Speech Volume Control Plug-In User Guide

Welcome to ADX SVC 1.5! This guide provides an in-depth look at the features, functionality and workflow of SVC. To quickly learn how to use and work with ADX SVC, please consult the Quick Start page here. Use the table of contents to navigate to a specific topic, or proceed step-by-step through the document.

Direct any questions or issues you may encounter with the use or installation of ADX SVC to support@audionamix.com.

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Welcome to ADX SVC!

Introduction

What is ADX SVC?

The ADX Speech Volume Control (SVC) plug-in allows you independent volume level control over both speech and background elements within a mono or stereo mix. Lower the level of background noise within troublesome production audio, or easily boost dialogue levels without requiring access to stems or the full multitrack session. SVC uses a speech-optimized version of ADX VEX, a cloud-based, multi-algorithmic voice extraction technology that automatically separates audio from within your favorite DAW. SVC is very easy to use. Its elegant interface and simple controls provide access to advanced separation algorithms and standard volume sliders. The integrated Consonants Detection algorithm automatically identifies and separates difficult noisy consonants. Pitch Range presets can be used to easily target typical male, female and child speech frequency ranges.

System Requirements

ADX SVC 1.5 is available in VST, AU (Audio Units) and AAX Native (64-bit and 32-bit formats) for Mac OS X and Windows as stereo, and mono plug-ins.

SVC relies on ADX cloud-based separation algorithms to manipulate the voice component of a mix independent of the rest of the background. Because the separation processing is done in the cloud, a high-speed Internet connection is required to use SVC.

We test ADX SVC regularly with the following DAWs:

- AVID Pro Tools
  - As an AAX Plug-in, SVC requires Pro Tools 10.3.5 or newer. Upgrade to the last version of Pro Tools 10, which you can find here.
- Steinberg Cubase
  - See detailed information and tips on the use of ADX SVC in Cubase.
- Ableton Live
  - See detailed information and tips on the use of ADX SVC in Live.
- Presonus Studio One Professional
  - Studio One Prime and Studio One Artist do not support third party VST plug-ins and will not load SVC.
  - See detailed information and tips on the use of ADX SVC in Studio One.
- MOTU Digital Performer
  - See detailed information and tips on the use of ADX SVC in Digital Performer.
- Logic
- Reaper 64

SVC is not compatible with the following DAWs:

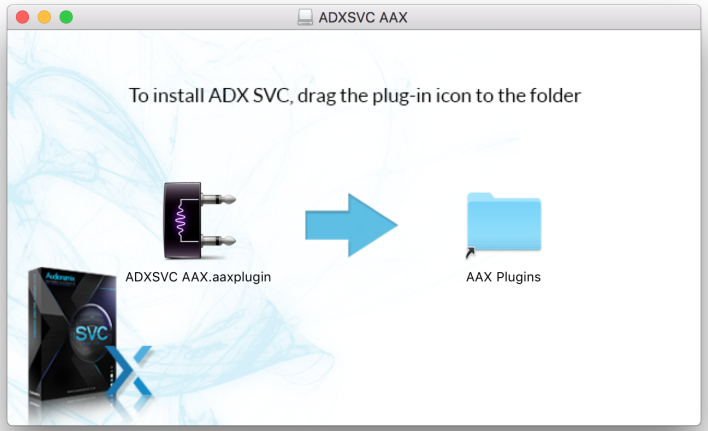
- Adobe Audition
- Audacity
- Sony Soundforge
- Steinberg Wavelab

Although ADX SVC may work with other DAWs, only those that are regularly tested are officially supported. For questions, please contact our support team at support@audionamix.com.

Installing ADX SVC

The installation process depends on your operating system.

For Mac OS X, open the SVC .dmg file.



Make sure that no DAWs are running and simply drag and drop the plug-in icon into the folder alias.

