
Subject: Source Impedance
Posted by [Adrian Mack](#) on Sat, 10 Apr 2004 04:57:07 GMT
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Just wondering if theres an easy way to measure the output impedance of an amplifier?

Subject: Re: Source Impedance
Posted by [Wayne Parham](#) on Sat, 10 Apr 2004 06:19:38 GMT
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I think the easiest way would be with a test resistor, oscilloscope and signal generator. You could measure current using the voltage drop and compare with open circuit output. While you're there you could find bandwidth and other specs.

Subject: Re: Source Impedance
Posted by [Adrian Mack](#) on Sun, 11 Apr 2004 02:42:22 GMT
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Hmmm, I dont have an oscilloscope, I guess I cant do it then. I just thought there may be an easy to to do it with stuff I already got, like a multimeter and some sort of computer programs like speakerworkshop or winMLS. Anyway, thanks for the info.

Subject: Re: Source Impedance
Posted by [Wayne Parham](#) on Sun, 11 Apr 2004 03:45:26 GMT
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You could probably do it with a DVM too. Just use a low value, high power test resistor and generate a 50Hz to 100Hz sine wave with your PC for an amplifier input source.

Subject: Re: Source Impedance
Posted by [Adrian Mack](#) on Sun, 11 Apr 2004 03:51:04 GMT
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Whereabouts would I actually measure the resistance? Just across the speaker output terminals on the amplifier?

Subject: Re: Source Impedance

Posted by [Wayne Parham](#) on Sun, 11 Apr 2004 06:37:31 GMT

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I'd measure the amplifier voltage output with no load, and then connect a low value resistor across it to see how much that dropped the voltage. Monitor the voltage across the amplifier's output terminals. You can either measure current directly or you can measure the voltage drop across the resistor and calculate current. Then, knowing how much reduction in voltage on the output will tell you what the output impedance is. Divide this amount of voltage drop by the current flowing to find output impedance.
