

hi-fine**s** GROUP TEST

For many music lovers the sheer listenability of tube amplifiers means that nothing else will satisfy. This month we lab test and audition five valve integrated models of diverse design

INTEGRATED VALVE AMPS £1739-£3100

TESTED THIS MONTH

CANOR TP134	£2495
ICON AUDIO ST60 IIIM KT150 SIG	£3100
MING DA MC34-ASE	£1739
PRIMALUNA DIALOGUE PREMIUM	£2998
XINDAK CS300	£2450



Cutting-edge gear, cherry-picked by the *Hi-Fi News* editor



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• CD PLAYERS • TURNTABLES • CARTRIDGES • SPEAKERS • AMPLIFIERS • HEADPHONES • INTERCONNECTS •

The magical allure of the thermionic valve remains as strong as ever among many audio designers. Nor are manufacturers simply producing valve amplifiers for their own satisfaction: there are music lovers all around the globe who will listen to nothing else, maintaining that a good tube amp will deliver the sweetest sound you'll ever hear.

Of course, valve amplifiers are niche products and the preserve of dedicated hobbyists, since they are inefficient and require maintenance. Valve life depends on many factors, such as hours of use and the number of on/off cycles. But assuming a few hours' listening every day, you can reckon on replacing the large output tubes every three or four years, so budget accordingly. And don't leave a valve amplifier needlessly powered up for hours on end, or you'll be in for a shock when your electricity bill arrives. Even at idle, most valve amps guzzle nearly as much energy as half a bar of an electric fire.

Chinese manufacturing has lowered the entry cost of ownership in recent years. This month we've put five modestly-priced integrated

models through their paces. And all bar the Canor TP134, which hails from Slovakia, are in fact built in China. The Ming Da MC34-ASE and Xindak CS300 are designs from Chinese brands, while the Icon Audio ST60 MkIIIM KT150 Signature and Primaluna DiaLogue Premium are designed by companies based in the UK and The Netherlands respectively.

OUR SYSTEM AND MUSIC

Each amplifier was auditioned using a carefully set up computer audio source feeding a T+A Elektroakustik DAC 8 digital-to-analogue converter, and easy-to-drive Townshend Sir Galahad speakers. (The loudspeaker/room setup can be seen at www.hifine.com/news/article/meet-the-team-john-bamford/9884.)

We played two high-resolution recordings to assess the amplifiers' transparency and outright ability to reproduce real-world dynamic contrasts. The first was from Norway's 2L label [www.2l.no], a 24-bit/192kHz download of one of its 24-bit/352.8kHz DXD productions: Marianne Thorsen and the Trondheim Soloists playing an *allegro* from Mozart's Violin

Concerto in D, K218. The other was 'Lone Star' by The Carl Verheyen Band from the Rumor Mill DVD-Audio project released in 2005, a 24-bit/96kHz recording produced by Mark Waldrep for his AIX Records label [AIX 83039]. This provides a stern test for any amplifier thanks to the dynamically lifelike sound of Verheyen (best known for his guitar duties in the band Supertramp) playing with Cliff Hugo and Bernie Dresel on bass and drums.

We also listened to tracks ripped from CD, included the opening title song from Shelby Lynne's *Just A Little Lovin'* album [Lost Highway/UMG 60918], an intimate recording that can seemingly put you right in the studio with the musicians if your system is up to the task.

Another 16-bit/44.1kHz track was 'Carousel' from the eponymously-titled *Lifesigns* CD [Esoteric Antenna EANTCD1001], an epic prog-rock extravaganza that's a challenge for any amplifier to reproduce, such is the density of its multi-layered instrumentation. ➤

REVIEWS BY JOHN BAMFORD
LAB TESTS BY PAUL MILLER

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Canor TP134



Longstanding Slovakian tube specialist Canor is based in Prešov, in a purpose-built factory where it builds everything in-house and has developed a proprietary valve-testing and burn-in methodology. Valves that don't measure up, we're told, are returned to their makers for use in guitar amps and the like.

The company traded for many years as Edgar until changing its brand name to Canor at the end of 2007. It currently makes just two integrated amps and two phono stages, a headphone amp and two CD players with valve output stages.

