

PreSonus Studio One 2.0 — The Best DAW For You?

RECORDING

The magazine for the recording musician

Soundware In Your Studio



Bring your tracks to life
Notation software — an orchestra on your desk
Great tips for drum tracks, piano charts, and more



Magnificent mics from Milab and Sennheiser

JUNE 2012
USA \$5.99
CANADA \$5.99
VOL. TWENTY FIVE
NUMBER NINE
\$5.99US \$5.99CAN
06
09281030508

26 audio products reviewed!

Applied Acoustics Systems • audiobro • Best Service • Camel Audio • Detunized
GForce • Ilya Efimov • MOTU • Sample Magic • Steven Slate Drums • Toontrack



BY PAUL VNUK JR.

Swedish microphone manufacturer Milab's roots lie in the designs of Rune Rosander and his original company Pearl Microphone Laboratories, founded in 1941. In 1978 PML was split into two companies, the second one dubbed simply Microphone Laboratories, or Milab for short, and helmed by his son Hans.

Milab retained many of Rune's classic designs, and the microphones we are looking at here are direct descendants of the Pearl DC-96 that was introduced in 1967.

The first of the pair, the DC-96B, is the current production model of the older DC-96, making it a vintage mic still in production 45 years later! The second mic is the new DC-96C, a transformerless design with an updated capsule and improved specs.

Unique and rectangular

The DC-96 mics have always had a rectangular capsule originally designed by Rune in the 1950s and known as the 2700. Aside from Milab, Pearl Labs also continues to use rectangular capsules.

Milab

DC-96B & DC-96C Condenser Microphones

These Swedish mics offer unusual design and impeccable sound

Why rectangular? For a thorough disertation check out milabmic.com, but in simple terms, the stated benefits include dispersion of the extreme midrange resonance peaks inherent in circular capsules, and an exceptionally neutral off-axis response. Further, it is said to have the added benefit that the horizontal (shorter) plane of the capsule has a larger pickup pattern than the vertical, allowing for better control of rejection and bleed based on mic position.

Body, build and kit

At a height of 1 1/2" the capsule is a hair bigger than your average large-diaphragm capsule; however, its 1/2" width allows it to reside in a side-address body that is only marginally bigger than a typical end-address pencil condenser.



specs include: Sensitivity of 6 mV/Pa (± 1 dB @1 kHz); Max SPL of 122 dB (1% THD @1kHz); and a 19 dBA noise level.

The transformerless DC-96C comes with a 2900 capsule, an updated version of the old 2700 capsule, with improved specs and noise floor. It includes a 12 dB pad switch on the side. Its specs include: Sensitivity of 21.5 mV/Pa (± 1 dB @1 kHz); Max SPL of 132 dB (1% THD at 1 kHz, 144 dB with pad); and a 12 dBA noise level.

Similar sounds

The DC-96B is virtually ruler flat from 1.5 kHz on down, with a slight bump from about 5-15 kHz.

The DC-96C has an ever so slight boost in the low end from around 60 Hz on down, and a slightly less pronounced high end than the DC-96B. The DC-96C is also a few dB hotter in signal, so the pad was a great idea.

The sonic difference between the two when A/B'd side by side is: the DC-96B has a solid evenly weighted sound with a nice forward, smooth top end. The DC-96C sounds virtually identical to its sibling, but when you switch back and forth between the two, the C's low end blooms a tad, and the midrange opens up and gives the illusion of added clarity and depth. Since the frequency plots of both mics are quite similar, with the DC-96B

The membrane is sprayed with aluminum rather than the more usual gold sputter, and is housed in a specialized internal rubber shock mount behind a single-layer mesh grille.

Both mics come in the same two-piece, ultra-thick brass body. They look alike in a matte black finish with white logo and lettering, a robust build with a Boutique-Euro look. They are just a hair shy of 5 1/2" high and just over 1" in diameter, which makes them easy to fit where most large-diaphragm mics cannot go. Each mic comes as part of a kit with a mic clip and a windscreen, and a mic-specific custom frequency plot.

