APRIL 2014

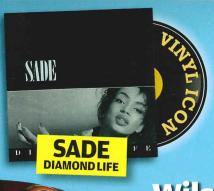
# THE HOME OF REAL HI-FI 1 THE HOME OF REAL HI-FI 1 THE HOME OF REAL HI-FI 1 THE HOME OF REAL HI-FI 2 THE HOME OF REAL HI-FI 2 THE HOME OF REAL HI-FI

& Record Review

**Exclusive** 

# MUSICMASTER

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**GROUP TEST** 

**Valve amps** 

Glowing tubes up to £3000

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Elite headphone amp

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• SHOW BLOG We report from Portugal and the USA • READERS' CLASSIFIEDS Hi-fi bargains galore

UK £4.50 US \$9.99 Aus \$9.95

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| 04 ||||||| Integrated valve amplifier, Rated at 36W/80hm (KT88) Made by: PrimaLuna, The Netherlands Supplied by: Absolute Sounds Ltd Telephone: 0208 971 3909 Web: www.primaluna.nl; www.absolutesounds.com Price: £2998 (£3294 with KT88s)

#### **GROUP TEST**

PrimaLuna DiaLogue

Premium

rimaLuna, 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 spaciously 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%

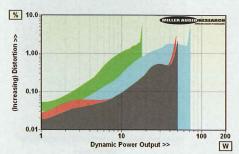


**RIGHT: There** are five line inputs, a hometheatre passthrough, a useful mono subwoofer output and a ground post in readiness for the optional MM phono stage



#### **HI-FI NEWS LAB REPORT**

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 40hm tap, respectively. There's slightly more juice available under dynamic conditions at 50W into 8/4ohm and a full 70W into 20hm loads, but the increase in distortion between 1W and 30W (0.02% to 0.5%) is marked [see Graph, below]. The 3-40hm output impedance (80hm tap) is not as high as with some earlier PrimaLuna amps but it's still high enough to put kinks into its flat (±0.5dB) 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), 40hm (red), 20hm (blue) and 10hm loads (green)

Power output (<2% THD, 8/4ohm)	45W / 45W
<b>Dynamic power (&lt;2%</b> THD, 8/4/2/10hm)	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. OdBW/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



Integrated valve amplifier. Rated at 10W/80hm Made by: Xindak, Sichuan, China Supplied by: Audio Emotion Ltd, Scotland Telephone: 01333 425999 Web: www.xindak.com; www.audioemotion.co.uk Price: £2450

#### **GROUP TEST**

Xindak CS300

ronounced '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: 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



**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.

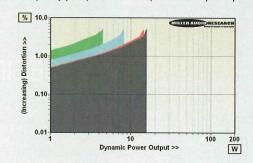
Sound Quality: 75%

### CS300 is in a low-power class of its own, matching its 10W

As the only single-ended triode amp in our test, the Xindak

**HI-FI NEWS LAB REPORT** 

spec. into 8/40hm at 2% THD while achieving a full 16-17W into 8/40hm 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 <10hm over much of the audio range (80hm tap), only rising above 10hm 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), 40hm (red), 20hm (blue) and 10hm loads (green)

17W / 16W
16W / 15W / 8W / 5W
1.63-0.60ohm
+0.48dB to +2.1dB
128mV / 430mV
93.1dB / 103.1dB
0.65-4.8%
190W / 190W
344x242x483mm / 27kg

## GROUP TEST VERDI

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

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 musicalsounding valve to have graced the earth. Moreover the price of the CS300, resplendent with wood trimmings, is extremely keen. After

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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 wellfeatured and impressively powerful. : Designer David

'If you are new

to valves, the

PrimaLuna is a

logical choice'

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.

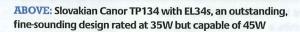
This makes 'tube rolling' as easy and hassle-free as possible.

#### **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





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

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