MICROPHONECHECK 1, 2

from their pop filters. A slight bit of compression evened things out, and the sound was tight and even, without too much of the room being picked up. We also tried the Shure KSM 27 for backing vocals but the mic didn't really shine in this application; it was a little dull and lifeless.

ELECTRIC GUITAR: I only tried the AT 4040 on this instrument as I usually use a ribbon and dynamic mic combo. With the 4040 I placed it about 4" back and off center from the best sounding speaker (a very loud 4x12 cabinet and 5150 head) and got a really good dark, thick sound. Combined with a Shure 57 it gave the guitar a unique blend that mixed well.

TRUMPET: For this hard-to-capture instrument we ended up running the mics through a Focusrite preamp and moving the player back about three feet to get more of the room and to even out the sound. Both the AT 4040 and 4033CL worked well for this, with just a bit of room ambience coming through. The Shure mics were a little drier sounding, with the KSM 27 being a little too thin to use.

KSM 44 Multi-Pattern Large-Diaphragm Condenser \$1,393, KSM 32 Fixed Pattern Large-Diaphragm Condenser \$1,070, KSM 27 Fixed-Pattern Large-Diaphragm Condenser \$575, KSM 137 Fixed-Pattern Small-Diaphragm Condenser \$575, Audio-Technica 4040 Fixed-Pattern Large-Diaphragm Condenser \$495, 4033CL Fixed-Pattern Large-Diaphragm Condenser \$595

—Bart Thurber

THEY CALL ME MANLEY AKG vs. AUDIO TECHNICA vs. B.L.U.E

Six large-diaphragm condenser mics: two AKG (C414B-XLS and C414B-XL II), two Audio-Technica (AT 4050 and 4047/SV), and two BLUE mics (Type B and Baby Bottle). All comparable in terms of possible application. I tried to use them in a variety of settings.

of possible application. I tried to use them in a variety of settings, seeing as they are all multi-purpose microphones. The vocal tests were done in a studio using a **Universal Audio 2-610** mic pre and a blackface **1176**, no EQ. The acoustic guitar tests were done in my home studio using the pres on my **MOTU mk II**, no compression, no EQ. The bass and drums tests were done using mic pres from a **Trident Series 65** mixing board.

AKG. The 414 is a long-standing favorite in studios everywhere. This mic has a long history and the C 414B-XLS and XL II are AKG's current installments. There are only two obvious differences between these two mics. Most obviously, the XLS has a silver front grille and the XL II has a gold front grille. Soundwise, the XL II has a +3dB rise in all frequencies above 2kHz. This translates to a very bright and present microphone. C 414s have always been very bright and responsive, and the XL II does not disappoint in the bright category. When recording acoustic guitar, the XL II does an excellent job of capturing all the subtle nuances of pick attack while still delivering a full-bodied and robust low end. There is a slight dip in the midrange around 1000Hz though, which gives the guitar a slightly scooped sound.

Another design change AKG has introduced with these two mics is electronic switching for polar patterns, LF roll-off, and pad. Switches on 414s past seemed only problematic if they'd been shorn off by egregious mishandling. Like electronic locks and windows in modern cars, I wonder if AKG should have left these switches as analog. That is to say, is it really an improvement, especially once the momentary electronic switches fail? But that is neither here nor there, since they seem to be working now. Besides the new switches, AKG has added a few extra settings to these mics. There's a new, wide cardioid setting, which falls somewhere in between the omni and cardioid settings. Wide cardioid can be useful when trying to reduce proximity effect. It also has a slightly more open high end than regular cardioid. Other new features include different pad settings. Old 414's had -10 and -20dB pad settings. This new generation offers -6, -12 and -18dB settings. Also, the same with the roll-off, AKG has added a third roll-off point, offering roll-off's at 40, 80, and 160Hz. These new features seem a little excessive, however not entirely useless. It's hard to fault AKG for trying. They're working with an amazing microphone design in the first place.

One major flaw with these mics: The XL II's jack was loose, causing a very bad hum. The hum would also increase as I reached to switch the polar pattern. I determined this hum to be unacceptable and fiddled with the jack for a second when I felt it finally click into place. Hmmm. Quality control any-One? In AKG's defense, I've used 414's as long as I've been

recording, and I've rarely ever been let down. I guess crap happens, even (or especially) in Austria.

These mics excel in so many different applications. My favorite use for these mics? On toms. They capture a very realistic, full-bodied sound event when put over the edge of a tom, aimed at the center for added stick attack. Unfortunately, they can suffer from badly dented grilles in the hands of a wild drummer. Though, I've never seen one damaged so badly that it hasn't kept on chooglin'.

When recording vocals with the XL II one should be wary. Sometimes the XL II was a little too detailed. Perhaps the slightly mellower XLS is better suited for vocals. Unless you want a very breathy vocal, in which case the enhanced presence of the XL II might be preferred.

