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Subject: Vintage 15" woofer recommendation for OB midbass array?

Posted by [Norris Wilson](#) on Tue, 06 Nov 2007 23:02:44 GMT

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I have been thinking about many of the efforts that are being made in the OB design arena recently. In the Beyond the Ariel's post over at DIY audio loudspeaker forum. There have been many enlightening aspects of OB speakers revealed. One major issue in order to obtain high SPL output ability. One has to increase radiating area as the frequency goes lower. In the name of expense, I thought four vintage 15" mid to higher Qts pro woofers could be desirable, say a Qts of .5 to .9. I think two 15" woofers per channel stacked vertically for the midbass region should be sufficient to obtain a real world 100db in my listening room.. My Philips AD5200M 12" fullrange drivers could work for the midrange, and possibly a vintage cheap compression driver for the tweeter. I would bi-amp this speaker, actively limiting the bottom frequencies of the midbass drivers, using a passive filter to roll off the top. Also, limiting the midrange bottom close to where the midbass is rolled off. This could be done by lowering the coupling capacitor value in the amplifier, and passively rolling off the top of the midrange with a coil. The tweeter would be passively crossed in. Of course this system would require active subwoofers, that I have, for the sub 50Hz frequencies. I have been listening to a pair of Philips AD5200M 12" fullrange drivers on a large baffle for a few years now. "Thanks spkrman57" But, there are many shortcomings of this approach using this particular woofer with a whizzer cone. The main shortcomings are mainly due to the whizzer cone distortion at high SPL's, beaming, and the effects of running a 12" cone above 2kHz, which is poor high frequency reproduction. I would love a vintage 15" woofer recommendation for the OB midbass driver that has a mid Qts around .5 to .9 range. A frequency range for this OB midbass section could be optimum at 50Hz to 200Hz. I have chosen vintage woofers as the most cost effective, to include resale if this all turns into a pile of wasted efforts. Any input about my hypothetical OB speaker would be greatly appreciated? Any other recommendations for midrange and tweeters would be helpful as well. Thanks Norris Wilson

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