by **Doug Young**

Preamps are a useful, if not essential piece of gear for acoustic guitarists, providing an interface to a PA or amplifier as well as tone-shaping capabilities, and generally acting as a control center for your sound. While most preamps have similar basic functions, their features vary widely, and guitarists often have varying requirements that may make one preamp or another a better choice. Headway, a UK company known for its pickups, recently introduced two preamps that fill different niches and offer guitarists some new preamp choices. I compared both models, the single-channel EDM-1 and dual-channel EDB-2.

Compact, Impressive Packages

Both preamps are impressively designed, packing most essential functions as well as some extras into extremely portable boxes. The dual-channel EDB-2 fits easily into a guitar-case compartment, while the EDM-1 (at less than half the size of the EDB-2) would practically fit in a shirt pocket. Both units have a robust feel, and are heavy enough to stay in place on a floor or desktop even with a guitar cord tugging on them. Both units can be mounted to mic stands, making it easy to place the controls at your fingertips. The smaller EDM-1 also comes with a belt clip.

The two preamps share some features, but differ in several ways that are important to understand. The EDM-1 is by far the simplest, with basic three-band EQ, volume, and notch filter as the main controls. One nice touch on the EDM-1 is that it can be powered via 48-volt phantom power from a mixing board. The EDM-1 also has three switchable input impedances, from one to 20 megohms, which allows you to match the impedance of the pickup you're using. Because of its small size, the EDM-1 has a TRS ¼-inch output, but Headway provides an XLR adapter for connecting to a PA. Oddly, the unit is turned on whenever the output is connected (activating the battery when an input is plugged in is more common).

The EDB-2 is far more complex, offering five-band EQ and some flexible dual-input options that can be slightly confusing and require some explanation. Channel 1 is a mono input intended for a typical guitar pickup, although the input can take a TRS cable and optionally provide nine volts of power to the tip or ring (switchable), which is intended to be used to provide power to Headway's line of pickups, such as the HE-4. The EDM-1 also supports this mechanism, even though it is a mono preamp. Regardless, Channel 1 recognizes a mono signal on the tip of a guitar cable.

The EDB-2 supports a mic via an XLR input for Channel 2, which provides 18 volts of (switchable) phantom power. In addition, there is a stereo input jack that can accept a TRS cable for a stereo dual-source pickup, which routes the tip to Channel 2 and the ring to Channel 1. One source of confusion is the way Headway supports pickup-and-mic systems that require power for a mic. To support such a system, you need to plug into the stereo jack and set the Phantom switch to route power to thetipof Channel 1, which has the side effect of providing power to theringof the stereo input! Headway devotes two entire pages of the manual to the company's view that internal mics should be avoided at all costs, which may partly explain the convoluted interface. But the bottom line is that the preamp does work with these systems, as well as other dual-source pickup setups that don't require power. The XLR mic input would also make the EDB-2 a natural choice for use with certain external guitar mics, such as the DPA 4099.

The larger size of the EDB-2 allows Headway to pack in a lot more controls, including an impressive five-band EQ and semiparametric notch filter. One shortcoming is that while you can control the gain of each channel of a dual-source pickup (or the mic input) separately, you have to choose between using EQ on one channel or the other, or on the overall mix. The notch filter can also only be used with one channel. In trying it out at home, I had no problem dialing in some very nice sounds even with this limitation, but on a gig, you would probably want to be able to EQ each source separately.

The EDB-2 also offers more flexible inputs and outputs than its smaller brother. In

addition to the input options, the EDB-2 offers a post-EQ auxiliary input that—in a sign of the times—is labeled as an iPod input, but could be used with any additional sound source, such as a drum machine, and has both ¼-inch unbalanced and XLR DI outputs, so you can send one signal to your stage amp and another to a PA. The master volume affects both outputs. Unlike the EDM-1, the EDB-2 cannot be powered by external phantom power, but it does use 18 volts (via a pair of nine-volt batteries), which provides additional headroom.

Crystal-Clear Sound

Most preamps claim to be transparent these days, and the sound quality of these Headway preamps justifies that claim. Both units sound great, delivering crystal-clear sound that neither adds nor subtracts from the pickup sound, with no noise. But both units stand out by virtue of their small size and well-laid-out feature sets, including tone controls and notch filters. The EDM-1's three simple controls are at musically useful frequencies (120 Hz, 590 Hz, 10 kHz), while the EDB-2 offers controls centered at 120 Hz, 590 Hz, 900 Hz, 2.8 kHz, and 10.5 kHz. The low and high midrange controls should be especially useful at taming most guitar pickups. In addition, the anti-feedback notch filter on the EDB-2 is actually a semiparametric EQ with an adjustable Q width of 0.5–5 and a frequency range from 50 Hz to 6 kHz (cut only). Because the EQ and notch filter have separate channel selectors, you could potentially use the notch-filter EQ to affect one channel, while applying the five-band EQ to the other channel or the overall mix.

I tried both units with a variety of pickups, including soundboard transducers from K&K and McIntyre, an L.R. Baggs Lyric, a Highlander active undersaddle pickup, a Seymour Duncan Woody magnetic pickup, and a custom K&K soundboard transducer plus internal mic setup. All pickups sounded excellent through both units. I appreciated the EDB-2's more extensive EQ, especially on the magnetic pickup, and having both channel gain and overall master volume was handy for adjusting both the low-output McIntyre Feather and the high-output Highlander. But the simplicity and tiny size of the EDM-1 was also compelling, and its three-band EQ was all I really needed to dial in a good sound. Of course, the EDB-2's dual channels and ability to provide power were essential for my dual-source setup, and I was able to get a usable sound in spite of not being able to EQ each channel individually. The impedance switches had no discernible effect on the sound of any of the pickups I tried, but it's a nice option to have, and potentially useful with some setups.

Flexibility and Utility

In spite of a few quirks, both the EDB-2 and EDM-1 are impressive tools, with superb sound and an amazing set of features packed into their tiny boxes. The minuscule EDM-1 might be all many guitarists need, and it has the benefit of being simple and easy to use. The complexity of the EDB-2 introduces a bit of a learning curve, especially if you need to figure out the best way to use the single EQ with a dual-source system, but its extra features provide capabilities and options that rival far larger preamps. With either of these units mounted on a mic stand, you will have full control over your sound at your fingertips.

At a Glance

EDM-1 SPECS: Single-channel preamp with volume, three-band EQ (+/– 12 dB), anti-feedback notch filter, mute switch, switchable input impedance, ground lift. 1/4-inch balanced output, convertible to XLR with provided adapter. Powered via nine-volt battery, external adapter (not included), or phantom power. 4.3 x 2.6 x 1.2 inches. Mountable on mic stand or belt clip. Made in Korea.

PRICE: $285 list/$199 street.

EDB-2 SPECS: Two-channel preamp with individual gain controls. 32 dB gain. 1/8-inch auxiliary input, XLR mic input with 18-volt phantom power. Five-band EQ (+/– 12 dB) assignable to individual channels or overall mix, semiparametric notch filter, mute switch, phase-reverse switch, ground lift. High-pass filter (bass rolloff). Switchable input

impedance on each channel (1, 5, and 20 megohms). Quarter-inch and XLR DI output. Powered by two nine-volt batteries or external power adapter (included). 5.5 x 3.7 x 1.5 inches. Mountable on mic stand. Made in Korea.