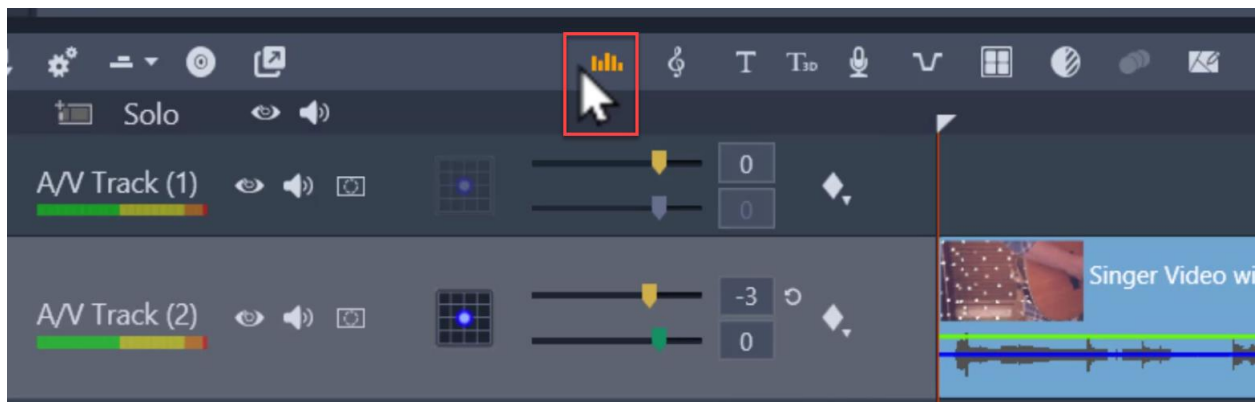# An Overview of the Audio Editor

In this tutorial, we'll review the Audio Editor in Pinnacle Studio and all the audio editing tools available to you, in addition to the new audio features introduced in Pinnacle Studio 25.

Audio Tools on the Timeline

First, let's review the audio tools that are available on the timeline toolbar. Start with your audio clip/video clip with audio on one of the A/V Tracks on the timeline and select the track that contains the audio or video clip that you want to make audio adjustments to.
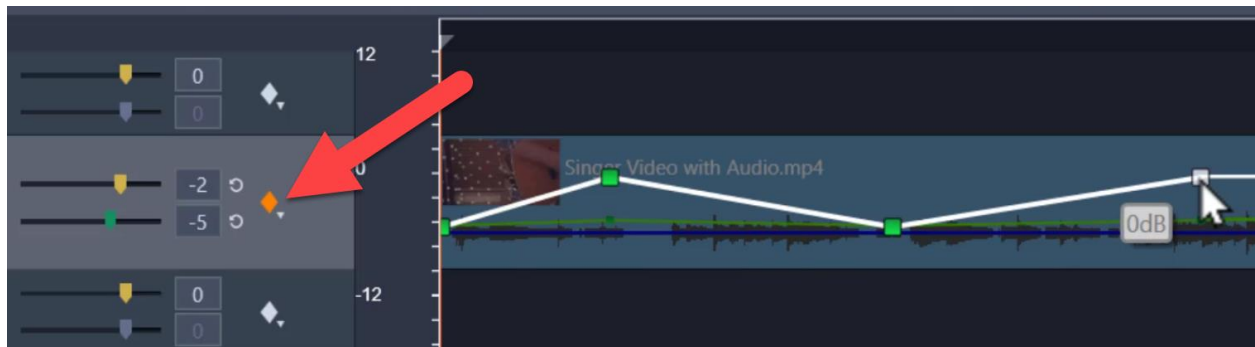
Audio Mixer

Click on the **Audio Mixer** button. This button opens the enhanced audio control area with volume adjustment tools.
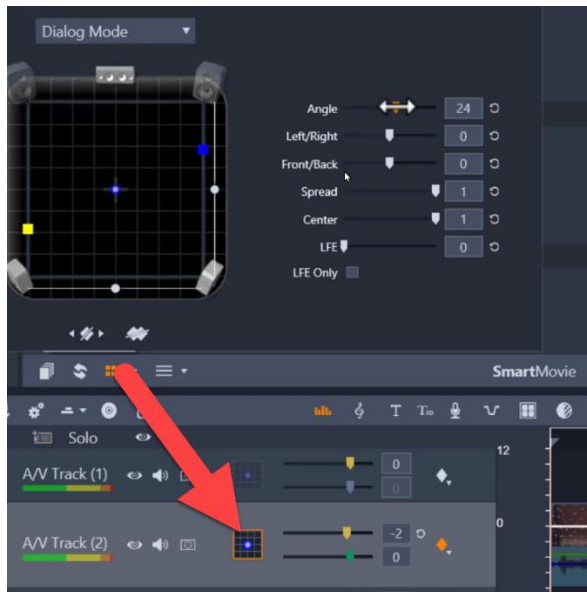

Below the timeline track headers is a master playback level indicator that will tell you your volume levels.

- Adjust your master volume by dragging on the yellow slider here or set your own dB level.

