

# Break for the Border

## Pure Sound A30 with Border Patrol power supply

by Alan Sircom



Sometimes the whole is greater than the sum of the parts. Occasionally, those parts are already good and the whole ends up being something truly wonderful. That's precisely what happened when the Pure Sound A30 met the Border Patrol power supply. Both products have been checked out in *Hi-Fi Plus* in the past (the power supply was reviewed way back in issue 15, while the A30 received a 'Discovery' award in issue 48), and both did very well. Even so, that doesn't prepare you for how the good the combination can sound.

Although producing a power supply for the A30 has made for slight redesigns in the circuit of the Border Patrol box, the two are essentially unchanged from our first encounters. The Pure Sound A30 is a Chinese-built integrated amplifier with a healthy dose of input from Pure Sound's own Guy Sargeant. It's a push-pull amplifier (with a triode-operation switch), featuring a pair of Electro-Harmonix 6550 power tubes per side. These are in an auto-biasing circuit, so no need to fiddle around with long-bladed screwdrivers and the rest. The input stages feature 6N8P and 6N9P triodes, somewhat different from the 12AX7's commonly found in today's preamps, but the two 6N tubes were once highly respected for their neutrality and good dynamic range. It's not exactly a feature-led product, with just a power knob, a central volume control and a three-source line-level selector and a choice of output impedances, but it invites the question; who needs much more? Yes, a remote might be nice and an extra input for a phono stage would be a bonus, but realistically, it ticks all the basic boxes.

The Border Patrol box is a separate power supply for valve amplifiers. It's a valve-rectified choke and input filter designed to replace your high voltage supply in an existing amplifier. This not a user upgrade; the Pure Sound needs surgery to receive its Border Patrol'd ►

▶ juice. The surgery is not irreversible (apart from a hole drilled in the back panel of the amp where the connector socket sits), but we doubt anyone would go back.

In essence, the use of the power supply strips out the need for the pair of 5Z3P/5U4G rectifier valves in the Pure Sound's circuit. This means the two valve seats bang in the centre of the A30's top panel are empty. This shouldn't pose any difficulties in the real world, although if you have a toddler with an interest in pushing pointy



metal things into curiously attractive little holes, you need to cover these things up (but, if you have toddlers with a penchant for exploration, a valve amp is not a good idea on any level).

Now this is where it gets odd, to the naked eye at least. You are essentially replacing a choke-regulated power supply (in the Pure Sound) with... a choke-regulated power supply (in the Border Patrol). Surely this would generate little or no fundamental changes to the sound? In fact, the reverse is true. If anything, products engineered well enough to utilise a choke-regulated supply are the ones most likely to benefit from the upgrade. And that's certainly the case here.

So, just how good is this amplifier combination? Disturbingly good. Good enough to make me think that as the new Editor of *Hi-Fi Plus*, I'd already

encountered the exit point – first day in, best product ever. The first few seconds make you think of only one thing – the Audio Note Ongaku. Specifically, the effect the Ongaku had on listeners when they first heard it in the UK nearly 20 years ago. Back then, no one had heard an amplifier as dynamic, as natural (or as expensive) as the Ongaku. And that's what the first moments of play with this amp remind you of. Only without the bank-balance crushing expense.

There are two key aspects to that massive upgrade in performance; the dynamic range and the open,

unforced high-frequency sound. That dynamic power comes across both as a macro and microdynamic boost. The sheer heft and solidity of Pablo Casals playing Bach's *Cello Suite No 1* comes across, but so does the deft fingerwork and energy of his playing. It's easy to get the broad strokes right and it's easy to get the details sorted, but it's very difficult to get both of them right in the same device, especially at anything like the money.

Then there's that high-frequency sound, or rather the absence of a sound. There's no hardness, harshness, grit or glare to the treble. It merely extends up into the higher registers with all the grace of a really, really good valve amp.

