FREE READER CLASSIFIED ADS IN THIS ISSUE!

COMPETITION
WIN AN ORTOFON QUINTET BRONZE CARTRIDGE WORTH £499! (UK ONLY)

GRAHAM AUDIO BBC LS5/9
monitor loudspeakers

WORLD DESIGNS HD3S
headphone amplifier EXCLUSIVE!

THORENS TD-209 EXCLUSIVE!

YAMAHA NS-F901 SOAVO
loudbspeakers

PROJECT USB BOXES EXCLUSIVE!

BAYAN SOUNDBOOKX3

RESONESSENCE INVICTA MIRUS DAC

ARCAM FMJ AVR 750 AV AMPLIFIER

9 PAGES OF LETTERS - THE BEST WINS A PAIR OF KEF Q100 LOUDSPEAKERS! (UK ONLY)
"Drums had real punch behind their sound and I felt the timing had much more cohesiveness ... the real delight was the Indigo. It offered insight and musicality and made listening to digital sources a far more involving experience" – Tony Bolton

Find your nearest retailer at www.chord.co.uk and get closer to your music.

Hand built in England by music lovers. Enjoyed by music lovers all over the world. Now listen...
Whoops! We didn’t manage to get our review of The Beatles in Mono LP box set into this issue — so I apologise to all those readers eager to find out about this new release.

You can read about the Abbey Road demo of these new albums in this issue, on page 25. OK, it isn’t the same as an album review, but in there you’ll see that the world consumes surprisingly large quantities of vinyl with a release like this – and it dwarfs production: there are not enough LP stamping machines to cope.

The upshot is, review samples are secondary to meeting pre-order demand. I’ve been begging for ours and we have been assured a box set will arrive soon – but too late for this issue I’m sorry to say. The review will now – hopefully – appear in our next (October) issue. We have a special ‘authentic’ system ready and waiting for them, featuring Ortofon’s dedicated 2M Mono SE cartridge and sparkingly new Tannoy Kensington Gold Reference loudspeakers, whose dual-concentric predecessors were used in Abbey Road Studios at the time. So I hope you like it – when we can publish it!

We had more success with other planned items. Yamaha’s new Soavo loudspeakers were eagerly awaited, because we loved their predecessors. Yamaha are a company dedicated to audio quality, graced by the pedigree of their historic piano division, and we all heard this in the new NS-F901s reviewed on p10.

If you use headphones, you owe it to yourself to hear a valve headphone amplifier — and we review a great one on p22. It’ll drive any phones, no matter how insensitive and exotic, and give that lovely big, spacious and liquid smooth sound only valves offer.

There’s no whiff of the past in the Invicta Mirus DAC reviewed on p36. This is as hot as it gets in digital today – no fewer than two ESS Sabre32 DAC chips strapped for full performance lurk inside — and what a sound!

So the success of LP today defeated us, you could say — but perhaps that is no bad thing: vinyl will forever sound wonderful. There’s still plenty in this sizzling September issue — I hope you enjoy it.

Noel Keywood, Editor.

testing (see www.hi-fiworld.co.uk for full explanations of all our tests)

To ensure the utmost accuracy in our product reviews, Hi-Fi World has extremely comprehensive in-house test facilities, and our test equipment - from big names like Rohde & Schwarz and Hewlett Packard - is amongst the most advanced in the world.

Loudspeakers are measured using a calibrated Bruel & Kjaer microphone feeding a Clio-based computer analyzer, using pulsed and gated sinewaves, in a large room to eliminate the room’s influence. Pickup arm vibration is measured with a Bruel & Kjaer accelerometer.

No other UK hi-fi magazine has in-house testing, and none has access to such advanced tests across all types of equipment. That’s why you can depend on Hi-Fi World reviews.

verdicts

OUTSTANDING
EXCELLENT
GOOD
MEDIocre
POOR
VALUE

amongst the best
extremely capable
worth auditioning
unremarkable
flawed
keenly priced

ELECTRONIC MAGAZINE

Go to our website www.hi-fiworld.co.uk to buy an electronic version of this magazine, individual issues, back issues or a subscription.

Distributed by Seymour Distribution Ltd. 86 Newman Street London, W1T 3EX Tel: +44 (0)20 7396 8000. Printed by Artisan Press Limited. Tel: +44 (0)118 235 3221.

Our Agents in Malaysia Millennium Hi-Fi & AV Simon Chang Showroom & office, 500-1-3 First Floor Wisma Indah (Shen Court), Jalan Tun Razak 50400 Kuala Lumpur, Malaysia Tel: 603 9283 8171 Fax: 603 9281 3762 e-mail: info@millennium-audio.com

All unsolicited submissions and goods are at the owner’s risk. We accept no responsibility for such submissions, nor do we undertake to return them.

No material may be reproduced from this magazine without the publisher’s written permission. © Audio Web Publishing Ltd.
LOUDSPEAKERS

YAMAHA NS-F901 SOAVO LOUDSPEAKERS 10
Noel Keywood is impressed by Yamaha's latest floorstanding loudspeakers

GRAHAM AUDIO BBC LICENCE LS5/9 MONITOR LOUDSPEAKER 40
A classic BBC design from 30 years ago still has the magic to make sweet music, says Jon Myles

BAYAN AUDIO X3 SOUNDBOOK 46
Jon Myles goes out and about with Bayan's latest portable Bluetooth loudspeaker

SONY SRS-X9 HI-RES WIRELESS LOUDSPEAKER 66
Sony's latest soundbar 'speaker system packs a lot into a small space, says Jon Myles

AMPLIFICATION

WORLD DESIGNS HD3S HEADPHONE Amplifier 22
Tony Bolton dons his headphones and listens in to World Design's latest amplifier

ARCAM FMJ AVR 750 AV RECEIVER 53
Noel Keywood gets to grips with Arcam's new feature-packed AV receiver

OLDE WORLDE

OLDE WORLDE REEL TO REEL 60
Tony Bolton rediscovers the joys of Technics RS-1500 reel-to-reel tape deck
DIGITAL
15 PARASOUND HALO CD1
Martin Pipe is seduced by the music-making abilities of Parasound's up-market CD player

36 RESONESSENCE INVICTA MIRUS DAC
Resonessence's new hi-tech DAC is a star performer, Jon Myles discovers

58 PRO-JECT USB BOX S+
Pro-Ject's latest USB DAC makes a big impression on Jon Myles

FEATURES
25 BEATLES SESSION
Noel Keywood heads to the famous Abbey Road Studios in London to hear the first UK presentation of the forthcoming The Beatles in Mono LPs

49 DIRECT TO DISC
Paul Rigby gets the low-down on ex-White Stripes' man Jack White's Direct To Disc vinyl operation, in Nashville, USA

VINYL
80 NEWS
All the latest and greatest vinyl releases for you, from the pen of Paul Rigby

83 THORENS TD209 TURNTABLE
Tony Bolton takes Thorens' latest turntable for a spin

89 ACCESSORIES
Vital vinyl accessories reviewed by Tony Bolton

CABLES
65 TITAN CABLES
Tony Bolton plugs in and takes a listen...

REGULARS
7 NEWS
Words from the world...

27 MAIL
Nine pages of your views, wonderful as always...

44 SUBSCRIPTIONS
Ensure your copy every month and save money too!

62 AUDIOPHILE VINYL
Paul Rigby rounds up the latest audiophile vinyl releases

69,71,73 OPINION
The team get to grips with matters music, hi-fi and life!

78 DIAL-A-DEALER
A comprehensive guide to UK hi-fi retailers

91 COMPETITION
Your chance to win a Ortofon Quintet Bronze cartridge worth £499

93 CLASSIFIEDS
Two pages of second-hand bargains

96 NEXT MONTH
What we hope to bring you in the next sizzling issue...

97 ADVERTISERS' INDEX

98 CLASSIC CUTS
Paul Rigby on The Impressions
Audio products designed to combat phase distortion

"In short, I can honestly say the Tellurium Q Black Diamond interconnects and speaker cable are the very best leads that I have ever had in my system."

Tony Bolton, Hi Fi World 2014

HiFi Pig Review

"The top end was clearly beyond what the K2 [Audioquest] had to offer me and I was really trying to hear something that presented itself to me which would lead me to believe that it was a bit over the top, harsh and spitty but it just didn't happen. A true increase in perceived bandwidth was shining through with strings giving small nuances of reverb that I hadn't heard so well articulated before."

"Nordost-with-substance"

Dan Worth, HiFipig.com

The new Ultra Silver

Find out why more and more people are talking about Tellurium Q® products.

You do not have to believe all the incredible reviews, just test our products for yourself against anything else in the same price range and hear for yourself the tangible difference.

www.telluriumq.com +44 (0)1458 251997
**NAD HAS SPOTS**

NAD has introduced Spotify Connect to its M50 Digital Music Player. While the focus of the M50 is on high-res audio listening, the addition of Spotify Connect allows music lovers the ability to playback millions of songs on the M50 using any iOS or Android device. NAD's M50 will offer Spotify Connect to Spotify Premium subscribers. Owners will need to upgrade their M50 Digital Music Player to software version 1.10.0 and download the updated iOS App v1.10.0 or Android App v1.10.0 to be able to experience Spotify Connect.

Click on [www.nadelectronics.com](http://www.nadelectronics.com) for more information.

**CHORD REFRESH**

Chord Electronics is refreshing its Chordette range, replacing the QuteHD DAC with the QuteEX, a 384kHz PCM/DSDI28 device compatible with today’s high-resolution DXD (Digital eXtreme Definition) music files. The QuteEX is an upgraded version of Chord Electronics’ QuteHD and has been available alongside the QuteHD since the EX’s introduction in October, offering music lovers the option of decoding at up to 384kHz PCM and DSD128 over USB, against the QuteHD’s 192kHz PCM and DSD64.

QuteHD models can be upgraded at the factory for £200 plus shipping, which represents the cost differential between the two products. Existing QuteHD owners should contact their local Chord retailer for further details.

Click on [www.chordelectronics.co.uk](http://www.chordelectronics.co.uk) or call 01622 721444 for more information.

**KEF EAR TIPS**

KEF has announced an improvement to its M200 in-ear headphones. The product will be packaged and sold with Comply ear-tips, improving fit, comfort, noise-isolation and performance. The material conforms more faithfully to the unique shape of the user’s ear canal, creating a better seal. That means better noise isolation, as well as a more comfortable fit.

There is no price increase as a result of this improvement. Even better, existing users who have registered their product will be provided with the Comply ear-tips at no extra charge.

The M200s use unique ‘DDD’ (Dual Dynamic Driver) technology, a genuine two-way system – unusual within in-ear headphones at this price point. Each side contains a 10mm driver for the bass and a 5.5mm dynamic neodymium driver for midrange and high frequencies.

The M200s also utilise an adjustable Secure Arm that helps to keep them snug in the ear, and a rigid aluminium driver housing that eliminates unwanted vibrations and raises sound performance. Price for the earphones is £150.00

For more information click on [www.keh.com](http://www.keh.com) or call 01622 672 261

**MCINTOSH MUSIC**

A new music stream designed for those who want to access music, direct to their PC, tablet or phone. The service is freely available either as a direct stream from the McIntosh Music website or via a free app for both Android and iOS devices.

Controlled via a stylised, McIntosh interface, complete with illuminated power output meters, the web version features a sliding volume control and pause/mute function, plus a number of additional functions, including links to the main McIntosh website and social media pages, a ‘share’ facility and scrolling track information, akin to an RDS display.

The apps add increased functionality including enhanced graphics, album artwork and direct links to Amazon, enabling users to directly purchase music featured on the service by simply tapping the album art.

McIntosh Music is freely available as a web stream or as an Android and iOS app.

Tel: 01202 911886 or click on [www.jordanacoustics.co.uk](http://www.jordanacoustics.co.uk) for more information.
DEEZER AND DOLBY ON ONKYO

Onkyo has confirmed that it now offers direct access to the Deezer audio service on its new range of AV receivers. Deezer will be available on the new TX-NR535, TX-NR636, TX-NR737, TX-NR838, TX-NR1030, TX-NR3030 and PR-SC530 models from Onkyo’s 2014 range, as well as on future products.

Deezer is a music service that delivers a multi-local music experience to more than twenty-six million music fans worldwide. Available in more than thirty languages, Deezer gives access to a catalogue of 30 million tracks and allows each subscriber to build up his own library over time, enjoy personal music recommendations and listen to dedicated personalised and themed radio channels.

To use Deezer on their Onkyo receivers, users will just need an Internet connection and a Deezer+ Premium account. Subscribers will then be able to enjoy unlimited music via their home cinema system.

Onkyo has also announced that its upcoming TX-NR1030 and TX-NR3030 network A/V receivers, flagship PR-SC530 Network A/V Controller, HT-S7705 and HT-S970STHX HTiB (Home Theatre in a Box) systems and SKS-HT678 and SKH-410 speaker packages will launch with Dolby Atmos.

The company will also release a firmware update later this year enabling Dolby Atmos on its mid-range TX-NR636, TX-NR737, and TX-NR838 network A/V receivers. Dolby Atmos has been developed to give the impression that sounds are coming from above you. It is not based on channels but audio objects such as a child yelling, a helicopter taking off or a car horn blaring. Phone 08712 001996 or click on www.onkyo.co.uk for more information.

CAD CABLE

Computer Audio Design has launched a new USB cable using proprietary technology. The cable uses a shielded independent cable for the power line designed to mitigate high-frequency noise from a computer’s USB power interface.

CAD is so confident music lovers will enjoy the cable it is offering a 30-day no quibble money-back guarantee.

The CAD Cable is available now priced at £480 for the standard 1.1m length. Call 0203 397 0334 or log-on to www.computeraudiodesign.com for more information.

PRIMARE REFERENCE 60

Primare has launched its 60 series pre/power amplification system. Designed and built in Sweden, the PRE60 is a pre-amplifier housed in an alloy steel chassis. It features an OLED display and incorporates balanced XLR inputs, four pairs of RCA inputs, RS232, trigger and IR inputs.

The PRE60’s integrated DAC/media board offers streaming connections such as USB, iPad and LAN. The Primare App for iOS or Android is available to control functionality including input selection, volume and the browsing and selection of online and stored media.

The matching A60 is a fully balanced 250W UFPD power amplifier designed to provide high power output in a fully balanced configuration. Each channel incorporates unbalanced RCA and balanced Neutrik XLR inputs, as well as WBT Nextgen speaker terminals. Unbalanced input signals are converted to balanced signals by an integral conversion stage. Prices are: PRE60 preamplifier £6,500 and A60 power amplifier £6,500. Click on www.karrna-ay.co.uk or call 01423 358846 for more information.

MONITOR AUDIO SOUNDBAR DROP

Now priced at £800 (down from £1,000) and with a comprehensive firmware upgrade, the ASB-2 soundbar accompanies the Airstream S300, which has also experienced a price drop to £250 from £350.

Click on www.monitoraudio.co.uk for more information.

ADL EARPHONES

The new Alpha Design Labs (ADL) EH-008 earphones feature dual dynamic drivers, treated with Furutech’s Alpha process (a cryogenic and ring demagnetisation treatment). An 8mm low-to-mid frequency driver is positioned in a bass chamber located directly behind a high-frequency titanium film driver, delivering phase-correct output to the ears. The inner and outer housings of the EH-008 are designed for driver stabilisation while the outer ring seals improve sound isolation.

The chassis features diamond-cut aluminum end plates and carbon fibre enclosures. Price is £175.

Call 0118 981 4238 or click on www.soundfoundations.co.uk for more information.
ATLAS HYPER INTEGRA

Atlas Cables has announced the latest addition to its mid-priced analogue interconnect Hyper range: the Hyper Integra. Handmade at the Atlas Cables factory in Scotland, the new cable introduces Atlas' in-house Integra RCA plugs to its Hyper range for the first time.

The Atlas Hyper Integra consists of a central conductor made up of 90 individual stands of OCC copper wire with 99.9997% purity. Insulated by an extremely low-loss foamed polyethylene dielectric, the return conductor is a two-layer braid made from a total of 252 strands of Ultra-Pure OFC (Oxygen Free Copper). This double layer of tightly woven wire mesh is wrapped over a PVC foil to provide 100% rejection of RFI.

The Atlas Cable Hyper Integra is available now in the following lengths: 0.5m, £105; 0.75m, £115; 1m, £125; 1.5m, £145; 2m, £165 & 3m, £205.

Call 01563 572666 or click or www.atlascables.com for more information.

NEW NEO & NOMAD

Distributor Renaissance Audio has announced two new products for its product portfolio. The Moon Neo 430HA is a headphone amplifier with an optional DAC included.

A fully balanced amplifier, it includes an output stage using a discrete transconductance circuit topology, selectable gain setting (14dB or 20dB), an oversized power supply and a defeatable analogue crossfade circuit. Rated at 667mW at 600 ohms and 8W at 50 Ohms, The optional DSD256 and 32bit, PCM capable DAC can be used with virtually any digital source such as a computer for streaming music, satellite TV receiver or Blu-ray player. Price is to be announced.

Also coming is a new turntable from VPI. The Nomad is an entry level package that comes complete with a headphone amplifier, phonostage and pre-mounted Ortofon 2M Red cartridge. Price is £795.

Call 0131 555 3922 or log-on to www.renaissanceaudio.com for more information.

HEAD: FROM OLD TO NEW

Martin Pipe is of course no stranger to these pages. He is now offering to put his collection of obscure formats, some of which have been featured in Olde Worlde, to good practical use. He invites you to get in touch if you have any dusty old media you want transferred, with the painstaking attention to detail of an audiophile, to CDs/DVDs or digital files. Among his capabilities are many consumer and professional audio, film and videotape systems. Martin can also affordably undertake the conversion of vinyl/78, DVD/ laserdisc and CD collections to digital files - ideal for those migrating their music and film collections to today’s servers and personal players. More information is available on www.tekktalk.co.uk - contact him directly on 07802 200660 or tekktalkuk@virginmedia.com with your requirements.

DAMSON HEADBONES

Damson has announced Headbones. The design creates sound by sending vibrations through the temporal bone straight to the inner ear, without blocking the ear canals. This means that the potential dangers of wearing headphones while cycling, skiing, snowboarding, skateboarding, running or crossing the road are eliminated, as the wearer can still hear the surrounding environment.

It also arrives in a limited edition carbon fibre finish. Headbones utilises Damson’s Incisor Diffusion Technology (IDT), also found on the Twist and Jet wireless speakers. Damson Headbones are compatible with any Bluetooth-enabled device and users can expect up to ten hours of music from a single charge. Price should be £99.

For more information click on www.damsonaudio.com.

ADIDAS ORIGINALS BY MONSTER

Already available in both over-ear and in-ear flavours, the over-ear model launched in three classic colours: black, white and blue. This month, three additional colours hit the streets: yellow and green over black, white and red over white and blue and red over white. Nicknamed ‘country colours’, these limited-edition colour combinations pay homage to the national football team colours of Brazil, England and France.

Monster has struck an exclusive deal with John Lewis to retail the Brazil, England and France-inspired over-ear headphones in the UK. Only 2,000 of each have been produced worldwide. Price is £219.95.

Click on www.johnlewis.com for more information.
Noel Keywood is beguiled by a beautiful-looking new floorstanding speaker from Yamaha.

So stereo loudspeakers are highly valued in bright the living room. If that's a view you've heard from - or other members of the family, then harmony and even happiness might be improved by Yamaha's lovely NS-F901 loudspeakers, priced at £2999. "The cabinets have Yamaha's signature piano black finish and are designed by Toshiyuki Kita, whose work is featured in the permanent collections of museums all over the world, including the Museum of Modern Art in New York and Centre Georges Pompidou in Paris," Yamaha tell us.

Brushed aluminium trims and white driver cones contrast well with the deep gloss black lacquer finish of the NS-F901s to give the eye a treat. OK, they are still big loudspeakers but they do have a classy air about them, making a clear statement of quality. It isn't one subverted by reality either: the NS-F901s feel beautifully made in the flesh.

At 30.5kgs the NS-F901s are heavy, but not cripplingly so. Internal bracing aids cabinet strength and rigidity to the 106cm high cabinets (when on their spikes). That figure puts them in the popular 1m high floorstander category, which these days an overwhelmingly large number of loudspeakers occupy, so the Yamaha's fit in with the crowd.

The cabinets have non-parallel sides to lessen discrete resonances, as well as slanted internal baffles and braces for the same reason; symmetry is not wanted in loudspeaker cabinets because it promotes discrete resonances, or so popular supposition has it. In practice I have found when designing loudspeaker cabinet chambers it isn't so simple; chambers have discrete resonances no matter how weird you make 'em, but their Q is usually...
The drive system comprised Quad QMP monoblocks, driven by a Mirus Invicta DAC (reviewed this issue), fed by an Astell&Kern AK120 acting as a digital transport, playing CD and high-resolution digital up to 24/192. Also feeding the Quads directly was an Icon Audio P53 valve phono stage (it has a volume control) hooked up to a Timestep-tuned Technics SL-1210 MkII Direct Drive turntable with SME309 arm and Ortofon Cadenza Bronze moving coil cartridge.

Moving up and down in front of the speakers confirmed that they focussed properly low down, as measurement had suggested, imposing a low optimal seating height. I had to remove the rear feet and unscrew the front feet to their limit to tilt the cabinets back to correct this, and still a little more backward tilt was required - so ideally the legs need to be longer. I sat reasonably low, ear height 100cms, 350cms away (11.5ft) in our 25ft long listening room.

Ortofon Cadenza Bronze moving coil cartridge.

These loudspeakers when listening to Benjamin Grosvenor playing (superbly) ‘Chopin’s Nocturne No5’ (24/96), His piano sounded wonderfully pure, the notes having a lovely fresh and elaborate character to them that came from the instrument rather than the loudspeaker, I felt. And they drifted outward nicely at me with no hint of being anchored to the cabinet; such unfettered purity being a sign of low colouration. I rather suspected someone from Yamaha’s famous piano division had sat in on the voicing of the NS-F901s when listening to this. If you want a loudspeaker that captures the sound of a great piano, these are the ones.

This gorgeous performance immediately placed the Yamaha’s in a particular mould; they are an academically refined and extremely well considered loudspeaker, I learnt from this and other performances.

So on to John Coltrane playing ‘It’s Easy to Remember’ (24/96), a laid-back performance that moves at a slow gait with Coltrane’s saxophone sounding richly metallic and smooth as it drifted from the left loudspeaker (piano occupies centre stage in this piece), the final drum roll delivered powerfully by the right loudspeaker: The Yamaha’s delivered this remaining clean and composed and spry; they are not heavy or wallowy or boxy, but very nimble. With Diana Krall’s ‘Narrow Daylight’ (24/96) I realised the Yamahas are deeply insightful, teasing out every little whisper of breath from Diana Krall at the microphone. The final guitar solo cut out with tremendous speed, and the strings were vibrant and had sonic texture; they were palpably alive and forceful too, yet there was no laceration, no sting and no hardness; the tweeter sounds sweet. Meanwhile the prominent bass line was nicely
tweeter sounds sweet. Meanwhile the prominent bass line was nicely

The two bass units are reflex loaded by a large front facing port. This may look good, directing low bass to the audience it would appear, but generally it is avoided because box colourations are also directed to the audience; it is after all simply a large hole in the cabinet (in which air resonates). Bass wavelengths at the port frequency are no less than 30-40ft, far larger than the cabinet’s dimensions so where the port is placed, front or rear, is acoustically unimportant and that’s why ports are usually rear mounted.

The plinth at the base of the cabinet is only that; there is no hidden port. Height-adjustable feet are fitted as standard, and spikes are supplied as options. Rear connection panels carry large, gold-plated screw terminals that accept bare wires, spade terminals (USA) or 4mm banana plugs (Europe). Bi-wire links are fitted and must be removed if bi-wiring is to be used. The piano gloss finish of the cabinets extends all the way around to include the rear panel, a nice point.

SOUND QUALITY

As always the NS-F901s were run in heavily, using pink noise, then music, then a Monitor Audio De-tox/run-in CD. We took them to 60 hours before listening, which is plenty enough for most loudspeakers, and sounded right in this case - they lost a light midrange patina and developed a sense of depth. Speakers with Kevlar cones and diamond domes need 200 hours and Tannoy Westminster Royal SEs need 8 months whilst the woods settle, I am told!
HEAR LIKE A PRO

'These are supremely musical mini-monitors with astounding bass punch and rhythmic ability allied to class-leading resolution.'

Hi-Fi World, July 2013

LS50

To celebrate 50 years of groundbreaking innovation, our LS50 mini monitor applies KEF's latest acoustic technologies from Blade and beyond to deliver the uncompromised sonic purity, accuracy and transparency we originally pioneered with the legendary LS3/5a professional studio monitor for the BBC.

The good news is that you no longer have to be a sound engineer to enjoy the startling illusion of presence it creates.

www.kef.com/LS50
boom from the box, through the port, evident at times, but subsonics are muted, this keeping the speakers sounding tight and fast. This particular track commonly sounds a little harsh sounding tight and fast. This particular port, evident at times, but subsonics boom from the box, through the Yamahas could be. They are very revealing and have strong upper midrange projection, so a preceding system without these traits is needed to achieve balance. Where I used the Mirus Invicta with the ESS Sabre's Slow filter engaged to ensure smoothest digital, with LP I had to use a quality moving coil; MMs won't do (the 2M Black is a bit shiny up top). With Mark Knopfler's 'True Love Will Never Fade,' from 'Kill To Get Crimson' (an audiophile pressing) I could hear every little detail of his finger work on the guitar's strings and there was again a lovely sweet quality to treble. This track, that I use a lot for review work because it is so well recorded and pressed, confirmed that the NS-F901s sounded almost magically clean and pure again, a very welcome feature. Spinning Phil Collins singing 'I Don't Care Anymore' (180gm audiophile pressed LP), initially with an Ortofon 2M Black MM cartridge had the man sounding light in character, drums fast but lacking body and the soundstage a tad flat in perspective. Going back to our usual Cadenza Bronze largely corrected all these factors, showing how critical the Yamaha's could be. They are very revealing and have strong upper midrange, so a preceding system without these traits is needed to achieve balance. Where I used the Mirus Invicta with the ESS Sabre's Slow filter engaged to ensure smoothest digital, with LP I had to use a quality moving coil; MMs won't do (the 2M Black is a bit shiny up top).

Moving on to a modern, well-balanced recording on 200gm audiophile vinyl, Kate Bush singing 'King of the Mountain', the strong reggae bass line rolled out fluidly whilst La Bush trilled clearly centre stage, every word sharply outlined and obvious. As the organ on 'PI' drifted out, the sheer tidiness and sophistication of these speakers made itself obvious. They're a little over-revealing for older recordings perhaps, but with modern material that has a natural balance and is well recorded, they fly.

CONCLUSION

Think of the NS-F901s as highly crafted loudspeakers that offer a sound characterised by poise and sophistication. They are smooth yet very insightful, pushing vocals and instruments out to listeners. Having neither excessive bass or treble, minimal colouration, but quite a forceful air, they were dynamically lively and engaging to hear. Classical listeners in particular will love their poise and refinement, but they played rock well too. The NS-F901s are true sophisticates, reflecting the pedigree of their manufacturers, Yamaha, who are also famous for their piano division.

YAMAHA NS-F901
£2999

OUTSTANDING - amongst the best.

VERDICT

A beautifully built and finished loudspeaker with a sophisticated sound. Exudes quality in every area.

FOR
- smooth, clear and accurate
- highly insightful
- rich cabinet finish

AGAINST
- inadequate tilt adjustment
- forward upper midband
- occasional bass bloom

Yamaha
+44 (0)844 811 1116
www.uk.yamaha.com
Based on the multi-award winning Series V pick-up arm, the Series V-12 incorporates the same design and engineering that have made SME a byword for excellence.