Under its wrap-over bonnet the ultralinear push-pull TP134 uses a complement of four 12AT7s (ECC81s) and two pairs of EL34 output pentodes. The PCBs are purposely milled to remove unnecessary areas of the circuit board and minimise dielectric loss, in a patented process which Canor says gives its circuit similar characteristics to one hard-wired with air dielectric cables. Volume control is via a relay attenuator, while the amplifier's control electronics are fed from a separate section of the power transformer. The control circuitry is only active when being used. The RCU includes transport controls for any accompanying Canor CD player.

FINE DETAIL RESOLVED

The TP134 was highly praised by our listeners. Hearing the vivid portrayal of the Trondheim Soloists demonstrated the Canor's ability to clearly resolve the natural acoustic

RIGHT: The amp is available in black or silver, the fascia sporting a solitary multi-function knob for input selection and volume control



of the high resolution recording and preserve its fine detail, where some of the others appeared soft and veiled in comparison.

Indeed, its designers seem to have struck an ideal balance which renders plenty of verve and energy to the sound without incurring any harshness or grain by way of penalty. While it didn't sound quite as ballsy and 'grippy' as did the Icon Audio when serving up the dynamic kick drum of The Carl Verheyen Band, it remained commendably fulsome in the bass nonetheless – and sounded deliciously open and airy too.

Where 'Carousel' from *Lifesigns* will have many amplifiers struggling to remain composed-sounding, the TP134 proved adept at separating out the myriad synthesizer and guitar tracks from the dense mix, with a hear-through clarity that only the PrimaLuna could match.

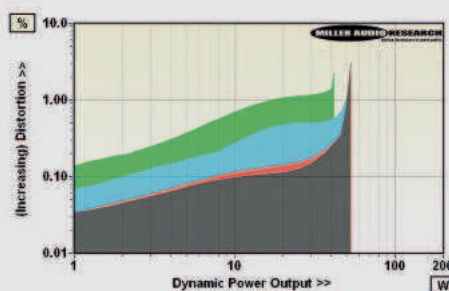
Sound Quality: 86%



ABOVE: Canor's TP134 has five line inputs and a fixed-level 'Tape' output, all on gold-plated RCA sockets. Speaker binding posts provide 4ohm and 8ohm taps

HI-FI NEWS LAB REPORT

This is a very clean-performing tube amp, suffering minimal hum (unlike others in this test) and offering an impressive 88dB A-wtd S/N ratio (re. 0dBW). Distortion is also low and well managed with just 2nd/3rd harmonics in the spectrum instead of the extended spray witnessed with many other tube amps. Figures as low as 0.03% at 1W to 0.3% at the rated 35W/8ohm are achieved by the TP134 through the midrange with figures at the frequency extremes of 0.05%/0.66% (20Hz, 1W/10W) and 0.09%/0.77% (20kHz, 1W/10W). The practical power output of the TP134, meanwhile, is higher than Canor suggests at a generous 45W 8/4ohm (continuous) and 50W 8/4/2ohm (dynamic), all at just 1% THD. The frequency response is also impressively flat and extended, not unlike that offered by the PrimaLuna, but free of the transformer resonances seen with the Icon Audio and Xindak. Within mere ± 0.05 dB limits it stretches from 5Hz-40kHz into 8ohm (via the 8ohm tap). Output impedance is a uniform 0.75-1ohm. PM



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

Power output (<1% THD, 8/4ohm)	44W / 45W
Dynamic power (<1% THD, 8/4/2/1ohm)	51W / 52W / 50W / 40W
Output impedance (20Hz-20kHz)	0.74-1.05ohm
Frequency response (20Hz-20kHz)	-0.02dB to -0.01dB
Input sensitivity (for 0dBW/35W)	59mV / 355mV
A-wtd S/N ratio (re. 0dBW/35W)	87.9dB / 103.3dB
Distortion (20Hz-20kHz, 10W/8ohm)	0.11-0.77%
Power consumption (Idle/Rated o/p)	145W / 227W
Dimensions (WHD) / Weight	435x170x390mm / 22kg

Icon Audio Stereo 60 MkIIIm KT150 Signature

The largest integrated in Icon Audio's wide range of amplifiers, the Stereo 60 MkIIIm had just been revised when we tested it [*HFN* Apr '12]. It began shipping with the (then) new-ish Tung-Sol KT120 tubes and featured improved transformers. Now it has been revised once more, available with the even bigger KT150 Tung-Sol valves manufactured in Russia by New Sensor. And the 'm' in the nomenclature signifies it now includes a (fascia) bias setting meter. Output valve idle current is adjusted via trim pots set into the top plate.

