

# Minimalist but Musical

**The AP10H headphone amplifier from British electronics specialist NVA may lack bells and whistles, but Chris Frankland finds it has hidden talents.**

I have a long memory when it comes to hi-fi and well recall NVA launching a pre/power amp onto the UK market back in 1982. And impressive it was too.

The company is still going strong but has expanded its range since then, now offering phono stages, cables, a balanced mains distribution unit – and the AP10H headphone amplifier

reviewed here.

NVA's ethos is all about using the simplest possible circuitry, combined with high-quality power supplies, no protection, no shielding, no filtering and no fuses.



The design is minimalist to say the least, with just a single line level input on the back that NVA suggests should be connected to your amplifier's tape output. There is a single 1/4in headphone jack output on the front along with a volume control. No adjustment is provided for headphone impedance.

The API0H measures 250mm wide by 65mm high by 205mm deep, and its bespoke acrylic case is bonded together so as to avoid electromagnetic interference from screws. That's why you'll see no photographs of what's inside the API0H here.

It uses a 50VA Toroid 'audio grade' mains transformer and an ALPS Blue volume potentiometer. NVA says that volume matching is achieved by a high-quality ceramic Vishay padding resistor with a standard value to suit 95% of headphones, or a higher value for very sensitive models.

The headphones are driven

directly from the output stage of the amplifier board, which NVA says is identical to those used in its 'speaker amplifiers. This, it says, makes it very powerful in terms of voltage and current and the company claims it will drive "any headphones on the market, regardless of impedance".

The API0H does not have a balanced headphone output but

"I heard a beautifully open, articulate quality to Benson's immaculate vocals"

then at this price point, £475, it is less usual than on more expensive designs.

To find out if NVA's minimalist, but rather smart-looking, headphone amp could pass muster, I reached for Focal's excellent Clear headphones at £1,399, which I like a lot. They are certainly very

revealing of differences and should therefore tell me a lot about the API0H's performance. I also had to hand a pair of Sennheiser HD599s at a far more modest £179. Would they also show what the API0H could do? Let's find out...

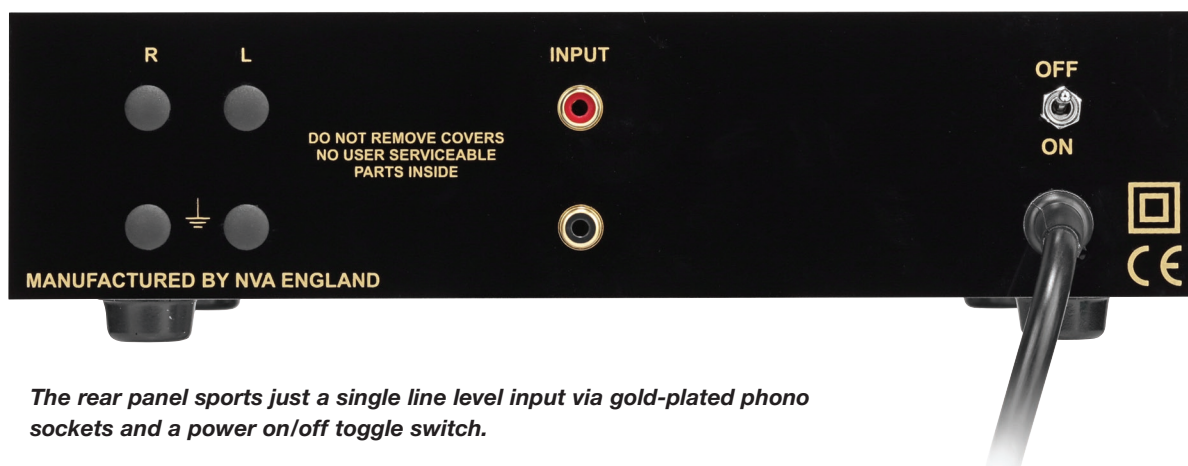
### SOUND QUALITY

To get the NVA up and running, I connected it to Tape Out of the

excellent Rega Aethos integrated amplifier, which I reviewed in the previous issue of Hi-Fi World. As a source, I used both the Audio Note CD4.1x CD player and the Audio Note TT3 turntable with Arm2 and IoI cartridge through an S9 transformer and the very capable Puresound P10 valve







*The rear panel sports just a single line level input via gold-plated phono sockets and a power on/off toggle switch.*

phono stage. Hooking the NVA up to the system was quick and simple.

