

# Hifi Pig

## EXTRA

### & GadgetyNews

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SEPTEMBER  
2016

## HIFI REVIEWS

GIK ROOM TREATMENT PRODUCTS  
AUDIO MUSIC AM-RT TVC/VALVE PREAMPLIFIER  
COPLAND DAC215 DAC, PRE & HEADAMP  
LEEMA LIBRA DAC/PREAMPLIFIER  
AUDIOBYTE HYDRA Z & HYDRA ZPM  
HANA LAB SAKURA MUSIC SERVER/DAC  
OPTOMA BE16 BLUETOOTH EARPHONES

## GADGET REVIEWS

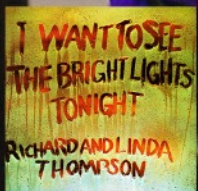
TILE KEY TRACKER  
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## CLASSIC ALBUM

**Richard And Linda  
Thompson – I Want  
To See The Bright  
Lights Tonight**



**ALBUM AND LIVE MUSIC  
REVIEWS PLUS  
PICTURES AND  
COMMENT FROM  
CRESCENDO  
PROGRESSIVE ROCK  
FESTIVAL**

**BEHIND THE BRANDS  
with Jonathan Billington  
Of Music First AUDIO**





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- Jon Myles, *HiFi World* 2015

"But perhaps their reticence is understandable when the product sounds as good as this - after all, why let others in on the secret? Used in a variety of systems the Black Diamonds consistently revealed a wider perceived bandwidth, bigger soundstage and the ability to present transient details in an effortless fashion."

- Awards Edition, *HiFi World* 2015

"The Tellurium Q company has once again proved their products belong at the top of current cabling offerings. No matter how secretive or even mystic their approach may seem, the indisputable fact is their cables show a level of reproduction quality so far unheard of."

- Mono & Stereo, 2015

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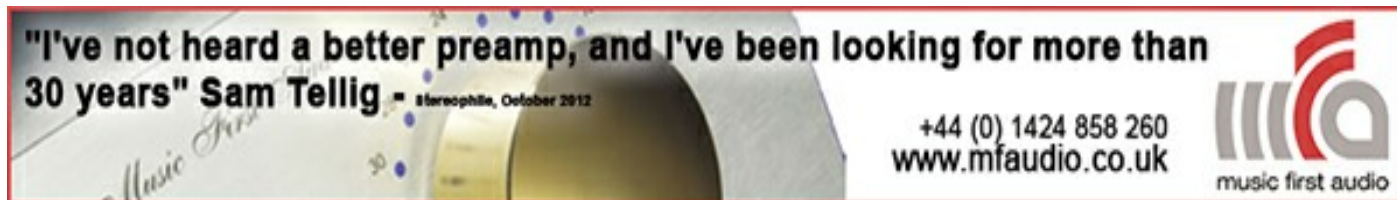
# WELCOME

August is renowned as being a quiet time in the audio industry as people and companies take time out to spend a few days in the sun, and so we at Hifi Pig thought we'd devote some of our time to help raise money for a young audiophile in the US who is confined to a wheelchair, but whose insurance company refuses to provide him with anything but the most basic of chairs. We set a target of £3000 and with a few days to go we've raised just over £2000. There's still **time to donate if you're quick** and we've had some great prizes donated by some very generous companies. Thanks everyone!

However, August has proved to be far from quiet and we've been inundated with news and new products but we did manage to take a few days away from the office and attend the Crescendo Festival in Poitou Charente in France. You can read all about it in this very issue - there's some great photographs of the bands playing there.

We've got some great reviews in this issue too including room treatment by GIK, a TVC/Valve preamp from Audio Music, Copland's DAC125 DAC, Pre and Headamp, the Leema Libra DAC, Audiobyte's Hydra, Hana Labs Sakura Streaming DAC, in ears from Oproma and in a new feature we take a look in the Hifi Pig archives to bring you the TSAE Evinco loudspeakers. Plus there's loads of great reviews from GadgetyNews. Enjoy!

*Stuart Smith*



## HIFI NEWS & REVIEWS

### HIFI NEWS

#### GIK ROOM TREATMENT PRODUCTS

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#### AUDIOBYTE HYDRA Z & HYDRA ZPM

#### HANA LAB SAKURA MUSIC SERVER/DAC

#### OPTOMA BE16 BLUETOOTH EARPHONES

#### FROM THE VAULT

In the first of a new series of reviews from the Hifi Pig vault, we take a look at the very interesting and unusually shaped Evince loudspeakers from German manufacturer TSAE

## GADGETY REVIEWS

#### TILE KEY TRACKER

#### BUFFALO LS510D NAS

#### SPEEDLINK PARTHICA KEYBOARD

#### D LINK EXO AC1750 ROUTER

#### MUSAIC MUSIC PLAYERS

#### MOTOROLA VERVEONES+ EARPHONES

#### STM PRIME LAPTOP BAG

#### POWREGG DRONE

## MUSIC

### MUSIC REVIEWS

Lung Dart – As I Lay Drying (PRAH Recordings)

Jon Hopkins – ‘Opalescent’ (Just Music)

Billy Bragg & Joe Henry - Shine A Light: Field Recordings From The Great American Railroad

### LIVE MUSIC

Crescendo Festival of Progressive Rock

Billy Bragg and Joe Henry, Summerhall, Edinburgh

Willis Earl Beal, Summerhall, Edinburgh

### CLASSIC ALBUM

This month John Scott breaks out Richard and Linda Thompson's timeless classic from 1974.

## INTERVIEW

With Jonathan Billington Of Music First Audio



## COLUMNS

### BIRDS EYE VIEW

Fame and the reasons people become, or want to become, famous.

**BIRD'S EYE VIEW**  
ACCEPTABLE AND MORE FROM THE FEMALE PERSPECTIVE...BY LINETTE SMITH

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Caravanning, Camping and Hifi

**THE VIEWS OF STU!**  
COMMENTS, RANTS AND THE OCCASIONAL TONGUE LASH...BY STUART SMITH

### READERS LIVES

An Evening Of Hifi and Booze

**READERS' LIVES**  
HIFI PIG READERS SHARE THEIR EXPERIENCES AND THOUGHTS WITH OTHER READERS

### RETRO BITES

This month Janine turns her attention to the Leak Trough-Line family of tuners

**RETRO BITES**  
CLASSIC AND ICONIC AUDIO...BY JANINE ELLIOT

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## International Audio Group (IAG) Appointments Darrell Huggins Group CEO

**D**arrell will be based at IAG's global headquarters in Shenzhen, China and will focus on strengthening the team and brand portfolio worldwide.

Commencing on the 1st August, Darrell brings more than 20 years of audio industry experience as he moves from a senior role within Armour Home Electronics, where he has been integral to the company's growth for the past 17 years.

Since 1996, Darrell has led the setup and development of Armour Asia. This Hong Kong-based subsidiary has been essential to Armour's growth across the Asia-Pacific region, while it also serves as a

centre to streamline manufacturing, logistics and procurement.

Darrell's experience will help to maximise the efficiency of IAG's internal operations, including the company's state-of-the-art 400,000 sq. metre manufacturing facility in Jiang Xi Province, China. He will also play a key role in developing IAG's product portfolio, while raising brand awareness on a global scale.

Darrell commented, "I am looking forward to working with the fantastic team and world-class brands that IAG has within its extensive portfolio and look forward to meeting everyone. I am excited that I will be part of this fantastic group of brands



and honoured that I will be integral in supporting the existing team in energising the strengths of the brands and people within IAG to drive competitiveness in today's rapidly evolving audio climate."

## aqua acoustics Optologic Formula DAC

**T**he Formula DAC is the first in the aqua – acoustic production to show a proprietary D/A conversion system, that they have named Optologic DAC. This conversion system follows the same multibit technology (already used in the previous DACs such as La Voce and La Scala) but with a discrete R2R resistors ladder instead of Burr Brown PCM1704 dacs

The Formula Dac uses no digital filter or any other compensation, relying instead on attention to each sub circuit. The analogue and digital power supplies are executed purely discretely by extensive use of BJT, Mosfet, Jfet and ultra-fast diodes. Passive parts were



selected not just for the best sonic result but also for their top quality, longevity and reliability. With the exception of six superior quality electrolytics, all other caps are Tantalum, solid-polymer OS-CON and double-metalized MJP. The signal path itself is direct-coupled and free of all capacitors. The two output stages (one single-ended, one transformer-coupled balanced) use discrete BJT and JFet with metal-film resistors. All the electronics parts show an ultra low RF noise.

## Arcam rHead Class-A Headphone Amplifier

PRICE: £399.00 UK inc VAT / US \$600 + sales tax

AVAILABLE: NOW

**D**esigned by Arcam's founder and Class-G design Guru John Dawson, the new Arcam rHead is a discrete true-linear Class-A analogue headphone amplifier, built for the highest possible performance and to outperform competition at anywhere near the affordable price, says the company's latest press release.

This compact, solid analogue product is designed to complement the audio system of any headphone lover. It delivers enough power to drive small speakers, let alone the least-efficient headphones.



Arcam say the the rHead is "ultra-low-distortion, ultra-low-noise and totally musical. Timing is fast and precise, with well-controlled bass and although the output is very wide-band, the extended treble is smooth and flat with no artificial exaggerations. Dynamic headroom is massive and all headphones we know of are handled with ease".

## Spiritland, High End Hifi Bar/Restaurant, Opening Soon

**S**piritland, opening in September in King's Cross, London is "a world first music-led concept built around the best sound system in the world – a one-off, exceptional creation playing original, in-depth musical programming day and night. It's all about the music, the artist and the listening experience." It sounds like our kind of place with a well stocked bar, a restaurant, a shop selling audio accessories, headphones, CDs and records plus a radio station featuring analogue and digital equipment.

The high end system has been put together by Kevin Scott of Living Voice and Definitive Audio and features bespoke Living Voice horn loudspeakers, which are being finished as I write this, paired with valve amplification from Italian manufacturers Atelier du Triode. While the system will be playing music of all genres all day and every day, at 6pm each week night an album will be played in it's entirety on the Kuzma Stabi XL2 turntable. The Spiritland rotary mixer is built by

Isonoe, a London-based company who hand build unique mixers and modify turntables for some of the most in-demand DJs.



## Bespoke Audio Event At KJ West One



**T**he Bespoke Audio Company have announced their partnership with KJ West One of New Cavendish Street, London, W1.

To mark their collaboration, they are planning a special event on the 21st September 2016 from 6pm at KJ West One.

Bespoke will present their pre-amplifier in their extraordinary sounding, beautiful looking demonstration facility together with some of the most desirable audio equipment available. They'll discuss the concept and the philosophy behind the company and their products and will be able to answer any questions guests may have.

To demonstrate one of the processes behind the product, they will bring their transformer winding machine to show how they make the custom components which are at the heart of the pre-amplifier.

Refreshments will be provided and guests will be invited to sample some local ales, wines and cheeses made in, or near to, their home town of Hastings on the south coast of England.





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## TRINNOV Audio Amplitude8

PRICE: \$13,500

AVAILABLE: NOW



**T**RINNOV Audio is introducing the new Amplitude8 power amplifier at CEDIA 2016.

With two large, linear power supplies, each with its own toroidal transformer and dedicated power cord, each of the eight channels of the Amplitude8 can deliver up to 500 watts rms at 2Ω. Perhaps more importantly, any single channel associated with either power supply can deliver 1200 watts peak power to handle transients.

A full 32-channel system including the AV preamp and all amplification requires less than 20U of rack space, yet delivers almost 10,000 watts of power at 8Ω.

## DALI Launch DALI Connect Loudspeaker Cable

PRICE: FROM £329

AVAILABLE: NOW

**D**anish manufacturer DALI has developed a series of terminated loudspeaker cables to complement their speakers. Dubbed DALI CONNECT, there are four loudspeaker cables in the line-up (including a bi-wiring option), each variant being available in mechanically tuned two, three and four metre lengths. Each of the cables is fitted with carbon-cased cable splitters that physically separate the terminations to avoid accidental shorting. The terminations comprise corrosion-resistant rhodium-plated banana plugs, encased in the same carbon material as the splitters. A mechanical twisting mechanism expands the plugs' centre-



pins to make a tight, secure connection with amplifier loudspeaker terminals. A distinctive mesh outer jacket over a PVC inner jacket provides the finishing touch.

There will be three models in the family: DALI SC RM230C, RM230S and RM230ST

## QUAD VA-ONE Valve Amp Announced

PRICE: FROM £1299

AVAILABLE: NOW

**N**ow in its 81st year, Quad has been making valve amplifiers for home use since the late 1940s. The company's latest model, the VA-One, brings the concept bang up to date; a compact integrated amplifier that fuses Quad's traditional valve-based audio expertise with modern digital audio streaming.

With a footprint measuring just 18x33cm, the VA-One is very compact for a stereo valve amp – sufficiently small to sit comfortably on a desk.

Three digital audio inputs – optical, coaxial and asynchronous USB – support data up to 24-bit/192kHz, and an RCA-phono input gives the option to connect an analogue source like a CD player or a turntable (when used with a suitable phono stage). In addition, those

who enjoy the freedom of wireless connectivity can pair smartphones, tablets and computers via Bluetooth,

with support for the sonically superior aptX codec.

The preamp section incorporates an ECC83 high-impedance triode, feeding an ECC82 twin triode driver and phase splitter stage. The output stage uses two EL84 pentodes per channel in push-pull configuration, delivering 2x15W.

External styling is classically Quad, finished in traditional 'Lancaster Grey'. The amp's front panel sports a smooth-acting volume control incorporating a motorised potentiometer, allowing adjustment via the supplied remote control, together with a headphone output and controls for input selection and Bluetooth pairing.

The Quad VA-One integrated valve amplifier is available from mid-August, priced at £1299.95 (RRP). It joins the similarly styled PA-One headphone amp in Quad's expanding 'One' range of valve-based amplifiers with integrated DAC circuitry.







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## New Moving Magnets From Gold Note

PRICE: €195 for Vasari Red and of €350 for Vasari Gold

AVAILABLE: NOW



**G**old Note, the Italian High-End manufacturer based in Firenze – is going to release Vasari in October, a new MM cartridge engineered to offer high quality at a competitive price.

The cartridge will launch in two models: Vasari Red and Vasari Gold, both featuring a unique body design, fully machined from solid blocks to achieve a high dampening factor, a rigid aluminum cantilever and a custom diamond tip.

“Vasari is the best MM cartridge we have ever created” – stated Maurizio Aterini, Gold Note founder – “We have

always been involved in analog audio, so much that we even make limited edition LPs. We just really like vinyl and that’s why we want vinyl lovers to be able to upgrade their systems and enjoy a better sound.”

Maurizio also explained: “Vasari is beautiful and efficient at the same time: we used high quality materials and developed custom designed elements to deliver an outstanding performance. After all, when you are looking at ways to improve the listening experience the first and easiest step should be to choose a better cartridge, and that’s what Vasari is made for.”

## World’s Most Expensive Earphones Arrive In UK

PRICE: £3,699

AVAILABLE: NOW

**T**he world’s most expensive earphone, the £3,699 oBravo EAMT-1, has arrived in the UK exclusively through Audio Sanctuary, London.

Priced at a cool £3,699, the oBravo Audio EAMT-1 is the flagship model from the headphone specialist’s portfolio of headphones, earphones, speakers and accessories, and

incorporates a number of world-first technologies and exotic materials.

The new EAMT-1 features a coaxial Hybrid-AMT drive unit specially developed by oBravo.

The coaxial drive unit features an implementation of Air Motion Transformer tweeters with Neodymium Dynamic Drivers.

The EAMT-1 body is hand-crafted from Precision-Ceramic and the supplied ‘Comply’ ear-tips give a huge range of interface options ensuring the perfect fit.

## PMC Appoints David Frost



**P**MC is enhancing its operations in Europe and the Middle East territory through the appointment of David Frost as business development manager, to drive the company’s expansion plans throughout this key market.

Based from PMC’s headquarters at Holme Court, north of London UK, Frost has over 10 years’ experience in specialist audio systems, having worked for other prestigious audio brands in business development and sales management roles. David has transferred his business skills and experience from the professional photographic industry.

Frost’s experience with audio companies, as well as his extensive knowledge of the region, put him in the ideal position to take PMC’s business in this market to the next level. He will be responsible for the support of existing distributors and development of new business opportunities across both consumer electronics and B2B commercial enterprises.

Miles Roberts, PMC managing director, commenting on the appointment says, “I was immensely impressed with David’s understanding of the markets and have no doubt he will be a significant asset to all of our businesses. I hope everyone will give their warmest welcome to Dave and allow him to assist those in his region with their future plans”.



Lightweight at just 35g and sensitive enough for compatibility with a huge range of smartphones, portable audio players and electronic devices, the EAMT-1.





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## Newly Enhanced Transfiguration Proteus Phono Cartridge Arrives In UK

Japan-based Immutable Music has long been renowned for its small but 'outstandingly formed' range of Transfiguration phono cartridges, whose design completely restructures the conventional moving coil (MC) concept. Now, the range is undergoing a number of enticing enhancements and first to arrive in the UK is the company's flagship model, hand crafted in Japan, the Proteus. Their yokeless double-ring-magnet design provides an extremely accurate coil / magnet interface in which the coils are positioned right at the focal point of the magnetic flux field. This construction was conceived to remove the variations in flux introduced by traditional MC designs.



## Chord announce SPM 1050 Mk II Amplifier

PRICE: £4,950

AVAILABLE: NOW



Chord Electronics' new SPM 1050 MkII power amplifier, first unveiled at High End 2016, Munich, is now available worldwide. The new MkII version directly replaces the original and introduces the latest Chord amplifier technology, plus some key aesthetic improvements.

The latest-spec MkII model offers reduced output distortion plus improvements to capacitance for cleaner power delivery. The second-generation version also includes enhanced isolation on the mains transformer to reduce interference. In keeping with the original, the SPM 1050 MkII uses Chord's low-distortion amplifier circuitry and features four proprietary lateral-structure dual-die MOSFETs per channel (eight in total).

The SPM 1050 MkII offers both balanced XLR and RCA phono inputs, plus two pairs of loudspeaker outputs with gold-plated connections. A single power button offers operational simplicity from stand-by mode and the amplifier's status is indicated on the faceplate by a simple two-LED sequence showing power and relay functions

Aesthetically, the MkII version includes a new vented aluminium lid, akin to the DSX1000 streamer, plus a new piano-black acrylic side-panel option giving the power amp a fresh, contemporary look. Additional options include a choice of finish for the established Integra leg system supports, these include: nickel, satin-black anodised and aluminium.

## Pioneer Announce New Systems

PRICE: FROM £399

AVAILABLE: NOW



Pioneer has announced the release of three new Network CD Receiver Systems with speakers – X-HM76, X-HM76D and X-HM86D. As well as the playback of existing CD libraries, each model supports various music streaming services combined with stylish design and support for high-resolution audio sources.

The X-HM76, X-HM76D and X-HM86D Network CD Receiver Systems support an extensive range of network streaming services including TuneIn, Spotify®, TIDAL and DEEZER. Furthermore, each system supports Google Cast, allowing the user to access the variety of streaming services Google Cast supports. The fascia-mounted 3.5" LCD screen can show album art along with a wide range of information to enable intuitive operation. Each model also includes Wi-Fi functionality including AirPlay. The playback of high-resolution audio files is also supported (FLAC/AIFF/WAV up to 192 kHz/24-bit) along with Apple Lossless and DSD up to 11.2 MHz.

## Eclipse TD-M1 At Richer Sounds



ECLIPSE, the loudspeaker division within Fujitsu Ten, has joined forces with leading British A/V retailer Richer Sounds to introduce their TD-M1 to the portfolio.





# Project

AUDIO SYSTEMS

## *RPM 3 Carbon*



### *Carbon Style*

The award-winning RPM 3 Carbon turntable takes the same basic styling of our iconic RPM 1 Genie design, but adds advanced audiophile technologies to deliver a premium performance from a striking device.

The minimalist aesthetic, available in three high-gloss finishes, is accented by the thick vinyl-topped platter, which spins on a high-quality inverted bearing for super-smooth rotation.

The decoupled motor is powered by a built-in generator, for a consistent performance, and sits within a guide in the plinth for optimal belt tension.

The innovative 10" S-Shape tonearm is made of aluminium and carbon fibre, for unrivalled rigidity while retaining a low mass. The arm benefits from a new magnetic anti-skate system and is supplied as standard with an Ortofon 2M Silver cartridge.

**Available Now for £599.00 (UK SRP)**



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*Hi-Fi News Review September '15*



## A Host Of New Speakers From Martin Logan

PRICE: FROM £4498 TO £24998

AVAILABLE: NOW

Following the launch of Martin Logan's frankly awesome Neolith flagship, the Kansas-based speaker specialist adds four new models to its hybrid range, combining the company's famous XStat electrostatic panels with dual bass drivers and, in the case of three models, sophisticated room-correction technology. Absolute Sounds, the UK distributor, got in touch with us to tell us all about the new models.

### ElectroMotion ESL X

The new ElectroMotion ESL X features a larger electrostatic transducer and dual woofers, with increased power-handling capabilities and is the flagship of the ElectroMotion series.

### Expression™ ESL 13A and Impression™ ESL 11A

The company will expand the Masterpiece Series with the launch of two New Electrostatic Loudspeakers: Expression™ ESL 13A and Impression™ ESL 11A.

Both new models feature Curvilinear Line Source (CLS™) XStat™ vacuum-bonded electrostatic transducers with advanced microperf stator technology and redesigned ultra-rigid AirFrame™ Blade construction; plus, dual low-distortion aluminum cone woofers powered by dual Class-D amplifiers and controlled by a 24-Bit Vojtko™ DSP Engine with ARC™ (Anthem Room Correction)



### Renaissance ESL 15A

Renaissance ESL 15A (*pictured*) features 15-inch wide Curvilinear Line Source (CLS™) XStat™ vacuum-bonded electrostatic transducers, with advanced MicroPerf™ stator technology, and redesigned ultra-rigid AirFrame™ construction; plus, other

company's laser-engineered low-distortion aluminum cone woofers in a compact enclosure, powered by new dual 500-watt Class-D amplifiers, and controlled by a 24-Bit Vojtko™ DSP Engine and ARC™ (Anthem Room Correction) – available in eleven finishes.

## New Network Players and Compact Systems From Onkyo Announced

PRICE: FROM £499

AVAILABLE: NOW

The NS-6170, equipped with Google Cast, AirPlay, Spotify, Wi-Fi, and HDD-ready USB input, is based on a twin-monaural L/R channel layout with separate power supply paths, discrete custom capacitors for each channel, and dual-differential 768 kHz/32-bit AK4490 DACs to

decode the positive and negative halves of the signal waveform.

In addition to the network streamers, Onkyo has also announced the launch of a compact system and CD player which they say is a "solution for music lovers who seek pristine sound from an elegant and unobtrusive Hifi separates package, the R-N855 receiver forms the centerpiece of Onkyo's new CS-N1075 Compact Hifi System" (*pictured*).



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## PIEGA Loudspeakers New Active Diamonds From Wharfedale

PRICE: £900 TO £12000

AVAILABLE: NOW



**P**IEGA, the loudspeaker manufacturer from Switzerland is set to launch in the UK in September. The move involves the set-up of PiEGA Loudspeakers (UK) Ltd and enlisting a number of specialist audio retailers to demonstrate the range.

The Swiss company is most famed for its Linear Drive Ribbon (LDR), coaxial ribbon and Air Motion Transformer tweeters, as well as its use of seamless aluminium housings in some of its high end designs. The company was the first loudspeaker brand to produce a commercially available aluminium housed speaker back in 1989.

The design of both of PiEGA's core ribbon HF systems is based on its development of an extremely thin, partially embossed foil diaphragm that gave rise to the company name, PiEGA – an Italian word meaning partially pleated or corrugated. PiEGA has refined this ribbon driver technology over nearly three decades, as well as perfecting the painstaking methods and elaborate tooling required to build them in its factory near Zurich.

The first series of PiEGA loudspeakers to hit UK shores will be the Classic line. Built using timber and fibreboard construction, the three premium models in the range feature smoothly curved, C-shaped cabinets to reduce colouration and PiEGA's coaxial ribbon tweeter. Three more affordable Classic models in the line combine traditional flat-sided cabinet construction with PiEGA's Air Motion Transformer tweeter, the AMT-1. Finish options include black, white or Makassar piano lacquer, with Napalette trim on premium models.

PRICE: £599.95 AND £999.95

AVAILABLE: NOW



**T**he Diamond Active Series from Wharfedale delivers wireless connectivity with a difference. Whilst not the first stereo speakers to offer integrated amplification and Bluetooth connectivity with compatible devices including smartphones, tablets and computers, their 'True Wireless' technology ensures greater flexibility than many similar designs says the company's recent press release.

The Diamond Active Series comprises two models: the Diamond A1, a classic 'bookshelf'-size speaker (31.5cm high), and the Diamond A2, a larger floorstanding design (91.2cm high).

Both models come in pairs, in the manner of traditional stereo hifi speakers, and include a 50W amplifier in each speaker to deliver a combined 'system power' of 100W.

Both Diamond Active models sport proprietary bass/mid drivers with woven Kevlar cones – one 130mm unit in the A1 and two 165mm units in the A2 – as featured in the Diamond 200 Series. The cones incorporate semi-elliptical 'break-up' areas, which smooth the response throughout the audible range, while rear-firing reflex ports augment the bass. The 25mm fabric dome tweeter is also derived from the Diamond 200 Series.

## New AV Receivers From Pioneer

PRICE: £1399, £1899, £2499

AVAILABLE: NOW

**P**ioneer have announced the launch of the SC-LX701, SC-LX801 and SC-LX901 network AV receivers. All three models feature Multi-Room Audio, which allows for the wireless distribution of a variety of sound sources — including LPs and streaming services — in different rooms. Also included are the latest network functions, including Google Cast and music streaming services including TIDAL, DEEZER,



Spotify®, and TuneIn. Each model also incorporates MCACC Pro, an automatic room calibration technology that adjusts specifically to your environment to deliver optimized object-based audio.



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Aequo Audio presents: the Ensis loudspeaker

The Ensis was developed to fulfill one of the most cherished wishes: to fully satisfy both the ear and the eye with a stylish, compact and truly full range high end floor standing loudspeaker. The three-way cabinet design resembles a musical note. Each component is engineered to deliver exceptional clean sound and live-like precision in reproduction. Its unique qualities satisfy the most critical listeners, but most of all ensure you of long hours of listening pleasure!

[www.aequoaudio.com](http://www.aequoaudio.com)



## CanJam Europe 2016, 24th and 25th September

CanJam Europe, the largest headphone show in Europe, will return to Essen, Germany on September 24th and 25th 2016 for its fourth session. Visitors get to try thousands of headphones, hundreds of portable and desktop players, headphone amps, DACs and other accessories for portable hifi from more than 60 exhibitors.

Highlights include Sennheiser's brand new Orpheus HE-1, with a price of 50,000 Euros currently the most expensive headphone in the world or Shure's electrostatic earphone KSE 1500 at 3,000 Euros. Many manufacturers of custom in-ears will be showcasing demo units of their earphones, which are fitted individually to the customer's ear shape and will be taking ear impressions right at the show. If you're looking for something a little more common, there'll



be headphones for sports, travel, daily commute or hifi at home, which won't break the bank. In addition to headphones, exhibitors will also be showing portable audio players, which go way beyond MP3, desktop and portable headphone amps for demanding headphones or external DACs, which convert every smartphone into a hi-res hifi device.

## Dali Announce Katch Bluetooth Speaker

PRICE: £329

AVAILABLE: OCTOBER 1st



Katch from Dali is their first-ever compact Bluetooth loudspeaker.

The KATCH features two placement profiles that run in conjunction with the front/back driver configuration, one for freestanding play and one that utilises placement on a shelf to reflect sound back from a wall.

Bluetooth 4.0 with Apt-X gives a wireless connection within seconds, while the NFC option is even quicker.

DALI has included a stereo mini-jack input, while the KATCH's USB charge connector means you can drive a Chromecast Audio dongle too, integrating your KATCH into your home network.

## Fine Sounds Becomes McIntosh Group

McIntosh Group, formerly Fine Sounds, has been launched.

McIntosh Group is the parent company of six luxury audio brands – Audio Research, McIntosh, Pryma, Sonus faber, Sumiko Subwoofers and Wadia. They say that their group represents 'an unparalleled assemblage of performance audio brands each with its own unique history, distinctiveness and reverence from their longtime customers'. The McIntosh Group continues with 'the aim of making recordings generate all the excitement of live music'.

## New AV Kit From Onkyo



Onkyo has unveiled details of a second wave of products from its RZ Series, including two top-of-the-line A/V receivers:

THX Select2 Plus-certified 11.2-channel TX-RZ3100 Network A/V Receiver.

2-channel TX-RZ1100 Network A/V Receiver.

Flagship THX Ultra2 Plus-certified 11.2-channel PR-RZ5100 Network A/V Controller.

## Pro-Ject Win EISA For Classic Turntable



Pro-Ject Audio Systems has received for the 6th time one of the most important awards in consumer electronics worldwide, the EISA Award.

Inspired by the classic turntables of our youth, The Classic comes in a wooden frame, with a damped heavy weight aluminium platter, a new carbon/aluminium tonearm and an aluminium counterweight.

The Classic is available with three different wooden chassis (Palisander, Rosenut, Walnut): Recommended retail price without cartridge is € 950 and with included Ortofon moving magnet cartridge "2M Silver" it is € 999.

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## New Entry Point Turntable For Clearaudio's Innovation Range

PRICE: £3400 TO £3550

AVAILABLE: NOW



Clearaudio's Innovation range of turntables now has a new entry point, the Innovation Basic. Borrowing technology from the three other members of the Innovation family – the Innovation, Innovation Compact and Master Innovation – the new Basic has many features, a bijou form and a more accessible price. It may be at the entry level of the Innovation series, in reality the 'Basic' is anything but say Clearaudio: 'Its design and construction bear all of the key Clearaudio hallmarks: intelligently-selected materials, precision engineering, painstaking craftsmanship and innovative technologies'. The resonance-optimised chassis features Clearaudio's iconic three-point design with its 'sandwich' construction of Panzerholz (a solid, bullet-proof wood) and aluminium. Speed stability is achieved with Clearaudio's decoupled custom-built high-torque DC motor with

their patented Ceramic Magnetic Bearing (CMB) and Optical Speed Control (OSC). CMB allows the dynamically balanced platter to magnetically levitate on an inverted and polished ceramic bearing shaft with polished sintered bronze insert. Meanwhile, an infra-red sensor reads a microscopically-etched strobe ring and sends signals to the OSC mechanism which auto-corrects in real time, consistently maintaining the perfect speed. Two tonearm mounting bases make the Innovation Basic dual tonearm capable, while fine height adjustment allows for precise levelling of the turntable on any surface.

The Innovation Basic is available with a choice of finish options. The chassis' Panzerholz wood layer can be natural or black-lacquered, while its aluminium layer can be silver or black. The platter is available in either clear acrylic or black high-density POM.

## Bryston Announce BDP-π Digital Music Player

PRICE: \$1295

AVAILABLE: NOW



The compact BDP-π features advanced Bryston hardware and software built upon the Raspberry Pi and HifiBerry platform giving users fast response to commands and superb overall performance all from a chassis 1/3 the width of Bryston's full-sized player. The BDP-π will playback digital music ranging from MP3 to lossless 24/192 high-resolution files and can be connected to virtually any DAC (Digital to Analog Converter) using the provided S/PDIF, Toslink, USB and HDMI connectors. The BDP-π is a complete digital entertainment hub—users can connect an external drive to access limitless libraries of digital content, gain access to their favorite Internet radio stations and enjoy lossless TIDAL streaming (subscription required).

The BDP-π is also a Roon Ready device.

## Hifi Pig Is Trying To Raise £3000 To Enable A Young Audiophile To Buy A New Wheelchair

Ricky is a young audiophile based in the US who has been paraplegic since the age of two. His insurance company refuse to fund anything other than the most basic hospital type wheelchair that is wholly unacceptable. Our Just Giving Page has to date raised £2000 and closes soon. If you can help please get in touch with us at [stuart@hifipig.com](mailto:stuart@hifipig.com) or telephone +33 (0)297237078 and let's raise our overall target of £3000. Thanks to all who have supported so far!

THEY DON'T FEEL  
WHAT YOU FEEL  
THEY DON'T SEE  
WHAT YOU SEE  
THEY DON'T HEAR  
WHAT YOU HEAR  
THEY DON'T HAVE  
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AND NOW, YOU CAN FIND US ON FACEBOOK 



## Taga Harmony Introduce Azure B-40 v.2 Loudspeaker

PRICE: €270

AVAILABLE: NOW



**T**aga Harmony have added a bookshelf speaker to their Azure v.2 series. Azure B-40 v.2 are bookshelf speakers ideal for rooms up to 25 sqm and, Taga say, “easily driven by virtually any amplifier”.

The speakers come with a matt black front panel and are available in walnut, black and wenge finishes.

## Custom Cable Becomes Audio



**C**ustom Cable has changed its name to Audio Sanctuary and has introduced a host of improvements to both its in-store (New Malden, Greater London) and online shopping experience. Along with the name-change comes an all-new website, a bigger and better in-store experience, plus new brands and product lines, all of which are available 24/7 online.

## Mola-Mola Comes To UK



**S**pecialist UK Distributor Sound Design Distribution Ltd has signed a UK distribution deal with Mola-Mola. Mola-Mola is the brainchild of Bruno Putzeys, “he wunderkind of Class-D technology” originator of

Universal class-D (UcD) in 2001 while at Phillips and as chief tech guru at Hypex, responsible for the development of its game-changing NCore Class-D amplifier technology.

## Furutech's New SK-Filter Now Available

PRICE: £350

AVAILABLE: NOW

**J**apanese cable and accessories manufacturers Furutech have added to their range of static charge eliminators with the new SK-Filter, designed to remove unwanted static build-up from the surface of records as they play.

Furutech's new SK-Filter solves the problem 'in situ'. As the record spins on the turntable, this neat little device gets to work sending static electricity packing. The SK-Filter uses a patented material, Thunderon®, which consists of a very fine acrylic fibre chemically bonded with copper sulphide. The resulting conductive filament has the



ability to discharge static electricity into the air whenever static-charged material approaches – so the SK-Filter's fibres do not need to touch the record. Rather, they are positioned a millimetre or two above the record's surface thanks to an easy-to-use stand which is fully adjustable to complement a wide range of turntable set-ups.

## The Indulgence Show

**T**he Indulgence Show, a major new audio and lifestyle event taking place at the Novotel Conference Centre in Hammersmith, 90

brands from the hi-fi, home entertainment and technology sectors have snapped up space to showcase their latest product ranges, services and experiences to the consumers that will come through the show's doors.

