Rick Jones, President, Acoustic Image

Quick Looks

- 8 Dunlop Super Bright Nickel Strings
- 10 Zymöl Instrument Polish
- 3Leaf Audio Wonderlove and You're Doom Pedals
- 16 Fender Rumble 200 Bass Head and Rumble 115 Bass Cab

bass gear

Full Reviews

20 Cliff Bordwell Ball Bass Guitar

Vic Serbe has a date to the Ball... the Ball Bass 5-string from Cliff Bordwell, that is.

26 Ritter "The X-Men" R8 Concept Bass Guitar

What do you get when you take an award-winning bass guitar design, and throw in a dose of classic Marvel super heroes? Read on to find out!

34 Headway EDM-1 and EDB-2 Acoustic Instrument Preamplifiers

Chris Fitzgerald leaves the comfort of his regular In the Doghouse column to give us a thorough review of these two mini marvels from Headway.

48 Mesa/Boogie Prodigy & Strategy Bass Heads and Traditional PH410 & PH810 Bass Cabs

With a history of ground-breaking amps and cabs, it may be difficult for Mesa/Boogie to match their prior glory, but somehow, they've managed to hit new heights.

80 MTD Kingston Saratoga 5 Bass Guitar

Michael Tobias has set the standard not once, but twice, with his hand-crafted basses. What happens when he dials up an import model? Lonnie NaVeau investigates.

86 Acoustic Image Flex Pre and Flex Cab

Acoustic Image has been making some of the most innovative bass amplifiers for years, but now they are really flexing some muscle.

Dealer Profile

118 FretSpot.com

Donovan Bowlcheat tells us what sets FretSpot.com apart from other bass stores.







Headway EDM-1 and EDB-2 acoustic instrument preamplifiers



by Chris Fitzgerald

I can remember a time when trying to amplify an acoustic instrument was far more difficult than it is today, due to the predominance of amplification gear best suited to amplifying the magnetic pickups most electric instruments utilize. While most of this "electric instrument gear" fulfilled its function well enough for electric instruments, it often left those attempting to use the same gear to amplify acoustic instruments with a number of difficult hurdles to overcome that the controls on

the "electric gear" were ill-suited to deal with: problems with input impedance for piezo pickups, lack of built-in phantom power for condenser microphones, and limited EQ options to reduce feedback and excess low end are three of the most common of these hurdles. Without specific controls to address these issues, amplifying an acoustic instrument in a live situation can easily become a sonic nightmare.

Fortunately, these days, there are a lot more options for the instrumentalist who wants to amplify an acoustic instrument cleanly in an increasingly noisy (and therefore complicated) soundstage. Headway offers two such products with the EDM-1 and EDB-2 instrument preamps, which are designed to handle the exact sorts of problems regularly presented by acoustic instruments, from basses and guitars, to violins and mandolins. Need to supply phantom power to a condenser mic? Need enough control over input impedance to allow you to get the most out of either an active input from your instrument or to allow you to use a piezo pickup? Want to bypass the colored preamp section of rented or borrowed backline amps while on the road? Need to be able to send your output either to an amp or direct to the front of house system? No problem - both units have you covered. And as we'll see, there are still more tools in the toolbox that these two units offer.

Introduction and Caveat

Both the EDM-1 ("EDM" is short for "[Sheer Acoustic] Equaliser Direct Mini") and the EDB-2 ("EDB" being short for "[Sheer Acoustic] Equaliser Direct Blend") are high quality class-A devices that are designed to pack a number of useful tools for the acoustic instrumentalist into a small portable package that can be easily transported in a gig bag, used onstage in a variety of convenient ways (worn on a belt clip, mounted on a mic stand, or placed on top of an amp), and allow the player to easily control many aspects of their signal that might otherwise be left up to chance or to the preferences of an unknown soundman. Both offer variable input impedance, a number of phantom power options, a low noise floor, flexible EQ options (including hi pass filtering) and a high quality DI, all built into a small, solid package. As someone who travels and often has to rely on borrowed backline amps, these units can often be a true godsend, in terms of salvaging what might otherwise have been an amplification nightmare without the tools they place readily at my fingertips.

