Product Release

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Above *Audiolab 7000A in silver finish*

7000A integrated stereo amplifier

Take everything that makes the 6000A one of the most popular integrated amps of the last few years. Add a healthy dose of upgraded tech from the flagship 9000A. The result? The new 7000A.

Since its launch in October 2018, Audiolab's 6000A integrated amp has been a consistent best-seller, lauded by critics and loved by its owners for its useful range of facilities and adroitly balanced sound – a clear class leader at £649. Recently, the 6000A was joined by a new flagship integrated model, the 9000A, taking the 6000A's established blueprint and elevating it across every parameter to deliver the epitome of 'affordable high-end audio' – uncompromising design, build and performance that rivals amplifiers costing twice its £1999 price tag.

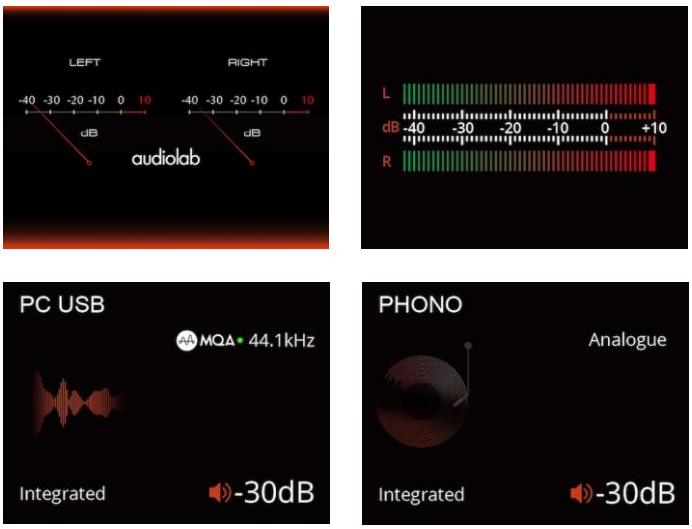
As winter turns to spring, the 6000A and 9000A are joined by a third integrated stereo amplifier. With an RRP of £1099, the new 7000A nestles between its two siblings in terms of both price and performance, whilst adding a few tricks of its own. It builds upon the same design fundamentals as the 6000A, recognising that while an amplifier is still the beating heart of any high-performance audio system, just as it has been for decades, a truly versatile integrated amp now needs to cover many bases – digital and analogue sources, wireless connectivity for portable devices, a phono stage for playing vinyl, and amplification for headphones as well as speakers. But while the ethos remains the same, every aspect of the 7000A's circuitry, both digital and analogue, has been enhanced to deliver updated facilities and upgraded performance.

A fine display

At first glance, the 7000A looks similar to its entry-level sibling but there are key aesthetic differences. Some are subtle, such as the sharper edges to the rotary controls and changes to the vent perforations on the top surface. The new amp also a little heftier, at 8.4kg compared to 7.8kg. The most obvious aesthetic change is the central display – while this remains stadium-shaped, like the 6000A's display, the window has been enlarged to 64x48mm.

The reason for the 7000A's larger display is clear as soon as the amp is powered up. The 6000A's monochrome text display has been replaced by a colourful GUI, like the one found on the flagship 9000A (albeit the IPS LCD screen is smaller – 2.8in as opposed to 4.3in). This shows a variety of information in a more visually appealing way than other integrated amps – volume level, input selection, format data and more. It gives access to the 7000A's impressive menu system, which includes such options as digital filter selection, upsampling, input sensitivity adjustment, balance control, automatic standby switching, and volume curtailment when the amp is powered up. It can even be set to display a VU meter in 'analogue' or 'digital' form, showing real-time signal levels for the left and right channels – a satisfying graphical representation of the music as it plays. Animations can be turned off and brightness adjusted, and the display can be set to activate only when a function is accessed and switch off after a defined period, as the user prefers.

The attractive versatility of the 7000A's GUI and the useful array of options it presents are a clear upgrade on the 6000A and an unusual asset for a high-performance integrated amp at this price point.



