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Subject: Re: Kat Giantis

Posted by [Wayne Parham](#) on Fri, 24 Jun 2005 22:03:41 GMT

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The cooling system is for loudspeakers but it's still a little early to say what places it will be most appropriate. Like most of my projects, the information is open and available for others to DIY. So it could be implemented on any loudspeaker by an industrious tinkerer. The idea is to remove heat from the speaker using a ducting arrangement and an intercooler. Speakers in very small boxes may not vent hot air effectively because the pressure in the box impedes air movement. The air inside the box may become more and more heated too. So by venting into an intercooler, I am hoping to remove the heat more effectively. This will increase power handling and reduce compression. It will also reduce the shift of electro-mechanical parameters towards an underdamped alignment as the voice coil becomes hot. Certainly, the main focus is on high-output woofers in prosound, but it may also prove useful for high-output home theater subwoofers too. It's a pretty simple system with a valve, a couple of hoses and an intercooler. All of it except the flow valve is available off-the-shelf, and the valve is easy enough to make. If it proves to be successful, I'll make the valves available at low cost. You can insert them into the cooling vent of most woofers, so this option is open to just about everyone.

Loudspeaker Venting and Cooling Techniques

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