

# Setup matters

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**M**ost scientific discoveries start with an observation and a question. The process has become more sophisticated and more expensive in recent times but still tends to begin with something like: “*That’s interesting! I wonder what...*”.

Sadly, for those of us without the research chops or the six, seven, or eight-figure budget to support them, the answer to the ‘I wonder...’ part may not get far beyond ‘*I have a good working hypothesis that...*’.

## They’re not accessories

And so it tends to be with the world of audio ancillaries. I won’t call them ‘accessories’ because, in my experience, they are much more fundamental and deserve a bigger slice of the system budget than mere accessories would warrant. It’s better to think of them as the essential bits of the system outside the hi-fi component boxes themselves. The purpose of good ancillaries is to enable the components to be better versions of themselves, either by not getting in the way (cables, I’m looking at you) or by mitigating any external effects on the components.

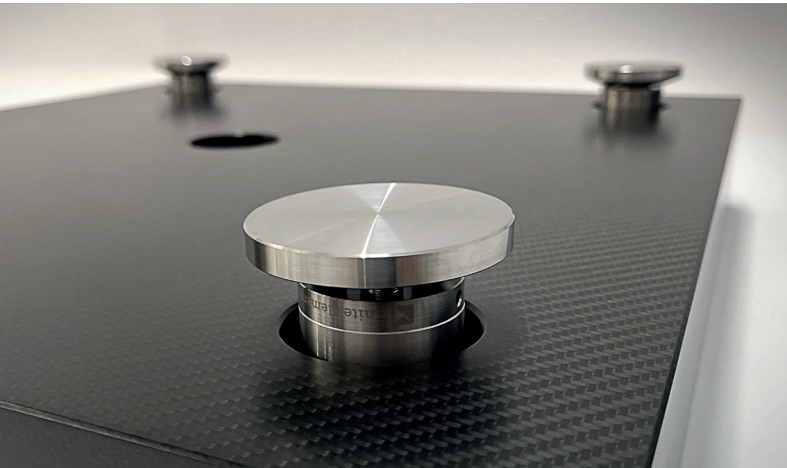
Unfortunately, the audio companies with seven-figure research and development budgets typically focus on mass-market products rather than high-end ones. Therefore, investigating why *this cable* sounds better than *that one* or why *this support* improves the sound while that support detracts from it isn’t an avenue they are interested in exploring.

So, we have a world where there’s an abundance of aftermarket ancillaries – cables, mains power, grounding and system supports – produced mainly by small, specialist firms. The better ones understand why they are doing what they do, but they rely comparatively little on hard science to back it up. Some people have a problem with this; I think it’s one of the more delightful aspects of this whole enterprise because the good firms are in it because they care about music and strive to make it better. They observe, listen, learn, think and experiment, then apply their working hypotheses to their creations. Many of the products reviewed in this issue result from this process, and it doesn’t feel like a coincidence that many have developed very similar rationales for what their products are doing, and why and how they improve a hi-fi system’s music-making abilities. »





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## » The stuff of myth

It can often feel as though navigating through this forest of aftermarket ancillaries is the sort of endeavour that the ancient Greeks would have created mythologies about, if only they’d had audio\* back then. Most hi-fi dealers offer a range of cables; many will sell system supports, racks and tables, and mains distribution products, but comparatively few dealers have any deep appreciation for the importance and significance of system setup, beyond things like speaker placement and awareness of interactions with room acoustics.

I suspect the majority of dealers, therefore, tend to view these as accessories rather than ancillaries. To them, they are ‘nice to have’ rather than ‘need to have’. And if your customer base is on a tight budget or in a price-sensitive market, they may defend this position from the perspective of their own business. But it does remove one opportunity for ‘value-add’ from their dealership, and system setup, using a carefully curated range of painstakingly auditioned

ancillaries, is one way good audio dealers can maintain their relevance and keep their clients away from the clutches of the online marketplace.

## Energy, friend and foe

Think of it this way: music is energy; exquisitely organised and carefully ordered energy, to be sure, but energy nonetheless. Our tapes, vinyl, CDs, and digital files contain a record of that energy, and it’s the hi-fi system’s job to extract and deliver that energy into the room to its fullest extent. However, it also needs to preserve the order and organisation within the music, or it’ll simply descend into chaos and noise. The better the system, the more energy it extracts, and the less disorder it introduces during the recreation and delivery process.

