
Subject: Re: Need a bit of help with cab volume
Posted by [Jim Griffin](#) on Tue, 08 Aug 2006 20:39:47 GMT
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Dennis, Let me throw out a couple of options on woofer volume per some Bass Box calculations (I'm assuming minimal fill for each of these two configurations). The drivers are connected series parallel so they can be either 4 ohms or 16 ohms overall array impedance. First, a closed box with volume of 0.375 cu. ft. per each of 8 woofers. That is a 3 cu. ft. sized box. The Qtc computes to be 0.73 and the f3 point is 112 Hz. Second, is a vented box that is 0.5 cu. ft. per woofer or 4 cu. ft. for the array of 8. This yields a box tuning of 62 Hz and a f3 point of 54 Hz. This box uses 4 separate 4" diameter ports that are 3.25" long. I personally prefer the sealed box better than the vented design even though it does not tune as low. This is because the vented box exhibits too much stress on the driver as the Xmax is excessive below 100 watts, the power handling is too low (limits the SPL), and the group delay is too excessive in the below 100 Hz area. My point is that you will need a sub woofer for lower end coverage with either design and you'll be safer with the sealed box than the vented box. A infinite number of design options exist if you don't like these but this is a good starting point. Jim
