

# How to adjust audio and apply crossfades

Adobe Premiere Pro has tools you can use to decrease or increase the volume of an entire clip or parts of a clip. For example, you might want to bring the natural sound on a video clip down while you narrate, gradually fade up the audio at the start of a clip, or fade up an interview just as the narrator completes a segment. The latter technique is a J-cut that is covered in the “How to create TV news-style J- and L-cuts” guide. You can also apply *crossfades*—audio transitions—between clips or at the end or beginning of a clip.

You adjust audio volume levels in the Timeline panel, the Effect Controls panel, the Audio Mixer, and the Audio Clip Mixer. This guide covers adjusting audio in the Timeline, Effect Controls, and Audio Clip Mixer panels. This guide introduces *keyframes*. You use keyframes to set parameters for motion, effects, audio, and other properties, usually changing them over time. A keyframe marks the point where you specify a value. In this guide you use keyframes to set and change audio volume.

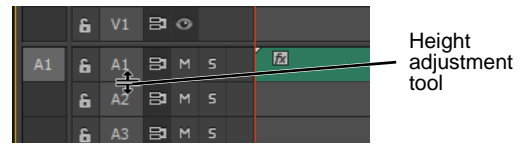
To complete the tasks in this guide, you need two or more audio clips or video clips that have audio. What works best is two brief stereo music clips.

## Using keyframes to adjust audio in the Timeline panel

When you use keyframes to create a change over time, you typically use at least two keyframes—one for the state at the beginning of the change and one for the state at the end of the change.

*To use keyframes to adjust audio in the Timeline:*

1. Start Adobe Premiere Pro, start a new project, create a new sequence, and import two audio clips (or two video clips that have audio).
2. Drag an audio (or audio/video) clip from the Project panel to the Audio 1 (A1) track in the Timeline panel.
3. Expand the audio track height by moving the pointer to the bottom of the track header until it changes to the height adjustment tool (**Figure 1**) and then dragging the bottom down until you can easily see the audio waveforms (**Figure 2**).
4. Click the Show Keyframes button to display the keyframes menu (**Figure 2**) and make sure Clip Keyframes is selected—the default opening condition.
5. Click the clip to select it and move the Timeline panel current-time indicator (CTI) to a point in the clip where you want to start changing the volume level.

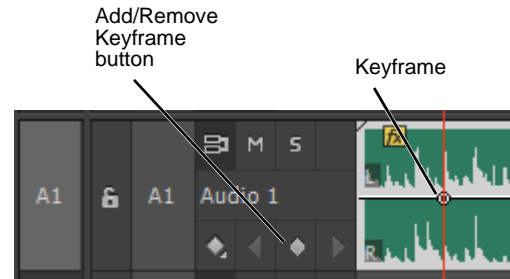


**Figure 1** Audio track header

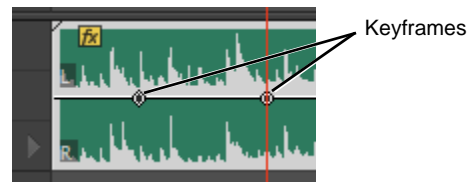


**Figure 2** Audio waveforms

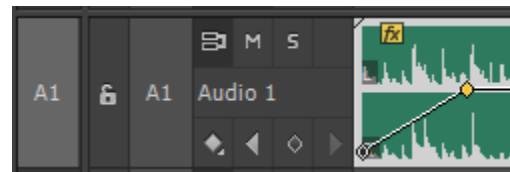
6. With the clip selected, click the Add/Remove Keyframe button (**Figure 3**).
7. Move the CTI to a point where you want the audio level change to finish and click the Add/Remove Keyframe button to add another keyframe there (**Figure 4**).
8. Drag the keyframe up or down to increase or decrease the volume.
9. Drag the first keyframe to the beginning of the clip and drag the second keyframe to a point about 2 seconds into the clip.
10. Create an audio fade-up by dragging the first keyframe down as far as it can go (the dB level will be negative infinity) and dragging the second keyframe to set its dB level to zero (**Figure 5**).



**Figure 3** Add/Remove Keyframe button and keyframe



**Figure 4** Audio volume keyframes



**Figure 5** Audio fade-up

## Adjusting audio in the Effect Controls panel

Using the Effect Controls panel, you can apply very precise audio settings.

To adjust audio in the Effect Controls panel:

1. Continue where you left off in the previous task.
2. Click the audio clip on the Audio 1 (A1) track to select it.
3. Display the Effect Controls panel to view that clip's Volume effect.
4. Expand Volume to see the two Volume parameters (Figure 6). Expand the Level parameter.
  - **Bypass:** All audio effects have the Bypass feature (video effects do not). You can switch back to the default volume setting at any point in the clip by turning on Bypass. You can switch the effect off and on any number of times within the clip by using keyframes.
  - **Level:** Decibel (dB) level. By using keyframes, you can change the dB level as many times as you like within a clip.
5. If the time ruler is not visible in the Effect Controls panel, click the Show/Hide Timeline View button (Figure 6).

