REVIEW

AEA

N8 and N22

ACTIVE RIBBON MICS THAT BRING PRO SOUNDS TO THE HOME STUDIO

BY GINO ROBAIR

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STRENGTHS

Phantom-powered for use with low-cost preamps. Solid build. Protected ribbon suitable for close-up recording and stage use.

LIMITATIONS

None

N8: $1,098 street
N22: $899 street
ribbonmics.com

Fig. 1. The affordable and solidly built AEA N22 is ready to capture, up close, nearly any instrument you'll record in your personal studio: guitar amps, voice, acoustic guitar, and drums.

At Sweetwater's GearFest a couple of years ago, I was given a sneak preview of a new AEA mic prototype. The company's founder and world renowned ribbon-mic expert, Wes Dooley explained that this transducer was being developed for the specific needs of the personal studio market: It would be easy to use (*e.g.* compatible with the average USB and FireWire interface) and able to handle the various instruments a singer/songwriter tracks at home (vocals, guitars, drums). And, of course, it would be affordably priced.

As a fan of AEA's product line, I was intrigued: While the company's classic ribbon mics are somewhat expensive, but by no means overpriced for what you get, the user does have to know what they're doing in terms of care and placement. Moreover, you need a preamp that meets the gain and impedance requirements of each mic. Of course, AEA offers preamps designed specifically for these products—the 2-channel TRP ($895), the 2-channel RPQ ($1,575) with EQ controls, and the single-channel RPQ500 ($584) for 500 Series racks—but that adds to the cost of setting yourself up with a pro-level ribbon mic.

Like other mic manufacturers, AEA has addressed these issues by developing a pair of active models that specifically meet their usability and price goals, while retaining the company's trademark sound and build quality. But unlike many other companies, AEA didn't skimp by having things built off-shore: Its powered ribbon microphones are entirely built in its facility in Pasadena, California.

MEET THE NUVOS

AEA's Nuvo active ribbon-mic series includes the N22 ($899 street), introduced in 2013, and the N8 ($1,098 street). The N22 is designed with the needs of the singer/songwriter in mind, where close miking amps, guitar, and voice is a primary focus. In contrast, the N8 is designed primarily for miking instruments at a distance.

Priced well below a grand, the N22 is definitely positioned for the personal studio owner (see Figure 1). While the N8 is a tad more expensive than the company's R84 ($1,035 street), as an active mic it is, again, more forgivable in terms of preamp choices and usage (see Figure 2).

The N22 and N8 share many characteristics. Each

utilizes AEA's pure-aluminum Big Ribbon design—1.8µ thick, 2.35″ tall, and 0.185″ wide—found in many of the company's higher-priced passive models. A custom German-made toroidal transformer is also part of the design and adds 12 dB of output level as part of the phantom-powered electronics.

Many of the specs are similar between the two models. According to the polar pattern charts, both microphones have remarkably consistent bi-directionality across the frequency spectrum (measured from 200 Hz to 10 khz).

Externally, the N22 and N8 have the same physical characteristics, but with different finishes. (Designed for far-field recording, the N8's body is black to make it less noticeable in multimedia applications.). At 8.83″ tall and weighing just over 1 lb. (without a cable attached), the machined bodies feel well-engineered and solid, and they have multiple layers of screening around the ribbon for protection. The enhanced screen makes the mics less susceptible to blasts of air from the front—perfect for vocals, loud amps, concert use, and handling by engineers who have little experience with a ribbon mic. But even with such a robust build, a standard boom stand easily supports either model. And unlike many of the other AEA mics, the N22 and N8 do not have "captive cables," but accept any standard XLR cable.

The N22 and N8 come with a foam-lined, hard plastic case, plus a mic clip that provides a marginal amount of shock relief, and a sleeve to cover the mic when it is on the stand but not in use. AEA offers a one-year warranty on parts and labor (shipping excluded) for each, which extends to three years when you register the product. Both models are available as matched pairs—great for stereo recording applications.

