VIVIDIZER Virtual Audio Device (VAD) User Guide

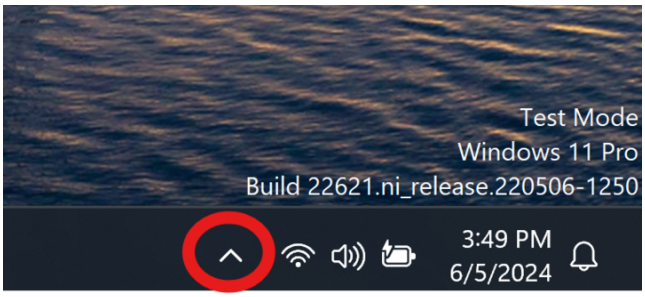
INTRO

Welcome to Vivid Audio. The Vivaldi3D VIVIDIZER is a Virtual Audio Device (VAD) that uses BACCH Spatial Audio filters to create a completely immersive spatial soundstage from any stereo speakers or headphones. This is achieved through BACCH Labs' award-winning cross-talk cancellation and speaker emulation filters.
For more info, visit our FAQ: https://vivaldi3d.com/pages/faq.
For additional guides, check out Vivaldi Support.

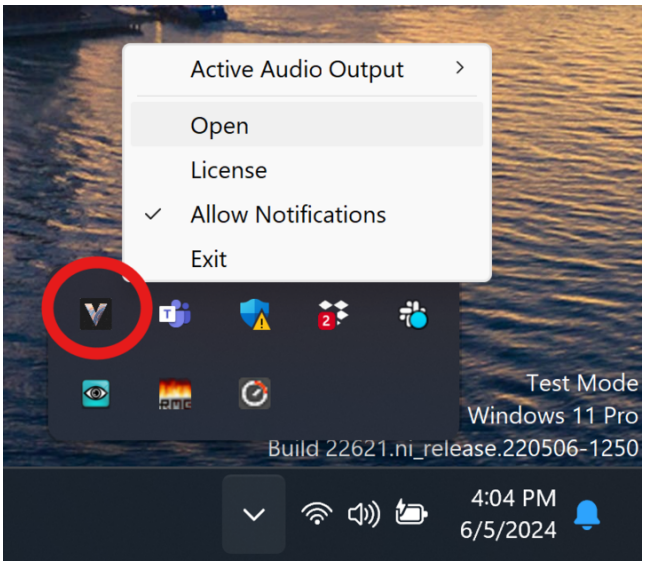
Quick Start

After you have downloaded and ran the Vivaldi3D VIVIDIZER installer, launch the app's user interface and set up to your custom listening environment using these steps:

1. Click the up arrow on the bottom right side of your task bar to open the system tray.



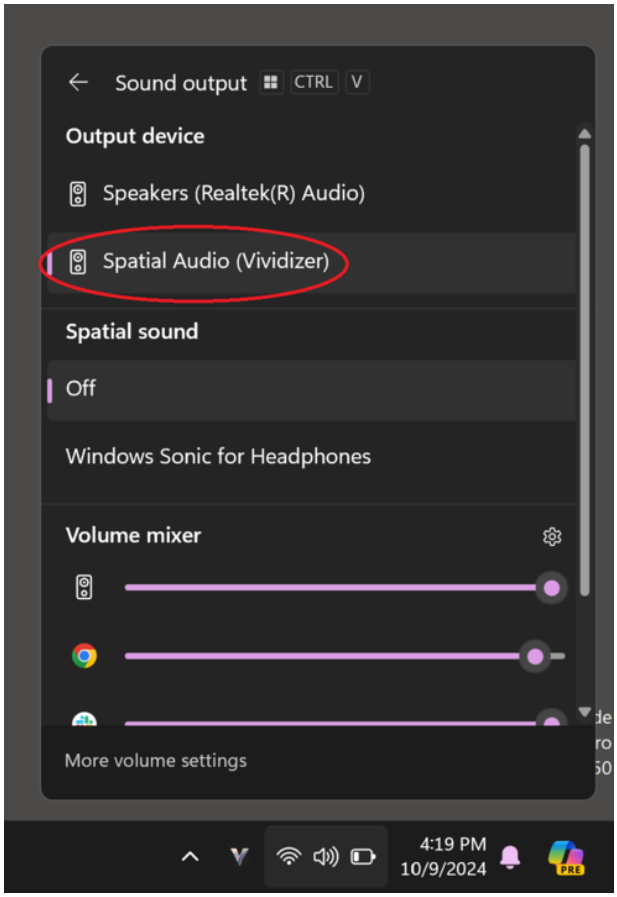
2. Right click the VIVIDIZER app icon in the system tray.
3. Select "Open" to bring up the VIVIDIZER tuning window or "License" to bring up the license window.



