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PrimaLuna ProLogue Premium Integrated and JBL Studio 530 speakers make the grade!

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Light fantastic



PrimaLuna's new ProLogue Premium promises great tube sound for the masses; **Richard Black** warms to its charms...

DETAILS

PRODUCT:
PrimaLuna
ProLogue Premium
ORIGIN:
Netherlands/China
TYPE:
integrated amplifier
WEIGHT: 21kg
DIMENSIONS:
(WxHxD)
370x200x400mm
FEATURES:
• claimed output:
35W
• push-pull circuit
• EL34 valves as
standard; KT88
also usable
• four line-level
inputs
• 8 ohm and 4 ohm
speaker output
DISTRIBUTOR:
Pistol Music
TELEPHONE:
020 8971 3909
WEBSITE:
primaluna.nl



Oh, the allure of valves! Here we are, at least four decades after transistors should have replaced old thermionic vacuum tube technology completely, and yet valve amplifiers

keep coming. And the rate that they come, if anything, seems to be quickening! While there are plenty of excellent transistor amplifiers out there, many buyers simply want glass audio, it seems.

Understandable? Of course there's nothing like their sheer tactility; those glowing bottles make you feel great about your hi-fi before you've even played a note of music. Maybe there's psychology at work here? It's fair to say that whereas thirty years ago people looked at valves in an almost wholly negative light, nowadays they're regarded by many in some kind of awe. Even the naysayers grudgingly admit that tube amps have got "a certain something" about their sound.

Surely there's more to it than that? A global industry isn't kept afloat by the feel-good factor of some dull orange glow at the far end of the room, is it?

PrimaLuna certainly doesn't think so. The company is a relatively new arrival on the valve scene, set up as



recently as 2003 in the Netherlands. From the outset, it has manufactured in China to keep costs reasonable. In the early days of Chinese-made hi-fi, we saw some pretty dodgy examples of construction, particularly in details like finishing of chassis corners, internal cable routing and insulation, and occasionally soldering too. This changed rapidly in the early years of this century, and we don't recall ever raising eyebrows at anything in a PrimaLuna amp.

Indeed this example is built as well as anything we can think of in its price bracket. First impressions on removing it from its packaging are that the chassis is very well finished. There's an easily removed valve cage which fits perfectly in its mountings, and all the corners and surfaces are smooth. The transformer cover (that's the large area of case behind the valves) is apparently hand rubbed and, right enough, it's got a superb sheen to it.

The paint is not quite black, rather a charcoal tint with a little metallic flake in it, while the front panel is black anodised aluminium.

If I have one reservation about the construction, it's the way the transformer cover rings and resonates. This is a common problem with sheet metal parts like this, and is liable to have some sonic effect as it 'sings along' with the music. Indeed, it's a major reason why chassis-

The valves operate in a push-pull arrangement, for lowish distortion and high output power

damping accessories are so successful. Microphonic behaviour of electronics, especially valves, is a documented phenomenon but simple mechanical resonance is often at least as significant. Indeed it's made all the more insidious by the way it carries on after the stimulus has left off – this is what is often referred to as 'stored energy'. Of course, you could put damping pads on a ProLogue Premium, but that would rather spoil the look. A bit of internal damping might be no bad thing then, methinks. PrimaLuna, how about it?

Talking of internal design, build quality inside the amp is the equal of that outside.

Valve amps are often these days built around a circuit board, like practically all solid-state models, but some manufacturers prefer to use old-time assembly methods and that's largely the case here.

Underneath, all the valve bases are components – resistors and capacitors – neatly bent into shape, with relatively long leads soldered directly to the valve bases and to a stiff copper earth 'bus'. There

are also some ceramic tag-strips added to support the key passive componentry.

The components themselves are of some interest. PrimaLuna isn't enormously forthcoming about the circuit details, but it's easy enough to trace a valve circuit and this one has plenty of familiar features, topologically. It's implemented with physically large resistors, which not only handle relatively high power, but also work

better with the high voltages inherent in valve operation. They're not all high precision components though; most just don't need to be. It's likely that PrimaLuna has selected the ones that are critical, as in general it's clear they have been chosen for sound performance rather than spec. Capacitors are mostly well respected Solen branded plastic film units directly in the signal path, for example.

