HIFICRITIC

Volume 10 / Number 4 Oct - Dec 2016 £17 (UK)

PICTURES AT AN AUDITION

Bob Pyle records his somewhat traumatic search for the ultimate DAC

DIGITS IS DIGITS? MAYBE NOT...

Re-clocking may bring improvements when connecting your computer to a DAC. Andrew Everard tries three such devices.

CLEARAUDIO CONCEPT

Chris Bryant assesses an intriguing 'plug'n'play' turntable/cartridge combo from Clearaudio

TEDDY PARDO HPN & TEDDYDAC

Martin Colloms & Chris Bryant try out a headphone amp and a DAC from the Teddy Pardo brand

MUSICAL FIDELITY M6 ENCORE CONNECT

Designed in-house, MF's new hard-disk music player could be the start of something big

CHARTWELL LS 3/5

Paul Messenger compares a new Chartwell LS3/5 to an original Chartwell LS3/5A from the 1970s

MUSIC & MORE



REVIEWED THIS ISSUE: B&W 800 D3, Apple MacMini, Auralic Altair, Arendal Monitor, Fostex HP-A4BL, Fostex TH610, C.E.C. CD5, Totem Sky, Teddy Pardo HPN, Teddy Pardo TeddyDAC, Musical Fidelity M6 Encore Connect, CH Precision A1, Google Cast, Chartwell LS3/5, Allnic H-3000, Clearaudio Concept MC, Q Acoustics 3020, QED Supremus, Teddy Pardo UnitiServePS, Mutec MC-3+ USB, Gustard U12, iFi S/PDIF iPurifier, Berkeley Audio Design Alpha DAC Reference Series 2, Roon, HiFiBerry

Contents

- 4 STAN'S SAFARI No36 Stan investigates electronic simplicity and complexity.
- 6 ON DISTORTION (2) Julian Musgrave chunters on quietly in a corner
- 8 B&W 800 D3 Paul Messenger gets to try out the 802 D3's bigger 800 D3 brother
- 10 THE SECONDHAND MAC MINI Andrew Everard looks at a low-cost route into computer audio
- 12 AURALIC ALTAIR Paul Messenger dips a toe into streaming.
- 14 ARENDAL MONITOR Martin Colloms tries an inexpensive stand mount from this Norwegian operation's 1723 series
- 16 NETWORKING OPPORTUUNITIES Andrew Everard explores the best solutions to network audio listening
- 18 FOSTEX TH610 Chris Bryant checks out the latest headphones from Fostex
- 19 FOSTEX HP-A4BL A Fostex DAC/Headphone amp seduces Chris Bryant
- **20 C.E.C. CD5** Paul Messenger tries a one-box belt-drive CD player from C.E.C.
- 22 REACH FOR THE SKY! Chris Frankland reports on a new Totem bookshelf speaker.
- 24 TEDDY PARDO HPN & TEDDYDAC Martin Colloms & Chris Bryant try out a headphone amp and a DAC from the Teddy Pardo brand
- 26 MUSICAL FIDELITY M6 ENCORE CONNECT

Designed in-house, MF's new hard-disk music player could be the start of something big

28 CH PRECISION A1

Martin Colloms assesses an unusually wellfeatured Swiss power amp

32 GOOGLE CAST

Andrew Everard describes the cheap puck that could revolutionise audio

34 CHARTWELL LS 3/5

38

49

52

53

60

Paul Messenger compares a new Chartwell LS3/5 to an original Chartwell LS3/5A from the 1970s

36 DIGITS IS DIGITS? MAYBE NOT... Re-clocking may bring improvements when connecting your computer to a DAC. Andrew Everard tries three such devices.

