

In Tune

Make the most of the hi-fi you currently own. Instead of replacing it why not give it a technology boost with Fidelity Audio's specialist upgrade service, suggests Paul Rigby?

Times are tough. There is less cash floating around the economy and people are tightening their belts, debts are being paid off, holidays delayed or even cancelled while the purchase of many luxury goods is being deferred or ignored altogether. Hi-fi is suffering too with many audiophiles deciding to stick with what they've got, for the moment, until the economy picks up. This doesn't stop the search for the perfect sound, however, it just means that you may have to go about it in a different way, thinking laterally and taking a more value for money approach.

This is where the skill pool of Fidelity Audio can be an ideal solution. In fact, hard times or not, Fidelity Audio's intriguing facilities

make you think about upgrading hi-fi in a way that makes you see a hi-fi separate as not the end, but rather a new start point. DIY and hi-fi tweekers are very familiar with this philosophy of course, but mere mortals such as myself aren't up to this sort of thing. Whether it's a an amplifier you want upgraded, or a phono stage, DAC, network box, tuner or cassette deck, they can oblige. "No manufacturer releases a product and then pushes it, technically, to the boundary," said Fidelity Audio boss, Brent Rowe. "It's mainly to do with price points, of course. Even a dCS DAC, which is pretty well sorted, can be improved upon."

Don't kid yourself with the belief that this sort of thing is exclusively the preserve of hobbyists and

specialist companies like Fidelity Audio though, as the manufacturers themselves have been doing it for years and charging money for the privilege, "Marantz's Ken Ishiwata is the doyen of the upgrade," confirmed Rowe. "You remember the Marantz CD63 CD player? They did a basic version, a SE and then a KI Signature – they all used the same circuitboard and mechanism. The basic 63 used cheap parts, the SE used a slightly better transformer and a few improved capacitors while the KI had an enhanced transformer and a bit of copper in the chassis. But they all sounded different. This is part of the reason that audiophiles like modifying Marantz hi-fi, because the company designs its gear really well and in such a way that later upgrades can be retrofitted, getting a bunch of models

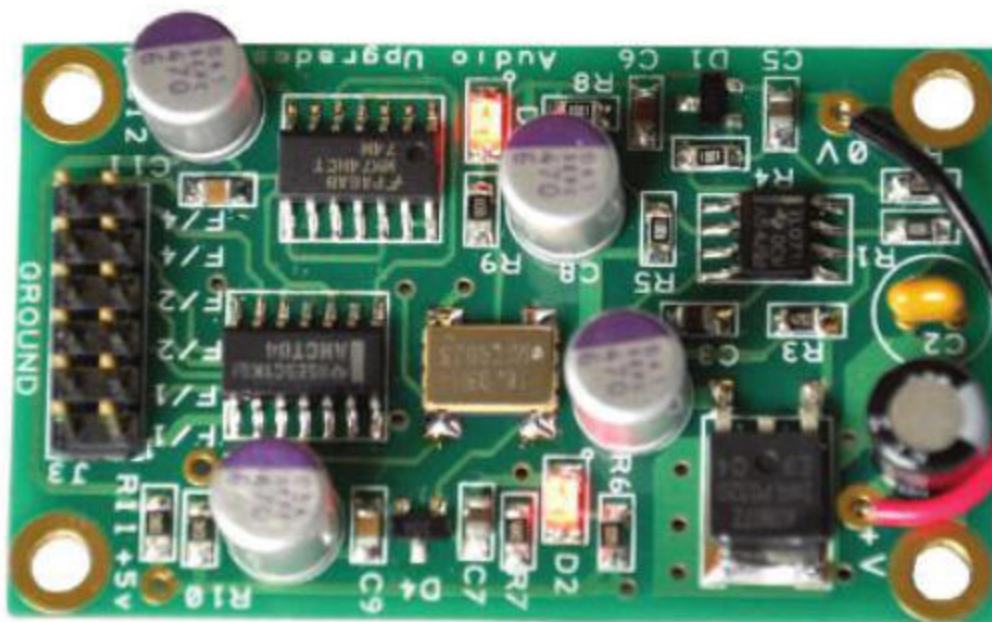
out of one circuit, basically.”

