

→ **A Killer Mic Preamp** For Five Bucks—Can You Really Build One?

RECORDING

The magazine for the recording musician®

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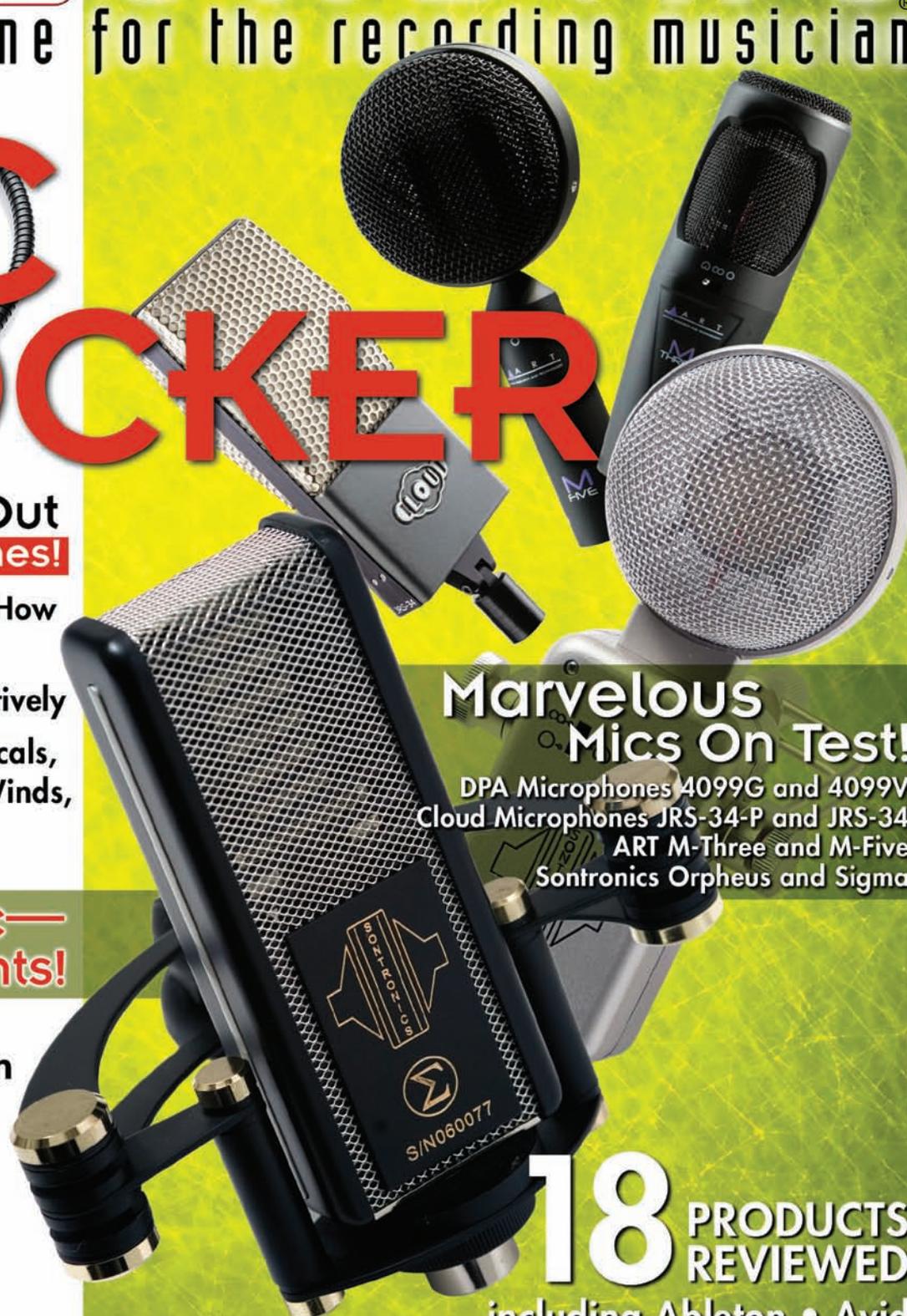


Marvelous Mics On Test!

DPA Microphones 4099G and 4099V
Cloud Microphones JRS-34-P and JRS-34
ART M-Three and M-Five
Sontronics Orpheus and Sigma

18 PRODUCTS REVIEWED

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REVIEW

BY PAUL VNUK JR.

Sontronics Orpheus and Sigma microphones

A maker we'd like to know better, and two mics we're glad to have in our locker

visual style to mics on offer by companies such as Violet Design and a few others, Sontronics mics look more like a rare antique-store find.

Unlike some less stellar Chinese mics, the Sontronics mics I was sent had an outstanding fit and finish; nothing was loose, thrown together or half-done. They have a healthy weight to them and a very European quality.

figure-8 patterns. It has a 1.07" dual-diaphragm capsule that is shock-mounted internally, inside of an abnormally large head basket that, according to Sontronics, helps add clarity by reducing internal reflections.

