NEW PROJECT 6.1S - BEST TURNTABLE UNDER £1000?

LOUDSPEAKERS FROM:
MISSION
TANNOY
SD ACOUSTICS
MUSICAL TECHNOLOGY

COMPETITION - WIN A COMPLETE VINYL SYSTEM WORTH £1300

DIY SUPPLEMENT No. 12 banded to this issue

Scoop! NEW DPA DIGITAL RENAISSANCE AMPLIFIER

5 QUALITY CD PLAYERS
Arcam Alpha One
Yamaha CDX-650
Rotel RCD-965BX Discrete
Kenwood DP-7000
Onkyo DX-750

DECEMBER 1994 £2.00

Hi-Fi WORLD
The most complex DAC in the World

It has long been held as a tenet of audiophile wisdom that the simpler the analogue circuitry, the better the sound quality. We have spent many years developing our own DAC technology that results in an order of magnitude improvement in analogue simplicity. This is achieved by the use of our patent pending DX processor DAC that employs up to 128 times digital filtering. This gives a very simple analogue topology - just our op-amp and four passive components in the direct signal path.

This is some ten times simpler than conventional DAC’s - and the sonic result it gives is extraordinary. Words cannot convey the sense of excitement when listening to music through it. Instruments sound much more tangible with better focus and separation. Sound stage and detail resolution are remarkable. Indeed, we are convinced our DX DAC technology completely redefines the capability of digital music.

However, this performance comes at a price - one being the complexity of the digital domain. An amazing one billion single bit additions are performed each second. The PDM ten twenty-four also features nearly 2,000 discrete components, 4,000 gates, 8 noiseshapers, 8 digital filters, 8 programmable dither sources and gold plated solid copper construction throughout - to name but some of the features. It is modular in construction, thus allowing future upgrades.

Moreover, the DX processor technology can be applied to more affordable DAC’s. The PDM two fifty-six (our replacement for the highly regarded PDM two) is available. We are currently developing the PDM sixty-four that features a scaled down version of this technology for only £1250. For more information please telephone or write to:

dpa Digital Ltd.,
7 & 8 Willowbrook Lab Units,
Crickhowell Rd., St Melons,
Cardiff, Wales CF3 0EF
Tel: (0222) 795621
Fax: (0222) 794267
EXPERIENCE MUSICAL TRUTH

45 High Street, Hounslow, Middx, TW3 1RH
Tel: 081 569 5802
(Also at Edgware, Middx, Tel. 081 952 5535)
(Also at Covent Garden, London, Tel: 071-497 1346)

NEW 200S PRE POWER
£1250

Doug Brady Hi-Fi
Kingsway Studios,
Kingsway North,
Warrington.
Tel: 0925 828009

Audio Suite
42 St. Andrews Street,
Aberdeen AB1 1JA.
Tel: 0224 625 635

Audio Suite
42 St. Andrews Street,
Aberdeen AB1 1JA.
Tel: 0224 625 635

SHROPSHIRE HI-FI
St. Michael's Street,
Shrewsbury,
Shropshire SY1 2ES.
Tel: 0743 222317

)throws
34 Buckingham palace
Road, London SW1W ORE
Tel: 071 - 233 0774
Fax: 071 - 233 7226

AT OUR KEY DEALERS

DPA Digital Ltd

2/4 Great Victoria Street
Belfast BT2 7BA
Northern Ireland.
Tel: 0232 332522

Zen Audio
35 George Street,
Hull HU1 3RE
Tel: 0482 587397

At Our Key Dealers

Audible Difference
Scole, Diss, Norfolk.
IP21 4DX.
Tel: 0379 740227

Chantry Audio
Chantry Walk,
16/18A Eldon Street,
Tuxford. Nr Newark,
Notts NG22 0LH.
Tel: 0777 870372

SHROPSHIRE HI-FI
St. Michael's Street,
Shrewsbury,
Shropshire SY1 2ES.
Tel: 0743 222317

dpa digital ltd

Unit 7, Willowbrook Technical Units,
Crickhowell Road, St. Mellons, Cardiff CF3 OEF, Wales, UK
Phone: 0222 795621 Fax: 0222 794267
THIS MONTH’S REVIEWS

AMPLIFIERS

DPA DIGITAL RENAISSANCE 16
Yet another entry into the mid-price integrated amplifier market. DPA have included a phono-stage, tone controls and headphone socket to their surface mount electronics to produce an attractive package.

LINN KAIRN & KLOUT 33
You may remember these from October’s group test. We thought they deserved a more in-depth review.

ROGERS CADET III 34 & Supp.
An introduction to this classic affordable valve amplifier, by Haden Boardman.

COMPACT DISC

AUDIOPHILE CD PLAYERS 21
We test a group of £300-400 CD players in a search for the best mid-priced sound around. Included in this test is the cheapest British built CD player available, the new Arcam Alpha One.

ARCAM ALPHA ONE

ROTEL RCD-965BX DISCRETE

YAMAHA CDX-880

KENWOOD DP-7060

ONKYO DX-750

LOUDSPEAKERS

MISSION 731 18
Mission’s latest mass market mini-monitor, the 731, is part of an all-new range of loudspeakers. Dominic Todd takes a listen.

MUSICAL TECHNOLOGY KESTREL 30
An affordable metal cone floor-stander from newly formed Musical Technology catches Dominic Baker’s attention.

TANNOY 632 41
Tannoy have a whole new range of loudspeakers. The 632 replaces the popular 605s. Dominic Todd and Eric Braithwaite air their views.

SD ACOUSTICS SD3-R 49
A high-tech, mineral-loaded polymer cabinet, custom bass unit and ribbon tweeter come together in SD Acoustics’ £399 SD-3R loudspeaker package. Auditioned by Dominic Baker and Peter Downs.

PRO-JECT 6.1S 57
This amazing package of Pro-ject 6.1 turntable, Sumiko tonearm and Ortofon MC30 Supreme moving coil cartridge costs just below £1000. Eric Braithwaite frantically works through his vinyl.

CASSETTE

KENWOOD KX-7060S 64
Kenwood have just introduced Dolby S to some of their cassette decks. We take the KX-7060S for a spin.

TUNERS

NAKAMICHI ST3s 36
Part of a new range of products from Nakamichi is the ST3s tuner. We scan the air waves to test its abilities.

NEWS 8
Following Live ‘94 we take a look at the flurry of new equipment that has recently appeared.

LETTERS 38
Readers’ views on all things hi-fi, with comments from our editorial team.

AMERICAN and CANADIAN SUBSCRIPTIONS - see page 68
Q&A
What is it? How do I get it to sound better? What should I do next? Our team of experts have the answers.

COLUMNS
61, 63, 69, 73
Opinions and views from our team of hi-fi gurus.

NEXT ISSUE
60
What will next month bring? Well, another issue of Hi-Fi World for a start, packed full of reviews, music, features, letters and much, much more.

SUBSCRIPTIONS
68
Worried about missing out on all of the new products, technology and music? Subscribe to Hi-Fi World and keep up to date with the world of hi-fi.

ACCESSORIES
97
One of those people who likes to have Christmas under control? Our accessories pages are packed full of super present ideas.

HI-FI WORLD LIBRARY
101
Educational, entertaining and affordable. A whole range of books for enthusiasts and budding audiophiles.

DIAL-A-DEALER
89
Who sells what and how to get in touch.

WORLD AUDIO DESIGN
81
Our in-house designed range of valve amplifier kits and high technology drive units from Audax offer superb value to the home constructor.

MEET YOUR MAKER
84
The manufacturers' directory.

WORLD FAVOURITES
110
Looking to buy a hi-fi? See our listing for the best sounding and best value equipment we've tested.

CLASSIFIEDS
123
SPECIALIST HI-FI DEALERS
77
Need a specialist, look no further.

ADVERTISERS' INDEX
130

FEATURES

DCC IMPROVED TO 18-BIT STANDARD
11
Decca are now recording DCC tapes at 18-bit resolution and true 18-bit machines will be available from Philips soon. We report on the advances made.

LIVE '94
12
The UK's biggest consumer electronics show held at Earls Court. We report on the show and all of the new products that were launched.

DIY SUPPLEMENT

In this month's FREE DIY hi-fi supplement, you'll find extensive application notes on two new High Definition Aerogel drive units from Audax, a super quality kit CD convertor from Audio Technology, a restoration article on the Rogers Cadet III valve amplifier plus book reviews, news, letters and more.

COMPETITION

A chance to win a top-flight vinyl playing system worth over £1300. The system comprises: Systemdek IIX900 turntable complete with Rega RB250 tonearm and Goldring 1022GX cartridge, DPA Digital Renaissance integrated amplifier and Systemdek Systym 931 loudspeakers.

MUSIC

Our guide to some of the best new releases.

ROCK RECORD OF THE MONTH:
R.E.M.: Monster

CLASSICAL RECORD OF THE MONTH:
The Tallis Scholars: Live In Rome

ROCK AND POP
73

CLASSICAL
85

JAZZ
93
The Digital Compact Cassette  When it comes to sound quality, for Sting "good" just isn't good enough. He demands that his music is reproduced perfectly. That's why he is so impressed with Philips latest invention, DCC.

A digital cassette with the pure sound quality of a compact disc and the convenience of a compact cassette. There's a complete range of equipment, so you can play your DCC anywhere, in the home, in the car or on the street. And don't worry about your collection of ordinary compact cassettes, the beauty of the DCC system is that it will play them too. DCC is already a big hit with the major record companies with hundreds of titles already available. So don't make a mistake, choose DCC. For details of stockists and further information telephone 081-665 6350.
QUAD LAUNCH INTEGRATED AMP
Quad will shortly launch the Quad 77, an integrated amp it hopes will become the essential core for hi-fi systems of the future. It is the first in a planned series of products which link up through a data bus which carries analogue, digital and control signals, Quad said, removing debates about interconnects.

Two systems are linked to the Quad 77: Quadlink and Quadremote. Quadlink is the system bus, enabling the amp to grow in any direction, carrying analogue, digital, system protocol, system commands and HT for lower powered units. Quadremote is a two-way, infra-red remote control system. The amp will retail at around £595 and the remote panel at £250.

The handset has just ten buttons, a rotary knob and a display for system information, defining the function of the six ‘soft’ buttons. The remote also receives information from any future equipment linked to the Quad 77.

Quad Electroacoustics
St Peters Road, Huntingdon,
Cambs. PE18 7DB, Tel: 0480 52561

NEW NFM2 FROM TDL
Two new TDL ‘speakers are now available. Complementing their established TDL Near Field Monitor (NFM) is a new NFM2 which uses two bass units in a taller cabinet to improve power handling. A soft dome tweeter is positioned between the bass/mid. ‘speakers, to resemble a point source.

A pair of NFM2s in Rosewood or a Black finish retail at £179.95.

Another newcomer is the TDL RTL4 which is an up-rated version of the TDL RTL3. It uses larger bass units and a 25mm soft dome tweeter for higher power handling and greater sound pressure levels, making it ideal for larger rooms. It offers all the detail and extended bass of the RTL3, even at low volumes, TDL claim.

At £649.95 retail, TDL RTL4s have a Black or Rosewood finish.

TDL Electronics
PO Box 98, High Wycombe
Bucks HP12 3AD Tel: 0494 441191

PHILIPS 18-BIT DCC RECORDER
Due for release early next Spring - probably February Philips told us - is Philips' new DCC-730 18-bit DCC recorder. Capable of playing normal 16-bit tapes, but also tapes recorded with higher resolution and, therefore, better sound quality, this new domestic recorder could well look interesting for audiophiles. The only caveat at present is lack of availability of 18-bit pre-recorded tapes. Curiously, by default, Philips have managed to upgrade DCC’s resolution to exceed that of CD, whilst tape prices remain the same (we hope) - now pegged at CD prices. At present, only Decca Records, who have collaborated in the development of DCC, have the necessary duplicating equipment to achieve the 18-bit standard on commercial cassettes, but if wise minds prevail at Philips, they’ll push this development through as quickly as possible to give DCC the advantage it so desperately needs.
FAST RESPONSE FROM PROAC

A new loudspeaker has been launched by ProAc to complement its Response range. The new Response Three Point Five is a replacement for the Three, ProAc said. Designed by Stewart Tyler, the Response 3.5 uses a new polypropylene bass driver possessing a lighter, thinner and stiffer cone, whilst retaining good damping qualities. The aim was to get faster, more powerful bass, whilst maintaining clarity and detail in the mid-range area. Like the Response Four, the new speaker's tweeter has a super-light diaphragm, exclusive to ProAc, with a nan applied coating. Driver arrangement into mirror image pairs gives the Three Point Fives a "wonderfully large sound stage, but with pin point imagery", ProAc said.

Prices start at £4250, moving up to £4975 for Signature finishes.

ProAc
130-132 Thirsk Road, Borehamwood, Herts. WD6 5BA
Tel: 081 207 1150

CZECH PRO-JECT 7

Czech turntable manufacturer Pro-Ject has just announced a new integrated amplifier. Named the Pro-ject 7, it will retail in the UK for around £259. Designed by Prague university professor, Dr Sykora, the amp has line and phono stages and is dual-mono in design, with the exception of the mains transformer. The phono stage can be adjusted to match the cartridge. Driver arrangement into mirror image pairs gives the Three Point Fives a "wonderfully large sound stage, but with pin point imagery", ProAc said.

Prices start at £4250, moving up to £4975 for Signature finishes.

Pro-Ject is also launching a high end version of the award winning Pro-Ject 6 turntable, which now features a tonearm that also features a new finish. The price of this 17kg solid walnut heavyweight is £1,300.