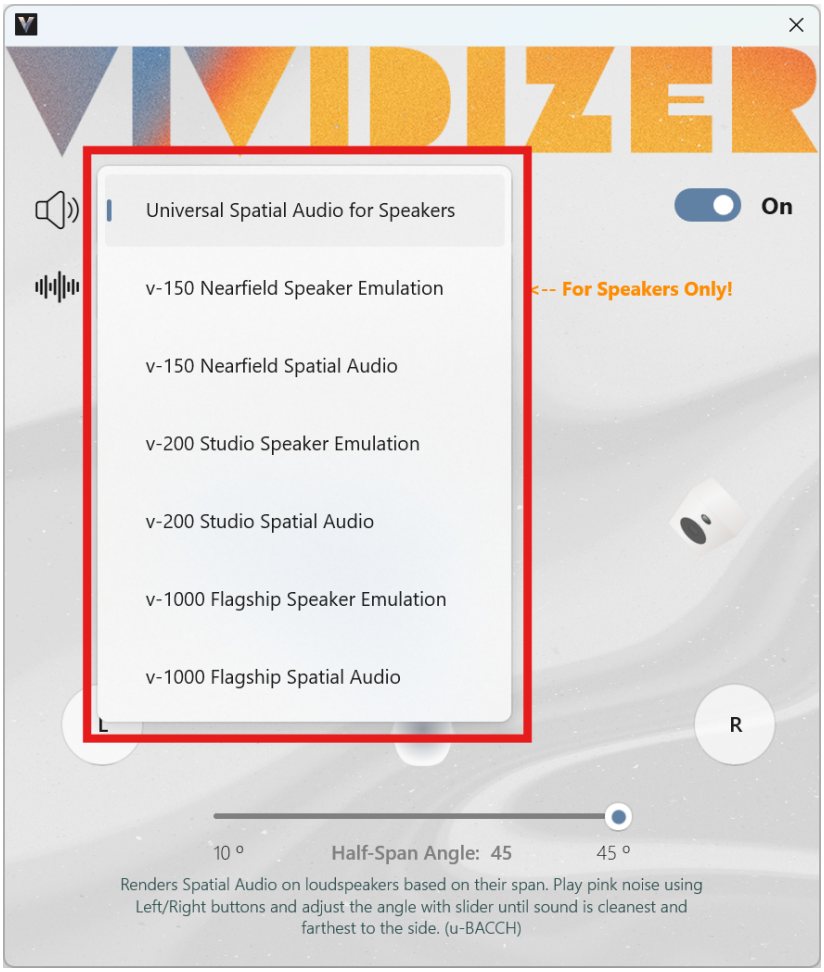
4. In the main window, chose the desired audio output from the dropdown menu.