Coherent musical control is held over the entire frequency range in terms of tonal quality, stability and stereo imaging. Startling dynamic range, neutrality, structurally inert, the Series V-12 embodies every worthwhile feature in a pick-up arm. The 12 inch tone-arm is pressure die-cast in magnesium complete with an integrated headshell to eliminate tone-arm resonances in the audio spectrum and offers a 27% reduction in maximum angular error distortion over 9 inch models. Listening, the benefits of minimal tracking error and harmonic distortion are clearly revealed.

Twist
Stereo Interconnect Cable

"Offering amazing value for money, every new hi-fi user should demo these interconnects"
HI-FI WORLD
February 2013

Why Choose the Black Rhodium Twist Stereo Interconnect?
• Based upon the multi-award winning Twist Speaker Cable
• Reduced "Transient Phase Distortion" to produce a more natural, open sound
• Improved RFI/EMI rejection from dual twisting of cable
• High quality gold plated RCA terminations
• Ultra low budget price, high class, 5 star performance

Scan this QR code on your smartphone or tablet to download the full Hi-Fi World review and find out more about "Transient Phase Distortion" (visit www.blackrhodium.co.uk/twisthfw on your PC)
The 1980s icon that is the Compact Disc may be slowly disappearing into Vintage Format Heaven, but most of us - even those who listen mostly to vinyl - will probably have large collections of these round silvery things. After all, a huge variety of music spanning three decades was never released in any other worthwhile format. It was thus a case of CD or nothing.

Given how much material there is on CD, though, it makes sense to build a player capable of extracting every last ounce of performance from the format.

Which brings us to the Parasound Halo CDI, a collaboration between a US brand that has hitherto made little impact in the UK and a Danish high-end company known as Holm Acoustics. A look at Holm's website (www.holmacoustics.com) demonstrates that the company's expertise is in the DSP arena; an impulse/frequency response measurement freeware for a Windows PC (equipped with suitable microphone) can be downloaded that can analyse the acoustics of a listening room.

At over 8kg the CDI is as heavy as some amps! Build quality is massive and the chassis rigid. It's also beautifully-finished, and the blue-backlit front panel is crowned by a comprehensive alphanumeric fluorescent display.

Around the back are a goodly selection of outputs - balanced/unbalanced analogue audio, plus optical and coaxial digital. Parasound has resisted the temptation to include the USB port or digital inputs that would enable its player to double as a DAC. No, the CDI is one of a fast-disappearing breed - a CD player, the purpose of which is to...play CDs. No DVDs, SACDs, computer audio, downloads, MP3s or kitchen-sinks here. Parasound and Holm have instead concentrated on making the best CD player their joint technology allows.

No conventional trays here; the mechanism is slot-loading, smooth in operation - and yet oddly familiar. Hmm. I've come across that sound and feel before...in one of my computers.

So let's take a peek inside the machine. The CDI has at its heart an Intel D425KT mini-motherboard. Then there's a 2GB memory module and under that lurks a 1.8GHz Intel Atom D425 microprocessor.

The aforementioned slot-loading optical drive (which is compatible with finalised CD-Rs and CD-RWs as well as CDs) connects to the motherboard via a SATA cable. You wouldn't know it from the outside, but the hardware features of a typical PC motherboard are present: its Ethernet jack and VGA (monitor) connector are unused, as are all of the USB ports bar the ones that link to Parasound's proprietary electronics and load the player's Linux-based operating software ('firmware') at startup from a bracketed USB thumbdrive.

Yep, this player has to 'boot'
Probably the best value valve amplifier in the world, just look at these features:

**Tertiary Wound Transformers**
Ordinary output transformers only have the audio signal going through them once, our Tertiary winding allows the audio signal to go through the transformer a second time allowing much of the distortion to be cancelled out without use of high overall feedback.

**Valve Rectifier and choke**
The heart of a good valve amp is its power supply, only a valve rectifier and smoothing choke can deliver the constant current needed without the constant "switching spikes" of a "capacitor only" power supply.

**Ultralinear/Triode switch**
Most (but not all!) music lovers prefer the sound of Triode but the penalty is always lower power, with the Stereo 40 you have both options at the throw of a switch allowing you to choose depending upon your mood, music and speakers. 40+40w UL, 20+20w Triode.

**Tape Record Loop**
This facility allows the connection of home cinema systems, recording devices and equalisers to give greater flexibility.

**Gain, Feedback and Damping**
The complex relationship between amplifier and speakers means that less than the best results are not always achieved, a rear switch allows you to choose the optimum feedback and speaker damping for speakers and room. Naturally we include both 4 and 8 ohms output.

**Easy Bias Meter**
Not even "matched" valves are identical, the only way to be sure of the correct setting is to measure it! And adjust if necessary using the built in meter. This way you can be certain that you getting the best performance throughout the life of each and every valve. Will also indicate "end of life" and failure.

**Tube Rolling**
The Stereo 40 is designed to work with all the popular valves in the EL34, KT88 6L6, 5881, 6CA7, KT66, KT77, 6550, family to give you maximum flexibility.

**6SN7 and 6SL7 Driver Valves**
More expensive but worth it! These older designs have a long reputation for sounding more musical than their miniaturized cousins.

Not what you looking for? Take a look at our other 9 integrated amplifiers, 7 power amplifiers, 10 pre-amplifiers

www.iconaudio.com  sales@iconaudio.com

Leicester UK
faster than the average PC at under
30 seconds, thanks to Parasound's
use of solid-state memory rather
than a hard disk, it makes the average
CD player look like a speed demon.

There is, of course, much more
to the CD1, and this is evident from
the neat and highly-compartment-
ised interior layout.

The aforementioned Parasound
electronics consist of the DAC (built
around a single Analog Devices
AD1853 chip) and the circuitry that
drive the display and accept user
commands from the IR handset or
front-panel controls. The PC part is
powered by a switch-mode supply,
but the audio electronics are served
by a linear power supply based
around an R-core transformer. All of
these different sections are separated
by large chunks of aluminium plate to
prevent them from interfering with
each other.

Hardly surprisingly, the CD1
works differently to the average CD
player. The optical drive reads data
do the disc multiple times. Two reads
of each sector are compared, and if
the results are identical the data is
passed to the buffer. If the two reads
don't match then there's a bit-error
somewhere and more reads are
tried. If errors are still encountered
before the buffer empties, a 'last
resort' option is used. The player's
software isolates the bad fragment,
and 'recreates' it via a proprietary
interpolation process. Traditional CD
players can't do this because they
decode the data as it comes off the
disc, before converting the recovered
digital audio into analogue.

The Parasound/Holm approach
is designed to be bit-perfect if at all
possible. It thus keeps audible errors
to a minimum and all but banishes
the effects of jitter. This clean data
is passed from the motherboard to
the DAC via an asynchronous USB
interface that is clocked by an ultra-
high precision voltage-controlled
crystal oscillator. Holm specified
the established AD1853 delta-sigma
24-bit DAC for its 'neutral, highly-
resolving but still warm sound'.

Here, an 8x oversampling process
is employed to deliver a smooth
aliasing-free analogue output. A single
stereo DAC is used not, apparently,
to save money with simpler circuitry
but to minimise the inter-DAC delays
of multiple-DAC arrangements.

In the analogue sections
Parasound employs National
Semiconductor LME49990 op-amps.

There is, however, an alternative
output stage built from discrete
components based on the circuitry
of Parasound's 20-bit DAC2000. A
switch on the front panel toggles
between this and the op-amp derived
output.

Buckley's extraordinary vocal
range comes across well, and there's
incredible resolution of detail from
his stringed instruments. When his
band gets into full flow, the various
musical strands and their textures
remain individually-identifiable in a
soundstage that's rock-solid.

On lesser players, this disc
sounds recessed and far less
emotionally-involving; that the CD1
is able to coax so much out of the
music is a testament to its underlying
technology and design.

An excellent performance of
Ralph Vaughan-Williams' 'Fantasia on
A Theme' by Thomas Tallis, part of an
exceptional-value 30-disc collection
of the quintessentially- English
composer's music, was bestowed
with a pleasantly-balanced string
tone. However, this archive recording
(1968) was spoilt by tape hiss and
the attendant roughness during the
quieter moments; like most players at
this level, the CD1 will lay bare any
inadequacies.

The early summer's cycling fever
having put me in the mood, I dug
out my copy of Kraftwerk's 'Tour
de France Soundtracks' CD. Sadly,
Connect.
With the Future...

K2 BT
- aptX Bluetooth streaming input
- Increased output for greater power and clarity
- Improved circuitry for greater efficiency
- Even better sound performance

ROKSAN

The award-winning Roksan K2 series has now been expanded to include a new integrated amplifier. The K2 BT improves on the original K2 Integrated with brand new circuitry and a higher output than ever before. The inclusion of aptX® technology also adds a whole new source input to the amplifier. Now you can stream your favourite music from a Bluetooth-enabled device in original 16-bit CD quality.*

Available Nationwide Now

Distributed by Henley Designs Ltd.
T: +44 (0)1235 511 166 | E: sales@henleydesigns.co.uk | W: www.henleydesigns.co.uk

* On compliant devices.
it wouldn't play - but there's a good reason for this. This disc features copy protection, which makes it incompatible with computer-type disc drives. Referring to the Parasound manual, I found a note to the effect that such CDs can't be played.

But my desire to listen to music of this type remained untainted. When digging around for media to check disc-compatibility, I came across a dusty CD-RW that contained 'headline (mix) sets' broadcast by the BBC's Mary Anne Hobbs on her late-night Radio 1 Breezeblock show. They were captured as broadcasts by a Philips CD recorder from a DAB tuner's digital output at the turn of the millennium; at that time, Radio 1 employed a DAB bit-rate of 192kbps and kept audio compression to a minimum. Radio 1 hadn't sounded so good before - and arguably hasn't since.

One of these mix sets was by Two Lone Swordsmen, comprising British house DJ/producer Andrew Weatherall and studio engineer Keith Tenniswood. It contained a lot of techno and electro, and was done justice to by the CD1. Fast-paced electronic rhythms were delivered with impeccable timing, verve and attack. Deep synthesised basslines got justice to by the CD1. Fast-paced techno and electro, and was done justice to by the CD1.

Similarly, Rage Against The Machine's 'Evil Empire' - a politically-charged fusion of rap and hard-rock - exhilarates with its high-octane riffage, feedback and vocal aggression, yet the subtleties aren't ignored (as evidenced by the acoustic guitar-driven 'Beautiful World'). I switched between the op-amp and discrete output stages and, to tell the truth, I couldn't sense an awful lot of difference between the two across a host of different musical genres. Splitting hairs, though, I'd say that the discrete setting was maybe a tad more revealing.

CONCLUSION
On the whole, this is a very well thought-out player that will breathe new life into CD collections.

There's an absence of the fatigue that plagued CD in its early days, a broad frequency response and plenty of dynamics coupled with a neutral character. It also has some nice usage touches - it will play a disc on insertion, and spit it out when switched to standby. The fact that the item of hardware most likely to fail - the optical drive - is a standard PC item should help to keep the cost of repairs down.

But most importantly of all, it has an innate musical quality. Slip in a CD, sit back and enjoy the music.

MEASURED PERFORMANCE
The Parasound CD1 possesses ruler flat frequency response to 21kHz. Our analysis shows, like most CD players, CD performance is dominated by distortion patterns. Parasound say the CD1 produced a conventional 100dB, again about the norm for CD. Some players manage a tad more, up to 102dB, but CD performance is dominated by 16bit quantisation noise so all this is as expected. Because of the limitations of 16bit it isn't possible to get any better. The unbalanced analogue phono socket output delivered 2V and the XLR output 4V. Unusually, the latter gave no better results than the former, and this appeared to be due to the unusual circuit internal circuit arrangement used. Also peculiar was the fact that the Op amp and discrete output stages gave identical output voltages, as well as identical distortion patterns. Parasound say the Parasound CD1.

OUTSTANDING - amongst the best
VERDICT
Delivers a musically-satisfying performance from CD
FOR
• fatigue-free listening
• cutting-edge disc-reading technology
• fast, evenly-balanced and detailed
AGAINST
• Red Book audio CDs only
• no volume/ headphone
• ruthlessly exposes deficient recordings

Wesco
+44 (0) 161 767 9043
www.wesco.com

HALO CD1 £4,699

WESCO
Who doesn't love bass?

The REL Gibraltar G-1 subwoofer transforms the definition of deep bass for the home. Whether used singly or in multiples, we know of no finer ambient space and deep bass reproducer than the G-1...

The REL Gibraltar G-2 subwoofer is the quickest large-scale sub-bass system, REL have ever created. While it gives up a small fraction of the deepest bass and the sense of sheer scale to its larger sibling, G-2 still retains excellent extension...

Whilst the REL S/2 subwoofer may be the least expensive, most compact chassis in the S range, it would be a mistake to think of it as anything but a true thoroughbred...

The REL S/5 subwoofer exceeds the mandate for mid-level models and crosses this model into true reference quality...

The REL S/3 subwoofer derives from the flagship S/5. While more compact with a smaller footprint, it never fails to impress and delight...

World Class | Audio Systems

 Established 1990 -

W | www.jordanacoustics.co.uk
World Radio History
"Better than Live" - Financial Times

Burmester Speakers
Range of different models | finance available* ** please call

Burmester 082
Integrated Amplifier | £8,630.00
20% deposit, then £230.13 x 30 months* **

Burmester 035
Pre-amplifier | £6,965.00
20% deposit, then £232.17 x 24 months* **

Burmester 956 mk 2
Power Amplifier | £9,565.00
20% deposit, then £255.07 x 30 months* **

Burmester 111
Musiccenter | please call

Burmester V6, V1 and V Base
Range of different racks | finance available* ** please call

Burmester 113
Bluetooth & USB Dac | £2,590.00
20% deposit, then £172.67 x 12 months* **

Burmester V6, V1 and V Base
Range of different racks | finance available* ** please call

*SUBJECT TO STATUS  **SUBJECT TO CONDITIONS
World Beater

Tony Bolton finds himself seduced by the World Designs HD3S valve-powered single-ended headphone amplifier.

Building your own hi-fi from a kit is a hobby that has declined as the complexity of some components, such as CD players, renders them inappropriate for DIY construction, and the cost of pre-built products, relative to disposable incomes, has come down. However, for the enthusiast who likes creating his own equipment, World Designs offers a range of products from phonostage and amplifiers through to the HD3S Headphone Amplifier under discussion here.

Unlike the majority of solid state headphone amps that I have listened to recently, this one has no in-built DAC or other extras. Also unlike them, it uses output matching transformers to feed headphones and is fitted with a volume control. Priced at £499 for the kit or £659 for a pre-built version as used in this review, HD3S is the latest version of the World Designs headphone amplifier. It features an aluminium case in place of the steel of the previous model. It is also equipped with internal dip switches to select output impedance, to match a wide variety of headphones.

The single ended circuit design uses two ECL 83 triode-pentode valves (one per channel). A large toroidal transformer supplies the power and two EI output transformers drive any load from 16 Ohms to over 300 Ohms depending upon how the dip switches are set. Volume is set by an ALPS Blue Velvet potentiometer.

The fit and finish of the casework (measuring a compact 220 x 310 x 85mm; w/d/h) is excellent with touches such as the precisely engraved World Designs logo and the heavily chromed volume control knob, ensuring that this product looks considerably more expensive than even its pre-built price tag would have you believe.

A lot of different brands of valves were listened to during the development of this component and original Mullard tubes were chosen for their sonic capabilities. Purchasers are, of course, free to change these for other brands. And with prices starting at around £15 each, valve rolling to fine tune the sound to your preference is an easily accomplished and affordable exercise.

The back of the case is only marginally more populated than the front with the mains IEC input and power switch on the right and two pairs of RCA phono sockets for the signal in and out situated in the middle of the panel. An earth terminal is fitted to allow separate grounding should hum be a problem.

I set the HD3S up on the downstairs system fed by the Tucana II amplifier and also tried it plugged directly into the outputs of my Agena phonostage. Listening came via a pair of ADL H118 headphones. Apart from the music mentioned on the next page I also listened to both the TV and FM radio through it where I was impressed with the amp’s ability to create a sensation of a three-dimensional field of sound around my head, making the afternoon play on Radio 4 a thoroughly immersive experience.

Listening through headphones allows an almost forensic analysis of the sound and even with records that I know very well, such as the ‘High Society’ soundtrack, I found myself appreciating micro-details in Louis Armstrong’s playing during the ‘High Society Calypso’. Although this is a mono record, the sense of space between and around the artists was well-described and the details of the tonality of the various instruments excellent. This combined with a good grasp of the Latin rhythm made for a thoroughly enjoyable listening experience.

I was particularly impressed with the bass performance and explored...
this further with a recording of Widor's 'Toccata' played on the Exeter Cathedral organ. Although I was not playing loudly (I dislike loud noises too close to my ears) the final majestic chords left me feeling that my insides were vibrating with the power of the bass pipe. I am familiar with the acoustic of Exeter Cathedral, having attended many concerts there, and felt that this amp produced enough detail and texture in the sound to go a long way to convincing me that I was actually present at a performance in that space.

I finished off my listening with some classic electronica from The Orb. This style of music makes great use of the spacial capabilities of stereo and I got totally involved with following the quite complex array of sounds as they floated through my head in all directions.

I really like the sound of this headphone amp - which offers a superb ratio of sound quality per pound. The presentation is beautifully textured and detailed, precise in its handling of rhythms and I would say, uncoloured in the presentation of instruments. The bass can also go very deep but is not overblown.

The midband sounds natural and the treble has that silky smoothness that thermionic amplification does so well. Whether bought as a kit, or pre-built, I think this is an excellent, value for money product that will provide many hours of undiluted listening pleasure.

The dip switches to the right of the two ECL83 valves allow the user to set the impedance to match the headphones in use.

The World Designs HD3S’s output transformers each have four secondary windings. Dip switches arrange these to suit loads of 16 to greater than 300 Ohms. Both gain and maximum output level vary according to settings.

As delivered the HD3S was set to suit loads of 16 to 50 Ohm phones, had a gain of x4 (12dB) and a maximum output of 3.8V - more than enough for any headphone.

This gain is sufficient to work from tape outputs and external phono stages, delivering 800mV output from 200mV input for example. The higher impedance settings give more gain and output, right up to x16 (24dB) gain and 14V maximum output for the ‘greater than 300 Ohm’ winding.

Frequency response, with a suitable load connected, measured flat across the audio band, our analysis of the 16-50 Ohm winding shows, with a 40 Ohm load connected. The higher impedance outputs gave a similar result. Output starts to rise above 20kHz so the HD3S will not have a dull or warm balance, although valves never have transistor spit, even when treble rises a little. Distortion levels were very low at 0.018%, mainly second harmonic, at 2V output. Noise was low at -90dB when delivering 2V out, a very good result.

The World Designs HD3S measured very well in all areas, offering impressive results. It is able to drive modern 'difficult' high-resolution headphones (e.g. Oppo PM-1s) of low impedance and sensitivity, as well as conventional designs. NK
Inspire Hi-Fi

Bespoke Award
Winning Turntables and Turntable Upgrades

LINN
REGA
THORENS
TECHNICS
AND MANY MORE

NEW ARMS, CARTRIDGES & PHONO STAGES FROM:
REGA, ORTOFON, AUDIO ORIGAMI, ORIGIN LIVE, ROKSAN, SME, DECCA, LONDON, HAYCOCK, ROTHWELL,
INSPIRE HI-FI, X100 MK2, VAN DEN HULL, PROJECT, AUDIO TECHNICA, SUGDEN, ICON AUDIO

TURNTABLE SERVICING & SETUP. LINN LP12 SPECIALIST. ORTOFON CENTRE OF EXCELLENCE

www.inspirehifi.co.uk
Units 2 & 3 Prospect House Collery Close
Staveley Chesterfield S43 3QE
T: 01246 472222
E: robert@inspirehifi.co.uk

“The best Linn LP12 Upgrade Package”

UPGRADE PACKAGES TAILORED TO SUIT YOUR BUDGET
VISIT OUR SUPERB DEMONSTRATION FACILITY. WHILE YOU WAIT REBUILDS ALSO AVAILABLE

futureshop connecting you with AV excellence . co.uk
Hi-Fi Cable, Home Cinema Cable & AV Connectivity Specialists

Expert Advice & Sales
0208 905 1555
+44 20 8905 1555

Hi-Fi Cable & Home Cinema Cable Specialists
Bring your hi-fi to life with our high performance award winning cables
www.futureshop.co.uk - call 0208 905 1555
FutureShop.co.uk, Unit 5 MODA Centre, Stirling Way, Borehamwood, Herts, WD6 2BW, England, UK
Beatles session

Noel Keywood heads to the famous Abbey Road Studios in London to hear the first UK presentation of the forthcoming The Beatles in Mono LPs.

Abbay Road Studios, 8th July 2014, I attended a listening session of the new The Beatles in Mono LPs, held in Studio 3. It was the first time these master-tape derived LPs have been played in the UK. The USA has already received the presentations, it is such an overwhelmingly important market in terms of sales, as well as enthusiasm, but Britain got to hear them only days later — in the building where the Beatles recorded (Studio 2), giving these presentations an air of authenticity that presenter Steve Berkowitz alluded to.

On hand to explain the new release was Guy Haden, Vice President Apple Corps, backed up by cutting engineer Sean Magee who put this new release together. Steve Berkowitz — who oversaw the mixing of the album — lead the presentation, adeptly playing ten tracks to a small invited audience — not so easy with LP where cueing requires a steady hand and a good eye.

First off was 'All My Loving' (With the Beatles, 1963), followed by 'Twist and Shout' (Please Please Me, 1963), high-energy tracks to kick things off. They were noise-free and well presented although bass, famously weak on early albums to limit groove excursions, was present but not strong; the original balance was retained.

There was a change of tempo to the wistful "I'll Follow the Sun", (Beats for Sale, 1964), that had the sound soften out, becoming more full-bodied and naturally balanced. This was followed by 'A Hard Day's Night' (A Hard Day's Night, 1964) that, like our factory stereo LPs, had prominent treble.

The biggest differences in mixing between the Mono LPs and Stereo LPs were, we were told, on The White Album (1968) and Sgt Pepper's Lonely Hearts Club Band (1967).

Interesting was the fact that a massive 35,000-40,000 box sets of these new LPs were to be manufactured, and around "one million pieces" (LPs) in all to be pressed. The quantity was too large for most of today's pressing plants as they lack sufficient stamping machines to produce on an acceptable time scale, explaining long production times — and also why we failed to get samples scheduled for a review in this issue!

The playback system comprised a pair of McIntosh XRT1k line array loudspeakers equipped with no fewer than 44 titanium 2in midrange units, flanking 28 3/4in titanium tweeters; they stood 6ft 6in high (202cms) no less! Two 10in bass units occupied the lower bass bins. Line arrays are good at projecting to an audience and this the XRT1ks did well, but their titanium drivers were fast and forward, in the manner of most metal cone/dome drive units, brutally exposing imperfections in the early 1960s recordings.

The speakers were driven by massive MC1 power amplifiers (2kW), a C50 preamp and an MTS turntable. A MEN220 room correction unit was also used. The arm carried an Ortofon Quintet Mono moving coil cartridge. Leif Johannsen from Ortofon was present and explained what lay behind their new 2M Mono SE moving magnet cartridge, designed to replay these LPs.

Box sets (£288) and single LPs will become available September 2014.

We hope our review, originally scheduled for this issue, will appear in the October 2014 issue.
EXCLUSIVE TICKET OFFER: 1 month free lossless streaming subscription with Qobuz

NATIONAL AUDIO SHOW 14
WHITTLEBURY HALL, UK, 20-21 SEPT

Make real connections and share the experience with genuine audio consumers at the 'National Audio Show'. Packed with some of the world’s best audio gear. Compare hundreds of audio, headphone, high-end and home entertainment brands before you buy. Sit down and relax in superb surroundings.

Whittlebury Hall is centrally located between the M42 and M1, superbly easy to get to with free parking and a glorious atmosphere, with many local attractions if you want to make it a weekend for you, your family or friends.

Over 50 demo rooms, headzones, live music, competitions, guest speakers, special events – to make a true audio experience and a great day out, or weekend away.

nationalaudioshow.com

OFFER ENDS AUGUST 20TH

Buy tickets online before August 20th and get 1 month free trial of lossless streaming from Qobuz

“Thanks for a great show, everything was well organised and very clear, staff were very helpful and looked after us.”
Alan Clark - Kralk Audio

“My partner was completely bowled over at the systems available, having never truly seen or heard what excellent high end Audio could do.”
Show visitor

“The National Audio Show is a rapidly growing event, and for many is now a staple in the annual show calendar.”
Phil Hanson - Clarity Alliance
Letter of the Month

HYPersonic

I was interested to read Tony Bolton’s comment regarding the perception and appreciation of sound. I had long felt that CD, while apparently covering all audible frequencies, for me was noticeably less satisfying than analogue sources. I look for, and relate to the emotion in music, and while I appreciate something that is well played and well produced, if it does not convey the emotion it leaves me stirred but not inspired.

I believe it is no coincidence that CD is designed to have zero output above 22kHz, whereas cartridges can extend this to double the frequency and beyond. This emotional connection could well relate to these ‘missing frequencies’. There is a clear description of this on the YouTube video from vwestlife; https://www.youtube.com/watch?v=4eC6L3_k_48. This is not the whole story, as CD players also include necessary error correction and filtering which can also degrade the sound, however, it is clearly a major part, as demonstrated with super tweeters.

I have moderate hearing loss and rely on an aid to supplement certain missing frequencies, notably 4-6kHz (which coincides with that of the female voice!). When tested by the audiologist, they now try out the head vibrator, the small contact transducer that transmits sound through the skull. Not yet as effective for me as the sound tube extending down my earhole, but a fascinating development none-the-less, and one that demonstrates clearly that sound perception is not solely through the ear system.

My own experience of super-tweeters reflects Tony’s findings. My ageing home-made KEF Chorales sounded more airy and atmospheric when two ribbon tweeters were added. It was very much the case that you couldn’t hear them but did notice when they were switched off. This is totally illogical unless you can accept that we do in fact perceive and experience hypersonic frequencies.

How we perceive this HFC is another interesting topic. While I accept that dimming the lights allows a more intense listening experience, I would doubt that we perceive these high frequencies through our eyes. I believe this heightened experience is due more to the fact that if you obscure or reduce the effectiveness of one sensory mechanism, others will react more acutely to compensate, e.g. blind people with sharper hearing and greater touch sensitivity to read Braille. Having heard high frequencies transmitted through the skull, the perception of hypersonic frequencies could well be a full body experience!

They say that only 30% of what we perceive, or what we can describe, is...
LETTERS & EMAILS

experienced consciously. A massive 70% is experienced without our realising or being able to identify or quantify its existence. The subconscious is a fascinating topic. When investigating hypersonics, we are perhaps considering the area where tangible and intangible overlap; the objective/measurable and the subjective/experienced; what we hear and what we feel.

In music reproduction, now we have access to sampling rates of 192kHz, we have the chance to refill those frequencies and that part of the music that was denied to us when we first moved to digital. It seems ironic that it has taken around 30 years to be able to mimic something that we had already; the vinyl experience!

Yours faithfully,
Andrew Entwistle
Purton
Swindon

Hi Andrew. Thank you very much for a fascinatingly informative and nicely penned view of a controversial topic. People who have bothered to experiment with super-tweeters consistently report they add a "sense of air" and also that they — surprisingly — sharpen up bass.

