
Subject: Re: Compressiondrivers in general
Posted by [Earl Geddes](#) on Tue, 07 Jun 2005 12:25:34 GMT
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Our study of distortion had a crossover at 1000 Hz. Remember that in a Home Theater one would never even come close to the SPL's that these devices are capable of. No, I don't think that nonlinear distortion is an issue at all in a non-pro application. In sound reinforcement the situation is clearly different. One is always trying to operate these devices at their upper limit. So I would not take a 1" Comp-Driver down to 900 Hz. In most of my designs for pro, I use a 2" driver down to 1.6 kHz or so and then there are sometimes three of them per cabinet. The pro world and the home world are quite different. Loading of a waveguide, or horn, is a totally over-blown concept. For all practical purposes any shape with the same throat and mouth areas will have about the same loading. Some may have a little more somewhere and another a little more somewhere else, but they will all be within about 1 dB of each other. I pay no attention what-so-ever to loading. I only care about wavefront formation, internal reflections and diffraction and the resulting polar response. I can easily EQ any "loading" differences, but I cannot correct any of these other properties after the fact - they must be corrected in the design.
