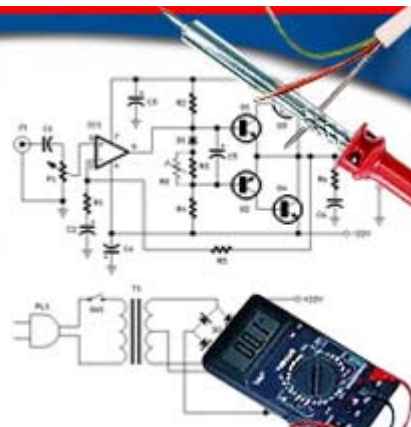


D-I-Why & How

*Your Equipment,
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Upgrading Your Cables Without Breaking the Bank

Audio cables are controversial and evoke considerable and often heated debate. If there's an online cable discussion that hasn't degenerated into a name-calling, flame-throwing insult fest, I haven't seen it -- and not for a lack of looking. But if there's one thing that almost all audiophiles *do* agree on it's that some audio cables are monstrously overpriced. Although it might sometimes seem that the world of high-performance cables is devoid of bargains, that's not the case. In fact, if you're willing to forgo fancy packaging and trim and put in a bit of effort, it's not at all difficult to assemble a high-performance cable package that will be easy on your ears *and* your bank account.



Many audiophiles aren't aware that some of the biggest names in cable offer their products in bulk form. As the name implies, bulk cable is offered off the roll, in whatever length is needed. Terminating the cable is left up to you. But that doesn't mean you necessarily need to invest in a soldering iron. With the right connectors, it's possible to assemble an entire set of cables with only a couple of screwdrivers. Some ability to solder, though, makes it possible for the DIYer to choose from a much wider variety of connectors.

Bulk cable is usually sold per foot or meter of wire; for an 8' pair of speaker cables, for example, you'd need to buy 16 feet of cable. Generally speaking, connectors are the most expensive part of a completed cable. A set of four good-quality RCA connectors, for example, will probably fall in the \$60 to \$100 range. Power-cord connectors can be significantly more expensive than the cable to which they're attached.

By combining high performance and great value, bulk cable is a no-brainer for inclusion in the regular "D-I-Why & How" repertoire, and I'll be revisiting the topic from time to time. First up in this ongoing survey are cables and connectors from DH Labs, Furutech and Supra Cable.

Associated Equipment

Loudspeakers – B&W CM1.

Integrated Amplifiers – Audio Note Kit 2 (from kit), Blue Circle Audio CS, Simaudio i5.3, DIY Paradise Charlize 2, Marantz SR8400 receiver.

Digital source – Audio Note DAC 2.1 (from kit), Dell laptop running Exact Audio Copy and Foobar2000 (FLAC format), Hagerman Technology HagUSB USB-to-S/PDIF converter (from kit).

Interconnects – Furutech FA-13S.

Speaker cable – Furutech u-2T.

Digital cable – Furutech FX-Alpha-Ag.

Power cords – Furutech FP-314-Ag.

Power conditioner – Furutech eTP-60 power distributor/filter, DIY "Grunge Sponge" passive parallel AC filter.

Accessories – Soundcare Soundspike footers, Vibrapods.

Furutech

Furutech offers bulk interconnect cable starting at less than \$2 per foot, but this Japanese company is probably best known for its cables at the high end of the bulk-cable price and performance spectrums. Furutech's Canadian importer, Audiyo.com, provided a wide variety of cables and connectors for evaluation. All of Furutech's cables and connectors undergo the company's proprietary demagnetization and cryogenic treatments, which are said to enhance performance. Where appropriate, each cable was soldered using Mundorf's excellent silver/gold solder.

The thick and unwieldy FP-3TS862 10-gauge power cord (\$27.84 per foot) is the most difficult-to-terminate cable that I've encountered -- ever! It literally took me three days of trying, retrying, cursing, sweating and blistering my fingers before I could force the cable's massive conductors into the FI-25M (R) (\$105) and FI-25 (R) (\$78.70) connectors, which inexplicably are made only for cables up to 12 gauge (the smaller the gauge number the bigger the cable). The trick to terminating this behemoth of a

cable, it turns out, is to separate each conductor into two ends, like a snake's forked tongue. You see, the mechanism in the connectors that grasps the cable is tightened with a screw, and that screw runs right through the middle of the mechanism. So splitting the conductors into forks permits it to go around the screw from both sides. Simple, but not too bloody obvious.

