CEDAR DNS2000

Part of a line of recent life-changing products, the DNS2000 takes the incredible control or the original standalone hardware unit and integrates it into the Pro Tools environment. ANDY DAY admits that his clients now think that he has 'super powers'.

CEDAR'S TRACK RECORD in noise reduction is excellent, with de-hissing, de-crackling and de-clicking solutions setting industry standards. Almost two years ago it released the DNS1000, a noise reduction system specifically for location audio noise reduction. This took the idea of analogue processors, such as the Dolby CAT 43 and CAT 280, to new heights, allowing camera noise and broadband location noise, such as wind and even reverberation, to be controlled. The DNS2000 has the same processing as the DNS1000 but with remote control from Pro Tools Mix, Mix + and HD systems, using the RTAS plug-in format.

The package consists of a 1U unit, which does the audio processing, plus a CD with drivers. It's worth noting that only Apple Macintosh-based Pro Tools users can use this plug-in, not that I know of many PC Pro Tools users in post. The processing unit has just six connections, AES I-O, SPDIF I-O, AC power and USB (used as remote control from Pro Tools).

The front panel has a few LED indicators to show input status and processing settings, but unless you are trouble shooting this information is not vital so you could rackmount the unit in a machine room. Installation of the drivers is easy.

The main difference between this plug-in and others is that although it's an RTAS plug-in, there are no DSP or processor requirements as all the processing is done in the 1U unit. This means that the audio signal flow is totally external, and may not relate to where the plug-in is inserted. Mono and stereo tracks are catered for by selecting a multimono RTAS plug-in, where the DNS will function as dual channel, or stereo, where the DNS will be a linked stereo processor.

The easiest way to connect it up is to use a couple of digital I-Os on your Pro Tools system to connect to the AES I-O on the DNS. This way you can cover all the possible insert combinations within Pro Tools without external routing, just remember that the position of the plug-in in the audio track may not represent the real signal flow.

The plug-in window has some very straightforward controls. Buttons for the frequency range of noise you want to remove, with options for Low, Mid and High frequencies, plus Low + Mid + High combinations. There are six frequency boost/cut controls that work at various frequencies depending on the range setting. Finally a level control sets the threshold for the noise reduction. As with all plug-ins, any of the controls can be automated within Pro Tools (a feature not available on the DNS1000) which is very useful for matching noise levels between scene changes and takes.

I used the DNS on a variety of location dialogue takes that had various types of problem. I also tried it as a basic de-hiss NR on some music material. The first dialogue takes I had were from a DV shoot, with some classic traffic and wind noise issues. The manual gives you some basic scenarios and is a great starting point but as with other CEDAR units the controls are simple and, once you get used to them, very effective.

The basic approach is to identify the frequency range of the noise, then set the level (or threshold) control and finally remove the most offensive parts of the noise using the frequency sliders. This is an interactive process, so you often find yourself tweaking the level control or frequency sliders for optimum results. Having heard a prototype DNS1000 a few years ago, I was amazed by the improvements in the production DNS2000. You can easily remove the majority of broadband noise, without effecting the dialogue too much. By using a combination of DNS and EQ some pretty amazing results can be achieved.

I also worked on some interior takes that were covered with high-pitched air con noise and I was able to remove this entirely by setting the range to High and choosing a couple of frequency sliders, very impressive. My final dialogue take was shot in a warehouse and had masses of natural reverb. The manual has a specific section on reducing reverb in dialogue, so I did it by the book. Again the results were excellent and by adding a small room reverb after the processing, any reverb tails from the original were covered up. This makes this an invaluable tool for matching ADR to location sound or for messy DV shot audio.

The de-hissing of music material, which is not necessarily what this unit is designed to do, produced excellent results, knocking spots off other TDM based plug-ins. Another major improvement over previous standalone CEDAR units is the very low delay (1/200th of a frame) which means everything can be done on the fly.

For anyone in TV or film using Pro Tools as their core system, this is a Godsend. With the increase in 'low budget' DV style programming, location audio is often the weakest point. This unit can solve most problems in a single pass and I would think pretty much anything in a couple of passes. Most dubbing engineers would want one in every channel, which, incidentally, is possible as up to 126 units can be controlled from one Pro Tools.

My only criticism was that when controlling the plug-in from Yamaha 02R96 DAW control, some of the frequency sliders appeared as switches. This may also be the case for Procontrol too, making remote control of these sliders difficult. Hopefully this will be fixed in a future update. At £3000 it's not cheap but there's nothing out there to touch it and clients will think you have 'super powers' when you save their location audio. ■

PROS No DSP loading on Pro Tools; low processing delay; very effective noise reduction with minimal side effects on dialogue; easy to use; can be automated within Pro Tools.

CONS Takes a while to figure out it's an RTAS plug-in (no mention in manual); all signal routing takes place 'outside' the Pro Tools environment; occasionally latches up if you repatch the AES inputs; remote plug-in control from 02R96 puts some frequency sliders on switches.

Contact

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