You can also manually copy and paste SVC into the correct location, depending on the version you're installing:

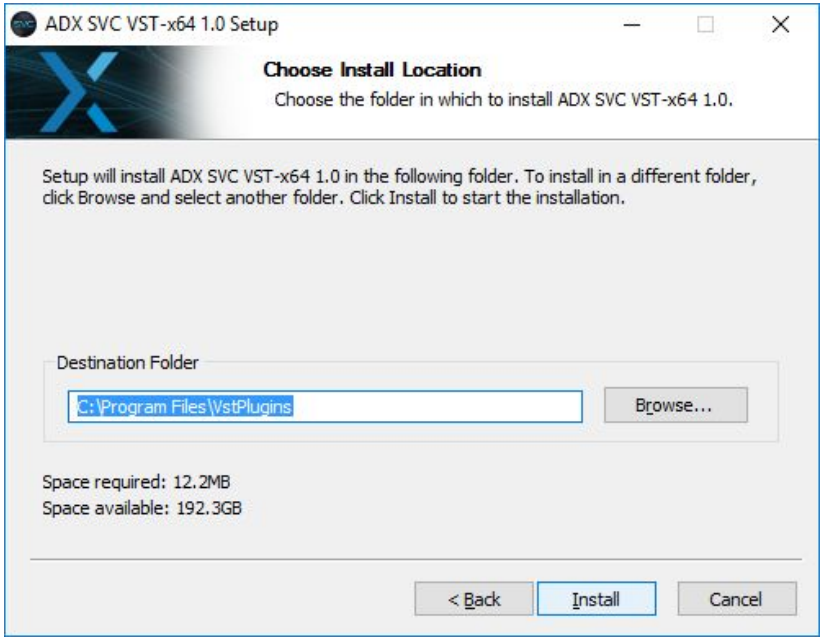
- AAX plugin should be in this folder: /Library/Application Support/Avid/Audio/Plug-Ins/
- VST plugin should be in this folder: /Library/Audio/Plug-Ins/VST
- AU plugin should be in this folder: /Library/Audio/Plug-Ins/Components

For Windows, first select between 32-bit and 64-bit versions of SVC. We advise you to match the host architecture. For example, if you're using a 32-bit VST host, you need to install the 32-bit ADX SVC edition, even if your Windows has a 64-bit architecture. Once you open the corresponding folder, double-click on the Setup.exe and follow the installation steps.

By default, ADX SVC is installed in these locations on Windows systems:

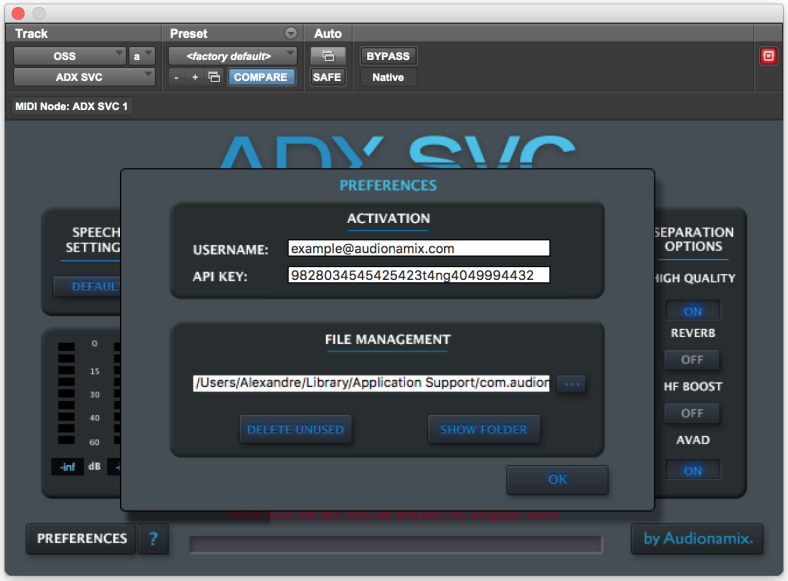
- The VST 32-bit edition at: C:\Program Files (x86)\VSTPlugins
- The VST 64-bit edition at: C:\Program Files\VSTPlugins
- Both AAX editions are installed at: C:\Program Files\Common Files\Avid\Audio\Plug-Ins\

You can also point the installer to another location and change the plug-in path from the host DAW to match.



Authorization

The first time you insert and open the SVC plug-in, you will have to authorize it. To do so, click the Preferences button and enter the Username and API key that you received when you purchased SVC. This information can also be found on your account page.



Quick Start

Please note that SVC requires an active Internet connection in order to connect to the cloud-based separation algorithms. Once your system is connected to the Internet, follow these steps to begin working with SVC:

1. Install SVC
2. Authorize SVC from the Preferences.
3. Insert the SVC plug-in on the track to be separated.
4. Open the SVC plug-in.
5. Make a selection of the audio to be separated.
6. Perform an offline bounce if supported by your DAW or play through the selection to acquire the audio you would like to separate.
7. After playback is completed or the offline bounce has finished, the Acquire button will pop out and turn blue, and the Separate button will now be active, indicating that SVC is ready to separate the acquired audio.
8. Optional: Set a Speech Setting or specific Pitch Range of the content to be separated for more precise targeting.
9. Optional: Select any of the advanced Separation Options.
10. Press the Separate button.
11. SVC will automatically detect the main voice and separate it from the rest of the background.
12. When the separation is complete, you can adjust or automate the level of the volume of the main voice and of the resulting background.

