Okay—enough blather. How does it sound? I first tried it on a session with one female and one male vocalist. Recording her in the past had been somewhat challenging due to sibilance that was a bit harder to control. I had set up some other mics as well, including a Telefunken R-T-F M16 MkII. The *CM-47* performed very well. It didn't exhibit the same top end as the Telefunken, which was not a surprise. The *CM-47* had a more mid-forward sound without the same type of top extension as the Telefunken. The *CM-47* provided an articulate sound while not exaggerating the sibilance. This is in part due to the capsule and electronics, but also due to the physical orientation of the capsule. As with a vintage U 47, the capsule is mounted higher in the basket so that the ring around the top of the grill slightly bisects the acoustic path to the capsule. This can result in a change to the frequency response, and I'm told that this is partially why it handles sibilance a little better. There is a tendency towards brighter LDC mics these days, and many are used as if the "brighter is better" approach is the "correct" way things should sound. But I must say, it is so refreshing to hear a mic that has a more balanced sound without defaulting to a large HF rise. Don't get me wrong, there are times when the type of vocalist requires that sort of sizzle, but it's great to have the option of another approach. In this case, the Telefunken put a sort of high frequency "zing" on the voice that sounded great on the solo vocal, but might turn into an issue when stacking some voices on multiple parts. On male vocal, the results were similar. The *CM-47* was more natural and balanced overall, while the Telefunken seemed a bit more hyped on both ends of the spectrum. We listened to several mics to make a choice for an upcoming project that will feature *many* stacked vocals. We chose the *CM-47*, feeling that the overall balance in the sound was more desirable, and a touch of HF EQ could be added later if needed.

One thing I must mention—this mic is difficult to overload. Really difficult. The way Dave Thomas has designed the circuit has resulted in a good deal of headroom overall. I tracked a female R&B singer who is notorious for getting very loud and fairly shrill. The *CM-47* took it and never crapped out. The characteristics of the mic also helped keep the tone from getting overly edgy. I had earlier tried various mics with this singer, and the *CM-47* was the winner.

I also tried the mic while tracking an electric guitar through a Vox AC15 amp. I often use more than one mic in this application, and in this case, I coupled the *CM-47* with a Royer R-121. Being able to adjust the balance between two mics gives me more control in tone-shaping than just EQ. The articulation of the *CM-47* was wonderful, no matter if the tone was clean or crunchy. The high end was defined, but not strident, and there was just the right amount of body to the tone.

I now did a comparison that wasn't completely fair. I compared the *CM-47* to a $6500 Wunder Audio CM7. This is their top model with the EF 14 M metal tube and the M 7 capsule. We even chose the best sounding example from a pair of CM7s. On vocals, the Advanced Audio *CM-47* held its own very well with the Wunder CM7. Now, the Wunder is a *fabulous* microphone, and there's no doubt that it performs with a certain magic and sparkle. In this test, both mics sounded very similar in overall tonal shape, but the Wunder had a bit more extension on the top and bottom. I was surprised, however, at how close I could get the mics to sound with the slightest touch of EQ. I will say that I could probably punch in a lead vocal (with some care) using the Advanced Audio mic on a track that had been originally recorded with the Wunder. The Wunder exhibited a bit fuller low end when worked close, but again, this could be compensated for with minimal EQ. The Wunder retained its tonal characteristics *slightly* better when worked from a distance. It had a bit more "reach" than the Advanced Audio, but only by a very small amount. Although I didn't have one for comparison, I'm told that the CM-47SE with the Peluso PK-47 will have the tighter low end and will hold the tonal quality with a bit more reach because of the construction being more similar to the original K 47. On piano, they were again quite similar in character and in off-axis response. They both sounded very natural without any peakiness in the upper midrange. I then mic'ed a Bassman amp from about a foot and a half away, recording a clean guitar tone from a Strat. Here, the Advanced Audio *CM-47* actually was preferred in this application due to having a more focused midrange than the Wunder. With the previous tests, the *CM-47* could be made to *very* closely resemble the Wunder with slight EQ changes, but in this case, I couldn't get the Wunder to sound like the *CM-47*. The *CM-47* just plain won that test. The *CM-47* was actually harder to overload than the Wunder. Not by much, but it did seem to have a bit more headroom.

The only area in which I could knock the *CM-47* (in these tests) was in its self noise, being only slightly more apparent than the Wunder's. Its noise floor was nothing that I had noticed previously, and it's not something that I would think would be an issue. It wasn't until I had it side-by-side with the Wunder that I noticed it at all. After speaking with Dave Thomas, he expressed an interest in hearing the clips to evaluate the results to see if he could improve the performance, which he seemed confident he could do.