14-16 October 2016

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Tony Bolton

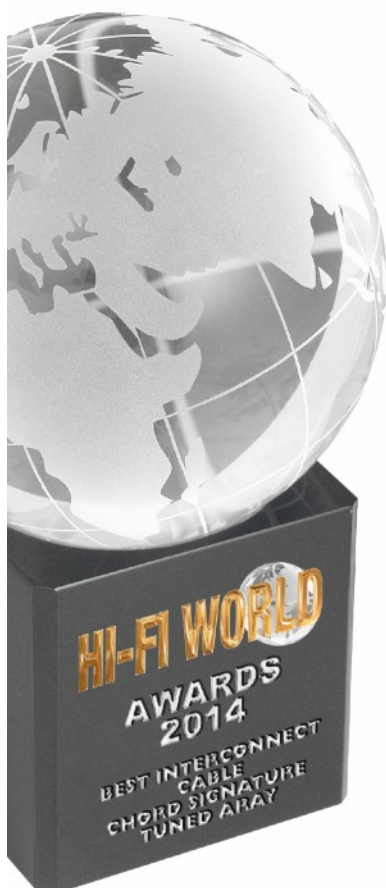


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# **GIK Acoustic Panels, Bass Traps and Diffusors**

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By Stuart and Linette Smith

**Room treatment is often seen as a dark art a somewhat expensive process. Stuart and Linette Smith try three products from GIK Acoustics including bass traps, acoustic panels and diffusors**

# GIK ROOM TREATMENT PRODUCTS



If you don't know GIK then let me fill you in a little. They're based in the UK with offices around the world and they manufacture room treatment products and that's all they do. GIKs products are used extensively in recording studios and even in the world renowned Abbey Road studios in London. They offer a free service where you can measure your rooms acoustics using a free little program and you can send the results in to GIK and they'll talk you through the treatments they recommend for you.

We added treatments in stages and listened for changes in the sound as we went along. Now, our room is a normal living space (be it quite a large space) and is acoustically not ideal and so I'd been itching to have the room treated for a few years. Don't get me wrong, it's not terrible, but as fellow enthusiasts will appreciate, there is always room for improvements.

Now, I'm sure there are going to be many reading this that will say, "But I'll never get away with having huge bass traps and offensive looking wall panels in the front room!", but fear not because GIK offer a wide range of colours, sizes and you can even have images printed on the acoustic panels. With regards the latter I went and had a series of abstract photographs printed on them and the results are pretty spectacular. However, I sort of wish I'd gone for all the panels in the bright red that the other panels I have are in as they immediately add a statement to the room and, to mine an Linette's minds, they look really rather

cool – sort of instant decorating. All the products are relatively lightweight and very easy to position, move about and the panels are a doddle to hang on your walls with all fixings being included in the packaging.

I'll go through the order in which we added each of the treatments and give you my thoughts on the benefits or otherwise of each.

## TRI- TRAP BASS TRAPS

The bass traps we have installed are £252 for a pair including VAT and measure 120cm in height and are 58.5cm wide. They are called Tri-Traps and, as their name would suggest, they are a triangular prism in shape as you look down on them – obviously designed to fit in corners. We have two stacked on top of each other in each corner behind the loudspeakers (we've had a few pairs in during the period we've been experimenting with GIK room treatments). They weigh 6KG each and as such are easy to position. The Tri-Traps are designed to absorb frequencies in the bass end from 50Hz up to 5000Hz.

What I was expecting was any bass boom in the room to be dealt with and the overall effect to be one of reducing the perceived amount of bass in the room. However, what actually happens when you pop these in the room is that you get more perceived bass...this threw me for a while to be honest. The bass is more pronounced in the mix, but it is also tighter, faster and without any

Anyone who is  
not convinced  
is either  
fooling  
themselves for  
whatever  
reason or  
needs to take  
themselves to  
the ear-doctor  
without  
passing go  
and without  
collecting their  
£200



# GIK ROOM TREATMENT PRODUCTS



flabbiness. Anyone who reads my reviews regularly will know that overhanging bass is something I loath and the Tri-Traps just tighten everything up really nicely.

We listen to a lot of bass heavy music (Techno and Dub in the main) and despite our speakers having onboard DSP there was still a propensity to have a bit of a boom in the room – the Tri-Traps cured this most effectively! I could waffle on about listening to this record and that CD but there's no need to and I reckon I've outlined what these things do pretty effectively.

## 242 ACOUSTIC PANELS



The acoustic panels we have are the larger ones measuring 60cms x 120cms and costing (in their plain coloured form) £185.40 including VAT for three panels. You have the option of adding a scatter plate, a boom stand bracket, a wooden or metal stand or brackets for mounting on the ceiling. Other sizes are available being 60cm x 60cm and 30cm x 120cm and so you really should be able to accommodate these pretty easy in your room. Initially we had two panels mounted on the wall behind the speakers and more on the side walls at first and second reflection points on the two side walls. To find the reflection points you sit in your listening chair and have someone walk down the side wall with a mirror until you can see the speaker in the mirror...easy and the "reflection" point name sort of gives it away really. GIK have a video that'll walk you through this too. They fix with a metal wire that you screw onto the back of the panel and this hangs on a hook/screw you screw into the wall...again dead simple to position and hang and once positioned they sit flush to the wall.



They are designed to absorb the entire frequency range and the effect is one of tidying everything in the mix up. Tough to describe in any way other than to say that it's a bit like focusing a camera from out of focus to a pin-point image. The aural effect is to add a dimensionality to the stereo image that now has greater depth and width, with instruments sitting in the soundstage in a more accurate and three dimensional manner. Stereo becomes more stereoscopic if that makes sense. Of

course, this is why these panels are used extensively in recording studios, but they have the same effect in the home and as such pretty much invaluable if you are serious about your listening.



## POLY DIFFUSOR

The Poly Diffusors are a polycylindrical diffusor and absorber in one unit. Basically speaking they look like a panel with a curved front which GIK says allows for "virtually perfect spatial diffusion". They're 120cm high and 60cm wide and at their deepest point 15.5cm deep. They hang onto the wall using the included little gizmo that fits to the back of the unit and also screws into the walls. It's not difficult to do and even this committed non-DIYist managed to get them up in a little more than ten minutes. The fixing gizmo allows the diffusors to be taken off the



# GIK ROOM TREATMENT PRODUCTS

wall should you need to pain or whatever. They're £240 for a pair.

We have two of these diffusors and they are positioned on the back wall where we previously had a couple of the 242 acoustic panels positioned. Their effect is similar to the panels we had in place in that they clean up the soundstage and add focus and dimensionality to the stereo image...only a little more so. They also seem to further tighten the bass but this effect is not so pronounced as when you first add the bass traps.

## CONCLUSION

I've read a lot of crap on various forums about the efficacy of room treatment and its place in the domestic audio set up, but all I can say is you need to hear what these relatively inexpensive panels can do. Anyone who is not convinced is either fooling themselves for whatever reason or needs to take themselves to the ear-doctor without passing go and without collecting their £200. The weakest part of your hifi is very likely to be the speaker and room interaction and, short of having your listening room built from scratch, the only way to get this sorted is to use room treatment products.

GIK's panels do what they say on the tin, their service is terrific and for the money I'd suggest that they represent astounding value for money given the increases in resolution, accuracy and clarity you will get from your hifi.

We have invested in the panels I've written about above but will be investing further in the future, initially on more of the 242 acoustic panels for a cloud on the roof and then more for the side walls and then finally a couple more of the diffusors so we can stack them behind the speakers.

I have absolutely no hesitation in putting these through to Linette for her thoughts on these and to see if they get our Outstanding Product award.

Perhaps the most cost effective upgrade you can make and if you have spent a good deal on your hifi you really should be aiming to get the very best out of it. You can start with a few panels or a couple of bass traps and go from there... as we have and will continue to do.

## LINETTE GIVES HER VIEWS

I must admit to being a bit sceptical about the idea of room treatment and

acoustic panels, however I am definitely a convert since we got the GIK Acoustics gear into the listening room. I would second everything that Stuart has said. These are well priced, great looking panels that just work. I was particularly impressed by the effect on bass, making it really tight. I love the fact that you can have your own artwork printed on them too, the interior design possibilities are endless. Importantly for us, we can move things around depending on what gear we are using, the flexibility is important. They were very easy to put up, even for my somewhat DIY challenged husband and they make your listening room look very professional. The products are extremely well made, from environmentally safe materials, our floor-to-ceiling bass traps have actually had kittens run up and down them with no ill effects! GIK are a very approachable company which is run by down to earth, knowledgeable and friendly people and they are very happy to give advice and help on getting the best sound in your room. Not just for home use, the products are used in commercial settings and professional studios too, which to me reinforces their reputation.

For all of the above reasons I think that GIK Acoustics thoroughly deserve a Hifi Pig

Perhaps the most cost effective upgrade you can make and if you have spent a good deal on your hifi you really should be aiming to get the very best out of it

## AT A GLANCE

**Build Quality:** Well put together and attractive. Feel solid and look smart. The ability to have your own images printed on will appeal to many.

**Sound Quality:** They obviously don't have a sound of their own, but they clear up, focus and improve all aspects of your listening experience. The most effective and draw-dropping improvement is when adding the bass traps

**Value For Money:** What can you say? If you have spent good money on your hifi then these represent excellent value for money given the improvements you will experience.



### Pros:

They do what they are supposed to

They represent great value for money

Well made and good looking

### Cons:

I seriously can't think of anything other than they could be difficult to accommodate if you live in a very small flat

Cats love to climb the bass traps





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# Audio Music AM RT-1 Ac- tive TVC Sin- gle Ended Valve Pream- plifier

By Dan Worth

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The £5500 Audio Music AM RT-1 active TVC single ended valve preamplifier is made and designed by Mr A M Fang in Guangdong Province in China. It comes with a fine pedigree, but will it cut the mustard with Dan Worth

# AUDIO MUSIC AM-RT TVC/VALVE PREAMPLIFIER



**A**udio Music evolved from the Stereo Knight brand of high-end, yet relatively affordable products. Designer and engineer AM Fang wanted to create a newer more vibrant company that pushed the boundaries of design and high precision engineering even further with a line up of products to rival some of the world's greatest talents in audio reproduction.

Previous products from the Stereo Knight range were extremely well constructed and implemented with the preamplifiers being TVC based (Transformer Volume Control), many years of creative testing also demonstrated the brands knowledge to influence the design of valve based mono power amplifiers.

Today Audio Music have continued there pursuit of musical bliss with the edition of more complex and refined preamplifiers and passives, along with some serious looking 833 and 805 based mono power amplifiers.

## FIT AND FINISH

There's no doubt that when an AM product comes for a visit the courier needs to be a fairly large chap or have a trolley handy! In the case of this review product it's the AM RT-1, a valve based preamplifier utilising transformer volume controls in a dual mono format, with a transformer coupled output stage. The courier was not expecting the answer I gave when he said 'my god, what on earth is in here this time Dan?' With me replying 'just a preamp'. The overall weight of the two

units (one preamp and one power supply) is 38kgs! An absolute beast, that size wise only comes in at 38x31x11cm per unit.

Opening the boxes to get a glimpse of the two units was an unbearably exciting event. I'd studied many photographs of the preamp over the previous weekend admiring its build quality and beautifully thought out layout. To finally have the physical articles in front of me was a true joy.

The build quality is absolutely phenomenal, the attention to detail and accuracy of machining puts AM products up there with the very best that I have ever experienced in the high end world of Hifi, which is a world usually only ever inhabited by the purely unobtainable. Each panel is precisely engineered to the finest of finishes, internal boundary sections of machined billet are impressively accurate and each component and its wiring is of the neatest possible standard. Mr Fang should be truly proud of this accomplishment alone.

What are those big caps inside you say? Well, these are from a company called u-cap, not heard of them? No, nor have I. Talking to Iain Borthwick of Iwaudio (UK Distributor) he relayed a short story which I would like to share – Mr Fang, the stickler for perfection that he is, decided that the capacitors on today's market were not quite at the specification he would have truly liked, so what would any engineer/designer do in this case I ask you? They would contact one of the major brands of course and have capacitors made to their very particular specifications, surely?.... no, not Fang, he decided



# AUDIO MUSIC AM-RT TVC/VALVE PREAMPLIFIER

that along with meticulously winding his own custom transformers he would build a factory that would be able to produce capacitors to his exacting standards! Now in my mind that's overkill to the last degree, but for Fang this is just another day at the office. The saying "if you want something done right, then do it yourself" springs to mind. I'm going to have to slightly change the initials to this mans name, AM Fang becomes AMS Fang (A Mad Scientist Fang), his efforts are pretty much unheard of today, every meticulous nut and bolt, cap, transformer, PCB layout, casing positioning is just phenomenally critiqued by Fang before us reviewers and consumers alike even get the chance to have a look. Really though, this level of attention to detail deserves applause.

Now, I hear everyone saying 'yes, yes that's all good and well Dan and we appreciate your candour but what does it sound like, does all the visual hype translate into equally exceptional sound quality?'

With a selection of three inputs, whether you opt for using the units assigned unbalanced XLR or unbalanced RCA inputs, a choice must be made for each of the three inputs available. My first instinct of course is to connect to the unit's XLR inputs, but as the design is single ended and not truly balanced it shouldn't really matter. I only have the single ended DiDiT 212 DAC at the moment as the balanced version is in final stages before production and my pre-ordered unit will not arrive for a little while yet.

The RCA version of Studio Connection's Platinum interconnects were plugged from DAC to pre, the same brand XLRs then trailed from the AM RT-1's balanced output sockets rather than RCA as the Muse Reference 300 monos I'm using are much more comfortable running on balanced, even if pseudo for some unknown reason. My usual modded Ayon Seagull Ceramic speakers are in play and all of this fed from the modded Mac using various software for normal and hi-res audio playback, through the recently reviewed Hydra S and Chord's Sarum Super Aray USB.

## THE SOUND

The first most clearly defined aspect of this preamp's sound signature is true transparency, after a few steps on both mono switches whilst listening to Nils Lofgren's 'Keith Don't Go' I felt I was really hearing my system for the first time in all its natural beauty. I specifically picked this track to begin as it's live, well recorded and needs a critical ear on leading edge performance, pace, and decay during the guitar solo off of the 'Acoustic Live' album.

I've never previously heard the decay of strings fade into such a dark background, especially on a live album so intrinsically natural, whilst the next leading edge saturates the foreground with precision and clarity. This all becomes so valuable when the wooden casket of the instrument itself can be heard as an extra resonating layer which fulfils a realism in the music, which I haven't before heard any other preamplifier achieve in my system.

The first  
most clearly  
defined  
aspect of  
this  
preamp's  
sound  
signature is  
true  
transparency



# AUDIO MUSIC AM-RT TVC/VALVE PREAMPLIFIER

Levels of excitement built drastically over the follow weeks, where I found myself listening to music more than I had done for a long while in my own personal time



Transformer based volume controls have a nature of being transparent and great ones will produce a level of detail and timbre which can be hard to achieve from an active preamp, however they can have some pitfalls. Drive can be a little weak, also grip and control can suffer, trading these aspects slightly for natural tones and detail retrieval generally outweighs any shortfalls for most enthusiasts.

The AM RT-1 takes all of the best aspects from each of the topologies and runs with it. Transformer volume switches to improve the noise floor, a single-ended valve stage to increase dynamic range and tone and critically wound c-core transformers with mosfet voltage stabilisers for drive and grip on some of the most demanding basslines makes me wonder what on earth some are missing from their designs.

I could play bass from a passage of Bach, a track from a Damien Rice album, playful Jazz and Trad, or even Pop with a little Dance music thrown in and each time the grip drive and gusto for each music type was enthralling!

I especially loved how the influence of popular music from across the decades sounded as each track from a playlist would be discernibly different... as the playlists are from various artists. Each track had a character of its own and my own system's signature, or house sound, disappeared and was replaced by music that had a relative tone and position with more truth to the mix. Each recording

could be explored further than when using my Jeff Rowland preamps which add a characteristic warmth and body to the sound.

Equally remarkable is the soundstaging of the AM RT-1. I really appreciate how different genres are portrayed, giving a more realistic perception of a performance, especially with live music, where I felt I could place each member of the group more accurately and each band members instrument had its own void to emerge tones from that was never disjointed from the music as a whole and remained utterly focused in its own free space.

Levels of excitement built drastically over the follow weeks, where I found myself listening to music more than I had done for a long while in my own personal time. I'd find myself getting up in the mornings and listening to the main system before I left the house and likewise when I came home again, I'd even just leave everything turned on whilst I was away from home so that when I arrived back I could have a fully warmed up system to just sink into.

A strong curiosity with the AM RT-1 was, if it sounds so utterly mesmerising now, how will it sound with a careful valve change? The valve compliment used in the RT-1 is two 6922/E88CC and two 6H30P. The hunt was now on for the best sounding equivalents in this circuit. The 6H30P tubes, which are the Electro Harmonix gold pin version were swapped out for the only real possibility,



# AUDIO MUSIC AM-RT TVC/VALVE PREAMPLIFIER



the early 80's model, legendary Russian Reflektor 6H30P-DR 'Super Tubes', which were incredibly hard to source and cost a small fortune. After some competition the 6922 valves I settled on were the USA made Amperex White Label, which bring a more organic flow to the mids and give a more dynamic bassline, again difficult to source and quite pricey but the way things were going with my time courting the AM RT-1 I could see us having a long and loving future together.

How gorgeously the vocals developed in tonal balance and natural dynamism after the valve upgrade left me mesmerised by every piece of music I played. I have only ever heard such fluid and liquid vocals like this once before with Lampizat0r equipment, but the AM RT-1 had no fear of breaking down and is built like a piece of fine jewellery, so in comparison its material wealth was simply greater. Coupled with the units subtle, sultry, dynamic, fast, gritty, deep and delicious characteristics that exuded from my transducers I felt very flattered to have found this brand.

There's the cliché 'it's like someone has lifted a veil'. I could agree with this in terms of transparency and insight but to try and convey some more meaningful context to the sound, my analogy can only be stated as a difference between watching a high school play compared to

that of a Broadway show, the raw emotion and power in the performance gives the AM RT-1 true believability.

I laughed to myself, thinking back to when the AM RT-1 first arrived some two months ago. I had just placed the units on the rug in my living room, side by side waiting for my friend Richard to come over. Richard is a DIY enthusiast and has some very interesting equipment. I knew as soon as he walked in he would just stop and look at the units then turn to me and offer that grin of acceptance he does when something pretty catches his eye. How correct I was, however I didn't expect him to sit cross legged on the rug for a good five minutes just turning the witches backwards and forwards, but there you go. Fortunately they are of superb quality and this over exuberant wear and tear didn't phase the solid build one little bit. He then spent the next twenty minutes along side me just glaring into the custom made and engraved acrylic lids Iain Borthwick of Iaudio had got custom made to show off all the lingerie the electronics was adorned in.

Well, Richard was here again today and we both spent some time listening through a great range of West African and Asian music which he is very fond of. It's the first time my ever critical friend has remarked at how natural and full instruments sounded, with areas of

micro dynamics which belie the very room we were listening in. I pointed out to him that centre focus was no longer as prominent and although the central soundstage was so well defined and characterised he needs to have a seat in my sweet spot to really enjoy how the stabilisation of imagery has now grown to include all areas of the soundstage in height and width, giving more maturity and insight into what is a true full picture or image of the performance, which I felt my previous preamps did well, but in hindsight barely scratched the surface and he agreed without hesitation.

Mr Fang's meticulous approach taken to the design of his products is truly reflected in the sound of this preamplifier. I am just so impressed with the level of performance obtained at this price point. The true impact and emotion coupled with intricate detail, timing and top end air simply put, proves itself time and time again with each and every piece of music I have thrown at my system.

Every venue is accurately portrayed, each note is produced with body and the story told within each piece of music, whether containing vocals or not, is emotionally connective. I can only speculate the improvements of the models further up the line, but right here, right now the AM RT-1 is the very

# AUDIO MUSIC AM-RT TVC/VALVE PREAMPLIFIER



best (by quite a margin) preamplifier I have had the pleasure of having in my system and there is no chance of it going back to the distributor, even if it's the only one he has in stock.

## CONCLUSION

The Audio Music RT1 is an absolute giant killer in my eyes. The brand offers another two incarnations of the design which take the performance even further. Firstly an RT-2, which, is an RT-1 that has all silver wiring throughout, then the RT-3, a silver wired dual mono power supply like the previous two models but this time you will receive three boxes rather than two, with more isolation and tweaks to power sections.

Performance of the AM RT-1 is absolutely natural and emotionally engaging, having me listen to more music than I have in a few years. I currently have lots of other activities which I am enjoying in my life and finding some real solid time to just sit down and have long listening sessions has not been as easy as years gone by, but I am finding myself making time to change this and my listening sessions have been becoming more frequent since the Audio Music AM RT-1 arrived and my listening has included many albums I haven't listened to for a very long time... as well as the enthusiasm to find and listen to new music.

The standard unit was a dream to behold, but the addition of the specially selected NOS valves really enhanced the RT1's natural abilities to reproduce timbre and vocal complexity.

Already the soundstage was a triumph, but the additional valves made instrument placement more accurate in sense of timbre and naturalness, whilst

also pushing the layering of venue acoustics and reverbs to the next level. The base unit will amaze even the most hardcore audiophile, but with these careful choices in play sonic greatness is achieved.

For my musical tastes, which are vast and varied, good solid state amplification coupled to the cleverly implemented valve line stage of the AM RT-1 suits my needs absolutely perfectly.



## AT A GLANCE

**AT A  
GLANCE**  
**HIGHLY RECOMMENDED**  
**LARGE 300DP**  
**ONLINE**

**Sound Quality:** Absolutely stunning, liquid midrange, very dynamic bass and a bandwidth that combines inner and upper end details with emotional insight and clarity.

**Build Quality:** Will compete with a lot high-end offerings and surpass many, absolute precision and quality inside and out, with a meticulous view on circuit and component implementation.

**Value For Money:** The AM RT-1 is a fairly costly preamplifier, but in

the realms of high-end prices the RT1 is a bit of a bargain.

### Pros:

Highly detailed natural sound  
Naturally dynamic and transparent  
Emotionally communicative  
Timbre rich

### Cons:

Only three inputs may not be enough for some  
Lack of remote could be a problem for some

Price – £5500

## SPECIFICATIONS

### SPECIFICATIONS

**Tube complement:** Two 6H30 or 6H6N as the drivers, two 6922 as the amplifiers

**Frequency response:** 20 Hz ~ 100KHz

**Input Impedance:** 47k ohms variable depending on the source

**Volume control:** 33-speed volume control

**Output Impedance:** 600 ohms . RCA output & BAL output.

**Input selections:** 3 pairs RCA single-ended ; 3 pairs balanced / XLR

**Gain:** Input 0.5V output 2.5V

**S / N:** > 98dB

**Distortion rate:** Under 0.5% / 5V

**Power consumption:** 45 watts

**Dimensions (W \* D \* H):** 380W\*340D\*110H\*(mm)

**Weight:** 38 Kg shipping weight





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# Copland DAC215 DAC, Preamplifier and Headphone Amp

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By Janine Elliot

**Costing £1998, the DAC215 from Danish manufacturer Copland is a combined DAC, preamplifier and headphone amp in one good looking unit. Janine Elliot takes a listen for Hifi Pig.**



# COPLAND DAC215 DAC, PRE & HEADAMP



I initially got excited about Copland when I first heard their CDA288 CD player in 1996. Producing a series of amplifiers, CD players, and even the unique DRC205 room equaliser, all their products have a distinctive musical performance and looks (particularly the use of rotary hat knobs) that set them apart from others, and I get interested every time a new product is released, not something I can say for many companies out there. The DAC215 at £1998 distribute in the UK by Absolute Sounds is no exception.

## DESIGN AND FEATURES

Available with silver or black facia, and looking like a retro 1970s kitchen radio that would grace any NEFF equipped designer room, the only thing this cooks up is an hors d'oeuvre of sweet music.

Copland is a Danish company founded in 1984 by Olé Möller, based in central Copenhagen. His professional career began at Ortofon, another major Danish company, where he specialized in low noise amplification of the minute signals from moving coil pickups. Always considered a class act they now work particularly with valve separates that regularly win praise in the press. With a series of 6 products in current production, Copland only bring out a new model after years of engineering and listening tests.

This product uses the highly regarded ESS Technology ES9018 Reference Sabre 32Bit DAC, a product finding itself in a number of DACs and hi-res players. In the DAC215 it is configured

in quad-mono, meaning that 8 mono channels are converted into two stereo. By combining four 'in-phase' and four 'opposite-phase' converters per channel, it works like a balanced power supply and adding the two together helps to reduce noise, therefore giving exceptional signal to noise ratio.

With PCM sources up to 384 kHz at 24 and 32 bit, and DSD 2.8-5.6MHz (64,128 and 256) this unit can cater for pretty much anything thrown at it. With a collection of USB, S/PDIF and Toslink digital inputs, plus an RCA analogue input, it can be used as a complete preamp to connect to your power amplifier with its high quality volume control. It can also be used solely as a DAC to be fed into your own preamplifier, missing out the Class A amplifier stage completely. For this review I tried both outputs, arriving at different pairs of RCA sockets at the rear, using MFA Baby Reference pre-amplifier and Krell KAV250a power amplifier. Sources came from a laptop using the Amanero USB driver and Foobar, or else digital output from a Fiio X5.

The asynchronous USB input converter module has its own regulated power supply and power transformer, meaning that a computer's power isn't used and the noisy output is isolated. Once connected, the computer recognizes the DAC and routes the digital audio data to it, bypassing the source device's internal audio circuitry. There are two Toslink and one S/PDIF input, all three allowing 44.1 – 192kHz and 24/32bit. On top of this there is a pair of RCAs for the

Copland  
only bring  
out a new  
model after  
years of  
engineer  
ing and  
listening  
tests

# COPLAND DAC215 DAC, PRE & HEADAMP

However, the valve stage seems to get it under control and make it human again, whilst still retaining all the detail

analogue input as well as the two sets of RCA outputs.

The front panel is distinctive with its radiator, which not only allows ventilation but also shows off the two ECC88/6922 valves, which are additionally lit up by a red LED behind (though should you wish to turn this off you can open up the unit and press a button). The design of the DAC means these valves are running at around 20% of nominal power, which will extend their life considerably, valves having a limited life span; one of the reasons we went for transistors in hifi back in the 60's, though, as any audiophile will testament to, the valve is as important to today's hi-end hifi as the klystron is for high power radio frequency transmitters, the magnetron is in your microwave oven, and dare I say any owners of CRT tube still out there. Olé uses tubes as he considers that so far "they have not been surpassed as active devices in high-end audio".

The minimalist approach extends to there being no infra-red remote. It is not needed. To be honest it is great to have knobs and switches to play with. To power-on there is a switch on the far right. No need to finger around the back to hunt for a rocker mains switch. On the left of the front panel is a switch, which in the up position lights itself up in red, the amplifier section is bypassed and DAC analogue output via is directed straight to the DAC Left and Right output RCA sockets. In the down position the light is green and the

amplifier circuitry in the DAC215 is engaged allowing you to use the volume control and also using headphones, plugging into the ¼ inch socket at the front. The DAC analogue output has a quoted frequency response of 20-20,000Hz +/-0.2dB, though is flat to 70,000Hz, with S/N ratio of 120dB. The Head amp has a better quoted frequency response (20-100,000Hz +/-0.5dB), though gives a much more rounded response up to 250,000Hz at -3dB, and with a powerful bass end, and highly respectable S/N ratio at 90dB. The class-A buffering technology of the analogue filtering sections, composed of discrete transistors, is borrowed from their CD-players, which provide an unfettered and agile sound that belies the small torso of this little monster.

## SOUND

On switching on the green/red lights flicker until the complete unit is ready to play music. Initially I used the unit as a preamp using the amplifier circuitry. Playing Pat Matheny, Steve Reich Electric Counterpoint 32Bit 176kHz FLAC I was instantly aware of a warmth, clarity and detail that was immediately interesting in a monotonous minimalist musical recital. The Clockwork Orange main tune from Wendy Carlos (32Bit 176kHz FLAC ) was profound and full of 1960's analogue Moog synthesiser fanfares that worked better through the Head amp than as a straight DAC output into my MFA preamp. Through the DAC output the sound was a lot more precise but lost





# COPLAND DAC215 DAC, PRE & HEADAMP



some of the melodic euphoria that the valve stage added. Indeed I found this with a number of hi-res files I played; where the DAC output was much more precise and accurate, it didn't give me as much of an emotional outcome as through the pre amp stage.

Pink Floyd's *Endless River* is the epitaph of an endless foray of musical landscapes since 1967. The final track on this album, "Louder than Words", is for me one of the greatest tracks they have ever produced. Musically, that is. It sets me crying every time I hear it, though I wish the main chorus section was repeated and developed for longer before petering out into the blue yonder, which in my opinion therefore seems to end way too soon. This album is, however, not that good acoustically. The vocal backing is highly digitised, and listening through the DAC215 shows just how off the mark this recording is. However, the valve stage seems to get it under control and make it human again, whilst still retaining all the detail. I recently remarked in the Clare Teal/ Syd Lawrence Orchestra album about the 24/192 backup recording being ditched

and instead the reel-to-reel backup then being converted to 24/192 as that sounded so much more musical. There needs to be a link between musicality and technological 'tops'; something the early Philips CD101 14Bit CD player, like several others, proved could be contradicted so well. Even Russ Andrews recently commented that ditching 16/44.1 CDs is perhaps too premature; a correctly mastered CD can still sound excellent. And whilst the highly regarded and complex ESS Sabre DAC is 'tops', I still needed to put it through the valve stage to humanise the recording, largely because the MFA preamp is so acoustically transparent. Interestingly when fed to a less transparent class A/B pre/power combo, the DAC output was preferable. So, it's good to have a DAC giving you the choice of selection.

To add confusion, in some of the music I played the Copland DAC output was actually favourable to the valve stage. If only there was just one set of RCA outputs and you could switch between direct/preamp on the front without having to fondle around the back to re-

plug the leads every time. There is much difference between the two outputs. Through the preamp stage the bass is particularly warm and inviting, adding power and emotion when needed, whereas through the DAC direct output it is precise and quick. And whilst this was the more perfectionist route, and ideal if you already have a preamplifier, it often left me wanting and, more importantly with my favourite Pink Floyd track, not crying. If this really is the last track Pink Floyd put to digits or vinyl, then it really does need to sound special. My own album 'Get Over It' was similarly more human through the valve amp, with a greater bass end and mid warmth.

Now, some will prefer the detail and accuracy invited from the DAC output, and playing Linn's *Berlioz Symphonie Fantastique* it had an immense detail front and rear as well as positions across the sound stage. This recording is the Scottish Chamber Orchestra's debut recording with their new principal conductor Robin Ticciati, and a monster of a performance. The 4th movement particularly had immense dynamism,

# COPLAND DAC215 DAC, PRE & HEADAMP

and bass prowess and crisp tops that weren't exaggerated in any way. This was precision and power that Hector would have appreciated hearing, had he still been around. The DAC output won it for me on this occasion. Even a lower quality 16bit/44.1kHz wav file of Ralph Vaughan Williams London Symphony played with a passion I didn't expect to be so compelling. The 2nd movement left me in tears. Definition between the strings extended the boundaries in my living room, giving a large soundstage with meaty bass from Timpani rolls when needed.

I was torn between favouring exactitude or emotion, spending many hours considering both options, and I have to say the latter won it for me. Having another preamplifier stage might seem pointless since my reviewing fed through the brilliant MFA Baby Reference autotransformer, but the overall sound was much more pleasing to me, and hence this unit stands as a great preamplifier in its own right. The sound was on the warm side of neutral, and this gave me a much more natural sound than was from the DAC output, which at times could sound a little clinical. Indeed, the valve-stage sound reminded me of the warmth and musical understanding in the Copland CD player that I almost bought many years back. This great product gives you a choice of how you want to use it, and if you don't have a preamp, then this is a good analogue and digital input control system in its own right. Used as a headphone amplifier I was of course using the great valve stage, and this gave enough grunt and clarity for my HD650's let alone the bass-generous Meze 99 Classics I also tried. The sound was highly infectious, and will work well with inefficient planar as well as conventional headphones.

## CONCLUSION

The DAC 215 is a very special addition to the Copland family, filling a gap in today's hifi bucket list. This product allows all the important digital formats, an essential condition of purchasing a converter, adding a touch of analogue musical finesse through the valve stage, just like the new Rolls Royce SUV maintains that Phantom style and luxury. This machine could do so with 24/32bit FLAC and DSD sources without any sign of difficulty, that I seriously considered investing in one myself. It's minimalistic, simplistic design hides some clever circuitry inside that sets it above many DACs I have had the pleasure/displeasure of playing with over the last few years. Having a choice of two output philosophies makes it all the more appealing.

## AT A GLANCE

**Build Quality:** Minimalist, well-built design.

**Sound Quality:** Much detail and unfettered control, and a musicality, especially through the preamp stage, that made listening to all types of music fun. Works well with all PCM/DSD sources. Excellent headphone amplifier.

**Value For Money:** With a price of £1998 this is excellent value, bearing in mind the amount of work this gentle giant can do, serving as DAC, headphone amplifier and preamp

### Pros:

**Immense musicality and detail**

**Minimalist good looks and ease of use**

**Choice of DAC or preamp outputs**

**Works on all music genres and recording forms up to 384kHz 24/32 bit FLAC and DSD 2.8-5.6MHz (64,128 and 256).**

**Good to have an on-off button on the front again!**

### Cons:

**Just wish there was one set of RCA output sockets**

**Some might not like the facia styling**

**Price: £1998**



## SPECIFICATIONS

### DAC:

**USB Audio: PCM 44.1~384K (24/32bit)**

**DSD 2.8~5.6MHz (64~128X)**

**S/PDIF Input: 1 x COAX / 2 x Optical**

**PCM 44.1~192K (32bit)**

**RCA. 2.0 V rms. @ 0dBFS**

**SNR DAC > 120dB**

**THD < 0.004%**

### Head Amp:

**Valves: 2 x ECC88 / 6DJ8 / 6922**

**Output: max. 8.5 V rms**

**Output impedance: 5.0 Ω**

**Frequency response: 20Hz~100 kHz (+/-0.5dB)**

**SNR: 90 dB**

**THD < 0.02%**

**Gain Head Amp: 10 dB**

**Power AC 110~120V or 220~240V**

**Power Consumption: 25W**

**Weight: 3.8Kg**

**Dimensions: 200 x 280 x 115 mm. W x D x H**



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# Leema Libra DAC & Preamplifier

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By Dominic Marsh

**The £5995 Leema Acoustics Libra is both a DAC and a preamplifier with a plethora of inputs that should be ample for anyone. Dominic Marsh gets to grips with it for Hifi Pig.**



# LEEMA LIBRA DAC/PREAMPLIFIER



**B**ack in June of 2015 I reviewed the Leema Elements integrated amplifier for Hifi Pig and I clearly recall giving that particular component a “Recommended” award. I liked the ease of setup and the sound quality, plus the connectivity with plenty of useful inputs to choose from.

