

HIFI CRITIC

AUDIO REVIEW
MAGAZINE

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THREE BIG SPEAKERS

Paul Messenger gets to play with the Spendor SP200, the Graham Audio VOTU and the B&W 802 D3

A SYSTEM OF NOTE

Chris Frankland tries out a relatively affordable complete system from Audio Note (UK)

MAGICO S5 RE-INVENTED

Five years on, Magico has released a MkII version of the S5. Martin Colloms assesses the results

JL AUDIO + ATC

This issue we've given Kevin Fiske a solid-state sub/sat system, to try and expand his world view!

NVA's INTRO SYSTEM

£650 for a serious hi-fi system? NVA sells direct in order to keep prices exceptionally low

MQA DACs

Harry Harrison and Chris Bryant finally get to try a couple of MQA-equipped DACs

MUSIC & MORE

REVIEWED THIS ISSUE

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iFi Pro iCAN

Audio Note TT-1+Arm-One+iQ3

Audio Note OTO SE Phono Signature

Audio Note CD 1.1x

Audio Note AN-J Lx Hemp KEF Carlton

Spendor SP200

Graham Audio VOTU

B&W 802 D3

NVA Intro System

JL Audio CR-1

JL Audio Fathom F112 V2

Magico S5 II

Audioquest DragonFly

Meridian Explorer2

Dynaudio Emit M10

SLIC Eclipse C MkII

Vertex AQ Pico

Audience OHNO III

EnKlein David Digital





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I am sometimes accused of Luddism, less perhaps for preferring vinyl over CD than my scepticism about computer audio in general (he says, just as his server starts working again!). However, it seems that I'm by no means alone, as others too are finding that the computer is not necessarily the all-singing-and-dancing godsend that was originally assumed. I was chatting to a contributor who shared my suspicions and had stopped trying to use his NAS drive. And I recall another contributor, returning from holiday, had to restart his server some 20 times before it began working.

“But a CD player is essentially a computer” is sometimes heard (though in truth it's really only a dedicated microprocessor). However, because it's a fixed standalone unit it doesn't connect to the internet, and therefore doesn't keep downloading software updates, which seems to be the curse that plagues all computers these days.

Granted it's not very convenient to have hundreds of silver discs, all with those horrid jewel cases, just hanging around and getting in the way. It's so much handier to store everything on a NAS drive. That's certainly true, but for me the core problem appears to be to do with timescales. Some of my favourite albums are 50 years old, which is long before personal computers came on the scene. And a few of my favourite CDs even go back to the days of floppy discs, long before the internet allowed the people developing computer software to go off at half cock on the basis that it can always be fixed and downloaded later. On the music side it's difficult to decide who is responsible: customer demand spurs the music industry into creating new standards and formats, internet streaming services react, and hardware makers are required to keep up.

In the days when vinyl and CD were developed, it was important to get things right 'first time' as there was little or no chance of changing things later. (The evidence is seen in numerous failures that also occurred!) Attitudes seem to have changed today. I've recently endured two spells of 'no internet', each lasting a week. While it was interesting to realise just how internet-dependent we've become, one of the Openreach guys who came and fixed the system told me that the 'fault' had been due to a software change that had stripped off my ID. He added that it was quite normal to start using software when it was just 80% finished, as it could always be updated after any bugs had revealed themselves.

Those internet incidents might not be strictly relevant to computer audio, but they do represent a similar attitude. I shall therefore carry on using my server as long as it continues working because it's so incredibly convenient, but I won't lose any sleep if it stops working again. And I'll keep my CD player well warmed up just in case.....

Paul Messenger

Editor

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VOTU from Graham Audio - page 26



Magico has released a MkII version of the S5. Martin Colloms reports on page 38

iFi Pro iCan

CAN THIS HEADPHONE AMPLIFIER/LINE PRE-AMP MATCH ITS PRO EXPECTATIONS? YES, IT CAN, ACCORDING TO JOSÉ VICTOR HENRIQUES

HIFICRITIC
RECOMMENDED

Fi Audio is an offshoot of AMR (Abbingdon Music Research), but in price, size and specification it couldn't have fallen much further from its rather more hair-shirt mothership. It has joined the upsampling war, which was initially abhorred by AMR, and then went the whole hog with online instructions on how to listen to Spotify MP3 files as DSD512 (with a *Micro iDSD* using free *Fidelify* software).

