I have more experience with point sources, but I have measured arrays too. One thing I noticed
right away is the absence of the floor bounce notch. Any time I measure a tower speaker or a
monitor on a stand, I see a notch from floor bounce. Arrays don't have this because of the
number of drivers.Because of this, ground-plane measurements took on a slightly different
meaning to me for arrays. The ceiling and ground are like reflectors of the line. Jim Griffin and
others describe this, and it surely makes sense. The ground reflector isn't a good thing if there is
a single woofer at ear level, but it's fine if there is an array of woofers from the floor up.Do you
have any other observations about measurement techniques specific to arrays? They're definitely
a different breed than point source speakers.On a similar topic, one thing I suggest to guys with
deep pockets is to use several subs in a room. It does sort of the same thing that vertical arrays
do to remove floor notch. Using a few strategically-placed subs balances bass throughout the
room. One can use a program like CARA to decide where to place the subs.Earl Geddes
suggests a random placement, with one sub in a corner, one sub above mid level height and one
or more subs placed randomly in the room. I agree with him on the idea of using multiple sources
to improve the uniformity of bass energy throughout a room, although I prefer trying to keep the
subs symmetrical and somewhat close to the mains, if possible. My suggestion is a layout that is
more like an oblique array, with a few subs at different points along the horizontal and also at
different heights. Most importantly, I suggest checking any proposed placement with CARA rather
than depending on randomness to take care of averaging. But whichever way you slice it, the
idea is to use a handful of subwoofers to smooth room modes.