

EAR Yoshino V12 (£6690)

Bearing the novel looks of the V20 – inspired by a Jaguar engine – EAR-Yoshino’s V12 integrated amplifier, offers more power, better bass and more grunt from fewer valves
 Review: **Ken Kessler** Lab: **Paul Miller**

Although EAR-Yoshino founder, boss and designer Tim de Paravicini describes the new V12 integrated amplifier as a totally ‘clean sheet of paper design’, you can’t help but notice its resemblance to the V20. That amplifier sired this one, yet all that remains to cause confusion are identical dimensions and looks. When asked to clarify the differences, Tim explained that he pretty much ‘tweaked everything.’

To appreciate the new amplifier, it helps to know the model that preceded it, and which remains in the catalogue. Ironically, the V20 was almost named the V12 because the look of the amplifier was inspired by Tim’s ‘passion for the motor car, and in particular, the famous V12 Jaguar engine.’ Because Tim had fitted 12 output tubes in the original prototype, coupled to a look reminiscent of the cam/valve covers in a V-configuration engine, it seemed only natural to call it the V12.

What happened, though, to delay the use of the name until this new model arrived, was Tim choosing instead to exploit his all-new circuit with 10 indirectly-heated twin-triode ECC83s valves per channel, so the name changed to V20. The rest of its tube complement consisted of another six ECC83s/12AX7s and four 12AU7s, for 20W/ch. The output tubes operate in push-pull Class-A mode, using the ‘enhanced triode mode’ found in the EAR 859 single-ended triode amplifier and the EAR 861 push-pull triode amp.

Equally crucial to the amplifier’s nature is the fitting of Tim’s Balanced Bridge Mode ultra-wide-bandwidth output transformers, and no overall feedback. Tim also wanted to use common-as-muck valves, for both reliability and availability – and you don’t get much more omnipresent than ECC83s. To make the model stand out in a field filled with cubist boxes or the usual ‘transformers lined-up at the back, with

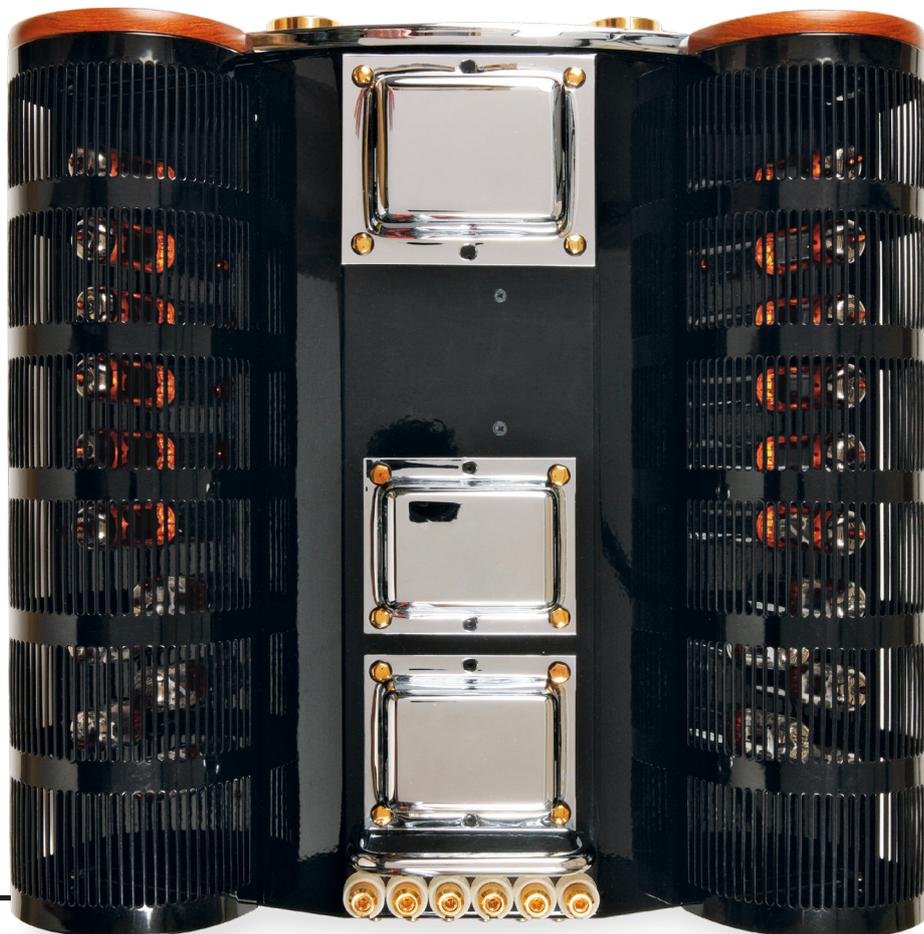
the valves at the front’, a new look was devised, instigated by the aforementioned passion for cars.