DACs used to be DACs and preamplifiers were pre-amplifiers at one time, but increasingly we are seeing DACs with albeit rather primitive volume controls and amplifiers with built-in DACs, so their identities are blurring into one and Leema have taken that concept one small step further by combining a top class DAC with a top class pre-amplifier only, rather than a full integrated amplifier.

## DESIGN AND CONSTRUCTION

How very astute of Leema to house the Libra in a chassis already being used in their top of the range amplifiers. You get an automatic visual match of course with other Leema components wearing its shade of silver/grey coat, but there is a visual clash when you introduce it into a non-Leema system. I don't get too fussed over colour matching whatever is in my rack, be it coloured silver, chrome, black, or green with purple stripes for that matter, but I harbour no discord with others that do require a perfect visual match.

The front panel layout is pretty simple and uncomplicated. To the left is a headphone 3.5mm mini stereo jack socket, beneath which is an MP3 input 3.5mm mini stereo jack. To the right of that pair is a large rotary volume control, beneath which is a home theatre bypass push button and a push button muting switch. To the centre of the front panel is a blue LCD display which shows the input selected and the volume level, plus the various menu options available, selected by a combination of a rotary control to the right of the display and two other push buttons for engaging menu selections. Sounds complicated but in reality is very easy to master because all the menu options are simple, concise and unambiguous.

Now if the Elements integrated amplifier impressed me with its plentiful amount of inputs, then little did that prepare me for the number present with the Libra DAC/Preamplifier. A quick

count gave no less than 14 digital and analogue input connections, not including the partnered XLR balanced inputs with matching single ended RCA input sets, which brings the total to 17 if we are going to be pernickety about it. Add on top of that the Leema “LIPS” (Leema Intelligent Protocol System) communication system input/output connections which allows the Libra to communicate directly with other Leema components and there isn't much empty space left on that rear panel to add anything else apart from a mains input. To table them out, we have 3 TOSLINK digital input sockets, 3 RCA digital inputs, a USB “B” connector input, followed with 2 AES/EBU XLR sockets, then for good measure a pair of I2S inputs. We then see 3 analogue input pairs labelled 1, 2, and 3 consisting of a pair of single ended RCA phono sockets and a pair of balanced XLR connectors, with a push switch to enable either single ended or balanced operation. If that wasn't enough, then the DAC is Bluetooth equipped to wirelessly connect with tablet computers and mobile smart phones. PHEW!

The digital decoding circuitry isn't centred around an off the shelf standard DAC chipset, so instead Leema have decided on a circuit called “Quattro Infinity” which effectively makes the entire circuit fully balanced in the pursuit of low noise and signal integrity. How the circuit achieves this is a mystery to me and concerns me not at all I might add. It also houses a Cirrus Logic CS4392 DAC chip to allow for DSD streams to be decoded, plus Leema's own M1 USB interface.

The Libra is supplied with a full function remote control handset.

## SOUND

Because the Libra is both a DAC and a pre-amplifier, my evaluation routine was split into three parts, namely as a standalone DAC, then the pre-amplifier in it's own right and of course I evaluated them as the combined pair, so I first began with the DAC section.

After having been relieved of a figure close to £6,000 you would expect there to be a quantum leap in sound quality from

# LEEMA LIBRA DAC/PREAMPLIFIER

the very start, but if that is your expectation of this component, it simply doesn't behave that way. It isn't lacklustre by any means, but by the same token it doesn't grab you instantly either with a beautifully rendered fireworks display sound palette that spreads all before you that you can quaff copiously. No sir. It deserves your close attention and beguiles you by stealth almost, because it provides an endless stream of surprises dug out of recordings you have probably heard many times, over many years in fact and intimately familiar with – or so you thought. This DAC is all about the details, consistently so and from that statement you would think I had my ears cranked up to full speed, my mind closely attuned to the music and listening intently, making almost hard work out of listening, but not so. I never once found it fatiguing or having it forcing me into making an effort to concentrate because the music just rolled forth without any strain or stress in an almost matter-of-fact manner. The highs were high, the lows were low, the midband liquid and sweet, imaging was very good rather than exceptional and the noise floor was absolutely silent. And that for me personally was its undoing, oddly enough. While the presentation was controlled, precise and dare I say accurate, it didn't hit me at any time emotionally. It lacked the zing and pizzazz I crave from whatever component I own or indeed review for that matter that makes it memorable. You could of course argue that my personal tastes stray away from strict accuracy and true fidelity, but having reviewed components that were

relentlessly accurate and by their nature highly fatiguing, or being given the choice of mildly coloured to connect with the emotions, then give me the latter every time and if we are to be brutally honest I believe I am not alone in this train of thought. That is irrelevant though in the context of this review and my own personal tastes should have no bearing at all in my findings for this review.

My favourite test CD of the moment is Fink's "Wheels Beneath My Feet" album recorded live in various venues during one of Fink's many European tours. The track "Sort of Revolution" has some powerful Floor Tom whacks and pounding kick drum beats from the drummer and the Libra DAC certainly did put the weight and power behind them so they were felt as well as heard. This same album has some well recorded venue ambience which changes at each location and of real note is the drum kit cymbals and Snare Drum which shine with startling realism, giving that crisp metallic ring from the cymbals and a solid 'crack' from the snare drum rim shots. Fink's lyrics writing and indeed diction is terrible when he sings and for reasons I still cannot comprehend, this album is rarely out of my CD player. With the Libra DAC however, a wealth of additional details were being revealed and I had to play several excerpts again and again to make sure I wasn't hearing things that weren't actually there to be heard. And I hadn't.

Now if the Elements integrated amplifier impressed me with its plentiful amount of inputs, then little did that prepare me for the number present with the Libra DAC/Preamplifier



# LEEMA LIBRA DAC/PREAMPLIFIER



The Libra portrayed this track with both the delicacy and power necessary to make it an enjoyable and satisfying listen

The opening track in London Grammar's excellent 'If You Wait' album there is a wealth of synthesized reverberation effects and a deep penetrating bass line to the music, underpinning the female vocals. The Libra portrayed this track with both the delicacy and power necessary to make it an enjoyable and satisfying listen. Track two from the same album contains some very obvious and deliberate fret fingering on steel strings from the guitarist and that comes across as crisp, defined and uncannily real sounding. The whole album is infused with artificial ambience and the Libra rendered this perfectly.

Ginger Baker's epic drum solo on 'Wheels of Fire' by Cream has the drum kit close mic'd during the performance which is ideal for testing transient ability. Snare drum and tom toms sounded less taut and slightly less dynamic than from other DACS I have heard lately, yet the cymbals had a polished refinement with no splashiness or tizz. Kick drum too had a less than solid "whump" which ought to feel like it's hitting you in the pit of the stomach as much as you hear it with your ears, but the Libra softened the effect slightly.

Moving on to Derrin Nauendorf's 'Live at the Boardwalk' which is a live acoustic recording with Derrin playing solo acoustic guitar and accompanied only by a basic set of drums, the tonality of the guitar's sound was conveyed realistically and full of natural resonances and timbres. Every pluck on the strings was heard in great clarity and detail, although I cannot say that Derrin is the best of vocalists, but an enjoyable listen nonetheless.

I then put the pre-amp section through its paces and once again I found it to be very good rather than exceptional and that is a high accolade on its own, as it equaled my resident pre-amp in terms of

clarity, detail and substance. The Leema Libra though still had an ace up its sleeve as my resident pre-amp has a clear sonic difference between the single ended and balanced connection, the latter sounding much better than the former. The Libra sounded equally as good no matter which input type was selected, which is highly commendable.

Finally then, I used the Leema Libra as the intended DAC/Pre combination to drive my resident power amplifier, which is a 150 watts per channel unit of American origin, with some major upgrades made a few years back for a more incisive and dynamic sound than the stock unit which was a tad too 'warm' and laid back for my tastes. The Libra unit had no problem at all driving my power amp to some seriously high volume level and the volume control in the Libra was about as linear perfect as I could wish for with no sudden rise in level as the control knob was rotated. Even then, the Libra couldn't peak that crest of getting me drawn ever closer on an emotional level. It certainly wasn't bland or indeed sterile by any means because there was a wealth of details and nuances to be heard and enjoyed, but it didn't demonstrate the elusive "Factor X" that keeps you listening way past your normal bed time and feeling emotionally satiated as you power the system down for the night. I suspect this is the result of Leema's pursuit of neutrality in the overall sound which I feel they have mostly achieved, but perhaps they were a little too diligent in that pursuit.

## CONCLUSION

Let me say here that I don't relish or enjoy picking holes in any product submitted to me for review. If I glossed these over or buried these findings (Especially at this price level) then the value of my reviews drops to zero and



# LEEMA LIBRA DAC/PREAMPLIFIER

has no merit whatsoever to a prospective purchaser. On the other hand though, it might be EXACTLY what you are seeking from your next audition or purchase and you might not be paying too much notice to what criticisms I may have leveled at the Leema Libra and your own perceptions could be at total variance with mine, even more so with other partnering system components different to mine, so let's sum up this review on the positive aspects of this product.

If you cannot connect up the Libra DAC/Pre into your system then I would be truly amazed at that. It would certainly meet all of my current connection needs and then some for whatever the future holds in store. Best of all is all the inputs have a high quality sound – even via the Bluetooth connection and the headphone amplifier is of very good quality too. The use of balanced topology in the majority of the circuitry (including the digital stages) shows a lot of careful thought has gone into the design.

It is a complex product and to some it might be daunting, but be assured Leema has gone to great pains to ensure setting up the Libra is simple – even I managed it without any stress or hassle.

There is a lot of digital (and analogue) hardware in that casework and geared for 44.1kHz native CD replay, USB asynchronous digital signal and DSD stream up to DSD 128 standard, DXD, 24 bit 384kHz through the I2S connection and it's about as "future proof" as is possible at this moment in time.

## AT A GLANCE

**Build Quality:** The case is as substantial and robust as the proverbial outhouse and the controls are well laid out and labelled well. The display is somewhat crude but does the job intended.

**Sound Quality:** Plenty of power, detail and nuances to the sound, although lacking involvement and emotional connection. It isn't bland or sterile by any means.

**Value For Money:** With a price tag of £5,995.00 this unit isn't cheap, but it's about as "future proof" as humanly possible, so it would probably be a long term ownership.

### Pros:

Fine build, plethora of digital and analogue inputs

Detailed and powerful sound

### Cons:

Perhaps a bit too much neutral sounding

### Price:

£5,995.00



It's about as  
"future  
proof" as is  
possible at  
this moment  
in time

## SPECIFICATIONS

**Analogue Inputs:** 3 (configurable as Balanced or Un-Balanced)

**Bluetooth interface:** Yes

**Headphone Amplifier:** Yes (high quality)

**S/PDIF Coaxial Inputs:** 3 (24 bit 192kHz & DSD64)

**S/PDIF Optical Inputs:** 3 (24 bit 192kHz & DSD64)

**I2S Inputs:** 2 via RJ45 connectors (24 bit 384kHz, DXD, DSD64 & DSD128)

**One I2S Input** has fully programmable pin allocation

**AES/EBU Inputs:** 2 via XLR connectors (24 bit 192kHz & DSD64)

**Asynchronous USB:** Yes (24 bit 384kHz, DXD, DSD64 & DSD128)

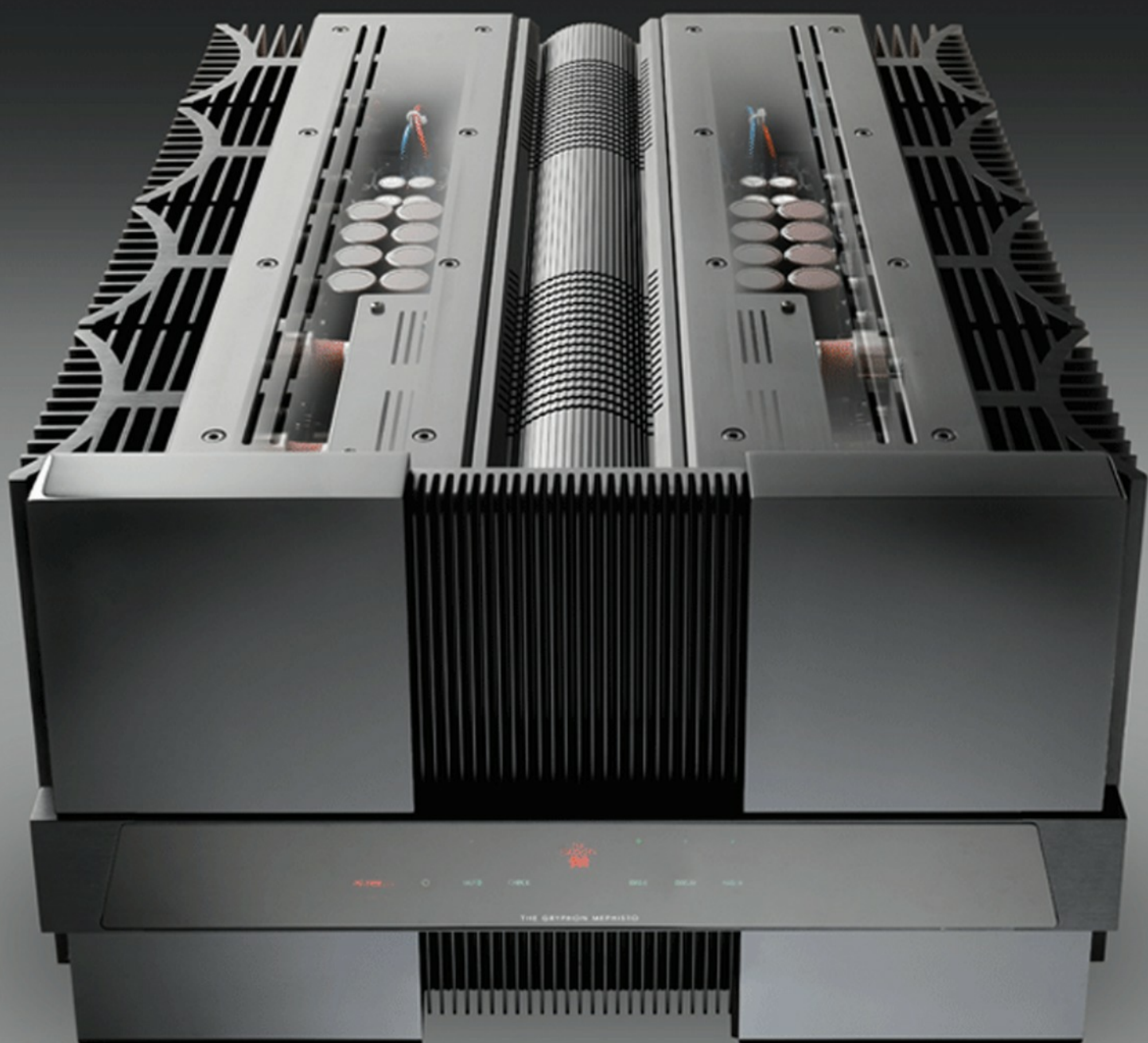
**USB:** Yes (fully asynchronous – Windows & Macintosh)

**USB Isolation:** Full Galvanic

**Dimensions:** 440\*320\*110mm (WxDxH)

**Weight:** 15Kg

# THE GRYPHON



GRYPHON MEPHISTO

[www.gryphon-audio.dk](http://www.gryphon-audio.dk)

# Audiobyte Hydra Z and Hydra ZPM

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By Dan Worth

Hydra Z from Audiobyte is a USB audio playback bridge and clock generator whilst the Hydra ZPM is its matching Ultra linear audio power supply. Dan Worth is already a user of the company's previous model Hydra X+ and most definitely a digital audiophile, so who better to put to put this £1050 combo through their paces



# AUDIOBYTE HYDRA Z & HYDRA ZPM



Once in a while I have the pleasure of reviewing a product which holds strong personal interest for me. The Hydra Z is an SPDIF converter, a bridge which converts the USB output of a computer orientated source to a multitude of digital outputs and at the same time offers clock regeneration with increased jitter control lowering distortion in the noise floor and increasing control over the frequency range.

The Hydra Z from Nicolae Jitariu of Audiobyte and Rockna is of particular interest to me as I have been a Hydra X+ owner for a couple years now and I'm familiar with the benefits of the product over any USB direct connection to a DAC. I have heard increasing performance and connectivity flexibility is improved.

The Hydra X+ is a battery powered unit with a switch mode trickle charger enabling playback for up to 10 hours. The Hydra Z however has 3 ways of being powered, firstly from the USB source, secondly from a 5v external supply of linear or switch mode technology and thirdly from Audiobyte's own ZPM linear based matching form factor power supply, also here for review.

Now I wouldn't recommend using a switch mode to power the Hydra Z, although there are switch mode supplies from a few companies which I have

encountered over the past year or so which offer outstanding audio performance over the cheap wall wart style common supplies. I would always opt for good solid well regulated linear power. The X+'s switch mode supply has always been connected to a separate electrical source than that of my system to eliminate any noise being injected into the rig, even though internally the X+ isolates any of this grunge.

My current X+ has a great range of digital outputs including my favoured HDMI over I2s option (created by Nicolae), coaxial BNC and RCA as well as AES/EBU. All outputs can be used simultaneously which for me has always been a big plus point as I run two of the outputs to two DACs for my main passive and secondary active system. The Hydra Z accomplishes this handy feat also, with the addition of a Toslink Optical output and a Wordclock connection.

If I had one little niggle with the X+ it is that connections to and from the device are on opposite sides of the unit, meaning that the X+ really needs to be placed behind other items on the rack for aesthetic reasons and needs a fair bit of clearance each side for the non-flexible cable ends I have in my system. Hydra Z however is a totally redesigned form factor. The unit has a more traditional styling, a clean front plate with indicators for external or USB power and PCM and DSD designation. The

The unit has a more traditional styling, a clean front plate with indicators for external or USB power and PCM and DSD designation

In comparison with the Hydra X+ the digital processing capabilities of the Hydra Z are much more advanced and powerful

rear of the device now houses all connectivity ports, allowing for the unit to be sat in the rack as most other main units would, allowing for easier isolation support and placement of cabling.

The ZPM linear power supply is identical in form factor and both units side by side on my isolation plinth complete the width of any standard full sized piece of equipment. ZPM has a short umbilical which connects the two units and is designated by a 'digital' output, also on the rear is a second power output named 'analogue'. Audiobyte concentrate their efforts on core products and their website confirmed that currently they offer no other products which could make use of this second output, but talking with Jack Durant of BD audio – distributor here in the UK – he simply said 'watch this space'. I of course had to press him a little harder and he confirmed that the new form factor products would indeed grow to include additional items which are currently under development.

## FIT AND FINISH

Hydra Z and ZPM are well constructed and are available in silver or black, the aesthetics of the two units are a little understated and not exactly audio bling, but the casework is solid and of substantial thickness making them both very strong and sturdy – the look almost fits the bill really and represents the type of products Z and ZPM are. Internal PCB layout and implementation of the FPGA circuit is extremely efficient and well laid out. All sockets are of high quality and are positioned to compliment the short signal path.

Packaging again isn't fancy but it is extremely protective and fit for purpose

keeping overall costs to the end user as low as possible.

In comparison with the Hydra X+ the digital processing capabilities of the Hydra Z are much more advanced and powerful, along with being future proof to further advances in bit depth and sample rates, the additional connectivity and wordclock master hub, along with advanced PCB layout and isolation, on paper alone assumed improvements can be made.

I've run a few devices over the years on battery power supplies, including my current X+ but I can confirm that my experience with very well designed regulators within linear power supplies accompanied by tight tolerance transformers made with high grade metals and isolation have won the battle of power source A/B testing. Hydra Z takes a different approach to the battery supply of Hydra X+ (the previous USB bridge from Audiobyte). A separate matching 'Ultra Linear Power Supply' from the company has proved from internal testing to be the most effective option, although any 5v supply, switch mode, battery or linear of around 1A of potential output current can be added, along with the ability to power direct from the source computer over USB.

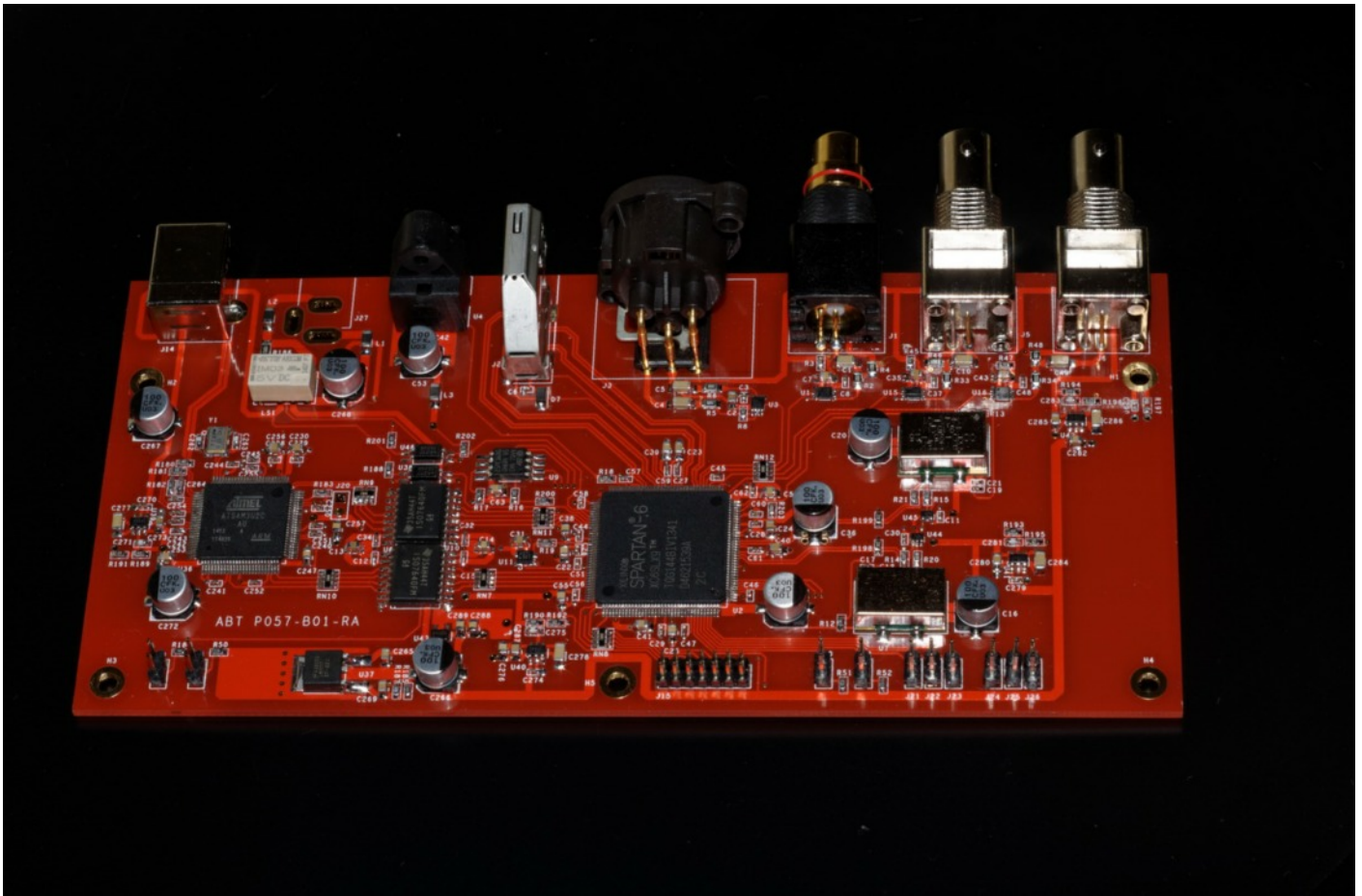
## INSTALLATION AND BURNING IN

I have the ability to utilise each and every option from the Hydra Z in my systems, from all the standard digital outputs to the less common but with increasing support I2s over HDMI, as well as the wordclock output.

I'll note here that I strongly recommend treating the Hydra Z and ZPM when purchased together as one full sized unit, I initially stacked the two items and



# AUDIOBYTE HYDRA Z & HYDRA ZPM



went through about a weeks burn in, playing music on repeat when I wasn't listening with the amplifiers off and found that the sound although changed after the initial week was disjointed and lacked flow. Placing the two units side by side had a dramatic effect and music was more palpable and 'made sense' again. Complete burn in time I estimate at around two weeks of continuous play – 300 hours or so.

## SOUND

Once positioned correctly in the system and played for a few hours after some more running in I wanted to place the Hydra X+ back into my system for a few days in order to bring myself back to the level of performance I had been accustomed too, with the newly run in Hydra Z being able to be swapped in and out I could now evaluate and convey any differences.

The first main difference between the two units is the amount of detail the Hydra Z offers on the outer boundaries of the soundstage. Both units convey a very information rich presentation with the Hydra Z delivering more detail throughout the range. When a piece of equipment can present a lot more information on the outer edges of the

room the entire performance grows and the rooms boundaries become less apparent making the recording venue becomes more realistic. This is noticed very well on live performances of an intimate nature, bringing the venue's acoustics into the listener's space. Larger more intense collaborations have more drama and three dimensionality that excel the midrange transparency and centre stage depth.

With the advanced performance of Hydra Z, Damien Rice's 'O' album, 'Older Chests' has a passage that leads into the perception of a set of patio doors being opened to the left hand side of the soundstage, immediately depth is perceived here as a group of children are heard playing in a park and can be heard laughing and chatting away. The intensity of this section of the music is far more substantial in naturalness with Hydra Z running from the Mac, increasing the complexity and cleanliness of the image, with the previous Hydra it is definite but just not as defined and complex.

Due to the low phase distortion of -114 dBc/Hz @ 10 Hz (which is a true measurement of jitter) what I am hearing and outlined with the previous track is obtained by the decrease in jitter. What

always impresses me with Audiobyte is that they offer 'real' measurements and figures instead of throwing around the typical 'lower than XYZ ppm' numbers and even specify clock and chip model numbers along with supported graphs and links to manufacturers websites for those of a technical mindset to scrutinize. This complete openness is a breath of fresh air amongst the BS that often consumes some products on market.

The lower noise floor of Hydra Z over X+ when just powered via USB within my setup is excellent, making leading edges very accurate and offering less fuzz in the treble. This was undoubtedly aided by the fact my Mac has a strong external linear supply, which I would expect from any hardcore computer audiophile. Hydra Z has excellent isolation and if you wish to add one to a computer source which isn't intensively modified for audio use its abilities are such that benefits are clearly discernible.

Adding the Z to my standard Mac of matching spec gave significant improvements over a USB direct connection to DAC, giving more insight into recordings, increased vocal separation from the main body of the



# AUDIOBYTE HYDRA Z & HYDRA ZPM

music, more articulated bass and overall less distortion and grain.

Back to the main setup – leading edges from over X+ are better defined and decays are heard in a more natural and expressive sense. A test track I often mention is Nils Lofgren's live acoustic version of 'Keith Don't Go'. What's special about this piece of music is the sheer speed and complexity of the guitar work by Nils, being able to hear each decay of the previous note in its own acoustic space whilst following notes overlay without masking the under layers. With the X+ I always felt that the abilities of the unit were very mature and one of the very best converters of its day, but Hydra Z surpasses X+'s abilities to discern additional space, information and clarity around notes and the depth and scale of this performance increases substantially, leaving my beloved X+ sounding a little rounded and softer.

Bass notes with Hydra Z have more prominence and energy, a kick drum sounds more natural with more appreciation of the skin tone and also comes from a slightly more localised position in the soundstage, presented with more focus on its leading edge. Deeper notes had far better extension but very favourably remained tight and didn't develop into that horrid looseness that can happen where there is more bloom and boom to the bottom end. Instead notes reflected a performance's scale and flow incredibly well and gave more presence and realism to music.

With the more palpable flow to the sound I was enjoying over the Hydra X+ in my system I intently listened to some good strong vocals to get a handle on any benefits in tonal balance in the ever critical midrange.

A great range of my favourite music consists of beautiful vocals from both females and males alike.

There's nothing more frustrating for me than to have a system or individual component that cannot produce a convincing vocal. A strong projected vocal that demands attention is an absolute must. One of today's biggest irritants, especially in mid-priced equipment is a female's vocal being presented with too much upper midrange which consequently leaves a male vocal thin without lower midrange body or chestiness, this is generally where

British mid priced electronics excel and have become a staple for many years.

Hydra X+ always had a great balance here but Hydra Z really pushes the envelope. The projection or dynamic power of the vocal is greater. It's easier to hear where the vocal begins and how it emanates out towards the listener, growing from the point of origin, rather than just being forward and out of position in the depths of the midrange. There's also more of that 'artist in the room' effect and a more effortless and natural strength to really powerful singers. The upper mids are a step ahead of the previous model, giving more transparency and smoothness integrating the treble in a more liquid nature which picked up on some recordings pitfalls but at the same time never presented the extra detail in an etched manner, yes you can hear more but it's presented with more sophistication.

Exploring the top end further with a range of material, I can confirm further improvements in air and space, exploring venue acoustics and ambience better. Notes are further fleshed out and the control on treble extremes is better handled with a more relaxed nature and greater feeling of effortlessness.

## ADDING ZPM ULTRA LINEAR POWER SUPPLY

After going backwards and forwards a good few times to A/B Hydra X+ and Hydra Z the results speak for themselves, a cleaner, more controlled and defined sound from the Hydra Z came out on top as an undeniable upgrade to the previous model.

Adding the ZPM Ultra Linear Supply only enhanced all of these performance gains further. Where say the leading edge definition had more clarity to the strings of Nils Lofgren's guitar, they now had a deeper density to them, increasing timbre and the addition of ZPM fleshed out the beginning the middle and the end of each note. Decays were more prominent again I would say. Their volume levels were not increased but their presence was more defined. The lower noise floor of the combination of the two units aided significantly in this area, cleaning up more background hash allowing for the micro details and micro dynamics to now show their prowess, which proves that wherever possible a good clean power is essential throughout the audio chain, even if like me you believe that

your mains is already superior. Please don't question the benefits of the additional support ZPM will give to the music even on a device that one could taken for granted, such as an SPDIF converter.

Piano notes benefited well from the additional clean power. Their tonality was more robust and the softness of strokes were completed with more delicacy in listening tests, along with more impactful hits of keys, conveying additional drama and dynamics. It's very difficult to reproduce a piano correctly and people spend thousands of pounds/dollars changing and upgrading system components in the analogue domain concentrating purely on piano tone. In the digital domain it is even harder to accomplish strong piano tonality, but as technology pushes forward digital comes closer to the organics of a strong analogue rig and can surpass it when done correctly in my opinion. I feel Hydra Z along with the addition of Hydra ZPM has brought me one step closer to obtaining a more natural tonality with piano as well as all other instruments and vocals, I'd even go as far to say that I would expect my current digital rig to now exceed the performance of a similarly priced analogue set up.

Depth of image also increased with the ZPM power supply in place and image height has better perception along with an additional layer of detail which was surprising to say the least!

The very bottom end rolled and extended cleaner, again with more impact and freedom which firmed up and underpinned the mid and upper frequencies at the same time, reinforcing the lower undertones of the higher frequencies.

The Hydra Z really retained its character and sonic signature when partnered with its matching ZPM Ultra Linear Supply, the additional benefits come in clarity, cleanliness/lower noise floor and layering. When listening to a busy orchestra, individual instruments are more discernible and the same applied to the dance music that I still love. All in all a terrific upgrade, the Hydra Z is the true star here but ZPM just lets the sound breath more.

## WORDCLOCK

I've only had experience with the addition of a wordclock once in my time

# AUDIOBYTE HYDRA Z & HYDRA ZPM

as a digital audiophile and let's face it, that is what I am, reviewer comes second. My experience was with DCS products a few years ago and the results were just so flattering to the DAC of that time.

I currently have a Mytek Brooklyn DAC sat on my desk feeding my actives and headphones, it has a wordclock input and output, so why not tether the Hydra Z direct I felt?

The Mytek in short is a unit which crosses the boundaries between pro and home audio and has a sonic signature that gives the listener complete understanding of its roots with a clean insightful and sometimes explicit playback. Adding the wordclock/masterclock from Hydra Z took away a little of the clinical feeling of the Mytek and added more flow to the music, less monitoring and more playback in its characterisation of tones. At the same time I found it to be more phase coherent and conveyed better timing giving a more solid image with better depth and enhanced definition. Bass notes faired particularly well due to this and frequency extremes gained a little more extension and presence without ever becoming too heavy or distracting...in fact the opposite was apparent. The additional control and timing accuracy added denseness and body to the top end, vocals had a stronger feeling of stability, sort of when the signer has spent some quality time warming up their voice. Lower midrange/upper bass gained some transparency and detail also.

## CONCLUSION

Computer based audio has a huge position in today's market with network storage, playback and ripping software, along with music streaming services being the fuel for this designation. Unfortunately what a lot of people overlook is the quality of the signal being fed to the DAC. Even with an expensive DAC, USB chips are still not as far advanced as they will inevitably become and this requires a company such as Audiobyte to design devices such as the Hydra Z in order to isolate the incoming noise from source and lower the jitter on the output signal.

As DAC chips and computer sources progress, for sure too will USB Bridges/SPDIF converters and the crucial part they play with master clock

control, enhanced lower jitter rates and digital conversion.

In the digital domain it's all about ridding the signal of noise pollution and this is done by eliminating phase distortion and ripple from the power source. I demoed many converters before, settling on the Hydra X+ for its detailed and musical sound, although I never liked its form factor, the sound it gave was paramount to my decision.

Hydra Z is a clear statement from Audiobyte that they know how to do digital and have concentrated their efforts on an absolutely crucial part of the audio chain that is so often overlooked by consumers. Enhancing what I believed to be one of the best SPDIF converters I had heard with a product that surpasses it in every area, whilst retaining the musicality, richness of tone and involvement of the previous incarnation. Audiobyte have really got a product here that changes a great digital front end into a truly superb digital front end.

Adding the companies Hydra ZPM Ultra Linear Power Supply again raised the bar, to give an impression of music that makes even more sense and firms up the Hydra Z design with clean and unimpeded power. The Hydra Z is a true statement on its own, accompanied by the ZPM and the combination is just additive.

