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Sonic Farm Creamer mic preamp

I've said it before; I really like being in audio production right now. There is a seemingly endless supply of small manufacturers that are bringing innovative products to the market. This is certainly true in the area of mic preamps, for example. As digital recording has increasingly become "the way things are done", people have looked to outboard gear, especially mic preamps, to provide some sonic character and musicality. Therefore, tubes and transformers have had an enormous resurgence. Sonic Farm has introduced a slightly different take on a dual-channel, tube mic preamp in their first product offering. It's called *The Creamer*. Why is it different? It's different for a couple of reasons, but let's start with the big one: it is a design that employs no negative feedback. I know — you were hoping for a bigger punch line, but it really is significant. Negative feedback is a very common way of designing a circuit. It sends a percentage of the output to the inverting input to reduce the distortion specs of the circuit, and to help add some stability. Sonic Farm takes the view however, that in the process, negative feedback also robs the signal of some of the desirable harmonic content that tubes provide. So they have taken on the daunting challenge of building a mic preamp with no feedback, but with acceptable distortion specs. And they seem to have done it. The specs are certainly not in the league of super clean, tweaky audiophile preamps, but that's not the goal or application. For example, before clipping, the THD is 2%, but it is considerably less as the gain is reduced. But keep in mind that some coloration is the goal of this preamp.

Let's look at the slightly unconventional feature set. Due to this approach to circuit design, the controls are a bit different. The first thing you notice is a lack of the traditional input-gain control. At first, this might seem limiting, but keep in mind that other preamps, such as the coveted V72, have no input-gain control at all. The maximum gain of the preamp is a whopping 74 dB, and there are a few different ways you can control this. First of all, you have the unusual feature of switching in an additional 6 dB of gain directly from the input transformer if desired. This will drive the input of the tube a bit more. It also has a 20 dB pad that can be switched in to drop the signal down if you're using a condenser mic with a hot output, for example. Then, there is an additional "gain up" switch that increases the circuit gain (as opposed to the transformer gain switch that I mentioned earlier). If needed, these switches can be used in conjunction with each other.

But wait! There's more! There are a couple more significant ways to adjust the gain and tone. This preamp has the highly unusual feature of being able to switch the configuration of the EF 86 tube gain-stage from triode to pentode. This has a sonic effect on the signal, as well as a gain increase in pentode mode. I found the character to be slightly thicker in pentode mode, in addition to the increased gain.

The last amazing feature to affect gain and tone is the output circuit. First, let me mention that this preamp uses a discrete, transistor output driver that can be switched between solid state with no transformer, or it can use the Cinemag transformer to be the final output. (One side note, the preamp can be ordered with nickel or steel transformer windings, or even one channel of each.) Also, they have included switchable input impedances. This takes a little explaining, and I'm not sure I'm up to the task. The three-way switch has a 1.2k, 2.4k, and 10k setting. So what's confusing? Well those values are affected by the +6 gain switch on the transformer, as well as whether or not the tube is in triode or pentode mode. So, there is a formula to figure out the multiples in these modes to know the impedance settings.

(I was told there would be no math.) I must admit, I kind of just listened to it instead of pulling out the slide rule to know the actual values in all of these modes. Other features include a high pass filter at either 80 or 160 Hz, a polarity-reverse switch, and a 1/4" instrument input, as well as individually switchable 48 V phantom power. There is also a variable output-level pot.

I had a pre-production prototype, serial number 002. It looked as good as any high-end production unit I've seen. The build quality was excellent without a hint of a wobbly switch or a flexing chassis. Usually pre-production units have little build details that need to be refined, but I saw no evidence of that at all with the *Creamer*. It has a classic, vaguely vintage look with a two-tone faceplate and cream colored chicken-head knobs.