That got my attention when I tested this amazing DAC/headphone amplifier in 2014. At around £400, it offered OctaSpeed conversion (DSD512/PCM768/Double DXD), and worked flawlessly at a time when one could pay ten times the price for a fraction of its awesome number crunching power; even today, many high end DACs cannot match its specifications. Numbers aren't everything, you may well say, and I'd have agreed until I heard DSD256 recordings in native format. I liked it so much I bought it for my own use, alongside Chord's *Hugo* and *Mojo* and an MQA-ready Meridian *Explorer II*. I had also tried iFi's original *iCAN* headphone amplifier (now in SE version), but found it somewhat lacking in transparency and pace, so the *iDSD* was my only successful iFi experience – until now.

This £1,495 *Pro iCan* is in a different league altogether. Being purely analogue it has no integrated DAC, so I used the *Micro iDSD* as its companion. I also tried all manner of headphones, dynamic, in-ear and planar magnetics, including the HIFIMAN *Edition X* and *HE1000* (*HIFICRITIC Vol9 No3*). Working in balanced mode, the latter became my evaluation tool of choice. (The *Pro iCan* can even drive electrostatic headphones by means of an external amplifier module.)

The *Pro iCan* also operates as a fine pre-amplifier, and I extracted more and better bass from a pair of active Focal *Book XS* bookshelf speakers than might have been expected. (As a headphone amplifier reference, I own a McIntosh *MHA100* [*HIFICRITIC Vol9 No3*] that costs five times as much as the *Pro iCan*, so I should know.)

Although small, the *Pro iCan* is surprisingly heavy for its size. It's a cute domestic desktop audio device with a top cover pierced by concentric circles that extend to the sides, shedding light (it glows reddish) and heat (it gets really hot). In the eye of the swirl, a glass porthole

renders visible the incandescent valve within.

The 'Pro' features include fully balanced circuitry input to output (differential mode) and 20V peak into 16ohms (balanced). Such unusual high power and a full assortment of balanced and single-ended connections will accommodate any headphone, however difficult (eg AKG *K1000*). And there's still the choice of +9 or +18dB of gain!

The same goes for the one balanced and three single-ended source inputs. Additional outputs address associated amplifiers and/or active loudspeakers, plus an (untested) electrostatic module. The 15V/4A DC power is supplied by an *iPower Plus*, an ultra-low noise 'battery type' adapter with active noise cancellation. I found the *Pro iCan* totally silent through headphones at maximum volume, in both solid state and tube modes.

The symmetric fascia has a hectic combination of output connectors, knobs, and diminutive toggle switches. The latter are so small and springy that the fingers may be burned by the top plate when switching them with a thumbnail. Single-ended and balanced 6.5 and 3.5mm output jacks are either side of the balanced 4-Pin XLR. Two small knobs operate the XBass and 3D features (see later), and two larger knobs supply volume and source selection. The volume control is a 6-track Alps motorised rotary pot for true balanced operation, so the *Pro iCan* follows ideal practice by keeping the two signal paths separate from input to output. All the audio circuitry is fully balanced and discrete, using GE 5670 triodes instead of stock 6922s, while the 'tube+' setting reduces overall loop-gain (and hence negative feedback) to a minimum. (According to iFi Audio, this mode is a trade-off between a valve's natural harmonics and its transient quality.)

The tiny moulded remote handset can get on one's nerves, as the volume knob moves in such small steps that you have to click 100 times just to get it half way to 12 o'clock, and holding down the button isn't an option. Operate the volume knob directly, and use the remote handset only for fine adjustment.

Sound Quality

Bass equalisation is available, at 10, 20 and 40Hz; I mostly used none but occasionally tried 20Hz without any adverse effects on voice. That cannot be said of the 40Hz position, where boost is audible

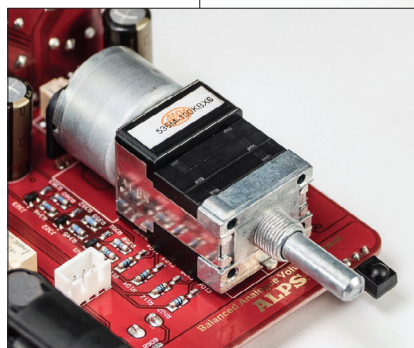
well above the specified frequency, as the circuit applies a minimum of 12dB boost. Processing is analogue, which iFi Audio claims is superior to DSD implementations. The facility might be useful for portable and in-ear cans but should be used judiciously with full-range headphones (though some planar magnetics like HIFIMAN *HE1000* can profit from a little boost).

