
EQUINOX

Table of Contents

1. Welcome to Equinox

Equinox is a flexible and customizable reverb for post and music production that combines Exponential Audio and iZotope technology to give depth, life, and clarity to every scene, song, and sound.

It uses the two legendary Exponential Audio algorithmic reverb engines from Stratus and Symphony in a single, streamlined plugin that provides both realistic and creative or experimental reverb spaces.

This user guide shows you how to work with Equinox and describes all of its features in detail, starting with the overview.

Document conventions

In this document the following formatting is used to highlight useful information:

Italics	Indicates paths to locations on your hard disk or other storage devices.
Bold	Highlights important names, concepts, and software interface elements.
[Brackets]	References keys on the computer keyboard.
►	Denotes a single step instruction.
→	Denotes the expected result when following instructions.

The following three icons denote special types of information:

The **light bulb** icon indicates a useful tip, suggestion, or interesting fact.

The **information** icon highlights essential information in a given context.

The **warning** icon alerts you of potential risks and serious issues.

System requirements

For the latest system requirements please see the Equinox product page.

2. Overview

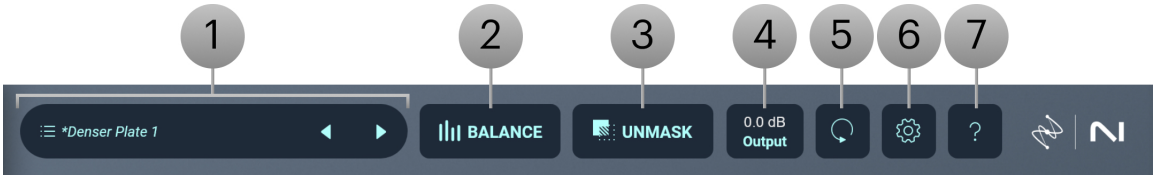
Equinox provides broad-to-fine control so you can get results quickly or go deep into crafting your sound. The main window features the main reverb controls on the left side, with the additional controls, EQ section, and Dynamics controls accessible to the right.

1. **Main controls**: Contain the most important settings of your reverb. For more information, refer to Main controls.
2. **Header**: Contains global controls including the Preset selector and the global output level. The Header also lets you access the **Balance** and **Unmask** features as well as the **Options** window. For more information, refer to Header.
3. **Additional controls**: Provide detailed settings for the reverb engine. For more information, refer to Additional controls.
4. **EQ section**: Lets you adjust the filtering for the input signal, the early reflections, and the tail of the reverb. For more information, refer to EQ section.
5. **Dynamics controls**: Let you apply a saturation, a compression, and a gate to your reverb sound. For more information, refer to Dynamics controls.

3. Header

The Header gives you access to presets, global functions, and the **Options** window.

The Header contains the following elements:

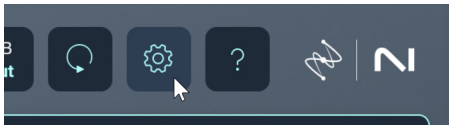


1. **Preset selector**: Shows the name of the current preset. A little star left of the preset name indicates that you have modified some settings since the preset has been loaded. Clicking the preset name opens the Preset Browser that lets you browse and manage presets. By clicking the left and right arrows you can load the previous or next preset from the list without opening the Preset Browser, respectively. Refer to Using presets.
2. **Balance**: Opens the **Balance** panel. Refer to Balance.
3. **Unmask**: Opens the **Unmask** panel. Refer to Unmask.
4. **Output**: Adjusts the global output level of Equinox, in dB. You can change the value by clicking the field and dragging your mouse vertically, or by double-clicking the field and entering the value on your computer keyboard and pressing [Enter] to confirm.
5. **Reset**: Returns Equinox to its default settings.
6. **Options**: Opens the **Options** window that shows the software version and gives access to options including tooltips and usage data, as well as your license. Refer to Options.
7. **Help**: Opens the Equinox online help.

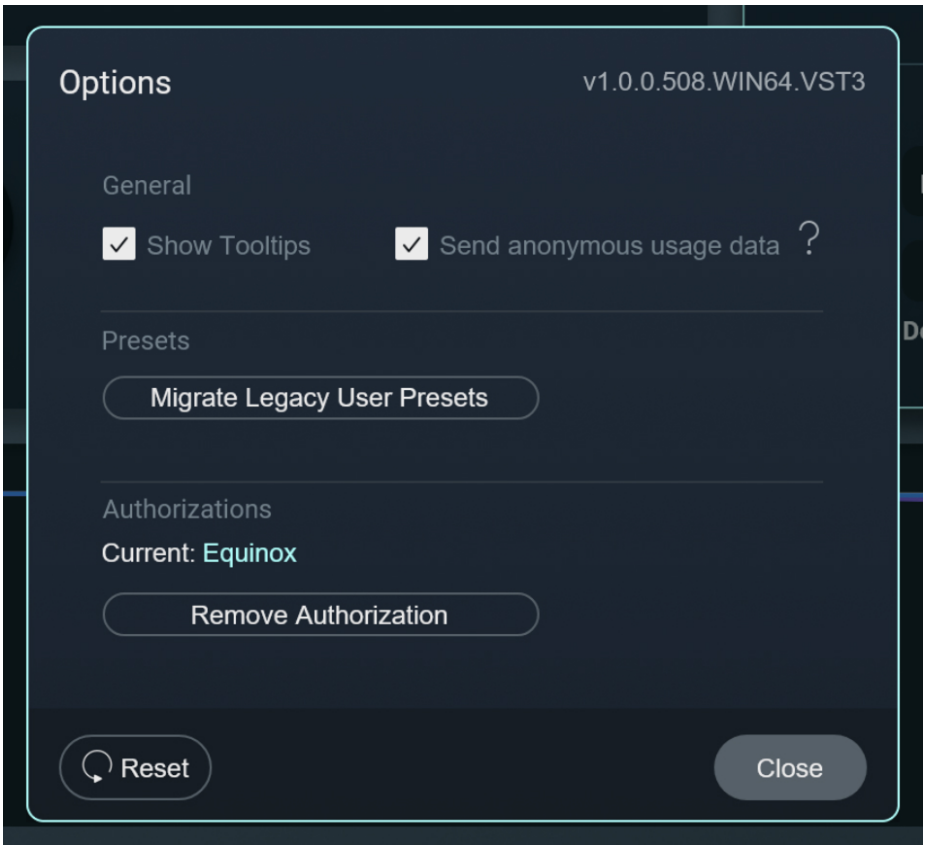
Options

The **Options** window lets you check the plugin's software version and gives you access to options including tooltips and usage data, as well as your license.

