

# CEDAR Audio DNS 8 Live

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CEDAR Audio is no stranger to noise reduction systems. The company pretty much wrote the book on state-of-the-art hardware- and software-based solutions for all types type of unwanted audio artifacts, ranging from pops and crackling on vintage 78 records to wind, rain and nearly every other type of sound that could creep onto an audio channel. In fact, CEDAR received an Academy Award for its original DNS (Dialogue Noise Suppressor) system.

CEDAR's most recent product is the DNS 8 Live, which brings eight simultaneous channels of real-time noise suppression into an eight-channel, hardware unit. The DNS 8 Live operates on a new DNS algorithm with a detailed editing mode and a simple “two-knob” interface that’s designed for fast-paced live situations — whether broadcast or sound reinforcement. A recent firmware update adds easy to use, browser-based DNS 8 Live RC remote control software (for Mac/PC/iPad control).

## Front and Back



The unit's front panel is deceptively simple with four navigation buttons for setup, entering adjustment modes and to edit/save/recall up to user presets. Next to each channel's level and NR display are push/turn rotary encoders for making individual channel and, when selected, detailed parameter value tweaks. The rear panel has XLR inputs and outputs (24-bit, up to 96k Hz) in AES format; AES-59 multichannel on a D25-sub; BNC word clock; an Ethernet port for network control; a 90 to 250 VAC IEC power connector, as well as a 12-VDC input for portable use.



## Operations

The DNS 8 Live has no analog connections, so its AES inputs and outputs can either be used in-line with the output of suitably equipped outboard preamps or patched in and routed as AES console channel insert/returns. Once set, the “level” and “gain” of each channel are overlaid on the signal power and processing activity indicators for each channel. The DNS in/out for each channel can be easily toggled for quick A/B comparisons when optimizing the correct threshold

for each input. Too little results in a slight amount of noise reduction; too much yields an obviously over-processed, somewhat compressed effect.

Alternatively, the level and gain thresholds can be automatically set using the DNS 8 Live's "Learn" function. When this is selected, the unit continuously monitors the noise, analyzes it and then applies the result to suppress it. You can use Learn as a one-off (like taking a noise "fingerprint") before passing the audio through the unit, or leave it engaged throughout, as you prefer. Setting channel parameters using the Learn function is fast and efficient.

It does take a while to become comfortable with the small channel displays and data buttons on the 1U front panel. Here's where the DNS 8 Live RC remote software shines. Connect your laptop via the Ethernet network by cable or Wi-Fi (or use an iOS device), and enter the DNS 8 Live's address into your browser's address bar and you have a large, easily maneuverable screen. I really appreciated the fast, touch screen access using an iPad, especially with the ease of naming, tweaking and storing presets.

When working in multi-channel mode, any combination of channels can be grouped (linked) to adopt identical settings. As with the other channel functions, creating groups is very simple from the front panel or via the DNS 8 Live RC remote software.

Another way to work is using Detail View mode, which provides a multiband channel view, with control of any channel broken down into six frequency bands. The algorithm itself is considerably more complex, but this interface was chosen as an optimum compromise between flexibility and simplicity of use. Detail view can also be used with the Learn function to provide a quick starting point from which you can do more detailed tweaking. Processing occurs in real-time, so hearing the effect is immediate. Latency is stated as less than 10 samples, also making the unit suitable when used in-line with picture playback.

## **The Verdict**

In use on a variety of signals and sources, the DNS 8 Live was an absolute gem. Unless intentionally overdone, the processing was invisible, leaving no artifacts, and the overall effect is nothing like gating or equalization, but simply a substantial reduction of background noise.

With the ability to deal with previously impossible noise sources such as wind, rain, mechanical sounds — ranging from moving lights to screen motors, ventilation systems, traffic noise, casino wall, nearby construction or leaf blowers, etc. — the DNS 8 Live handled it all. And the more I used it, other applications seemed to open, whether in houses of worship, multi-mic'd panel discussions, live theater, sports, award presentations, political rallies, outdoor events — essentially any place where improved vocal reproduction is important in a difficult space. Thumbs up on this one.

**Web:** [www.cedaraudio.com](http://www.cedaraudio.com)