/ **Retouch 'base gain' blends original signal**

CEDAR Studio 8

BILL LACEY enjoys some radical additions which amount to more than a re-touch

The standard-bearer of digital audio restoration plug-ins doesn't disappoint with this new release. CEDAR Studio 8 continues a tradition of increasing performance, operation and value with each release. New modules, improved algorithms, updated features, additional plug-in formats and new authorisation options are all included.

Clearly the most exciting new processor module is DNS Two. When it was first introduced in CEDAR Cambridge v11, I was blown away by its power, and hoped the module would find its way into CEDAR Studio. DNS Two shares the same algorithm found in the hardware DNS 2. This adaptively analyses any incoming signal without the need for a noise profile, and just two simple knobs for Bias and Reduction are provided. The Bias control lets the user weigh detection towards identifying more noise (resulting in a drier signal) or preserving more ambience (leaving more of the atmosphere of the source recording), depending on the preferred result. The Reduction knob then adjusts the degree of noise reduction. A 'Learn' button enables the adaptation, which will react to any changes in the noise content of the input signal when left on. The combination of DNS One and DNS Two in your kit will allow you to handle just about about any dialogue recording in need of noise reduction and increased intelligibility.
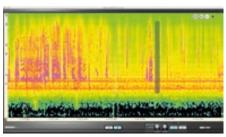
Declip 2 represents a complete re-write of this indispensable solution for clipping distortion. It incorporates a new algorithm that improves detection of both digital and analog distortion and restores the original signal in real time. It include a new 'Auto' feature that automatically identifies the clipping point, and

tracks changes in the amplitude at which clipping occurs. The signal is reconstructed, distortion free, and with restored dynamic range. It's simple to use and the results are simply stunning.

Manual Declick and Dethump are powerful off-line processes which, for obvious reasons, are available only in Pro Tools AAX Audiosuite format. Manual Declick is designed to repair large clicks and scratches occurring in any media, as well as dropouts or digital errors. Two modes are available: model A is a general purpose declicker to use for most situations, while model B is specifically for clicks that occur in the presence of high levels of noise, and you want the resynthesis to include that, so there is no apparent dropout in the noise floor. Dethump is ideal for removing any type of low frequency thump or short term disturbance no longer than one second, such as plosives. A single control is provided for user identification of the number of cycles. Both plug-ins require the user to Render the result.

New feature for Retouch
CEDAR Retouch now includes an important new feature worth mentioning. This hugely beneficial feature allows you to merge a specified amount of copied material with the original rather than strictly copying and replacing it. When using the Copy tool you can now adjust the 'base gain' and 'copy gain'. The base gain determines the level of the original signal that the new material is being merged into. Copy gain controls the level of the material that you are copying from. Reducing the base gain to its minimum completely removes it from the Copy operation, while retaining some of the

original can make all the difference to ensuring a transparent edit, especially with tonal material that continues into the edit selection. Similarly, being able to control the copy gain is sometimes essential in order to match the ambience surrounding the edit points. All in all, these two simple controls bring tremendous power to this flagship technology.

The inclusion of Audio Units (AU) and VST3 support puts CEDAR Studio 8 in compliance with all major plug-in formats. Now Logic Pro X users can for the first time use the Adaptive Limiter on their mix or utilise any of CEDAR Studio 8's real-time restoration plugins.

Currently, there is no Cloud option available for iLok authorisation. While not many developers support it yet, I hope that CEDAR Audio will implement it in a future release. Although the audio industry isn't happy about it, current generation Apple MacBook Pros only provide USB-C ports and require an adapter for dongles. Those of us who require portability long for the ability to leave our iLoks at home when taking these laptops on the road.

CEDAR Studio 8 is now available in four packages, depending on your needs and budget. In additional to the attractively priced CEDAR Studio 8 Complete that includes all eleven processes, you can now purchase CEDAR Retouch separately, CEDAR Studio 8 DNS that includes both DNS One and DNS Two, or CEDAR Studio 8 Restore which includes the traditional restoration tools: Debuzz, Declick, Decrackle, Declip 2, Auto Dehiss, Adaptive Limiter and the 'Pro Tools only' Manual Declick and Dethump.

More audio professionals than ever are using an continually growing list of digital audio restoration tools. I've tried almost all of them. What I can tell you unequivocally is that CEDAR Audio makes the best sounding and easiest to use tools. If you care what your finished audio will sound like, you owe it to yourself to get the best. ⊕

resolution/VERDICT

PROS	DNS Two — of course! Declip 2 improved algorithm. iLok authorisation.
CONS	No iLok Cloud authorisation available yet.

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