My only slight remaining reservation at present is that high resolution digital does not so strongly represent "air and space" as vinyl seems able to do, but this may be down to current limitations in recording equipment. At least the gap is closing and the high frequencies you talk about can now be captured by digital — an impossibility with CD, as you point out. NK

Hi Andrew. Thank you for your letter. My curiosity about this subject was first aroused when my mother, who is in her late 80s and wears two hearing aids, commented on the difference in the sound when I first got my super-tweeters. Since conventional medical theory would advise that it was impossible for her to be hearing anything from the super-tweeters, I found it most interesting that she found exactly the same benefits as I did; greater clarity in the bass and midrange areas and a sensation of greater space in the overall sound.

What further interested me was playing 78rpm records with the super-tweeters in circuit produced quite noticeable benefits by way of the usual improvement in bass and midrange clarity, an increase in the smoothness and air in the treble response, and most curiously, a perceived reduction in the level of surface noise.

The Townshend Audio super-tweeters that I use begin to work at 6kHz. Pre-flfr 78s allegedly weren't recorded above 15kHz so there is a limited amount of recorded information for the super-tweeters to work with yet the sound displayed the improvements mentioned above. I have also found far smaller but still noticeable improvements in sound when playing acoustically recorded discs where it is highly unlikely that anything was recorded above 4kHz or 5kHz even on a particularly good recording, so quite what is happening in this situation I do not yet know.

I think there are several parameters in this discussion that would benefit from investigation with modern measuring equipment. When most of the definitions regarding the frequency response of both audible and recorded sound were laid down, the measurement equipment had a level of inbuilt noise that prevented true hypersonic information being distinguished from the measurement device's own noise level. A good example of this is to look back to the 1920s and 30s, when the limit of human hearing was deemed to be around 15kHz. As measurement equipment improved, this figure was gradually revised up to the 20kHz standard that is often quoted today.

Most of the research that I have quoted in my columns has taken place within the last 15 years, using state-of-the-art equipment, and I would be most interested to know if modern measuring equipment applied to both old and new records would come up with different definitions of what was actually recorded to those that are currently deemed to be accurate.

As for the premise of some of the hypersonic response being subconscious, I am quite prepared to accept this theory in principle but am interested to know if anyone has made a proper scientific study of this in any form.

No one has yet come up with a proven explanation of how we perceive hypersonic sounds, so I quoted the thought about our perceiving it through our eyes as a possible answer. I have also read theories that we absorb it through the ears; a much more direct way of receiving sound.


The Prestige SuperTweeter provides an increased immediacy, airiness and impact making music more true to life.
our skin. When I come across any more information on this subject I will be writing about it. TB

Hmm... Modern measuring equipment typically has 24-bit dynamic range (144dB) to over 100kHz, it has moved way beyond our hearing abilities. I think the answer lies in our cognitive processes. When CD was launched we could hear sounds 80-90dB down at most, we were told – and this is true in standard listening tests. However, I’m surprised to find that we seem able to subtly perceive the improvements offered by 120+dB DACs over older 110dB designs. What we perceive and how we do it is complex and baffling. NK

HEARING HYPERSONICS

Your article was most interesting. It closely touches points I have puzzled over. Perhaps at least part of the answer lies in the following:

We do not listen to pure tones. We listen to a single (but complicated) waveform modulating a single parameter - air pressure. This waveform contains, for example, some very abrupt and complex changes in which we can perhaps characterise as high frequency “tones” altering the shape of the rest of the wave. Is there any reason why such “tones” cannot be hypersonic but have audible effects on the waveform which we do hear?

Similarly, harmonics from musical instruments can presumably extend up and beyond the frequency range of audible single “tones”, but may subtly and slightly affect the shape of the waveform we can hear, probably for the better.

Such an explanation would fit the evidence you present in your article.

Perhaps the same argument holds for subsonic “tones”, but it is less easy to see how these might arise, and intuitively one feels they are less likely to be welcome.

Kind regards,
Paul Gladwell
Cheshire, UK

Hi Paul. Thank you for your letter. Yours is an interesting concept and if my understanding of it is correct, it would fit in with some of the findings that I presented in my Opinion Column in the July 2014 issue of Hi-Fi World.

The only drawback that I see with this theory is that the tests made by Tsutom Oohashi, Emi Nishina, Norie Kawai, Yoshitaka Fuwamoto and Hiroshi Imai entitled “High-Frequency Sound Above the Audible Range Affects Brain Electric Activity and Sound Perception” (Audio Engineering Society preprint No. 3207 - 91st Convention, New York City - Abstract page 2) did not use harmonics to explore hypersonic hearing abilities, but fundamental sounds that are of ultra high frequency, so any harmonics associated with these fundamentals would go even higher. This information is buried in the main text of their report, but not immediately clear from the abstract.

In my first exploration of this subject in the January 2014 issue of this magazine I quoted the findings of James Boyk of the California Institute of Technology whose research demonstrated both harmonic and fundamental high frequency energy being present above 20kHz from random sounds such as car keys being jangled, some instruments and the human voice, so the harmonic explanation that you propose would only apply to certain parts of these findings, but not the overall result. However that is not to say that harmonics do not play a part in this whole debate over hypersonic sound and our response to it.

This is a subject where the investigation is still at a fairly early stage and is only confirming that, despite the level of knowledge that we have of the human body, we still have a vast amount to learn. TB

That’s an interesting one, Paul. I think you are suggesting we hear, or perhaps I should say ‘sense’, the waveform - and somehow if this is altered by addition or removal of high frequencies, we can detect it. I’m sure there are experts who would point out the ear hears bands of frequencies, in effect analysing the incoming waveform, but I’ve seen it your way and wondered about this. I rather like what Andrew Entwistle has to say though, that the ear isn’t the only sensing mechanism. Will we get skull-speakers in future I wonder? (and what should appear in News – skull speakers? Go to p9 and Damson headphones). NK

POWER ISSUE

This letter is in two parts, the first asking a simple question that I have been puzzling over for some time and the second asking about a system problem that I am struggling with.

Firstly I would like to understand the relationship between amplifier power and the rated maximum power handling of a speaker. This concerns me because my speakers are rated at 200W and I expect, sometime, I will need to replace my power amplifier, but all solid-state amplifiers at the likely price point, say £1000-£20,000, produce way over 200W. Clearly, there’s something I don’t get; can you explain?

Secondly, I find that my system sounds best when it’s playing quietly, producing a reading on an SPL meter around 68dB. If I turn it up to a louder, though still perfectly reasonable level, say 78dB, detail will be washed out, stereo imaging will be much diminished and it will sound generally less musical.

My system is LP only: source is an SME 2012 with Funk Firm tonearm and Koetsu Red Signature K cartridge; amplification is Art Audio Vinyl One Phono Stage, with volume control, feeding into a pair of Krell KMA 100 mono-blocks and the speakers are Usher Be-10s. The room size is 11 x 16ft which, I know, is small for this type of system; within a few years I’m upsizing our home and the hi-fi will get a bigger room but, until then, it definitely has problems.

The hi-fi room is furnished like...
Hi Grant. The issue of loudspeaker power ratings is arcane and complex and definitive conclusions are just about impossible to reach. So don’t fret about not understanding - no one does!

The maximum power rating of a loudspeaker is the maximum power it can absorb without showing signs of damage, under IEC tests. Damage can be thermal, usually an overheated voice coil, or mechanical - meaning surround, spider or coil former damage caused by bottoming out.

When testing to IEC standards to obtain a quotable power figure, pink noise (it represents music) is run for 100 hours and there should be no signs of damage at the end of the test.

This has only a loose connection with how loud a loudspeaker goes, since that also involves sensitivity - a sensitive 200 Watt loudspeaker will go louder than an insensitive one that can withstand 200 Watts.

These days loudspeaker manufacturers commonly quote ‘recommended maximum amplifier power’, so if that is 200 Watts a 200 Watt amplifier cranked up to deliver full output (i.e. deliver 200 Watts on musical peaks, and not overloaded) is suitable. In spite of this you can use an amplifier rated well above 200 Watts if you wish - but not up to full output.

In real life the situation is that although amplifiers commonly produce 100 Watts or more it is very unlikely most people play at much more than a fraction of this. When I play very loud, so loud people complain very quickly, so loud it permeates a building - home or office - I am using around 30-40 Watts absolute maximum, on short term peaks (I know because I check this with an oscilloscope able to capture short term peaks). Most of the time I play just loud - meaning 10 Watts or so!

Manufacturers know that power specs mean all to non-technical buyers, so we get the simple but misleading situation that ‘big Watts’ are better than little ones - but they are not and for most people they are irrelevant.

If you live in a detached house a distance from neighbours and have a big room 25ft long or more, and play really loud then you might conceivably need 100 Watts at 200 Watts, especially with insensitive loudspeakers like Kingsound Prince II electrostats and a few other exotic devices. Because, counter-intuitively, big loudspeakers designed for big rooms actually need less power to go loud than small speakers. Your Usher Be10s are 89dB sensitive and are more than able to withstand high power, so I don’t think you will reach their limits, especially in your current room.

I find it hard to understand why your system should sound “washed out” at such a low level as 80dB at the listening position (I rate 85-90dB as loud). I suspect reflections from nearby surfaces may be adding high frequency confusion and, although your walls have bookcases to break up and absorb sound, your ceiling and floor may need looking at. Stereo imagery will degrade as you move back, when there is a lot of reflected sound coming in, because the ratio of reflected-to-direct sound increases.

Low ceilings are a problem and need diffuser panels that you can obtain, for example, from StudioSpares. I had to do this at our last offices, where the rooms were big at 24ft square, but had low 7ft 6in concrete ceilings (it was a converted car park!). Big diffuser panels 8in deep were attached to 8ft x 4ft plywood sheets and these sheets screwed into the concrete ceiling, so they could be easily removed. You may have to find your ceiling joists and put screw holes through the plaster into these joists – they can be easily filled in later on, with Polyfilla.

If you have hard floor, carpet it, Ikea have a thick carpet, Adum, whose “thick pile dampens sound and provides a soft surface to walk on” Ikea say. We use three of these and they work well in damping down our latest listening room.

I can see nothing else in your system that will cause “washout” at modest listening levels, unless something strange is going on, like your speakers feeding back into your turntable. You could listen using headphones to see whether switching the speakers off makes a difference, but this will mean borrowing a headphone amp unit.

If the turntable is being affected by acoustic feedback, then get it out of a corner (where bass is strongest) and off the floor, and onto a very stable surface. Typically, a short, stout
table one third to one half way down the room, with breeze blocks or marble top, is a good option. Or a wall shelf, on a brick wall.

I hope some of these suggestions help. I have a 17ft x 14ft lounge, like you, and have suffered problems getting my Garrard 401 into position - so I speak from experience! NK

HIGH WITH A PRO
Martin Pipe’s article (Hi-Fi World, August 2014) really brought back fond memories of the Sony Walkman Professional (WM-D6). I used this machine professionally throughout the 1980s and early 90s for field recordings, both speech and music. I very much regret selling it to upgrade to a MiniDisc Walkman.

Sound quality and robustness were the main selling points of the Walkman Pro. I once used it to record myself making a parachute jump for a travel and leisure show on LBC Radio. The machine performed flawlessly all the way down, but one of my two microphones failed, so my material had to be broadcast in mono. I also recall a TV sound-man relating the story of documentary-making up Mount Everest. He took a variety of equipment with him, including a Nagra tape recorder: the only item that worked all the way to the top? The Sony Walkman Professional. With best regards,
Jonathan Kempster (MIPS) Limehouse, London

"I once used a Sony Walkman WM-D6 Pro to record myself making a parachute jump" Jonathan Kempster tells us. "The machine performed flawlessly all the way down."

PLEASE PLEASE ME
Thank you and your team for the excellent article about the new Beatles mono LPs in the August edition of Hi-Fi World. I’ve been a convert to the mono mixes of the Beatles albums since I bought the mono CD set back in 2009. But, being a fan of vinyl too, I now very much look forward to being able to hear these mixes on LP, especially given the laudable all-analogue philosophy behind the project.

However, I do disagree with your comment (Letters Aug HFW) that Please Please Me was "recorded in a rush". It’s true, the album was recorded in a day. But the band had a great stock of material, were well rehearsed and the recording techniques and production values displayed by the EMI team are consistently high. In fact, the Please Please Me sounds much better in every way to their next record. By the time With The Beatles was recorded, the pressures on The Beatles time really did produce a shockingly rushed recording with over-recorded audio and with some of the worse edits in their recorded legacy (just listen to the edit which inserts the four bars immediately following the vocal entry of You Really Got a Hold on Me if you need to refresh your memory!)

The problem with Please Please Me, and in fact all the Beatles material up to The Beatles (White) album is tonal balance and I don’t believe this is related to the recorded medium, it’s present on the original, studio masters. To put it bluntly, all EMI pop sessions were recorded shockingly bass-light. As Paul McCartney says in Mark Lewisohn’s The Beatles Recording Sessions, “On the original recordings you didn’t really hear the bass much... EMI had very firm rules about that...[We’d say] "What do you mean we can’t have bass?" They’d say, "Well our rule book says..."

So it’s not even possible to blame bass-heavy monitoring (and the monitors on all The Beatles early session were Altecs, not Tannoy) because Paul here is commenting about the control-room playback. Sadly, if the new LPs are pressed from the original masters, they too will betray this bass-light balance.

The good news is that, despite the EMI rules on bass levels, the recordings were technically good and the information is still there, albeit at a low level. I know this because I have been listening to The Beatles albums for the last few years via tube equalisers I designed which accurately recreate the...
EQ on the famous REDD consoles used on all The Beatles recording sessions until Abbey Road. (See http://www.phaedrus-audio.com/philter.htm). Using this gear, it's possible to give Paul the extra few dBs of bass boost he was asking for back in 1963! Now, I know it's an awful transgression to use tone-controls, and possibly worse still to admit it! But the results are so remarkable that I want to share the results with you and your readers.

Whilst a long way from the innovation he displayed later, McCartney's bass-parts on these early recordings were often far from obvious. Yet, they are so back in the mix they are simply eclipsed by the guitar parts. When the bass is boosted, sometimes a new, unfamiliar, bass root-note emerges from the mid-range; giving the impression that familiar tunes are re-harmonised... An extraordinary effect!

Best wishes,

Richard Brice

Thanks for that Richard. Long term readers will remember Richard's columns in this magazine — it is the same Richard Brice.

On REDD consoles and Abbey Road, readers will be interested in this source that has full explanations and great pictures: http://www.philsbook.com/abbeyroad.html.

The original EQs were re-applied manually on the fly, to get close to the original balance, cutting engineer Sean Magee told me. I believe I am right in saying Steve Berkowitz oversaw this, using original LPs for comparison.

On the matter of studio monitors I was quoting a fascinating reference from Tannoy that we have permission to reproduce here:

TANNOY SAY -

In 1949 the Tannoy 12" Dual Concentric loudspeaker was demonstrated to Decca, and they subsequently placed an order for 900 loudspeakers to be used in the Decola gramophone. Later, in 1950, Arthur Haddy, (Chief Recording Engineer at Decca) heard the Tannoy Dual Concentric and ordered them for use at the Decca FFRR Studios (situated close to Abbey Road, in North West London).

The loudspeakers were named the Monitor Silver. Rapid industry recognition of the Dual Concentric continued when EMI ordered them for the Abbey Road recording studio in 1951.

By the early 70s most recorded music available was being produced on the Tannoy Dual Concentric, using either Monitor Reds or Monitor Golds. All the music at EMI including Abbey Road and most of the Decca Classical output was produced using Tannoy loudspeakers.

From a Beatles History on the 50th Anniversary:

The group, consisting of John Lennon, Paul McCartney, George Harrison and Pete Best, arrived at what was then called EMI Studios on June 6, 1962, for a commercial test (an evaluation of a signed artist). Two days earlier, the band had signed a recording contract with The Parlophone Company Limited of Hayes in the County of Middlesex. The group was paid Musicians Union rates for the June 6 session, indicating that the Beatles were in fact EMI recording artists by the time they arrived at Abbey Road. Engineers attending the session in Studio Two remember the poor shape of the group's equipment, particularly Paul's bass amp, which was deemed unusable due to its rattling and rumbling. Engineers Norman Smith and Ken Townsend improvised and created a bass rig by soldering an input jack to a preamp and combining it with an amp and a large Tannoy speaker taken from Echo Chamber No. 1. A string was tied around John's amplifier to prevent it from rattling.

After resolving these problems, the Abbey Road staff was ready to record the group. Four songs were recorded that day.

According to our Tannoy history book (The Tannoy Story, Julian Alderton), Altecs were seen as a rival, Tannoy's eventually replacing Altecs it would seem.

Whatever — it gives us a chance to publish that lovely black-and-white picture again of Tannoy's at Abbey Road. NK

I know that Paul McCartney was very happy with Please Please Me, especially the short time it took to complete. "There's power in John's voice there that certainly hasn't been equalled since and I know

Here's a filter unit designed by a hi-fi expert, Richard Brice. It's an interesting and more flexible alternative to tone controls and can be used to re-equalise The Beatles if you so wish, to strengthen Paul McCartney's bass.
exactly why; it's because he worked his bollocks off that day,” he told Mark Lewisohn in an interview. “We left ‘Twist And Shout’ until the very last thing because we knew there was one take. The whole album only took a day, so it was amazingly cheap, no messing, just massive effort from us. But we were game. We’d been to Hamburg for Christ’s sake, we’d stayed up all night, it was no big deal. We’d started at ten in the morning and finished at ten at night, it sounded like a working day to us! And at the end of the day you had your album”. PR

BEATLES IN MONO

I find your article puzzling. Mono was the dominant recording method at the time. Please Me, their first LP, a 1963 UK release. Really?

In classical music, for instance, which had been recorded (but not released) in stereo since at least 1934? If I read the Popular record reviews of The Gramophone for 1963 I see that most of the LPs were released in both mono and stereo. I have lots of jazz LPs released in and before 1963 which came out in stereo at the time.

Obviously the first few Beatles LPs were recorded to two-track for release in mono and the stereo version was an afterthought, but from Help! and Revolver on they were recorded properly in stereo and meant to be heard in stereo. What’s the point of Sergeant Pepper in mono? All you could really say is that the stereo pressings of the time really weren’t as good as the mono pressings, but that’s not a rationale for release in mono only for a better stereo stamper.

The paragraph about Magical mystery tour seems to imply that is has never appeared as a mono vinyl LP but this is untrue as it was issued as an LP by Capitol in the US in both mono and stereo at the same time as the UK EP set, but the whole paragraph is so badly composed that its hard to know what it means. Why is Mono Masters in upper case and why does it have a singular verb? Is it a person like Tony Hancock’s Magna Carta?

I find Tony Bolton’s contention that a cartridge can have a comfort zone and be ill at ease with music that has attitude (what is the attitude that jazz has?) equally incomprehensible, but then he’s a bit of a flat-earther.

Best wishes,
David Mansell

Hi David. The article was about The Beatles, not the music industry at that time. Mono was for them the primary mix, for reasons you can read about below. Bear in mind in studio music was dominant in exposing music to a wide audience back then, and it required a mono source.

Only Abbey Road and Let It Be had no mono studio mix, so these albums are not within the mono box set. The new mono LP box set, entitled The Beatles In Mono, presents their mono studio mixes, it’s as simple as that. NK

Economic factors played a major part in the adoption, or not, of stereo for LPs in the late ’50s and 60s. In America the disposable income for all ages of the record buying public was greater than in Europe and the UK, due to higher wages and lower living costs. The far lower cost of both records and the playing equipment in the USA than on this side of the Atlantic was also significant. This meant that the American market moved over to stereo far quicker than the markets in Europe or the UK.

The classical market, which has traditionally been wealthier, moved over to stereo fairly quickly after its introduction although mono versions were still being made into the late ’60s. The popular music market continued using mono as the main format into the early ’70s due to public demand. Some younger readers may be surprised to learn that portable, leather cloth cased, auto-change, mono record players were still selling strongly into the early 1970s, although by this stage they would have been fitted with ‘stereo compatible’ cartridges so that both formats could be played without risking damage to the narrower stereo grooves from 0.0010” mono needles (the stereo standard being 0.0007” diameter).

Even Pink Floyd’s first two LPs were released in mono. The mono version of Piper At The Gates Of Dawn was released on 5th August 1967 with the stereo mix following in 1968.

LETTERS & EMAILS
a month later, and 'A Saucerful Of Secrets' had both stereo and mono versions released simultaneously on 29th June 1968.

Since mono was the main pop music format, considerably more attention was given in the studios to the mixing and releasing of music in this form than the stereo versions. It was the most cost effective use of studio time to focus on the medium that produced most revenue. Also both AM and FM radio were monophonic at the time, so records were mixed with this in mind, to sound at their best when played through this medium.

After listening to a great deal of equipment across all recorded formats over several decades, my ears tell me that vinyl, valves and, preferably, high efficiency loudspeakers still give the best sound in the domestic environment. If that makes me a “flat earther” then I hold my hand up to be counted. TB

To follow up on Tony’s points, there was also a sort of Catch 22 effect in terms of studio production because pop/rock studio engineers, in the early to mid sixties, saw stereo as a new toy and treated the buying public as guinea pigs. Like the early Surround Sound mixes, such early stereo mixes were lamentable in quality, Beatles or no Beatles. For example, I remember listening to an early Elvis Presley stereo track and thought my right channel speaker had packed up after the extended introduction seemed to drone on for five minutes. It was only after Elvis deigned to open his mouth on the right channel that I realised what was going on. At that time, engineers didn’t have a clue what to do with stereo. Not just that, artists themselves didn’t understand the format, initially. The Beatles (as a group and as a studio team) certainly didn’t. Doing A-B comparisons on many stereo and mono versions of the same songs often reveals a rather sloppy approach to the stereo mixes that show a lack of attention to detail. The Beatles, largely, didn’t even attend the stereo mixing sessions. Incidentally, many Beatles fans have created a minor hobby in finding the differences between mono and stereo versions of each Beatles song.

Confusion about mono and stereo wasn’t just confined to early Beatles albums like Please Please Me, Paul Rigby tells us. Early Elvis albums were also cut with what is in effect two channel mono – instruments on one channel, Elvis on the other! It was a misunderstanding of the time.

BEATLES MEMORIES

Your articles and Mario’s letter about the Beatles, in the August 2014 edition, brought back many memories for me and even though I have gone digital I still play some of my 1960s albums with a turntable.

In 1963 times were very straitened both socially and economically. Parents were much stricter and attitudes were illiberal compared to now. A young single woman who got pregnant quite often had her baby taken away and there were plenty of loveless forced marriages. She’s Leaving Home reflects this quite mildly but gives you a feel for the times. The Beatles represented the moods and desires of the young so well and that is why they were and remain so popular.

I was 12 in ’63 and like Mario and all my friends we could only play our records on a Dansette type player with a BSR or Garrard autochanger. There were many other brands with a similar style which were made by Fidelity, Ekco and Bush etc. The average family could only afford one valve driven television and a huge valve radio. The Dansette was a luxury item that had to be shared too. All of these had single speakers. A 12 year old was well down the pecking order of what was to be viewed or heard.

I had to save hard to be able to buy an LP and this is why I shared my LPs with my friends who did the same, or I just bought 4s. An LP record collection of 500 was a dream and you were lucky if you had 10. Our records were played over and over again.

By today’s standards the quality of the sound reproduction was a joke. The valve amplifiers made a noticeable hum and created distortion. The cartridges had a limited frequency range and their heavy tracking soon damaged records. You could hear annoying rumble and pitch variations.

Surprisingly, given the expense, most teenagers did not take good care of their records or the equipment. Quite often records were left lying around in the window seat, the floor or even a bed. They were never changed so groove damage was inevitable. The record player never saw a spirit level. The Dansette would have been positioned anywhere that was convenient; a table, a sideboard, a window-seat, the floor or even a bed.
Listening to The Beatles was nearly always a social activity; if you were the first to get their new 45 or LP then you held a record party to jive with your friends, but only if you were lucky to have tolerant parents.

The new record was guaranteed to get scratched sooner rather than later. Record playing was definitely not an audiophile or tweaker affair; there was little room for improvement. The Dansette was 1960s plug-and-play and only the music mattered, but it was crackle, pop, scrunch and wow wow all the way. However, we seemed to be immune to the grunge and the Beatles shone through all the muck and grime. This is why their music will live on forever.

Some of my old records now produce a slight buzzing noise on sections where there is intense groove damage. I never heard that on a Dansette as the cartridge just ploughed through it all. I am really surprised that my 1967 Sgt Pepper album is still playable but the surface noise is so bad that I can barely listen to it.

My 1963 mono of Beatles! The Beatles looks quite damaged but amazingly there is hardly a crackle or pop and the slight groove noise, even with a stereo cartridge, is masked by the music. The album sounds just as fresh as yesteryear but modern equipment helps. This augurs well to get excellent sound quality from the new LPs.

I am sure that the new mono masters will be a treat for the ear and it is only fitting that they were produced from the original master tapes. I am now tempted to sample mono microgrooves for the first time and only the Beatles could have that influence on me.

If you are new to records and looking for a form of 60s sonic nostalgia then you will not find it by playing the newly remastered LPs of the Beatles, the Stones or the Yardbirds on your hi-fi. You will need to find a refurbished Dansette or Bush record player and some secondhand records. Most of the vinyl oldies will be in poor condition but they will probably still play through because of the heavy tracking. Then just hear what we had to suffer. I do not recommend playing modern LPs or 45s on such kit - any thoughts Tony?

You will be astonished at the difference between the sound quality of the 60s equipment and modern kit. Nowadays we are very privileged that we can listen to The Beatles at their very best. I am still picking out detail that I never heard in the good old days, but I won’t be buying a refurbished Bush as I can remember those times all too well.

Yours sincerely,
Trevor Morgan
London

Hi Trevor. Thanks for sharing your memories with us. I would agree with you, a combination of tracking weights heading towards double figures, low compliance cartridges and not changing the needle are not a good recipe for prolonging the life of your vinyl.

I don’t play modern records on old turntables. I do use restored or overhauled 50s and early 60s machinery mostly for playing my 78s, where a 10g tracking weight is inconsequential provided the needle is in good shape, and a crystal cartridge would be regarded as very high compliance compared to the steel needles and virtually zero compliance of the acoustic and early electric heads that these records would have originally encountered. I have 78s that I have had from my teens that show no signs of deterioration from being repeatedly played over the years on my Bush SRP31 portable, with a Garrard RC120 autochanger. Vinyl, on the other hand, would fair less well, especially if the machine was not in the best of shape.

I was given a second hand 1954 Marconiphone radiogram when I was 7 to stop me using my parents record player, but I was lucky enough to have a father who taught me how to handle records properly and would make sure that the needle was replaced at suitable times. The cartridge was also later replaced with a stereo compatible unit. This has resulted in most of the records that I have had from childhood still being in good condition.

Like you, I also find that the visual condition of a record is not necessarily a guide to the playing condition. I have bought second hand records that look mint, but have been played with a worn stylus that has left some horrible grating noises behind it, and others that look as though they have been skated upon, that, having been through a vacuum cleaning machine, play superbly.

I firmly believe that record cleaning is essential, not just for the improvement in sound quality but the reduction in record and stylus wear due to not dragging the needle through a totally inhospitable place and grinding the dirt into the groove wall. If you haven’t used a vacuum cleaning machine on the records that you had in your youth, I think you may well be surprised at how much less surface noise and perceived groove damage there can be after being properly cleaned. If you don’t wish to buy a cleaning machine, a lot of hi-fi and record retailers offer a record cleaning service at quite affordable prices. I would have a look on the internet to find such services in your locality.

