

Audiolab 6000A

This latest variation on Audiolab's integrated amplifier theme lacks the sheer grunt of its 8300 big brother but seems none the worse for it, and looks better value too
Review: **Nick Tate** Lab: **Paul Miller**

Audiolab's 8000A first appeared on dealers' shelves in October 1983, and was arguably the least fashionable new integrated amplifier for a long time. It was everything that the cool audiophile cognoscenti of the time didn't like. How could anyone possibly produce a supposedly modern product fitted with tone controls, a headphone socket, independent source and tape switching and – perish the thought – a balance control? It was the very antithesis of what the sparse, minimalist, less-is-more 1980s was about. Despite this however, it sold like hot cakes at Christmas...

Amazingly, it turned out that hi-fi buyers did actually crave its plentiful facilities and 50W per channel rated power output. Better still, it proved highly reliable in an age where this could not always be taken for granted. The 8000A continued to improve for the next fifteen years or so, given a subtle colour change from gunmetal grey to black, plus a 'CD' input, more power and better sound.

A RACING CERTAINTY

Warp forward a further two decades to 2015, during which time Audiolab had become TAG McLaren Audio and then back to Audiolab again, and the 8300 successor was launched for the princely sum of £899 [*HFN* Mar '16]. Boasting better ergonomics with a new digital display and a further power increase, it has gone from strength to strength. And now the new £599 6000A is here, which is essentially a lower-powered version of the 8300 minus its balanced inputs. With the same claimed 50W power output as the original 8000A, think of it as the true spiritual successor to Audiolab's classic integrated.

As well as three analogue line inputs, the 6000A offers DAC functionality and aptX Bluetooth connectivity, plus

RIGHT: One pair of power transistors are deployed per channel on the 6000A's two internal heatsinks [centre], fed from a linear PSU [far right]. A small daughter board [top] carries the Bluetooth receiver and ES9018 DAC

a FET-based MM phono stage to keep the vinylistas happy. The company stresses that these aren't mere 'tick box' features, designed to fill space in a brochure specs list. Bold claims are made for the digital stage in particular – it sports an ESS Sabre ES9018 converter chip, as seen on the M-DAC [*HFN* Sep '12], and the digital filter has three user-selectable settings: Fast Roll-Off, Slow Roll-Off and Minimum Phase.

The four S/PDIF digital inputs – two coaxial and two optical – run at up to 192kHz/24-bit PCM, but there's no support for DSD. In truth, few Audiolab buyers will really miss this, and what's more important is the decently spec'd Class AB power amp rated at 50W/8ohm and 75W/4ohm [see PM's boxout, p79 and Lab Report, p81].

Audiolab says its output stage uses a complementary feedback topology,

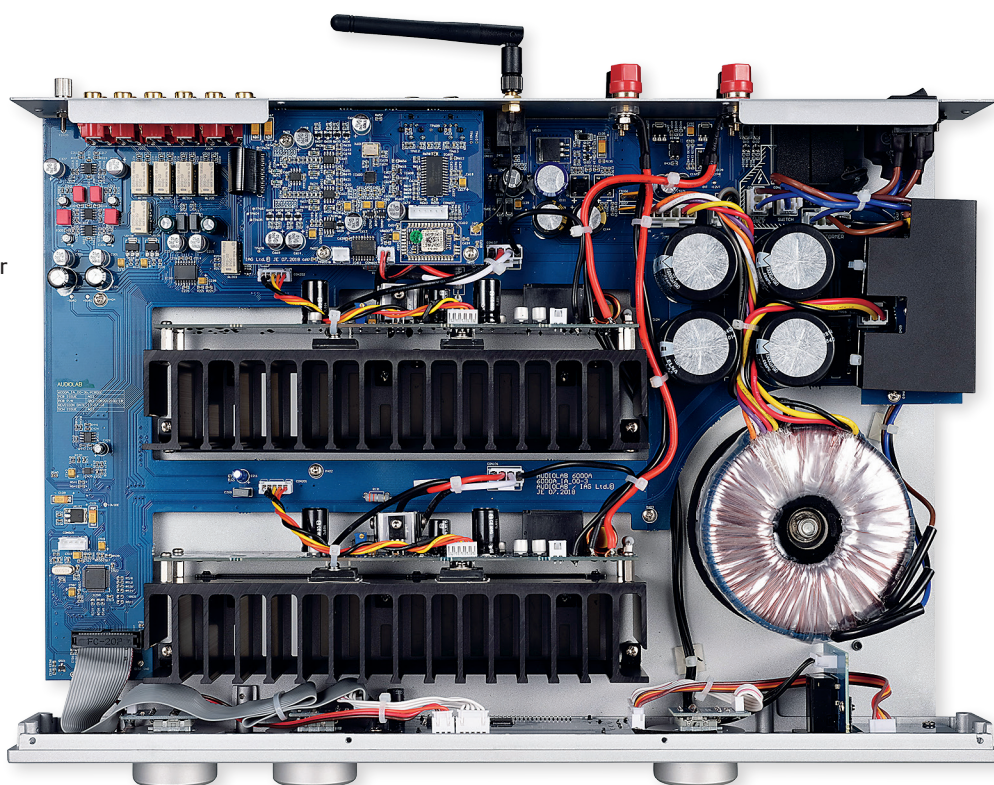
claimed to give better linearity and thermal stability, its performance remaining independent of heatsink temperature. The PSU features a 200VA toroidal transformer and 4x15,000µF of reservoir caps while the preamp section offers volume adjustment