NOTE: After a separation is complete, acquired audio will output from within the SVC plug-in. Editing or moving the original audio clip on your timeline will therefore affect your results. For this reason we recommend editing audio prior to applying SVC.

NOTE: SVC records the audio material acquired from the DAW track, and creates files during the separation process that it stores on your hard disk. Learn more about File Management.

Using ADX SVC

Interface Overview

Speech Settings
Click to cycle through preset Pitch Range values for female, male and child voices. Must be selected prior to initiating a separation.

Meters
Once audio is separated, the meters display the overall output level of the plug-in. Prior to separation, meters display the input level to the

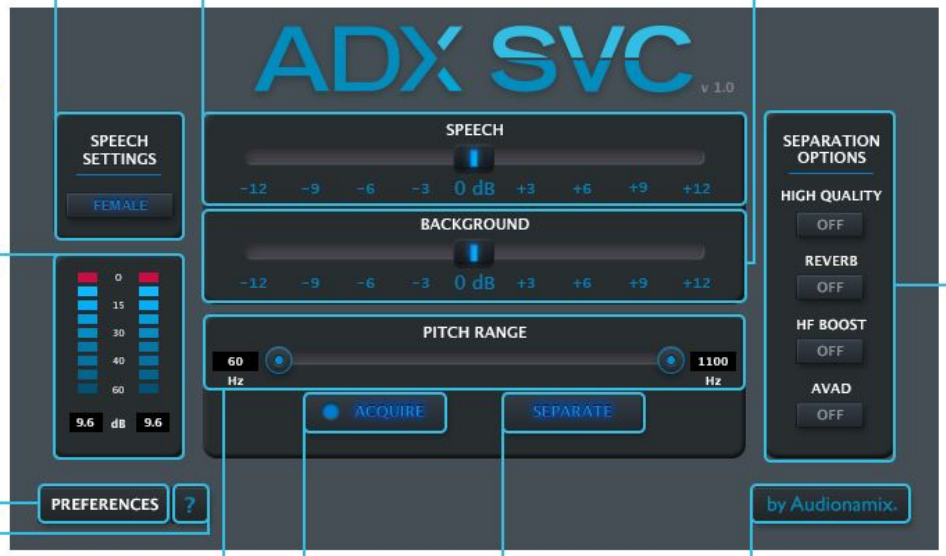
Preferences
Click to input your Username and API Key to activate ADX SVC and to manage your separation files.

Help Button
Click to access the SVC User Guide.

Pitch Range
Drag the left and right sliders to set the fundamental pitch range of the speech to be separated. Setting this range can help SVC perform a better separation. Must be selected prior to initiating a separation.

Speech Volume Slider
Once a separation is complete, use the speech volume slider to adjust the level of the speech +/- 12 dB.

Background Volume Slider
Once a separation is complete, use the background volume slider to adjust the level of non-speech elements +/- 12



Acquire Button
When the Acquire button is red, it is primed to acquire new audio data. Once playback (or offline bounce) is complete, the button will pop out and turn blue, indicating that SVC can now separate

Separate Button
Once your selection has been acquired, press Separate to send the data to the Audionamix separation servers for processing.

by Audionamix
Click here to visit Audionamix.com for updates, tutorials, tips, and support.

Separation Options
Options must be selected prior to initiating a separation. You must therefore be sure to press the Separate button after changing separation options.

High Quality
This algorithm takes longer to process but can improve the quality and clarity of your separation.

Reverb
Separates reverb along with the dry speech to maintain the wet/dry balance original mix throughout volume adjustments.

HF Boost
High-Frequency boost. Helps target and separate the high-frequency, noisy content of speech.

AVAD
Automatic Voice Activity Detection. Separates only where speech is present to avoid separating other content. Turning AVAD off will separate content for the entire length of the selection and can help if speech missed with AVAD on.

ADX SVC Workflow

1. Acquire

In order to allow you to adjust and control the volume of a voice within a mix, ADX SVC first needs to isolate the speech.

This is why acquiring the audio you want to separate is the first step in ADX SVC.

