

General Information

What is Audeze Reveal+ Plugin?

Reveal+ is the world's first Personalized Virtual Studio plugin which enables sound engineers to virtually mix in world-class sound studios from the comfort and privacy of their Audeze headphones. Reveal+ puts **you** in the sweet spot of iconic sound studios by modeling **your** unique ear shape using Artificial Intelligence algorithms.

How is Reveal+ different from other virtual studio plugins?

Most Virtual Studio plugins measure the sound response of a studio and then combine the measured response with your audio mix in order to bring the sound of that studio to you. However it never quite sounds like you are virtually sitting and mixing in that studio. Why? When you physically sit inside a studio your unique ear structure is as much a critical factor in your experience as the studio sound itself, but the Virtual Studio plugins have no knowledge of your unique ear shape. In order to transport you to the sweet spot of a studio, it is not enough to just measure the studio response; your [unique HRTF](#) which is driven by your unique ear shape must be modeled as well. In the decade-old promise of virtually mixing and monitoring over headphones, your unique HRTF has been missing from the equation - *you* have been missing from the equation.

The Reveal+ plugin delivers on the promise of virtual mixing and mastering over headphones. From a single image of your right ear, it maps your unique ear anatomy using Artificial Intelligence algorithms and creates your unique Personalized HRTF profile in less than 30 seconds.

What makes Reveal+ special?

Reveal+ is a powerful tool that features the acoustics of several world-class studios. This gives an artist the unique ability to monitor their mix on headphones but have the perception of sitting at the sweet spot of a state-of-the-art studio and listening on the respective monitor speakers. What makes this plugin unique is the truthful representation of the exact acoustics, signal chain, and speaker frequency responses all designed with the collaboration of the sound engineer.

In this digital era, Reveal+ is an essential tool for traveling musicians, producers, and engineers to have an uninterrupted workflow when they are not physically present in the studio.

How does Reveal+ compare to the Waves NX Tracking with Abbey Road Studio or the newly added Ocean Way?

The unique thing about Reveal+ is, unlike any other virtual studio plugin, it uses AI algorithms to deliver a mixing experience that's unique for your ears and your ears only. When you physically sit inside a studio, you are part of the mixing experience in that studio. The sound bounces off your unique ear shape before entering into the auditory cortex of your brain. You, with your

unique ear shape, are part of that space and for the last decade in all the plugins promising a virtual Studio mixing experience that piece about 'you with your unique ears' has been missing. Reveal+'s ability to create your unique audio profile from a single picture of your right ear puts this piece in place. And this makes all the difference in giving you a True and Trusted studio monitoring environment over headphones.

Additionally, the mixing experience inside each studio featured in Reveal+ is tuned and certified by the studio artists and sound engineers themselves.

How can I know what the Reveal+ virtual mixing experience sounds like unless I've been inside the featured studios?

The sound of each studio featured in the plugin is tuned and certified by the sound engineers themselves. For example, Spitfire Studio featured inside Reveal+ is tuned by Warren Huart himself. Only when the mixing experience over each headphone through the plugin matches the in-studio mixing experience to a point where the artist can not tell the difference is the studio certified and added to the plugin.

And until the mixing experience through the plugin matches the in-studio mixing experience to a point where the artist themselves can not tell the difference, the studio is not available in the plugin. This process is painfully long and detailed. But that's the promise Reveal+ delivers on, a True and Trusted studio monitoring experience on headphones.

Why do we even need Personalized HRTFs?

It is important to understand that human ears are as unique as fingerprints. Modeling these complex ear features or Head-related transfer functions (HRTFs) is extremely critical in rendering an immersive experience that sounds natural and is perceived as "outside the head." However, measuring HRTFs accurately using state-of-the-art methods is a complex and tedious process that is also expensive in terms of computation and resources. This could take several hours that requires a subject to sit in an anechoic chamber and participate in measurements. The AI engine of Reveal+ plugin models these personalized HRTFs in less than 30 seconds. To learn more about the Personalized HRTF AI engine inside Reveal+, [please watch this video](#).

Does Reveal+ support all the Audeze Headphones?

Reveal+ currently supports almost all the Audeze headphones that are available for purchase. We have worked with several world class sound engineers to optimise the sound precisely for each headphone, and will add more models as they become available or are updated, as part of the continuing evolution of the plugin.

Can you judge the depth of someone's ear from a flat photograph? Surely it's more about sonics than the visual of the ear.

Inside your ear image are cavities, folds, and thousands of abstract parameters, which define your unique auditory profile - your Personalized HRTF. AI and Cloud Computing come to our rescue here and we use sophisticated Artificial Intelligence and Machine Learning algorithms to create your personalized auditory profile (HRTF). By combining this profile with precise room measurements, Reveal+ delivers a true studio mixing environment on headphones that you won't find anywhere else.

In virtual mixing, is my own hearing ability more important than my Personalized HRTF?

Reveal+ does not compensate for your hearing ability. It takes into account how you hear the sound coming from different directions in the real-world. When you sit inside a studio, you can tell the sound coming from the left or right monitor. That's because the sound bounces off your unique ear shape before entering into your brain. You with your unique ear shape is part of that space, and to virtually and accurately put you inside that space, we take a picture of your ear.

Underneath Reveal+ there is an AI engine, which uses your ear image to make a mathematical model of how you hear sound directionally in real life. This model is called your Personalized HRTF and it makes all the difference while mixing over headphones. True and Trusted studio monitoring on headphones - that's the promise Reveal+ delivers on.

Sonarworks supports more headphones; isn't Sonarworks Headphone Edition a better option?

A big missing piece from all virtual studio plugins over the last decade has been Personalization. When you sit inside a studio, you are part of the mixing experience in that studio. The sound bounces off your unique ear shape before entering into the brain. You with your unique ear share is part of that space and for the last decade in all the plugins promising on the Virtual Studio mixing experience that piece about 'you with your unique ears' has been missing. Reveal+ put this piece in place.

Unlike any other plugin, Reveal+ uses AI algorithms to model your unique ear profile in real-time. And that makes all the difference in giving you True and Trusted studio monitoring experience over headphones.

How much does Reveal+ cost?

Reveal+ is available for purchase at \$199. You can purchase it at <https://www.audeze.com/products/reveal>.