over a –80dB to +8dB span in 2dB, and then, finally, 1dB steps.

In practice the 6000A is a delight to use. The company has abandoned its gaudy brushed aluminium fascias of a few years ago for a simpler painted finish that looks subtle and tasteful. Ergonomically it's intuitive enough, its Mode selector and small display used in conjunction to vary the balance, digital filter type and standby time.

The amp has three main modes – integrated amplifier, split pre/power and preamplifier, so there's plenty of flexibility

'The music comes at you in a positive, engaging way'



for people slowly ascending the upgrade ladder, and perfect for an affordable product such as this. Overall, the general look and feel of the 6000A totally belies its price as it looks, behaves and sounds like a far pricier product.

HOUSE MUSIC

To any owner of the original 8000A, the character of this new integrated will be reassuringly familiar. Indeed, it's almost uncanny that the classic amp's basic way of going about making music is still here, after all those years. There are some subtle differences of course, but the Audiolab 'house sound' has largely been retained.

All this suggests a spry and crisp way of making music, and the diametric opposite of the 'rich and rose-tinted' school of design. Everything is taut, tight, orderly and measured, so the music comes at you in a positive, engaging way but there's no great romance either to the tone or emotional aspect of its delivery.

Cue up Change's 'A Lover's Holiday' [from *The Glow Of Love*; Warner Bros.

Records 3438-2], and you're instantly taken aback by the precision of the sound. This is a beautifully recorded analogue disco/funk track from 1980, and its innate warmth gives the 6000A a chance to shine via its (analogue) line inputs.

Everything is etched out precisely, from the big bass guitar line pushing things along, to the spiky rhythm guitar giving great impetus and urgency to the music. The lead vocal harmonies are delivered with energy and speed, and there's plenty of detail in the mix. The 6000A sounds in its element here, its slight tonal dryness being more than compensated for by the majestic scale and sweetness of this classic track. I was struck by its willingness to tackle the boldest of dynamics, making for a most pleasurable listen.

Feed it the driving mid-'80s indie-rock of Easterhouse's 'Whistling In The Dark' [from *Contenders*; Cherry Red CDM RED 185], and again it proves lots of fun. This is a fast and lithe-sounding product and it captures the music's attacking guitar transients with aplomb. It sounds highly

ABOVE: Traditional values in a modern setting as the 6000A's fascia is less cluttered than earlier generations thanks to its twin control knobs and digital display. Build and finish are very good

percussive, and syncopates well with the frenetic drum work. Even the lead vocals are well handled, integrating perfectly and giving the song a really direct, to-the-point feel. It's a dense, quite compressed recording, and yet the 6000A cuts through it imperiously – showing surprising grip and command of the detail. If anything, it sounds fractionally better resolved than I remember with its bigger 8300 brother, sounding a little faster and more nimble on its feet here.

DIGITAL DIVA

The digital input takes things up a notch, with more detail and directness than the analogue line inputs. Indeed it's here that you begin to realise how good the soundstaging is for a product of this price. Okay, so Randy Crawford's 'Rio De Janeiro Blue' [from *Secret Combination*; Warner Bros. Records WPCR-28100] did lack the full depth offered by better, pricier amplifiers – but was still surprisingly spacious from left to right.