This almost spherical silver grill measures about 3" x 3.5" and rests lollipop-style on top of a champagne-sparkle, rectangular Zinc alloy body (2.5" x 4.25" x 2"). The Zinc alloy helps reduce body resonances.

This body rests in a vintage-style swing mount, reminiscent of a 1920s desktop mic, that attaches to your mic stand. Since the capsule is internally suspended, no shock mount is included (or available) with this design.

On the front of the mic are two switches, one for pattern selection, the other a pad/boost switch. Unlike most mics with just a 10 dB pad, Orpheus also has the option of a 10 dB boost.

The XLR input is located on the back of the mic, and while in some positions it may limit the throw of the swing mount, when used as a drum overhead, it actually reduces mic strain and aids in positioning.

Orpheus is listed as having a 20 Hz–20 kHz frequency response with a healthy 10 kHz presence peak and a low-end bump between 80 Hz down to about 40 Hz. It is listed as having a sensitivity of 20m V/Pa –34 dB ±2 dB (0 dB=1 V/Pa 1000 Hz), an impedance of ≤200 Ohms, a 16 dB (A-weighted) equivalent noise level and a max SPL of 125 dB.

The song of Orpheus

Sonically Orpheus falls into the modern/bright category, but rather than being piercing or harsh, it's best described as open and wide, with the low bump as mentioned. I tried it on acoustic guitar, vocals, voiceover, trumpet, amplifier, drum overhead, and room mic applications.

Orpheus was very well suited to acoustic guitar. It accommodates the low fullness of the body without being mushy or overbearing and does a great job of

For this review I was sent the multi-pattern, solid-state Orpheus condenser and the phantom-powered Sigma active ribbon mic. These mics are on opposite sides of the sonic spectrum and could not be more different.

Orpheus

Orpheus is a FET-based multi-pattern condenser microphone with cardioid, omni and



We at *Recording* have been curious about Sontronics microphones for a few years now, but their distribution in the US was somewhat limited; luckily that all changed a few months ago with new distributorship and I was excited to finally get my hands on a couple of their designs.

Launched in 2005 by Trevor Coley, Sontronics is a UK-based company that offers British-developed and -designed, Chinese-made microphones, and preamps made in Europe. The mic lineup includes the full range of styles and sizes from tube to FET to ribbon and more. Another "me too" line in an ocean of imports? A quick look around their website may change your mind.

Distinct and solid

This line of mics has a distinctive faux vintage look. I don't mean microphones trying to look like famous vintage models; rather, an interesting "Art Deco meets 1920s RKO meets black and white sci-fi fantasy vibe". While in a way similar in

highlighting the picking and strumming without sounding brittle.

Like many microphones of this variety its success on vocals is very singer dependent, and I preferred it on a softer folksy female voice to hard rock male vocal duties. Orpheus also works well on voiceover work.

It was not to my taste on close-up guitar cabinet, but did do a nice job when moved about 3–6' back from the cabinet in a 3-mic set up, where it added an airy depth and space to the sound.

But where Orpheus really shines in my opinion is in omni mode, either on drum overheads or as a room mic. The 10 dB boost allows you to move farther away from the source than normal for an even more spacious sound, all without raising the microphone's noise floor.

While I did try Orpheus on trumpet, I just did not find it well suited to the task; of course that probably has a lot to do with the fact that I was doing a side-by-side comparison to the second microphone in this review...

Sigma

The Sigma is an active ribbon microphone with a fixed figure-8 pattern (typical for ribbons). An onboard phantom-powered active head amp gives a ribbon microphone two advantages: it lessens the need for a clean high-output mic pre-amp, and aids in consistent performance between different mic pre-amps by making it less prone to impedance-matching issues. While phantom powered active electronics are becoming more popular in ribbon mics, they're still not all that common, especially considering the glut of import ribbons littering the market.

By itself the 2.25" x 5.80" x 1" rectangular Sigma looks classy, wrapped in a silver mesh screen between two black celluloid-looking plastic end caps and a large Sontronics logo. It looks like a 60-year-old relic in mint condition. If that wasn't enough, its double-braced half-moon shock mount looks like a cross between modern art and a prop from a Batman movie.

The Sigma features a manufacturer-specified frequency response of 20 Hz–15 kHz that is fairly smooth and even across the board and then rolls off around 4 kHz; it also sports an ever-so-slight bass bump starting around 90 Hz. It comes listed with a sensitivity of 12 mV/Pa –38 dB ±1 dB (0 dB=1 V/Pa 1000 Hz), an impedance of ≤150 Ohms, a 14 dB (A-Weighted) equivalent noise level and a maximum SPL of 135 dB.

