Subject: Re: please advice: 8 drivers, 95dB, 6ohm+
Posted by Jim Griffin on Fri, 06 Jan 2006 03:01:56 GMT
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Dave,Let me comment on a few items in your posting:You said: "I'd like to build a quasi array using 8 5" drivers and a single dome tweeter at its center. I've read Jim's paper and Im stuck with achieving the following goals:- 8 drivers per side- roughtly 95dB efficiency- minimum 6 ohm loadThe drivers i plan to use have 86dB eff each @ 8ohms.Doing the basic math described in Jim's paper, I 'best' I can do is 4 parallel groups totalling 98dB and 4 ohms."Comment: With the assumption that you have either a sealed or vented box and that it is out in the room a bit, you will need baffle step compensation which will cost you 3-6 dB of that woofer sensitivity that you were planning to have. Hence, your array will likely run in the 92-95 dB sensitivity range. By the way, what dome tweeter are you using to keep up with the woofer line? Most dome tweets are best case in the low 90's sensitivity. You said: "The only solution I can think of is to add series resistance (4ohms) to get down to 95dB and 8 ohm load."Comment: With 8 drivers you can connect them as you have in mind in 4 parallel groups of 2 in series to get a 4 ohms impedance. You could go to a 16 ohm impedance by using 2 parallel groups of 4 in series. I don't recommend series resistors in the woofer line unless you take the increase in Re into account when you size/tune the box. A thought is to add another woofer so that you have 9 in the woofer array (connected as 3 parallel groups of 3 in series) which yields 8 ohms array impedance for 8 ohms drivers. Jim