License Information

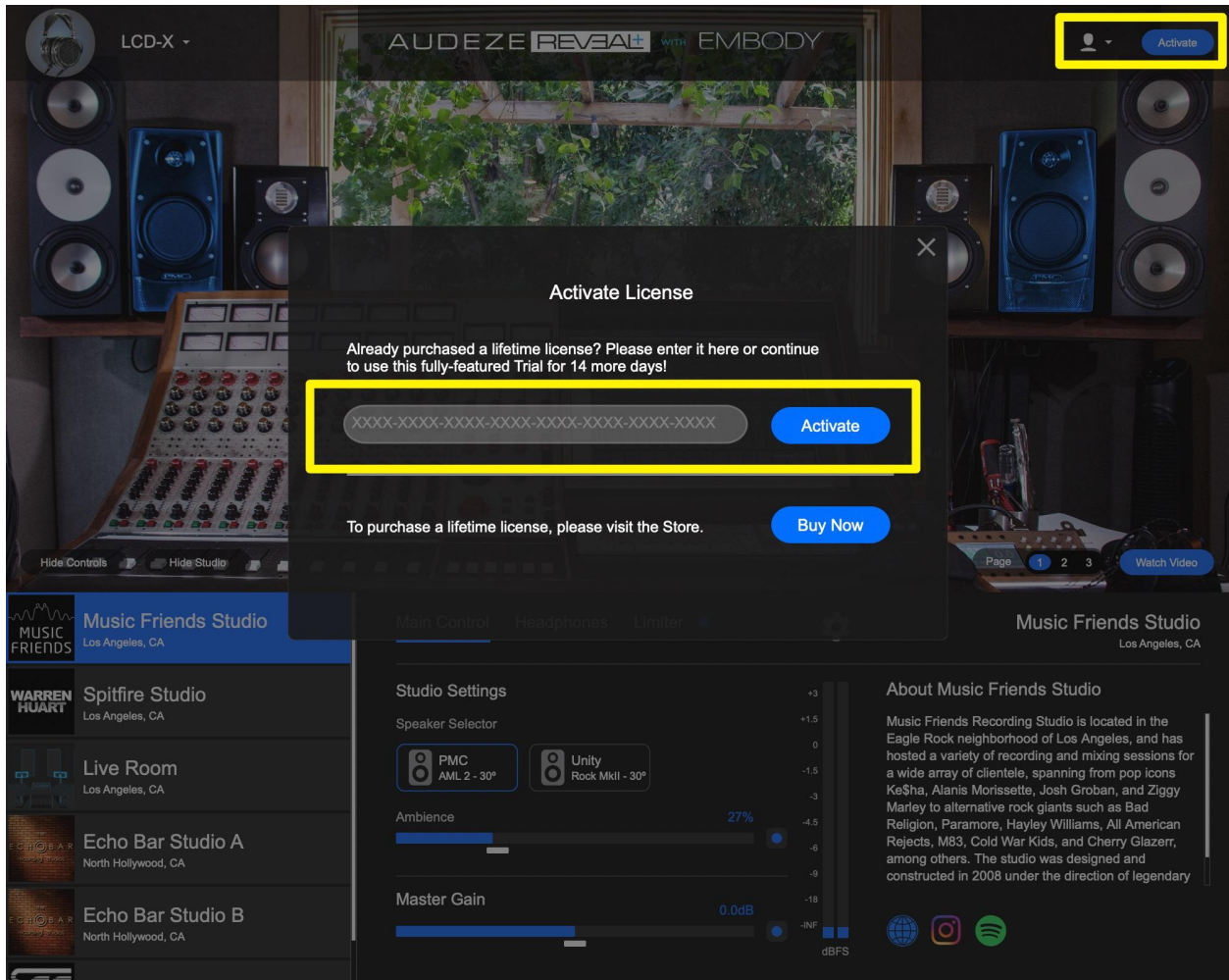
Is there a free trial of Reveal+ ?

Yes, we offer a FREE fully-featured 14-day trial, so you can experience Reveal+ first-hand before making a decision to purchase.

I got a free trial license, how can I convert it to a lifetime license?

We are glad that you enjoyed your trial. You can make a purchase on the Audeze website: <https://www.audeze.com/products/reveal>.

After purchasing the license, you will receive a license number in email. Please enter the license number in the plugin to activate your license.



How many computers are supported under one license?

You can activate your license on 3 unique computers giving you the flexibility to take Reveal+ with you.

How many trial licenses can be activated one one computer?

You can activate up to 10 trial licenses on a particular computer.

Does Reveal+ support Multi-user?

Yes, Reveal+ 2.0 has multi-user support. You can add as many users as you want in Reveal+ !

Technical Specifications

Which OS (Operating Systems) are supported by Reveal+ ?

Reveal+ currently supports the following operating systems. If you would like to see us expand our supported OS landscape, please feel free to reach out to us at support@embodyvr.co

- macOS 10.9 - 10.15, 11.0
- Windows 7-10 (Considering dropping Windows 7 support as it has reached End Of Life as of January 2020)

Which CPUs are supported by Reveal+ ?

You can enjoy the Reveal+ experience on a typical CPU used during mixing. We recommend using the following configurations:

- Core i3 CPU or better (Core 2 Duo and below are not fully supported)
- Equivalent AMD CPUs

What different plugin formats is Reveal+ available on?

Reveal+ is available in the following formats : AU, AAX, VST, VST3. If you would like to see us expand our supported plugin formats, please feel free to reach out to us at support@embodyvr.co.

Which DAWs and Media Players is Reveal+ compatible with?

The Reveal+ plugin is compatible with DAWs and playback software that supports AU, VST, or AAX plugins. Compatible DAWs include ProTools, Logic Pro X, Ableton Live, Digital Performer, REAPER, and others. Compatible audio playback software includes JRiver, Fidelia, Audirvana Plus, Sound Source, VOX. Currently, Reveal+ is not supported by Pure Music, Foobar2000 or Equalizer APO.

What are the Sampling Rates/ Block Sizes that Reveal+ supports?

Please refer to the table below for supported sample rates. The filters used by the Reveal+ plugin were designed for all commonly used sample-rates (44.1 kHz - 192 kHz), so no resampling happens no matter what sample-rate you use.

Sample Rate (Hz)	Minimum Block Size
44100	No minimum (32 samples or higher)
48000	No minimum (32 samples or higher)
88200	64 samples or higher
96000	64 samples or higher
176400	128 samples or higher
192000	128 samples or higher

How many Reference Studios does Reveal+ contain?

As of now, the latest version of Reveal+ plugin has six world class reference studios : Music Friends Studio, Spitfire Studio, Live Room, Echo Bar Studios A and B, and SAE Diamond Control Room. There are several more studios in the pipeline that will be added in future updates.

Does Reveal+ plugin have Multi-channel or Ambisonic Support?

Reveal+ at this moment supports Stereo playback. We are also building plugins that support Multi-channel and Ambisonic content. Watch out for future updates!

Do I need to install any mobile app to use Reveal+?

Audeze Reveal+ 2.0 does not require the use of any mobile app. The improved UI experience uses a unique QR code to assist you in submitting the right ear picture in a friction-free process.

Can I use Reveal+ without the internet?

Reveal+ plugin needs to be connected only once to our cloud servers to fetch your Aural Map profile (and updates if any are available) to deliver the ultimate spatial audio experience. But once you have your profile loaded, you will not need an internet connection to use the plugin.

I have an older version of Reveal+, how can I update?

The updates are issued on the plugin itself. If there is a new version available, just close and reopen the plugin, you will see a notification “Software Update Available”. Click on the link to download the new version of the plugin. Close your host DAW and run the new installation file. You now have successfully installed the new version of the plugin.

Alternatively, to install a new version of the plugin, visit

<https://www.audeze.com/pages/revealdownload>

What are Immerse updates?

An Immerse update can happen in two cases: when a user submits a new image and we generate a new personalized profile for the user or when we improve our algorithms and there is a change in the personalization for the user. This will be shown as a notification pop-up on the lower left corner in the Aural Map, whenever there is an Immerse update available.

How does Reveal+ AI engine work?

How does Reveal+ work with only an image of the right ear and not both ears?

The Neural Network algorithms that Reveal+ uses have been trained to model the asymmetry between left and right ear. There is a good amount of correlation between our left and right ears. Reveal+ uses Artificial Intelligence algorithms to predict this correlation and models the asymmetry; giving you a synesthetic experience with least friction. Take an image of your right ear; and in under 30 seconds, the plugin will create your personalized spatial audio profile.