Pro-Ject is also launching a high end version of the award winning Pro-Ject 6 turntable, which now features a tonearm that also features a new finish. The price of this 17kg solid walnut heavyweight is £1,300.

Ortofon UK
Chiltern Hill, Chalfont St Peter, Bucks. SL9 9UG Tel: 0753 889949

UNO & DIVA DUO

Encouraged by the success of its Callas model, UKD has introduced a further two models to the Opera range of solid-wood loudspeakers.

New are the Opera Uno and the Diva. At £450 the Opera Uno is made of solid walnut and described by UKD as "an affordable luxury miniature ‘speaker’". Sharing many of the characteristics of the existing Callas model, the Diva has twice the internal volume and offers "outstanding depth and weight to musical presentation". UKD said. The price of this 17kg solid walnut heavyweight is £1,300.

Two other members of the Opera range have been updated. Both the SuperPavarotti and the Caruso have new drive units and crossovers to give deeper and tighter bass.

U.K Distribution
23 Richings Way, Iver, Bucks. SLO 9DA Tel: 0753 652669

NEW-LOOK CHESTERS

Castle Acoustics have made several modifications to their popular Chester loudspeaker, adding new finishes, repositioning the drivers and adding a new curved grill.

Matching wood plinths, once an extra, are now included on the Chester, and the drivers have been repositioned on the front baffle to form mirror image pairs for improved stereo.

The revised Chester is available now and a choice of nine real wood veneers are on offer. Prices start from £699.

Castle Acoustics
Park Mill, Shortbank Road, Skipton, North Yorkshire BD23 2TT Tel: 0756 795335

DENON LAUNCH NEW MODELS

Replacing Denon's well-received DRM-710 cassette deck is the DRM-740, which with a retail price of £259.99 offers a three-head, three-motor, dual-capstan arrangement, plus contemporary styling.

Both record and playback heads contain Super Permalloy cores for wide frequency response and the head coils are wound from high purity, oxygen-free copper wire.

Denon also have a new remote control RDS receiver, the DRA-365 RD, costing £249.99. With a 13 segment display, giving the station name or frequency, up to 40 stations can be manually or automatically stored in the memory. Functions on the '365 include: full remote control, traffic information service, an accurate clock and programme type for selecting news, rock or classical.

Aimed at the budget CD market is the new DCD-615 (£179.99). Denon say the 615 is a replacement for the DCD 595 to the keep company competitive in a "fast changing market". The new machine employs 18-bit Burr-Brown DACs and Denon's own 20-bit/8x oversampling Lambda digital filters, plus a host of other features.

Denon has also launched a refinement of its PMA-450 amplifier, the PMA-450SE priced at £269.99. It boasts a number of improvements, including revised track layout on its output board and a gas-filled output relay with silver contacts for the speaker switching circuit. Denon said this model, giving 60w per channel, had proved in listening tests to "deliver tremendous levels of dynamic punch, detail and transparency along with improved sound staging."

Denon
Hayden Laboratories
Chiltern Hill, Chalfont St Peter
Gerrards Cross, SL9 9UG Tel: 0753 888447
Don't trip up on your speaker cable!

When you invest in good quality hi-fi equipment, why skimp on the cable?

Especially now that Ortofon can offer 3 types of top-quality cable for under £10.

Each cable is made up of very fine core copper strands rated at 6-Nines (that's a copper purity of 99.9999% — it doesn't come much better), is flat and flexible for easy installation and features a 'tack-rack' for panel-pin fixing.

<table>
<thead>
<tr>
<th>Cable Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPK 100</td>
<td>Twin-core white cable, each core with 130 copper strands (total 260 strands)</td>
</tr>
<tr>
<td>SPK 200</td>
<td>Triple-core grey cable for bi-wiring with twin-core treble (260 strands) and 3-core bass (390 strands)</td>
</tr>
<tr>
<td>SPK 300</td>
<td>7-core blue cable having 13 strands per core (each strand laminated). Requires soldering</td>
</tr>
</tbody>
</table>

You'd better hound us for the name of your nearest stockist.

Ortofon (UK) Limited, Chiltern Hill, Chalfont St Peter, Bucks SL9 9UG. Tel: 0753 889949.
KENWOOD DEPTH CHARGE

Tackling criticism that CD reproduction lacks depth, Kenwood has launched two new CD players. Both models feature ‘DRIVE’ (Dynamic Resolution Intensive Vector Enhancement), a new development from the company that, they claim, improves sound quality by ensuring that players hold on to the lower level information from a disc. DRIVE works by ensuring a correlation between input and output signals is maintained, which helps resolve fine detail.

With a retail price of £249.95, the new DP-5060 CD player also carries a fourth order, zero-shifted noise shaping 1 bit digital-to-analogue converter for greater harmonic detail. It also has a high precision master clock system to prevent CD jitter and Optimum Linear Cascode Drive to ensure a pure sound quality by ensuring that players hold on to the lower level information from a disc. DRIVE works by ensuring a correlation between input and output signals is maintained, which helps resolve fine detail.

At the top of Kenwood’s range is the DP-7060 (£399.95) carrying even higher sound quality specifications. It has a switched capacitor one-bit convertor, based on Philips’ DAC-7 chip. See review in this issue.

Kinshaw Electronics
84 Pendarves Street, Tuckingmill, Camborne, Cornwall. TR14 8RE Tel: 0209 715878

NAKAMICHI’S ‘S’ GENERATION

Nakamichi has launched four ‘S’ models - an amplifier, a tuner and two CD players. In the face of what the company described as “tough competition in the UK amplifier market”, a new 1A-4s integrated amplifier has been launched. Priced at £199.95 the amp. has an output of 30w.

At £349.95, the new ST-3s VHF-FM tuner features multi-regulated power supplies along with a special circuit that disables the tuner data circuitry to improve performance. See review in this issue.

B&W Nakamichi
Marlborough Industrial Estate, Lancing, West Sussex. BN15 8TR Tel: 0903 750750

PHILIPS TO PUSH DCC

In a press conference held at Decca Records’ famous Kilburn Studios, Philips told journalists that they’ll be righting wrongs in the marketing of DCC, in order to give the medium a new push into the marketplace. Potential buyers might be interested to know that a reduction in tape prices is on the agenda in this new campaign.

Pre-recorded tapes will be priced identically to CDs in future and many more new releases will be put onto DCC, giving this medium parity with the silver disc. A Philips representative said this should bring DCC pre-recorded tapes from £14.99 down to £10.99 or so.

Blank tape prices are unlikely to change much though, even though a DCC tape is basically cheap to manufacture. Keeping the price of blanks high might be a gesture of goodwill to the music business though, who are convinced recorders exist only to deprive them of income through loss of sales of pre-recorded material due to copying.

The number of retailers stocking DCC recorders will be reduced from 1000 to around 300, in order to provide better understanding and advice at the point of sale.

Philips and Marantz are actively and effectively bringing recorder costs down and widening their scope. The new range is to possess car players, inexpensive portables, high quality 1-bit domestic machines and hybrid recorders that can record to DCC or normal analogue cassettes for car or portable use. The new line up includes the DCC730 domestic 1-bit recorder priced at £249, a DCC mini-system with analogue and digital recording for £499, the DCC740 twin deck with analogue and digital recorders priced at £300, the DCC34 personal stereo (playback only) for £149.99, the DCC170 personal with recording as well for £249.99 and the DCC821 car player for £399.

Another interesting advance is the move to 18-bit digital-to-analogue conversion in domestic recorders. Decca claim to be able to supply 18-bit pre-recorded tapes now and others may shortly follow. Were this to become widespread, then DCC could well offer an improvement in quality over CD for no extra cost. This would usefully buff-up its somewhat lack-lustre current image. With the promise of shorter access times due to Turbo Drive, which gives higher tape reeling speeds, Philips may well be able to give DCC the appeal it currently appears to lack.

With Sony targeting MD at young buyers only and refusing to engage in any form of quality contest, it looks as if DCC has occupied the high ground unchallenged. Whether Philips have either the will or the ability to make the most of this, only time will tell.

Philips
City House, 420-430 London Road, Croydon, Surrey. CR9 3QR
love it or hate it - and some did - Live '94 at the Earls Court exhibition centre was a great extravaganza of an exhibition this year. It attracted a massive and impressive showing from the world's major manufacturers and although officially a 'consumer electronics' show, it was strongly attended by Britain's specialist hi-fi manufacturers.

For some, the noise and commotion was too much, but it simply reflected the level of activity in the vast display hall, with live shows, demonstrations, Karaoke, competitions and such like, not to mention the 30,000 people or so who attended daily, totaling 186,484 over six days. Serving their needs were a variety of restaurants and bars around the perimeter of the hall. We contributed to the din by irreverently running our KLS3 carbon fibre cone kit 'speakers from a World Audio Design 300B valve amplifier, assailing passers by with a variety of music from Snoop Doggy Dog to Carlos Santana. Mendian and B&W Loudspeakers - our high technology neighbours - occasionally looked bemused, either at our music/grits/valves. Someone was handing out free lollipops - Richer Sounds we suspect - and there seemed to be a great affinity between them and our carbon fibre cones. Teenage reprobates who wanted to know what the "jamjars" were for on our valve amps were invited to try touching them, but sadly they knew more than they were letting on, none did! A large number of dedicated World readers tuned up to chat about their homes, music and systems - and very interesting it was too. Although Live '94 had more than its fair share of camcorders, home theatres, computers and musical instruments, it also had plenty of real hi-fi and plenty of real hi-fi enthusiasts: thanks for attending.

Quad's Ross Walker, son of founder Peter Walker, looked permanently happy to be back in the middle of a big show - Quad have always been great exhibitors -
and they had their new Quad 77 integrated amplifier on display. Also, there was a cut-away ESL63 electrostatic and an attractively lit Quad 22/11 valve amplifier, amongst other things.

KEF had a big stand with a variety of new models on display. Especially interesting were the new baby Coda 7s which, they claim, have 90dB sensitivity (6Ω) and costs £129. A new Coda series above this is expected. There’s a new Reference range and we heard a demo of the revised Reference Model 2 with its improved Uni-Q drive unit. It sounded very smooth and revealing, projecting fine stereo images.

KEF’s new Coda 7s claim 90dB sensitivity for a modest £129.

KEF’s new Coda 7s claim 90dB sensitivity for a modest £129.

Linn’s log cabin housed a solid sound, supplied by Activ powered Keltik loudspeakers.

Linn’s log cabin housed a solid sound, supplied by Activ powered Keltik loudspeakers.

Linn built a bigger log cabin this year which, no matter how much Amanda Sweeney (she’s our advertising girl) huffed and puffed, she couldn’t blow down - see picture. Mind you, Linnies inside looked pretty scared. But perhaps that was because they were playing Keltiks, on the end of an Activ system comprising Kank transport, Numenik converter, Kaim pre-amp with new switched mode power supply and Klout power amplifiers - price £23,000 in all!

Naim’s Paul Stephenson and our Ad sales girl Amanda.

Naim’s Paul Stephenson and our Ad sales girl Amanda.

Naim had more luck with Paul Stephenson of Naim; her Black Belt in Judo made the right impression. So did their Flat Cap power supply, which she thought went on the head. In fact, Naim told Amanda, you connect this new £299 power supply to your 92/90 pre/power amplifier combination to upgrade it. Also there was their awesome DBL loudspeaker costing £6900 and the new Slimline Series CD3 CD player at £898.

Amanda had more luck with Paul Stephenson of Naim; her Black Belt in Judo made the right impression. So did their Flat Cap power supply, which she thought went on the head. In fact, Naim told Amanda, you connect this new £299 power supply to your 92/90 pre/power amplifier combination to upgrade it. Also there was their awesome DBL loudspeaker costing £6900 and the new Slimline Series CD3 CD player at £898.

Marantz are due to launch this high end CD23 CD player in 1995.

Marantz are due to launch this high end CD23 CD player in 1995.

Marantz had a squat, purposeful looking dedicated CD player in the new CD23. It uses a full floating CDM-9 Pro transport and Philips’ DAC-7 convertor configured in differential mode for minimum distortion, due out in 1995, price £3990. There was a new CD15 Reference CD player with CDM-4 decast transport and copper-plated chassis at £3499 and a new CD63SE CD player with CDM-12 transport and copper-screened HDAM output stage, plus chassis bracing. This is a budget audiophile special, a player Marantz have traditionally done well with.

Mission, with their new 73’ series. The range starts with the 731s, reviewed in this issue, and goes right up through the 733 two-way floorstander at £299 up to the massive 735s using four drive units in a tall tower enclosure. All of the 73’ series use a clever modular construction approach which allows Mission to offer them at very competitive prices.

Mission’s new 735s look impressive for £599.

Mission’s new 735s look impressive for £599.

The organisers told us it went “wonderfully well” and people are signing up already for next year. Grundig and Hitachi being new recruits. Live ’95 will be bigger again, spilling over into Earls Court 2 hall from Earls Court 1. We hope to see you there.
In 1994 Jamo celebrates its 25th Anniversary and to celebrate we bring you leading edge technology combined with an exceptional loudspeaker design synonymous with Danish styling and excellence. The 07 series combines fascinating design with transparent and authentic sounds meeting all the demands of the eyes and ears.

