

---

Subject: Re: H290C Horn/Waveguide

Posted by [Wayne Parham](#) on Thu, 21 Mar 2013 02:26:47 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

The H290C is the best 90°x45° horn/waveguide available, truly a no-compromise design. So naturally, I would suggest it for any DI-matched two-way speaker or constant directivity cornerhorn.

The loudspeaker models I make using that waveguide are the ones I found to be the best out of a few dozen that once made up my line, so I find them to represent the best of the best. I wouldn't make any other design choices than those.

That said, there are plenty of other similar components that work very well. An example is the Eminence Kappa line of drivers, which are very similar to the ones I use in some of my models, and which have been used by many DIYers on this forum. There are lots of others too, lots of ways to "do it right" but of course lots of ways to do it wrong too.

So my suggestion is to study the links in the Pi Speakers FAQ, especially those in the "Crossovers" and "Simulations and Measurements" sections. Also look at the "General Information" section, especially the post called "Notes for the DIYer". It has links to some of the most useful notes for designing speakers like these. For example, "Crossover optimization for DI-matched two-way speakers" describes my exact crossover design process including a video showing how to measure the forward lobe by finding the vertical nulls that mark its edges.