Subject: 7PI midrange horn box volume
Posted by hornT on Sun, 14 Mar 2010 14:01:06 GMT
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Does anyone have the box volume of the 7Pi midrange horn?

Subject: Re: 7PI midrange horn box volume
Posted by Wayne Parham on Sun, 14 Mar 2010 16:33:15 GMT
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The rear chamber should be greater than 0.5ft3, if that's what you are asking. It is formed by the area behind the flare in the midhorn cabinet.

More information at the link below. I can send plans if you like.
Midrange Horn

Subject: Re: 7PI midrange horn box volume
Posted by hornT on Sun, 14 Mar 2010 19:04:28 GMT
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Thanks but I've already built the speakers and they sound great!
I'm thinking about trying out some different 10" though...
Apart from the original filters I have a Deqx processor - so swapping drivers is easy.

I've been thinking about this one:
http://www.usspeaker.com/beyma%2010MI100-1.htm
- but it needs 0.7ft^3
-or do you think it could work out fine in the existing cabs?

Subject: Re: 7PI midrange horn box volume
Posted by Wayne Parham on Mon, 15 Mar 2010 03:42:20 GMT
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It's hard to say what that driver will perform like in the horn. You can generally predict the lower end of the response curve using Hornresp, but higher frequency response is dominated by cone behaviour, how it flexes and how much damping there is. Breakup modes aren't included in the Hornresp model, so naturally, it can't tell predict upper end response.

Subject: Re: 7PI midrange horn box volume
Posted by hornT on Tue, 16 Mar 2010 19:35:51 GMT
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Thanks Wayne.

Do you have the input parameters on a hornrespons chart for the Delta 10? I could use some guidance on how to set up a driver.

This way I can compare the inputs with the driverspecs..

- and do you have any experience with this Eminence?
http://www.usspeaker.com/delta%20lite2510II-1.htm

Subject: Re: 7PI midrange horn box volume
Posted by Wayne Parham on Tue, 16 Mar 2010 21:14:06 GMT
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I can pull up the electro-mechanical parameters (BL, CMS, RMS and MMD) for the Delta 10 for you tonight if you want me to, but you don't really need them. Hornresp can calculate BL, CMS, RMS and MMD from T/S parameters Fts, Vas, Qes and Qms. Double-click on any of the electro-mechanical fields and it will prompt you for related T/S values. Once you've entered the T/S values, it will calculate the electro-mechanical parameters for you.

As for the Eminence Deltalite 2510, I tested with it a few years back and found it wouldn't work for me. The upper response was way too low. I think the issue was the dust cap was a mesh, sort of like the old Magnums, and didn't provide much acoustic output. The midhorn really needs the dust cap to provide some output to get any high frequencies, otherwise, there are too many path length cancellations and nothing emerges up high.

You might try it again though, sometimes Eminence changes their product manufacturing processes but retains the same name. So there can be some changes over time. I catch those in products I regularly use, but I haven't brought in a Deltalite driver in a few years.