

Millennia, Now

My Interview With John La Grou

By [Monte Vallier](#) | July 2006

I was going to review the unit anyway but they were close now, real close. This is about my trip to Placerville. And after it was over, I'd never want for another.

As I sit in the studio with one of the products that John La Grou from Millennia Media had his hands on, certain words keep coming to mind: well structured, rich, clean, vibrant, an abundance of different flavors, and a strong backbone. These words not only come in handy to describe Millennia Media's professional audio components, but the fine glass of 2004 Syrah in my hand that came from grapes John had grown on his property outside of Placerville, California.

And like the wine, the complex flavors of the STT-1 Origin bear profound investigation. First of all, the STT-1 Origin is kind of like, to quote the owner's manual, a "greatest hits" compilation of essential products from the Millennia line of gear. It's a mono recording channel featuring the "Twin Topology" of the HV3 solid-state mic pre and the M-2b transformerless tube pre amp that can be switched between with the push of a button. The next fine element is the four-band NSEQ parametric EQ with shelf/peak switchable high and low frequency bands and continuously sweepable mids. Following that is the TCL opto-compressor de-esser. It's a deep piece of gear. So deep that it inspired me to go the source.

Specifically the STT-1 Origin recording channel.

Hey, John: Let's start at the start.

I've been doing pro audio design on and off since I was young, building mixers and preamps and things. When I started recording classical music with the Sacramento Symphony in the late '80s, I realized that the preamps I was using were not cutting it. I realized that my equipment was getting in the way. And with my background in design I thought, "Well, I'm going to try and do it better."

It took a couple of years of design effort and trial and error to finally to get to the HV3. I kept designing different things, but I kept coming back to that circuit and finally realized that this was the best one I could do for that era. So that became my preamp — I built up eight channels for myself. It wasn't a business and I wasn't thinking business at all when a friend of mine, Jack Vad at the San Francisco Symphony, asked if he could try my preamp. I sent him a stereo pair and he loved it and wanted to buy some. So I built him four channels in my garage and living room. Then he told some people about them and I sold some more to his friends. But then he knew a magazine editor, Nick Badstorf, from *Home and Studio Recording* [which became *Recording* in 1994] and I got a call one day saying that they were doing a preamp shootout with like the 10 preamps that were available then — now there are hundreds — and he said that he'd like to include my preamp in the shootout. I said that I wasn't really a business. And he said that was alright, they would just really like to have it there. So they reviewed it and I got a call from the reviewer and he said that it was their favorite one. They did the review and that was it. It just sparked the business. All of a sudden, dealers were reading it, users were reading it, and I was getting calls to build them. So I built 50 of them in my living room and garage and sold them; then another 50; then I realized in a very short period of time that this was going to become a viable

business. I went out and got a 400 square foot space and hired Peggy, who is still with us. That's the history. That's how the company started.

I was working in Silicon Valley — doing technical and business management. And we were very successful at it and the company grew to a multibillion dollar company. But I realized that I didn't want to do that. When I started Millennia as a business, I wanted to keep it as my passion and never compromise for business reasons. And that whatever we did was always the best audio path we could do: not compromise to meet a marketing goal, or a price point, but always to achieve the best that we could do — the best we could offer. We've always maintained that.

So what made you want to do a “channel strip”-type of product?

It made sense. Because we had developed the mic pre, the compressor, and the equalizer, and there seemed to be a trend in the market for everybody wanting all of that function in one box, so we acted on the need from the market and put everything we made into one box. The one thing we didn't do is compromise anything that went into it. So in the Origin is an HV3 preamp, M2-b tube preamp, NSEQ equalizer, and a TCL compressor without any compromise of the individual circuits. In a broader sense, everything we do at Millennia follows our need for our own studio. Remote recording, mastering, editing, some studio recording, and I've always looked at products and said, “Can I use this?” and if I can, we've done it. While we continue to take that philosophy, we expand it as well. The Origin was driven by a number of factors — we've got the components, there is a market need, and I can use these in my studio.

How's the “Twin Topology” work?

Joel Silverman (Managing Director): You have the option of using either a tube op amp or a FET op amp in the circuit. They sound completely different. When John was putting these things together, he had both op amps and came up with a clever way to switch between the two and have the choice of what kind of sound you want. It comes down to more flexibility and more differentiation between the two types of sounds. These days, everyone is pretty much using the same recorders: some kind of digital box and recording to hard drive, so the days are over when you could bias a tape machine to get different sounds that would make your studio sound different from everyone else's — so it's all down to front end gear and mix gear. With these pieces, because you do have the flexibility of the tube or solid state, you can get a lot more flavors on your recordings.

And the transformer coupling circuit? I mean you've been making such clean, transformerless gear, was this a market decision?

It just happened that I had a design for a type of transformer that wasn't real accurate and that had a coloration that I found really useful for low-end punch. I was drawing a curve this morning, showing Joel that this transformer has a bit of what's called inductive leakage and it's a problem. When you design transformers you don't want inductive leakage. But this certain design delivers it. What it does, in consort with the circuit that exists around it, is give a bump around 100Hz. But it's not a bump that you can achieve via EQ; the leading edge is almost straight — which would be almost an infinite “Q” on an EQ, and the trailing edge falls off very gradually. It's a result of a thing called “ringing” in the transformer. I don't know if you've noticed it — especially with a kick drum or a tom — where the lows are going boom normally — with the transformer coupled, they go BooM!

I thought this would be cool to have in a product, and the Origin would be a good place to put it even though our general philosophy is to keep everything as accurate and transparent as possible. This gives the user a bit of extra flavor.

What about the compressor?

The compressor is an opto design. Optos are good at certain things. Some of the ideal applications for optos would be low to medium ratios and program material that doesn't require extremely fast attack times. That turns out to be about 95 percent of most programs. There are some programs where you may need really fast attack and you'd have to go for a VCA- or FET- based compressor. That's the trade off. Which technology do you use in a generalized, all in one box? It turns out that to my ears, opto is the best sounding technique for gain reduction. Compared to the VCA especially, the Origin is optimized toward those programs that don't require really fast attack and don't require high ratio limiting. We offer it in the box, but it's not its sweet spot. The Origin's sweet spot would be ratios up to about 6:1, and within that range it's as good as it gets. It really shines on guitars and bass. . . . and Gwen Stefani's voice. Also, program 2-mix is very nice. The sweet spot for the amount of gain reduction with the Origin is up to about 10dB of gain reduction. When you start getting up to 12–15dB and it's not as happy — it works, but it's not ideal.

It's a traditional compressor. It's not an easy, one-slider kind of deal. It doesn't have shortcuts or presets. It's a very traditional engineer's compressor that interacts with the side chain controls, not interacting inappropriately, but in ways that an engineer knows about. You have to learn about attack, release, ratio, and amounts of gain reduction. It's a dynamic process for an engineer to work with. If someone expects a real quick fix, they're not going to find it. What I've found is that when you do dial in a TCL compressor it disappears and that's the sweetness of it. It may take a while to find it and get it dialed in — there's no way around it. You have to work with it. It's not an effects tool.

Any tricks or pointers to get the most out of the box?

Joel Silverman: There's a direct out from the pre and a main out from the whole chain. I always suggest recording both so you have your straight mic pre out and your processed out so that you can always go back in case you did something with the knobs that you didn't like when you get into the mix.