
Subject: Who knows about preamp input impedance?
Posted by [gumby1](#) on Fri, 06 May 2005 01:20:11 GMT

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I'm shopping for a solid state preamp and noticed what seems to be a substantial difference in input impedances between the models I am considering. The four brands and models I am looking at have input impedances at 10K Ohm (McCormack Audio), 22K Ohm (Zus Audio), 47K Ohm (Van Alstine), and 50K Ohm (Marsh). Can anyone explain to me how this is going to affect my system components that I might hook up to the preamp? I am considering building a Bottlehead Seduction phono preamp. The designer indicates that it is designed for preamps with input impedances of 50K or greater. What might happen if I hooked it up to a preamp with lower impedance? This particular phono preamp is not a high priority so I could choose a different one depending on which preamp I go with. I suppose the preamp designers choose input impedance based on certain criteria. I just don't know much about it.

Subject: Re: Who knows about preamp input impedance?
Posted by [Bill Wassilak](#) on Fri, 06 May 2005 12:52:18 GMT

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Usually the lower the input impedance on pre-amps less noise is likely to enter it (rf,emf,etc.). It's better to hook up a lower impedance output to the same or higher impedance input. If you do just the opposite higher impedance output to a lower impedance input distortion will result.HTHBill W.

Subject: Re: Who knows about preamp input impedance?
Posted by [Wayne Parham](#) on Fri, 06 May 2005 18:54:00 GMT

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Very true. I'd call Dan over at Bottlehead and see how he thinks the Seduction will do driving a 10Kohm or 22Kohm load. It may be too much of a load, and might modify the response or make it distort.

Subject: Re: Who knows about preamp input impedance?
Posted by [sam9](#) on Wed, 22 Jun 2005 02:53:15 GMT

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Depends on how the input impedance is obtained. While it is generally true that the the lower the figure the lower the noise due to resistor value, there are techniques to (namely "botstrapping")

where low value resistors can be made to appear to the signal source to have a high impedance. At the same time a higher impedance at the input may improve the performance of the signal source to some degree. This depends on the capabilities of the source.
