Subject: Tweeter voice coil
Posted by Mahendra Palesha on Tue, 24 Jan 2006 11:10:02 GMT
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I hv got one titanium dome tweeter with aluminium voice coil. Also the same is available with copper voice coil. The spl level of cu voice coil tweeter is reduced by 2~2.5 db, but the frequency reaponse is almost the same. The voice coil size is 1.75 inches. The aluminium tweeter is specified for 40W RMS. What watts(power) to assume for copper voice coil tweeter? What r other advantage & disadvantages 4 cu voice coil tweeter?

Subject: Re: Tweeter voice coil
Posted by Wayne Parham on Tue, 24 Jan 2006 14:11:28 GMT
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No way to know without testing. It's not just the coil material that sets the power limits, but also the former, the diaphragm and horn, the magnet, the heat conduction properties of material surrounding the coil (ferrofluid or air), how much radiated heat is dissipated and how much air surrounding the coil can convect it away.

Subject: Tweeter voice coil
Posted by Mahendra Palesha on Tue, 24 Jan 2006 16:15:35 GMT
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All the other comditions r assumed to be the same as the both the models r made by the same manufacturer. They claim that only voice coil material is changed due to hot conditons in my country.

Subject: Re: Tweeter voice coil
Posted by Wayne Parham on Tue, 24 Jan 2006 18:45:51 GMT
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Interesting that output is reduced 3dB. That's pretty significant.

Subject: Re: Tweeter voice coil

Posted by spkrman57 on Thu, 26 Jan 2006 10:53:15 GMT
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Aluminum voice coil is lighter.Take in point the JBL E-140 with copper voice coil is 100db/watt and the E-130 is 105db/watt.The E-140 is a deeper voice coil than the E-130 but the E-140 is copper and the E-130 is aluminum used for lighter weight to wrench every last bit of efficiency from the driver.Reason I know this is because I have a pair of E-140's being reconed to E-130's and this discussion came up on lansing heritage forum.Ron