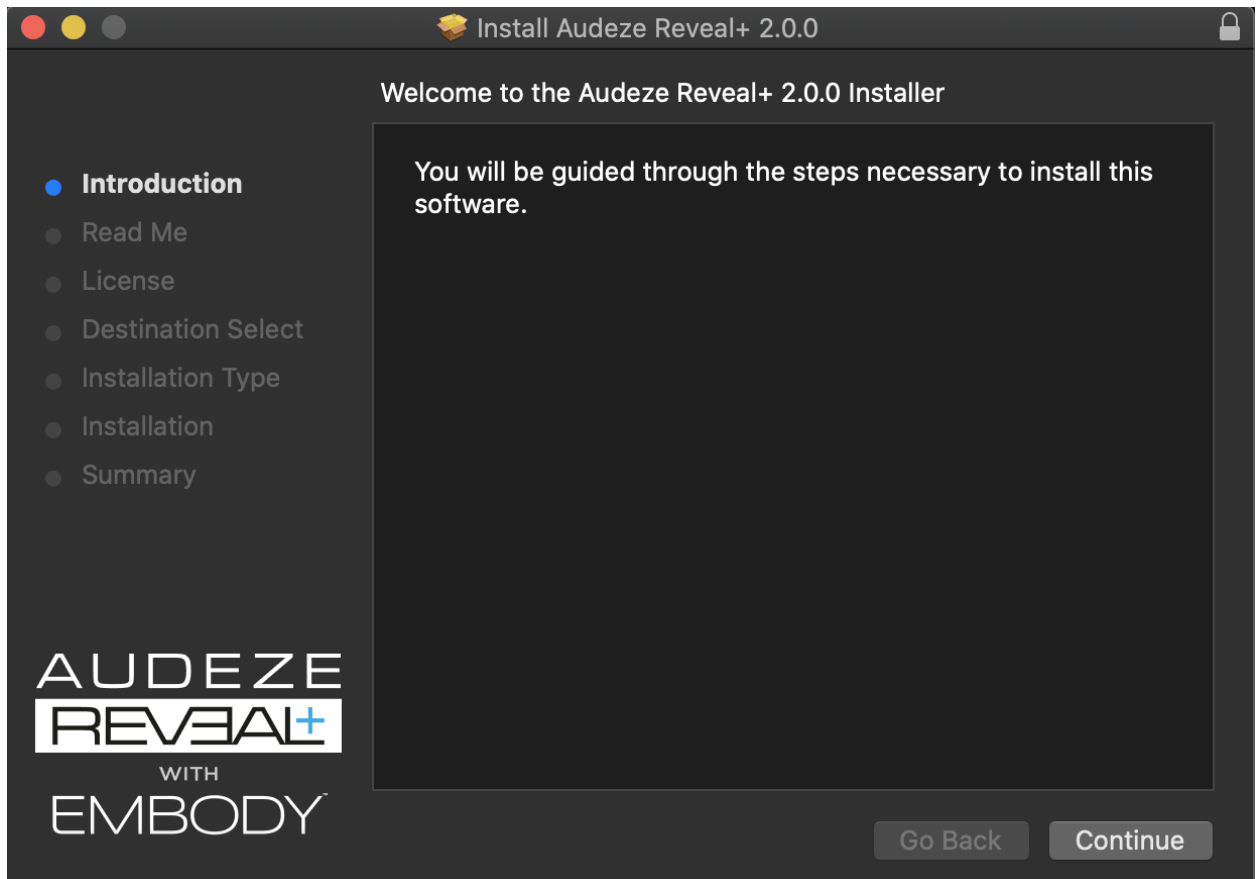
Is the predicted profile truly personalized to my ears or does it select an ear model which is most similar to my ear in its database?

The prediction engine does not simply pick a match to your ear shape. It uses Artificial Intelligence algorithms to model how sound diffracts from all the folds and cavities in your ear shape. And we do that by extracting thousands of unique identifiers from your ear shape, which are as unique as your fingerprint. As you can imagine this is not only computationally complex but very intensive and that's why we harness the power of cloud computing to run millions of calculations - all to model what's unique about your ear and how it changes the sound. Your Personalized Spatial Audio profile emerges literally out of billions of possibilities. It is truly unique and personalized for you.

Installing and Using Reveal+

How do I install Reveal+?

To install the Reveal+ audio plugin, download the Reveal+ Plugin file from <https://www.audeze.com/pages/revealdownload> . The installer should prompt you to select which components you want to install, and the directory in which you would like to install them. Be sure you download the versions you need for your system (.pkg for Mac or .exe for Windows).

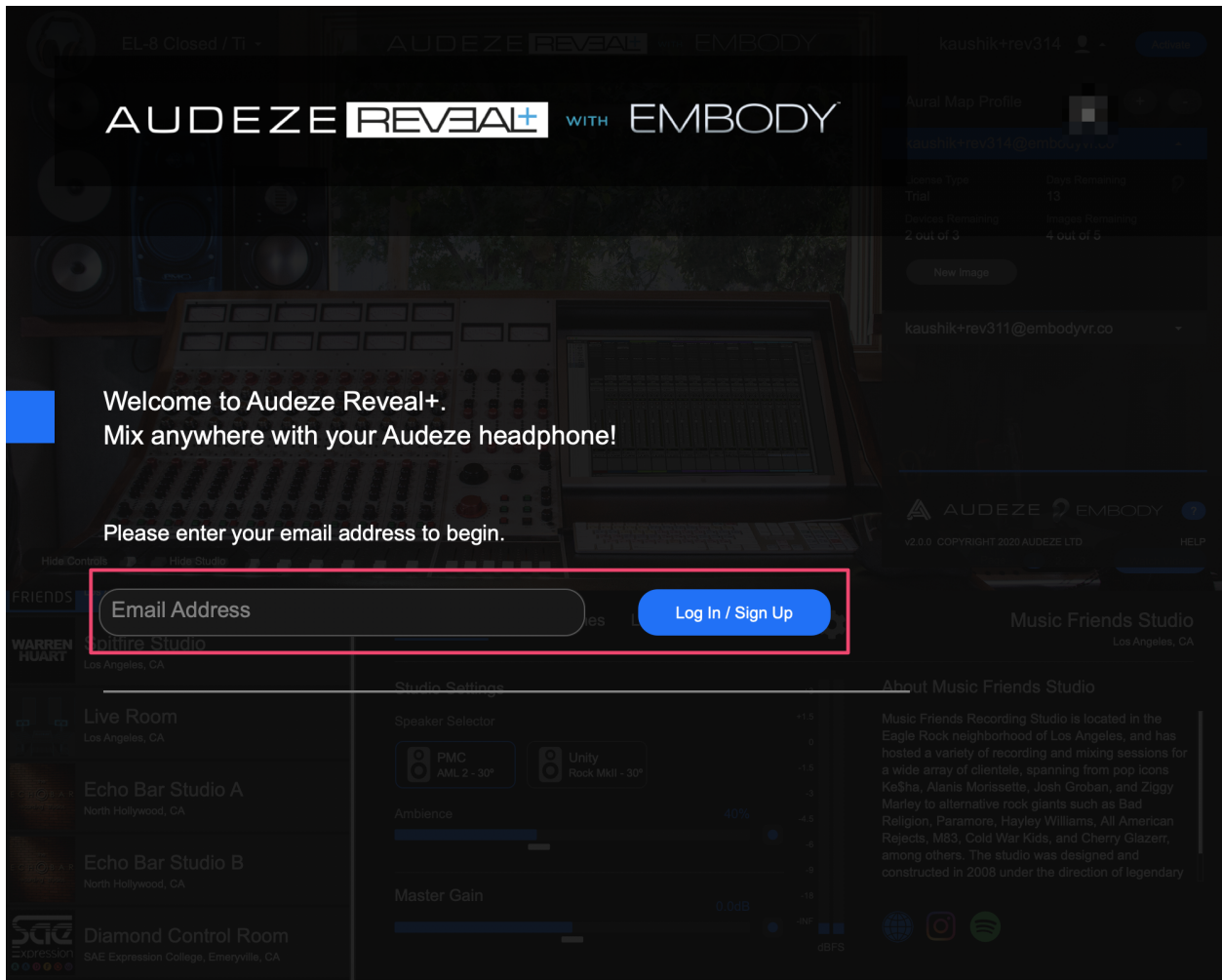


I have installed Reveal+, how do I login?