Fidelity Audio takes the Ishiwata philosophy and applies turbochargers to the technique. Check out the website and you will see options to upgrade everything from Naim and Nakamichi, Sugden to Squeezebox and Denon to dCS. How and what they upgrade is down to you, your needs, the rest of your hi-fi and how much cash you're willing to spend. The website provides neat and tidy 'levels' of increasing sophistication and prices for each product but the sky is the limit. Also, personalisation is paramount. The upgrade has to blend with your own requirements. In theory, you can upgrade your Creek Destiny CD player, say, to such an extent that it stops becoming a Creek and becomes a unique, personalised, great sounding beast. Rowe himself has proven the point with his own, personal, Marantz CD63 KI. "It was only £400 when it was new. I've spent around £2,000 on it and, similarly, have included around two thousand parts within. Now, it sonically compares to £10,000-£12,000 CD players. Although, saying that, the only original part of it is the mechanism, which I've improved with extra damping. The machine has also leapt from having three to twenty-six

power supplies.”

So we decided to put the upgrade theory to the test, handing over an old Cambridge 650C Azur CD player (around £300, new) for a £410, Level 2, upgrade. An intriguing choice because, according to Rowe, "half of the player contains the same components as a Cambridge DacMagic." He adds that, "for that upgrade, we put large smoothing capacitors inside for the benefit of the main power supply to give

more balls and flow to the bass. Cambridge has their own name on the capacitors but they're rebadged cheap versions. You can tell by the cheap metal on the top, which looks like lead. Quality 'caps' tend to be polished and shiny because they use better materials. We then change all the capacitors around the DAC chip. This allows the DAC to work more efficiently, giving you a cleaner punchy sound and more detail while the treble reflects real instruments rather



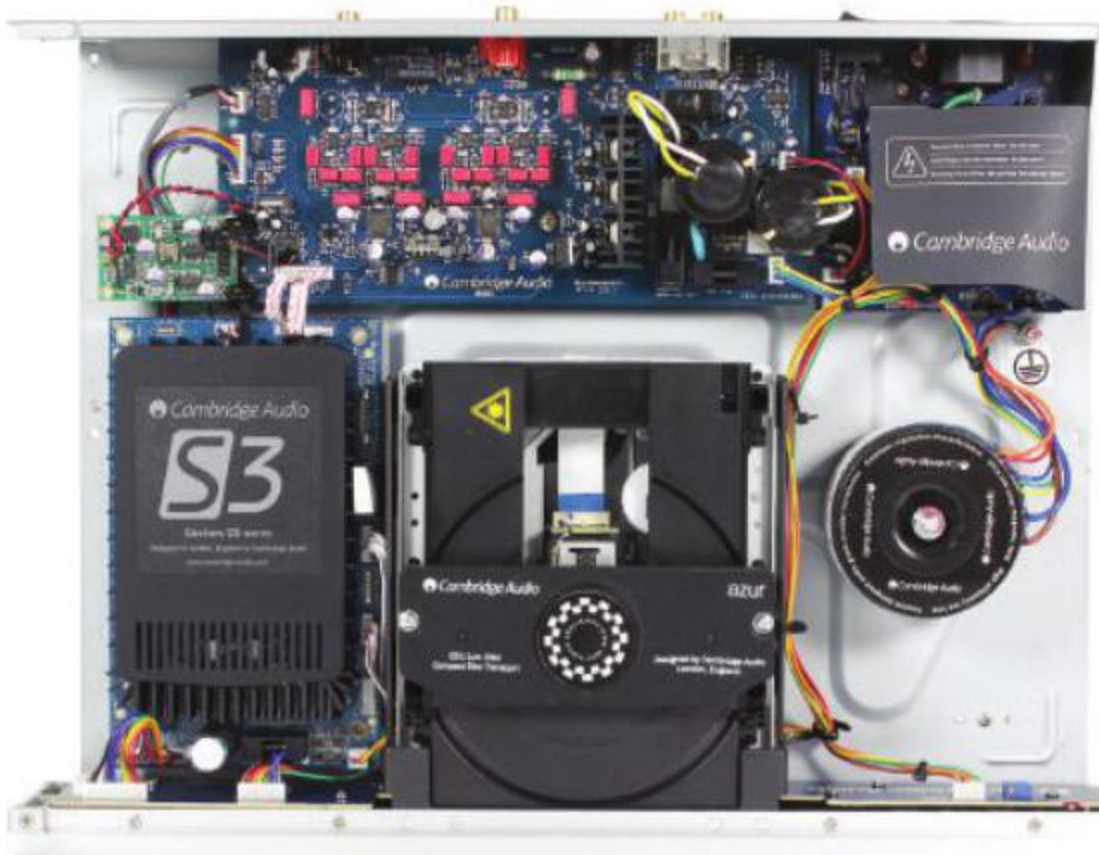
Fidelity Audio's C2 Premium low jitter clock. The clock feeds a reference signal to the DAC/Servo IC. It replaces the standard, 'jittery' crystal oscillator, allowing the IC to perform more efficiently and the audio to sound more accurate.

than a distorted 'tizz'. The op-amps – which the signal goes through and there are six in this machine – we change to make the machine sound more natural and linear.”

