



Preamp/DAC and power amplifier. Rated at 2x100W/8ohm
 Made by: International Audio Group, China
 Supplied by: IAG Ltd, Cambs
 Telephone: 01480 447700
 Web: www.audiolab.co.uk
 Prices: £1499 (9000Q); £1099 (9000P); £2499 (package)

AUDIO FILE

PREAMP/DAC & POWER AMP

Audiolab 9000Q/9000P

With a CD transport, network streamer and integrated amp already launched, Audiolab's top-tier 9000 series is now made complete with this partnering pre/power amp combo
 Review: **Jamie Biesemans** Lab: **Paul Miller**

Since its debut in 2022, and with models introduced on a piecemeal basis, Audiolab's 9000 series has sought to offer improved performance and specification above the company's already popular 6000 and 8000 ranges. And now, with the launch of the 9000Q preamplifier/DAC and 9000P power amplifier, the family is truly complete. Topping off the flagship range with these final two models is a wise move by the IAG-owned, Huntingdon-based manufacturer, as the 9000 series now caters to a wide audience, from CD and digital enthusiasts to turntable owners. There's also a deal of interconnectedness between all 9000 models, as audio designer Jan Ertner has shared a lot of technology between them.

POWER TO THE PEOPLE
 The combination of the 9000Q and 9000P, rated at 100W/8ohm but delivering slightly more [see PM's Lab Report, p67], addresses audiophiles who prefer their pre and power amplification split into two chassis. There's also the temptation to make it a trio, as the £1099 9000P provides a relatively affordable pathway to a bridged system with each (mono) power amplifier now taking care of one channel for a promised 2x300W [see PM's boxout, p63]. Arguably, this is a niche scenario at the price point, but maybe Audiolab is hoping enthusiasts will buy one 9000P and be seduced into adding a second at a later date...

Full-width but slim, the 9000P and 9000Q's clutter-free design mirrors that already made familiar by the rest of the series, while paying homage to an Audiolab aesthetic that stretches back many decades. This approach means that a system built entirely from 9000 series components, maybe adding the 9000N network player [HFN Mar '24] or 9000CDT

RIGHT: The 9000P's big linear PSU [left] feeds two pairs of power transistors per channel [on heatsinks]. Op-amp based balanced input [bottom right] reverts to the left channel if the two power amps are configured in bridge mode

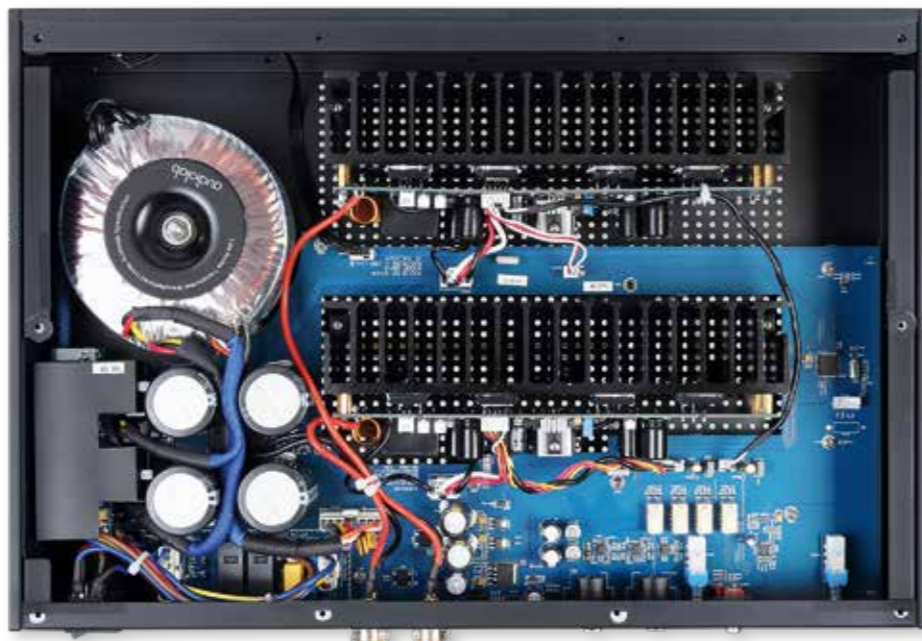
CD transport [HFN Aug '23], will have an agreeable symmetry. The 9000P power amplifier, particularly, is very unassuming – it's basically a black box with a single on/off button. A finely crafted aluminium box, true, but nothing that will turn heads. Nevertheless, pay closer attention and you'll appreciate the slick feel to its matt finish and the first-rate build quality. Like the rest of the range, the amp is offered in two colourways, black and silver, so covers the eternal hi-fi taste divide between dark and light finishes. Limited visible screws and a thin groove that matches the position of the screen edge on its 9000Q sibling suggest the involvement of an industrial designer with an eye for detail.