Its Class A front-end employs two 6SL7 triode first stage tubes, with two 6SN7s used as drivers, while the output stage can be switched between ultralinear and triode modes. Internal assembly is entirely point-to-point, the only circuit board being a small one for the remote control to drive the amp's ALPS motorised potentiometer.

The 'stock' 60 MkIIIm provides the biggest bang for your buck at £2600. However, in this premium-priced 'Signature' version various components have been upgraded by designer David Shaw to include, for example, copper foil in paper caps.

A POWERFUL BASS

This KT150-equipped Signature amp sounded immensely confident and relaxed, delivering the 'richest' and deepest bass performance of all

RIGHT: Front panel has bias meter, standby, tape monitor and ultralinear/triode mode switches. The copper-plated top plate looks great



the amplifiers in this month's test group. The evocative bass pedals in *Lifesigns* were *really* powerful and extended, while the bass and drums in the tracks from Shelby Lynne and Carl Verheyen had impressive punch and drive. But where the Canor and PrimaLuna amplifiers sounded fresh and alive this Stereo 60 Signature sounded a tad thick and lazy. With the hi-res Mozart recording leading edge transients appeared blunted and dynamic shading softened.

In 'Just A Little Lovin' the voice of Shelby Lynne appeared rather unfocused. The holographic imagery of the Stereo 60 we observed last time around seemed to elude this particular Signature sample. It sounded a little more vivid in ultralinear mode than in triode mode but in our test system a bit more sparkle and vibrancy would have been appreciated.

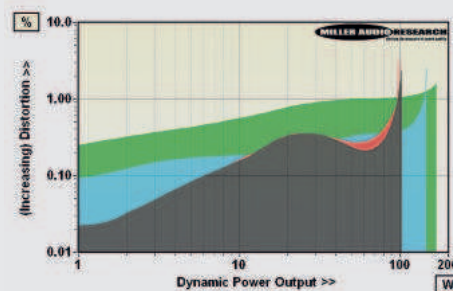
Sound Quality: 75%



ABOVE: Three line inputs – four with the tape monitor loop – are provided. High/low sensitivity switch at rear allows the integrated to be used as a power amplifier

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The most substantial amplifier in our test is also the most powerful, although Icon Audio's 85W specification for its Stereo 60 MkIIIm Signature (with KT120 or KT150 output tubes) was only just met on test into both 8/4ohm loads at 2% THD. There's sufficient headroom, however, to accommodate 100W, 100W, 145W and 170W into 8, 4, 2 and 1ohm loads under dynamic conditions [see Graph, below]. Distortion is slightly lower under continuous power at 0.04%/1W to 0.09%/10W and 0.12%/70W (all at 1kHz into 8ohm) while the hefty LDT output transformers keep distortion very low indeed at bass frequencies (0.12%/20Hz/10W). We've seen these output transformers used before [ST40 MkIIIm, *HFN* Mar '13] and the ST60 MkIIIm shares the same low (by tube standards) 0.8-1ohm output impedance, offering an extended response that's flat from 4Hz-20kHz (-0.5dB). The only quibbles with our sample concerned a poorer-than-expected S/N on the left channel (80dB, re. 0dBW) and weak stereo separation of 30dB at high frequencies. **PM**



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

Power output (<2% THD, 8/4ohm)	87W / 85W
Dynamic power (<2% THD, 8/4/2/1ohm)	100W / 100W / 145W / 170W
Output impedance (20Hz-20kHz)	0.75-1.05ohm
Frequency response (20Hz-20kHz)	-0.05dB to -0.52dB
Input sensitivity (for 0dBW/85W)	115mV / 1075mV (Low sens mode)
A-wtd S/N ratio (re. 0dBW/85W)	79.7dB / 99.0dB
Distortion (20Hz-20kHz, 10W/8ohm)	0.023-0.20%
Power consumption (Idle/Rated o/p)	220W / 413W
Dimensions (WHD) / Weight	430x230x380mm / 35kg

Ming Da MC34-ASE 'Dynasty Octet'

Based in Malvern, Ming Da Valve Audio UK was formed in 2011 to distribute amplifiers made in the Meixing Electronics Factory in Guangdong, China. Having made valve amps for over two decades, the factory now produces a vast portfolio of models.