SOUND QUALITY

All well and good then, but the question is, was it worth the effort? Well, I decided to compare the Fidelity Audio-upgraded (FA) Cambridge (now, with the cost of the upgrade factored in, totalling £710) with my reference mid-price reference, the Naim CD5 (originally retailing around £1,400), in purely 'stock' factory form of course. Spinning the compressed 2002 hit single, 'Freak Like Me' by The Sugababes, and whereas the original Cambridge 650C machine was clean and crisp, albeit a touch mechanical and digital sounding, the newly fettled machine sounded more natural by comparison. Greater light and shade was revealed while upper mids offered greater tonal delicacy.

For example, vocal harmonies sounded, for the first time, like a group of individual voices singing together rather than a melded lump. Against my Naim reference, the FA Cambridge 650 produced a far tighter bass, packing a punch but not overwhelming the listener. Whereas the Naim offered a bottom heavy



Cambridge put their name on major internal parts within the 650C CD player but the capacitors are rebadged cheap versions. You can tell by the cheap metal on the top, which looks like lead, say Fidelity Audio.

the room, it could sound a tad bloated – and there was no sense of this with the tweaked 650C.

Switching to jazz vocalist, Helen Merrill's 'Yesterdays' ('Jazz 'Round Midnight'; Verve), and the stock Cambridge is a clean, matter of fact machine that paints a well resolved picture of the proceedings, whereas

instead of plodding, those creamy vocals now held more texture and emotion while the extended outro sounded crisp, deliberate and considered. With it came a grandeur that was previously missing and a magnificence that held you fixed in your seat.

the Naim offered a bottom-heavy presentation that produced a mighty, low frequency bass fest that shook



The SPower Low-Noise Voltage Regulator replaces standard, noisy voltage regulators that transfer their noise to the circuits they are powering, affecting sound quality. Fidelity-sourced SPower units are quieter and have less influence, they say.

picture of the proceedings, whereas the stock Naim seemed to bathe in a sea of bass. The FA 650C however refocused and rebalanced the track, creating spaces in-between the notes – real, tangible gaps instead of the blurs provided by the CD5. It recreated the delicate reverb surrounding the lead vocal, and the breathy pauses within the trumpet playing. That extra focus gave the track more precision and more edge, imbuing a heightened sense of rhythm.

Playing 'Song For The Generals' from the new post rock/indie EP by Monsters Build Mean Robots, and this track was much loved by the Naim CD5, with its creamy vocal and building, symphonic outro which extended for half of the track. The FA modded Cambridge however, decided to approach the music from a different direction by opening up the track for the first time in a dynamic sense. The mandolin-inflected guitar now danced onto the track

CONCLUSION

The improvement from the stock Cambridge 650C was dramatic then, the Fidelity Audio mods package taking the player not just up to the very respectable standards of the Naim CD5 but considerably beyond. I have to admit no small degree of surprise in this respect, not least considering the fairly modest outlay. Of course, approaching your hi-fi upgrade path from this direction rather than buying a completely new piece of kit does take a slight shift in one's mindset (a bit like a Roman Catholic converting to Buddhism, perhaps?), but I found that adopting this internal upgrade philosophy really is a life-changing experience, in a hi-fi context.

FIDELITY AUDIO LEVEL TWO

Upgrade Component List

- 1 x C2 Premium low jitter clock
- 2 x Fidelity Audio SI low esr capacitors (main PSU)
- 1 x SPower +5V Low noise Regulator (DAC PSU)
- 1 x ZA / ZLG decoupling capacitor (pre 5v reg)
- 6 x LM4562NA Audiophile opamps
- 6 x Oscon SEPC decoupling capacitors (DAC digital)
- 2 x ZA / ZLG decoupling capacitors (DAC analogue)
- 1 x ZA / ZLG decoupling capacitor (DAC PSU)
- 1 x Oscon SEPC decoupling capacitor (3.3v rail)
- DC blocking bypassed