'Okay, it's an

at hi-fi shows'

Veb: www.quad-hifi.co.uk; www.internation



Duad 3

INTEGRATED AMPLIFIER

'Embracing the future/celebrating the past', says Quad as it launches its first integrated, styled after the 22 control unit from 1959 and equipped with digital tech from today Review: Ken Kessler Lab: Paul Miller

any moons ago I learned about the lack of sense in making predictions, as they usually prove wrong. Despite this I'm happy to posit that we are entering two 'Golden Ages'. The first appears to be that of superb integrated amps appearing in a flood, including the Marantz Model 10 [HFN Jun '25], D'Agostino's Pendulum [HFN Jul '25] and the Musical Fidelity Nu-Vista 600.2 [HFN Aug '25]. But they are all highend units. By contrast, the Quad 3 has a list price of only £1249, and it blew me away.

Which leads me to the second 'Golden Age', and that's Quad's renaissance. Following cool lifestyle products like the Vena II Play [HFN May '20] and the S-1 hybrid 'ribbon' speaker for a paltry £479 came the reborn 33 preamp/303 power amp [HFN Jan '25] at an unbelievable £1199 apiece. Here we are, nine months later and the Quad 3 integrated is an even bigger surprise... and another bargain.

A FAMILY AFFAIR

Clearly, the price alone is enough to make me stand up and perform a jig. But that's validated by how fully equipped this wonderful device is. The icing on the cake? A look that tickles my penchant for retro styling, and which answers the question no one has asked – what would have happened if a Quad 22 [see PM's boxout, p51] and Quad 33 had a baby?

It starts with the dimensions of only 300x101x332mm (whd), a footprint smaller than an LP sleeve. Lift the Ouad 3 and it's clear there's a lot of engineering in this baby, thanks to internal heatsinking and a toroidal transformer accounting for its 8kg heft [see inside pic, right]. And yet it is deliciously compact and self-contained, sacrificing nothing save for balanced XLR inputs. Working through its facilities, it was a case of surprise after surprise.

RIGHT: Chunky transformer [bottom right] services a PSU [top] for Quad's Class AB power amp [on heatsink]. USB and wireless PCB [lower left] sits above the ES9038Q2M DAC-based line/ preamp. MM phono eq is tucked away [top left]

While the front panel seems no more feature-laden than its 1950s forebear, and it lacks the 22's row of push-buttons, the control element is actually as deceptively loaded as the new 33's equally clever, equally clean fascia. Five rotary controls dominate, the largest

being the volume control. This is surrounded by an album designed illuminated arc of orangecoloured dots that can to dazzle people show you where the control is set from across the room. Press it for mute and it flashes. To the right

are dials for source, bass, tilt and balance. Those steeped in Quad-lore will recall the tilt control – a 'see-saw' that pivots at 700Hz to bring a broad but subtler change in tone than typically offered by higher-Q bass/treble tone settings.

Below these controls, where the 22 had buttons, is an orange-lit display that indicates the selected source, and changes to address each function such as balance, tone/tilt, etc. Beneath the fascia's front edge are a 6.35mm headphone socket

(which mutes the speaker output) and an 'eye' for the amp's IR remote.

This seemingly minimalist display belies the plethora of features on offer. It provides information for all the Quad 3's functions,

matched in the comprehensively equipped remote control [see pic, p53]. This remote will also operate a forthcoming Quad CD transport, so be aware you need to select the 'A' button for 'amplifier' if the 'CD' button has been pressed by accident. ⊖







Accessible via the menu, with either the remote or the volume control, are bass and tilt controls; a choice of digital filters [see PM's Lab Report, p53]; adjustment of the digital PLL to accommodate wayward digital sources; and selection of MQA Mode (this must be defeated for the digital filters to work properly). Those with a variety of sources will also appreciate the Quad 3's sensitivity adjustments for level matching its two line and phono inputs, in 1dB increments to ±6dB.

DIGITAL ENGINE

Also menu-based are volume limiting, tone defeat, five levels of display contrast/brightness, configurable auto standby and 12V triggers, turning text on or off, and factory reset. Connections are self-explanatory, but the rear panel [see p53] does have a few extras beyond the basics. Viewed from the back, at far left are RCA sockets for MM phono plus an earthing post, two line-level inputs, and outputs for using the Quad 3 as a preamp. Next are binding posts

BACK TO THE FUTURE

With pairs of Mullard ECC83 and EF86 tubes under its stylish bonnet, Quad's iconic 22 'control unit' [inset picture] appeared in