The Dynasty Octet is in fact a special edition (SE) version of its 38W MC34-A entry-level model, benefiting from the Dynasty range's high quality 6mm-thick chassis, uprated JJ EL34 output valves, Ruby preamp valves and Audio Reference coupling capacitors. The company also claims greater levels of power supply smoothing.

It's a handsome chassis, although not family-friendly as its rotary input selector and volume controls are situated on the top plate and close to the hot tubes. Moreover, once its Plexiglas tube cover is fitted you can't access the input selector – and the RCU only governs volume up/down/mute. The Dynasty Octet's twin VU meters can be switched to indicate bias levels, but as adjustment is made internally this is best left to your dealer.

ENGAGING WARMTH

Of all the integrations in this month's test group it was this Dynasty Octet that sounded the most stereotypically 'valve-like', inasmuch as it delivered a noticeably warm and 'gentle' sound [see Lab

RIGHT: Rotary input selector and volume controls are on the top plate and thus inaccessible once the valve cover is in place

Report]. High frequencies were audibly rolled-off, the sizzling and shimmering of the cymbals in 'Just A Little Lovin'' noticeably muted by the Ming Da. Shelby Lynne's close-miked voice sounded overly hooded and 'cupped'. Similarly the effervescent live-in-the-studio recording of guitar wizard Carl Verheyen lost much of its sparkle and realism, the sound richly-smooth and simply too polite to be true-to-life.

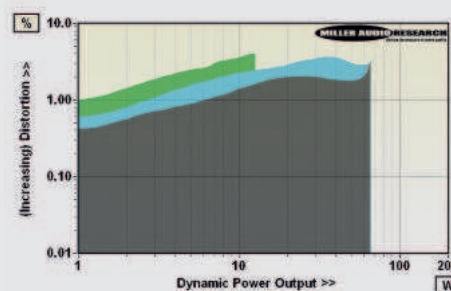
Yet despite its rolled-off treble it remained an engaging listen, serving up a seemingly boundless soundstage with 2L's hi-res Mozart recording. It also sounded bold and colourful playing Lifesigns' 'Carousel', demonstrating fine bass control and articulation while clearly keeping vocal sibilants in check. But if you prefer your music with a crisper edge and more transient realism the Ming Da was bettered by the other amplifiers in the group.

Sound Quality: 68%



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While Ming Da rates its latest MC34-A variant at a conservative 38W, the <0.8% distortion is more optimistic. In practice the amplifier is capable of higher power at commensurately higher distortion, ranging from 1W at 0.4% to 10W at 1.9%, 40W at 3% and 60W at a full 4% THD. Our sample had poor L/R (tube?) matching with distortion vs. level and vs. frequency markedly better on the right channel (9.2% THD at 20kHz on the left, 2.2% on the right, for example). Hum and noise was also poorer on the left channel with the A-wtd S/N ratio amounting to 72.4dB and 81.3dB, respectively (re. 0dBW). Stereo separation, ironically, was very good indeed for a tube amp of this price and specification at 75dB (midband) and 63dB/20kHz. Aside from its progressive distortion trend, the real 'character' of the amp will be determined by your choice of loudspeaker, the high 4.6-8.2ohm output impedance influencing the overall amp/speaker system response. Into a flat 8ohm load, the response rolls off quickly in the treble (-1dB/7kHz, -2dB/11kHz, -3dB/14kHz). PM



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



LEFT: Four line level inputs are provided on gold-plated RCA sockets alongside 4 and 8ohm speaker taps using high quality 4mm multi-way binding posts

Power output (<3% THD, 8/4ohm)	52W / 50W
Dynamic power (<3% THD, 8/4/2/1ohm)	60W / 60W / 60W / 10W
Output impedance (20Hz-20kHz)	4.6-8.2ohm
Frequency response (20Hz-20kHz)	+0.05 to -5.0dB
Input sensitivity (for 0dBW/38W)	34mV / 210mV
A-wtd S/N ratio (re. 0dBW/38W)	72.4dB (81.3dB R ch) / 88.2dB
Distortion (20Hz-20kHz, 10W/8ohm)	1.68-9.2%
Power consumption (Idle/Rated o/p)	130W/230W
Dimensions (WHD) / Weight	410x210x310mm / 18kg

PrimaLuna DiaLogue Premium



PrimaLuna, established in 2003 in The Netherlands, needs little introduction for regular *hfn* readers, its range of valve audio components built in China offering tremendous value. As its name implies, this version of the DiaLogue Integrated features premium parts such as an ALPS volume control, and uprated resistors and capacitors in critical sections of the signal path. The amplifier's front end is now all 12AU7-based, and it ships fitted with selected EL34 power pentodes.