- You can also **Turn on Keyframing** and edit levels on the tracks using audio keyframing. This will allow you to right-click on the track and manually add or delete keyframes so you can have audio higher and lower in different positions on the clip.
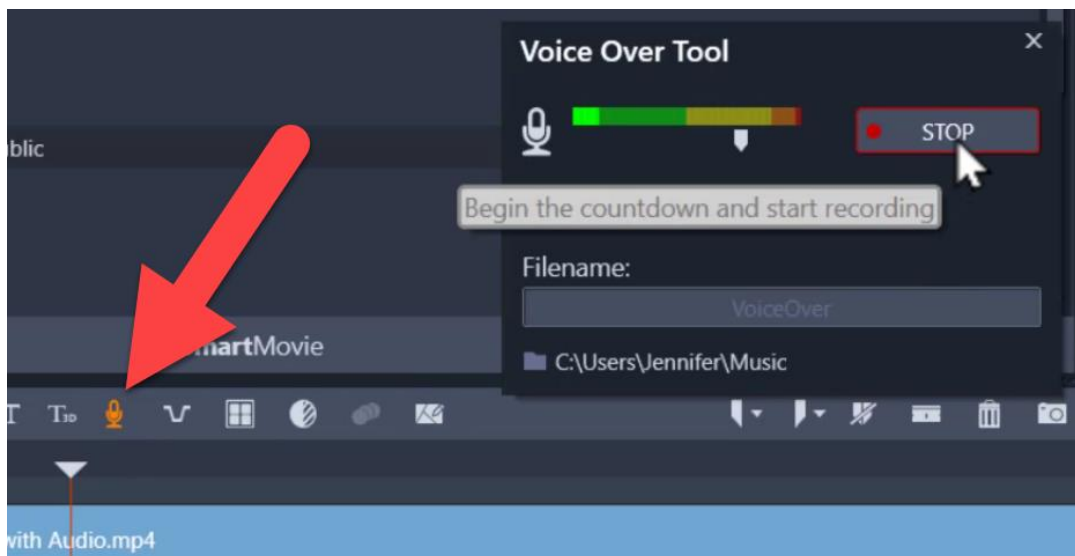
Click on the **Panner** tool button to adjust the surround sound settings by selecting any of the presets or customizing your own settings by adjusting the sliders manually.

- Introduced in Pinnacle Studio 25, the 5.1 surround sound controls now have support for **Angle**, **Spread** and **Center** with keyframe options to manipulate multi-speaker panning over time.
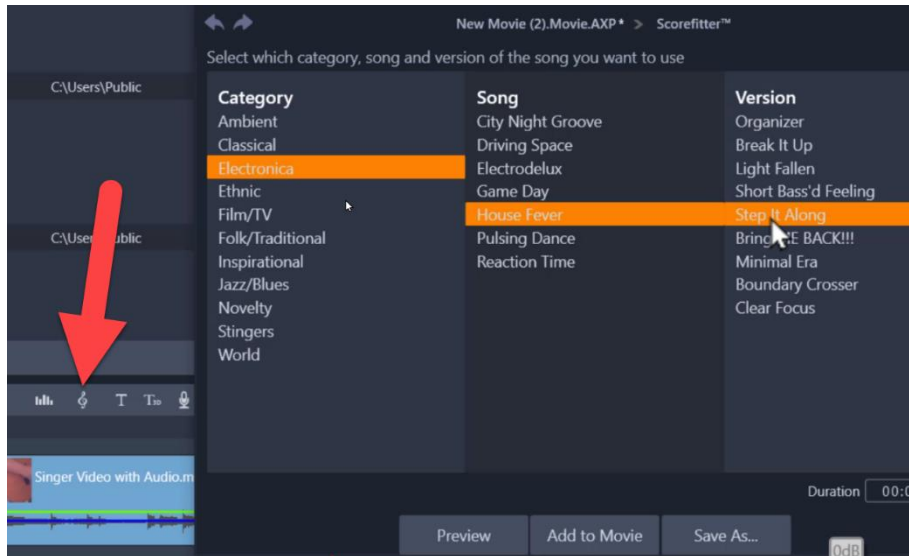