Despite having some very fine modern equipment, I still play some of my older kit periodically. It can be very easy to dwell in an audio-ivory-tower in this job, and I find that occasionally listening to a range of equipment from acoustic through to modern high end audio is a good way of staying grounded and getting a realistic perspective on the progress that we have made, or, sometimes, haven’t. TB
Magical Mirus

Resonessence's new Invicta Mirus DAC sets new standards in both technical specifications and sound, say Jon Myles and Noel Keywood.

Canada's Resonessence may be an unfamiliar name to many readers - but its products have been causing a bit of a stir recently. We were impressed with the Herus USB to headphone DAC we reviewed earlier this year and its first product - the Invicta digital-to-analogue convertor and headphone amplifier - has drawn enthusiastic recommendations.

So it's no surprise we were keen to get our hands on the latest in the Resonessence range - the recently launched Invicta Mirus priced at £4,499.

At first sight the new unit looks just like the original Invicta, except without the headphone section.

But look under the hood and there's one massively important change. Yes, the headphone amp has gone - but it's been replaced by a second ESS Sabre ES9018 DAC meaning the Minis uses two of these for its digital circuitry.

"So what?" you may be asking. But for those in the know ESS Sabre DACs are among the best in the business when properly implemented - as in, for example, Audiolab's superb M-DAC and Q-DAC convertors.

And, luckily enough, Resonessence knows exactly how to implement them. Not least because its founder Mark Mallinson was previously operations director for the Sabre's manufacturer ESS Technologies.

So to say Resonessence know all about getting the best out of the ES9018 is something of an understatement.

Which undoubtedly explains why the Invicta Mirus produced some of the best technical specifications we have ever seen in a digital-to-analogue convertor (see Measured Performance).

But that's not the only trick up its sleeve - as is evident as soon as you unpack the unit.

Measuring 22cm x 28.2cm x 5cm and weighing in at 2.9kg the Mirus is a slim unit with a fetching Resonessence logo on the left hand side of the front panel which glows blue when in operation and red while in standby mode.

To the right of the clear OLED display sits a digital volume control knob which doubles as the function selector as well as, unusually, an SD card slot selector. The card reader supports both AIFF and WAV as well as DSD 64 and 128 files. Next to this is a set of discrete blue LEDs which indicate the sample rate of incoming files - with the Mirus handling everything up to 24-bit/384kHz if you happen to have any!

Round the back are the usual selection of connections - an AES/EBU S/PDIF, USB, Toslink input and output, two BNC S/PDIFs as well as XLR and RCA analog outputs.

Finally, an HDMI output allows the Invicta Mirus to be connected to a monitor to allow easy access to its comprehensive set of menus.

This is more handy than you might originally think as Resonessence has packed some serious processing power into the Mirus and the various options can be initially difficult to access using simply the rotary selector knob and front panel display. It also allows album art to be displayed.

Inside the aluminium case, apart from those aforementioned Sabre
DACs, is an over-specced power supply built around a toroidal transformer together with galvanic isolation to ensure the various audio components do not interfere with each other and can operate at their maximum performance levels.

FILTER OPTIONS
Like the similarly Sabre DAC-equipped Audiolab M-DAC, the Mirus has a range of filter options to fine tune the sound.

Two of these are ESS's own and the other seven Resonessence-designed. The company makes no recommendations on which to use but does say the Linear Phase Apodizing filter was preferred by many of its beta testers.

In truth, the differences between the various options can be subtle and are often music-dependent. But having the option is welcome and the fact that they can be changed on-the-fly makes for interesting listening sessions.

SOUND QUALITY
As can be seen from all of the above, the Invicta Mirus packs a heck of a lot of digital firepower into its compact chassis.

However, all that would count for nothing if the sound wasn't up to scratch.

Fortunately, there are no fears on that score. To put it bluntly, the Resonessence has the ability to truly beguile with its sound.

Overall, it has a sense of musical coherence, top-to-bottom integration and easy flow to its sound that makes listening sessions stretch into hours.

Partnered with our resident Quad QMP monoblocks feeding the impressive Yamaha Soavo loudspeakers (see review this issue) the sound was exceedingly smooth and detailed.

Led Zeppelin's 'Good Times, Bad Times' had power, presence and tremendous timing. The Mirus brought out all the rich resonance of Robert Plant's voice while retaining the intensity of Jimmy Page's crunching chords.

Similarly Eleanor McEvoy's 'Non-Smoking Single Female' bounced along with verve and energy. Here the Mirus showed its tremendous sense of instrumental separation. Every element of the song can be tracked easily - from the walking bass line, through the delicate guitar overlay to the understated vocal performance.

In short, it has a musical integrity and sense of spot-on presentation that few other DACs can match.

And this is perhaps where its true magic lies. High-resolution files finally give our digital systems the chance to match analogue playback and the Invicta Mirus truly brings the best out of these.

Connecting a MacBook Pro and playing Michael Tilson Thomas and the San Francisco Symphony's rendition of Mahler's 'Symphony No 2' on DSD and the sense of atmosphere is mesmerising.

Instruments are not just well-reproduced, they are almost solid in front of you. Dynamic contrasts are a revelation and the soundstage doesn't just extend between the left and right boundaries of the speakers but seems to occupy a space well beyond the rear boundary wall.

You can place the chorus and orchestra in their relative positions in front of you and feel the intensity as the music swells.

Interestingly, playing the same tracks through the Resonessence's SD card slot option provided a slightly cleaner and crisper presentation.

The difference wasn't night and day - but it was noticeable so if you are considering storing music in the
MWA-RC
Magnetic Wave Absorbers

“Dynamics in the music seem to be more refined with the Magnetic Wave Absorbers fitted and the music flows more smoothly. This is an excellent value accessory for your hi-fi system”

HI-FI Choice, October 2013

These simple yet effective products from Oyaide in Japan have been designed to add further improvements to the equipment and cabling in your system.

MWA-RC caps are manufactured from high quality polypropylene which act reduce the vibrations found on unused RCA contacts on your system.

The inclusion of a 1mm thick piece Oyaide’s very own Magnetic Wave Absorption material also acts as a barrier from the noise generated from the unused RCA contacts on your equipment.

Additionally the caps act as a barrier to dust build up in your equipment, which combined with the above can taint the quality of the music you have come to love and enjoy!

TRY THEM FOR YOURSELF.... WE GUARANTEE YOU WILL NOT BE DISAPPOINTED

Tel: 01332 342233 sales@blackrhodium.co.uk www.blackrhodium.co.uk/oyaide

Upgrades that make all the difference

You can radically improve the sound quality of your deck with the simple addition of Origin Live upgrades. This applies whether your deck is budget or high end.

As a vinyl upgrade specialist for over 25 years, we have earned an enviable reputation for delivering real results that are not just different but a massive improvement or your money back.

Countless enthusiasts and numerous magazine awards attest to the ability of these products to transform performance with high value for money.

Why not allow your system to sound better than you've ever heard it before and treat yourself to a serious upgrade.

Remember, all our products carry a no quibble money back guarantee when ordering from us directly, should you be anything other than delighted.

Website: www.originlive.com
Email: originlive@originlive.com
Phone: +44(0)2380 578877

Award winning platter Mat £39.95
Upgrade belts for all flat belt decks £29.95
Ultra low friction turntable oil £9.99
Power supplies from £255
Multi-award winning Tonearms from £299
simplest way possible this may well be an option.

Switching between the various filter options also proved interesting. On the whole, I preferred the slow roll-off options, especially with CD where they seemed to ameliorate that slight tickness inherent in the medium.

Having said that, with higher bit-rate material the effect became less pronounced and the Linear Phase Apodizing option came into play more. But again this will depend very much on personal choice — and the fact that the options are there is the most important factor.

What is also important, though, is whichever you choose the Invicta Mirus has the ability to provide some of the best digital playback available at the moment.

I'd go so far as to say it might even have the ability to make converts of even the most die-hard analogue aficionados — especially when used for the playback of DSD files which do have a depth and warmth of character to shame CD.

But even if you don't use the DSD facility, the Invicta Mirus's resolution, detail and downright musical rightness make it a delight when playing back anything from standard Red Book CD to high-resolution material of 24/96 and above.

CONCLUSION
As you might have guessed, Resonessence's Invicta Mirus is among that select group of components that deserves whole-hearted recommendation.

Yes, its £4,499 price tag is not to be taken lightly. But neither is its sonic ability.

The decision to use two Sabre DACs running in parallel has given a level of clarity, musicality and all-round a-smile-on-your-face delightfulness that makes many rivals at or anywhere near the price sound slightly suited and mechanical.

SD card playback option is also a nice addition while DSD functionality and a comprehensive range of inputs means this is one DAC that seems virtually future-proof.

Its in-built volume control also means you can pair this with a decent power amp and then just take your choice of the various front-end options to build a very special system indeed.

Yes, in the end, there are cheaper DAC options available, but very few as talented as the Invicta Mirus.

MEASURED PERFORMANCE
The Mirus has a wide range of filter options, programmed into each ESS Sabre32 DAC including the Sabre's own 'fast' and 'slow' options. There are seven options, giving variants of best

FREQUENCY RESPONSE, 192k

DISTORTION, 24bit, -60dB

But the result was an extraordinary 131dB EIAJ Dynamic Range figure, way above all other DACs. With distortion also way below all rivals, measuring 0.006% at -60dB, the Mirus is comfortably ahead.

Interestingly, these results were similar between the unbalanced phone outputs and the balanced XLR outputs. XLR had highest output (4.4V) and lowest distortion at -60dB, and since XLR cables are also free of earth currents, common mode interference, and are best screened, XLR should be used if possible.

The Mirus possesses the best measured performance of any DAC we have measured to date, by quite a large margin. With a good set of filters to allow fine optimisation, it looks like a fabulous tool for digital. NK

VERDICT
One of the best DACs we've come across. A tour-de-force in digital engineering.

FOR
- superbly musical
- dynamic
- class-leading bandwidth
- DSD playback
- SD card slot

AGAINST
- absolutely nothing

CUSTOM CABLE
+44 0208 942 9124
www.customcable.co.uk

RESONESSENCE INVICTA MIRUS
DAC £4,499

REVIEW
NEW LINEAR POWER SUPPLY FOR NAIRM UNITISERVE

£995.00

GET IN TOUCH WITH US
WWW.MCRU.CO.UK
DAVID@MCRU.CO.UK

WORLD DESIGNS

• WDKT88 32 watts per channel ultralinear push pull stereo amplifier. Single input power amp or integrated with multi-input relay switching.
• WDKEL84 15 watts per channel ultralinear push pull stereo amplifier. Single input power amp or integrated with multi-input relay switching.
• WDPPhono3 All triode passive equalization valve phono-stage. Dual input option. MC step-up transformers available. Requires WDPSS3 power supply.
• WDPre3 Transformer coupled single ended valve pre-amplifier. Low output impedance. Multi-inputs utilizing relay switching.
• WDPSS3 High performance choke power supply.
• WDHD3S Transformer coupled single ended valve headphone amplifier. Multiple settings for headphone impedance matching.

Kits and Components for the Audiophile Community
07972 055492 sales@world-designs.co.uk
www.world-designs.co.uk

hear the music ... not the equipment
to the piano of Keith Jarrett on Arvo Part's 'Tabula Rasa', it had both body and resonance. When the low notes faded away they did so in an entirely realistic way – just as you'd imagine they sounded in the studio.

Switching to female vocals – such as Nico on 'The Velvet Underground's 'All Tomorrow's Parties' – and she was there in front of me.

Fans of pounding dance tracks may find the bass slightly lacking as, in common with most standmount loudspeakers, the LS5/9s don't go down to sub-sonic levels.

But there is certainly plenty of low-end power on hand if the music demands it, with the 'speakers having a distinct thump to them. The rumbling synth lines of Leftfield's 'Rhythm And Stealth' had plenty of attack. There was a slight sense of overhang at times – with a feeling that the bass was lagging just a little behind the rest of the music but nothing which detracted from the overall propulsive feel of the album.

But it's when you move up the frequency register that things really start to shine.

The polypropylene mid/bass driver has a deliciously creamy quality that makes all forms of music sound rich and appealing. It is also extremely good at layering the sounds in complex pieces so you can hear into and around the musical parts.

Take John Coltrane's 'Ascension'. It is also extremely good at revealing bass overhang at low frequencies, across the midband the sound, although a phase dip did appear between the midrange and treble units to soften the audio band. There was no dip between the midrange and treble units to soften the audio band. There was no dip between the midrange and treble units to soften the audio band.

When the low notes faded away 10kHz even on the tweeter axis, this is inevitable. Upper treble rolls away above 10kHz even on the tweeter axis, and drive to sound exciting when the music demands it. But they can also be extremely refined when that's what is required.

Play some modern, signal-compressed rock or pop and the Grahams will soon let you know all about it. But let them have well-recorded high-resolution music and they'll reveal it in all its glory. In the end they just sound honest.

**CONCLUSION**

Graham Audio has done a fine job with its BBC-licensed LS5/9. It's overall sound is well-balanced, smooth and even. There's no stringing treble to make your ears ring nor a thumping bass that overwhelms everything else.

Yes, some loudspeakers of a more modern vintage may sound superficially more exciting at first listen – but the LS5/9s are more likely to reward in the long-term as they let the music flow without firing it at you full bore.

The original BBC design proved popular 30 years ago – and I'd have a bet the latest Graham Audio iteration could well be giving listeners musical pleasure 30 years from now.

Just remember to partner them with a suitably powerful amplifier, sturdy stands and take care with positioning.

Then sit back and enjoy.

---

**GARCIA AUDIO**

**LS5/9 £3,450**

---

**OUTSTANDING - amongst the best**

**VERDICT**

A well-engineered update of a classic loudspeaker design. Superbly musical and enjoyable

**FOR**

- smooth mid and treble
- detail
- timing

**AGAINST**

- needs a powerful amplifier
- slight bass emphasis

Graham Audio Limited
+44 (0)16263 61168
www.grahamaudio.co.uk
SAVE UP TO 16.5% off the cover price when you subscribe to Hi-Fi World. That's an amazing £3.42 per issue, including postage.

FOR BACK ISSUES ENQUIRIES PLEASE CALL

01442 820580

OVERSEAS SUBSCRIPTIONS IF YOU LIVE OUTSIDE THE UK, PLEASE CALL FOR OUR LATEST PRICES

+44 (0) 1442 820580

SO WHAT ARE YOU WAITING FOR? CALL NOW!!!

SUBSCRIPTION HOTLINE 01442 820 580

Lines open Mon-Fri 9.00-5.00 or (weekend answering service available)
WHY SUBSCRIBE TO HI-FI WORLD?

1. 12 issues a year delivered straight to your door.
2. Be first to grab a bargain in our "Free Reader Classified Ads" section.
3. Run by dedicated hi-fi engineers and enthusiasts.
4. Subscribers receive a minimum 10% Discount annually.
5. HI-FI World has become famous for its informative reviews and radical kit designs.

PLUS! Subscribe by Direct Debit and receive a 16.5% discount on a yearly subscription (UK only).

Instruction to your Bank or Building Society to pay by Direct Debit

Please fill in this form and send to:

Originator's Identification Number 4 2 7 0 4 9
Name and full Postal Address of your Bank/Building Society
To: The Manager
Address
Postcode
Name(s) of Account Holder(s)
Branch Sort Code
Bank/Building Society Account Number
Reference

Instruction to your Bank or Building Society
Please pay Webscribe Ltd Direct Debits from the account in this Instruction subject to the safeguards assured by the Direct Debit Guarantee. I understand that this instruction may remain with Webscribe Ltd and, if so, details will be passed electronically to my Bank/Building Society.

Signature(s)
Date

Bank and Building Societies may not accept Direct Debit Instructions for some types of accounts. The guarantee should be detached and retained by the Payer.

The Direct Debit Guarantee

The guarantee is offered by all banks and building societies that accept Direct Debit Instructions to pay Direct Debits.

1. If there are any changes to the amount, date or frequency of your Direct Debit, Webscribe Ltd will notify you 10 working days in advance of your account being debited or as otherwise agreed. If you request Webscribe Ltd to collect a payment, confirmation of the amount and date will be given to you at the time of the request.

TERMS & CONDITIONS: You will receive 12 issues per year. Minimum subscription term is 12 months. Prices include P&P and are correct at the time of going to press. All prices are quoted in sterling. Offer available for UK subscribers only. For enquires relating to overseas pricing call +44 (0)1442 820 580.

Send this form to:
Hi-Fi World, Subscriptions Department Unit 8, The Old Silk Mill, Brook Street, Tring, Hertfordshire, HP23 5EF
Bayan Audio has built on the success of its Soundbook Bluetooth portable speaker with the new Soundbook X3 – a larger and more powerful version. Jon Myles takes a listen.

Standing out in the ever-expanding Bluetooth loudspeaker market is becoming increasingly difficult. With new models hitting the shelves of retailers on a seemingly weekly basis designers have to work hard to make their mark with consumers. Which is why we liked the Bayan Soundbook so much when we reviewed it last year (Hi-Fi World September 2013).

Here was a portable Bluetooth speaker/radio that not only looked good with an innovative design but also sounded better than most other units at the price.

Constructed from premium materials and small enough for portable use, its size meant it was the ideal speaker for slipping into a suitcase or bag for music on the move.
But of course small size means obvious limitations in sound quality. So now UK-based Bayan Audio has rolled out the Soundbook's bigger brother in the shape of the Soundbook X3.

Its larger size—235mm wide by 40mm deep and 120mm high—means Bayan has managed to squeeze in larger speakers and more amplifier power.

Inside the solid aluminium casing and ballistic nylon cover are four 1.5-inch long-throw neodymium drivers allied to a passive 3.25-inch bass radiator all driven by a 20-Watt amplifier.

Like its smaller sibling the X3 features a clever hinged cover that flips under the base to form a firm stand, or it can be pulled back over the front to turn the unit off.

Connectivity comes via Bluetooth 4.0 with aptX as well as a built-in FM radio. There's also a 3.5mm audio-in jack on the rear, as well as a USB socket that allows you to charge mobile phones and other devices straight from the Bayan—which could be handy if you are out and about.

In addition there's NFC capability for suitably equipped devices which helps automate the pairing process. Users switch between Bluetooth, auxiliary and radio through the on/off button on the top of the unit. It sounds fiddly at first but is easily mastered after a little practice.

Out of the box, pairing the X3 with my iPhone 5, iPad and an Android device proved almost instantaneous and the connection stayed solid throughout the review period.

**SOUND QUALITY**

The original, smaller Soundbook had a nice, clear, articulate sound that was refreshingly gimmick-free with no attempt to boost either bass or treble.

The X3 continues in that tradition—only with appreciably more power thanks to the extra speakers.

Pushing up the volume on the Jesus And Mary Chain's 'Psychocandy' produced no hint of strain. Bass was deep and true while trebles were well-defined. That aluminium casing means there's no hint of the rattle and hum you can get on cheaper Bluetooth loudspeakers.

There's real power and punch to the low frequencies—The Pet Shop Boys' cover of Bruce Springsteen's 'The Last To Die' in Apple Lossless bounding along with real verve. It's easily capable of filling a medium-sized room and could just as well serve musical duties at an outdoor barbecue or party.

Taking it outside and using the Bayan X3 to play Bjork's 'Debut' album proved just how capable it can be. The Icelandic singer's vocals were full of presence and strength with an emotional range not all Bluetooth speakers can bring to the party. OK, it's never going to rival your own hi-fi system for overall clarity but it does what it does very well.

Battery life was also impressive, the X3 running for a good 10 hours with the volume at a decent level.

Radio reception was crisp and clear, the internal FM aerial enabling good reception.

As an added bonus, the X3 switches to conference-call mode if anyone rings while you're listening to music from your phone.

**CONCLUSION**

Bayan have done it again with the X3. The original Soundbook was good but the X3's extra drive units and amplifier power take its sound quality to another level. Anyone looking for a decent Bluetooth speaker should really give it a try.

It's not the cheapest option at £250 but its design, sound quality and construction make it worth the money.

**BAYAN SOUNDBOOK X3 £250**

- **OUTSTANDING** - amongst the best

**VERDICT**

A superbly designed and great sounding Bluetooth speaker. Smooth, civilised musical presentation makes listening a pleasure.

- **FOR**
  - great design
  - good bass
  - clean treble

- **AGAINST**
  - nothing

Bayan Audio
www.bayanaudio.com
+44 (0) 844 800 3480
Yamaha Digital Sound Projector

Using unique Yamaha technology, sound beams create real surround sound!

YSP-1400

Digital Sound Projector

The YSP-1400 produces sound beams that are reflected off the walls, achieving a wide 5.1-channel listening area. Upgrade your TV to a high-performance home cinema system. Stadium excitement, right in your room!
Direct To Disc:  
Third man style

Jack White's Third Man Records is backing the Direct To Disc resurgence. Paul Rigby talks to the mastering engineer at the centre of it.

In analogue terms, Direct To Disc is a process where you perform a song in a studio, for example, and then, instead of that signal being recorded to tape, it is sent direct to a lathe where an acetate is cut, promising superior sound quality. The last commercial recording of this type was completed around forty years ago. Now, the process is making an intriguing return.

This month I am covering ex-White Stripes' lead singer Jack White's desire to integrate Direct To Disc within his own record label Third Man, based in Nashville, Tennessee, USA.

George Ingram, owner and president of Nashville Record Productions (NRP) and mastering engineer of over forty years, was recently cleaning and rebuilding a circa 1955-1959 Scully lathe, a relic from King Records in Cincinnati (record label for such luminaries as James Brown) when White paid him a visit.

"Jack fell in love with the lathe," said Ingram. "He likes older, vintage equipment and we were putting together a tube, mono system to go Third Man hold regular Direct To Disc live events."
During live event the audience can view the lathe in action.

with it. In fact, we were trying to put together a system very similar to that seen in the late fifties and early sixties."

After being assured that a stereo cutting system could be added, if required, to the basic mono cutting system White proposed a unique partnership with NRP to create a live cutting room at a new facility within Third Man Records. That is, a set-up that would feature a Direct To Disc system with an adjacent studio for musicians to play, but with one important addition - space and seating for an invited audience. In effect, this cutting system would be recording live gigs.

Realising that he would have to expand his operation to accommodate such an enterprise, White bought an adjacent building and fitted it out for the task.

"I reminded Jack that he'd have to isolate the cutting room completely from the stage," said Ingram. "If there are any vibrations at all, if it's transmitted through the floor, it comes out in the record. This was done so that the final construction is isolated from the building but you can still see the lathe through glass windows. The audience, sitting in an adjacent space called the Blue Room, can actually look in and see the lathe turning and the record being cut. But that's not all, there are also video monitors showing shots of the lathe as it is cutting."

The cutting systems include that same Scully lathe from the mid-50s with a stereo cutting system added to it (using a solid state 1974-era Westrex 3D2 AH) plus a tube mono cutting system (with a mid-fifties era Western Electric 2A cutter head).

The latter has already been used to produce and release Third Man-backed Johnny Cash Sun recordings using a 15ips master of the original. Also in the room is a Neumann VMG-70 lathe with a SP-79 console, one of the last examples built, from 1979.

"Because the cutting room is somewhat limited in width, Jack had a new custom-built Neve 5088 console built to do all of the live recording. So, the stage is right outside of the room. The recording is performed and then mixed in the cutting room, the stereo feeds go straight to the cutting system and straight onto the disc. The audience is fully informed through each step of the process. The band is cued and they play for twenty minutes then they stop and a new lacquer is put on for the B-side and another twenty minute set is then recorded. The album is then cut and the band interacts with the audience and plays a few more songs.""

Quite apart from the promised technical enhancements there is also the human element to consider. For example, you have to remember that...
WHY DIRECT TO DISC?

Why Direct To Disc at all? The last commercial Direct To Disc recordings done by the major labels were in the mid-seventies. The reason they were done at all was because the cutting systems that cut the grooves had a far superior transient response than the analogue tape at the time. “They wanted to get away from the tape that has its own sounds and tape saturation, which is a bit of a dulling on the high end” said Ingram. “In those early days, the tape’s transient response was nowhere near the cutting head performance. The recordings, at that time, were done for audiophiles. Nowadays, tape quality has improved a lot. The sound quality differences are closer.”

So is there a technical benefit recording direct to disc? Yes, according to Ingram. “There is still a bit better transient response. Vocals are tighter and there is an open end in the bass. On a master tape, you don’t quite get that ‘ting’ on the cymbals. You lose that attack on the high end. On Direct To Disc it comes back fuller and richer. More detail on the extremities.”

THE WORLD’S FASTEST RECORD

Now er mind Direct To Disc, Third Man has also laced Direct To The Public as it holds the record for bringing vinyl to market, as George Ingram describes. “We wanted to produce the fastest record release but we decided we wanted to do this as school as possible. We took two tracks from Jack’s new album, ‘Lazarreto’, cut them onto a 7” single on Record Store Day, sent them to the pressing plant, United Record Pressing, then played it. We put it on a press at a press, put it in a sleeve with images made during a live concert at Third Man, took it back to the record store and sold a copy. That constituted a record release. We recorded it, mixed it, mastered it, plated it, pressed it, sold it. Three hours, fifty-five minutes and twenty-one seconds!”

NEIL YOUNG & THE VOICE-O-GRAPH

Third Man’s secret weapon and another form of Direct To Disc was, and now is, the Voice-O-Graph. The Voice-O-Graph was a tourist device created and used in the late fifties until the late eighties, essentially a record cutting machine. It is also used in popular locations where people are encouraged to make recordings. The Voice-O-Graph looked like a telephone booth. The idea was you stepped into it, paid your 35¢, then a series of lights would flash and the machine would ask you to start your recording. During the copy, it would warn you when you were half way through, then when you were finished, the machine would eject a record: a flexible paper disc coated with lacquer. You would then have the option of putting it in a mailing envelope to send, if you wished.

Third Man unveiled a 1947 vintage, restored version in 2011, recording Store Day in their Nashville, TN store. Immediately, one wonders used the booth’s recording facility to ask his girlfriend to marry him! The booth was used for more serious reasons soon after.

Neil Young came to town because they were celebrating Willie Nelson’s birthday and tried to coat some paper. Neil thought that it was the coolest thing in the world. It’s old school and it’s scratchy but it has a flavour all its own. At a later date, Neil said to Jack, “Hey man, why don’t we do a whole album and cut it in the Voice-O-Graph booth and then transfer those records to analogue tape and master from the tape? They hit me with the project.”

The machine is quirky and fun but it is limited in its frequency response. According to Ingram, a normal vinyl record, cut on a modern cutting system, ranges from 40Hz to 15kHz. The Voice-O-Graph booth reduces those figures to around 100Hz and 9.3kHz. There is an element of noise to contend with. The team spent three days on the recording. In fact, Neil Young has a luxury box set version of the final album, ‘Letter Home’, which includes a DVD showing the creation process. There’s about two minutes of recording time on each disc. To record ten albums, we cherished. For those songs over two and a half minutes, we did them in pieces, cutting the pieces together in the analogue tape. Neil did a number of takes on each song. Said Ingram, ‘We took them up into the cutting room, cut them back on the cutting lathe and then transferred those to 15 analogue tape. From the tape was the source of the final mastering.’

The Voice-O-Graph didn’t use its original discs. That software had long since disappeared. “We worked with a company, Anodis Masters, in California,” said Ingram, “and tried to cast some paper. We started polyvinyl chloride with lacquer to cut on but the experiments didn’t produce good results and they were pricey. Jack didn’t want to charge $30 per vinyl, which was what it was going to be.”

So they turned to the UK and one Bill Bollman (a recognised expert on the Voice-O-Graph). He created a batch of Voice-O-Graph-friendly discs made from vinyl. PVC. The discs themselves were not made specifically for the Voice-O-Graph but made here and cut well. “They are made from a substrate that is similar to a CD,” said Ingram.

