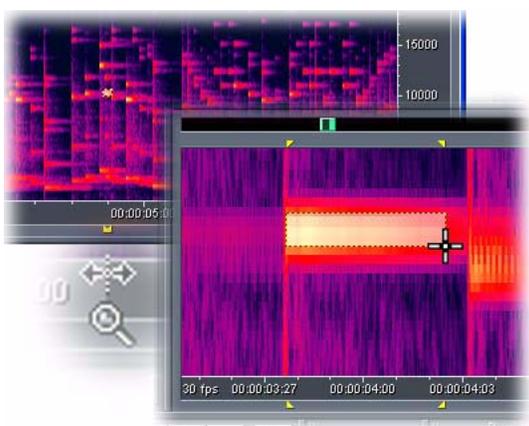


Adobe Audition 1.5

Edit audio with frequency-specific precision

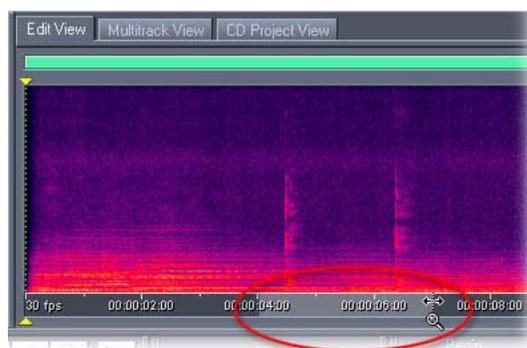
With revolutionary frequency-space editing in Adobe® Audition™ 1.5, you can edit audio with maximum precision. Using the Marquee Selection tool in Spectral View, you can quickly isolate artifacts and background noise, apply effects to specific frequency ranges, and more.



1. Visually identify individual sounds.

Open a file containing unwanted artifacts and background noise. (Our example includes two coughs by a musician during an old classical recording.) Choose View > Spectral View. To view greater detail, choose Options > Settings, click the Display tab, choose 1024 from the Resolution menu, and click OK. Then zoom in on the artifacts: Right-click+drag in the horizontal ruler.

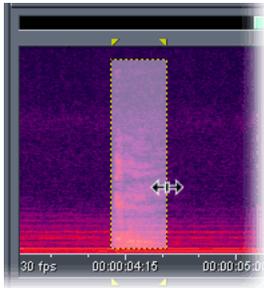
You can quickly toggle between Waveform View and Spectral View by pressing F9. Waveform View shows changes in amplitude only, helping you identify musical beats and evaluate dynamic range. Spectral View shows changes in both amplitude and frequency—helping you isolate individual sounds. For most editing tasks, spectral resolution values between 256 and 1024 work best. Lower values reveal less detail, but they increase performance; higher values do the opposite.



2. Select sounds in specific frequency ranges.

In the toolbar, select the Marquee Selection tool. Then drag a selection around an artifact in the spectral display. Press the spacebar to preview your selection. If it needs fine-tuning, position the cursor over a selection edge, and drag. As you drag, note the range of selected frequencies in the status bar.

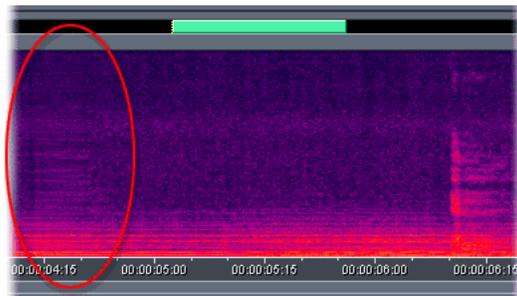
If you want to preview selections in the context of surrounding audio, use the preroll and postroll options in Adobe Audition. (To configure these options, right-click the Play or Play To End button in the transport controls.) Note that when you preview a marquee selection, you hear all frequencies in the same range of time, not just those in the selection. To instead preview only frequencies in the selection, choose Edit > Copy To New.



3. Repair artifacts in a single step.

Choose Favorites > Repair Transient. Adobe Audition replaces the artifact by copying surrounding audio. To make the repair even more seamless, choose Effects > Amplitude > Amplify/Fade, select 3dB Boost from the Presets list, and click OK.

