Subject: piezo buzzing when amp clips.
Posted by Andy G on Thu, 24 Jan 2002 00:27:53 GMT
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The piezo is protected? by (from the piezo) an 18ohm in series, then 22ohms parallel then 2µF in series. This should give some cut below 3500. When the amp clips, the piezo really buzzes, is there any way I can stop this happening??

Subject: Don't go into clipping and check for back-EMF
Posted by Wayne Parham on Thu, 24 Jan 2002 08:28:44 GMT
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Check to see if this is caused by back-EMF from the woofer. Certainly, the solution is to refrain from clipping the amp. But I'd like to know if, when the woofer is decoupled from the circuit, the piezo "buzz" goes away. I've heard 'em "chirp" from back-EMF in certain implementations. So try either bi-amplification to decouple the two systems, or simply temporarily removing the woofer from the system for a "chirp test."This situation was covered in some detail in the post called "More piezo stuff - high order networks, etc."

Subject: there is nothing on the woofer at all...
Posted by Andy G on Thu, 24 Jan 2002 20:04:01 GMT
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.... would putting a coil on the woofer possibly elleviate the problem?

Subject: Further..
Posted by Andy G on Thu, 24 Jan 2002 21:04:06 GMT
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I had to take the speaker fronts off to disconnect the woofer, there was nowhere near as much buzz with the woofer disconnected, (still some though) I put the appropriate coil on the woofer while I had them apart. This seems to have helped significantly. It is a el cheapo woofer I might add !!. I wish the guy who built them 4 years ago had known more back then ;-)) But they are still running, just getting used for something they were never intended to do. They were designed for just vocal and flute (100w 12") now they are trying to put percussion, electonics etc through them, I guess they have to expect problems. !!Thanks Wayne for pointing the right direction.

Subject: Back-EMF solutions for piezos
Posted by Wayne Parham on Thu, 24 Jan 2002 22:51:38 GMT
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I have never had success adding passive components around the piezo's to reduce chirping caused by back-EMF from a woofer. If the woofer makes enough back-EMF to cause the tweeter to chirp, you can't use the two together on the same output circuit.