
Subject: Distortionss

Posted by [Mike.e](#) on Mon, 15 Nov 2004 04:41:00 GMT

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Hi waynequoting "Commercial loudspeakers generally have a force function containing both square and cubic terms, the second harmonic being predominant at medium levels, and the third harmonic increasing with increasing amplitude.." - Loudspeaker and headphone handbook - John Borwick. I think the push pull arrangement will sound pretty good. Question - when the loudspeaker is used ABOVE resonance, what are the distortion factors - is it only BL nonlinearity? Definitely below F_s the stiffness is providing linearity. Book also shows flux distribution with flush/extended pole piece (above top plate) showing reduced 2nd harmonic by ~10db with extended pole piece. The book also goes into - Cone modes, w-what the concentric corrugations on cones are for, -nodal circle overtones (non harmonic!) - also some boring derivation of point source/flat piston at the beginning :P-HUGE! section on electrostatics - Sizable section on room acoustics, -enclosures and baffle resonance measurement, -measurements and evaluation, -hardly anything on horns though!! I would buy this if it was cheap enough. Also 'high performance loudspeakers by Martin Colloms' is pretty good. Some derivations, it's a bit more balanced, ie : normal amount of info on electrostatics :P Problem is that online descriptions of books tend to hardly even tell you chapter titles! ridiculous! I'm thinking of Aes anthology on CD or something...
Regards Mike.e
link