Sounds of the Sigma

As you can see from the frequency response graph and the specs, this is one smooth and dark microphone. I can't and

won't tell you that the Sigma sounds like a vintage this or that, but in my opinion it gives the illusion of what we in 2010 think a 1940s ribbon should sound like. Sigma is dark and smoky with a sound that hangs in the air in the most beautiful of ways.

The Sigma is the antithesis of many of its ribbon-mic competitors that have been edging toward a more midrange, open modern sound. The Sigma has a thicker, slower quality to it. While many large-diaphragm mics have been trending toward the smoother dark side in the past few years, they still cannot come close to the sound of a ribbon mic.

In sessions I tried the Sigma on pretty much the same selection as I did the Orpheus, with the addition of saxophone and flute.

Since I ended that review talking about trumpet, that's where I will start with the

muddy. (Sontronics makes a mic called the Delta that I didn't get to test; it's a ribbon like the Sigma, but ruggedized and frequency-tweaked for use on sources like guitar cabs.)

Also, while the Sigma is not my favorite standalone acoustic guitar microphone, it works well when blended with other microphones. Elsewhere in this issue you will find my review of a clip-on acoustic guitar mic by DPA. In one session I combined that mic in the 12th-fret position, the Sigma about 6" out of the sound hole, and the Orpheus a few feet back with its 10 dB boost on, and got an obscenely huge and full acoustic sound that I could have not achieved with any one of them on their own.

For drums, again the Sigma tilts heavily toward the vintage and not as suited to modern overhead work, but it works great on toms—especially in conjunction with the Orpheus handling overhead duties.

The Sigma makes a really cool room mic, and because it is active, you can really slam it with compression without worrying much about noise floor issues.

Vocals are another subjective area with the Sigma; some will love its fullness, beauty and warmth while others, used to slicing a vocal through the mix, may find it way too dark for their tastes. This also applied to voiceover work.

However, one thing to keep in mind is that Sigma, like many ribbons, takes eq very well. It is easy to shelf some lows and add back some high end all while retaining the mic's smoothness.

Sontronics summary

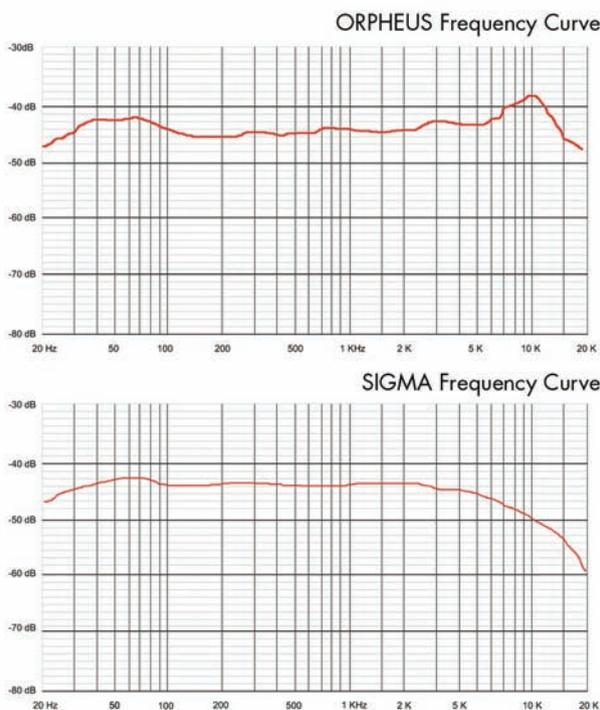
I am happily surprised and quite impressed by these microphones. Their prices don't place them at the beginner end of the market, nor are they at the boutique level. Both microphones sound as good as they look.

If you need a multi-pattern microphone that will tackle most sources with openness and ease, all while being a great conversation piece, then the Orpheus may be just what you are looking for. And if you need instant classic vintage in a bottle, with a unique sound I have heard in no other current ribbon mic, then the Sigma is for you. Check them out. ➔

Prices: Orpheus, \$639; Sigma, \$839

More from: Sontronics, www.sontronics.com; dist. in USA by FDW Worldwide, www.fdw-w.com.

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Sigma. I tried it on solo trumpet as well as an orchestral trumpet section and it was simply gorgeous. Big and full, yet with a warmth that sat nicely in the mix. Think of an old '40s and '50s big-band record and you won't be far off.

I had similar feelings when using it on saxophone and flute. It shaves off most of the tones that can make brass and wind instruments seem strident in a mix, but leaves them full and punchy. If you record brass and winds of any kind this mic will do well for you.

After that the Sigma gets a bit more subjective in its use. Oddly enough, the one area where modern ribbons have become the most popular—stuck right in the grille of a guitar cabinet—is one where the Sigma is in my opinion not well suited. Without the midrange push present in so many of those mics the Sigma's sound was a touch too