I used this preamp on a variety of sources. First, on electric guitar, I set up mics that I'm used to using. I often use a couple of mics on a guitar cabinet so I have some tonal choices later on. In this case, it was a Royer R-121 (*Tape Op* #19) and tube condenser mic that will be the subject of an upcoming review. The guitarist I was recording has tracked *many* hours in my studio and is very used to the setup. He immediately commented on the sound, saying he felt it was very natural and detailed. The only change from his normal setup was the *Creamer* preamp, instead of a tube preamp that he normally tracks through. Although it took me a moment to settle on the correct switch setting for the various gain options, I chose pentode mode with the transformer output pretty quickly. I found that I needed to employ the pad on the condenser mic. Since the pad is a 20 dB pad, I had to really crank up the output level to get to the desired tracking level. I didn't expect to have to compensate quite that much with the output control. It had gone from almost full counter-clockwise without the pad to almost fully clockwise with the pad. This wasn't really an issue, as I was able to dial in enough gain. I found that I really didn't need to use any EQ to get the presence that I needed from the guitar. It just sounded good from the start.

I also used the *Creamer* for tracking acoustic piano, acoustic guitar, and overheads for drums. In each case, the character was never anything but great. I found it to always have excellent presence and detail, much more so than other tube preamps that I routinely use. Vocals were wonderful through the *Creamer* as well. There will always be times when I need the lushness of a UA 2-610 (*Tape Op* #27) on the 500 ohm setting for a vocal, but in general, the *Creamer* provided an amazing immediacy. I loved having the ability to tailor the character by changing the tube stage from triode to pentode. I felt that there was just a little more tube character on the pentode setting, with triode being slightly cleaner. And the option to switch the transformer in and out allowed the ability to have a little more "beef" to the sound, or have it more transparent.

In these days of hybrid mixing, I don't think I can do a mic preamp review without using it in a passive summing application. Since many people are mixing using a passive summing device such as a [Roll Music] Folcrom (*Tape Op* #45), there's a need for makeup gain options that have different characters. I pulled up a mix that had previously been summed with a Folcrom using a different tube preamp for makeup gain. After level matching, I ran a version of the mix using the *Creamer*. Due to the *many* options of impedance, tube configuration, transformer output, and gain setting, I ran *many* versions of the mix using these options. After painstakingly reviewing the endless array of mixes that I had compiled, I settled on having a slight preference for the pentode setting with the non-transformer output. It seemed to have the right balance of body and clarity for this particular mix. But how did it compare to the mix that I had done with a different tube preamp? It..... um..... blew it away. The most obvious thing it revealed was how non-linear the high end was

on my “usual” tube preamp. My preamp sounded smeared in the upper midrange as it transitioned into the high end. In comparison, the *Creamer* just sounded like it had smoother and better high frequency response. At the risk of repeating myself, it again just sounded amazingly open and detailed. Maybe a touch less “tubey-goopy”, but a *much* better feeling of transient response. In fact, you could actually *see* that represented on peak meters. When bouncing mixes through the Folcrom using various preamps, I could see more pronounced peaks on the meters when using the *Creamer*. This increased transient response gave it a feeling of life and sparkle. It’s my new favorite for passive summing makeup gain.

Do I have any complaints? Not really. The only thing that puzzled me was the switchable impedance. I have several mic preamps that have this feature, and I’m used to how it usually behaves. I must confess that I really couldn’t tell quite as much of a difference with the different settings. The manual does say that there might not be much noticeable difference when using a condenser mic, or when the pad is engaged. That *minor* puzzlement aside, I was thrilled with this mic preamp. It has caused me to change my “buy list” priorities and figure out how fast I can put one of these in my rack. The other good news is that buying direct from Sonic Farm means it’s an amazing value. This is a high-end, flexible, dual-channel tube mic preamp that can be purchased for \$2000. I can’t think of another tube mic preamp that performs like this for anywhere near that price. Sonic Farm is also developing another version called the *Creamer Plus*. It will have a bi-level switchable low and high frequency boost, not a dedicated equalizer. But the low boost will be inductor based. It won’t have any additional gain stages, hence the transparency will stay the same. Another addition will be a dedicated line transformer that will enable the preamp to be used in more situations, including mixing. The new model will not be a replacement, but rather a deluxe version that will cost around \$2500. The standard version will also continue to be available. I look forward to trying anything these guys come up with in the future. (*\$2125 CAD direct; www.sonicfarm.com*)

