



Powerplant

Inspired by its designer's love of Jaguar's seminal 'double six', EAR Yoshino's V12 is no less impressive a valve amplifier. Noel Keywood enjoys its grace, space and pace...

Why a V12 valve amplifier? Car analogies spring to mind immediately of course, but that's not *just* it. The reason for designing a valve amplifier like this is a little more subtle, and the outcome intriguing. Some of the smaller power valves available have an incredibly sweet sound and the EL84 has long been recognised as one of them. Unfortunately, whilst it sounds wonderful it handles little power unless lots are used all working together - hence the six per channel within the new EAR Yoshino V12 reviewed here. This way you get a 50 Watt per channel amplifier and a license to use the same V12 moniker that I spotted in the EAR van's number plate at this

year's Whittlebury Show! So a car analogy isn't out of the question.

Designer Tim De Paravicini has put more into this design than lots of EL84s, however. It uses what he calls a Balanced Bridge Mode circuit and no overall feedback, plus substantial Class A working, to keep things sweet and like any good valve amplifier the V12 produces just 'soft' second harmonic distortion, in very low quantities at ordinary power levels. To approach the miniscule 0.06% distortion we measured from this amplifier a transistor amplifier would need lashings of feedback to force it into line and that's one differentiating factor between the two. But in my experience, although the excellent basic linearity and low feedback of a valve amplifier are a great advantage,

I'm not sure they have much to do with the characteristic sound of individual valves. Here, from my experience, it is down to materials and construction, as well as the internal geometries that determine whether a valve is a good (i.e. linear) audio amplifier or not. One of the last power valves designed for audio work was the KT88 and that remains a great sounding valve even today. KT88s remain affordable too, costing around £35 apiece, yet the EL84 costs a mere £12 or so. Obviously twelve of them in this amplifier bumps the total re-valve cost to £144 - hardly a king's ransom - and little different to a brace of KT88s at £140. Compare this to four 300B power triodes at £300 each - ouch!

So the V12 isn't going to cost

a fortune to re-valve, but then as it costs £6,550 in the first place perhaps you could say this does matter, because the piggy bank isn't likely to have anything left in it, or it doesn't matter when compared to the Aston in the driveway. Mark your complaining letters accordingly!

What you get for this is a very large and heavy amplifier. It weighs 22kgs and is just under 17in wide (i.e. it will fit a 17in rack). It is a little deeper than it is wide at 18in (46cm) but height is restrained at 5.5in (14cm) high. The V12 looms large until it has been heaved into place on a shelf, whereupon its low curved front and broken lines make for a pleasing appearance – and an unusual one too. At right sits a machined and gold plated volume control that feels very solid, and at left there is a rotary input selector. Five pairs of inputs are fitted, but I was disappointed that at this price the one marked 'Phono' did not connect internally to a phono preamplifier; if you want one it is an additional purchase, no less! And there is no remote control. Switch on is achieved using a large, yellow illuminated push button at right and the V12 lights up gently, without a murmur...

Sitting right at the back, and facing upwards are the loudspeaker outputs, for 4 Ohm and 8 Ohm loudspeakers. These days it is the 4 Ohm that will best match loudspeakers, as most use 4 Ohm bass units and draw most power reproducing bass frequencies. The V12 produced 50 Watts into either, our measurements showed.

Construction is old-school solid, with plenty of heavy sheet metal work and a massive machined fascia that has a pleasing chrome finish. They don't make amplifiers quite like this anymore; the V12 has the sturdiness of a steam locomotive and this seems to be where much of its weight comes from.

SOUND QUALITY

Hooked up to our well run B&W 804D loudspeakers, and it didn't take long to discover the low damping factor of this amplifier, typical of a zero feedback design, didn't suit the B&Ws one bit. But this is usually the case with low or zero feedback amplifiers, including my own World Audio Design 300B with feedback switched off. As the bass guitar kicked in on Eleanor McEvoy's 'I Got You To See Me Through' from her Yola SACD, bass was soft and ill defined. This wasn't entirely down to the V12 though; even with our grippy Musical Fidelity AMS50 transistor amplifier the B&Ws possess little bass insight.

