

Blue Vinyl

Blue Aura add vinyl to their neat budget system. Noel Keywood comes away impressed.



We've reviewed Blue Aura's lovely little system before, with cute little V40 amplifier (£469) and small ps40 loudspeakers (£179). Now the company have come up with a matching turntable, the PG-1 (£259) that I'm reviewing here. I'll also quickly cover the system again, to get the PG-1 into context, as well as using it in an alternative reference system – because at the price this is as a neat way to bolt LP replay onto any system.

The PG-1 is a two speed (33, 45rpm) belt drive design that, judging by its arm, comes from Pro-Ject of Austria. Pro-Ject are adept at fitting extra bits into turntables, such as phono stages and digital outputs, to make them more adaptable – and that's what you get here. The PG-1 has a simple internal phono stage (MM only) so will feed any amplifier direct, but it can be switched out if an external stage or amplifier with its own phono input is used.

Unusually, there's a digital output in the form of Bluetooth wireless transmission, but only Bluetooth and nothing else – there's no S/PDIF digital output in optical or electrical form. The Bluetooth stream is 16bit / 44.1kHz – CD quality.

The PG-1 is fairly basic: there are no auto mechanisms. I had to hand cue the arm onto a disc, using either the damped cue platform and lever, or the headshell finger lift. I prefer to use my fingers and here the simple, flat headshell grip was difficult to grasp – as they always are. Headshell finger lifts need to be curved upward but – hey-ho – this is a minor point since most people will likely use the damped platform and it worked smoothly. Also, the finger lift can be replaced for a better one.

Bouncing cartridge onto LP always was a big problem with vinyl, resulting in bent cantilever and the cost of a replacement stylus. Audio Technica have a good remedy in their AT-3600 MM cartridge; it has a carbon composite cantilever able to

withstand such heavy use – and that is what Blue Aura fit to the PG-1. Yep – it's a workhorse that tracks at 3.5gm but the use of carbon fibre in the cantilever gives it a wonderfully smooth and deep sound that is entirely in-character with LP – and preferable I feel to the brighter sound of metal cantilevers, which most are. Ironic that a workhorse construction gives best sound – but that's a neat touch with this low cost cartridge, making it my budget favourite.

The arm has a fixed headshell and comes with cartridge attached – and changing the cartridge isn't easy I found. It can be done if you have the tools, steady hands and good eyesight but realistically it's a dealer job for anyone wanting to upgrade. Tracking force is set by rotating the counterweight on the rear stub, a common method – but in our review sample the weight was loose due to a small internal friction pad disintegrating.

Quoted cartridge weight range is a limited 3gm-6gm, suggesting



Blue Aura's PG-1 turntable flanked by the system it was designed to match, comprising ps40 loudspeakers at left and V40 amplifier at right, with remote control. The turntable can be connected directly to the V40 or via Bluetooth digital radio link.

cartridges over 6gm cannot be used, such as Audio Technica's VM95 budget series that come in at 6.1gm. The common upper limit is 10gm so the PG-1 has restriction here; it isn't a turntable for upgraders. I suspect Blue Aura's quoted weight range is inaccurate and a heavier cartridge would be compatible – but getting the tight fitting connectors off one channel to make internal amplifier measurements was difficult, so to avoid damage – that manufacturers don't like in review samples – I decided against swapping cartridges



Audio Technica's AT-3600 moving magnet cartridge is fitted as standard. The finger lift is removable and can be changed.

to check this.

Bias force is applied by a small counterweight and thread assembly. The arm has good bearings that allowed it to float freely when balanced out, so in all it performs well.

The plinth measures 420mm wide, 130mm high (lid closed) and 345mm deep (lid closed). Opening the lid makes overall depth 420mm due to rear overhang, and demands 400mm top clearance – important dimensions for anyone using a wall rack system. The three feet do not height-adjust so a level surface is needed.