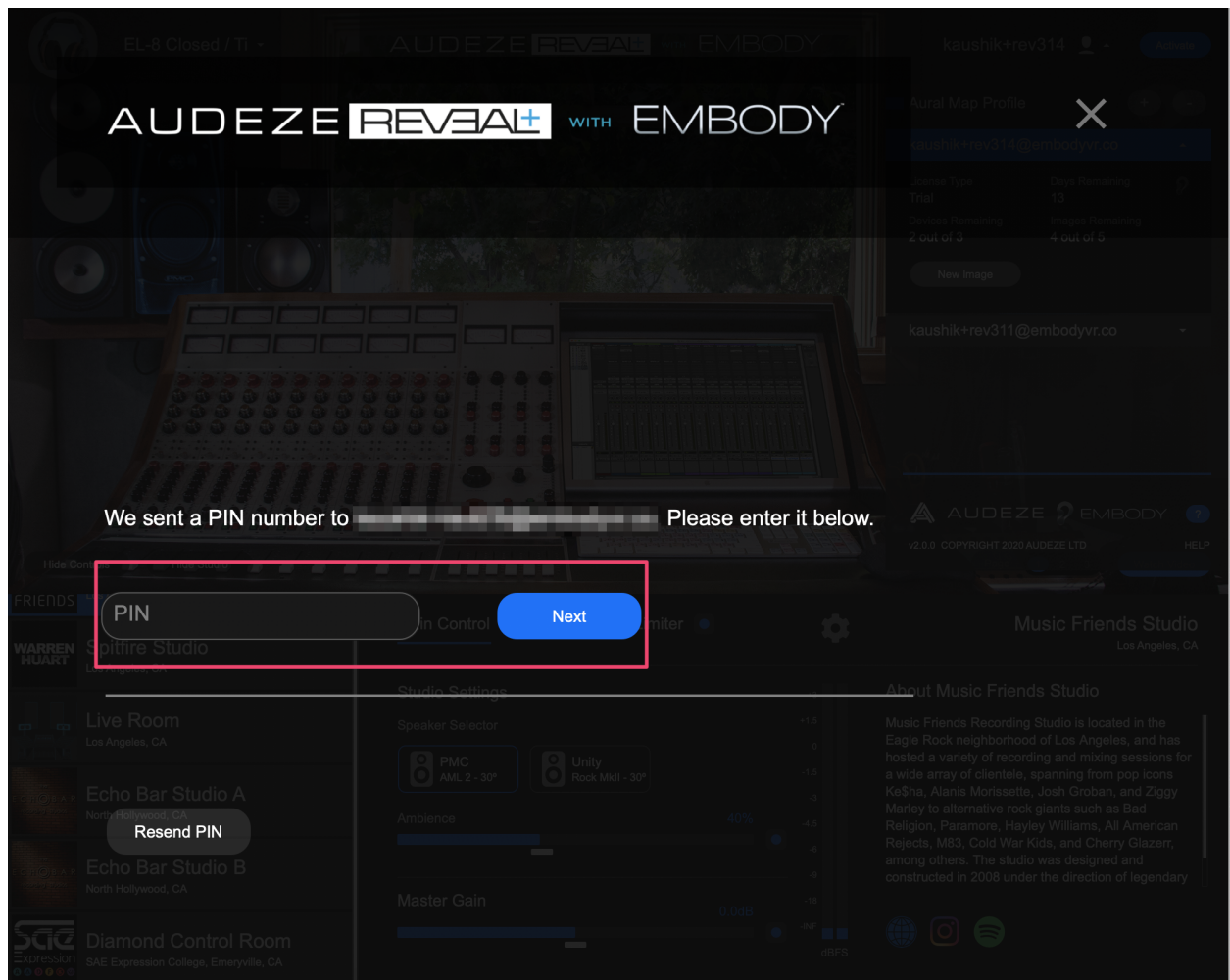
Once you have successfully installed the Reveal+ plugin, please follow the following steps:

- Open Reveal+ in your favorite DAW, or a MediaPlayer.
- If you have already purchased Reveal+, enter the email ID you used when purchasing the Reveal+ plugin and click on Log In.

- If you are logging in for the first time, you can use your email address to get a free 14 day Trial of Reveal+



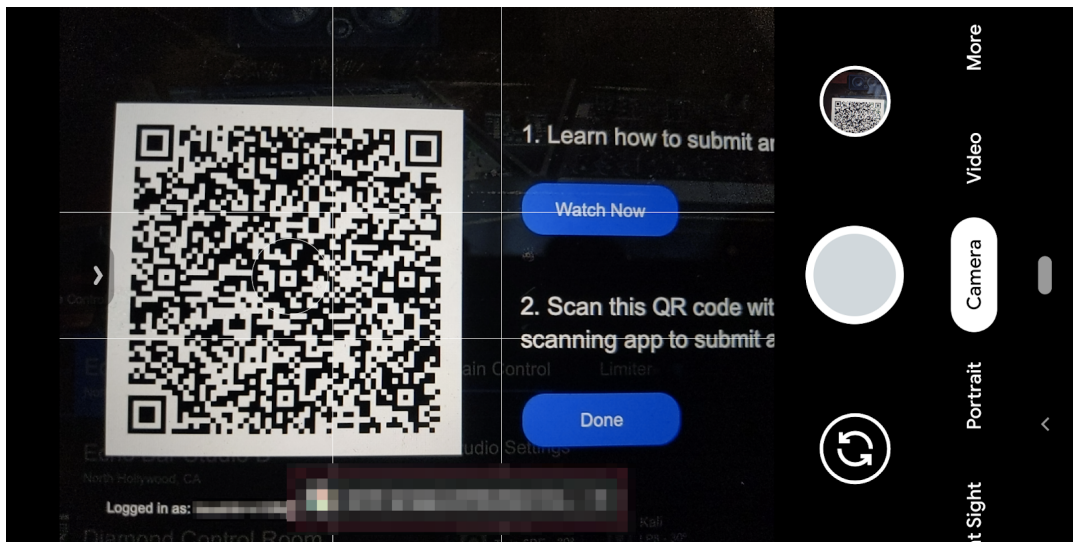
- You will receive a 6 digit PIN in your email. Enter the PIN in the plugin and click "Next".



- You have now been successfully authenticated and logged in.

I got the QR code in the plugin, How do I scan and submit my ear picture?