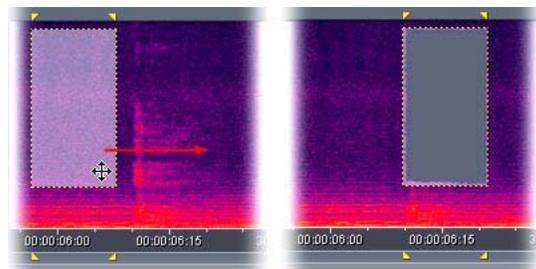
Favorites let you quickly apply frequently-used effects and scripts. The Repair Transient favorite automatically applies the Fill Single Click Now command from the Click/Pop Eliminator effect. This command requires a selection of less than 25,000 samples—a bit more than half a second at CD quality.



4. Replace artifacts with ambient sound.

Repeat step 2, and select an artifact that doesn't interact with musical frequencies. (In our example, we selected the second cough, which emphasized upper frequencies above the music.) Hold down Ctrl, drag the selection to an area that contains only ambient sound, and choose Edit > Copy. Again hold down Ctrl, drag the selection back over the artifact, and press Delete. Then choose Edit > Paste.

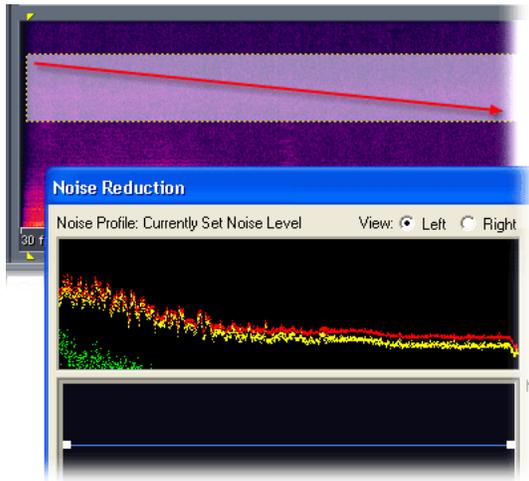
The Ctrl key lets you move marquee selections horizontally only, ensuring that they stay in the same frequency range. When you delete the contents of these selections, feathering occurs at the top and bottom edges, reflecting a smooth rolloff curve at the highest and lowest frequencies. (Note that if you paste into a marquee selection without first deleting its contents, Adobe Audition combines pasted and existing audio.)



5. Remove background noise from specific frequency ranges.

To view the entire file, right-click the horizontal ruler, and choose Zooming > Zoom Full. Then drag across the spectral display to select only frequencies that contain noise. (Like many audio files, our example includes high-frequency hiss.) Right-click the selection, and choose Capture Noise Reduction Profile. Then choose Effects > Noise Reduction > Noise Reduction, and click Select Entire File. Click Preview, move the Noise Reduction Level slider to fine-tune the effect, and click OK.

Most noise reduction tools require a selection of isolated noise, which usually exists only at the beginning or end of a file. With the Marquee Selection tool, however, you can visually define noise profiles in virtually any material—even when desirable audio exists in the same range of time.



6. Selectively process bass frequencies.

With the Marquee Selection tool, you can easily apply frequency-specific processing—a particularly effective technique with bass frequencies. To zoom these frequencies, right-click the vertical ruler, and drag from 2,000 to 0 Hz. In the spectral display, drag across the entire file, selecting only frequencies from 300 Hz to 0 Hz. Choose Effects > Amplitude > Hard Limiting. Set Limit Max Amplitude to -0.1 dB and Boost Input to 6 dB, and click OK. Press the spacebar to hear the more pronounced yet tightly focused bass in the processed file. (Dynamics processing effects such as Hard Limiting enhance bass without making it overly loud and boomy.)

We've barely tapped the potential of the Marquee Selection tool. In addition to performing frequency-specific audio restoration and processing, you can edit individual instruments or independently manipulate fundamentals and overtones. Explore this tool further, and you'll continue to uncover new possibilities.