▶ To open the **Options** window, click the Options button (cog wheel icon) in the Header.



The **Options** window contains the following elements:

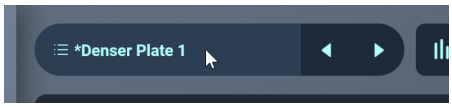


- **Version number**: The software version is displayed in the top right corner.
- **General**:
  - **Show Tooltips**: Activates or deactivates the tooltips in the user interface. When activated, hovering over a control shows a brief description of its functionality.
  - **Send anonymous usage data**: Activates or deactivates anonymous usage data tracking. When activated, this information helps us improve the software. You can click the question mark on the right to get more information on anonymous usage data tracking from the iZotope website.
- **Presets**:
  - **Migrate Legacy User Presets**: Clicking this button will import your Exponential Audio Stratus and Symphony User Presets into Equinox. The migration can be run multiple times if you create new legacy presets later. Presets that have already been migrated will be ignored on subsequent runs. For more information on presets, refer to Using presets.
- **Authorizations**:
  - **Current**: Shows the current license status of the plugin.
  - **Remove Authorization**: Removes the current product authorization, letting you authorize the plugin using another serial number.
- **Reset**: Resets the settings in the **Options** window to their default values.
- **Close**: Closes the **Options** window.

4. Using presets

The Preset Browser lets you browse and manage presets. Presets store settings for all the parameters of Equinox, with the exception of the **Mix** and **Freeze** controls (located in the Main controls). They can originate from the Equinox factory library, which contains more than 1250 presets from a wide variety of settings and locations, or from your own collection of user presets.

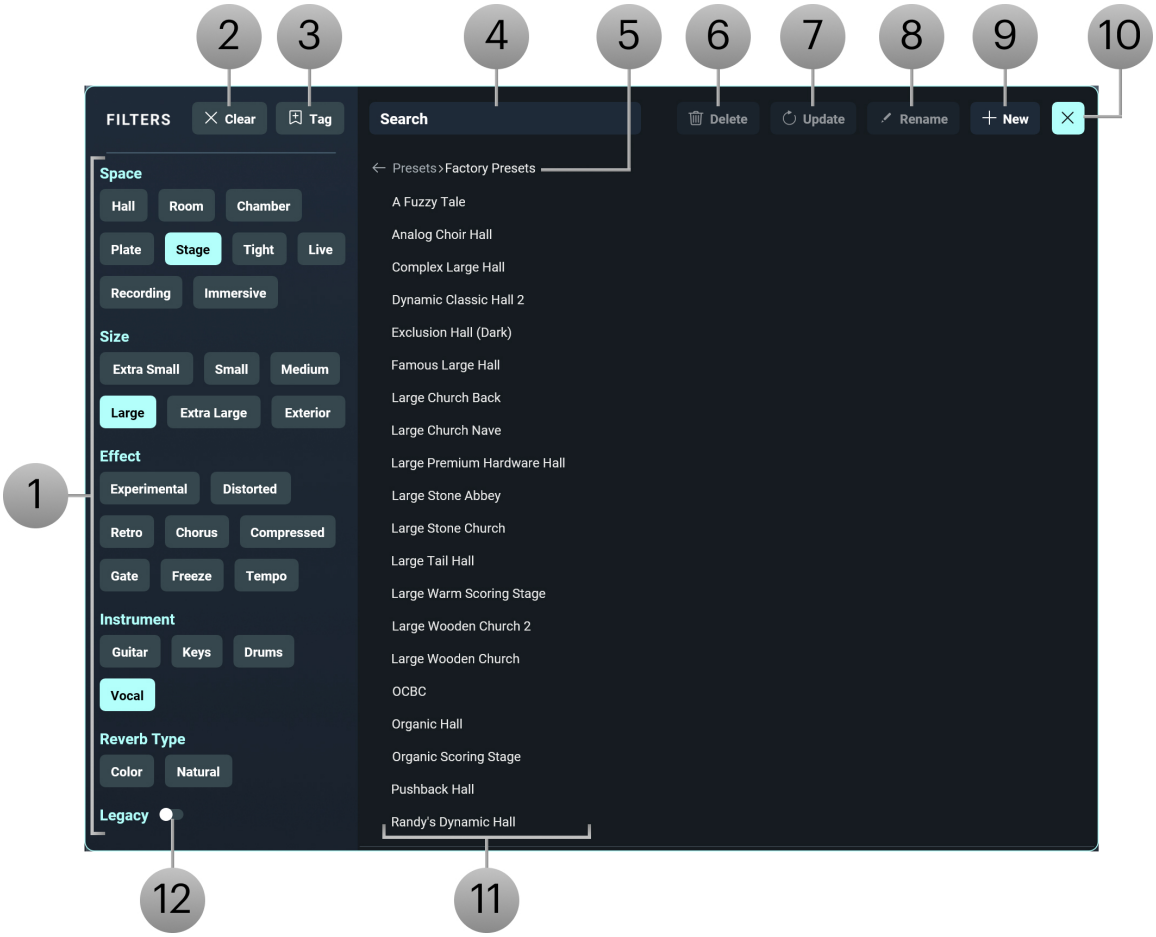
▶ To open the Preset Browser, click the preset name in the Header.



Browsing presets follows this typical workflow:

- You first select the factory or user preset folder in the preset list.
- Then you can select the tags in the Space, Size, Effect, Instrument, and Reverb Type categories on the left side of the Browser that describe the type of space that you are looking for. You can also use the Search field at the top to refine your search.
- Finally you can select the desired preset from the list of presets matching your search criteria.

The Preset Browser contains the following elements and controls:



1. **Tag filter**: You can click the tags describing the space that you are looking for. The preset list on the right is updated accordingly. The Tag filter is organized into various categories: **Space**, **Size**, **Effect**, **Instrument**, and **Reverb Type**. If you select multiple tags from the same category, the presets matching any of them will appear in the list. If you select tags in different categories, the presets matching all of them will appear in the list. The **Reverb Type** category allows you to search presets according to their reverb engine, either **Color** (creative or experimental spaces) or **Natural** (realistic spaces).
2. **Clear**: Resets the current search by removing any tag selection from the Tag filter and any string entered into the Search field. The Preset list shows all the presets found in the current folder.
3. **Add Tag**: Lets you select or deselect tags for the selected user preset. You can click the Add Tag button and navigate through the tag categories to choose the desired tags for your user presets.
4. **Search field**: Lets you type any string followed by [Enter] on your computer keyboard in order to search all the presets matching this string. Click the **X** button on the right to empty the Search field.
5. **Preset Folder path**: Shows the path to the folder that you are currently browsing. You can click any element in the path to directly jump to that folder and continue browsing from there, or click the little arrow on the left to return to the previous level in the folder structure.
6. **Delete**: Deletes the selected user preset. If a factory preset is selected, this function is not available and the button is grayed out.
7. **Update**: Saves any changes you have made to the selected user preset. If a factory preset is selected or if the preset settings have not been changed, this function is not available and the button is grayed out.
8. **Rename**: Renames the selected user preset. If a factory preset is selected, this function is not available and the button is grayed out.
9. **New**: Saves the current settings as a new user preset in the user preset folder or its current subfolder.
10. **Close** (cross icon): Closes the Preset Browser.
11. **Preset list**: By default the Preset list shows two folders: **Factory Presets** and **User Presets**. You can click either folder to open it and start to browse that type of presets. The Preset list then shows all the presets corresponding to the selected tags on the left and/or to the text entered in the search field above. Clicking a preset from the list loads it with all of its settings, while the preset name appears in the Preset selector of the Header.
12. **Legacy switch**: Changes the names of the reverb engines back to the original Exponential Audio **Symphony** (Color) and **Stratus** (Natural) names for legacy users who prefer to search this way. It also exposes additional variations of presets, such as Light, Dark, Wide, Narrow, etc.

Once you close the Preset Browser, you can cycle through the presets from the current Presets list using the arrow keys in the Preset selector of the Header.

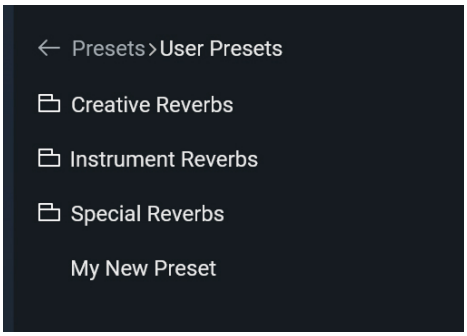
Managing user presets

User presets are saved in the following user preset folders:

- macOS: */Users/<user name>/Documents/iZotope/Equinox/Presets*

- Windows: *Users\<user name>\Documents\iZotope\Equinox\Presets*

To manage your user presets, the Preset Browser provides the **Add Tag**, **Delete**, **Update**, **Rename**, and **New** buttons (refer to Using presets). In addition, you can manually create custom subfolders within the user preset folder to further organize your user presets. Your custom subfolders will appear in the Preset list as you select the **User Presets** folder:



Any new preset that you save will be stored in the current subfolder.

You can import user presets created in Exponential Audio Stratus and Symphony into Equinox. This is done using the **Migrate Legacy User Presets** button available in the Options window.

5. Main controls

Use the Main controls to adjust the settings of a selected preset or to quickly create a space for your project. If you are starting from scratch, first select the Reverb Type, then adjust the **Time** for the reverb decay, the **Size** of the room, and the **Pre-delay**. Use the **Tone** control to make your space darker or brighter. To make further adjustments and go much deeper into settings, use the Additional controls, EQ section, and Dynamics controls.

The Main controls contain the following elements:

- **Reverb Type menu**: Selects the type of reverb. Plates are very dense and diffuse, often used for percussion. Chambers are dense and uncolored, used for all sorts of applications. Halls have a slower buildup and are excellent for vocals and classical music and will pass lower frequencies. In addition, the reverb types use either of two reverb engines:
  - **Natural**: Creates realistic spaces. This is the reverb engine from Exponential Audio's Stratus.
  - **Color**: Generates creative and experimental sounds. This is the reverb engine from Exponential Audio's Symphony.

- **Time**: Adjusts the reverb decay time. This is dependent on the room size and determines approximately how long a full-range signal takes to fall off by 60 dB. It may be helpful to think of this as a "reflectivity" control.
- **Freeze**: Turns global freeze on or off. When Freeze is activated, it holds or "freezes" the current reverb setting as a drone effect. It only works when a **Color** reverb is selected in the Reverb Type menu.
- **Pre-Delay Sync menu**: Activates or deactivates the synchronization of the Pre-delay. When set to **Off**, the **Pre-delay** value below is measured in milliseconds. When set to **Note**, the **Pre-delay** is measured in note values relative to the tempo. When set to **Ratio**, the **Pre-delay** is measured as a ratio relative to the beat duration: For example, at 60 beats per minute (BPM) with a ratio set to 1, the pre-delay time is set to 1 second; at 120 BPM with a ratio of 4, the pre-delay time is set to 2 seconds.
- **Size**: Adjusts the size of the room that you are modeling, measured in meters. Larger sizes will slow reverb buildup and give a less dense reverb. Reverb time will also be affected by changes in this value.
- **Pre-delay**: Adjusts the pre-delay time. The pre-delay unit depends on the synchronization setting specified in the **Sync** menu above. Adding pre-delay can help control muddiness in the reverb.
- **Tone**: Moving the **Tone** slider to the left makes the reverb darker, sliding it to the right makes the reverb brighter.
- **Early Gain**: Adjusts the level of early reflections.
- **Reverb Gain**: Adjusts the level of the reverb tail.
- **Mix**: Adjusts the wet/dry mix. This should only be used if the plugin is inline. If the plugin is on an aux/effect track, it is best to control the track level instead.

6. Additional controls

The Additional controls allow you to make detailed adjustments to your space.

The Additional controls are split into four panels:

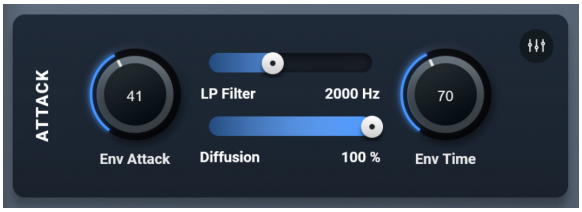
- The Attack panel affects the signal as it enters the tail of the reverb.
- The Early panel adjusts the early reflections.
- The Tail panel adjusts the reverb tail.
- The Chorus panel adjusts a chorusing effect. This panel is only available when a Color reverb type is selected.

Each panel also provides advanced controls that can be accessed for further refinement.

> If the Additional controls are not visible, make sure to deactivate the **Unmask** button in the Header.

Attack panel

The **Attack** panel affects the signal as it enters the tail of the reverb. It contains the following controls:



- **Env Attack** (Envelope Attack): Adjusts the distribution in time of the signal entering the reverberator. Low values mean that the earliest part is stronger. High values mean that the latest part is stronger. High values with a large attack time can move the listening position farther away from the sound source.
- **LP Filter** (Low-Pass Filter): Adjusts a low-pass filter applied to the later part of the signal entering the reverberator. This can be more apparent with larger reverbs.
- **Diffusion**: Adjusts the amount of irregularity in the room's reflective surfaces. Higher values may cause coloration with some signals.

