Subject: Re: Audiolici Integrated Tube Amp
Posted by Wayne Parham on Wed, 30 Jan 2013 17:17:53 GMT
View Forum Message <> Reply to Message

Twenty or thirty years ago, I would have been surprised to see anyone prefer tubes over solid state. At that time, the only people I knew that prefered tubes were musicians, guys that would say things like "tube watts were louder than transistor watts". I realized tubes clipped more gracefully, decided that was all there was to it, and so I sort of dismissed the comments of guitar players.

But since then I've realized a few things that surprised me:

One is that amplifier topology is at least as important as the active element used. I guess that doesn't surprise me so much, but the point is one shouldn't just think in terms of "tubes verses solid state" - One should think in terms of Class A, Class AB, amount of feedback, location of feedback (global or local) - that is as important if not more so than the active elements used.

Another thing that surprised me was that output transformers aren't as bad as I expected. I would have intuitively thought those were killers of all that is good, from phase and frequency response to distortion and even dynamic range. But the truth is that output transformers can be made that pass a very good signal.

But the biggest surprise for me was information about the tubes themselves. While it is true that they aren't as mechanically durable, and they are vulnerable to mechanical distortions (like microphonics), a tube can actually be made as linear, and sometimes even more linear than a comparible solid state device. That surprised me - I assumed the load lines of tubes were inherently less linear than solid state devices. But that's not true. A triode is actually very linear, and some are better at pure Class A zero-feedback operation than bipolar transistors.
A Taste of Tubes