DAC with Tubes

AUDIO RESEARCH MIGHT CONTINUE TO FAVOUR THERMIONICS, BUT IT'S NOT IGNORING THE DIGITAL WORLD. MALCOLM STEWARD TRIES ITS NEW DIGITAL STREAMER/PRE-AMP



he Audio Research *Reference DAC Digital Media Bridge* is a magnificently sumptuous piece of engineering. When the review sample arrived, along with the *Reference 75* power amplifier that Martin Colloms had suggested would make a suitable partner by offering a balanced connection, I was taken aback by the sheer size of the boxes, let alone what was inside them. The *REF DAC DMB* was no great trouble to install but the *REF 75* had to be positioned side-ways atop my Quadraspire *Sunoko Vent* support in order to fit. The grab handles on the fascia of the *REF 75* proved a pure high-end affectation and no use whatsoever in manoeuvering an object quite so colossal. (A fork-lift truck would have been more appropriate!)

The *REF DAC DMB* seems at first glances to be quite an expensive item: £13,998 for a DAC? In truth, however, it is far more than just a DAC. The unit comprises a multi-input 24-bit/192kHz DAC, a USB 2.0 HS player, a regular USB input, an internet radio player, and a UPnP digital media player/streamer. It also offers Wi-Fi connectivity and may be hooked up to an *iPod*. (In both of the last two cases I am sorely tempted to ask "why?", but doubt that everyone will share my indifference towards Wi-Fi and *iPods*.)

For the bulk of the review I took advantage of the player being perfectly compatible with the NAS setup I employ, which features both Asset and Twonky servers (using Asset on my primary NAS).

The REF DAC was unusual in providing a 3.5inch TFT fascia display with which my tired old eyes seemed perfectly happy, and a simple, aluminium, full-function remote control that operated completely as I expected, which is, I suppose, a benefit of having engineered a bespoke unit rather than simply grabbing one from a Chinese sweatshop shelf.

The REF DAC and REF 75 are both vacuum tube or (as we folk who invented the English language call

them) valve designs. Audio Research has, throughout its 40-year history, favoured both thermionic valves and Class A amplifier configurations. I have only used these technologies with review equipment during the past 30 years, but have often greatly enjoyed them. (That said, I do not really appreciate amplifier components that degenerate – albeit by only a degree – every time you audition them, as is the case with valves.) Valve equipment is also prone to microphony and generating unnecessary heat – although my cats find the latter an admirable quality and have become big Audio Research fans (they truly adored the *REF 75*).

The valve complement in the *REF DAC* is four 6H30 dual triodes, plus one 6550C and a 6H30 in the power supply. These are purely operating in the power and analogue domains, for the *REF 5*-style volume control and output stage – the *REF DAC DMB* incorporates much of a *REF 5* pre-amp's capability. This is a *Digital Media Bridge* and not a Columbus-style code-breaker, after all.

It is worth noting that Audio Research is very pernickety about its valves, selecting examples that give both excellent performance and longevity. The company deliberately avoids exotic, costly, small-production-run valves or so-called new-old-stock (NOS) models, buying its valves solely from preferred manufacturers and vendors around the world. These are selected, matched and pre-biased for best performance when installed in a new product at the factory. No further biasing or other measures are necessary, says the company.

Sound Quality

I used NEAT loudspeakers throughout my testing: my behemoth, nine-driver *Ultimatum XL10* reference, and the compact Petite *SX*, along with several models from other manufacturers. All were driven very capably and rewardingly by the *REF 75*.

The first rip auditioned was jazz guitarist Bill Frisell's instrumental take on the Marvin Gaye classic, *I Heard it Through the Grapevine*, from the *East/West* live album. There was no background noise whatsoever, so low-level detail leapt out enthusiastically. Replaying this track absolutely defined the terms detail and tonal colour: every instrument was gloriously etched and natural in its sound and presentation. There was also a beautifully crafted soundstage, with Frisell playing mainly to the right in front of the drums and the bass guitar forward to the left. Each instrument was painstakingly detailed, both dynamically and in note shape and space. The