Subject: Reverse Horn ?
Posted by Anonymous on Thu, 25 Jul 2002 19:34:13 GMT
View Forum Message <> Reply to Message

The question of the day is.. Lets compare two scenariosand perhaps you can tell me what is going on.Scenario one. You have an 8" midbass driver in a boxcrossed over from 70hz to 500hz.Scenario two. You desire to replace that 8" inch driver with a12" midbass driver but don't have the space on the front baffle of the box because there is only 8" width available, so you compromisea little bit and you recess the 12" midbass ~6" to 12" inside the boxand taper the wall so the energy squirts out of the 8" opening onthe front baffle.Questions are;How much senstivity will you lose, isn't this sorta like a reversehorn effect sensitivity-wise?How much more "punch" in the music do you gain, if any, vs. the 8"driver?

Subject: Re: Reverse Horn ?
Posted by Adam on Thu, 25 Jul 2002 19:48:54 GMT
View Forum Message <> Reply to Message

As long as you maintained the crossectional area, the design you are describing would almost be a transmission line listening from the end of the line.. I'm not completely sure what the effects would be, you'd probably have resonances within the chamber... Umm other then that I'm not completely sure what the effects would be. I'd say some beaming at higher frequencies, again depending on the designYou wouldn't really gain anything going from an 8" to a 12" midbass in this application. It won't necessarily sound any better, although the 12" would have more output capability because of the increased cone area and likely excursion as well. Still, a good 8" midbass, in the right box crossed at 70-80 Hz should be able to hit 105-110 db without overexerting, so it depends on your design goals...Why do you want to switch? Maybe you could use two 8's?Adam

Subject: Re: Reverse Horn ?
Posted by Anonymous on Fri, 26 Jul 2002 00:40:44 GMT
View Forum Message <> Reply to Message

Well, I did some crude tests with a 10" eminence beta 10.Putting this woofer in a box, then placing *it* inside anotherbox that was about 3x longer to simulate the recessed part seemedto give me louder bass, more directional since it was shooting outthe big box, similar to a horn loaded box but with no expansion horn.hehehePlacing a board to cover the opening (at a 45 degree angle)about 1/3 to 1/2 just seemed to suppress the SPL and alter thefreq slightly. Appears that I choked the bass output - haha*BUT* it was still louder and more punchy than just havingthe box sit there in open space.Hornloading does rule, too bad I don't have the room to makewhat I really want to

make. There is no magic bullet.For now, I will stick with my traditional design, perhaps somedaymake a horn loaded system. hahahaI do like the chest pounding midbass from concerts.