But as mentioned before in these pages, 'tube rolling' to taste is positively encouraged by PrimaLuna, its amplifiers featuring a proprietary solid-state 'Adaptive Autobias' circuit that requires no user adjustment. On the right side of the chassis is a bias setting switch for EL34 or KT88s. We tested it with the latter.

As with the Canor, the DiaLogue Premium can be operated fully by remote control, its RCU including transport keys for a partnering CD player. The remote handset also includes a button for switching between ultralinear and triode modes on the fly. An optional MM phono board can be pre-installed or added later by your dealer.

IN SHARP FOCUS

As we've observed with other PrimaLuna amps, the DiaLogue Premium Integrated delivered a sharply focused image and appeared impressively composed at both

RIGHT: Rotary controls govern volume and input selection. On the left and right sides are the power and EL34/KT88-KT120 switches

frequency extremes, its sound bursting with detail and texture.

Both of our high-resolution recordings sounded vivid and full of dynamic contrast: Norway's Trondheim Soloists were clearly delineated in a spaciouly wide and deep sound image, while the exuberance of the Carl Verheyen Band's 'Lone Star' was simply exhilarating. Where the Ming Da, Xindak and Icon amplifiers appeared to sweeten the raw liveliness of these recordings, it was the PrimaLuna – and the Canor – which delivered their energy and lifelike transient details intact.

Playing Lifesigns' 'Carousel' the PrimaLuna proved wonderful at separating out the layers of keyboards and guitars. And where it could be criticised for lacking a degree of 'valve-like charm', this could be rectified to some degree by switching to triode mode.

Sound Quality: 80%

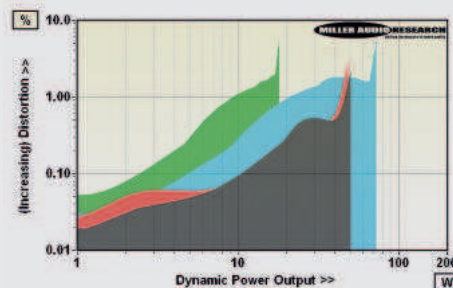


RIGHT: There are five line inputs, a home-theatre pass-through, a useful mono subwoofer output and a ground post in readiness for the optional MM phono stage



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Tested in ultralinear mode with KT88 tubes *in situ*, the DiaLogue Premium met its 2x36W specification at just 0.6% THD but continued to offer more power until its true clipping point (closer to 2% in practice here) at 2x45W into 8ohm and 4ohm via the 8 and 4ohm tap, respectively. There's slightly more juice available under dynamic conditions at 50W into 8/4ohm and a full 70W into 2ohm loads, but the increase in distortion between 1W and 30W (0.02% to 0.5%) is marked [see Graph, below]. The 3-4ohm output impedance (8ohm tap) is not as high as with some earlier PrimaLuna amps but it's still high enough to put kinks into its flat (± 0.5 dB) 10Hz-20kHz response with swings in impedance of the attached loudspeaker. This amp offers low-ish noise (84dB A-wtd S/N ratio, re. 0dBW) and a wide stereo separation (82dB midband) but L/R matching could have been better with distortion lower on the left channel (0.06-3.9% vs. 0.30-5.4% at 10W, 20Hz-20kHz). PM



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

Power output (<2% THD, 8/4ohm)	45W / 45W
Dynamic power (<2% THD, 8/4/2/1ohm)	50W / 48W / 72W / 18W
Output impedance (20Hz-20kHz)	3.05-4.0ohm
Frequency response (20Hz-20kHz)	+0.13dB to +0.55dB
Input sensitivity (for 0dBW/36W)	41mV / 250mV
A-wtd S/N ratio (re. 0dBW/36W)	83.6dB / 99.2dB
Distortion (20Hz-20kHz, 10W/8ohm)	0.064-3.85%
Power consumption (Idle/Rated o/p)	180W / 300W
Dimensions (WHD) / Weight	365x202x390mm / 22.5kg

Xindak CS300

Pronounced 'Zindak', Xindak audio components are designed and manufactured in Sichuan in the south west of China. The history of the company dates back to 1988, the firm currently producing a massive range of both valve-powered and solid-state audio components.

