

QUAD *twenty four P*

For the Record

QUAD TWENTY FOUR P (£1000)

Visually it might be classic Quad but the company's new phono stage is no mere exercise in retro...

We tend to think of Quad's proprietors as the custodians of a great institution, rather than merely the owners of a brand. But having updated Peter Walker's ESL-63 electrostatic loudspeaker, the International Audio Group needed electronics to match them in both performance and heritage, and decided that this was best achieved with valves. So there came the Quad QC Twenty Four preamp and II Forty power amp, combining UK design input with the cost advantages of manufacturing in China.

Customers who'd followed Quad this far were likely to want a suitable phono stage too. As to the circuit design, there was really only one man for the job. Quad's chosen design consultant for the 24P phono preamplifier (and also for the new II Eighty valve power amp), was none other than Tim de Paravicini.

By the early 1980s, de Paravicini had established the EAR valve amp line that continues to this day. 'Valve revivals' have come and gone, but Tim de Paravicini has carried on ploughing his own furrow, regardless of passing fashions.

TRADITIONAL

Externally, the 24P could hardly be more traditional. The casework's wraparound top and sides form curves that immediately recall the original 22 valve preamplifier, as does the volume control positioned near the right-hand end of the fascia. Of course, if you compare the two side by side, you realise that the 24P, like the QC24 line preamp, is a modern design with cleaner lines than anything made in the 1950s or 1960s. The old Quad 22 fascia, designed for panel mounting, is really just a point of reference.

But those louvres on the top don't only provide ventilation for the tubes inside – as a styling feature, they will win over anyone, of any age, who ever hankered after a vintage sports car. Looking at the back panel, inputs are provided by just one pair of RCA phono sockets, with a small button alongside to switch between moving-coil and moving-magnet sensitivity. There is also a three-position rotary switch to give 'low', 'medium' and 'high' sensitivity, operative in both MC and MM modes.

This simple, easy-to-use system (clearly explained in the excellent instructions) gives just about all the control you really need for matching cartridges, if not



ABOVE: A large volume knob on the front panel allows the Twenty Four P to serve as a preamp in a vinyl-only system

INSIDE TIM'S QUAD PHONO BOX

Tim de Paravicini based this all-new design on four 6111 double triodes. Intended for industrial and military applications, the 6111 was designed to maintain its emissive properties over long periods, and this, Tim says, makes it perfect for a quality phono stage. But the 24P's custom input transformers are also key to the product's performance. Quad says: 'Transformer design is not trivial and Tim has designed a pair of input transformers that capitalise on the strengths of the Quad in-house transformer winding facility, affording the customer the performance benefits of a one-off hand-wound "special", without the expense.' Voltage gain and EQ stages use what's said to be a unique method of inductive RIAA EQ to maximise headroom, for compatibility with even the lowest-output cartridges. Careful selection of components such as anode resistors assures the best noise performance. The PCB went through several iterations until it was felt to be correct, not just in terms of measurement, but through listening tests. Magnetic shielding, DC heaters and a custom-made mains transformer help minimise noise.

AUDIO FILE

Valve phono stage for moving-magnet and moving-coil cartridges, with built-in volume control

Price: £1000

Made by:
Quad
Electroacoustics

Supplied by:
IAG

Telephone:
01480 447700

Web: www.quad-hifi.co.uk

for really fine tuning. There is no provision to adjust the loading – input impedance is set at a nominal 10ohm for moving-coil, and 47kohm for moving-magnet.

As well as the usual fixed-level output, the 24P provides a variable-level output, controlled by the

'Customers who'd followed Quad this far were likely to want a phono stage'

volume knob. This allows you to connect the 24P direct to the inputs of a power amplifier. If you are constructing a system only to play records, and your power amplifier has sufficient gain, this can be a very worthwhile option.

SWINGING RHYTHMS

During this review I listened to several front-end combinations with the Quad phono preamp, notably the Roksan Xerxes.20/Artemiz/Shiraz and the SME Model 10/Koetsu Black. I also tried a couple of moving-magnet options including the surprisingly solid-sounding low-cost Goldring GR2, with its ready-fitted Goldring Excel cartridge. But the initial experience described below relates to the Roksan combination.