Although, as mentioned above, most of the circuit is hard-wired, there are some boards in evidence, the largest one carrying some – gasp! – integrated circuits. These are not used to amplify the audio, but instead to look after the biasing of the output valves. Bias is a long-term bugbear of valve amp design, and although there are many standard approaches, it's fair to say that none is entirely satisfactory.

PrimaLuna is proud of its 'Adaptive AutoBias' circuit, which monitors bias current (the current that flows through the output valves in the absence of a signal, which is critical to adjusting their performance). This isn't entirely a new idea. It is, however, an eminently sensible one. A little tricky to get right, but done well, it can extend the life of valves, accommodate unmatched (up to a point!) valves, and protect against potentially damaging upsets, in addition to its most obvious gain of making life easy for the user.

Here, it even allows the user to fit different valves, KT88s instead of the standard EL34 (if you want KT88 valves from the outset, they cost an extra £300). All one needs to do is flick a switch on the side of the amplifier and the AutoBias circuit is set up for the different type. The valves operate in a classic push-pull arrangement, for lowish distortion and reasonably high output power.

There are other helpful technologies within the ProLogue Premium. The Bad Tube Indicator is an LED in front of each power valve, which lights up to indicate that the valve in question is faulty. A thermal sensor in the power transformer shuts the amp down safely in the event of overheating, and further protection circuits guard against the ill effects of valve failures involving sudden high-current draw, which can damage output transformers. These are usually the most expensive parts of a valve amp, and therefore worth saving!

I remember being told once by a leading maker of solid-state amplifiers that his current models had as many components dedicated to fault monitoring and protection as to actually amplifying audio, and it makes sense for valve amps to be similarly overseen, especially when valves do die as a matter of course (after many years) and plenty of other fault conditions can occur. It's even more important in a 'entry level' tube product such as this.



Q&A...

RICHARD BLACK SPOKE WITH PRIMALUNA'S FOUNDER HERMAN VAN DEN DUNGEN ABOUT THE PROLOGUE PREMIUM...



RB: Are valves still able to offer something that transistors can't?

HD: Certainly, yes! Just use the most important 'measuring tools' you have; your ears! Even people only just introduced to valve sound will notice the relaxed, warm yet detailed sound from a well-designed tube amplifier. We don't claim that solid-state technology can't deliver good results, but in general it's much more difficult to achieve such results!

What about supply of parts? Are valves still readily available?

Yes. Primaluna products are designed around valves which are still in production. In addition, there are many NOS (New Old Stock) valves around. There is no certainly need to worry about the availability of valves.

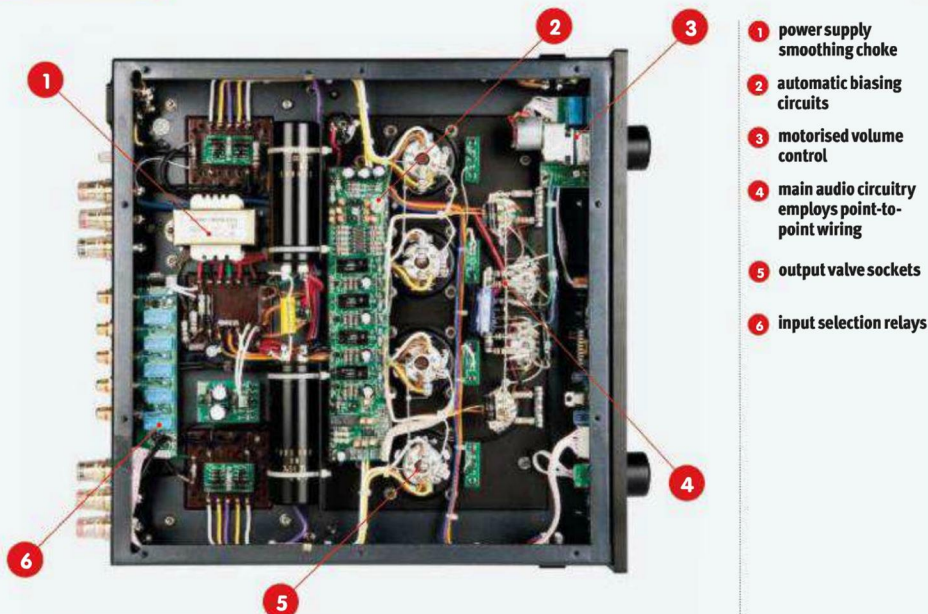
Don't valves wear out and need replacing eventually?

