Valve phono preamplifier
Made by: Audio Research Corp, Minnesota, USA
Supplied by: Absolute Sounds Ltd
Telephone: 0208 971 3909
Web: www.audioresearch.com; www.absolutesounds.com
Price: £6998

AUDIO FILE

Audio Research PH9

Blending superb sound from tube circuitry allied to ultra-modern styling and a slick user-interface, this new high-end phono stage is all things to all men – well, almost

Review: **Nick Tate** Lab: **Paul Miller**

'Traditional values in a modern setting' is how you might describe the new Audio Research Foundation Series, albeit in a nutshell. It feels very contemporary, a world away both from the golden age of tube amplification of the 1950s and '60s, and almost as distant from the hobbyist, tweaky valve renaissance of the past decade or so. Indeed it rather renders obsolete much of what people typically associate with the thermionic breed.

The £7k PH9 phono stage is but one of the series: there's also the LS28 line stage preamplifier – to be reviewed next month – and the DAC9 digital-to-analogue converter. Audio Research says there will soon be a new amplifier and other associated products to complete the line.

A SENSIBLE SIZE FOR BRITS

The mission for this particular phono stage then is to do its job in a classically satisfying but unerringly modern and fuss-free way. Yet as we all know, one doesn't automatically follow the other – quite the reverse, in fact. Indeed, many tube designs are still very much hobbyist devices, aimed at those enthusiasts who relish tube-rolling of an evening. This Audio Research product by contrast, will likely be seen and heard but mostly left alone.

The company is famous for its technical-looking products. To the British eye especially, and with our quaint, cramped listening rooms full of tea and scones, Audio Research gear can look a bit too imposing. Well, the PH9 hasn't exactly shrunk compared to previous ARC offerings but it's still just about sensibly sized enough for 'the old country'. It's also nicely and subtly styled with a more rounded and less industrial feel than of yore – so much so that it may well finally be allowed out of the man cave and into your main living area, providing it behaves itself.

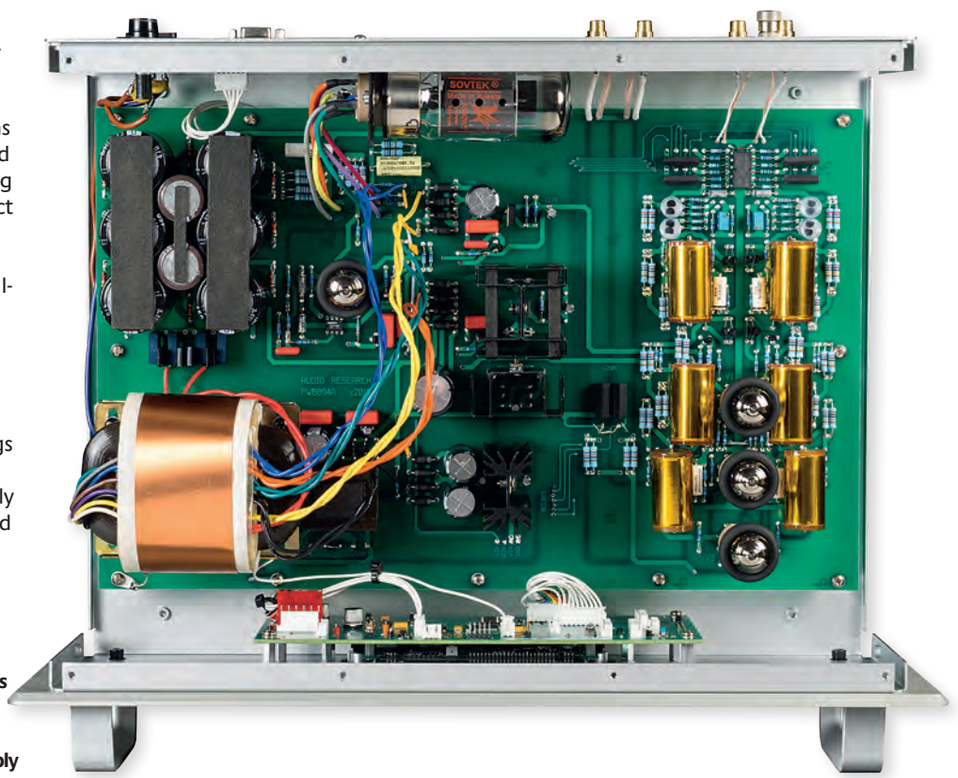
Aiding its transition into the world of domestic acceptability, the unit comes in a choice of black and natural silver anodised aluminium finishes, which both look superb. The reassuringly sturdy metal remote control unit is a nice touch too – although of course analogue source components don't offer track search, play and pause buttons. The real reason for this hefty handset, we shall soon discover…