This pure Class A single-ended triode (SET) integrated is arguably the most esoteric amplifier in Xindak's line-up. Indeed, you might regard the CS300 a power amplifier with a volume control, since it's as minimalist as it could possibly be, with just a solitary single-ended (RCA) line input. If you've more than one source you'll have to add the cost of a switching box – or a passive preamp, perhaps?

The CS300 is beautifully finished for the price, the wood fascia with inset aluminium face plate and wooden volume control adding a touch of *je ne sais quoi*. And it is an SET amplifier using 300Bs – considered by many to be the purest of all valve designs. It employs a 5U4G rectifier tube with a 12AX7 and two 6SN7GT dual-triodes for the input and driver stages. The gain pot is not motorised – it's the only amplifier in this group that doesn't include remote volume control.

A CALMING WARMTH

'Exquisite, mellow, warm and melting' is how Xindak describes the sound of its CS300. Listening to it we'd be inclined to agree. Where the Mozart violin concerto appeared vibrant and brightly-lit via

RIGHT: Toggle switch on the left sets the amplifier into 'warm up' mode for 60 seconds; a second switch activates operation

the PrimaLuna and Canor amplifiers, the Xindak softened the instruments' leading edges somewhat, sounding altogether more easy-going and rounded. The tonal balance was more akin to that of Ming Da's Dynasty Octet and Icon's ST60 MkIII, although when hearing the bass guitar and drum kicks in 'Just A Little Lovin'' and Carl Verheyen's 'Lone Star' it became clear that it didn't possess the Icon's richly-textured and subjectively muscular LF grunt.

The CS300 sounded calm and seductive, its sweet treble quality removing any hint of sibilance in Shelby Lynne's voice. It also threw up a seductively large soundstage – well beyond the boundaries of the loudspeakers – but the image was a little soft-focused. With Lifesigns' 'Carousel' the layering of individual elements was highly praised.

Sound Quality: 75%



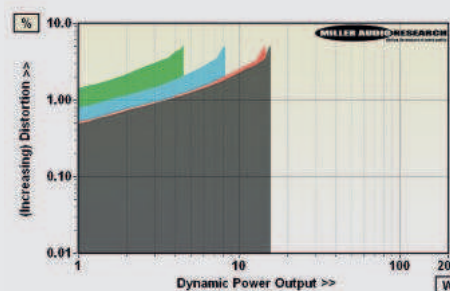
RIGHT: The CS300 has only one line input on RCA phonos, alongside 4 and 8ohm loudspeaker connectors using 4mm multi-way binding posts. All the terminals are gold-plated



hi-fi news
EDITOR'S
CHOICE

HI-FI NEWS LAB REPORT

As the only single-ended triode amp in our test, the Xindak CS300 is in a low-power class of its own, matching its 10W spec. into 8/4ohm at 2% THD while achieving a full 16-17W into 8/4ohm at the rated 5% distortion under continuous or dynamic conditions [see Graph below]. Designed to be partnered with very sensitive speakers, the CS300 is nonetheless one of the most capable and high performing 300B-based amps we've tested in *HFN*. Overall gain is a sensible +26.6dB (for line-level sources), the A-wtd S/N ratio is a very impressive 93dB (re. 0dBW) while the output impedance is <1ohm over much of the audio range (8ohm tap), only rising above 1ohm below 80Hz. As a result the CS300/speaker system response is more consistent, peaking at +0.5dB at 20Hz and +2dB/20kHz but flat through the midrange (the transformer resonance is at ~45kHz). Distortion obviously increases with level (0.5%/1W to 2%/10W at 1kHz) and with frequency (3.8%/20Hz and 4.8%/20kHz at 2W/8ohm). PM