BEHIND THE FACE

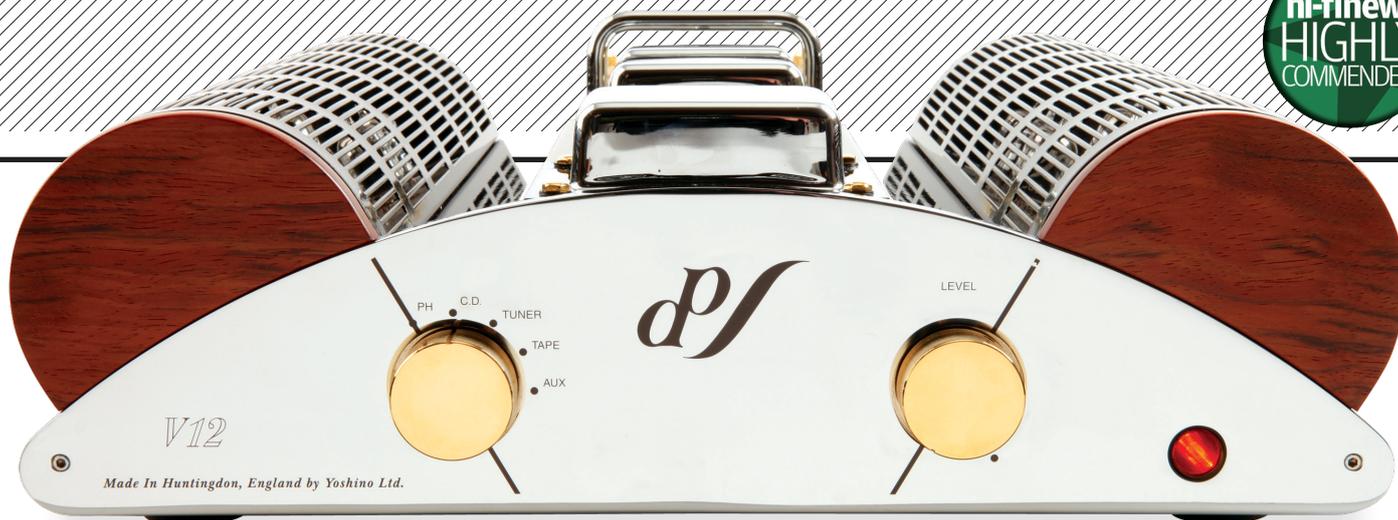
To create a look that Tim feels is ‘less aggressive’, he came up with a near-square footprint, but with sculpted upper levels instead of either flat, uniform surfaces, or a mixed-up profusion of exposed valves and the usual unfinished, industrial-look transformers in dull black. The V20, and now the V12, looked like no other, with the banana-shaped chrome-on-brass faceplate, the left-and-right channel valve arrays canted on opposite sides and protected by curved mesh cages reminiscent of the hot-houses used to protect crops, with accents of chrome and wood and black gloss. But

Tim wanted more. ‘I wanted more grunt, a good, honest 50W/ch, and more extended tube life.’ He stuck with the ‘basic architecture as V20, but I tweaked the circuit, the mechanical details, yet retained a similar family quality. What changed was the valve content.’ He replaced the V20’s 30 tubes with 10 ECC83s and a dozen EL84s for the output tubes, mounted as six per channel. And that was enough for Tim to revive the V12 nomenclature.