> **ALLNIC H-3000** Kevin Fiske assesses a remarkable valve phono stage from Korea

- 40 ROON Is Roon the answer to smarter streaming? Andrew Everard reports
- 42 PICTURES AT AN AUDITION Bob Pyle records his somewhat traumatic search for the ultimate DAC
 - **Q ACOUSTICS 3020** Martin Colloms assesses the compact twoway bookshelf speaker from Q Acoustics' latest range
- 50 CLEARAUDIO CONCEPT MC Chris Bryant assesses an intriguing 'plug'n'play' turntable/cartridge combo from Clearaudio
 - **BITS & PIECES** Martin Colloms tries out the QED Supremus speaker cable and the Teddy Pardo UnitiServePS

CHORD DAVE Rafael Todes tries out Chord's new and relatively upmarket DAC

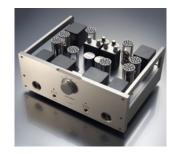
- 54 HIFIBERRY (FOR RASPBERRY PI) Andrew Everard examines the add-ons that HiFiBerry makes for the Raspberry Pi computer
- 55 JAZZ PICKS Greg Drygala with three recent Jazz releases
- 56 THE BEST OF CLASSICAL A clutch of recent classical releases collected by Colin Anderson
- 58 ROCK, POP AND OTHER NICE MUSIC

Half a dozen new releases chosen by The Chord Company's Nigel Finn

SUBJECTIVE SOUNDS How internet streaming could take over hi-fi



Bowers & Wilkins 800 D3 on page 8



Allnic H-3000 on page 38



Chartwell LS 3/5 on page 34

HIFIC RITIC Vol10 | No4 Oct | Nov | Dec 2016



Editor | Paul Messenger

Writers Colin Anderson Chris Bryant Martin Colloms Stan Curtis Greg Drygala Andrew Everard Nigel Finn Kevin Fiske Chris Frankland Paul Messenger Julian Musgrave Bob Pyle Rafael Todes

Publisher | Martin Colloms

Design | Philippa Steward

Published by

HIFICRITIC Ltd. Registered in England No.6054617 Registered Office: Winnington House, 2 Woodberry Grove, London, N12 0DR info@hificritic.com www.hificritic.com

> Printed in the UK by Premier Print, London

HIFICRITIC is a printed publication available by subscription only.

© HIFICRITIC Ltd 2016. All rights reserved. Any unauthorised editing, copying, reselling or distribution of the whole or part of this publication is prohibited. The views expressed in any articles in this magazine should be taken as those of the author or the person quoted unless indicated to the contrary. While HIFICRITIC endeavours to ensure the accuracy of the information contained in this publication, its accuracy cannot be guaranteed and HIFICRITIC.COM accepts no liability for any use of, reliance on or the accuracy of such information. his has turned out to be a most interesting issue, as I've managed to pass many of my digital audio responsibilities over to the excellent Andrew Everard. I've never really had much personal enthusiasm for the digital stuff, and while that wasn't really a problem through the '80s and '90s, when CD was the only significant digital game in town, a subsequent proliferation of digital sources, devices and software have made my analogue preferences feel more than a little isolated. (Despite recent news that the UK sales value of vinyl discs had actually overtaken download sales for the first time since the 'vinyl revival' first began!)

I'll carry on experimenting with new digital sources as and when they become available – indeed, this very issue sees me trying out 16-bit streaming for the first time, and with some rather positive results (see also Auralic review, pp12-13, and Subjective Sounds, p60). But I'll no longer feel obliged to keep up to date with the latest digital developments, which, to be honest, is quite a relief.

Instead I'll be able to bang on about some of my favourite hobby horses, such as the premature death of rock music, the ludicrous and totally unjustified price inflation that seems to have afflicted hi-fi (and house prices) in recent years, and so on. (And I should manage to come up with some other issues before we go to press, I'm sure.)

Although it's neither finished nor ready for publishing yet (hopefully it'll appear in our next issue), I've started writing a piece with NVA's Richard Dunn, who has some very radical ideas about where the hi-fi business is heading. To summarise his views, he reckons that the effect of the internet has barely started yet, and to a great extent will undermine the role of the traditional specialist dealer.

He's very critical of the way prices have increased, and claims that this rise is often down to increasing trade margins to compensate for a shrinking marketplace. That's as may be: it may well be true but I'd have to undertake some further investigations to confirm it. (I do, however, believe that money itself has been dramatically devalued by something that we're supposed to call 'quantitative easing'; I prefer the phrase 'printing money', but maybe that's another story.)