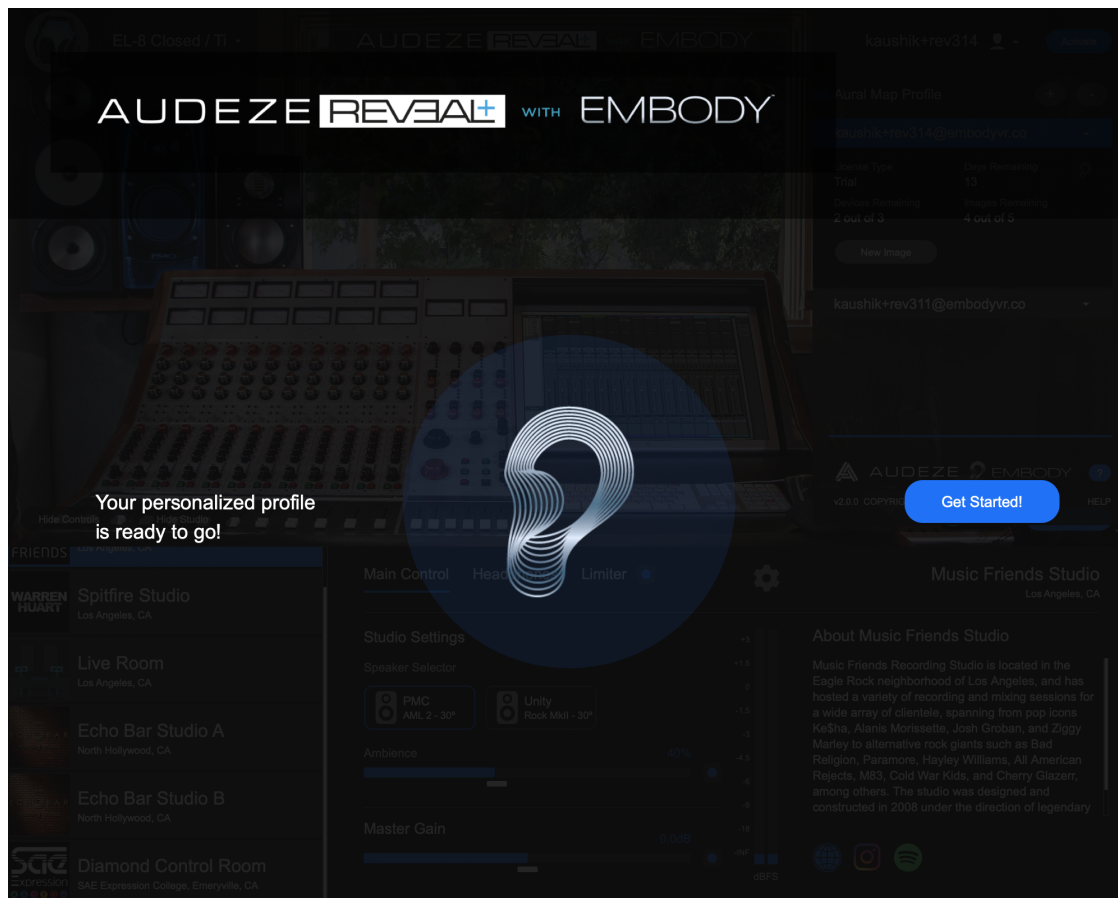
- Click on Watch Now to watch a tutorial on how to submit an image of your right ear
- You can scan the QR code by opening your smartphone camera app and pointing the camera to the QR code. You can also use any other QR code scanner app.
- Your smartphone camera will automatically prompt you to open a webpage. Click the URL to open the webpage on your smartphone browser.



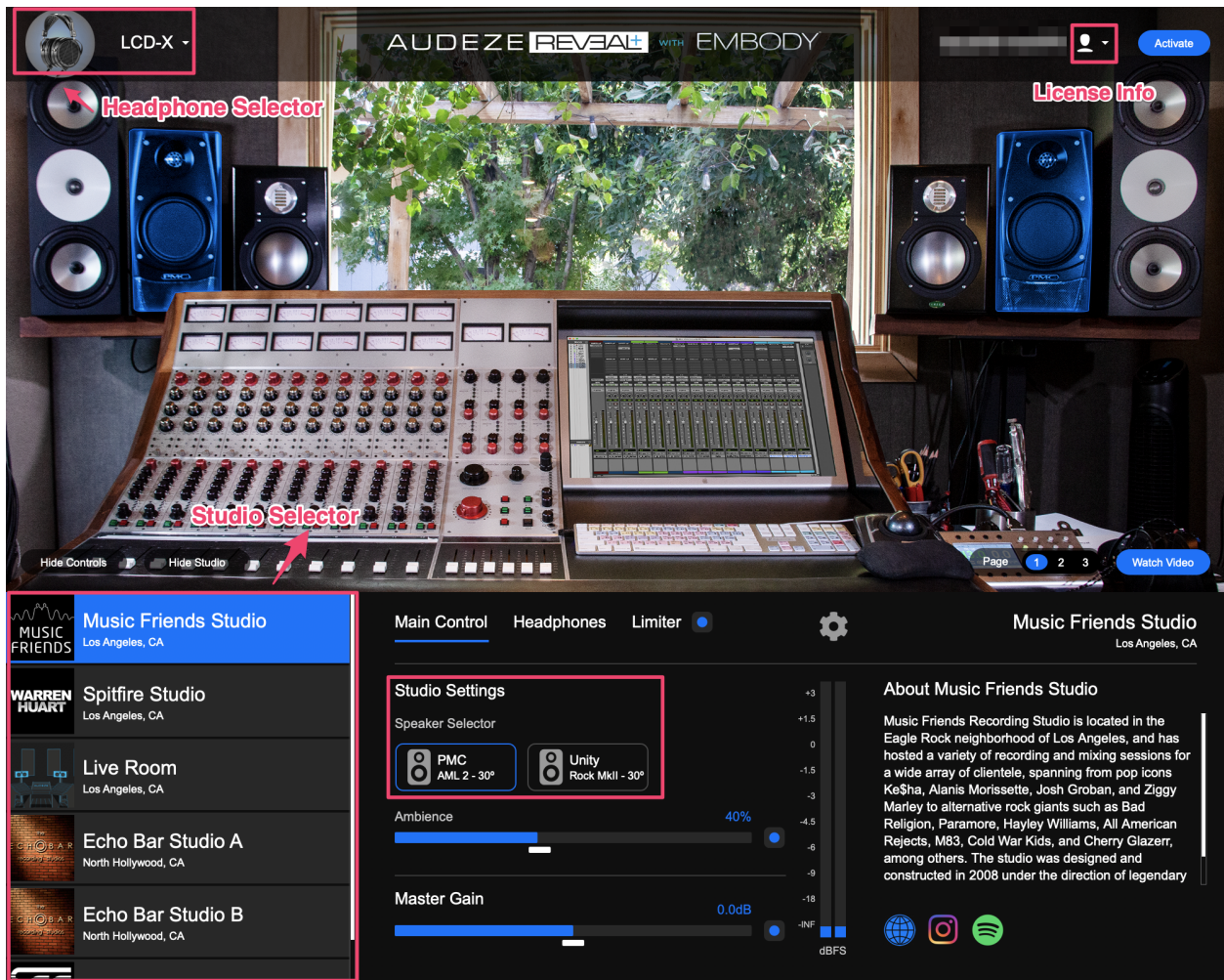
- Once you submit the photo, the image gets uploaded to the cloud. Embody's proprietary algorithms create the user's personalized hearing profile using this image. At this stage, the app also verifies if the image submitted is a valid image. The app returns a success message once your personalized hearing profile is created from the image uploaded. You can now return to the Audeze Reveal+ Plugin on your laptop/desktop to complete the setup.

I have submitted my ear picture, How do I download my personalized profile in the plugin?

- Return to the plugin once you finish submitting the ear picture
- Your personalized profile will be downloaded by clicking "Done".
- If you don't click on "Done", your personalized profile will also be automatically downloaded.
- Once downloaded, simply click on "Get Started!" to get to the main Reveal+ UI.



The plugin main UI looks as follows :



What is the Master Gain in the Main Control tab?

Master Gain in the Main Control tab corresponds to the overall gain of the Stereo output. We recommend leaving at Zero (0), unless you experience level differences when engaging the plugin. In those cases, the Gain control can be used to offset any differences in volume level.

