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Subject: Woofer/Amplifier questions

Posted by [Anonymous](#) on Fri, 29 Nov 2002 06:12:24 GMT

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Take two different amplifiers; Amplifier #1 100w into 8 ohms 200w into 4 ohms 400w into 2 ohms Amplifier #2 100w into 8 ohms 100w into 4 ohms 100w into 2 ohms Amplifier #1 is a conventional design where power doubles as impedance halves. Amplifier #2 is a breed that monitors load and lowers the rail voltages to maintain the same power regardless of load. Two questions. 1. If amplifier #2 has variable rail voltages, would clipping occur sooner at 2 ohms vs. 8 ohms load? Suppose rails are +40v/-40v at 8 ohms, and +20v/-20v at 2 ohms. I argue that you would clip easier on transients at 2 ohms vs. 8 ohm, others say 100w = 100w, makes no difference. 2. Woofers have an impedance curve that varies with frequency. Hypothetical -> if an 8 ohm woofer's impedance is 2 ohms at 60hz, does amplifier #1 output 400w @60hz whereas amplifier #2 only outputs 100w across all frequencies, in which case, people may interpret amplifier #1 as driving woofers better due to more power ?

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