
Subject: bass reflex vs back loaded horn boxes
Posted by [jim denton](#) on Thu, 18 Dec 2003 23:21:25 GMT
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Gentlemen, Probably posted my request on the wrong forum so I'll try here--just ordered a pair of Fostex FE206E's and am getting plans for a simple bass reflex as recommended from the Decware site---but got antsy waiting around and went to the Fostex.com site and there they had the darnest back loaded horn cabinet I'd ever seen---this bass reflex is a snap to build but man o man---this loaded horn work bust the chops on a cabinet builder!!!---Tell what the heck is the difference in sound??? I like this whole project as it has upgrades to a 2-way and on to a 2-woofer & a tweeter too---lots of options to build and listen to a lot of things but man---you got to look at this horn box!!!!---Jim

Subject: Re: bass reflex vs back loaded horn boxes
Posted by [akhilesh](#) on Fri, 19 Dec 2003 20:20:06 GMT
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Hi Jim, A horn simply makes bass differently than a bass reflex. If properly designed, I seriously don't think there is much difference. If you want to extend the bass of the driver (like in lowther) the horn may be the way to go. You will get some coloration with a horn. With a bass reflex, if poorly designed, you will either get no bass, or a dip in upper bass. If well designed, you will get adequate bass, but not as much as a horn. However,, you will also get better coherence (i think tighter group delay) than a horn, since the sound is not travelling through a tube. IMHO, a lot depends on the driver you select. I'd rather select a good driver which will give decent bass in a bass reflex, and do a well designed bass reflex box; than select a driver doped with magic dust and then flog the bejesus out of it by building a humongous horn. Just my 2 cents. thanx-akhilesh

Subject: Re: bass reflex vs back loaded horn boxes
Posted by [JLM](#) on Sat, 20 Dec 2003 00:37:04 GMT
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Jim, what FE208E cabinet plans from Decware are you referring to? With the FE208E's low Q_t (0.18) common wisdom would be to look for horn loading. Q_t of 0.4 is more in line with bass reflex or transmission lines. Bob Brines (<http://geocities.com/rbrines1/>) sells plans for smaller Fostex drivers, but it's a transmission line based design that looks much like a bass reflex cabinet. Tom Zurowski (<http://audio-resolution.com/zhorn/>) of Z-horn fame sells a rear loaded horn cabinet for the FE208E called "Garuda". Steve has his new High Definition Tower design that uses the FE208E, but that's perhaps the most complicated design I've ever seen (has lenses, port, two passive radiators, and a transmission line). Classic Audio (<http://www.oldschoolhifi.com/>) sells bass reflex design for the FE208E in a variety of sizes and Steve built a rather small standmount bass

reflex for it as well. We heard all of these at the 2003 DecFest: Steve's HDT uses modified FE208E's (treated = ??). The prototype sounded pretty good, but the untreated driver was still breaking in. The Classic Audio 2.5 sounded less flat, more boomy, and the side panels resonated when struck, but received less play from the new drivers. Steve's small standmount I thought sounded quite promising if used with a sub, but received little play from the new drivers.

Subject: Re: bass reflex vs back loaded horn boxes
Posted by [jim denton](#) on Sat, 20 Dec 2003 21:24:53 GMT
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Akhilesh---- Thanks for your reply---I'm starting at the simple to build point and then listen and go from there---I already have some ideas of my own but can't start until I get 2 pairs built to listen and compare---but must agree with your comment about trashing the driver to cover too wide a range---I met 2 EE's (by sheer accident) in a Radio Shack and they were both into PA systems---and I got an interesting idea of building 2way speakers and bi-amp directly to them ---then learn how to build a Xover and compare ---anyway isn't just about everybody using a Sub to get the bottom end bass covered ? Jim PS Wayne invited me to your january meeting and I hope to bring a pair then (if Santa is good to me) and spend a few minutes on that computer program

Subject: Re: bass reflex vs back loaded horn boxes
Posted by [akhilesh](#) on Mon, 22 Dec 2003 14:44:43 GMT
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Hi Jim, You are welcome to the Jan get together! The name of the game is to learn from each other's experiences. Wayne is a great guy, and a great resource as well, he really helped me out a lot and he also knows a lot!-akhilesh

Subject: Re: bass reflex vs back loaded horn boxes
Posted by [jim denton](#) on Sat, 27 Dec 2003 17:17:41 GMT
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Starting to pick up on a few things and already have a fostex speaker project underway---but I'm needing to get up to speed on tube testing--I think my little amp went down but can't figure if it is the amp or the pre-amp---it's always something ---looking forward you guys in January Jim
