Subject: Re: Passive preamp resistive design?
Posted by Wayne Parham on Wed, 16 Jun 2004 16:46:39 GMT
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If the load impedance is less than output impedance, it does generally cause problems. It can cause distortion or frequency response aberrations. The most common symptoms are distortion and loss of bass. But the output impedance of most devices like this is 600 ohms or less, so you're probably just fine.You can match impedance between the output stage of one amp to the input stage of the next amp to obtain maximum power transfer between stages. Or you can connect a low output impedance of an amp to a high input impedance of the next stage to obtain maximum voltage transfer. Both are acceptable methods, and each will work just fine depending on what you are trying to do. The one thing you don't want to do is to connect an amp with high source impedance to a low impedance load.If the output device characteristics aren't known, it can be checked with a test load resistor using a scope to see how much voltage drop results. Using a test signal at bandwidth extremes, one can also find out where is rolls off and if this frequency changes with different load resistances. A CD player, tape player or turntable require test disk, tape or record to provide the signal. But for a preamp or main amp, a signal generator can be used instead.