SOUNDS, NEAR AND FAR

Of course, what differentiates the two microphones, sonically speaking, is their frequency response. As you might expect from a directional mic intended for close-up work, the N22's low-end response is slightly attenuated to make up for the proximity effect; tested at a meter from the source sound, the frequency response starts to decrease at roughly 900 Hz, reaching -2 dB around 200 Hz. To compensate for distance recording, the N8's low-end response rises ever so slightly beginning at 500 Hz.

In the upper register for both models, the high-frequency response begins to taper off around 4.5 kHz, reaching -2.5 dB by 8 kHz. The N22, however, dips down to about -13 dB by the time you hit 20 kHz, whereas the N8 drops to only -7.5 dB at that frequency. The differences in the midrange response between the two mics looks much more subtle in the charts, but these differences really add up sonically when you put the mics to use.

The N22 brought out a smooth, organic tone from every instrument I used it on—electric guitar amp, acoustic guitar, vocals, mandolin, marimba, and drums. With the protective screen built in, I didn't have to worry about cheating it up to a vocalist or a loud amp. And the tone didn't change significantly if the subject moved slightly off axis, which is really helpful with singers.

The deep null points and small body size make the N22 well-suited for the studio-oriented Blumlein technique that allows you to isolate the voice and guitar of a singer/guitarist from each other while tracking live: One mic is pointed at the instrument and its null point aimed at the singer to reject the voice, while the front of the second mic is aimed at the singer and its null point rejects the guitar. (To learn more about this technique, see the December 2014 article "Capture Acoustic Guitar and Vocals with the Blumlein Technique" at emusician.com.)

Fig. 2. Designed for miking instruments at more of a distance, the N8 is equally well-built but offers a different frequency response that helps it excel as drum overheads and on winds and strings.

As a complement to the N22, the N8 was designed to work farther from the sound source. To get a sense of that, I used both mics to record guitar parts in my living room, which has a high ceiling and a wooden floor. With the N22 placed about 2 inches from the grille of a tube amp and the N8 from 4 to 10 feet away, I was treated to a buttery direct sound from the close mic, augmented by the natural reverberance of the room in the N8.

Both mics are fantastic as drum overheads in jazz and rock contexts, though the N22 is noticeably a bit shy in the lower frequencies by comparison. Like the N22, the N8 did a nice job of smoothing out any harshness in the cymbals, but it provided an especially beefy low-mid sound that brought out the tone of the snare drum and toms while slightly de-emphasizing the sizzle of the snare. In side-by-side comparisons with the N22 as drum overheads, I noticed that the N8 provided just over a decibel more of output level.

But don't assume that the N8 should be relegated to only room miking: It sounds great and provides excellent resolution on plucked strings and percussion when set up about 3 feet away from the subject. This mic is perfectly suited for tracking bowed strings, brass, and woodwinds, where you want to capture the tone of each instrument while rejecting high-frequency harshness.

Despite its design intentions, I tried the N8 in a few close-miking situations, but with mixed results. However, after close-miking a chimey, arpeggiated guitar part with the two mics side by side on a tube amp, the N8's enhanced lows helped round out the notes nicely while smoothing out the upper partials. To enhance the guitar's upper register in the mix, I brought in the N22 about 4 dB below the N8 to create a beautiful composite tone.

PRO SOUND AT HOME

Remarkably, I had no issues while using the N22 and N8, no matter which preamps and interfaces I used, and that says a lot. After putting them up and setting levels, a slight bit of repositioning was all it took to get the sound I was looking for. Their tone accepts EQ tweaks well, but I found that careful placement was all I needed to get them to sound good in a mix.

And despite the fact that AEA has marketed the N22 and N8 for the personal studio, both microphones are pro-level products and worthy of professional recording situations. Depending on your recording needs, the N22 and N8 offer high-quality ribbon tone and resolution in an affordable and easy-to-use format. ■