HEY, GOOD LOOKIN'
 The 9000Q DAC/preamp, selling for £1499 individually (there's a £100 saving if both pre and power are bought together) is more of a looker, thanks to a colour 4.3in/11cm display off to the left of

the front facade. The lack of a network/streaming connection means you'll be looking at text rather than album artwork on this display, although the configuration menu has options to view bouncing signal level bars or a simulated VU meter, to liven things up. If all this CGI feels rather gratuitous, then it's possible to switch off the display completely. Other menu options include DAC filters, PCM upsampling and tone controls, the latter functioning in the analogue domain. The bundled remote [p67] lacks the premium feel of the 9000Q and 9000P themselves, being a plastic unit with a lot of buttons. Functionally, however, it's very practical, and if you add the 9000CDT or 9000N it will control those devices too.

'The 9000P offers an affordable pathway to a bridged system'

The uniformity of this series' external appearance is also reflected in the shared building blocks within. The core Class A/B amplifier circuit, including internal heatsinking, and ES9038PRO-based digital board launched in the 9000A integrated



amp [HFN Aug '23], are repurposed in the 9000P and 9000Q, respectively, albeit with detail revisions to some key components and the dedicated power supplies.

A SIMILAR STORY
 For example, the DC rejection technology used in Audiolab's DC Block and DC Block 6 mains optimisation devices is now incorporated into the 9000Q and 9000P's internal power supplies, alongside improved RFI/EMI filtering. These 'cleaner' supplies are reflected in an improved noise performance [see Lab Reports, p65 and p67]. In addition, the 9000P can accept both single-ended (RCA) and balanced (XLR) sources with, as discussed, the option to switch to a bridged mode. Waking the power amp from standby is possible via its

12V trigger port, but missing is the signal sensing option seen on some rival designs. Looking at the connections on the 9000Q, a similar story unfolds – there are many similarities with the 9000A integrated amp, but also some intriguing additions. Audiolab's new preamp offers a similar USB-B port (supporting up to 768kHz/DSD5 12) and four other digital inputs but the balanced analogue stage is significantly beefier than that in the 9000A, with three single-ended and one balanced line input. The MM phono stage is said to be further refined in the 9000Q while, in addition to the new PSU filtering, a large 40VA ultra-low-noise toroidal transformer claims an improvement in headroom.

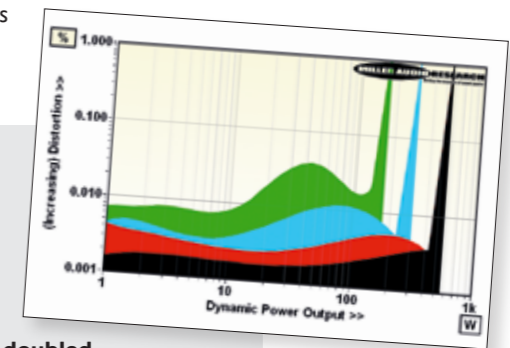
ABOVE: Seen here in matt black livery (silver is an option), the 9000Q [top] is illuminated by a 4.3in (800x480) LCD window – all features are accessed via the push 'n' twist 'Select' rotary

Purists will appreciate the XLR Direct Mode (selected via the screen), which keeps the signal path balanced from source to the 9000Q's XLR outputs. Nevertheless, this is not an all-singing, all-dancing preamplifier/DAC, as for wireless music playback you'll need to add an external streamer or make do with the built-in Bluetooth option. It's good to see Audiolab taking BT seriously though, including support for the higher-fidelity LDAC and aptX HD codecs.