As an example, on a recent trip abroad, where I was forced to rely on both borrowed acoustic basses and backline, the amplifiers provided did not have an input impedance that was friendly to a piezo bridge pickup, and also had highly colored preamp sections that were designed to bring out a lot of lows and low mids. Without some control over these aspects of the signal, it would have been nearly impossible to get what I would consider to be a usable sound. With the use of these two handy little units, I was able to start the signal chain with a proper input impedance, and in most cases also bypass the built-in colored preamps of the backline, by plugging directly into the

effects return, which produced a much more neutral and "acoustic friendly" environment from which to begin sculpting a sound. I'm not sure that it's possible to put a price tag on the peace of mind that having these options brings to the traveling musician, but I think it's fair to say that the cost of either of these units falls well below the price of that piece of mind.

As a caveat, I will pass along one mantra that has been shared with me over the years by a number of people who know far more than I do about electronics in general and preamps in particular: every preamp imparts some sonic coloration to the output signal. The question of, "does this preamp provide me with a truly uncolored signal?" is better stated as, "does this preamp add a coloration that I find sonically pleasing?" With that

distinction in mind, I will add that I find the sound of the preamp circuit on both units very pleasing. While I slightly prefer the color of the preamp circuit on my personal gear that I carry with me when I am able to take my own gear to the gig, I can safely say that I prefer the sound of the Headway preamps over the built-in preamp section of any borrowed backline gear I've ever run across, and that's saving a lot.

EDM-1

Right off the bat, the "mini" portion of the name of this unit turns out to be entirely accurate. Only slightly larger than a box of cigarettes (remember

those?), this little black box packs a small set of useful features into a clearly laid out and solid package. For whatever reason, I'm not the kind of player who likes to clip preamps to my belt, but if I were that kind of player, I could easily see the EDB-1 being very comfortable in this capacity. All of the controls and inputs (save the DC power input, which belt clip types tend not to use) are on the front and bottom front of the unit, which makes finding everything a very simple matter, even on a dark stage.

The bottom of the unit (imagining it's mounted on a belt clip) contains the ¼" input and output jacks and the phantom power controls. Since both jacks are TRS (tip-ring-send) jacks, phantom power can be used on either. The input jack can supply







9v of phantom power to an external mic, or the entire unit can be powered (thus saving battery life) by 48v phantom power from a mixer through the XLR adapter to the output jack. For the phantom power supplied by the input jack, a three-way switch allows the choice of phantom power off, through the ring, or through the tip of the TRS connection - a nice touch, which increases flexibility for different pickup/mic options out there on the market. In all cases, Headway recommends using the external power supply for increased headroom and clarity.

The front panel (still in imaginary "belt clip status") contains the bulk of the controls. At the very bottom of the panel, there are switches for input impedance and earth lift. The Input Impedance specs are as follows: +Hi =>20 Meg Ohms, Hi = 5 Meg Ohms, Active/Low = 1 Meg Ohms. This is an incredibly useful feature for an acoustic preamp, since piezo pickups

are often extremely sensitive to input impedance. In my case, using the Fishman Full Circle pickup, the 5 Meg Ohm option always sounds best, but when borrowing instruments abroad, I used this switch as three options to try whenever plugging in an unfamiliar pickup, and as might be expected, different positions of the switch seemed to suit different pickups best. As I have mentioned before, this is a wonderful option to have access to close to the beginning of the signal chain, and an almost indispensible one when relying on borrowed gear. The earth lift switch is self-explanatory and very useful. Headway reminds the user repeatedly in the manual that phantom power is

automatically disconnected when earth lift is applied.

Next tier up on the front panel are Mute/Live switch, master Volume, the Low Battery indicator, and the Range control. The Volume spec is listed as continuously variable 0 - +20dB (note that this assumes that the tone section above is set flat; boosting or cutting frequencies in the tone section naturally affects the output). The Mute/Live switch is a great feature that allows the player to make discrete changes without creating a lot of noise in the amp or front of house signal, and is (to my ears) dead silent in operation. By far, my favorite feature of the unit is the Range control, which is a continuously variable

high-pass filter that rolls off the lows at 12dB per octave over a frequency range from 40Hz to 300Hz. As I've said many times previously, I consider a continuously variable high-pass filter to be the most useful tone control any bass amp could possibly have, and this one works beautifully.