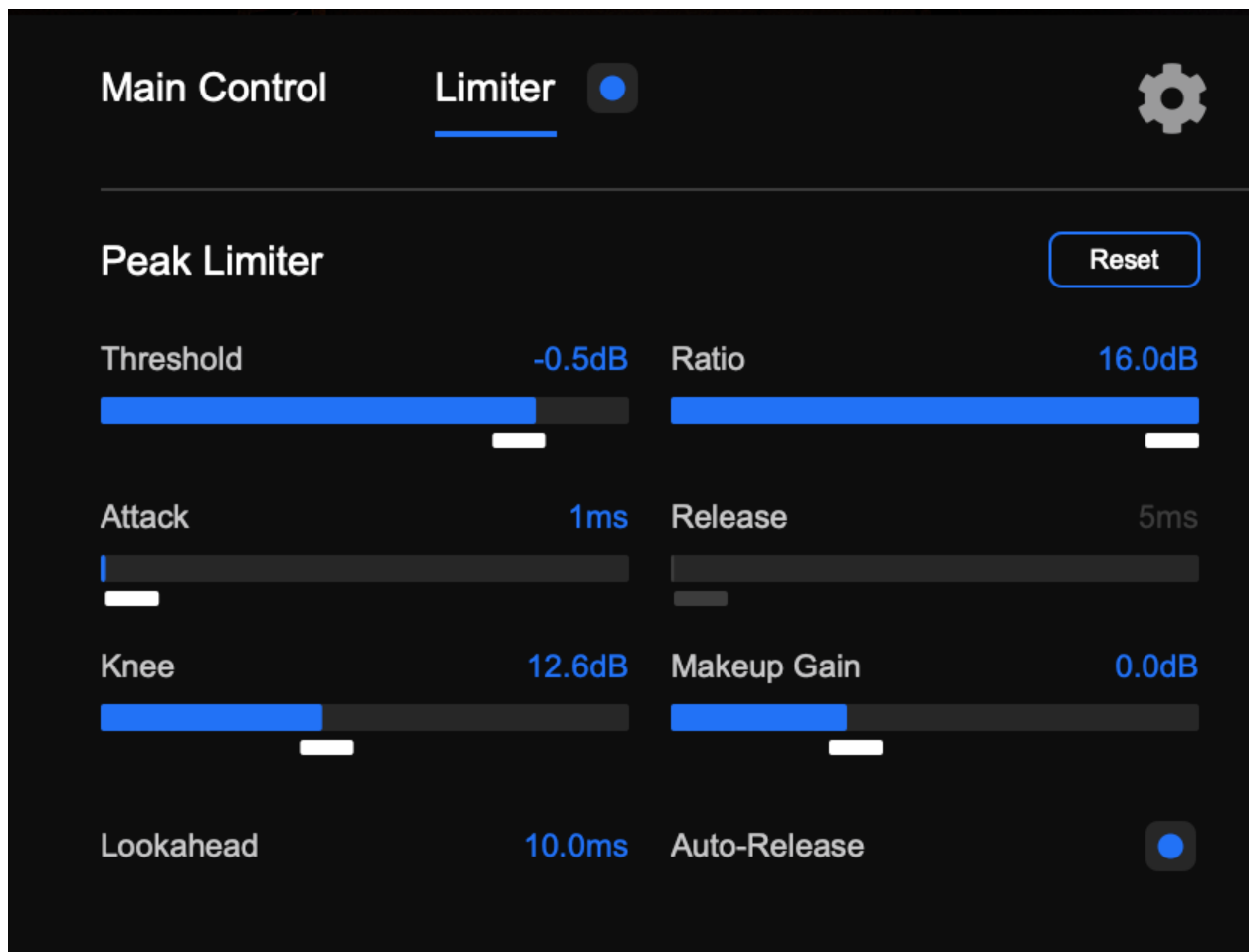
What does the AMBIENCE slider do?

AMBIENCE refers to the amount of reflections of the selected studio that you may want to have in your mix. To start with, we recommend an AMBIENCE setting between 40-75%.

What controls do I have access to in the Limiter tab?

Advanced tab gives you access to all the dynamic controls of the Limiter. You can specifically set the Threshold, Ratio, Attack and Release time, Knee, Make-up Gain and the Lookahead time.

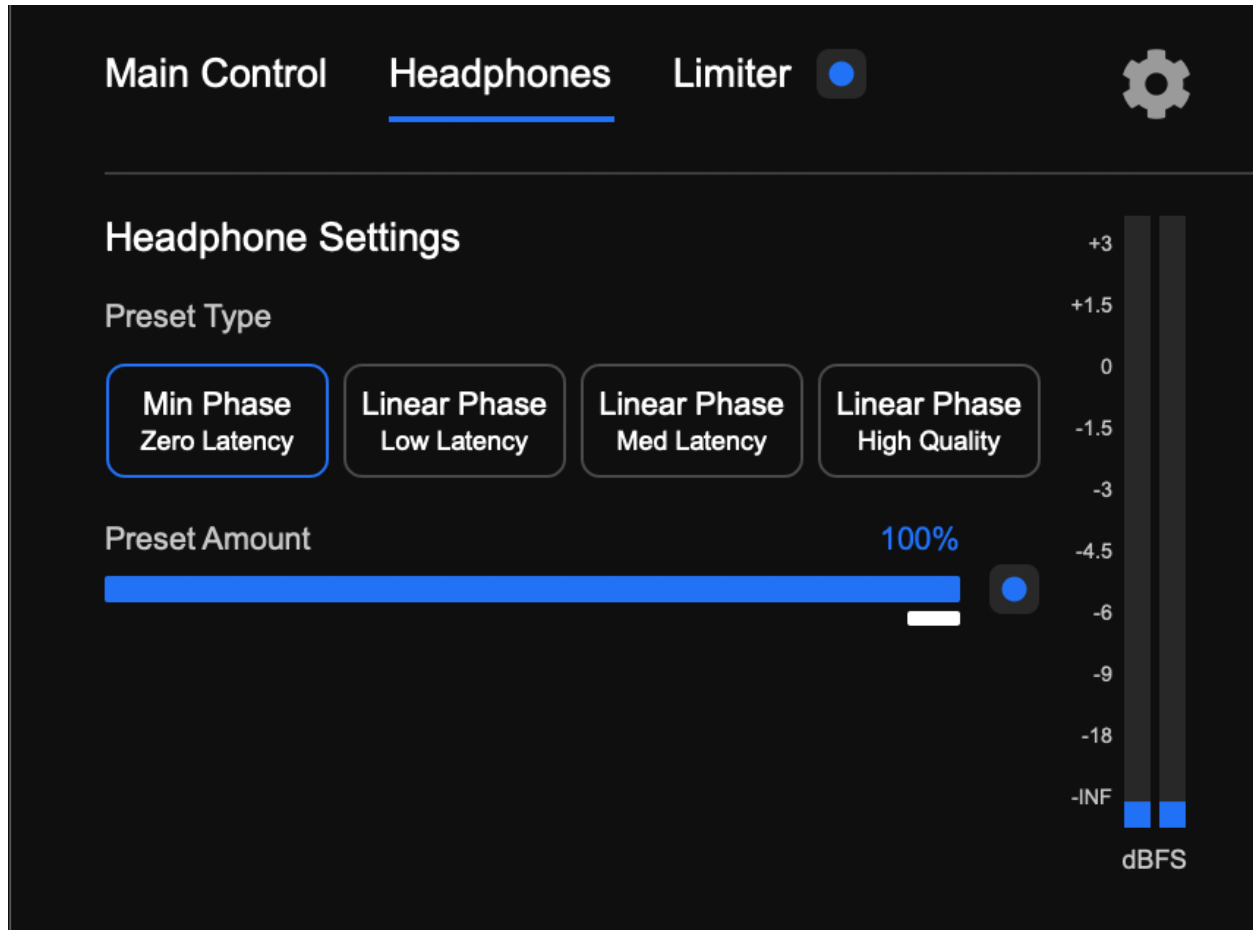
There is also an Auto-release function, which automatically optimizes the release time for your music.



How do I select a particular studio and speaker to audition?

You can select your favorite reference studio on the left side of the plugin as shown below. In addition, you can compare between different monitor speakers in the studio under the Main Control tab by clicking on the speaker icons, or directly in the main plugin interface by clicking on the speakers in the main image. (Please note that not all speaker images will be available to audition, there are a few that could not be modeled in some studios.)