Something that's really hard to get across in print is the 'shape' of the music. This is a nebulous term at best, vaguely related to timbre and tonal accuracy. That isn't all, though; an amplifier can be tonally accurate, temporally correct and have spot-on timbre and still not raise a smile, while there can be products that do everything wrong but make a sound so right people will forgive almost anything. The Border Patrol'd Pure Sound manages to do both; combining tonal accuracy with a captivating musicality. Of course, the absence of grain and glare from the high frequencies help.

There's a gloaming to the sound, like an audiophile twilight, with notes rising out of a surprisingly quiet, peaceful background. Were it not for the slight



glow of the valves, you'd be forgiven for thinking this were a solid-state design, or switched off. It's extremely quiet.

It's almost perfectly designed to silence solid-state proselytisers who dismiss valve amps as sounding 'slow'. Bass here is wonderfully resolved, combining that dynamic punch with a speed of attack and note-release that makes the amp keep time admirably. Often, those amps praised for their keen timing are demonstrated with music with extremely simple time signatures, often just a simple backbeat with ▶

▶ surprisingly little syncopation (the exception being Pink Floyd's 'Money', which is mostly in 7/4 time). The Pure Sound/Border Patrol combination doesn't rely on 3/4 or 4/4 time; instead, it portrays the time signature of a piece of music accurately and precisely irrespective of what that signature actually is. If the music places accent on the beat, the backbeat, the offbeat or no beat at all, this combo portrays it accurately and makes sense of the music.

As you listen more and become acclimatised to the performance of the Pure Sound/Border Patrol combination so you realise where that Ongaku moment begins to pall. What's missing is the subtlety behind the dynamic range. It's still a very detailed,



subtle and refined performer, but not one that draws a six-figure sum these days. So, where the Ongaku has the sheer grace and good sound to back up that powerful dynamic range, the Pure Sound/Border Patrol combo is a bit rough-edged.

This rough edge is as much to do with the functionality of the product and its finish as it is sonically. The finish – more than good enough for a sub-£2,500



amp – doesn't use inch-thick aluminium panels, anodised gold finishes or fancy LCD readouts. There's not even a remote control. Also, although the treble is sweet and extended and the midrange fluid and open, there is a limit to what essentially is a sub-£1,500 valve amp. It covers its tracks remarkably well. Then there's the power issue; 30 watts means some care in speaker selection is needed. But that was a given when first looking at the integrated amplifier on its own.

It's time to put this into some kind of perspective. This is an amplifier that costs slightly less than £2,500 in total – and yet does things that you might struggle to find at amps costing ten times that figure. But not everything – and that's a double-edged sword; where the standard Pure Sound is uniformly good in all aspects, lofting some musical elements into the top of the tree might tantalise those after across-the-board improvements. It's not for everyone; if you have inefficient loudspeakers and if you really can't stand the idea of a

pair of exposed valve seats running down the middle of the amp, look elsewhere.

On the other hand, if you always lusted after the best in valve amps without the best in valve amp prices, the Border Patrol'd Pure Sound A30 is the first port of call. Neither product

lose any of their well-documented magic in this fantastic pairing. ➤

#### TECHNICAL SPECIFICATIONS

Type:	Line-level integrated valve amplifier
Valve complement:	2x 6N8P, 2x 6N9P, 2x 5Z3P (not fitted), 4x 6550
Inputs:	3x single-ended RCA/phono
Outputs:	2x 4mm binding posts (four and eight ohm taps)
Output power:	2x 30 Watts RMS Class A per channel
Dimensions (WxHxD):	350x200x435mm
Weight:	25kg
Price:	£1,370

**Manufacturer:**  
Pure Sound  
Tel: +44 (0) 1822 612449  
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**Border Patrol PSU**  
Choke-regulated power supply upgrade for valve-based products (see website for options)  
Valve complement: 1x 6Z34  
Output Voltages: (selected internally, dependent on amplifier upgraded) approx 310V, 380V, 420V.  
Max Current: 260mA  
Dimensions: 345x145x220mm  
Weight: 11kg  
Price: £1,195

**Manufacturer:**  
Border Patrol  
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