1959, shortly after stereo LPs first became available in the UK. The matching mono Quad II power amplifier had been launched some six years earlier, but with the 22 now on the scene [HFN Apr '60 & Mar '14], the former was then sold in pairs to form the heart of many an early stereo system, complete with not one but two ESL-57 loudspeakers! This was the Acoustical Manufacturing Company's only stereo amplifier until 1967 (the company changed its name to Quad Electroacoustics in 1983), when the transistorised 33/303 system [HFN Apr '68 & Jul '11] was introduced. The 22 and II were comprehensively interconnected – AC power and input signals were supplied to the 22 where all the controls were located, while two umbilical cables carried both power and audio to the Quad II amps. These cables were terminated in custom-made flexible plastic boots, colour-coded to differentiate between the two channels – blue for left and yellow for right or mono-only operation. Some 65 years later and today's fully integrated, digitally equipped, solid-state Quad 3 would surely have been the stuff of fanciful science fiction for those latter-day engineers. PM

accepting spade connectors or banana plugs, followed by a centrally mounted Bluetooth aerial. Quad has engineered an ESS DAC-based digital engine into this little amplifier, hence this and other assorted digital inputs – coaxial, Toslink optical, USB-B and HDMI ARC. LPCM files or streams up to 768kHz/32-bit and DSD512 are accommodated via USB.

Quad isn't simply on a nostalgia trip with the 3's looks and facilities. It is essential that one absorbs the full import of the bass/tilt features, which do hark back to the early years when Quad was the Acoustical Manufacturing Company. Judiciously used, these controls – like the much-derided 'loudness' button of yore – have value if you want to listen late at night and you live in a flat, or if you have odd recordings in need of fine-tuning.

ABOVE: Echoes of the Quad 22 [below] but with a rotary encoder [left] for volume, mute and menu navigation, plus dials for input, bass/tilt tone control and balance. Display brightness is adjustable and, below, sits a headphone amp

Warm-up to what I would consider optimal performance took between 15 and 30 minutes if switched on from cold using the rear panel on/off switch. If left in standby overnight, warm-up is near-instantaneous. My smart meter showed hardly any cost penalty, the front panel light switching off after a few moments.

(A) HAT TRICK?

Few suitable plays on words with or reference to the number '3' spring to mind, other than this is the third product following the 33 and the 303 which

Quad has delivered in under 12 months.

all of which are sensational.
PM confirmed that the Quad 3 certainly isn't lacking in power, and it proved a beast when driving stacked LS3/5As. Luckily, LS3/5As

cannot survive hammering, so wattage wasn't an issue. Conversely, it drove Wilson Audio's The WATT/Puppys [HFN Sep '24] to ear-worrying levels, exhibiting more than enough slam to make me back off the SPLs. Seriously, there was no obvious break-up when pushing it to an insane volume.

Why was I playing at settings exceeding my preferred, sane levels? One album in particular was exploiting the utter brilliance of this amplifier, a CD released in 1985 that I fed it because the great Brian Wilson had recently passed away. I had, apropos of mourning him, recalled Papa Doo Run Run's sublime *California Project* [Telarc CD-70501], with its selection of ⊝





ABOVE: One MM phono and two line inputs are joined by a preamp output and digital ins across S/PDIF (one optical, one coax), asynchronous USB-B and HDMI ARC. Bluetooth 5.1 (aptX HD) is supported alongside pairs of chunky 4mm speaker sockets

note-for-note cover versions of The Beach Boys' greatest hits.

Okay, it's an overly dramatic album designed to dazzle people at hi-fi shows, much like the same label's 1812 Overture, featuring those notorious cannons. But if anything would tax the limits of this beer-budget integrated amplifier, it would be The WATT/Puppys with their prodigious bass capability, especially the album's on-steroids take on 'Good Vibrations'. But no, the extreme bass extension was not compromised nor was the ultimate impact, mass or scale. Wow, does this amplifier sound huge!

THAT'S THE SPIRIT

Turning to vinyl and the magnificent new edition of Norman Greenbaum's *Spirit In The Sky* [Craft CR00893], the Quad 3's MM phono stage proved to be clean, fast and eerily quiet, rich in dynamic contrasts and with plenty of gain. I also tried it with my much loved Ortofon T5 transformers (please put them back in production!) for a taste of moving-coil playback. Quad's new amplifier handled the assorted textures in the LP's title track more than admirably, exhibiting genuine high-end grace. And it balanced the heavy fuzz bass,

celestial backing vocals and the track's massive scale with aplomb.

A bonus for the digitally inclined is how well the Bluetooth and USB options worked. The former found an Android smartphone in seconds, the latter

LEFT: Handy remote grants access to the setup menu as well as input, volume, mute, tone and tilt controls. Other buttons cater to Quad's forthcoming 3CDT transport

QUAD

sounding absolutely staggering when playing high-res downloads. Bluetooth isn't my preferred means of listening, but I admit to sitting there for three hours, Willie Nelson followed by Linda Ronstadt and then ZZ Top, all free from grain or edginess. And with 768kHz/32-bit PCM and native DSD512 handling on offer via that USB input, there was no impeding the talents of my PS Audio PerfectWave transport.