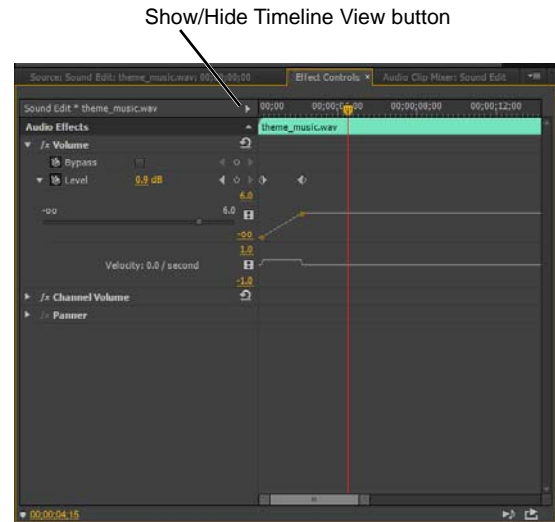


Figure 6 Effect Controls panel

- Note:** Widen the panel as much as you need to make the Show/Hide Timeline View button visible and active.
6. Click the Go To Next Keyframe button (Figure 7).

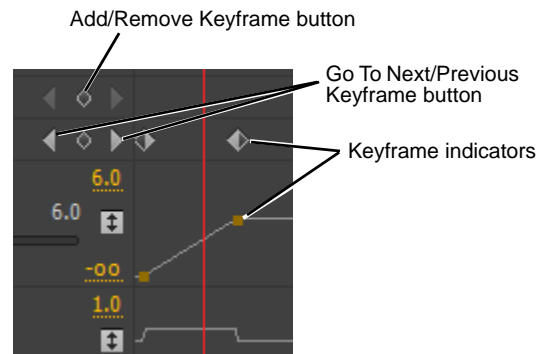


Figure 7 Effect Controls panel keyframe controls

- The Effect Controls panel CTI moves to the second keyframe (small square icon) in the time ruler.
7. Increase the Level to 2.0 for that volume keyframe by typing in a new value or dragging the Level slider (Figure 8).
- The line graph to the right of the Volume Level slider moves up.

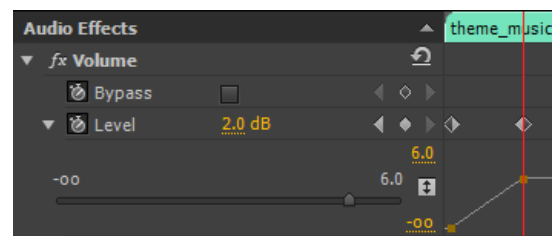


Figure 8 Volume Level controls

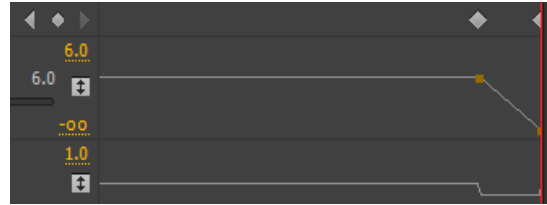
8. Drag the CTI in the Effect Controls panel or the Timeline panel to about 2 seconds before the end of the audio clip.
  9. Click the Volume Level Add/Remove Keyframe button.
- You have added a keyframe to the volume line in the Effect Controls panel time ruler and to the audio volume keyframe graph in the clip in the Timeline panel.
- Note:** To remove a keyframe, move the CTI to the keyframe and click the Add/Remove Keyframe button.

10. Move the CTI to the last frame of the clip. You can do this by pressing Shift+End, and then the Left Arrow key.

**Note:** Shift+End takes you to the end of the selected clip. The Left Arrow key takes you back a single frame to the final frame of the clip.

11. Drag the Volume Level slider as far to the left as it will go (to negative infinity).

The right end of the volume keyframe graph in the Effect Controls panel drops to negative infinity (**Figure 9**).



**Figure 9** Volume keyframe graph

## Working with a crossfade audio transition

A crossfade audio transition fades down one audio clip as another audio clip fades up. This allows for smooth or interesting transitions from one scene to the next and opportunities for creative sound mixing.

To work with crossfade audio transitions:

1. Start where you left off in the previous task.
2. Replace the clip on the sequence with two audio clips.
3. Trim the Out point of the first clip and the In point of the second clip to give them sufficient tail and head frames for a smooth transition.
4. Click the Effects panel tab to display it.
5. Open the Audio Transitions > Crossfade bin (in the Effects panel) and drag the Constant Power audio transition to the cut line between the two clips in the Timeline panel (**Figure 10**). You may need to zoom the Timeline to see the transition.
6. Click the Constant Power transition to select it and view its parameters in the Effect Controls panel (**Figure 11**).
7. Change the duration to 3 seconds.
8. Listen to the audio crossfade.
9. From the Effects bin, drag the Constant Gain audio transition to the Constant Power transition at the cut point between the two clips.

