Subject: JBL L5 mid-horn
Posted by Manualblock on Wed, 16 Jun 2004 21:50:49 GMT
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Glancing through an old Speaker Builder from '87 I read a pretty thorough article by Bruce Edgar on building a mid-horn with the JBL L5 driver. Well researched.

Subject: Re: JBL L5 mid-horn
Posted by Adrian Mack on Wed, 16 Jun 2004 22:49:07 GMT
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http://www.volvotreter.de/dl-section.htm What I dont agree on in the article is the spacers between driver and mounting plate - seems like a way to increase bandwidth of the horn and perhaps reduce resonances under the cone up high, but at the expense of a fair bit of efficiency. Not 100% sure, but thats what I think. Other than that I have always liked his article and he has done a good job.

Subject: Re: JBL L5 mid-horn
Posted by Manualblock on Thu, 17 Jun 2004 00:23:22 GMT
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Yep; thats it; seems at that time he was doing a little fishing still. How much of a sacrifice in efficiency are we talking here? Isn't that what Wayne is doing with the 8's?

Subject: Re: JBL L5 mid-horn
Posted by Wayne Parham on Thu, 17 Jun 2004 10:00:15 GMT
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The gaskets on my midhorns are there to keep the cone from striking the front plate at high excursion. I cannot detect or measure any difference in response when using it. The volume difference is so small that modeled response doesn't show it either.

Subject: Re: JBL L5 mid-horn

Posted by Adrian Mack on Thu, 17 Jun 2004 12:53:13 GMT
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The gaskets you're talking about are different to what Mr Edgar used though. Edgar's ones are just spacers, not full gaskets. I believe it just uses 4 spaces on the driver to make a physical gap between driver and mounting plate, and you can see the gap through the side (unlike a gasket where its all covered).

Subject: Re: JBL L5 mid-horn
Posted by Wayne Parham on Thu, 17 Jun 2004 13:35:46 GMT
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Thanks for that clarification, Adrian. I remember seeing that he had done that now, and it's completely different than using a gasket. As I recall, Edgar said the horn was peaky but he found the gap would help or some such thing.

Subject: Re: JBL L5 mid-horn
Posted by Adrian Mack on Fri, 18 Jun 2004 22:47:40 GMT
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I think the gap tamed down some peakiness around the lower cutoff but the big thing was the gaps made frequency response flat to a good octave or so higher. I tried a variety of spacers on my midrange horn once, never bothered to measure the response curve though, but just 'by ear' I could tell that efficiency definitly decreased audibly.

Subject: Re: JBL L5 mid-horn
Posted by Wayne Parham on Sat, 19 Jun 2004 10:29:57 GMT
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I've noticed the same thing you have, but I've noticed it just when bolting drivers to horns while playing. You can hear the output increase as the driver nears the horn, but it really jumps when you snug it up for an airtight fit.