Dunn's arguably most contentious claim is that internet forums might have rendered regular hi-fi journalism – and indeed the traditional specialist hifi dealerships – effectively redundant. He may have a point, inasmuch as every hi-fi enthusiast out there now has a voice that he/she can use to discuss equipment and its performance.

It's a powerful argument, as the availability of space for anybody to express an opinion has certainly expanded, and should allow a more democratic discussion on the merits or otherwise of specific items or combinations of equipment. Dunn's theory is that this will lead to sale-or-return deals on equipment *via* eBay and forums, and dramatically shake up the profit margins, which is certainly an interesting point. We shall see...

Paul Messenger Editor

Digits is Digits? Maybe Not...

JUST GOT YOUR HEAD ROUND THE SIMPLICITY OF CONNECTING YOUR COMPUTER TO A DAC? RE-CLOCKING MAY BRING IMPROVEMENTS, SAYS ANDREW EVERARD

The biggest trend in DACs of late has been the appearance of asynchronous USB inputs. Not only does this simplify the route for music from hard disk to hi-fi – all you need is a USB-A-to-USB-B cable – but it also opens up the whole world of ultra-hi-res music. Indeed, provided the DAC can handle it, and a software player on your computer is compatible with the files, anything up to 32-bit/384kHz PCM files, or DSD256/ 11.2MHz (4x standard SACD).

It's all very simple: if you have a Windows PC you

might need a driver to unleash this capability, but a *Mac* running something like Audirvana or Roon will handle it natively, and then it's just case of plugging into the DAC, and off you go.

Except....it's not quite that easy, and the direct connection isn't the only way. Neither is that home computer you use for everything from e-mail to online banking always ideal. Which is why I've been looking at some add-ons designed to improve the sound of 'computer audio', and even exploring the odd alternative.

HIFICRITIC

Contact: www.affinityaudio.com Tel: 01923 265400

Mutec MC-3+ USB

I first became aware of the c£800 Mutec *MC-3+ USB* though someone else raving about it. A couple of friends asked me if I'd come across this little black box from a German-based pro audio company, which could make a huge improvement when placed 'twixt computer and DAC. As I've recently been putting together (or indeed taking apart) a *MacMini* computer as a dedicated audio digital audio source (elsewhere in this issue), I was intrigued.

The Mutec *MC-3+ USB* is one of a range of studio-oriented digital clock devices, and while it does a lot more than I could want, what got me interested was its ability to take in a digital stream on a range of connections (including asynchronous USB), re-clock and convert it, and then output it via conventional S/PDIF or AES/EBU to an external DAC.

That got my interest as two of the digital converters I use (a Naim nDAC and the digital inputs of an NDS network music player), have no provision for a direct computer connection. Yes, you can stream music at up to DSD64 to the NDS over a network, but that didn't help my experiments with the nDAC much.

With the Mutec inserted and connected using a USB cable, it's possible to use the unit's (only slightly



confusing) menu system to set it up, so that it not only re-clocks incoming PCM data and outputs a cleaned-up form to the DACs, but also converts DSD into a form that's usable with DACs without native 1-bit capability.

I have tried various programs to convert DSD to 176.4kHz or 88.2kHz 24-bit files (including the excellent free DSDtoFLAC), but somehow such conversions don't sound as convincing as those processed through the Mutec. Put simply, this little unit gives the sound more punch, more conviction and less 'grain', revealing more detail and ambience, better slam in the bass, finer textures in bass strings and drums, and just that bit more character on voices and lead instruments.

What's more, trying it with a variety of DACs able to take USB input reveals that even with 16-bit/ 44.1kHz CD-quality files (not to mention highersampling-and-bit-rate PC content), it manages the same trick of making the music sound more natural and less mechanical.

Certainly the *MC-3+ USB* isn't cheap. It will cost around £800 either online or *via* UK pro audio distributor Affinity Audio. But it has had a welcome effect across a wide range of DACs with which I have tried it over recent months, and it does prove rather addictive. If only Mutec could make a simpler version without all those word-clock inputs and outputs, aimed at the audio enthusiast rather than the studio professional and at a lower price, it might well be a runaway success. Even as is, Recommendation is clearly mandatory.

Subjective Sounds

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.

