

Blind-listening Group test

VALVE AMPS £1,395-£1,895

Can today's best valve amps rival solid-state?

Modern valve amps continue to charm, delight and lure us away from solid-state. **Richard Black** and the blind panel pick the best from a closely priced pack

TRANSISTOR AMPLIFIERS arrived on the scene in the mid-1960s rapidly rendering valves obsolete, or so we thought. In fact, a small hard core of valve enthusiasts kept the flag flying through the dark days of the 1970s and early '80s, until gradually the audiophile world realised that valves still had a lot to offer. The high profile of brands like Audio Research (USA) and EAR (UK) helped increase valve visibility and by the mid-1990s it was simply no longer remarkable to see a few valve amps on the shelves of a showroom, or powering a show demonstration.

We are now in something of a valve renaissance, with a multiplicity of makes and models available covering just about all bases from low-power single-ended triode designs to substantial multi-valve models kicking out a couple of hundred watts or more. Production of valves themselves continues apace in several countries and most of the classic types, made popular in audio amps of old, are now readily available.

One of those classic valves is the KT88, one of a group of valves called 'kinkless

tetrode' (hence the KT), designed at GEC in the 1950s. These were intended to be low-distortion audio valves with output duty in mind and the KT88 was the most powerful of them and, for many enthusiasts, was one of the finest audio

"We are now in a valve renaissance, with a multiplicity of makes and models."

output valves ever. It still has a strong following and when we realised that a whole group test of KT88-output amps was a possibility, we just couldn't resist!

If you're not (yet) a valve convert, there's really nothing special you need to take into account beyond the fact that valve amps are almost invariably a little bigger and hotter than similarly-rated transistor amps and have a very modest need for occasional servicing (new valves). They need no special pleading on any sonic or technical grounds; like any hi-fi, they play music and that's it!



Valve amps are not the cheapest: that's inevitable because they require fundamentally expensive parts like output transformers. Specifically, they aren't the cheapest per output watt, but it's more than a touch ironic that their increasing popularity has brought their price down in recent years, even as solid-state amps have been forced up by less favourable market conditions worldwide. As a result these six models are far from frightening and are indeed quite closely matched.

ON TEST



Cayin Audio A-55T
£1,460 P42

Every inch a classic, this amp does include one feature we've never seen before: switching between triode and ultra-linear mode via remote control. It's one of the 'new wave' of Chinese amps, beautifully made to a standard that needs no apology by an all-Chinese operation; no European hand-me-downs!



Icon Audio Stereo 60 Mk 3
£1,700 P43

A bulky and particularly weighty amp, the Stereo 60 is another model that offers dual operating modes for the output valves. Its exceptionally robust chassis encloses a circuit that extracts a little more power than most from a pair of KT88s, though still well within the valves' safe operating limit.



Opera Consonance Cyber 100 Signature
£1,595 P47

Another model proudly produced in China, from the prolific Opera/Consonance stable. Like the Cayin, this one offers remote control of input selection and volume, though operating mode is fixed. With more inputs, it scores highly for flexibility, while output power is par for the course.



Prima Luna Prologue Two
£1,820 P49

Prima Luna has made quite a splash in the audio world since its launch in 2002. The relatively modest Prologue Two keeps features to a minimum and instead, puts the money into parts and build quality, including a particularly smart paint job. The 'shoebbox' format case saves space, too.



Pure A30 £1,395 P53

The cheapest amp in the group is in fact the most valve-y, as it uses valve rectifiers alongside the more familiar amplifying components. In other respects it is not dissimilar, however, and it offers a choice of triode and ultralinear output modes. Our review sample differs from current production, which includes a valve cage.



Triode Corporation TRV-885E
£1,895 P53

Another beautifully finished amp, from Japan this time. Triode Corporation specialises in amplifiers using triodes, but the cheaper models, use more regular valves. Not that there's anything regular about the amp, which thoughtfully adds a front-mounted line input and headphone socket for flexibility.





Icon Audio Stereo 60 Mk 3 **£1,700**

More powerful than most and built the old-fashioned way: no printed circuit boards here!

