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SE Electronics SE1a mics: affordable instrument-miking power

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review

Sonic Distribution, a distributor of pro audio gear, originally in the UK and now also based in the USA, has recently purchased an ownership interest in SE Electronics, producing microphones in its Shanghai factory that range from the entry-level SE1a and SE2a condenser instrument mics all the way up to the Gemini (review forthcoming), a dual-tube, large-diameter side-address mic costing well over $1000. I had the opportunity to evaluate their basic instrument mic, the SE1a. The mics are available singly and as a stereo matched-pair kit; I reviewed the latter.

BY MATT SEILER

SE Electronics SE1a

A name new to the USA on an instrument mic that will turn heads

Openers

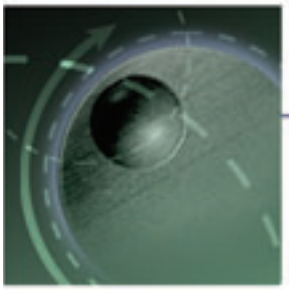
The SE1a kit includes a factory-matched pair of pencil-style cardioid mics done in a satin nickel finish. They come in a gorgeous cherry-stained and lacquered wooden box—sumptuous yet understated. Inside you'll find the two mics, a pair of plastic mic clips and an unusually cool dual mic bar.

Documentation in the case was light, with just a warranty card and individual frequency response plots for both mics. The 'generalized' plot for this model provided by SE (see page 20) reveals a gentle rise starting at about 150 Hz, ending at a 6 dB peak at about 12 kHz, with a 4–6 dB falloff by 20 kHz. The lower curve on the graph is the 90-degree off-axis response; it's a bit more peaky but well down in sensitivity, as noted in my tests.

The SE1a is capable of handling up to 137 dB SPL and reports a respectable 17 dBA of self-noise. The mics require phantom power from your board or from an external source, and output is such that I needed about 40% of the available gain of the mic preamps on my Mackie board to get a comfortable signal.

First course

The foot-long mic bar has two slots milled in it that allow the generously sized attachment lugs to each independently slide almost five inches left or right on the bar. The plastic clips grab ahold of the mics nicely and you can easily maneuver the mics for ORTF and coincident XY placement and anything in between. If you happen to have another dual-mic bar with removable attachment lugs you can snuggle them onto the SE's mic bar and have four mics all going on one bar at the same time. I ran this way for some of the A/B tests and it was very helpful.



Initial signal checking revealed that these mics are outrageously sensitive to wind noise. These are instrument mics, after all, and the front grille just isn't purpose-built to manhandle air turbulence. Even the slightest breeze woofs out the mic. It makes quality pop filters an absolute must if you're going up against wind instruments or pinch hitting with vocals.

Speaking around the mic to listen for the pickup pattern I found a deep null right at ninety degrees to the face of the capsule, and the rear pickup sensitivity was down somewhere about 10 dB. Careful spot placement yielded decent results in rejecting sounds from the sides and behind the mics.

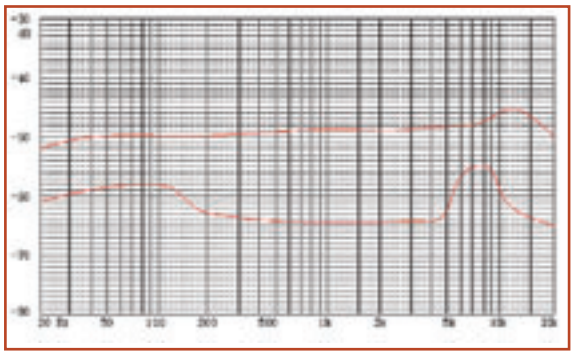
My first instrument test was to mike a nylon-string guitar with just one mic placed at the usual neck/body joint, at about eight inches away. That guitar isn't usually prone to being low-end heavy, but I had to pull down a lot of the SE1a's low end to manage the unexpected boom I heard at this pickup location. That's a little unexpected. Moving the mic around the body, I found a few alternative spots that nicely balanced out the frequencies without the need for eq, and none of them were my usual mic locations. Interesting.

