



REVIEW

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Sontronics

DM-1B, DM-1S, and DM-1T Drum Microphones

...and a look at the STC-1 condenser mic, too!



The Sontronics DM Series is a collection of condenser microphones dedicated to drum recording. DM presumably stands for Drum Microphone, and the series is currently comprised of three models: the DM-1B kick drum mic, DM-1S snare mic, and DM-1T tom mic.

We have been looking at Sontronics microphones and preamps for a few years now and the DM series is a bit of a departure for the company. The mics are still designed in the UK and manufactured overseas. However, unlike the Orpheus and Sigma (reviewed June 2010) or the Halo (reviewed July 2013), all of which featured the company's "future retro" stylings such as bulbous head baskets, spring-suspended capsules, and art deco leanings, the new DM series are quite straightforward in the looks department with a nicely matching brushed finish.

The DM-1B ships with a foam-lined aluminum road case, and the DM-1S and DM-1T ship in a foam-lined cardboard box. Each mic comes with a screw-on drum mount as well as a mic clip, and they're all built to withstand the rigors of

percussive recording, including accidental stick hits and bumps.

Similar to the guitar-focused Halo mic, the DM models are task-specific and are laser-focused on recording the elements of a drum set. While they're designed to work hand in glove, the DM mics are sold separately and currently not sold as a kit. This allows you to purchase the correct number of mics tailored to your own needs.

Boom boom!

Let's start with the kick drum. The DM-1B is a cardioid condenser microphone with 20 Hz to 20 kHz frequency response, a 6mV/Pa - 45 dB ±1 dB sensitivity, a <200 ohm impedance, a maximum SPL of 155 dB and a self-noise of 14.0 dBA. Internally it has a 27mm diaphragm in a 32mm capsule, which is suspended in a rubberized internal shock mount.

Externally the DM-1B has a 5½" body (XLR jack to the top) with a 2¾" diameter. This mic does not ship with a mic clip or shock mount, because it comes attached to a large vintage-style yoke connected with set screws, allowing it to swivel and lock for easy placement. The DM-1B also features a recessed -15 dB pad switch.

Sonically it is a very full-range condenser mic that has not been overly scooped or pre-tailored in the mids for kick drum use like many dynamic kick mics. It also has a surprisingly crisp and airy top end. On the kick, this results in a very full even sound across the spectrum with a very big bottom end. It also grabs the upper beater hits well, and does not sound pinched or muffled on top.

If you are used to many of the pre-tuned kick mics on the market, the DM-1B may take a bit of getting used to. Any scooping, shaping and EQing will take place at the board or in the DAW. I used it on both a 20" and a 22" kick drum and it did well on each; the two words that stand out are "huge" and "natural."

I found it well suited to the sound hole of the kick, where it offered a nice balance of



hit and boom. The outside of the resonant head was my favorite use, yielding a vibey boom perfect for exaggerated and even vintage-flavored kick drum sounds, well-suited for many indie rock and alt folk styles. Up by the beater on the batter head, it was less suited to my tastes, as its high end and mids captured too much beater attack and sounded too "thwappy," for lack of a better description.

One thing I really appreciated was that unlike many condenser mics, when placed in the sound hole I did not experience any plosive overload caused by the air rushing out of the port. I am convinced that this is because unlike a typical large-diaphragm condenser, where the capsule is often only ¼" from the grille, the capsule in the DM-1B is set back about 1¼" from the grille, so the air gusts have a chance to dissipate a bit.

The DM-1B is a fantastic bass cabinet mic and here its full-spectrum condenser nature really shines. It captures the subsonic lows beautifully while grabbing the mid honk of the strings, but never sounds overhyped.

Having said that, this is not a multi-purpose condenser, and when trying it on other sources it just sounds (to put it bluntly) weird. Only here does it become apparent that there is some sonic tailoring going on for kick and bass sources. On things like vocals or guitar, its top end is slightly harsh and spitty and its midrange slightly pinched. All in all, that's OK... this isn't a vocal or guitar mic, it's a kick or bass mic, and at those tasks the DM-1B does a great job.

Thwack thwack!

Moving to the snare, the DM-1S is a small sized pencil condenser, 3 1/2" long by 7/8" wide, with a 30 Hz to 20 kHz response, an 8mV/Pa - 42 dB ±1 dB sensitivity, a <200 ohm impedance, a max SPL of 135 dB, and a Self-noise of 14.0 dBA. It has a 24mm capsule and a recessed -10 dB pad switch.

The DM-1S is the most sonically carved of the three mics and the most focused for its intended use. It has a very subdued low end in terms of proximity effect and boom. Its mids and highs are open and quite real, and it captures the crack and harmonics of the snare well, both over and under the drum.