Whereas the Wunder is designed to emulate what a U 47 would sound like in brand-new condition, the Advanced Audio *CM-47* is attempting to go after the sound of a vintage U 47 today, after some aging. The high frequencies aren't as pronounced, for example. Dave Thomas says that through playing with tube selection and voltage settings, as well as choosing which of the available capsules to use, the mic could be made to sound "newer" or "more modern" in its response. This type of flexibility is great. This is what I love about boutique manufacturers who make gear because they love to; they respond to users and try and improve their products immediately. Again, the Wunder is an amazing mic; I'm just thrilled that the *CM-47* can deliver such a competitive level of performance for those who can't afford a $6000 mic.

There are those out there who are critical of mics that deviate from classic designs. I firmly believe that there is real value in the merits of vintage equipment, but I also firmly believe that there can be exceptional value in modern adaptations of those designs. There are many manufacturers that make equipment that is inspired by classic products, while employing differences in approach. Advanced Audio is in that category. No one is claiming that the *CM-47* is a U 47, but it is designed to have similar characteristics. I feel that this mic fulfills the type of role for which one would want a U 47. It is amazingly well built and delivers unbelievable performance for the price. At $735, it is quite a deal. Partially this is due to the fact that Dave Thomas doesn't have to support a 5000 sq ft factory or a staff of twenty. He works by himself. He's been an audio engineer and tech for thirty years and is now applying his knowledge to the area of great mics for a decent price. I can't wait to audition some of his other offerings. He makes a very popular CM-12, which is more along the lines of (you guessed it) an AKG C 12. Also in the lineup are CM-67, CM-47 fet, CM-87, CM-414, and CM-54, with more models in the works. These are definitely worth checking out. I'm adding several to my mic collection. *($735 direct; www.aamicrophones.com)*

–Kirt Shearer <kbshearer@sbcglobal.net>

JZ Microphones

BH-1 Black Hole condenser mic

JZ Microphones is a new Latvian company started by mic designer Juris Zarins, who at one time worked closely with the company BLUE. JZ's promotional literature touts its old world, no-compromise manufacturing methods, and it's easy to see why. The *Black Hole* is meticulously crafted, with a courageously unique design based around an oblong hole through the center of the mic's body. Weird, but in my opinion, very cool. Definitely a mic locker standout. Looks kind of like a really tall, rounded Arc de Triomphe.

The mic's three polar patterns (cardioid, figure-8, and omni) are switchable on the inside of the oblong hole. This pattern switch takes a little getting used to, being somewhat hidden. But once you get accustomed to its location, it's actually very easy to use, and as a bonus, there is very little danger of the switch position being accidentally changed.

In use, the *Black Hole* delivers all the sonic characteristics one would want out of a high-end large-diaphragm condenser: broad frequency range, marked sensitivity, high output, etc. There's a nice, smooth top end and a very focused midrange (lovely—and rare these days), as well as the expected pronounced proximity effect (when not in omni mode). I compared it to an Audio-Technica AT4040 (*Tape Op* #33), and while I noticed cursory similarities between the two (very differently priced) mics' performances, I was knocked out by the *Black Hole*'s noticeably lower noise floor, its smoother high end, and most of all by its lack of any significant tendency to self-resonate. Though I did not have an AKG C 414 on hand to compare side-by-side with the *Black Hole*, my past experience with 414s led me to consider the two somewhat equivalent sonically and feature-wise. The *Black Hole* seems quite versatile, and—excelling on vocals, grand piano, upright bass, acoustic guitar, and various percussion—it could certainly qualify as a top choice for "desert island" mic.

Quibbles, I had a few. The overly-elaborate shock mount (optional) is difficult to set up and allows the mic to "sag" in certain positions. It should be noted that the stock mic clip—while also a bit elaborate—is much more stable and very easy to use. Also, a low-end rolloff would be very handy; the *Black Hole*'s proximity effect, though very flattering, could seemingly be pushed over the edge with a bass singer coming in too close. Ditto on a switchable pad—I had trouble recording loud gang vocals on an aggressive rock song without the recording chain distorting. (The cardioid-only BH-3 version of the *Black Hole* does have a pad switch.) And, although this is an extremely worthy microphone, the price is a bit on the high side considering the aforementioned shortcomings. Still, I wouldn't hesitate to recommend the *Black Hole* to anyone. And I'd consider it a perfect choice for a smaller studio looking to add a versatile flagship mic to their collection. *($1995 street; www.jzmic.com)*

–Pete Weiss, www.weissy.com

McDSP

FutzBox plug-in

FutzBox is a brand-new distortion and noise generator plug-in for mashing, destroying, and making low-fidelity versions of your tracks. The main interface offers configurable "futz" effects, including filters, EQ, distortion, noise generation, and gating. Along with these tools, McDSP has included a new twist—Synthetic Impulse Models (or SIMs for short). SIMs provide realistic modeling of items like radios, cell phones, and televisions.