Subject: Crossover help
Posted by frankmalz on Sun, 10 Aug 2003 09:40:54 GMT
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hello forum,i wish to build a coax system with the 12cx eminence .The tweeter is the cp380m from beyma.I measured up the frequency response of the system at 1m in a 125 liter enclosure.My questions are :where would you start to design the crossover?which crossover point?what to do with the rise at 10khz?Thank you very much for your help!frank

http://de.f1.pg.photos.yahoo.com/bc/frankmalz/vwp?.dir=/Coax&.dnm=frequence+response.jpg&.src=ph&.view=t&.hires=t

Subject: Here is the graph! (nt)
Posted by frankmalz on Sun, 10 Aug 2003 10:15:56 GMT
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graph

http://us.f1.yahoofs.com/users/a1457f87/bc/Coax/frequence+response.jpg?bcyokN_AIzc_cgmU

Subject: Re: Crossover help
Posted by Jeff Robinson on Sun, 10 Aug 2003 13:12:00 GMT
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I'd be more concerned with the dip at 6.5 kHz. Have you tried moving the measurement mic position to see if it's an artifact?I'd look at 1.6 kHz for a starting point on the crossover, if you're doing a passive crossover then the 800 Hz resonance of the Beyma will need an impedance notch filter. I'd look at Wayne's crossover document for help with that.http://www.pispeakers.com/Speaker_Crossover.docJeff Robinson

Frank's photos

Subject: More measurement files!
Posted by frankmalz on Sun, 10 Aug 2003 15:55:23 GMT
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Hi,thanks for your helpful replies!!I loaded the complete measurement files at my yahoo briefcase.Open "coax".frank

http://de.f1.pg.briefcase.yahoo.com/frankmalz

Subject: 1.6kHz with Zobel and L-Pad
Posted by Wayne Parham on Mon, 11 Aug 2003 05:55:20 GMT
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I'd go with a ~1.6kHz crossover. For a coaxial arrangement, I might be tempted to use a symmetric crossover. As for the top-octave, it really looks pretty good and so I wouldn't add more energy there. Just use an attenuator to match the Beyma tweeter level with the Eminence midwoofer.I think you will probably want a Zobel on the Eminence midwoofer, but for the tweeter horn, a series/parallel L-Pad arrangement that attenuates 10dB would be great for double duty - attenuator and damper. Give that a go and check your measurements to see where you're at. If the L-pad doesn't damp the circuit enough, try some different values and maybe even go with Jeff's suggestion of a tank circuit (notch filter) which will act as a resonating damper.