Our budget is directed towards obtaining the very best research and writing from the very best freelance authors, whom we encourage to express themselves fully in print, an opportunity not always available *via* established publishing regimes.

Through the use of a virtual office, we aim to be exceptionally cost effective. Subscription management, production, printing, editorial, design, laboratory measurement and journalism are scattered around the world, yet are also efficiently and almost instantaneously linked at the touch of an e-mail send button.

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

SUBSCRIPTION DETAILS: Full details are provided on the WWW.HIFICRITIC.COM website, including foreign rates and secure electronic payment. If you prefer to pay direct for the UK please copy this page and send the filled in form, including a cheque payable to HIFICRITIC Ltd and send it to: HIFICRITIC, 29 Flask Walk, London NW3 1HH.

Our website supports the day-to-day activities, reports, archive and download material, while the Journal contains the primary contemporary output of our editorial team. The HIFICRITIC audio journal is a full colour print magazine with about 40,000 words of original editorial content per issue. To see what is in our most recent issue, see our *current issue* page.

Name
Address
Town
Post Code
Country
Email
Please give your choice of issue number for start of subscription (see above) Issue no

UK SUBSCRIPTION PRICES: (mail included)

1 Year £65, for four, quarterly issues

'm not sure whether it's really appropriate to use this column to bang on about a means of receiving music over the internet, but Qobuz and TIDAL have loomed large in my leisure activities over the past couple of months, and have actually proved a generally positive experience.

I could see the attraction of streaming services when I visited the children, who had relatively small collections of pre-recorded music and seemed happy enough listening to compressed MP3-encoded files. They seemed perfectly content, streaming off Amazon via the TV and a pair of tiny B&W *MM1*. But I couldn't really see the relevance to my own situation, in view of my large music collection and dislike of MP3 encoding.

I was therefore rather surprised to find myself quite seriously impressed when recently experiencing the 16-bit streaming delights of Qobuz and TIDAL, courtesy Auralic's *Altair* (see pp12-13). Journalists get to play with such things without having to pay a subscription, which is certainly a worthwhile bonus, and it does mean that I can try more than one streaming service without the usual cost penalty. But I'm still not certain I can sensibly advise which one is the better. Auralic rates Qobuz, but on my explorations it seems a triffe less capable than TIDAL.

The bottom line is if course that streaming involves computers, and computers do have a will of their own, and if you don't like them (and I don't), they don't like to cooperate. I was happily listening to a live Ry Cooder concert from San Franscisco when the stupid thing simply stopped. I did eventually get the concert starting again, after spending about an hour restarting several things several times. But it was a frustrating experience that did nothing for either my blood pressure or my attitude towards computers.

Still, I suppose I'd never have heard Ry Cooder's version of Wooly Bully if I hadn't had access to a decent streaming service, so I ought to be grateful for such a merciful experience...only for the damn thing to crash again a few minutes later. Maybe I'd just chosen a 'difficult' album... who knows.

When everything's working fine, I have to say that streaming has a lot going for it, because of the way it can expand even a reasonably comprehensive record collection. I'm particularly fond of live recordings, and found a number of alternative versions of familiar (and sometimes not so familiar) tracks. Quite often I've acquired a studio version of an album without realising that live performance versions were also available from around the same time.

Being a Deadhead at heart, I was particularly pleased to notice that a whole collection of live recordings had now been released from the *Europe '72* tour. I've had the vinyl triple album for many years, but had never expected to hear the set that I'd heard live at the Bickershaw Festival more than forty years earlier. (I do remember the sun coming out for the first time that weekend, just as the Grateful Dead took to the stage!)

At the same time, I did try to play four Rolling Stones albums (including my all time favourite *Let It Bleed*), only to be told that none of my selections was available. It all seems to be rather random, as I had no trouble finding some very rare Beatles tracks, along with the regular mainstream material. It all seems to be very unpredictable.

What really matters, however, is that streaming is all about the music, not the hardware. The 16-bit/44.1kHz services like Qobuz and TIDAL sound just fine to these ears *via* the Auralic *Altair*, so what's not to like: it's a golden opportunity to expand your record collection dramatically for £20/month.