After selecting the audio you wish to process, ensure that the Acquire button is pressed in and the light is red. This indicates that SVC is ready to acquire audio data. Start playback or initiate an Offline Bounce to send the selected audio into SVC. When you stop playback or the Offline Bounce process completes, the Acquire button will pop out and the light will turn blue. The plug-in should now read 'Data Acquired, Choose Separation Options and Press Separate…'

2. Set Options

As the plug-in message indicates, before running the separation, you can change the Separation Options and indicate the Speech Settings or specific Pitch Range in order to improve the separation.

3. Separate

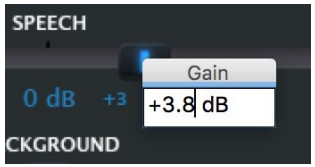
After data is acquired and the options set-up, press the Separate button to send the data to the ADX servers for processing.

4. Control

After the separation process is complete, use the Speech Volume Control Slider to raise and lower the level of the main speech within the mix +/- 12dB.

Use the Background Volume Control Slider to raise or lower the level of all non-speech content +/- 12dB.

To enter a specific level, Double-click on a Volume Slider.

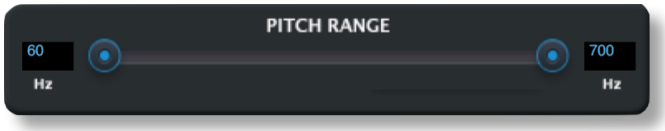


To return a Slider to 0, Option-click or Right-click it.

Speech and Background volume sliders can also be automated.

Speech Settings, Pitch Range and Separation Options

Speech Settings and Pitch Range



SVC will separate the voice in the selected audio based on its best calculation of the pitch. You can assist the plug-in in this regard by entering the known or estimated pitch range of the

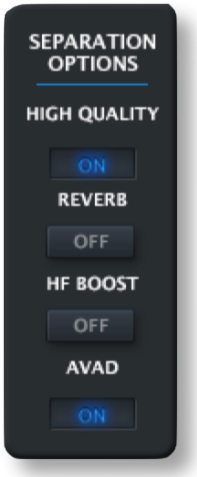
speech you would like to target. This will tell SVC to only look for voices whose fundamental frequency is between the lowest and the highest pitch you've selected.

The Speech Settings can help you to set the Pitch Range.

Settings are based on typical adult male, female, or child speech frequency ranges . Click on the button to switch from one setting to another. You will see the values adjust on the Pitch Range slider, and can then customize the range from there.

The Separation Options

These options can help improve the results of your separation.



To use an alternative algorithm, turn on the High Quality option. This algorithm takes longer to process, but can improve the quality and clarity of your separation.

To have SVC include the reverb or room tone of the voice in the separation and maintain the wet/dry balance as you adjust the speech volume, turn on the Reverb option.

Turn On HF Boost to have more high frequencies included in the separated speech.

AVAD stands for Automatic Voice Activity Detection. This is on by default and helps in precisely targeting speech content within your audio file.

With AVAD off, ADX algorithms extract speech content for the entire duration of the acquired selection. This can be useful when the algorithm misses segments of the speech. However, turning off the AVAD may bring back unwanted elements in the extracted file when no speech is actually present.

Unlike ADX VVC, ADX SVC only extracts Speech. This means that you cannot adjust the volume of a vocal melody line, even when AVAD is turned Off.

NOTE: results do not adjust in real time. In order to hear the effect of adjusting these parameters, you will have to **run the separation process again.**

Automation

There are four settings that can be automated in the SVC plug-in:

1. Bypass controls (if the plug-in is on or off).
2. Mode (if the plug-in is in acquire mode or playback mode).
3. Speech Gain (controls the level of the separated speech).
4. Background Gain (controls the level of the background, non-speech elements).

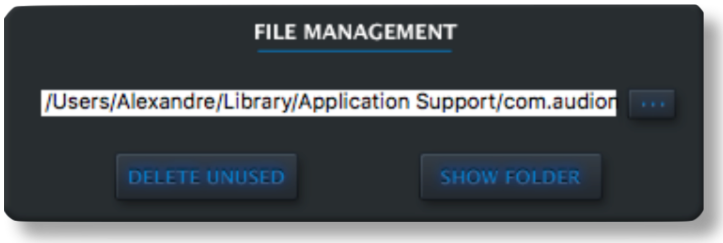
Please consult your DAW's help documentation for specific instructions on automating plug-in parameters.

