
Subject: Re: Inspired by the McIntosh XRT2K
Posted by [Attila](#) on Fri, 26 Jan 2007 09:03:47 GMT
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You are right in your assumptions, but I think there may be a problem using BassBox in this way, as it apparently assumes parallel wiring of all drivers. That is fine with 2 drivers, but with 45 the impedance would drop way below the 'amplifier-up-in-smoke' level as each doubling of driver numbers will half the nom impedance, leaving you with a load of about 0.15ohm for 45 drivers. Not good!! If, on the other hand, you assume constant impedance (for 49 drivers that could be 7 parallel series of 7 drivers each), you only gain about 3db by doubling the number of drivers, or a bit more precise: $10 \cdot \text{LOG}(49)$, which is 16.9db going from 1 to 49 drivers. If the impedance due to your wiring goes down from 8ohm (single driver) to say 4ohm nominal, you will get an additional gain of $10 \cdot \text{LOG}((8/4);10)$, which is about 3db in addition to what the extra radiating area gave you.
