Subject: 3 Pi Slanted Baffle?
Posted by rkeman on Thu, 22 Apr 2010 15:00:48 GMT
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Audiokinesis has released a two-way design called the Rhythm Prism that offers a design similar to the 3Pi in a cabinet with a slanted baffle. The angled front baffle minimizes the need for sustantial speaker toe-in and lessens the footprint of the speaker. A 20" x 30" front baffle maintaing current driver and vent placement and total enclosure volume could be accomplished with side wall depths of about 12" and 22". Other than more complicated cabinet fabrication, does the 3Pi seem amenable to this design approach?

Subject: Toe-in and cabinet shape
Posted by Wayne Parham on Thu, 22 Apr 2010 18:44:53 GMT
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orientation. It offers the benefits of improved imaging and coverage, constant directivity through the entire audio band from the Schroeder frequency up. This placement also sort of "tucks away" the speaker in a typically unused part of the room, so it tends to allow a much larger speaker to be less obtrusive. All bonuses, if you have the right corners.

designed to snuggle back into a room corner.

The answer is, yes, you can angle the baffle. You can make the cabinet a trapezoidal shape. You can radius the entrance and exit of the port to reduce turbulence. All of those are modifications that are potentially useful, perhaps. But they also would probably require some design effort, at least some models and/or measurements for verification.

Some people radius the ports, that's probably a safe mod, and some people slightly change cabinet dimensions, maybe also safe if changes are very small. It's just really hard to know when you go past that. I think the only way to know is to build your proposed design and measure it.