DETAILS

- ORIGIN:** UK
- WEIGHT:** 27kg
- DIMENSIONS:** (WxHxD) 440x230x400mm
- FEATURES:**
 - 4 line inputs
 - Record output
 - High/low sensitivity
 - Triode/ultralinear mode
 - 8/4 ohm speaker outputs
 - Notional output 65W/35W
- DISTRIBUTOR:** Icon Audio
- TELEPHONE:** 0116 244 0593
- WEBSITE:** iconaudio.com

Icon's exuberant literature makes many claims for this amp, including higher output power than most KT88 models can muster: 65-watt ultralinear or 35-watt triode. There's nothing outrageous about that, though, and indeed we've seen 100-watt amps using just a pair of KT88s.

The relatively high output power is partly responsible for the considerable weight of this amp, but the chassis is very substantially built too, complete with a solid copper top-plate around the valve area. Unusually, all the valves are octal-base types, including the small-signal valves and voltage regulator. These are relatively old designs, compared with the 'modern' (about 1960!) KT88.

We weren't surprised, given the valve complement, to find that internal electronic assembly is entirely point-to-point, with the only circuit board being a small one for the remote control decoder.

Passive components are good quality throughout, including one-watt-rated resistors almost everywhere, brand-name

polypropylene capacitors and a motorised volume control.

The input selector switch is manual (not remote-controllable) and connected to the input sockets with PTFE-insulated screened wire. The complement of inputs looks a bit stingy, but don't forget that the 'Source/tape' switch effectively gives you a fourth input.

Sound quality

In many ways, this more than any of the others in the group, upheld the classic stereotype of 'valve sound', with strong, very present vocals, good vitality and persuasive communication in all sorts of music.

If there is a quality to this amp that may cause dissatisfaction it's tonal coloration. This clearly isn't a function of frequency response which is fine, rather it's something about the distortion 'fingerprint' of the amp that is persistently audible and can be a little distracting.

One listener pointed to cymbals as being the main indicator of this and indeed it is the region where high midrange becomes treble that shows it up most.

We'd probably live with it happily enough, though, considering the Stereo 60's many admirable traits. Notably, and perhaps to some people's surprise from a valve amp, it has very good timing and gets feet tapping reliably across the widest range of musical styles. It's also very good at resolving detail and, for instance, our musically dense opera excerpt benefitted no end from the way this amp keeps

all the different parts clear and well-balanced. Bass is a little mixed, with good extension but sometimes a slightly soft attack, at least compared with the very tight leading edges this amp produces on high-frequency notes.

On the other hand; the bass is well integrated with the rest of the range. Dynamics are very good, swinging effortlessly from one extreme to the other and also making the most of finer gradations around the middle of the range.

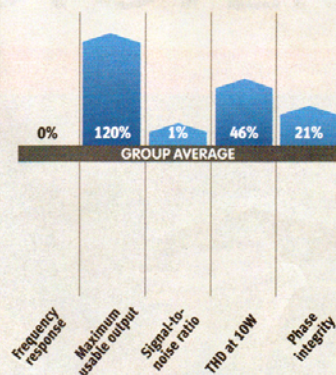
TECH LABS

LAB REPORT

Although the manual claims 75W per channel output, no accompanying distortion figure was provided.

However, in our tests we measured 1% THD at 70W (8 ohms), thereby lending credibility to Icon's claims. The left channel was much more sensitive to crosstalk - we measured 20dB at 1kHz and nearly 30dB at 10kHz. The frequency response test highlighted disparities of 0.3dB between the two channels, as well as a strange right-channel 'bump' at around 100Hz. With the Stereo 60 MkIII operating in its 'triode' mode, we achieved 30W with 1% distortion. The frequency-response curve was broadly similar to the ultralinear one, with a dip of approximately -1.5dB at 25Hz followed by a slight rise (about 0.2dB) at 100Hz.