Left *The 7000A's GUI, displayed on its 2.8in colour screen, gives access to settings, format data, and even a VU meter display in 'analogue' or 'digital' form*

Versatile connectivity

The 7000A incorporates state-of-the-art digital-to-analogue signal conversion, enabling digital sources to connect directly without an external DAC. Like the 6000A, there are four S/PDIF inputs – two coaxial and two optical – but the 7000A adds a USB Type B input for PCs, Macs, smartphones, tablets and digital storage devices. It also includes an HDMI ARC input for convenient AV system integration – the 7000A is the only Audiolab amplifier to include this facility. Bluetooth reception is included too, with support for

multiple codecs including aptX HD, and Bluetooth 5 compliance for optimum range and speed. For analogue sources there are three line-level RCA inputs, plus one for a turntable. Audiolab has tweaked the 7000A's MM phono stage to improve performance compared to the 6000A, with precise RIAA equalisation and input filtering to ensure vinyl is treated with as much care as digital sources.

Digital circuitry

Ever since the much-admired M-DAC launched more than a decade ago, Audiolab has been famed for the performance of its DAC circuitry. The M-DAC was one of the first consumer audio products in the world to incorporate ESS Technology's groundbreaking Sabre32 Reference DAC chips, sharing its use of the ES9018 chip family with other renowned Audiolab components including the 6000A. For the 7000A, Audiolab has switched up to a new-generation 32-bit Sabre chip – the ES9038Q2M. This is accompanied by proprietary circuitry to make the most of ESS Technology's HyperStream II architecture and Time Domain Jitter Eliminator for ultra-low noise and high dynamic range.

No company knows more about making the most of Sabre DAC technology than Audiolab, having worked with it for years through several product generations. Although always technically excellent, these DAC chips are also challenging to implement to maximum effect and must be integrated into a product's circuit design with care to extract their full sonic potential. The post-DAC active filter is a critical element; Audiolab developed a new Class A circuit for its flagship 9000A integrated amp that's perfectly tailored to make the most of the ES9038 chip family and this same circuit is used in the 7000A.

The 7000A's hi-res audio support is state-of-the-art, handling PCM to 32-bit/768kHz and DSD to 22.5MHz (DSD512) via USB. The 6000A, in comparison, is limited to 24-bit/192kHz PCM over S/PDIF.

Left *The 7000A's USB, HDMI, optical and coaxial digital inputs benefit from the amp's state-of-the-art built-in DAC*

The 7000A also delivers full decoding of MQA, the hi-res streaming technology. This means that the complete 'three unfold' decoding process is performed internally, as opposed to just the final unfold in the manner of an MQA renderer, making the 9000A an excellent amplifier for subscribers to Tidal's 'HiFi Plus' tier where Tidal Masters (MQA) content can be found. The 7000A is officially 'Roon Tested' too, ensuring it works seamlessly in a Roon audio environment.

Users can opt to upsample digital audio signals to 352.8kHz or 383kHz, and five DAC reconstruction filter settings allow the listener to adjust the sound to suit the source material – particularly useful

given the variable quality of digital formats and streaming platforms. No matter how it is connected, via USB, S/PDIF or Bluetooth, every digital source benefits from the exceptional quality of this DAC – you will not find a finer DAC stage in any integrated amplifier anywhere close to the 7000A's retail price.

Analogue circuitry

The 6000A's Class AB amp circuitry has been widely praised for its impressively balanced performance across all critical parameters, at an affordable price. Jan Ertner, Audiolab's lead electronics designer, took the circuit he designed for the 6000A and considered where the additional budget afforded by the 7000A's higher price point could best be invested to achieve optimal sonic dividends. His resulting design improves key areas to significant sonic effect, whilst also increasing the amp's power output.

The 6000A delivers 50W per channel into 8 ohms; the 7000A ramps this up to 70W, with a maximum current delivery of 9 Amps into difficult loads. The output stage of the discrete power amp circuits uses a CFB (Complementary Feedback) topology, ensuring superior linearity and excellent thermal stability, as the idle current is kept independent of the temperature of the output transistors. The 6000A's 200VA toroidal transformer has been uprated to a new 250VA unit, combining with 60000uF reservoir capacitance to maintain firm control of the music whilst enabling excellent dynamic range.

Left *Whether its powering speakers or headphones, the 7000A is expertly engineered to make the most of all manner of music*

Headphone listeners are well served too, thanks to the 7000A's dedicated headphone amplifier. With its current-feedback design and high slew rate, a dynamic and detailed performance with all manner of headphones is assured – a far cry from the elementary headphone outputs of most integrated amps.