BRIDGE TO POWER

For another £1099 many enthusiasts will be tempted by a second 9000P power amplifier and the prospect of a claimed 300W/8ohm in bridged operation. In this mode each 9000P becomes a monoblock using its two internal amplifiers to serve the positive and negative phases of the audio signal (the notional left channel is positive, and 'right' is negative in this instance). The available voltage is doubled (gain increases from +23.1dB to +28.9dB in bridged mode here) but power only increases proportionally if the 9000P's PSU has the current to support this increased voltage across the loudspeaker load. Audiolab rates the 9000P at 100W/8ohm in stereo mode [see Lab Report, p67] which, doubling the voltage, would give 400W/8ohm in bridged mode. Audiolab errs on the side of caution with its 300W rating met, in practice with 370W/8ohm and 520W/4ohm.

Because a bridged mono amplifier effectively 'sees' half the load impedance of a single-ended stereo amplifier, distortion typically increases, and dynamic power measurements are safer – here the 9000P delivers 550W into both 8 and 4ohm loads, decreasing to 300W and 170W into 2 and 1ohm, respectively, because it is still governed by a 13A current limit [see inset Graph; 8ohm, black; 4ohm, red; 2ohm blue; 1ohm green]. The moral of the story, in this instance, is that bridging the 9000P really comes into its own when paired with 6-8ohm nominal impedance loudspeakers. With tougher loads, 4ohm and below, you may experience less audible headroom. PM



GOLD STAR
 Audiolab supplied not one, but two of the 9000P power amplifiers, allowing us to try out the bridging option. However, as most buyers will probably settle for just the one,

our listening commenced with the 9000Q and a single 9000P connected to a pair of Monitor Audio Gold 300 6G floorstanders [HFN Oct '24]. And in this guise, Audiolab's new flagship amps showed off an appealing mix of speaker-driving power and fine-touch detail.

Making use of the 9000Q's phono stage with a Technics SL-1200GR turntable [HFN Sep '24] and Audio-Technica VM750SH moving-magnet pick-up, Jacob Dinesen's vocals across his *Let The Hard Times Come* LP [DALI 5703120112510] sounded gnarly and full of character. But as well as showcasing his remarkable singing, Audiolab's pre/power pair extracted a lot

PREAMP/DAC & POWER AMP



ABOVE: Linear PSU [left] feeds regulated supplies for the digital board [bottom] with its Feasycom BT audio module, XMOS USB receiver and tried-and-tested ESS ES9038PRO DAC. Analogue preamp PCB includes MM phono stage [bottom right]

more musical information from this excellent pressing, helping to paint the album's pictures of the American Midwest, pick-up trucks and beer pitchers (which is curious, as both artist and recording originate in Denmark, half a world away). It was fun and engaging – I've certainly heard less accomplished phono inputs on similarly priced amplifiers.

THEREMIN THRILLS

Lonesome Dreams, from the Los Angeles folk/rock band Lord Huron [Play It Again Sam PIASR585LP], also embraces country and western influences. Here Audiolab's flagship system built a soundstage evoking great distances, as opposed to the tight focus of Dinesen's songs, as most of the tracks employ plenty of expansive reverb. The amps impressed with the wistful-sounding 'Ends Of The Earth', where choral chants, percussion and theremin join Ben Schneider's singing and guitar. Yes, there's a lot going on here, but the 9000Q and 9000P layered it eloquently together, topped off by a discernible airiness.

This sense of spaciousness, naturalistic but not exaggerated, was apparent during 'Vision Of Love' from the sixth album in Adrian Younge and Ali Shaheed

Muhammad's *Jazz Is Dead* series [JID006; 88.2kHz/24-bit], here streamed from a Matrix Audio TT-1 digital transport to the USB DAC of Audiolab's preamp. The backing vocals, straight out of a 1970s soul album, sounded fluid and rich, next to a mellow portrayal of Gary Bartz's alto saxophone. However, as with other tracks on this release, it was the Audiolab pre/power's ability to groove along with the rhythm section that really struck a chord, finding plenty of depth and scale

from Monitor Audio's loudspeakers.

