Subject: LT250 Horn Flare? Posted by GarMan on Sat, 23 Jul 2005 01:07:56 GMT View Forum Message <> Reply to Message

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 View Forum Message <> Reply to Message

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 90° 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 90° horn.

Subject: Horizontal Symmetry Posted by GarMan on Mon, 25 Jul 2005 19:31:31 GMT View Forum Message <> Reply to Message

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 View Forum Message <> Reply to Message

It's hard to say. I suspect if the crossover is low enough, it won't matter.

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 View Forum Message <> Reply to Message

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.

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