
Subject: Fostex 167E distortion
Posted by [Dave](#) on Fri, 26 Aug 2005 18:05:07 GMT
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After being extremely pleased with the midrange of a pair of Fostex 127E BR speakers I built I decided to try a pair of BR 167E's. These don't have the magic in the midrange that the 127E's do. There seems to be a distortion in the upper midrange, highest octaves of the human voice and the electric guitar. I never had this problem with the 127E's even when new. I am not using BSC on either speakers.

Subject: Re: Fostex 167E distortion
Posted by [Bob Brines](#) on Fri, 26 Aug 2005 20:26:11 GMT
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Try using a BSC, something like 1.5mH||4-6 ohms. I've never had a problem with the upper mid-range of the FE167E. The FE127E has a serious hump in the frequency response 5-10K Hz. I find the FE127E unlistenable without a zobel to bring down the rising FR. Bob

Subject: FE127e [was] Re: Fostex 167E distortion
Posted by [lon](#) on Fri, 02 Sep 2005 19:04:04 GMT
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Bob, What do you suggest for the FE127e problem? I have the FE127e's in GM designed MLTL.

Subject: Re: FE127e [was] Re: Fostex 167E distortion
Posted by [Bob Brines](#) on Sat, 03 Sep 2005 11:24:44 GMT
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I'm real sensitive to spitting, sibilant speakers. A zobel helps when a driver has a rising FR like the FE127E. Try 8 ohm and 2.2 uF. Right now I'm trying to find a good cabinet for a pair of FE127E's I have laying around. I've looked at all of the MLTL variants, BR's and the Fostex standard DBR. Nothing is going to go below 70 Hz and max power handling will be in the 1/2 watt range -- 85dB max undistorted. The only use I can see for a "full-range" application is computer speakers, and 24x9x9" is a bit big for my computer desk. I'm thinking that the right application for this driver is as a mid-tweeter over a 10" or 12" woofer and crossed at 300 Hz or so. The best of the lot is indeed the Fostex DBR. However, the dip at 150Hz is just hinted at in the Fostex FR plot. Running the numbers through MJK's spreadsheet shows the dip to be a very sharp 20dB hole. AT 150 Hz, that

should cause notes to drop out! Anyone build the standard DBR?Bob

Subject: Re: FE127e [was] Re: Fostex 167E distortion

Posted by [lon](#) on Sat, 03 Sep 2005 17:25:56 GMT

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Building anything fresh for me is going to be a problem since I've developed some joint problems. So my other question is what would be a good upgrade for the FE127e that would be plug and play for my MLTL? FX200 has been mentioned by GM as a drop in replacement. Overall I'm sold on the MLTL config. The boxes have nothing inside and I extended the port tube to 6". Original calls for much less to attain very low frequency but the elongated port brings the harmonics up to where all stringed instruments like double bass and piano sound superb. I will be interested to see what you come up with for these. I originally got the FE127e's for computer speakers. But they sounded better than the off brand mains I had so I started to build with them. The previous bookshelf speakers had junk in them near as I can figure but the workmanship is great. I have some blank baffles made to tinker with some other speakers for those. Measures are very close to what Jim Griffin uses for his Jordan BR.

Subject: Re: FE127e [was] Re: Fostex 167E distortion

Posted by [GM](#) on Sun, 04 Sep 2005 02:12:18 GMT

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>FX200 has been mentioned by GM as a drop in replacement.=====Greetings! I believe you meant FX120..... That said, assuming you didn't get carried away cutting out the mounting holes, the new CSS 125S is a slightly smaller, but still drop-in once you drill new mounting holes, and sounds better overall in your cabs than either the FE127E or FX120. I gather from your remarks that strong bass isn't desired, so you may have to either extend the vents to 8" or damp them to suit. GM

Subject: Re: FE127e [was] Re: Fostex 167E distortion

Posted by [lon](#) on Sun, 04 Sep 2005 03:37:08 GMT

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Hi Greg, Thanks for responding. And yes I must have meant what you said. The CSS would be an interesting experiment. And I still have (or can get more 2" pvc. Bob's comments notwithstanding, the FE127e in the MLTL made me a believer. This is stereophile sound on a true budget: Particle board shelving, pvc and a bit of glue. I did make some grilles out of a piece of 3/8" in particle board and some stretchy doubleknit fabric from my old bell bottoms... (just

kidding.) Grilles look good though for being a cut and paste job. Maybe the CSS 125's will go on deal. One of us on here was saying they were overrated IIRC. Over at Full Range Driver Forum there has been some talk about a Tangband model -- 1346 (whatevs) that is showing potential for full range builds as well.

Subject: Re: FE127e [was] Re: Fostex 167E distortion
Posted by [moray james](#) on Sun, 04 Sep 2005 20:38:10 GMT
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Have a look at Onur Ilkorur's site at this address <http://www.yildiz.edu.tr/~ilkorur/>. Onur has a great design for the fe127e which can also be used for the fe126e as well. Not to mention his Singular design which he says kicks butt with a Tannoy in wall dual concentric that hits 27 Hz. and plays as loud as a PA system with no distress. Regards Moray James.

Subject: Something new on the radar [was] Re: FE127e [was] Re: Fostex 167E distortion
Posted by [lon](#) on Mon, 05 Sep 2005 19:11:05 GMT
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Hi Greg and all, Adire has a driver on pre-order called the Extremis 6s. It's getting favorable recognition over the CSS released product. Any news on that? A fresh thread is called for... I'll go to the top and make one.