As the TT-1 is – in the context of this system – comparatively pricey, I swapped it out for an affordable Bluesound Node

network player, with handy USB-DAC mode. The performance remained enveloping and finely etched, so that Moby's 'Harbour' [18; Virgin 5016025612024], with its guest appearance from Sinéad O'Connor, sounded roomy and nuanced.

TRICKS AND TREATS

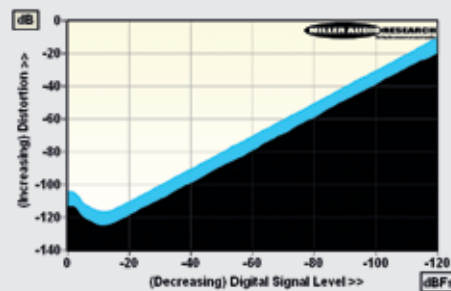
Clearly, Audiolab has skilfully engineered the 9000Q's USB input and DAC stage, and its performance allowed me to appreciate this song's production trick, where O'Connor's close-miked singing is balanced by airy backing vocals. This textural, ⇨

'The vocals sounded gnarly and full of character'

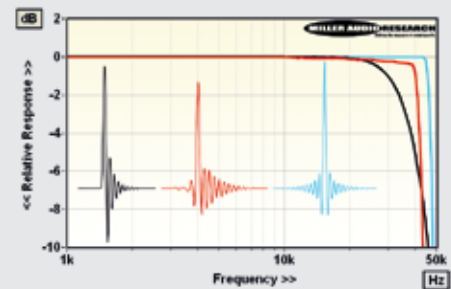
AUDIOLAB 9000Q

With a default unity gain (0dB), the 9000Q's analogue preamp section includes a ± 6 dB 'trim', the +6dB setting realising a 2V output from a (balanced) 1V input together with a wide 98dB A-wtd S/N ratio (re. 0dBV), a response flat to within ± 0.03 dB from 5Hz-100kHz and distortion held to a super-low 0.0002-0.00054% (re. 0dBV). The 9000Q's digital inputs – using the ES9038PRO-based platform seen in the partnering 9000A amp [HFN Aug '23] and 9000N network streamer [HFN Mar '24] – offer low-level resolution true to ± 0.5 dB over a full 110dB range, all from a 4V (re. 0dBFs) output with a fabulous 114.5dB A-wtd S/N ratio. Peak level distortion is slightly higher at 1kHz (0.0005% vs. 0.00025%) and especially at 20kHz (0.0013% vs. 0.00026%) in the 9000Q vs. the 9000N, respectively, though both settle out at a minimum of 0.00005% with upsampling switched off [see Graph 1]. Similarly, peak level distortion is slightly higher at a digital clip of $\sim 0.4\%$ at 20kHz when 'upsampling' is engaged where there's also insufficient headroom to accommodate intersample overs.

With 352.8kHz/384kHz 'upsampling' on, the 9000Q defaults to a gentle minimum phase filter offering a -0.4 dB/20kHz, -9.6 dB/45kHz and -4.8 dB/90kHz roll-off with 48kHz, 96kHz and 192kHz inputs, respectively [see Graph 2]. Jitter is extremely low at ~ 9 psec with 24-bit inputs regardless of whether 'upsampling' is engaged or not. The five digital filters include fast and slow roll-off linear and minimum phase types plus a fast roll-off hybrid option, these offering responses of -0.0 dB, -3.4 dB, -0.03 dB, -5.0 dB and -12.3 dB (re. 20kHz with 48kHz files) traded against stopband rejections of 83dB, 14dB, 75dB, 18dB and 99dB, respectively. With 96kHz media the 45kHz responses are -0.5 dB, -5.0 dB, -0.2 dB, -7.2 dB and -23.5 dB, respectively. PM



