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Subject: Re: What happened to standards for advertised power?

Posted by [Wayne Parham](#) on Fri, 15 Mar 2013 18:53:52 GMT

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Doubling power increases SPL 3dB. That is an audible increase, but most would say it's "just a nudge". To make it sound twice as loud to your ears, you would need a 10dB increase, which is also ten times the power. Twenty decibels is 100x power, and 30dB is 1000x power. So it's easy to get moderately loud, but the transients are surprisingly hard to hit without clipping.

When I was in school, I had a mentor that gave me a gag-gift for one of my birthdays. He glued a TTL chip to a the anode cap on top of a tube the size of a 2A3 and made a little plaque that said "microprocessor controlled tube". It was just a joke to us. Now days, every time I see a DAC with a tube output stage, I think of that gift.

All that said, tubes actually aren't just an old-fashioned throwback. They do some things better than transistors, which kind of surprised me. I can remember a lot of guitar players over the years saying how they liked tube amps better than solid state, and that tube watts were louder than transistor watts. I wrote it off to the gentler clipping of the tubes, and the presumption that they probably smoked a lot of pot too.

But really, after I actually studied it, I found that tubes run single ended are pretty linear devices, and so while they are more delicate and consumed more power, they could be used to make great little high-quality low and medium power amplifiers.

A Taste of Tubes

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