Next month, I will look at how classical music is facing Direct to Disc.

THIRD MAN RECORDS

623 7th Avenue South, Nashville, Tennessee, USA.
For more information, call 00 1 615 891 4393.
High End – Made in Germany

Master Innovation

The Clearaudio catalogue of high quality pressings inc. Deutsche Grammophon re-issues available now

For orders and information contact;
0118 9814238  info@soundfoundations.co.uk
Arcam's new AV receiver offers comprehensive facilities and superb sound - but Noel Keywood discovers some flaws under the polished exterior.

Arcam's AVR750 is designed in the UK, with a user manual written in the UK, helping make it relatively easy to set up and use, which I see as a big plus point. And Arcam like to stress that the AVR750 offers real high-fidelity, where other AV receivers do not.

The AVR750 is quite a brute, weighing a hefty 13.5kgs (and much more packed). Width is 433mm, depth 425mm and height 171mm. It is solidly built, but sombrely finished. The green LED matrix display is bright and legible at a distance if not as slick looking as the common electroluminescent displays of rivals.

The AVR750 is a seven-channel receiver that, Arcam state, works in clean Class A mode up to 30 Watts per channel, and beyond this in Class G where power line voltas are increased to pass transients of up to 100 Watts, all channels fully driven.

Most people will play in Class A mode and our measurements showed the receiver was very clean indeed, critically at high frequencies where crossover distortion was effectively absent.

I prefer to switch off the centre channel of a receiver, since the Martin Logan Electromotion electrostatic loudspeakers I use create a better correlated centre image than a box below the TV screen (a Samsung 50in LED) and this was possible in the on-screen set-up menu.

There are no fewer than seven HDMI inputs and two HDMI outputs. Although there are both composite and component analogue video inputs, there are no analogue video outputs, only HDMI, with Audio Return Channel (ARC).

Arcam keep it simple-ish with audio. There are no faux "hall modes" nor Audyssey digital processing. There is a full suite of Dolby modes, however, including Dolby Volume, to equalise volume levels. Dolby TrueHD as well as DTS HD Master Audio cope with HD Blu-ray soundtracks, whilst Dolby Digital Plus and DTS cope with lower resolution digital.

Stereo can be converted into surround-sound with Dolby PLIX or DTS Neo 6. For a full and detailed list, download the AVR750 user manual available on the Arcam website. Loudspeaker auto-tuning is fitted, as well as room equalisation. I manually tune, but Arcam's system worked well enough in my lounge.

On the digital side there are S/PDIF digital audio inputs, optical and electrical - and both work up to 192kHz sample rate our tests showed. There is no USB (B) for direct connection of a computer, but there is ethernet to allow network connection and the Arcam will play computer music files from any UPnP equipped computer, which means PCs, but not Macs unless a UPnP server is loaded. It also has an internet tuner (Vtuner).
Since 1948 Ortofon have introduced nearly 100 different moving coil pick-up cartridges to the hi-fi market. Their latest models in this long and proud heritage are the Quintet Series.

All Quintet cartridges use the same ABS thermoplastic bodies and neodymium magnets, but each model in the range has its own sonic expression that reflects its status. From the well-rounded Quintet Red, through the smooth Quintet Blue and spacious yet dynamic Quintet Bronze up to the pure audio excellence of the Quintet Black, this series offers something for every discerning listener at a very attractive price.

The Quintet Series also includes a true-mono cartridge, for accurate reproduction of older mono recordings.
There is a USB A socket for a memory stick, however, so high-resolution computer files can be played from this, the only drawback being it is rear panel mounted, making 'sneakernet' awkward. Lossless WAV and FLAC are supported, up to 192kHz sample rate I found, as well as MP3, WMA and AAC (iTunes).

Like other AV receivers the Arcam has a VHF/FM and DAB tuner, but not Medium wave. I suspect both are derived by a Software Defined Radio (SDR) tuner section because the VHF section wasn't so impressive under test, DAB/DAB+ appear to take precedence.

Whilst on analogue I should mention there is no Phono stage, for those wishing to spin LP where Phono has now been resurrected on other AV receivers.

An illuminated remote control is provided. I was disappointed to find it would not source select without AMP being selected first. This is not uncommon, but it is an irritation and you can for a moment believe the receiver has thrown a wobble (as they do) when it won't react to an input command.

Like all AV receivers the AVR750 turns analogue inputs to digital, unless Direct is selected to bypass processing. A good 24/96 analogue-to-digital convertor (ADC) is fitted, but there is no digital output for recording purposes (e.g. using Audacity on a laptop).

**IN USE**

For £3999 the Arcam looks and feels a tad workmanlike. The remote was reasonably easy to use, however, with AMP, volume and mute fairly obvious. Direct is also provided, and power on/off as well as input selection of course, and set-up menu selection.

Tests had showed hiss on VHF/FM was high in stereo mode, but not mono. Unfortunately, mono cannot be manually selected. The receiver switches to mono automatically when there is no 19kHz mpx tone, and it also switches to mono at low signal levels, but it cannot be manually forced to mono. Using a large outdoor aerial providing well over 1mV for BBC stations coming into Central London from the Wrotham VHF transmitter, hiss wasn't obvious. However, during Radio 3 silences with volume set high a small background hiss could be heard.

Unfortunately, this wasn't the main issue. Sound quality was papery and a little coarse on VHF/FM and not very nice where Onkyo and Yamaha fit excellent analogue VHF sections and superb quality is possible. Internet radio and DAB commonly come in at 128kbps and quality isn't so good.

The Arcam saw my computer (a Mac running EyeConnect UPnP server) and its music files immediately. I was surprised that all my high-resolution files (24/96, 24/192) were flagged as Unsupported; the Arcam played up to 48kHz sample rate, WAV and FLAC etc, but no higher, and was similarly limited reading a USB memory stick. This is a surprising limitation at the price; less expensive rivals have no such problem.

In happy contrast, I hooked up my Astell&Kern AK100 MkII to one of the two optical digital audio inputs and played 24/192 high-resolution files without murmur — and with impressive results.

**SOUND QUALITY**

In a nutshell, the Arcam sounded superb when playing high-quality source material. The amplifier has a crystal clear quality about it, putting up images between my Martin Logan Electromotion electrostatics that were seemingly hewn in stone.

Spinning a 24/192 Blu-ray on a Cambridge 650BD Blu-ray player of the Trondheim Soloists playing 'Divertimento', DTS HD Master Audio, Dolby TrueHD and uncompressed PCM all played fine, the big green display (as well as an OSD) flagging up the formats. Violins were a smidgen less hard and sharp than is common, and their strings better separated; the AVR750 delivered a
The Evo! What an evocative name and rightly so too! The SL-1200 evolved from a Hi Fi turntable into a DJ deck and now we turn it back into a Hi Fi turntable again! Fitted with the legendary SME 309 tonearm and the Audio Technica AT33EV your emotions will run wild. The AT33EV is itself an evolutionary cartridge hence its EV suffix and matches the SME 309 so well. We have worked with direct drive turntables and moving coil cartridges for 33 years and the EVO has evolved into a mature product that is quite simply a world beater. We can supply completely new units with 6 year guarantees, used ones with 5 year guarantees, or we can convert your own...

The T-01MC moving coil phono stage has been designed to work with every moving coil cartridge from a DL-103 to a Clearaudio Goldfinger Statement. Two reviewers use the T-01MC for their reference system and another compared it favourably to a £9.5K stage noting it was almost as good and with a lower noise floor! In stock now at £995.00

The Beatles in Mono!
You must have read about the original master tape audiophile mono Beatles by now! To be heard at their best you really need a true single coil mono cartridge: we stock the amazing Denon DL-102 and the hand made Miyajima mono cartridges encased in bodies of rare wood.

Clearaudio Goldfinger - Miyajima - Benz LPS - Denon DL103 - Audio Technica AT33
SME Turntables & Tonearms - Oyaide - Furutech - Klipsch - Whest Audio - 78rpm - SL1200 Mods

All demonstrated in a relaxing setting with river views! Very high part exchanges & World wide mail order.

Sound Hi Fi Dartmouth Devon 01803 833366 web www.SoundHiFi.com

“a discernible improvement in overall clarity... The PowerBar™ is an excellent quality product”
Hi-Fi Choice, May 2014

The start of the Russ Andrews range of mains extensions, PowerBar™ features 4, 6 or 8 high-quality, positive-grip and individually wired sockets along with the option of SuperClamp™ surge protection - a “no-brainer” according to Hi-Fi Choice.

And all from just £89!

To claim your PowerBar with FREE integrated SuperClamp
go to the web address below, select your choice of PowerBar and tick the SuperClamp option. Then enter offer code HFWPOWERBAR at checkout. Or simply phone us on 01539 797300 quoting code HFWPOWERBAR. Offer ends 22nd Aug’14.

VERDICT
New minimalist phono stage, that sonically, punches well above its weight
FOR
- open and precise
- plenty of emotion
- plays old mono records well
AGAINST
- only available in black

Enhanced with Super Burn-in Lite process
Robust extruded aluminium casework
Optional PowerMax Plus™ - our entry level, custom made mains cable
SAVE 10% on a PowerMax Plus mains cable when you buy both together

Order now on 01539 797300 or visit www.russandrews.com/powerbar
Mail Order Direct • 60 Day Cable Home Trial • Cable Upgrade Scheme • Free Delivery (orders over £100 within UK Mainland)
great sound here, about the best I have heard from this challenging test disc.

I found it easy to slightly tweak the balance, too, with the bass and treble controls.

Greig's 'Piano Concerto' (24/192) thunders through my lounge, played by the deft hands of Percy Grainger, and here I started to sense the Arcam's low-end push. Time for John Mayer's 'Vultures' from 'Where the Great Spin Through' of Carlos Santana's 'Supernatural' DVD-A (24/96) and kick drum had real kick to it. This receiver has taut and fast bass that energised the Electromotions alive. That made for a great spin through of Carlos Santana's great sound here, about the best I have heard from this challenging test disc.

This was clearly high-resolution digital; the AVR750 put up a sparkingly good performance here and I was left musing about how its apparent lack of noise and mush, its detail, grip and control complemented my witheringly critical Electromotions.

But with VHF/FM the Electromotions told a different story. I heard slight hiss during Radio 3 silences and a generally grey and edgy quality, even though signal was always 100% from my outdoor aerial. DAB offered no better; Jimi Hendrix's 'Wind Cries Mary' at 64kbps from 'The Arrow' being sacrilegiously poor, mostly due to low data rate I must admit. But DAB offered no improvement across a wide range of stations, even at higher bitrates, excluding Radio 3 at 352kbps. The tuner section was unimpressive against what I expect from a good AV receiver.

**CONCLUSION**

I loved listening to the AVR750; it worked beautifully with my Martin Logan Electromotion hybrid electrostatics, that critically revealed its fine treble, deep detailing and superb imaging. The bass bins suddenly started to produce punchy bass too. But happiness only existed whilst playing digital from CD, Blu-ray, or S/PDIF digital audio. I was underwhelmed by both Network and USB audio, as well as radio. Consequently, the high price seems difficult to justify unless its particular raft of strengths are those that appeal.

---

**MEASURED PERFORMANCE**

The AVR750 produced 153 Watts into 8 Ohms and 266 Watts into 4 Ohms, so there is plenty of power available for loud volumes, even in the biggest rooms. With a damping factor of 36 it will maintain good loudspeaker control and have quite dry bass quality. The amp ran cool under test.

Distortion was very low, the critical 10kHz value being just 0.004%, primarily third harmonic our analysis shows, a very good result. There was little change in the distortion pattern with level or frequency too, so harshness is unlikely. Frequency response of the amplifier was wide, measuring 2Hz-75kHz (-1dB) with Direct selected to bypass the input ADC.

The input ADC was linear, distortion measuring a low 0.04% and bandwidth reached 48kHz due to 96kHz sample rate. Noise through the ADC and DAC with input sensitivity set to maximum was a mediocre 80dB, always a limitation in AV receivers. However, the AVR's ADC still worked well enough to give good results.

The S/PDIF digital inputs, both electrical and optical, accepted up to 192kHz sample rate, with up to 24bit resolution. Frequency response measured flat to 33kHz at 192kHz sample rate and distortion 0.1% at -60dB with 24bit, and Dynamic Range 106dB, good if not up with the best.

The VHF/FM tuner possessed flat frequency response to 10kHz (-1dB). Pilot tone filtering rolled upper output down fast above 15kHz. Distortion measured 0.18% at 50%, whereas 0.08% is possible. Noise (hiss) was high at -60dB on stereo.

---

**FREQUENCY RESPONSE**

**DISTORTION**

**S/PDIF (24/192)**

**VHF/FM**

---

**VERDICT**

Great sound quality from Blu-ray, DVD and CD, and from high-resolution digital via S/PDIF. Mediocre tuner and lack of hi-res from USB and ethernet are severe drawbacks at the price.

**FOR**

- high quality amplifiers
- easy to set up
- reliable tuner

**AGAINST**

- mediocre tuner sound
- no hi-res from USB or ethernet
- bulky design

Arcam
+44 (0)1223 203 200
www.arcam.co.uk
Top Technics

Technics RS-1500 series of open reel tape decks is surveyed by Tony Bolton.

Back in the 1970s there were two tape formats available to audio enthusiasts. The compact cassette, having originally been introduced as a dictation medium in the early 1960s, had been dramatically transformed by the likes of Tandberg and Nakamichi into a true high-fidelity recording and playback format. However, serious recordists were still wedded to open reel tape and in 1976 Technics introduced their RS-1500 series of machines which are, even today, regarded by aficionados as some of the finest tape recorders and players ever to have been created.

The range started with the three speed RS-1500U and 1506U models, the difference between the two being down to the choice of 2 or 4 track recording ability. Later on they were joined by the RS-1520U (2 track with 4 track play and added eq/bias/oscillator panel) the RS-1700 (4 track auto reverse, also available in silver as the RS-1700US) and the RS-1800U (called an Isolated Loop system) was unusual in having two large pinch rollers rotating against a single capstan at the top of the tape loop. The U in the deck's nomenclature is due to the shape the tape makes as it traverses this mechanism. At the bottom resides a 34mm reversing roller. All of this combines to feed the tape past the heads with minimal disturbance and a working tape tension of only 80g, which is considerably lower than most machines could manage, and contributed to the excellent speed stability figures and sonic performance.

At its top speed the claimed

"I felt that every groaned utterance of his distinctive vocal style was quite effortlessly put in front of me for my perusal."

60cm/sec studio machine.

All of them shared the same big, direct drive DC motors for the reels and the capstan, these all being controlled by some very comprehensive solid state circuitry. This gave instantaneous switching between 9.5, 19 and 38 cm per sec (3 3/4, 7 1/2 and 15 ips.) and vanishingly low wow and flutter figures of 0.018% WRMS (+/- 0.035% DIN).

The tape tensioning mechanism , due to the shape the tape makes as it traverses this mechanism. At the bottom resides a 34mm reversing roller. All of this combines to feed the tape past the heads with minimal disturbance and a working tape tension of only 80g, which is considerably lower than most machines could manage, and contributed to the excellent speed stability figures and sonic performance.
The direct drive reel and capstan motors and (centre) in place on the aluminium chassis. Since no drive belts or clutches are used, the brushless DC motors can get up to their top tape speed of 38 cm per sec. in 0.7 seconds.

In use it feels surprisingly modern for a mid 1970s design. The switchgear is electronically controlled and the Isolated Loop tape system means that there are no undignified mechanical noises when operating the deck.

I tried the machine with some good condition pre-recorded tapes dating from the late 1960s and also with recordings made from vinyl, the former being recorded at 19 cm/s and the latter at 38 cm/s.

The sound of the 1960 recording of Bernstein conducting the New York Philharmonic playing Rachmaninoff’s ‘Piano Concerto No. 2’ was excellent. The stability of the piano notes was exemplary and the presentation of the orchestra was detailed and spread across quite a wide area in front of me. The imaging was rock solid with the piano just to the left of centre.

I also listened to Bob Dylan’s ‘Bringing It All Back Home.’ Side two starts off with ‘Mr Tambourine Man’ and I felt that every groaned utterance of his distinctive vocal style was quite effortlessly put in front of me for my perusal.

Later on, when switching between source and tape with the recordings made from vinyl at 38 cm/s I can honestly say I was hard pushed to tell the difference. This machine seems to be capable of making some of the most faithful copies of a recording that I have heard in over 25 years of using various high-end tape recorders.

If you are interested in first-class analogue reproduction that avoids the end of side distortion and surface noise issues that can affect vinyl then high-quality open reel tape is one of the best sounding options available, and the Technics RS-1500 is one of the best ways to explore this format.

It is beautifully made, seemingly without compromise, and sounds amazing with either pre-recorded or self-recorded material.
A four-LP box set that examines Rich's early career, most of the included music is previously unreleased or only ever appeared in a very limited fashion on cassette tape via the Auric Label or Swedish Psychout Productions (aka Multimood).

In technical terms, the box set has been beautifully remastered to take advantage of its nightmarish frequencies.

The soundstage has been set up almost theatrically with a deep, 3D effect that spins away towards the perfectly mounted central stereo image. In fact, in purely technical terms, listening to this album on a quality reference is like the first time you may have tried a good quality pair of 3D glasses on a top notch flat screen TV.

The effects are quite arresting. Trekkies will love it, for example. It certainly has that cosmic singularity about it. In fact, there is a deep space flavour to the box set with a decidedly obscure album from an obscure duo. Released in 1971, O.P.M.C. (Oldest Professional Music Company – a nod to the Amsterdam Red Light district) was the product of two men, Scotsman Barrie Webb and Dutch artist Teun van der Slikke and their occasional drop-in chums.

Right from the first few seconds of the first track you get a real East Coast, folk rock vibe. That sunny combination of perfectly-formed vocal harmonies (there's some Crosby, Stills & Nash in there), a clarity in presentation that screams California and an unhurried tempo that exudes confidence that, hell, there's plenty of time to sing these songs and, well, if we end up with a 25LP box set instead of a single album then, hey, it was meant to be...man.

That said, there is more to this group than kicking back and dropping out (although the rumours of their drug intake might prove otherwise). There is also a melancholy tone to their work. A feeling of loss and regret that adds a dark edge and a flavour of loneliness.

Fans of early period Bee Gees and mid-term Beatles will find an affiliation with this album. The melodies fall easily from each song and gentle hooks will have you humming after the second listen.

Technically, the album has a golden glow that anyone familiar with early seventies productions, will be familiar with. There is also a distinct warmth that adds to the relaxed demeanour of the group. In this way, the upper mids could be sharper while the transients may have been more precise but, to be honest, if they were, then the magic of this LP would be lost. This is a perfect period piece that reflects a time and a place and way of life.
Depeche Mode fans can now dance around wildly, flailing their arms above their heads because Music On Vinyl has released the group’s entire back catalogue on vinyl. That means, from their debut album 'Speak And Spell' to the most recent release 'Delta Machine', all arriving in glossy gatefold sleeves and 180gm vinyl along with inserts and sleeve notes.

To provide a bit of focus, I chose to review the classic album, 'Violator' in a bit more depth. This is the band’s most impressive title, a consistent and perfectly-structured album with a suite of sublime songs that sit on the foundation of sympathetic and considerate production values. It is an astounding album and a career high - among a fair few catalogue 'highs', it has to be said.

Dip into this album and pick out an impressive track. 'Enjoy The Silence' is a real sing-a-long track.

Dip into this album and pick out an impressive track. 'Enjoy The Silence' is a real sing-a-long track and a real rarity for Shadows fans is this twelve-track LP (with a free CD as part of the package) that was originally released by Columbia in Italy in 1964 and featured tracks from the group covering the period from 1961-1963.

More to the point, five of the included tracks are rare B-sides while the cover features the original Italian sleeve notes. Tracks include 'Shazam', 'Sleepwalk', 'My Resistance Is Low', 'That's My Desire' and 'I Want You To Want Me'.

The easiest things to do when remastering old mono classics like this album is to not only ignore the inherent compression but push the effect to extremes and add a slice of excessive peak limiting too. To its credit, Doxy has not done this. On the contrary, the label has opened up the restricted mono soundstage to provide some very creditable instrumental separation which means that Bruce Welch’s acoustic rhythm guitar is beautifully light, airy and quite fragile during his Spanish style strumming on 'Geronimo'.

Similarly, Hank Marvin’s lead guitar not only has immediate and bold presence as a lead ‘voice’ during the same track but the bass frequencies of his meaty lead guitar gives the track a solid strength and weight, adding a measure of gravitas. Again, on ‘Shindig’, a wholly lighter ‘fun’ track, the percussion is impressive with spacious cymbal work giving the track a new dimension.

On one of the rare vocal tracks, such as ‘Baby My Heart’, the voice is placed exactly in the heart of the stereo image and pushed a touch towards the listener to provide an essential stage effect.

This is an excellent release. In fact, I was surprised just how exciting this album sounded – I look forward to hearing more from Doxy.
Xpression Carbon

Xpress your sound.
Xpress your look...

A Classic Made New...

The Xpression Carbon is the latest version of Pro-Ject Audio Systems’ original turntable, the Pro-Ject 1. This new model employs a brand new carbon fibre tonearm with an Evolution-inspired support structure. The superior motor, with isolation blobs designed by Ortofon, drives a high-quality platter that can be fitted with either a Cork or Felt mat. The plinth is available in three stunning finishes*, and the arm is rounded off with an Ortofon 2M Silver cartridge to create a comprehensive package that would suit any system.
Titan cables

Based on the South coast of England, Titan Audio will be a new name to most of our readers. They have been making mains cables for two years and offer a choice of six different leads. Tony Bolton plugs in and takes a listen to the two most affordable of the range.

Titan Audio may be quite a new name to many readers — but the construction of their cables points to a company who put a premium on quality.

Both these mains leads are impressive to look at — with heavy braiding and a feeling of some substance when picked up in the hand.

The slimmer of the two is the Tyco, retailing at £75 for a 1.5m length. It features a copper Wattgate connector at one end and an MS 13 Amp plug at the other.

The £150 (1.5m) Helios lead is fitted with a Rhodium plated Wattgate connector and a MS 13 Amp plug at the other end. All of the plugs on both leads are cryogenically treated.

Internally they both feature Oxygen Free Copper conductors which are braided to reject the effects of EMI and RFI. Both have several layers of screening with drain leads inside the braiding.

Since the manufacturers are keen to protect the results of their research I have been unable to discover anymore about the construction or design of these products.

It is worth noting, though, that these are quite substantial cables so at least six inches clearance is required behind equipment to allow them to gently curve into position. The minimum lengths available are 1.5m with longer ones available on request.

I plugged them into the Leema Acoustics Tucana II amp and Antila 2 S Eco CD player and started listening. My first impressions were of a rather tight sound that is typical of new leads so I left them in situ for a few days to run in.

The sound started to relax and open up after about ten hours of usage and when I settled down to do some comparative listening after about three days of use I found quite a different sound to the one which I had first encountered.

Starting with the Tyco, this lead is primarily aimed at source components where I found it was well up to the standards set by the competition, offering a quite open sound with a sensation of quite fast and reasonably deep bass. Mid-range projection was good with soloists seeming to be placed a little ahead of their accompanists.

The heavier Helios lead was also tried on the Antilla CD player where it seemed to open up the soundstage more than its sibling and to provide a fuller presentation in the bass regions.

When used to feed the Tucana II amplifier it produced a very solid sound that got the Charlo Ursa Major loudspeakers subwoofers moving effectively.

Treble response from both leads was smooth, the Helios offering more detail in this area that allowed the sound of the recording venue to show through.

Both cables offer a performance that is good value for the money invested in buying them and are a very substantial improvement on those supplied by most manufacturers.

The Helios in particular seemed to let the music flow just a little bit more naturally.

Titan Audio Tyco Mains Cable. £75 for 1.5m
EXCELLENT - extremely capable

VERDICT
Best suited to source components, this cable offers a smooth, detailed presentation of music
FOR - good mid band and treble detail
- quite deep soundstage
- tight timing
AGAINST - nothing at the price

Titan Audio Helios Mains Cable. £150 for 1.5m
OUTSTANDING - amongst the best

VERDICT
A heavier cable that can be used with integrated and power amplifiers and offers a good, open sound
FOR - well formed deep bass
- expansive soundstage
- detailed treble
AGAINST - may be a tight fit behind some equipment racks

Distributed by Zepher Audio
+44 (0) 843 289 8723
www.titanaudio.co.uk
Wireless speaker systems have come on apace in the past few years — both in terms of usability and sound quality. And with more and more people storing high-resolution music collections on their desktop or laptop computers they’re becoming an ever more popular choice in the marketplace.

So no surprise, then, to see Sony devoting some of its massive design expertise to an upmarket wireless soundbar-style system.

And make no mistake, the SRS-X9 is aimed firmly at the serious audiophile — coming in at a penny under £599 and featuring comprehensive connectivity options.

It’s a typically sleek Sony design measuring 133 x 430 x 125mm (h/w/d) and weighing in at a sturdy 4.6kg with a black glass top, removable metallic grille and brushed metal sides.

Underneath that glass top are touch sensitive controls for on/off, volume control and input selection while the unit itself sits on five rubber feet for effective isolation.

At the rear are USB A and B inputs, an Ethernet port, 3.5mm audio-in jack as well as a WPS button for connection to a router. The Sony also supports aptX Bluetooth and Apple’s AirPlay for streaming from a smart device and is DLNA certified.

A retractable aerial in the top right-hand corner of the unit helps boost wireless reception if needed.

Jon Myles is impressed by Sony’s new wireless ‘speaker system
REVIEW

A pair of tweeters on the top of the SRS-X9 help give a sense of scale to the sound. Beneath the front grille lie another five speakers as well as a pair of passive bass radiators.

All the major file formats are supported including AIFF, FLAC, WAV and ALAC up to 192kHz/24-bit as well as DSD.

A slim, basic but functional remote control is supplied but Sony's free SongPal app is more convenient and gives total control as well as access to Deezer, TuneIn and Sony's own Music Unlimited service.

Comprehensive input options mark the Sony out from many competitors. A neat foldable aerial also helps boost wireless reception for high-resolution streaming.

Inside the box is a 154 Watt digital amplifier supplying power to the seven speakers. Two tweeters sit on the top of the SRS-X9 to broaden the soundstage while behind the front grille is a central woofer flanked by two bass radiators along with a pair of mid-range drivers and two more tweeters.

All in all, the SRS-X9 is an impressive product that oozes quality. Set-up and ease of operation is exemplary and in use its wireless connection remained rock-solid. Sony's SongPal is also one of the better music apps out there, giving easy access to both computer and NAS-based music collections.

SOUND QUALITY

Fire the Sony up and you're immediately impressed by the scale of the sound it produces. Those tweeters on the top help to give a wide and well-defined soundstage with music pushed well into the room. The Pixies 'Indie Cindy' comes over as big and bold with a good sense of punch to the bottom end. Indeed, the Sony's bass performance is better than I expected from a unit this size. It's taut and tuneful - and refreshingly free of that one-note thump you get from some lesser one-box units of this sort.

Moving up to some high-res material in the shape of The Clash's classic 'London Calling' in 24/96 and the Sony showed it has the resolving power to make the most of the increased resolution. Instruments were well-separated with excellent clarity and bite to the top end too.

Push it really hard and, inevitably, the Sony does start to show its limitations. Turning the volume up on a 24/96 rip of Stravinsky's 'The Rite Of Spring' there was a touch of steeliness to the treble while the orchestral crescendos were devoid of the sheer physical power provided by a pair of good standmount loudspeakers.

But that's only to be expected in a relatively compact device such as this. Used it within its limits, however, the Sony is tremendously impressive.

CONCLUSION

The Sony SRS-X9 is one of the best one-box units out there at the moment.