Another small control engages *3D Holographic Sound*. I dread digital 3D processing, but this is a pure analogue matrix, not a cross-feed Blumlein/EMI Stereosonic derivative, nor a sound degrading DSP spatial algorithm. iFi Audio claims it: “corrects the spatial distortion in stereo recordings and increases the width of the apparent soundstage” with both headphones and loudspeakers. You have the choice of ‘Off’ (original recording width); +30 degrees; 60/30+; and 90/60+. At +30 the effect is subtle and barely audible, while the 90/60+ setting is arguably too obvious. Try it with live

concerts and movies to enhance the atmosphere, and it really widens the soundstage. The best analogy I can come with is that of a zoom lens: the wider the perspective the better the depth of field and the more laid back and smaller the central image becomes. I did not dare go beyond 30+, which served many recordings just right. Take it with a modicum of bass boost to bring back the reduced ‘body’ in the central image. Or just forget about it, which will happen once you get tired of playing with the knobs and switches and settle on a final setup.

iFi’s *Pro iCan* includes choice of a tube/valve or a solid state (J-FET) input stage circuit, leading to a bi-polar second stage, and a DC-coupled MOSFET-buffered bi-polar Class A power stage (Class AB with low impedance headphones at high levels). The LED-illuminated logo will change from white (the J-FET alternative input) to amber (tube/valve). The same logo also blinks green during warm-up when you initially switch the power on, and then turns red before stabilising on the selected operating mode; ‘tube+’ is a lower gain and feedback option for ‘tube’.

At first all the modes sounded vanilla, but after 50 hours or so the differences became more discernible: ‘tube’ adding a little ‘chocolate’ and ‘tube+’ a touch of delicious ‘caramel brûlée’. ‘Solid state’ sounded more neutral, lively and dynamic; ‘tube’ was more liquid and transparent, with a slightly laid back midrange, more high frequency information and better bass; ‘tube+’ sounded warmer, rounder with an uncanny sense of presence and a surprisingly



extended and articulate bass, despite less available loudness.

With ‘tube+’ I could hear second harmonic creeping in, which I consider inhibits that last ounce of transparency.

Lately, however, the toggle switch seems to remain in this position, presumably because the resulting euphony grew on me. iFi’s *CAN Pro* might be one of the most powerful headphone amplifiers around, but it’s hardly the most neutral if that toggle switch remains in the ‘tube+’ position.

I am well aware that referring to ‘a diaphanous veil of euphonic colorations’ may lead to an unfair caricature of valves painting music with the crazed gaze of Van Gogh; the distorted extravagance of Dali; the formal disintegration of Picasso; the chromatic subtlety of Matisse; or the crepuscular luminosity of Turner. Why do so many people still enjoy passionate and ornate valve-driven sound ‘paintings’ more than the sharply defined outlines of transistor charcoal drawings? I also like the ambiguity of light and shadows more than geometrically precise lines and angles, but with one condition: out of an apparent chaos of shapes and colours art must arise. And unlike life, art (and music is art) is not limited by reality.

Conclusions

The iFi *Pro iCan* therefore comes with a box of ‘sonic paints’, which can either be used to add some colour to one’s audio – or not at all, by switching to solid state. What more can you wish for? Listening to high resolution music files through headphones is a new trend, and iFi Audio here supplies the tools to make the best of it, without taking the best from your bank account.