–Kirt Shearer, www.kirtsheareproductions.com

Avid HD I/O

Converters and clocks are hotly debated topics, and it’s been my opinion for a while now that the reason they’re such sore topics is that people are often trying to establish objective and definitive statements about them. Clocks, power supplies, converter chips, and analog components get discussed in terms of jitter, stability, accuracy, transparency, distortion, and color. How all of these aspects really work is just mysterious enough to inspire countless debates, a number of ponderous shootouts, and a great deal of confusion. As I’ve said in my reviews of the Antelope 10M clock (*Tape Op* #68) and the Burl B2 converter (#79), my personal opinion is that because different converters have different sounds, the best way to evaluate them is to put aside the quest for objectivity and to simply use your ears to subjectively evaluate the sound, just as you would evaluate any other piece of audio gear. So, for this review, I am not even going to discuss the components of the *HD I/O* or its measured specs. I’m just going to tell you what I hear, because in the end, that’s all that really matters. This review is also not a shoot out with the rest of the converters on the market, but a focused comparison with the Digidesign 192 I/O, which the *HD I/O* is replacing.

First of all, the *HD I/O* has been reconfigured from its prior inception as the 192 I/O. The *HD I/O* can be configured in three ways. The *8x8x8* has eight analog ins, eight analog outs, and eight AES digital I/O. The *16x16 Analog* has sixteen analog ins

and sixteen analog outs on DB25 connectors, and the *16x16 Digital* has exactly that many AES digital ins and outs. Each configuration also includes two channels of AES/EBU I/O (supporting 192 kHz single-wire), two channels of S/PDIF I/O, and eight channels of ADAT I/O (supporting S/MUX II and IV). While the *16x16 Analog’s* rear bays are full, there is one free bay on the *8x8x8* and two free on the *16x16 Digital* for further expansion and customization. Also different from the 192 I/O is the elimination of the second set of trim pots. Apparently, this feature wasn’t so necessary, and Avid decided to remove the second set on all new converters moving forward. While this is perhaps a simpler configuration, I can imagine some studios will miss them. Aside from these differences, the *HD I/O* is physically nearly identical to the 192 I/O.

I was using an *HD I/O* configured as a *16x16 Analog*. In order to judge the sound of the unit, I did a direct comparison tracking drums at Mavericks Studio in NYC, a room where I have been tracking drums through the 192 I/Os for over five years straight. It’s a sound I know very well, and I know what the 192 I/Os do with that sound. My recording setup was a pair of Neumann U 87s as overheads being fed through API 7600 channel strips (*Tape Op* #43), an AKG D 112 on the kick, and a Royer R-121 (#19) as a room mic being fed through API 512 preamps. All channels were first sent directly to the 192 I/O, and I tracked a beat at 96 kHz. Then I switched the converter over to the new *HD I/O*, and I played the same beat. The only difference in the signal path was the converter. I didn’t bother trying to track the same performance through each converter because I would have been introducing the clocking issue. I wanted to hear each unit on its own, clocked internally.

In a nutshell, the new *HD I/O* gets rid of everything I never liked about the sound of the 192 I/O and leaves a far more open and “natural” sound. To my ears, the 192 I/O has always had a slightly crispy-crunchy top end. Not a horrible sound, but lacking a certain nuance and smoothness that I always noticed, especially with hi-hats, strummed acoustic guitars, and vocal essences. Similarly, the bottom end on the 192 I/O always seemed to lack a certain 3D quality that I heard when using analog tape, or even when using other converters like the Crane Song HEDD 192 (*Tape Op* #26) or the new Burl B2. Perhaps because of these qualities, the 192 I/O often sounded hyped in the midrange — just a touch. Again, these aren’t huge complaints as much as observations made over nearly a decade working very happily with the 192 I/Os day-in and day-out.

With the new *HD I/O*, I immediately enjoyed the more open and smooth top end. For these drum tracks I did, that meant that the hi-hats were more nuanced and not as harsh on my ears, the snare seemed to sit in the kit very nicely, and the crash cymbals were just a touch smoother and complex. Also, the smoother and more detailed top end allows the great room sound at Mavericks to ring just a bit more deeply. If you’ve ever clocked a 192 I/O to an Antelope, Big Ben, HEDD or other external clock, you may have noticed that you get a more 3D soundstage. I heard a similar 3D quality when listening to the *HD I/O* over the 192 I/O. Again, not enormous, but apparent.