Voice Over Tool

Click on the **Voice Over Tool** button. You can record a voice over using your microphone by pressing the **Record** button, and then once you finish recording, your voice over will be automatically added to the Voice Over track on the timeline.
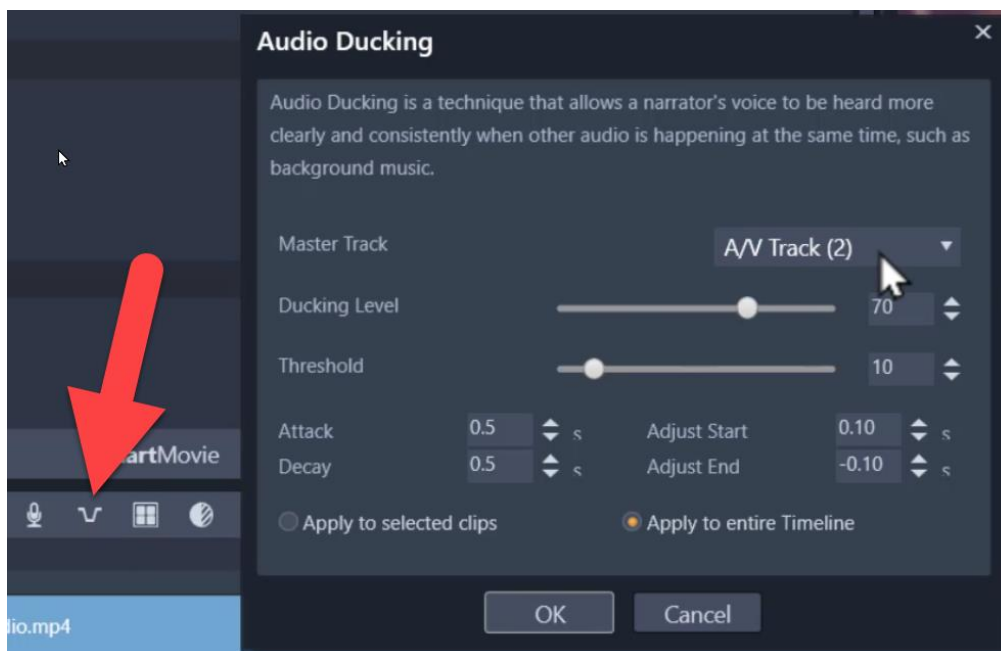
ScoreFitter Music

Click on the **SoundStage** button to access a collection of ScoreFitter music. This is an easy way to add a great soundtrack to your videos, as the ScoreFitter tool will automatically compose the song so it perfectly matches the length of your media on the timeline.

To learn more, watch the full tutorial How to Add Music.

Audio Ducking

Audio Ducking is a technique that allows a narrators' voice to be heard more clearly above other audio, like background music, in the project.
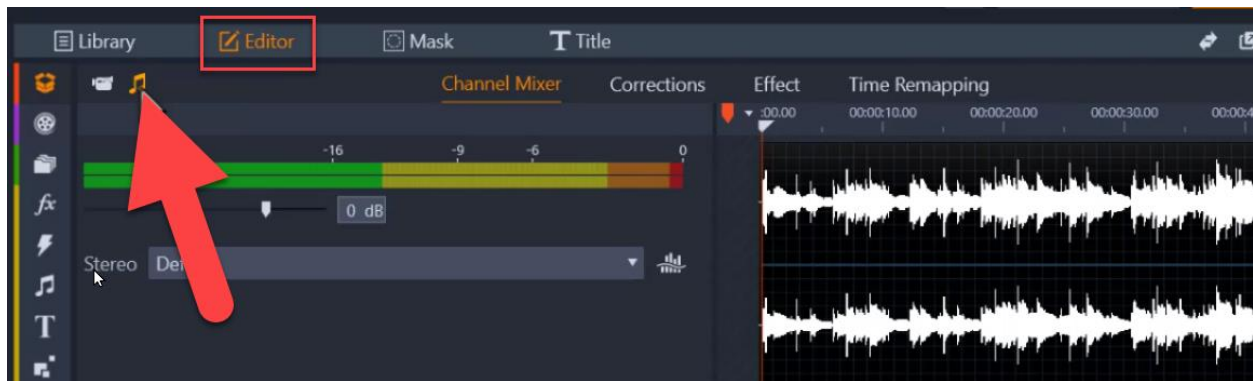
To learn more, watch the full tutorial [How to Use Audio Ducking](#).

