

---

Subject: Re: Tubes versus Transistors

Posted by [positron](#) on Wed, 11 Sep 2024 01:57:10 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

I have obtained a little more information from the RCA Radiotron Designers Handbook, 1960, by 26 engineers. Attached are the dynamics characteristics of a triode vs pentode vs straight line, and the second is the IMD characteristics of a triode vs Pentode. (See figure 2 in the article to compare.)

The second has to do with the article statement:

"Reportedly, his manipulations were so successful that not one of his challengers could consistently distinguish his solid-state amplifier from their own specially designed tube equipment, nor could they say definitely which sounded better in the long run.

Notice the words "consistently" and "in the long run", which infers multiple A and Bs, back and forths. No conditions or methods are mentioned. As such, they were just asking for a false conclusion.

Any time one suggests just listening multiple times, the listening session is not scientific in any way, shape, or form.

In fact, the way comparisons are suggested/performed means the conclusions are skewed 100% of the time towards no sonic difference. That is worse than a simple normal sighted listening comparison.

This includes allowing one to perform the test anyway one wants; a guarantee one will Not perform the listening session/dbt correctly, thus skewed.

The problem lies in the fact that virtually No confound variables are addressed, except sight. But how is one to know they are being taken for a ride? I doubt if the author, himself, even knows.

In previous posts in this string, I have mentioned differences between transistors and tube characteristics and surrounding parts. Each component, even parts make a sonic difference when specialized listening tests are performed correctly.

How is that important? In my lab designs (now home) after performing

specialized listening tests of each component, ics, parts etc, and found accurate in absolute terms, my friends can perceive sonic changes as low as -132db from the fundamental (using 20log equation). Not surprising that components with the "same specs" sound different.

Unfortunately the article's performance is an uneducated attempt to explain sonic differences between transistors and tubes. However, it is all the parts, and design that are involved in producing the music we hear.

It is not surprising why Audio excellence has stagnated, and the audio field has been in decline for decades.

pos

### File Attachments

---

- 1) [Triode vs Pentode vs Straight Line.pdf](#), downloaded 391 times
  - 2) [Triode vs Pentode IMD.pdf](#), downloaded 380 times
-