Subject: Full range speaker
Posted by Adrian Mack on Fri, 26 Dec 2003 07:54:37 GMT
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hah, came accross a 12" full range speaker today :P a bit stupid.
http://www.eighteensound.com/pdf/12TC300.pdfyou need acrobat reader to see it. I always wonder how could a fullrange speaker sound good when its able to develope parallax across the diaphram even. Notice the rather bumpy response up high on that speaker. It does 70Hz-16KHz

Subject: Re: Full range speaker
Posted by JLM on Fri, 26 Dec 2003 12:49:30 GMT
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That driver looks to be mixed bag:1.) Very good efficiency;2.) Good power handling capacity;3.) Ragged high end response (not unusual for extended range drivers);4.) Severe roll off above 15,000 Hz (to be expected from a large driver);5.) Severe off axis roll off of higher frequencies (again to be expected given the driver size);6.) Bass roll off starts around 150 Hz (quite unexpected from a 12 inch driver, and this in a cabinet!);7.) Specified bass response is severely overstated (this driver needs a sub that could use a smaller driver!);8.) With Qt = 0.43 this could be a good candidate for bass reflex, transmission line, TWQP, open/infinite baffle.Don't know the price (or recognize the brand) but a number of 4 - 8 inch diamter Fostex drivers that provide more extended frequency response with less beaming, but somewhat less efficient.

Subject: Re: Full range speaker
Posted by hurdy_gurdyman on Fri, 26 Dec 2003 17:03:17 GMT
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Now that is an interesting driver. The graph shows the response in a 50cu. litre box tuned to 60Hz, but doesn't show what kind of box. With a box that boosts low end, this could be a driver that covers all the important frequencies and just needs a sub for the lowest couple of octives and a super tweeter for the highest sounds. With that kind of sensitivity, any amplifier could drive it, and it comes in both 8 ohm and 16 ohm, to get even better amp matching (on a typical tube amp with the 16 ohm setting, these speakers could really put out some efficient sound). Sitting a bit off axis should tame the high frequency peak. Of course, you can't tell what it will sound like untill you try it. ;^)Dave