Inside the PH9's svelte casing, you'll see those glowing glass bottles – the Audio Research trademark. Three 6H30 vacuum tubes are at the core of a simple signal path, and provide an impressive amount of whack at the output terminals [see PM's lab report, p51]. The PH9 has five different impedance settings (47kohm, 1000, 500, 200 and 100ohm) to allow for accurate cartridge loading, and usefully they can be changed on the go, so you can hear the difference as you listen. Indeed, that's where the remote control does come in handy, because it lets you toggle between settings from the comfort of your listening chair. However, I must say that once I had got the right setting for each cartridge I tried, I didn't do too much subsequent fiddling with this particular feature.

A PLEASURE TO USE

As phono stages go, this Audio Research model has a complex user interface, but it's not hard to use. There's no fumbling underneath and/or messing with DIP switches. Instead everything is selectable or displayed via the user menu – including the aforementioned pick-up loading, the number of hours on the tubes, and the auto shutdown mode.

One of the most useful buttons is 'mute' because, as we vinylistas know, you



RIGHT: The vacuum tube audio stage employs three 6H30 triode tubes as part of the input and RIAA with another 6H30 and a 6550WE beam tetrode for regulation in the power supply

ABOVE: The superbly finished PH9 presents a slick user interface with switchable load, auto-off settings and valve hour display via the menu and central display, plus handy mono and mute

invariably end up brushing dirt off your stylus periodically and this means you don't have to twiddle the preamp volume knob every time, to avoid thumps and bangs. Overall the PH9 was a pleasure to use, even down to the sizeable central fluorescent display (which was a joy to behold for ageing eyes like mine), and the large rack handles which made moving it a breeze – so they're not just for show…

Unlike its flagship Reference Phono 3 big brother, the PH9 offers a single, fixed gain of 55dB (x560). I tried various MM and MC cartridges, and found it to work well in practice with most – from medium-output moving-magnets like the Audio-Technica AT-120EB (4.0mV), to higher-than-average output (but not high output) moving-coils like the Lyra Dorian (0.6mV). However, the 0.2mV output of my vintage Northwest Analogue-rebuilt Supex SD900 MC was just a tad too feeble to get really high volume levels out of my system.

If you're going to have fixed gain input for MM and MC cartridges, then Audio Research has drawn the line in the sand pretty much in the right place, and most owners should find it workable [see PM's boxout, below].

EXPANSIVE SUPPLE SOUNDS

Those who have owned Audio Research products in the past won't be entirely surprised by how the PH9 auditions, for there's a strong family resemblance. In essence it delivers a powerful and expansive sound, with a solid but supple bass, and crisp but shimmering treble. Across the midband it demonstrates both scale and detail, placing instruments in space with consummate accuracy and ease. And like the best tube designs, it's devoid of the metallic sheen that some solid-state phono stages still possess – there's certainly no sense that the upper mid in particular has been chromium-plated! Rather, this big silver box has a very subtle sepia tint that is most pleasing to the ear. Don't get me wrong, for I don't want to suggest it's cloyingly rich or gloopy. Rather, the PH9 treads a well-judged path between satisfyingly sweet and sickeningly syrupy!

> 'I was struck by how easy it was to listen into the inner recesses of the mix'

A fine example of its talents can be heard when spinning the classic Jolly and Swain produced 'Just An Illusion' by Imagination on their 1982 album *In The Heat Of The Night* [R&B Records RB LP1002]. This chart peaking dance track has a wonderfully thick – and much imitated – analogue synthesiser bass line which drives the whole song along. Added to this is some delicious electric piano and Fender Rhodes keyboard work that's set in front of a tight snare drum sound, with some added drum machine handclaps for good measure!