ABOVE: Distortion vs. 48kHz/24-bit digital signal level over a 120dB dynamic range (black, 1kHz; blue, 20kHz)



ABOVE: Impulse and freq. resps with 96kHz data (Upsampling, black; Hybrid, red; Linear Fast, blue)

HI-FI NEWS SPECIFICATIONS

Maximum output level / Impedance	5.95Vrms / 46ohm (XLR)
A-wtd S/N ratio (preamp / DAC)	98.0dB (0dBV)/114.5dB (0dBFs)
Distortion (20Hz-20kHz, 0dBV)	0.0002-0.00054%
Distortion (20Hz-20kHz, 0dBFs/ ~ 30 dBFs)	0.0005-0.001/0.0003-0.0004%
Freq. resp. (20Hz-20kHz/45kHz/90kHz)	+0.0 to -0.0 dB/ -0.4 dB/ -0.7 dB
Digital jitter (48kHz / 96kHz / 192kHz)	9psec / 9psec / 9psec
Resolution (1kHz @ -100 dBFs/ -110 dBFs)	± 0.1 dB / ± 0.5 dB
Power consumption	15W (1W standby)
Dimensions (WHD) / Weight	444x90x328mm / 6.2kg

PREAMP/DAC & POWER AMP



ABOVE: 9000Q [top] has MM and four line ins (one balanced on XLR), a line out and three pre outs (two on RCA, one balanced XLR). Digital ins include coax/opt digital (192kHz/24-bit) and USB-B (768kHz/DSD512). 9000P [bottom] has RCA and balanced XLR ins and outputs on 4mm binding posts. Note bridging option [see boxout, p63]

spatial detail felt very tangible, and is part of what makes this track so enjoyable – less so Moby’s saccharine synthesiser lines.

The change of transport didn’t have much subjective impact on sound quality, although the potential of the 9000Q’s line/preamp stage was revealed when I connected the TT-1 to a T+A DAC200 [HFN May ’22], and hooked that up via balanced XLRs. Returning to some tracks previously played, including a refined interpretation of Dvorák’s Symphony No.9 in E minor by Nathalie Stutzmann/ Atlanta Symphony Orchestra [Erato 5021732263797; 96kHz/24-bit], the system as a whole ‘gelled’ more convincingly, unearthing microdetails that heightened the sensation of listening to a live orchestra. At £5800, the T+A

DAC is more than double the price of Audiolab’s pre/power, so is hardly a sensible option. It did, however, illustrate that adding a high-quality analogue source could be rewarding.

Switching to a dual (bridged) 9000P set-up, and keeping the

LEFT: Audiolab’s system remote caters for the 9000Q’s input, volume and config. menu while also serving the partnering 9000A amp, 9000N network player and 9000CDT transport



Gold 600 6G loudspeakers in place, provided an eye-opening performance with the soundtrack to Oscar-winning film *Birdman* [Milan 399 618-2]. This album might not tickle everyone’s fancy, as it mainly consists of short solos by virtuoso Mexican drummer Antonio Sánchez, but the dynamics of ‘Doors And Distance’ were deftly handled by the Audiolab (now) trio, bringing a very lifelike sound to the drum kit.

SINGLE OR DOUBLE?

Was there a big difference when listening with two, rather than one, 9000P? Not enough to warrant the ‘night and day’ cliché, but at the same time this minimalist recording appeared just a bit more controlled and better delineated, exposing more of Sánchez’s skilful playing. So, there’s the potential here for a power amp upgrade, even while the performance of just one 9000P, in stereo mode and tethered to the revealing 9000Q preamp, remains immensely satisfying. ☺

HI-FI NEWS VERDICT

The versatile 9000Q and capable 9000P are Audiolab’s crowning achievement, finally giving its 9000 series the flagships it deserves. Stylistically and technically they have strong links with the 9000A integrated, but the excellent phono stage, good DAC and tantalising possibility of upgrading to two monoblock 9000Ps make this pair a sharply priced audiophile for separates-loving audiophiles.

