



Ten Mics I Swear By

In which the author presents his well-considered opinions.

By Myles Boisen

Here's a question that most recording engineers have heard at one time or another: "What's the best microphone?" A very insightful response to this question appeared on the rec.audio.pro Web site in the form of another question: "What kind of ice cream is best?" Some people like vanilla. I usually go for Cherry Garcia, but tomorrow I may be in the mood for

chocolate. In other words, the best microphone is the one that sounds best on a particular instrument for a specific project and comes at a price you can afford.

That said, I will now list ten of my favorite microphones, all but one of which cost less than \$2,000 retail. This list is subjective, based on my experience as a recording engineer and a reviewer for **EM**. I regularly reach for each of these microphones from the collection of roughly 50 brands and models that are found in the Guerrilla Recording mic cabinet.

This list, originally compiled as a general post to the rec.audio.pro newsgroup, was intended to address some frequently asked questions, as well as to guide readers toward good all-around studio microphones. Of course, such lists are necessarily works in progress, because new products are released continually. It's quite possible that, of the many new microphones on the market that I have not worked with, some could well infiltrate these ranks and usurp a position or two. But at the same time, rest assured that most of the mics discussed here have withstood the test of time, and I expect that they will not lose their appeal anytime soon.

You will notice that certain "legendary" Neumann and AKG tube mics are not included here, nor will you find any mics that are particularly esoteric. The only reason for these omissions is



Two of the better values on the market, the Oktava MC 012 (center) and MK 219 (right) cover a lot of tonal ground. The MC 012 is modular, providing an in-line 10 dB attenuation pad and three interchangeable capsules (cardioid, hypercardioid, and omnidirectional). It comes with a shock mount, too (left).

that I haven't yet worked up the courage to pay more than \$2,000 for a single piece of gear. I like the more expensive toys, of course; I like to read about them, and I like to hear them used well on recordings. But I *love* great-sounding gear that I can actually afford to own.

Please note that I generally use these mics with class A or high-quality tube preamps, and I usually record to analog tape. Naturally, depending on the type of gear you use, the way you record, and your personal tastes, the results you get from these mics may differ from mine, or you may reach different conclusions. Also, note that the prices given here are the manufacturers' suggested retail prices for the U.S. market.

AKG C 414 B/ULS large-diaphragm, multiple-pattern condenser.

The smooth response, extended highs and lows, and versatile features of this mic—combined with its durability, market longevity, and accessible price—have made it a universal favorite. Sometimes it is too bright around 6 to 8 kHz, and after countless struggles with it on horns, I finally had the sense to give up and buy a Neumann U 87. But when you hear a good C 414, the airiness and transient response are outstanding. (As with many mics, the sound can vary from one unit to the next.) These days, I rely on the C 414 almost exclusively for bass amps, and I regularly pull it out for kick drum (in omni pattern and with the 10 dB pad engaged), percussion, and congas. Truly a classic and a great buy. Price: \$1,285

AKG C 3000 large-diaphragm, dual-pattern condenser. This is my long-standing nominee for best large-diaphragm condenser under \$300 (street price). I have used C 3000s extensively for live-to-DAT stereo recording, as well as in the studio for overheads on bright and loud drum kits, vocals, acoustic guitar, strings, and such. Many people have bought pairs on my recommendation, and all of them have been quite satis-



The AKG C3000 was always a great mic, but since AKG slashed its price in half a few years back, it has become an irresistible buy.

fied. The C 414 B/ULS offers more features and superior electronics, but the C 3000 has better internal shock mounting and seems to sound less "fizzy." Other than remarks about a little extra "edge" around 3 kHz, I have heard no complaints about this microphone. Price: \$438

Coles 4038 figure-8, ribbon.

I am a big fan of ribbon mics, and this one is my favorite for all-around use. A trombonist friend talked me into buying one after Steve Albini used it to record his horn. This mic is unbeatable for cello, violin, acoustic bass (unless you have an RCA 44BX), low brass, and drum-room ambience. It has tons of transparent lows, a slight 200 Hz boost, and an ultrasmooth upper midrange. I've never tried it as an overhead drum mic (a common application in the Beatles' heyday), but I have received uniformly pleasing results on bass, guitar, and organ amps; all kinds of saxes; and even some vocals. The 4038 may not be bright enough for some folks, and for those raised on digital recordings and crispy condensers, it may take some getting used to. (Note: This mic is typically carried only in pro audio stores. It is also available direct from Audio Engineering Associates and Independent Audio.) Price: \$1,195