I will be trading my beloved Hydra X+ in against the Z and ZPM, the increased performance and design layout is just a no brainer for me.

## AT A GLANCE

**Build Quality : Substantial metal case, good size, abundant amount of connections**

**Sound Quality: Surpasses Hydra X+ in every way, has superior transparency and detail all presented in a musically engrossing manner**

**Value for Money: Upgrades this substantial costs thousands if upgrading, for example, a CD player**

**Pros:**

## Build quality

**Express, detailed, transparent, powerful, coherent sound**

## Cons:

**Nothing other than the warning not to stack the Hydra Z and ZPM as this diminishes sound quality considerably**

## Price:

**Hydra Z – £600 – £640**

**Hydra ZPM – £450**



## SPECIFICATIONS

**Inputs: USB receptacle, type B**

**Outputs: S/PDIF, 75 ohm coaxial, AES/EBU, 110 ohm XLR,**

**BNC 75 ohms, I2S over HDMI (LVDS), Toslink, Wordclock BN**

**Supported Sample Rates:**

**PCM: Upto 384 KHz**

**DSD:**

**2.8 MHz (DSD64) – DoP, native**

**5.6 MHz (DSD128) – DoP, native**

**11.2 MHz (DSD256) – native (via ASIO)**

**22.5 MHz (DSD512) – native (via ASIO)**

**Bit Depth: 32 bit over I2S output, 24 bit over S/PDIF, AES/EBU, Toslink**

**Compatibility: Native MacOS 10.6 and later, Native Linux with UAC2 compliant kernel**

**ASIO, WASAPI, KS, DS drivers for Win XP to W8 32/64 bit**

**Recommended players: Foobar2000, Audirvana Plus, Jriver etc.**





MC Step-Up Transformers  
Phono Amplifiers  
Pre Amplifiers





# Hana Lab Sakura Music Server/DAC

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By John Scott

**John Scott takes a listen to the Hana Lab Sakura music server and DAC hailing from Croatia and costing £500**

# HANA LAB SAKURA MUSIC SERVER/DAC

**H**ana Lab is a Croatian company specialising in digital music servers and class D amplifiers. All products are hand built and can be customised to the buyer's specification, whether buying a single component such as a streamer or a streamer/DAC/amplifier combo. Hana Lab sent me a Sakura Server/DAC for review.

## UNBOXING AND APPEARANCE

The Sakura arrived in a plain cardboard shipping box, well protected internally by polystyrene inserts. The unit was accompanied by a robust power cable and pleasingly comprehensive and easy to read instructions which aided a straightforward set up.

The Sakura is a circular aluminium case measuring 150mm across and 50mm deep. The case is topped by a solid slice of the Sakura wood that gives it its name. A single on/off button at the front provides a minimalist design with all the inputs and outputs being hidden round the back.

The inputs comprise of a power socket, Ethernet port and two USB ports; one for connection to a USB drive, if desired, and one for the supplied USB wireless dongle. Outputs are two RCA sockets.

## SET UP AND USE

Connections were straightforward – the USB dongle provided a satisfactory connection to my router but after ascertaining that this was the case I disconnected it and opted for the wired Ethernet connection for the remainder of the review period. Powering the unit up by pressing the on/off switch results in this flashing with a green LED for a few seconds. The light stops flashing when the unit is fully initialised. The server and

DAC run from Raspberry Pi hardware featuring a Sabre chip. Software is the popular Rune Audio programme.

Accessing the Rune Audio software to connect the Sakura to your music source, eg NAS or USB drive, requires you to identify the unit's IP address but if you haven't done this before, the instructions clearly explain how to do this. The next step is to point the server programme to your music library and allow the programme to compile your library into the programme's player interface. Depending on the size of your library this might take some time – I found that it took a few hours – I have a large digital library – but fortunately, subsequent updates whenever you add or remove tracks in your library are much quicker.

In my opinion, servers stand or fall on the quality of their control app. The job of a server is to allow you to choose the tracks you want to play from your digital music library and then present them to the DAC. Using a control app should be a pleasure and, ideally, add value to the listening experience. The Rune Audio app does all the things you need it to: search by artist, album or track, construct playlists on the fly, display cover art, access internet radio. It's not the best app I have encountered but it is far from the worst and is perfectly adequate for use in a desktop or second-room system. For everyday use in a main system I'd be looking for a little bit more sophistication. That said, Rune Audio is an open source software programme and improvements will no doubt be forthcoming from its enthusiastic user group.

## SOUND

When compared directly to a combination of a Logitech Squeezebox Touch streamer and Cambridge Audio DacMagic, the Sakura acquitted itself admirably. The Squeezebox edges



# HANA LAB SAKURA MUSIC SERVER/DAC



The Sakura offers a simple single box streamer/DAC solution, ideal for a desktop or second-room system

the Sakura in functionality – Tidal integration, for example – but, sound wise there is very little between the Sakura and the DacMagic. Soundstage was solidly presented, instruments holding their position and not wandering around. Harlem/Cold Baloney, the closing track of Bill Withers' excellent Live At Carnegie Hall features an extended call and response section between Bill and various sections of the audience. The acoustic of the hall was well rendered with clear differences between the sound of the responses at the sides, centre, front and back of the room. Mary Coughlan's voice on Leaf From A Tree from her Uncertain Pleasures album is very closely mic'd and it was easy to close my eyes and imagine her standing at the bottom of my room in front of her band.

## CONCLUSION

The Sakura offers a simple single box streamer/DAC solution, ideal for a desktop or second-room system. That's not to say that it wouldn't work well in a mid priced main system but, for me, the app needs a little more refinement for extended use. Its hand-crafted solid wood and aluminium finish is highly attractive but will not be to all tastes; if you prefer nondescript black or silver boxes then this may not be for you. If, however, you are looking for something a little bit out of the ordinary that offers good value for money then the Sakura is worth considering.

## AT A GLANCE

**Sound Quality:** Good sound for a product at this price point.

**Build Quality:** Hand crafted – bespoke options are available on request.

**Value For Money:** There are lots of generic bits of kit available in this sector of the market. The Sakura offers something that stands out from the crowd.

### Pros:

Distinctive, hand-crafted looks.

Good sound for the price.

### Cons:

App could be better – but this is a criticism I have about almost every streamer/server.

**Price – Basic Sakura (as reviewed) €500. Deluxe version with display and remote €650 (both prices inclusive of VAT).**

*Photographs show matching Sakura amptoo*



## SPECIFICATIONS

The specification can be tailored to your requirements. The Sakura audio server is based on Raspberry Pi hardware, and features an integrated DAC which supports high resolution playback (configurable with a 24/192 or 32/384 DAC – the review model is based on an ES9023 DAC chip, capable of 24/192 resolution- and a variety of services (Spotify, Internet radio, UPNP/DLNA playback, Airplay, etc.). It plays most of the usual audio formats (MP3, Flac, Aiff, WAV, etc.) via external USB disk, or a wide selection of Internet radio stations. It also supports network sources for audio files (NAS or a network share), and can play music files from a smartphone or tablet.

The server connects to network via Ethernet cable or wirelessly (Wi-Fi) and is powered by a 5V (DC) switching power supply.



# Optoma BE16 Bluetooth Earphones

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By Janine Elliot

People now demand that they have their music with them at all times, even when at the gym or out exercising and In ear monitors are becoming increasingly popular for this. Add Bluetooth and you make them even more portable. Janine Elliot takes a listen to the Optoma BE6i Bluetooth in ear headphones.

# OPTOMA BE16 BLUETOOTH EARPHONES

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I have always been sceptical of Bluetooth® headphones and earphones, having tried and even bought a number. The technology either reduced sound quality to an unacceptable level, or else the Bluetooth® is sporadic in operation, turning off at the slightest excuse, or often that the technology takes precedence over the sound quality of the speaker diaphragm.

At a time where Bluetooth® earphones are becoming increasingly visible in the high-street, indeed I see them as the next ‘big-thing’, it is no wonder that I am excited at being given the opportunity to hear a Bluetooth® IEM from a company producing high-end ear speakers. As I write there are rumours that the next iPhone 7 might not even have a 3.5mm earphone socket in order to keep the unit thin, so a high quality non-wired ear-set is needed to fill the space presently occupied mostly by those lesser-known brands by ex-rappers or those available by online companies. Whilst 3D TV and even those lovely curved tellies are going to be a “here today, gone tomorrow” topology, I seriously believe that non-wired earphones will take a major role in mobile music of the future. I spent 25 years between shifts at the BBC sitting on trains

listening to music on my cassette, then portable CD, then portable DAT, and then regrettably the MP3 player, with the constant problem of coiled up wires, broken cables, or the cables getting trapped by my clothing so that the IEMs fell out of my ear. I yearned then for wireless earphones, but they had not yet been invented.

The BE6i is a very new product, in some respects similar to the BE6 before. That product was well received by the audio-press. This “i” improved version has a better battery life of around 8 hours (I achieved slightly more in my reviewing) and have better protection against rain and sweat. Unlike the ‘plastic’ models appearing in online shops, these are made from aluminium and certainly have that “made to last” quality. They also feature aptX® and AAC compatibility, so allow better audio streaming. Even answering calls from my mobile phone was quick and good quality (both ends of the line). More than that, they look gorgeous. The solid metal results in better sound; I first audibly could hear the effect that metal cases have on earphones about 10 years ago, but only recently when reviewing the various metal variants of the Flare R2Pro.



# OPTOMA BE16 BLUETOOTH EARPHONES

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The difference between the aluminium, stainless steel and titanium versions was more profound than the weight and chemical makeup. The BE6i therefore feels tougher than many similarly priced IEMs. They are also water-resistant (IPX5 certified), just in case you like to listen in the shower. To put all this into context, IPX0 means it's not waterproof, IPX1 means it will be protected by the occasional drop, all the way up to IPX8, which is totally waterproof up to 3 feet under water. Whilst the UK weather luckily only occasionally gets that bad, IPX5 is guaranteed to protect from water jets in all directions, so you can safely listen to Handel's Water Music whilst washing the car. The box they come in might be nothing to shout about, but once you open it up it is pretty clear that they have thought of everything here. As well as the best looking and solid hard-case to put the earphones in so that they cannot be damaged whilst bumping around in your handbag, they also come complete with a plethora of earbuds. There are six sets of silicone ear tips. Three sets are slightly shorter than average ear tips offering greater comfort when used for prolonged periods. The other three sets are longer and therefore form a more secure fit in your ear canal, being designed for those with an active lifestyle. As well as this there are two sets of my favoured Comply™ soft foam ear tips, with their better noise isolation and ability to stay put when moving about. If that is not enough, they also come with what I term as "Spock" wingnuts that you attach between the aluminium barrel containing the very large 10mm driver and your chosen ear tips. I only wish the space was slightly bigger as it does mean that if you choose the longer length ear-tip it has to be slightly squashed in order to fit both items onto the frame. This only became a problem on a few occasions when removing the earphones the Comply ear tips remained in my ear. When in use, though, the Spock wingnuts tightly and comfortably fit in your ear auricle to keep the unit sat secure so that you can play music without the worry that they will fall out when you run to get out of the rain. The wingnuts are made from silicon and have a hollow "spring" design to keep that comfort greater and more secure.

As mentioned, the BE6i contains a very large 10mm driver. This doesn't mean the bass will go down below 20Hz, as that is very much decided by the Bluetooth®. Rather, it gives a very flat

frequency response and ultimately eliminates unwanted reverberations that would otherwise affect the frequency curve. This is a very musical player that played whatever fed to it without complaints. The driver is made from a high-grade titanium and magnesium and inert metal is used to form a thin nano-layer over its surface. This precise mixture of metals, along with the help of a circumferential copper ring, allows the driver to maintain what they term as 'optimal structural integrity for distortion-free sound even at high volume levels'. Indeed, the sound was unstressed, whatever I played. The patented driver selected for the BE6i is designed to maintain a constantly accurate impedance curve, resulting in improved sound quality from any source whatever the frequency. This also has the added benefit of extending battery life, which at 8 hours is 25% longer than their previous Bluetooth® IEM, and is very good by today's averages.

In recent years there are simply hundreds of new headphones and IEMs appearing as we humans become more insular and lose our ability to communicate with those around us. And, unfortunately, there is more rubbish pertaining to be "top quality" that appears in the press, even I hasten to admit toasted by audio reviewers. I have been often dumfounded at audio shows in the last few years when I put on £1000 cans that either have a totally unreal frequency response or inefficiency that make them anything but portable. Luckily (or unluckily) this review coincided with a short time stuck in a hospital bed which gave me the perfect review conditions to try out the BE6i. Their comfort and truly portable design was of course prime importance during my encumbrance, but the sound quality made my stay all the more painless. Lying in bed forever listening to music was actually fun!

Firstly, they look striking when "assembled", available in either a white/gold version or a classy matt grey/silver finish. The instruction manual is just a set of pictures without words, to save translating endless paragraphs, and was extremely easy to follow to set up within seconds. The flat cable is for me a must-have in terms of design; this idea was introduced to me by Jays IEMs I reviewed for another mag a few years back, and makes untangling and wearing a lot easier. The BE6i is recharged in around 2 hours via

The driver is  
made from  
a high-  
grade  
titanium and  
magnesium  
and inert  
metal is  
used to form  
a thin nano-  
layer over  
its surface



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a micro USB socket built into the in-line remote control. The remote is very quick acting, remembering up to 8 different Bluetooth® devices, and manually accessing a ninth if you are that way inclined. Turning the unit on and playing from my Sony Z5 was simple and took a matter of four seconds. With Sony's NFC that could have been a very slightly shorter time, though that would put up the price. Even forwarding a track or changing volume was quickly done. Some Bluetooth® devices I have tried are not quite so controlled in this particular behaviour. The volume up/down was quick and operated in larger steps (around 2dB from my Sony phone and slightly less from other sources) than some remotes I have used, meaning that whilst getting an exact volume level might be hard, you only need to press and let go to immediately hear that the level has gone up or down, without keeping your button held down still wondering if it actually doing anything, and then before you know it you have changed tracks. My favourite symphony of all, Vaughan Williams London Symphony (London Philharmonic Orchestra, Sir Adrian Boult) has an amazingly quiet start before it lets' loose with the Cockney "Have a banana" theme. With the earphones tightly in place the dynamic range from quietest to loudest was not a problem for these Bluetooth® inner-ear cans, nor was there any audible noise. The 10mm drivers handled the music from this and other albums I played with a bass and top end that lived well up to their £100 price tag. I value my hearing so wouldn't blast the music, but the background noise was never noticeable apart from that on the music itself, and most importantly the music sounded equally good at all levels that I played it. Whilst they have a 30m range from the sound source, this still does depend on there not being walls or large obstacles in the way, but with most having their phone or HiDef source in their pocket or handbag this was never going to be an issue. The BE6i played the music with a good sense of ownership that made it very enjoyable. The frequency response was very flat from bottom to top. Whilst some might find only their JVC XX Bass Boost IEMs give enough grunt, the BE6i was just plain honest. David Rees-Williams Trio "Classically Minded" was gentle but detailed from the two pianos (yes, two) I can hear with the bass and drum. The main piano is closer miked on the left with the accompaniment less

defined on the right; not the way I would have engineered it.

With Optoma presently releasing a HEM multi-driver IEM series (see review coming shortly) with frequencies from 10-40,000Hz I did wonder if the BE6i could have more appealing frequency credentials. However, when you consider that on top of the music the BT technology needs to convey other functions, such as the microphone, remote control functions and battery information, it is not quite that simple. Be warned about believing those online companies claiming enviable frequency responses. As Reuben Klein, Audio Product Manager, Optoma EMEA, informed me;

"Adding the same hi-res certified drivers that we have specified for the HEM series will require a redesign of the whole platform as the drivers will require far more power to maintain their performance".

If Bluetooth IEMs do take off, as I see them doing, then the platform for them will no doubt need to improve to allow this extra bandwidth and greater speed needed to carry more information, just as the original USB has morphed towards USB4 (in around 2020). The future is exciting. Sony, for example,

has tackled this with their proprietary LDAC system, which transmits approximately three times more data at around 990 kbps (allows 96KHz/24bit).

Back to the music, Mozart 41st Symphony had all instruments sitting just where they should be in the soundstage, as Mozart sets the first and second violins off against each other in music conversation. This was fun. Turning to Ella Fitzgerald tribute Dee Dee Bridgewater singing Duke Ellington's "Cotton Tail" it felt almost like dummy-head stereo, with the clarity of the ride cymbals against the bass. Neither took supremacy, rather they worked as a team, making the music a pleasure to listen to. Bass in "Spring Can Really Hang You Up The Most", Rickie Lee Jones was superb, the aptX® making it all sound so easy. This track isn't extremely spaced between all three instruments; with the bass left, vocal centre and acoustic guitar centre right, but all was extremely clear, and I certainly felt no missing bass end. The sound might not be quite as clear and extended as my top spec IEMs of choice, but these are 4 times the price. But bear in mind the lowest note on a full-size piano is 27.5Hz (lowest A), the 20Hz cut-off is not an issue. Only the lowest organ pedal notes in the final movement



# OPTOMA BE16 BLUETOOTH EARPHONES



of Saint Saens Organ Symphony (Jane Parker-Smith, LPO, Serge Baudo) couldn't quite make it for me, though harmonies made it so you wouldn't really notice. Most loudspeakers would find that a tough order. The Division Bell, Pink Floyd, offered me a relaxing and informative apparition into my late youth, yet the detail in the voice and guitar made for an invigorating and musical experience with a depth of sound is clearly audible giving a 3D soundstage, as far as that can be possible stuck inside your head. And when I eventually prised myself away from playing these IEMs, the magnets at the ends of each earpiece married the two together so the BE6i could be worn like a necklace. A very clever afterthought.

## CONCLUSION

Now, I don't know about you, but I find my loudest and most excitable friends tire me out and give me a headache quite quickly, and so it can be with many of the IEMs I have listened to. The BE6i was an honest but still a very entertaining friend to accompany me for 8 hours before needing recharging, and I never felt I wanted to turn him off whatever he was playing. There were no sudden cut-off artefacts at each end of the scale, so no concerns about bottom and top frequencies. Perhaps the top could be a little quicker and tighter, but this was already better than many post £200 wired headphones I have listened

to. No, I strongly believe this is a cleverly thought-out and designed product, that I even bought one. For £100 this is an extremely good value product and sounds very natural, with nothing sounding out of place. Considering the technology limitations and having heard a number of Bluetooth® IEMs in recent years, this is a good buy from a company with a heritage of excellent earphones that go a lot more expensive.

**HIGHLY**  
**Hifi Pig**  
**RECOMMENDED**

## AT A GLANCE

**Build Quality:** Excellent build for the price, with solid aluminium body and "flat" wiring so won't get caught up. water-resistant (IPX5 certified), with magnetic backs to keep secure around neck whilst not in use. Excellent quality of carrying case and accessories

**Sound Quality:** For the price this is excellent, allowing full frequencies from 20-20,000 with with good and not over-emphasized bass end and a clear treble with no excessive brightness. aptX® and AAC compatibility.

**Comfort:** These were exceptionally comfortable for long periods, the lightweight unit of remote/battery/microphone, not pulling at all when moving at high speed. With the Spock-wingnuts they were kept secure in the ear.

**Value For Money:** At £100 these are good quality IEMs in terms of sound quality, and adding to this their Bluetooth® capability make them highly recommended in terms of value for money

### Pros:

Honest, flat sound covering all frequencies 20-20000Hz

Musical performance

Very quiet in operation

Quick response of controls

aptX® and AAC compatibility

Choice of two colours

Cons:

Not a lot at this price

Some may find the sound limiting in grunt in the extreme bass and top ends

## SPECIFICATIONS

Connection type: Bluetooth 2.4Ghz

Bluetooth type: V4.0+EDR Compliant

Bluetooth profile: HSP 1.2, HFP 1.6, A2DP 1.2, AVRCP 1.4 , aptX, AAC

Codec: SBC, aptX, AAC

Cable length: 550mm

Driver Type: Dynamic

Driver size: 10mm

Impedance: 20 Ohm

Battery life: Up to 8 hours

Battery type: Lithium-ion battery, Cylindrical Type, Typical 3.7V/120mAh

Microphone sensitivity: -42dB

Frequency response: 20Hz – 20kHz

Sensitivity: 95dB +/-3dB at 1KHz

Power consumption: 15mA at A2DP mode, speaker output 75dB SPL

Range: Up to 10m

Weight: 19 Grams

# Some Follow

others

# Leedh!



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The Leedh E2 loudspeaker system and its dedicated subwoofer are the culmination of years of intensive research into the fundamental principles into the way the human ear perceives sound, the way that sound is generated and how the inherent problems with conventional drivers can be overcome.

We believe that Leedh E2 offers music lovers looking for the very best in sound quality the ultimate listening experience, offering a level of fidelity previously unattainable and unimaginable with conventional driver technology, which has changed little in decades.

LEEDH designers have developed a new type of electrodynamic loudspeaker, the Acoustical Beauty Speaker. This technology does not contain a soft iron pole in the motor, a foam edge, or a spider in the suspension, because these three components produce the majority of sonic imperfections found in all traditional speakers.

The purity of each wave of sound reaching the listener is the zenith of the unique and innovative way the drivers in the loudspeakers are designed, bringing the concert hall into your living room.

## **Leedh - The Sound of Science**

For more information on this exceptional loudspeaker technology [CLICK HERE](#) to visit our website

[www.leedh-acoustic.com](http://www.leedh-acoustic.com) or email [Gilles.Milot@Acoustical-Beauty.com](mailto:Gilles.Milot@Acoustical-Beauty.com)



# **TSAE Evince Loudspeakers**

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By Stuart Smith and Linette Smith

**In the first of a new series of reviews from the Hifi Pig vault, we take a look at the very interesting and unusually shaped Evince loudspeakers from German manufacturer TSAE**

**S**CHERER, the brand of TSAE (Thomas Scherer Audio Engineering) and the owner Thomas Scherer is a German based audio engineer who manufactures just two loudspeakers, the standmounted Elation and the floorstanding Evince which we're looking at here.

The Evince is a transmission line design using a five inch fullrange driver. Low frequencies from the back of the full range speaker are channeled through a dedicated tube/duct and output in-phase with a forward facing driver. The shape of the transmission line used here allows the bass frequencies to travel through the line but mid-frequencies are reflected back in on themselves at the corners so that only bass frequencies are emitted from the mouth of the line. The cabinet is made from birch ply covered in a composite material that looks very sleek and well finished – it feels like very highly polished stone to the touch.

The review pair were white but you can have pretty much any colour you want. It's a very interesting and modern looking design with an interesting profile for which Thomas has been granted a patent. Basically where all other transmission lines I've seen hide the transmission line within a box the Evince has it unfolded and forming the body of the speaker – have a look at the photographs and you'll see what I mean. It's not a huge speaker, though it is deep from front to back, and it is very slim (220 x 944 x 873 mm w/h/d). The speakers weigh 25.5Kg. Purely from an aesthetic point of view I think it's a winner, but I'm sure there will be some for whom the design is just a little too radical. They are, for all their unusual design very unobtrusive in the room and I can see them finding favour in ultra sleek and modern rooms, but also in more conventional rooms where a person wants a statement piece. Attached to the loudspeaker base is 4

These are  
really simple  
to set up  
and really  
aren't fussy  
about  
placement  
at all



# FROM THE VAULT

cones but other feet are available to suit your particular floor type.

Plugging in the usual 300B amp which gives 18 Watts per channel it quickly became apparent that this was not the amplifier for the job and so we plugged in a Gainclone of 25 Watts (ClonesAudio 25i) which immediately gave us more control and grip to the loudspeakers, with much better and less exaggerated mid frequencies. Sensitivity of the Evince is measured at 90 db/ 5 W/ 2m listening distance (this refers to a real listening situation in a room rather than the usually quoted db/ 1 W/ 1m listening distance, which Thomas claims is a useless measurement/statement) Loudspeaker cables used were quite bulky and I was worried that they would be too big as the single pair of WBT Nextgen terminals is located under the loudspeaker. I needn't have worried as they fitted fine. It's actually quite an elegant design and means that there's no strain put on the cables at all.

Setting up the Evince loudspeakers is a breeze. We plonked them down, well into the room, about six feet apart and with a slight toe in to the main listening position. These are really simple to set up and really aren't fussy about placement at all.

## Listening

First up on the CD player was Duke Ellington and Louis Armstrong "The Great Summit". Double bass was the first thing to stand out from the recording on the first tune Duke's Place. It was bouncy, well defined, clearly separated in the soundstage and not at all flabby. The image of the bass player stood to the left of the stage was clearly 'visible'. The beautiful timbre of Louis Armstrong was well produced with the decay at the end of phrases being apparent. Drums were a real treat and the swing of the piece being obvious – you can visualize the drummer being very relaxed and loose whilst playing. Pianos stopped and started properly and sounded ...well it sounded like a piano with different emphasis on the keys been easy to hear. Dynamically you could hear the different nuances in the music – quiet passages or instruments were well described with loads of detail. This is a nicely balanced speaker my notes say and I just wanted to keep on listening to the album and enjoy it for what it was. Soundstage is high and wide but very natural and didn't feel over exaggerated or artificial.

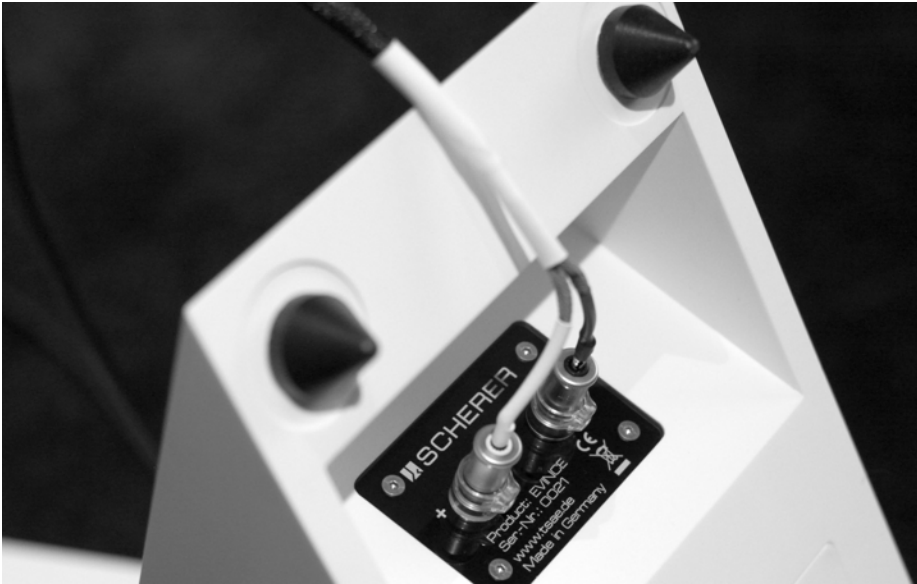
More laidback vibes were the order of the day and so to Gil Scott-Heron's "Did You Hear What They Said?" Again a

nice representation of the soundstage with pinpoint imaging – clearly the point source single driver at work here! Guitar had a nice tone and attack whilst bass was clear, easy to follow but not over dominant. Flute was breathy and natural sounding and vocals were beautifully portrayed with every little shade of emotion being heard. These are a fairly small speaker but the big sound and the amount of bass produced belies their stature.

If you've read other reviews of mine you'll know that I like to listen loud but I wanted to see what these loudspeakers would sound like at the kind of levels that people with neighbours would listen at and so we turned the amplifier right down and put on Nolwen Leroy's "Brettone" album. It has a wonderful version of Alan Stivell's "Tri Martolod and is worth buying just for that one song. Despite the low volume the music was detailed and the Breton inflection in Leroy's breathy voice was clear as a bell and with nice tone. I moved from the "hot seat" to sit on the sofa, which is at 90 degrees to the loudspeakers and much further away, to have a glass of wine and a slice of pizza. Immediately it was evident that off-axis these things still manage to throw up a very good soundstage with little loss across the







# Bass is good on these speakers – full and tight

frequency range. The sound in the hot seat was better with more pin point imaging but on the sofa it was still wholly believable. A good loudspeaker for those who listen as a family and in real world houses I think. I spoke to Thomas later about how he manages to achieve this and he claims this is down to the way he measured the loudspeakers during tuning and for the design of his filter. Basically rather than measuring the speakers on axis he measures all around the speaker and then takes an average of these measurements and tunes accordingly. Here's what he says: "Transmission lines are seen as being really difficult to build. I'm using a measurement technique that I think is unique (we call it "Tonal Measurement") which depicts the dipole characteristic of a TML at low frequencies, which relieves in fact the tuning of its bass response. Many full-range drivers can sound nasal or dull and the real frequency response is not depicted with conventional measurement methods. With our method we are able to tune the required filters properly; as a result we achieve a correct transient response. Now the speaker shows a perfect tonality with "drive in the bass part".

I listen to a lot of Breton music, both live and recorded and the traditional instruments used on some of the tracks on Nolwen Leroy's album were well produced and very believable. You get a real connection with the music and it's sometimes difficult to listen critically to these things. They're very nice loudspeakers and certainly something I could live with long term I think.

Now, one of my fellow Hifi Pig reviewers (no names....Jerry) mentioned that I'd listen to anything so long as it played dubstep well...but I do listen to quite a wide range of music. However, anything that is to be given houseroom for anything more than a few days has to pass the Hardfloor test...more of that later though as the next album onto the CD was 'Happy Woman Blues', the breakthrough album for Lucinda Williams. The volume was turned back up. I was really being drawn into listening to much more 'acoustic' music with the Evinces. The first track, 'Lafayette' is a Cajun tinged tune and I soon had my feet tapping to the snappy drums underpinned with the slow and loping bassline. Bass is good on these loudspeakers – full and tight. There was a real feeling that the album was recorded 'live' and as a band rather than individual musicians recording their pieces separately and the fiddle was fast, tight and with no overhang of the notes. As she says in the tune "I might just dance until three".

"Ok, Jerry you're right" I thought to myself and headed over to the rack with the intention of pulling out some nice, fat, synthesized bass, but instead I was drawn to 'White Light/White Heat' by the Velvet Underground and the track 'The Gift' was chosen. I'm sure you know the tune, it tells the sad and sorry tale of one Waldo Jefferson whose girlfriend leaves him to go to college. Upset by her absence he decides to parcel himself up and send himself through the post with tragic consequences. Vocals on this track are panned right over to the left with everything else over to the right. John Cale's Welsh drawl comes over

# FROM THE VAULT

perfectly and sounds just like someone telling the story down the pub whilst the rest of the band screech and drone away over to the right. Perhaps not the best track to use in a review actually but it's clear the speakers are pretty much accurate and very fast.

And so to Half Man Half Biscuit's "Dickie Davie's eyes. The cheap, plasticky 80s synth is produced just so you can hear how horrible these things were, but the drums are crisp, snappy and tight. Perhaps here, for the first time I noticed the bass is not as full as I'm used to. However the swept cymbal splashes sounded great with the tom to the end of the tune being very life-like. This is low-fi music and this comes across well with the Evinces. It's at this point I notice that I'm actually digging further back into my collection than I've done in a while.

Right, that's it! It's time for some Hardfloor and the track 'Once Again Back'. For those that don't know it's a great tune for testing out how a speaker responds to low bass. The start of the track sounds as it should and the speakers feel like they're doing the job of good monitors in the studio. The imaging is pin-point accurate. When the bass does come in it's clear that this is a

different kind of reproduction to that I'm used to in the reference system – it's much tighter and drier and there is less of it. It's not trouser flapping but what is there is good. This makes me think that this is actually a more accurate sound than my current speakers. Words I wrote down here with relation to the bass were tight, taut and accurate. The Roland 303 may not be most peoples' idea of the perfect instrument to use when reviewing a pair of loudspeakers but I know the sounds the little silver box can produce like the back of my hand and the Evinces manage to convey the raspy, screeching harshness of the 'instrument' very well indeed.

## Conclusion

These are not cheap loudspeakers coming in at €12 140 (£10 360 at today's exchange rate) but had I the money they would certainly be on my must hear list and I could certainly live with them long term I think – actually I was working out what I could sell to raise the funds for these before they were taken away from me such was their impact.

Thomas has gone to a lot of trouble to make these a speaker for real world situations and one of the stand-out

features for me was the superb off-axis performance which is down to the way he measures and the subsequent design of the onboard filter. They are certainly a loudspeaker for using when entertaining guests as everyone gets to hear great reproduction rather than just the person in the hot seat.

They do imaging and soundstaging superbly (especially when you're in the hot seat) but you don't get the impression that the soundstage is artificial and this is another of their positives.

Upper frequencies are clean and crisp and I'd suggest that these speakers are pretty flat across the spectrum. I think anyone with valves, particularly 300Bs with their exaggerated (to my ears at least) middle frequencies, may want to ensure that they benefit from an extended home trial as I don't believe they are a good match.

Bass is astonishing from such a small driver and design and it is perhaps more precise than I'm used to, but it doesn't drive the room in the same way that much bigger drivers do – you wouldn't expect them to.

On acoustic music they offer up a real image of the recording environment and



on electronic music they behave very much like monitors when in the sweet spot.

Add all of the above together and you get a loudspeaker that sounds great in real homes, across a wide range of genres and at both high and low volumes, but you also get something else and that's a unique and interesting piece of modern sculptural design – they were certainly a talking point when anyone came to our house whilst they were in place.

The main thing is the music and I just couldn't stop listening to these (They aren't fatiguing in any way I don't think) and I went on to listen to masses of music whilst they were with us.

**Stuart Smith**

### **The Aliens have landed.**

I'll be honest, I really, really like loudspeakers that are a bit, well...different. Life is far too short to only ever have boring, black boxes in your system so when something that looks like it has been beamed down from another planet arrives for review, I get very excited.

The Evince is certainly different, and you could be forgiven for thinking that they are just too 'try hard' in the looks department, that Thomas Scherer has dreamt up a 'wacky' design just so his speakers stand out from the crowd.

The truth is though, the Evince looks like it does because it is the ultimate expression of that age old adage, 'form follows function'.

In true Bauhaus spirit these stunning speakers are how they are because the design has been stripped back to basics. The transmission line would usually be folded up and tucked away in a box, but Thomas has freed it from its prison and let it dictate the overall shape of the Evince.

The result is an incredible shape; different to any other speaker I have ever seen.

They are actually quite diminutive in size, which I was surprised about as I thought they would be much bigger, but they look very elegant rather than being too room dominating.