Overview of the Audio Editor

To access the Audio part of the **Editor** panel, make sure you select the audio or video clip you want to make edits to.
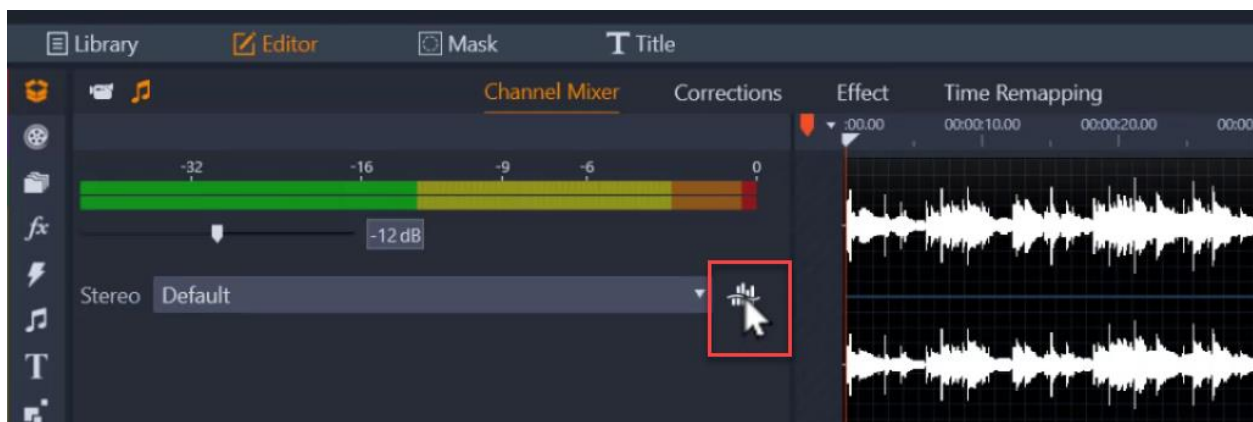
Then click on **Editor**, and click on the **Music Notes** icon to enter the audio editing mode if you are editing audio in a video clip.
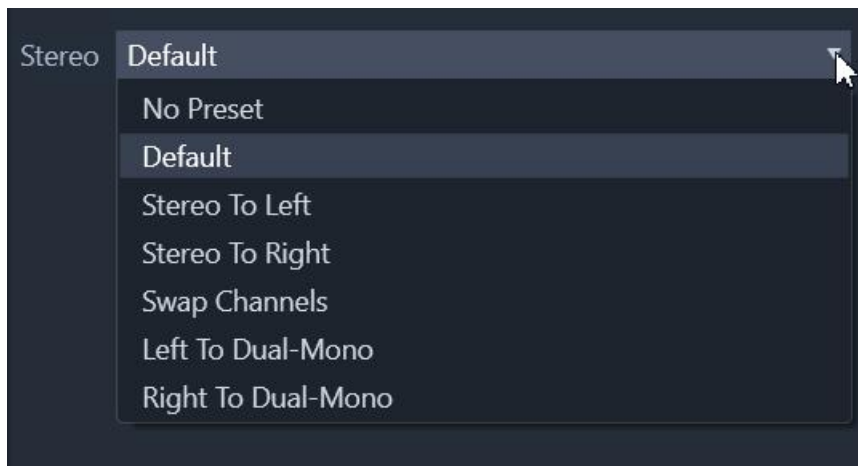

Channel Mixer

The channel mixer allows you to make level adjustments and redirect audio signals from their original channel assignments to new ones.

Level adjustment: Click on the slider under the level meters to set the playback level of the clip. The level you set will be used whenever this clip is played or used in a timeline. The red area on the meters represents overmodulation of the sound and should be avoided if possible. To determine the maximum level you can safely use, click the **Normalize** button.

Stereo: This dropdown list contains all options for redirecting audio signals, such as a channel exchange (left interchanges with right, for example), or combining a two-channel stereo signal onto one mono channel.
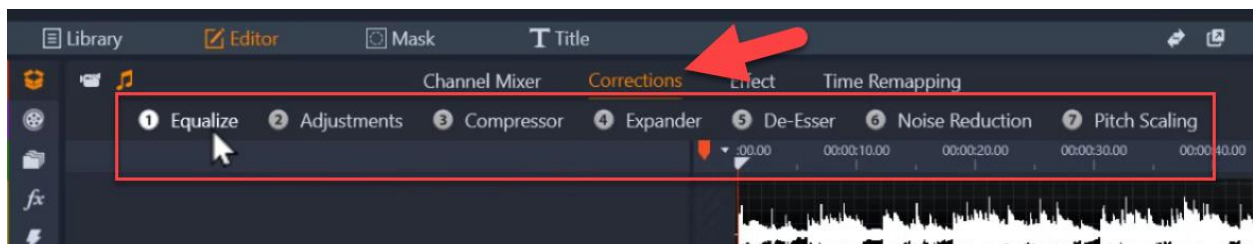

Introduced in Pinnacle Studio 25 to 5.1 surround sound controls are support for **Angle**, **Spread** and **Center** with keyframe options to manipulate multi-speaker panning over time.

To access the surround sound controls, click on the **5.1 Surround/Stereo Panner** icon in the track header area beside your clip on the timeline, as demonstrated at the beginning of this tutorial.
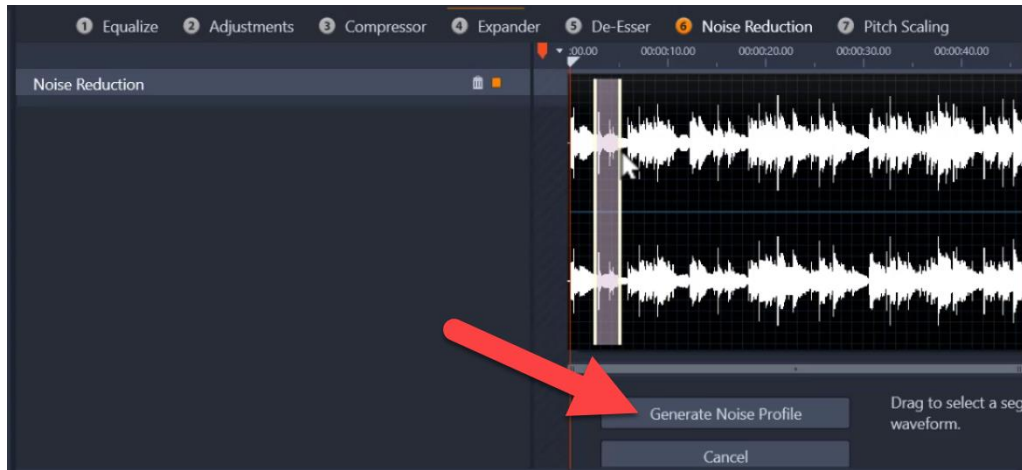
Corrections

This section lets us make many different corrections to improve our audio quality.