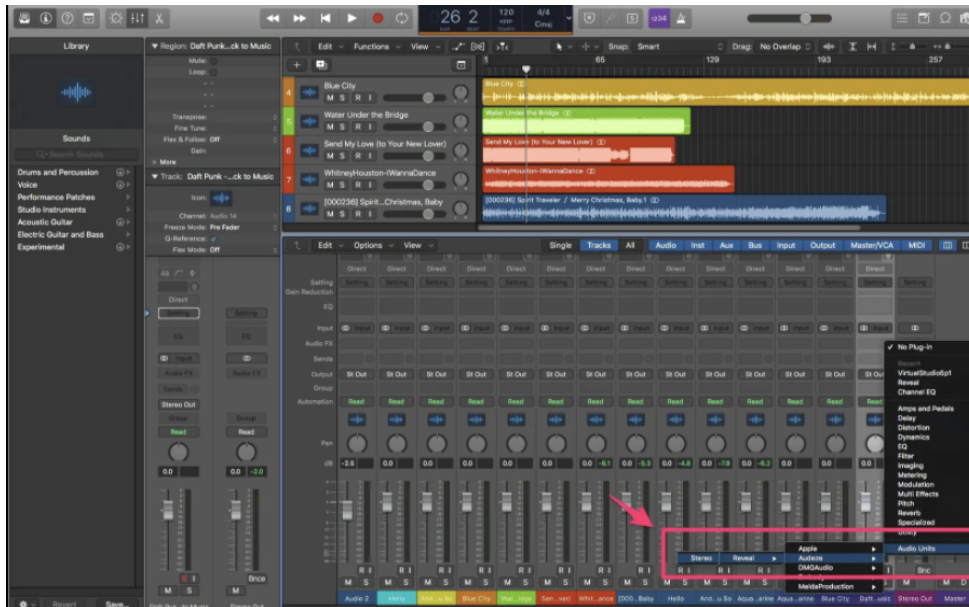
What is there in the Headphones Tab?



You can select between different Preset Types (Minimum Phase, and Linear Phase options) for improved quality. You can also choose different preset amounts with the slider.

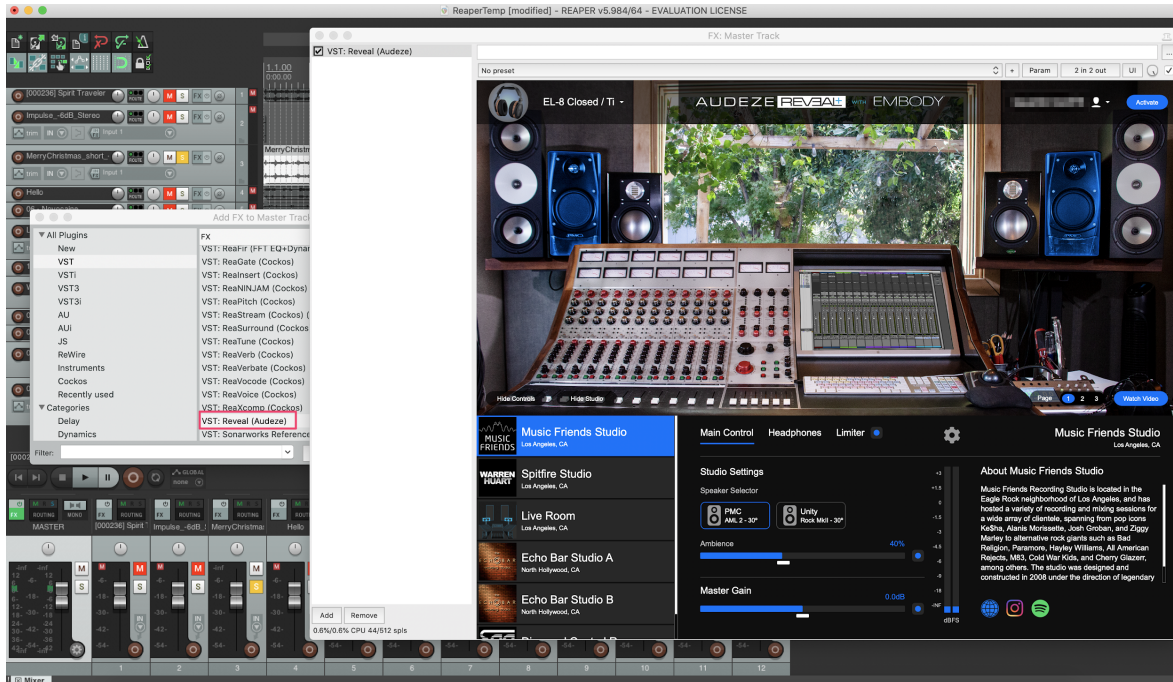
How do I use Reveal+ with Logic?

- In your project, open the mixer by pressing X on your keyboard and locate the Audio FX section of your Stereo Out track.
- Select an empty plugin slot, then locate the Reveal plugin under Audio Units > Audeze > Reveal > Stereo in the dropdown menu.



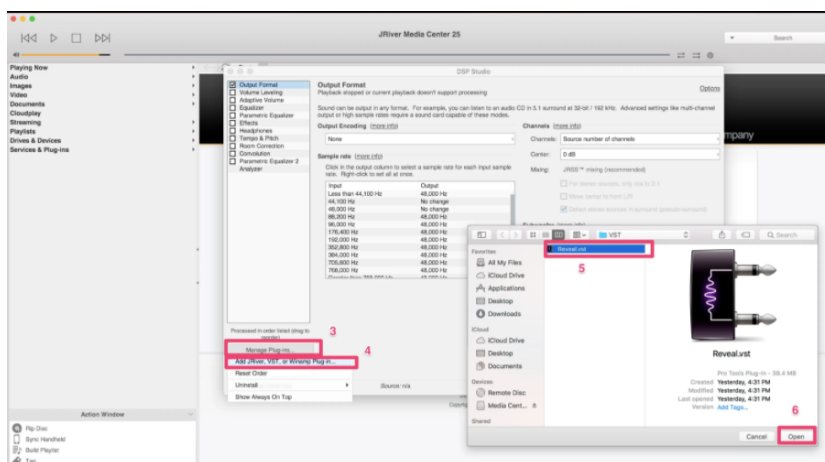
How do I use Reveal+ with Reaper?

- Open the Mixer Window on Reaper and click on FX
- Select Reveal (Audeze) from either VST or VST3



How do I use Reveal+ with Media Players like Jriver?

- Make sure you have the latest Jriver software installed
- Open the Tools menu and select the DSP Studio button
- In DSP Studio dialog, select 'Manage Plug-ins'. Then click 'Add JRiver, VST, or Winamp Plug-in'. Navigate to the folder where the Reveal+ plugin is located and select Reveal.vst. Click Open to proceed.



- Once the plugin has been activated, the Graphic User Interface (GUI) should automatically open, allowing you to select the appropriate preset for your Audeze headphone. Select the gear icon on the top right to open up your plugin setting and ensure Reveal+ plugin is enabled.

Troubleshooting

I am not able to click my ear picture correctly.

Please follow these steps:

Bring the selfie camera close to your face so that your face fills the screen.

Look left so that your right ear gets exposed to the camera.

Make sure that nothing blocks your ear, especially hair.

Tap anywhere on the screen to capture an image.

I just bought a Trial/Purchase license on the Audeze webstore, but I have not received the download link to the plugin.

Download links to the plugin are sent to your registered email address. Please also check your spam or other folders. If you've checked all inboxes and don't find the download email, please write to us at support@audeze.com and support@embodyvr.co.

I did not receive my PIN in my email.

- Check Spam mail in your inbox
- Click on Resend PIN
- If you still haven't received your PIN, write to us at support@audeze.com and support@embodyvr.co

I am getting the error “Please check your internet connection and try again”, but I am well connected to the internet.

It is possible that some kind of firewall is blocking it. Please verify that and get back to us if the problem persists.

I am using older versions of Pro Tools such as 12.7.1 and earlier. Pro Tools is crashing when downloading an HRTF.

