Subject: Why does Selah find this to be true?
Posted by Marlboro on Mon, 28 Sep 2009 16:54:26 GMT
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Rick Craig>

I've found the 3"-5" woofers work best with the majority of planar / ribbon tweeters in a passive design.

Why have you found this to be the case for you? Measurement? Listening? Critical response of customers or peers?

Just a gut feeling?

I'm more of a WHY GUY; I don't respond well at all to authoritative statements without descriptions of the reasoning or research behind it.

Subject: Re: Why does Selah find this to be true?
Posted by selahaudio on Wed, 30 Sep 2009 00:29:56 GMT
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Marlboro wrote on Mon, 28 September 2009 11:54Rick Craig>

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Why have you found this to be the case for you? Measurement? Listening? Critical response of customers or peers?

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I'm more of a WHY GUY; I don't respond well at all to authoritative statements without descriptions of the reasoning or research behind it.

Combination of reasons. Not always customer-driven; in fact, sometimes they're under the assumption that a 80hz-120hz crossover isn't possible with a subwoofer or they want a 7" to run ported and full-range without a sub.

The driver integration to the tweeters and vertical coverage is easier to optimize with the smaller C-T-C spacing and higher crossover point. Measurements and listening experience.

Subject: Re: Why does Selah find this to be true?
Posted by Marlboro on Wed, 30 Sep 2009 01:28:09 GMT
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Thanks.

If I may ask, and don't feel a need to respond if its proprietary, at what frequency have you chosen to cross your HV's to the Fountek's in your Symmetrica speakers?

Marlboro

Subject: Re: Why does Selah find this to be true?
Posted by selahaudio on Wed, 30 Sep 2009 12:42:05 GMT
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Marlboro wrote on Tue, 29 September 2009 20:28Thanks.

If I may ask, and don't feel a need to respond if its proprietary, at what frequency have you chosen to cross your HV's to the Fountek's in your Symmetrica speakers?

Marlboro

Sorry, that's proprietary. Also, a crossover point can be quoted but it can be acoustical or electrical. If it's non-symmetrical that can change things as well.

Subject: Re: Why does Selah find this to be true?
Posted by Marlboro on Wed, 30 Sep 2009 12:56:43 GMT
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Of course....

The actual point is somewhat less important than the slope of the cross, the symmetry of the cross, and the characteristic acoustic or electrical.

Traditionally when one(not to imply that the "one" is Selah) is using 6.5 - 8 inch woofers with a ribbon one has been forced to cross in the vicinity of 1200-1600 hz.

When one is using 3 inch wide range speakers, one can raise the cross point substantially to something above 2300 or more. Of course everyone should know that this ALWAYS entails the use of a woofer system to go with it since the 3 inch wide range just won't go low enough even with equalization, electronic crossovers, and a high power amp. You can't get a lot of water from a stone, some but not a lot.

Subject: Re: Why does Selah find this to be true?
Posted by AudioFred on Thu, 01 Oct 2009 10:55:46 GMT
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selahaudio wrote on Tue, 29 September 2009 19:29

Combination of reasons. Not always customer-driven; in fact, sometimes they're under the assumption that a 80hz-120hz crossover isn't possible with a subwoofer or they want a 7" to run ported and full-range without a sub.

My XT-8 arrays are an example. My wife generously bought me this expensive kit and lets me position these large speakers in our family room, and I didn't want to push the envelope of her generosity by adding a couple of large sub boxes. But with the increased availibility of smaller affordable high quality drivers I might go for a Symmetrica-type array if I were doing it all over again today. No, if I were doing it over again I believe I would go with nine 7" Scan Speak Revelator woofers and nine Fountek ribbons in a ported box. Or then again I might...

http://fredt300b.smugmug.com/Hobbies/Building-the-XT-8-Line-Arrays/362400_3AfcH#P-1-12

Subject: Re: Why does Selah find this to be true?
Posted by selahaudio on Thu, 01 Oct 2009 12:22:41 GMT
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Marlboro wrote on Wed, 30 September 2009 07:56Of course....

The actual point is somewhat less important than the slope of the cross, the symmetry of the cross, and the characteristic acoustic or electrical.

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You assume wrong.

Subject: Re: Why does Selah find this to be true?
Posted by Marlboro on Thu, 01 Oct 2009 14:58:49 GMT
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Let me gently try this again:

What in all the stuff I said, did i assume wrong, according to you?

Kind regards,

Marlboro