



REVIEW

BY PAUL VNUK JR.

Sonic Farm

Silkworm 500 Series Mic Preamp

Tweakable tonal response gives this 500 Series pre extra flexibility



We first met Boris Drazic and Zoran Todorovic of Canadian audio firm Sonic Farm in our July 2013 issue, when we looked at the 2D14 tube direct box and I noted Sonic Farm's iconoclastic design philosophy. In a nutshell: As long as the end result sounds right to their ears, they don't care if it takes tubes, transistors, IC chips, or op amps to get there—these guys will do whatever it takes to get the right tone. They are also unconcerned with recreating classic gear of yesteryear, so you'll find no clones or copies on this Farm.

Sonic Farm products are all about tonal choices and versatility. The company's flagship device, the Creamer, offers multiple flavors of solid-state and tube tones in one box, their Creamliner tube line conditioner offers a choice of pentode or triode modes, and a similar design was used in the 2D14. The Silkworm preamp keeps this tradition going, giving you multiple flavors of sonic coloration; it's Sonic Farm's first all-solid-state product, and its first 500 Series module.

Look and feel, fit and finish

The Silkworm is a single-channel 500 Series microphone preamp/instrument DI. It is well built from top to bottom and is one of the heavier 500 Series modules I have ever used. This is due to there being a pair of large transformers inside its enclosure.

The Silkworm features all-metal construction and is clothed in the same red and black enamel finish as the rest of the Sonic Farm line, with white lettering and accents. Its large white Gain knob has a nice balance of glide and resistance and its toggle switches are similarly solid and firm.

The Silkworm is fully enclosed on all sides, which is how I wish all 500 Series devices were built. A full casing makes it so much easier to seat in your 500 Series rack (in my case, it's the Radial Engineering Workhorse that I use for most reviews), and it keeps internal components from getting bent or bumped when doing so.

The signal path and some specs

The Silkworm uses a fully discrete op amp gain stage; there are no capacitors anywhere in its all-DC signal path; Sonic Farm says this results in a natural low end free of phase shifts, "something no tube pre-amp can do." It also makes use of servo control for minimal DC offset. Its signal path starts with a low-distortion Cinemag transformer input stage, and then offers a choice of output stages. You can choose between a second Cinemag Fe output transformer or a balanced IC-based output stage. Additionally, the Silkworm offers multiple character voicings as well; we'll talk about the Vibe switch in a moment.

The Silkworm's maximum microphone gain is 66 dB while its instrument input offers up to 42 dB. Its maximum output level is 28.7 dBu. Further tech specs include gain stage THD under 0.0005% at 1kHz, minimum output load of 600 ohms. See the Sonic Farm website for detailed Total Harmonic Distortion figures as a function of frequency for the input and output transformers.

Controls and features explained

The Silkworm's Gain knob trims the input signal with respect to the initial level set by a 3-position toggle switch marked H (high), M (medium) and L (low). The unit is equipped with a single bi-color LED which glows from green to red to indicate signal and clipping.

There are two columns of toggle controls down the front of the unit. The left column has the aforementioned Level switch, in between two switches marked SS/OT and Vibe. The SS/OT switch chooses the output stage signal path, either IC only (SS stands for "solid state", a bit of a misnomer since the Silkworm has no tubes anyway) or with the output transformer in place (OT). The Vibe switch uses changing capacitance and resistance to alter the sonic character of the source. The switch is cryptically labeled S, P and W. The P setting stands for Presence, and is essentially the Silkworm's most neutral, flat frequency response. S stands for Smooth; as its name implies, it offers a

round rolled off top end. The last choice is W, which stands for Warped; it opens up the top end slightly with an 8–10 kHz boost.

The right column of controls includes more mic preamp standard fare such as 48V phantom power, phase (polarity), and a mic/instrument switch that selects between microphone input and a 1/4" instrument input on the front panel. Also on this side is a 15 dB pad switch; while pads are usually nothing to write home about, this one is not only pre-input transformer but it also lowers the microphone impedance as well.

In use

I put the Silkworm to work immediately at the start of two new recording projects, both primarily acoustic in nature. The first was a world-music influenced version of the Proclaimers song "500 Miles (I Wanna Be)". Other than the multi-miked group backing vocals, I tracked the whole song entirely through the Silkworm, one solo instrument at a time. I instantly favored the forward push of the W setting coupled with the OT output setting, and that is where it stayed for the whole song. Instruments tracked included multiple acoustic guitars, lead vocals, three separate Irish bodhrans, and a kick drum. The results were full and solid, and the Silkworm did well to capture the raucous nature of the track.

The next Silkworm session was a young female singer/songwriter with a Martin acoustic guitar played as she sang. For her vocal, I stayed with the OT output setting but this time put the Vibe switch in P mode. I used the Silkworm with a Pearlman TM-47 mic (also reviewed in this issue) and was very pleased with the weighty and sonically pleasant nature of the recording.

I did try the S setting for both sessions and found it a tad too rolled off for my tastes. I later found this setting useful on shrill sources or for imparting a purposeful dark vibe to a track.

Sounds like?

I find this a hard mic preamp to pigeon-hole as sounding like this pre or that pre. On its website, Sonic Farm mentions a similarity to a Neve 1073LB, but since I don't have one on hand to compare it with, I won't go out on a limb and corroborate that claim. I do have a Great River MP500NV mic preamp in my collection, which is known to hint at a Neve flavor, and I can say that these two preamps did share sonic similarities. Overall I would easily put the Silkworm in the classic console mic pre category with a solid forward feel.

Even though it has the option of a transformerless output, thanks to its transformerless input it still has weight and character. Some say that switching off the transformer output gives the Silkworm the sound of a completely clean "wire with gain" preamp as you would expect from

firms like Millennia Media, GML, or Grace Design, but as a longtime Millennia owner I hear—and like!—the difference.

Removing the transformer in the output stage widens the sonic spectrum by a hair and subdues the weight of the mids while giving a touch more openness to the lows. As such, it is similar to designs by Daking and Focusrite, putting it in great company.



Conclusions

If I have any small complaint at all about the Silkworm, it would be with how its Vibe and output staging controls are labeled. I mentioned how odd it is to have a "Solid State" setting on a device with no tubes. In addition, on the Vibe control, S is indeed Smooth, but the neutral setting should be called that, not Presence, which makes one think of enhanced highs and high mids. For that tonal response, instead we have "Warped", which implies distortion or other strangeness that isn't there. [Zoran Todorovic agrees. The original design had a "Warm" setting; early test users asked that it be tweaked to the current sound, but the front panels were already made... so the Sonic Farm folks just changed what "W" meant.—Ed.]

That quibble aside, what I like most about the Silkworm is that it retains its base sonic signature, while the output and Vibe switches offer great variations on a theme rather than trying to be two or three mic preamps in one. Users will happily live with the naming conventions if they have a chance to use a preamp that sounds this good!

The Silkworm is a great-sounding, solidly built, and highly versatile entry into the world of 500 Series preamps. It evokes a classic preamp sound with being too heavy-handed, and its wonderful sonic alterations take it over the top. Another product to watch for, from a firm to watch for! ➔

Price: \$700

More from: Sonic Farm, www.sonicfarm.com

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