Audio-Technica 4047/SV and 4050. I've always been a fan of Audio-Technica for their excellent bang-for-the-buck products. These mics are no exception. Both members of A-T's top-of-the-line "40" series, both mics are excellent competitors when compared to other brands with similar specs.

MICROPHONECHECK 1, 2

The 4050 is an elderstatesman in the 40 family. This multi-purpose multi-pattern large diaphragm condenser mic can handle pretty much anything without flinching. Perhaps this is AT's answer to the 414? It excels in many of the same apps. The 4050 made my '67 Gibson Country-Western acoustic jump out of the speaker like a bucking bronco. It's literally like you're in the room with the guitar. Incredible detail without sounding unnatural. Again, with a lot of clarity to fingerpicked notes and a full depth to the sound, this mic "hears wood". The omni setting provided a more open high end while the figure-8 provided a more exaggerated proximity effect. The output of this mic is higher than most, perhaps because of its transformerless design. Also, this mic can withstand up to 15dB with the 10dB pad engaged, making it well suited for any sort of percussion, or miking an AK-47 at close range. This mic can really handle anything you throw at it. I thought it sounded a little brash when used as a drum overhead. Perhaps a little too much high-mid information. Or perhaps it was the drummer bashing on his hi-hats? Wait that was me playing drums. Wait, I can't play drums. The frequency response between polar patterns is remarkably the same, making it useful when switching between patterns not for tonal differences, but merely to isolate a sound source from unwanted bleed.

The 4047/SV is a newcomer to the 40 family. Its design is based on the early FET mics, namely the U-47 FET. Its amplifier is transformer coupled and has a specially tuned element that adds up to a pretty cool sounding mic. Not quite as detailed in the highs as the 4050, this mic is more reminiscent of a time when things were a little mellower. It provides the aural equivalent of velour - soft and warm. It sounded great on acoustic and even better on vocals. It really excels on low-frequency instruments - particularly bass guitar and kick drum. Used as a close mic on an Ampeg SVT 8x10 cab, this mic was slamming! Very full, round low end with extended girth, as well as enough high mids to provide clarity in the mix. On a closed headed 24" Ludwig kick drum, this mic sounded great about 8" off the front head, aimed dead center. It captured the whole kick with a good balance of lows to highs. Again, a great all-purpose mic if you're looking for something a little mellower than the 4050. Sometimes mellower is a really good thing in this digital age.

BLUE A very pleasant surprise. I'd always seen these mics but had never had the opportunity to try them. These mics have a very distinctive art deco style that sets them apart from most. The Type B is purported to be part of BLUE's affordable line, but you'd never know it from the sound. This mic has amazing depth and clarity and a unique character that sets it apart from all the other mics mentioned earlier. Using a Class-A discrete circuit and interchangable capsules, the mic amplifier body is based loosely on the original Neumann CMV condenser microphone although this mic is much smaller than the original CMV, thankfully. This mic has a very distinguished look about it, surely to inspire comments from vocalists. It's the sound that will inspire the most comments, however. Using a cardioid capsule, there is a certain immediacy to the midrange that makes instruments sound pleasant and present. The highs are exceptionally clear without being annoyingly detailed. The low end is amazing - very round and extended. Using this mic on vocals, I could hear the vocalist's throat. I know this sounds weird, but I could. It's almost as though I could hear the air traveling through his throat. Very intense depth of field, like a large format camera.

The people at the BLUE factory in Latvia clearly have an understanding of an older way of building things. The detail in the craftsmanship is astonishing. The mics come in very satisfying Baltic birch wooded boxes. Presentation is obviously a big deal to the people at BLUE.

The Baby Bottle. This mic held its own against a Klaus Heynemodified U-67 (a benchmark, for sure) and its parent Bottle mic. In fact, the vocalist preferred the Baby Bottle to both the Neumann and the bigger Bottle. The Baby Bottle has a more focused mid range and a slightly less extended high-frequency response than the Type B. The low end was comparable to the Type B using the cardioid capsule. This focused mid range helped the vocals cut through the mix without any EQ at all. The Baby Bottle has a fixed cardioid element, not a modular capsule like the Type B, making it slightly less flexible than the Type B. But whatever, this mic rules. The exquisite sound of the BLUE mics lives up to their audacious looks.

OH YEAH?

In summary, the AKG C 414 XLS and XL II are repackaged classics with a few design changes, perhaps in a sideways direction. The sound remains classic — full and present with a super-real detail that's synonymous with all 414s. Audio-Technica provides the most affordable bang for buck large-diaphragm condenser mics with the 4050 and 4047/SV. The 4050 is A-T's answer to the 414 and it does it well. A jump out of the speaker sound. The 4047 has a mellower, softer, warmer sound for sure. This mic excels in the low end. Try it on a bass and you'll be thinking of James Jamerson wearing a soft, worn-in Pendleton pullover. And lastly, the BLUE Type B and Baby Bottle mics really surpassed all expectations, delivering an incredible depth of field, intense clarity without being annoyingly detailed, and a bottom end that doesn't quit. That is to say nothing of their distinctive good looks.

