

Adobe Studio on Adobe Audition 1.5

High frequency effects

The effects in Adobe® Audition® 1.5 are too numerous to walk through the configuration process for each one. In this tutorial, however, we'll take an in-depth look at three effects (Full Reverb, Graphic Equalizer, and Amplify/Fade). This will accomplish two things: you'll see some of the various methods used in Audition to configure effects, and you'll get a close-up view of three of the effects you're most likely to use on a regular basis.

The Full Reverb effect simulates room reverberation to create the illusion of a sound originating in a particular place in relation to the listener. It offers a high degree of customization; you can specify the dimensions of your imaginary room and tweak the sound further via equalization.

The Graphic Equalizer effect allows you to cut or boost preset frequency bands with the aid of a graphic interface, which shows you a visual representation of the resulting EQ curve.

Finally, the Amplify/Fade effect allows adjustments to the volume of an audio clip, either consistently throughout the clip via the Constant Amplification tab or at a rising or falling rate to produce a fade via the Fade tab.

Apply the Full Reverb effect

To apply the Full Reverb effect in the Edit View:

- 1 Make a selection in the waveform.
- 2 Do one of the following:
 - Choose Effects > Delay Effects > Full Reverb.
 - Click the Effects tab in the Organizer window, expand Delay Effects, and double-click Full Reverb (Figure 1).

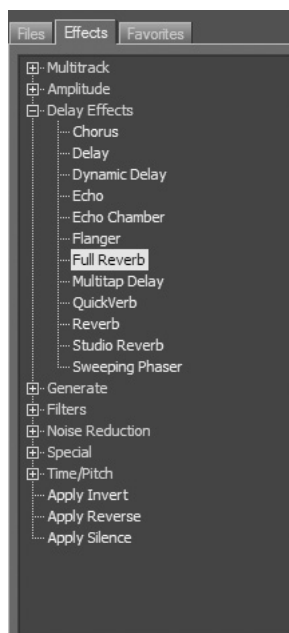


Figure 1: You can also open the Full Reverb effect in the Effects tab of the Organizer window.

3 Do any of the following:

- Move the Original Signal (Dry) scrubber to adjust the prominence of the original signal relative to the reverb sound.
 - Move the Early Reflections scrubber to adjust the perceived size of the virtual “room.”
 - Move the Reverb (Wet) scrubber to adjust the prominence of the reverb sound relative to the original signal.
 - Check the Include Direct box to phase-shift the left and right channels of the original signal to best match the Early Reflections setting.
 - Check the Combine Source Left and Right box to sum an original stereo signal to mono before the reverb is added.
- 4 Configure the options specific to each tab (see the following tasks).
 - 5 Click OK. The Full Reverb effect is applied.

General Reverb tab

To configure the Full Reverb effect (General Reverb tab):

- 1 In the Full Reverb window, click the General Reverb tab (Figure 2).

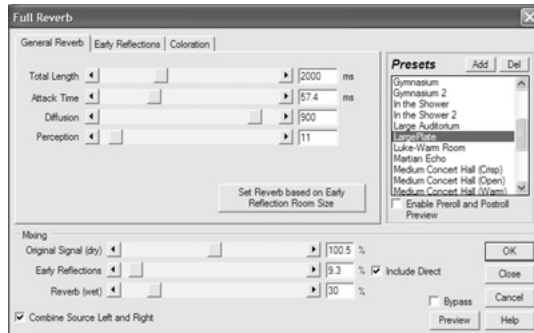


Figure 2: The Full Reverb window.

- 2 Do any of the following:

- Set the Total Length scrubber, or enter a value in the adjacent field, to specify how many milliseconds the decay of the reverb should last.
- Set the Attack Time scrubber, or enter a value in the adjacent field, to specify how many milliseconds it should take for the reverb effect to reach maximum amplitude.
- Set the Diffusion scrubber, or enter a value in the adjacent field, to specify how many individual echoes should be contained in the reverb sound (higher settings result in smoother reverb).
- Raise the Perception setting, using either the scrubber or the adjacent value field, to increase the auditory perception that the reverb was produced naturally in a room (lower settings result in smoother but some-what artificial-sounding reverb).
- Click the Set Reverb Based on Early Reflection Room Size button to set the Total Length and Attack Time settings to conform to the room-size settings configured in the Early Reflections tab (see the next task).

- 3 Go on to the next tab, or click OK.

Early Reflections tab

To configure the Full Reverb effect (Early Reflections tab):

- 1 In the Full Reverb window, click the Early Reflections tab (Figure 3).

