
Subject: pi one question

Posted by [Demetrius](#) on Wed, 30 Jul 2003 17:58:17 GMT

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First and foremost I'd like to thank Wayne. You are consistently kind and generous. This is a fascinating and, well, cool place. I appreciate the commonsense and elegant engineering and conversation. I've been reading in here for a bit and recently collected some drivers. I had some JBL 077's and just added a pair of 2115H's. I have these in a recycled box, crossoverless, with a .47 microfarad cap. for the 077. Is the 077 sufficiently similar to the 2405 to pair with the 2115H and fashion a pi 1? Is the 2115H sufficiently similar to the 2115? I read in a thread about matching the sensitivities since the slot tweeter is more efficient than the full-range, 92db and 105 db respectively I think. Couldn't find specs for the 077. So, can I make a pi one with these and if so could I get some guidance. Thanks.

Subject: pi one answer

Posted by [Wayne Parham](#) on Wed, 30 Jul 2003 20:10:46 GMT

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I don't have any experience with the JBL 077 tweeter, but I've used a lot of 2115H's over the years

the JBL 2115, and they were some of my favorite loudspeakers. They're tiny but they sound great! At 93dB/W/M, they're just about right for a small apartment or bedroom, especially when used with a medium power amplifier from 20 to 50 watts. The 2115 is an excellent midwoofer - truly a full range speaker. It's not the most efficient driver, but it is capable of deep, clean bass extension and works well up through the midrange overtone region. Run the 2115's in bass-reflex boxes from 0.6ft³ to 2.0ft³ tuned to 45Hz and you'll be amazed. Use a 93dB tweeter above 5kHz and you're set.

Subject: Re: pi one question

Posted by [ToFo](#) on Wed, 30 Jul 2003 21:23:14 GMT

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I looked at some info from jbl obsolete specs page and I think that with the right tweeter attenuation and a crossover above 5 khz, you would have a NICE speaker. That tweet doesn't handle as much juice as the 8", so you want to pad it down anyway. Attenuation about 12 dB would be a good starting point. That 8" has a rising response from 1.5 to 5 Khz and would be good with pseudo butterworth. I guess about .3 mH coil ought to do it. I am no expert, but I bet these would really cook! Have fun and let us know what happens, Thomas

Subject: Series coil for JBL 2115's
Posted by [Wayne Parham](#) on Thu, 31 Jul 2003 01:52:48 GMT
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Hi Thomas! You're exactly right about the Pseudo-Butterworth series coil for the 2115. I ran 'em with 0.5mH on 2115H's or 1.0mH for 2115J's. Without a Zobel, the circuit develops a shelved response that reduces the rising response without having an electrical crossover slope. Wayne

Subject: Re: Series coil for JBL 2115's
Posted by [ToFo](#) on Thu, 31 Jul 2003 05:31:25 GMT
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Yeah, I didn't think about the impedance rise working in our favor. I see what you're saying. That is cool! Might have to go hunting for a pair of these 8's. T

Subject: Re: pi one answer
Posted by [Demetrius](#) on Thu, 31 Jul 2003 16:39:39 GMT
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Thanks for the help. I might have some more questions soon.