On a well-balanced flat-top steel-string acoustic, using one SE1a at the neck/body joint, I got an even sound with a good presence peak in the upper midrange. No low-end problems this time. The mic nicely responded to the timbral changes you get by switching from heavy to paper-thin picks. This was a sound I could definitely work with on a tracking session. It was clean without being brittle, and reasonably detailed in the upper and lower registers.

Second course

Taking good advantage of that cool design of SE's mic bar, we ran the SE1as alongside a pair of Oktava MC012s and separately against a pair of AKG C1000s to see how they compared. I was able to get the SEs to sit on the provided attachment lugs, scooted in on the slots and then nestled side-by-side the second pair of mics that sat on a pair of robbed lugs. We ran this way with a coincident XY placement on both pairs. We recorded four parallel tracks at a time through an analog Mackie 8-Bus console and into a Mackie HDR 24/96, then A/B'd the stereo tracks to compare the sounds.

Our first stereo test was on a fourteen-inch diameter Remo djembe, with the mics positioned 24 inches away and about ten inches above the plane of the head. The Oktavas gave us more of a crack on the hand slaps and had a noticeably less coherent low end than the SE1a mics. Comparatively, the AKGs gave a very round low end, good slap, but were a bit thick sounding overall, definitely needing subtractive eq in the midrange to clean up the sound. The SE mics represented the low end well without overdoing it, were accurate in the midrange, and gave enough slap to cut through a mix but, again, didn't overdo it. I'd gladly reach for the SE1a for recording djembe again.



We then backed off the mics a few feet and ran the same test. This time we looked for imaging and stereo components on playback. Although it was subtle, the SEs did a better job of putting the Remo into a room than did the other two pairs. And when I summed the two sides to mono there was a much more dramatic collapse to a mono image with the SEs than with either the AKGs or the Oktavas. No phasing artifacts occurred with the SEs either. It was a clean shift from a hard L–R image to a focused phantom center image. That, my friends, is what a factory-matched pair gets you!

We then ran the three pairs of mics in front of clangy and clicky percussive things. On these short-burst and predominantly higher-frequency sounds the differences between the three brands of mics were really hard to detect.

As drum overheads on a rock kit and in a widely spaced XY arrangement the SEs were similar in sound to the Oktavas. But the telltale was, again, the better low end in the SE1as. That buttery low end made the SE1as sound seem smoother and friendlier than the Oktavas. And when compared to the AKG C1000s we went for the sound of the SE1a every time.

In front of an electric guitar cabinet the SEs captured an accurate, balanced sound that was fairly neutral, but lacked that in-yo-face attitude we generally like from a close microphone on guitar cabs. But as a room mic the SE1a worked quite comfortably.

Dessert

SE Electronics has an interestingly versatile design with the SE1a. You're not going to use it on vocals, to be sure, but as an instrument mic it can be rather nice. You'll want to pay attention to where and how it likes to pick up lower-frequency information and possibly readjust your pickup location to better suit this mic, but once that's sussed out it plays quite nicely in the sandbox.

It compares favorably to other mics right at its price point. At first listen the SE1a had a lot of aural similarities to the Oktava MC012, but if you're looking for a more extended low end, not to mention an eminently affordable factory-matched pair, the SEs are your ticket.

The provided dual mic bar was a lot friendlier than others I've used, and, with a little innovation and a good counterweight on the other end of the boom stand, you can get more mics on there than you might think.

As more products of this caliber hit the marketplace SE is going to help make the words "Made In China" mean a lot more than it has in recent years. Nice price, good performance, no regrets.

Prices: single mic $199; boxed stereo pair $449

More from: SE Electronics, dist. by Sonic Distribution USA, 27 Gilman Terrace, Suite 1, Somerville, MA 02145. 617/623-5581, fax 617/623-5857, www.sonic-distribution.com.

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Frequency plot courtesy SE Electronics.