- **Equalize**: An equalizer is basically a tool that lets you adjust the volume of the individual frequencies within an audio source.
  - o You can choose from a number of select presets from the dropdown list, or choose to manually adjust the dials to set **Gain, Frequency, and HiCut and LoCut** settings.

- **Adjustments**: The only parameter available under the **Adjustment** tool the is LFE (Subwoofer), which lets you either activate or deactivate the Subwoofer channel for a particular clip.
- **Compressor**: Adding a compressor can help smooth out your sound by scaling back the loud sections.

- **Expander**: Expanders increase the difference in loudness between quieter and louder sections of audio making quiet sounds quieter and loud sounds louder.

- **De-Esser**: De-essing helps you reduce sibilance or harsh high-frequency sounds.

- **Noise Reduction**: Using the noise reduction filter can help reduce or eliminate background noise to give you cleaner and clearer audio.

Introduced in Pinnacle Studio 25, the **Noise Reduction** section now allows you to create a **noise profile**. This allows you to make a selection of audio as a sample of the background noise you want to eliminate throughout the entire clip.
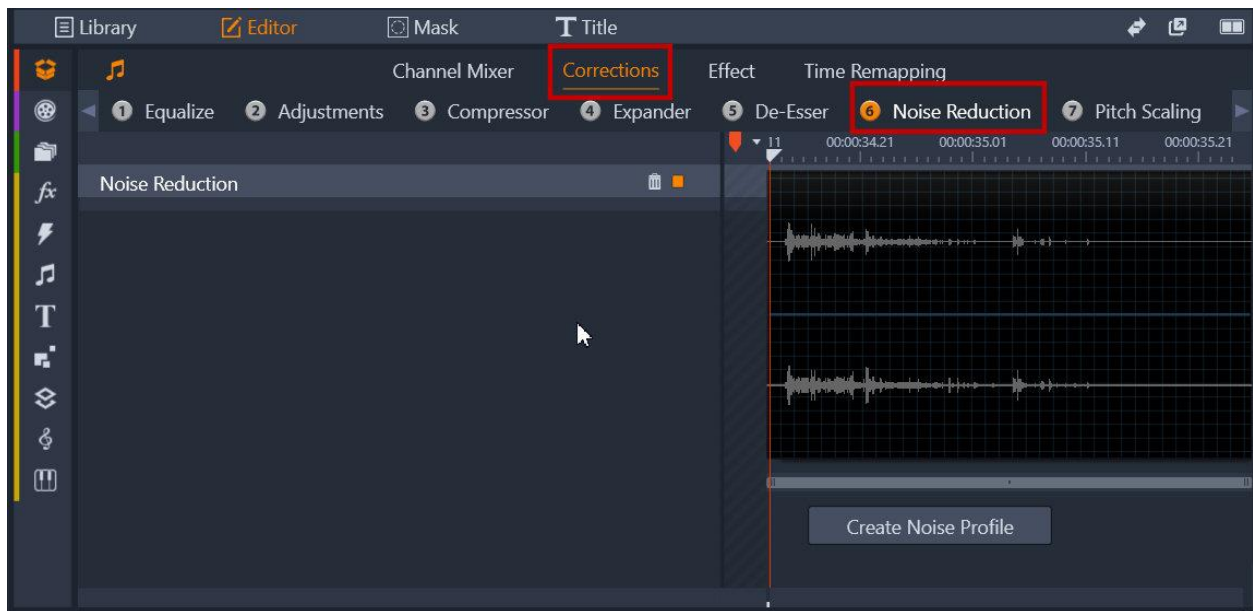
Noise Reduction Using a Custom Noise Profile