Instruments were set up in the mix with impressive focus, and you could follow them for the duration of the song without getting distracted. Unlike many integrated amplifiers of this price, vocalists and instruments do not subtly fade in and out as the music gets more complex, or the mix more dense. The vast acoustic of the Jesus-Christus-Kirche Berlin was blissfully evident when playing Beethoven's Pastoral Symphony [BPO/Karajan; DG 2531106] via the phono input, too. Again, this proved the point that neither the digital nor MM phono inputs were included by Audiolab just to make up the numbers.

HE'S NOT HEAVY

Moreover, the 6000A proved able to drive loudspeakers up to reasonably high volume levels in my largish listening room

DESIGN CHOICES

With Audiolab's PR and marketing departments in overdrive, messaging the brand's heritage and how this new 6000A model is its most affordable yet, I thought a closer look at the work of Audiolab's long-term designer, Jan Ertner, would prove illuminating. A glance at the 6000A suggests it's based on the 8300A [*HFN* Mar '16] with the same control layout and very similar casework, but where has Jan trimmed the corners of the 8300A's design? Slightly reduced power output is the most obvious clue, the 6000A rated at 50W/8ohm against 70W/8ohm for the 8300A. While the power amp designs are similar, the 8300A's larger power supply supports 300W into 2ohm and 163W (12.8A) into 1ohm, against 98W/55W (7.4A) under the same dynamic conditions for the 6000A.

So the 8300A will handle low impedance/low sensitivity speakers with a firmer hand despite the 6000A having a usefully lower output impedance (0.011ohm vs. 0.059ohm), and arguably better bass control, and despite the overall frequency response remaining unchanged from one model to the other. The 6000A lacks the 8300A's balanced inputs, and though the overall gain of +37dB is identical, the newcomer is the quieter of the two amps, improving upon the 8300A by over 3dB. Finally, distortion, while remaining very low, increases more gently with frequency in the 6000A than the 8300A, so it's likely that Jan Ertner has polished almost as much as he has trimmed during his latest design challenge [see Lab Report, p81]. PM

AMPLIFIER/DAC



ABOVE: Three line ins and MM phono are joined by power amp-in/preamp-out [mode switch on the front panel and remote, below]. Two optical and coaxial digital ins are included with Bluetooth. Switched speaker outlets are on 4mm terminals

with no undue signs of stress. It's no American muscle amp though, because when you really twist the volume knob clockwise it's clear that it lacks the ease and low-end grunt of its beefier 8300 bigger brother.

This is especially obvious when playing heavier rock music, but the trick is to match it with reasonably easy-going loudspeakers, and keep it in the comfort zone. Cambridge Audio's Aero 6 floorstanders proved a perfect match – even the vast swathes of granite-like sub bass from LFO's '90s techno classic 'Low Frequency Oscillation' [from *Frequencies*; Warp Records WARP LP 1073] didn't see it complaining. It does get quite warm playing this sort of music for any sustained period of time however – if not exactly breaking into a sweat – but my ears shut down before it did!

HUGE RESPECT

One potential downside to the Audiolab 6000A is its slight lack of musical charm. It's the sort of amplifier you develop a huge respect for yet don't quite fall in love with. For example, its reading of The Box Tops' 'The Letter' [*Best Of The Box Tops* – Soul Deep; Arista 07822 18937 2] – a jaunty yet melancholic '60s pop song – came across as slightly too clinical for my tastes, and with a drier tone than I would have preferred.

The music didn't quite gush with emotion in the way that perhaps it should have, but still proved

LEFT: A limited number of functions are enabled on Audiolab's remote for the 6000A including volume, input selection, mode and menu access



quite fun to hear all the same. It's a trade-off, and while there are more emotive-sounding rivals around, they typically lack this amplifier's grip, control and insight.

The 6000A's consistency across musical genres really impressed me. Its smooth, unflustered delivery doesn't flatter any one type of music, yet is revealing enough to let you right into the recording. Fed from a top-notch source, the fast, punchy electronica of Nu Era's 'Starlight' [*Aquarian Android*; Omniverse OMNI1202] benefited from the 6000A's intrinsic 'cleanliness' – so even if it doesn't set out to thrill, there's always something going on to enjoy.