The 07 series - The Total Listening Experience
Pure and Precise

Dealer Town
Adams 8 Jarrett St
Leonards on Sea
Brighton

Canterbury Hi-Fi
Canterbury

Dawson's
Bournemouth

Howes of South Borough
Tunbridge Wells

Kimberley's Hi-Fi
Bexley Heath

Tru-Fi
Redhill

Universal Hi-Fi
Croydon

Weybridge Audio
Weybridge

Alphabec
London NW2

Ask Electronics
London W1

Atlantic Electronics
London NW3

Bobber Electronics
London W13

Galaxy Audio
London W1

Hi Spek Electronics
London NW3

Hi Way Hi-Fi
London W2

Kamla
London W1

Laysyl Ltd
London SW14

MCO Entertainments
London SE17

Musical Images
Edgware

Musical Images
Hounslow

Myers Audio
Walthamstow

Rightway
London

Selfridges
London

Time 8 Tune
London E1

Hi-Fi Corner
Dublin (Eire)

Cas Sac
Bradford

Cleartone Hi-Fi
Bolton

D Eckersley
Bury

Geoff Jackson
Leeds

JR Gough
South Shields

Riley Electronics
York

Scratch Music
Bradford

Westgate Audio Visual
Sheffield

Weston Park Music Centre
Stockport

Armatrac Sound & Vision
Grantham

Satton Crestfield
Norton

Macclesfield
Stockport

Grandbam
Congleton

Concrete
St Neots

Torrington
Torquay

Potters Bar
Hampstead

Shepherds Lode
St Ives

Nottingham
Ipswich

Ortolan
Leeds

Soho Sounds
London W1

The Hi-Fi Exchange
London W1

The Video Shop
Leicester

Fortune Ltd
Leeds

Great Western
Warwickshire

Jamo Hi-Fi
UK Ltd

Jamo

Out and Buy a Nakamichi

For details of products and stockists, phone B&W UK on 01903-750750

Ortofon is famed the world over for the tracking capability of its cartridges. Cartridges which will breathe new life into a cherished LP collection, divulging detail of never before.

The cartridge is always the key factor in the reproduction of music from records and Ortofon has dedicated nearly 50 years to the manufacture of the finest pick-ups possible. Enjoying constant critical acclaim along the way.

So if you want to bring more out of your records than ever imagined, an Ortofon Cartridge will have you hot on the scent.

Ortofon (UK) Limited, Chiltern Hill, Chalfont St Peter, Bucks SL9 9UG.
Tel: 0753 889949.
DPA enter the fiercely contested integrated amplifier market for the first time with their new Renaissance amplifier. It brings an interesting extra dimension, offering buyers the special surface-mount components and unusual circuitry normally found in the company's top-end designs - albeit with some differences.

We know DPA amplifiers for their concise, yet pleasantly pure sound, with plenty of detail and a generally refined presentation. But they've also been expensive audiophile items: the new Renaissance by contrast is priced at £595.

The slate grey casework, with its large radiuses, is very much in house-style, even if the company have been forced to drop their deeply curved and distinctive cast front panels in favour of more controllable machined panels that look a little slab-like - unhappy conscripts to the idiom. The volume control carries the style well though, falling to hand nicely. To its left lie clusters of push buttons. They control solid-state switches that select input or tape monitor, alter balance and adjust tone. One button acts as source selector, toggling through four line level and one phono input, accompanied by slight clicks from the loudspeakers whilst doing so. A green LED identifies the input selected.

The tone controls offer only bass lift (no cut) and treble cut (no lift), which they apply in sparing but useful amounts, I found. Adjustment is carried out by 'up' and 'down' buttons. Unfortunately, there's no way of knowing how much boost or cut is available.
or has been applied, except by counting, which is a little disconcerting. I found there were seven boost/cut steps.

For better or for worse, all adjustments default to zero at switch on, so flat response and normal balance can be set by switching the Renaissance off then back on. And, of course, whenever the amp is switched on any preferred settings will have to be re-programmed in. It's not a convenient system, nor one that is transparent to understand.

The rear panel carries a set of gold-plated 4mm screw-plug speaker terminals, a line of phono socket inputs and a switched mains IEC power input socket. To switch on, you have to reach over to the back of the amplifier to flick this hidden switch - fine in some situations, but not so easy in a rack.

SOUND QUALITY
The rich tones of Eddie Reader's voice and the gentle trill of percussion on Patience of Angels showed clearly enough that the Renaissance reflects DPA's abilities in amplifier design well. Clearly outlined between the 'speakers, full bodied and timbrily rich, her voice came over as engagingly clear and natural. The sweet nature and gentle ring of the percussion was testament to the amplifier's handling of high frequencies, imposing little if anything in the way of harshness or coarseness. In fact, the Renaissance has to be one of the sweetest sounding amplifiers around, matched or exceeded only by esoterica like Audionote's single-ended valve OTO.

Steve Earle's resonant guitar strings on Guitar Town sang crisply too, evoking no hint of nastiness or incision. His gutteral voice perhaps lacked a little push, some bite, a little viscosity and, perhaps, the Renaissance could be accused of seeming a little too euphonic and cutely manicured for hard rockers.

The distortion characteristic was very unusual - in fact it was one of the most unusual I have ever measured, possessing more fifth harmonic than anything else, as our analysis shows. Usually, second or third dominate. High order components, characteristic of hard switching (crossover) distortion, were present, but happily in small quantities. The highest figure was 0.07%, produced at 1W/10kHz. Otherwise, levels hovered around 0.02%, a satisfactorily low figure.

The Renaissance comes in line level only form or with an MM disc stage; ours had the latter. It has an unusual equalisation drive too, if not bass power of the earth shaking variety. The gentle yet tactile bass performance was entirely in keeping with - and helped form - the overall character of the Renaissance. It plays for you, honestly, openly and with great poise, yet it just could not offend.

Even with its unusual bass lift, the disc stage sounded light in bass drive, but it was exceptionally clear across the midband and treble, giving superb sense of insight, again aided by precise imaging. A cartridge with plenty of bass drive - a good Goldring is my recommendation - is needed, plus speakers with some bass too.

If this amp is lacking, it is only in ultimates: ultimate detail and retrieval, ultimate power. As a solid-state amplifier to sit in front of and enjoy most types of music, especially with violin and strings, the new Renaissance is difficult to beat in its composure, clarity and openness. It has a gentleness born of refinement, with superb stereo staging and imaging. I'd rate it very, very highly for serious listeners, since as with all DPA amplifiers, what they do well they do so very well few can come close.

Renaissance Integrated
DPA Digital Ltd.,
Unit 7, Willowbrook Technical Units,
Crickhowell Road, St. Mellons,
Cardiff. CF3 0E1
Tel: 0222 795621

RENAISSANCE INTEGRATED AMPLIFIER

MEASURED PERFORMANCE
The Renaissance was unusual in its performance. It delivers a modest 32 watts, limited by asymmetric clipping, not a good sign, but DPA told me that the asymmetry was a function of the circuit topology and couldn't simply be balanced out by adjustment. The problem became worse into 4 ohms, limiting power to just 36 watts.

The Renaissance should ideally be paired with sensitive speakers of 88dB SPL/watt or more. In contrast to this, DPA power amplifiers have traditionally clipped cleanly into 4 ohms, limiting power to just 36 watts.

The bass boost control gives a maximum of +5dB boost below 500Hz, a useful amount, and the treble control -5dB cut above 1kHz. Both offer a useful 'fine trim' facility.

The distortion characteristic was very unusual - in fact it was one of the most unusual I have ever measured, possessing frequencies, imposing little if anything in the way of harshness or coarseness. In fact, the Renaissance has to be one of the sweetest sounding amplifiers around, matched or exceeded only by esoterica like Audionote's single-ended valve OTO.

Steve Earle's resonant guitar strings on Guitar Town sang crisply too, evoking no hint of nastiness or incision. His gutteral voice perhaps lacked a little push, some bite, a little viscosity and, perhaps, the Renaissance could be accused of seeming a little too euphonic and cutely manicured for hard rockers.

The Renaissance reflects DPA's abilities in amplifier design well. Clearly outlined of Angels showed clearly enough that the Renaissance is dificuht to beat in its composure, clarity and openness. It has a gentleness born of refinement, with superb stereo staging and imaging. I'd rate it very, very highly for serious listeners, since as with all DPA amplifiers, what they do well they do so very well few can come close.

Renaissance Integrated
DPA Digital Ltd.,
Unit 7, Willowbrook Technical Units,
Crickhowell Road, St. Mellons,
Cardiff. CF3 0E1
Tel: 0222 795621

TEST RESULTS

Power
32 watts

CD/tuner/aux.
Frequency response
17Hz-30kHz

Separation
47dB

Noise
-96dB

Distortion
0.006%

Sensitivity
450mV

dc offset
0/2mV

Disc
Frequency response
30Hz-71kHz

Separation
41dB

Noise
-80dB

Distortion
0.004%

Sensitivity
3.8mV

Overload
23mV

Distortion

0.1% Distortion is low, but high order harmonics may add sharpness to the sound.
Can Mission's new compact 731 loudspeakers match the success of their top selling 760s? Dominic Todd listens carefully.
The trouble with products that turn out to be run away successes, is what to do when it comes to replacement time. Pioneer faced such a dilemma when it came to replacing the A-400, which it didn't overcome entirely successfully with the A-400X. Mission now face a similar dilemma in replacing the high selling, highly praised 760. As Pioneer did with the A-400, Mission are wisely keeping certain 760 models (and spin off varieties) going in case the new model isn’t so well received. Mission have also had the good sense to completely rename the new model, establishing it as an entirely different speaker.

Different the 731 most certainly is, at least in terms of construction. The new model makes extensive use of injection mouldings, which are used for both front and rear baffles, pushing together to sandwich the thin MDF cabinet wall carcase. Even more unusual is the way the entire front baffle lifts out exposing the bass unit, which is actually connected to the rear baffle by integral plastic stalks. The plastic dome tweeter is bayonet mounted to the front baffle, next to the port. The bass unit is similar to the 760s, but feels lighter and more responsive. Although it does smack of cost-cutting somewhat, it’s thoroughly serviceable and the bass unit is rigidly mounted. The wiring and crossover components are nothing special and there's only a single tiny piece of wadding. This, however, is no doubt something to do with the way Mission wanted the 731s to sound. A deliberate fast and clean balance has been sought which, bearing in mind likely partnering equipment, is probably no bad thing.

The styling is a matter of taste. They certainly look more hi-tech than the 760s, but are rather too similar to the “organic” look favoured by the Japanese, for my liking.

A sensitivity of 88dB means the Missions should prove difficult for most amplifiers, with a budget Rotel system, and my own A-400, having little trouble driving the 731s. You could even consider a low-cost valve amp.

The little Missions were initially very impressive. But as is often the case with first impressions, the they weren't faultless, yet neither were they without ability. Elvis Costello's "Mighty like a Rose" album showed up a slightly exaggerated edge to vocals, although imaging always remained precise and consistent. Mission have certainly succeeded in producing a fast and clean sounding ‘speaker. Bass quality, in particular, was superbly judged with none of the artificial boominess of other rivals (present to a degree with the TDL NFMs).

It wasn't really surprising to find the "speakers worked better with simpler music, and could become confused with more complex pieces. No 'speaker at this price possesses an iron grip on the music. However; it would be wrong to call the 731s muddled, quite the opposite in fact. Transients were handled very cleanly, and the baby Missions were quite capable of high levels without showing signs of stress. Because of their well tuned bass quality they never sounded tinny, managing an overall balance akin to a 'speaker a size or two larger. Certain drum beats could occasionally sound boxy, but in general the 731s sounded impressively articulate. Cymbals infrequently caused a degree of splashiness in the treble, and its bright, clean nature could make the treble units sound slightly detached from the mid-range.

"Imaging always remained precise and consistent. Mission have certainly succeeded in producing a fast and clean sounding 'speaker."

With Prefab Sprout the crisp treble was in evidence once again. Although there was no unwanted sibilance, I did detect an unnatural sheen to the sound which spoiled an otherwise impressive performance. Despite the occasional boxiness I’d noticed on drums before, with a good quality, sparse, pop recording the Missions sounded pleasantly open and clear as you’d expect (but don’t always find) from compact, narrow 'speakers. Fine so far, but the flip side of the 731s’ jollity was a forwardness that could becoming tiring, especially with unsympathetic equipment. Listening further revealed that although the bass was fast and articulate, it lacked extension compared to rivals.

If this review seems a little critical it's only because the 731s' forebears and (many) rivals have led us to expect high standards from smaller 'speakers these days. Although I felt the 760s were often over-rated, there's no doubting their widespread appeal from mid-system upgrade to audiophile on a tight budget. They managed to pull it off too, sounding just as impressive on the end of a mid-system as they did on a top valve amp.

In summary though, although they are an impressive small 'speaker, they lack the refinement of the 760s, or better still the Celestion 3s, meaning they don't quite sound at home on a high quality system. Having said that, used in context with similarly priced equipment, or on the end of a dull sounding hi-fi (perhaps even a vintage valve unit), they deserve recommendation, and should be auditioned alongside competitors from Celestion and Goodmans.

Mission 731
Mission Electronics,
Stonehill, Huntingdon,
Cambs. PE18 6ED
Tel: 0480 451777

£129.90

MEASURED PERFORMANCE

Whilst the 760s are an affordable audiophile loudspeaker aimed at the UK, the new 731s look to be a Euro-speaker preened for success overseas. They have treble lift and a bass peak, to give a more exciting balance, with sparkling treble and punchy bass. These speakers won’t necessarily be the last word in refinement or neutrality, but they could certainly add some useful speed and excitement to budget hi-fi systems possessing limited dynamic ability.

Mission's 731s are easy to drive. They have a high overall impedance and just above average sensitivity, exactly the kind of easy load that is needed for budget amplifiers. The impedance curve holds no nasty surprises either, staying high over the audio band and never dipping below 6Ω at any point.