So here we have an amplifier whose output valves are indirectly-heated pentodes, still in a parallel push-pull Class-A circuit but operating in pentode mode. Also remaining, of course, are Balanced Bridge Mode, the custom-made, ultra-wide bandwidth output transformers, and no overall feedback. It accommodates five



RIGHT: A unique view: two cylindrical cages on a 420x440mm footprint, flanking the chrome-plated transformers, with speaker terminals sprouting vertically at the back



line-level sources, with one input labelled 'phono' but requiring a phono stage, while outputs are restricted to one pair of sockets for tape.

Tim positioned the speaker terminals across the top, at the back. Cables can be inserted straight down into the sockets with banana plugs; or bare wire (or pins) can be inserted from the back. The bank of six terminals, allowing connection for 4 or 8ohm loads with separate sockets for either impedance, is also protected by a chrome bar.

Operational interplay is restricted to three controls: the now-familiar EAR-Yoshino 'signature' orange power on/off button, a rotary volume control and a rotary source selector. As you can appreciate, then, set-up is a no-brainer. The only considerations you need to address are its weight and dimensions of 420x135x440mm (whd). Although the amplifier doesn't run particularly hot, ample ventilation above is recommended.

MUSICAL CHALLENGES

I connected the V12 to Wilson Sophia 3 speakers with Yter speaker cable, while the primary source was the Musical Fidelity kW DM25 DAC and transport, via (again) Yter cables. I also used the SME 20/3 turntable with Series V arm and Koetsu Urushi cartridge, and Audio Research PH5 phono stage, with Kimber Hero interconnects. While I suspected the V12 was still new and barely run-in, it gave an immediate

impression of power and coherence. Still, there was something about it that suggested a few hours under its belt wouldn't go amiss, so I let it play for 72 hours before listening in a critical mood. The difference was marked, if not profound, especially in terms of bass fluidity.

So detailed, precise and controlled is the characteristic EAR-Yoshino sound that it can prove almost too revealing of both partnering equipment and any listening material. A perfect example is the choice of outputs offered by the kW DM25 DAC: valve or solid-state. Why, I don't know, but I was prompted to try the latter, when I always use the former. The V12 suddenly began to sound a trace brittle and too sharp, with vocals a bit thin. Returning to the tube outputs of the kW restored everything to blissful warmth.

Listening to the opening of the remastered *Band On The Run*, the title track having a nasal nature all its own, enabled the system to show how it handled varying overlaid textures. Yet Paul McCartney's voice is smooth, almost muted on this track, while the synth-y whines, roiling bass, slow drums and hand claps, acoustic and jangly electric guitars – separated by wide-open stereo – present a challenge to any system with such a strong sonic personality. The V12's trick is to allow you to isolate these elements,

ABOVE: Level is adjusted via an ALPS volume control, while source selector and orange power on/off button complete the control complement on the V12's banana-shaped front

so you can focus on any sound you care to, while ensuring that it all coalesces into something utterly coherent.

It made me think of my current obsession, which is watching the 'food channels' on TV. Aside from being a gourmand of longstanding (I lack the refinement to be adjudged a gourmet), I'm fascinated by their code, a language that makes audiophile terminology seem as precise as that of a corporate lawyer lying to a politician. They're embarrassingly inarticulate, limited to a handful of

'Much as I prefer Italian, I looked instead for a bouillabaisse'

words, even fewer than oenophiles can access, despite the plethora of terms they have for actual cooking techniques. The gist of the matter is to describe the myriad flavours in a single dish. How this

applied to the V12 is that it seemed as if the amplifier was acting as the aural equivalent of an educated palate.

No audio scribbler dares to challenge those who describe flavours as 'notes', as we're all guilty of reverse sins like 'plummy bass' and 'chocolate-y midrange', so I can't escape the way that the V12's portrayal of complex recordings resembled the sampling of a taster session at a fine restaurant. As much as I prefer the three-ingredients-are-enough approach of Italian chefs, I went looking for bouillabaisse.