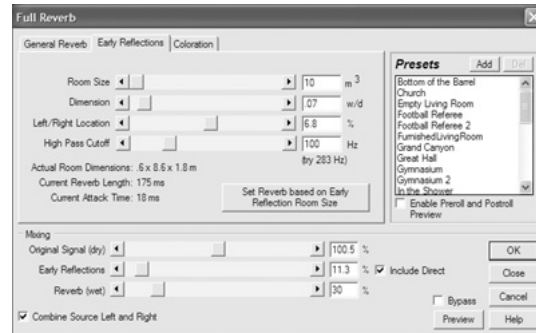


Figure 3: The Early Reflections tab of the Full Reverb window.

- 2 Do any of the following:

- Set the Room Size scrubber, or enter a value in the adjacent field, to specify the size of the room you want to emulate, in cubic meters.
- Set the Dimension scrubber, or enter a value in the adjacent field, to specify the virtual room's width-to-depth ratio.
- Set the Left/Right Location scrubber, or enter a percentage in the adjacent field, to move the virtual sound source (the original signal to which you're adding reverb) to a particular off-center location in the "room."
- Set the High Pass Cutoff scrubber, or enter a Hz value in the adjacent field, to avoid losing low-frequency (bassy) sounds below that value (the addition of reverb can often cause low-frequency loss due to phase issues).

- 3 Go on to the next tab, or click OK.

Coloration tab

To configure the Full Reverb effect (Coloration tab):

- 1 In the Full Reverb window, click the Coloration tab.

- 2 Do any of the following:

- Move the three control points in the graph to color the reverb sound.
- Adjust the amplitude or frequency scrubbers to color the reverb sound.

- Adjust the values in the Hz and dB fields to color the reverb sound.
 - Specify a value in the Q field to set the width of the mid band.
 - Specify a value in the ms field to set the decay time for the affected reverb.
- 3 Click OK. The Full Reverb effect is applied.

Apply the Graphic Equalizer effect

To open the Graphic Equalizer effect in the Edit View:

- 1 Make a selection in the waveform.
- 2 Do one of the following:
 - Choose Effects > Filters > Graphic Equalizer (Figure 4).

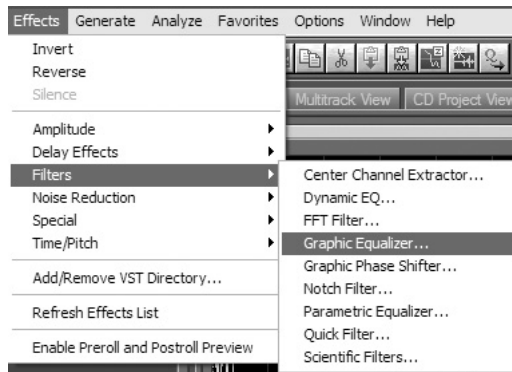


Figure 4: The Graphic Equalizer effect can be found in Effects > Filters.

- Click the Effects tab in the Organizer window, expand Filters, and double-click Graphic Equalizer. The Graphic Equalizer window opens (Figure 5).

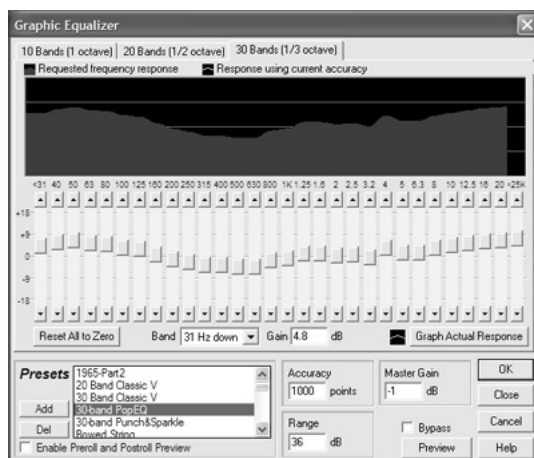


Figure 5: The Graphic Equalizer window.

Configure the Graphic Equalizer effect

To configure the Graphic Equalizer effect:

- 1 Do any of the following:
 - Click the 10 Bands, 20 Bands, or 30 Bands tab to specify how many frequency bands you wish to configure (use more bands if you want to exert control over more specific frequency ranges).
 - Use a scrubber to boost or reduce the amplitude of the associated frequency range (your adjustments will be reflected in the graph).
 - As an alternative to using the Effects tab of the scrubbers, select a frequency band in the Band drop-down menu, and enter an amplitude value in dB in the Gain field.
 - Click the Graph Actual Response button to produce a green line in the graph representing the actual frequency adjustment that your equalization will produce. Compare it to the requested frequency adjustment, shown in blue in the graph (Figure 6). Increase the value in the Accuracy field as needed and click the button again until you're satisfied with the projected actual frequency adjustment.



Figure 6: When you click the Graph Actual Response button in the Graphic Equalizer window, a line is added to the graph to illustrate actual frequency response that will result from the current Accuracy setting.