The 731s are an interesting loudspeaker. They have been boosted up at frequency extremes for a lively and exciting balance and are an easy load for low-power amplifiers. They could well bring a pleasant injection of energy to budget systems.

<table>
<thead>
<tr>
<th>Frequency Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
</tr>
<tr>
<td>Smooth response, but treble rise and bass peak will give an exciting sound</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Impedance</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5</td>
</tr>
<tr>
<td>The high overall impedance makes the 731s an easy load</td>
</tr>
</tbody>
</table>
Just what you've always wanted. Speakers that don't make a sound.

And so it was written that the advanced "silent" cabinet design of Tannoy Profile speakers should offer a purity of sound and absence of distortion that other manufacturers could only dream of. Allowing the powerful drive units to produce a volume of music sufficient to bring down the walls of Jericho. And the people heard this, and there was great rejoicing.

TANNoy PROFILE

RING THE PROFILE HOTLINE ON 0235-425407. OR WRITE TO TANNoy LTD., ROSEBARK ALL INDUSTRIAL ESTATE, COATBRIDGE, STRATHCLYDE ML5 4TF.
Make it slick, sensible or sassy. Those are the rules for designing CD players at around £300. Below that price, buyers are assumed to be going for widgets. Above, it is sonic performance—or more widgets. Onkyo and Yamaha have gone for a sassy approach, button-happy. Arcam opt for a stripped-down, performance-based design with a Delta-Sigma converter and slim-line looks. Rotel, as always, keep their eyes firmly fixed on the audiophile with a stripped-down purse. Kenwood have adopted a half-way house approach, with a medium range of facilities but a sleek curvature to the drawer, fascia and controls.

It should be no surprise then—though it was to one of my tame listening panel—that the sound of each is totally different. This time, I mention a listening panel because, playing the suspense game again, the conclusion on one CD player is quite different to what you will read in another magazine. Both listeners heard the CD players in random order, unaware of which was which, with a 'spoiler' not tested here thrown in. Fortunately, for the peace of mind of all of us, it's worth pointing out that the reference Arcam 170 transport and Sugden SDD-1 DAC came out top every time.
CD players group test

**ARCAM ALPHA ONE**

£299.90

The Alpha One is neatly styled, having smooth lines and gentle curves to break the harsh appearance of a rectangular box. Built like its competitors, the Alpha One nevertheless feels sturdier if, unfortunately, it clanks more resonantly than them. Arcam have yet to stick bituminous pads to the casework to prevent this and convey a better impression, as the Japanese commonly do.

Never mind, the Alpha One works plenty well enough in practical terms. It moves quickly and quietly, giving any user a good impression in this respect. The display offers track number and time in soft green numerals, a Remain button switching the display to show track time remaining (rather than elapsed) and disc time remaining - useful for tapers.

There's no keypad on the machine itself, but the remote control has one. It also has a volume control function but, teasingly, this is not available on the Alpha One. There's one set of analogue outputs (fixed level) and one electrical digital output. Up to 21 tracks can be programmed in, with Shuffle play an option for those who like surprises.

**Sound Quality**

At first hearing, this was a very bright, crisp breezy player with a very full bass. On the plus side it was very exciting to listen to, but doubts, alas, crept in quickly. While on blues or simple rock tracks the bass line thundered along and vocals and rhythm guitars projected sharply, the performers were uniformly placed in a triangle with its base well inside the centre point of each 'speaker.

Tonaly, there was a question mark on classical music. Authentic strings, for example, were barely recognisable as such, all with a warmer Romantic tinge. Orchestral dynamics too, were less good than expected, there being something of a curtailment evident when things became busy. The Alpha One had a knack of rhythmically being in the right place at the right time, but not entirely respecting nuances in a score. It was noticeable how, when a panel of friends heard other players in this group, they observed how the musical subtleties some displayed just weren't in balance on the Arcam: some practically squeezed out or subdued in favour of the general picture.

**Conclusion**

This is certainly an exciting player, but it has its own view of how music should be performed, and that is not necessarily what the producer intended. It was very reminiscent of a certain type of turntable: you'll either love it or hate it.

A&R Cambridge Ltd., Pembroke Avenue, Denny Ind. Centre, Waterbeach, Cambridge CB5 9PB
Tel: 0223 440964

**MEASURED PERFORMANCE**

In similar style to the older Alpha + CD player, the new Alpha One has a rolled-off high frequency response. This gave the old Alpha + smooth, 'warm' treble, which went down well with many audiophiles. Our frequency response analysis also shows that the Alpha One has falling bass, which may give it a slightly lightweight bottom-end.

The new Alpha One has much lower distortion than the Alpha +. The plot below, taken at -30dB to represent typical music level, shows that third harmonic distortion predominates. Even at a low level such as this, I would expect this to add a little sharpness to the sound, but this may trade nicely against the rolled off treble.

Distortion is a little higher than average at -60dB, with a corresponding lower than average 102dB measured dynamic range (E1AJ). Output is high too; at 2.44V, making the Alpha One sound louder than its competitors in a demonstration.

**TEST RESULTS**

- **Frequency response**: 4Hz-20.75kHz
- **Distortion %**
  - -6dB: 0.004
  - -30dB: 0.032
  - -60dB: 0.93
  - -90dB: 32.1
  - -120dB dithered: 12
  - Separation dB: left 106, right 105
  - 20kHz: 85
  - Noise: -95dB
  - with emphasis: -95dB
  - Dynamic range: 102dB
  - Output: 2.45V

**Frequency Response**

Rolled off treble should give a smooth sound

- **Distortion**
  - 3rd harmonic distortion may add some brightness.
MEASURED PERFORMANCE

The frequency response of the Rotel RCD 965BX Discrete shows the characteristic ripple of Philips' SAA 7323 bitstream convertor in its high frequency performance. However this ripple isn't normally audible, and good 7323 based players can sound extremely clean and powerful in their presentation. The bass has a slight lift towards lower frequencies, which should give the '965 a solid bottom end.

Distortion was low on both channels in this sample, an earlier machine having fared more badly. Our distortion analysis at -30dB signal level from disc shows little in the way of harmonics, a performance repeated on both channels. At low levels though, performance deteriorated in this respect, distortion rising past that of competitors like the Kenwood, the -60dB figure giving a poor dynamic range figure.

Channel separation was satisfactory and output normal at 2.2V. There was a little more noise than usual these days, but it was so low in any case as to be inaudible. Generally, the '965BX measured well.

TEST RESULTS

<table>
<thead>
<tr>
<th>Frequency response</th>
<th>4Hz-20.8kHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distortion %</td>
<td></td>
</tr>
<tr>
<td>-6dB</td>
<td>0.004 0.003</td>
</tr>
<tr>
<td>-30dB</td>
<td>0.009 0.009</td>
</tr>
<tr>
<td>-60dB</td>
<td>0.7 0.7</td>
</tr>
<tr>
<td>-90dB</td>
<td>51 50</td>
</tr>
<tr>
<td>-90dB dithered</td>
<td>37 38</td>
</tr>
<tr>
<td>Separation</td>
<td>left right</td>
</tr>
<tr>
<td>1kHz</td>
<td>98 97</td>
</tr>
<tr>
<td>20kHz</td>
<td>98 98</td>
</tr>
<tr>
<td>Noise</td>
<td>-92dB</td>
</tr>
<tr>
<td>with emphasis</td>
<td>-98.5dB</td>
</tr>
<tr>
<td>Dynamic range</td>
<td>-102.5dB</td>
</tr>
<tr>
<td>Output</td>
<td>2.2V</td>
</tr>
</tbody>
</table>

**Frequency Response**

- Even response, but some ripple in the treble.

**Distortion**

- Strong, low-order distortion.

ROTAL RCD-965BX DISCRETE £374.95

The Rotel has a fuss free front panel and remote control; both are clearly marked and easy to use. This isn't solely due to lack of facilities - necessary or unnecessary - since a good number are provided. The player can be programmed with up to 20 tracks, a high enough number for most people, and there is an allied repeat function. The remote has a 0-9 keypad, a very useful facility, but the player itself does not. Rotel do, however, provide comprehensive index search facilities, which classical music enthusiasts may appreciate, although this function isn't much in use these days.

The display panel lights a peculiar blue/green, giving track number and elapsed time simultaneously, as well as disc size, in large, pin-sharp numerals. This player is built well, the large Discrete logo referring to the audio output stage, which uses discrete transistors rather than silicon chips. Whether this is consequential depends solely upon the effectiveness of its design.

The rear panel carries an electrical digital output as well as normal analogue outputs. Remote control of volume is not provided.

**Sound Quality**

Here is a player that deserves its 'audiophile' tag. A little laid back in presentation compared with the others, it makes use of precise internal sound stage focusing that lays recording techniques unusually bare. The RCD-965 was the only player in this group to entirely separate single instruments or orchestral sections with fly-on-the-wall clarity. A crisp delivery, on-the-ball timing and bass that was only around when it had to be, produced a very lively performance. Unusually for this group, the Rotel also managed the 'infill' in the sound stage, with a clear perspective all the way from left through centre to right. Tonal variety of colour was exemplary at this price. Its only drawbacks were a touch of hardness to strings, with a degree of hollowness in the mid-range that tended to give an impression of depth while also adding a touch more reverberation than was entirely truthful and tending to give a mild degree of lightness to male vocals. All the same, when a sax let rip it sounded nearly as big as a real sax would.

**Conclusion**

Apart from a desire to be a little over-atmospheric on orchestral recordings, the Rotel was placed next to the reference for overall accuracy and clarity. Its sound had a clinical aspect which would prove disconcerting to some, but it responded to changes in musical dynamics very fast and kept tempo perfectly in time.

Gamepath Ltd.,
25 Heathfields,
Stacey Bushes,
Milton Keynes,
Bucks. MK12 6HR
Tel: 0908 317707
CLASSIQUE SOUNDS
Leicester’s leading vintage valve hi-fi specialist.
Are looking for vintage valve Hi-fi equipment

AMPLIFIERS/TUNERS
Leak, Quad, Radford, RCA, Rogers, Fisher, Marantz, Pye Avantic,
Dynatron, Western Electric ETC. (working or not)

TURNTABLES/ARMS
Garrard 301/401, Thorens 124/224/125, Emt, Sme, Decca, ffss
ETC

SPEAKERS
Lowther, Quad Electrostatic, Voigt, Tannoy (dual concentric)
ETC

AUDI0 VALVES
Mullard, Osram, Bimar, Gec ETC

ITEMS FOR SALE INCLUDE
Leak TL10, TL12, Stereo 20, Troughline 2/3, Quad11, Radford
STA25/SC22, Dual Electrostatics, RCA new orthothonic (mono)
Lowther (mono), Revox G36 (slight fault)
Garrard 301/401, Thorens 124, Thorens TD150, Sme arms,
Decca arms heads ETC

REBUILDS (including same day service) for vintage valve amps.
From £100.00 complete.
Handcrafted plinths for 301/401 ETC From £200
Power supplies for 301/401 (100v) £95.00
Cork mats for 301/401 £15.00
Meridian M1 active loudspeakers £495.00
Townsend Avalon/Moth £225.00

I ALSO OFFER:
Home visits (within 40 miles) radius.
Dedicated listening room.
Part exchange service.

FOR MORE DETAILS PLEASE CONTACT:
CLASSIQUE SOUNDS
61 Aylestone Drive, Aylestone, Leicester LE2 8GE
Telephone/Fax (0533) 835821

EXPORT ENQUIRIES WELCOME
MEASURED PERFORMANCE

The new Yamaha CDX-880 has an interesting frequency response. Rather than the usual ruler-flat line, Yamaha have chosen to engineer the response to give a slight lift in both bass and treble. This, although appearing to be only minor from the plot, should give the CDX-880 good bass weight and bright, clear treble in subjective tests.

This treble lift can turn to harshness if combined with high distortion, but the CDX-880 behaves well in this area. Although wide-spread across the band, all of the distortion harmonics are low, so the Yamaha should remain reasonably sweet in the treble.

Elsewhere, as is commonly the case with mid-priced players these days, the CDX-880 performs well. Separation is wide, noise low enough to be inaudible, dynamic range good thanks to low distortion, and output dead on the Philips standard at 2V. DB

TEST RESULTS

<table>
<thead>
<tr>
<th>Frequency response</th>
<th>4Hz-21.4kHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distortion %</td>
<td></td>
</tr>
<tr>
<td>-6dB</td>
<td>0.004</td>
</tr>
<tr>
<td>-30dB</td>
<td>0.025</td>
</tr>
<tr>
<td>-60dB</td>
<td>0.67</td>
</tr>
<tr>
<td>-90dB</td>
<td>24</td>
</tr>
<tr>
<td>-90dB dithered</td>
<td>11</td>
</tr>
<tr>
<td>Separation dB</td>
<td>left: 99</td>
</tr>
<tr>
<td></td>
<td>right: 96</td>
</tr>
<tr>
<td>1kHz</td>
<td>74</td>
</tr>
<tr>
<td>20kHz</td>
<td>75</td>
</tr>
<tr>
<td>Noise</td>
<td>-103dB</td>
</tr>
<tr>
<td>with emphasis</td>
<td>-103dB</td>
</tr>
<tr>
<td>Dynamic range</td>
<td>105.5dB</td>
</tr>
<tr>
<td>Output</td>
<td>2.0V</td>
</tr>
</tbody>
</table>

Another player with an urge to fit in facilities, but this time locating the secondary controls on a flip-down panel. When this is closed, the CDX-880 could be mistaken for a minimalist audiophile machine, should anyone feel shy of admitting a need for taping facilities like the Onkyo, Repeat, Random play and all the other CD replay options reviewers often despise, but come in handy. The player itself has a 0-9 keypad and this is repeated on the remote control. Exclusive to the remote is control of volume, variable output being available from a set of sockets on the rear panel. There's a fixed output avoiding the internal volume control chip for those who want the highest quality. Yamaha also fit electrical and optical outputs for those who might want to use an outboard converter at a later date. The remote control sender has been fitted with every facility possible it appears, including all the taping functions, display dimmer and open/close.