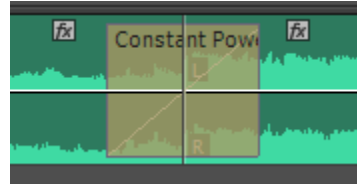
The Constant Gain transition replaces Constant Power.

10. Listen to that transition.

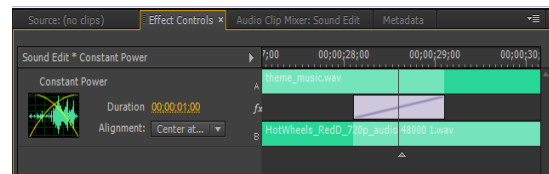
**Note:** As shown in (**Figure 12**), Constant Gain changes audio at a constant rate, in and out, as it transitions between clips. This can sometimes sound abrupt. Constant Power creates a smoother, more gradual transition.

11. From the Effects bin, drag additional Constant Power transitions to the beginning of the first clip and the end of the second clip.

The two-clip sequence now has a nice audio fade-in and fade-out.



**Figure 10** Audio transition at cut line



**Figure 11** Effect Controls panel



**Figure 12** Audio transition graphs

## Using the Audio Clip Mixer panel to adjust audio levels of individual clips

In addition to adjusting clip volume in the Timeline and the Effect Controls panel, you can adjust the volume of each audio clip in a sequence by using the Audio Clip Mixer. Unlike the Audio Track Mixer that lets you adjust volume for entire audio tracks, the Audio Clip Mixer lets you mix the audio of individual clips within the same track. When you position the CTI in the sequence Timeline, any tracks that contain audio at that position in the Timeline become active in the Audio Clip Mixer. The adjustments you make in the Audio Clip Mixer apply only to the audio clips at the current position in the Timeline, not the entire track.

To use the Audio Clip Mixer to adjust audio levels:

1. Start where you left off in the previous task.

**Note:** You currently have two clips in Audio 1 (A1) track.

2. Add another clip (below the first clip) to Audio 2 (A2) track.

**Note:** In this example, we placed a music track in A2 below some dialog in track A1 (Figure 13). The Timeline also includes a third audio track, A3, but it's empty.

3. Position the CTI anywhere in the Timeline where both clips are present.
4. Click the Audio Clip Mixer panel to select it.

The Audio Clip Mixer displays volume controls for all three tracks in the Timeline. However, since there are no clips in track A3 at the current position of the CTI, the controls for track Audio 3 are disabled in the Audio Clip Mixer (Figure 14).

5. Position the CTI at the beginning of the clips and play the sequence.

As the sequence plays, the levels for each clip display in the Audio Clip Mixer panel (Figure 15).

6. Use the Volume Control sliders in the Audio Clip Mixer to adjust the volume for the clips in audio tracks 1 and 2.

For example, you might want to reduce the volume of a music track or the background noise of a video track while the narration is playing.

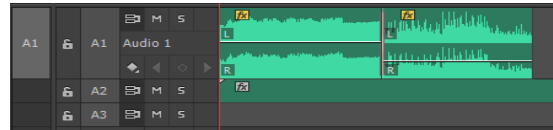


Figure 13 Audio clips in A1 and A2

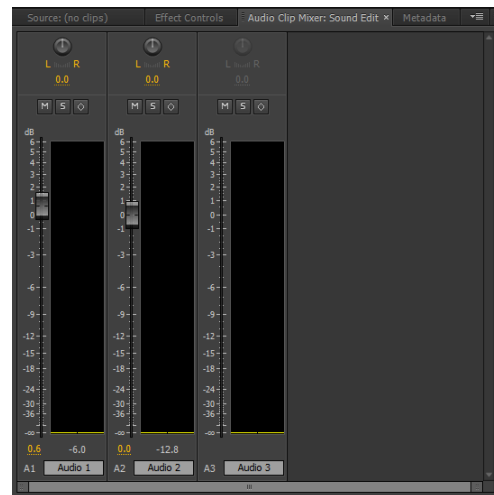


Figure 14 Audio Clip Mixer panel

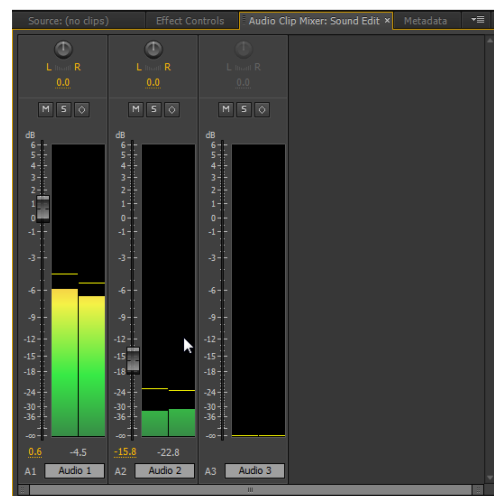


Figure 15 Volume levels in the current clips