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Subject: Re: 4pis lacking bass?

Posted by [Wayne Parham](#) on Thu, 10 May 2012 04:26:23 GMT

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I agree with Bill's assessment, completely. I listened to four Pi's for a long time without subs, and they satisfied me completely. But they don't go deep. Compared to little single driver speakers, they "dig down deep" but compared to pretty much any competent home hifi speaker, they really don't. They're high-efficiency monitor speakers, and don't get much below 60Hz. That's not very deep, and subs are needed for that bottom octave.

But the truth is you get much better sound with subs anyway, because of the modal smoothing they provide. Flanking subs and four Pi's are a match made in heaven, because flanking subs do their modal smoothing magic between 60Hz and 180Hz or so. Perfect overlap with four Pi's, just exactly what we want. Then the subs give the thunder, when required. So it's a great combination.

As for "break in", what you'll find with four Pi's is they definitely shift electro-mechanical specs when power is put to them. They're designed to be used at high power level, so - much to JBL's credit, in my opinion - the T/S small signal measurements are actually taken at high levels. That way, the box tuning is appropriate for the driver at high power levels.

The consequence is that box tuning is overdamped at low power levels. And since I tune all my boxes to be slightly overdamped anyway - it's more conservative, safer, never gives thumpy, bloated bass even when used with high output impedance or high power levels - since they're overdamped anyway, low power levels make 'em pretty bass light. Not a problem with subs, but you can hear it without subs.

They are probably 10dB shy below 60Hz at 1 watt compared to what they are at 100 watts. Even just 10 watts wakes them up. So it's not so much a first-use initial break-in period as it is a difference between low power and high power operation. First time the driver sees 50 watts, it's "broken in" but it will always be different in tonal character at 1 watt than it is at 10 watts.