How to adjust audio and apply crossfades

Adobe Premiere Pro CS4 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, and the Audio Mixer. This guide covers adjusting audio in the Timeline and Effect Controls 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. 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 complete the tasks in this guide, you need two audio clips or video clips that have audio. What works best is two brief stereo music clips.

How to use keyframes to adjust audio in the Timeline panel

1. Start Adobe Premiere Pro, start a new project, and import the two clips needed for this project.
2. Drag an audio (or audio/video) clip from the Project panel to the Audio 1 track in the Timeline panel.
3. Check that the audio track view is in the expanded mode (the default condition when starting a new project).

   If not, click the Collapse/Expand Track button (**Figure 1**).
4. Expand the track height farther by moving the pointer to the bottom of the track header until it changes to the height adjustment tool and then dragging the bottom down until you can easily see the audio waveforms.
5. Click the Show Keyframes button to display the keyframes menu (**Figure 2**) and make sure Show Clip Keyframes is selected—the default opening condition (**Figure 2**).
6. 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

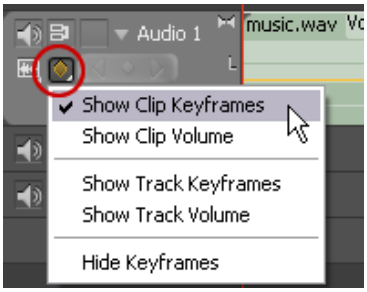

Figure 2 Show Keyframes button and menu

7. With the clip selected, click the Add/Remove Keyframe button (**Figure 3**).

You have added a keyframe—indicated by a little diamond (it looks like a circle until you move the CTI)—at the CTI location on the audio volume keyframe graph (the thin horizontal yellow line) between the left and right channels in the audio clip (**Figure 3**).

Note: If you're working with a monaural clip, there will be only one waveform and one channel displayed in the clip. If you have a 5.1 surround-sound clip, there will be six waveforms and channels.

8. 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**).

9. Hover the Selection tool over the second keyframe until the pointer changes to the Pen tool (**Figure 4**).

10. Drag the keyframe up or down to increase or decrease the volume.

Note: A tool tip pops up briefly, telling you the timecode and the dB value (decibel or volume level) (**Figure 4**). Zero dB is the clip's original volume level. Moving the volume graph to an exact dB setting later is difficult; you can use the Effect Controls panel Volume effect to do that.**11.** Drag the first keyframe to the beginning of the clip and drag the second keyframe to a point about 2 seconds into the clip.

Note: As you slide keyframes left or right, you invariably move them up or down a little, thereby changing their dB (volume) levels slightly. You can fine-tune the volume levels in the Effect Controls panel later.

12. 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

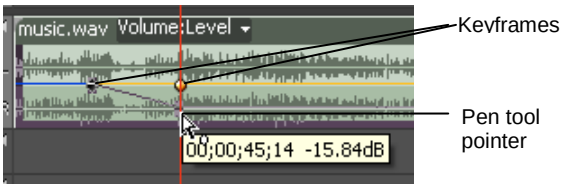

Figure 4 Audio volume keyframes

Figure 5 Audio fade-up

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How 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 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**).

   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**).

   Note: If the Go To Next or Previous Keyframe buttons are not active, there are no keyframes before or after the CTI. You may need to move the CTI to see this.

   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.
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 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.

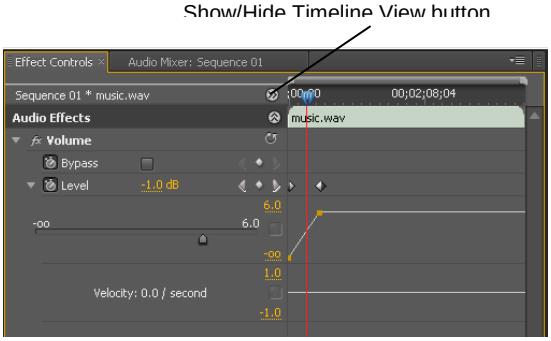

Figure 6 Effect Controls panel

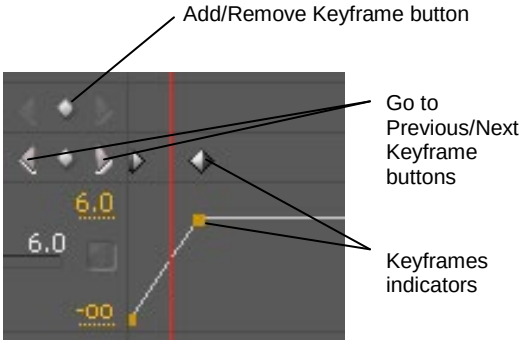

Figure 7 Effect Controls panel keyframe controls

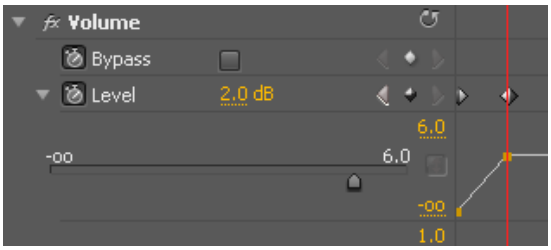

Figure 8 Volume Level controls

10. Move the CTI to the last frame of the clip by pressing the Page Down key and then the Left Arrow key.

Note: Page Down takes you to the first frame of the next clip or, in this case, because there is no next clip, one frame after the out point of the clip you're working on. The Left Arrow key takes you back a single frame to the final frame of the previous clip.

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

Your clip's volume keyframe graph in the Effect Controls panel should look something like **Figure 9.**

Figure 9 Volume keyframe graph

How to work with a crossfade audio transition

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**).

Figure 10 Audio transition at cut line

6. Click the Constant Power transition o select it and view its parameters in the Effect Controls panel (**Figure 11**).

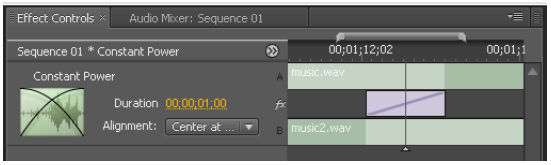

Figure 11 Effect Controls panel

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.

Figure 12 Audio transition graphs

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.

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