The preamp section is kept as simple as possible to maintain signal purity, with line input signals passing to a precision analogue volume stage. Much effort has gone into the physical layout of the 7000A's circuitry, protecting the sensitive preamp section from noise interference. This, plus the use of independent low-noise power supplies for critical stages, combined with enhanced mains filtering, helps to deliver a performance that rivals significantly more expensive analogue amplifiers – even before taking the 7000A's impressive digital circuitry into account.

Pre and power operational modes

As is traditional with Audiolab's integrated amps, right back to the original 8000A from 1982, the 7000A offers three distinct operational modes which reflect its discrete internal architecture and enable it to

adapt as its user's requirements evolve. The primary mode is 'Integrated' – this combines the pre and power amp stages, for the connection of digital and analogue sources to the amp's inputs and a pair of speakers to its binding posts.

'Pre-Power Mode' disconnects the pre and power amp stages. The allows the 7000A to be used solely as a power amp – for example, connected to an AV processor in a home cinema system. It also enables additional signal processing to be added, by connecting the 7000A's 'preamp out' socket to an external processor, then returning the processor's output to the amp's 'power amp in' socket.

Finally, 'Pre Mode' disables the power amp stage, turning the 7000A into a standalone DAC/preamp. This enables external power amplification to be added, thus providing a possible upgrade path.

Left *All three 7000 Series components are available in classic Audiolab black as well as silver*

Versatile features, virtuoso performance

The 7000 Series is a logical step for Audiolab, filling the space between the entry-level 6000 Series and the flagship 9000 Series by building on the firm foundations of the former and utilising newly developed technologies from the latter. The 7000A sits at the heart of the range and delivers a killer combination of class-leading facilities and, crucially, sonic performance.

The 6000A's balance of sonic attributes continues to ensure its popularity with critics and consumers alike, and the 7000A is clearly cut from the same cloth – it does everything the 6000A does well; it just does it even better. Deep, fleet-footed bass; expressive midrange and an expansive soundstage; treble that sings with sweet precision – the 7000A delivers an adroitly balanced performance with all kinds of music, from rock and electronica to classical and jazz. In short, it delivers an open window on the music being played, as all great hi-fi should, engaging the listener with natural, unforced energy that is fully reflective of the source material.

The Audiolab 7000A is available from March in a choice of silver or black, at an RRP of £1099. The 7000 Series is completed by the 7000CDT CD transport and 7000N Play network audio streamer, which launch concurrently with the 7000A.

Specification summary

- Integrated stereo amplifier with hi-res DAC
- Class AB power amplification: 2x70W into 8 ohms
- DAC stage based around new-generation ES9038Q2M Sabre chipset
- Supports PCM to 32-bit/768kHz, DSD 64/128/256/512 and full MQA decoding
- Digital upsampling and five user-selectable DAC reconstruction filters
- Class A post-DAC active filter
- Bluetooth 5 streaming with aptX HD support
- Certified 'Roon Tested'
- High-quality MM phono stage
- Dedicated current-feedback headphone amp
- Three operational modes: Integrated Mode; Pre-Power Mode; Pre Mode
- 2.8in colour IPS LCD display

Cable inputs

- 1x USB Type B digital (768kHz)
- 4x S/PDIF digital (192kHz)
- 1x HDMI ARC
- 4x stereo RCA analogue (3x line; 1x MM phono)
- 1x stereo RCA power amp in
- 1x USB Type A for firmware updates
- 1x 12V trigger

Cable outputs

- Gold-pated speaker binding posts
- 1x 6.3mm headphone out
- 1x stereo RCA preamp out
- 1x 12V trigger

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Formed in the early 1980s by Philip Swift and Derek Scotland, Audiolab earned worldwide acclaim with the 8000A – an integrated stereo amplifier that became a classic 'step-up' from the budget models of the time. Now part of the IAG brand family, Audiolab's reputation has been further enhanced by its hugely respected DAC circuitry, earning the company a plethora of awards since the launch of the 8200CD and M-DAC in 2010 and 2011 respectively. Today, the company continues to make class-leading source and amp components across its highly acclaimed 6000, 9000 and M-DAC product lines, delivering crisp, clean ergonomics and superb sound with everything from vinyl to the latest digital formats.

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