Subject: Speaker 120dB
Posted by ghostbreeze on Fri, 11 Mar 2005 11:16:16 GMT
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I need a speaker that can handle 120dB. Do I need to look for certain specs? Do you know any that I can buy in the UK? Thanks

Subject: Re: Speaker 120dB
Posted by GarMan on Fri, 11 Mar 2005 13:30:56 GMT
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In theory, max SPL will depend on a combination of sensitivity and power handling. Sensitivity will give you dB at 1 watt while power handling will tell you how many additional dB you can pile on top of that. Doubling wattage gives you an additional 3 dB. Or technically, incremental dB is calculated by 10xlog(power).For example, a driver with sensitivity of 96dB/w/meter and power handling of 300w should allow you to sneak pass 120dB.Unfortunately, in the real world, dB's don't add up linearly. Even the best drivers suffer from compression as they approach max power handling. For example, a JBL 2226 can loose 4 dB at max power, 2.5 dB at half power, and 0.7 dB at 1/10th power. This driver has sensitivity of 97dB/w/m and power handling of 600W. Therefore, max SPL for the 2226 is 97 + 10xlog(600) - 4 = 120.7dB.But again, this is all theory, so, as they said in advertising: "actual results may vary".If you're willing to pay for the premium, JBL Pro drivers would be an excellent choice. Eminence Pro Series are very good too.Gar.