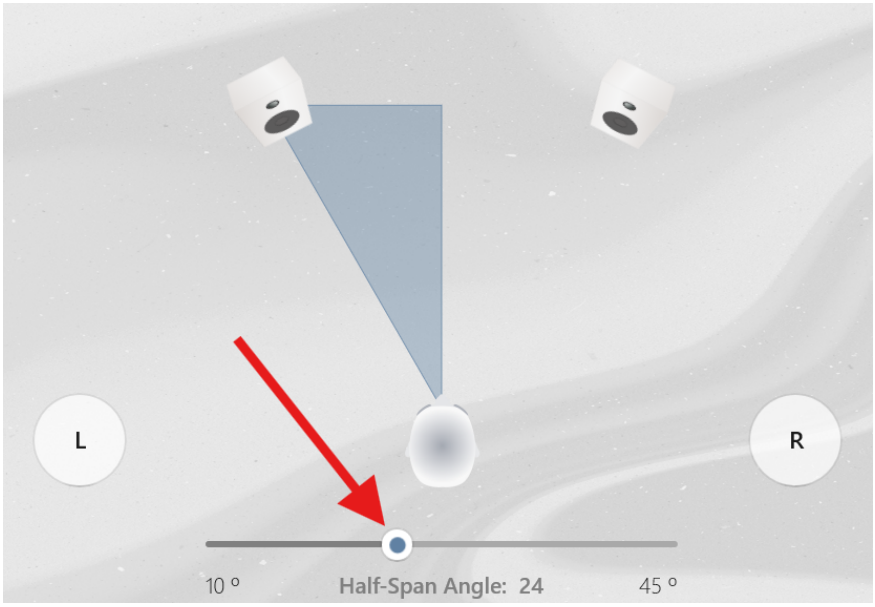


5. Ensure that the system audio output is set to “Spatial Audio (Vividizer)”. This can be done in your system settings.

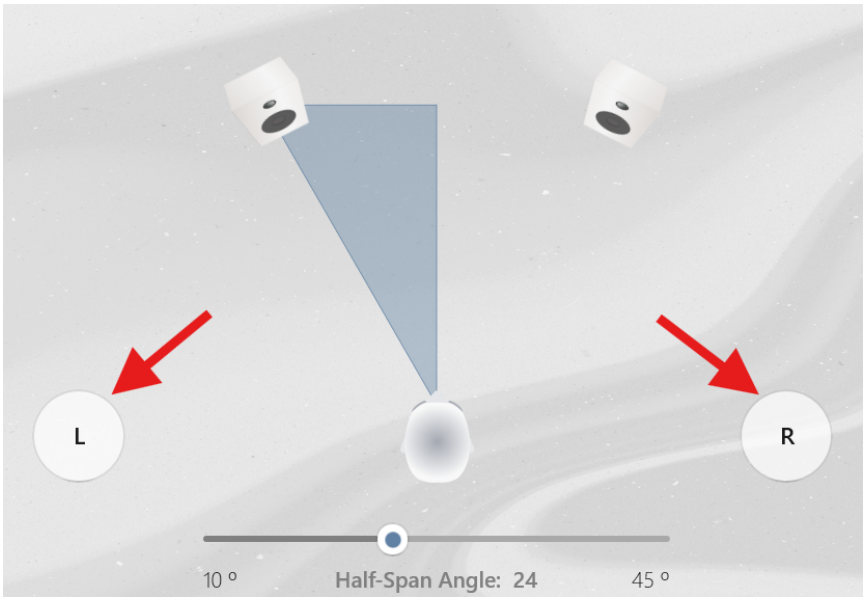


6. For headphones, simply select your desired speaker emulation from the dropdown list.
7. For speakers, select the Universal Spatial Audio for Speakers filter and change your Half-Span Angle with the slider to tune to your speaker listening setup.

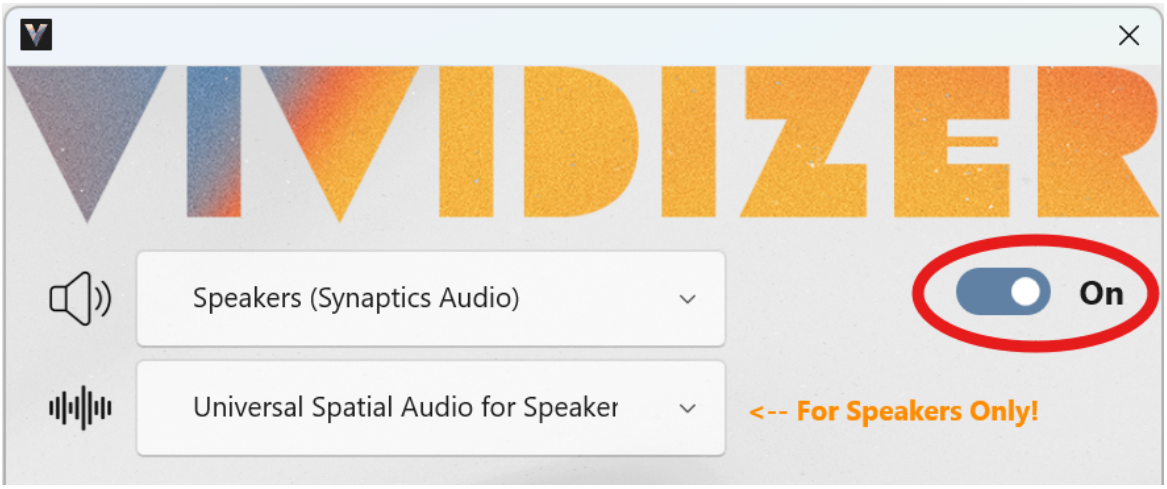




8. For tuning the Universal Spatial Audio for Speakers, toggle noise on and off with the L and R buttons to help with tuning by ear. Please reference our **SETUP** section below for more details.



9. Toggle the VIVIDIZER on and off to compare bypass and Vivid Audio.



10. Play any audio and enjoy the lush soundscape of Vivaldi3D's VIVIDIZER!

INSTALLATION & LICENSING

To install, simply download and run the Vivaldi3D VIVIDIZER VAD installer for windows, found on the Vivaldi3D website.

Upon first opening the Vivaldi3D VIVIDIZER, you'll be prompted to **start a trial** or **activate**. If you've purchased a license already, you will have received a license code in your email along with the download link. Simply paste in your license key and select "activate." If there are any issues here, please contact support@vivaldi3D.com.

If you're testing the software, start a free trial! The trial will require an internet connection while using the software and you'll have 14 days of full use.