It has a natural, detailed sound that is more than capable of filling a medium-sized room with music, so long as you're not looking for ear-splitting volume. Add in the fact that it can handle almost any file format you care to throw at it and this little system begins to make a lot of sense.

SONY SRS-X9

£599

OUTSTANDING - amongst the best

VERDICT

A one-box, wireless, hi-res music system that sounds as good as it looks.

FOR

- hi-res capable
- ease of operation
- big, room filling sound

AGAINST

- can sound strained when pushed too hard

Sony
+44 (0)844 8466 555
www.sony.co.uk

SONY SRS-X9

£599

OUTSTANDING - amongst the best

VERDICT

A one-box, wireless, hi-res music system that sounds as good as it looks.

FOR

- hi-res capable
- ease of operation
- big, room filling sound

AGAINST

- can sound strained when pushed too hard

Sony
+44 (0)844 8466 555
www.sony.co.uk
Award-winning Products

Turntables, tonearms, amplifiers, phonostages and accessories

Thorens - Since 1883

TELEPHONE 01753 652669  WEB SITE  WWW.UKD.CO.UK
"Where was the disco version of 'Dark Side Of The Moon'?

I must admit that I don't really watch too much TV. I'm too busy doing other things. What I do watch is normally your typical DVD box set or something off the back of recorded TV via my 1TB Sky box.

When that begins to get a little full, I archive onto blank DVDs. I'll do this especially with old films - you see a lot of rarely aired movies on TV when you channel scan - plus music programmes.

In general terms, the BBC 4 channel is arguably the best media source in the UK at present. It not only features a host of excellent documentaries and drama but a wealth of superb music is regularly shown in either concert or documentary format.

A few archived goodies, recorded some time ago but only recently, was all about disco. I must admit that I do have a penchant for the genre: especially Chic and Sister Sledge. The programmes mixed documentary investigations alongside band interviews.

One thing that only recently hit me about disco was that here was a music genre that lasted from around 1972-ish to sometime around the very early eighties and at no time in those eight to ten years did anyone ever say to me, “Go listen to that superb album by this or that disco group”. Not once.

What I did hear from a wide range of people and plenty of times through my very own ears, where heaps of top-notch, even classic, disco singles.

But where was the disco version of 'Dark Side Of The Moon'? Who ever said that their best John Travolta impression while throwing a boogie to disco's version of 'Sgt. Pepper'? Boogied on down while drinking Dr Pepper, yes, maybe, but not one of my acquaintances ever, ever gurgled a Babycham and talked, rather philosophically, about disco's version of 'Blood On The Tracks'.

All of those brilliant disco singles didn’t arrive on their lonesome, oh no. They hitched a ride on an album on their way to the Top 10. But what of these albums? What happened to them? Where did they go and why don’t you see many of them even in the second-hand bins at record fairs? They’re there, but not in tremendous numbers.

For example, one of the best disco singles of all time was penned by one Tom Browne, even though Browne was a jazz-funk man – that’s his piercing horn intro, at the beginning of ‘Funkin’ For Jamaica’. A song that is designed to get you up off your chair. It’s almost impossible to play this song, especially with a pair of speakers fitted with healthy sized bass bins, listen to the introductory bass guitar and sit still. But who ever bought ‘Love Approach’, the album that classic single derived from?

With a bee in my bonnet, I scanned the internet to see if anyone was pushing out these albums to the second-hand bins at record fares? They’re there, but not in tremendous numbers.

For example, one of the best disco singles of all time was penned by one Tom Browne, even though Browne was a jazz-funk man – that’s his piercing horn intro, at the beginning of ‘Funkin’ For Jamaica’. A song that is designed to get you up off your chair. It’s almost impossible to play this song, especially with a pair of speakers fitted with healthy sized bass bins, listen to the introductory bass guitar and sit still. But who ever bought ‘Love Approach’, the album that classic single derived from?

With a bee in my bonnet, I scanned the internet to see if anyone was pushing out these albums to the second-hand bins at record fares? They’re there, but not in tremendous numbers.

For example, one of the best disco singles of all time was penned by one Tom Browne, even though Browne was a jazz-funk man – that’s his piercing horn intro, at the beginning of ‘Funkin’ For Jamaica’. A song that is designed to get you up off your chair. It’s almost impossible to play this song, especially with a pair of speakers fitted with healthy sized bass bins, listen to the introductory bass guitar and sit still. But who ever bought ‘Love Approach’, the album that classic single derived from?

With a bee in my bonnet, I scanned the internet to see if anyone was pushing out these albums to the second-hand bins at record fares? They’re there, but not in tremendous numbers.

For example, one of the best disco singles of all time was penned by one Tom Browne, even though Browne was a jazz-funk man – that’s his piercing horn intro, at the beginning of ‘Funkin’ For Jamaica’. A song that is designed to get you up off your chair. It’s almost impossible to play this song, especially with a pair of speakers fitted with healthy sized bass bins, listen to the introductory bass guitar and sit still. But who ever bought ‘Love Approach’, the album that classic single derived from?

With a bee in my bonnet, I scanned the internet to see if anyone was pushing out these albums to the second-hand bins at record fares? They’re there, but not in tremendous numbers.

For example, one of the best disco singles of all time was penned by one Tom Browne, even though Browne was a jazz-funk man – that’s his piercing horn intro, at the beginning of ‘Funkin’ For Jamaica’. A song that is designed to get you up off your chair. It’s almost impossible to play this song, especially with a pair of speakers fitted with healthy sized bass bins, listen to the introductory bass guitar and sit still. But who ever bought ‘Love Approach’, the album that classic single derived from?

With a bee in my bonnet, I scanned the internet to see if anyone was pushing out these albums to the second-hand bins at record fares? They’re there, but not in tremendous numbers.

For example, one of the best disco singles of all time was penned by one Tom Browne, even though Browne was a jazz-funk man – that’s his piercing horn intro, at the beginning of ‘Funkin’ For Jamaica'. A song that is designed to get you up off your chair. It’s almost impossible to play this song, especially with a pair of speakers fitted with healthy sized bass bins, listen to the introductory bass guitar and sit still. But who ever bought ‘Love Approach', the album that classic single derived from?

With a bee in my bonnet, I scanned the internet to see if anyone was pushing out these albums to the second-hand bins at record fares? They’re there, but not in tremendous numbers.

For example, one of the best disco singles of all time was penned by one Tom Browne, even though Browne was a jazz-funk man – that’s his piercing horn intro, at the beginning of ‘Funkin’ For Jamaica'. A song that is designed to get you up off your chair. It’s almost impossible to play this song, especially with a pair of speakers fitted with healthy sized bass bins, listen to the introductory bass guitar and sit still. But who ever bought ‘Love Approach', the album that classic single derived from?

With a bee in my bonnet, I scanned the internet to see if anyone was pushing out these albums to the second-hand bins at record fares? They’re there, but not in tremendous numbers.

For example, one of the best disco singles of all time was penned by one Tom Browne, even though Browne was a jazz-funk man – that’s his piercing horn intro, at the beginning of ‘Funkin’ For Jamaica'. A song that is designed to get you up off your chair. It’s almost impossible to play this song, especially with a pair of speakers fitted with healthy sized bass bins, listen to the introductory bass guitar and sit still. But who ever bought ‘Love Approach', the album that classic single derived from?

With a bee in my bonnet, I scanned the internet to see if anyone was pushing out these albums to the second-hand bins at record fares? They’re there, but not in tremendous numbers.
<table>
<thead>
<tr>
<th>Name</th>
<th>Model</th>
<th>Specification</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technics</td>
<td>SL-1200</td>
<td>Direct Drive Turntable</td>
<td>£799</td>
</tr>
<tr>
<td>SME</td>
<td>3009/3</td>
<td>Reference Tonearm</td>
<td>£1299</td>
</tr>
<tr>
<td>SME</td>
<td>3009</td>
<td>Reference Tonearm</td>
<td>£1599</td>
</tr>
<tr>
<td>Roksan</td>
<td>Xerxes UPS</td>
<td>Integrated Amplifier</td>
<td>£1499</td>
</tr>
<tr>
<td>Linn</td>
<td>Sondek</td>
<td>Turntable</td>
<td>£999</td>
</tr>
<tr>
<td>Michell</td>
<td>Focus One</td>
<td>Turntable</td>
<td>£999</td>
</tr>
<tr>
<td>Musical Fidelity</td>
<td>VLPS/2</td>
<td>Reference Turntable</td>
<td>£1999</td>
</tr>
<tr>
<td>Nalco &amp; Integra</td>
<td>2242</td>
<td>Turntable</td>
<td>£1199</td>
</tr>
<tr>
<td>Hadcock 24/32</td>
<td>Export</td>
<td>Turntable</td>
<td>£1199</td>
</tr>
<tr>
<td>Conrad Johnson</td>
<td>TEA/P700</td>
<td>Reference Turntable</td>
<td>£2499</td>
</tr>
<tr>
<td>Vision R111/01</td>
<td>c/w Grace 707</td>
<td>Reference Turntable</td>
<td>£5999</td>
</tr>
<tr>
<td>Focal</td>
<td>MPS/2</td>
<td>Bookshelf Monitor</td>
<td>£949</td>
</tr>
<tr>
<td>Monitor Audio</td>
<td>RX6</td>
<td>Bookshelf Monitor</td>
<td>£1599</td>
</tr>
<tr>
<td>Monitor Audio</td>
<td>PL300</td>
<td>Bookshelf Monitor</td>
<td>£299</td>
</tr>
<tr>
<td>Monitor Audio</td>
<td>C3000</td>
<td>Bookshelf Monitor</td>
<td>£399</td>
</tr>
<tr>
<td>Monitor Audio</td>
<td>CIO</td>
<td>Bookshelf Monitor</td>
<td>£199</td>
</tr>
<tr>
<td>Kef</td>
<td>107</td>
<td>Reference Monitor</td>
<td>£199</td>
</tr>
<tr>
<td>Kef</td>
<td>Reference 005</td>
<td>Monitor</td>
<td>£699</td>
</tr>
<tr>
<td>Kef</td>
<td>Reference 005</td>
<td>Monitor</td>
<td>£699</td>
</tr>
<tr>
<td>Focal</td>
<td>Electro 1038</td>
<td>Monitor</td>
<td>£1599</td>
</tr>
<tr>
<td>Focal</td>
<td>Magnatone MK1.6</td>
<td>Monitor</td>
<td>£1299</td>
</tr>
<tr>
<td>Focal</td>
<td>Magnatone MK1.6</td>
<td>Monitor</td>
<td>£1299</td>
</tr>
<tr>
<td>Kudos</td>
<td>X2</td>
<td>Monitor</td>
<td>£299</td>
</tr>
<tr>
<td>Kudos</td>
<td>C2</td>
<td>Monitor</td>
<td>£199</td>
</tr>
<tr>
<td>Kef</td>
<td>Reference 107</td>
<td>Monitor</td>
<td>£199</td>
</tr>
<tr>
<td>Kef</td>
<td>Reference 005</td>
<td>Monitor</td>
<td>£699</td>
</tr>
<tr>
<td>Kef</td>
<td>Reference 005</td>
<td>Monitor</td>
<td>£699</td>
</tr>
<tr>
<td>Focal</td>
<td>MPS/2</td>
<td>Bookshelf Monitor</td>
<td>£949</td>
</tr>
<tr>
<td>Monitor Audio</td>
<td>RX6</td>
<td>Bookshelf Monitor</td>
<td>£1599</td>
</tr>
<tr>
<td>Monitor Audio</td>
<td>PL300</td>
<td>Bookshelf Monitor</td>
<td>£299</td>
</tr>
<tr>
<td>Monitor Audio</td>
<td>C3000</td>
<td>Bookshelf Monitor</td>
<td>£399</td>
</tr>
<tr>
<td>Monitor Audio</td>
<td>CIO</td>
<td>Bookshelf Monitor</td>
<td>£199</td>
</tr>
<tr>
<td>Kef</td>
<td>107</td>
<td>Reference Monitor</td>
<td>£199</td>
</tr>
<tr>
<td>Kef</td>
<td>Reference 005</td>
<td>Monitor</td>
<td>£699</td>
</tr>
<tr>
<td>Kef</td>
<td>Reference 005</td>
<td>Monitor</td>
<td>£699</td>
</tr>
<tr>
<td>Focal</td>
<td>Electro 1038</td>
<td>Monitor</td>
<td>£1599</td>
</tr>
<tr>
<td>Focal</td>
<td>Magnatone MK1.6</td>
<td>Monitor</td>
<td>£1299</td>
</tr>
<tr>
<td>Kudos</td>
<td>X2</td>
<td>Monitor</td>
<td>£299</td>
</tr>
<tr>
<td>Kudos</td>
<td>C2</td>
<td>Monitor</td>
<td>£199</td>
</tr>
<tr>
<td>Kef</td>
<td>Reference 107</td>
<td>Monitor</td>
<td>£199</td>
</tr>
<tr>
<td>Kef</td>
<td>Reference 005</td>
<td>Monitor</td>
<td>£699</td>
</tr>
<tr>
<td>Kef</td>
<td>Reference 005</td>
<td>Monitor</td>
<td>£699</td>
</tr>
<tr>
<td>Focal</td>
<td>MPS/2</td>
<td>Bookshelf Monitor</td>
<td>£949</td>
</tr>
<tr>
<td>Monitor Audio</td>
<td>RX6</td>
<td>Bookshelf Monitor</td>
<td>£1599</td>
</tr>
<tr>
<td>Monitor Audio</td>
<td>PL300</td>
<td>Bookshelf Monitor</td>
<td>£299</td>
</tr>
<tr>
<td>Monitor Audio</td>
<td>C3000</td>
<td>Bookshelf Monitor</td>
<td>£399</td>
</tr>
<tr>
<td>Monitor Audio</td>
<td>CIO</td>
<td>Bookshelf Monitor</td>
<td>£199</td>
</tr>
<tr>
<td>Kef</td>
<td>107</td>
<td>Reference Monitor</td>
<td>£199</td>
</tr>
<tr>
<td>Kef</td>
<td>Reference 005</td>
<td>Monitor</td>
<td>£699</td>
</tr>
<tr>
<td>Kef</td>
<td>Reference 005</td>
<td>Monitor</td>
<td>£699</td>
</tr>
<tr>
<td>Focal</td>
<td>Electro 1038</td>
<td>Monitor</td>
<td>£1599</td>
</tr>
<tr>
<td>Focal</td>
<td>Magnatone MK1.6</td>
<td>Monitor</td>
<td>£1299</td>
</tr>
<tr>
<td>Kudos</td>
<td>X2</td>
<td>Monitor</td>
<td>£299</td>
</tr>
<tr>
<td>Kudos</td>
<td>C2</td>
<td>Monitor</td>
<td>£199</td>
</tr>
<tr>
<td>Kef</td>
<td>Reference 107</td>
<td>Monitor</td>
<td>£199</td>
</tr>
<tr>
<td>Kef</td>
<td>Reference 005</td>
<td>Monitor</td>
<td>£699</td>
</tr>
<tr>
<td>Kef</td>
<td>Reference 005</td>
<td>Monitor</td>
<td>£699</td>
</tr>
<tr>
<td>Focal</td>
<td>MPS/2</td>
<td>Bookshelf Monitor</td>
<td>£949</td>
</tr>
<tr>
<td>Monitor Audio</td>
<td>RX6</td>
<td>Bookshelf Monitor</td>
<td>£1599</td>
</tr>
<tr>
<td>Monitor Audio</td>
<td>PL300</td>
<td>Bookshelf Monitor</td>
<td>£299</td>
</tr>
<tr>
<td>Monitor Audio</td>
<td>C3000</td>
<td>Bookshelf Monitor</td>
<td>£399</td>
</tr>
<tr>
<td>Monitor Audio</td>
<td>CIO</td>
<td>Bookshelf Monitor</td>
<td>£199</td>
</tr>
<tr>
<td>Kef</td>
<td>107</td>
<td>Reference Monitor</td>
<td>£199</td>
</tr>
<tr>
<td>Kef</td>
<td>Reference 005</td>
<td>Monitor</td>
<td>£699</td>
</tr>
<tr>
<td>Kef</td>
<td>Reference 005</td>
<td>Monitor</td>
<td>£699</td>
</tr>
<tr>
<td>Focal</td>
<td>Electro 1038</td>
<td>Monitor</td>
<td>£1599</td>
</tr>
<tr>
<td>Focal</td>
<td>Magnatone MK1.6</td>
<td>Monitor</td>
<td>£1299</td>
</tr>
<tr>
<td>Kudos</td>
<td>X2</td>
<td>Monitor</td>
<td>£299</td>
</tr>
<tr>
<td>Kudos</td>
<td>C2</td>
<td>Monitor</td>
<td>£199</td>
</tr>
<tr>
<td>Kef</td>
<td>Reference 107</td>
<td>Monitor</td>
<td>£199</td>
</tr>
<tr>
<td>Kef</td>
<td>Reference 005</td>
<td>Monitor</td>
<td>£699</td>
</tr>
<tr>
<td>Kef</td>
<td>Reference 005</td>
<td>Monitor</td>
<td>£699</td>
</tr>
</tbody>
</table>
"do you ever have those moments on ebay when you know that you shouldn’t, but..."
The Cadenza series represents another example of Ortofon's constant push toward technological perfection. By taking various design characteristics acquired through market leaders, such as the MC Jubilee and Kontrapunkt series, Ortofon have developed Cadenza to elevate any decent Hi-Fi system to a whole new level.

The range consists of 5 different models, including a Mono version, but they all adhere to Ortofon's core principles of accurate information retrieval and phenomenal sound performance. Since they were originally introduced in 2009, each model has received high-praise from owners and reviewers alike.

Available in the UK through Henley Designs Ltd.
T: +44 (0)1235 511 166
E: sales@henleydesigns.co.uk
W: www.henleydesigns.co.uk
"these LPs ... are as authentic as an analogue CD"

Noel Keywood

As our deadline for securing The Beatles in Mono box set loomed I became desperate. The review was scheduled for this issue but we had no LPs. Perhaps, I thought, Amazon would take precedence over Hi-Fi World (I) and I could buy a set from them faster than get review samples from Apple Corps. So I did what we all do now, resorted to Google.

What I saw took me aback. Retailers were clearing all sorts of Beatles box sets on the internet. And this makes a confusing situation even more confusing. The only company to genuinely offer the new The Beatles in Mono LP box set I am talking about was Amazon, at exactly the £288 price set by Apple Corps, but this was available until 1st September 2014.

But what you get in a Google search depends upon what you type in - and potential buyers won't necessarily see this particular advert.

The range of albums on offer was extraordinary. Here's what I found in response to a UK Google search.

Firstly, Apple Corps and Abbey Road Studios have genuinely sought to offer a definitive product in this new mono box set; there's little to compare with it. I think it will be accepted as such, because there's no more you can do to get closer to the original performance.

However, that does throw into light the mistakes of the past. What now of the stereo LPs? Will these ever be re-issued from the new analogue copy masters that have been made, I'm told, to preserve the original tapes that are shedding oxide? And I haven't mentioned the U.S. albums that Americans better recognise. There's more to go...

But what else is on offer? Well, at the top of Google page I was a The Beatles in Mono box set 13 CD collection for $680 with free shipping to the UK, supplied by Drive of Life, situated in mainland China. Just contact Mary Wang with your credit card. I don't think I will be doing this.

MusicDirect in the USA are offering the same set for $219 which sounds more like it.

After page 1 of Google I started to encounter the rarities. How about this one, at http://eil.com/products/TheBeatles/Singles+Box. It is The Beatles with Tony Sheridan, an early collaboration in Hamburg, pre-fame. This is a Japanese CD and may well be a valuable rarity, but you have to remember here that although Japan had its own high quality Beatles CD issues, they are easily copied (i.e. faked). I wouldn't price it like an early mono Parlophone mono LP; that may reach hundreds of pounds, or a Sheridan/Beat Boys 1962 demo single that reached $15000.

Then there is the Stereo vinyl LP box set, released 2012. It's selling for around £300 from Amazon and plenty of other retailers around the world, and contains the lovely - and last - Abbey Road album. The mono collection lacks this classic album. Surely then, it's best to buy the stereos and get all the albums in one set, and if you want mono just flick a mono switch.

Er, yes!

Not many amplifiers have mono switches and the mixing of the stereo LPs is considered inferior to that of the monos; less time was spent on stereo mix-downs in the early days. Worse, the stereos are again derived from that digital master tape made in 2005. It is top resolution 24/192, granted, but as digital goes 2005 is when Barney Rubble was at the controls. These LPs have a low sonic credibility rating, and are as authentic as an analogue CD.

My trawl of the internet's Beatles offerings leads to a few simple conclusions.

Firstly, Apple Corps and Abbey Road Studios have genuinely sought to offer a definitive product in this new mono box set; there's little to compare with it. I think it will be accepted as such, because there's no more you can do to get closer to the original performance.

However, that does throw into light the mistakes of the past. What now of the stereo LPs? Will these ever be re-issued from the new analogue copy masters that have been made, I'm told, to preserve the original tapes that are shedding oxide? And I haven't mentioned the U.S. albums that Americans better recognise. There's more to go...

My internet foray showed buying The Beatles isn't as easy and straightforward as I had imagined. It's a massive market, one in which LP cannot be challenged. And there was nothing I could buy to save the day. Oh shame.
Sometimes you just can’t see the wood for the trees when you’re buying hi-fi.

Clarity is here to help.

And you can only find the answer at your local expert retailer. You can’t audition hi-fi or make comparisons online or by mail order.

Members of The Clarity Alliance are the only independent retailers who are trained to industry agreed standards to give you unparalleled levels of product advice and service. Take your time and relax in dedicated listening rooms, try a variety of equipment and music, audition and study each item, get to know it and see how it makes you feel.

www.clarityalliance.co.uk

Let our expert retailers guide you through the myriad of choices and show you some clarity.

- Free geek time impartial and honest advice
- Transferrable warranty the freedom to move
- Listen great demo facilities
- Knowledgeable staff a refreshing change
- Awful coffee but we’ll always make a cuppa

/ClarityAlliance  @clarityalliance  www.clarityalliance.co.uk
OUR BIGGEST EVER SUMMER SALE

Great savings in-store and online. For the latest prices and offers visit www.ssav.com or contact your local store

UP TO 50% OFF SELECTED ITEMS

ARCAM • SOLO MINI • CD / DAB SYSTEM
This award-winning system provides the perfect answer for those craving high-quality music reproduction but without the traditional pile of boxes, high-performance Hi-Fi system.

ARCAM • SOLO MINI • CD / DAB SYSTEM
This award-winning system provides the perfect answer for those craving high-quality music reproduction but without the traditional pile of boxes, high-performance Hi-Fi system.

PIONEER • XW-SMA3 • WIRELESS MUSIC SYSTEM
Delivers stunning sound streamed to wherever you are, from your mobile device, PC or Mac. The built-in, rechargeable battery and splash-resistant exterior make it ideal for indoor or outdoor play.

REL • T-5 SUBWOOFER
Delivers the exceptional low-bass performance, rugged build quality and unique design of larger REL models at a more affordable price. T-5 can be used to wonderful benefit to underpin both two-channel and multi-channel systems.

BOWERS & WILKINS CM9 SPEAKERS
This top-of-the-range floorstanding speaker will fit even the largest domestic spaces with music so richly detailed, and so startlingly lifelike, that it will leave you speechless. The three-way CM9 delivers truly commanding bass with the aid of twin 165mm paper/Kevlar cone drive units. An FST driver is especially developed for outstanding midrange performance while the tube-loaded aluminium dome tweeter keeps high frequencies crisp and sharp all the way up to 50kHz and beyond.

NAD • D 7050 • NETWORK AMPLIFIER / DAC
The D 7050 from NAD with Apple AirPlay and Spotify Connect is one simple package. If you have a computer or smartphone running iTunes and a home Wi-Fi network, you add the D 7050 and your favourite loudspeakers. You will now have a state-of-the-art audio system in a stylish and compact package that fits anywhere in your home. Wireless access is universal as the D 7050 also supports Bluetooth aptX for hi-fi fidelity point-to-point streaming without a network.

CLAIM 6 MONTHS FREE SPOTIFY PREMIUM

PSB PFS-27 SPEAKERS
Compact speakers with a startlingly big and commanding sound. WALNUT FINISH

YAMAHA • CRX-N560D • CD / DAB / NETWORK SYSTEM
This Hi-Fi system, with a CD player, DAB/DAB+ tuner for digital broadcasts and Network compatibility with AirPlay, combines elegant design with high-quality sound.

PLEASE NOTE: SOME BRANDS/PRODUCTS ARE NOT AVAILABLE AT ALL STORES SPECIAL/ADDED VALUE OFFERS ARE NOT IN CONJUNCTION WITH ANY OTHER OFFER (NEW/MADE) ADVERTISE VALID UNTIL 30/08/2011 ending

www.SSAV.com

World Radio History

SEVENoaks
SOUND & VISION
An unbeatable combination of audiophile performance and cost conscious engineering from this CD, Amplifier and Speaker Package.

**NAD & Q ACOUSTICS**

C 516BEE • CD PLAYER  
C 316BEE AMPLIFIER  
2010 • SPEAKERS

"Standard Finishes £499  
SAV  £ 128"

This package, combining the award-winning NAD D 3020 Alt Oiler / 'DAL, and Bronze DX2 speakers, delivers a generously full performance that belies its discreet appearance and modest size.

**NAD & MONITOR AUDIO**

D 3620 • AMPLIFIER / DAC  
BRONZE 8X2 • SPEAKERS

Get immersed in the ultimate Hi-Fi experience in any room in your home with the POWERNODE music streamer/amplifier and award-winning Concept 20 speakers.

**BLUESOUND & Q ACOUSTICS**

POWERNODE • HI-RES WIRELESS MUSIC STREAMER / AMPLIFIER  
CONCEPT 20 • SPEAKERS

The POWERNODE is a bi-amplified streaming music player that delivers crystal clear audiophile-grade sound to any room in your home. The perfect partner for the Power node, the DUO sub woofer and satellite speakers, deliver crisp delicious detail that you simply have to hear to believe.

**BLUESOUND**

POWERNODE • HI-RES WIRELESS MUSIC STREAMER / AMPLIFIER  
DUO • 2.1 SPEAKER SYSTEM

UnitiLite from Naim takes the feature set of the award-winning NaimUniti, including high-resolution music streaming up to 32bit/192kHz, CD playback, internet radio and iPod/iPhone/iPod playback and deals it into an elegant, sleek enclosure. The addition of B&W's visually understated CM1 speakers create an accessible all-in-one system that can put music at the centre of your life.

**NAIM & BOWERS & WILKINS**

UNITILITE • ALL-IN-ONE-PLAYER  
CM1 • SPEAKERS

Sonos CONNECT AMP turns your speakers into a music streaming system. All you have to do is plug it in, connect your choice of speakers and you have got a room filled with music. With 55W of amplifying power, coupled with its superior wireless range, music lovers really can play music they love, all over the house.

**SONOS & Q ACOUSTICS**

CONNECT AMP • WIRELESS MUSIC STREAMER / AMPLIFIER  
2020 • SPEAKERS

www.SSAV.com
OUR BIGGEST EVER
SUMMER SALE

UP TO
50% OFF
SELECTED ITEMS

Q ACOUSTICS • CONCEPT 40
The Q Acoustic Concept 40
outstanding speakers are the
latest addition to the
award-winning Concept range
and deliver unparalleled sonic
performance at a
new price.

BOWERS & WILKINS • 605 S2
At home on a stand, wall or book-
shelf, the versatile 605 S2 is ideal
for stereo and home theatre
use in most rooms. And
performance is enhanced with the
addition of a
Decoupled Double Dome tweeter.