### **The future's white, the future's Scherer.**

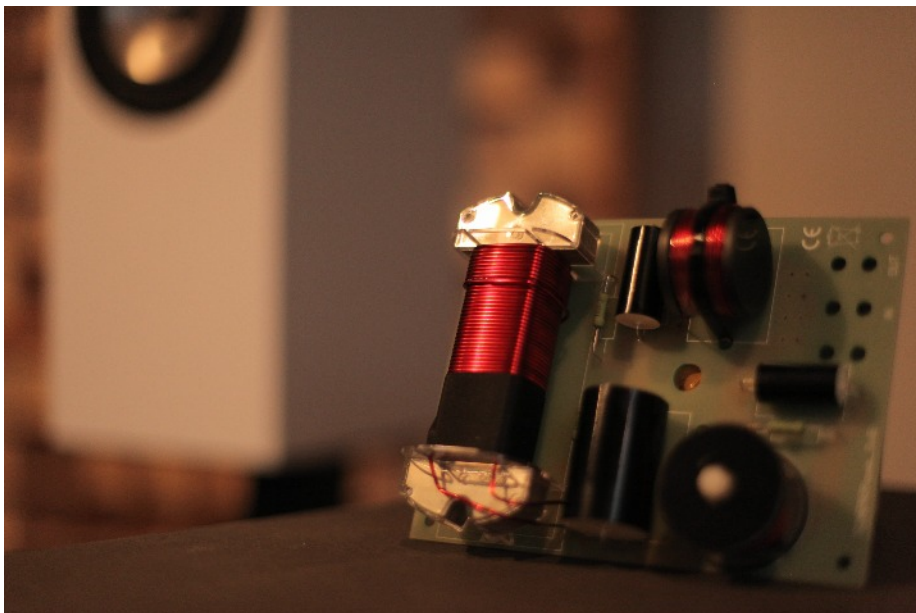
The speakers are truly beautiful, neither matt nor shiny, they are finished in a thick coating of Titanium White GetaCore, which is a composite material that looks and feels like stone or perhaps porcelain.

It really is gorgeous and you just want to stroke it and has the added advantage that if you do something stupid like scratching your speakers, it can be polished out.

There seem to be a lot of white speakers on the market at the moment, much in evidence at Munich this year, probably down to the ever increasing force of the WAF, but these really stand out as being a top quality finish.

The GetaCore also has the added advantage of strengthening the speaker and making it incredibly rigid, which

The truth is though, the Evince looks like it does because it is the ultimate expression of that age old adage, 'form follows function'





# FROM THE VAULT

helps stop vibration...form follows function again.

You can, if you like, have the Evince in a different colour, but I love them in white and having that juxtaposition of a super futuristic speaker in an old, stone house.

## **Surrounded by Sound.**

So lets get down to the nitty-gritty, how do these babies sound, there is no point them being dressed up in a glam designer frock if the sound quality isn't there.

I was actually a little worried that they may be too small for our room, but the immediate thing that grabs you is how they seem to throw the soundstage much further than they look like they should.

The sound is very defined and crisp but also mellow, there seemed to be no harshness at all.

Shut your eyes and listen to them and you are enveloped by the music...open your eyes again and you think you should be looking at a much bigger pair of speakers. It messes with your head a bit!

You could (and we did) listen to these non stop without getting fatigued or bored; they are the perfect speakers to live with.

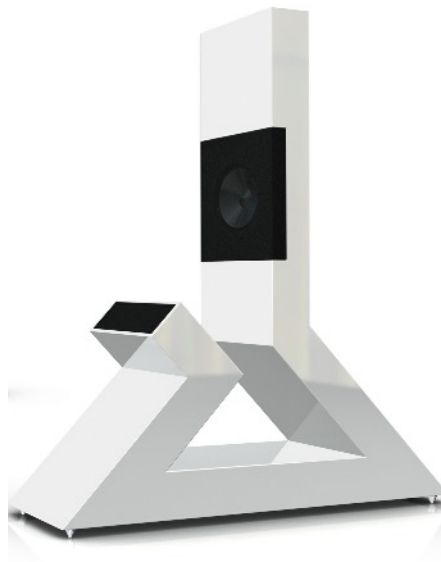
What makes them even more perfect to live with is some very clever tweakery that Thomas has done with them.

Unlike a lot of speakers, you don't actually have to be sat in the sweet spot for them to sound right.

I was in the kitchen which is off the main room and at a lower level and they still sounded fantastic. You can even walk around behind them and, although not completely omni directional, they are on the verge of it.

This is a great thing because it makes them a lifestyle speaker, not just an audiophile speaker. Get on with your life while you enjoy the music!

## **Bassline Junkie.**



As I mentioned earlier, we really gave these speakers a good listening to and we listened to just about every genre of music that we had in the house, from jazz to country to guitar rock to Breton folk music, there was even some classical!

Everything sounded fantastic on these, but me being the basshead that I am, they had to have dance music thrown at them.

Play anything by Hardfloor, especially 'Once Again Back' or their remix of 'Blue Monday', and you really separate the men from the boys in the bass dept.

The Evince's certainly didn't disappoint, they have an incredible capacity for clean, well defined bass.

They sound fabulous at a lower level but really come in to their own when you crank it up a notch.

And then, (and I can hear Jerry gnashing his teeth and wailing from over the Channel!) we got the Dubstep out.

The Dubstep Washing Up Crew (the alter ego of our youngest teenaged son, so named because he puts on his headphones and washes up whilst listening to Dubstep and generally chips every bit of crockery in the sink) was well impressed with them too, even that big fat dirty 'hoover' bass of the Dubstep genre sounded great.

These speakers brought with them a proper party atmosphere, they made you feel like you were dancing around getting ready for a 'big night out' ...but then you don't bother going out because the music is so good, just invite every one back to yours!

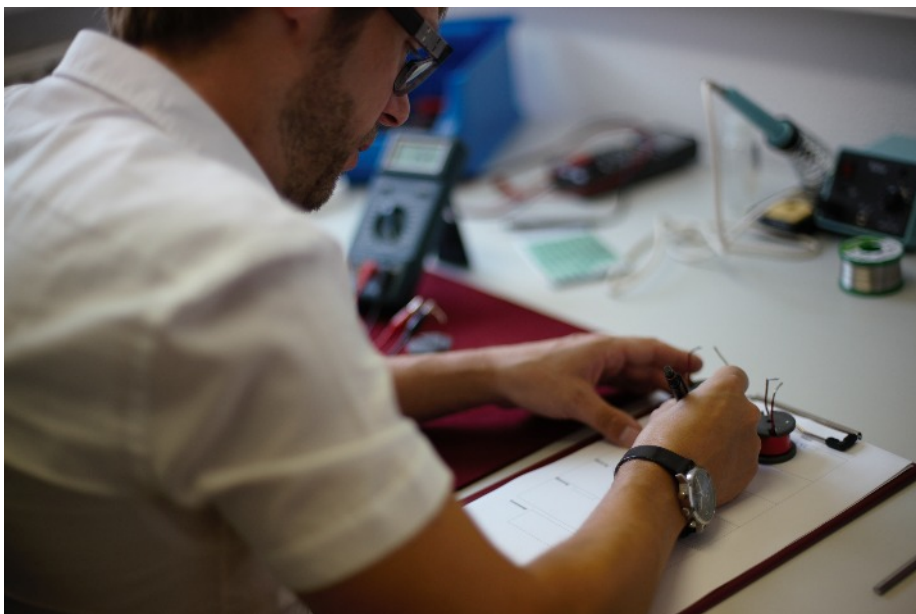
12000€ is a lot of money, but you are not just buying a pair of loudspeakers here; you are buying two works of precision, German-engineered art.

They won't date because they aren't following a fashion fad, they are not afraid to stand out from the crowd and be different.

They are speakers to be lived with and enjoyed, whatever your music taste, and appreciated as incredibly beautiful and well made.

I heartily recommend them.

**Linette Smith**



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HIGHLY  
COMMEDED

*Benchmark*  
...the measure of excellence!™



hi-finews  
EDITOR'S  
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# Behind The Brands

**With Jonathan Billington Of  
Music First Audio**

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# BEHIND THE BRANDS

Jonathan Billington is the person behind Music First Audio who make TVC preamplifiers, phonostages, step up transformers, headphone amplifiers and have just opened a dedicated listening space called the Music First Studio. Hifi Pig gets Behind The Brands with Jonathan.

## **Your History**

### **How did you get into/what was your first job in the industry?**

My First job after leaving school in 1978 was winding transformers for Stevens & Billington Ltd.

### **Who or what was the biggest influence on your career?**

I was very lucky. My parents introduced me to music at a young age. Full orchestral performances before I was 10 years old. I loved music from such a young age. And the family firm made audio transformers.

### **Proudest moment/product you're most proud of?**

Getting my degree in Electronics and communications engineering in 1986 was a good feeling. My Baby Reference V2 is the product I am most proud of.

### **What product do you wish you had never conceived/launched?**

Nothing springs to mind.

### **Tell Hifi Pig readers about your next project and what they can expect in the future from you and your company.**

I started making moving coil step up transformers in 1988. Line control transformers in 1998. And Phono Amps in 2015. So it has to be power amps and loudspeakers next. Keep your eyes on the our news page on the Music First Audio website

## **You and your system**

### **What was your very first system?**

In the 60's my grandmother gave me a transistor radio. Radio Luxembourg was way better than homework. Not quite a system but I was now hooked on recorded music.

### **Tell us about your system history and the way it has developed to the system you have today.**

In the 70's my parents bought me a mono turntable with the speaker in the lid. My first good system turned up in around 1988. Cambridge Audio CD3 into Musical Fidelity A100 integrated power amp and onto Musical Fidelity MC2 speakers. By the late 1980's I was making transformers for many UK companies. Getting hold of components



# BEHIND THE BRANDS

was not a problem. Here is a chronological list of the components that have been used in my home system and have made me smile.

Audio Note K's. I still have a pair. EAR valve integrated power amp sounded very nice. Audion silver knights (I think) sounded good. The Audio Note K's were replaced with J's and later E's. I used the Cambridge Audio CD3 as a source at home for many years. Then I reintroduced myself back into vinyl. I sourced a Nottingham Analogue Spacedeck with a Rega arm. Cartridge by Ortofon. Now I wire up some of my own transformers for MC step up and run into an Audio Note (UK) Phono stage. Speakers are still Audio Note (UK) and power is by EAR integrated. Now I introduce my first Transformer Volume Control into the system. By now its 1999. These TVC's really do a very good job. Since then I have played with an SME V arm, Quad ESL 63, Bel Canto, Quad 405-2 that I am still using.

I have used Howes Acoustics Quad11 power amps, and Howes Acoustics ¼ wave speakers. Then I get into reel to reel tape machines. My first one was a Revox A77. Making recordings from a Firestone Audio DAC from the Cute range. It's still being used at work. Then I used a B77 machine. And today I use a Nagra machine. So today (25 August 2016) I will go home and listen to:

Audio Note (UK) TT2, Ortofon mc15 super 11, Audio Note arm.

Music First Audio Classic SUT

Music First Audio Reference Phono Amplifier

Nagra IV-SJ reel to reel

Music First Audio Classic QSE Pre-Amplifier

Quad 405-2

Snell J's

Cables by Melodika

Power conditioning from Isotek

What component/product do you miss the most/wish you had never got rid of?

Rogers LS3/5A (don't ask!)

How often do you listen to music?

Every day.

**Best system (or single component) you have ever heard (no brands you represent please...!)**

MSB Select 11 DAC, SME 30. The best system I have heard this year was thanks to Mr. Williams in Leicestershire. Some lovely modified Quad ESL 57's and a rather nice Pre-Amplifier. Icon Audio power amps and phono amp (I think). Good power conditioning and very good positioning of components.

**The state of the industry**

**What's your view on the valve renaissance of the past 20 years or so?**

For many, valve amps never went away. As a transformer manufacturer I have been pleased with the renaissance. As a show exhibitor you need to keep a few spare valves not far away and have a good transistor back up. I have heard some great systems over the years. Some valve and some not.

**Vinyl resurgence... what are your thoughts?**

I put on my 1977 vinyl copy of The Jam's "This is The Modern World" a few days ago. On the inner sleeve was a message from my first girlfriend. "Lots of love Christina x" No more needed.

**Is CD a dying format?**

Yes.

**What are your views on the state of the industry/where is it going/what will it look like in 5 years/what will typical systems look like?/What will happen to prices?/What will happen to the high end – will it carry on regardless?**

I sit at work and listen to my demonstration system. It all ways makes me smile and sometimes I cry with joy. Well perhaps a small tear. The British HiFi industry has a magnificent past and will continue, at its best, to produce magnificent components that will make many more listeners smile and feel joy. As engineers and manufacturers, we must all ways make sure we all ways move things forward. A small step forwards does take a lot of research and development. The overall effect of these small steps produces exceptional results. I hope the industry moves forward through engineering and design improvements. Let's not rely on marketing and focus groups. I dread to think what they could come up with. When was the last time a pretty box made you smile or produce a tear of joy?

**Digital downloads, what do you think their impact has been on the way people listen to music?**

I love them. If you are on the move your phone or similar will be a great way to hear your choice of music. Last Saturday evening I downloaded Christine and the Queens "Tilted" and I loved it. So I then downloaded the complete album. Then I transferred to my Nagra TA-TC reel to reel on 7.5" tapes at 7.5 ips. I had to do some editing. Now I have the tape at home and the digital at work. As far as analogue /





# BEHIND THE BRANDS

digital goes I am a firm believer in putting music first.

**How do we engage young people, the audiophiles of the future?**

Buy them a transistor radio. Then a TT with perhaps 2 speakers. Hope they hear a full orchestra or Jazz trio, perhaps a beautiful African choir. And then just hope that they get the opportunity to hear a great system. Perhaps a parent or relative. Or a system set up in a wonderful demonstration studio. We have to work at it and keep our fingers crossed. And remember the harder you work the luckier you get.

**Online shopping's effect on the retail industry?**

It is good for sausages.

**What are the industry's biggest con(s)?**

What's the deadline for this piece?

**The way you work**

**Presuming the measurements are fine, what do you listen for when assessing products?**

Take it home and have a listen or use it for a few days in the demonstration studio.

**Your sound preference - 'Smooth, listenable musicality', 'forward, driving, 'foot-tapping', involving sound' or 'detailed neutrality and transparency'?**

Detailed neutrality and transparency is a good start.

**Turntable preferences...direct drive, belts, Idlers or what?**

All mine use belts and sound good to me.

**Your preference - Full-range floorstanders or freestanding mini monitors with a sub?**

A well-built BBC designed monitor speaker sounds pretty good to me.

**It's all about the music, man...**

**What is your favourite recording?**

Are you joking? It is a bit like asking George Best "what's your favourite beer? "



**Tell us about your 3 most trusted test recordings.**

Lou Reed-Transformer. Lou Reed-Transformer and Lou Reed-Transformer. I guess that is a three phase transformer.

**What are your most embarrassing recordings/guilty musical pleasures.**

Am I aloud to say Gary Glitter?

**Having safely ushered your loved ones out of the house as it is burning down to the ground, you ignore all standard safety advice and dash back inside to grab just one recording – what is it?**

It would have to be my original vinyl copy of This Is The Modern World by The Jam.

**Thanks for speaking with with Hifi Pig, Jonathan**







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# READERS LIVES

HIFI PIG READERS' ADVENTURES  
IN AUDIO

## An Evening Of Hifi and Booze

Audiophile Hifi and Music Evening at The Ridger  
Bar and Grill, Wirral on Sunday 21st August  
2016





For most of us, especially audiophiles, music plays a big part in our lives, whether it's listening to tunes on a radio in the car, at home on our Hifi, or in our ears while out and about. I myself love a bit of live music, mostly local pub bands or even a bit of Disco/karaoke to get a bit of a volume fix! (not to mention a few cold beers...cough!)

What do we have to combine music, food and booze into an easily accessible format? Where can we get quality music in a relaxed atmosphere and have the added social side to our hobby? Well apart from Hifi shows like North West Audio Show at Cranage Hall, nowhere. A few dealers have invitation evenings, but apart from that there is nothing that really fits the bill. This little question popped into my mind whilst whiling away a few hours in the garden and I had a bit of a "eureka" moment – why not bring my two favourite hobbies together? Music and Beer! Perfect!

I put the question to Audiophiles UK Facebook group! The answer was a resounding "YES!".

I approached Martin Clark of Do Good Audio with my idea, this to bring a selection of Hifi equipment to a local pub, set up a budget, mid and high-end system and entertain and educate some of the customers into what is now available and achievable in a home system. I'm sure a lot of people are confused and bamboozled by modern technology – streaming, NAS drives and add to that the fact that computer networks sends a shiver down my spine, and I have tinkered and built a few

computers over the years and been at this hobby for over 30yrs!

So the seed was planted and I approached my local pub with the idea and they also thought it was a great idea. Martin, Matt Morgan (Dali UK), and Gareth James (Ophidian Audio) along with myself formed a little plan and on Sunday Martin and his partner Kirstie arrived at The Ridger along with myself in pouring rain to unload his truck of Hifi goodies! Martin and Kirstie set about unpacking boxes of Hifi and I did a bit of furniture re-arranging to set up the room. It was a raised area some 20x40 feet with a vaulted ceiling. I know Martin was keen to let loose a pair of big Dali Rubicon 6 speakers in this space and let them work their magic in a space most people are not fortunate to have.

Anyway, I'm now jumping the Gun. Martin set up the first of the systems which consisted of an Audiolab 8300A amplifier with the 8300CD Via Gekko Silver Lining XLR's. The Audiolab CD was used as a DAC fed by a Laptop to the Ophidian Minimo Speakers using Gekko Silver Dream speaker cables. These diminutive speakers have got to be seen and heard, as the output of sound defies physics! There is such a huge sound from the tiny boxes. Gareth James who demonstrated the speakers gave a little talk on how the design incorporates a transmission style he calls Aeroflex, whatever the magic incorporated it certainly seems to work. The review on the Ophidian Minimo can be read here on Hifi Pig. We then swapped out the Minimo for Gareth's slightly larger Mojo standmount speaker incorporating two of the tiny drivers

This little question popped into my mind whilst whiling away a few hours in the garden and I had a bit of a "eureka" moment – why not bring my two favourite hobbies together?





# The final system set up was to give vinyl fans a treat



from the Minimo and the Aeroflex design.

Swapping brands of speaker to give the listeners some variety, we replaced the Ophidian with some Acoustic Energy Reference 1 speakers. These are the replacements for the 30 year old AE1 classics. The Reference 1s gave a great rendition of some classic tunes from Dire Straits and Steely Dan, a nice detailed and rhythmic presentation via the Audiolab CD/Amp combo.

We then had a little break from the music to have some snacks and sandwiches provided by Ian Sharp, Manager of The Ridger, while we chatted about what we had heard earlier. The evening was going well and early indications from our guests were all positive.

Matt from Dali introduced some Zensor 1AX Active Speakers and first gave a demonstration of how easy it is to get on the streaming bandwagon by using a tablet to run Tidal via Bluetooth to the Zensor 1s. He was taking requests like a pro DJ and playing tunes for our guests. He then went on to introduce his Dali Rubicon 6 speakers, he gave a great little chat on the materials used in the cones and drivers.

The last CD based system to grace our listening room was assembled by Martin and consisted of the Dali Rubicon 6 speakers with Musical Fidelity M6si Integrated Amplifier. This was fed by a MBL CD player, which had been heavily modified by Danny Baty of goodsoundsmodifications. His extensive work bringing this already good Marantz based CD player up to a very high standard of musical reproduction indeed.





Once all the Gekko cables were installed we progressed onto the music playing. One of my good friends and big rock fan had been asking for us to play some heavy rock and as he had encouraged me by supplying a very nice cold pint of lager. We spun some AC/DC with a fine rendition of Thunderstruck!! Those big Dali's could certainly move some air, the wide open room and high ceilings providing an outdoor concert soundstage and feel to the proceedings. To say the listeners were impressed by the clarity and punchy sound was an understatement. Martin went on to play some WOW factor music to show just how good home HiFi can sound with Nils Lofgren "Acoustic live" and "Keith Don't Go" as well as Supertramp's relatively unknown album "Some Things Never Change" and "It's A Hard World". Then onto the Hugh Masekela album "Hope" and tracks, "Abagoma" (The healers) and "Stimela" (The coal train) for good measure.

The final system set up was to give vinyl fans a treat. Martin added an Edwards Audio TT3 turntable fitted with a Goldring 2400 moving magnet cartridge, he used the Musical Fidelity's own Phono stage for this. He spun Miles Davis "So What" and Radiohead "Fifteen Steps" we let these spin for a while through the tracks on the albums.

As the evening drew to a close Kirstie and Martin took a little time to show those interested some headphones from Grado and Meze via the Questyle Qp1r Hi Res Dap, playing some DSD/FLAC tunes.

At the end of the night we asked the attendees to fill in some simple response forms, and all are keen to do it again, and had enjoyed all that they heard and saw. My biggest disappointment and left me somewhat annoyed is that all the local Charity shops (and read about 12 in a half mile radius) refused to let me place an A4 advert by their second hand

music selection to let local folk know about the event. Organisations who want local volunteers to work for free, want local people to donate items to their cause, want local people to give money to their coffers, yet refuse to help local people promote local events that are none profit making! I even offered to make a donation to each charity, the answer was always NO! Very disillusioned is an understatement. I know they do great work and I fully support that, but it left me a little sad.

Anyway, not to let that put a dampener on what was a great evening of entertainment and music. Martin, Kirstie, Matt and Gareth did a great job of keeping all informed on what was being used and had answers to all the questions proposed by or audience. More events are planned for the future...watch this space!!!

**Dave Robson**



# BIRD'S EYE VIEW

AUDIOPHILIA AND MORE FROM  
THE FEMALE PERSPECTIVE...BY  
LINETTE SMITH

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## Tonight, I'm A Rock And Roll Star

Fame and the reasons people become, or want to become, famous.

I do like an autobiography, I think it's that look behind the scenes and inside the mind of someone who you will only ever have seen a carefully crafted public persona of, of being able to read their thoughts like an open book. We picked up a haul of music related ones recently, so that is my current reading list. Having just finished Bez of The Happy Mondays book, I'm now delving into the life of Keith Richards of

The Rolling Stones. Both these stars are probably as well known and infamous for their rampant drug consumption as they are for being in bands, reading their stories got me thinking about why people want to be in a band, is it for the music, their craft? Or for some is it the fame and adoration that they seek....and all the celebrity trappings that go along with that, like the sex and the drugs? Is it about being a rock and roll star, or being

a musician and being allowed to make your living doing what you love.

### Pour Some Sugar On Me

As a teenager, like most, I loved music. I went through several phases including being a bit of a goth before I found my true love of dance music at the start of the 90's. When I was a young teen I was into rock/metal music. I grew up in the Midlands where it was obligatory that everyone had a rock/metal/goth phase and spent their time drinking snakebite and black and trying to get into Rock City under-age. I would have loved to be in a band but, unfortunately, I could neither sing nor play any instrument to a decent standard. I'd had the standard school music lessons and could get a murderous noise out of a violin but it



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# BIRDS EYE VIEW

was kinder in the end to put it out of it's misery. The real instrument I wanted to play was the guitar, what else was as cool? Giving my lack of musical talent it was pointless bothering with lessons. I really just wanted the fame and excitement of being in a band like Sheffield heros, Def Leppard. With no way of achieving this aim, the closest I ever came to being in a band was miming along to 'Pour Some Sugar On Me' in a Girl Guide talent contest with a couple of my mates, pretending to play the guitar. We were really more Deaf Shepherd than Def Leppard. In 2016 that would probably have been enough to get through at least the first couple of rounds of a TV singing competition.

## You're Twistin' My melon, Man

Bez basically ended up actually in the Happy Mondays by accident. There he was, doing his own thing, scraping a living, being 'a bit of a scally' and knocking round with his mates in a band, yes and taking plenty of drugs...well he was part of the rave generation after all. All of a sudden Bez finds that his freaky dancing and maraca shaking is actually an integral part of the band's magic and he is officially 'in the band'. Whether it was down to the endless touring, the recording schedule or the large quantities of chemicals that they were taking, things did get rather messy for the Mondays and they went through a cycle of falling out, bankruptcy and reforming. In his book Bez describes the thrill of being on the stage and having the crowd respond to his, well, 'Bezness'. He was definitely in it for the ride and the whole thrill of being with the band. He also describes an incident in the early days at The Hacienda where he fell off stage and cut his head: "The doc tells me to take it easy and put my feet up. I thought, 'I'm not fucking havin' that'. I got some of [lead guitarist] Moose's acid, dripped it in the cut and ran back out with me shakers. Fuckin' raz!" That's dedication for you. He is now much calmer and after having become a bit of a reality TV star, keeps bees and brews his own beer and helps out charities supporting the homeless.

## Sex and Drugs and Rock and Roll

While Bez certainly appreciated the trappings of fame and got a buzz from being on stage, Keith Richards, at the start of his career at least, was just in it for the music. He was music obsessed and found his soulmates in the early days of The Stones. They wanted to be the best Blues band in London, studied and practised obsessively, getting gigs wherever they could and playing constantly. Nothing else mattered to Keef. If he wasn't playing music he was listening to it and honing his craft. He wanted to get into the recording studio to hear what they actually sounded like, to see if they were getting close to their idols, rather than to sell records and to be famous. I'm currently at the part in his story where things are really taking off for The Rolling Stones, they are being drowned out at gigs by screaming girls and nearly ripped to shreds if the fans get hold of them...Keith does seem rather taken aback by the first flush of fame, however someone has given him his first taste of drugs, pharmaceutical speed and a spliff to 'keep him going' while he is performing....With Keith being quite famous for his drug use I fear things may be about to go downhill rather rapidly for him in the book.

Back to the modern day where celebrity culture seems to have changed a lot. While there are still great fledgling musicians, writers and producers out there who are, like Keith was, in it for the music, there are many more that simply want to have, as Warhol put it, their fifteen minutes of fame. Reality TV has spawned a glut of 'celebrities' who are more or less famous for doing nothing. To me a celebrity in the true sense is someone who has become famous for doing something incredibly well, whether they be musicians, artists, actors, film or sports stars. They have a talent and are among the best in their field. These days if we put on the TV for some so called 'celebrity' program I'm hard pressed to recognise any of the celebrities, who are mostly likely to be somebody who had sex with someone else on Big Brother or ate kangaroo genitals in a jungle setting rather than anyone with an actual talent. Add to that

I got some  
of [lead  
guitarist]  
Moose's  
acid,  
dripped it in  
the cut and  
ran back out  
with me  
shakers



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## Reality TV has spawned a glut of 'celebrities' who are more or less famous for doing nothing

shows like the X Factor, which, while it does unearth some truly talented people, seems obsessed with generating 'ready made pop stars' who are propelled from obscurity to fame and then, sadly through the mill and back down to obscurity again, with a career only to be revived by a plate of the aforementioned kangaroo genitals. All these people seem to want is the fame and adoration but without having the talent, without having to live in a scummy flat or sleep on someone's sofa while they try and make their mark on the industry.

### Everybody Wants to Be a DJ

If you know me and Stuart then you will probably know that we have a past steeped in rave culture and a love of



house and techno, you can read more in Stuart's article about why we are called Hifi Pig. What Stuart doesn't tell you in his article is just how good he was at Djing, he played beach parties, raves, house parties, clubs as far afield as Prague and Edinburgh and all over the North East of England and of course on the radio, plus he spun the wheels of steel in a dub reggae band, Roughneck Sounds. Back then, Djing was no different to actually playing an instrument. It required quite a large investment in equipment and records and hours upon hours of practice. Djing on a pair of Technics required skill, playing raves and clubs was a feat of endurance. Stuart regularly played several hours at a time with me providing him with 'refreshments' to keep him going (spliffs and blackcurrant cordial if I remember correctly – Ed). It was also fraught with danger, I remember one incident where Stuart was playing at Sativa in The vaults in Edinburgh. Not only was he under constant threat of electrocution (it was a sweaty techno dive and the condensation was raining down on the decks) he managed to chew through his lip and was covered in blood. It was a memorable night. Back to today and it seems like everybody wants to be a DJ. While there is some excellent tuneage being created by the new wave of DJs and producers using computers rather than decks, there are also some lazy so and so's that are giving modern day Djing a bad name. The rise of the

Superstar DJ that sprung from rave culture when dance music went more mainstream led to huge names like Carl Cox and Pete Tong being paid small fortunes to fly round the globe and make the party happen. Of course aspiring DJs looked at these superstars and wanted a piece of the action. The Superstar DJs of recent years that don't have the solid vinyl background of Tong and Cox and fellow DJs from their era have been accused of dumbing down dance music and not actually playing live. We have a huge festival each year, just up the road from us, and know the people that supply some of the sound systems. In a recent year, a certain, incredibly famous DJ played a set, the kids went wild but apparently none of his equipment was actually wired up, he basically just pressed play on a pre-recorded set. The fact that Simon Cowell has announced an X Factor style DJ competition is more than a little disturbing for the future of Djing.

So what will the future hold for the music industry? There does seem to be backlash to 'manufactured' celebrities and bands. While the likes of Cowell will continue to churn out fodder for screaming re-teens, hopefully there will still be really talented musicians, DJs, producers and singers that are in it for the music and that make it, not because they want to be famous, just because they want us to be able to hear what they do.



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# THE VIEWS OF STU!

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# Caravaning, Camping and Hifi

We've been having a lovely time covering the Crescendo Festival in St Palais sur Mer in the Poitou region of France – and a great festival it is too. It's free, there's bands from all over the world play and it's really well organised and attended. Now, as a family we've always been campers...never in caravans or mobile homes, just tents and all the gubbins that goes with that...and so naturally when we attended this years Crescendo Festival we bought a tent (ours is a long time dead) and set off South for a bit of an adventure...sort of Hifi Pig gets back to nature.

The foods been interesting...some good and some absolutely diabolical, but the whole back to a nice simple way of live for a few days has been quite

lovely...yes, we've been out and spent silly amounts of money on great lunches, but the tent was erected and that has been our home for the last few days.

Cooking dinner on a single burner camping stove is an interesting and humbling experience when you are used to the full piano experience (it's a French thing), but what really grabbed me whilst watching different folk on the campsite was that camping and caravaning have lots of parallels to the whole audiophile world.

In this mad world of audio there are lots of different kinds of audiophile. Some folk are on a budget because of financial constraints, some are on a budget because they feel much of the esoteric gear is a rip off, some spend lots to get

the best they can, some spend lots to show off a bit, some make their own gear and others tweak endlessly.

Let me explain.

### The Back To Basics Camper (BTBC)

Owens an old canvas scouting tent and cooks everything from scratch on a methylated spirit stove. In the same way the BTBC will be ensuring the watertightness of their temporary home before they set off on their adventure, and fiddling with guy ropes once there, the audiophile equivalent will be forever poking about round the back of their Heath Robinson set up and playing with homemade crossovers that really ought to be in a box, but for practical reasons they're just hanging out the back of an

"I've not heard a better preamp, and I've been looking for more than 30 years" Sam Tellig - *Stereophile*, October 2012

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# VIEWS OF STU

equally hotchpotched pair of loudspeakers.

This kind of camper gets their pleasure from knowing that they are having the full on camping experience, bereft of corporate manipulation and they sort of enjoy the discomfort that their steadfastness to the true path that they have chosen gives them. They “know” their path is the only true and righteous way, and whilst they have seen the luxury afforded by modern tents and associated paraphernalia, the BTBC still chooses to camp in a field in wet Wales with limited availability of proper sanitation and other such comforts.

Can be a bit sanctimonious and possibly wears hessian undergarments.

## Camper On A Budget (COAB)

The COAB will have a relatively basic set up but it will be the very best that they can afford. They perhaps want a more luxurious camping experience but simply do not have the dosh to fork out on expensive gear and this is after all why they are camping rather than being pampered in a luxury hotel. The COAB will have spent time and energy looking for tenting equipment that will give them

maximum bang for their buck and will have invested wisely in equipment that will offer good service and reliability for years to come.

We’ve all been there in the audio world of course. We may have hankered after the LP12, Celestion SL600s and Naim amplifiers back in our teenage years, but the reality was that what we could afford was a second-hand NAD amp, a pair of Wharfedale Diamonds and a Dual turntable.

The COAB is a wise fellow and shrewd with his hard earned money and, whilst he is aware that there is better out there, he is also safe in the knowledge that he has the very best camping experience that he can have. Many of the aforementioned BTBCs may actually be on a budget in reality but want to decry anything that is corporate because their undergarments irritate their nether regions, leading them to be similarly grating.

## The Virgin Caravanist (TVC)

The TVC will have previously been a COAB but has seen that the caravan is a superior place to rest ones head of an evening and that cooking undercover is

Can be a bit  
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vastly preferable to cooking in the open air where leaves and wildlife will inevitably find their way into your camp stew. They will have saved hard for their used van and, just the same as when they were looking for the best tent they could afford, they will have done all the research to ensure they are getting the best value.

The audio equivalent will be the audiophile on a budget who has seen and heard kit that is better than their current set up and have been looking to upgrade slowly and methodically ensuring that each purchase in the chain works with the previous and will give outstanding service for the capital outlay. Many of the components in this audiophile's rig will be second hand and may well be marques that are a bit esoteric.

Of course there is a sub-group to the TVCs and this will be the VWD (Virgin With Dosh) who, whilst never actually having gone camping or caravanning has noticed that a few of his friends at the golf club have been chatting about their adventures in the caravanning world and so he's gone out and bought himself the biggest and flashiest van that his BMW or Range Rover will tow. This camper is looking to gain status by waving his ever so massive appendage in the faces of his friends and other campers.

## **The Seasoned Caravanist (TSC)**

Not to be confused with the VWD, the TSC have a long and illustrious history of caravanning and will have steadily upgraded their mobile dwelling over the years. These are the ones who will have a modestly priced motorcar they have bought especially to pull the van, though it will be used throughout the year too. The TSC can be seen early of a morning polishing their wheels and buffing the windscreens of their temporary accommodation. As well as the well appointed van they'll also have all the outside kit and will rarely stray further than the on-site loos to empty their chemical toilet.

They'll proudly be displaying their Camping and Caravanning Club membership on the rear screen of their small SUV and will probably have

flowers in a nice vase on the outside dining table.

Can be a bit of a caravan bore and probably a bit "adenoidy"!

Audiophile comparisons are obvious.

## **The Motorhome Enthusiast (TME)**

TMEs are most often seen loitering around carparks and shop carparks in their vehicles because they haven't been allowed into the campsite or town with their gargantuan mobile homes. They are on the fringes of the camping fraternity and often eschewed by campers and caravanists alike as being "not real caravanists" because they don't have to endure the perceived hardships of either tent life or van life.

It's a false logic though and akin to the snail! Like the snail they can go nowhere without their van unless they mount a small car or motorcycle to the back of their mobile homestead. If they do make it onto the site and have their extra mobility device it is unlikely that they'll ever use it because it's a faff to get off the trailer and they're busy anyway cleaning and tidying up in the motorhome.

