Subject: ART array - What might be the effects of narrowing baffle on Posted by Marc G on Thu, 21 Aug 2008 22:01:33 GMT

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What would audible effects be of building the ART array, with a baffle width reduced to 7-9 inches? Adjusting the depth and height to maintain the internal volume. I realize this may have been done to make your budget goal of using only one sheet of material. Wouldn't diffraction effects be lessened if the baffle was as narrow as possible? Would there be any problem with making the cab taller using the same amount of drivers - starting the first driver say 12" off the ground? My first attempt at an array was less than stellar and I like an affordable tested design.

Subject: Re: ART array - What might be the effects of narrowing baffle on Posted by FredT on Sun, 24 Aug 2008 23:15:45 GMT

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I wouldn't anticipate any problem with narrowing the baffle. As you said, the width was driven by the most efficient use of a sheet of mdf or plywood. The height is intended to position the tweeter at ear level, about 36" off the floor. Also, the interior is divided into two equal volume chambers by a solid brace positioned just below the tweeter. You could add a few inches to the enclosure so the distance from the bottom woofer to the bottom of the enclosure would be the same as the distance of the top woofer from the top of the enclosure. This would require a bit more complex middle divider because it would be placed at the tweeter height, but it could be done. Like Shane said, the height is the greatest contributor to the low WAF, but aesthetically I prefer a narrow and deep enclosure to an almost square one. Let us know how it turns out.