## CEDAR DNS2000 DIALOGUE NOISE SUPPRESSION FOR PRO TOOLS



## MIKE AITON BROWNE tests the Pro Tools friendly version of this popular noise nobbler from CEDAR.

In my review of the stand-alone CEDAR DNS 1000 Dialogue Noise Suppressor - a must have for the savvy dubbing mixer - I had mentioned my desire for a timecode automated version of the product due to the increasing use of virtual mixes. This would save having to re-record each processed clip and would also give the added benefit (when reviewing with the client) of being able to adjust the processing easily.

I was therefore intrigued when I heard rumblings about a Pro Tools version. This sounded too good to be true. I have since tried the DNS 2000 on real world examples such as BBC Horizon, Changing Rooms, and Gary Rhodes' cookery programme - with the luxury of comparing it to some of its market competitors.

The DNS 2000 is a IU 20cm deep rack - which contains the processing electronics and audio I/O, and a USB connector to the controlling computer. The required USB cable and software on CD-ROM are also included. It is important to realise that this is not just a standard Pro Tools plug-in, but in fact, a hardware device controlled from an RTAS plug-in. After a quick gander at the very readable manual, I installed the plug-in software and connected the 'enclosed' XLR AES I/O from my Digidesign 192 interface box, then added the USB cable between the CEDAR Box and the Mac.

In Use

After booting Pro Tools the CEDAR DNS 2000 was available as a mono or stereo RTAS plug-in. The only question was how to implement it. Previously with the DNS 1000 I had used pre-fader aux sends on my AMS Logic 1 and routed the CEDAR output to the Audiofile input to record the processed output.

I routed all the signals needing to be processed to a CEDAR bus, with each channel having a pre-fader output to the bus, and an RTAS control plug-in (which has to be before any TDM plug-in). The bus was routed out to the CEDAR. The CEDAR return was fed back into Pro Tools via an external Aux input and fed as per usual to the dialogue group, and thence to the M&E/Main outputs as applicable.

In use I found it slower than the stand-alone DNS 1000 to move the five faders with a mouse. However, bringing the plug-in control parameters up onto the ProControl faders brought this product alive and from the must-have category, to the 'mortgage your granny if you have to'. Having the faders timecode automateable made for a fast and extremely highly powerful interface. As a noise changed in character, I was able to vary the processing parameters via touch (or auto-takeover in AMS speak) mode and 'goose' the parameters.

Come the final mix, I was able to vary the amount of processing once the director had decided to remove music from a scene. I was also able to copy and paste settings when different takes were substituted due to a production decision during the final mix. That would have meant re-inventing the wheel on the DNS 1000 and reprocessing, or asking your assistant which settings you used on that particular cue and watching him go a whiter shade of pale.

The CEDAR DNS 2000 works in a very different way compared to a plug-in-only product such as Waves X-Noise. I compared a few examples of Waves against CEDAR. The Waves X-Noise has a latency of 115ms so you must remember to offset the track that you have inserted the plug-in on by this amount to maintain sync. If over used X-Noise can suffer from 'daleky' metallic overtones. In comparison if the DNS 2000 is over used dynamics artefacts can be noticeable. Generally the CEDAR was faster to achieve results on, due to not having to 'learn' the noise to be able to subtract it. A few blind tests revealed most people preferring the CEDAR artefacts to the metallic X-noise. It should however be pointed out the near zero (<10samples) latency and less intrusive processing of the CEDAR do come at a substantial price difference!

## Conclusion

The predominant use of this box/plug-in control software would be in mono dialogue premixing, meaning that by careful use of AES combining/splitting, two rooms that shared a common jackfield/router could use half of the rack each. I rather like this ability to intelligently share resources (and so will my Facility Manager!). It would be an easy thing to install the RTAS control plug-in on all Pro Tools systems in a facility, and either route the I/O around to the processing box, or physically move the box to the required area.

I never tested the 24-bit capability of this hardware, or even its SPDIF or 44.1kHz sampling rate function - as Clear Cut Pictures runs at a house standard of 16-bit/48kHz, but I am sure that this would not be a problem to equipment of this pedigree.

CEDAR has announced a close partnership with AMS-Neve, and have some exciting developments in the pipeline. Third-party Audiofile plug-ins are soon available, I can only telepathically allude to what these may be... I wonder... Roll on Christmas.

CEDAR DNS 2000 £4000 + VAT; 6600 Euros+ VAT.

CEDAR Audio Limited, 20 Home End, Fulbourn, Cambs CB1 5BS, UK. Tel: +44 (0)1223 881 771. Fax: +44 (0)1223 881 778. Email: info@cedar-audio.com Web:www.cedar-audio.com

http://www.audiomedia.com/archive/reviews/uk-1002/uk-1002-cedar/uk-1002-cedar-f.htm