Subject: Under $500 Line Array Choices
Posted by FredT300B on Tue, 13 Jul 2004 17:30:21 GMT
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There's an interesting project description at http://www.lonesaguaro.com/speakers/array/array.htmThis array uses multiple midwoofers with a single tweeter. Certainly this type of array is a compromise, but with the least expensive planar tweeters selling for about $30 (and you need 16 of them for a full two speaker array), a single $55 dome tweeter is about the only way you are going to build an array that sounds good for less than $500. I built a similar array using 10 very similar Vifa/JBL midwoofers and the $22 Peerless #811647 1" horn loaded fabric dome tweeter. You can see it at http://fredt300b.smugmug.com/gallery/132721/1/4830622But the midwoofers in both Lou's array and mine are PE "buyout" drivers that will not be available in the future, and they are designed for use in a small volume ported satellite-type enclosure. Lou's Morel tweeter choice sounds good to me, but I doubt its 93dB sensitivity would be adequate with a high efficiency midwoofer array. My Peerless tweeter choice was a very sensitive 99dB, but its sound is clearly inferior to the Silver Flute planars in my Linus array.So here's the challenge: How can you build an under-$500 multi woofer single tweeter array using drivers that 1)will sound good, 2)will be available in the future, 3)will go down into the mid 50's, and 4)the tweeter will be sensitive enough to match up with a 95-97dB woofer array?I was looking at Madisound's 5.25" 8 ohm Silver Flute midwoofer as a candidate for the midwoofer array. It seems to do what I need, and if I used 8 in a 2-3-3 ported configuration I would get a reasonable friendly 6.8 ohm nominal impedance and an F3 in the mid 50's. Its less-than-$15 price makes it a tempting choice.Finding an inexpensive tweeter that's sensitive enough and that will sound good is a tougher challenge. I don't want to spend much more than $50 for each tweeter in a "budget" array. The only ones I can find are the Morel that Lou used, the Peerless that I used in my first project, and the Vifa MG27TG39-04, at 95dB efficiency, but it's a four ohm speaker and its frequency graph looks like it might be a bit tizzy in the top end (good for a car audio system). The Fountek JP3 would sound much better, and it offers a very friendly six ohm load, but it's a bit on the pricey side for this array at $81.Any comments? Would the Silver Flute midwoofers be a good choice? How about the tweeter choice? Should I bite the bullet and go with the Fountek, or are there some other choices I'm not aware of?