software instruments sparingly.

For the money, though, GarageBand '08 is spectacular. It packs a powerful punch behind a deceptively simple user interface. Having such a fabulous songwriting tool with good software instruments, effects, and loops already installed on every new Macintosh is a huge win for musicians of every variety. Audio pros and serious hobbyists have a great foundation to get ideas down quickly (and then open them directly in Logic if desired), and beginners have a fun and easy-to-use app to begin exploring music. GarageBand '08 is a fantastic product, and its new features increase its power greatly.

Value (1 through 5): 5
Apple
www.apple.com

BLUE MICROPHONES

Woodpecker

By Eli Crews

Blue has carved out a niche in the audio industry by combining innovative, sleek design with superior sonic performance. The Woodpecker ($999) is a phantom-powered ribbon microphone that has both of those qualities in spades.

KNOCK, KNOCK

Two inches in diameter and 9 inches long, the Woodpecker is striking. It has a golden mesh grille, and its cylindrical lower body is covered in a real wood veneer. The Blue logo badge marks the front lobe of the figure-8 polar pattern. The mic comes in a velvet-lined wooden jeweler's box and is accompanied by a golden spider-style shockmount.

I understand the benefit of shockmounts for reducing floor rumble, but I'd prefer an old-fashioned clip over a less useful shockmount that increases the mic's diameter by a factor of three. If any mic manufacturer provides only a shockmount, it must be an excellent one. The spring-loaded clips on the Woodpecker's shockmount lost their tension after only a few uses, resulting in a less-than-firm grip. I taped the mic in place to keep it from slipping.

Bold and beautiful, the Woodpecker has a sound that lives up to the mic's regal appearance.

PEEP, PEEP

When I plugged in the Woodpecker, I immediately noticed a higher-than-usual noise floor, clearly audible as a high-end hiss. One reason is an approximately 4 dB boost centered around 8 kHz. Another factor is an extremely hot output signal, far exceeding an average ribbon mic's output by up to 30 dB, and even rivaling that of most condenser mics to which I compared it.

When I set the preamp to optimize the recorded signal, the noise level was low enough to be inaudible while recording. In the pauses, though, I still heard faint high-end noise a few decibels higher than that of my reference mics. The Woodpecker probably isn't quiet enough for critical solo instrument or voice recording. For recording a medium-to-loud instrument in an ensemble setting, however, the noise wasn't an issue during mixdown, even after I applied EQ and compression. The healthy dose of high end in the mic's response usually allowed me to lay off any additive EQ in that range.

The one time I kept the Woodpecker up as a single mic for a solo vocal and piano performance, the subtle extra noise gave the digitally recorded track an almost tapelike quality that the artist was very happy with, reminding me that a little noise is not always a bad thing.

HOW MUCH WOOD . . . ?

I had two Woodpeckers, and they found their way into all my sessions during the test period. The pair was sonically well matched, making stereo applications a breeze, but it was almost hard to believe they were ribbon mics. In addition to having a hot output (putting fewer restrictions on the choice of preamps), the top end was very present, unlike with any other ribbon I've ever used. The smoothness of the midrange and the warmth in the low mids sounded similar to that of my favorite ribbons, with not as much subrange beef as a Coles 4038, for example, but right in there with the RCA 77DX, Royer R-121, and Royer SF-12.

Vocals sounded fantastic, up-front and clear, with plenty of body. Even with the enhanced high end, vocal sibilance was less harsh than with most condenser microphones. When I used the Woodpeckers as overheads, the metal of the drum kit had loads of sheen but wasn't overbearing, and the toms and snare were clear and full-bodied. Trumpets and saxophones sounded exactly like trumpets and saxophones, although for certain players the Woodpecker accentuated the brassiness or reediness in a way that made me favor my standby ribbons. Electric guitars sounded fantastic as long as the amp wasn't too bright or the mic too close.

And I may have found my new favorite mic for grand piano and upright bass. The figure-8 pattern does call for a room that sounds good, though. If you usually use cardioid mics, you may hear a little more of your room than you're used to.

