Subject: New Project - The DR912a Line Arrays
Posted by AudioFred on Tue, 08 Nov 2011 12:24:06 GMT
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The 42 drivers arrived last week, and I'll soon be headed to Home Depot to pick up five sheets of mdf, and to the woodworkers supply store to pick up the just-sharpened blades for the table saw. My friend John, who was the amp testing guy at this year's LSAF, will help me saw the panels. I've tried pushing full sized 4X8 sheets of 3/4" mdf through a table saw solo, which convinced me this is a two-person job if you hope to saw just the mdf, and not risk the amputation of your important and highly valued body parts too.

The DR912a is so named because each 7-1/2' tower will house nine BG Neo 8 PDR planar tweeters and twelve 7" Dayton Audio Reference Series RS180-8 woofers, actively crossed over using a dbx DriveRack PA+ loudspeaker management system. Each speaker will have its own dedicated 125w/ch stereo amp. Two downsides to this choice of drivers are that the woofer array will be more sensitive than the tweeter array, and the Neo 8's have a problematic frequency response curve and are normally used as midrange speakers, extending only to about 15khz. Neither should be a problem with this project, since the speakers will be bi-amped, with each section having its own level control and dsp equalization, and at my age I can't hear much above 15khz anyway.
http://www.parts-express.com/pdf/264-713.pdf
http://www.parts-express.com/pe/showdetl.cfm?Partnumber=295-355
http://www.parts-express.com/pe/showdetl.cfm?Partnumber=246-171

The towers will be fairly complicated, with a separate 4" deep internal tweeter chamber extending the full vertical height of the enclosures, plus extensive internal bracing that will effectively divide each tower into six two-woofer ported sections. I expect this to be a months-long project. I'll post updates.