Subject: Large Heils & Hi-Vi M8A's
Posted by thetubeguy1954 on Thu, 24 Mar 2005 16:39:15 GMT
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I've decided I'd like the use the Large Heil in the middle of eight 8" Aluminum/Magnesium drivers (4 above the Heil 4 below the Heil) The driver's I've decided on are Hi-Vi Research M8A's. Here's their specifications: * Power handling: 80 watts RMS/110 watts max * Voice coil diameter: 1-3/8" * Nominal impedance: 8 ohms * DC resistance: 6.5 ohms * Frequency response: 30-3,000 Hz * Fs: 30 Hz * SPL: 87 dB 1W/1m * Vas: 1.78 cu. ft. * Qms: 4.90 * Qes: .47 * Qts: .43 * Xmax: 5.8 mm * Net weight: 5.5 lbs. * Dimensions: Overall Diameter: 8-1/2", Cutout Diameter: 7-3/8", Mounting Depth: 3-7/8", Magnet Diameter: 4-3/4". I fiqured with a frequency response of 30-3K and with the Heils being able to cross in at 800-1Khz, they should match up fairly well. Where I really need help is:1) Using eight of these per side what will the efficiency of the M8A's now really be? I'm sure it won't remain at 87dB, but I don't know how to deteremine what it will be.2) Given the specifications above, I'm considering an enclosure 10" wide 78" tall and 24" deep. Does this seem acceptable? Does it need to be ported? If so what should port dimensions be? If I can use infinite baffle I'd like to, but what can I expect low end to cut out at?More about the M8A's can be seen here at the link I've provided. This is my 1st attempt at a DIY speaker and I'm aiming for something I can live with for years to come, so ANY and ALL help is greatly appreciated.Thanks, Tom Scata (thetubeguy1954)
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