

For one particular small British hi-fi company, the true path has become a quest for transparency via a minimalistic approach to design. Careful listening led to active pre-amp stages being abandoned, likewise 'ordinary' continuous track volume controls and indeed anything else that which could get in the way of optimal resolution.

As audio technology has advanced new opportunities have arisen and in recent years it's become possible to compare the sound quality of digital and analogue volume controls in some audio systems. For, Audio Synthesis the pendulum has swung towards the digital form, allowing its integration with a new digital decoder and the complete elimination of the analogue volume control unit, passive or otherwise including the required connectors, cables and switches.

We recently [HFN/RR, May] covered the company's new DAX Decade decoder in its standard universal form, and mentioned that there was also an advanced, specialised version, adapted for

specific direct connection to a matching direct connection to a matching version of the Desire Decade power amplifier. Due to its dedicated nature, a formal review was deemed inappropriate for this highly-tuned Audio Synthesis combination. However, the implications and sound quality results for this chosen technique will be covered; and in any case, the general technical performance closely mirrors that given in the recent DAX review.

Chief engineer David Heaton finds himself inexorably driven down the path to continuing simplification. Given the assured control of both the volume-controllable DAX and the matching power amplifiers, the integration

With its own 'N-Code' interface, Audio Synthesis creates a purer source-to-speaker terminals signal path in its transport, DAC and power amplifier

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SUPPLIER

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● Transcend Decade CD

● DAX Decade
£2795 (balanced
option £795
extra)

● Desire Decade
power amplifier
£2495

process was continued.

The characteristics of the power amplifier were adapted to take on some of the circuit responsibilities previously found in the DAC; for example, additional gain and the alias filtering.

Remarkably the Desire power amplifier may be opened out to a high 43dB of gain, with just 260mV needed for a full power output of 175W. This is to match the special DAX unit, whose output buffer and gain filter stages have been thrown away to allow the DAC chip itself to speak directly to the power amplifier, at around 350mV output for peak modulation.

Passive input and passband filtering takes care of the fine print, especially with the cleaner-than-usual audio signal which is achieved by synchronised jitter-reducing 'gating' at the DAC output.

As described in the DAX Decade review, 'N Code' is a proprietary Audio Synthesis digital interface with minimised data induced jitter. When these special versions of the Decade DAX and Desire are partnered with fine interconnect cable plus the matching 'N Code'-



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compatible Audio Synthesis transport, this sonic recipe reached new height of aural palatability. If you're an Audio Synthesis fan, and I know there are quite a number, then you'll be in no doubt that this is the way for you to go.

Fine as the individual stand-alone audio components are, this completed digital audio replay chain is an undeniable advance for the brand.

SOUND QUALITY

In context, the quality gain is so significant that it would be easy to give the wrong idea, even seeming to denigrate the quality of the standard Audio Synthesis components in the light of the special dedicated arrangement. Audio Synthesis will have to carry that risk, since it ventured the project in the first place!

For monitoring I used the WITT II, referenced to the standard DAX Decade driving the Krell FPB-600, Audio Synthesis Desire Decade or Cary 572 (single-ended triode) power amplifiers.

I can easily empathise with Dave Heaton and his infectious

enthusiasm for this short path audio system. In context, the sound quality of the 'system' replay chain is advanced by something like 10 points, using my usual listening-test scoring. While it would be unfair to separate the hot-wired DAX from the system, this performance is equivalent to an intrinsic 54 points on my scale, a commercial class record for 16-bit 44.1kHz replay. You can imagine how a source of this quality juices up the Desire Decade power amp.

In combination, the lower-feedback Desire Decade swings more sweetly with the matched DAX, delivering a remarkable advance in transparency and perspective. The whole presentation was more relaxed, more musical, more elegant, more resolved. It sounded as if treble jitter had been abolished, sibilants were very pure, perfectly registered in the balance and placement of the vocal sections.

The added quality of the 'N' code digital interface was abundantly obvious with this perfectionist system, reaching beyond the ordinary SPDIF interface results in jitter terms even

Addendum: the DAX Decade in balanced form

Since the Dax Decade review [May], Audio Synthesis has been able to supply the fully balanced version (also including unbalanced outputs) of the universal high-output model and I was able to check its performance. I can verify that this meets the high standard already set for the 'normal' version, with the advantage of still better sound (approximately plus 2 marks) when driving fully balanced amplifiers such as the Krell FPB series. So this version is also recommended.

with the support of precision re-clocking. Finally, this sound quality standard must also rest on the fine performance achieved for the CD transport. Of basically good rhythm and timing, it has excellent bass, fluid, powerful and open, with a high resolution, naturally balanced mid range. The treble is virtually grainless.

CONCLUSION

From the test report for the DAX Decade [HFN/RR, May; see also June, p43] we know already that the technical performance is first rate, for example distortion, low level resolution and general accuracy.

However such tests do not reveal the important difference between the 'direct coupled' version and the standard unit yet in combination with a matched Desire it is trivially easy to identify them by ear.

At present only for 'locked in' Audio Synthesis customers the company has once again shown how the purist approach can be made to deliver a worthwhile audio payoff. The faithful system builder will find this special combination hard to resist. +



DIGITAL