- Click the Set All to Zero button at any time to return all equalization settings to 0 (to bring the waveform back to its unequalized state).
- Adjust the decibel value in the Range field to increase or decrease the amplitude range of the scrubbers.
- Adjust the decibel value in the Master Gain field if you need to compensate for volume changes that may result from your EQ settings.

- 2 Click OK.

Apply the Amplify/Fade effect

To apply the Amplify/Fade effect in the Edit View:

- 1 Make a selection in the waveform.

2 Do one of the following:

- Choose Effects > Amplitude > Amplify/Fade (Figure 7).

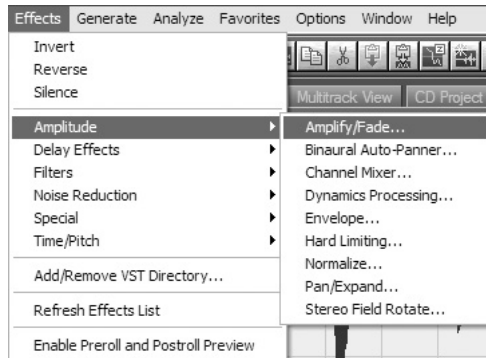


Figure 7: The Amplify/Fade effect can be found in Effects > Amplitude.

- Click the Effects tab in the Organizer window, expand Amplitude, and double-click Amplify/Fade. The Amplify/Fade window opens.

3 Do any of the following:

- Check the DC Bias Adjust box to adjust an off-center waveform.
- Enter a value in the Peak Level field to specify a maximum amplitude for the normalization process. Click Calculate Now to scan the waveform and normalize based on that value.
- Check the Lock Left/Right box to lock all L and R scrubbers together so that their settings always match; uncheck it if you want to use the scrubbers separately.
- Check the View All Settings in dB box if you want amplitude settings to appear as decibel values; uncheck it if you want the settings represented as percentages of the original wave-form values.

4 Configure the options specific to each tab (see the following tasks).

5 Click OK. The Amplify/Fade effect is applied.

Configure the Amplify/Fade effect

Configure the options specific to each tab. See the following:

Constant Amplification tab

1 In the Amplify/Fade window, click the Constant Amplification tab (Figure 8).

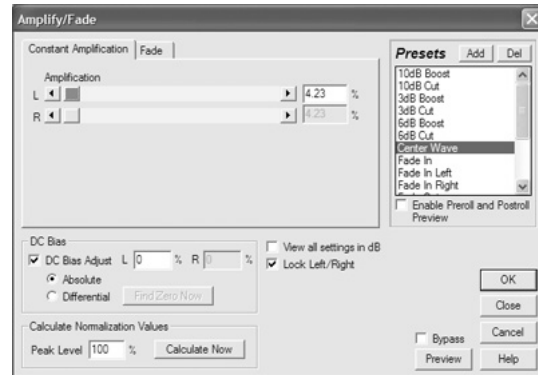


Figure 8: The Constant Amplification tab of the Amplify/Fade window.

2 Move the Amplification scrubbers, or enter values in the adjacent fields, to change the volume of the selected audio.

3 Go on to the next tab, or click OK.

Fade tab

1 In the Amplify/Fade window, click the Fade tab (Figure 9).

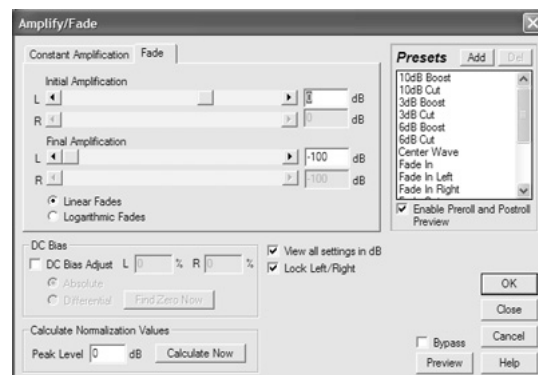


Figure 9: The Amplify/Fade window.

2 Use the scrubbers, or the adjacent fields, to choose amplitude values for Initial Amplification (the beginning of a fade) and Final Amplification (the end of a fade).

3 Check a button next to Linear Fades (for a smooth fade at a constant rate across your selection) or Logarithmic Fades (if you want a steeper slope at one end of the fade).

4 Click OK. The Amplify/Fade effect is applied.

Tip

The Fade In and Fade Out presets in the Amplify/Fade effect window can be handy when editing files originating from vinyl records or live performances. You'll often want to fade LP clicks and pops or audience applause in and out at the beginning and end of such files, and these presets provide a quick and easy way to do it.

Excerpted from "Adobe Audition 1.5 for Windows Visual QuickStart Guide" by Jeff Partyka.

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