Valves do wear out. But all electronic parts in a circuit wear out, too. The advantage of valves is that you can change them more easily than the tyres of a car; that's certainly not the case with transistors. In addition, you can tune the sound of a well-designed valve amplifier according to your choice of valves – that's another thing you can't do with transistors!

Tell us a little about the automatic biasing circuit. Is this every valve-user's dream?

In the past, valve amplifiers were thought of as products only for technically schooled people. Now, thanks to Primaluna's Adaptive Auto Bias circuit, everybody can use a valve amp and change tubes without any technical knowledge. It really is 'plug 'n' play'! Not like in the past, fiddling around with a screwdriver and a meter, with the risk of doing something wrong. It's fair to say that Primaluna's Adaptive Auto Bias circuit has made the use and ownership of a valve amplifier as simple as any solid-state amplifier.

IN SIGHT



- 1 power supply smoothing choke
- 2 automatic biasing circuits
- 3 motorised volume control
- 4 main audio circuitry employs point-to-point wiring
- 5 output valve sockets
- 6 input selection relays

ON TEST

The question on every Prima fan's lips will be 'how does the Premium fare against Primaluna's earlier DiaLogue Two?' Tested in EL34/Ultralinear mode, our more recent ProLogue Premium is ostensibly less powerful at 2x35W/8ohm and 2x40W/4ohm (8 and 4ohm taps, respectively), but is a little more tolerant of 'difficult' loudspeakers, delivering over 60W under dynamic conditions into very low 2/1ohm impedances (4ohm tap). More usefully perhaps, the output

impedance of the Premium, while not especially low at ~3ohm across much of the audio range, is still half that of the DiaLogue Two.

So, not only is the frequency response more extended and unaffected by volume position (thanks to its decent buffering), any variations in the amp/speaker system response are less exaggerated. Ideally, it achieves -0.2dB/20kHz into 8/4ohm loads through its 8/4ohm taps and -0.1dB/+0.1dB into 2/1ohm loads (4ohm tap).

Despite its proprietary auto-biasing, our sample still showed a larger discrepancy in distortion between channels than I'd expected. Indeed, the difference in harmonic distortion between the right channel (0.1%/1W and 0.6%/10W) and left (0.6%/1W and 1.4%/10W) is rather greater than might be encountered between two different amplifiers. Versus frequency, the Premium shows far greater consistency with distortion between 0.6-1.2% (10W/8ohm) over much of the audioband. **PM**

HOW IT COMPARES

THERE ARE PLENTY of integrated amps around competing in the same price bracket. One fine example is the Primare I32 (£2,200). Electronically, it's as different as can be, with a Class D (switching) solid-state circuit. Sonically, the Primare wins out on detail, although it doesn't quite have the charm of the Primaluna.

If you're set on valves, you might also consider the Opera Consonance Cyber 100S Signature (£1,600-£2,000 depending on valve type). Overall though, the Primaluna is the more engaging and communicative amp, its extra cost being obviously justified.

You might be wondering about the name. 'ProLogue' sounds as if the range is a starter range, and that's correct; Primaluna's upmarket range is 'Dialogue'. And, yes, 'Premium' denotes the top model within ProLogue. As such, it combines features of both ProLogue and Dialogue ranges.

Basic specification is typical for a modern valve integrated, with four line inputs and a 'home cinema' input, which bypasses the volume control (in other words, a power amplifier input). One input can optionally be converted to phono operation, using an internal module. The output power rating is enough, experience suggests, to drive all, but the least sensitive loudspeakers to satisfying levels in a typical British living room.

Sound quality

I tried various speakers for reviewing purposes, including some with quite low sensitivity, eventually spending the bulk of the time using Bowers and Wilkins 803S floorstanders. That might not seem the most obvious

choice for valve compatibility – it's a slightly tricky load for a start – but I didn't find it a problem and it just confirms the long-held view that in the business of amp/loudspeaker matching, there's nothing like a bit of experimentation.