The Yamaha has a clean profile and a clear orange display showing track number and elapsed playing time; it was easy enough to use.

Sound Quality

Thanks to its 'Pro-Bit' DAC, the Yamaha was the most 'analogue-sounding' of all this group. Nothing in this world being entirely equal, this had unexpected results, its ranking changing depending on the music played. While a Purcell overture failed, since the normally dry strings sounded distinctly nineteenth century, other orchestral material blossomed into a warm, rich and undeniably enjoyable experience. While full-scale orchestral dynamics were a little restrained, at least the effect was even throughout, no melody or rhythm gaining undue prominence. Rock music too was lively, detailed and very believable, if somewhat studio-bound, never quite powering out into a tough performance. Tonal colour tended to be gently sketched in rather than reproducing the whole spectrum, while the sound stage was a spot lacking in focus in the centre. One curiosity was that it was difficult to follow a beat: I noticed one listener, heavily involved in the music, nonetheless tapping her foot in the wrong time-signature.

Conclusion

Without being condemnatory, Yamaha has produced an easy-listening player in the best sense. This is a player with just enough analogue warmth to take the sting out of the nastier digital recordings, only a little too easy-going to produce that essential shock factor when music is intended to startle.

Yamaha Electronics UK Ltd.,
Yamaha House,
200 Rickmansworth Road,
Watford,
Herts. WD1 7JS
Tel: 0923 233166
The Kenwood possesses a wide range of facilities, including peak search for aiding home-taping, but less than the Onkyo’s FTS-equivalent or the Yamaha’s array. The display can be switched off, a nice touch, even though it is among the cleanest and most legible of this group, possessing large blue numerals. They show track, time, emphasis if on, and even output level in dB, which all looks pretty impressive. The styling is as curvaceous as any Page 3 model too, and the cabinet equally well built.

This player has a 0-10 keypad on its front panel as well as on the remote control and it also has remote control of volume, with ‘fixed’ output in addition to variable for those who want optimum sound quality. There’s just one digital output though, which uses an optical transmitter.

Lack of time and a manual prevented me from discovering precisely what the legend “Dynamic Resolution Intensive Vector Enhancement” meant, but it sounds like something the USS Enterprise would use for chasing Klingons.

**Sound Quality**

By and large, a refined and listenable player, safely playing at Warp Factor Three. Kenwood’s DP-7060 has one of the most lucid mid-ranges of any of these players and catches fine detail like the slightest breath of players or the dunk of music stands.

However, frequency extremes are a little restricted. Bass trombones and flutes were lacking some body to them, with horns tending to be very horn-like but without that control over dynamics that allowed muted instruments to diminish their volume naturally. Although adept at reproducing a melody, the 7060 did sound a little slow by comparison with the other players, which made it less sure-footed by catching a beat or sudden time-signature changes. Although tonally on the thin side, the DP-7060 made up for the lack of thick-blood in the musical stream with a compensating aura of clarity which spread instruments across a fairly wide stage without them being clotted together; producing a very good impression of individual sections, vocalists or players with the proper amount of space between them.

**Conclusion**

Not the niftiest of this group in timing, but a very lucid and clean-sounding player. Had there been a little more ‘body’ and roundness to strings and vocals to add to a splendid definition of detail, this would have been a winner.

Trio Kenwood,
Kenwood House,
Dwight Road,
Watford,
Herts. WD1 8EB
Tel: 0923 816444
MEASURED PERFORMANCE

The frequency response of the Onkyo DX-750 is an interesting one. The whole response has a tilt to it, favoring bass, which I would expect to result in subjectively solid and weighty bass. There's a peak in the treble too, which may add some brightness, but the peak is sharp and above 10kHz where its effect will be less audible than a slow rise starting from lower down.

Distortion is reasonably low, as can be seen from the plot below, taken at -30dB to represent a typical music level. Second harmonic predominates, which is a good sign as this form of distortion is mainly innocuous and there is only a very small amount of 3rd or higher order distortion. However, at -60dB the DX-750 has higher than average distortion which limits dynamic range to a mediocre 100dB.

Elsewhere, the DX-750 measures well, with output just a touch higher than normal at 2.15V.

TEST RESULTS

<table>
<thead>
<tr>
<th>Frequency response</th>
<th>4Hz-20kHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distortion %</td>
<td>0.003%</td>
</tr>
<tr>
<td>-6dB</td>
<td>0.035%</td>
</tr>
<tr>
<td>-30dB</td>
<td>0.94%</td>
</tr>
<tr>
<td>-60dB</td>
<td>3.0%</td>
</tr>
<tr>
<td>-90dB</td>
<td>14.3%</td>
</tr>
<tr>
<td>-90dB dithered</td>
<td>3.9%</td>
</tr>
<tr>
<td>Separation dB</td>
<td>Left: 101dB, Right: 98dB</td>
</tr>
<tr>
<td>1kHz</td>
<td>76 dB</td>
</tr>
<tr>
<td>20kHz</td>
<td>77 dB</td>
</tr>
<tr>
<td>Noise</td>
<td>-109dB</td>
</tr>
<tr>
<td>with emphasis</td>
<td>-109dB</td>
</tr>
<tr>
<td>Dynamic range</td>
<td>100dB</td>
</tr>
<tr>
<td>Output</td>
<td>2.15V</td>
</tr>
</tbody>
</table>

ONKYO DX 750

£349.95

After some years' absence, Onkyo, once a mainstream brand here, is back. The DX-750 is by far the bulkier, with an intimidating array of buttons left and right of the central tray. These control all the usual functions, but also include 'Peak Search' and 'Time Edit' for (still illegal) home taping and 'Music File' which allows selected tracks from up to 204 discs to be memorised. The complex display has a track calendar, in addition to track number and, in smaller numerals, track elapsed playing time. A 0-10 keypad for quick track selection has been provided on both player and remote control and remote control of volume has been included too. As usual with this facility, those who want top quality can use a pair of 'fixed' output sockets on the rear panel. There's a digital output too, but optical only - an unusual choice. These days, electrical digital outputs are more common, optical coming under suspicion for the dubious quality of the transmitter system commonly used. Yet it does invariably offer an amentable sound.

The Onkyo was reasonably well built and finished. Inevitably, a box of this size has large surfaces and rings more than smaller, sturdier constructions, making it seem less substantial than competitors. This is a problem Aiwa face too, with their penchant for large, unfillable boxes.

Conclusion

Consistent in playing music, the Onkyo constantly came out top of the bunch, not for accuracy, but for a strong balance of virtues. My panel of friends tended to mutter more about the quality of performance than recording quality, always a good sign at this price level, though noting a slightly dry, lean tonal quality in the mid-range.

NAD Marketing Ltd.,
NAD Building,
401-405 Nether Street,
London N3 1QG
Tel: 081 3433240

Sound Quality

A very harmonious player, this one, smooth and extremely enjoyable. With rock music, rhythm and bass guitars came forth and multiplied, while orchestral music had strong dynamics. If there was anything missing, it was only the perception of depth, the Onkyo having a perspective that was forward of the plane of the speakers plus a layer just behind. Consistently, however, the DX-750 reproduced instrumental and vocal colour with a kind of gleefulness that ensured listeners could always be certain that a band was playing authentic instruments or romantic ones. Its sense of timing was totally consistent, too: listeners never failed to match a beat or keep to a rhythm. A small degree of coarseness in the upper mid-range would have said 'multi-bit' a few years ago, but this is a bitstream player.

NAD Marketing Ltd.,
NAD Building,
401-405 Nether Street,
London N3 1QG
Tel: 081 3433240
Here's what the UK's leading publications have to say about the new Q Series.

"ALL ROUND THE USER-FRIENDLY Q10... LOOK LIKE WINNERS FOR KEF • AND MUSIC LOVERS SHORT ON SPACE."
What Hi-Fi?, February 1994

"WHERE THE KEF REALLY SCORE IS IN THEIR ABILITY TO BRING EVERY SEGMENT OF THE MUSIC TOGETHER IN A HIGHLY INVOLVING MANNER."
What Hi-Fi?, February 1994

"THE OPENNESS, CLARITY AND SPEED OF THE Q50... MAKE IT PRE-EMINENT OF ITS TYPE."
Alvin Geld, Audiophile, June 1994

"...THE Q70 WILL DELIGHT YOU WITH THE SHEER TOUGHNESS OF THEIR MUSIC MAKING."
What Hi-Fi?, June 1994

SEE YOUR NEAREST DEALER FOR A DEMONSTRATION.

Aberdeen
Holburn Hi Fi
0224 585713

Alloa
Michael Brothers
0259 724230

Birmingham
Music Matters
021 499 2611

Bournemouth
Golding West Highland
0903 473499

Bristol
Radford Hi Fi
0272 4924748

Cardiff
Audio Excellence
0223 248655

Cheltenham
Stevenson
0242 441173

Colwyn Bay
Cubitt Audio
0493 546922

Edinburgh
In Hi-Fi
031 225 8854

Glasgow
Bill Hutchinson Hi Fi
041 304 4434

Guernsey
Milo Don
0481 56647

Guildford
Pinto
0483 566047

Huddersfield
Real Vision
0486 532994

Jersey
E & M Hi Fi
0534 538518

Leeds
Audio Projects
0532 304565

Leicester
Leicester Hi Fi
0533 539753

London
Hi-Fi Experience
071 304 3533

London Hi-Fi
071 866 9200

Manchester
D & T Electronics
061 643 2694

Newcastle
J & O Windows
091 232 1356

Nottingham
Unilet
091 445 2694

Oxford
Douglas Audio
0943 467669

Peterborough
The Hi-Fi Company
0733 297231

Preston
& S Hi Fi
0722 436730

Suffolk
Sound With Style
0765 733589

Sunderland
Creative Audio
0769 241924

Swindon
Audio 1
0973 566272

This does not constitute a full dealer list. For a complete dealer list please contact
KEF UK: 0622 672261.
CONCLUSION

All CD players sound the same, do they? Not on your Nelly. For amusement value only, there are two rankings this time. First for facilities: joint winners are Yamaha and Onkyo, though the Onkyo's optical-only digital output puts it one place behind the Yamaha.

Least facility-bound and therefore bottom of this list, is the Rotel, though of course its simplicity puts it top for audiophile credibility. Only winner of the upgradeability prize is the Rotel RCD-965BX, since it can be transformed into an RCD-965BX LE, where an added UK-designed board addresses what few sound-quality criticisms can be made of 't and puts it decidedly two rungs up on the ability scale.

Sonomically, each of these players has a quite different character. In order of bulk, clearest defined lateral soundstage. A slight constriction of tonal colour put it somewhat behind the Onkyo, while a too-refined dynamic smoothness added to its long-term overall listenability, while making it perhaps rather too bland for up-beat rock listeners.

The Yamaha unexpectedly caused a guinea-pigs' revolt, having been praised for the nearest-to-vinyl vocal and tonal quality of any of the players. An LP was produced to test the claim, whereupon three grands' worth of vinyl replay system turned out to have such a superior range of tonal colour and dynamics that the guinea-pigs refused to go back to digital at all and the fourth listening session came to a sticky end. However, despite a rather flat sonic perspective and restrained dynamics compared to the other CD players in the group, the CDX-880's overall just-on-the-right-side of rosy glow brought praise.

Distinctly the odd one out, Arcam's Alpha One turned out to be, well, odd. Alone, it would be likely to score highly, since its strengths are immediately obvious. Very tight, very sharply focused, superficially it tightens up a listener's picture of a rock or blues band, so it sounds 'live' between the speakers with, always, a deep rich 'thrum' from the bass, more impressive than that from any other player. Only in comparison does it become obvious that the whole tonal balance is slightly skewed, with the emphasis on rhythm and sharpness of projection rather than all the internally-defining subtleties of attack and decay in notes that define a coherent musical performance. Exciting, no doubt, but less than accurate. The benefit is on the side of rock listeners who would be dismayed at the technical inadequacy of some current recordings; the Arcam would still let them spark and sparkle, whereas, at the other end of the scale, the Rotel, especially, or the Kenwood would strip them so bare the result could be dismaying.

Over to you, Nelly •
The name is new, although former TDL designer Clive Gibson is no stranger to loudspeakers. Dominic Baker listens to Clive's latest design, the small floor-standing Kestrel.
Although Musical Technology are new to the loudspeaker market, the people behind this venture are certainly not. The Kestrels' impressive paper spec, includes in-house built metal cone bass units and an attractively proportioned triangular floor-standing cabinet, all for a mere £250. This is the work of designer Clive Gibson, until recently with TDL and before that IMF and Acoustic Energy amongst others.

The Kestrels are slim, narrow floor-stander's. This kind of cabinet makes a lot of sense, taking up less room than a standmounter plus stand, but allowing better bass from the increased cabinet volume available to the designer. A spiked metal plate stand is available for an extra £29.95 which gives them a solid footing.

The Musical Technology Kestrels benefit strongly from near-wall placement. Further out into the room bass became light, lacking power and clearly showing the metallic character of the bass unit. Even when pushed right back so that they were virtually touching the rear wall, bass couldn't be described as weighty or strong. They did have enough lower down to establish a reasonable balance, displaying good definition and an ability to play a tune. They coped well with Frank Black's 'Sir Rockaby', the deep underlying bass line strong enough to make its presence known, whilst upper bass followed the beat of the music well.