Yes, the FP-3TS862 was a real pain to work with, but does it ever make a great power cord. It's not too often one can speak of a cable that instantly transforms a system, but the FP-3TS862 is one. When powering my Simaudio Moon i5.3 integrated amp, everything improved with the FP-3TS862: better detail, stronger bass, cleaner highs, a blacker background and a more three-dimensional soundstage. This cable absolutely smoked the Shunyata Snake Bite power cord it replaced. It might cost three times more than the Shunyata, but the Furutech is easily ten times better. For all the trouble the FP-3TS862 caused, it was worth it in the end. This is a seriously high-performance cable. It's not cheap, but it's worth every penny.

The FP-314Ag (\$11.67 per foot), Furutech's 15-gauge power cable, easily terminated with the FI-11M (Cu) (\$35.60) and the FI-11 (Cu) (\$35.60), was assigned the duty of powering the tube-regulated power supply in my DAC 2.1. This little guy offered benefits similar to those of its bigger brother and its most noticeable achievement was lowering the tube section's noise floor. Interestingly, where before a whisper of tube rush was always apparent (ear on speaker), with the FP-314Ag it was gone. I noticed, too, that the FP-314Ag got more out of the DAC's Amperex 6922 output tubes. The legendary smoothness and sublime midrange of the 6922s was still there, but the bass tightened up and gained some heft and punch.

The FX-á-Ag (\$16.65 per foot) digital and FA-13S (\$11.07 per foot) interconnect cables are as different from one another as cables can be. The former is a pure-silver stranded-core coaxial cable, while the latter uses two massive (for an interconnect) 16-gauge solid-core conductors in a twisted-pair configuration. The FX-á-Ag is supremely flexible, while the FA-13S is as stiff as one would expect: Bend the FA-13S into a shape and it will stay that way for eternity. To counteract the solid-core cable's tendency to want to ring like a bell, Furutech twists the conductors with soft cotton filaments in between. These seem to do a very effective job of damping the cable.

To suit the peculiar needs of the DAC 2.1 at one end and the Blue Circle USB Thingee at the other, the FX-á-Ag was terminated with the FP-3-117 (R) BNC connector (\$40.40 per set) at the DAC end and the FP-120F (R) male RCA (\$33.20 each) where it met the Thingee. The FA-13S was terminated with the FP-110 (G) (\$25 each) male RCA at all four ends.



Furutech FX-á-Ag and connectors.

Both cables are quite nimble compared to the DH Labs D-75 digital and Tara Labs RSC Prime interconnects that they replaced, and they offered faster transient response and greater detail. The FP-13S is a somewhat dryer-sounding cable than the RSC Prime, but it has the edge in bass impact, attack and decay. FX-á-Ag is a terrific digital cable, though it sounds a smidgen softer than the D-75, perhaps an effect of its stranded core of fine silver wires, versus the D-75's solid-silver-over-copper core. This softness translated into bass that was slightly less focussed than with the D-75, though in every other measure the five-times-more-expensive FX-á-Ag topped the D-75 by a considerable margin.

The i-2T (\$8.27 per foot) speaker cable is another that is a little too big for its Furutech connector's britches. In this case, the cable's inner insulators are the tiniest bit too big to easily fit into Furutech's jewel-like FP-201 (G) spades (\$13 each) and FP-202 (G) locking banana plugs (\$17 each). Once forced in, though, finishing the job of terminating the speaker cable is as easy as tightening two screws. To put less strain on the wire stands, it's recommend that the top screw be used to crimp the wire to the connector and the bottom screw be tightened against the cable's insulator. This should make for a tight fit that will prevent the cable from coming loose, even under strain.

Of all the Furutech cables, the i-2T took the longest to break in; only after a couple of hundred hours of constant playing did it seem that the i-2T had finally settled down. Initially it presented overblown, tubby bass and recessed highs. Detail retrieval, though, was very good to excellent throughout the break-in process. Once fully ready, the i-2T proved to be an excellent speaker cable. It managed to offer outstanding detail retrieval without sounding bright, etched or tizzy and, unlike the Supra Ply, never offered a strained rendition of brighter recordings through the CM1 speaker. Bass reproduction is well controlled and fast: There'll be no one-note bass with the i-2T in the chain. At around \$250 for an 8' pair, including Furutech's lovely spades and banana plugs, the i-2T is a fantastic bargain.

Conclusion

Some people have no problem spending thousands of dollars on audio cables. If you're not one of them, check out bulk cables. Chances are very good that you'll find the perfect cable for your budget and your audio system. Then, the next time you hear someone gasp at the price of some audio cables, tell them that you're not into that game -- you roll your own.

Now, go forth and terminate!

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