For most rock players, I found it essential to engage the pad to avoid clipping. With the pad disengaged, it makes a

nice intimate mic for delicate stick and especially brush work, well suited to jazz and nuanced playing.

This is one of the most source-specific mics I have ever used. Beyond snare applications, I found only a few uses for it, such as on the head of a doumbek, where it highlighted the crack and finger work nicely.

Thud thud!

The tom-focused DM-1T is similar in every way to the DM-1S from looks to specs; you will need to look at its engraved model number to tell it apart. It differs tonally in that it opens the "faucet" a bit more on the low mids and lows, and also highlights the upper mids. This shaping makes it well suited to the hit, thud, and sustain of most toms.

It's still not a full-range pencil condenser like the Sontronics STC-1 (see the sidebar), but unlike the DM-1S it does have broader uses. The DM-1T works well on percussion such as congas, bongos, tabla, bodhrán, and the like.

The trio in use

Taken as a set, the DM series mics work together well. Unlike many dynamic drum mics, the Sontronics condensers tilt heavily toward openness and realism vs. focus and vibe. This is a strength if you have an impeccably-tuned drum kit and the music style is suited to realism and openness. The downside is that as cardioid condensers, all three mics pick up everything—resonance, ring, rattle, and the bleed of the other drums and the cymbals.

On classic R&B, minimal rock, jazz, and similar styles in a decent tracking room, this is not much of a problem. However, I did find it problematic in live situations, as well as on louder styles of music like punk, prog, and metal in the studio. Bleed—not only of the other drums, but the other instruments as well—was an issue, even when gating the signal, as the ambience change was noticeable.

On toms, the supplied mic mounts work great. They allow for a nice choice of angles to help balance the initial hit with the drum's tone. However, on the snare I found the clip awkward to place; it was necessary to use a regular mic stand or different clip mount, as the supplied mic clips are too high for the snare drum and could get in the way of the hi-hat and high tom.

Conclusion

These are well-built and useful mics that work well together. They are a tad style-specific, as mentioned, but really that's the hallmark of using cardioid condenser mics on a drum kit vs. dynamic mics. If you can only afford one of the trio to begin with, go for the DM-1B. It's great for huge natural kick tones with a nice sound of its own, and it's also killer on bass cabinet. ➤

Prices: DM-1B, \$399; DM-1S and DM-1T, \$175 each

More from: Sontronics, www.sontronics.com. Dist. in North America by Pro Audio Distribution, www.proaudiodistribution.com.

Overheads and more: the Sontronics STC-1



Although it's not a drum mic per se, and an older model in the Sontronics mic locker, the company also sent me three of its STC-1 pencil condensers. I received the STC-1S matched stereo kit (\$449), in a wooden "cigar box" case complete with mic clips, windscreens, and a stereo bar. The third STC-1 (\$199) came with clip, windscreen, and an additional, interchangeable hypercardioid capsule (\$69).

The STC-1 is a beautifully-made mic, available in an elegant matte black/brass color scheme as well as an optional chrome and black. It has a great weight and impressive build quality. It is 6 1/4" long by 7/8" wide and offers a 3-position pad of 0, -10, or -20 dB, and a 3-position lowcut filter with off / 75 Hz / 150 Hz settings. It's a transformerless

class A design with a 25 Hz to 20 kHz frequency response, a 12mV/Pa - 36 dB ±2 dB sensitivity, a <200 ohm impedance, a max SPL of 137 dB, and a self-noise of 16.0 dBA. It is fairly smooth across the mids, with a slight 300 Hz dip and a healthy 18 kHz rise on the top.

I put the cardioids to use on overheads, both in XY and spaced-pair configurations, and used the hypercardioid STC-1 for the hi-hat, before trying them on other sources as well. I found it a very open, clear, and modern condenser that works well on overheads as well as backing vocals, choirs, strings, acoustic guitar, and percussion. It's a tad too sibilant for distorted electric guitar, but that was really the only source I would hesitate to use it on.

I was really impressed with this mic overall, especially when one considers its price. I compared the cardioid STC-1 to a few other pencil condensers in a similar price range; it was the most open and bright, with a nice full low end that offered a very dimensional sound. These were the brightest pencil condensers in my little roundup, but they are not spitty or harsh at all. The hypercardioid capsule was by nature both narrow in regard to rejection and also more "narrow" in tone, but this made it a very nice focused and mid-forward hi-hat mic.

I really liked the STC-1, especially as an XY pair using the stereo bar on acoustic guitar, where it offered a nice natural clarity. I don't say this often, but you would need to move up quite a bit on the price ladder to find a pencil condenser nicer than the STC-1 in this class. —PV