

MILAB BDM-01

A kick drum mic for all occasions, surely not?

Text: Michael Carpenter



▶ ‘Dedicated’ bass drum microphones; there’s a lot of them on the market. Many of these, however, are dedicated to little more than a tolerance for high SPL. The bass drum is a complex instrument to record or amplify through a PA. A mic that’s truly dedicated to this role needs to offer more than just the ability to endure an SPL barrage, though it’s a good start. There are already several established microphone standards and mic placements that perform this task well, so when a microphone manufacturer brings out a dedicated bass drum microphone, and a condenser at that, this reviewer reacts with a combination of off-hand bemusement and curiosity. The question is, ‘Does the world need another bass drum mic?’

Whether you’re in a recording session or on stage, the cardioid-pattern Milab BDM-01 is aimed specifically at the bass drum (literally). The mic is hand built in Sweden and aims to provide “superb attack and high-frequency response, especially when compared to dynamic capsules, which are found in most bass drum microphones.” Let’s see then shall we?

PURPOSE BUILT

The BDM-01 is designed to endure the SPL of a bass drum regardless of where you place the capsule. Its maximum SPL rating (at 1kHz) is a published 155dB “without audible distortion” (or 1%) – more than enough to cope with even the most leaden foot. The dynamic range and frequency response have been purpose built to accommodate and withstand the tone and force of a bass drum and other bass instruments, and to that end the mic provides a classy tone with an enhanced response around 5 and 8kHz. It also has an effective internal pop filter to help prevent damage to the condenser capsule.

So, what does this microphone offer over and above what so many others already do so well? The only way to find out was to start shoving it in, outside and way out front of a variety of bass drums. The project I was working on at the time of the mic’s arrival was a stylised ’70s R&B project. For this we removed the front head from our authentic ’70s Vistalite bass drum, and shoved lots of pillows into the drum to completely deaden the instrument. With the mic halfway inside the drum pointing slightly off centre, the first thing that struck me about the Milab was the detail it provided the recorded sound. Not only did it have more bottom end than I’d expected from a ‘dead’ drum, the top end wasn’t just cicky and defined, there was something elegantly complete about the tone – perhaps this was the sound of the condenser immediately shining through. Being recorded flat and uncompressed through a Neve 1272 preamp, the sound seemed surprisingly finished, as if EQ and compression had already been applied. Furthermore,

even after subsequent overdubbing on the tracks, the kick drum remained completely untouched and still had a special tone that was easy to place in the mix. A surprisingly good start.

I SHOULD BE SO LUCKY

Assuming the sound we’d pulled from this atypical ’70s kick drum was tantamount to beginner’s luck, the next test was to pull out a rather imposing Yamaha 24-inch kick that contained very little dampening and two almost full heads – the front skin had a small hole to allow for an internal mic. Placing the mic inside the hole and aiming it about halfway between the centre of the drum and the shell, the big open tone of the Yamaha drum was captured beautifully. Again, the Milab provided tons of detail in the sound. With the Yamaha 24-inch in particular, the bottom end can sometimes be overwhelming, but even in this position the BDM-01 captured a remarkably defined, true and *deep* tone, with plenty of highly desirable character in the high mids. Moving the mic to about an inch outside the front head provided different tonal results that were equally impressive – huge bottom end that wasn’t just ‘woofy’ or ‘deep’, but beautifully representative of the tone of the drum. Lastly, I moved the mic about two feet away, a place usually reserved for a large diaphragm condenser. This provided a significant tonal change. Apart from sounding more distant, there was actually more top-end definition, and though the immediate bottom end dissipated somewhat, there was an excellent ambient depth to the sound that was very appealing. So much so that I made sure I sampled it for the next time I needed to add a little more ‘Bonham’ to a recorded bass drum!

Aiming to befuddle the microphone with a tone it didn’t like, I dampened down the drum with a few towels, just to take the ‘flap’ out of it, and get a more typical rock tone. The Milab behaved as if very little had changed, delivering the same excellent tone from the drum. In fact, the result stayed consistent with both a wide open and more contained 18-inch kick, and the monster: a 26-inch bass drum with full heads and minimal padding. In a nutshell, as far as bass drums were concerned, the BDM-01 managed to deliver in spades with every scenario I threw at it. I was very impressed.

MORE THAN THIS?

Retailing at \$1377, the Milab BDM-01 is obviously significantly more expensive than its established competitors. To gauge its value I was keen to try it out on a few other things besides bass drums.

On a bass guitar cabinet the mic was very refined sounding, certainly not as throaty as a dynamic. It was almost a little too DI like, if you can believe that. Not a bad thing perhaps, but maybe not what you’re

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after when miking a bass amp. It was fantastic on the bottom of a Leslie speaker, translating the depth and growl beautifully, and the pop filter helped keep the flapping of my noisy Leslie in check. I was keen to try it on a guitar amp too, and here again it was good, but this is where the tonal shaping of the mic started to run slightly off course. On one amp in particular it was a little *too* detailed in the bottom end, but contrarily, the in-built EQ curve really enhanced the throatiness of a Vox AC30. Even as a tom mic it was beautiful. Oktava MK012s have been immovable from my toms for years now, but these things translated all of my open toms superbly, with great bottom end and exquisite stick detail. Lastly, I thought I’d sing into the mic a little, and – surprise, surprise – the sound was impressive. Not as complete as a studio vocal condenser, but good enough to spark my curiosity about Milab’s other stage vocal mics. If it was the only mic you had for vocals, you could certainly make it work without too much trouble – the built-in high-mid peak wasn’t as troublesome as I’d expected, and the pop filter was quite effective against plosives. (I should also add that, though slightly smaller than a typical stage vocal mic, the rubberised casing felt excellent in the hand.)

BIG BOTTOMS

So... wow! Once upon a time I was quite happy with the results I got just shoving a D112 into the hole of my bass drums, pointing arbitrarily somewhere near the beater. Then at some point, I felt I needed more, so I moved the D112 to the outside head, and would use something like an SM57 or M88 for the detailed ‘click’. The Milab BDM-01 would seem to do a better job than any, or maybe even *all*, of these combinations. Though a lot more expensive than what we’re used to paying, there wasn’t much I could throw at this mic that it didn’t deliver on. Plus, it feels solid and robust – almost bulletproof, which, for a condenser, is a great thing. That would make it a pretty good investment for any studio I’d expect. And as a live bass drum mic, the ease of use and quality of sound would be a lifesaver in most situations. Whether that’s enough to make you change whatever currently works for you is entirely your decision, but it’s certainly given me a lot to think about! ■

NEED TO KNOW

Price
\$1377

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Pros
Excellent detailed sound.
EQ curves enhance bass instruments perfectly.
Versatile.
Robust.

Cons
More expensive than many other bass drum mics.

Summary
Dedicated bass drum mics are relatively commonplace nowadays, but there’s nothing common about the BDM-01. Refined and detailed sounding, this newest addition to the Milab range is an impressive addition to the Swedish stable.