
Subject: screwed by geometry,
Posted by [Sam P.](#) on Thu, 28 Feb 2002 12:40:21 GMT

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After drawing a side view of my mike and driver positions, it seems the dip is really a diffraction/cancellation situation. The mike was about 39 inches high - halfway between the centerline of the 511 and the UPPER woofer, which made the path length from each of the two woofers to the mike differ by approx. 7 inches, one-half wavelength at 960 Hz. So it was science, not room ghosts or coil values that were at play after all. Probably would not have been there at a different distance/height...also, above 500 Hz, as the dispersion of the lower woofer was narrowing, less energy would have reached the mike that was about 30 degrees away from the lower woofers axis. Sand, sand, sand...