First CD to spin up on the CD4.1x was George Benson's wonderful old classic Breezin', where I kicked off by listening to This Masquerade. The NVA did not take long to show its true colours, with a beautifully open, articulate quality to Benson's immaculate vocals, while giving good bite and body to his guitar. Bass lines had real oomph and impressed me both with their weight and tunefulness.

Next up was the excellent album Blue Country Heart from ex-Jefferson Airplane and (still) Hot Tuna guitarist Jorma Kaukonen, where he went back to his country/bluegrass roots, joined by dobro virtuoso Jerry Douglas and mandolin ace Sam Bush. And a fantastic recording it is too. On Blue Railroad Train, the NVA conveyed the violin, dobro and mandolin with great openness and presence, with excellent leading edge detail and body. And Byron House's bass line was deep, tuneful and really moved along apace. All in all, the NVA conveyed it with tremendous competence and really captured the feel of the track.

Switching the mood to jazz, I loaded up The Bright Side from Dave Koz's The Dance album – a brilliant album and a fantastic, dynamic recording. On this, the NVA captured the sound of his sax superbly, without any hint of harshness or glare. It also captured the weight and movement of the bass line well and separated out the various instrumental layers

with great precision.

It only took a quick spin of the track So Amazing (which, by the way, it is!) from Luther Vandross's Give Me The Reason album to convince me that NVA has a winner on its hands with the AP10H. His vocals were packed with emotion, dynamic, subtle, heart-wrenching – the full gamut of the Luther experience. Marcus Miller co-wrote the track and his deep, powerful, sinuous bass line was all of those things.

## CONCLUSION

The NVA AP10H proved extremely capable and also acquitted itself very well with the cheaper Sennheiser HD599s. At the price, I have to say that the AP10H turned in a truly superb performance and it can more than hold its own against competitors at its price level and above. It is one not to be missed off your shortlist.

*Thanks to my local dealer, Home Media, Maidstone, for loan of Rega Aethos. CF*

## MEASURED PERFORMANCE

The NVA AP10H was able to deliver 9V maximum into 300 Ohm headphones, but this fell to 1.7V into 40 Ohm headphones, suggesting high output impedance. An output of 1V into headphones is enough for shatteringly high volume so these outputs are enough for most.

High output impedance affects voltage gain. A gain of x4 (12dB) was available with 300 Ohm headphones but with 40 Ohm headphones this fell to x3 under measurement, suggesting output impedance of 20 Ohms.

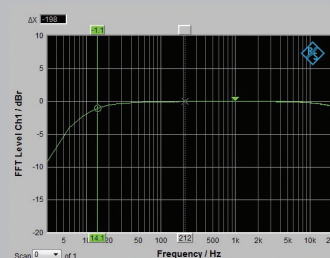
Frequency response held stable between loads, measuring 14Hz-20kHz as our analysis shows, at all volume control positions. Distortion was low at 0.02% and noise also low at -103dB.

The AP10H measured well, offering more gain with 300 Ohm headphones than 40 Ohm headphones, these being two common standards. It has sufficiently high output to go very loud, but unusually high output impedance. **NK**

**Frequency response (-1dB)** 14Hz-20kHz  
**Distortion (10kHz, 1W)** 0.02%

**Separation (1kHz)** 85dB  
**Noise (IEC A)** -103dB  
**Gain (300Ω load)** x4 (12dB)

## FREQUENCY RESPONSE



## DISTORTION



## NVA AP10H HEADPHONE AMPLIFIER £475



**OUTSTANDING - amongst the best.**

**VALUE - keenly priced.**

## VERDICT

This headphone amp had a detailed, dynamic and tuneful sound with great bass power and weight.

## FOR

- Detailed and dynamic with good subtlety
- Packs a real punch at the bottom end

## AGAINST

- no adjustment for headphone impedance
- no balanced outputs

NVA  
www.nvahifi.co.uk