- **Env Time** (Envelope Time): Adjusts the duration of the reverb attack. Larger values can make the reverb "speak" more gradually.
- **Advanced Controls button** (three-fader icon): Shows or hides the panel's advanced controls.

Advanced controls

When the Advanced Controls button is active, the **Attack** panel extends and provides additional controls in its lower part:

- **Diffuser Size**: Adjusts the feature size of irregularities in the room's reflective surfaces. Small values may be helpful for signals with sharp transients.
- **Link**: Links the **Diffuser Size** parameter to the reverb size. When **Link** is on, the **Diffuser Size** control above is grayed out and inactive.

Tail panel

The **Tail** panel lets you adjust the reverb tail. It contains the following controls:

- **Damping**: Adjusts the sharpness of the filter for high reverb frequencies (frequencies above the Damping Frequency). The lower this value, the more rapidly those frequencies are absorbed.
- **Damping Freq** (Damping Frequency): Adjusts the frequency of the low-pass filter for high reverb frequencies. The damping effect takes place above this frequency.
- **Width**: Controls the width of the reverb effect. Be sure to check for mono compatibility for higher values.
- **Balance**: Adjusts the relative reverb times as a percentage of signal above and below the **Crossover** frequency (set in the Advanced controls). Low values mean longer reverb times for low frequencies. High values mean longer reverb times for high frequencies.
- **Advanced Controls button** (three-fader icon): Shows or hides the panel's advanced controls.

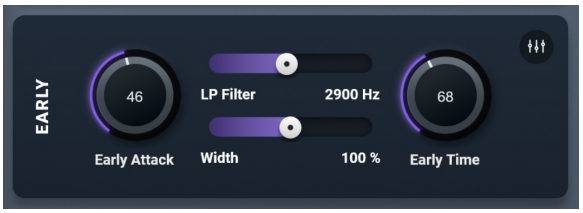
Advanced controls

When the Advanced Controls button is active, the **Tail** panel extends and provides additional controls in its lower part:

- **Delay**: Controls an additional delay for the reverb signal after the onset of the early reflections. The unit will differ according to the setting in the Delay Sync menu below.
- **Tail Delay Sync menu**: Activates or deactivates the synchronization of the additional delay. When set to **Off**, the **Delay** value above is measured in milliseconds. When set to **Note**, the **Delay** is measured in note values relative to the tempo. When set to **Ratio**, the **Tail Delay** is measured as a ratio relative to the beat duration: For example, at 60 beats per minute (BPM) with a ratio set to 1, the tail delay time is set to 1 second; at 120 BPM with a ratio of 4, the tail delay time is set to 2 seconds.
- **Suppression meter**: Shows the attenuation currently applied.
- **Suppression**: Adjusts the attenuation applied to the tail when the input is detected by the level sensor. You can use the Tail Suppression Source menu at the bottom to adjust the placement of the sensor. The current suppression is indicated by the vertical bar on the left.
- **Recovery**: Adjusts the time taken by the tail level to be restored when the input signal is low. The maximum value is related to the reverb time (as set by the **Time** dial in the Main controls).
- **Suppress Early**: Activates or deactivates the tail suppression on early reflections.
- **Crossover**: Adjusts the crossover between low and high frequencies. This works in conjunction with the **Balance** control above.
- **Tail Suppression Source menu**: Determines the position of the level sensor for the tail suppression. The sensor may detect an input level, a reverb (output) level, or both.

Early panel

The **Early** lets you adjust the early reflections. It contains the following controls:

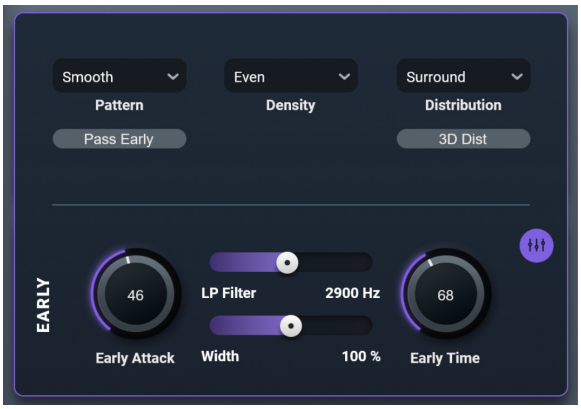


- **Early Attack**: Adjusts the angle of attack of the early reflections. At lower values the earliest reflections are stronger. At higher values the latest reflections are stronger.
- **LP Filter** (Low-Pass Filter): Adjusts a low-pass filter applied to the later part of the early reflections.

- **Width**: Controls the width of the early reflections. Be sure to check for mono compatibility for higher values.
- **Early Time**: Adjusts the duration of the early reflections (in milliseconds), which are spread out over this time.
- **Advanced Controls button** (three-fader icon): Shows or hides the panel's advanced controls.

Advanced controls

When the Advanced Controls button is active, the **Early** panel extends and provides additional controls in its upper part:

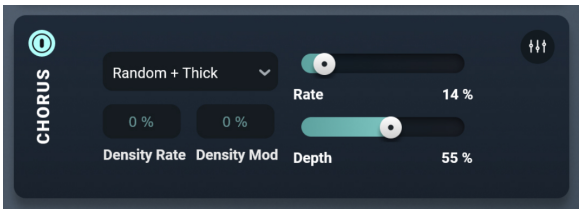


- **Pattern**: Selects the early reflection pattern. This can affect the placement of your source material.
- **Pass Early**: Allows the early reflections to pass when **Freeze** is engaged in the Main controls.
- **Density**: Controls the density of the selected pattern.
- **Distribution**: Controls where the early reflections go based on the input channel.
- **3D Dist** (3D Distribution): Allows the distribution of the early reflections to move into the height channels.

Chorus panel

The **Chorus** panel lets you adjust a chorusing effect. It is only available when a Color reverb is selected in the Reverb Type menu at the top of the Main controls. Chorusing happens inside the tail portion of the Color reverb. If a Natural reverb is selected instead, the Chorus controls are grayed out and inactive.

The **Chorus** panel contains the following controls:



- **Chorus on/off**: Turns the chorus on or off.
- **Chorus Type menu**: Selects the type of chorus. The **Thick** choices will have less noticeable pitch effects.
- **Density Rate**: Controls the speed of the room size modulation.

- **Density Mod** (Density Modulation): Controls the depth of the room size modulation.
- **Rate**: Controls the speed of the chorus effect.
- **Depth**: Controls the depth of the chorus effect.
- **Advanced Controls button** (three-fader icon): Shows or hides the panel's advanced controls.

