Subject: 80-100hz corner horn??
Posted by Scholl on Thu, 25 Aug 2005 20:48:57 GMT
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Does anyone know of plans for such a beast?Might make a nice sat\sub for home useThanks, Scott

Subject: Re: 80-100hz corner horn??
Posted by Wayne Parham on Fri, 26 Aug 2005 03:41:52 GMT
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Maybe design your own? It's really a midbas/midrange horn, and with corner loading, it won't have to be very large. You could make a simple straight horn shaped for easy placement in the corner. How comfortable are you with Hornresp?

Subject: half or quarter space???
Posted by Scholl on Fri, 26 Aug 2005 09:54:55 GMT
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Hi Wayne,I've looked at Horn REsponce in the past.If a midbass horn where designed to be 90 degrees, fitted in the corner but 3' off of the floor, would that be considered half space or quarter space?Thanks, Scott

Subject: Re: half or quarter space???
Posted by Wayne Parham on Fri, 26 Aug 2005 17:25:57 GMT
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That would be quarter-space, and it would help you reduce mouth size. Not as much as eighth-space, but still, quite a lot. It would provide another benefit, that of extending your 90º flare on the outside walls, ensuring the horizontal pattern was fixed at 90º. This placement and radiating angle reduces reflections at the same time as filling the entire room uniformly. It's an excellent way to go.

Subject: Re: half or quarter space???
Posted by Bill Fitzmaurice on Fri, 26 Aug 2005 19:53:11 GMT
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I agree completely on the value of corner loading, but not to 80-100 Hz. That doesn't even cover the bass spectrum for music, let alone home theatre if that's in the cards. I'd aim an octave lower.

Subject: Re: half or quarter space???
Posted by Wayne Parham on Fri, 26 Aug 2005 21:19:58 GMT
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I like corner loaded bass bins too, but Scholl asked specifically about an 80-100Hz horn. That's really a midrange device, touching the midbass. Constrained space will smooth the response of his horn and reduce mouth size requirements. A quarter wavelength of 100Hz is 2.8 feet, so as long as his horn mouth is within this distance from a room boundary, it will reduce the radiation angle and act as a launch boundary instead of acting as a reflector.If the midhorn has 90º flare and placed in the corner, the mouth will probably be less than a foot away from the walls. So the walls will act as flare extensions up to a few hundred Hertz, setting the horizontal pattern and smoothing the response. Above that frequency, the walls will no longer be significant but the horn itself will play the major role. At higher frequencies, horn response is smooth without boundary reinforcement and the horn is better able to control directivity.

Subject: Re: 80-100hz corner horn??
Posted by DanTheMan on Sat, 27 Aug 2005 04:20:54 GMT
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It should be about 90-100 cms deep and open up at 2100-2300cms I believe. That should do it according to the hornresponse program. Seems like it might be hard to find a woofer that will give you reallysmooth (mid)bass response though. I'm still debating wether to try one or use a pi mid(it seems much easier to get a smooth low-end with that. Sorry, that's the best I can give you.

Subject: Re: half or quarter space???
Posted by Scholl on Sat, 27 Aug 2005 11:49:57 GMT
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Hi Bill,The idea is to make a system that is mostly horn loaded but small for normal living room use. A dinner plate boot rubber compact subwoofer that fits neatly under the couch will fill in the

bass. I know this maybe hard to integrate.Any other ideas would be great!Thanks, Scott

Subject: Re: 80-100hz corner horn??
Posted by Scholl on Sun, 28 Aug 2005 10:11:35 GMT
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Surf to parts express and look at the B&C woofers and midranges. You'll find 3-4 8-12" speakers that do very well.I'm finding a much shorter faster flair does well and gives better top end.Thanks

Subject: Re: 80-100hz corner horn??
Posted by DanTheMan on Mon, 29 Aug 2005 03:43:03 GMT
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thanks! I'll check it out

Subject: Re: 80-100hz corner horn??
Posted by DorinD on Fri, 11 Nov 2005 22:11:14 GMT
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I built a Edgard's Show-Horn re-calculated to 70Hz insteed of 50Hz. Look here http://www.hi-fi.ro/fhifi/viewtopic.php?t=5278I'm very satisfied with the sound but I suplement them with a TL-sub