Specs

Both DC-96 models have a double-sided cardioid capsule with a 20 Hz to 20 kHz frequency response. DC-96B

being a touch more pronounced in the high end, this is slightly surprising, but is most likely due to the DC-96C not having a transformer. It's not like removing a pillow from the sound, but more like the room around the source becomes more noticeable.

Overall both models can be described as neutral and natural rather than thick and vibey, and yet the DC-96B does have what I would call a nice classic rounding to its top end.

In use

This is one of those rare reviews where I can start by saying that these mics will work on anything... period. They are not clones of a U87, but since they are similarly versatile I would use these mics on any source where you might naturally think to throw up a U87.

As far as comparisons to my own mic closet go, I would say that the DC-96C reminded me a lot of my Brauner Phantom and gave it a run for its money, and that is not a statement I make often. These are both workhorse mics of the highest order, but due to their sonic differences there are areas where one may be better suited to a source than the other.

For drum overheads, for pure clarity and detail, I would choose the DC-96C, and as such I loved it as a ride mic. For the most part, however, I preferred the DC-96B for general overhead duties; it was clear and honest, but still had that nice rounding and smooth mids I mentioned above. The DC-96B is one of the most balanced overhead or, better yet, mono front-of-kit mics I have heard, and gave me one of the rare times I will say "needed little to no eq" when mixed in with the rest of the drum mics.

The DC-96B is an awesome snare mic as well, capturing less of a mid punch than the usual SM57 but more crack and overall fullness. In a jazz situation, with a lighter, more nuanced player, the DC-96C is also a good snare mic choice, especially when you have a drummer who plays to and with the sound of the drum. The two mics really make a killer combo with the DC-96B on top and the DC-96C grabbing the underside snare rattle.

On acoustic instruments, both mics excel. On acoustic guitar the DC-96B is tad more midrangy and woody, while the DC-96C is just a touch more suited to string definition, and here it's really nice when you want to highlight the room and space around the guitar as well.

On violin, with a nice instrument and a great player, about 1 foot from the f-hole is where I really felt the DC-96C gave my Phantom a run for its money, with great clarity and detail, while ignoring too much woof on the body. It worked similarly well as a single mic in the middle and in front of a string trio, with 2 violins and a cello.

Moving to vocals, starting with a female soprano, here I could go either way as it is more an issue of taste. The DC-96B was

more solid, while the DC-96C had a nice airy intimacy, its only detriment (and something we don't often think about) being that if mouth noises like spittle-clicks are an issue, choose the smoother response of the DC-96B.

On electric guitar they both worked well together. I placed the DC-96B on axis about 1" from the grill of a 12" Mesa Boogie cabinet next to a standard SM-7, and placed the DC-96C about 4' back as a distance mic. Once blended into the mix it yielded a huge yet open and detailed blues rock tone.

I also evaluated both mics on mandolin, shaker, tambourine, and a set of congas, and for each it was a tossup depending on where I wanted things to sit in the mix and musical style. Ultimately it always came down to where I needed the high-end to sit. For more natural and smooth I chose the DC-96B; for more detailed and open the DC-96C, whose slight low bump didn't hurt either.

Conclusions

I had heard of Milab and was glad to finally get my hands on some of their mics. There are a lot of great mics out there, and as a reviewer I have had the opportunity to play with a lot of them over the years. Every now and then a mic crosses my path that really turns my head and frankly blows me away. The DC-96B and C are just such mics... just scary good on everything.

They're alike in many ways but with subtle differences that make it impossible to choose a favorite... At first I think the DC-96B wins, but maybe I am romanticizing its vintage classic touch... ah, heck, I'm sure I am, but as soon as I say that I second-guess myself that maybe it's better to have the extra clarity of the DC-96C... darn it, go try them yourself! ➡

Prices: DC-96B and DC-96C, \$1470.95 each (MAP)

More from: Milab, www.milabmic.com