This is a known issue. There are two workarounds for this :

- a. Solution 1: Upgrade to a newer version of Pro Tools
- b. Solution 2: Use any other plug-in host (Reaper, Logic, etc.) available on the system to download the HRTF. The HRTF will then be available in Pro Tools the next time you open it.

VST3's loaded in my host DAW show only a portion of the UI, rendering the plug-in unusable.

Some DAW hosts on Windows have incomplete HiDPI awareness implementations, such as Reaper 6: <https://forum.cockos.com/showthread.php?p=2211751>.

- a. Solution 1: Use the VST2.4 version of the plug-in instead, which will render correctly. This will preserve the HiDPI look of the DAW itself
- b. Solution 2: If the VST3 version is needed, disable HiDPI awareness in the DAW if possible. In the case of Reaper 6, go to:

Options → Preferences... → General → Advanced UI/system tweaks... and change HiDPI mode... to Unaware.

Close and Re-open Reaper and the VST3 window will load correctly

In rare cases on new installations of Windows, the Reveal+ plug-in cannot be scanned or run without installing MSVCP140.dll, which can be installed using the package below.

This is a known issue. Please install this package:

<https://www.microsoft.com/en-ca/download/details.aspx?id=48145>

- a. Solution: Install the package and clear cache/re-scan plug-ins

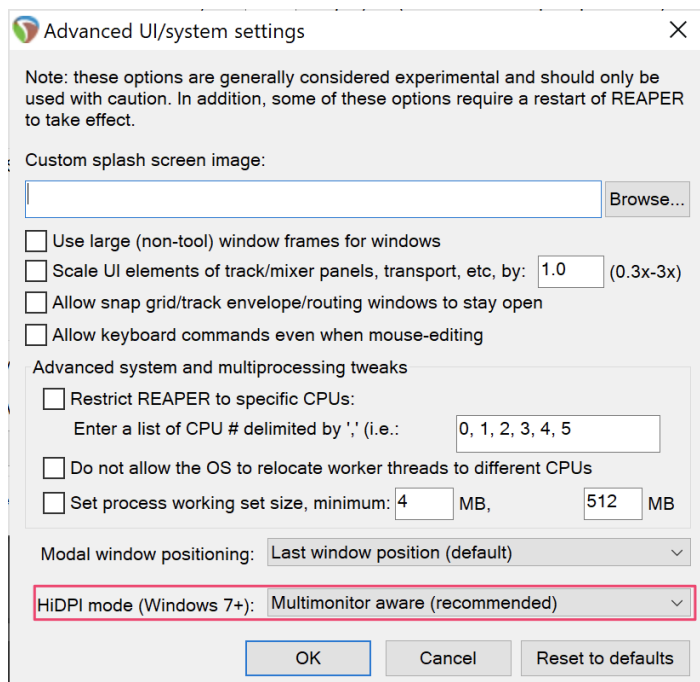
I am unable to type into the e-mail Text Editor in the plugin.

In rare cases, with some hosts it is not possible to type into the e-mail Text Editor (i.e. Wavelab 7, 32-bit VST only, macOS only)

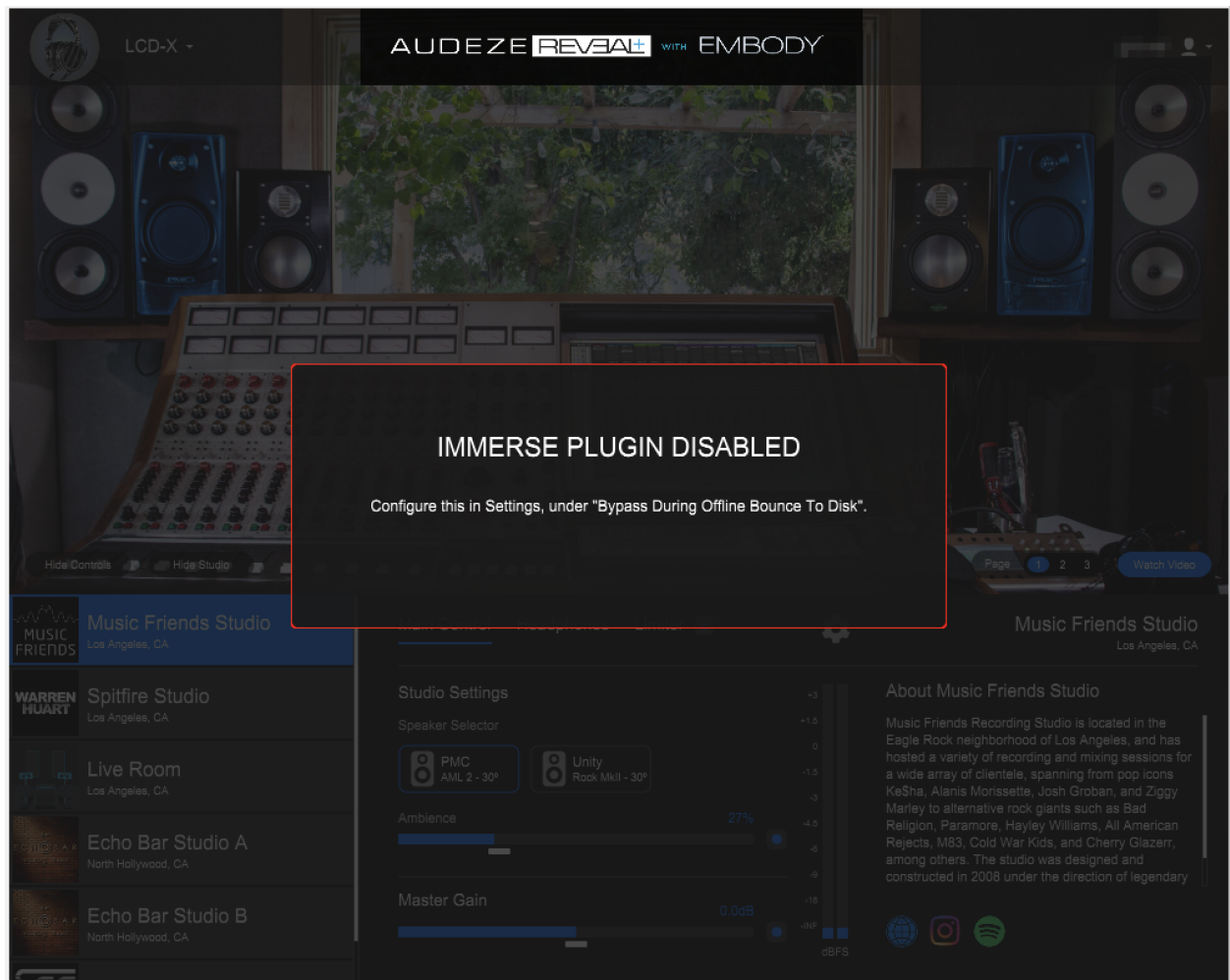
- a. Solution 1: Use another plug-in type (in this case, 32-bit VST3 does not exhibit the issue)
- b. Solution 2: Type the e-mail address into another Text Editor and then right click into the Reveal Text Editor and use the context menu to paste the e-mail address

I am seeing poorly rendered graphics in the plugin on my Windows monitor. How do I fix it?

This is most likely because you do not have HiDPI enabled within your DAW. You can set this in reaper as follows : Go to Preferences -> General -> Advanced UI/system settings -> HiDPI mode.



When I open the plugin, I see this window and I am stuck. What do I do?



This is probably because your audio device is disconnected or powered off. Please reconnect/power on, then close and reopen the DAW to resolve the issue. Alternatively, If you go to your DAW preferences and select a device that is connected/on, or choose Built in Output, it should resolve the issue.

I need help!

Please send an email to support@audeze.com and support@embodyvr.co