CEDAR DNS One

It's the one that many people have been waiting for — a real CEDAR DNS for Pro Tools.
ANDY DAY **plugs in his dongle and marvels at his multiple instances.**

*I*n the digital world you might not think you need noise reduction anymore, but the kind of noise that needs to be removed now is not introduced by the recording system so much as by outside sources. With more and more audio being used from single camera shoots, being able to remove unwanted sounds captured on location is now an important part of your audio repertoire. This is where the CEDAR DNS One comes in handy.

CEDAR has been involved in noise reduction and restoration for more than 20 years and it has always been perceived as state of the art when it comes to the removal of unwanted noise elements in the most transparent manner possible. It's one of the reasons why its products are used as extensively in the forensic world as they are in the world of major TV and Film companies.

The new DNS One is capable of removing all types of common noise problems, from tape hiss to traffic noise *(To vuvuzelas; not that CEDAR made a big song and dance about it. Ed)*. If you've ever used the DNS 2000 with Pro Tools then the DNS One takes the idea even further with the incorporation of hardware into a USB dongle. You'll need a Pro Tools system, either HD or LE version 7.4 and up, on PC or Mac to control the hardware dongle.

Installation couldn't be easier; just run the installer and plug the USB dongle in. That's it. There's also a 16-page manual, most of which is the usual licensing and compliance stuff, with four pages of tutorials covering all the major applications including the reduction of reverb.

Pro Tools control is simply an RTAS plug-in, which acts like a remote control for the hardware. In fact it's pretty much the same as the DNS 2000 and DNS 3000. The good news is that the USB dongle supports multiple instances. The RTAS plug-in can also control other CEDAR units (if you already have them) from

a drop down list, which will be really useful for larger dubbing theatres that already use DNS 2000 or 3000 hardware. Another handy side benefit of using the RTAS plug-in is that all parameters are automatable within Pro Tools, so for material with changing noise levels, all your DNS settings can be changed over time and stored within your Pro Tools session.

For those who are new to the CEDAR system it uses a very effective 'single ended' noise reduction processor with a series of five sliders. The frequencies these sliders control are switched by the buttons at the top of the interface. Frequency choices are low, low mid, mid, mid high, high and full range. They are split at the following frequencies: Low 20Hz-400Hz; Mid 200Hz-6kHz; High 4kHz-18kHz; Low + Mid 20Hz-6kHz; Mid + High 200Hz-18kHz; and Full Range 20Hz-18kHz.

The easiest way to decide which range to use is to set the range to full, reduce all the sliders, then adjust the level control (which acts like a threshold control) until the noise is completely removed. Then gradually return the faders to the 0db position to isolate which frequencies contain the noise. This then allows you to select the relevant range switch and to begin the process again, but this time you can adjust the amount of noise reduction to taste. If all this sounds complicated, it's probably more my fault as a writer, as the process is incredibly simple and fast and effective. This is what gives the DNS One a distinct advantage over other noise sampling approaches, which take time to sample the noise and then another stage of fiddling around to try to get a usable result. Each frequency band slider can remove up to 24dB of noise but in reality you'll probably end up achieving 10-12dB, which is still very respectable and enough to make something that was previously unusable into something usable.

Apart from noise reduction the process also works

really well to reduce unwanted reverb in location recordings. I tried it on some dialogue recorded in a warehouse, which was unusable as a consequence. The DNS One did an excellent job of removing the reverb tails with the small sacrifice of some high frequencies. We could certainly have used the results instead of rerecording and that's a big bonus as everyone hates ADR.

I also tested the DNS One with traffic noise, lighting noise, cell phone noise, tape hiss and air conditioning noise. If you want a quick way to improve all of these common problem areas then the DNS One performs really well. Best results are often achieved by combining the DNS One with a bit of EQ. And, of course, it has limits as with all noise reduction processing; the difference between the noise and the wanted signal needs to be as great as possible to avoid too much colouration of the result.

Despite all my positive experiences with the DNS One, and maybe because of them, I would ideally really like to be able to use it in other DAW software, like Soundtrack Pro, Nuendo or Adobe Soundbooth. While the audio industry is dominated by Pro Tools there are many editors using Final Cut Studio or Adobe CS5 that would really benefit from the DNS One.

This is an ideal noise reduction system for traditional mixing engineers who are familiar with using EQ and Dynamics. The performance quality is excellent and it's much kinder to the original signal than other systems out there. CEDAR has also gone a step further than its own hardware based processors by opening up the possibility of multiple instances (host dependant) with the USB dongle. This gives us the flexibility to be able to clean up dialogue and music within the same session.

The incredibly simple interface might fool you into thinking that the DNS One is limited in performance, but quite the opposite is true. In fact I'd go so far as to say it provides the most natural noise reduction of all the processors out there. Plus it's really fast to setup. ■

PROS USB Dongle processor makes the system very portable; can be automated from Pro Tools; quick and easy to use; fewer processing artefacts if used correctly.

CONS Only works with Pro Tools; takes up a USB port.

EXTRAS

DNS One allows control of as many instances of DNS One as your host system can support plus up to 126 DNS2000s and/or DNS3000s.

It is also fully integrated with Pro Tools' automation and hardware control surfaces such as the Icon, D-Control and D-Command. The DNS Control System is completely cross-compatible between DNS One, the DNS2000 and the DNS3000, so users can install DNS One alongside existing hardware units, creating sessions on one and later, if desired, recalling them on either of the others.

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