Subject: 12lfa bench test!!!
Posted by Wayne-o on Wed, 10 Jun 2009 18:53:40 GMT
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purchased 1 year ago , Free air rez. tested at 40 hz. is this normal ? Listed spec. says 51 hz. Thanks!!!

Subject: Electro-mechanical parameter shifts
Posted by Wayne Parham on Wed, 10 Jun 2009 19:58:45 GMT
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Did you test it face down, by chance? Or was the driver mounted to an open baffle, or otherwise held vertically?

Does the suspension travel freely when gently pressed in and out by hand?

Usually I find Fts is higher than expected on new drivers. The suspension is usually tighter when new or after sitting a while. You'll see more peaking down low when a woofer is first used. Then after a little while, especially after heavy use, it calms down.

Some drivers shift more than others. Some need less initial break-in, virtually none at all. Most all drivers change with age though. And every driver shifts at various power levels.

This shift is normal, and that's why I like designs that are tolerant of shifts. If a loudspeaker design requires the driver specs be too tight, it is not very good in my opinion because every loudspeaker driver shifts a lot.

Drive the woofer hard for a few hours and then let it cool down and test it again. Test it with different drive levels too, if you have that capability. You might be surprised how much movement there is.

Subject: Re: 12lfa bench test!!!
Posted by Wayne-o on Wed, 10 Jun 2009 23:06:05 GMT
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Tested with magnet on top of 12 x 18 surface 2 feet above floor . Tested other drivers that tested the exact same as listed. tested with about 2 watt drive with 8 ohm resistor in series with woofer.

Subject: Re: 12lfa bench test!!!
Posted by Wayne Parham on Thu, 11 Jun 2009 14:21:28 GMT
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It could be that woofer is bad. One of the reasons I asked if the cone moves freely when gently pressed by hand forward and back is that I've seen drivers with stretched spiders. These will

require more force to push through center than either side. When you measure a driver like that, the T/S specs are way off. They make a sort of popping movement, similar to a membrane switch. A spider that is the wrong size or stretched will do this. Could be something like that, or any number of other electro-mechanical problems.

Subject: Re: 12lfa bench test!!!
Posted by Wayne-o on Sat, 13 Jun 2009 14:55:37 GMT
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Yes the cone does move freely , One thing I noticed was that the alpha 10 was louder in the bass and lower midrange ,both tested in Pi-3 box tuned to 46 hz. the port was different size in the 12lfa box to make up volume of horn and woofer displacement. the a-10 vifa and crossover came from Pi-speakers, the 12lfa came from the factory in Kentucky.the x-over had the 20 and 30 ohm series resistors on board. Tone wise the 2-Pi was better. when I used a Kappa 15lfa the tone was very near the 2-Pi. The volume was as expected with the kappa 15lfa but lower then expected with the Delta 12lfa. Thanks for your reply.

Subject: Re: 12lfa bench test!!!
Posted by Wayne Parham on Sat, 13 Jun 2009 16:29:09 GMT
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Eminence is very good about honoring their warranty. I rarely need to send anything back but occasionally, you know, stuff happens. Send that driver back and Eminence will check it out for you. If it's bad, they'll send you a replacement.
