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Subject: Smith Horns, pt1

Posted by [GarMan](#) on Mon, 06 Jun 2005 01:30:32 GMT

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This weekend, I got it into my head that I need to build a pair of JBL 2397 / Smith Horns clone. How hard can it be? Just a couple of semi-circles sandwiching a group of internal vanes. Turns out, it was the hardest project to date. I spent more time designing and building jigs than actually building the horns themselves. A circle jig for the router to cut the 15" radius circles. A cutting board for the long straight cuts. And then, there were the vanes. Designing a jig and cutting a set of vanes measuring 1.5" high and 5/8" wide was tough. Doing the same for the "half" vanes (1.5" high, 5/16" wide) was a big PITA. Couldn't get it done over the weekend, but did get the set of 10 vanes, 4 half vanes, and major pieces cut. Assembly will probably take another weekend. This was supposed to be a quick "mock-up" project to see if I like the sound, before committing to real wood. I originally planned on using MDF, but found a source of Baltic Birch for just a little more than a sheet of MDF. The extra cost for the birch was well worth it to not have to deal with MDF dust. Vanes are routed out from poplar, based on its availability, cost, and workability. I first tried routing it out of stacked baltic birch ply, but found it impossible to cut 1.5" of it with a router at once. Design based on plans posted by Mr. Widget from Lansing Heritage board.gar.

Smith Horn Project

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