VALUE ADDED

Incontestably, the Quad 3 proved sensational from the first notes it played. As dazzled as I am by the manufacturer's 33/303 pre/power set-up, which certainly outperforms this new arrival in terms of absolute finesse and slam, I was flabbergasted repeatedly by the Quad 3's amazing value for money. From any other maker this would cost much more.

To sum up for readers past considering entry-level gear, the compact Quad 3 would be ideal as the heart of one's first music system, or perhaps a second set-up in a study or kitchen. Match it with Quad's S1 loudspeakers (which it loved), a turntable in the £500-£1000 region, or a similarly-priced CD transport or streamer, and the Quad 3 integrated won't disappoint. If anything, it will enthral.

HI-FI NEWS VERDICT

What can I say? Quad's 3 changes the landscape for integrated amplifiers at this price point. It does everything you could want – for analogue and digital – and it acts like it has twice the power it possesses. It looks fabulous, the build quality is exceptional, and the outlay is exactly the same you'd have paid 60 years ago for a Quad 22/II stereo set-up. Quad doesn't practice inflation – this amplifier is deflation taken form!

Sound Quality: 89%

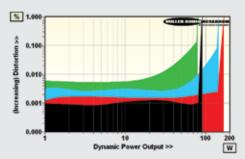


LAB REPORT

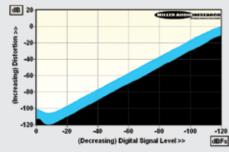
QUAD 3

Carefully positioned under the Quad 3's wrap-around bonnet is a Class AB power amp rated at 2x65W/80hm and 2x100W/40hm, figures that are comfortably met at 2x74W and 2x120W, respectively, and with sufficient headroom in its partnering linear PSU to accommodate 91W, 170W and 145W into 8, 4 and 20hm under dynamic conditions [see Graph 1]. Output into the lowest 10hm loads is limited to 80W (or 9A re. 1kHz/10msec/<1% THD). Overall gain is a sensible +29.3dB (the preamp section is 0dB) to get good use out of the volume control while noise is very low and the A-wtd S/N ratio a fine 92.4dB (re. 0dBW). Distortion is low and very consistent with power output at 0.0008-0.001% from 1W to the rated 65W (re. 1kHz/80hm) and increases only at higher frequencies – 0.045%/20kHz/10W. Output impedance is a usefully low 0.0250hm and the response deep and extended with 1dB points at 1Hz-68kHz (–1.6dB/100kHz).

Tested via the pre outs, the Quad 3's digital stage is steered by the choice of ES9038Q2M DAC, although only five filters are offered here. The Linear, Minimum and Hybrid Fast filters afford a good 83dB, 75dB and 98dB suppression of stopband images, respectively, vs. 14dB and 18dB from the Linear and Minimum Slow choices, although the latter suffer less 'ringing' in the time domain. Responses are flattest at -0.0dB/20kHz, -0.15dB/45kHz and -0.8dB/90kHz with Minimum Fast and 'gentler' at -5.0dB/20kHz, -7.1dB/45kHz and -7.4dB/90kHz with Minimum Slow (all re. 48kHz, 96kHz and 192kHz media, respectively). The A-wtd S/N is a wide 109.3dB and distortion falls to a minimum of 0.00005-0.0005% at -10dBFs [see Graph 2] while jitter is incredibly low at <5psec across all sample rates. PM



ABOVE: Dynamic power output versus distortion into 80hm (black trace), 40hm (red), 20hm (blue) and 10hm (green) speaker loads. Max. current is 8.95A



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

HI-FI NEWS SPECIFICATIONS

Power output (<1% THD, 8/4ohm)	74W / 120W
Dynamic power (<1% THD, 8/4/2/10hm)	91W / 170W / 145W / 80W
Output imp. (20Hz–20kHz, Pre/Amp)	116ohm / 0.025-0.065ohm
Freq. response (20Hz–20kHz/100kHz)	+0.0dB to -0.15dB/-1.6dB
Digital jitter (48kHz / 96kHz)	<5psec / <5psec
A-wtd S/N ratio (DAC/Amp, 0dBW)	109.3dB / 92.4dB
Distortion (DAC, OdBFs/Amp, 10W)	0.0004-0.0011%/0.00075-0.017%
Power consumption (Idle/rated o/p)	21W / 209W (1W standby)
Dimensions (WHD) / Weight	300x101x332mm / 8kg