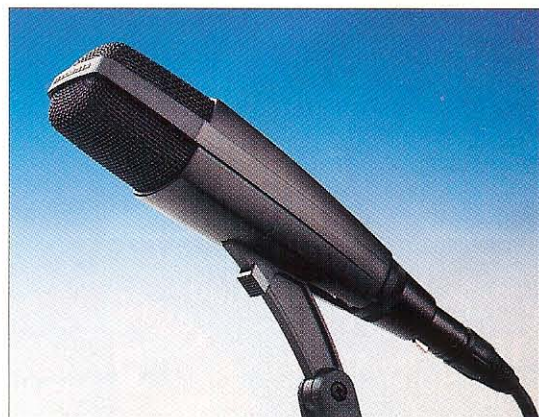
Lawson L47MP large-diaphragm, multiple-pattern tube condenser.

This mic is my first choice for any vocal, reed instrument, electric guitar, or organ overdub, and for any source that would benefit from the thick low mids, creamy highs, and richness that only a tube mic can deliver. The continuously variable pattern control (located on the power supply) is fun to use and gives amazingly varied results (which may delight or confound you). Fur-

thermore, vocalists always seem to give 110 percent when you put this "golden Goliath" in front of them. I'm constantly raving about the L47MP online, as are dozens of other satisfied customers. (See "Tube Mic Tête-à-Tête," in the February 1998 issue of *EM* for additional pluses and minuses.) Available direct from Lawson Microphones only. Price: \$1,995

Neumann U 87 large-diaphragm, multiple-pattern condenser. If I had to pick only one mic to use for the rest of my life, this would be it. The U 87 sounds good on everything, great on most things; it always delivers a big sound at any distance, with generous low end, lots of airiness, and minimal off-axis coloration. Many microphones have been modeled on the U 87's look and sound, but none offer the realistic, pleasing ambience of the real thing. Mine, which are late '70s models, are exceptionally smooth and full in the mids. My only negative comments are that the U 87 can make certain vocals sound too warm or muddy around 300 Hz, and in other applications the mic can sound a little "scratchy" due to its slight presence boost above 5 kHz. Price: \$2,725

Neumann TLM 193 large-diaphragm, cardioid condenser. This mic uses the smaller diameter capsule employed in the Neumann U 89 and TLM 170 mics and offers a more neutral sound than the U 87. Although some people find it overly dark or not "zippy" enough in the highs, I find its response at a distance of two to three feet to be very flattering. I like the unique quality it imparts to potentially harsh-sounding



Legendary as a tom mic but also great on kick drum, electric guitar, horns, and vocals, the now-discontinued Sennheiser MD 421 was recently superseded by the MD 421 II (shown).

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sources, as well as the transparent lows of its transformerless circuitry. The TLM 193 has given me excellent and distinctive results in a variety of applications: on vocals, sax (including the edgy Rova Sax Quartet), trumpet, and bass amps, as well as on scratchy-sounding sources such as certain "ethnic" stringed instruments, resonator guitar, and acoustic harmonica. Price: \$1,495

Oktava MC 012 *small-diaphragm condenser with interchangeable cardioid, hypercardioid, and omnidirectional cap-*

sules and in-line 10 dB attenuation pad. A great "bargain" mic, the MC 012 (with the cardioid capsule) is my overhead mic of choice. This mic, excellent on acoustic guitar and percussion, has also come in very handy for soft-spoken vocalists who can't cut through on a Neumann U 87 or Lawson L47MP. The MC 012 has all the highs and snappy transient response that small diaphragms are known for, and it exhibits a full low end. Be warned, however, that prominent mids around 800 Hz (again, with the cardioid capsule) can be a

problem when miking cymbals. (Note: Most stores do not carry this mic. Try Guitar Center or Oktava specialist Taylor Johnson [tjohnson@centuryinter.net], who also offers accessories, matched sets, and pretested mics.) Price: \$599.99

