Subject: Re: 7 pi bassbin
Posted by Wayne Parham on Fri, 07 Apr 2006 15:05:30 GMT
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Some cabinets are more forgiving of modification than others. But really, any time you modify the plans, there is a risk that it will not perform as expected. If it's a simple bass-reflex box and the only thing modified is slight change of dimensions, that's usually OK. If the volume is the same, I expect it to work well, provided there are no standing wave issues that crop up, such as would be

cornerhorn design a little more sensitive is it is designed for uniform directivity over a range of positions. This is true of our matched-directivity two-way loudspeakers too, basically all our models with horns. The smaller speakers with a cone woofer and dome tweeter are pretty simple, designed to sum properly on-axis, straight in front of the midwoofer. But the horn speakers are designed to sum properly everywhere in a 90°x40° pattern, so the crossover and the positions and orientation of each driver are more critical.The bass bin itself isn't too complicated a device. You want it to be slightly overdamped, as a conjugate of room gain. You don't want standing waves inside the box to influnce the response. More importantly, you want the physical alignments of each driver to be as designed. The position and orientation of each driver is important, as proper summing on and off-axis relies on the position and directivity of the drivers, as well as the crossover frequency and slope. It all comes together as a system design, and modifications may upset the relationships between components, changing the overall system.