Weight is quoted as 5.8kg (light-ish) and power is delivered by a small wall-wart 12V / 500mA power unit, having a 2m long lead. Low voltage external supplies like this with no earth connection eliminate hum.

The PG-1 has a well made and finished plinth with a single pair of phono socket outputs at rear that deliver either output direct from the cartridge or from the internal phono stage, a small slide switch making the choice. There's also a small blue LED at rear that winks to show Bluetooth connection.

I connected up to the Line input of our Creek amplifier, then Aux input of the VA40. However, the turntable's Bluetooth output can also be used to pair to the VA40, which has a Bluetooth receiver – more in a minute on this. As Blue Aura note the PG-1 can transmit to Bluetooth equipped headphones or loudspeakers, avoiding wires altogether. Bluetooth also means it can be sited away from the hi-fi, perhaps in a firm location.

Blue Aura's lovely little VA40

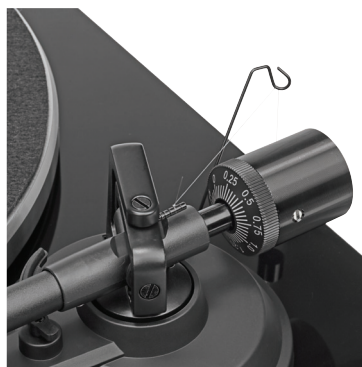
hybrid amplifier has a silicon power chip inside, fronted by valves, including an EM84 magic eye that glows green for added visual appeal – these things acting as radio tuning indicators in the past.

To initiate Bluetooth pairing I had to switch off power at rear then back on, at which point the unit paired both with the VA40 and a Cambridge Audio streamer (used for measurement) that confirmed 44.1kHz sample rate digital. There's quite a lot of latency in the system, so drop arm onto LP and there's a short silence until the music starts – eerie! Cue arm up and the music keeps playing – disconcerting! Happily it does stop when the buffers run out, after 0.5 secs or so I would guess.

The PG-1's electrical Line output is weak and the VA40's gain low via its 'RCA' phono-socket inputs so I had volume turned right up here. Swapping to the more sensitive AUX input (3.5mm input jack) gave apparently more volume (more gain in fact).

Blue Aura claim 30 Watts from their VA40 amplifier but our measurements show it delivers 10 Watts (15 Watts into 4 Ohms) as we found in our original review (July 2016 issue).

And finally, the little ps40 loudspeakers (£179) complete the system. Reviewed in our November 2016 issue we thought these were



Tracking force is applied by a calibrated counterweight and bias by a weight on a thread over a shaped wire support.

easily worth five Globes, especially at the very low price – superb value. They are a tad bright but clear and detailed – and with fast bass. Far better than they had any right to be at the price I felt.

SOUND QUALITY

I used the PG-1 with our Creek Evolution 100A amplifier connected to Martin Logan ESL-X hybrid electrostatic loudspeakers to assess its sound directly and – of course – through the VA40 amplifier also connected to the Martin Logans, then the ps40s.

Connected directly via the internal phono stage to the Creek I had to turn volume up but the PG-1 was clear, smooth and accurate. Running through a selection of our high quality review LPs I heard a sound that was well balanced and revealing. There was plenty of detail at high frequencies that made vocals stand out, the trumpet solo on Fanfare for the Common Man from 'Two Countries One Heart', for



An EM84 valve shows music level in a light blue fluorescent display that's entertaining – especially in the dark.

example, coming over with great presence and good pitch stability; there was no obvious wavering. Similarly, with I Look To You on the flip side, Cheryl Porter's vocals stood out with all the vivacious push LP can provide – a lovely performance.

Swapping over from the Creek Evolution 100A to Blue Aura VA40 there was slightly more dimensionality, courtesy of the valves. Although there was less absolute power – 10 Watts against the Creek's 100 Watts – the VA40 still went very loud, driving our Martin Logan ESL-X hybrid electrostatic loudspeakers with ease. It was a fine sound, communicating the smoothness of analogue and also its dynamic liveliness.