RESULTS AT A GLANCE

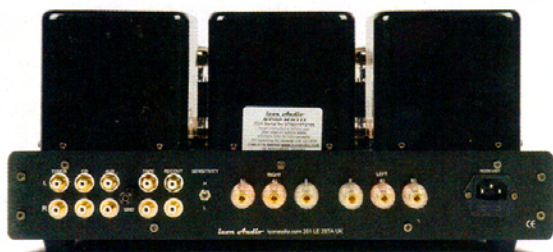


Hi-Fi Choice

OUR VERDICT

- SOUND QUALITY** ★★★★★ **LIKE:** Good timing, with lovely integration of instruments
- VALUE FOR MONEY** ★★★★★ **DISLIKE:** Slight lack of naturalness to treble-rich sounds
- BUILD QUALITY** ★★★★★ **WE SAY:** An energetic amp that offers high power and delivers it with confidence
- FEATURES** ★★★★★

OVERALL



Lab conclusions

The measurements exposed some startling shortcomings – certainly when compared to the supposedly inferior solid-state competition

TECH LABS

Most of the technology in these amps dates back to the 1950s (or earlier!) and it is amazing that they manage to hold their own in today's audio world. Subjectively these amplifiers still manage to excite their audience and it cannot be denied that valves hold a unique romantic charm. However, in some key respects, the measured performance is very disappointing by modern standards.

Even the best of these amplifiers (the Triode's TRV-88SE) offered a THD+N that would be considered poor, when judged by the rating system that HFC employs for transistor amplifiers.

The frequency response is also limited at the extremes of the audio band. Noise performance also fails to impress when compared to 'semi-specs', although some of the amplifiers – notably the Cayin and the PrimaLuna – achieved results that are excellent by tube standards. It may be interesting to consider that these employ printed-circuit boards as opposed to the expected point-to-point wiring. The traditional problem of 'hum' has largely been banished, thanks to refinements in this age-old technology.

The use of a single power-supply transformer has also impacted crosstalk results across the board and, although

the figures measure quite highly, chances are other components in the audio chain will also impact the channel separation, balance and stereo imaging.

Phase is an important consideration, due to the fundamental design characteristics which were found to affect the whole audio spectrum. As all six amplifiers offered outputs that varied slightly between each channel, we would have liked to have seen independent volume controls.



Although our distortion measurements fell short against other technologies, the even-harmonic nature of the distortion is subjectively warm and pleasant – and is likely the cause of our affection.



TALKING POINT
 The Cayin, Pure Sound and Icon Audio can all be switched between 'triode' and 'ultralinear' modes of operation.

Essentially, the difference between the two is that while triode mode cannot drive a load as large, or deliver as much power as an amplifier supporting the ultralinear configuration, its distortion of the sound at lower levels is much less.

RESULTS AT A GLANCE

Make/model	 Cayin A-55T	 Icon Audio Stereo 60 Mk 3	 Opera Consonance Cyber 100 Signature	 PrimaLuna Prologue 2	 Pure Sounds A30	 Triode Corporation TRV-88SE
Price	£1,460	£1,700	£1,595	£1,820	£1,395	£1,895
Sound	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
Value	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
Build	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
Features	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
Overall	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
Conclusion,	Despite minor shortcomings, the A-55T offers a very rewarding listen with any kind of music	Energetic and enjoyable; offers relatively high power and delivers it with confident dynamics	Pleasant, but not highly likely to give startling new insights into familiar music	Smart and fuss-free, with many fine qualities which will endear it to many listeners	Strong on character and well worth an audition – it is individual and in many ways, likable	Attractive and practical, but we would really have liked some more musical communication

Key features

Line inputs	4	4	5	4	3	3
Preamp input	No	No	No	No	No	Yes
Headphone output	No	No	No	No	No	Yes
Remote control	Yes	No	Yes	No	No	No
Switchable mode?	Yes	Yes	No	No	Yes	No
Notional output	40W/18W	65W/35W	40W	40W	30W	45W

Lab conclusions E = Excellent | AA = Above average | A = Average | BA = Below average | P = Poor

Frequency response	+/- 0.4dB A	+/- 0.4dB BA	+/- 0.5dB BA	+/- 0.4dB BA	+/- 0.3dB BG	+/- 0.4dB BA
Max usable output	12W A	26W G	4W P	4W P	13W BA	15W G
Signal-to-noise ratio	81dB E	75dB G	76dB BA	81dB E	78dB BA	74dB G
THD at 10W	0.5% A	0.5% A	2% BA	1% BA	1.2% BA	0.4% AA
Phase integrity	+1.1° A	+0.37° E	0.10° E	+0.20° E	+1.5° BA	+2.8° P

Blind-listening verdicts

With so many different attitudes and talents to consider, picking a winner from this group was never going to be easy

IF NOTHING ELSE, this *Blind-listening Group Test* proves conclusively that there is no such thing as 'the KT88 sound'. It would be ridiculous, really, to expect such a thing but it's the kind of sloppy thinking we all fall prey to now and then and it's good to see it exposed as such. Maybe, if we compared six KT88-based amps with, say, six using the 2A3 triode, we would find some sort of common ground, but in general our results amply uphold the rule of thumb; that what you do with it is more important than what you have.