Using the noise reduction filter you can reduce or eliminate undesirable background noise. The filter reacts dynamically to changing amounts and kinds of noise within the material.
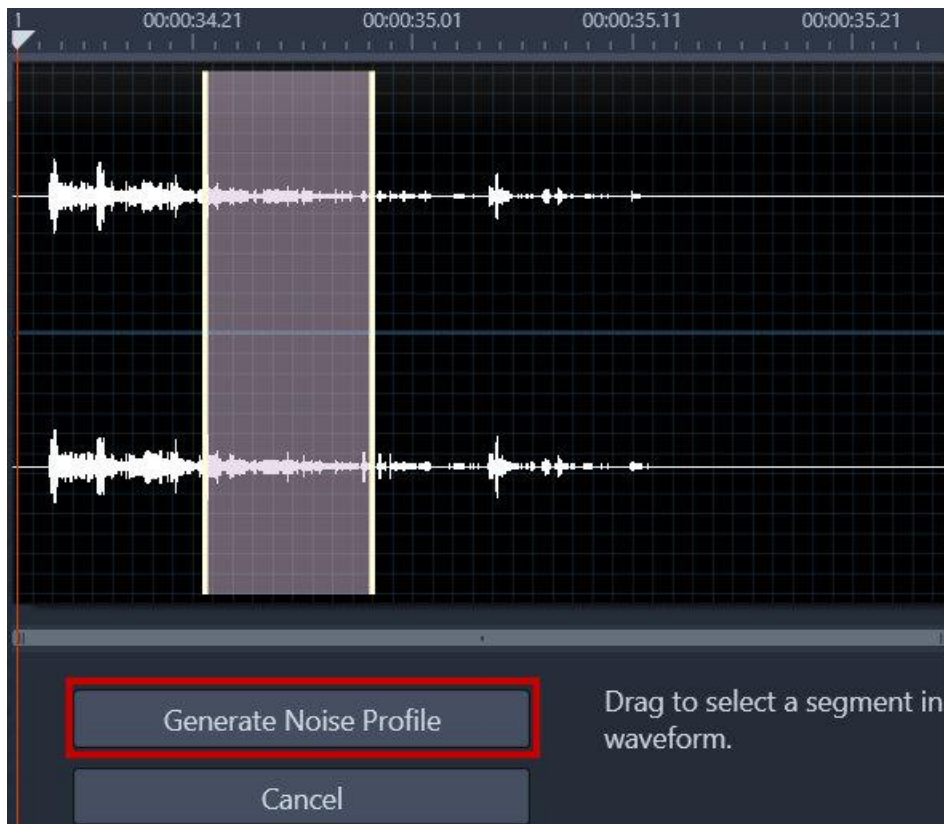
Noise reduction can be applied for a range of problems. The results obtained may differ, however, depending on the source material and the origin of the problem. In many cases the results can be optimized through targeted use of the Level and Fine Tuning parameters.
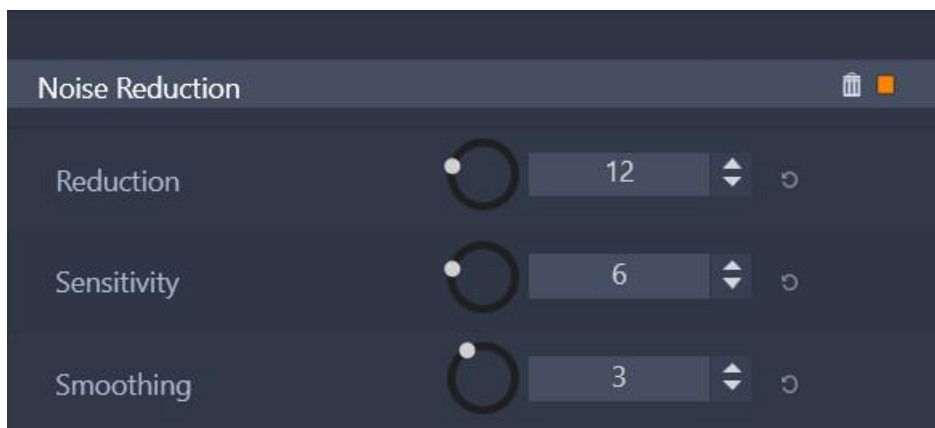
To apply noise reduction:

1. Double-click a clip with audio.

2. In the **Editor** panel, click the **audio** button in the upper-left corner.

3. Click the **Corrections** tab and click **Noise Reduction**.

4. Click the **Create Noise Profile** button.

5. In the waveform view, drag across a section of the audio that contains only the audio sound that you want to remove.

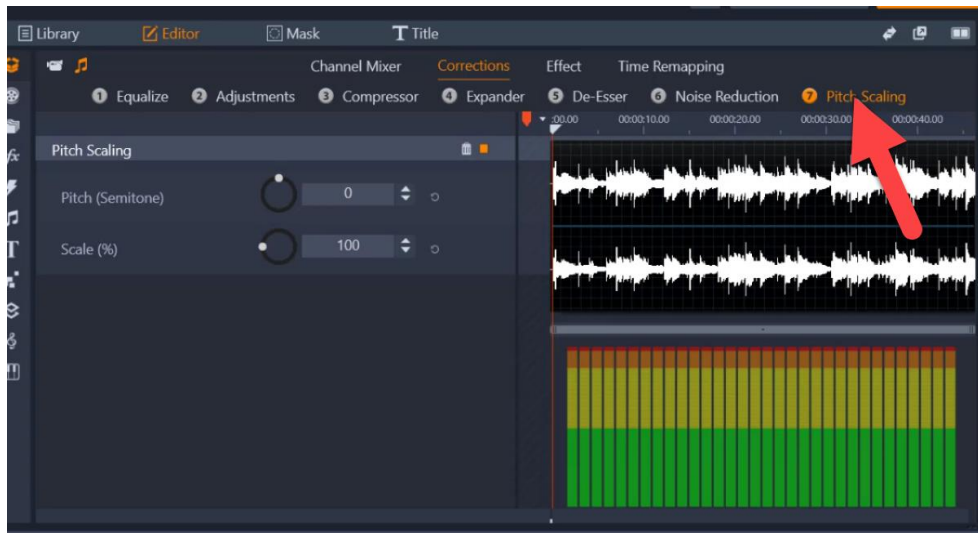6. Click the **Generate Noise Profile** button.

