Design examples for an EAD E60 array satellite configuration.

Note, these are only conceptual drawings. You may add your own design. The sound of this small array has been very well received at high end shows. For easier assembly, we recommend using our 4 array front plate.

The cabinet size depends on your goals, but for a Q around 0.7, you should use aproximately 10L internal volume, Fb and F3 will land around 120Hz, depending on how much stuffing you use too.
We recommend filling the cabinet with long hair sheep's wool, compressed to about 50% of the natural volume, or Angel Hair **http://www.twaron-angelhair.com** (follow their recommendations)

A closed cabinet will act as a 2nd order filter and you may cross over to a subwoofer at around 120Hz.

Note, this is a short array which will give most you the advantages of a tall array, but at a lower cost and a much simpler design. Some describe the sound as electrostatic or ribbon-like. Just like a tall array, the sound spreads very well horisontally and less vertically, avoiding floor and ceiling reflections.
The excursion is also reduced for each unit and sensitivity goes up.
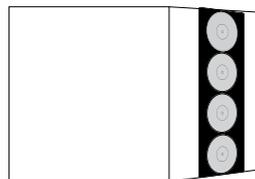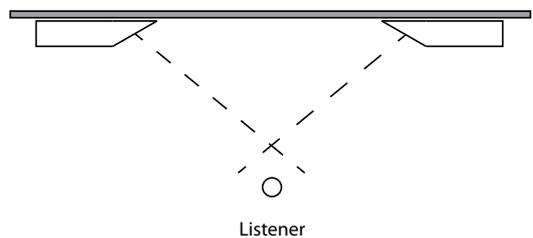
Listener

We recomend trying a toe-in configuration where the axes cross in front of the listener.
This will give a very wide sound stage. It can be acheived by an angled front. When mounted on a wall, the wall becomes a part of the baffle.

You may of course build regular satellite speakers for your favourite stands. This way you can easily try different toe in angles.
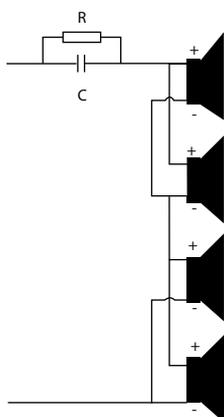
To keep the 4 ohm impedance, 2 units are connected in parallel, then the 2 pairs in series. With 4 wide band point sources in an array, there will be some loss of higher frequencies. This is not very serious in this case, but you may prefer a compensation as shown to the right; R4.4 and C 3.3uF is suggested, or if you have equipment that will do this on a low level e.g. a DSP.
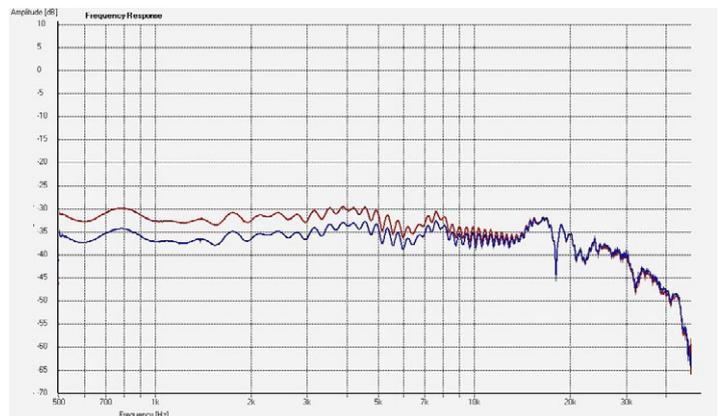
In red, uncompensated signal at 2 m.
Blue is compensated and more levelled. Note, it's only a comparative measure, not absolute values. You can increase the effect by increasing R

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EAD SWEDEN AB