

Upgrading Your Hi Fi System (Part 2)

by
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At its simplest, a hifi system is a device for taking electricity from the mains and converting it into a musical signal. Thought about in these terms, the real 'source' for our hifi is the mains socket in the wall. There is, of course, very little we can do to affect the mains between the transmission lines and our homes, but I don't think this should preclude us from making improvements to the bits we *can* affect.

The fact that the mains is the source of our music is why I think that attention to detail in how you feed that mains to your equipment pays such dividends. There are various schools of thought as to why using better mains leads than the supplied 'kettle' leads makes a difference, and why a dedicated mains block is such an essential component and not just a useful accessory. Reducing the impedance of the mains, so that your equipment can draw power more quickly and respond more deftly to changes in demand, is one possibility. Reducing the amount of external interference which gets picked up by the mains leads, typically from mobile phone, radio, wifi or even your fridge, is another. A third is creating a more constant and stable earth potential for your system to use as its reference point.

Whatever the reason, and if I'm honest I can't explain it definitively in these terms and I suspect there is more to it than that, first getting the energy into, and then getting it out of the system is the object of the exercise when we're talking about mains and cabling. Taking this as our working hypothesis, where does it, er, lead us?

The first, and in many ways fundamental, item I'd suggest you investigate is the mains distribution block. This is usually a box of some sort, containing four, six or more mains sockets, fed from a single connection to the wall socket. Many people use regular domestic multi-way extension blocks; some use the sort of surge-protected blocks designed for computers. These, unfortunately, seldom (if ever) bring the sort of benefits I've heard from properly designed and constructed mains blocks intended for audio equipment.

The key differences are that an audio-specific block will use high-quality sockets, preferably chosen by listening to various alternatives and choosing the best-sounding one; it will feature attention to detail in respect of how the earth is managed, typically by star earthing; and it will eschew any form of filtering. No doubt there are other factors at play, depending on what the manufacturer considers important and wants to achieve. Taken as a whole, this attention to the form of construction which is relevant and appropriate for the intended purpose can produce a mains distribution block which will bring your hifi system to life: I tend to notice musically important improvements in the dynamics, the timing, and the tunefulness of my system when a well-designed mains block is used, as against connecting the units to individual wall sockets, or using a 'domestic' multi-way mains adapter.

People sometimes use the surge-protected blocks intended for computers, because they suspect the surge protection facility will be beneficial. I'm not at all sure this is the case. Computers can be very sensitive to sudden irregularities in the mains, in a way that hifi systems aren't. A mains surge or 'spike' can cause a computer to shut down, or corrupt files, where in a hifi system it is more likely to simply degrade the sound quality. The problem is that the cure is worse than the disease. In my experience, the sort of surge protection circuitry employed in these blocks 'strangles' the dynamics, probably because it diminishes the system's ability to draw rapidly changing amounts of current in response to the dynamic needs of the system.

And once you've selected your mains distribution block, some attention to the mains cables themselves should be your next consideration. Again, I don't want to delve into technicalities (the internet is full of arguments for and against the benefits of specialist mains leads and it seems pointless to reprise them here). Suffice to say, my experience is that, used in conjunction with a decently designed mains block, properly constructed mains leads can offer similar benefits, and to a similar degree to the mains block itself. What seems to happen is that the equipment wakes up. Music has life, vitality and vibrancy which the equipment had hitherto kept to itself. If you suspect that your CD player, or amplifier, is not doing your music justice, before you decide to upgrade it, do try replacing the mains block and leads (most dealers will be able to loan a set, for a few days' trial). Sometimes, that's all it takes to realise the potential of the equipment you already own, and the cost of a mains block and two or three mains leads could well work out rather cheaper than a better source or amplifier.

There is a small caveat here, and it is that the cheapest 'upgrade' mains leads may not offer the sort of benefits I'm talking about, and certainly not to the degree I've experienced by spending more. Unfortunately, when you factor in the cost of labour and materials (bearing in mind that 'boutique' cables tend to be made by hand and in very small quantities), it's tricky to make something which will be appreciably better in materials and construction than the £5 giveaway which came with the unit, for less than £50. Many people have dipped a toe in this particular water, arguing that they will risk £50 just to see what the fuss is about, and have come away convinced that this whole mains hoo-hah is a lot of fuss and bother about nothing. Had they been a bit braver, and spent maybe £100-200, they might have had a rather different outcome.

Again, many dealers offer loan sets, so you can try before you buy, but keep an open mind and don't be afraid to splash out a little. I've personally used mains blocks and leads from Russ Andrews, Nordost and MusicWorks, to very good effect; indeed I think the MusicWorks options are among the very best I've heard, at any price.