Specifications

Gain	0dB, 9dB and 18dB (user-selectable)
Frequency Response	0.5Hz to 500kHz(-3dB)
Total Harmonic Distortion (Balanced/Single-Ended)	
Solid-State	Balanced ≤0.0015%/SE ≤0.005%
Tube	Balanced ≤0.002%/SE ≤0.005%
Tube+:	Balanced ≤0.012%/SE ≤0.2%
S/N Ratio (Balanced/SE)	>147dB(A)/> 137dB(A)
Output Power (16Ω, Balanced/SE)	>1.4W/>0.48W
Output Voltage (600Ω, Balanced/SE)	>23V/>11.5V
Input V (Pro iCan supply)	DC, 9V/6.7A to 18V/3.35A
Power Consumption	≤ 22W idle, 50Wmax
Size (WxHxD)	192.5x63.3x213mm
Weight	1.93kg
Price	£1,495

Subjective Sounds

PAUL MESSENGER

HIFICRITIC

AUDIO AND MUSIC JOURNAL

BECAUSE HIFICRITIC IS FUNDED BY ITS READERS THE SUBSCRIPTION COST IS NECESSARILY HIGHER THAN FOR MAGAZINES SUBSIDISED BY ADVERTISING REVENUE, THOUGH CERTAINLY NOT AS HIGH AS PROFESSIONAL SPECIALIST JOURNALS.

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Our independence from product advertising allows us to criticise and comment without fear or favour. The HIFICRITIC team scrutinises interesting and internationally important issues and equipment in depth and detail, technically and subjectively, and provides comprehensive investigations into the key issues facing high quality stereo music recording and reproduction today.

Martin Colloms, Publisher

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It's quite useful to have this back page available as a rolling diary, catching up with recent experiences and updating some of the things I might have overlooked. Saying that, this particular past quarter has been traumatic, thanks to multiple power amp failures. To summarise, I've been using a Naim *NAP500* with total reliability for around fifteen years (and *NAP135s* and *NAP250s* before that, going right back to the 1970s, again with utter reliability). However, I sent it back for a *DR* upgrade in mid-June, mindful of the fact that it would need 6-8 weeks running in after re-fettling, but unhappily, a week after it came back (and with Spendor's Philip Swift sitting right next to me), smoke arose from the power supply unit, due to a faulty component.

The '500 went back to Salisbury for repair, which took a week (thanks to an intervening bank holiday), so I installed an NVA *The Second Statement* as a replacement. Everything seemed to be working fine for a few days, but then the B&W boys arrived. Everything went swimmingly for an hour or so, and I was perfectly happy using the NVA amplifier as a substitute. Until, that is, Steve Pearce slipped a techno disc into the CD player. I then got carried away with the volume control, and I blew one of the NVA's channels. Timing couldn't have been worse as the 500 was already sidelined, so I had to dig out a very old (but recently serviced) *NAP250*, which happily worked out fine.

The 500 came back and I used it for another three weeks before I discovered another problem. This only revealed itself when I wound up the wick and started using serious power, whereupon one channel showed signs of instability. It was back to Salisbury for another week or so, and the problem this time turned out to be faulty soldering of a power transistor in the amplifier itself.

I'm not going to complain, as this is the first (and second!) time I've encountered any reliability problems with Naim components in forty or so years. And the *NAP500 DR* certainly sounded particularly good when it came back the second time. But the toing and froing has certainly chucked an unexpected spanner in the running-in and hence the reviewing procedures, for which I should apologise.

Why do I always discover niggles with digital audio devices after I've already written about them? I was certainly happy enough at getting Arcam's little *irDAC-II* to sort out my digital sources when it came to writing last quarter's *Subjective Sounds*, especially as it seemed to have sorted out the mild irritations I'd encountered with the *MkI* model.

Now I've found a new niggles that certainly affects the practicality of the *MkII* version. It doesn't seem to affect the co-ax or optical inputs that are used for my server and TV respectively, but the problem seems to involve the USB input which is normally used for my lap-top. If I switch the DAC on after the lap-top, all is well, and the lap-top recognises the presence of the DAC. However, when I shut down the lap-top and go to bed leaving the DAC on, the lap-top sometimes no longer recognises the Arcam DAC. In practice this can be rather inconvenient, as I tend to leave the DAC permanently 'on', but shut down the lap-top overnight, with the result that it sometimes (and somewhat unpredictably) loses the connection.

I also owe Andrew Rothwell an apology, for completely ignoring the M-C cartridge loading adjustment that is available on his *Headspace* step-up. It was only after we'd gone to press that I found the little bit of paper that told me to open up the unit and make the required adjustments to match cartridge and load...