I've heard a few phono stages suck all the tonal vibrancy out of this track, but the PH9 retained this in all its glory – this, it told me, was a classic analogue disco song rather than a digitally sampled dance tune. That bass was a delight, full and fat but fast and fluid. Moving up to the midband, and my attention was drawn to the cathedral-like soundstage, inside which singer Lee John's saccharine vocals echoed around. Forget the dance floor, this became a hugely enjoyable listening experience from the comfort of my sofa…

Sweetness can be a blessing for some types of music, and a downside for others, but this didn't prove the case for the PH9. Cueing up my well-played pressing of My Bloody Valentine's *Loveless* [Creation CRELP 060], and 'When You Sleep', was a joy. This track can be downright torture with a less than subtle system, laced as it is with distortion and compression. Yet underneath there's a melody that wouldn't disgrace The Byrds at their best, and a touching sentimentality that's easily lost.

HOW MUCH GAIN?

One of the great benefits of a tube-based phono preamp is its potential to accommodate relatively huge voltage swings – up to 51V at the output of the PH9 in this instance. With a fixed gain of some 55dB, and wide 85dB S/N ratio, the PH9 is therefore perfectly placed to work with a wide gamut of pick-ups: sub-mV MCs will not drown in noise while high output MMs, including Ortofon's 2M Red, Blue and Black with their 5-6mV (re. 5cm/sec) specification, will not clip any stage of the preamp. But compatibility problems may still be manifest downstream as few integrated amp/preamp line inputs will tolerate an input of 20, 30 or more volts. And even if they do, you'll not get a lot of use out of the volume control! In practice, and with a maximum +18dB groove excursion from a very 'hot' LP pressing, a high output MM might deliver up to 50mV, which is about 30V from the PH9… So while the PH9 is as versatile and bullet-proof a fixed-gain phono stage as you'll ever find, audiophiles might experiment with an attenuator or even a passive pre on its output. PM

ABOVE: Could not be simpler – a single set of RCA phono inputs (with ground post) and another pair of RCAs for the RIAA-equalised output. RS232 services automation

The Audio Research PH9 struck just the right balance, conveying the track's rawness and power without descending into harshness or chaos.

True, you might say that this phono stage ever so slightly 'sugared the pill', but this made it easier to take one's metaphorical hi-fi hat off and just get lost in the music. I was quite struck by how easy it became to listen into the inner recesses of the mix, despite that vast wall of distortion-laced, effects-processed electric guitars. At the same time, the PH9 carried the vocals beautifully, allowing them to break out of the mix and hover ethereally above the fray.

HERBIE AND HERBERT

Jazz was just right. I had a funny feeling that this phono stage would sing with Herbie Hancock, so I cued up *Maiden Voyage* [Blue Note BST 84195]. The opening title track is one of my favourites of the great man's career, and has a shuffling rhythm that lesser front ends simply sail past imperiously.

The PH9 got right into the groove, showing off its fine combination of speed and delicacy. It captured the subtle rhythmic nuances of the music adeptly and displayed effortless dynamics, showing itself able to go loud at a millisecond's notice to really push out the players' accenting and musical inflections.

The same skill set brilliantly transferred to classical music, as I found as my vintage pressing of Beethoven's 'Pastoral' Symphony with Herbert von Karajan and the Berlin Philharmonic [DG SLPM 138 805] was taken from its ageing inner sleeve. This was recorded in 1962 by the legendary engineer Günter Hermanns. The beginning of the first movement lapped gently around me like ripples on the seashore, the PH9 serving up a blissful sound that retained every last rhythmic and dynamic nuance.

The recorded acoustic was large, yet the instruments within the soundstage were so delicately rendered that it was hard not to be transfixed. I particularly loved the timbral richness of the strings, which dripped with harmonics, plus the sheer firepower available when the orchestra wound itself up to full chat on the climaxes.

This is a superb phono stage by most measures yet its fixed gain means it can never be all things to all men. While it works superbly with medium and lowish output MMs and highest and medium output MCs, it's less happy with low output MCs, which need more juice.