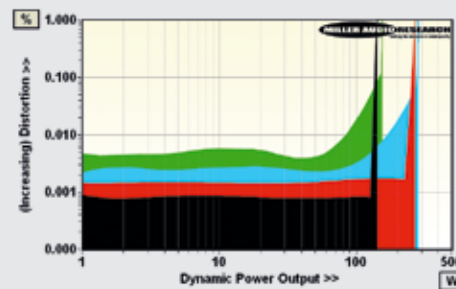
Sound Quality: 88%



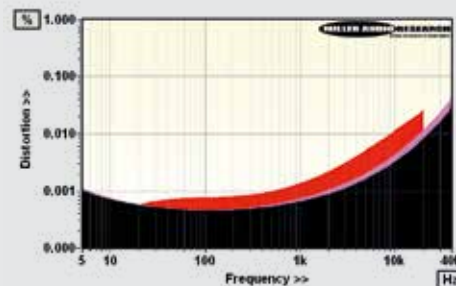
AUDIOLAB 9000P

While the 9000P lifts the power amp from the 9000A integrated [HFN Aug ’23], it also benefits from an improved PSU and RF/EMI filtering. The 9000A also features an input trim for its gain to be adjusted over ±6dB from a default +23.1dB, so it’s no surprise the 9000P’s fixed gain is the same +23.1dB, requiring the same (balanced) 2V from a contemporary source to raise the rated 100W/8ohm output. In reality (again) the 9000P achieves more, delivering 2x113W/8ohm and 2x188W/4ohm with sufficient headroom to accommodate peaks of 145W, 270W, 285W and 155W into 8, 4, 2 and 1ohm loads, respectively, under dynamic conditions [see Graph 1, below]. The output is restricted into the lowest loads by a 12.5A current limit (re. <1% THD/10msec) while a mild Zobel network ensures stability into any load – this also sets the 0.03-0.08ohm output impedance (re. 20Hz-20kHz). Once again, the response is a wide –0.15dB/20kHz and –1.75dB/100kHz into 8ohm but droops slightly to –0.35dB/20kHz and –3.4dB/100kHz into lower 2ohm loads.

Distortion and noise remain very low, the latter improving on the 9000A’s 91.9dB A-wtd S/N ratio (re. 0dBW) to 92.4dB courtesy of the 9000P’s fettled PSU. Otherwise we see distortion, again, largely unaffected by power output (though it does increase with decreasing load) from 0.0004-0.0006%/1kHz over a full 1-100W/8ohm range. Versus frequency, distortion settles out at 0.00045-0.011% (re. 1-10W from 20Hz-20kHz), increasing slightly to 0.00055-0.026% at a full 75W/8ohm [see Graph 2, below]. Thanks to Audiolab’s optimised layout, with limited capacitive coupling between channels, the 9000P’s stereo separation is excellent at 71-93dB (20Hz-20kHz). PM



ABOVE: Dynamic power output versus distortion into 8ohm (black trace), 4ohm (red), 2ohm (blue) and 1ohm (green) speaker loads. Max. current is 12.5A



ABOVE: Distortion versus frequency vs. power output re. 1kHz/8ohm (1W, black; 10W, pink; 75W, red)

HI-FI NEWS SPECIFICATIONS

Power output (<1% THD, 8/4ohm)	113W / 188W
Dynamic power (<1% THD, 8/4/2/1ohm)	145W / 270W / 285W / 155W
Output imp. (20Hz–20kHz/100kHz)	0.029-0.080ohm / 0.66ohm
Frequency resp. (20Hz–20kHz/100kHz)	–0.01dB to –0.15dB / –1.75dB
Input sensitivity (for 0dBW/100W)	199mV / 2005mV (balanced in)
A-wtd S/N ratio (re. 0dBW/100W)	92.4dB / 112.2dB
Distortion (20Hz-20kHz, 10W/8ohm)	0.00045-0.011%
Power consumption (Idle/Rated o/p)	17W / 314W (1W standby)
Dimensions (WHD) / Weight	444x90x328mm / 9.2kg