BIRD OF A DIFFERENT COLOR

If it weren't for the minor noise issue and my problems with the shockmount, the Woodpecker would garner the highest rating possible. It really is an exquisite mic in every other aspect, and it's quickly becoming one of my favorite all-purpose microphones. If absolute silence is mandatory, it may not be the mic for the job. But if you want natural-sounding recordings that capture the nuances and spirit of performances in an open and vibrant way, I highly recommend catching this bird.

Value (1 through 5): 4
Blue Microphones
www.bluemic.com

Brainworx bx_digital is a software simulation of the company's hardware mastering processors. The display includes a large, well-marked depiction of the EQ curve for each channel.

BRAINWORX

bx_digital

By Brian Heller

Brainworx is a new hardware and software company based in Germany, and the bx_digital plug-in (approx. $877, TDM CD and printed manual; $857, TDM download; $509, VST/RTAS CD and printed manual; $488, VST/RTAS download; $427, RTAS-only download) is an emulation of its bx-series hardware mastering processors. It runs on both Macintosh and Windows platforms and is available in VST, RTAS, and TDM formats. All versions are copy protected and can be authorized with the iLok system or a challenge-and-response procedure.

The plug-in combines a mid-side processor, stereo equalizer, and de-esser. It also includes two unique Brainworx features: Bass and Presence Shifters on each channel and the Mono-Maker (more about these in a moment).

Bx_digital's EQ section provides five bands per channel, each of which is fully parametric. Bands 1 and 5 can become high and low shelves, and bands 2 and 4 can become high- and lowpass filters. In the TDM version, two more bands offer dedicated high- and lowpass filters for each channel. Each band offers plenty of control over frequency range and bandwidth as well as 12 dB of boost or cut. Each band can also be individually linked to the corresponding band on the other channel, making it easy to work with some bands in stereo and some in mono.

I found the EQ to be exceptional. It was as smooth, transparent, and clean as I've ever heard. Compared with an average mixing EQ plug-in, it was clearly more elegant with large boosts, and it didn't impart any sense of harshness in the mids and highs. It also stood out among some other computer-based mastering EQs, requiring almost 3 dB less gain in the high shelf to give the same sonic results as another such respectable product.

The Bass and Presence Shifters are essentially 2-band EQs with fixed center frequencies and bandwidths that operate in tandem from a single control—a boost in one band causes a corresponding cut in the other. The Bass Shifter bands are set around 63 Hz and 315 Hz, and the Presence Shifter bands are centered around 6 kHz and 12 kHz. The designers' years of practical experience suggested that corresponding boosts and cuts at these frequencies are commonly needed in mastering, and I found them to be both convenient and effective.

One thing that sets bx_digital apart is its M-S (mid-side) processing. In fact, the elegant and user-friendly way this is handled represents a significant step forward. In the conventional left/right stereo mode, the controls operate as you would expect. But when you engage one of the M-S stereo modes, all controls for the left channel are relabeled "mono" (mid) and the right channel's controls become "stereo" (side). This makes bx_digital a useful tool for M-S recordings.

The Mono-Maker is another Brainworx-specific tool. It creates a mono low end by cutting low frequencies in the side channel while boosting them in the mid channel to retain their total power in the mix. This feature has a cutoff-frequency control that ranges from 20 to 400 Hz. The manual provides good examples of how this might be useful, such as ensuring that bass frequencies are mono for vinyl mastering.

In operation, bx_digital was nearly flawless, and my gripes are mostly nitpicky wishes. For instance, there is a master bypass for the EQ, but there are no bypass controls on the individual EQ bands or the de-esser. In addition, there is no true notch filter, which might be a useful thing to have on a great-sounding EQ like this one. Loading settings saved in a VBox matrix in BIAS Peak Pro didn't work correctly (Brainworx said it will look into this issue). It would also make sense to add a list of the keyboard modifiers to the documentation; for example, Option-clicking on a control resets it to the default value.

Bx_digital needs a lot of screen real estate. That is part of what makes the plug-in a pleasure to use, but it also