In fact, the sounds these amps made varied probably more than in any recent group test we can recall. If you want to be absolutist you can take the high ground and say that they can't all be right, so most of them are clearly wrong, but in a world where there is no such thing as an absolute recording; or loudspeaker; or indeed listening room; such poses get one nowhere.

Rather, we rejoice in the fact that varying tastes are catered for here.

On the other hand, considering the aural evidence as heard by our listening panel and ourselves, we ended up with both praise and blame, in varying measure, for each amp. As always, we've reported as simply and straightforwardly as we can the reasons for this, in the hope that it will help you match an amp to the way you personally hear and appreciate music.

Scores are close, but we feel we should, at least, justify the lower marks for sound given to the Opera and Triode amps. Quite simply, in both cases, we felt that the level of musical communication was below the group average. Never mind the niceties: that's what gets the blood flowing and neither amp really did it for us. For the rest there's plenty to choose in terms of specifics, but we felt the overall standard was largely comparable. ●

THE WINNER IS...

THE PRIMALUNA PROLOGUE 2 may not exactly romp home in simple numerical terms, but we feel that overall it leads by a nose. It's not the 'perfect' amp (well, why else would PrimaLuna make dearer models?), and it has a bit of a forward image, but as we gradually made acquaintance with this amp through the listening sessions, we felt its winning way with voices and the sheer sense of ease with which it plays any style of music, contributed strongly to our appreciation of the music we played through it. In feature terms it is as plain as plain can be and its looks are nice, though hardly astonishing; it's just that it plays music in a way that makes you want to hear more. Which is the point, really, isn't it?



Integrating a valve amp into your hi-fi system can be a challenge, but as the following examples demonstrate, compatibility is easier than you think

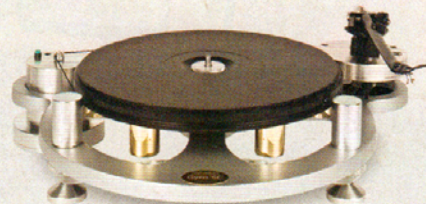
CD PLAYER: Creek Destiny, £1,400

It may seem a little perverse to recommend a solid-state CD player alongside valve amps, but there's logic in selecting a relatively 'characterless' source component alongside the more individual sonic traits of a valve amp. This is, not least because the mixing up of characteristics can be a very dodgy business! The Destiny is an excellent digital player all round, achieving a very high standard of tonal neutrality, alongside terrific detail and beautifully effortless pace and timing. As such, it stands to make a perfect counterfoil to the more individual sonority of a fine valve amp.



TURNTABLE: Michell Gyro SE, £1,450

You'll need to add a phono stage as none of the amps in this group features one, but an LP source is, let's face it, the perfect accompaniment to the beauty of valves. The outright winner in our recent turntable *Blind-listening Group Test*; the Gyro SE, offers a high degree of naturalness and an impressive disappearing act, which sees it vanish in favour of utterly believable musicians in front of you. In addition, its smart looks will in no way diminish the visual impact of a valve amp, while the reliability and longevity of Michell products are legendary.



LOUDSPEAKER: Spendor SP2/3R2, £2,295

Another recent *Blind-listening Group Test* winner, this model is particularly well-suited to the virtues of valves, on several scores. For a start, it's quite an easy load. If valve amps have a generic weakness, it's a lack of tolerance for awkward loudspeakers and this is one of the least troublesome around. Quite separate from that, it is also of above-average efficiency, making satisfying volume entirely possible from the modest output of any of the amps in this group. Finally, and crucially, it sounds superb, with great timing and coherence, good detail and a thoroughly delightful willingness to enjoy the music.