Advanced controls

When the Advanced Controls button is active, the **Chorus** panel extends and provides additional controls in its upper part:

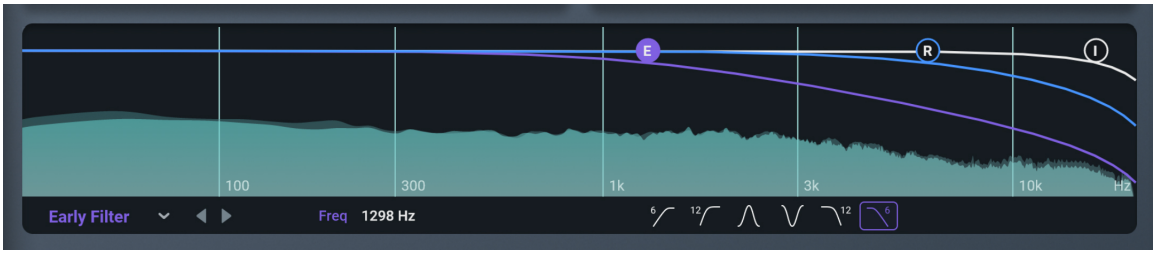
- **Early Modulation**: Adjusts the amount of early filter modulation.
- **Reverb Modulation**: Adjusts the amount of reverb tail filter modulation.
- **Early Rate**: Controls the rate of the early filter modulation.
- **Tail Rate**: Controls the rate of the tail filter modulation.

7. EQ section

The EQ section lets you make EQ adjustments to the input, early reflections, and reverb (reverb attack and reverb tail) with high-pass (6 dB and 12 dB per octave), notch, band-pass, and low-pass (6 dB and 12 dB per octave) filters.

In the graphical display, the colored areas show the current frequency contents of the reverb signal (brighter area) and input signal (darker area), while the three colored lines indicate the frequency responses of the filters applied to the input (white line), early reflections (violet line), and reverb (blue line) signals, respectively.

The EQ section contains the following controls:



- **EQ nodes**: Clicking the Input ("**I**"), Early ("**E**"), or Reverb ("**R**") node in the display will select the respective filter and show its settings below the display. You can also drag the node horizontally to quickly adjust the frequency of the respective filter.
- **EQ Filter selector**: Selects the input filter, early filter, or reverb filter to show and adjust its settings. You can click the filter label and choose another filter from the drop-down menu or click the little left/right arrows to switch to the previous/next filter from the list.
- **Freq** (Frequency): Adjusts the frequency of the selected EQ filter.
- **Q** (available only for the band-pass and notch filter types): Adjusts the sharpness of the filter's bandwidth.
- **Filter Type selector**: Chooses from various filter types. Click an icon to select that filter type. The following types are available, from left to right: high-pass 6 dB/octave, high-pass 12 dB/octave, band-pass, notch, low-pass 12 dB/octave, and low-pass 6 dB/octave.

ⓘ If the EQ section is not visible, make sure to deactivate the **Balance** button in the Header.

8. Dynamics controls

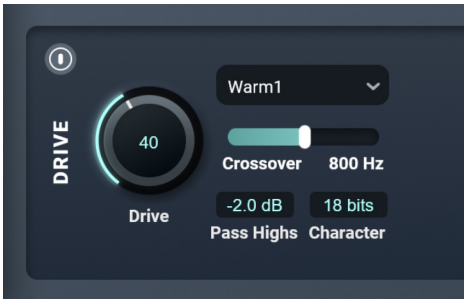
The Dynamics controls provide saturation, compression, and gate effects that can be applied to your space.

If the Dynamics controls are not visible, make sure to deactivate the **Balance** button in the Header.

Drive panel

The **Drive** (overdrive) panel lets you add warmth or distortion to the reverb signal by increasing the number of upper harmonics. The saturation is applied to the input.

The **Drive** panel contains the following elements:

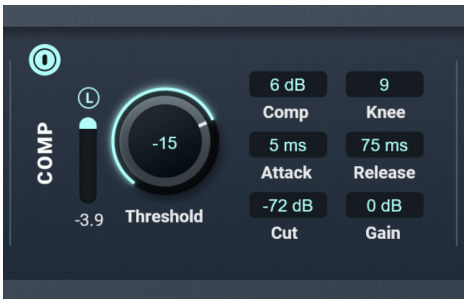


- **Drive on/off**: Turns the saturation on or off.
- **Drive**: Controls the amount of overdrive. Overdrive is a non-linear effect. The distortion components are strongest when the input is at high levels.
- **Drive Type menu**: Selects the type of overdrive.
- **Crossover**: Signals below the specified crossover will pass through the overdrive circuit. Signals above the crossover can be controlled with the **Pass Highs**.
- **Pass Highs**: Controls the amount of signal above the overdrive crossover that is mixed into the output. This can have significant timbral effects.
- **Character**: Controls the word size of the signal. This is typically used to imitate older hardware equipment.

Comp panel

The **Comp** panel contains a compander. When the **Comp** parameter is positive, it boosts the input signal below the threshold, applying upward compression. When the **Comp** parameter is negative, it attenuates the input signal below the threshold, applying downward expansion. The compression/expansion is applied at the input.

The **Comp** panel contains the following elements:

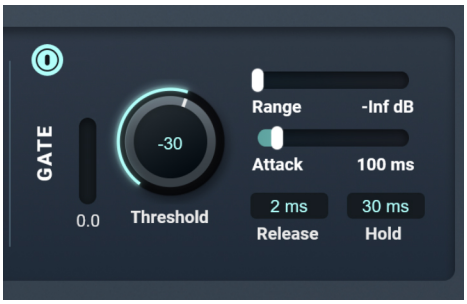


- **Comp on/off**: Turns the compander on or off.
- **Limiter button** ("**L**"): Activates or deactivates the hard limiter for the compander output. This is used to tame any compander overshoot.
- **Compression meter**: The vertical bar indicates the compression/expansion currently applied.
- **Threshold**: Controls the threshold of the compander. In compression mode, signal below the threshold will be boosted by the gain amount. In expansion mode, signal below the threshold will be attenuated by the gain amount.
- **Comp**: Controls the amount of compression or expansion below the threshold. For positive values, the compander applies upward compression. For negative values, it applies downward expansion.
- **Knee**: Controls the action of the compander knee. Softer values allow a more gradual action and are usually less audible.
- **Attack**: Controls the attack time of the compression/expansion effect.
- **Release**: Controls the release time of the compression/expansion effect.
- **Cut**: Determines the low compressor threshold. Signals below this level will not be boosted. This can keep unwanted noise (footsteps, etc.) from being boosted.
- **Gain**: Controls the makeup gain for the compander. The compander can have a significant effect on gain and this allows the signal to be matched with the unprocessed signal.