Listening to several tracks on the same album also demonstrated their civilised and polite nature. Even with screaming guitars, crashing cymbals and punchy bass lines they sounded comfortably soft. This can be seen in two lights. On the one hand they won't offend, and are particularly suited to relaxing background music. But personally I'd rather have a little more get up and go. From an audiophile point of view, they're not really captivating enough to encourage you to listen deeper and deeper into the music.

A violent drum roll didn't get much louder as the drummer worked harder, and no part of the music ever really made it out of the plane of the loudspeakers and into the room. It's on dynamic contrasts like this that the Kestrels don't really convince. Pink Floyd's 'The Wall' goes from an almost inaudible whisper to super, loud, guitar riffs within moments, but the contrast between loud and soft was compressed down to reduce dynamics and impact.

In other areas though, the Kestrels do extremely well for their price. Their midrange was exceptionally smooth. The Cranberries' Dolores O'Riordan showed this to full advantage with her rich, full-bodied voice. Their clarity across the midrange is no doubt due to a well-engineered crossover integrating the drive units smoothly together. The triangular section cabinet will help to prevent standing waves setting up, which can introduce a hard and boxy effect.

The metal drivers gave The Cranberries a brighter tone than normal, which was quite a pleasant effect with this album, if not the most accurate. This brightening of tone gives the 'speakers an open and clear sound that certainly seems impressive to start with. After a few hours though, I found myself struggling to hear the finer points of the music. Low level detail such as the ambience surrounding the instruments and the way they decayed were rarely fully exposed, making it difficult to gain much insight into a recording. I found that.

The Kestrels do extremely well for their price. Their midrange was exceptionally smooth. The Cranberries' Dolores O'Riordan showed this to full advantage with her rich, full-bodied voice.

Partly for this reason, the Musical Technology Kestrels have a fairly limited repertoire. Their metal dome tweeter handled cymbals well, giving them the sharply etched zing necessary to become believable, the midrange coped smoothly with most vocals and the upper bass played a tune well. But if percussion became too complicated and laced with high treble energy, the Kestrels quickly became splashy and vague. Counting Crows' acoustic guitars sounded like they were stuffed with foam and the string bass intro to Lou Reed's 'Walk on the Wild Side' was coming from a cupboard at the back of the stage.

I'm not against metal cone loudspeakers; JPW's Ruby Is and Townshend's Glastonburys are among two that I rate highly. I suspect that the larger magnet assemblies needed to drive the heavy cones properly cost a lot and that a compromise has to be made for more affordable designs such as this.

Unfortunately, this results in a weak sound, one that at this price level others can beat. For the money you do get a lot of technology. Metal cone drivers and a triangular-shaped floor-standing cabinet together make the Kestrels look good value. Sadly, for £50 less the standmounting Harman Kardon LS0200s put more effort into the music and if you really want a floor-stander with good bass, then TDL's RTL2s have it sewn up. The Kestrels are a lot more civilised than either of these two though, so if that's what you're looking for, they're worth auditioning.

**Kestrel** £249.95
**Stands** £29.95
**Musical Technology**
Unit 10, Howard Industrial Estate,
Chilton Road, Chesham,
Bucks. HP5 2AU
Tel: 01494 793137
NEW... Diamond shaped crystal clear Big sound deep bass line... Bright and life like sound... Even from the smallest one... Home trial or no trial this must be done...Better price better design. 1994.......For free full colour brochure
Phone 081 986 8455

PRICE STUDIO MONITOR

* Direct from manufacturer
* Why pay more?

Each Price Studio Monitor is individually calibrated.

By using the very best drive units available coupled to ceramic-resin bonded cabinet of immense rigidity, the result is a loudspeaker with an incredible dynamic range and extremely flat frequency response extended from 28Hz to 20KHZ.

Loudspeakers of this quality normally cost £2,500

The price Studio Monitor is available direct from the manufacturer for only £1,500 (VAT is included and there's no charge for delivery!)

For a free home trial or further information simply phone:

0443 - 480258

The Sound Company

Getting a better, more involving, sound often means spending alot of hard earned money. It’s such a waste, because every system can benefit from our cables and accessories, at a fraction of the cost of some new “black box”. Here are some of the ways we can help.

1. Loudspeaker cables in Silver plated Copper or Pure Silver. Our main cables add weight, power and scale. Non-inductive RF filtering (£10.00) and over voltage protection (£3.00) enhance performance still further. Gold plated AV cables, both RF (£19.95) and Scart (£23.52), help bring picture quality in line with NICAM sound resolution.

2. Valves, capacitors and transistors are all microphonic, they cannot perform optimally if vibrated. Our set of three Brass Isolation cones (£6.513) are worth their weight in gold - revealing low level resolution and dynamics hither to hidden beneath electronic noise. We also have a cure for your noisy fridge or central heating motor (£3.50), enabling you to throw away your big mains noise suppressor, which has been giving you that “sat upon sound” for years.

3. There’s lots we can do to bring you closer to the emotion and energy of the performance. So confident are we, that we offer a 14 day money back guarantee.

Ring or write for details:

CAMPAIGN AUDIO DESIGN
Llandudno Road (HW)
Cardiff CF3 8PG
Tel: 0222 779401
Trade and International Enquiries Welcome.

Tesserac Audio.
If you've never heard of it, you should hear it.

For an appointment call 081 568 8808.

For full details of the Tesserac range of head amplifiers, pre-amplifiers, power amplifiers, Gyrodec power supplies and dealer list contact: Choice Audio Marketing, Butter Field House, Church Street, Old Isleworth, Middlesex TW7 6BE.
Tel/Fax: 081 568 8808

TESSERAC AUDIO
The Best of British High End

HI-FI WORLD DECEMBER 1994
KING KLOUT

Is Linn's Kairn and Klout pre/power amplifier the king of slam and dynamics, or is there something more subtle about this top-end combination? Noel Keywood listens closely.

A

lthough the days of blind Linn/Naim religion are over, other beliefs being given some freedom of expression, it's still the case that what Linn and Naim do well, they do very well. If you want to hear grippingly dramatic solo-state amplifiers, all punch, power, control and revelation ask for a Lin - i or s. Of the Klout In spite of on/off mute properties in the Linn Klout power amplifier. There were so many other items in the chain, however, that I couldn't distil the sound of the Klout from the rest with any confidence - and it's always dangerous to base firm views on anything other than comprehensive experience in this game. I had to get a Klout home and into a known system before becoming more certain about its qualities.

The property that originally captured my attention made itself clearly known straight away: the Klout projects strongly across the midband and lower treble regions, throwing out a wealth of fine detail. This gave a captivating stereo stage with simple recordings possessing well separated instruments and performers, strongly outlining castanets, vocals and strings, for example, on Manual de Falla's 'The Three Cornered Hat', from a delicious analogue 35mm film soundtrack recording (on CD) of the L.S.O., from Everest records. In this area the Klout possesses a master-tape type of presentation, forward, dry and detailed: impressive.

With the Kaim preamplifier especially, and with loudspeakers possessing strong bass, our own KLS3s and Heybrook Quartets, I was impressed by the powerful metronomic beat on Carol Kenyon's Dance With Me (12in single): it's meant to move you almost physically and it punched out from the 'speakers. The Klout has grip and power, it can also reproduce delicacies whilst supporting strong driving bass lines - impressive stuff.

Some of the dryness and in-your-face drama of this combination may be a little overwhelming for some listeners. Depth perspectives and a certain sense of liquidity in the sound are less evident than with good valve amplifiers (or DPA). However, to some extent this is the trade-off you make between good solid-state and valves, some like one, some the other. The Kaim preamplifier survived being hooked up to our revealing 30013 amplifier. So often, solid-state pre-amps are revealed as sounding grainy and flat by a lucid valve power amplifier, but in this case the Kaim shone, coming over as clear, concise and highly detailed, with scant sign of unpleasant colouration.

Ultimately, I was deeply impressed by the Kairn/Klout. It's a forceful combination that images superbly left-right, has pile-driving power (I measured 78 watts) yet a vividly detailed midrange. Full marks for viscerality - it's a system that's especially fine for hard driving rock yet it is neither hard nor fatiguing.

Kairn Pro £998
Klout £1895
Linn Products, Floors Road, Waterfoot, Eaglesham, Glasgow. G76 0EP
Tel: 041 644 5111
Haden Boardman explores a classic affordable valve amplifier, the Rogers Cadet.

A total of four versions of this classic little valve amp. The MkI introduced around 1958 was initially called the ‘Minor’ and used a pair of ECL83 triode/pentode valves to give a claimed 5 watts output – quite reasonable in those days. The chassis was very small and neat, with the matching four-knob pre-amp; they’re not that common though as monoblocks and if you have just one, finding another for stereo sound may take some time.

The MkII arrived in 1961 as a Stereo pre/power combination. This time it used ECL86 valves for a more powerful 10 watts per channel. If you already have one of these be warned, the pick-up input on the preamp does not accept MM cartridges.

The later MkIII from 1964 was much more modern looking. Usually, it was supplied in a little wooden case and early versions were split into pre/power sections. The circuit was not that different from the MkII, but the pre-amp was significantly better and with a suitable adapter most moving magnets will work very well. Later MkIIIs were built as pure integrated amplifiers, and tend not to be as popular as the pre/power item, especially if the case has gone astray.

One fly in the ointment with the
MkIII is the Brimar ECC 807 tube used in the preamp. Supplies of these have long since dried up. Fortunately an ECC 83 is basically the same valve, and will work if you alter the wires on the base of the socket. (The two are not pin compatible). In theory an '807 is an up-rated '83, in reality, though, the two measure near enough the same.

The ECC 83 heater does have a centre tap, whilst the ECC 807 heater does not. Connect one side of the heater supply to strapped pins 4 and 5, and the other connection to pin 9. Watch the earthed screen on the 807. When swapping leads about remember not to mix the two halves of each valve up. If in doubt leave this job to a professional.

Another problem that can be usefully solved is the joint cathode resistor for the output valves. As with the QUAD IIs these should be split. Components that give the most aggravation are usually the aforementioned cathode resistors, bypass capacitors and all of the anode load resistors in the amplifier. Around 99% of faults on Cadets are caused by these components. Coupling capacitors and power supply electrolytics are usually very reliable, surprising for an amplifier of this period. Make sure the insulation is good on these electrolytics. Because the Cadet uses a voltage -

<table>
<thead>
<tr>
<th>Pin</th>
<th>ECC83</th>
<th>ECC807</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Anode I</td>
<td>N/C</td>
</tr>
<tr>
<td>2</td>
<td>Grid I</td>
<td>Grid II</td>
</tr>
<tr>
<td>3</td>
<td>Cathode I</td>
<td>Anode II</td>
</tr>
<tr>
<td>4</td>
<td>Heater</td>
<td>Heater</td>
</tr>
<tr>
<td>5</td>
<td>Heater</td>
<td>Heater</td>
</tr>
<tr>
<td>6</td>
<td>Anode II</td>
<td>Cathode I</td>
</tr>
<tr>
<td>7</td>
<td>Grid II</td>
<td>Cathode II</td>
</tr>
<tr>
<td>8</td>
<td>Cathode II</td>
<td>Anode I</td>
</tr>
<tr>
<td>9</td>
<td>Heater centre tap</td>
<td>Grid I</td>
</tr>
</tbody>
</table>

The matching Cadet III pre-amplifier and Variable tuner complete with wooden cases.

Price of Cadets is pretty low, and supply of MkIIs very good. Anyone after an introduction to valves on a very tight budget should certainly consider a good second-hand Cadet with confidence. Sonically they are surprisingly open through the midband, with the extreme frequencies rolled off gently (thanks to a rather average output transformer). I think this can be a good thing with some budget CD players, taming the bright and sterile treble quality they tend to exhibit.

Power isn't exactly in the Cadet's dictionary either. Unless you own a pair of Klipsch horns or something with 90dB or higher sensitivity, head bangers should look elsewhere.

Rogers Cadet
Mellotone Acoustics
PO Box 67 Wigan,
Lancs WN2 3AG
Tel: 019457525

FOR CIRCUIT, SEE SUPPLEMENT, P.19

Valve Pin Connections

The ECC83 and 807 are both twin triodes, i.e. two valves in one glass envelope.
review

SEEKING SIMPLICITY

Does the weight, not least the bag of Monitor Audio's new 371s, impose more of its own sound on your audiophile?

Robert F. Fairclough Jr.
**Nakamichi would do well to engineer for a warmer, sweeter balance in the treble than they have here.**

Part of the new 's' series from Nakamichi, the ST3s tuner is attractively styled. The front panel is clean and uncluttered, having only what is necessary and no more. For £350, this Japanese tuner is surprisingly minimalist; FM only and no RDS - something becoming standard even on £150 tuners these days.

Tuning can be controlled in two different ways. There is the, nowadays, more common push-button scan-up and down, or a nicely weighted rotary control. Rather than being a free-wheeling control though, it turns in 5/100th MHz steps with a positive click for each step. However, this is all a bit academic; the push-button scan controls make tuning fast and accurate, and once you’ve stored your favourite thirty stations, the rotary control is redundant.