7. Adjust any of the following settings to fine-tune the noise reduction:

- **Reduction**: Specifies the amount of noise reduction. Higher values remove more noise, but can reduce the volume of the audio that you want to preserve.
- **Sensitivity**: Specifies the frequency range of the noise reduction. Higher values remove more noise, but might remove some frequencies that you want to preserve.
- **Smoothing**: Removes artifacts such as choppiness and popping. Higher values remove more artifacts, but can reduce clarity.
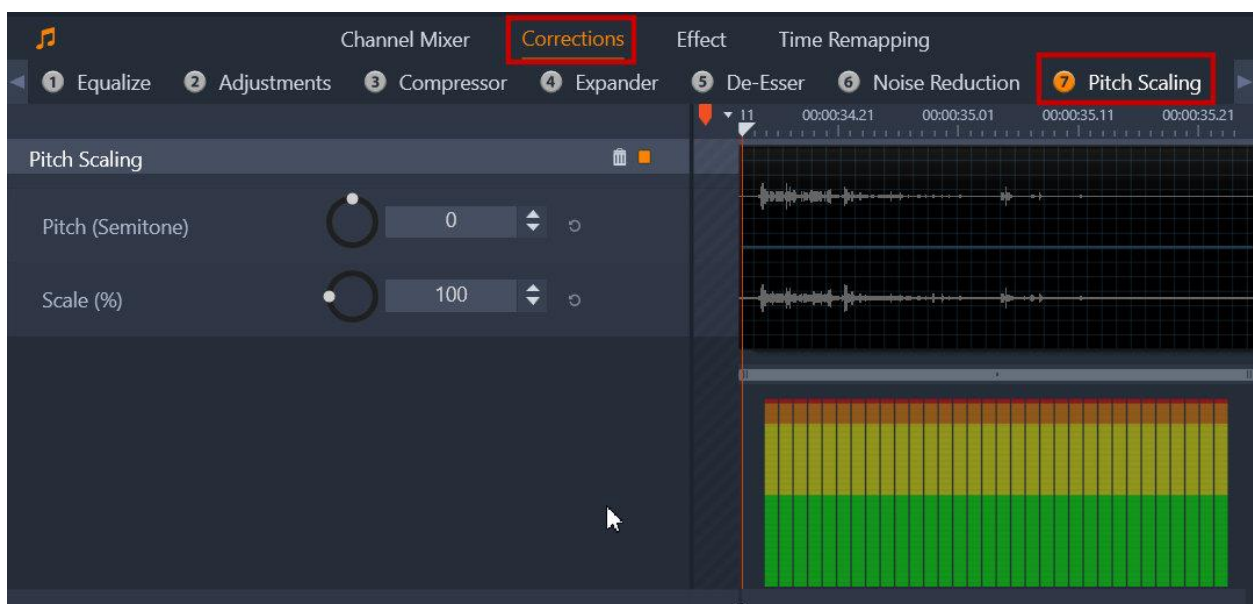
If you aren't able to get the results you want, you can click **Recreate** to select and generate a new noise sample.

Also introduced in Pinnacle Studio 25, is a new section for **Pitch Scaling.** Pitch Scaling lets you change the pitch of audio without affecting the speed and therefore not impacting the duration of the clip.

To apply Pitch Scaling:

1. Double-click a clip with audio.

2. In the **Editor** panel, click the audio button in the upper-left corner.

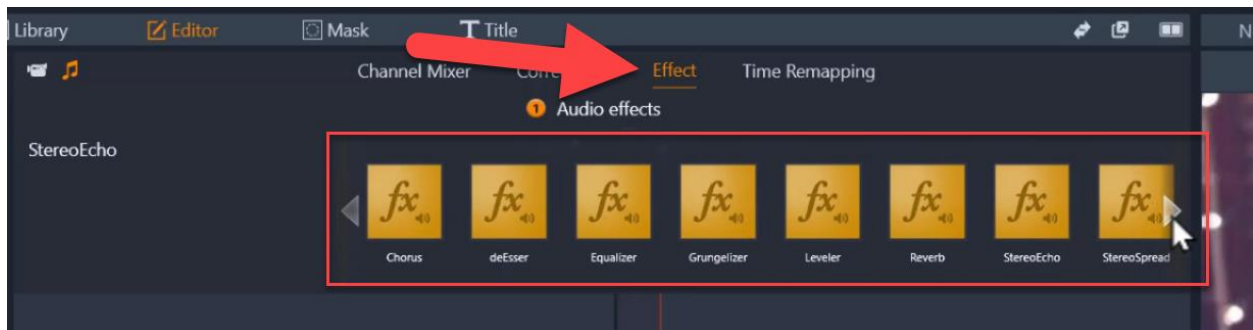3. Click the **Corrections** tab and click **Pitch Scaling**.