MONITOR AUDIO
SILVER 6
2.5 way speakers system
combining excellent dynamics
with a naturally rhythmic
sonic character and tight,
controlled bass. The Silver 6 is
an outstanding communicator
of music and film audio.

SONOS
THE WIRELESS HI-FI SYSTEM
The Sonos Wireless Hi-Fi System
delivers the music on earth,
in every room, with deep, richly
textured sound. Based on the
same technology used in the
industry’s most advanced
stereo systems, Sonos creates
ballroom-filling sound in
rooms of any size.

BOWERS & WILKINS • ZEPPELIN AIR
Introducing the PSB Imagine
T2, a high performance,
transitional 5-way tower speaker
powered with Treble Port Bass
Reflex and subdivided discrete
chambers. Listen to smooth and
detailled soundscapes as they
slowly dance out of beautifully
curved, hand-crafted cabinets
to fill your listening room.

NAD • VISO 1 HPD
A wireless music system
designed to wirelessly play music
from your iPod, iPhone, iPod
or any Bluetooth device enabled
smartphone, tablet or laptop.

PSB • IMAGINE T2

FOR THE LATEST PRICES AND OFFERS VISIT WWW.SSAV.COM OR CONTACT YOUR LOCAL STORE

STORES NATIONWIDE
We have a national network of
stores and a hard-won reputation
for outstanding customer service.

WEBSITE
Visit our website for a stream-
lined on-line experience with
an outstanding product selection
plus the latest product news
and store information.

Stores Nationwide
We have a national network of
stores and a hard-won reputation
for outstanding customer service.

Website
Visit our website for a stream-
lined on-line experience with
an outstanding product selection
plus the latest product news
and store information.

Q ACOUSTICS • CONCEPT 40
The Q Acoustic Concept 40
outstanding speakers are the
latest addition to the
award-winning Concept range
and deliver unparalleled sonic
performance at a
new price.

BOWERS & WILKINS • 605 S2
At home on a stand, wall or book-
shelf, the versatile 605 S2 is ideal
for stereo and home theatre
use in most rooms. And
performance is enhanced with the
addition of a
Decoupled Double Dome tweeter.

MONITOR AUDIO
SILVER 6
2.5 way speakers system
combining excellent dynamics
with a naturally rhythmic
sonic character and tight,
controlled bass. The Silver 6 is
an outstanding communicator
of music and film audio.

SONOS
THE WIRELESS HI-FI SYSTEM
The Sonos Wireless Hi-Fi System
delivers the music on earth,
in every room, with deep, richly
textured sound. Based on the
same technology used in the
industry’s most advanced
stereo systems, Sonos creates
ballroom-filling sound in
rooms of any size.

BOWERS & WILKINS • ZEPPELIN AIR
Introducing the PSB Imagine
T2, a high performance,
transitional 5-way tower speaker
powered with Treble Port Bass
Reflex and subdivided discrete
chambers. Listen to smooth and
detailled soundscapes as they
slowly dance out of beautifully
curved, hand-crafted cabinets
to fill your listening room.

NAD • VISO 1 HPD
A wireless music system
designed to wirelessly play music
from your iPod, iPhone, iPod
or any Bluetooth device enabled
smartphone, tablet or laptop.

PSB • IMAGINE T2

FOR THE LATEST PRICES AND OFFERS VISIT WWW.SSAV.COM OR CONTACT YOUR LOCAL STORE

STORES NATIONWIDE
We have a national network of
stores and a hard-won reputation
for outstanding customer service.

WEBSITE
Visit our website for a stream-
lined on-line experience with
an outstanding product selection
plus the latest product news
and store information.

Stores Nationwide
We have a national network of
stores and a hard-won reputation
for outstanding customer service.

Website
Visit our website for a stream-
lined on-line experience with
an outstanding product selection
plus the latest product news
and store information.

Q ACOUSTICS • CONCEPT 40
The Q Acoustic Concept 40
outstanding speakers are the
latest addition to the
award-winning Concept range
and deliver unparalleled sonic
performance at a
new price.

BOWERS & WILKINS • 605 S2
At home on a stand, wall or book-
shelf, the versatile 605 S2 is ideal
for stereo and home theatre
use in most rooms. And
performance is enhanced with the
addition of a
Decoupled Double Dome tweeter.

MONITOR AUDIO
SILVER 6
2.5 way speakers system
combining excellent dynamics
with a naturally rhythmic
sonic character and tight,
controlled bass. The Silver 6 is
an outstanding communicator
of music and film audio.

SONOS
THE WIRELESS HI-FI SYSTEM
The Sonos Wireless Hi-Fi System
delivers the music on earth,
in every room, with deep, richly
textured sound. Based on the
same technology used in the
industry’s most advanced
stereo systems, Sonos creates
ballroom-filling sound in
rooms of any size.

BOWERS & WILKINS • ZEPPELIN AIR
Introducing the PSB Imagine
T2, a high performance,
transitional 5-way tower speaker
powered with Treble Port Bass
Reflex and subdivided discrete
chambers. Listen to smooth and
detailled soundscapes as they
slowly dance out of beautifully
curved, hand-crafted cabinets
to fill your listening room.

NAD • VISO 1 HPD
A wireless music system
designed to wirelessly play music
from your iPod, iPhone, iPod
or any Bluetooth device enabled
smartphone, tablet or laptop.

PSB • IMAGINE T2

FOR THE LATEST PRICES AND OFFERS VISIT WWW.SSAV.COM OR CONTACT YOUR LOCAL STORE

STORES NATIONWIDE
We have a national network of
stores and a hard-won reputation
for outstanding customer service.

WEBSITE
Visit our website for a stream-
lined on-line experience with
an outstanding product selection
plus the latest product news
and store information.

Stores Nationwide
We have a national network of
stores and a hard-won reputation
for outstanding customer service.

Website
Visit our website for a stream-
lined on-line experience with
an outstanding product selection
plus the latest product news
and store information.
This is a comprehensive directory of Hi-Fi Dealers throughout the UK and Ireland.

**BERKSHIRE**

**LORICRAFT AUDIO**
Loricraft Audio is now open for visitors but please call to arrange for a visit. You can buy all our products directly from us or through your local dealer. Our internet shop site can take direct orders for our turntables and accessories! Loricraft Audio, The Piggery, Mile End Farm, Wantage Road Lambourn, Berkshire, RG17 8UE. Office Phone/Fax: +44 (0)1488-72267. Email: terry@garrard501.com. Website: [http://garrard501.com](http://garrard501.com)

**STUDIOAV LTD**
44 High Street, Eton, Berkshire SL4 6BL. Tel: 01753 631000. Email: sales@studioay.co.uk. Website: [www.studioay.co.uk](http://www.studioay.co.uk)

We are Berkshire's premier Linn dealer (complete range) and LP12 specialists. Naim, Focal, Totem, The Chord Company, Lyra, Dynavector, Benz Micro, with more to follow.

**CHESHIRE**

**ACOUSTICA**
17 Hoole Rd, Chester CH2 3NH. [www.acostica.co.uk](http://www.acostica.co.uk). Tel: 01244 344227. B&W 800 Diamond series dealer Naim Audio specialist & 500 Series stockist. Other brands carried include Arcam, Audiovector, Audio Analogue, B&W, Classe, Piega, Rega & Spendor. Full demonstration facilities. Open Tuesday to Saturday 10.00 to 5.30.

**ACTON GATE AUDIO**
[www.acton-gate-audio.co.uk](http://www.acton-gate-audio.co.uk)
4 Ruabon Road, Wrexham, LL13 7PB, Tel: (01978) 364500. Arcam, Atlas, Audiolab, Denon, Grado, Michell, Monitor Audio, Dali, Leema, Loewe, Musical Fidelity, Ortofon, Onkyo, Pro-ject, Sonos, QED, Quad, Rot, Roksan, van-den-Hul, Wharfedale, Yamaha. Tuesday - Saturday 9.00 - 17.00. Email: info@acton-gate.com

**DOUG BRADY HI-FI KINGSWAY**

**CORNWALL**

**BIGEARS AUDIO**
To find a system that will allow you to hear the music instead of the equipment phone Bigears Audio, here you will find an interesting array of new and good quality used equipment! My intention is to have satisfied customers whatever their audio preferences. Naim dealer for the South West. Email: chrisbirchley@btinternet.com. Tel: 01736-740421

**ESSEX**

**ROCOCO SYSTEMS & DESIGN**
Essex/London Linn Specialist. Tel: 01271 856 407 – 0207 454 1234. [www.roccosystems.com](http://www.roccosystems.com)
We have over 30 years in entertainment solutions, We can give you expert advice on your Linn Hi-Fi, Multi-room AV and Home Cinema systems. P/EX, ex-demo and used Linn available, demos by appointment. Home demos welcome. Authorised dealers for Arcam, Artcoustic, Chord, Denon, Linn, Lutron, Kaleidescape, Marantz, Opus, Runko, Systemline, Sonos, Sim2. Linn Service & Repairs.

**EDGAR LUTHER**
[www.edgarluther.co.uk](http://www.edgarluther.co.uk)
75 Church St, Chelmsford, Essex CM2 0QX. Tel: 01245 357420. Email: info@edgarluther.co.uk. Website: [www.edgarluther.co.uk](http://www.edgarluther.co.uk)

Selling sensible Hi-Fi systems since 1973. Albarry, ATC, Chord Co, Creek,Croft, Devialet, EAR, Funk, Harbeth, Icon Audio, Kudos, LFD, London/Decca, Lyra, Martin Logan, Michell, Neat, Nottingham Analogue, Ortofon, Puresound, PMC, Quad, Rega, Sme, Something Solid, Sumiko, Sonneteer, Spendor, Tellurium Q. Turntable specialist - repair and set up.

**LANCASHIRE**

**HOUSE OF LINN MANCHESTER**
Telephone: 0161 766 4837. Email: Info@houseoflinn.com. Website: [www.houseoflinn.com](http://www.houseoflinn.com)

Dial A Dealer

**V'AUDIO HI FI CONSULTANTS**
36 Druid Hill, Stokie Bishop, Bristol. BS9 1EJ. Tel: 0117 968 6005. Website: [www.v-audio.co.uk](http://www.v-audio.co.uk). Email: icvhifi@yahoo.co.uk. ATC, AVI, Nola,ALR Jordan, Audio Analogue, Avid, Black Rhodium, Electrocompaniet, Edge amps/cd, Harman Kardon, Infinity, Jamo, Lyra, Origin Live, Opera, Ortofon, PS Audio, Michelle, REL, SME, Sugden, Townshend, Specialist in Video Projects by SIM2, Infocus, Sanyo, Power Plan, Screens by Stewart, smx and da-lite. Demos by appointment only. Home trial facilities.

**CORNWALL**

**BIGEARS AUDIO**
To find a system that will allow you to hear the music instead of the equipment phone Bigears Audio, here you will find an interesting array of new and good quality used equipment! My intention is to have satisfied customers whatever their audio preferences. Naim dealer for the South West. Email: chrisbirchley@btinternet.com. Tel: 01736-740421

**ESSEX**

**ROCOCO SYSTEMS & DESIGN**
Essex/London Linn Specialist. Tel: 01271 856 407 – 0207 454 1234. [www.roccosystems.com](http://www.roccosystems.com)
We have over 30 years in entertainment solutions, We can give you expert advice on your Linn Hi-Fi, Multi-room AV and Home Cinema systems. P/EX, ex-demo and used Linn available, demos by appointment. Home demos welcome. Authorised dealers for Arcam, Artcoustic, Chord, Denon, Linn, Lutron, Kaleidescape, Marantz, Opus, Runko, Systemline, Sonos, Sim2. Linn Service & Repairs.

**EDGAR LUTHER**
[www.edgarluther.co.uk](http://www.edgarluther.co.uk)
75 Church St, Chelmsford, Essex CM2 0QX. Tel: 01245 357420. Email: info@edgarluther.co.uk. Website: [www.edgarluther.co.uk](http://www.edgarluther.co.uk)


**LANCASHIRE**

**HOUSE OF LINN MANCHESTER**
Telephone: 0161 766 4837. Email: Info@houseoflinn.com. Website: [www.houseoflinn.com](http://www.houseoflinn.com)
The Linn specialists. Independently owned by former Linn staff. Straightforward, professional expertise with demonstration, sales, installation and support for the Linn range of components and systems. The listening experience is so good that demonstrations can last for hours. Discover how we make music sound real in your home! Appointments only.

MANCHESTER

AUDIO COUNSEL
Audio Counsel, 29 Sam Road, Diggle, Manchester, OL3 5PU
01457 875555
www.audiocounsel.co.uk
dave@audiocounsel.co.uk
Hi Fi from, B&W Densen, Dynavector Cartridges, Dynavector Amplifiers, Isolblue, Naim, Neat Acoustics, Piega, Quadraspire, Rega, Revolver, Shahnihan, Totem, Well Tempered Turntables, Zu Loudspeakers. Quality Hi Fi is not plug and play. We deliver and install all systems. Tuesday to Saturday 10.00am to 5.30pm Thursday till 8pm

MIDLANDS (WEST)

SOUND CINERGY
37 high street, Aldridge, WS9 8NL
Tel: 01922 457926
www.soundcinergy.co.uk
clive@sounadinergy.co.uk
Black Rhodium, Chord Co, Exposure, Heed, Kudos, Lehmman, Linn, Marantz, Michell, Monitor Audio, Neat, Nordost, Okki Nokki, Ortofon, Project, REL, Roksan. Check our website for ex dem and secondhand bargains. Ample car parking. Tuesday-Saturday 10-5.30

SUSSEX

15 AUDIO
Churchward Court, 15 Western Road, Lewes, BN7 1RL
Tel: 08448 221115
Email:sales@15audio.co.uk
www.15audio.co.uk
Formerly Sounds of Music, new ownership - demonstration facilities in centre of Lewes. Friendly staff. Free parking. Ayon, Bladelius, Boulder, Coda, Hansen, LSA, SoundLab, SME, WBT and more. Quad centre - ‘Digital Clinic’ - service centre. Home demo’s, delivery and installation. Mon – Frid 10:00am – 6:00pm. Sat 10:00 – 2:00pm. Closed Wednesday.

IRELAND

ARDHOWEN HIFI
10 Menapian Way
Enniskillen, Fermanagh, BT74 4GS
Established 1989
For the best in quality hifi in West Yorkshire, representing Naim Audio, Rega, Sugden, Audio Research, VPI, Krell, Copland, Sonus Faber, Arcam, Nottingham Analogue, Roksan, Hutter, Martin Logan, Proac, PMC, M&K, Finite Elements, SME, Cardas, Kudos Loudspeakers and others. Open Tuesday-Saturday 9.30am to 5.30pm

FANTHORPES HI-FI, TV & CUSTOM INSTALLATION SPECIALISTS
HEPWORTH ARCADE, SILVER STREET, HULL, HU1 1JU
Established over 60 years
Tel: 01482 223096
Web: www.fanthorpes.co.uk
Email: shop@fanthorpes.co.uk

DIAL A DEALER
THORENS TD209 83
Tony Bolton reviews a great new turntable from Thorens

ACCESSORIES 89
Vital vinyl accessories reviewed by Tony Bolton

EDDI READER
Eddi Reader's new album, 'Vagabond' (Diverse Records; diverserecords.com) is possibly her most accessible LP to date and certainly her most mature and insightful. A folk/jazz triumph.

I’LL BE BACK
One nice little addendum to my Record Store Day piece in last month's issue is this 7" EP of Brad Fiedel's Terminator 2 Theme from Silva Screen (www.silvascreen.com). Featuring a silver foil-embossed cover it includes: 'Main Title (Terminator 2 Theme)', 'Escape From The Hospital (And T1000)', 'Trust Me' and 'I'll Be Back'.

WAYLON JENNINGS
From Bear Family (www.bear-family.com) 'Just To Satisfy You' isn't a rehash of the so-so 1969 Waylon Jennings album but a reissue of his excellent 1970 A&M early rarities collection with the first ever version of that title song, plus five bonus tracks not on that album: 'Love Denied', 'Rave On', 'I'm Coming Home', 'Big Mamou' and 'Sing the Girls A Song, Bill'.
AND THAT'S JAZZ...

Making its first appearance in this column is the Black Saint label (www.goodfelles.it) and improv sax player Julius Hemphill’s 'Raw Material And Residuals' (1977), a major modern jazz LP of improv and hard bop, combining clever writing with unadulterated rage.

Art Ensemble Of Chicago's Joseph Jarman & Don Moye's original external project 'Black Paladins' (1979) is both jubilant, infectious and upbeat.

Also look out for Bill Evans/Jim Hall’s ‘Undercurrent’ (1963; Doxy, www.goodfelles.it). It's a great album and notable for being on clear vinyl, which removes damaging magnetic influences from the carbon black of the common vinyl platter.


Also look out for Kenny Burrell’s 'Weaver Of Dreams' (1961) which shows the man’s vocal as well as his guitar talents. Burrell always had a light touch on the strings – a smooth guitar player.

SUNDAZED QUARTET

Four from reissue specialists Sundazed (www.sundazed.com). The See See are a contemporary psychedelic outfit and “The Bright New Light” shows the band's East Coast, free and easy, harmonically-rich, loping style.

Paper Garden are from 1968, offering smiley, happy, sunshine pop with Sgt Pepper-esque layers with an almost Lennon-like delivery.

Onto Condello’s ‘Phase I’ (1968) starts with San Francisco rock, Grateful Dead harmonies and George Harrison sensibilities and ends up sounding like late-period Byrds.

Finally, Joseph's ‘Stone Age Man’ (1969) is a Hammond organ-based, blues rock, outing with a coarse lead vocal and a passionate delivery.

PASCAL COMELADE

Entitled ‘My Degeneration: Electronics 1974-1983’ (Vinyl On Demand; www.vinyl-on-demand.com) and focusing on Pascal Comelade’s early works, this 5LP box set features a range of electronica textures relying on repetitive and developing loops. The relatively primitive nature of the presentation does provide a welcome immediacy and rawness to the works.

...AND FINALLY

Two from the Thirty Tigers label (thirtytigers.com), Elephant Revival’s ‘These Changing Skies’ is the 2013 release for these folkies that utilise a light, contemporary touch and a maturing sound. Nicole Atkins’ new release, ‘Slow Phaser’, meanwhile provides late-night pop with a grand outlook and big melodies.

From Head Spin (www.clearspot.nl) is one-man band Astral Son’s new album ‘Gurumaya’ that harks back to seventies’, layered psychedelia.Very Hawkwind in tone.

Garotas Suecas’ ‘Feras Miticas’ (Vampi Soul; www.munster-records.com) combines freakbeat and tropicalia, with a laidback, easy soul/funk attitude.


Belgium-based guitarist Stein Urhelm’s new self-titled album (Hubro; www.hubromusic.com), offers a superb conglomeration of guitar styles and techniques. Show off...a worthy one, though.

Finally, new from Rookie is ‘The Trouble With Templeton’ (Bella Union; www.bellounion.com) a smoothly, insinuating indie force that oozes over your consciousness like rhythmic syrup. Like a snoozy Radiohead.
### SPEAKERS
- Tannoy Stirling GR speakers, as new (£3950) only  
  - £2995

### PRE-AMPS
- Musical Fidelity 3A pre amp, boxed, ex’ cond.  
  - £150
- Audio Note Zero R (NOS) pre amp  
  - £350
- Toft pre amp, balanced and s/e on every input/output  
  - £295

### AMPLIFIERS
- Cello Encore monoblocks with Cello Encore pre amp inc' dedicated PSU & Audio Tekne cables (£7500)  
  - £7249.00 Offered for

### CD PLAYERS & TRANSPORTS
- Accuphase DP555V CD player, superb/boxed  
  - £1250
- Ancient Audio Lektor CD player  
  - £1850
- Rega DAC with USB input, MINT/BOXED  
  - £325
- Musical Fidelity M6 CD player MINT/BOXED  
  - £395
- CEC TL-0X CD transport (£15k) ex demo  
  - £7995
- Mark Levinson 31.5/30.6 Reference CD transport and DAC, superb/boxed (cost new £27,490.00) Offered for  
  - £6995

### MISCELLANEOUS
- 1 Metre Madrigal C2 Gel balanced interconnect  
  - £295
- Studer A-807 pro' stereo tape recorder  
  - £2495
- Yamaha TX-761 DAB/FM Tuner  
  - £195
- Okutsu Denko 1.5 metre mains cable (US plugs)  
  - £1195

---

**Digital & Analogue Audio Specialists**

**Call Sales:** 01362 820800  
**enquiries@basicallysound.co.uk**  
**www.basicallysound.co.uk**

---

**Epiphany Acoustics**

Headphone Amplifiers. DACs. Interconnects

*Atratus RCA Interconnects*

**Hi-Fi Choice**

"Great realism... Tight and punchy bass... Amazing value for money."

- Hi-Fi Choice

Find out what all the fuss is about at our online shop and use discount code MAG10 for your exclusive 10% discount.

Prices start at under £40/pair  
**www.epiphany-acoustics.co.uk**
Thorons is a name that has been synonymous with good-quality turntables for many decades. Rather than resting on their laurels, the company have been developing new designs, of which the TD-209, launched at the Munich High End Show and under review here, is one.

Available in black, white or the red of this example, the TD-209 shares all of its mechanical specification with the more conventionally shaped TD-206 but takes its styling cues from the enthusiastically reviewed and award-winning TD-309.

Priced at £850, the '209 includes a pre-fitted and aligned cartridge so the deck merely requires the platter, drive belt and counterweight to be fitted, and it’s ready to use. A full complement of accessories is provided with a basic but reasonably accurate stylus balance, a bubble level, 45rpm centre adaptor and an Allen key to adjust the feet to level the deck. These are substantial, multi-component affairs that seemed effective in decoupling the deck from whatever it was placed upon. Adjustment is accessed through holes above the feet in the top of the plinth. This is made of MDF and coated in a high-gloss lacquer finish that was well executed and thick enough to be durable.

The drive mechanism is borrowed from the TD-309 and uses a servo controlled DC motor to drive the subplatter via a flat drive belt. The top platter is a two-part
**WHAT WE CAN NOW PROVIDE IN HOUSE REPAIR SERVICE FOR ALL VINTAGE AND CLASSIC HI-FI EQUIPMENT**

**AMPLIFIERS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grado F1000</td>
<td>£1495</td>
</tr>
<tr>
<td>Quad ESL-980</td>
<td>£1995</td>
</tr>
<tr>
<td>Monitor Audio 700</td>
<td>£395</td>
</tr>
<tr>
<td>Mission 775</td>
<td>£1995</td>
</tr>
<tr>
<td>Linn 325i</td>
<td>£295</td>
</tr>
<tr>
<td>Naim CDS2</td>
<td>£495</td>
</tr>
<tr>
<td>Marantz CD5000</td>
<td>£395</td>
</tr>
<tr>
<td>CDV 302</td>
<td>£495</td>
</tr>
<tr>
<td>CDV 305</td>
<td>£645</td>
</tr>
</tbody>
</table>

**HEADPHONES**

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quad ESL-980</td>
<td>£1995</td>
</tr>
<tr>
<td>Quad ESL-989</td>
<td>£1995</td>
</tr>
<tr>
<td>Quad ESL-990</td>
<td>£1995</td>
</tr>
<tr>
<td>Quad ESL-999</td>
<td>£1995</td>
</tr>
<tr>
<td>Quad ESL-1000</td>
<td>£1995</td>
</tr>
<tr>
<td>Quad ESL-1005</td>
<td>£1995</td>
</tr>
</tbody>
</table>

**AMPLIFIERS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linn 325i</td>
<td>£295</td>
</tr>
<tr>
<td>Linn 325b</td>
<td>£495</td>
</tr>
<tr>
<td>Linn 325c</td>
<td>£645</td>
</tr>
</tbody>
</table>

**CABINETS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mission 775</td>
<td>£1995</td>
</tr>
<tr>
<td>Mission 775b</td>
<td>£1995</td>
</tr>
<tr>
<td>Mission 775c</td>
<td>£1995</td>
</tr>
<tr>
<td>CDV 302</td>
<td>£495</td>
</tr>
<tr>
<td>CDV 305</td>
<td>£645</td>
</tr>
<tr>
<td>CDV 306</td>
<td>£895</td>
</tr>
</tbody>
</table>

**TUNERS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linn 325i</td>
<td>£295</td>
</tr>
<tr>
<td>Linn 325b</td>
<td>£495</td>
</tr>
<tr>
<td>Linn 325c</td>
<td>£645</td>
</tr>
<tr>
<td>CDV 302</td>
<td>£495</td>
</tr>
<tr>
<td>CDV 305</td>
<td>£645</td>
</tr>
<tr>
<td>CDV 306</td>
<td>£895</td>
</tr>
</tbody>
</table>

**RECORDS**

- Various artists available please phone +44 (0) 131 558 9889

**ACCESSORIES**

- Digital Stylus Gauges
- Record Cleaning Machines
- Audio Cassettes

** brakes per item £ 2900**

**ophonostage beautifully made german**

**new and boxed £ 1995**

**Lowther PM6 in  Hom loaded cabinet**

**Impulse H6 valve friendly floorstanding speakers**

**Boston VRM 50s Lynnefield series monitor speakers**

**Telephone for terms. Please phone to confirm price & availability prior to ordering.**

**I SELL FINEQty.**

**THANK YOU FOR YOUR SUPPORT.**

**IAN HARRISON HI-FI**

**50% OFF**

**WEBSITE: www.retroreproduction.co.uk**

**E-mail: retroreproduction@virgin.net**

**Tel/Fax: 0131 558 9989**

**See page 38 for details.**

**RETAIL REPRODUCTION LTD**

**1135 Buy Direct**

**World Radio History**

**September 2014**

**Advertisement**

**WE CAN NOW PROVIDE IN HOUSE REPAIR SERVICE FOR ALL VINTAGE AND CLASSIC HI-FI EQUIPMENT**

**AMPLIFIERS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mission 775</td>
<td>£1995</td>
</tr>
<tr>
<td>Mission 775b</td>
<td>£1995</td>
</tr>
<tr>
<td>Mission 775c</td>
<td>£1995</td>
</tr>
<tr>
<td>CDV 302</td>
<td>£495</td>
</tr>
<tr>
<td>CDV 305</td>
<td>£645</td>
</tr>
<tr>
<td>CDV 306</td>
<td>£895</td>
</tr>
</tbody>
</table>

**HEADPHONES**

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quad ESL-980</td>
<td>£1995</td>
</tr>
<tr>
<td>Quad ESL-989</td>
<td>£1995</td>
</tr>
<tr>
<td>Quad ESL-990</td>
<td>£1995</td>
</tr>
<tr>
<td>Quad ESL-999</td>
<td>£1995</td>
</tr>
<tr>
<td>Quad ESL-1000</td>
<td>£1995</td>
</tr>
<tr>
<td>Quad ESL-1005</td>
<td>£1995</td>
</tr>
</tbody>
</table>

**AMPLIFIERS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linn 325i</td>
<td>£295</td>
</tr>
<tr>
<td>Linn 325b</td>
<td>£495</td>
</tr>
<tr>
<td>Linn 325c</td>
<td>£645</td>
</tr>
</tbody>
</table>

**CABINETS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mission 775</td>
<td>£1995</td>
</tr>
<tr>
<td>Mission 775b</td>
<td>£1995</td>
</tr>
<tr>
<td>Mission 775c</td>
<td>£1995</td>
</tr>
<tr>
<td>CDV 302</td>
<td>£495</td>
</tr>
<tr>
<td>CDV 305</td>
<td>£645</td>
</tr>
<tr>
<td>CDV 306</td>
<td>£895</td>
</tr>
</tbody>
</table>

**TUNERS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linn 325i</td>
<td>£295</td>
</tr>
<tr>
<td>Linn 325b</td>
<td>£495</td>
</tr>
<tr>
<td>Linn 325c</td>
<td>£645</td>
</tr>
<tr>
<td>CDV 302</td>
<td>£495</td>
</tr>
<tr>
<td>CDV 305</td>
<td>£645</td>
</tr>
<tr>
<td>CDV 306</td>
<td>£895</td>
</tr>
</tbody>
</table>

**RECORDS**

- Various artists available please phone +44 (0) 131 558 9889

**TO ADVERTISE HERE PLEASE CALL BRAD FRANCIS ON +44 (0) 923 677 256 OR EMAIL: advertising@hi-fiworld.co.uk**
aluminium and acrylic design that seemed to control resonance issues quite well. I was initially a bit sceptical about the record gripping capabilities of the polished platter mat but my usual test record of Chopin's 'Nocturnes' showed no signs of wow during long-held piano notes so I accepted that it worked satisfactorily.

