

Increasing vacuum tube amp relevance:

It's all about pushing their boundaries.

Historically, Audio Research tube amplifiers have played subjectively louder with ease than similarly rated solid-state amplifiers. That is to say, with more head room. There are several reasons for this. First, tube amps in general clip more gracefully—smoothly to the ear as you reach their power limit on musical peaks. Secondly, a particular hallmark of ARC tube amps, a real Bill Johnson (ARC founder) fixation, is a highly regulated, beefy power supply that doesn't wilt when the music gets really demanding. I can tell you from personal listening experiences with Bill over the years -WZJ loved uncompromising musical dynamics and music played at truly life-like levels!

Also, having a great output transformer design is the other essential part of the equation to achieving a transformer coupled tube amplifier with unfettered dynamic performance, bandwidth and clarity. And you don't learn from a textbook how to design great transformers. It is an art discovered and refined only through years of empirical research and always careful listening.

A bit of context: Back in the late 1950s and 1960s, Marantz, Dynaco and other tube designs had relatively small power supplies with tiny bulk capacitance reserves, mostly because small bookshelf speakers and some electrostats and efficient horn speakers of that era were adequately served by them. As we turned the corner into the 1970s and 80s, speakers grew in stature and complexity (Infinity, for one, comes to mind). Consequently, there grew corresponding power and control demands on vacuum tube amplifiers whose many established sonic advantages this new generation of audiophile speakers readily responded to and revealed.

The paradigm shift came from leaving the era of old-school tube amps with their wimpy power supplies that are essentially voltage amplifiers, not able to supply sufficient current and driver control for this new crop of demanding, current-hungry speakers. Enter the era of voltage and current delivering tube amps that Audio Research began to pioneer, providing both finesse and the driver control/dynamics/speed previous tube amps had lacked. Massive power supplies with large joule bulk energy storage reserves were now an established part of the way forward in advancing the vacuum tube amplifier art. Soft, polite and euphonic was now your father's amplifier sound.



What does all this translate into on a practical level for you with our current generation of vacuum tube amplifiers?

Take the Reference 75 SE amp for example. It has been extremely successful with many tube music lovers despite its relatively low 75 watt per channel power rating. If you own speakers with about an 89 dB or greater sensitivity and don't have a giant listening room, this amp will serve your needs very well. But for perspective, we test every REF 75 SE amp driving a pair of very inefficient Magneplanar 20.7 speakers that reside in our production sound room. They dance

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together like Fred and Ginger as long as you don't play things much too loud. So for smaller ensemble classical, jazz and pop this amp will provide all the quality your ears demand from this pairing. Should you want to play a full orchestra at full tilt, loud rock/electronica or big band jazz through the 20.7s (or other similarly demanding speakers), I recommend the Reference 150 SE as the most cost effective gateway to playing these speakers very loud while providing all the glorious spatial, tonal and textural "intangibles" that most solid-state amps only hint at.

Then, of course, there remain the Reference 250 SE and Reference 750 SE mono blocks waiting in the wings for those with aspirations, speakers, rooms and budgets on an even loftier scale.