Subject: Line array driven as a phased array to create directionality? Posted by Magnus on Sun, 22 Aug 2004 21:27:35 GMT View Forum Message <> Reply to Message

This question really belongs in the Line Array section but since my question is targeted mainly at Bill Fitzmaurice and pro audio I post it here.Bill (or anybody else), do you know if their have been any use of line arrays driven as a phased array in pro audio to create an intentional controlled directivity, like for a phased array radio antenna or ultrasonic imaging transducer?/Magnus

Subject: See Duran Audio's Intellivox systems Posted by Hallowed Sound on Mon, 23 Aug 2004 02:00:24 GMT View Forum Message <> Reply to Message

Here's a link to a PDF: http://www.duran-audio.com/Download/Directivity%20modeling_rev1p1.pdf

Subject: Re: See Duran Audio's Intellivox systems Posted by Wayne Parham on Mon, 23 Aug 2004 02:33:43 GMT View Forum Message <> Reply to Message

That's a great link, you might have noticed it in the Array Speakers forum. Here are a few others: Interesting articles Fresnel and fibonacci line array systemsArray types Driver Center to Center Spacing for Line Arrays

Subject: Re: See Duran Audio's Intellivox systems Posted by Hallowed Sound on Mon, 23 Aug 2004 03:10:41 GMT View Forum Message <> Reply to Message

No, I didn't see your post but am glad to see them mentioned. Duran Audio is known around the world but I don't see much about them in the US, at least not on the web. Their work on directional control, intelligibility and DSP beam steering is the best in the world, IMHO. Duran Audio

Subject: Re: See Duran Audio's Intellivox systems

Thanks for the links. Looks like I should have done my homework in the line array section =)/Magnus

Subject: Pro Audio Arrays Posted by Bill Fitzmaurice on Mon, 23 Aug 2004 12:34:31 GMT View Forum Message <> Reply to Message

In the large scale pro-audio format that I deal with arrays consist of a number of boxes, usually eight cabinets per stack, running from 12 to 16 feet total height. You can achieve a very high degree of directional control in the vertical plane based on the way the cabinets are splayed. What is paramount is achieving a balanced SPL in the audience, and this can be accomplished quite well even with throws on the order of 300 to 400 feet. One of the the best sources to see what can be accomplished is the EAW site, where you can download for free the program that they use for setting up their arrays in various size and shape venues.