The only other controls worth mentioning are for mono and automatic off-station. Throughout the listening tests, the ST3s stayed admirably clean and clear of birdies or whistles, as you’d expect from a modern tuner. Even from a modest three-element aerial in Central London the signal proved strong enough for good stereo and low noise from a large range of stations. The ST3s appears to be very sensitive, but be careful of overkill when selecting an aerial; on a couple of stations it came close to being overloaded, and a touch of distortion set in. The signal level meter doesn’t seem to be too discriminatory either, if I could get a squeak out of a station at around that level, the ST3s sounded surprisingly clear and open in the top after the Troughline reference. However, on mainstream rock from Capital Radio and BBC Radio 1, the splashiness of the treble made itself known, clearly. Admittedly, transmission quality also took a step backwards from the solid and rich character conveyed by Radio 3, but the Nakamichi struggled to play cymbals with any power, the paper texture of the upper registers removing body and weight from each strike. Bass lines too, on Kiss FM, weren’t given enough presence and attack to really define the beat, although individual notes seemed well constructed. These days, when a lot of transmissions sound thin and sibilant to start with, Nakamichi would do well to engineer for a warmer, sweeter balance in the treble than they have here. With light bass and treble that could become a touch sharp, a gritty and weak overall balance was provided. Here, tuners like the Aura TU-50, shortly to be replaced by the TU-80, have a sweeter balance that manages to bring body and warmth to rock, yet stay neutral enough to do justice to better quality signals from BBC stations.

The Nakamichi ST3s is attractively styled, quick and simple to initially program and then use in everyday life. But although minimalist in design, the quality of its sound wasn’t quite up to what you’d expect from a £350 tuner. There are cheaper designs around, the Aura TU-50 for example, that gives a smoother and sweeter sound with better body, yet they lose little in terms of clarity to the ST3s. And there are even more tuners around that can offer a far wider range of facilities, RDS, medium wave etc., for less than half the price. The ST3s looks like it’s been aimed at the audiophile with its ‘less is more’ design approach, but it falls too short in sound quality to gain any appreciation in this market.

**MEASURED PERFORMANCE**

The ST3s has a small upper midband lift - enough to add a little sheen or brightness into its sound. Our frequency response shows this clearly, as well as the sudden drop in output above 16kHz due to the 19kHz pilot tone notch filter. This did a good job in suppressing all unwanted outputs above 16kHz, reducing pilot to -75dB and sub-carrier to -100dB. Bass output extended down below 10Hz.

Distortion was a trifle higher than that of some tuners, hovering around the 0.2% mark, with both second and third harmonics present; this may tinge the sound slightly. At -71dB, hiss was satisfactorily low, but this performance was no better than that of most rivals. For Radio 3 in particular, which has extended silences, a tuner must offer better than -70dB, so the ST3s just scrapes in here.

Sensitivity was high: just 0.5mV was needed for minimum hiss (full quieting), a level any two or three element aerial can usually provide. Selectivity, the ability to separate closely grouped stations, was also high. Nakamichi have also fitted a useful signal strength meter: all five segments must be lit for full quieting. NK

**TEST RESULTS**

**Frequency response**

| 42Hz-13kHz | 42dB |
| Stereo separation | 0.2% |
| Distortion (10% mod.) | -71dB |
| Signal for minimum hiss | 0.5mV |
| Selectivity (at 0.4MHz) | 0.2% |
| Sensitivity | 4µV |
| mono | 250µV |
| stereo | 500µV |

**Frequency Response**

- **Response rise will give a bright sound.**
- **Distortion is a little higher than most, which may tinge the sound.**

**Nakamichi ST3s**

- **£350**
- **Nakamichi B&W**
- **Marlborough Road, Churchill Ind. Estate, Lancing, W. Sussex, BN15 8TR**
- **Tel: 0903 750 750**

**HI-FI WORLD DECEMBER 1994 37**

**World Radio History**
VINYl STAND
I have been reading hi-fi magazines for 25 years now. I am 47 years-old and have a large collection of LP records. I have been reading Hi-Fi World for several months and have placed a regular order with my newsagent.

I am completely satisfied with my system which doesn’t have a CD player. I remember when they first came out and someone said they had a quiet background. So, Ivor Tiefenbrun of Linn took a lemon to some hi-fi shops, saying that didn’t make a noise either.

Although the technology has advanced, I was really pleased to see in a recent issue of Hi-Fi World the advice that readers with large LP collections shouldn’t ditch them, but get a really good turntable and enjoy the result. Well, I have just such a turntable; it wasn’t expensive and it certainly has a fine sound. It is an Acoustic Research EB101.

Amplification is provided by an Arcam Delta 60 which has a superb sounding phono-stage. This then drives Tannoy floor-standing 611 Mark One speakers.

Ancillaries are an Arcam Alpha 2 tuner - excellent FM sound, the MW and LW bands can be useful too - and an Arcam Delta 150 Nicam tuner for excellent TV sound. Try putting your television between the ‘speakers and place the rack with your hi-fi behind, to the left or right; a little trouble making the wiring neat doesn’t take long.

In my Target rack there is room for just one more item, a NAD6325 cassette deck. Using TDK AR90 tapes, superb results can be obtained. ‘Speaker cable, I forgot to mention, is the tried and trusted QED 79 strand with gold-plated banana plugs. One other famous make of plug made the sound tinny and the bass guitar wouldn’t play properly on my Grace Jones LPs.

Finally, the amp, two tuners and my Nicam VCR each stand on a Mission Isolat; these really do help.

So why all the funny stares from staff at the High End of hi-fi shops when I say I haven’t got a CD player? One feels ostracised. I don’t ask them to order a stylus from Goldring - I might be thrown out of the shop. I got the 1012 GX direct from Goldring because of the attitude I mentioned with vinyl. And yet CDs are expensive, they can skip or jump, they can rust even. As far as I’m concerned they are also boring. There’s nothing like seeing the marvel of a pick-up in its arm and that platter revolving one can hardly believe it would make the sound it does, or contribute towards it.

Readers who need convincing can visit my home, if you did make a fair point regarding his room and furnishings, how the hell did he get away and ditching whatever it is they’ve got. Look at the letter from Joe Hagan of Thornton Heath, Surrey in your September issue, headed Two of your letters in the October edition, and one in particular, brought waves of nostalgia back to me from many years ago.

Your Letter of the Month espoused the cause of quality hi-fi and not simply the latest is always the best, but the letter about the Voigt Tractrix horn loudspeaker was the one which really struck home. I thought you may wish to hear the following true story.

As a preamble my Father, who died in 1980, was always a keen lover of good quality reproduction. His interest was more than academic and he built much of his own equipment in the early days. By the early days I mean the late nineteen twenties and thirties. My mother still holds the third broadcast/receiving licence to be issued in Nottingham, to my father. In the thirties he built a Beard-type television to receive the early transmissions from Alexander Palace. The resolution was so good, he said, that a pair of ‘drop’ earrings could just be made out on a female announcer during one of these early broadcasts. I believe the standard in those days was thirty lines!

To get on to the story I intended to tell, my father had a great friend, also a lover of reproduced music, who at the time owned a Magnavox Model 66 12” mains energised drive unit. This was a most handsome unit with a beautiful, black enamel case and cone basket and a chrome carrying handle. With its curvilinear cone and conservatively rated at 20 Watts, it was the apple of his eye. He had this unit mounted on a large baffle and fed it via a DC powered amplifier - I said it was the early days! They had both discussed for some time the merits of the Voigt approach and had both cast covetous eyes over a Voigt unit. At a cost of £17.10 Shillings per unit however, in the nineteen thirties the cost was just too much.

The resolution was so good, he said, that a pair of ‘drop’ earrings could just be made out on a female announcer during one of these early broadcasts. I believe the standard in those days was thirty lines!

To get on to the story I intended to tell, my father had a great friend, also a lover of reproduced music, who at the time owned a Magnavox Model 66 12” mains energised drive unit. This was a most handsome unit with a beautiful, black enamel case and cone basket and a chrome carrying handle. With its curvilinear cone and conservatively rated at 20 Watts, it was the apple of his eye. He had this unit mounted on a large baffle and fed it via a DC powered amplifier - I said it was the early days! They had both discussed for some time the merits of the Voigt approach and had both cast covetous eyes over a Voigt unit. At a cost of £17.10 Shillings per unit however, in the nineteen thirties the cost was just too much.

So keep it up; yours is the best hi-fi magazine I’ve read to date.

Brian Walker
Stratford on Avon
Warwickshire.

Just because CD is the latest medium, it doesn’t mean that you can’t have musical enjoyment from vinyl or compact cassette. I cringe at the thought of the thousands of records that were ditched in favour of CD when it was first introduced. Even cassette can sound superb, some of my best hi-fi dealers not
The success of Hi-Fi World is evidence in part of the continued interest in many of the glorious names of the past, such as Leak and Racford, who were part of the history of the British hi-fi industry. Is it too much to hope that at sometime in the near future we will see a definitive history of the British hi-fi industry, similar to that now provided by 'Setmakers'? Who knows, perhaps some hi-fi journalist at a loose end will take up the challenge (maybe from the now defunct Audiophile magazine or even Hi-Fi World - not that I'm suggesting anyone at Hi-Fi World is ever really at a loose end!)

Michael Winnington
Belfast.

It should be done - and soon. Sadly, many of the great audio engineers of our past are passing away, taking their knowledge and experiences with them. At the moment there is still a massive amount continued on page 45...

WIN HI-FI WORLD INTERCONNECT CABLES
OR PERFECT PITCH'S FRANCINSTIEN CD ENHANCER

The writer of the most interesting or funniest letter will receive a choice of either: a free set of Hi-Fi World's silver plated copper interconnect cables, worth £69.95, or a Francinstien CD convertor enhancer worth £150.

64, Castellain Road, Maida Vale, London W9 1EX.
Close your eyes and see the difference between Arcam's new Alpha 5 system of hi-fi components and anything else in its price range.

Ignore the fact that the Alpha 5 amplifier is our best 'budget audiophile' amplifier ever, out selling all others in the UK for the past year. Don't be tempted by its attractive styling or a price tag which looks too good to be true. Just listen, and discover for yourself a quality of sound that can only be described as exceptional.

Next, try the Alpha 5 FM tuner. Again, don't let its surprising affordability seduce you. Instead, listen to broadcast sound that is natural, clear and dynamic - qualities which gained it a class leading Recommendation in the 1994 What Hi-Fi? Awards.

Finally, feast your ears on the new Alpha 5 Plus CD player - quite simply, the best value high performance CD player ever produced by a UK manufacturer. Over the past year the critics have heaped praise on its predecessor, the Alpha 5 CD player, calling it “the player to beat” (What Hi-Fi?) and “standing head and shoulders above the rest” (Hi-Fi News)*. Now, thanks to new master clock circuitry, the 5 Plus sounds even better and once again sets the standards for other CD players to match.

Just listen. Close your eyes, open your mind, and see the light.

*If you already own an Alpha 5 CD player, we'd be happy to update it to full 5 Plus specification. Please call our service department at the number below during office hours for full details and prices.

For more information, including the nearest place you can listen to Arcam, complete the coupon and post it to:
Arcam, Pembroke Avenue, Waterbeach, Cambridge CB5 9PB, England. Or telephone: (01223) 440964 (24 hours). Fax: (01223) 863384


Please send me information and reviews on (please tick boxes):

- Arcam CD players
- Arcam tuners
- Arcam amplifiers
- Arcam's cassette deck
- Arcam speakers
- AudioQuest cables

Please send me a brochure with details of all your products

Title ___________________________ First Name ___________________________ Surname ___________________________

Address ___________________________ Postcode ___________________________
NOW HEAR THIS!

Dominic Todd and Eric Braithwaite listen attentively for that ‘big box sound’ from Tannoy’s new 632 loudspeakers.
 fuller’s audio

The new high sensitivity SULTAN H.E. Loudspeakers from Fuller's Audio are rated at 98dB 1w/1m

This has been achieved without sacrificing sound quality and imaging. An ideal partner for low powered amplification, you can now attain realistic music levels without having to put up with the resulting distortion. The matching, optional sub woofer can be added to give truly extended bass, without boom or drag.

For a demonstration visit your dealer or contact us direct

SULTAN H.E. - £439 Sub Woffer - £559

Fuller’s Audio 20 Tunbridge Road Southend-on-Sea Essex SS2 6LT

Telephone - 0702 612116

Acoustic Arts

Full range of Denon equipment on demonstration. Including the new Denon DCD 825

Come and experience Denon Audio Visual in our dedicated studio.

Stockists:-
Adcom, Apogee, Audiolab, Audio Innovations, Audio Research, B&W, Castle, Celestion, Copland, Denon, Jadis, Koetsu, Kef, Krell, Magneplanar, Marantz, Martin Logan, Michell, Micromega, Orelle, Professional Monitor Co., PS Audio, Rel, Revox, Roksan, Sequence, SME, Sonic Link, Sonus Faber, Target, TDL, Theta, Thorens, UDH, Wilson Audio.

Acoustic Arts Limited
101 St Albans Road, Watford, Herts. WD1 1RD
Tel:- 0923 245250/233011 Fax:- 0923 230798
Opening hours 10 am - 6 pm Tues to Sat

Ruark Crusader II Loudspeakers
"One of the best 3 ways designs around"
Hi-Fi Choice May '94

BRENTWOOD HI FIDELITY

Aura • Audio Innovation • Castle • Chord • Crimson • Denon • DNM • E.A.R. • Impulse • Lumley • Marantz • Mission • Micromega • Musical Fidelity • NAD • Pink Triangle • Project • Quad • Ruark • Shearne Audio • Systemdek • Tannoy • TDL • Thule Audio

Tel: 0277 221 210
2 INGRAVE ROAD, BRENTWOOD
Near corner of Brentwood High St. Closed Tuesday
Tannoy's new 632 is arguably their best looking affordable model so far. The rather blunt hexagonal cabinet from the previous range has been rounded off and is tapered less towards the rear. In the case of the 632, it creates a stance not dissimilar to that of Tannoy's more expensive D100. The squarer footprint also allows it to fit conventional stands, unlike its forebears.

