

# Hearing is believing?

The hi-fi business seems peculiarly vulnerable to fraudsters, charlatans and pre-owned car salesmen. The industry's golden ears are distorted by a mixture of flattery and auto-suggestion, says Barry Fox.

Where did all the snake oil salesmen go when the Wild West was tamed?

Into hi-fi, of course.

A few years ago a jaded audio engineer told me his secret master plan. He was going to create a market for "hi-fi solder".

His solder would contain a secret ingredient that eliminated the distortion created by conventional solder joints.

No matter that no-one had previously measured, or heard, any distortion created by factory soldering. A clever campaign by word of mouth, and demonstrating to selected journalists, would do the trick.

"Now listen to this", he would say to a golden-eared pundit. "Can you *really* say there's no difference between the sound from these two amplifiers, one factory-fresh and the other re-made with hi-fi solder?"

Never underestimate the powers of auto-suggestion. Tell someone that they are listening to something special, while inferring that their keen hearing is famous the world over, and you immediately have a convert with religious fervour to convert others.

Don't fudge the issue with blind and double-blind testing. Just tell people what to hear, and they will

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obediently hear it. Better still, get them to pay through the nose for a sprinkle of electronic magic dust. It takes a brave man or woman to admit that they have been conned and wasted their money.

I don't doubt for a moment that if the man with the hi-fi solder plan had followed through, tortured souls all round the world would soon have been re-soldering every joint in their hi-fi, or paying specialist treatment centres to do the job for them. They would have gladly ignored the residual hum and intermittent crackle that would surely have resulted from the amateur reconstruction of joints that soon "went dry". All they would have heard was the absence of solder distortion. And who could have proved that they were not hearing an absence of something which never existed?

As far as I know, the hi-fi solder plan was never put into action. But I often wonder how many of the other hi-fi crazes began with a similar over-a-drink fantasy and ended up as a solid commercial venture. As the late Lenny Bruce so succinctly put it. "If they'll give, I'll grab".

At the Tokyo Audio Fair recently, I watched a roomful of head-nodding Japanese super-ears listening to what they obviously thought was the obvious difference in sound between different cables - all virginally pure of oxygen contamination and with stringy copper crystals neatly aligned in apple pie order. I don't doubt that they all heard how much better the more expensive cables sounded.

But at the same time I wondered why they were ignoring the far more significant effect on the sound caused by cramming at least two dozen different loudspeaker pairs into the same room, without any apparent attempt at shorting the voice coils to stop them flapping in sympathetic distortion.

Of course there is an obvious benefit from using gold- and silver-plated plugs and sockets. As any schoolboy will tell you, they do not

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corrode and so will not introduce crackles and semiconductor junctions which rectify the sound of passing radio taxis.

Likewise no-one disputes that the use of thin, high-resistance cables will affect the sound from loudspeakers, if only by reducing gain. By the same token, nice thick cables with plenty of heavy copper will do a better job.

I don't doubt the sincerity of those who truly believe that the sound is better if the copper has linear crystals and is oxygen-free. What I, and other cloth-eared pragmatists like me, object to is the quite shocking disregard for scientific methodology in some of the "proving" tests.

We have recently seen a fatal fascination for the "neutralization" treatment of everything from metalwork to paper-back books in rooms dedicated to super-fi listening. Again, there is no doubt that most people who pay hard-earned cash for mumbo-jumbo witchcraft will far rather hear the difference than acknowledge that they were taken for a ride. That's fair enough. If they want to invest in neutralization, rather than going to concerts or buying gramophone records or beer



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in the pub, good luck to them and those who sell the treatment.

But please don't anyone preach the gospel, and expect others to play the same stupid game, without first running blind tests in which no-one knows what they are hearing.

In fact, even blind tests can be fudged – as all those tests on the difference between valves, transistors, analogue waves and digital pulses proved. It only takes one strong character on the panel to influence the rest with a pained grunt or a sigh of satisfaction.

Any logged result can always be excused. You just blame the stress of the test procedure, inadequacy of the source material or, if all else fails, some unspecified weak link in the chain, such as the contacts of the switch used for the A/B test transition.

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Of course not all amplifiers sound the same; of course there are differences between analogue and digital recordings; and of course different digital-to-analogue decoders create different audible

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effects. Early transistor amplifiers sounded downright nasty, because their designers were still "thinking valves". The master tapes from which digital CDs are pressed will often have been equalized to compensate for the physical deficiencies of a vinyl LP. If the record company cuts costs and uses the same tape as a master for "flat" CDs, you end up with something that sounds very nasty indeed.

Until recently, the electronics companies were vying with each other to offer DACs with as many bits of resolution as possible. Now the world has gone mad for one-bit

coding.

The Japanese had developed this technology two years ago but, by their own admission, held back on an announcement for the simple reason that they could not see how to explain to the public that suddenly multiple bits were out, and single bits were in. When Philips went with Bitstream, the Japanese rode on the back of the confusion caused. But because many companies will not have single-bit hardware available until next year, Philips' premature announcement successfully shot the industry in the foot for the Christmas market. Punters are now waiting to buy for fear of being left with obsolete DACs. Not of course that the average punter has any idea what a DAC is – just that what was previously held to be good is now held to be not so good as that which is not yet available.

Little birds tell me that the next round of nonsense will centre on the theory that some optical-fibre cables are better at carrying digits than others. So fibres sound different. Doubtless the more expensive ones will sound better. The sales possibilities for this one are endless.

The absurdity is that while all this is going on the audio industry still has not got round to doing what the professional sound recording industry did years ago. In a recording studio, the cables from different microphones are colour coded, to make connections at the mixing desk fast, easy and unambiguous. But hi-fi buffs still grovel on the ground with a spaghetti cobweb of indistinguishable leads, connecting innumerable different audio and video sources. Who will be first to forget about the minor benefits of grossly over-priced hi-fi cabling, and offer the public the real benefit of colour coded connecting cables?

And who will be first to offer a video cassette with both linear and hi-fi stereo which identifies the left and right and rear surround channels, and their phase, to help set up an audio-video system?

For my money, straightforward questions like these sum up the status quo in hi-fi. (status quo is, after all, only Latin for the mess we are in). The hi-fi industry has never been able to see the wood for the trees. Minor improvements are endlessly debated while the real and significant benefits (like the glorious convenience of CD) are taken for granted. The wrong channels are connected, out of phase, by miracle cables.

Which makes me fear that it will only be a question of time, before someone makes the hi-fi solder joke a deadly serious business venture. ■