Gate panel

The **Gate** panel allows the reverb levels to be controlled by the characteristics of the input signal. It works with the Color reverb types and can be used for special effects, such as the giant snare sounds from the 1980s, or to help with matching Automated Dialogue Replacement to the characteristics of location sound.

The **Gate** panel contains the following elements:

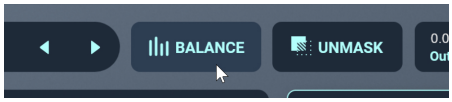


- **Gate on/off**: Turns the gate on or off.
- **Gate meter**: Shows the attenuation currently applied.
- **Threshold**: Sets the threshold below which the gate begins to shut off.
- **Range**: Determines how much the level is reduced when the signal falls below the **Threshold** value.
- **Attack**: Determines how long it takes for the gate to close.
- **Release**: Determines how long it takes for the gate to reopen after the signal has crossed above the threshold.
- **Hold**: Determines how long the gate remains open after the signal goes below the threshold. This is useful in keeping the gate from shutting down with rapidly changing input.

9. Balance

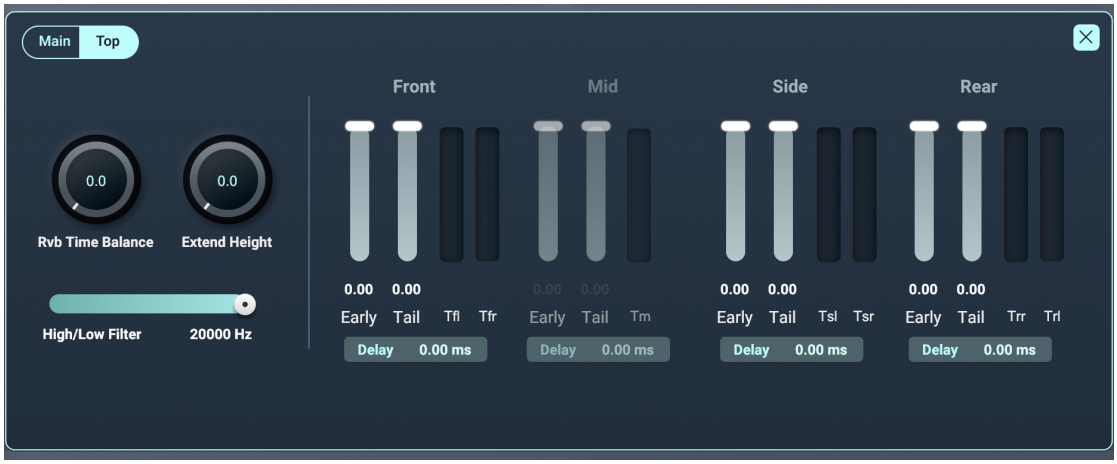
The **Balance** panel controls how the reverb is sent to the channels in surround and Atmos/ immersive formats. Channels that are not supported in a particular format will be grayed out and unavailable.

▶ To open or close the **Balance** panel, click the **Balance** button in the Header.



The **Balance** panel contains the following controls:

- **Main/Top**: Clicking **Main** displays the Front, Center, Side and Rear channels of surround reverb, while clicking **Top** displays the overhead/height channels of Atmos/immersive formats:



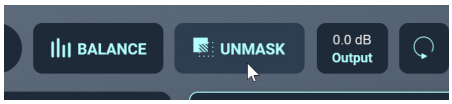
- **Rvb Time Balance** (Reverb Time Balance): Controls the percentage of additional delay for the reverb signal after the onset of early reflections.
- **Extend Height**: Adds height to the reverb, measured in meters.
- **High/Low Filter**: Applies a low-pass filter to signals going low-to-high or high-to-low from 2000 Hz to 20000 Hz.
- **Early**: Controls the level of early reflections for the channel.
- **Tail**: Controls the level of the reverb tail for the channel.

- **Delay**: Adjusts an additional delay for the channel.

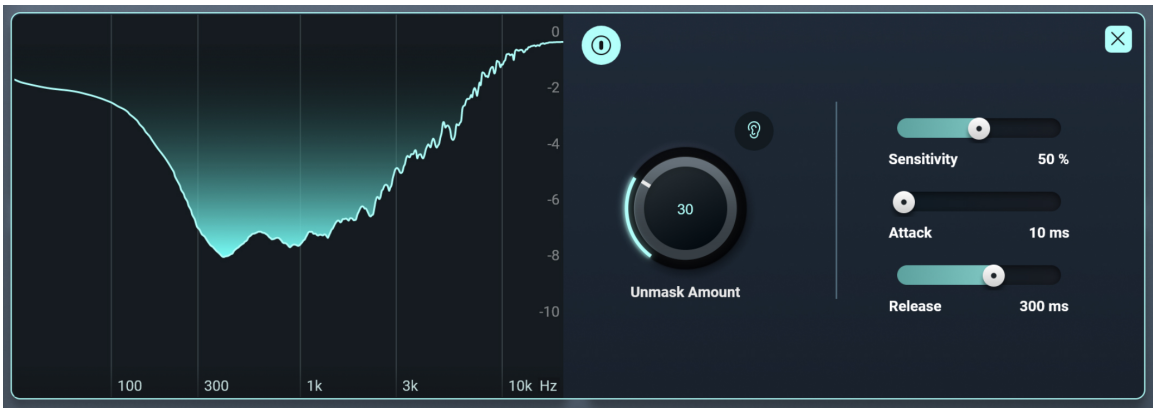
10. Unmask

Adaptive unmasking identifies and dynamically ducks certain frequencies of the reverb to make space for the dry signal. It prevents the reverb from muddying up the mix, keeping instruments, dialogue, and more clean and clear. Unmask works on mono, stereo, surround, and Atmos / immersive audio.

▶ To open or close the **Unmask** panel, click the **Unmask** button in the Header.



The Unmask panel contains the following controls:



- **Unmask on/off**: Turns unmasking on or off.
- **Delta button** (ear icon): Monitors the difference (delta) from the Unmask processing.
- **Unmask Amount**: Controls the amount of unmasking applied to the audio.
- **Sensitivity**: Scales the threshold of Unmask to account for a variety of input levels.
- **Attack**: Sets how quickly the Unmask processing reacts to the input level.
- **Release**: Sets how quickly the Unmask processing returns to baseline.
- **Close** (cross icon): Closes the Unmask panel.

11. Accessing additional height channels for Dolby Atmos (Pro Tools only)

In this section you will learn how to access additional height channels via plugin aux sends for Dolby Atmos workflows in Pro Tools.