‘Disorder’ might manifest as gross audible distortion, or subtle timing or phase information that’s slightly ‘off’. By ‘timing,’ I’m not just referring to whether the musicians can play in time but also to whether the elements of the notes





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» arrive correctly in relation to each other, ensuring that the attack, sustain, and decay occur in the right places, at the correct levels, with the deepest bass notes delivered as accurately as the highest treble.

This is confounded by the fact that the system's problems aren't over once delivered to the room. It seems increasingly evident from the empirical evidence that microphony – the ability of physical vibrations to generate an electrical signal – is not merely a phenomenon confined to a small subset of 'microphonic' components, but also to cables, and componentry that isn't traditionally regarded as microphonic.

The potential for musical energy to feed back into the system, thus contributing to the disorder we're trying to avoid, can be significant. Microphony isn't random noise; it's a product of the signal, so there's a feedback mechanism modulated by the signal but subtly time-delayed, contributing to smear, vagueness in pitch, timing, and a subtle loss of focus. It's a phenomenon that we're all so used to hearing that we often don't even notice it is there, until we encounter a system that doesn't suffer from these effects as much. Ironically, the better the system transfers energy from the recording into the room, the greater the potential for that energy to interfere with itself and feedback.

### The coherent approach

The approach I try to use is to get as much musical energy into the room as coherently as possible, and then to manage the system support infrastructure so that this energy doesn't feed back or disrupt the subtle details in the music. It's a holistic, systematic approach to the signal that I picked up from a dealer who really cares about this stuff. This means careful attention to mains, grounding and cabling, to maximise energy transfer from recording to loudspeaker, then careful setup and vibration management, to minimise the disordering effect of any feedback mechanisms.

Many people focus on the sound quality aspects of a system, because tonal or dynamic differences between equipment are the most obvious attributes, at the expense of recognising the system's emotional qualities. That's the ability of the music to engage the listener, to evoke a mood, or generate an emotional response. Certain tracks can make me cry, so if the system doesn't make me want to cry, there's something amiss in that system's emotional quality. Thought of in these terms, the basic sound quality is merely a means to an end, and the objective it aims for is a greater emotional connection between composer, musician and listener.

This emotionality is difficult to convey in a traditional review, where the music itself is dissected into components such as frequency response, dynamic range, detail, etc. Even there, such products are discussed in terms of 'coherence', 'musicality', 'engagement', and more. While there are some products which seem so focused on the 'magic' of audio that they overlook real-world operational demands, the best products are consistently described in terms of how they make the reviewer 'feel' about the music rather than through a dull analysis of the music.

The better your equipment, the more likely it is to respond to care and attention in setup; however, even budget kit will benefit from a bit of judicious optimisation. Poorly set up high-end kit can leave the listener wondering what the fuss (and expense) is about, but that's because high-end equipment has fewer compromises in design and execution. Therefore, any compromises in the way it is set up can feel like a disproportionate effect on the outcome.

### Take me to your dealer

However, just as when you're buying the boxes, you can't just randomly throw money at the solution and expect to get the best results. And this is where a good dealer earns their keep. I've heard a £10k CD player, carefully set up with perhaps £3k of cables and supports, convincingly outperform, in emotional terms, a £20k CD player just plonked down and hooked up with whatever was to hand. And the effect on the £20k player was similarly transformational.

I would go so far as to say that if you don't pay proper attention to system setup and are careful with your chosen ancillaries, you likely have no real understanding of what level of emotion your current system is truly capable of.

If you have a good audio system, the most significant and cost-effective upgrade might involve addressing cables, system support, and setup, often for a fraction of the cost of upgrading to better components. Once you've found that sweet spot, you'll have a clearer idea of what and where to upgrade next, and that setup will beneficially complement your new kit. Consider this the next time you feel tempted to throw up your hands in horror at the price of some 'mere accessories'. +

*\*Audio is a Latin word, so presumably the Romans had hi-fi, but weren't as interested in creating mythologies as the Greeks.*