## **CEDAR Cambridge V8**

The premium restoration workstation has undergone a significant update that includes new features and improvements to productivity. BILL LACEY



he sun does not set on the hard working team at CEDAR Audio, who continue to define — and then redefine — excellence in audio restoration. In March 2010 (*Resolution* V9.2), I reviewed V6 of the flagship CEDAR Cambridge product which introduced five new modules and numerous enhancements. Version 7 was released last August, featuring the new Respeed module and further enhancements (*Resolution* V10.5). While the latest V8 doesn't include any new modules, the enhancements to workflow and existing modules are truly significant. CEDAR has always been responsive to the needs of end users, and the degree to which it listens is evident in the depth of the improvements to the system.

Let's start by examining the numerous system upgrades. The underlying code has been further optimised to work more efficiently, and users should notice a significant improvement when handling audio with large numbers of edits from modules such as Manual Declick and Retouch. Looping is improved and is now largely glitch-free with a predetermined crossfade, and CEDAR Cambridge now supports all major sample rates up to 192kHz. Hot Keys have been expanded, and Markers now show harmonic lines in the spectrogram views, with the number of lines user-selectable.

Cue Point categories is a significant new feature that allows the user to process multiple non-contiguous regions of audio in the File Processor. The Cue Editor allows the user to create the categories and assign the regions within them, complete with specific notes and labels that, if required, the Report Generator can convert into transcriptions. Users can select combinations of track processes and streaming processes that can then be rendered in a single step so, for example, if you had a piece of audio that switched back and forth between different microphones you could assign a different

category to each mic and then process the sections of audio from each one in a single operation.

Retouch 5 is also the beneficiary of some very exciting updates, most impressive of which is the Preview function. With this engaged, Retouch will update automatically as you change the audio selection and any processing parameters. In addition to being able to hear these changes almost immediately, you can visually confirm what is happening as the spectrogram is updated as well. (The Patch Tool particularly benefits from the visual feedback). This feature alone dramatically improves the speed and effectiveness of working in this module.

The new Volume Mode allows you to affect the amplitude of the signal within selected regions, as well as signal outside those regions. The volume can be increased by +20dB or decreased by as much as -150dB. If you need to boost dialogue that is hard to hear, or suppress audio that doesn't lend itself to repair using the Interpolate or Patch modes, or reveal a drum beat buried in a mix, or even eliminate all the sound except the targeted audio, Volume Mode is the tool for you.

The Paintbrush tool now makes it easier than ever to make selections that otherwise would have been difficult (or impossible) to identify with existing selection methods. The scroll wheel allows the brush size to be changed, which allows for pinpoint control or broad strokes. The Paintbrush used with the erase function allows you to refine selections — even those made with other tools — and create very complex shapes that accurately define the audio to be processed.

A Pitch Shifter is now available in Patch and Copy modes, which helps when restoring audio material that has discernible tonal content, and finally, Retouch is no longer constrained in time and now loads and processes unlimited file lengths.

The Power Normaliser was the star of two normalisers introduced in V7, and CEDAR has made it even more valuable in V8. With the addition of two new algorithms, Power Normaliser 2 provides users with even greater flexibility when balancing the levels of a number of grouped tracks. ITU1770-2 uses a 'gated loudness' approach, which is particularly effective when applied to dialogue as it ignores any silent gaps between speech when calculating the loudness. M-Weighted has been adopted for use when judging the power of source audio at cinema playback levels.

The Adaptive Limiter 2 has a new Gain control allowing users to increase the input level and there are now two Temporal controls instead of one, which is CEDAR's response to user requests to be able to achieve powerful 'maximizer' results. The HF and LF Temporal controls determine rates at which the profile is permitted to change, but now separately defined for high and low frequencies.

Recently, I was tasked with assembling over a thousand music tracks that were mixed and mastered over the course of 20 years for inclusion on a website search engine. I used the Power Normaliser 2 and Adaptive Limiter 2 to bring all the tracks into spec. The desired result was achieved almost effortlessly (all the tracks being processed in a single operation by the Batch Processor) allowing potential clients to preview a mixture of tracks without the discomfort of hearing wildly varying levels.

Respeed has also been fitted with two new controls. The first, Hold, allows you to create a template from one audio file and apply it to another. This is particularly useful when working with multitrack audio in separate files. Normally, when loading a new file into the File Processor any existing templates are cleared, but Hold preserves the template and applies it to the new file. Invert offers the ability to return to the original speed profile of a track after processing. This can be useful if there is, for example, a wandering hum that's proving difficult to remove. Respeed can be used to steady the pitch of the tone for easier removal. Then the track can be returned to its original form, minus the offending tone. The new MIDI Note scale is also available in this module, and provides the ability to correct the pitch of audio that has been transferred at the wrong speed.

Saving the best for last is the introduction of video file playback from within CEDAR Cambridge. Users restoring sound for film and television will rejoice at its arrival. No longer will you have to restore 'in the dark' and we finally have the benefit of visual confirmation to aid us when the audio contains something that may sound like a noise but is in fact an acoustic event that belongs right where it is. While there may be some exceptions, if you can open a video in the Windows Media Player you can open it in CEDAR Cambridge. Additionally, CEDAR Cambridge can handle multiple video files up to a maximum of eight audio tracks.

Each of these upgrades are worth an upgrade cost in and of themselves, but CEDAR continues to provide them free of charge to existing users. That's pretty rare to see these days. CEDAR Cambridge is an investment that continues to add value year after year, and CEDAR has once again raised the bar.

PROS

Exceptional update to a top of the line suite of restoration tools.

Cons

Can't pin the video window on top; still expensive, but still the best.

Contact
CEDAR AUDIO, UK
Web: www.cedaraudio.com