Sennheiser MD 421 *cardioid dynamic.* Comparison tests in my recording classes revealed this "workhorse" mic to be a winner on electric guitar, with just the right mix of lows, cutting power, and presence for any and all musical styles. With a tube mic preamp and careful placement, it just can't be beat (except maybe by the Lawson L47MP). The MD 421 also excels on jazz and rock kick drum, is legendary as a floor-tom mic, and produces a pleasing, musical tone on horns for live-sound work. The even midrange response, classic German engineering, and unique five-position low-cut switch make this mic much more than your average dynamic. (Note: There is a new version of the now discontinued MD 421—the MD 421 II. My remarks refer to the original, since I have not yet recorded with the MD 421 II.) Price: \$485 (MD 421 II)



**Vocalists tend
to give 110 percent
when confronted
by the
"golden Goliath."**

Sennheiser MD 441 *supercardioid dynamic.* This is a superb dynamic mic with a sweet tonal response that rivals that of many condensers. It can be a little too bright at times, with an abundance of 5 to 6 kHz presence, but it is never harsh. The MD 441 has worked particularly well for me on "live" session vocals, guitars (acoustic and electric), and brass. (It's wonderful on tuba.) My favorite application has been with highly produced, "in-your-face" male vocals. The ample proximity effect, linked with crisp highs and a midrange dip, delivers a huge, imposing sound when worked close, and the mic is especially resistant to popping. The MD 441 also features a five-position

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low-cut switch and another switch for boosting high frequencies. Price: \$895

Shure Beta 58A super-cardioid dynamic. A lot of vocalists love this mic, and I used to use it a lot. It is somewhat neglected around my studio these days, because I have acquired some higher-end mics that I prefer for most applications. But I still pull it out for snare drums, guitar amps, bright hi-hat cymbals, and "live" session vocals (for example, with a loud blues band in which all the musicians are recorded simultaneously in the same room). The Beta 58A is also very good to use on trumpet when the Coles 4038 or Lawson L47MP is too sensitive or dull sounding. Basically, the Beta 58A can fill in for a Sennheiser MD 441, offering a more pronounced midrange and less "fizz" on high-presence sources. It also makes for a nice change from the standard Shure SM57 on guitar amps (as does the original Beta 58 model). Price: \$332.50

HONORABLE MENTIONS

Electro-Voice RE20 large-diaphragm, cardioid dynamic. Another versatile and rich-sounding dynamic mic, the RE20 runs a close second to the Sennheiser MD 421 in my book. Price: \$655

Fen-Tone 500-C Dual Crystal omnidirectional crystal mic. This made-in-Japan high-impedance mic looks like a miniature RCA 77 and is really good at sounding really bad. Run through a tube direct box, it gives the best (and cheapest) vintage sound I've ever heard: no lows, no highs—just an instant ringer for that vintage 78 rpm sound. (Available used only. Keep an eye out at pawn shops and garage sales.)

Neumann TLM 103 large-diaphragm cardioid condenser. This no-frills newcomer made a very positive impression during testing for EM's September 1998 cardioid-condenser face-off, and some folks like it better than the Neumann U 87. It has extended low end, a hot output, and untouchably low self-noise



Designed by the BBC and renowned for its smooth sound, the Coles 4038 ribbon mic is just as useful today as it was when first introduced in the mid-1950s. Here, two 4038s are positioned on a stereo bar.

specs. The TLM 103 is surprisingly useful on difficult sources such as vocals, horns, and strings, and for the money, it's an outstanding mic. I always grumble, however, about the flimsy plastic stand mount (I've broken two so far) and the lack of a 10 dB pad. Fortunately, Neumann has promised a new, more durable stand mount. Price: \$995

Oktava MK 219 large-diaphragm, cardioid condenser. Another very useful and extremely affordable condenser mic, the MK 219 was best described by one reviewer as "an SM57 on steroids." The unique "vintage" frequency response is noticeably rolled off below 150 Hz and above 12 kHz, packing lots of hard-hitting midrange for vocal, snare-drum, and electric-guitar tracks. Price: \$599.99

Sennheiser MD 504 cardioid dynamic. This is an ideal tom mic, thanks to its small size, beefy construction, low price, and superb sound. It is also good on guitars and low brass. Price: \$169

Finally, I like just about any ribbon mic, including the **beyerdynamic M-130** and **M-160** (\$659 each), the new **Royer R-121** (\$995), the **Altec 639b** (not made since the 1950s and hard to find used), and practically all working models by RCA.

Happy miking!

Myles Boisen is a guitarist, producer, composer, teacher, and head engineer/instructor at *Guerrilla Recording* and *The Headless Buddha Mastering Lab* in Oakland, California. He can be reached at mylesboise@aol.com.