Here it was the frequency extremes that really drew my attention; the synthesised bass line was taut and tuneful, while the looped hi-hat cymbals were clear and sparkly. Even the Bluetooth input proved pleasing, with a bouncy rendition of Caravan's 'Nine Feet Underground' [*In The Land Of Grey And Pink*; Deram 8829832]. As this classic '70s folk rock epic twisted and turned, Audiolab's newest arrival picked up the beat and grooved along with it. What more could you ask? ☺

HI-FI NEWS VERDICT

The new 6000A really is a great value modern integrated. It offers a decently powerful, 'grown up' sound with the facilities that today's budget amplifier buyers actually want. Its built-in DAC and phono stage are really rather good, and the build and finish are first-rate. Indeed, this is just what attracted those '80s and '90s buyers to Audiolab's original 8000A, all those years ago. And so the legend lives on...

Sound Quality: 83%

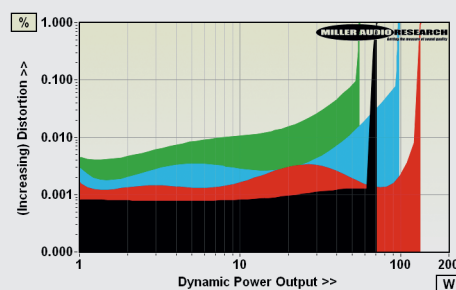
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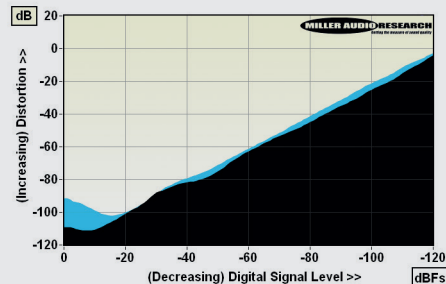
AUDIOLAB 6000A

Some brands are more conservative than others when it comes to specifying power output (and speaker sensitivity!) but Audiolab is flying quite close to the wire with its 50W/75W 8/4ohm rating for the 6000A. With a high 246V AC mains feed it manages 2x55W/2x85W, respectively, but we've seen other 50-watters achieve 70-80W/8ohm in practice. Nevertheless, the PSU is sufficiently 'relaxed' to support a far higher 71W and 133W into 8 and 4ohm loads under dynamic conditions, albeit with some restriction to 99W/55W into lower 2/1ohm loads [see Graph 1, below]. Otherwise, the A-wtd S/N ratio is very generous at 92dB (re. 0dBW), the output impedance usefully low at 0.01ohm and the response very extended, reaching 20Hz-20kHz (±0.1dB) and out to -1.6dB/100kHz. Distortion is also very low at ~0.0004% through the bass and then increases gently to 0.001-0.006% in the midband to ~0.03%/20kHz and 0.06%/40kHz.

The onboard DAC stage is certainly no afterthought – tested via the preamp output (a maximum of 2.8V being available here) – it delivers a performance that's commensurate with most ESS9018-based outboard DACs at £500. The A-wtd S/N is a wide 109dB and low-level resolution is good to ±0.2dB over a 100dB dynamic range. Jitter is exceptionally low at <10psec across all sample rates and distortion is not only as low as 0.0005-0.0014% at -10dBfs (20Hz-20kHz) but is also very consistent with frequency below -20dBfs [black vs. blue traces, Graph 2]. With the default linear phase digital filter option, stopband rejection is a full 83dB and the response reaches out to -0.2dB/20kHz (CD/48kHz media) with -1.3dB/45kHz and -3.7dB/90kHz realised with 96kHz and 192kHz files, respectively. PM



ABOVE: Dynamic power versus distortion into 8ohm (black trace), 4ohm (red), 2ohm (green) and 1ohm (cyan) speaker loads. Maximum current is 7.4A



ABOVE: Distortion vs. digital signal level over a 120dB dynamic range (preamp out), 1kHz (black); 20kHz (blue)

HI-FI NEWS SPECIFICATIONS

Continuous power (<1% THD, 8/4ohm)	55W / 85W
Dynamic power (<1% THD, 8/4/2/1ohm)	71W / 133W / 99W / 56W
Output impedance (20Hz-20kHz)	0.011-0.031ohm (115ohm, pre)
Freq. resp. (20Hz-20kHz/100kHz)	+0.0 to -0.13dB/-1.6dB
Digital jitter (S/PDIF at 48kHz/96kHz)	<10psec / <10psec
A-wtd S/N ratio (re. 0dBW/0dBfs)	92.1dB (Analogue) / 109.1dB (Dig)
Distortion (20Hz-20kHz; 0dBW/0dBfs)	0.0004-0.031%/0.0004-0.0037%
Power consumption (idle/rated o/p)	19W / 165W (1W standby)
Dimensions (WHD) / Weight	445x66x300mm / 7.8kg