TME a little like some AV enthusiasts – they seem to have more bells and whistles than the two channel aficionado, but in reality their listening experience is likely to be less, rather than more satisfying.

## **The Lightweight Backpacker**

TLB carries everything they need for their often solitary week away in a backpack. Everything will have been bought with weight and performance being paramount. Their isolationist leanings are not out of lack of funds, rather they enjoy having the time to be on their own, collect their thoughts, meditate on their existence and spend time away from the hustle and bustle of daily life and people.

Hifi comparisons are obvious. These are the portable headfi enthusiasts. They'll have all the best gear – player, headphone amp and DAC – all tied

This camper is looking to gain status by waving his ever so massive appendage in the faces of his friends and other campers

together with those rubber wrist bands. Possibly wears hessian underwear but really enjoys it!

So, there you have it! The outside world is not so different to our little audiophile world. For the record we have a relatively high-end audio system but a £99 tent and single burner stove but yearn for a bell tent and the whole "glamping" experience...and a kayak! No hessian though!

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# RETRO BITES

CLASSIC AND ICONIC AUDIO ...BY  
JANINE ELLIOT



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## Leak Trough-Line Tuner

This month Janine turns her attention to the Leak Trough-Line family of tuners

When talking about iconic tuners two or three words often come to mind; 'Leak' and 'Trough-Line'. Only a few other tuners, the Quad FM3 and Marantz Model 2110 with built in oscilloscope get me excited.

The 1950's marked an important change in listenership, as short, medium and long-wave broadcasting became unacceptable sound quality as our ears adjusted to the improving musicality acquired by high fidelity turntable, amplifier and loudspeaker separates beginning to appear on the market.

Luckily the BBC with UK company STC (Standard Telephones and Cables) supplying the tuners worked together to research and trial the new Frequency Modulation FM technology, a system that gave far better noise level and increased frequency response (and later stereo). Harold Leak at his company H.

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# RETRO BITES

J. Leak and Co. Ltd, based at 57-59 Brunel Road, Westway Factory Estate, London W3, had already gained a good reputation for his amplifiers, especially the "Point One" range; 'point one' relating to the then miniscule distortion level of 0.1%. He was able to get hold of an STC tuner so he could test out the technology, and even show off a tuner to the public alongside their own products. Thinking these weren't good enough for their own high standards they began to develop a model for themselves in 1954, with Ted Ashley, Stan Amos and G.C. Johnson, the latter two who were both ex BBC engineers.

After a year the first tuner was produced. This was called the 'Trough-Line', the name derived from the tuning element being used. You see, a big problem in early tuners was that due to changes in temperature (valves heat up!) the components, notably the inductors inside

the tuned circuit that are used to control the local oscillator and hence tune to the radio frequency you need to hear, would change dimensions and therefore vary the inductance. This meant that you would regularly need to retune the radio to keep the radio station playing at its best. The Trough-Line series worked, like most tuners do, on the superheterodyne principle where the radio frequency is mixed with the output of a local oscillator to produce the

intermediate frequency (IF) signal. In the case of the Trough-Line it is 12.5MHz. That means that for say Radio 2 88.3MHz, the local oscillator is tuned at 100.8MHz. By mixing these together the difference frequency is 12.5MHz. For Classic FM at 100.4MHz the local oscillator will therefore be tuned to 112.9MHz. If the local oscillator is drifting about then it will be hard to keep "tuned in". The answer was to make "U" shaped trough as the outer transmission

line conductor, hence the word "Trough", with the open end facing down. This was actually also a cheaper design option, but it worked brilliantly, keeping heat changes to a minimum. Also, unlike most tuners that used wound coils as inductors, the Leak tuner used a tapped transmission line, hence the word "Line". From this the name "Trough-Line" was adopted. The later Mk 2 used a



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metal cylinder as the outer conductor, but kept the name, and much harder to get into if you needed to repair/adjust components.

The original Trough-Line was square shaped and very heavy (the trough itself had significant amounts of copper which also made it very expensive) and would tune from 88-100MHz, missing out most of the popular stations of today. The gold-enamelled steel unit with black writing had a very modern rectangular tuning dial with a volume and tune knob underneath, and the unit was also self-powered unlike most tuners of the period which had power fed from the preamplifier or amplifier. It had screw connections for the aerial at the back and an RCA output socket. This model was made until 1959.

The distinctive Mk2 Art-deco version appeared in 1960, with its gold-brown front panel made of Diakon (a type of acrylic plastic made by Lucite International Inc.) fitting in well with the Varislope preamplifier that itself mates with the Stereo 20 power-amp. This model extended the tuning range so it went from 88 to 108MHz. This also used a copper plated mild steel oscillator tube to keep down cost and weight. The original three engineers worked on the development of this model. FM Stereo decoding hadn't yet been decided in the UK, so this model had provision for an external stereo decoder to be added if and when it was available, connecting to the RCA "Multiplex" socket at the rear. Interestingly, there wasn't an RCA socket for audio-out, rather it had a basic lead with RCA plug exiting the rear of the unit. This model had switchable Automatic Frequency Control (AFC) and Local/Distance sensitivity control on the front panel.

The valve Trough-Line Mk3 was issued in 1964, which with its silver/black rectangular shape matched the transistor Stereo 30 integrated amplifier. This was the only change; the electronics being the same and still having the "multiplex" socket at the rear, but in 1966 when stereo was finally adopted in the UK (following the USA General Electric – Zenith system, first trialled as far back as November 1934 from the 85th floor

of the Empire State Building!) a new model was produced called the "Trough-line Stereo". This model also retained the screw connections for the aerial and now had two internally connected RCA leads, one for each channel. For a while an internal stereo upgrade was offered to owners of the mono Trough-Line 2 and 3 versions. Interestingly both the mono and stereo versions of the tuner were on sale together, at £32 and £47 respectively. Tests in stereo from the BBC from their Wrotham transmitter started as far back as 1958. Broadcasting in stereo didn't appear until the 1970's, but this was sporadic and only on Radio 3. Interestingly the link from Broadcasting House to the Wrotham transmitter went PCM digital from 1972 improving the S/N ratio significantly, making live Radio 3 stereo broadcasting even better and heralding the start of Radio 2 stereo.

When it was decided to change from valve to transistor in 1969 Leak brought out the Stereofetic, itself a good looking tuner, now with buttons, but somehow it has never had quite the same excellent sound quality and none of the historic importance that make any of the tuners sought after hi-fi antiques. Interestingly, whilst the name Trough-Line is important, the best of the tuners didn't actually have a trough!

I have always considered Harold Leak one of the most important pioneers of hi-fi, better known for what he achieved in the early years rather than at the end. He was a popular man, often driving about in his Rolls Royce, and with his son, Simon, working with him from the 1960's. The Point-One series and the TL tuners, and even the sandwich speakers (that'll be for another Retro Byte) make him the sort of person I wish I had the fortune to have known in my life of hi-fi addiction. Maybe I will meet him in Hi-Fi Heaven. I don't believe the Trough-Line has been bettered, and if you can pick one up it is worth servicing it and replacing some of the components, particularly aging capacitors and resistors. Then it will sound even better, as long as we continue transmitting on FM.

Broadcasting  
in stereo  
didn't appear  
until the  
1970's, but  
this was  
sporadic and  
only on  
Radio 3

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# **Crescendo Progressive Music Festival 2016**

By Linette and Stuart Smith

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**You may not have heard of the Crescendo festival that takes place each August in the beautiful French tourist resort of Saint Palais sur Mer in the Poitou Charente area of France, but it's possibly the best organised festival we've ever attended and is in an absolutely magnificent setting on the cliff tops looking out to sea**

# CRESCENDO FESTIVAL

There are very good campsites within 600m of the festival site, great restaurants and bars and the festival itself is safe, clean and attracts brilliant bands under the broad umbrella that is progressive rock. We visited first a few years ago when Hawkwind were headlining the Saturday night and this was sadly the last gig that their keyboard player Jason Stuart would ever play before he died.

Crescendo is in its 18th year and this year the organisers have pulled out all the stops to attract some really great bands from all over the world to perform 12 free concerts on the 18th, 19th and 20th of August and needless to say we were there to take a listen. Sadly time constraints meant we didn't get to see all the bands but we did go every day and caught some great performances.

First up on the Thursday evening was **Basta** who are a young band from the Tuscany region of Italy and this was to be their first venture outside of their home country. Their first album was out in 2012 and called "Oggetto di Studio" and their second "Elemento Antropico". There are five members of the band and they cite their style as being neo-progressive with influences including Jethro Tull, King Crimson and heavy metal fused with a smattering of jazz and original Tuscan troubadour stylings.



#### Band Members:

Damiano Bondi: Mellodica, Hammond Organ

Roberto Molisse: Drums and Percussion

Saverio Sisti: Guitars

Giacamo Soldani: Bass

Andrea Tinacci: Clarinets

**Telescope Road** is an international band hailing from France, United States and Finland and has just three players. Sadly we missed most of this set as we got speaking with the guys from another

band and only managed one paltry photo (Sorry Guys). They cite their influences as De Lucia, Shakti, King Crimson and Rush and so it's a bit of a shame not to have caught their set. The band have their first album in preparation for release and have already played a tour of Japan and the Italian festival Rock Ad Ovest.



#### Band Members:

Alain Chiarazzo: Guitars

William Kopecky: Bass

David Lillkvist: Drums

It's eight pm and time for Belgian band **The Wrong Object** to take to the stage and what a great band these proved to be. The band was formed in 2002, originally as a Zappa tribute, and is made up of five musicians who are having a ball on stage. There's bit of psychy jazz-rock fusion, Canterbury style and a healthy smattering of Zappaesque hilarity. Think Zappa, Soft Machine, Gong and Fripp popped in a blended and the pulse button hit.

They have already released six albums and have collaborated with the Philharmonic Orchestra of Belgium with whom they reinterpreted the soundtrack to Zappas 200 Motels.

There's a good deal of improvisation in tonight's set but this is a tight band that

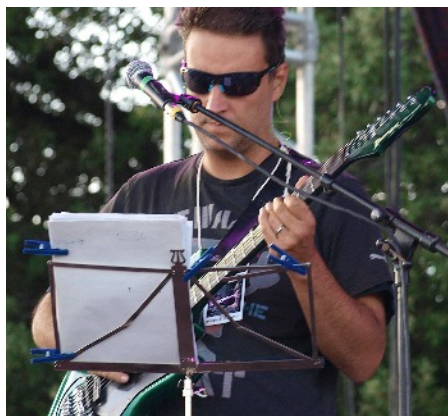
The  
surroundings  
are beautiful,  
there's plenty  
to do during  
the day for  
families,  
there's good  
eats to be had  
and then  
there's the  
legendary Pink  
Fluid



# CRESCENDO FESTIVAL

clearly know each other very well indeed. What I loved about their music was the humour and apparent silliness they bring to the stage with titles such as Zappa's This Town Is Just A Seal Tuna Sandwich...there was also a tune about Brexit in there somewhere but the Pink Fluid on sale may have clouded my judgement somewhat.

If you have the opportunity to go see this band live then you really must!



## Band Members:

Michel Delville: Guitars

Laurent Delchambre: Drums,  
Electronics and samples

Antoine Guenet: Keyboards and Vocals

Francois Lourtie: Saxophones and  
vocals

Marti Melia: Saxophones and Clarinets

Pierre Mottet: Bass

**IO-Earth** hit the stage next and we'd already had a good chat with their leader and guitarist Dave Cureton and a beer with their engineer in the nearby Skooby Doo bar. The band is from the UK and have three studio and a live album to their name.

This is neo-prog with hints of art rock, ambient and electro, but at the same time Dave Cureton brings a healthy dose of ROCK to the proceedings with Linda Odinsen adding fabulously ethereal vocals to the mix that have a touch of gothiness about them.

Clearly these are a headlining act and have a power and presence that sets them apart from what has gone before. Cureton is a bit of a demon on the guitar and isn't shy of coming to the front of the stage for the obligatory "guitar god" pose. He really is a blisteringly good guitarist and tonight the music verges on the edge of melodic metal.

The band gel brilliantly and clearly play off each other to bring out the best in each. Christian Nokes on bass and Christian Jeromes on drums adding a rock solid foundation on which the rest of the band build and special mention should also go to the violin of Jez King...I'm a sucker for a bit of violin in rock music.





# CRESCENDO FESTIVAL



We arrive late on the Friday evening and missed the whole of the set of **Light Damage** from Luxembourg but we were reliably informed by audience members that we'd missed a bit of a treat. The band have one eponymous album under their belt and have a melodic and accessible sound.



## Band Members:

Frederic Hardy: Bass, Bass pedal, "Choirs"

Sebastien Perignon: Keyboards, Percussion, Tubular Bells

Stephane Lecocq: Guitar

Christophe Szczyrk: Drums and Percussion

**Flor De Loto** are from Peru and were formed in 1998 after a meeting between guitarist Alonso Herrera and bassist Alejandro Jarrin with the intention of fusing progressive and hard rock, metal and Andian folk with a good dose of psychedelia thrown in too.

It's hard not to immediately love this band. They have a presence that has everyone in the audience on their feet. Bass is furiously fast and complex, guitar verges at times on the edge of metal and yet when Luis Pacora gets out the traditional South American instruments things take on a whole different perspective.

In my notes from the band's set I've written; Sort of what Jethro Tull would have been like had they come from South America but they are more than that. There is a much harder feel to the music!

Absolutely recommended and I'll certainly be looking out for some of their records in the very near future, and that's the great thing about festivals like this where you don't really know that many of the bands that come from all over the globe. You get to hear new music and have your ears and mind

opened to new styles that otherwise may well have passed you by.





# CRESCENDO FESTIVAL



## Band Members:

Alonso Herrera: Guitar

Alejandro Jarrin: Bass

Luis Pacora: Flute and other traditional instruments

Pierre Farfan: Keyboards

Alvaro Escobar: Drums

And so to finish the night off we're presented with **My Brother The Wind** from Sweden who have released no less than four albums. The festival guide (hard to come by) touted them as a mix of psychedelic rock, space rock and Kraut rock with their influences coming directly from the seventies. Right up my street then!

Their music is largely improvised and conceptual and they've charted well in the Swedish charts. The band play brilliantly together with long and epic pieces that soar into the stratosphere with one guitarist taking the lead and encouraging the other to follow and yet the whole lot is kept safely rooted with a rhythm section that is hypnotic and relentless. There's not a vocal in sight and these guys let the music take you away.

I reckoned that the band sounded a lot like Spacemen 3 crossed with the best of Kraut rock and speaking to guitarist Nicklas after the show he said that when he first started to listen to psychedelic music Spaceman 3 were one of the bands he got into.

I absolutely loved this band. They reminded me of much of the music that formed my current tastes and they were a fitting headliner to this Friday night's session.



I think I've found a new favourite live band and was enjoying them so much forgot to take photographs!

## Band Members:

Nicklas Barker: Guitars

Mathias Danielson: Guitars

Samuel Helberg: Bass

Daniel Fridlund Brandt: Drums

And so the final evening of Crescendo Festival 2016 is upon us and we were a bit disappointed that we didn't get the opportunity to arrive earlier and see the two opening acts. The first of these was French band **Anaid** who have, since 1982, undergone many line up changes. They have played with many big names including Hugh Hopper (Soft Machine), Sophia Domenich and Rick Biddulph (Caravan) and have released a self titled album in 1982, and album called Belladonna in 1989 and in 1990 a CD with the title Four Years.

After a long musical break vocalist Emmanuelle Lionet and drummer Jean-Max Delva brought in guitarist Alexis Delva, later adding bassist Ludovic Métayer.





# CRESCENDO FESTIVAL

## Band Members:

Emmanuelle Lionet: Vocals

Jean-Max Delva: Drums, Percussion

Alexis Delva: Guitar

Ludovic Metayer: Bass

The second band we missed were Catalanian **Herba D'Hameli** who were formed in 2001 and have released six albums, their latest being 2015's Interiors

The group is very true to their Catalan roots and defiantly sing their songs in Catalan rather than Spanish.

Their music is described as being heavily influenced by the Canterbury scene (think Caravan and Camel) but they also draw on their Catalan folk traditions.



## Band Members:

Carles Pinos: Keyboards, Vocals

Claudio Trullen: Acoustic Guitar, Vocals

Dani Fabre: Bass

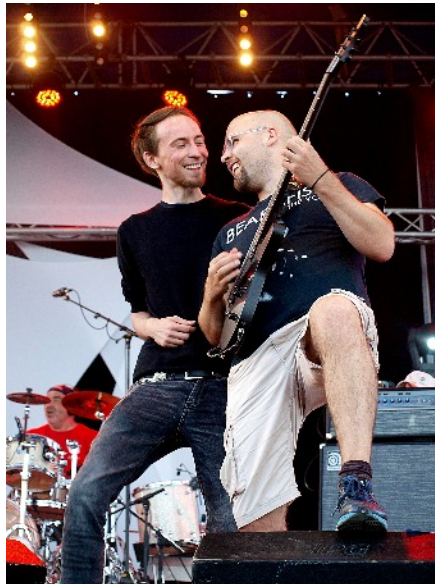
Guillem Roma: Drums

Josep Tardio: Flute, Keyboards

Valenti Pinos: Guitar

We did get to see German band **Seven Steps To The Green Door** who were formed in 2005 by Marek Arnold and Ulf Reinhardt and the band are quoted in the festival guide as "playing music just for the pleasure of it and not taking it too seriously", adding that no style is taboo and nothing is off limits. Their fourth album Fetish was well received and is said to be a very melodic, inventive and rich album blending styles, harmonies and instruments with vocal harmonies.

Personally I found the band to be a little on the bland and lack-lustre in this live situation but clearly I was in a minority of one as the assembled throng were lapping it up.



## Band Members:

Marek Arnold: Keyboards, Saxophone, Flute

Ulf Reinhardt: Drums, Percussion

Martin Shnella: Bass

Lars Kolher: Vocals

Anne Trautmann: Vocals

Headlining the final night of Crescendo Festival was Swedish **Anekdoten** with the aforementioned Nicklas Barker (My Brother The Wind) on guitar. The band was formed in 1990 with the name King Edward with the band playing essentially little more than King Crimson covers. Later Anna Sofi Dahlberg joined the band on keyboards, Viola and vocals and the band became Anekdoten.

The band have six albums out with the latest being Until All The Ghosts Are Gone as well as four live CDs.

Live this band are fantastic lead by Nicklas Barker and Marty Willson-Piper's guitars that had me in mind of Neil Young – close to the edge of being over overdrive, but still managing to keep the sound musical and controlled. Nicklas and Marty cook up a tremendous storm of music and play off each other so well.

The band are tight, professional, exciting and whilst My Brother the Wind were out there exploring a more ethereal soundscape, Anekdoten keep it rocking, and yes, progressive. The addition of Anna Sofi Dahlberg on keyboards, vocals and Mellotron adds a certain something to proceedings that elevates the music beyond what one could ever expect to hear at a festival that has cost you not one penny.

Anekdoten come highly recommended as a band to add to your bucket list to see live! Very different to My Brother The Wind but equally fantastic live!





# CRESCENDO FESTIVAL



## Band Members:

Nicklas Barkers: Guitar: Vocals

Anna Sofi Dahlberg: Violin, Keyboards, Vocals

Jan Erik Liljestrom: Bass, vocals

Perter Nordins: Drums, Percussion

Marty Willson-Piper: Guitar

And so Crescendo draws the curtain for another year. It still amazes me how a

festival of this scope and with such a wide variety of musical styles from all over the world manages to remain free, but then behind the scenes there is a whole load of organisation from the volunteers that make this happen.



The music this year, or what we saw of it, was certainly progressive in the main, but the term prog rock is a very broad church and we've been treated to almost metal, Kraut rock, space rock and folk amongst what many would consider to be the more conventional prog rock sound.

The site was cleared within a couple of days, leaving no litter and barely a sign that there'd been a festival at all.

If you find yourself in the area, or if you just love great music, then you really owe it to yourself to get down to this remarkable event. I can't think of a better setting for it. The surroundings are beautiful, there's plenty to do during the day for families, there's good eats to be had and then there's the legendary Pink Fluid.

Thanks to all the people who put so much effort into making this happen and thanks to all the bands who took part...even if we didn't manage to catch you all.



# Billy Bragg and Joe Henry, Summerhall, Edinburgh

**A**mtrak's Texas Eagle train runs from Chicago to Los Angeles, covering 2,728 miles and taking just under 67 hours to complete its journey. Tonight Billy Bragg and Joe Henry are showcasing a set of songs that they recorded when they took that trip together in March this year.

Songs were recorded in sleeping compartments, on railway platforms, in waiting rooms and hotel bedrooms. Recordings were interrupted by grackles, crisp packets and oblivious bystanders some of which make a guest appearance on *Shine A Light*, the resulting album which will be released on 23 September.

This is, Bragg tells us, the first time that the pair have performed these songs since recording them. Consequently, there are a couple of false starts during the evening that are brushed off with self-effacing good humour and which only add to the charm of the performance. Bragg and Henry open with *Railroad Bill*, recorded by Lonnie Donnigan in 1956, picked up by Donnigan from Leadbelly's recording. Leadbelly and Donnigan recorded several of the songs that Bragg and Henry play tonight. For *Rock Island Line*, Bragg explains that Leadbelly had heard the song from a group of prisoners while travelling with Alan Lomax to collect songs for the Smithsonian Institute and Bragg and Henry perform the song in the call and response style of a prison workgang.

With each song Bragg and Henry tell us a little more about their epic trip, explaining why they chose each song and the circumstances of its recording. The history of the railroad is inextricably linked with the history of the USA – Bragg likens the railway network to the Internet as the most important communication system that the world had seen, allowing both freight and people to connect across the length and

breadth of the country, creating history with every foot of new-laid track. These songs celebrate that achievement, the work of those that made it possible and the mythology that it inspired.

Bragg and Henry have been friends for over 20 years and tonight during Hank William's *Lonesome Whistle* they harmonise like brothers; brothers called Louvin or possibly even Everly. Following Jimmie Rodgers' *Waiting For A Train*, Bragg suggests that this might be the first time an Englishman has yodelled since Morrissey recorded *The Boy With The Thorn In His Side*.

Between 23rd and 27th of November 1936, in room 414 of the Gunter Hotel in San Antonio, Robert Johnson recorded 16 of the most important songs in blues music history. On an overnight stop in San Antonio, Bragg found himself staying in room 414 and knew that a song would have to be recorded there too. These tales of Bragg and Henry's journey, together with the songs that were inspired by it provide a fascinating evening's entertainment. The pair were keen that *Shine A Light* would indeed shine a light both back into the history of the railroad and forwards to more recent times and so rail songs like Gordon Lightfoot's *Early Morning Rain* and an encore of John Hartford's *Gentle On My Mind* are included, joining together the songwriters of the past with those of the present.

Over the course of 13 songs tonight we've had a bit of a history and musicology lesson, a terrific performance from Bragg and Henry and a unique insight into the recording of what promises to be an exceptional album. Bragg and Henry will be touring the UK in November. Don't miss it.

**John Scott**

These songs  
celebrate that  
achievement,  
the work of  
those that  
made it  
possible and  
the mythology  
that it inspired



# Willis Earl Beal, Summerhall, Edinburgh

In a former existence, Edinburgh's Summerhall art space was a veterinary college. Tonight's gig is located in The Dissection Room and its tiled walls, linoleum floor and viewing gallery create a certain unsettling atmosphere that turns out to be quite appropriate. Normally a standing venue, we've been provided with extraordinarily uncomfortable plastic chairs to sit on. This is also apt as feeling uncomfortable is something of a theme for tonight's entertainment.

The show is opened by Miles Manley; edgily nervous. Fuck Your Wife is a tale of envy and revenge. "This is a long one, so settle in" Manley advises us before I Love Her Family which manages to turn a litany of mundanity into a thing of fascination before veering off into something from a David Lynch film. "I might have made bits up" Manley sings towards the end and we can only hope that this is the case. "If you've felt weird and uncomfortable then I've succeeded" Manley tells us. Unfortunately for him, we are about to experience a masterclass in weird and uncomfortable that simply wipes the floor with his efforts.

Willis Earl Beal arrives on a darkened stage to a taped introduction that slowly builds in intensity against a spoken monologue. Beal removes his boots, hits the floor and does a set of push ups followed by some stretching exercises and tai chi before slipping his boots back on.

Beal tells us he has some rules for tonight's performance. Firstly, no applause. "No one applauds you in your life, you don't need to applaud me. It's masturbation and I don't need it." Secondly, stay seated. "Although I don't want you to piss yourself or anything." Finally, Beal has a special rule for tonight: "if you don't like my performance, leave. Just fucking leave. Don't write a stupid review, just leave. That's what I'd do." Er, okay.

Beal sings to backing tracks from his iPod which is called Steve Jobs. His songs are almost all uniformly slow-paced soul numbers and it is hard to discern what he is actually singing about. One thing is clear: he is angry. Over the course of the evening he will be angry about a number of things: capitalism, race and gender identity but mostly, it seems, about being Willis Earl Beal.

From anyone else, this might be tedious but Beal has several redeeming qualities. Firstly, an utterly extraordinary voice; he is a fabulous singer. Secondly, he is a tremendous dancer. Thirdly, he has a totally magnetic stage presence; think Terence Trent Darby crossed with Hannibal Lector. It is impossible to take your eyes off him. A large blanket serves as cape, transforming him into some kind of murderous superhero. Later, he will totally envelop himself in it, twisting and turning as he sings like a bug breaking free from a chrysalis. Beale doesn't tell us the titles of his songs and it's generally impossible to guess. I hazard that the first song might be called Flying Solo but as it proceeds it seems more likely that it is Flying So Low. Another song is probably called Honey Child but other than that, it's anyone's guess.

It's also impossible to guess what Beale will do next. He breaks off songs early, "I get bored" he says. "I need to fuck around". He introduces us to an invisible backing singer and dances with her. He stops a song halfway through the first line. "It's not time for that song. Not the right time yet." That song's time never comes tonight.

The centrepiece of the performance is a scarily intense acappella version of Frank Sinatra's Why Try To Change Me Now which Beal sings like a baritone Nat King Cole while riding the microphone stand like a demented porn star. "I need to thank Bob Dylan for introducing that to me. I love Bob

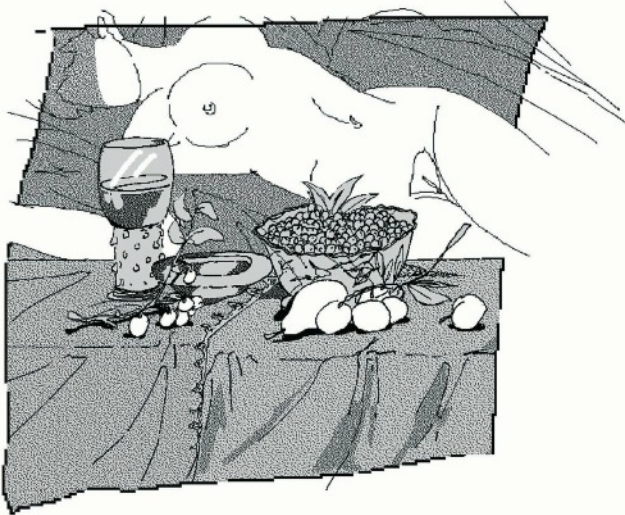
He  
introduces  
us to an  
invisible  
backing  
singer and  
dances with  
her

Dylan; not the old stuff but Modern Times, Time Out Of Mind, all that stuff. I haven't met him but I'd like to. Because he's going to croak soon."

When Beale finishes what he has told us will be his final song we are so bound by the Rules that no one applauds even as he moves to leave the stage. Finally, someone whoops. "Yeah, that's okay" Beale says with a sardonic laugh and we are given permission to show our appreciation. It's been an uncomfortable evening but I wouldn't have missed it. If you get a chance to see Willis Earl Beal you will be taking a chance but it's a chance worth taking.

**John Scott**

# Lung Dart – As I Lay Drying (PRAH Recordings)



LUNG DART  
AS I LAY DRYING  
PRAH

I'm really not sure what to make of this album. That's not to say that I've initially approached it only to then back away with a kind of "what the hell is this?!!" type of response, but moreover I've played this album some 20+ times and still really don't have a clue what to make of it all. I'm not totally sure if it's either a conscious body of work or possibly a case of throwing ideas into a blender only to see what happens.

It doesn't help that the album kicks off with "Healthy Functional Tissue" which completely dispenses with the usual build-up and instrumentation. Instead, we're introduced straight away to the vocals – or more accurately the line "Fool, you will find you need a woman" repeatedly sung around a piano loop which is soaked in reverb. It's all very Pentecostal church. I also have no idea why, but at the point just where the vocal commences in "Totem", we're suddenly introduced to a snippet of a woman's voice for about two seconds before suddenly being returned to the song.

It's almost as if Lung Dart, A.K.A. London-based Tim Clay and James Rapson, have seriously gone out of their

way to test us. "Please Font Worry" (yes, the track's actually spelt like that!) is the sound of a piano which is possibly being played at the bottom of the ocean. "One Day You Just Stop" then immediately begins – and once again it's a single vocal line repeated over and over. Similarly, "Caliope" is the sound of a lightly played synth with what sounds like people buying a coffee (I think) in the foreground.

So, who's this album going to appeal to? Well, once upon a time I went to see a band called Revolting Cocks (from the United States). I recall looking around and seeing that the audience appeared to be full of misfits – people who you just didn't seem to see in the street – yet here they all were, gathered together in that room. Perhaps the misfits will like this album. I also imagine that arty types may be interested in this album – particularly women with long hair who wear purple dresses to gigs and wave their hands around in the air as if to catch passing fairy dust. If you think you'll enjoy the sound of church-like melodies played alongside the sound of somebody playing squash (as on the track 'Squeeze'), then maybe you'll enjoy it too.

It should be noted that Lung Dart are not touring this album – but instead putting on an "installation" (whatever that means) in a back room of Holdron's Arcade in Peckham on 26/27 August, which aims to provide the "ideal environment to take in this record". Make of that what you will. But you make want to take sunglasses.

**Paul Lockett**

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# Jon Hopkins – ‘Opalescent’ (Just Music)

I’ve been a fan of Hopkins’ work for a number of years. The eagle-eyed amongst you will already be aware that Hopkins has previously worked with Coldplay and his track “Light Through The Veins” was reworked into what became the introduction to opening track “Life In Technicolor” from Coldplay’s album ‘Viva la Vida Or Death And All His Friends’.

This 15th anniversary remaster of ‘Opalescent’ sees the album released on vinyl for the first time – and it’s a stunning double LP special edition with gatefold sleeve.

For those of you who are familiar with Hopkins’ later work, in particular 2013’s glorious ‘Immunity’, his debut may initially come as somewhat of a surprise. None of the tracks are as hard-hitting as those on ‘Immunity’. However, what this album clearly demonstrates is just how much Hopkins has

developed as an artist over the past decade or so. ‘Opalescent’ carries much more of a ‘chill-out’ vibe than Hopkins’ later albums. With ‘Halcyon’ or ‘Lost In Thought’, for instance, you could almost be floating in the Dead Sea. It’s amazingly relaxed stuff – and the remastering sounds magical too.

‘Fading Glow’ is a masterclass in taking an individual idea and extrapolating it to see where it takes you on its journey. The acoustic guitars sound sublime atop the layered synths. Similarly, if you close your eyes, ‘Apparition’ really could be the soundtrack of a presence in the room with you. Fans of Max Richter or Michael Nyman will love it. At just two minutes’ duration, it’s not exactly long but is, for me, one of the album’s standout tracks. ‘Cold Out There’ sounds hauntingly beautiful. I defy anybody not to simply fall in love with its fragile, delicate soul. Amazingly, the track’s nearly 4

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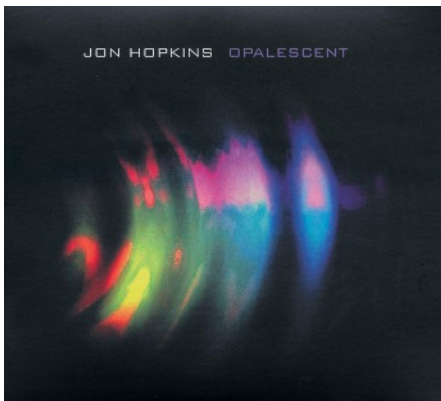
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# ALBUM REVIEWS

minutes long, yet time seems to barely pass at all as I'm auditioning this track.

In summary, 'Opalescent' is a snapshot of a brilliant musician at the start of his career

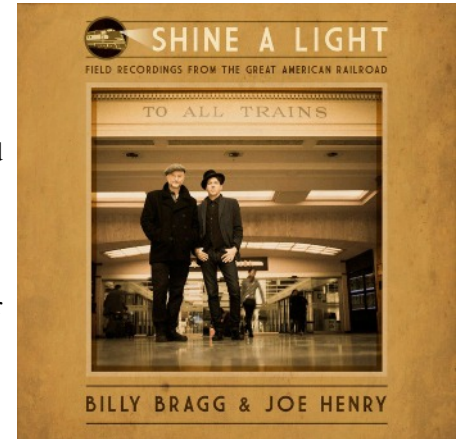


In summary, 'Opalescent' is a snapshot of a brilliant musician at the start of his career. At the point in time when this album was recorded, Hopkins would have no realisation that he was about to embark on working with Coldplay or that he would later write and record the brilliant 'Immunity' and performing it live on stage during a headlining slot at Glastonbury Festival's Park Stage. What Hopkins delivered with 'Opalescent' was a gorgeous set of chill-out vibes which transport the listener to a sunset on a beach or a quiet corner of an island. And there's absolutely nothing wrong with that.

Paul Lockett

## Shine A Light: Field Recordings From The Great American Railroad by Billy Bragg & Joe Henry

In March this year, Billy Bragg and Joe Henry carried their guitars on to the Texas Eagle train in Chicago bound for Los Angeles. During the journey, the pair recorded songs while the train stopped to pick up passengers. With one eye on the train, to make sure that it didn't pull off without them, songs were recorded in station waiting rooms and trackside platforms. Four days and 2,728 miles later they disembarked at Union Station at 4.30am and recorded their final song accompanied by the first chirpings of the dawn chorus.



The resulting album *Shine A Light: Field Recordings From The Great American Railroad* captures the atmosphere of these recording locations alongside others including sleeping compartments and room 414 of The Gunter Hotel in San Antonio where Robert Johnson recorded 16 of his legendary blues songs.

The songs recorded by Bragg and Henry tell the story of the railroad, the men who built it and the country it connected. The performances also acknowledge the role these songs played in shaping British rock and roll music.

