Subject: Re: High-performance cables
Posted by Wayne Parham on Wed, 07 Aug 2019 20:36:27 GMT
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This is a subject that gets some pretty enthusiastic debates going in some audiophile circles. Some people think they find night-and-day differences between cables, but most people say they can't tell any difference.

I'll tell you what I think, coming from an engineering point of view.

Video cables are used at a frequency where inductance and capacitance matter, so the cable itself is important, especially longer lengths. Audio cables are used at a relatively low frequency, so inductance and capacitance are less relevant.

In general, I like to use a good pure-copper conductor of adequate size for the current required and an insulator that won't break down over time. Conductor size is generally only an issue in power and speaker output cables.

Beyond that, the connector and assembly is always important. A gold-plated connector will work better than a tin-plated connector, especially after it has been in place for a while. Tin oxidizes and forms resistance, reducing signal quality. Crimped conductor assembly is common, and it can be acceptable, but if the crimp bites into the conductor's copper and leaves it exposed, then the copper will oxidize and create resistance. It has to be sealed, soldered or welded for best quality.