4. Adjust either of the following settings to change the pitch of the audio:

- **Pitch (Semitone)**: Increases or decreases pitch (measured in semitones)
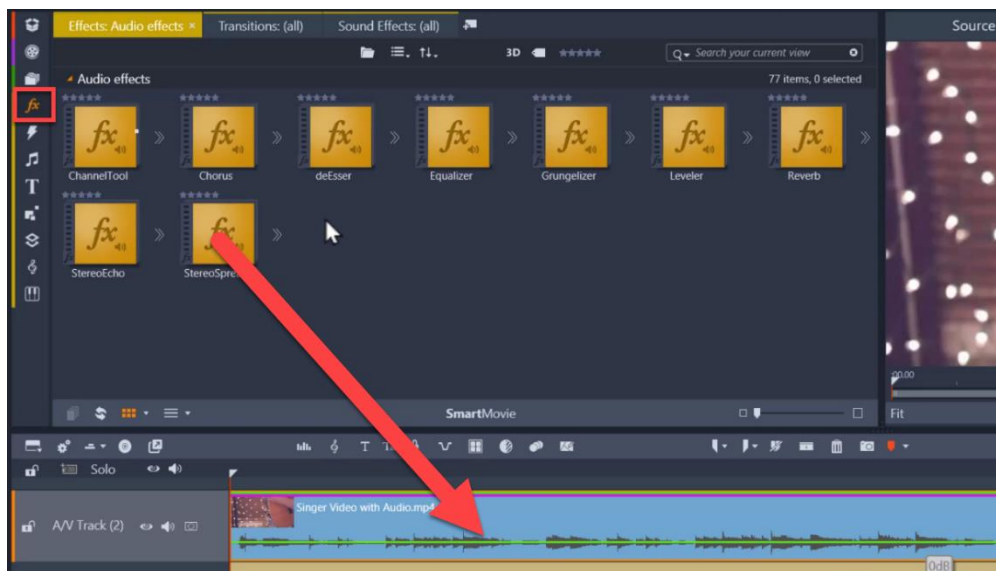- **Scale (%)**: Increases or decreases pitch (measured as a percentage)

Audio Effects

Apply Audio Effects by clicking on the **Effects** section. There are a number of audio effects we can apply to our audio or video file: **ChannelTool, Chorus, deEsser, Equalizer, Grungelizer, Leveler, Reverb, StereoEcho,** and **Stereo Spread**.

To apply the effect, simply click an effect on the thumbnail bar and it will automatically apply to your selected clip.
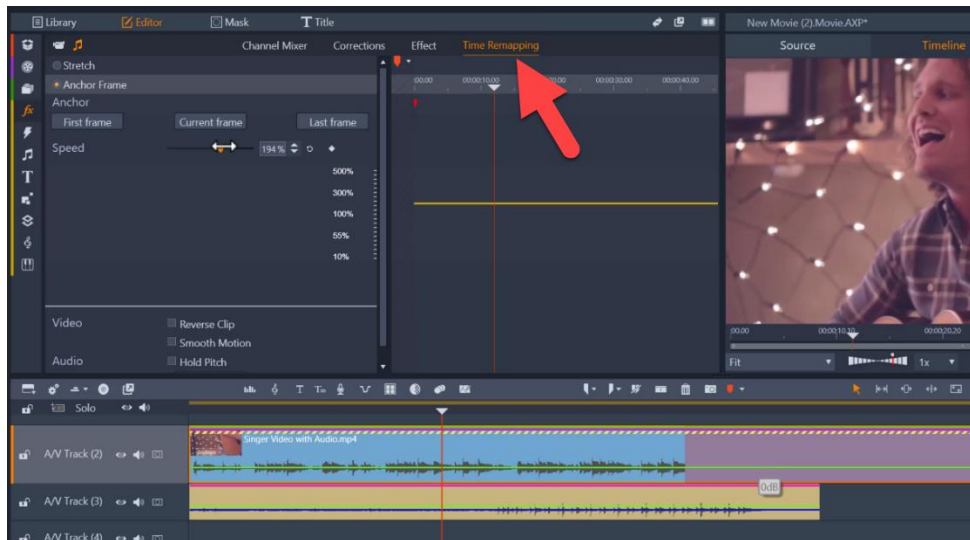
Another way to add an audio effect to your project is to go to the Library panel and go to **Effects > Audio effects**. Then drag the effect from the Library onto your audio or video clip.

After editing an Audio Effect, you can make custom edits to any of the default settings by right clicking on your clip on the timeline and going to **Effect > Edit** and selecting the applied effect. From here, make any adjustments you wish or select a different preset.

Time Remapping

Time Remapping allows you to adjust the speed for your video clips. You can apply a slow motion or fast motion effect to the entire clip, or you can use keyframes to speed up some scenes in a clip, while slowing down other scenes.

To learn more, watch the full tutorial [Adjusting Speed with Time Remapping](#).

These are all of the different ways you can improve or experiment with your audio and video clips in Pinnacle Studio!