I actually started off with ATC SCM20 speakers; large standmount models which are a little insensitive but a relatively easy load, not least because they have a sealed box design and hence lack the complicated bass impedance characteristics of bass reflex models. It's proved a popular speaker with our listening panels over the years, who have always appreciated its direct and fuss-free presentation, as well as its good sense of rhythm. The ProLogue Premium integrated certainly made good use of both those characteristics...

Actually 'fuss-free' is a good summary of the amplifier's sound. It has surprisingly good insight and fine extension at both frequency extremes considering its tube design; tonality is commendably even and there is good rhythm. But the most

CONNECTIONS

- 1 pressed steel transformer cover is too resonant
- 2 grounding post useful if optional phono stage fitted
- 3 loudspeaker outputs for 4 or 8 ohm loads
- 4 home cinema input bypasses volume control
- 5 RCA phono line level input socketry

immediately obvious aspect of its performance is the way it gets on with communicating the essential character of the music playing. Be it heavy rock, unaccompanied folk songs, classical chamber music or even grand opera, the music is always convincing, lively and emotionally satisfying.

There's a lot more to a two-and-a-bit-grand amp than just sounding nice, however welcome that may be. To put it another way, I love the absence of hi-fi artifice, but still want to be sure that the hi-fi niceties are well dealt with. Let's take each in turn.

An excellent 'budget audiophile' design; well made and robust when driving loudspeakers

Valve amps are sometimes accused of having rather 'soft' bass. Extension may be okay but probably not seismic, and there's not quite as much grip and control of the speaker as the best solid-state amps can offer. I have heard one or two valve models that justify that comment, but plenty that refute it. This one is interesting, as it comes somewhere between those two poles. Its bass is, in fact, beautifully extended, with any loudspeakers (and in addition to those mentioned above I tried a couple of Spondor models and the original Quad ESL). Real trouser-flapping stuff may simply require more power, and we don't really care too much about that because it's a bit of a party trick. And how many normal music recordings do that anyway?

But with good recordings, both analogue and digital, that explore the lowest reaches in realistically subtle ways, this amp is highly assured. One of the most telling tests is quiet orchestral bass drum, as heard on any good recording of Berlioz's *Symphonie Fantastique*. The ProLogue Premium gave that a lovely sense of body and scale, but didn't unduly emphasise it and also left it in its proper stereo position, at the back of the orchestra. In this sense it didn't do what some lesser or older tube amps do, and give a euphonic, 'larger than life presentation'.

On the other hand, I felt that hard-driven rock could have done with just a *little* more precision in the lowest couple of octaves. You can hear the drum kit, bass guitar and the rest, but they sometimes lack bite. Rhythms are certainly satisfying, but not always the most attention-grabbing, and the precise timing of bass attack isn't always as on the money as with some of the better, similarly priced solid-state rivals.

Treble is simply lovely. I won't dwell on this because there's little to say. It's sweet, open and informative, and just goes on getting better if one changes from a slightly harsh loudspeaker to a sweeter one. Extension seems limitless, but there's never any hint of brightness, at least until one starts overdriving the amp which, interestingly, quickly results in the kind of graininess more often associated with solid-state amplifiers.

Midrange is largely neutral, though I did pick up some tonal highlighting here and there. I'm not inclined to get too upset about that though, as it's minor and very much the sort of thing one becomes accustomed to within minutes.

My reservations centre on its low level detail. It's quite good, but not exceptional. I spent some time swapping it against a couple of solid-state amps, and each time felt that the latter simply offered more precision and resolution. Putting the ProLogue Premium back resulted in a sound that one might describe as more beautiful but also less informative, with such aspects as instrumental definition less clearly apparent, and voices not as individually characterised.

Conclusion

Insight versus euphony is the classic trade-off with tube amps. The Primaluna ProLogue Premium integrated has great strengths, but if you're inclined to listen in an analytical way then it won't be for you. Rather, it majors on music making.

Overall then, it's a well made, fine sounding design that proved an endearing listening companion. It has *just* the right combination of talents to warrant an enthusiastic recommendation. ●

Hi-Fi Choice

OUR VERDICT

SOUND QUALITY



LIKE: Gorgeous treble, extended and open with never a hint of harshness

VALUE FOR MONEY



DISLIKE: Detail ultimately limited, making it harder to hear the inner goings-on of a multi-layered recording

BUILD QUALITY



FEATURES



WESAY: Excellent affordable tube amp that does the job asked of it

OVERALL

