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Subject: Re: fostex design search results  
Posted by [Martin](#) on Wed, 22 Sep 2004 11:02:23 GMT  
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Hi J.R."Understand from where my position comes; that in fact I have always understood the purpose of a full range driver to be an attempt to avoid the deleterious effects of passive components on the speed and ability to resolve complex passages in the signal. As well as to represent a point source radiator."I agree. The only thing I would add is the increased efficiency that seems to be a property of most full range drivers. Low Qts (0.2 - 0.3) and high efficiency (94 - 98 dB) come with the large magnet. If you can design the enclosure to compensate and balance the SPL response this is no doubt the best solution. If your enclosure is unable to do this then a filter can help. The enclosure is not necessarily a bad design just a different set of compromises (typically smaller size and less complex). I personally believe that the benefits of a filter are much larger then any claimed potential degradation introduced and can improve the design (including correcting phase shift associated with baffle step losses). I don't hear any loss of speed or detail with the filters I have used in my designs. If you apply too much filtering then I would agree that the advantages of full range drivers start to disappear quickly. Everything is a balancing act and a set of compromises.Martin

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