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Subject: 4pi Pro & Tubes

Posted by [LuxmanLover](#) on Sun, 10 Nov 2002 12:51:53 GMT

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As previously posted I had the opportunity to hear what all the "tube buzz" (no pun intended) was all about. I won't reiterate the whole experience but there is magic in the tube sound in the right combo. Unfortunately the big motor in the 2226 based 4Pi pro is generating too much back EMF for the little SET amps to overcome (my best uneducated guess, please anyone jump in and rescue me on this one). Consequently, the bass is quite attenuated on a SET/4Pi pro system (the top end, mid range, imagining etc. is fantastic). Since most of us here are tweakers/fiddlers by nature I've been kicking a few ideas around of how to overcome this problem. I would like to keep the control and detail of the JBL professional drivers and still be able to drive them with a small SET amp, clearly the 2226H won't allow this so I began to look at the 2235H, which is also a 15" JBL driver that usually gets used for sub duty but has been used very successfully in JBL monitors. The zmax is lower on the 2235H than on the 2226H, so that's a good tube thing, also the motor is only a 150 watt piece vs the 600 watt motor on the 2226H, might be easier to drive(?). So what's the problem, well the 2226H has a nice smooth response up to 1500/1600 Hz where Wayne cross' them over to the PSD2002, however the 2235H gets pretty peaky after 800/900 Hz. On a previous post I asked about crossover attenuation hoping that I could get around the 5 Db dip in response that the 2002 has right around 1000 Hz. This 5 Db dip combined with the 5 Db peak on the 2235H probably wouldn't work out to be the best combo. Possible solution? If you look at the FR chart on the 2235H the off axis response flattens right out to 1000 Hz. So with that in mind what I think I'll try is to build a cabinet that has the HF horn on axis with the listener and the LF driver aligned straight ahead, my speakers are quite far apart so the LF drivers will be about 30 degrees off axis, cross the whole thing at 1000Hz (remember this will only see about 3 watts) and see how it sounds. KellyPlease keep in mind this is only my personal quest for knowledge and is in no way implying Waynes designs are flawed or inferior, quite the contrary.

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