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Questions for "Tonmeistertest"

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1. Three consecutive resonance frequencies of an organ pipe are 1310 Hz, 1834 Hz and 2358 Hz.
a) Is this pipe on one or both sides open or closed?

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- b) What is the fundamental frequency and what are the next four harmonics?

2. From the instruction manual for the Sony compact disc player, FM / MW / LW:
http://akio.konishi.free.fr/sony_GT500-autoradio.pdf



How do you feel about the advertising for the sound improvement with even-numbered overtones?

3. http://www.amazona.de/index.php?page=26&file=2&article_id=1213

Norbert Pawera writes: "If you drive a tube slightly into saturation, there are generated mainly even-numbered harmonics which our ears feel comfortable. This is a soft, transparent sound image of the valve (tube) technology." How do you feel about this claim to the production even-numbered overtones by valves?

4. <http://www.fairaudio.de/lexikon-v.html>

"It is interesting that it is not only important to get the lowest possible distortion values, but also on the shape or the distribution of the distortion spectrum. If THD is unavoidable, then it should be possible to create even-numbered overtones, i.e. starting at the root k_1 and the multiples k_2 , k_4 , k_6 , etc. In fact, it can be demonstrated, that a tube amplifier supports such a distortion spectrum, rather than transistor devices."

What does mean to generate even numbered overtones? What are the multiples k_2 , k_4 , k_6 ?

5. <http://www.hdm-stuttgart.de/~curdt/Roesner.pdf>

The AKG SolidTube has a cardioid polar pattern. Tube microphones are very popular because of their warm sounds. The SolidTube reinforces the even-numbered overtones and creates slight distortions which is perceived from the ear as the enrichment of the sound image. This is why the sound is clear and present in the treble range.

What do you think of even-numbered overtones for a clear and present sound in the treble range?