I put on the original and best direct-cut big band



classic, *The King James Version* [Sheffield Lab LAB-3]. It must have been just auto-suggestion, but within three seconds the word 'valves' had sprung unbidden into my head. It was something about the sound of the ensemble, which at the risk of sounding critical I would describe as a very slight fuzziness, combined with a somehow gentle quality to the swinging rhythms, an easiness about the cymbal sound, a natural quality in the spatial rendition.

With the SME/Koetsu combination, I went on to my other Sheffield standby, Thelma Houston & Pressure Cooker's *I've Got The Music In Me* [Sheffield Lab LAB-2]. Houston's miraculously high-energy vocal on the title track came over more vibrantly than ever, while the vocals on the (somewhat anticlimactic) next track, 'Reggae Tune', seemed to make more musical sense than usual.

TREMENDOUS ATMOSPHERE

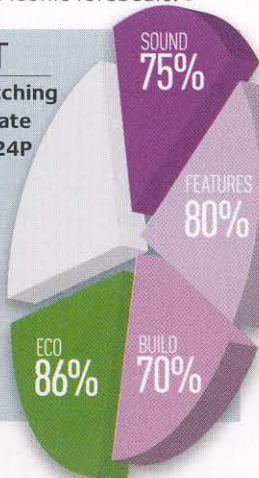
Turning to orchestral music, I found myself engrossed in Walton's *Improvisations on an Impromptu of Benjamin Britten*, which appears with *Belshazzar's Feast* in the LSO and LSO Chorus/Previn recording of 1972 [EMI SAN 324]. Here the orchestra's mysterious lower depths were compelling, with the feeling that Walton had completely absorbed and retransmitted an eerie inner world of Britten's music. There was just tremendous atmosphere, especially when the passionate strings come in, with big snarling brass. In the main work on the disc the choir sounded great, those male voices resonant and full.

Hidden depths of a different kind emerged from Bobby 'Blue' Bland on *His California Album* [ABC Dunhill DSX-50163] from 1973, a record that's had its ups and downs for me over the years, as it worked on some systems, failed completely on others. This time, the somewhat antiseptic production didn't seem to prevent the music getting going and you felt that Bland was really telling a story with his songs. Similarly, on Joni Mitchell's *Blue* [Reprise KK4128] it seemed that the wonderful 'Little Green' tugged at the heartstrings even more than usual.

Visually, it might be classic Quad, but internally the 24P has more to do with later developments in valve design than with the original Quad valve models – after all, as every vintage Quad enthusiast knows, the preamplifier performance was always the weakest link. In any case, moving-coil cartridges as we know them today did not exist for the Quad owner of the 1950s and 1960s. The sound is solid, convincing, musical and rewarding. Above all, the Quad 24P is certainly not just an exercise in retro that trades on the appeal of those early products. It is a worthy, practical and commendable successor to those iconic forebears. ☺