File Management

ADX SVC records acquired audio material and creates files during the separation process that it stores on your hard disk. SVC requires these separation files in order to allow you to adjust and control the volume of the voice within the mix.

It is therefore important to remember that when you archive a project or share it with another user or system, you must also be sure to include the files created by SVC.

The File Management control panel can be accessed via the Preferences panel.



Here you'll find the current save location for all of your separation files.

By default, ADX SVC stores its files in the following folder: /Documents/Audionamix/SVC

You can change this location by clicking on the ellipsis "..." button and navigating to your desired file path. You can also use this method of selecting a new save location to relink to separation files that have been moved from their original location.

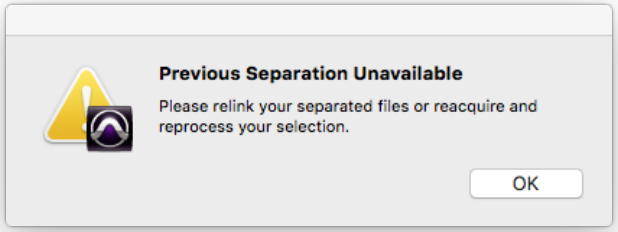
The DELETE UNUSED button allows you to delete the separation files associated with your current project, such as previous separations which are no longer in use, in order to save disk space.

The SHOW FOLDER button offers easy access to your separation files for archiving purposes and for sharing between systems.

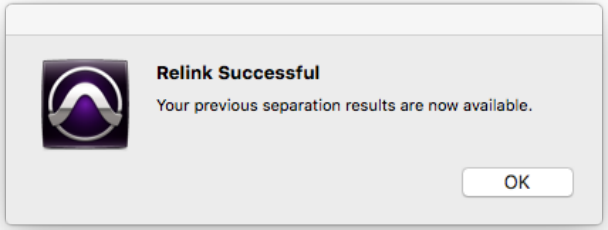
Relinking and Sharing Separation Files

In order to share separation files between systems, click on the SHOW FOLDER button, then move the highlighted separation folder to your target destination. Separation folders can be easily distinguished via their unique identifiers, e.g. *108CA8D5-E6D1-2191-3B47-D3603F6CAAAF.*

When you first launch your session on a new system, you'll see the following warning message:



Open your SVC Preferences panel, click on the ellipsis button, navigate to your stored separation file folder, then click OPEN to relink your separation files.



Once you see the above message, your previous SVC results are relinked, available and active in your session.

Click here to watch a video showcasing the SVC File Management system in action.

DAW Particularities when using SVC

Tips on use of ADX SVC in Cubase

You can quickly acquire the audio you want to separate by Exporting the Audio Mixdown from the File Menu after setting the left and right locators to the desired audio selection.

ADX SVC has been designed to be used as a pre-fader plug-in.

Using ADX SVC on a post-fader insert slot is not recommended and will lead to unexpected results.

Tips on use of ADX SVC in Ableton Live

You can quickly acquire the audio you want to separate by using the Export Audio function from the File menu.

If you are using ADX SVC in Live's Arrangement View, you can acquire, separate and control speech volume level as described in this user guide. However, if you wish to use ADX SVC in the Session View, please keep the following points in mind:

When the separation is complete, ADX SVC is playing the extracted speech part at the exact same time as your original song, and that is what permits you to adjust the level of the speech and background volume. If you cannot ensure that the two parts are played at the same time, SVC won't work as expected. The clips in Session View represent small loops

within the linear running time of the Arrangement in Live. It is from this Arrangement time that ADX SVC derives its timing information. For this reason, you're recommended to **use SVC only when working in Live's Arrangement View.**

Tips on use of ADX SVC in Studio One

You can acquire the audio you want to separate by clicking on Export Mixdown from the Song Menu.

When working on a Project, ADX SVC has to be put on a master insert slot.

Tips on use of ADX SVC in Digital Performer

You can quickly acquire the audio you want to separate using the Bounce to Disk command under the File menu.

Customer Support

For additional help with ADX SVC, please visit our web site at www.audionamix.com/support where you will find Pro Tips, Tutorials, and Frequently Asked Questions, or contact our technical support department at support@audionamix.com.

Our support team offers significant media industry experience, expertise and personal dedication to help you resolve technical issues and stay productive.

Thank you for using ADX SVC.

ADX SVC Known Issues

- In Pro Tools 12.0.0 to 12.4.0, attempting to cancel a separation once initiated will lead to a crash. To fix this crash, update your system to Pro Tools 12.5.0 or later.