From experience I knew our under damped Sendor S8es would not match the V12 either, but as luck would have it the Triangle Antals had not crossed *La Manche* to their homeland and they were perfect. With the big Antals the V12 sounded

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as well damped and expressive at low frequencies as any other amplifier. In truth it is the Antals that are well (acoustically) damped of course, allowing the high output impedance of the V12 to pass unnoticed.

This points to the need for a suitable partnering loudspeaker and the not-so-expensive Antals were spot on in this role. In fact, they teased out the deeply open and easy nature of the V12, its honey-smooth midband and its totally relaxed delivery. It's a beautifully spacious sounding amplifier that puts singers into a cavernous space. Eleanor McEvoy floated in this beautifully atmospheric environment singing 'When the Rain Falls', tiny hits against cymbals ringing sweetly in the background whilst piano chords struck out sonorously from just to one side of her. With the Antals the bass

line strode along nicely, in perfect balance with the rest of the performance. All the same you have less choice with partnering loudspeakers with

amplifiers like this, if you want to get the best from it.

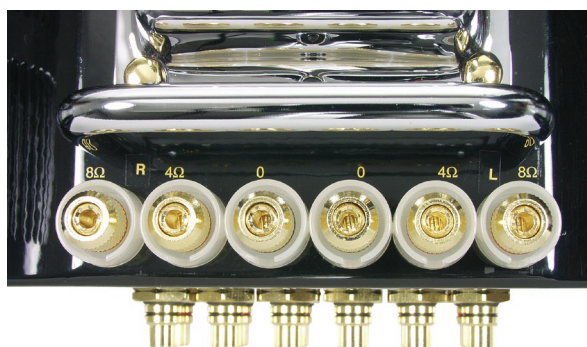
Moving on to Holst's 'Planets' again showed the great strength of this amplifier. It has a lovely sense of unrestrained dynamics that allowed kettle drum to thunder out of from 'Mars', the climactic ending sounding bigger and less dynamically restrained than that achieved by most else except terror weapons like our Icon Audio MB845s. Where the latter are quite easy natured up top, even a little soft, the V12 sounded better balanced and less characterful, but then the 845 is a characterful triode and that's part of its charm. By way

of contrast the EAR V12 comes across as gloriously spacious and clear, putting the orchestra in a big hall with all its sections reaching out clearly from their respective physical positions.

Put this wonderfully open and

balanced delivery, which was just luscious – yes, that's the right phrase! – into your room and you'll marvel at what a good valve amplifier can do. I rarely get to hear EL84 based valve amps because they're uncommon, but Tim De Paravicini's take on the idea in this amplifier is certainly a lesson in what (again) the valve can do when used properly in an audio amplifier. You could almost say the V12 is a finely crafted musical instrument in its own right it is so wonderfully easy and open, so fluid and natural. Only Puresound and Triode Corporation come close with this sort of excessive lushness.

Reading the headlines prompts me to label this the Liz Hurley of valve amplifiers; it doesn't have the horticultural solidity of the also lovely Kim Wilde (our MB845s perhaps?) or the finely manicured class of Kiera



Knightley. Its sound is big and bold; horns blared out with a lovely rich, brassy rasp in Jupiter and strings were honey sweet and finely etched. As the romantic main theme enters the orchestra swelled up to a lovely unstrained crescendo via the V12 and the amplifier was, quite simply, in its element with an orchestra. The easiness wasn't just one of tone or its extraordinarily wide tonal palette, but also one of an easy yet broad expressiveness made obvious through a generous sense of well controlled pace and power. 'Jupiter' ends in a simple, strong climax and this the V12 captured perfectly, making it sound



unhindered and exciting, throwing the instruments out into the room with a lovely power, yet with no little hint of any hardness, restriction of tonal colour or dynamic resolve. Only a beautifully wrought valve amplifier can manage this and the V12 was almost in a class of its own.

To hear the V12 properly you will need good loudspeakers though (in addition to Antals, Tannoys come to mind) since its unhampered dynamic swings and glorious swathes of detail will not be easily apparent from a lot of today's loudspeakers. It does not have the low end drive of the MB845s nor many other valve amplifiers; it does have an unalloyed loveliness that is worth hearing, however, if it is partnered sympathetically.