As Bragg explains: "Railroad songs provided the bedrock of American popular music, from Jimmie Rodgers, the Singing Brakeman, to Lead Belly, whose repertoire provided several of the songs for this project. In this country, Lonnie Donegan's 1956 hit *Rock Island Line* sparked the skiffle craze, inspiring a generation of British teens to pick up guitars and form the groups that invaded America in the '60s, from The Beatles to Led Zeppelin.

"Growing up in the UK, I'd always been aware of this tradition but when I travelled to the US I was surprised at how few people look to the railroad as a means of transport. With this project, we wanted to explore the transformative power that the coming of the railroad had on the lives of ordinary people by taking these songs back to the places that inspired their creation. Travelling on the train and recording and recording the songs as we went allowed us to both visit places that were important 125 years ago when the lines were laid, but also to explore the viability of the railroad as a means of transport in the 21st century."

By taking them out of the studio and reconnecting them with their natural environments, Bragg and Henry have breathed new life into these songs. *Rock Island Line* is sung in the call and response style of the the prison workgang that taught the song to Lead Belly. In *The Pines* channels the harmonies of The Louvin Brothers while *Hobo's Lullaby* links Bragg directly back to his hero Woody Guthrie. In laying down these tracks, Bragg and Henry are not only celebrating the railway tracks that enabled America to flourish; they also pay tribute to more recent songwriters such as John Hartford whose *Gentle On My Mind* was a big hit for Glenn Campbell and Gordon Lightfoot whose *Early Morning Rain* gets a unique dawn chorus backing here.

*Shine A Light: Field Recordings From The Great American Railroad* is released on Cooking Vinyl on 23rd September.

John Scott

# Richard And Linda Thompson – I Want To See The Bright Lights Tonight

This month John Scott breaks out Richard and Linda Thompson's timeless classic from 1974.

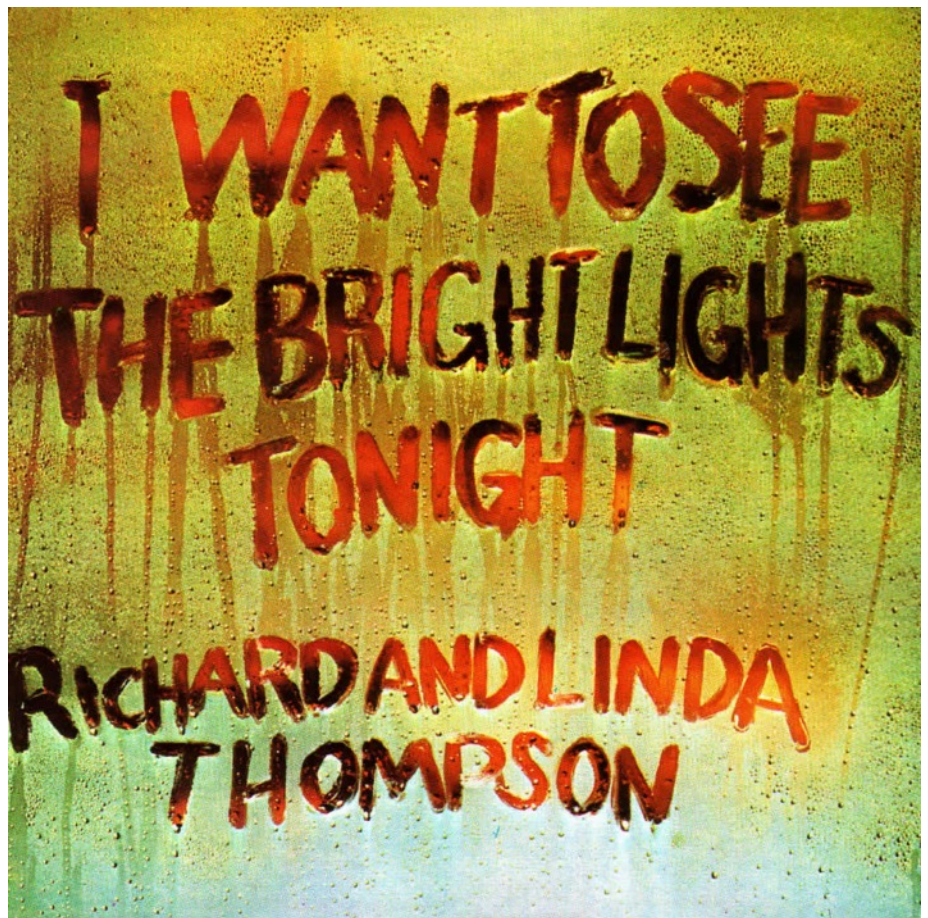
In the annals of history, Richard Thompson will be recorded as one of Britain's greatest and most distinctive guitarists, as well as being a first-class songwriter. By 1974, he had turned a schoolboy hobby, having played in a school band with future Strangler Hugh Cornwell, into a successful career with folk-rock pioneers Fairport Convention. His playing on Fairport's *Who Knows Where The Time Goes* is an early indicator of his inimitable style.

Initially focussing on covers of songs by American artists such as Leonard Cohen, Joni Mitchell and Bob Dylan, the band would evolve into a blend of traditional English folk music with contemporary rock instrumentation with Thompson's guitar battling for prominence with Dave Swarbrick's fiddle. After recording two genre defining albums, *Liege & Lief* and *Full House*, Thompson decided to leave the band to concentrate on session work and with vague thoughts of a solo career.

In 1969 Thompson had met singer Linda Peters. They married in 1972 and Linda guested on Thompson's first album *Henry The Human Fly* which was released that year to a lukewarm reception.

Thompson's second album, and the first to be credited to Richard and Linda Thompson was *I Want To See The Bright Lights Tonight* which came out in 1974 to an equally tepid response from both critics and the general public but has, rightly, been subsequently regarded as something of a masterpiece.

*I Want to See The Bright Lights Tonight* opens with *When I Get To The Border* in which Thompson contemplates his own mortality in the face of the mundanity of



everyday life. "If you see a box of pine, with a name that looks like mine" he sings, "Just say I drowned in a barrel of wine, when I got to the border."

This song sets the tone of the album in that it presents contemporary themes – we can all relate to the drudgery of the working week – using music and lyrics that have their roots in an earlier age. The narrators of these songs could easily live in either 1974 or 1497. Equally, the songs are as relevant today as when they were recorded. *When I get to the border* ends with an instrumental call and response section that pits Thompson's sinuous electric guitars against

mandolins, whistles, krumphorns and concertinas.

*Calvary Cross* opens with Thompson's guitar spitting out a seemingly formless sequence of notes and chords like a dusty death rattle before snapping into a tale that brims with foreboding. Here, as elsewhere on the album, Timmy Donald's drums are a masterclass in understatement, allowing the gaps between beats to contribute as much as his spare fills. The reissue of the album contains a live version of *Calvary Cross* that sees it expanded into nearly 10 minutes of excoriating guitar playing from Thompson while retaining that



# CLASSIC ALBUM

devastating economy from the rest of the band. Thompson's solo on the live version is a thing of wonder, building from single exploratory notes and chords into a howling frenzy before collapsing back in on itself as if some personal demons have been confronted, battled and defeated.

Linda takes the lead on Withered And Died: "This cruel country has driven me down, Teased me and lied, teased me and lied, I've only sad stories to tell to this town, My dreams are withered and died." Words that are probably as true now to many as they have been over the years since the song was written.

Thompson's artistry lies in blending these sorry tales with entrancing musical accompaniments that keep you enthralled and will have you returning to the album time and time again

The title song continues the theme of escape from drudgery: "Take me to the dance and hold me tight, I want to see the bright lights tonight". Despite some exalted singing and playing throughout, it could be said that there isn't a single happy song on the album. Loneliness, betrayal and disillusionment permeate with things really come to head on End Of The Rainbow where Richard Thompson basically informs a new born baby – a "little horror" that his father is a bully and his sister is a whore. There is no point in growing up because he is going to get screwed over and there is nothing to grow up for. Songs don't come much bleaker than that.

If this sounds like an album that is going to have you slitting your own wrists before you get to the end of side two, it really isn't. Thompson's artistry lies in blending these sorry tales with entrancing musical accompaniments that keep you enthralled and will have you returning to the album time and time again. I've owned it for over 30 years and never tire of it.

Thomson would go on to record many more fine albums, both with and without Linda. The couple's final album Shoot Out The Lights was recorded before their marriage had begun to unravel but by the time it was released they had separated, appearing together on tour purely for the purposes of promoting the album. Ironically, that album represents another of their high points and is worth searching out.

Richard Thompson has continued to produce a varied and enthralling body of work. Linda succumbed to spasmodic dysphonia, a psychological condition that left her unable to sing for many years but produced a fine album, Won't Be Long Now, in 2013 that included some contributions from Thompson on guitar.

If you haven't yet discovered Richard Thompson, either with or without Linda, then I Want To See The Bright Lights Tonight is a great place to start and I'm sure your discoveries won't end there.

## AT A GLANCE

**Released:** April 1974

**Recorded:** May 1973 at Sound Techniques, Chelsea, London

**Genre:** Folk rock

**Length:** 36:55 (original)  
53:26 (2004 reissue)

**Label:** Island

**Producer:** Richard Thompson, John Wood

### Side one

1. "When I Get to the Border" 3:26
2. "The Calvary Cross" 3:51
3. "Withered and Died" 3:24
4. "I Want to See the Bright Lights Tonight" 3:07
5. "Down Where the Drunkards Roll"

### Side two

7. "We Sing Hallelujah" 2:49
8. "Has He Got a Friend for Me" 3:32
9. "The Little Beggar Girl" 3:24
10. "The End of the Rainbow" 3:55
11. "The Great Valerio" 5:22





# Tile key tracker

**There are similar devices out there but Tile was the first one that I became aware of that did exactly what it promised. I have now had the opportunity to test a couple of Tiles in the real world.**

There are a few people close to me that aren't exactly what you'd call organised. They'll drop their things where they land and then wonder why they can't find them again later. One would literally forget his head if it wasn't attached. I'm not perfect though, don't get me wrong. As I have regular places that I keep my things, if I break that routine, for whatever reason, I will go into a tailspin. *"My keys are always there. Who's moved them?"* – until I remember that I was in a rush and left them in a different jacket.

I first became aware of Tile way back in 2013. Its campaign managed to attract thousands of people to back its crowdfunded project to the tune of \$2.5m. So, how does this latest generation of tags to track your precious perform?

## Tile design

Tile is a small white plastic tag that measures 37 x 37 x 5mm.

It is actually larger than I was expecting. It's not huge, by any stretch of the imagination, just bigger than I thought it would be. It fits nicely on a key-ring or even be slipped in to a wallet.

The device has neatly rounded edges and a big hole in the top left for a keyring loop. It's smooth, plastic, and is stylish in a very understated way. Think Apple attempting Brutalism.

It is also very light, but that's due it only holding a Bluetooth receiver and a battery.

There is a hidden button where the 'e' is, other than that, there's nothing else to report.

Drop it in to your luggage or attach it to other portable valuables.

## Tile performance

The Tile concept is simple. Register a Tile on your phone through the free app and then attach it to your keys or slip one in your wallet. Then, all you have to do is ring your misplaced items just as you would call a lost

The phone checks in with the Tile every minute or so, and when it loses touch you'll be able to see where it was last logged. The Tile outsources the majority of the heavy lifting to your smartphone, borrowing its GPS for one thing. You see, they reckon that we take our phones everywhere – yeah, ok. You got me.

It does the tracking thing pretty well, informing you where your things were the last time you were near it. The Tile's tune playing speaker is loud enough to find in a regular home too. As I've already mentioned, most of the floor at my day job could hear it.

But, what happens if you've lost something and you know it's not nearby? Perhaps it dropped out of your bag at some point during the day? Well, thankfully, there's a whole Tile community that are out there to help. You see, Tile not only relies on *your* smartphone, but on every other Tile user out there. Hit the 'Notify when found' button and the crowdsourced smartphone army



phone. If your Tile is within the 100-foot Bluetooth range, it will play a loud tune until you find it.

It works as colleagues on my floor started looking around when the tune started and one fellow Tile owner came up to say how much he likes his.

## Tile in the real world

gets to work, anonymously tracking the missing Tile. When another Tiler comes within Bluetooth distance of your Tiled possessions the system will ping you an email with its coordinates.

The company cites a case study where a Belgian Tiler used this function to locate his stolen VW

# Tile key tracker

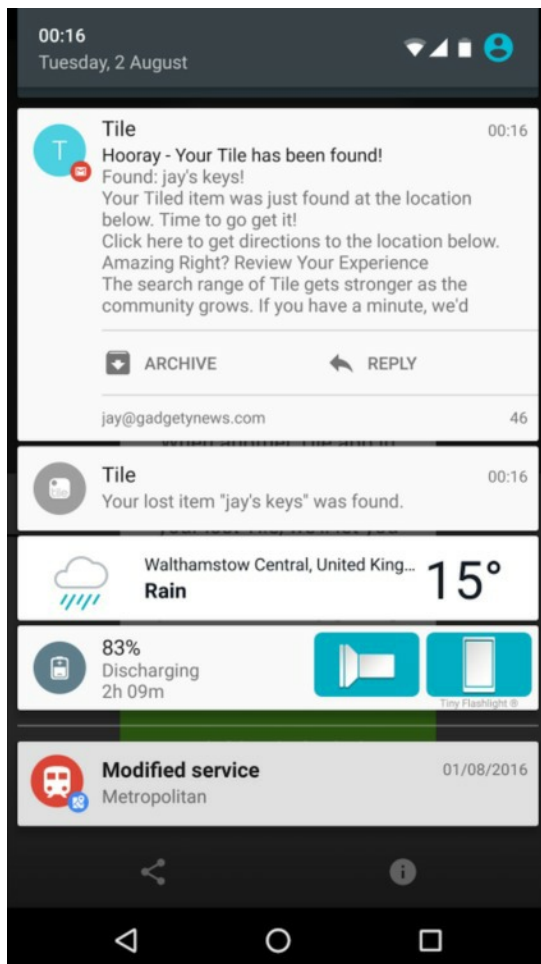
bus in Amsterdam, seven days after the initial theft.

## In use

I have been impressed by the Tile's range. Leaving my keys in my house I was able to get a good 40 feet or so clear before the Bluetooth connection died. Tile reckons that the range can be anywhere up to 100 feet in the right conditions.

Now, knowing that your precious is in the area and actually finding it are two entirely different things. Hitting the 'Find' button sets the

Just in case the sound is muffled in clothing, under bedding, etc, there's a read out that lets you know if you're getting closer or moving away from it, depending on the meter-style blue ring. Check out the screenshot below.



Tile playing that tune which is audible from yards away. The shrill tones knock out 90 decibels, which is loud enough to be heard a few rooms away at home or, as mentioned, across the floor of a large office.

The 'Notify when Found' function also seemed to work well. I left a unit at home and, when out of range, hit the Notify button. Within moments of me being back in range I received the email letting me know where my stuff was.

Turning on the app in my home area it informed me that there's 897 users nearby – at work there's 1977, and I now know one of them is a colleague who is similarly armed.

This should mean that this function is actually useful.

An extra bonus is that if you have your keys but can't find your phone – hit the E button on the Tile twice and it will make your phone ring. This works even if you left your phone on silent!

## Tile tracker conclusion

This is definitely a handy and inexpensive thing to have. Slip it in to your purse or wallet, attach it

to your key ring and forget about it – until you need it.

The Tile will make a great gift for those people you know who are always asking you "have you seen my....?", "did you notice where I put my....?" and have the repeating mantra of "I can't find my....!"

The battery will last about a year and, as there are usually bundle deals on these, there's nothing to stop you stocking up. I should be getting my car soon and I am seriously contemplating getting another Tile just to leave it hidden in the car somewhere. Could be handy if I forget where I left my vehicle in a shopping centre or airport car park.

## Tile price and availability

You can buy the second generation Tile from Amazon for £20, or a four pack for four for £50.

**Overall score 8.5**

**Build quality 8/10**

**Design 8.5/10**

**Ease of use 8.5/10**

**Portability 9/10**

**Value 8.5/10**

# Buffalo LS510D NAS

**Having Network Attached Storage (NAS) is one of those things that you don't realise how useful it is until you have it. That's speaking as a very recent convert. Buffalo are skilled at making easy to use storage solutions and I have the LS510 here to test.**

The LS510D is from Buffalo's Link Station range. This 2TB NAS has been designed to increase the size of your shared home data storage by creating your own personal cloud.

Other disk flavours are available if you need more space.

So, is the Link Station LS510D a helpful addition or just downright NASy?

## LS510D NAS design

The LS510D is not here to attract the heart, but the mind. It is here to quietly and confidently go about its business.

The black box's only real nod to flare is a single red strip embellishing the top of the unit's front panel.

Designed to sit in an upright position, this NAS measures 45 x 128 x 205mm (W x H x D) and weighs in at 1.1kg.

On the roof of the LS510 are a series of cross slats to aid airflow should things get warm in there.

Around at the rear is where you'll find the various connection ports. Mains power, Gigabyte ethernet, USB 3.0 and an On/Off slider switch are all present and correct.

LED power and activity lights are on the front of the box providing visible status feedback.

Handily bundled in the box are a power lead with interchangeable two and three-pin plugs and a ribbon style Ethernet cable.



## LS510D NAS performance

The LS510 NAS box is powered



by a Realtek RTD1195N Dual Core 1.0GHz processor with 256MB of DDR3 RAM.

The Link Station is compatible with Windows 7 32/64-bit and later or Mac OS X 10.7 and later.

## LS510 NAS set up

The Quick Start Guide gives options to set up your Link Station via mobile device or your PC.

You also get clued in to how to get the NovaBACKUP and NAS Navigator 2 utilities downloaded. The latter is essential as that's how you're going to add files, etc.

This was all very straightforward – even though the unit I was sent still had the previous tester's credentials saved. Powering on the LS510 whilst pressing down the red Function button resets the password to the default (admin/password), just in case you need to know.

From here, you will be required to set your own password to securely protect the content on your device.

## Using the LS510 NAS

The NAS Navigator 2 interface features areas designated for photos, music, videos and applications within the User and Public sectors.

Apps for both iOS and Android devices have been created for use with the LS510 NAS. These apps are entitled SmartPhone Navigator and WebAccess.

Using these apps you can carry out management tasks and access content stored on this Buffalo Link



# Buffalo LS510D NAS



Station unit from wherever you feel like.

Viewing documents, watching/downloading videos and music to my mobile device were all easily and quickly achieved.

## Desktop interface

The PC interface is clean and easy to find your way around too.

From the main dashboard simply click in to the media type you're after (here are some Fleetwood Mac FLAC files – or Flac FLACs as I call them) and you can view or play from there.

There are of course options to upload more, download the highlighted file to your local device or even publish it for all to see.

## Ease of use

The Buffalo LS510D has obviously been designed to be used

by everyone, no matter their technical knowledge. Unlike, say, the [QNAP](#) or Synology devices.

Apart from a little bit of password management, everything else is pretty straightforward. Both the mobile app (I tested the Android

version) and desktop interfaces are very intuitive.

## Buffalo LS510D re-view conclusion

The Link Station isn't going to win any prizes on the catwalk, but that's not the point. The LS510D is wearing practical clothes to do a practical job.

2TB of extra storage will suit most modern households. The fact that the data held can be accessed whenever, and wherever is a sure-fire bonus.

The ease of set-up, uploading, accessing, downloading and everything else makes using the LS510D a breeze for all. You don't have to be a tech wizard to get things done here. If my parents were looking for their own personal cloud, I'd definitely recommend them to check out the Link Station line.

The same goes for people who don't want to get knee-deep in admin/user options, security protocols, etc.

## Buffalo Link Station LS510 NAS price and availability

You can buy the Link Station LS510 now from Amazon for £129. Link Station is also available in 3TB and 4TB models.

**Overall score 8.2**

**Build quality 8/10**

**Design 8/10**

**Ease of use 8.5/10**

**Performance 8/10**

**Value 8.5/10**



# SpeedLink Parthica keyboard

**Computer keyboards, especially gaming keyboards, are an odd thing. Most will see them as purely utilitarian. That same majority would baulk at spending a decent amount on one. SpeedLink hear this and have introduced their Parthica Core gaming keyboard.**

You probably interact with keyboards more than any other aspect of your computer and yet so many people will opt for the cheapest. I too have had huge budget constraints but when I built my PC I wanted a good quality gaming board and mouse to partner it. I get that money is tight and this will mean most mechanical keyboards might be out of reach for some. The thing is, I have been using the SpeedLink Parthica Core Gaming Keyboard and, whilst not mechanical, it might just do the job.

This bank account-friendly offering from SpeedLink seems to tick all the right boxes: Macro, multimedia and shortcut keys are all present and correct. You even get control over the lighting profile colours. Gamers will also be tempted by its anti-ghosting and 6 key rollover. But does the price indicate its quality?

## Parthica Core design

The keyboard certainly looks to be aimed at gamers. It has that angu-

lar profile that many makers go for.

The body of the board is matte black with the keys a glossier finish. The WASD keys feature the commonly used gamer direction arrows. All the keys are backlit.

The Macro keys down the right-hand side certainly draw the eyes being silver against the sea of black. These five keys can be set and customised however you see fit.



Top and centre is a large black section with the model name, which is also backlit. At either side of the branding there are cut-outs, these are also located at the far left, right and also down in the lower section.

Also along the top, the left side is home to five quick access keys for browser, mail, search and browser bookmarks. On the right are media keys that control the most common audio and video functions.

The F12 key serves a dual purpose; here you can disable the Windows key. This is a very useful feature. Before moving over to a gamer board hitting that key can have disastrous effects mid-game.

There are a grippy rubber pads underneath the Parthica which

stops it from sliding around. A pair feet can be flipped out to add height and rake to the keyboard although, oddly, there's no grips on these.

Connectivity of the Parthica is handled with a USB 3.0 Connector, which is attached to a 1.8m black and red braided cord.

Bundled in the box with the keyboard is a software installation CD and a user manual.

## Parthica Core performance

I've used the Parthica Core as my board for the past few days. Using it to write pieces for GadgetsNews, gaming, social stuff. Everything.

As my daily driver is a Corsair K60 there was a period of transition. Wrong keys were hit, wrist angles changed. The usual. Most occasions would see me hitting one of the Macro keys instead of Esc or Shift. Also, the Parthica's spacebar is shorter too. In fact, all the keys are smaller than those on the K60. This is good for those short of desk space as I have seen some monster-sized keyboards out



# SpeedLink Parthica keyboard

there. It really didn't take me long to get acquainted with the Parthica and I have long fingers and fairly big hands.

The in-built wrist rest comes in handy and the angle with the keyboard legs up feels right to me.

The matte black areas have a soft rubber-ffeeling coating which I like.

I have been pleasantly surprised by the build quality of this keyboard.

Especially as it currently sits well under the £40 mark.

## Customisation

### Colours

The additional features such as lighting and customisation was all quite intuitive too.

To change the lighting's brightness, hold down the Fn key and

Whilst all of this is neat and all, why can't the keys have the same colour options as the logo? #Just-Sayin

Installing the software via the disc opens up more options. I did check the SpeedLink website so I could just download the software but, at this time, no can do. There is a tab there, but it doesn't work.

Through the bundled software you can set the lighting effect to:

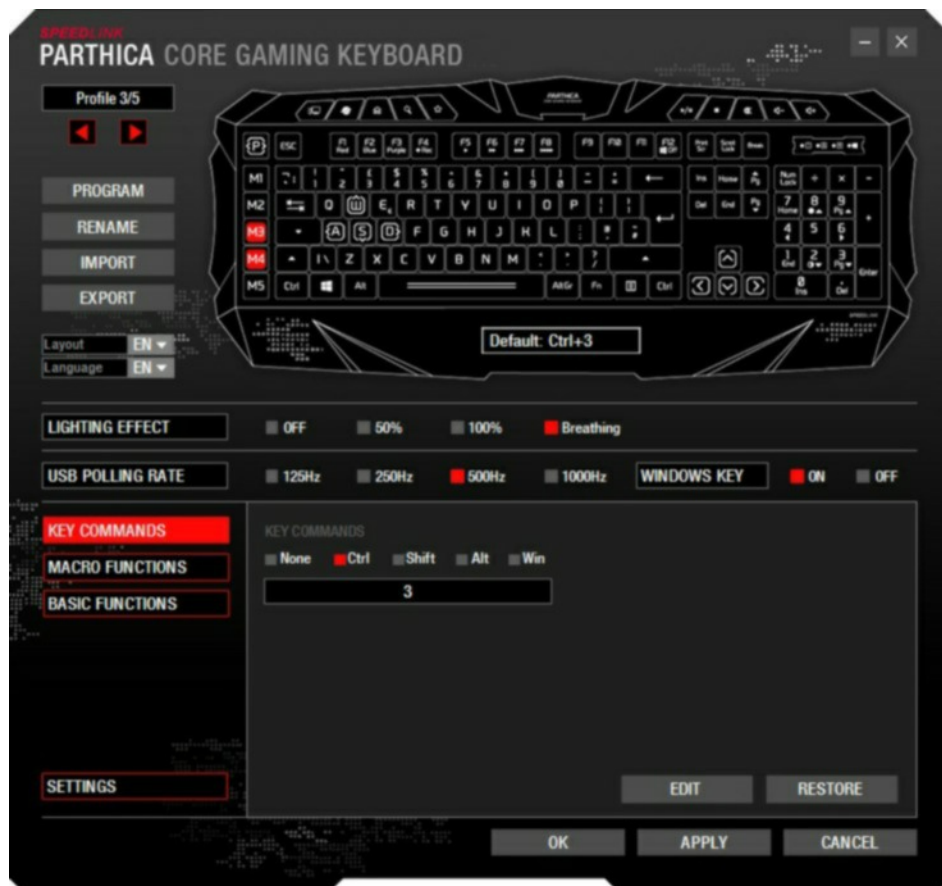
- Off
- 50%
- 100%
- Breathing

Self-explanatory of course, the breathing effect is a fade to black and back to colour which I didn't have on for long as it bugged the hell out of me. Perhaps if you could set it to do that when it has been idle for a while, kinda like your screensaver, I might be tempted.

### Keys

Using 'Key Commands' you can tweak any key and change it to another – you could, for example, relocate the 'Shift' action to the '5' key.

Looking deeper here we also have the ability to set basic commands from the predefined list. This is a large list of common functions like Explorer, mouse, browser, multimedia or Office functions.



the 8 on the number pad to increase or 2 to decrease the lighting level.

Again, holding down the Fn key, use the F keys on the top row to change the colour schemes.

- F1 Red
- F2 Blue
- F3 Purple

The Parthica logo colour is changed separately using the P key at the top of the Macro keys. This scrolls through Blue, Red, Purple, Green and Yellow.





# SpeedLink Parthica keyboard

The final option is to configure keys which will load your chosen application or game.

## Macros

Macros can only be attributed to the Macro M1 – M5 keys. But that's to be expected. That's why they're called Macro keys, right?

These are saved to the keyboard's 128K internal memory. This means they'll be saved if you take your board to your mate's place to use.

## Gaming

I missed the noise of my mechanical keyboard (my other half didn't) but I found the Parthica plenty responsive enough to be competitive in first person shooters such as Battlefield, Call of Duty and CS:GO. The addition of the on-the-fly Macro recording and shortcut keys certainly come in to their own, especially if you're an MMO fan.

## Parthica Core conclusion

If I was to be extremely petty I'd say that the lighting didn't go bright enough and that the light profiles for the keys and logo



should match. I like being able to select red for the logo and blue for the rest of the board but what if I want everything yellow?

I am taking it that SpeedLink will get the software on their site to download so I'll skip the rant about not everyone having optical drives in their computers any more.

Yes, it is a membrane keyboard but the keystrokes are definite and the keys themselves are nicely cupped.

I have to keep reminding myself that this gaming board has on board memory, programmable keys and Macros and colour customisation at a price that's going to be really hard to beat.

The design is pure gamer and, yet, the Parthica has a relatively tiny footprint.

I would definitely recommend anyone looking to get in to gaming or those upgrading from a standard board to a more game-centric one to check out the SpeedLink Parthica Core gaming keyboard. Especially for the price.

## Price and availability

The SpeedLink Parthica Core gaming keyboard is available from Very right now for just under £40

**Overall score 8.2**

**Build quality 8/10**

**Design 8.5/10**

**Ease of use 8/10**

**Performance 8/10**

**Value 8.5/10**



# D-Link EXO AC1750 router

**The AC1750 EXO Wi-Fi Router (DIR-869) is the starting point in D-Link's new EXO series of routers. This range is designed to offer a combination of power, style, and affordability.**

The DIR-869 is a dual-band Wi-Fi router and certainly has the looks.

The spec sheet reads pretty good too; Four LAN ports, automatic band selection and beamforming.

Is it pretty enough to turn my head away from my Linksys EA7500? Maybe. Has it got the necessary chops to keep me interested after the first date?

Well, we'd better have a look. Hadn't we?

## D-Link EXO DIR-869 design

I do love routers that look like they've come fresh from the special projects lab of a military hardware maker. This is fortunate, as the DIR-869's stealth fighter aesthetics mixed with just enough Ar-15 is just that.

It shares its looks with the more technically beefed-up DIR-879. You can also tell that it comes from the same stable, or should I say hanger, as the DIR-890L Tri-Band offering from D-Link.

The DIR-869 is finished in a burnt orange hue which is contrasted by black sections. It is flanked by four flat-folding antennas.

The antennas have some neat geometric patterning on the outside, whilst their inner most panels are left a shiny, glossy black.

The router measures 8.72 x 6.30 x 2.38-inches and so you should not have any difficulty in finding a place to put this compact device. Although, the colouring may make



it difficult to blend in with your decor.

A thin LED lighting strip on the front of the router glows white when the device is working properly, and orange when it is rebooting or being reset.

The back of the DIR-869 is home to four wired Gigabit Ethernet ports and a WAN (Internet) port. There are also Reset, Power, and WPS switches around here too. One more switch allows you to toggle between using the EXO as a router or a Wi-Fi extender.

The observant amongst you will have noticed a distinct lack of USB ports. Not a single one.

## Performance Set-up

Having flown the 890L I am familiar with D-Link's web-based management console.

It is very intuitive with the Home page displaying a simple network map with DHCP, IP address, and Internet connection status information.

Through the Settings menu you can use the Wizard or get your fingers dirty with the DHCP, PPPoE, and Static IP settings. Flick over to the Network page and you can edit LAN IP Address, Subnet Mask, and advanced DHCP settings.

The Wireless page is where you go to change the SSID and password for each band, assign security settings, select a Wi-Fi channel and an 802.11 operating mode, and enable scheduling.

The Features menu offers QoS, Firewall, Port Forwarding, and Website Filtering settings. Finally, the Management menu has Internet access scheduling, system logs, data transmission statistics, and firmware upgrades.

AC1750 comes from its wireless spec of 11AC Wi-Fi – Up to 450Mbps (2.4GHz) + 1300Mbps (5GHz). The next step up in the EXO range gives you AC1900. That one brings the 2.4GHz band up to 600Mbps.

- 450Mbps + 1300Mbps = **AC1750**
- 600Mbps + 1300Mbps = **AC1900**



# D-Link EXO AC1750 router

## Installation

Installing the DIR-869 was done within 15 minutes all told.

Simply connect the router to your modem and then either connect a laptop or PC direct and head over to 192.168.0.1 via your browser, or go in via your mobile device.

You will have to log in using the default credentials at this point, naturally.

Rename the SSID and update the password to your usual network preferences and Robert is your mother's brother.

## In use

My first gripe is that DIR-869 spends most of its time looking like a stallion pawing at the air.

I don't think my Ethernet cables are heavier than anyone else's nor are they so short that they are pulling at the router. But, still, if I have the DIR-869 with its back to the edge of the unit it stands on so that the cables run behind it, the EXO will start to point skywards.

Is this due to its small footprint? Perhaps. Could it be because it doesn't weigh much (15.24 ounces)? It's a possibility. Either way, it looked like it was generally ready for launch.

Speeds were never going to match the AC1900 Linksys EA7500, it may have been more sporting to have had the DIR-879 to compare (this is on its way to me I have just been told).

As the 2.4GHz speeds were already skewed in the home team's favour I turned to the 5GHz band.

The Linksys managed to clock a good few Mbps more than the DIR-869. I doubt that most people would notice the difference to be

honest unless you're dealing with large file streaming.

I generally use the 5GHz for my mobile phone and tablet (admin privileges) but I did find that the signal dropped sometimes when I was upstairs. Overall though, the signal strength is pretty good from the DIR-869's quad aerial set-up.

## D-Link AC1750 EXO (DIR-869) review conclusion

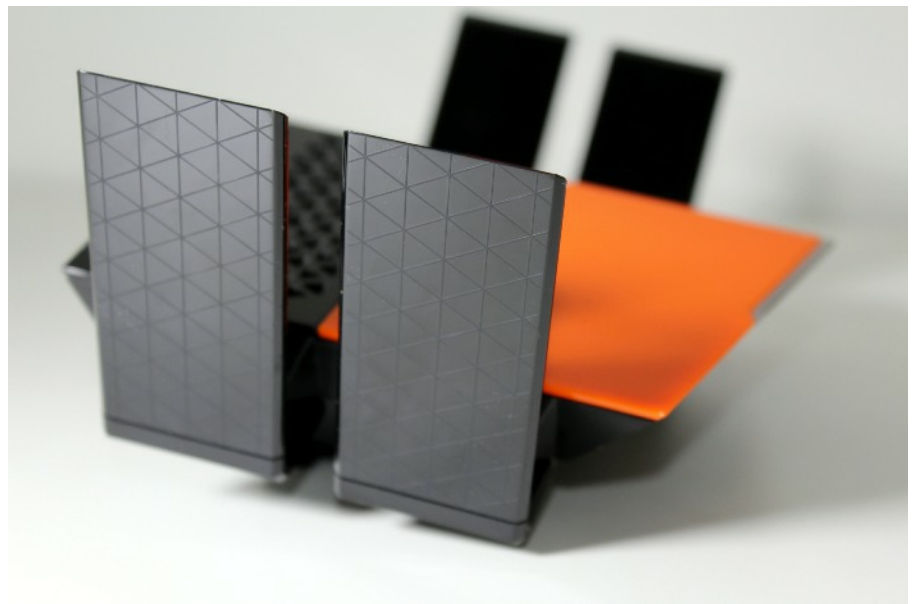
The D-Link AC1750 EXO is a very good looking 802.11ac Wi-Fi router.

It might not be able to match AC1900 device,s but then,

Now that it's 6 months old, it's actually £30 cheaper than the EXO DIR-869 and packs a pair of USBs and Multi-User Multiple Input Multiple Output (MU-MIMO) simultaneous data streaming. It might not be as pretty or small, but it's all down to what you're after at the end of the day.