Likewise, a high output MM will reduce your volume control range considerably, providing it doesn't overload your preamp input beforehand. However, its obvious talents will charm a great many people, and I'd strongly suggest an audition to see if you're one of them – ideally with your own pick-up cartridge, of course.

HI-FI NEWS VERDICT

Combining a quintessentially sweet and powerful tube sound with a modern user interface – alongside a number of handy facilities – the Audio Research PH9 will catch the audiophile's eye and ear. Yes, it's expensive and, with its fixed gain, not entirely universal in its application, but with anything other than very low output MCs still offers real appeal. For purity of sound, it's one of the finest phono stages around.

Sound Quality: 85%

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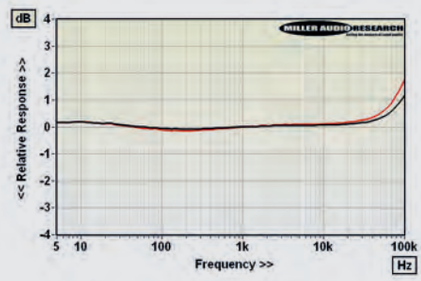
LAB REPORT

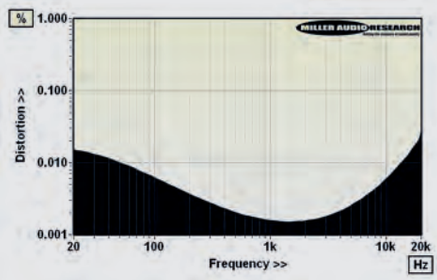
AUDIO RESEARCH PH9

Judging the amount of gain to offer in a fixed input/output phono stage is tricky – too high, and input overload margins can be compromised with very high o/p pick-ups, too low and lower output MMs or medium output MCs may not achieve an adequate S/N ratio. Audio Research has opted for a very compatible +55.4dB (x586) with input loading options ranging from 100ohm to 1kohm for medium/high output MCs and a standard 47kohm for MMs, sufficient to raise 0dBV from its RCA outs with a 1.7mV input. Ordinarily this generous gain might presage a limited input headroom, given by ARC as 80mV for its PH9. In practice this phono stage will tolerate a full 111mV input before reaching 1% THD at its output, at which point the latter has developed to a truly massive 51V! Furthermore, and despite this generous gain, the A-wtd S/N ratio remains impressive at 85.2dB (re. 5mV in), illustrating that the PH9 is an unusually versatile phono preamp [see boxout, p49].

Distortion remains very low, especially through the midband where its minimum of 0.0015% is around 500x lower than that possible from any contemporary MM or MC pick-up [see Graph 2, below]. The RIAA response is very flat and extended, albeit with the faintest 'shaping' through the bass, and eschewing the 7950µs subsonic pole [see Graph 1, below]. ARC quotes ±0.2dB from 5Hz-20kHz with –1dB limits at 0.3Hz-80kHz for its equalised response, but the PH9 is flatter still, achieving ±0.15dB from 5Hz-20kHz while actually *climbing* into ultrasonic frequencies to reach +1.2dB/100kHz. Rather like the THD profile, this response is significantly more linear than that obtainable under practical conditions from any MM/MC pick-up. As, I might add, is the 0.1dB channel balance and stereo separation of ~75dB through the midband. **PM**



ABOVE: RIAA-corrected frequency response over an extended 5Hz-100kHz at 0dBV (left, black; right, red)



ABOVE: Distortion versus frequency (20Hz-20kHz) at 0dBV. THD is low with a mild lift through bass/treble

HI-FI NEWS SPECIFICATIONS

Input loading (MM/MC)	47kohm / 100-1kohm
Input sensitivity (re. 0dBV) / **Gain**	1.71mV / +55.36dB
Input overload (re. 1% THD)	111mV
Max. output (re. 1% THD) / **Impedance**	51.2V / 185ohm
A-wtd S/N ratio (re. 5mV in / 0dBV out)	85.2dB
Freq. response (20Hz-20kHz/100kHz)	–0.08dB to +0.11dB/+1.17dB
Distortion (20Hz-20kHz, re. 0dBV)	0.0015–0.0265%
Power consumption	99W (3W standby)
Dimensions (WHD) / **Weight**	480x137x348mm / 7.0kg