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

Power output (<5% THD, 8/4ohm)	17W / 16W
Dynamic power (<5% THD, 8/4/2/1ohm)	16W / 15W / 8W / 5W
Output impedance (20Hz–20kHz)	1.63–0.60ohm
Frequency response (20Hz–20kHz)	+0.48dB to +2.1dB
Input sensitivity (for 0dBW/10W)	128mV / 430mV
A-wtd S/N ratio (re. 0dBW/10W)	93.1dB / 103.1dB
Distortion (20Hz–20kHz, 2W/8ohm)	0.65–4.8%
Power consumption (Idle/Rated o/p)	190W / 190W
Dimensions (WHD) / Weight	344x242x483mm / 27kg

GROUP TEST VERDICT

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I rather enjoyed listening to Ming Da's MC34-ASE, the 'Dynasty Octet', its smooth and relaxed demeanour every bit the 'sound of valves'. While not worthy of an outright recommendation – most audiophiles will consider its drooping frequency response and consequent 'softening' simply too euphonic – it should certainly be high on your list if you're clamouring for a dose of thermionic romance.

Its construction is robust, with neat point-to-point wiring and a smart satin finish to its heavyweight chassis. Remember, as our Lab Report shows you'll need to match the Dynasty Octet carefully with partnering speakers, due to its high-ish output impedance.

Also designed and built in China, Xindak's CS300 appears to be very well made, built by a company that produces literally everything in-house including its own transformers. This minimalist, low-powered single-ended triode amplifier represents the epitome of 'classic' valve amp design. Many tube lovers consider the 300B to be the sweetest and most musical-sounding valve to have graced the earth. Moreover the price of the CS300, resplendent with wood trimmings, is extremely keen. After

all, two-and-a-half grand is the sort of price one would have paid 20 years ago

for a 300B-equipped SET amplifier. But volume control is manual; the CS300 has only one input; and partnering it with very sensitive loudspeakers will be a prerequisite.

BUILT TO LAST

Against this, the ST60 MkIIIm KT150 from Leicester's Icon Audio is well-featured and impressively powerful.

Designer David Shaw is renowned as a stickler regarding quality control, travelling regularly to China to oversee the manufacturing of his designs, and he's proud of his amplifiers' built-to-last-a-lifetime construction.

This 'Signature' version, which will have been modified with premium-priced components after it arrived at Icon Audio's UK headquarters, didn't measure quite as well as models we've tested in the past, but in the listening tests it certainly packed an impressive punch with its bold, 'meaty' bass performance and luxurious tonality.

The Canor TP134 and PrimaLuna DiaLogue Premium Integrated proved difficult to separate in the listening tests, both amplifiers sounding vivid and vibrant, with good dynamic shading and excellent detail

retrieval. If you're new to valves the PrimaLuna would be a logical choice, as the company's proprietary 'Adaptive Autobias' circuit requires no user adjustment even when experimenting with different output tubes. It responds to changes in the temperature, voltage and audio signal, and the ageing of the valves, to maintain optimum performance.

This makes 'tube rolling' as easy and hassle-free as possible.

TOP HONOUR

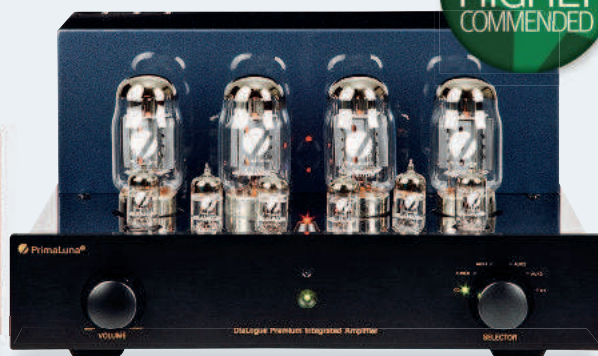
But in the end, the top honour in this month's

group goes to the Canor TP134, which deserves a higher HFN sound quality rating and costs £500 less than the DiaLogue Premium. This Slovakian-made valve integrated straddled the romanticised view of traditional 'valve-sound' with a more modern, crisp presentation and served up wide and open images of musicians performing in space. Like the PrimaLuna, it provides remote control input switching as well as volume control and it can certainly form the central hub of a high-end hi-fi system that won't break the bank. ☺

'If you are new to valves, the PrimaLuna is a logical choice'



ABOVE: Slovakian Canor TP134 with EL34s, an outstanding, fine-sounding design rated at 35W but capable of 45W



ABOVE: DiaLogue Premium Integrated, another great valve amp from PrimaLuna. Swapping its standard-fit EL34s is easy

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