Size** to **2048 Samples**.

**What to do next**

Set up Pro Tools to communicate with the Dolby Atmos Renderer.

## 4.2 Setting up Pro Tools to communicate with the Dolby Atmos Renderer

Before authoring Dolby Atmos with Pro Tools, you must set up Pro Tools to communicate with the Dolby Atmos Renderer.

**Prerequisites**

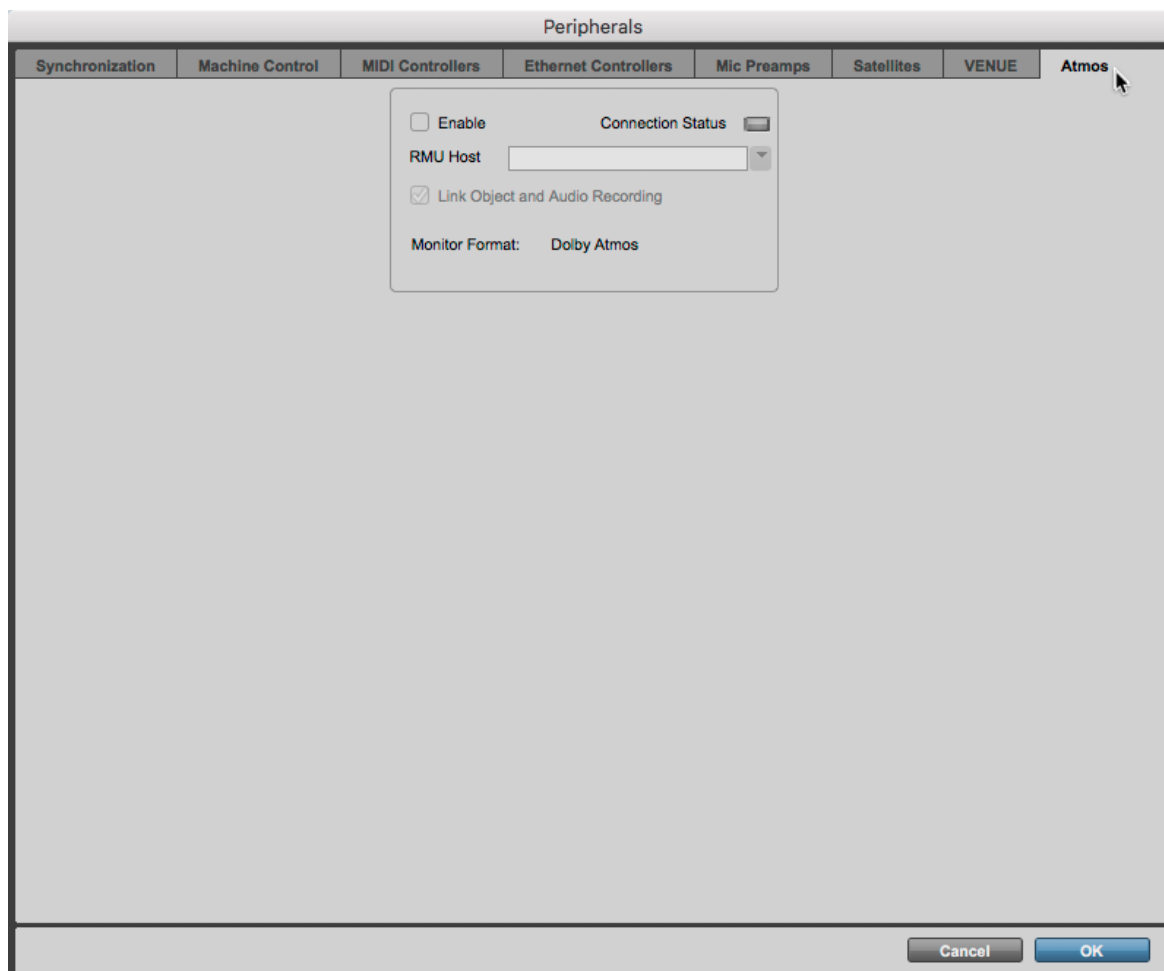
- Required components for a Dolby Atmos system have been installed.
- Renderer **Driver** preferences have been configured to ensure the routing of audio between the Renderer and Pro Tools.

