Subject: Attention: If you own JBL 3677S click here
Posted by BillEpstein on Wed, 30 Jan 2002 00:44:33 GMT
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I sent for and received (thanks to JBL tech Everett Watts) the specs on the 3677 components. Eight pages worth.If someone has a scanner and wants to e-mail me a fax number, perhaps they could be posted. Most of it is response curves.The Thiele-Small for the M-115 woofer are for before and after a power test as follows:Fs 46, 42Re 5.3, 5.3Qms 5.1, 4.6Qes 0.42, 0.39Qts 0.39, 0.37Vas 225L, 275LMms 53g, 53gCms 222uM/N, 271uM/nBl 14TM, 14TMRme 37, 37Sd 845 sq cm, 845 sq cmLe 1.3mH@1kHz, dittoRg 0.91 degC/W, dittoRt 1.56 degC/W, dittoPower test 50-500Hz 40V RMS (250W) Free air for 100 hoursLeap motor constants Krm 8.47mH Erm 0.696 Krm 17.7mH Erm 0.667The graphs show - 10 dB at about 25 Hz rising to 115 or so and peaking near 120 at almost exactly 1.6kHz with a zoom up after to 2000Hz and then rapidly falls off. Unfortunately, after further review, it seems the graphs were plotted in an 8 cu ft sealed enclosure. Oh well.There are several graphs of the 2418 horn. One is called EPR Plane Wave Tube Response, one is a waterfall looks like a Melissa, and others. There is a data sheet that reads that freq resp is +/- 1 dB 1000 - 6000 Hz,etc. There are also T/S Parameters for the 2418:Fs 1000 HzRe 3.7 ohmsRet 8 ohmsSd 15.5 sq smxmax .5 mmBL 5.0 TeslaMms 1.1 gramLe .08 mHNo 25%Zmin 5.0 ohms Pe 25 watts into zminI hope this helps someone. Ain't the people at JBL amazing!

Subject: Good information
Posted by Wayne Parham on Wed, 30 Jan 2002 02:04:23 GMT
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Thanks very much for the information. I think everyone that bought these JBL speakers from the tent sale appreciates your post a great deal.

Subject: Re: Good information
Posted by Adam on Wed, 30 Jan 2002 02:08:19 GMT
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It's very cool that they posted xmax.Adam

Subject: Re: Attention: If you own JBL 3677S click here
Posted by spkrman57 on Wed, 30 Jan 2002 12:33:57 GMT
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Greetings all, Can any of you math wizards tell me what the efficiency and or sensitivity is on this. With all these specs, I'm not sure if the answer is right in front of me or not. I never said I was a rocket scientist. I don't believe you have to be in this field. (I'm sure it helps though, my basic math is fine, just can't handle multiple equations) Thanks from the math challenged, Ron

Subject: 97dB
Posted by Wayne Parham on Wed, 30 Jan 2002 13:50:23 GMT
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250 watts is a 23dB increase over 1 watt, so if the 250 watt measurement maxes out at 120dB, I'd expect the maximum 1 watt SPL to be 97dB at 1 meter. I'm guessing at 250 watts, it is losing 1dB or so to thermal compression so it's 97dB to 98dB at 1 watt / 1 meter. At 500 watts, it probably loses 3dB to 4dB, but thermal losses aren't quite that high at 250 watts. Also note that Bill said the passband average was 115dB, so most of the bass range would be closer to 92dB. Used as a midwoofer in a two-way speaker, you can expect midrange output to be 3-6dB louder than bass below 100Hz.

Subject: Re: Attention: If you own JBL 3677S click here
Posted by spkrman57 on Wed, 30 Jan 2002 15:52:47 GMT
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Hi again, I am wondering if the spec sheet for the 2418 horn/driver has minimum crossover frequency limit on it. I see where T/S has "fs = 1khz" , I see application puts crossover at 1.2 khz. Usually I double fs to get minimum safe crossover frequency for compression horns. Has anyone put a pi crossover on these?????? Regards, Ron.

Subject: Things and stuff
Posted by Wayne Parham on Wed, 30 Jan 2002 16:32:28 GMT
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Our crossover uses a third-order filter on the tweeter with top-octave compensation. The frequency chosen is where there is DI matching between midwoofer and tweeter. I generally try to make circuits in one series similar to another, so there is some standardization possible. This also gives a nice upgrade path, where you can re-use components as much as possible.

Subject: Thanks nt.
Posted by Robert Hamel on Thu, 31 Jan 2002 12:01:56 GMT
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nt
