

technologyreview

CEDAR Studio

CEDAR's offerings have always been at the top of the audio restoration tree. CEDAR Studio is a bundle formed specifically for Pro Tools – **Russ Hepworth-Sawyer** climbed up to see if it reaches the same dizzy heights

CEDAR is a familiar name to those in forensic audio, radio production or film and TV post. The company's products provide engineers with valuable tools that can re-touch signals and remove audible nasties from treasured audio. Traditionally, CEDAR has supplied its tools for a range of platforms, including its own Cambridge digital audio workstation, but now the developer has bundled four popular processes into a suite specifically for Pro Tools, and called it CEDAR Studio.

The Studio suite of 'Pro Tools only' plug-ins operating through RTAS and AudioSuite draws directly from CEDAR's high-end Cambridge DAW. CEDAR has selected four of its most critical processes for the package: Debuzz, Declip, DNS One and (interesting choice here) Adaptive Limiter. The essence of Studio is that the selected processes are simple to use, employing minimal tweaking yet providing effective results.

Debuzz cleverly builds on concepts of comb filtering to eliminate buzz as well as maintain its sonic quality. Typically Debuzz works best on your traditional mains hum or similar, but can work with interfering signals up to 500Hz. What impressed me most was Debuzz's ability to manage the harmonic artifacts related to a fundamental buzz and even manage to detect if the hum varies frequency a little. I would

apply this when restoring analogue audio where repair speeds can waiver a touch.

Declip is another classic process reconstructing your clipped audio signal to its former glory. This is achieved by applying an algorithm that intelligently recreates the original

quite common across the film and television industries. DNS One, or one of its already-established hardware brothers such as the DNS1500, effectively eliminates background noise from critical dialogue tracks, whether that be on a film set, or for news reports captured in the

wonder CEDAR is so popular, as you're able to get clean dialogue tracks incredibly fast, which could be on air in seconds if necessary.

CEDAR's Adaptive Limiter is built using proprietary code that 'calculates a continually varying EQ profile' constraining the amplitude of the output. In other words, it intelligently calculates which frequencies need containment against another providing some interesting results. Perhaps not an obvious choice for musical contenders I'd send to the 'loudness war', but would certainly be added to my arsenal if I was editing or restoring dialogue using Pro Tools, given the sheer uniqueness of its approach. Adaptive Limited permits the shape of the original content to breathe through the limiting process leaving a really natural sound that worked best on dialogue tracks.

Coming in at £8,000 (+VAT), CEDAR Studio is a serious investment, and is eye-wateringly expensive if you calculate the price-per-control ratio. But for those people working in busy, high-pressure broadcast environments where dialogue needs to be cleaned up before it goes on air in minutes – you need this. CEDAR Studio's ease of use defies the sheer quality of processing taking place in the background. The view from up here is truly stunning, if costly!



The Adaptive Limiter is one element of a suite of plug-ins for Pro Tools

audio removing the clipping. In my experience systems similar to this are a balancing act where you can only expect 'it's the best I can do' results. However, CEDAR's Declip is a star in the Studio suite as it does what it does spectacularly given the minimal number of controls, including the light or heavy clipping modes.

DNS One, or 'Dialogue Noise Suppression' to you and I, is

field. How DNS One simplifies what is, in fact, a tremendously clever process is nothing short of impressive. DNS One reflects the look and therefore the controls of its hardware siblings – six frequency ranges each providing a further six threshold controls which you tune to the background noise, leaving you with a clarity behind your audio. Once you've trained yourself how to use this, it's no

PRICE AND AVAILABILITY

- Bundle price for all four options £8,000 (€9,427) (ex VAT)
- DNS One individually £2,500 (ex VAT)
- Declip, Debuzz and Adaptive Limiter £2,000 each (ex VAT)
- Available from CEDAR Audio www.cedar-audio.com

TECH SPECS

- Intel Mac OS X 10.5 onwards (now compatible with 10.7 Lion)
- Windows XP, Vista and Windows 7
- Pro Tools HD and LE 8 onwards
- RTAS and Audiosuite

PROS

- Outstanding noise suppression and restoration algorithms
- Simple, ease of use
- Adaptive Limiter's unique approach
- Exceptionally low latency
- Low CPU usage

CONS

- Cost
- Won't appeal to all PT users