So now we've got our equipment properly nourished by some nice wholesome power, the next challenge is to get our musical signal from its source, to our loudspeakers. This is going to require at least one pair of interconnects, possibly more, and a pair of loudspeaker cables. People do mix and match brands of interconnect and speaker cable, but I wouldn't recommend it. I say this for a couple of reasons:

First, let's dispense with the notion that cables act as tone controls. Different manufacturers all have their own preferred ways to make their cables, and they do all sound different. Sometimes, people are tempted to 'solve' a problem by finding a cable with the opposite characteristic, perhaps curing a perception of fierce or aggressive treble by choosing a cable which gently attenuates the higher frequencies, for example. I think this is a mistake. The musical signal, for which we've already laid out a fair amount of money, is a sophisticated and complex thing, and deliberately interfering with it is only likely, in the long run, to obscure or confuse matters.

The second reason is that manufacturers, certainly the better ones, do tend to have a 'house' sound, so it's far better to find a manufacturer whose approach more closely matches your own preference than stick with it, than to try to make two different brands work together when their designers had two rather different sets of priorities.

Often people question whether it's necessary to spend significant sums on interconnects and speaker cables. As with the mains I think the rewards can, if chosen well, outweigh the costs. In other words, the benefits of better cables can improve the sound of your system beyond what could have been achieved by spending the same money on a better source or amplifier. And crucially, the sort of improvements we're talking about quite simply aren't available from a better piece of kit, at any price, unless you also address the cabling and supports as we're discussing in these pieces. Again, you don't have to take this on trust, your dealer will have cables available for loan. And again, the more you can budget, the better results you can expect, but remember that you'll get more consistent and meaningful results by keeping to the same brand, than by mixing and matching; I've had much more musically meaningful results from using one manufacturer's entry-level interconnect and speaker cable, than two different mid-range cables from two entirely different makers.

People sometimes describe the music signal as "fragile". I don't think that is quite right. I think it is more that the signal is full of potential, but realising all that potential can be a challenge. The cables we choose can almost literally make or break a hifi system, depending on what they do with the complexity and subtlety in that signal. It's much more than whether they can deliver a nice, sweet treble, or a deep and powerful bass. In many ways, those gross effects are rather less important than the subtle ways in which a cable can mess things up. The very best cables will show you the interrelationships between the different parts of a piece, to a degree that sometimes seems barely credible. Subtleties of timing, nuance and expression, exactly the sort of things which differentiate a good musician from a great one, are also the things which separate a decent cable from a great one.

And by the same token, a poor cable, or simply the wrong cable, can turn all the musicians in your collection into people who can't play in time, or in tune, with each other. So, while I can see why people describe the music signal as fragile when it's so easy to break it, the problem is that it isn't fragile enough. You can degrade those subtleties a fair way before the music becomes unrecognisable; so it's easy to assume that because you can still tell what piece is playing, your cables are OK. The fact that you can still tell it's Miles Davis, means the cables are doing their job, right? Well, it depends. If you don't hear what it is about Miles' playing which is so

magical, or you think the recording you've got was him on an off day, perhaps, then it may be worth asking yourself if it's worth checking out some better cables.

Here's another caveat. Some hifi dealers get this, some don't. You need to find one that does, and who you can rely on for good advice and guidance. Here's one possible clue: if your dealer still talks about cables and tone controls in the same terms, then it might be worth asking elsewhere. Similarly, taking pot luck on a couple of internet bargains might work, if you're lucky, but might not. So if you're interested in finding out just what some attention to mains and cabling can achieve, find yourself a dealer who understands what a well-chosen cable can do for a system, and put your faith in him.

And finally: a note on connectors. Cables have various parts: the conductors, the dielectric, often there will be some form of screening, and there will always be connectors. The plugs on the ends. Don't dismiss these. It's been my experience that, just as the cable can make or break the performance of the system, the connectors can make or break the performance of the cable. And, counterintuitively, lots of metal or mass in the connector is rarely a good idea. Manufacturers like WBT, Eichmann, Furutech and others expend a great deal of effort in making their connectors as unobtrusive as possible. There are also a fair few copies out there, which look superficially similar, but which degrade the performance to a degree which can be entirely unexpected. Beware of inexpensive clones or copies. They are never the bargains they at first appear.

And remember this, you're reading this because you're interested in getting the very most out of your hifi system, and that means getting the most out of your music collection. Attending to the mains, and the cables, can be an unexpected yet absorbing way to make sometimes significant improvements to your system. Find yourself a dealer who understands this, and see where it takes you. But don't forget to have fun, and enjoy your music.

One place it may take you first, however, is to somewhere where your system sounds rather worse than it did before you started on this little adventure. People sometimes spend significant sums on upgrading their cables, only to find that they are no longer enjoying their music. Their system may now sound confused, muddy and congested; it shouts where it should be singing, or the acoustic space may sound more reverberant and muddled. Vocals can be less intelligible, lyrics slurred and mumbled; instruments might develop a harsh or unsatisfying tone. Naturally, people blame the cables, which were the last thing they changed. This is quite logical, but it's also a common mistake.

They decide that the whole mains and cables thing is a racket, because their system is now making one. Unfortunately, they're blaming the messenger for the message, and making one of the most basic errors a hifi upgrader can make. Now would be a good time to talk about supports, so that's what we'll do in the last part.