The final tier of controls at the top of the front panel contains a 3-band EQ that is simple enough for even the most gear-shy bassist to comprehend: the three controls are marked "Bass," "Mid" and "Treble," and the corresponding frequency center points for each are 120Hz, 590Hz, and 10kHz. While at first glance, the frequency center of the Treble control seems a bit far removed from the center points of the other two bands, in actual practice, I did not notice anything unusual about the center points while using the controls as their names suggested.

An external 18v power supply input (power supply is included) is on the left-hand side, and the battery compartment for the single 9v battery



to power the unit is on the top. All controls are clearly marked and easy to access, and the unit, though small (dimensions are 4.3"L x 2.625"W x 1.37" D), has a pleasing heft to it that makes it feel extremely well made and solid. Users who choose not to clip the unit to their belt will find that the mic stand mounting option works perfectly and feels solid as a rock, and those who choose (as I did) to set the unit on top of their amp will find that the rubber feet on the back of the unit hold the unit in place nicely.

EDB-2

As the name of the unit suggests, the EDB-2 is version 2.0 of the previous model of the same device, the EDB-1, which I previously reviewed as a smaller article in issue 6. The important difference between the EDB-2 and the EDM-1 is that the EDB-2 is designed to handle the blending or mixing of two different signals into an aggregate signal (it could also easily be used for doubling, by plugging a different instrument into each of the two channels, although Headway does not recommend this because the two sources would share the same EO). While it's the same basic design as the EDB-1, the EDB-2 features a number of changes and improvements, including a lower noise floor, better gain matching between the two channels, and a number on instances where the functions of the various controls can be assigned to one channel or the other (or, in the case of the EQ section, both). Having spent some time with both units, and as a satisfied owner of an EDB-1, I can safely say that each of the improvements implemented in the EDB-2 iteration are both well thought out and welcome.

Although the EDB-2 seems a bit large and complicated to be worn in the belt clip configuration, a belt clip

is included in the box, and like its smaller sibling, the EDB-2 can also be mounted on a mic stand or set on top of the surface of the amp on ergonomic rubber feet. As this black box is nearly twice the size and weight of the EDM-1 (with dimensions of 5.5"L x 3.7"W x 1.7"D), it has a lot more room for added functionality, and it packs an amazing amount of features in the package. Fit and finish are similar to the EDM-1, with a clear layout and a satisfying heft and solidity to the unit. While the unit is probably best used on a flat surface or mounted to a

stand, for the sake of consistency, I'll describe the features as I did those of the EDM-1, as though it were mounted on a belt clip.

The bottom of the unit contains the input section. The Channel 1 input section is exactly the same as the EDM-1: a 1/4" TRS connection that allows the same phantom power options - but this is where the similarities with the EDM-1 end. To the right of the Channel 1 input is a TRS input marked, "Channel 2/Stereo in," a 1/4" input that accepts a mono cable wired to the tip, or a stereo cable that carries the Channel 2 signal wired to the tip and the Channel 1 signal wired to the ring. To the right of this input is an XLR input marked "Channel 2 Mic," which can also supply 18v of phantom power to a



condenser microphone. No matter which configuration of inputs is used, the Channel 1 and Channel 2 inputs always get routed to individual gain controls for optimal mixing.

The front (face) of the unit contains a number of tiers of controls. At the bottom are two 3-way input impedance switches (one for each channel), with the same specs as the switch on the EDM-1. Again, this is an extremely useful feature, as it is never safe to assume that the optimal input impedance for two separate input devices would be the same, and it's crucial to be able to control both independently (the EDB-1 also had two switches, but the Channel 2 switch had only two positions, instead of three). On the next tier up, there are gain controls for both channels (now

matched, where previously the channel 1 gain was much hotter than the channel 2 gain), a 3-way Phase reverse switch (switchable for either channel), phantom power switch for the XLR input, and a 3-way Range control. This Range control is basically a high-pass filter with only three stopping points, marked "Bass," "Guitar" and "Violin." While these are useful for managing excess low end thickness, they are not as useful as the Range control on the EDM-1, since the "sweet spot" for high-pass filtering is usually discovered aurally and varies from room to room.

