







Helios Speaker Part 5 - Driver Recess and Cutouts

The moment of truth! After flying in the sides and flush trimming everything down, it was time to pull out the belt sander, with 80 grit I sanded all the translam sides down flat to make up for the small irregularities from layer to layer. With the hog monster Porter Cable belt sander this goes pretty quick, as a bonus you get a killer upper body workout with nice isolation of the Pectoral and Latissimus Dorsi muscle groups!

I followed up the best sanding with RO Sander of 80-120-180 and 220 grits. Don't forget to maintain proper cabinet orientation during all this! The cabinet has a front and a left and right (to accommodate the passive radiator), masking tape is great for doing this.

After everything is flat and smooth, drivers positions are laid out and verified, centers are drilled out to 1/8" for the circle jig pin.

I measure driver frames precisely with calipers or a tape measure for larger frames above 12", then I use a formula for calculating what 16th to use in the circle jig. If a driver measures 9.55", then I multiply $.55 \times 16$, which equals 8.8, round up to 9 and that's 9/16". I typically shoot for 1/32-1/16" oversized overall, it's tempting to make drivers fit perfectly but that only asks for trouble later on as the wood moves around.



