

These are pictures of a project to build a center channel speaker for our television. It is based on the design for the [Cynosure](#) speaker. This version is modified in three ways:

- 1) The box is  $\frac{1}{2}$ " higher, 12" wider and  $5\frac{3}{8}$ " shallower than the original design, maintaining the original volume.
- 2) The ports have been moved from the sides to the front.
- 3) A minor substitution for the 1.5 mH inductor in the crossover. The one specified in the original design is on back order until the end of time. The one I used has a slightly higher DCR, but should be fine.

Otherwise, it is pretty well stock. Like the original, my version is built from  $\frac{1}{2}$ " MDF. I don't think I'd do that again. MDF machines well, but puts dust *everywhere*. Next time, I'll try Baltic birch plywood or solid wood. I'll also use  $\frac{3}{4}$ " material for the top, bottom, and baffle (front). Thicker top and bottom would eliminate the need for the gusset in front to mount the baffle. The baffle has a lot of holes cut into it;  $\frac{1}{2}$ " material is fairly flimsy.

It's not obvious when you are building, but the ports are tapered. When you measure for the hole, take the measurement from the front, not the back. This will save you an hour of work to enlarge the holes. Trust me on this one.

At this point, it has only been in the system for a few hours, but I am very pleased. It is good match for existing Thiel 3.5 left-right speakers. Voices are much clearer and solidly located on the screen.

I did not put any damping in the box, either stuffing or lining on the walls. I am going to listen for a while. I'll probably try it, but it sounds good right now. I also have some lovely figured cherry that I planned to cut up for veneer to cover the outside. However, the speaker is buried so far in the bookcase; I may do something simpler and use the cherry elsewhere.

May 23, 2003