TAPESTRIES OF SOUNDS

A recently-renewed friendship with Geoff Richardson, viola player with Caravan, led me to (guiltily) digging out 'Golf Girl', 'In The Land of Grey and Pink' and other music I thought I'd only ever listen to again if I had a relapse into drug use. Complexity was *de rigueur* for the prog-rock bands, as was the use of *outré* instruments. Here a trumpet, there a flute, plus a whole array 

IT'S ALL IN THE WEIGHT

Tim de Paravicini is blunt about it: output transformers determine the performance of an amplifier. He describes himself as 'very anti-toroidal', and goes so far as to judge amplifiers by their weight – a clue to the mass of their transformers. 'I lift these lightweight amps from China with 845s and 2A3s and I know they'll have no bass. There are no short-cuts. If those amplifiers don't weigh 70lbs, they aren't gonna work.' It explains not just the heft of EAR-Yoshino models, but also the amps he conceived for Quad. Then ask Tim to describe his hand-wound, in-house transformers and he sounds like a chef asked to name the spices in his secret brisket dry-rub: 'Basic EI construction, with special layering and winding, with copper wire – not silver. The layering and how you arrange the windings are the key. Most manufacturers just don't get it.'

INTEGRATED VALVE AMPLIFIER



ABOVE: No mysteries here, just IEC mains in, fuse access, RCA sockets for line inputs (phono requires a phono preamp) and vertical sockets for bare wire or banana plugs

of sounds I'm hard-pressed to identify. What I'd forgotten was how well-recorded their Decca releases were, while the V12 lets you hear so far into the performance that you'd be forgiven for thinking it's been lifted straight out of a recording studio's monitoring system.

Without trying to read their minds 40 years on, I can easily imagine that they were thinking of creating a sonic tapestry, as that's the impression made by the V12. It worked, too, with Caravan's fellow Cantabrians, Soft Machine, the intricacy of their pieces, the varying sonic textures never growing muddled or confused.

TAKING A HOLIDAY

Most surprising of all, the same kind of coherence, though hardly as challenged as by prog-rock excess, affected the most sparse recording I had to hand: Billie Holiday's 1956 recording of 'My Yiddish Momme', in mono. It's just Holiday, a piano, some friends. It's not particularly spectacular in audiophile terms – a private, home recording never intended for release. But the V12 presented it as a cloud of music, in the middle of the room, with a visceral presence like driving in a fog: obscured but real. Whatever magic the V12 possesses, it enables you to ignore deficits in the recording in precisely the same measure that it can highlight said problems. I'm at a loss to understand it, but the V12 somehow liberates the listener from convention.

Another track on the same CD, *Black Sabbath: The Secret Musical History of Black-Jewish Relations*, offers the Temptations, live, singing a medley from *Fiddler On The Roof* in 1969, in unbridled Broadway mode, with overheated drummer, punchy brass, orchestral mass and – importantly – an appreciative

audience. After the bombast of 'If I Were A Rich Man', they move on to a quiet, thoughtful 'Sunrise, Sunset'... the V12 shifted gears as smoothly as the cars powered by its namesake.

Perhaps the most breathtaking display of the V12's ability to balance finesse with power, grace with authority, comes from the legendary Jimmy Scott, also on the *Black Sabbath* set. His high voice, easily and often mistaken for a woman's, turns the vocal theme from *Exodus* into a plea so plaintive that your heart will ache. Behind him is orchestration that's sparse and subtle, the majesty coming solely from the vocal.

It's the transparency and openness of the V12, exploited fully by the Sophias, that reveal every delicate nuance of a vocalist who defines 'inimitable'. Lush but not overbearing strings, restrained bass, a bare hint of percussion or piano – it is a performance that should shoot to the top of every audiophile's demo list. The V12 treats it as if it were an honour and a privilege to reproduce it. In other words, it respects the music. But it takes no crap, either. ☺

HI-FI NEWS VERDICT

If you've lived with an EAR-Yoshino or EAR amp, you'll recognise this as a de Paravicini design by the bass alone. It is deep, controlled and Amarone-dry, yet resolutely valve-y thanks to the warm midband that complements it. Power? The V12 matched the Sophia 3 as tuna loves mayo. Though crammed with valves, it's minimalist and no-nonsense, yet it oozes luxury. That's my kind of schizophrenia.