The bottom end on the *HD I/O* was similarly more open and extended. I have a particular interest in making the low end of my recordings sound as 3D as possible. I love the big, expansive low end Daniel Lanois and T Bone Burnett are able to achieve on records like *Rockets* and *Raising Sand*, respectively. These are kick drum sounds that you can see; they’re like enormous, weightless boulders drifting through the night. With the *HD I/O*, that kind of low end was rendered more vividly than with the 192 I/O, and I think this quality will be important in any production style, from live orchestral performances to programmed TR-808s.

So if you own a 192 I/O, I wouldn’t tell you to run out and buy an *HD I/O*. If you’re looking to upgrade your 192 I/O, I might suggest you try out some external clocks and use your ears to determine if that’s a sound you like. (Again, I suggest bypassing all theoretical and specs-based arguments.) Perhaps a clock will work for you and save you a few bucks. However, if you are in the market for a new converter, the *HD I/O* should definitely be on your list of options, and if you do get an *HD I/O* to complement your 192 I/O rig, I’d bet money that you’ll be routing to the *HD I/O’s* conversion channels first.

At \$4995 street for the *16x16 Analog*, this is not a small investment. With the number of less-expensive third-party converters out there that will work with Pro Tools, I think the decision of which converter to buy is only going to become even more confusing and complex in the next few years. I encourage everyone to ignore the specs, theories, debates, and confusion as much as possible and to make a thoroughly subjective decision based on what you hear and can afford. The new *HD I/O* may not be cheap, but I’m sure it’s going to win a lot of listening tests. (Check out Allen’s audio samples at tapeop.com/audio/81/avid-hd-io). (*I/O Digital* \$2495 street, *8x8x8* \$3995, *16x16* \$4995; www.avid.com)

–Allen Farnelo, www.farnelo.com

XILS Lab XILS 3 LE

This “matrix based modular synthesizer” softsynth, based on the EMS VCS 3, was an impulse purchase for me on AudioMIDI.com’s eBay store – one of their “No Brainer” plug-in deals. I figured at \$20, what the heck! I’ve got a soft spot in my heart for old EMS synths, as I learned basic synthesis on an EMS Synthi when I was in college before moving up to the school’s Buchla modular system. Plus there are classic Eno and Pink Floyd records I love that used this synth. I dig the idea of showing up to a studio Eno-style with my EMS Synthi suitcase, ready to go to work on someone’s tracks, but with EMS synths going for well over \$5000, this plug-in is as close as I’ll get for now. This sounds really great, maybe even better than I remember the Synthi sounding some 20 years ago. Once I got all the serial numbers and links emailed to me, the install was pretty quick and easy. This is the LE version, but it’s still quite deep! I can’t imagine I will even fully explore all the options that are present, much less wish for more functionality. All of the standard features of the VCS 3 are here (three oscillators, filter, etc.) along with the unique matrix patching system. The *XILS 3* version adds an envelope follower, pitch tracker, plus quite a few refinements and options to the synth, keyboard and sequencer features of the original synth. And since it’s a plug-in, you can automate any parameter. One of the reasons I bought this is that it also works as an audio processor – you can run audio through the filters. I inserted it on a vocal track, and after figuring out the matrix routing, had the vocal going through the distinctive EMS filter and then automated the cut-off frequency to change along with the vocal phrasing and dynamics of the song. Super cool! I also set up a second instance on an instrument track and checked out a bunch of the presets, all of which sounded great! The beauty of this is that I’m using an old Mac G4 and some of my other soft synths can’t even run one instance on this machine, much less two on a song with 20-something tracks! My hat is off to XILS for writing some very efficient code! Unlike the original EMS, the *XILS 3* is also polyphonic if you want it to be, with up to 18 voices. Keep your eyes peeled on the AudioMIDI.com site and eBay for this deal to pop back up again. (*\$20 special for RTAS, AU, VST/Mac or PC versions, audiomidi.com, xils-lab.com*) -JB