
Subject: A power supply/ amp designer has offered to design a DIY amp to drive 0.75 ohm parallel arrays,,,

Posted by [Darkmoebius](#) on Thu, 15 May 2008 17:44:13 GMT

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Over on Audiocircle's Line Array Forum, Paul Hynes, an amp/power suply designer, has offered to design a DIY power amp capable of driving 0.75 ohm parallel arrays if enough people show interest. If anyone is interested in such a project, please post a response the thread linked below. Hynes believes that fully parallel arrays sound significantly better than series/parallel, although the downside is that very few amps could ever handle the extremely low impedance that results. "Moving coil drive units have complex reactive impedance characteristics. If all the drive units are wired in parallel the reactive impedance is relatively benign as the amplifier has direct control over all the drive units. Wiring drive units in series/parallel causes considerable additional electrical reaction and interaction between the drive units. This is because the amplifier can no longer exert control as it is attempting to drive some drive units via the reactive impedance of the other drive units. My eight-way Visaton B200 open baffle line arrays are wired in such a way that I can effectively program parallel or series/parallel operation using 4mm plugs and sockets. If I choose parallel operation I have a convincing illusion of real musicians. The music is effortless, focussed and full of inner beauty and I don't suffer fatigue no matter how long I listen to music. If I choose series/parallel operation the musicians get lost and confused in the mists of time and space. The confusion with this setting is tiring and fatigue sets in rapidly. The nominal impedance of eight B200 drive units in parallel is 0.75 ohms. "I'm not trying to drive posting traffic away from this forum, just trying to drum up enough support for Hynes to finish up the design and get it out to the line array community. Anyway, here is his actual offer: "I did order all the materials to prepare the project and I verified that the mosfet, heatsink and transformer suppliers would be happy to supply individuals on a worldwide basis. I could re-introduce the project to my work schedule if enough interest is shown. So, if anyone is interested in such an amplifier, make yourself known on this thread."

parallel or series/parallel?

Subject: transformer?

Posted by [lcholke](#) on Thu, 15 May 2008 20:24:29 GMT

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The thread mentioned using a transformer. I think this is a good idea and may be more universal since there is less to design and amps can still be swaped out. If most of the improvement is in the highs, then a lower wattage transformer can be used after the tweeter xover. This would lower the "cost to try" the idea even more.- Linc

Subject: Re: A power supply/ amp designer has offered to design a DIY amp to drive 0.75 ohm parallel arrays,,

Posted by [Anonymous](#) on Sat, 17 May 2008 00:34:14 GMT

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I like low impedance arrays. I drive my tweeters with an off the shelf power amplifier in bridged mode at 0.8 ohms and the mids are 2 ohms. Four bridged amplifiers. If the amplifier is not in bridged mode, I can do 0.4 ohms/ch, and 1 ohm/ch. If I wanted to boost performance more, I would be using simple 'power distribution' amplifier methodology. No special amplifiers needed, just get some amplifiers a notch above entry level. If you need more info because *you will attempt this*, then send me email.