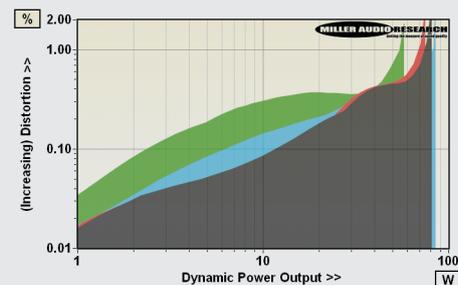
Sound Quality: 83%



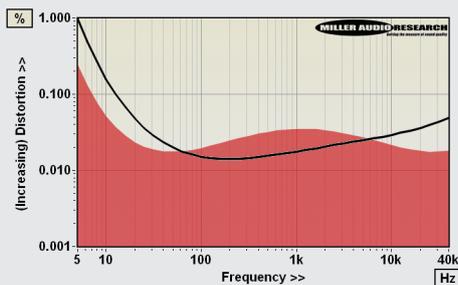
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EAR/Yoshino, in common with McIntosh in the US, utilises an ingenious output transformer configuration to achieve lower distortion, improved low-impedance power output and a wider frequency response than might otherwise be achieved with a more conventional EL84 push-pull design. In this instance, no less than 3 pairs of EL84 pentodes are connected in a balanced-bridge configuration to achieve a full 2x60W into both 8 and 4ohm loads (8/4ohm taps, respectively) at less than 1% THD. Under dynamic conditions, and up to 2% THD, the V-12 delivers a full 80W, 75W, 85W and 58W into 8, 4, 2 and 1ohm loads [see Graph 1, below] from a low 0.8ohm source impedance.

Otherwise, distortion rises gently with output, from 0.02% at 1W/1kHz/8ohm to 0.07% at 10W and 0.25% at its rated 50W. Demonstrating its sheer class, the V12 delivers a remarkably uniform distortion profile versus frequency [see Graph 2, below]. Accepting the inevitable LF rise of 0.2-1% (right-left channels) at a subsonic 5Hz, distortion between 20Hz-20kHz lies between 0.02-0.05% at 1W/8ohm and 0.06-0.1% at 10W/8ohm. The V12's response is equally uniform, extending to a -3dB point of just 3Hz in the sub-bass to -3dB at 45kHz at ultrasonic frequencies. The same response is maintained into lower 4ohm loads via the 4ohm tap, dipping to just -3dB/30kHz into 2ohm and -3dB/20kHz into 1ohm. Noise is very low too, the V12 achieving an A-wtd S/N ratio of 88dB (re. 0dBW) – above average for a *solid-state* integrated! Readers are invited to view a comprehensive QC Suite test report for the EAR Yoshino V12 amplifier by navigating to www.hifinews.com and clicking on the red 'download' button. PM



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



ABOVE: Distortion vs. frequency from 5Hz to 40kHz (10W/8ohm) through left (black) and right (red) channels. Uniform distortion is commendable

HI-FI NEWS SPECIFICATIONS

Power output (<1% THD, 8/4ohm)	60W (8ohm tap) / 60W (4ohm tap)
Dynamic power (<1% THD, 8/4/2/1ohm)	80W / 75W / 85W / 58W
Output impedance (20Hz-20kHz)	0.80-1.83ohm
Frequency response (20Hz-100kHz)	+0.0dB to -8.9dB
Input sensitivity (for 0dBW/50W)	53mV / 379mV
A-wtd S/N ratio (re. 0dBW/50W)	88.2dB 105.2dB
Distortion (20Hz-20kHz)	0.065-0.11%
Power consumption (Idle/Rated o/p)	142W/340W
Dimensions (WHD)	420x135x440mm