I realised after some listening that bass from the Antals was reaching lower and had more power than when paired with other amplifiers and here the low electrical damping of the V12 seemed to complement the high acoustic damping of the loudspeakers. Kettle drums in particular reached down and had a lively rumble to them that made me keenly aware of the percussionists' actions, making what is often an undifferentiated booming sound a considered piece of playing.

And yes even an amplifier as sweet and sonorous and Liz Hurley luscious as this one could handle the hard rhythmic drive of Lady Gaga's 'Bad Romance', little asides like "I'm a free bitch baby" springing out from the side stage whilst the perfectly formed and shimmeringly clear vocals of Gaga punched out from centre stage, supported by bass synth pounding out the backing. In fact, it was with this track I became aware that the sparkling vocal clarity and concise enunciation of Gaga was a step up on most else and the V12 really was a quite extraordinary amplifier in this respect. It has a

strong yet ornate treble delivery that allows not one small detail to escape unnoticed. This is an amplifier that conveys speed as a result, yet without any hard edge. And when those deep synth pushes come through in 'Monster' the Antals were driven to deliver them with a muscular ease that would satisfy anyone.

Out of interest, with volume high, I measured 4V maximum into the Antals, superficially equivalent to 4 Watts (likely 10W absolute maximum as I was using an average reading meter), so the V12 was relatively unstrained driving the 90dB sensitive Antals. This situation isn't unusual. A lot less power is required to run loud than most people think, at least with modern loudspeakers.

Over a long period with the V12, whatever I played was handled with a level of ability that easily places it amongst the best amplifiers available, accepting its low power. But to hear this you will need suitable loudspeakers, ones that are large and well damped acoustically. This is the

case with all low damping factor valve amps. I make this point again because the chances of hearing this amp with suitable loudspeakers is low and partnered with much of what is available today you will not reach the impression I got of this amplifier. But that's high quality valve amplifiers for you; if you know how to treat them, they'll repay you. Bit like my cat!

CONCLUSION

This amplifier is a Tim De Paravicini special. It is expensive, exotically crafted and built to survive if the Cold War had ever turned hot. It is also something quite unusual and a special listening experience. I admit I became a convert to this sort of perfection long ago and it just reaffirms to me why valves are a long step ahead when it comes to ultimate sound quality. The EAR V12, for all its cost and quirkiness, was able to demonstrate this fact, and so although it may be easy to protest the price, it isn't easy to protest the sound. That makes it special.

MEASURED PERFORMANCE

Power output measured 55 Watts from the full 8 Ohm secondary winding and from the 4 Ohm tap, so coupling efficiency of the latter is very good. The V12 has enough power to drive modern floorstanding loudspeakers to very high volume, and shelf/stand mounters of lower sensitivity to high volume.

Distortion was very low right across the audio band, measuring 0.04% at 1 Watt. Our analysis at 10kHz, 1 Watt shows this was primarily second harmonic; there were no high order crossover components. Distortion rose to 0.24% at high power output (full output, -1dB), comprising mainly second and third harmonics, a good result. Bass distortion was higher than is possible, measuring 0.75% at 50 Watts output, third harmonic from magnetic saturation in the core.

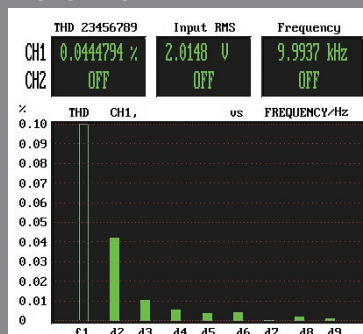
Input sensitivity was 400mV and noise and hum very low, the latter measuring a low 0.5mV at 50Hz. Frequency response was limited to 22kHz, not unusual with low feedback valve amps.

The V12 has useful power output

and benign distortion characteristics, especially at low levels. Bass distortion could be lower, but otherwise the amplifier measures well. NK

Power	55 Watts
CD/tuner/aux.	
Frequency response	5Hz-22kHz
Separation	92dB
Noise	-105dB
Distortion	0.06%
Sensitivity	400mV
Damping factor	4.5

DISTORTION



HI-FI WORLD

VERDICT

Seminal valve amplifier with sonics, build and style commensurate with its premium price. Needs careful speaker matching, however!

EAR V12 £6,550
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FOR

- superlative sound quality
- beguiling design
- epic build quality

AGAINST

- no remote control
- limited power
- no phono stage