When running on a 7.1.2 or 7.0.2 track, Equinox runs in a 7.1.6 configuration under the hood. We provide optional access to additional Top Front and Top Rear channels via plugin aux outputs. These outputs enable you to easily route the 7.1.2 reverb bus to the Dolby Atmos Bed, while splitting out extra Top Front and Top Rear channels for assignment to Atmos objects.

This feature is useful because of the following scenario:

In Pro Tools, let's say you instantiate Equinox on a track with a channel width of x.y.4 or x.y.6. These configurations use Top Front and Top Rear height channels. If you route that track directly to the 7.1.2 Bed, the Bed only "knows about" the Top Side height channels present in its native 7.1.2 configuration. Therefore, the Top Front and Top Rear channels present in x.y.4 and x.y.6 configurations are downmixed into the Top Sides. This loses the intended immersive effects of the added height channels!

Objects are the solution for the downmixing limitations of the 7.1.2 Atmos Bed. Equinox provides aux outputs so you can quickly route Top Front and Top Rear channels directly into additional Stereo aux tracks. These aux tracks can be assigned to Objects and then mixed into the Top Front and Top Rear height speakers with the Object Panner. With this strategy, we can directly route the 7.x.2 part of the 7.x.6 layout into the Atmos Bed, whilst preventing the Top Front and Top Rear channels from being downmixed into the bed's Top Side channels.

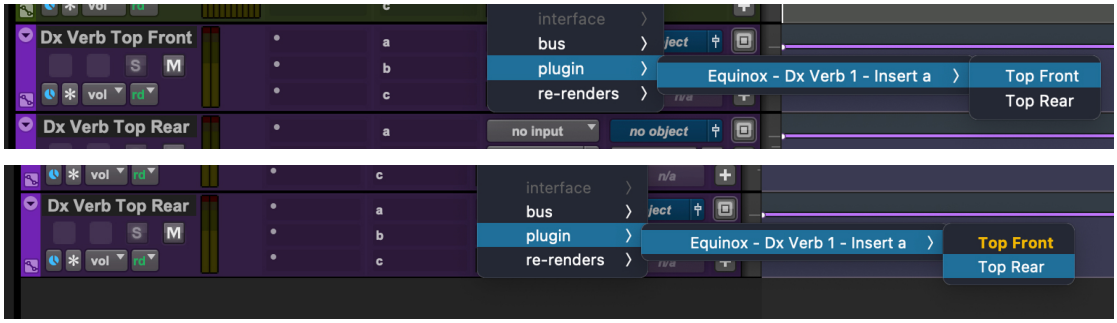
While there are other techniques (such as sub-paths) for splitting reverb busses larger than 7.1.2 into objects, we provide a solution that doesn't require deep complexity of I/O management and preserves the workflow many users of Stratus 3D and Symphony 3D are used to. Access to the Top Front and Top Rear channels is as simple as creating new aux tracks, assigning the plugin's extra outputs, and assigning the aux tracks to objects.

> ⓘ When using height channels in an object workflow, you may need to visit the Top page of Equinox's Balance panel to adjust the delays of the outputs. Objects are not time-aligned the way channels in the Bed are, so it might be necessary to tweak the timing of the height reverb tanks depending on the sound you are going for. See some of our "Immersive"-tagged presets for examples of this.

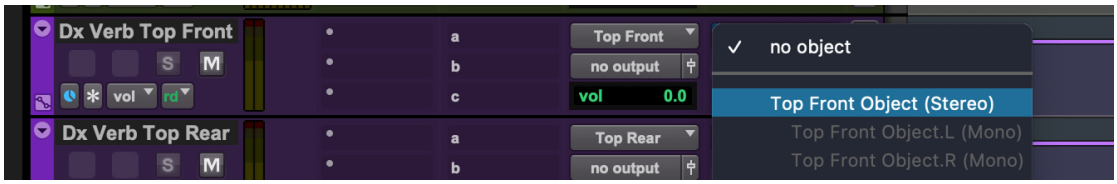
To utilize the plugin aux output feature:

1. Open Equinox on a 7.1.2 or 7.0.2 width track in Pro Tools.
2. Create two new stereo aux tracks.

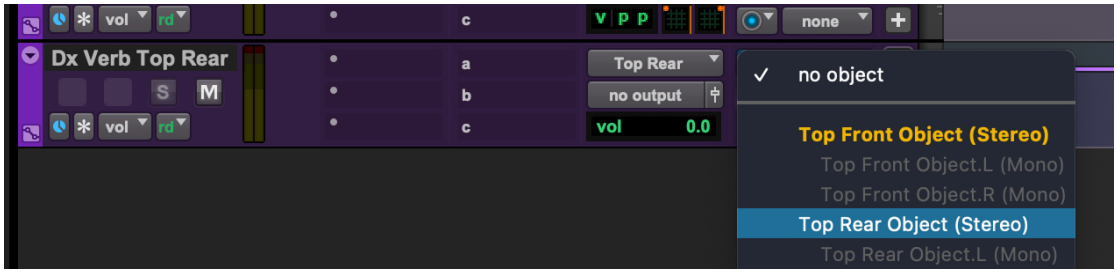
3. Set the aux track inputs to Equinox's **Top Front** and **Top Rear** plugin aux outputs, respectively:
   - Open the **Input** menu on an aux track, and you will see a category called **plugin**.
   - In the **plugin** category, navigate to the correct instance of Equinox and assign **Top Front** as the input. Assign **Top Rear** to the other aux track.



4. Assign the **Top Front** aux to an unused stereo object and activate it. In the example below, we renamed the object using the Dolby Atmos tab in I/O Settings. Pan this new Top Front object into the top front of the room using the Object Panner.