**About this task**

Perform the steps for this task on the computer that is running the Dolby Atmos Renderer and Pro Tools.

**Procedure**

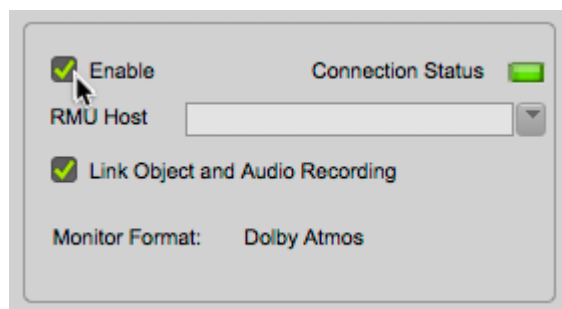
1. Launch the Dolby Atmos Renderer.
2. Launch Pro Tools.
3. In Pro Tools, choose **Setup > Peripherals**.
4. Click the **Atmos** tab.




5. Perform these steps in the **Atmos** page.

- a) Click (set) **Enable**.

The **Connection Status** indicator flashes green.



- b) In the **RMU Host** field, enter the IP address for the Dolby Atmos Renderer, or choose it from the drop-down menu.

 **Note:** When using the Production Suite, the Renderer is running on the same computer as Pro Tools, so you can enter *LOCALHOST*, instead of an IP address.

The **Connection Status** indicator turns solid green.

- c) (Optional) Click (enable) **Link Object** and **Audio Record**.

Typically, you will want this option enabled so that you record and monitor object audio and metadata simultaneously when in a source/recorder workflow. If you do not want to record object metadata, disable the option.

6. Click **OK**.

#### What to do next

Create a new session.

## 4.3 Playing back audio in Pro Tools with a Dolby Atmos session template

You can use one of the Pro Tools templates provided by Dolby to confirm playback of audio and session routing.

#### Prerequisites


- Ensure that you have installed the Dolby session templates for Pro Tools. These are included in the Dolby Atmos Renderer installer.
- Ensure that Renderer **Driver** preferences have been configured to ensure the routing of audio between the Renderer and Pro Tools.
- Ensure that Pro Tools is set up to communicate with the Renderer.

#### About this task

- You perform this task with the Dolby Atmos Renderer using a Production Suite license.
- Additionally, this task uses Pro Tools and a *DolbyAtmos Renderer Send Return* session template.

#### Procedure

1. Launch the Dolby Atmos Renderer.
2. Launch Pro Tools.
3. In Pro Tools, choose **File > Create New**.
4. In the **Dashboard** dialog, choose one of the templates from the Dolby Atmos Production Suite template group.
  - a) Click **Create**.
  - b) Click (enable) **Local Storage (Session)**.
  - c) Click (check) the **Create From Template** option.
  - d) Click the **Template Group** drop-down menu, and choose the **Dolby Atmos Productions Suite** folder.
  - e) In the list of Dolby Atmos Production Suite templates, click (highlight) one of the **Dolby Atmos Renderer Send Return** templates.
5. After the session opens, perform one of these steps to add audio to the session:
  - Open a **Finder** window, and drag and drop a mono audio file from your computer onto the object 11 audio track.
  - Import audio into the Pro Tools session using the **File > Import > Audio** command, and place the audio on track 11.
6. Start playback.
7. Listen to the headphone Left and Right channels, which are routed to your Pro Tools stereo output path.
 

 **Note:** If you do not hear audio from your Pro Tools output, stop playback and verify that your headphone mapping is correct in I/O setup.
8. (Optional) In Pro Tools, use object track panners to move objects and listen to the results.
9. Stop playback.

# Glossary

**CPU**

Central processing unit.

**DAW**

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

**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.

**object**

An audio signal plus associated object audio metadata.

**Dolby RMU**

Dolby Rendering and Mastering Unit.

**RMU**

Rendering and Mastering Unit.

**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.

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