HOW-TO

Sibilance Smackdown!

Use advanced monitoring and metering for ultra-precise de-essing

BY MICHAEL COOPER

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When de-essing a vocal or other track, the key to obtaining transparent and effective results is applying pinpoint processing that avoids doing unnecessary damage. To do that, you need a de-esser that lets you clearly see and hear what it's doing.

In this article, we'll take a look at a standout performer: the Metric Halo Precision DeEsser. Of all the many de-esser plug-ins I've used over the years, Precision DeEsser has, by far, the most comprehensive and effective facilities for zeroing in on sibilance while retaining a vocal track's presence and air.

PROCESSING AND MONITORING

Precision DeEsser has all the controls you'd expect a compression-based de-esser to include: ratio, attack, release, and threshold controls; a gain-reduction meter; and a sidechain filter with adjustable center frequency and bandwidth (see Figure 1). In addition, a Sharpness control adjusts the sidechain filter's slope from moderate to cliff-like, letting you isolate sibilance from desired spectra with laser-like precision. To ensure your filter settings have cast a wide enough net to capture offending sibilance across the audio spectrum, choose the Out-of-Band Signal selection in the Listen To dropdown menu; this selection lets you monitor only that portion of the audio that's *not* being processed. If you still hear offending sibilance with Out-of-Band Signal selected, you know that you need to make changes to your filter settings.

Like other de-essers' key-listen functions, Precision DeEsser's Listen To selections also let you alternately hear the detector signal (the filtered sidechain signal before compression) and the plug-in's output signal after processing. But it's the plug-in's two remaining Listen To selections that dramatically help you confirm which frequencies are being removed and fine-tune the desired amount of processing: The Removed Material selection lets you hear only the peaks above the detector threshold that are being removed by the compressor from the plug-in's output (only sibilant transients should be audible), whereas the Esses selection lets you hear the compressor's output (that is, both the compressed and uncompressed audio within the band you're treating). The Esses selection is especially powerful when using Precision DeEsser to tame a vocal track's honky midrange frequencies (instead of sibilance), as it lets you evaluate not just how much they are being attenuated but also how much energy they still have remaining post-processing—without the distraction of hearing out-of-band frequencies.

METER READER

In addition to its unparalleled monitoring facilities, Precision DeEsser also offers unrivalled metering. A Detection Level meter shows signal level in the sidechain with respect to your threshold setting, helping you fine-tune the threshold post-filter—a far more accurate tack compared to making adjustments based solely on a gain-reduction meter's response. In addition, a spectragraph at the top of the GUI—which uses Metric Halo's state-of-the-art SpectraFoo metering and analysis—analyzes the signal you're currently monitoring via your Listen To menu selection and lets you see either an instantaneous (white-color) or average (yellow) trace, or both. As sibilance is extremely short in duration and lightning-fast in onset, I use the instantaneous trace to identify in what frequency range its immediate peak level resides. This is by far the most accurate and helpful metering I've seen in a de-esser plug-in, and one more way in which Precision DeEsser lives up to its name. ■

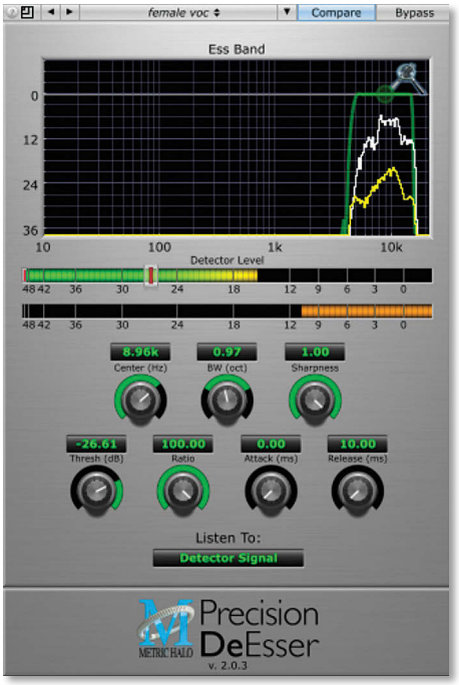

Fig. 1. The Listen To button at the bottom of Metric Halo Precision DeEsser's GUI lets you monitor five different signals in turn, while the spectragraph at the top of the GUI displays the corresponding signal's amplitude vs. frequency. The spectragraph's green line illustrates the sidechain filter's bandwidth and slope, while the white and yellow traces respectively show the filtered sidechain's instantaneous and average levels.