
Subject: Re: Compressiondrivers in general
Posted by [Earl Geddes](#) on Mon, 06 Jun 2005 02:35:59 GMT
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"devices which give axisymmetric and plane waves doesn't seem easy to find"Quit the contrary they are the most common sources for waveguides - compression drivers."A compressiondriver has like 105dB sensitivity while the 15" bass lies in the 96-99dB region. I'm thinking the extra sensitivity of the compressiondriver isn't needed since it'll have to be attenuated in the crossover anyway"All of which is a good thing. Sensitivity is relatively unimportant - unless its really low - its Max SPL that matters. And a compression driver has lots of that. Sure a 1" tweeter would work on a waveguide, they work fine, but they suffer from limited LF capability and really loose it at higher SPL's. I also use the high sensitivity to advantage in my passive crossovers with the resistor pad for lower the sensitivity. This makes the driver look almost like a purely resistive load, which is ideal for passive crossovers."Is it possible to improve the compressiondriver (more linear?) but sacrificing some sensitivity?"My studies have shown that compression drivers have no perceivable nonlinear distortions at any level - even 124 dB. So I would say that a compression driver is just about the ideal HF source. And, of course, this is what I use. It is not a coincidence.But compression drivers on horns have a deserved reputation for poor sound quality. I fixed this problem and now consider them to be the best available source for HF response - even for audiophile loudspeakers.
