Subject: Re: How important are speaker wires? Posted by Bob Brines on Thu, 08 Jul 2010 15:15:51 GMT

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Asking questions about cables invites a flame war because to many it is almost a religions thing, but....

Every piece of equipment in the chain acts a a tone control -- equalization if you will. Your choice of amps, speakers, even the medium affect the sound of what the engineer put on the recording. Choice of cables is yet another tone control. That said:

The only thing of any great significance is the LCR characteristics of the cable. L and C are pretty much a trade off. Increasing L decreases C and vis versa. Most people opt for increased C because L rolls of the top end. You must be careful to not make C so large that you drive your amp into oscillation, if that is an issue.

What remains is R. You need a wire guage large enough to keep ohmic loss to an acceptable minimum. Anything else is a waste of copper. You need to figure out what your maximum power level is and then do the math. when you arrive at an ohmic loss that you can live with, that is the size wire you need.

In my case, I use rather high efficiency speakers and never exceed 10w/ch. This means that I can use single pairs of CAT5 and get less that 1dB loss in a 2m run. If you are using 85dB/w/m speakers at 100's of watts, your answer will be different.

Bob