
Subject: how many watts would 2 eminence12" woofers make?

Posted by [shamrock13](#) on Sun, 05 Aug 2001 04:26:02 GMT

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I'm putting 2 12" eminence woofers in my car and I wanted to know what size amp to get. I want to get an amp with less watts than the woofers...any help?

Subject: Re: how many watts would 2 eminence12" woofers make?

Posted by [Bill](#) on Sun, 05 Aug 2001 10:49:04 GMT

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First of all...overpowering woofers (having more power than the RMS rating) is a good thing to keep motor temperatures lower. Having an amplifier with less power can heat the motors and cause failure due to the amplifier running out of power, clipping, introducing amplifier created square waves and eventually ruining the motor. When a loudspeaker is presented with amplifier induced square waves (amp distortion from being driven into clipping) the motor will heat up and the voice coil may buckle and lock. Suppose the eminence woofers are rated for 250 watts each RMS and you power the pair with 700 watts. You will be less likely to cause damage with this power if it stays undistorted. A 100 watt amp will surely clip and cause failure given time. Best to go with as large an amplifier (within reason) as you can afford in a car stereo situation. If you do not understand any of this...do a search on amplifier clipping and you surely will find some more explanations. I suppose you will be using the car stereo at high volume levels. If not, you can get accurate bass from a good set of 8" woofers in the proper box and not need the higher power. If SPL is what you are seeking, you cannot have "too much" power. Now if your amplifier is more than twice the RMS rating of the woofers, the other extreme can burn out the voice coils from sheer voltage. I hope this helps you.

Subject: Re: how many watts would 2 eminence12" woofers make?

Posted by [Wayne_Parham](#) on Sun, 05 Aug 2001 11:34:42 GMT

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As you probably noticed, Eminence makes several woofers of various power ratings. If you put two in series, then power handling is raised and if you put two in parallel, then sensitivity is raised but power handling remains the same. As for the amplification required, generally you want the two to be matched. Some prefer to get an amplifier that is capable of a little more power than the speakers can handle, so ensure the amplifier won't clip. That's not a bad idea. But don't overdo it, the whole point is to match the amp with the speakers.

Subject: clipping question...

Posted by [James W. Johnson](#) on Sun, 05 Aug 2001 13:00:12 GMT

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I have a couple of pro amps I use at home and do drive them to clipping once in awhile during playback of certain material at a certain volume I get the amps clipping lights to flash intermittenly.I have heard that this is ok.

Subject: Re: clipping question...

Posted by [Wayne_Parham](#) on Sun, 05 Aug 2001 14:03:48 GMT

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Well, yes. It's not great - but OK. The cones aren't going to melt or anything, and especially with the drivers you've chosen. But the sound quality is poor, and the more you push the amp into clipping, the more noticeable it becomes. What happens at clipping is a rapid transition from linearity to non-linearity. It generates massive amounts of the worst kind of distortion.

Subject: Re: clipping question...

Posted by [James W. Johnson](#) on Sun, 05 Aug 2001 18:02:48 GMT

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Thanks Wayne, I should probably get a higher powered amp to run the Four Pis , my current amp can only put out 240watts per channel 20-20K @ .1%THD ,both channels driven.It would be nice to find an amp that can put out 500 or 600 watts per channel @8ohms...any recommendations?

Subject: Re: clipping question...

Posted by [James W. Johnson](#) on Sun, 05 Aug 2001 18:04:39 GMT

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Also with my 240watts per channel how loud will the Four Pis go?..Then if I double the power to 480watts per channel what will happen? (sorry if we already covered this before, my memory sucks)

Subject: Re: clipping question...

Posted by [James W. Johnson](#) on Sun, 05 Aug 2001 18:09:12 GMT

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Lastly its going to be nice to have 8ohm speakers since they are an easy load on power amps, the last 4 or 5 pairs of speakers I have owned have all been 4ohms with I am sure nasty dips as well. Who knows? , Maybe one day I will venture into a tube amp of some sorts , thats if I can find a powerful enough one.

Subject: something like this would be nice...

Posted by [James W. Johnson](#) on Sun, 05 Aug 2001 18:13:43 GMT

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http://www.crownaudio.com/amp_hm/maspec_3.htm

Subject: Crown Macro-Tech

Posted by [Wayne_Parham](#) on Sun, 05 Aug 2001 20:33:02 GMT

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You posted a link to the Crown Macro-Tech series amplifiers. I run them for high-power systems, and love them. Highly recommended.

Subject: Re: Crown Macro-Tech

Posted by [James W. Johnson](#) on Mon, 06 Aug 2001 00:02:20 GMT

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Looks like capable amps. I think the 240 wpc amp will do for awhile if not permanently. 90% of the time the Four Pis will be fed everything from 80Hz on up so I might be able to squeeze a few more dbs out of them with 240watts.
