Subject: Tweeter or Super-tweeter
Posted by GarMan on Mon, 05 Jun 2006 17:09:10 GMT
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It seems everyone agrees that most fullrange drivers can benefit from top-end augmentation with a (super)tweeter. But should I be looking for a tweeter or super-tweeter?Many postings here describe the use of dome tweeters that extend just past 20Khz as "super-tweeters". However, if these tweeters can comfortably cover as low as 2kHz, I don't really consider these to be super-tweeters. This is in comparison to true "super-tweeters" in the market that extends to beyond 40kHz, with min. XO points of 10kHz.So in a fullrange driver application, which should I consider using?Gar.

Subject: Re: Tweeter or Super-tweeter
Posted by Manualblock on Mon, 05 Jun 2006 19:33:09 GMT
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I have a pair of Loth X Ion's that use a fullrange transmission line with a tweeter that comes in around 10k. Is that what you had in mind? Becuase that set-up has a nice balance overall; very full-range sounding but with some air on top. I think the tweeter is the typical Dynaudio.

Subject: Re: Tweeter or Super-tweeter
Posted by akhilesh on Tue, 06 Jun 2006 11:21:58 GMT
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I'd go with a dome tweeter that goes to at least 25KHz (like the VIFA units). More important than the frewq is the material of the tweeter. Domes match well with wde ranges in general, as opposed to some of the other super tweeters. Horn loaded super tweeters will need to toned down. My advice is a dome. -akhilesh

Subject: Re: Tweeter or Super-tweeter
Posted by GarMan on Tue, 06 Jun 2006 12:16:55 GMT
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Hi MB. Just want to know if I should be taking the term "super-tweeter" literally or if a regular tweeter would suffice. Some of the dedicated super-tweeters on the market are outragous in price and performance.

Subject: What about piezos for super-tweeter
Posted by GarMan on Tue, 06 Jun 2006 12:21:34 GMT
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Akhilesh, the problem I've found with dome tweeters is that it's hard to find one with a high enough sensitivity to match fullrange. Most domes are at 90db with a handfull in the 93db range. Ideally, I'd like to have something at least 95db.What about the use of piezos as super-tweeter? Looking at specs, many of these units go up to 30kHz. Never considered piezos until I saw the $300 unit offered by Phy-HP.

Subject: Re: Tweeter or Super-tweeter
Posted by Manualblock on Tue, 06 Jun 2006 12:32:04 GMT
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Yeah thats why I thought I would offer my 2c. The Ion BS 1's have what sounds to me like plenty of air. Thats a regular dedicated tweeter not a supertweeter.There was an article in AE a few years ago where they studied exactly how high in freq you needed to go to sound real. It dealt with much of what you are asking I think.

Subject: Re: What about piezos for super-tweeter
Posted by akhilesh on Wed, 07 Jun 2006 16:17:28 GMT
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Here is one at 93.5db:http://www.partsexpress.com/pe/showdetl.cfm?&DID=7&Partnumber=264-578I think you'll find the 1.5 db difference will hardly be audible at higher frequencies. But if phy-hp is selling a piezo for $300 it must be something special. IF you are spendign that kind of moneyy look at the JBL & B&C bullet supertweeters as well (of course eff is far higher). -akhilesh

Subject: Re: What about piezos for super-tweeter
Posted by GarMan on Wed, 07 Jun 2006 19:41:15 GMT
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I'm sure a $300 piezo UFH would be a good complement to the $1500 phy-hp fullrange, but there are other things I need to consider, like food. My budget is down at around the $25 level.gar.

Subject: Re: What about piezos for super-tweeter
Posted by akhilesh on Wed, 07 Jun 2006 20:37:52 GMT
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Then go with Vifa: the link I gave you. -akhilesh

Subject: Re: What about piezos for super-tweeter
Posted by GarMan on Thu, 08 Jun 2006 16:12:13 GMT
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Just ordered a pair from Solen. I already have a pair of piezos from my Pi-Studio kits and Eminence APT-80 at home. Looking forward to comparing the three and reporting back.

Subject: Re: What about piezos for super-tweeter
Posted by gfederys on Thu, 08 Jun 2006 18:46:07 GMT
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Hi GarMan. I just finished auditioning a variety of tweeters trying to match my Loather DX3, (98 db), Might I suggest the Fostex FT 17H? I found it to be smooth, detailed, and not annoying, @ $35 ea., you'd only have to give up maybe one meal a day for a week.