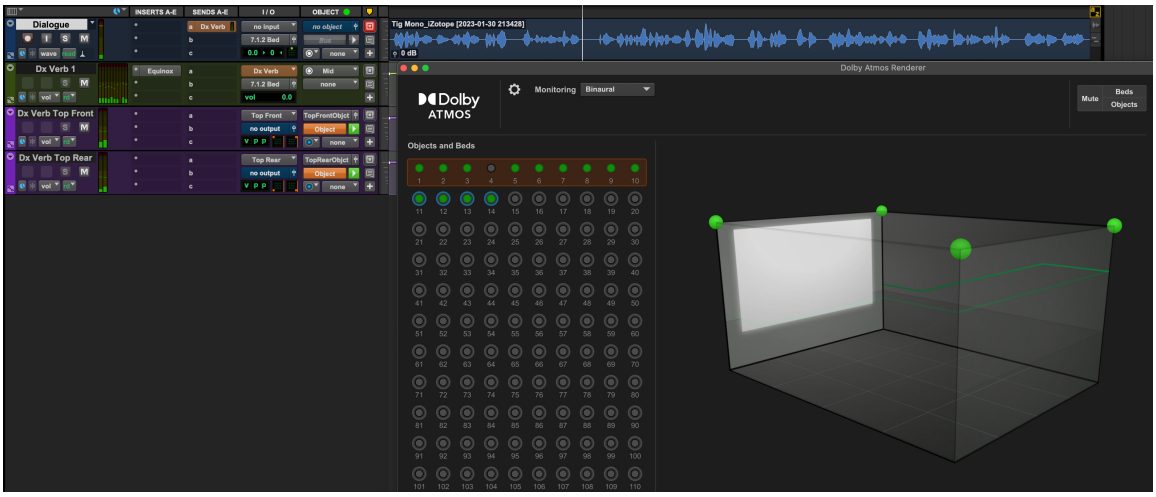


5. Assign the **Top Rear** aux to a different unused stereo object and activate it. Pan this Top Rear object into the top rear of the room using the Object Panner.



→ Reverb will be heard for all channels of the 7.x.2 configuration inside the track where Equinox is located. The additional Top Front and Top Rear channels are heard on their respective stereo aux tracks, which are assigned to objects. The objects are panned to their respective locations.

In this example, we have the 7.1.2 Dx Verb 1 track routed to the 7.1.2 Bed. The Atmos Renderer shows the Bed (channels 1–10 highlighted in orange) receiving signal. The additional Top Front and Top Rear objects light up in channels 11–14 as reverb passes from the plugin into these object aux channels.



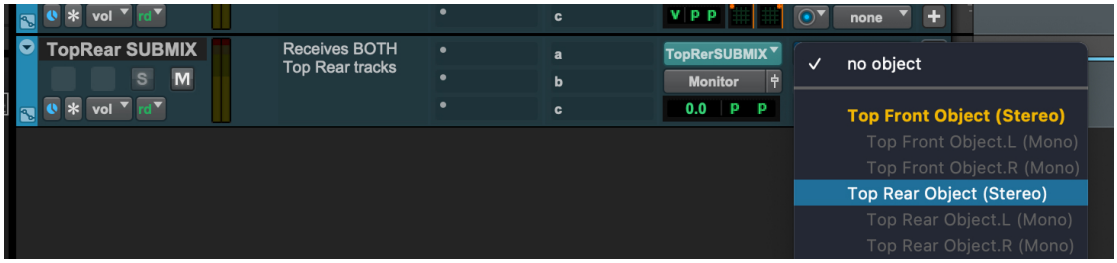
Top/Rear submix objects

If you want to use this Atmos workflow with many instances of Equinox in one session and don't want to use up additional object pairs, it may be helpful to create submixes for your Top Front and Top Rear aux channels. While it is possible to assign multiple aux tracks to the same object directly, if you route them through submixes that are assigned to objects you will have centralized places to control the object panning. Otherwise, you will need to navigate to the first track assigned to a given object to control its panning.

To create submix objects for Top Front and Top Rear aux tracks:

1. Follow steps 1 through 3 of the instructions above to create as many instances of Equinox as you wish. This time, do *not* assign their related aux tracks to objects.
2. Create two additional stereo aux tracks. Give them names such as "Top Front Submix" and "Top Rear Submix."
3. Assign the **Top Front Submix** aux track to a stereo object. Pan the **Top Front Submix** object into the top front of the room using the Object Panner.

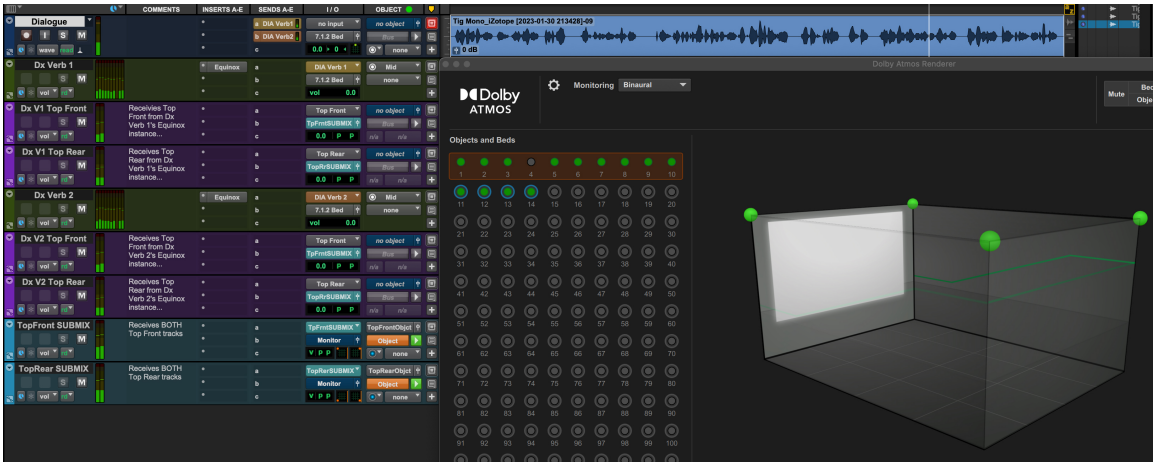
4. Assign the **Top Rear Submix** aux track to a stereo object. Pan the **Top Rear Submix** object into the top rear of the room using the Object Panner.



5. Route the output of all relevant Top Front aux tracks into the **Top Front Submix**.
6. Route the output of all relevant Top Rear aux tracks into the **Top Rear Submix**.

→ You should now hear all the Top Front and Top Rear aux tracks routed through their respective submixes.

In the example below, both **Dx Verb** tracks are routed to the 7.1.2 Atmos Bed. The **Top Front** and **Top Rear** aux tracks route to their respective submixes. The submixes are assigned to objects, which are panned to their respective locations with the Object Panner.



If you have to deliver separate stems for Dialogue, Music, FX, etc. you might be using separate reverbs for each group of tracks. In this case, you may need to create separate submixes per stem. For example, Top Front and Top Rear submixes for Dialogue reverbs, Top Front and Top Rear submixes for Music reverbs, Top Front and Top Rear submixes for FX reverbs, etc. The setup instructions above apply to any submix you wish to create.

The aux output workflow only functions when Equinox is opened on a 7.0.2 or 7.1.2 track inside Pro Tools. When you open Equinox on other channel widths besides 7.x.2, it is still possible to assign Top Front and Top Rear aux outputs for these channel widths. However, for all configurations besides 7.x.2, no reverb is present on the Top Front and Top Rear aux outputs.