Subject: Re: 3 Pi or similar for Small room - Near field listening?
Posted by Wayne Parham on Fri, 01 Sep 2023 16:46:16 GMT
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All models of Pi speakers offer high-efficiency and smooth response. They are an easy load for tube amps.

The one Pi and two Pi models do not offer uniform directivity. They sound great for what they are, and are suitable for surround speakers or casual-listening mains. But they are traditional direct-radiating "cone/dome" speakers so they cannot provide uniform directivity.

Both the three Pi and four Pi models can be used in much smaller rooms that one might imagine. Every time we demo at the Lone Star Audiofest, we're setup with speakers barely eight feet apart. They can be used in rooms the size of yours.

three Pi loudspeakers in a small room

The thing is you want to set them up such that they are angled-in 45° towards each other, and the listening area must be behind where their axes cross. So what that means is if they can be set eight feet apart, the listening area should be at least four feet back. The spectral balance is uniform when seated anywhere between the speakers, so that example would give a good experience for anyone sitting along an eight-foot wide area of the room. If you can't go that wide, maybe have them six feet apart and have listeners at least three feet back.

The reason you want this setup arrangement is shown pretty well in a diagram on page 7 of the document below. It's actually showing coverage of constant-directivity cornerhorns - which naturally have the 45° toe-in - but this has the same coverage pattern and stereo-image self-balancing characteristic provided by three Pi or four Pi speakers, when setup with 45° toe-in.

High-Fidelity Uniform-Directivity Loudspeakers