Subject: Building a Pro Sound Speaker Pair
Posted by AudioFred on Sun, 12 Sep 2010 12:14:30 GMT
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We host house concerts, and I need a pair of good sounding pro-type speakers. I've auditioned some lower priced commercially available speakers such as the Peavey PR-12 ($169 street price) and they don't sound very good to my ears. I've also auditioned some expensive speakers such as the JBL MRX512M ($650) and they do sound good, but they're out of my price range. Sound quality is far more important in a house concert setting than it is in the typical noisy bar gig situation.

So I'm considering diy speakers using a 12" woofer with a compression horn. I would like something that sounds as good as the Three Pi speakers I once owned, but in a much smaller ported cabinet (about 1.5 cu ft) for light weight and portability. The speakers will be stand mounted for the concerts. Sound levels at these concerts are typically in the 100-105dB maximum range, and bass response below about 60hz isn't important in this project. The speakers will be driven by a 600w/ch powered mixer.

I was thinking of something along the lines of the Smithereens in the PE project showcase, but with the Eminence H290 horn substituted for the LT250 used in this project (I prefer a bi-radial horn to a CD type). I plan to use the PE #245-325 birch cabinets.
http://www.parts-express.com/projectshowcase/indexn.cfm?project=Smithereens

I'm wondering how I could adapt the Smithereen crossover for use with the 290 horn, or better, to adapt the Three Pi crossover for use with the Selenium 12WS600 woofer. Any suggestions?

For the curious, here's a link to our facebook house concert page:
http://www.facebook.com/pages/The-Thompsons-House-Concerts/262719984449?v=wall&ref=nf