Subject: LT250 Horn Flare?
Posted by GarMan on Sat, 23 Jul 2005 01:07:56 GMT
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Wayne,Can you tell me anything about the Eminence LT250 horn? I understand you've used this in the past in designs where space was tight.I've been trying to come up with a design for a center channel to match my Theatre-3's and can't find a way to do it with the H290/295. The speaker has to be under 18" and the horn over driver arrangement does not fit.I'm thinking a horizontal MTM arrangement, with a 12LF on either side of a LT250. Do you think the 60 degree horizontal dispersion is too narrow? Will sensitivity for the PSD2002 increase with this horn vs. the H295 due to the more confined dispersion?thanks,Gar.

Subject: Re: LT250 Horn Flare?
Posted by Wayne Parham on Sat, 23 Jul 2005 05:45:23 GMT
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Personally, I don't like narrow dispersion horns for home hifi. It just doesn't sound as natural as sound coming from a wider flare does, especially 90º horns coming from the room's corner. But the LT250 is a pretty good horn and doesn't sound colored when used with appropriate compensation, so if space is tight, that will work pretty well for you. I just prefer a 90º horn.

Subject: Horizontal Symmetry
Posted by GarMan on Mon, 25 Jul 2005 19:31:31 GMT
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Wayne, another option I have to keep the speaker small is to do away with the second woofer and just have woofer and horn side-by-side on the baffle. However, almost all center channel speakers I've seen have symmetry along the horizontal (or symmetry reflected on the vertical, but you know what I mean).Is this MTM symmetrical arrangment an absolute neccessity for horizontally placed speakers, or is it a way for manufacturers to justify a higher price due to the second woofer?Gar.

Subject: Re: Horizontal Symmetry
Posted by Wayne Parham on Mon, 25 Jul 2005 19:54:18 GMT
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It's hard to say. I suspect if the crossover is low enough, it won't matter.

Subject: SST1
Posted by GarMan on Tue, 26 Jul 2005 14:26:26 GMT
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Did some reading last night and found the rule of thumb of keeping drivers under one wavelength apart of the crossover frequency. Crossing over at 1600Hz means I need to keep the drivers under 8" apart.I also found that a horizontal placement of woofer and tweeter may not be a bad as I originally thought. I was surprised to see in Loudspeaker Cookbook that a W/T placement performs better horizontally off axis than a W-T-W placement. It seems that the extra woofer in the W-T-W creates even deeper nulls at the crossover region off axis than a simple W-T.My new question is, what's the difference between Eminence H295 and the SST1. According to spec, they both have the same cutoff and dispersion pattern. Yet, they're different in shape. I used the H295 in my Theatre-3's and would like to keep a CD horn for centre channel. The SST1 is several inches more narrow than the H295 and would allow to to place the two drivers closer.thanks,Gar.

Subject: Re: SST1
Posted by Wayne Parham on Tue, 26 Jul 2005 18:47:37 GMT
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I've not used the H295, but my guess is it would be similar to the SST1, maybe retaining directional control a bit lower on the bottom end.