
Subject: 8 inch FRs: Give them a chance!

Posted by [AstroSonic](#) on Sat, 03 Jan 2004 18:15:27 GMT

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Adrian, Don't give up on these! That response curve is not that bad. Check out the response curves for other full range drivers on the Melhuish single driver website. The overall response trend is actually pretty smooth - draw a line through the middle of the peaks and valleys. Much of the rising trend below where the wavelength is less than the cone diameter is due to cancellation from the backwave. Higher in frequency, the rising response trend is largely due to the driver itself. The lack of the 2-3 kHz 'voice range' peak that plagues many full range drivers is a real plus. If breakin does not resolve the rising trend (it often improves this considerably), try correcting for it with simple 6db/oct compensation (parallel cap & resistor, or a series inductor). If you are unable to get T/S parameters for them, just try them out in a TQWT. Fs is evidently about 50 Hz - not bad for a paper surround 8-inch. If these have not been used for a long time they will likely need to be broken in - not so much for the surround/Fs but for the cone itself. Old paper cone drivers often need around 100 hours or more of breakin. Very likely, they currently sound thin and even a little shrill. Don't give up without breaking them in. You may also want to consider modifications such as coating the cone with damar, damping & reinforcing the basket and the \$0.98 tweak. First, give them time to breakin. Then give them some serious listening time. If you like what you hear, but the sound still has some problems, consider modifications that address those problems. It looks like there are a few radial cracks in the paper accordion edge surround. These should be repaired if you seriously want to use these drivers. These may not be the last word in full range drivers, but they may provide you with a good introduction to that approach. With a little work, I suspect that you will be surprised at how good these sound. Give them a chance! Good luck, Bob
