
Subject: 12pi hornsub questions
Posted by [noviygera](#) on Sun, 22 Jul 2018 06:04:51 GMT
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Hello,

I'm evaluating the 12pi horns for my application. Home use, 2 channel music. They will need to mate with my mid and high horns.

What's the horn path length?

What would it take to make 12pi play up to 250hz? What part of their geometry makes them roll off above 120hz, as I can see from hornresp simulation?

thanks,
Herman

Subject: Re: 12pi hornsub answers
Posted by [Wayne Parham](#) on Sun, 22 Jul 2018 16:16:50 GMT
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The horn path length is 9.3 feet. Upper frequency rolloff is due to mass rolloff, front chamber volume and horn folds. Mass rolloff, front chamber volume and flare are incorporated in the Hornresp model, but the specific folds aren't. That's what tends to make it rolloff a little lower than what the model shows.

Subject: Re: 12pi hornsub answers
Posted by [noviygera](#) on Tue, 24 Jul 2018 06:36:44 GMT
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Wayne,

thanks for responding. Possibly in the future, when I build the WE 13a horns, I would be ok with 100hz upper frequency rolloff. I plan to start that project in the near future. However, my current mids play down to 250hz -3db. Out of curiosity and actual current need, what design changes would it take to bring the upper rolloff freq of 12pi to 250hz? Is it possible?

thanks,
Herman

Subject: Re: 12pi hornsub answers

Posted by [Wayne Parham](#) on Tue, 24 Jul 2018 13:42:57 GMT
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I think if you could extend the upper cutoff if you unfolded the horn and made it straight.