Via Bluetooth the sound became slightly softer and blander – almost a shame as the PG-1 deserves the convenience of a Bluetooth connection that is higher in fidelity. But you can't have everything at this price.

Feeding Blue Aura's VA40 amplifier and ps40 loudspeakers direct (phono leads) the PG-1 was lovely. Hugh Masekela's 'Uptownship' raced along, sounding vivacious – his trumpet rich in tone. Here, the carbon fibre cantilever of the AT-3600

showed its peculiar sonic strengths, pulling out the rich tapestry of sound from this wonderfully recorded LP, teasing out the timbral delineation that analogue can achieve. The sense of speed and pace came largely from the small ps40 loudspeakers that well complement the rest of this system. You don't get deep bass here, but you do get speedy punch. Think lively, dynamic and clear.

CONCLUSION

Blue Aura's PG-1 turntable is a neat little package with fine sound from the Audio Technica AT-3600 budget MIM cartridge fitted. The Bluetooth link is a convenience that allows the turntable to be sited anywhere, but quality is below that of direct connection. The PG-1 works well within Blue Aura's fine little system and also on its own, offering superb sound and value. It's definitely worth hearing this little set up – one that takes up little space, sounds lovely and costs – well – I'll say it again: peanuts!

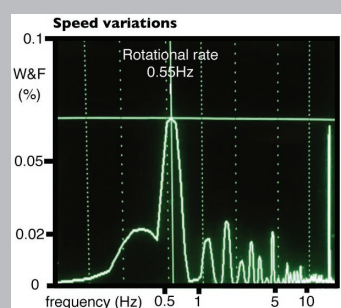


MEASURED PERFORMANCE

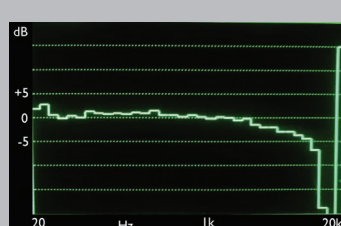
From a 3150Hz test tone (DIN 45-452 test disc) the PG-1 wandered from 3134Hz to 3142Hz, in random fashion over a 24hr period. That puts nominal speed at 3138Hz, a small -0.4% slow – not subjectively obvious in terms of pitch accuracy.

The speed wander did however result in a mediocre 0.2% Wow value, fairly typical of a budget belt drive

SPEED VARIATION



FREQUENCY RESPONSE BT



turntable. Our speed variation analysis also shows a flutter peak at right (15.9Hz) responsible for a poor 0.1% Flutter reading (0.04% typical). All the same, total Wow & Flutter, DIN weighted, was 0.13% – respectable for budget belt drive turntable.

The internal phono stage has a very low gain of x60 and overloaded above 10mV in / 600mV out, where distortion measured 1%. Although this is poor, in practice it will only affect music peaks and pass largely unnoticed. Equalisation was accurate, making frequency response effectively flat from 10Hz to 20kHz, there being no warp filter.

Frequency response of the AT-3600 cartridge, measured with pink noise, was relatively flat via the Line output (-1dB at 10kHz), but with treble roll down via Bluetooth (-3dB at 10kHz, as shown), giving a milder sound.

The PG-1 measured as expected for a budget belt drive, having no serious weaknesses. Considering price versus complexity, it was very good. NK

Speed error	-0.4%
Wow	0.2%
Flutter	0.1%
Wow & Flutter (DIN wtd)	0.13%

**BLUE AURA
BLACKLINE PG-1
£259**



OUTSTANDING - amongst the best.

VALUE - keenly priced.

VERDICT

Good budget turntable, well suited to Blue Aura's neat little system.

FOR

- bluetooth
- phono stage
- analogue sound

AGAINST

- cartridge weight range
- some speed variation

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