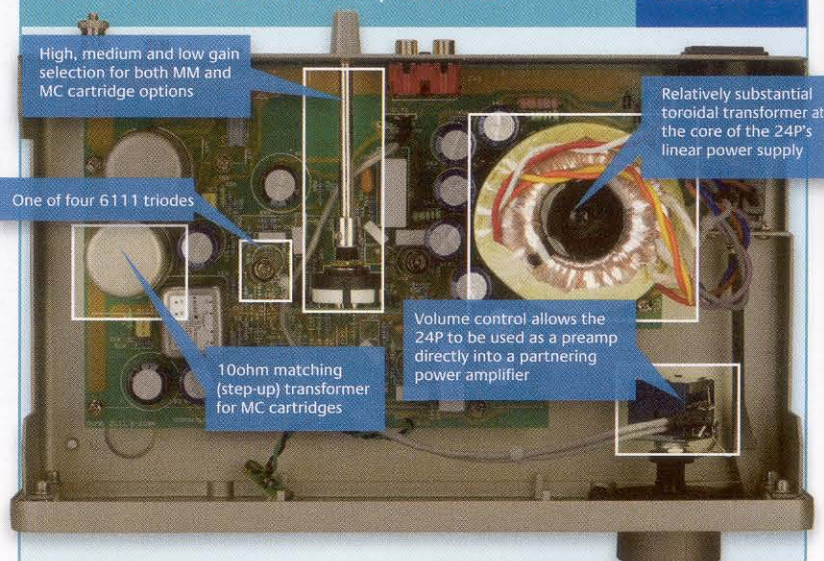
HI-FI NEWS VERDICT

While it doesn't lay claim to matching the test-bench figures of solid-state circuitry, subjectively the Quad 24P delivers a satisfyingly musical result. Also, the built-in volume control is a valuable feature, either as a permanent solution, or as an interim measure in a long-term upgrading plan. It will certainly help users who want to enjoy the best sound from vinyl.



QUAD 24P PHONO STAGE / £1000

Hi-fi news
LAB
RESULTS



HI-FI NEWS LAB REPORT

While ostensibly designed for the same purpose, Quad's all-valve phono preamplifier is a very different proposition to the PS Audio GCPH reviewed by CB last month. The latter offered a quite remarkable RIAA eq. accuracy extending, if only for academic purposes, right out to 100kHz. Quad's 24P is both more realistically constrained but also subtly shaped, an effect not unlike the tilt filters added to its preamps some decades ago (see graph, below left).

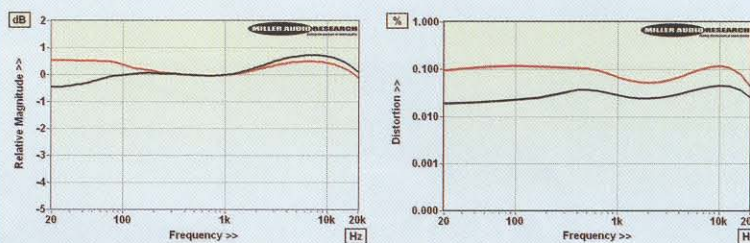
Specifically, there's a ± 0.5 dB shelving of its bass (depending on which channel you choose) together with a maximum +0.75dB boost right across the high treble. The response then rolls gently away, but is only -3dB down at 48kHz. If your MM cartridge already has a hint of brightness about its presentation, then this might well be sufficient to add further energy or bite.

There are fixed 47kohm and 10ohm input loads for MM and MC cartridges, respectively, but the stages are further

divided into High, Medium and Low sensitivities (gain). For MM/MC inputs, these are 1.3mV/130 μ V, 2.6mV/260 μ V and 5.2mV/520 μ V, respectively, with a difference in gain of some 12dB between the High and Low settings (+45dB to +57.5dB for the MM input).

Distortion is significantly higher than measured with the GCPH and there was also some variance between channels (0.04% on the left versus 0.11% on the right at 400Hz), possibly as a consequence of tolerances between the pairs of 6111 triodes. Nevertheless, while the GCPH might achieve values closer to 0.004% under the same conditions, with an 85dB A-wtd S/N ratio some 10dB ahead of the 24P, we should not lose sight of the fact that most partnering cartridges will suffer distortion an order of magnitude greater still.

Readers may view a QC Suite report for Quad's 24P by logging onto www.milleraudioresearch.com/avtech.com. PM



ABOVE LEFT: RIAA equalisation accuracy (MM frequency response) for left (black trace) and right (red trace) channels

ABOVE RIGHT: Distortion versus frequency (500mV out), left and right

HI-FI NEWS SPECIFICATIONS

Input sensitivity, 1V out (Low, Medium, High)	5.5mV / 2.73mV / 1.38mV
A-wtd S/N ratio, MM Low (20Hz-20kHz)	76.7dB
Distortion, 20Hz-20kHz (re. 0dBV)	0.003%-0.12%
Frequency response, 20Hz-20kHz	0.0dB to +0.75dB
Input overload, Left/Right (MM Low)	106mV/45mV