The next tier of controls is the 5-band EQ, marked "Bass" (120Hz), "L. Mid" (590Hz), "H. Mid" (880Hz), "Presence" (2.8kHz), and "Treble" (10kHz). In actual usage, the Presence control was especially useful for quickly dialing in definition, and I found myself wishing that this band had been included on the EDM-1 in place of the Treble control. Next to the EQ section is a 3-way switch which allows the user to choose between applying the EQ settings to Channel 1, Channel 2, or both. This feature was not a part of the original EDB-1 design, and is an extremely welcome and useful addition. The next tier up includes a sweepable Notch Filter featuring variable Q width and frequency sweep controls, plus switches to assign the filter to either channel, or to turn it off entirely. Not being a fan of notch filters for bass, I generally had the filter turned off, after determining that it did exactly what it was supposed to do.

Rounding off the features on the front of the unit are the Master volume control, Mute switch, Power/standby switch, Earth Lift, and Low Battery indicator. The top of the unit includes the battery compartment cover, which houses two 9 volt batteries, the DC in jack, and the DI XLR out. The right side of the unit has jacks for Line Out and a thoughtful and handy 1/8" iPod In jack, which seems like an afterthought, until you really need it (in which case it's a blessing). All in all, there are a truly astounding number of routing and tonal options available with this unit, and though the term "Swiss Army Knife" is often bandied about in gear reviews with annoying regularity, this is one product to which it truly and rightly applies.

The EDM-1 and EDB-2 in practice, and "which one is right for me?"

Not surprisingly, the two units sound practically identical when set flat, which makes sense since they share the same preamp circuit. I mentioned earlier that every preamp imparts some coloration to the sound, and though it's basically "dancing about architecture," I'll try to describe the "Headway Sound" a bit, here. The first thing I notice about the signal is that it sounds extremely clean, very focused in the high mids and highs, and what I would usually describe as very "Hi-Fi." It's the kind of sound that sits extremely well in the mix whenever there is sonic mud to be overcome, whether that mud be from other instruments, the acoustics of the room, or some combination of both. I normally don't bother taking a preamp to gigs where I can take my own gear, as I like the sound of my amp's preamp section quite a bit. But there are several rooms where the added clarity of the "Headway Sound" really helps me cut through, and when possible, I'll add it to the signal chain in those spaces so that I don't get lost in the mix. "Transparent" is an overused term, but one that I would generally apply to the sound of the Headway preamp; to me, for the double bass, it's almost like a microphone sitting close to the top - there is an added layer of detail that many preamps don't put out there

front and center, and in a mix, this is very often a good thing.

These units are the kind of gear that I am happy to review, because I can give them a hearty two thumbs up without any real reservations. For the traveling bassist, I am hard-pressed to think of any gear I would recommend ahead of these units, as they give the player so many options to shape the sound, and allow the option of bypassing the EQ section of borrowed or rented backline, which is a godsend. As for which unit is right for you, that will of course depend on what you're trying to do. If you need to blend two signals before sending them to the house, or if you want to send one signal to the house and another line to your stage amplifier, the EDB-2 does both of these things, while the EDM-1 doesn't. If you like to have a lot of EQ band options or a notch filter for more surgical EQ possibilities, again, the EDB-2 does this while the EDM-1 does not.

If, on the other hand, you are more of a simple person who doesn't need to blend multiple signals, who dislikes futzing with too many controls, and who wants a more meat-and-potatoes approach to tone shaping, then the EDM-1 may be more up your alley. I am one of these people, and frankly, I quickly fell in love with the EDM-1 because of the variable HPF feature, then later came to appreciate the tiny footprint and simplicity of the unit. While I had to use the EDB-2 on one occasion on the tour, due to the need to send a signal both to the FOH and the amp at the same time, when I had a choice (i.e. - when the borrowed back line had a decent D.I. built in), I chose the EDM-1 for the sake of simplicity and for the variable high-pass feature. (BGM)