SETUP

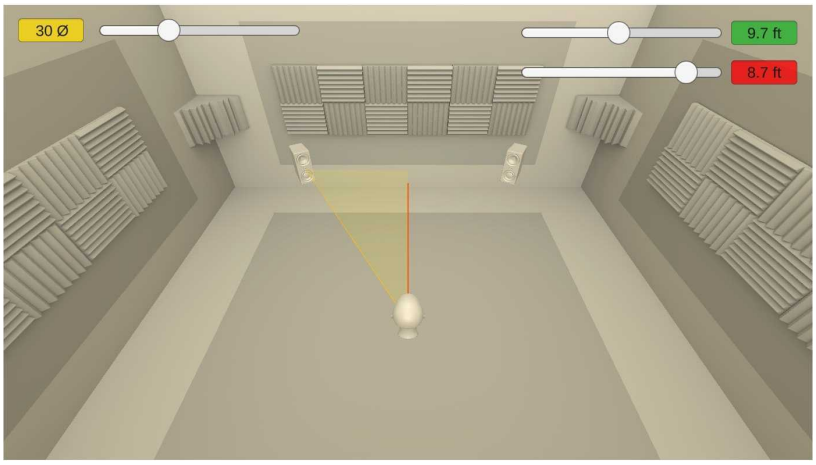
The VIVIDIZER **headphone** output provides several different headphone filter options for users to choose from based off of their specific desires. We recommend starting with the v-1000 Flagship filters. The 'Speaker Emulation' versions will provide a more externalized, traditional stereo speaker experience, while the 'Spatial Audio' versions will be more immersive and completely compatible with any spatial/binaural information fed through it (best for gaming and movies). Simply pick one, pop on some headphones, and start enjoying any content, spatialized.

The VIVIDIZER **speaker** output utilizes a series of cross-talk cancellation filters based on the half-span angle of the speakers at the listening position, ranging from 10 to 45º. You can imagine the two speakers and listener as forming a triangle: in an equilateral setup where the distance between the speaker is the same as the distance from either speaker to the listener, then the angle of the speakers would be 60º. To get your half-span angle, you'd simply divide that in half to get 30º. This is represented as the blue triangle in our app. Choosing an angle is explained more in the section below.

EXAMPLES:

- A lot of studio monitoring situations will have stereo speakers with half-span angles anywhere from 20-35º (some wider).
- A computer with symmetrical speakers to each side of the keyboard would be somewhere from 12-18º, a tablet held horizontally would be a similar range, and a soundbar several feet away could range from under 10-14º.
- Please note these are ballpark numbers, just to give you an idea of where to start looking for your own devices.

So how do you pick a half-span angle?



While you could measure your stereo triangle and compute the angle (there's a calculator on our website), it actually may be faster and potentially better to tune by ear. Simply click the "L" or "R" buttons to play binaural noise, and move the slider until the sound is cleanly off to one side around 90º. Think of trying to get the ball of noise to sit within arms reach directly to either side of you. The actual perceived location varies by device based off of acoustic performance and geometry, but the target stays the same.
You only need to tune one side, whichever is more obvious to you. Once you've settled on a number, do some listening! You can always go back and re-tune.
[TL;DR - you'll just need to move a slider and tune it briefly by ear.]

LISTENING

Start simple with obvious stereo hard panning or even a binaural recording. Tracks like Money by Pink Floyd, Lovesong by Adele, or Afro Freestyle by Erykah Badu are great starting points.

When turning VIVIDIZER on and off, there should be an obvious image change: those instruments and sounds located directly at the speaker in bypass should pop out to either side, or even approach either ear. This may be less obvious on very wide stereo setups, but you will still notice an increase in depth and immersion, especially with ambience and reverb.

Always feel free to retune while playing music, and give yourself some listening time — sometimes the most obvious change is actually going back to stereo and thereby losing the VIVIDIZER's sense of realism and ambience.
Here's a link to our Spotify Playlist.

Signal Flow for the VIVIDIZER Virtual Audio Device (VAD)

The VIVIDIZER works as a Virtual Audio Device that has a system audio input and a selectable audio output. Be sure to set your system audio output to “Spatial Audio (Vividizer)” and then select your desired audio output within the VIVIDIZER app. The audio signal flow is as follows.

System Audio Output -> Spatial Audio (Vividizer) -> Selected Audio Output

Uninstalling the VIVIDIZER VAD

To uninstall, simply open your file browser and navigate to:

“C:\Program Files (x86)\Vivaldi3D\Vividizer Virtual Audio Driver”

Then, double click to run the uninstaller named “uninstaller.exe”.

For more info check out our pages:

Vivaldi3D

Vividizer FAQ

Vivaldi Support