The Thorens-badged Audio Technica AT-95B cartridge (the A.T. version retails at £36.11 in the UK) was new, I gave it about 20 hours of judgmental listening. I was working my way through my collection of electronica at the time and found Banco De Gaia's '12' single 'Heliosopolis' particularly engaging. This 'down tempo/trance' infused series of mixes based around the track 'Heliosopolis' present the main themes in a variety of forms and rhythms (not unlike the variations on a theme of...) found within the classical repertoire. Although I felt that the bass was a little lacking in weight and incisiveness, which I attributed to the limitations of the cartridge's performance, it was very tuneful and quite reasonably fast, with little perceivable overhang. The soundstage was of quite wide proportions, although not as deep as I would ideally like, and the presentation of the sounds filled it in a convincing manner.

The following evening I settled into a more jazzy mood and listened to Julie London slinking her way through 'Black Coffee'. Although more closely associated with Peggy Lee, London treats it as a classic torch song and makes it her own. This American first pressing is in near mint condition and I found myself getting thoroughly drawn into the sonic picture being painted before me. I found the tonal balance of most of the instruments to be generally quite good, although the strings had a tendency to a slightly glossy, almost synthesized sound that was definitely not accurate.

Later on I moved onto an early stereo Canadian pressing of 'Die Fledermaus' which confirmed my worst fears regarding the reproduc
DISCOVER YOUR DEVIALET
AT OXFORD AUDIO

Stereo or Dual-mono?

120 DEVIALET
Devialet's total pledge of uncompromising performance, its revolutionary ADH® and integrated SAM® technologies, expandability via its EVO® platform and extreme ease of use, in an extremely elegant cabinet will suit your home perfectly.

200 DEVIALET
The audiophile's favourite model, for its professional digital and analogue inputs/outputs, its power and its wealth of customisable options and settings. In addition to 400W mono-block customisation, the Devialet 200 also represents a first step for those seeking to eventually upgrade to a dual-mono system.

250 DEVIALET
The Devialet 250 may be used in stereo mode, as well as the master unit of the Devialet 800, Devialet's ultimate audio solution. By purchasing a slave Devialet 250 (without the Wi-Fi module and the remote control), you can build the most incredible of Devialet systems.

400 DEVIALET
Finally, a dual-mono solution at an affordable price! The Devialet 400 is the most comprehensive and high-performance dual-mono model. Extreme power (400W), an inexhaustible wealth of adjustable parameters and unsurpassed performances (THD + N 0.00025%), the Devialet 400 finally enables you to make the transition to a system comprised of two power blocks.

800 DEVIALET
The Devialet 800 makes your dreams a reality; unimaginably fine rendering (distortion is no longer even measurable) combined with more than 2x800W of power reserves. Not intended for amateurs!

FINANCE: ASK ABOUT OUR BUY NOW PAY LATER SCHEME. 0% APR NO DEPOSIT NO FEES.

Hi Fi - Home Cinema - Custom Install

TELEPHONE
01865 790 879

E-MAIL
info@oxfordaudio.co.uk

WEB SITE
www.oxfordaudio.co.uk

Call Jon Harker on 01865 790 879 to find out more.
The thread of the counterweight mounting is fine enough to allow very small alterations to the tracking weight (VTF) to be made. The anti-ski control is the knurled nut protruding from the arm mounting.

range or from another manufacturer. Otherwise I would use the supplied cartridge until it was worn and then replace it with a more expensive unit. After some further listening with the Goldring fitted, I returned the deck back to standard specification with the AT-95B and listened to The Man In Black singing a cover of Bob Dylan’s ‘It Ain’t Me Babe’. Cash gives his version more of a country music flavour than the Dylan original and I found myself appreciating the full-bodied textures of his voice as well as the easily flowing timing, driven by string bass and guitar. It sounded relaxed and easy, just as it was intended to. Cash’s distinctive vocal style was well described with just enough depth in the lower reaches of his voice to sound realistic.

I find this deck very easy to get on with. It plays music in an unpretentious but pretty honest manner. The only real shortcoming that I could find is the sonic limitation of the supplied cartridge for classical music; it would not be my first choice of transducer for this genre. Otherwise, the whole package gave a very good account of itself.

The TD-209 ran at absolutely the right speed, our analysis shows. The AVG Freq in our analysis should be 3150Hz but 2.27Hz above this is of no consequence and in fact the platter varied speed very slightly around 3150Hz, being more stable than most. Because of this low basic rate of variation of speed, wow was low, measuring typically 0.16% as shown in our analysis. With weighting applied this fell to a very low 0.06%, up with the best turntables available — a great result from a budget player. So although simple and basic looking, the TD-200 uses a good motor, belt and platter to produce impressive results.

The cartridge tracked very well, clearing all lateral and vertical test tracks on CBS STR 112 test disc, including the top torture track, VTF being 2gms. Frequency response was flat to past 10kHz with a 200pF load and fell slightly with OpF, so the cartridge has no midrange droop and detailing will be good-to-strong. Inner groove tracing loss (red trace) was minimal. The AT-95B produced good results, complementing the turntable well. NK

The TD-209 was easy to set up, precise timing and relaxed sound quality at an affordable price.

MEASURED PERFORMANCE

FREQUENCY RESPONSE

WOW & FLUTTER

THORENS TD-209
TURNTABLE £850

OUTSTANDING - amongst the best

VERDICT
Plug in and play turntable that offers good sound and build quality at an affordable price

FOR
- ease of set-up
- precise timing
- relaxed sound quality
- trackability

AGAINST
- can be a little too polite with the fitted cartridge, but upgrades are easy

UKD
+44 (0) 1753 852869
www.ukd.co.uk
Subscribe to our eco-friendly e-edition of Hi-Fi World and receive a 50% discount!!!

- Receive your issue a week before on-sale dates.
- Be the first to grab a bargain in our Free Reader Classified Ads.
- In-house lab. tests to AES and IEC standards
- Run by dedicated hi-fi engineers & enthusiasts.
- No missed issues, or postal delays.
- Access your issues from anywhere in the World.
- PC and Mac friendly.
- Eco-friendly.

Subscribe today and receive 12 issues for £20 – that’s an amazing £1.90 per issue!

Check out our free trial issue

VISIT OUR WEBSITE: www.hi-fiworld.co.uk and select "ELECTRONIC EDITION"

To purchase your e-edition click here
Here's your chance to win the superb Ortofon Quintet Bronze moving coil cartridge we reviewed last month.

Read the review excerpt below and answer the questions.

“Following on from my review of the new £649 Ortofon Quintet Black cartridge (Hi-Fi World, May 2014) I have managed to get hold of its £499 sibling, the Quintet Bronze.

It is housed within a similar ABS (Acrylonitrile/Butadiene/Styrene) thermoplastic body as the Black model, but in a colour that looked more orange than bronze to my eyes. Internal specification includes neodymium magnets and coils of 99.99% pure copper.

Apart from the colour, the main difference between the cartridges is the stylus profile, the Bronze using a nude Fine Line profile while the Black is graced with a nude Shibata diamond.

The straight lines of the body and the good visibility around the stylus and cantilever made setting up the cartridge on my Linn Izotophone very easy. Tracking force is a not insubstantial 2.3g — but since this is spread over a large contact area between the stylus and groove wall record wear should be minimal.

As with all cartridges the first few hours of playing allowed the sound to loosen up and expand so that the rather tight and bassless presentation of music was replaced after about 25 hours of use with a more open and lucid sound.”

For a chance to win this great prize, just answer the four easy questions at right. Send your entries, on a postcard only, by September 5th to:

September 2014
Competition,
Hi-Fi World magazine,
Studio 204,
Buspace Studio,
Conlan Street,
Notting Hill,
London W10 5AP

RULES AND CONDITIONS OF ENTRY

- ONLY ONE ENTRY PER HOUSEHOLD
- MULTIPLE ENTRIES WILL BE AUTOMATICALLY DISQUALIFIED
- PURCHASE OF THE MAGAZINE IS NOT A PRE-CONDITION OF ENTRY
- NO CORRESPONDENCE WILL BE ENTERED INTO
- THE EDITOR’S DECISION IS FINAL
- ND EMPLOYEES OF AUDIOPUBLISHING LIMITED, OR OF ANY COMPANIES ASSOCIATED WITH THE PRODUCTION OR DISTRIBUTION OF THE PRIZES, MAY ENTER

QUESTIONS

[1] What is it housed in?
[a] putty
[b] gold
[c] ABS
[d] wood

[2] What is the magnet material?
[a] ceramic
[b] ferrite
[c] wrought iron
[d] neodymium

[3] What is the tracking force?
[a] 2.3 gms
[b] 2.3 kgs
[c] 3.2 lbs
[d] 4.2 tons

[4] The stylus profile is?
[a] Fine Line
[b] elliptical
[c] spherical
[d] wiggly
Promised me a Funk

...all I get? Paradise

...ever closer

www.thefunkfirm.co.uk 07846 798367 / 01273 585042

Enjoy the Music.com

Audiophile Equipment & Music Reviews
Your resource for high-end audio news & information!

Over 5,700 Web Pages
The most extensive high-end audio knowledge and news online!

Over 150 Audiophile Show Reports
No one has more worldwide show coverage on the Internet!

The Best Contests
Over $150,000 in prizes offered to our readers!

Internet Partners With Leading Magazines
hi-fi+ the absolute sound HI-FI CRITIC HI-FI WORLD hifimedia

Media Partners With Major American Shows

www.EnjoyTheMusic.com
TERMS AND CONDITIONS: Only one advert per reader. No Trade adverts. This section is strictly for readers selling secondhand hi-fi equipment only. Maximum length per advert is 30 words. Adverts over 30 words will not be accepted. Telephone numbers and E-mail addresses are treated as one word. Model numbers are treated as one word i.e. Quad 303 = two words. Email your advert to: Classifieds@hi-fiworld.co.uk or fill in the form on page 97 and post it to Hi-Fi World Free Readers Ads, Studio 204, Buspace Studio, Conian Street, Notting Hill, London W10 9AR. Sorry, we cannot accept adverts over the telephone. The Publisher reserves the right to judge submissions.

ION SYSTEMS X-Pak2 power supply, SPI preamp, MA600 monoblock amps, £850. Roksan Xerxes turntable, Artemis tonearm, TMS1 power supply board, black ash, £850. Original boxes. Tel: 01562 753 662

TOWNSHEND GLASTONBURY, very good condition, boxes, £500 ono. Naim 82 preamp, HiCap pair 135 mon amps, very good condition, boxes, offers. Tel: 01446 418207 or 07792 221917

LINN LINGO, unused since recent £90 service. Class A, boxed, £495. Linn Ittok VII, black, immaculate, £500. Denon DL101 cartridge, 5 hours use, £85. Tel: 01323 728 118

WANTED: LATE SME Series IV-D with detachable headshell. Mint condition. Perfect working order essential. Complete with all tools and accessories. Tel: 01505 346 791 (Renfrewshire)

WANTED: TOP quality Hi Fi separates and complete systems, Naim, Linn, Cyrus, Meridian, Audio Research etc, fast, friendly response and willing to travel/pay cash. Please call me on 0781 5892458

ART SKIBO floor standing speakers. Light wood finish. Slight damage to one cabinet. Full working order. £425 ono. Collect only. No boxes. Will demo. Tel: 01745 822 992

ARCAM SOLO 5.1 AV amplifier, DAB/FM. Arcam service this month. (New £2000) £475. Denon PMA520 amplifier, 70wpc, £65. Sony TCK615 cassette deck, £50. Tel: 01708 457 691

MBL 121 Radialstrahler compact speaker stands cartron mint. MBL 2008 integrated amplifier, mint, boxed. Music First passive pre (copper) mint. For details ring: 07770 772647 (Wigton)

NAD FAMOUS Designers speakers, 200 watt, 8 ohms, American walnut veneer with grills, excellent condition. £100. Cambridge assorted pre and pieces. Well worth a phone call. Tel: 0115 754070 or 07791 363 434 (Nottingham)

WILL SWAP Dali Mentor Two pair bi-wire speakers (RRP £1400) good use few chips scratches though perfect working sound stage. Would like projector for VHS/DVD, Scart, RF. Offers. Mike Sinclair, 72 Sandy Lane, Dereham, Norfolk NR19 2EE

PAIR EPOS ES11 speakers. Bought new. Used in one room since purchase. Excellent order. £150. Buyer collects, Dorset. Tel: 01935 812 544 (Leave message if out)


QED A230S amplifier, mint, £80. Yamaha YSTSW45 active sub, £50. Marantz SD35 cassette, mint, boxed, £50. Dual CS505 turnable, very good condition, £45. Yamaha MDX793 MiniDisc, £60. Tel: 01708 457 691

CUSTOM DESIGN wall mounted turntable support. Black metal frame Toughened glass shelf Complete with all fixings In as new condition Offers please Tel. 01293 524587 Mob. 07951596593 West Sussex

QUAD II Anniversary amplifiers in gold. Written provenance these were the pair reviewed by “Sterophile” magazine. Full details via email to: wobble0007@gmail.com. Offers over £3,250

MOON CD5.3RS CD player. Boxed and excellent condition. £750 o.n.o. Collection only. email: farrow_jim@hotmail.co.uk mobile: 07913236601

B&W DM 601 S2 speakers, ash black, mint condition, with box and manual Collection only, happy to demonstrate, RRP £200 - £100. Tel: 01902 884694 - Email: jukey39@yahoo.co.uk

SEPARATES SYSTEM. Pro-ject turntable, Yamaha TX590/RDS tuner, Onkyo DX7333 CD player, Yamaha RX933 cassette player, Rotel amp RB971 and 2 Quad 77-111 speakers. £600 01380 830463 (Wiltshire)

WANTED-COPIES of the old style (A5 size) Hi-Fi Choice magazines starting with the first issue from 1975. Tel: Ray 07708431963.

CYRUS CD8X and PSX-R. Can demo. £475. Buyer collect. Tel: 01354 652 691

MISSION 753 Freedom loudspeakers in rosewood, I bought these from new they are a matched pair in perfect working order and condition. £299 Tel Derek 0771 1741860 West Sussex

FREE READERS CLASSIFIEDS
MUSICAL FIDELITY
A308CR Pre-amplifier £695: as new except the price! (RRP was £1500) Great reviews! Musical Fidelity A3.2 RDS Tuner £295: As new Musical Fidelity A308CR CD Player £695: as new (RRP was £2000) Great reviews! Owned from new, less than 100 hours use, still pristine, unmarked, original boxes, remote and instructions. Protected in an audio rack in my smoke and pet free home. All have the attractive all-silver appearance. Mike (Cheshire) 07500 804700 Email: michael.yates7@ntlworld.com


MONITOR AUDIO
Studio 20 SE Cherry, excellent condition, boxed. spikes and with full set of Russ Andrews accessories including jumbo oak feet, focus rings and Torlyte iso-pads. £750 ovno. Call 07730 796204 or e-mail graham.wynde@gmail.com (Herts)

MCINTOSH MC 275 power amplifier Mk 5 £2650. McIntosh C220 preamplifier with remote £2500 Both are in excellent condition with manuals and boxes. Bernardharding @btinternet.com 07956584363

WANTED FAULTY or non working Quad 34 preamps. Also required Supex SD900, SD901 and Denon DL103 cartridges. Contact Mike 01758 613790 with price.

LUMIN AUDIOPHILE
Network Player in black, 6 months old with external PSU and all packaging £3200.00 Audition can be arranged in your system. Call (07788) 418318

BROADSWORD
RUARK speakers, bi-wire terminals with 16” Target stands. £90. Tel: 01825 722 936

ION SYSTEMS X-Pak2 power supply, SPI preamp, MA600 monoblock amps, £850. Roksan Xerxes turntable, Artemis tonearm,TMS1 power supply board, black ash, £850 Original boxes. Tel: 01562 753 662

TOWNSEND
GLASTONBURY, very good condition, boxes, £500 ono. Naim 82 preamp, HiCap pair 135 mono amps, very good condition, boxes, offers. Tel: 01446 418207 or 07792 221917

LINN LINGO, unused since recent £90 service, Class A, boxed, £495. Linn Ittok VII, black, immaculate, £500. Denon DL10 cartridge, 5 hours use, £85. Tel: 01323 728 118

WANTED: LATE SME Series IV-D with detachable headshell. Mint condition. Perfect working order essential. Complete with all tools and accessories. Tel: 01505 346 791 (Renfrewshire)

WANTED: TOP quality Hi Fi separates and complete systems, Naim, Linn, Cyrus, Meridian, Audio Research etc, fast, friendly response and willing to travel/pay cash Please call me on 0781 5892458

ART SKIBO floor standing speakers. Light wood finish. Slight damage to one cabinet. Full working order. £425 ovno. Collect only. No boxes, Will demo. Tel: 01745 822 992

ARCAM SOLO 5.1 AV amplifier DAB/FM. Arcam service this month. (New £2000) £475. Denon PM320 amplifier, 70wpc, £65. Sony TCK615 cassette deck, £50. Tel: 01708 457 691

PAIR EPOS ES11 speakers. Bought new. Used in one room since purchase. Excellent order. £150. Buyer collects, Dorset. Tel: 01935 812 544 (Leave message if out)

FREE READERS CLASSIFIEDS

GUIDELINES FOR BUYING AND SELLING SECOND-HAND EQUIPMENT

FOR THE BUYER
1. Not everyone is honest - Buyer Beware!
2. Don’t send cash!
3. Accept no verbal guarantees.
4. Have you heard the item or something similar? If not, why do you want it?
5. Don’t pretend to have knowledge - it’s your fingers that will get burnt!
6. Is it working? If not, why not? Can it be repaired and if so is it worth it?
7. Has it been modified and, if so, have notes been kept?
8. Was it any good in the first place?
9. Don’t send cash!
10. If you are in the slightest doubt, arrange an audition (see point 5) If it’s too far, wait for another time.
11. Either buy it or don’t: vendors are excusably impatient with ‘consultation’ exercises.
12. Don’t send cash!

FOR THE SELLER
1. Not everyone is honest - Seller Beware!
2. Make no verbal guarantees.
3. Even nearly new is still second-hand. If the manufacturer’s guarantee is no longer in force, your price should reflect this.
4. There is very little intrinsic value in second-hand hi-fi; it’s only worth what someone will pay for it.
5. The best guide to pricing is last month’s Classifieds: that a ‘classic’ was worth £xxx a year or two ago is no guide. Values fall as well as rise.
6. Amateur second-hand dealings is not a big money game: you win some, you lose some.
7. Be prompt with despatch.
8. Buyer Beware!
9. Don’t send cash!
10. Be prompt with despatch.
11. Don’t send cash!
12. Be prompt with despatch.

SEPTEMBER 2014 HI FI WORLD
NEXT MONTH
OCTOBER 2014 ISSUE

EKCO EV55SE VALVE AMPLIFIER

iAG have revived the Ekco brand name for an amplifier designed and built by their factory in China. It promises high quality at a low price. But just how good will it be? Find out in our forthcoming October issue.

Also, we hope to bring you —

ANTELOPE ISOCHRONE 10M RUBIDIUM MASTER CLOCK
ANTELOPE ISOCHRONE TRINITY MASTER CLOCK
ROBSON ACOUSTICS VOLTAIRE ZERO LOUDSPEAKERS
ACOUSTIC ENERGY 103 LOUDSPEAKERS
SONY STR-DN1050 AV RECEIVER
SIMPLE AUDIO STREAMER
ARCAM R DAC
...and much more.

THE BEATLES IN MONO LP BOX SET REVIEW
ORTOFON 2M SE MONO CARTRIDGE

Right now we are still awaiting this box set for review. It may well be with us soon, in which case a full review will appear in the October issue too. Our apologies to all readers expecting a review in this issue.

This is a selection of what we hope to bring you, not a complete list. We regret that due to a wide range of issues, such as failure under review, we cannot guarantee that all products listed above will appear.

PICK UP THE OCTOBER 2014 ISSUE OF HI-FI WORLD ON SALE AUGUST 29TH 2014 OR SUBSCRIBE AND GET IT DELIVERED TO YOUR DOOR: SEE PAGE 44
FREE READER CLASSIFIED ADS ORDER FORM

TERMS AND CONDITIONS: Only one advert per reader. Maximum length per advert is 30 words. Adverts over 30 words will not be accepted. No Trade Adverts. This section is strictly for readers selling secondhand hi-fi equipment only. Telephone numbers and E-mail addresses are treated as one word. Model numbers are treated as one word i.e. Quad 303 = two words. Sorry, we cannot accept adverts over the telephone. The Publisher reserves the right to judge submissions.

You can email your advert to us at: classifieds@hi-fiworld.co.uk or write or type your advertisement copy in block capitals with one word per box and post it to us at:

Hi-Fi World Free Readers Ads,
Studio 204,
Buspace Studio,
Conlan Street,
London W10 5AP

Name: ____________________________
Address: __________________________
Post Code: _________________________
Daytime Tel: ________________________

FREE READER CLASSIFIED ADS COPY DEADLINES
OCTOBER 2014 - 5TH AUGUST 2014
NOVEMBER 2014 - 4TH SEPTEMBER
THE IMPRESSIONS
THE IMPRESSIONS
1963

This stylish soul group from Chicago could have done nothing but stand around drinking coffee, nibbling cake, keeping quiet and merely existing and they still would have been famous and lauded amongst music fans. Why? Because the outfit launched the careers of two of soul's legends: Jerry Butler and Curtis Mayfield.

But the group didn't frequent the American version of the Kardomah or Lyons Tea House. In fact, they recorded some of the best and most distinctive vocal group R&B that the world had ever heard - either then or now, to be frank. It's affected by the delightful touch of Mayfield and his guitar work, plus a three-part harmony that was rare in the R&B field at the time. The Impressions inserted subtle spiritual themes into their work that gradually evolved into a social consciousness, egged on by Mayfield's awareness of his surroundings and the direction of the political wind.

Initially called The Roosters, from Chattanooga, the group began with Sam Gooden plus brothers Richard and Arthur Brooks. Soon after, the group's lead singer Jerry Butler signed up, bringing his friend Curtis Mayfield in on the act. Renamed The Impressions by their manager, the group had a hit in 1958 with 'For Your Precious Love'. Butler then left for a successful solo career to be replaced by Fred Cash while Mayfield took a tenor role and became the principal creator in the outfit.

It was when Mayfield brought the group to New York that The Impressions hit new heights, especially after the release, in 1961, of the Latin-tinged single, 'Gypsy Woman', which Cash almost missed entirely. As he recalled, "Well, just as 'Gypsy Woman' was about to be released, I received my papers to go into the armed forces. So, of course I was scared to death! I was like 'Oh my God, I'm gonna miss out on this'. But what happened, when I went down to take my physical, was that they were taking every other one..." and leaving the other one go, taking every other one and letting the other one go... and thank God, I was one of the guys they let go."

"And then, with 'Gypsy Woman' being such a big record, it all turned out to be just a great time for me and the other guys in the group".

The Brooks brothers soon left, leaving the classic trio format to build on a very promising career culminating in their first R&B No 1 and biggest pop hit 'It's All Right' which was released in 1963.

But why did they drop from five members to three? Cash explained, "We were actually in Chicago at the home of our manager Eddie Thomas. ABC/Paramount Records had just released a song of ours called 'I'm The One Who Loves You' (which is also on the debut album, incidentally) and basically the Brooks brothers had a fit! Because they were wanting to do stuff like Little Richard was doing, whereas we kept telling them that we needed to have our own identity and that we couldn't just be doing what everyone else was doing".

"So they got really mad, took the record, threw it on the garbage and said 'We're quitting! We're gonna sign to End Records instead!' because at the time the group Little Anthony & The Imperials were really hot on End Records".

"So yeah, that's how that break-up came about. And from there Sam, Curtis and myself just decided to keep rehearsing and just carry on as a trio".

And the trio were on the up. A fact that was sign posted by this self-titled album debut, one of the best by any of the sixties soul acts. This album was a real gem as it already featured five chart singles (including 'Gypsy Woman', 'Little Young Lover', 'Grow Closer Together', 'I'm the One Who Loves You' and 'Minstrel and Queen').

'It's All Right', the best song on the album, was quickly added to the original program. Featuring beautiful harmonic vocals and some superb guitar work from Mayfield, it also included some surprisingly swinging horn work via Johnny Pate.

The quality of the songs lifted the album to a top-notch standard, but it was Mayfield's arrangements coupled with those dazzling vocals that elevated the LP to pure greatness.

If you want to grab a copy of the album, the best current source is a CD version via the Kent label (www.acerecords.co.uk) as part of a 'two-fer' alongside 'The Never Ending...', the group's 1964 follow-up.
The USHER Dancer Diamond Series features the world’s first amorphous DLC (diamond-like carbon) diaphragm tweeter. This is a tweeter which is second to none in the current market. To find out more, visit www.usheraudio.com or your nearest USHER dealer...

"2012 Editor's Choice" Awards --- AUDIO ART

Mini-X Diamond

2-way system: 1.25" Diamond DMD dome tweeter, 7" midrange
Sensitivity: 87 dB @ 1 watt / 1m
Nominal impedance: 8 ohms
Frequency response (3 dB): 41 Hz – 40 kHz
Power handling: 100 watts
Crossover frequencies: 2.3 kHz
Weight: 15.5 kgs/34.2 lbs. per piece
Dimensions (w x d x h): 26 cm x 37 cm x 43.5 cm;

Behind the scenes

Dr. Joseph D’Appolito, a world renowned authority in audio and acoustics designs the crossover and performs prototype testing/final fine tuning for Usher Audio. Consulting to a couple of famous audio companies, Joe always finds the tremendous value Usher Audio products represent a delightful surprise in today’s high end audio market.

Rueyma Electric Technology Co., Ltd.

Distributed in the UK by Decent Audio

Tel: 886 2 2314 3868, Fax: 886 2 2371 7253

T: 0560 2054669
W: www.decentaudio.co.uk E: info@decentaudio.co.uk
For more than a quarter-century, Sonus faber has represented the pinnacle of loudspeaker aesthetics. From its earliest models, incorporating real wood, furniture-grade finishing, seductive curves and even grilles that reveal style and inventiveness, this repository of Italian artisan skills and artistry has achieved what was once deemed impossible: creating speakers that sound as beautiful as they look.

Along with a series of models paying homage to the great luthiers of Cremona, the company has since been inspired by the Teatro Olimpico in Vicenza. It is appropriate that this new family of speakers considered the standards of a famed venue as the ne plus ultra of the reproduction of music with vivacity and power... exactly what defines music from opera to orchestral to rock music to soul to jazz. To achieve this, Sonus faber has exploited all that it has learned since its inception.

Like all Sonus faber loudspeakers, Olympica represents what is possible, while respecting what has mattered.