If you are looking for a stylish dual band Wi-Fi router that can handle most streaming challenges and have limited space. Then check out the D-Link AC1750 EXO (DIR-869).

## D-Link AC1750 EXO (DIR-869) price and availability



AC1750 normally won't.

The EXO DIR-869 does a lot of things well. It also manages to fit a dual core processor, dual band Wi-Fi as well as four Gigabit Ethernet ports in to a rather small and attractive frame.

The lack of USB ports could be a deal breaker to some as this means you can't share USB-equipped printers or storage devices. At the time of review, the Linksys would've cost you another £20-30.

The D-Link AC1750 EXO (DIR-869) is available now direct from D-Link for £129. The AC1900 (DIR-879) is £174 and a review of this will be posted soon.

**Overall score 8.3**

**Build quality 8.5/10**

**Design 8/10**

**Ease of use 9/10**

**Performance 8/10**

**Value 8/10**



# Musaic Music Players

**March 2014.** That's when I first wrote about the London-based start-up, Musaic. I dropped in on them at Gadget Show Live, been to their launch parties but it is only now that I have had the opportunity to play with their MP5 and MP10 music players in my home.

The Musaic Music Players have impressed me for the past couple of years. Since their inception they have become more integrated with smart home technology – or Internet of Things (IoT).

At the start of this year they became AllJoyn certified but, more recently, they have added IFTTT cleverness to their arsenal.

The latter really interests me as I use IFTTT to automate some of my day-to-day and I was really interested to see how the MP5 and MP10 worked with some of my smart home kit.

Musaic may have only been around for a couple-or-so years but this British company stems from experienced lineage, especially as it is co-founded and run

by ex-Cambridge Audio technical director Matthew Bramble.

Part funded from when it was looking for £60,000 through its Kickstarter campaign, Musaic offers two products, the MP5 and MP10. These music players have an identical feature set which only differs with the larger of the two units, the MP10, sporting increased power.

## MP5 and MP10 design

Musaic consists of two Music Players – the MP5 (12.4cm H x 34.3cm W x 9.5cm D) and the larger MP10 (14.6 H x 41.2cm W x 11.5cm D) which packs an additional subwoofer.

Using standard Wi-Fi, they stream tunes from almost any device, be it an iPhone, iPad, Android smartphone or tablet, PC, or Mac. They can also use Bluetooth or wired Ethernet.

The design of the cabinets shows that an easy user experience was the order of the day here. The simplified physical controls come in the form of 10 touch-sensitive top-panel buttons.

These emulate smartphone icons to some degree. From the control panel you have access to power, volume and mute in the right bank and play controls to the left. The latter bank of buttons also double up as memory recall buttons.

There's also a heart-shaped 'like' icon and light bulb symbol, re-



# Musaic Music Players

veals how the Musaics are also designed to work with streaming services and smart home lighting systems.



At the heart of each MP beats Class D amplification. The MP5 dishes out 18W per side into two full-range 55mm front-firing drive units made from doped paper cones with mylar dust caps. The MP10 ups the ante with 60W on tap, shared across two 45mm high-frequency/midrange drivers flanking a centrally positioned 90mm front-firing bass driver.

A rear grab handle also acts as a discreet bass port, to further aide lower frequency reproduction and both models feature a custom-tuned version of HDSX signal processing, claimed to expand the listening position's sweet-spot.

Physical inputs are limited to a rear-panel 3.5mm analogue input, a USB-A charge socket for smartphones and the like and an Ethernet port.

The MP 5 weighs in at 1.8kg and the MP10: 2.6kg.

## Musaic app

The Musaic players have really been designed to be used via its mobile apps. These are streaming machines, after all. Setting up a Wi-Fi connection is incredibly straightforward and once you're

up and running the app is really intuitive.

The top row is where you'll find your music sources. Local will play whatever's on your device, and Radio hooks up to internet stations. Streaming allows Spotify Connect, AUPEO!, Napster, Qual-

and heard them in a variety of settings and they have always impressed.

It is fair to say that both Musaic players are capable of producing a much bigger sound than you'd expect from boxes of this size.

But it isn't just their sheer power that grabs my attention. The reproduction is well defined as well as offering enough excitement to engage even the casual listener.

## MP5

I plugged in the MP5 on the unit in my bedroom.

Hooking it up to Spotify Premium I squirted through Florence and the Machine's MTV Unplugged performance of 'Dog Days Are Over'. I will admit that I wasn't prepared for such a wide sound-



comm AllPlay, Rhapsody and Sonoma FM with more in the pipeline, including Tidal.

The top level menu is where you'll find Setup, and Players where you can Group your players for multi-room music.

I really like the way this app is laid out.

## Performance

### Sound quality

I am, of course, very familiar with how these units sound. I have seen

stage from this networked ghetto blaster.

Granted, I wasn't getting two channel imagery but the MP5's presentation sounds much broader than any of the one-box solutions I have tested.

The mids are really well projected and so gives the rest of the frequencies room to breathe. All the instruments just seem to sit right.

## MP10

The MP10 has been resident in my living room as I had IFTTT plans for the larger MP sibling.

# Musaic Music Players

I was now expecting something bigger and better from this box, and I wasn't disappointed.

The MP10 is what I can all refer to as being a much more grown-up performer.

Vocals and instruments, especially the treble, are less pushed and more relaxed. It's a more refined listening experience when compared to the MP5.

Ms Welch's delivery is captivating and more realistic and seems to have more command across the soundstage without fear of sibilance or hard edges.

The MP10 presents music more neutrally.

The low end, as is expected, is handled much more openly with the MP10. With bass-lead tracks such as Pearl Jam's 'Jeremy' the bass is more firmly rooted, underlying the performance of the unit's dedicated driver.

The bass unit integrates seamlessly with the mid and treble drivers and all three work in unison. This combined effort results in a soundstage with more of an extended top to bottom than the MP5. The MP10 will certainly hold its own in a party environment.

## Immersive listening

What really amazed me from both units is that, whilst they don't claim surround skills, the speaker's focus is not just simply straight ahead.

Testing both players with a range of FLAC files and a fixed listening position (about 3 meters directly in front) the instruments are placed precisely where they should be. Moving left or right of this position and the musical image remains the same.

There is that feeling that the band is following you around the room without losing its distinction or direction. This makes them great for listening to music when cooking or tidying up.

Both the MP5 and MP10 handle a variety of genres equally well. Jazz is roomy and singer/songwriters have almost a holographic presentation. Vocalists come across with emotion and instrumentation is deftly handled.

Rock and metal, usually a good test to see how speakers separates the melee of instruments, is tackled head on with horns raised. The MP5 puts up a good fight, especially with the industrial stylings of NIN's 'Pretty Hate Machine' album. But it is the MP10 who adds the beef needed for distorted powerchords. Motorhead has all the attitude that the late, great, Lemmy would expect.

## IFTTT recipes

As I mentioned before, I was excited to try these.

So, I diligently signed up to Musiac and connected my profile through IFTTT.

This was all very simple as I am quite familiar with the application.

The next step was to cook up what IFTTT calls recipes. These recipes are follow the 'If This Then That' model. So, if something happens, then that triggers something else.

I had signed up to Musaic and registered the devices but, yet, I hadn't linked the players up with my account. ***This is why I have had to update my review.***

## Link Musaic music players to your account

To do this you need to head over to your Musaic app and enter the settings menu (the three squares in the uppermost right hand corner).

You will recognise this as the place where you connect to your player. Tapping the cog will open up another menu. Give it a tap.



This is a rather long menu so scroll to the very bottom.

Right at the bottom, after the Reboot player and firmware updates and just underneath the Debug logs is the important bit: Link player to account.

You can see why and how I missed this can't you?

Once you've tapped the Link player to account option, you will be shown your player(s) listed. Select and add. There is also an option for you to 'add all players' which



# Musaic Music Players

is handy should have more than just the one.

## Create Musaic IFTTT recipes

Now that you have your players linked to your Musaic account, you can get your IFTTT on.

Making your own custom recipes is really easy but, for speed, I have used some from the Musaic IFTTT cookbook.

## Arlo and Musaic

The first one I wanted to test was the one which utilised my Arlo camera.

I set the camera to trigger Musaic to shout a warning should it detect



### Scare away intruders with a spoken warning

**Notes:** When triggered by Arlo motion detection this recipe will vocalize any warning message you choose via a Musaic player.

Which Device?

4K7261SG0CAA8

Which room?

Please select

Please select

Add

motion. I have already set the camera with a geofenced area so I won't get the MP10 in the living room shouting at the birds, foxes or the neighbour's cat.

As you can see, the Musaic players are now listed where before I couldn't get past that step. Naturally, you can set this for all your players to say something in unison.

## Musaic turns on the radio when I get home

One of the first things I do when I get home is to put some music on. The thing is, I've usually got my hands full. I am either carrying tech that has been delivered to the office or I have had to grab some groceries on the way home. This delays me from getting my tunes on.

This recipe will actually trigger the Musaic players to start playing a preset radio station as soon as I get in the area.

Of course, you can narrow the area down to closer to your home. This is achieved by using the plus and minus buttons.

I have set the MP10 to tune in to the station I have assigned to Preset 2. Total Rock, if you need to know.

## Musaic IFTTT recipes results

It's really easy to get on a roll with these recipes. I even added a time reminder to give me a nudge on an evening to get upstairs and start writing.

I am very happy to announce that all of these recipes worked as expected. Yes, the screen shot below was taken before I ran any of the recipes. I was just happy that I could complete them at that point.

IFTTT is really intuitive and, once you have your Musaic players linked to your account, much fun can be had.

Remember, just make sure you have your players and your Musaic account linked.

## Musaic review conclusion

The MP5 and MP10 have been designed as 'lifestyle' sound slin-

gers but I dare say even the most sniffiest of audiophiles will be won over by them.

The audio quality achieved from these compact boxes proves that you don't always have to compromise.

The Musaics' onboard controls are simple with more options being kept to the free accompanying app. The app itself is extremely user friendly, allowing you to jump across each device easily, or linking them together without interrupting the flow of the music.

That one simple step of linking the players with my account is all it took. Once I had the players linked, the IFTTT functionality is easy to use and borderline addictive.

While the MP5 is a great value single-box player, paying the extra money for the MP10 is worth considering as it takes the audio quality up to the next level. The MP10 really does punch above its weight without ever seeming strained.

## Musaic price and availability

Both players are well and truly available. The MP5 comes in at £280 and the MP10 will cost you £370 on Amazon.

## Overall score 8.3

**Build quality** 8.5/10

**Design** 8/10

**Ease of use** 8.5/10

**Sound quality** 8.5/10

**Value** 8/10

# Groov-e Fusion headphones

**The Groov-e Fusion are a set of inexpensive wireless headphones which can also be used with a cable. Do they bring together the best of both worlds though?**

Chances are, Bluetooth headphones are going to become even more popular very soon if Apple does indeed remove the headphone port from their fruity phones.

The Cupertino company have been threatening to do away with the headphone port in their iPhone products for a while now. This will further enhance their ability to make wafer-thin phones (do we actually want that?).

Bluetooth has improved over the years and more-and-more manufacturers are offering wireless products.

Groov-e is a brand who offers a variety of products at really good prices. I have been using a pair of their Fusion headphones on my commute for the past couple of weeks.

Let's see if they're any good.



## Groov-e Fusion design

Peering through the window of the Fusion's box I liked the look of these on-ear cans.

They were plain looking, but in that classy, understated kind of way.

Getting them out of the box and

holding them in my hand, my first reaction was at how plastic-y they felt.

I know a lot of headphones are constructed

from plastic but if I was to hold, say, the Astro A40 TR in one hand and the Groov-e Fusion in the other you would be able to tell that there's a world of difference between these headsets.

The Fusion are light, which is good, but they don't have that reassuring solidity that whispers quality.

I have been sent the set in silver and, as I have already said, they do look pretty good.

Pretty much everything happens on the edge of the left-side ear-piece. Here you'll find the volume controls which, if just tapped, will also skip tracks.

You'll also find there your Micro USB charging port, the cable port for wired connections, and a microphone for hands-free skills.

There is a good amount of padding on both the cans and on the underside of the head band.

The band itself is plenty flexible and I can imagine it being able to get over even the largest of craniums. On the face of the left earcup is the power button. This is slightly bowled and easy to locate. This



# Groove-e Fusion headphones



button can also stop and start tracks.

The cans can twist and fold inwards, so the whole thing can be stored and carried around quite flat. This makes them ideal travel partners.

## Fusion performance

Getting the Fusion paired with my smartphone was a simple operation and I was soon good to go.

I have used the Fusion at least twice a day on my commutes to and from work, as well as using them with my tablet during lunch breaks.

The 40mm drivers do an ok job, both via BT and the included stereo cable.

I wasn't expecting audiophile quality from these but there was a huge emphasis on bass.

On electronic/dance tracks the level of deep, resonating bass was almost overpowering. The treble is there, but to a lesser degree. This is what some makers would class as an 'exciting' sound.

The unfortunate side-effect of this is that the mids are so recessed in the reproduction that, at some

points, some of the music is missing.

The main vocal track of Type O Negative's cover of 'Cinnamon Girl' actually disappears. Great if you were wanting a karaoke version, not so good for listening.

There were other tracks too which sounded like someone had unplugged one of the speakers.

It's not all bad news though; Tesla's 'Modern Day Cowboy' helped me through the journey to work.

Podcasts and audio books were nicely handled too.

Battery life is around the 12 hour mark which got me through a week's worth of listening before needing a power boost.

## Groove-e Fusion headphone review conclusion

These lightweight on-ear headphones will suit some listeners,

depending on music choice. I like that they are able to work as Bluetooth or cabled cans.

I generally favour wireless headphones when traveling, especially on the London Underground. Cables can so easily get you in a tangle with your fellow commuters.

As I have an extremely broad range of genres I like to listen to, I need a more versatile set of headphones.

The price of the Groove-e Fusion is right, they are comfortable and flexible. It's just a shame they're tuned a little too specifically.

## Groove-e Fusion price and availability

You can grab the Groove-e Fusion in silver, black or gold right now for a RRP of £34.99.

Amazon.co.uk has them for £25 at



the time of this review going out.

**Overall score 7.7**

**Build quality 7.5/10**

**Design 8/10**

**Ease of use 8.5/10**

**Sound quality 7/10**

**Value 7.5/10**



# AOC Q2781PQ monitor

I have been eyeing up AOC's AEGIS gaming monitors but they also have some lovely kit designed for work too. The Q2781PQ is almost pretty enough to be desk furniture thanks to its bezel-less frame.

The AOC Q2781PQ is a 27-inch 1440p resolution monitor that, you have to admit, looks pretty amazing.

It's all well and good having a swanky monitor but how does it perform. Is it all show and no go?

## AOC Q2781PQ design

At the risk of repeating myself, the Q2781PQ has remarkably skinny bezels that measure just 8mm across. This means that your PC desktop takes up 93% of the entire front of the monitor. The aesthetic is almost that of a floating display.

Having a slim monitor (measuring



desk space for your keyboard and other bits.

The screen is edged with a slim, silver trim which is embellished with a rather unobtrusive logo.

Even the stand adds a touch of class. The sculpted lines and machined finish not only adds form but function. The asymmetrical design is also easy on the desk real estate.

There's room within the stand's U-shaped foot for your phone, notebook, or game controllers.

The screen is also just 15mm thick in most areas, and it's not until you get down to where the stand attaches to the monitor that it starts bulking out slightly.

It's here where the ports sit, too, and you'll find two HDMI inputs,

DisplayPort and VGA, and a headphone output for sound transmitted over HDMI or DP.

There's no USB hub, but that's a reasonable omission considering the price of the screen.

There aren't any speakers either, but that's no great loss. It has been a while since I've heard any decent sounds coming from a screen.

There's also no VESA mount, so you won't be able to use a custom stand or mount it to a wall.

The back is extremely shiny! I have seen glossy black backs before but I actually just gave in trying to photograph this one without getting reflections.

I would have liked to have seen some adjustment beyond a simple screen tilt though. The Q2781PQ allows for tilting between -2 (forwards) and 16 degrees (back).

## AOC Q2781PQ performance

### Set up

The monitor's interface pops up from the bottom of the screen, and is divided into clear categories



just 615 x 452 x 197 mm including the stand!) also helps keep more

# AOC Q2781PQ monitor



can give to colour blocks, makes browsing a joy. Also, writing in Word, and such like, for that matter.

I am a huge fan of the Q2781PQ's 2560 x 1440 resolution 27-inch display. I could certainly get used to all this space. OK, text would be sharper on a 4K screen but I think this suits me for what I need it for.

Colours also appear to be very

accurate too, great for photo and video editing.

The chief problem I found with the screen was an area of backlight leakage at the top-left of the panel, a couple of inches in from the left-hand bezel. When I filled the screen with a black test image, this manifested itself as a semicircle of whitish-grey. I found it hard to notice in static test images, but in games the backlight bleed added an unintentional lens flare effect in darker scenes.

The Q2781PQ spec sheet gives a GtG (Grey to Grey) time of 4ms but a quick blast on Test UFO shows noticeable blurring even at 240 pixels per second 60 frames per second.

Yes, there is ghosting and there is some haloing but, this doesn't mean that games are unplayable. I managed an hour-or-so's enjoyable gaming on Project Cars and CS:GO without blaming any mis-

takes on the monitor. • This is from AOC's style range and not its gaming range, remember.

## AOC Q2781PQ review conclusion

The Q2781PQ (why can't monitor makers come up with catchier names?) is a real looker. You may have also noticed that I like it quite a bit.

The size and resolution has made my last couple of weeks work a little bit more enjoyable. Even when it isn't switched on it is a nice thing to look at. Yes, it only tilts, but I will allow it that.

It's not the fastest monitor out there, but I will forgive it that too. I am sure that you will also fall under its almost frameless shell. Its skinny dimensions and attractive stand.

The AOC Q2781PQ is a great, stylish, business monitor which also copes well with video and photo viewing and editing.

The ViewSonic 24-inch monitor that I had recently was good, but the AOC is better but more expensive.

## AOC Q2781PQ price and availability

You can grab one of these great looking monitors now from Amazon for £300.

**Overall score 8.2**

**Build quality 8.5/10**

**Design 8/10**

**Ease of use 8.5/10**

**Performance 8/10**

**Value 8/10**

such as Color Setup and Luminance.

I will have to pull AOC up on this small matter though. Unless you know where the buttons are, it can be a bit hit and miss. If only they had the courtesy to backlight the icons or have the buttons glow or something. As it is, under normal lighting conditions, it's a bit like having a teenage fumble on the back row of the cinema. Whatever that means.

## Image quality

Saying that though, I doubt if many, if any, will see the need to tweak the out of the box settings.

The image quality is pretty darned good as is. Colours are nicely saturated and vibrant without any graininess.

As white space is still a lovely thing in web design, the lack of that bitty texturing some monitors

# Wistiki Voilà tracker

You may have already read my review about Tile, the key tracker. Well, as good as it is at doing its job, it probably won't win any fashion shows. Wistiki, on the other hand, has had some help from renowned designer Philippe Starck for their Voilà.

Keys can be pesky things at times. So can bags, cars and bikes. We know this. We covered most of this ground already in my Tile review.

So, let's get straight to the burning question. What's different about the Wistiki Voilà, and why should I want one?

## Wistiki Voilà unboxing

It's not often I do unboxings but, before I even got to the device, I could tell that some care had been taken in the way the Voilà was packaged.

There's an outer box which slides off and then the inner opens up. These are all presented in classy,



understated style.

When you finally get to the device it is nestled in foam rubber and can be extricated easily thanks to a finger gap in the foam.



Once the device is freed you can see a user guide – but can't quite get to it. This is because it actually slides out of one side of the box.

For such a small object, they have really gone to town on how you first meet it.

## Wistiki Voilà design

Imagine asking Philippe Starck to design a USB stick and you'd probably get something similar to the Voilà.

I love his eye for industrial design and I like what he has done for what could be as utilitarian as a key tracker.

The device measures 6.5cm long, 0.6cm wide and 2.2cm across.

At the top is an opening for a keyring, and then at the bottom there's a

small coloured transparent plastic section that covers the circuit board. It actually reminds me of the ONEmicro's dongle.

There is a selection of colours so that, when you assign them particular jobs, you won't get them mixed up. I was sent the orange one, but you can also get it in purple, pink or yellow.

## Wistiki Voilà performance

### Set up

This is the all too familiar 'download free app' process we've seen and done thousands of times before so I won't waste too much time on this bit.

Make sure you have your phone's Bluetooth switched on, download the app, and follow the on-screen wizard. I did try starting off by using the QR code in the user guide but that sent me to a Zendesk site.

The app is available from Google Play and Apple App Store.

You have to register for an account and activate it through email and then you're almost good to go.

When your app tells you to, just hold down the thumb indentation on your Voilà 'til you hear a tune. Then you're done.

### Voilà!

Once you have set it up, you are ready to use the Voilà to track your phone or keys easily.



# Wistiki Voila tracker

Press the bell icon on the app and the tracker will play its cheerful 90 decibel tune for around 12 seconds or so.

If you have your keys but have lost your mobile: press the button on the tracker you used to pair it with your smartphone and your phone will ring for about 3 seconds (even when it's on silent or vibrate only).

On the app, you also have some tracking features that allows you to hunt your keys down. There's map integration as well as a hot/cold bar that changes as you get closer to your keys.

The Voila also has a range of around 300 feet, so you can communicate with it from quite far away.

However, as the app does track the Voila's last known position, it is possible to track your keys from outside of that range.

Just as the Tile does, the Wistiki device will automatically search for other users, and notify them via their app if they should pass in the vicinity of your keys.

If this happens you will then be able to open up a chat with that user to get your keys back. Of course, that only works as long as a number of people use the tracker. But, at £45 a pop, any help will be happily received I should imagine.

A feature I didn't use is Wistiki sharing. This lets you grant up to 6 users access to a single Wistiki device, which I imagine makes for

some incredibly effective family car key-hunting efforts.

To share Wistiki, just tap on the tracker's icon on the app's main page, then hit share. Whoever you share it with will need to make their own account, and will then be able to do everything that you can with the app and tracker – apart from adding new users.

I almost forgot to mention. The



Voila can take a dunking. The website states that it is *"rain resistant and can be submerged"*.

## Battery life

According to Wistiki, 'love lasts 3 years' – remember, this is a French company and they apparently know a thing or two about this.

I am guessing that, by then, there will be a newer, fancier version. I have a feeling that, as this is a 'designer' key tracker; it's more about changes in fashion than upgrades.

## Wistiki Voila review conclusion

The Wistiki Voila does look and feel like a well-constructed and well-conceived device.

I do love the attention to detail, right from the packaging through to the device and even the way the app is designed. You can even colour code your trackers in the app.

All of this does come at a price though. Although a premium that fans of Philippe Starck are probably used to paying.

Does it do anything that the other tracker I recently reviewed did? Nope. Does it do anything better than the other tracker did? Nope. Does it look and feel better? Yes.

I can see more people attaching a Voila to their bags on the outside than the other white tracker (Wistiki does one of them too). It does look more of a bag charm than a tracking device.

vice.

I think I'd be more likely to buy a Voila or the wallet-friendly Hopla as gifts, rather than a plain plastic white thing.

## Wistiki Voila price and availability

You can purchase one of these devices in one of four colours for 49.90€ direct from the Wistiki site.

**Overall score 8.7**

**Build quality 9/10**

**Design 9/10**

**Ease of use 8.5/10**

**Portability 9/10**

**Value 8/10**

# Motorola VerveOnes+ earphones

**Earphones like the Motorola Verve Ones+ have remained science fiction or in the kit bags of the likes of James Bond or Agents of Shield. • Using totally wireless, tiny in-ear earphones is now an option for everyone, not just covert operatives.**

Wireless earbuds have been in development for a while now and Samsung has also joined in the fun. But, the Motorola (or Bina-tone licensing the Motorola name) got there first with its Verve Ones+ headphones.

I've been wearing these in between my other review headphones since getting them at launch, so a couple of months.

## Verve Ones+ design

OK, these aren't tiny, tiny. But they do fit nicely in your ears.

They stand about 1cm proud of my lug-holes but I have long hair so no one can see them. Even though they are bright orange.

Saying that though, the orange bit will be in your ears. The outside world will see mostly black and an orange ring.

I like how they look and, thanks to the range of rubbery tips (three with a double-flange design) they fit snugly.

They are comfortable and not too heavy. They stay stuck in too, even when jogging or jumping around.

They're rugged, too. IP57 rating means they can be immersed in 1m of water for 30 minutes. I wouldn't recommend going swimming with them, but a bit of rain or sweat won't hurt.

## Verve Ones+ performance

The first thing I will say is that the freedom that these wireless in-ears provides is almost like when you go from glasses to contact lenses. It's a familiar yet slightly odd feeling.

Soon you will get used to the fact that you no longer have to live in fear of having your ears yanked off by a passing commuter. Putting bags on your shoulders or zipping up a jacket doesn't require



a cable check fist.

The case they come in handles charging as well as safe storage when they're not shoved in your ears.

Every time you put the buds back in the case, they get a top-up via

the neat connectors on their underside.

A fully-charged case is claimed to be good enough to provide charge for up to 12 hours, and I can confirm this is about right.

## In use

Connecting the Verve Ones+ to your smartphone or laptop is straightforward enough. Just take the buds out of their case and they'll immediately activate, searching for a nearby host. Flick on your Bluetooth and you'll be hooked up in seconds.

Things started off a little bit... bity when I was first getting to grips with the 'Hubble Connect for VerveLife' app though.

The app adjusts the sound with various EQ presets, and toggles the 'pass-through' feature. The latter option is for those who want to hear more of the outside world – cyclists, and the like.

I do dig the in-built locator that shows where the buds were last registered. Handy should you misplace the little blighters.

Even though I realise that the Hubble app was/is brand new(ish) there were connectivity issues. I experienced most of those at the start of my testing, and it seems to be more stable now. For the most part. The good thing is that this doesn't affect the Bluetooth connection.

Also, you can cycle through the EQ presets by holding down a button on the buds themselves, which also handles play and pause functions.

## Sound quality

# Motorola VerveOnes+ earphones

There are six presets – these generally tweak bass or treble.

I find the sound quality pretty good to be honest. I am not generally an ear-buds man but these I really enjoy.

They are not too bass heavy, as is the usual way for most 'urban' phones. Nor is the treble hissy and horrible.

I had them set on the most balanced EQ but, as I've said, there are options if you favour bass in your face. As these fit really well in my head I got quite a decent dynamic range from these tiny noise makers.

On odd occasions I have had one of the buds drop out for a second. This is due to the left one being the master and the right the slave. That means that your phone con-



I wouldn't use these when watching videos on the go though because the lip sync, or lack thereof, does become annoying. Music only for these little buds, but that's what they've been designed for.

But, apart from that, I can't see a downside to the Verve Ones+. Well, perhaps the price.

I am not saying that they're perfect, but their quality, fit and concept outweighs their little foibles.

Jogging without having large, branded 'Mug Me Quick' cans, using weights or treadmills without the fear of entanglement. These are the domains of the Verve Ones+. Not to mention covert music listening when at work... well, if you have long hair.

## Verve Ones+ price and availability

You can buy the Verve Ones+ direct from the VerveLife website for £229.99. You can get the VerveOnes (No +, all black and no IP rating) for £199.99.

**Overall 8.3**

**Build quality 8.5/10**

**Design 8.5/10**

**Ease of use 8/10**

**Sound quality 8.5/10**

**Value 8/10**



nects to the left first, and the left then connects to the right. Normally, all is well as they connect and chat to each other without any latency issues. But the right does seem to be the one that goes quite more, which leads me to think that I have a thick skull. This doesn't happen every time and I have actually got used to it.

## Verve Ones+ review conclusion

Feeling like a cross between a special agent and Pinocchio, I really do enjoy having no strings to hold me down. True, if you haven't got a secure fit then you'll be scrabbling around for your errant bud.



# STM Prime laptop backpack

**I love my STM Drifter backpack and when my girlfriend said that she was looking for something similar my thoughts, of course, turned to STM's Prime.**

At the moment my other half either takes just her laptop sleeve and a decent-sized shoulder bag or her trusty wheeled backpack. The thing is there are occasions where she either over-packs her shoulder bag or under-utilises the wheeled pack.

The Prime seemed a perfect fit for those in-between moments.

The STM Prime backpack is from the Australian company's 2016 Velocity collection.

## STM Prime design

I have become accustomed to my Drifter's dimensions and thought it rather compact. The Prime is even more so.

The 'Frost Grey' pack I was sent to review is a mere 16.5-inches tall

and just a just over 10-inches wide.

As with the other STM products I

13-inches, as well as a number of smaller sections. These will easily take a tablet, notebooks and that kind of thing.

I really like the addition of STM's 'slingtech' protection. This suspends the pocket in the middle of the bag so it does not hit the floor when you put the bag down.

Added corner padding also mean the devices inside are well protected.

This will all be useful as my test subject isn't renowned for her soft touch when it comes to tech.

There are a couple of internal pockets which lend themselves perfectly

to chargers, cables and other accessories. The main cavity has room for a few items — a large book or, perhaps, some overnight clothing and bits.

On the outside you have some handy quick access pockets. There's a zipped, soft, fleece-lined pocket which is handy for shades or your mobile phone.



have seen, this backpack doesn't scream "laptop bag!" either. This pack would equally be at home on the gym run or heading to the beach.

Just because it's small does not mean that it is lacking in storage space or neat organisation ideas.

Inside you will find a large padded sleeve for holding laptops up to

# STM Prime laptop backpack



As with the other STM products I have reviewed, fit and finish of the Prime is great.

The materials used seem robust and the stitching hardy. My Drifter still looks as new, even after 7 months of constant use.

The Prime features good, heavy duty zippers. Its water resistant out fabric and quality internal linings all add to the reassurance that your gadgets will be safely cosseted.

## STM Prime price and availability

STM Prime is available in frost grey, black, steel, and Moroccan blue for \$79.95. You can buy direct from the STM website, or Amazon.co.uk.

**Overall score 8.8**

**Build quality 9/10**

**Design 9/10**

**Comfort 8.5/10**

**Use of space 9/10**

**Value 8.5/10**

You get the standard elasticated side pockets too which are great for a water bottle and umbrella.

## STM Prime performance

The Prime has done very well in its tests. Not only is it comfortable to wear, it has proved that having two shoulder straps will take stress off the user's shoulders and back.

Even on those times where my girlfriend was tempted just to take her laptop sleeve and shoulder bag, she would opt for the Prime. The back air channels have also proved their worth during the stickier days we have had here in the capital recently.

Having that gap between your back and the bag really does make a difference.

## STM Prime review conclusion





# PowerEgg drone

After all my previous articles, I managed to go hands on with PowerVision's PowerEgg drone.

PowerVision, a global leader in UAV technologies, products and services has launched the PowerEgg as it's first consumer product!

The PowerEgg also has the bragging rights to being the world's first drone to come with a gesture-based single-handed controller.

Did you enter the design competition? The examples on the PowerVision website looks excellent. The egg still looks cool in white though.

## PowerEgg design

As its name suggests, this drone has a uniquely egg-shaped robotic design.

Not only does this look very cool, it means that it can be dropped in a bag without the risk of breaking bits off.

The self-contained egg bot can also be placed in a rather neat display stand (as in the first picture).



Disappointingly though, this is not a charging base. I was told that, to incorporate touch charging tech would have increased the PowerEgg's weight, and thus reducing flight time. It still looks awesome.

The bottom portion of the egg comes off to reveal a camera on a gimble. As PowerVision is well established in the field of drones, mostly for engineering inspection, etc, I am sure this camera will be great.

The rotor arms are easily unfurled manually. The folding blades are easily clicked open. To fold these away it is a simple matter of reversing the process. There is a little black catch at the base of each arm which

needs to be depressed to allow them to be folded back in to its shell.

The landing gear, on the other hand, is automatically deployed when using the assisted landing as the drone detects distance from

the ground. It can also be controlled by the main controller.

## PowerEgg performance

### Fly straight out of the box

PowerEgg is looking to take the consumer drone market to the next level with the world's first gesture-based one-handed drone controller — PowerEgg Maestro.

With PowerEgg Maestro, takeoff and landing can be done with the push of a button so that anyone can fly PowerEgg right out of the box.

The motion-sensing one-handed remote looks similar to a Wii wand. It also appears to be just as easy to learn to use. Thanks to its advanced, integrated accelerometers and gyroscopes you can control up-down, left-right, and near-far using intuitive motions.

PowerVision separated the flight processor and base station from within PowerEgg Maestro to enable its one-handed gesture-based capability. This allows for future PowerEgg and potentially third party controller and upgrade options. For users that require en-





# PowerEgg drone



beneath it for patterns, enabling it to identify its position and move accurately.

The integrated 4K UHD camera can produce professional-grade photographs and

videos with panoramic 360 degree views on a 3-axis gimbal. This hands you stabilised aerial views with an immersive “spherical” experience.

In addition, PowerEgg’s flight software includes multiple automated flight modes that let the user easily frame their shots while the PowerEgg automatically manages its flight path.

These ‘PowerModes’ include Follow Me, Orbit, WayPoint, and Selfie mode, and are easily accessed through the iOS or Android user interface.

hanced control, PowerEgg also comes with a traditional two-handed remote control.

Wally Zheng, Founder & Global CEO of PowerVision Technology Group had this to say:

As an established innovator in the commercial drone industry, our goal was to take PowerVision’s technology expertise and package it in a form factor that everyone interested in flying a drone could relate with and enjoy immediately... We designed PowerEgg to be the consumer drone for everyone. It’s sleek, compact and portable but also easy to operate, making it simple for anyone to launch and capture special moments on camera.”

## Range and camera

The PowerEgg delivers long distance real-time video transmission up to 3.1 miles (five kilometers). It is equipped with HD video transmission and has a maximum flight time of approximately 23 minutes.

With its optical positioning system, PowerEgg can fly indoors, low to the ground and in GPS-free areas.

PowerEgg’s visual and ultrasonic sensors scan the ground

## PowerEgg first look conclusion

The PowerEgg certainly looks good and the short indoor flight proves that it does work. There was video footage (some did look rendered though) showing the egg out in the wild. We were promised that PowerVision will return to take us outdoors with the drone. This I very much look forward to.

The cool, unique styling combined with ease of flight should make this drone a winner.

I hope to spend some more quality time with the PowerEgg and give you a more in-depth review soon.

## PowerEgg price and availability

Priced at £1,290, PowerEgg global pre-orders are being taken now at the PowerVision Online Store with shipping scheduled for mid-October 2016.

Pre-order customers will receive a limited edition PowerEgg backpack.

