Subject: Try it and see
Posted by Wayne Parham on Mon, 15 Aug 2005 03:08:53 GMT
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Of course, you could certainly do it, let the panel flex make the midbass bloom. Bring up the lower vocal range with panel resonance. I've just never heard a speaker that used this kind of tuning method (on purpose or accident) that I thought sounded good. The bass is too bloated and the vocals too throaty. It just sounds unnatural to me, and since I can hear the effect, I know what kind of ragged response there must be. Small peaks aren't immediately obvious, so when I hear a speaker that is noticeably boxy sounding, I know that the response peaks are pretty big. It might sound interesting at first, but it really gets on your nerves after a short while.But I suppose it isn't out of the question that a loudspeaker be built that uses resonant panels that are precisely tuned and damped. It would be like a sounding board on a piano but with one important distinction. The piano is made to be an intrument on its own, so unique resonance is just a characteristic of the instrument, and not necessarily a bad thing. If the loudspeaker resonance colors the sound though, it becomes unnnatural sounding so it has to be more controlled.Just like trying to tame cone flex resonances for well behaved breakup modes in a full range speaker, the builder of a speaker with panel resonance would have to do the same. Quality control becomes impossibly difficult. Each cabinet has to be built and then tested, because wood panels aren't uniform. I imagine if they were really interested in trying to do this, the reject rate would have to be pretty high, else they'd be passing a lot of dissimilar samples.I don't know if you've ever listened to any of your speakers before finishing them, before bracing. If so, you know what I mean. Especially big boxes, those can be really nasty sounding before bracing is installed. I guess you can try and fine tune the panel resonance, to get it to do exactly what you want. But if you ask me, it's like trying to make a square cut on a long board with a pocket knife. You can do it, but it's probably better to use a table saw.