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Subject: Re: 100W resistor in 3Pi crossover

Posted by [Wayne Parham](#) on Sat, 03 Aug 2013 15:33:48 GMT

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See page 66 of the following document:

Speaker motors and passive crossover filters That shows the voltage across the Zobel resistor, which then lets you know the power dissipation required of this part. The drive voltage to get to

What you should take from this is that component needs to be able to handle at least 1/3rd the amount of power applied. So for example, if you use a 10 watt part in this position, your speaker is safe to about 30 watts continuous power. It can handle higher peaks than that, and it is only vulnerable in the upper midrange, around 1kHz. But those are the facts. It can't handle more than about 3x the power that resistor is rated at 1kHz, and should be considered vulnerable from 500Hz to 3kHz.

My suggestion would be to order the right part and install it when it gets here. In the meantime, you can install a smaller part in that position, and derate the loudspeaker accordingly. Just go easy on the power knob 'til you get the right part.