The drive units are similar to the previous Tannoy 605, using a gold anodised metal dome tweeter and variable thickness plastic 6.5 inch woofer. What is new, though, is the drive units are now inverted. Previous manufacture was exclusive to limited edition derivatives. The oxygen-free copper cabling remains, but the actual terminals have been tweaked. The old bi-wiring terminals were great in principle, with no chance of losing the linking pins, but proved fiddly in practice. The new terminals have greatly improved cable access, although finger space is still a bit tight, despite Tannoy's claims to the contrary.

Unfortunately, the finish proved to be unexpectedly dodgy on my pair, with large gaps around the top cap and cabinet and an ill-fitting top panel. My examples weren't pre-production either, but knowing Tannoy's previously good reputation I'd expect things to improve.

Tannoy have deliberately sought a 'big box sound' from the ported 632 and, with this in mind, it was interesting to see how they compared with Mission's 731's which are designed to have a similar balance. The new Tannoy's left me in no doubt of their big box pretensions with Bob James' Restless. Although reasonably compact, the bass depth was equivalent to a compact floor-stander. Yet, even over a foot out to squeeze the most bass out of the 'speaker. As a student's boom box it would be there, but needing a bit more power. The 632 wasn't too clear about distinguishing the upper notes of double basses from the lower ones of cellos for example, and timps were a little perfunctory. The Tannoy's did, however, offer up a whole orchestra with a very wide range of tonal colour.

While woodwinds, especially oboe and bassoon were splendidly rounded, flute, piccolo and violins missed out on middle notes, resulting in a mildly quacking effect when they happened to be playing at the same time. Harp arpeggios, rich at one end, suddenly 'pinged' at one point, which was mildly disconcerting. Colour rather washed out of boys' and sopranos' voices, too, giving a mildly pinched effect on some notes.

Overall though, Tannoy have produced a relatively affordable speaker which makes a serious attempt to reproduce a full chorus or orchestra. One of the few speakers under £250 I would risk opera, Bruckner or Mahler on.

Tannoy 632 £189.99
Tannoy Ltd Rosehall Ind. Est., Coatbridge, Strathclyde. MLS 4FT Tel: 0236 420199

MEASURED PERFORMANCE

Tannoy's new 632 loudspeakers have an unusual response characteristic. Across the midband output is generally lower than that of bass and treble, which tends to limit projection of vocals and lead instruments. There are a couple of dips in the response too, at 1kHz and again at 5-6kHz; they are almost certainly phase cancellations; moving my ear up and down the plane of the baffle I could hear phase lobes as the tweeter added to the midrange output at one point, then subtracted at another.

In the far field (listening position) however these response dips filled in to give a flatter result, so the 632 should sound balanced, but critical listeners may detect a slight loss of coherency or focus. As far as driving the 632s is concerned, this type of speaker is unlikely to tolerate. The balance would also suit a lean amplifier, although the loose bass may still remain. It's a shame, because the rest of the 'speaker isn't that bad. It showed the customary Tannoy strength of being able to image well, and is more tolerant of room variations than many competitors.

Music with a less prominent bass fared better; although I still felt there was a slight cloudiness to the sound that could make all the difference to the presence and believability of a flute, for example. The shut-in upper midrange also took its toll on pianos, sounding distant and boxy. Female vocals, such as Michell Shoked didn't prove a problem though. The treble was never intrusive and struck a good balance between smoothness and detail retrieval. It also has the edge on most of its rivals in being clean and free from sibilance.

One advantage brought about by the ample bass was decent scale. I could see how this could appeal to some listeners, with music such as Gershwin's Fanfare For The Common Man sounding expressive and powerful. Equally, the overbearing nature of the bass could irritate.

To sum up, I feel Tannoy have achieved their ambition in creating a big box sound. However, whilst this may appeal to lovers of dance or even organ music, anyone else is left with a compromise. The combination of a lack of bass integration and solidity with a nasal mid range spoils an otherwise fine 'speaker. As a student's boom box it would do just fine (and I know many who'd adore the sound) but, unfortunately, the 632 is no audiophile bargain and cheaper Missions (731's included), Celestions and even Tannoy's own 631 model offer a better balanced sound. These represent superior value for the audiophile on a tight budget, or you could save up for Tannoy's excellent D100s, but that's a different ball game altogether.

Second Opinion

By far the best aspect of the 632 is an openness that does wonders for its clarity of perspective on classical music. In one choral recording the positions of the members of the BBC Chorus were quite remarkably obvious for a speaker this price. So was a twittering sparrow on one track, definably up in the rafters. It was a delight to hear the relative perspective of orchestra and piano in one of the Mozart Piano Concertos. Just as good, too, was the enveloping ambience, which adds a great deal to the atmosphere and often somehow separates itself from the music. Through the 632s, this was all a homogeneous whole, a wee bit on the small side of full scale, but that is inescapable. A Sony SBM recording of Haydn had Talfemus's gritty, authentic strings and the empty studio space around them down to a T; the T in Studio Monitor, almost.

With this as a serious benefit, a certain lack of weight and definition in the lower registers was acceptable, left hand on piano being there, but needing a bit more power. The 632 wasn't too clear about distinguishing the upper notes of double basses from the lower ones of cellos for example, and timps were a little perfunctory. The Tannoy's did, however, offer up a whole orchestra with a very wide range of tonal colour.

While woodwinds, especially oboe and bassoon were splendidly rounded, flute, piccolo and violins missed out on middle notes, resulting in a mildly quacking effect when they happened to be playing at the same time. Harp arpeggios, rich at one end, suddenly 'pinged' at one point, which was mildly disconcerting. Colour rather washed out of boys' and sopranos' voices, too, giving a mildly pinched effect on some notes.

Overall though, Tannoy have produced a relatively affordable speaker which makes a serious attempt to reproduce a full chorus or orchestra. One of the few speakers under £250 I would risk opera, Bruckner or Mahler on.

Tannoy 632 £189.99
Tannoy Ltd Rosehall Ind. Est., Coatbridge, Strathclyde. MLS 4FT Tel: 0236 420199

Frequency Response

Output dips at 1kHz and 6kHz

High overall impedance of 11.5kΩ
Tel: 081 348 5676 (2.00-7.00pm)  
Fax: 081 341 9368

Esoteric High Fidelity CABLES

Dealers in: Absolute, Audio Note, Audioquest, Deltec, Harmonix, Kimber, Mandrake, MIT, Siltech, Symo, Van den Hul, WBT, and others

...the RIGHT cable
...in YOUR system
...for YOUR ears
...in YOUR home

Contact us by phone, fax, or letter and we'll do our best to help you achieve your goal.

(Auditions may be subject to a handling charge)

CONNECTIONS 13 John Prince’s St, London W1M 9AH (A division of Connection 90’ Travel Ltd.)

Analogue lovers... S

Our world renowned precision pick-up arms and turntables await you. Sales and service enquiries to:

SME LTD • STEYNING • SUSSEX • BN44 3GY • ENGLAND

Tel: (0) 903 814321  Fax: (0) 903 814269

Art Audio

MAESTRO

“They are just so stunningly gorgeous and open to listen to, I can barely imagine anything more alluring”

NK Hi-Fi World, June ’91

Valve amplifiers from £750 to £4150 Cables from £27 to £1700

Select Audio
Glasgow (041) 226 4368

Dancestore Hi-Fi Studies
Sconefield D3009 7N1207

Paul Green Hi-Fi
Bath, Avon
0225 316197

Hometown Audio
High Wycombe, Bucks
0494 437992

Audio Ventures
London (071) 360 0866
Evenings (071) 483 0003

Audio Difference
Bexley, Kent
0858 902333 or (0377) 740237

K A L (UK) Ltd
Folkestone (0303) 240055

The Hifi Consultants
Nottingham (0602) 338330

Impulse Audio Consultants
Westleigh, Exe
(043) 616426 or 0374 777376

Sound Academy
Birmingham, West Midlands
0922 473499

New A4 brochure containing full details of our amplifier and silver cable range contact

Art Audio (UK) Ltd., 330 Main Street, Calverton, Nottingham, NG14 6LU

England UK

Tel: 0602 - 653604
Fax 0602 - 637792

SPALDINGS

The South East’s Leading Hi-Fi Specialists

352-354 Lower Addiscombe Road, Croydon, Surrey. CR0 7AF

081 654 1231/2040

Arcam, Audiolab, Linn, Meridian, Naim, Mission, Quad, Denon, Marantz, Ruark

“SIMPLY STUNNING”

Alvin Gold (Hi-Fi Choice) December 1993

★ Phone or write for review reprints and details of the full range of Opera loudspeakers, including the Superb new Solid Walnut Operetta

CALLAS from UKD

UK Distribution
23 Richings Way
Iver, Bucks SL0 9DA
Tel: 0753 652669  Fax: 0753 654531
SACKED AND LOOTED

"That Quad don't often get recommended is part of the same problem, one of limited outlook. There's been far too much concentration on some forms of musical presentation to the exclusion of all others."

Hear, heart. My experience exactly! As a relative newcomer to hi-fi a couple of years ago I went down the 'Naim route' at the recommendation of several dealers. Why Naim? because I was looking for a 'live' sound.

Whilst I enjoyed some aspects of the system (I ended up with CD172/II-CAP/140), it ultimately proved not as enjoyable as I had hoped. Dealers seemed unaware that this would be the case, and attempted to sell me increasingly expensive upgrades to further my listening enjoyment.

Earlier this year I made a bold decision and advertised my entire Naim system in Loot, a London free ad newspaper, and sold the whole lot to a guy who only owns ten CDs and claims to only own CDs at all so he can 'listen to the equipment'.

Funnily enough, this reinforced my opinion that a music lover like me, who is not really interested in electronic components per se, would be better to switch to Quad.

Once I had sold the Naim set-up I went out and ordered the top of the range Quad system: 67 CD player, 66 pre-amplifier and 606 power amplifier. I then made an inspired choice and bought a pair of B&W's fabulous Matrix 805V monitor loudspeakers. These are mounted on Sound Organisation stands - although the finishing touch, the dedicated slate Audio 805V solid slate loudspeaker stands are now on order.

Noel, I think that you will know what I'm talking about when I describe the many nights of enraptured, totally happy listening that I have enjoyed since changing to the Quad/B&W system. The Quad sounds to me like music; it does all the hi-fi things as well, like imaging and so on, but any type of CD that I care to put on sounds musically rewarding and delightful to listen to.

I have a sneaking suspicion that, if dealers sold Quad more enthusiastically, (a typical dealer comment is "That Quad. It's not really competitive any more. We only keep it for old times sake") the hi-fi industry in Britain would be in a far healthier state. Many people are sold a middle-of-the-range Linn or Naim system and after a while find that they are not really happy; that's why there's so much of this equipment advertised in the columns of publications like Loot.

People like myself, who have spent a few thousand pounds, but are completely happy and satisfied with their purchases, are becoming increasingly rare. Hi-fi dealers, tempting customers along these 'upgrade paths', in the hope of gaining bigger profits, could be unwittingly killing the goose that, in the past, has lain golden eggs.

PS: can we have the B&W Matrix 805Vs back in World Favourites please? And what about the Quad 66 pre-amplifier (which I would rate on a par with the Naim 82 with two HI-CAPs - yes, honestly!)

Anthony Edwards

Chislehurst, Kent.

Hi-fi is all about finding what is right for yourself. Many people swear by Naim, it's dynamic, forthright and exciting presentation is just what they are looking for. You have found the more laid back and richer sound of Quad suits your music and taste far better than Naim. Others would say that a record deck and a valve amplifier driving horn loudspeakers is far more effortless, smoother and sweeter. Andy Grove loves horn loudspeakers. I find them coloured, unacceptably so in some cases, but Andy says he can ignore this because they are fantastic in other areas. So be it.

As reviewers we have to appreciate this 'personal taste' factor. When something is not to our liking, we must be able to pull back and listen for what is good about a product, and what may appeal to different listeners' tastes. The attitude of reviewers in the 80s, telling readers that Linn/Naim were the only answer and everything else was wrong was naive. Sure a Linn/Naim system is fantastic, but it's not everyone's cup of tea, as you've found. Nothing comes close to reproducing a live event, it just produces a different interpretation of music that will appeal to some listeners, but not to others.

DB

SOURCING YOUR SOUND

Remember when some people said "A turntable cannot possibly have an affect on the sound" - even though they hadn't checked for themselves? In practice, it only took a short audition to hear completely unpalatable differences in sound from systems differing only in the choice of turntable. Later, some people said that 'CD' was vastly superior to LP (they had compared a £200 CD-player with a Dansette-clone) and others said that 'CD' was aurally offensive (they had compared a £200 CD-player with their £2000 analogue front-end).

Having got used to the idea that 'the source' is fundamentally significant, perhaps reviews of loudspeakers should consist only of technical specifications (among the most important being physical dimension, colour range and price) with instructions to audition them with various 'speaker cables, various interconnects and various mains leads with the desired front-end/amplifier in the intended listening environment.

If the above seems jaundiced, it's because I have just replaced my mains distribution lead with a RATA Distribution Powercord (incorporating a RATA Supercrimp, Olson distribution block and Kimberkable mains lead) and the sound from my loudspeakers (IMF ALS40s) is so enhanced (not just changed) that I would certainly want to experiment with all types of lead/interconnects before considering a change of loudspeakers.

Prior to the new mains lead I tried a pack of Harmonix tuning sheets which, for a cost of around £2 per disc, improve CD sound dramatically. Is their effect merely to bring the disc to the standard which the manufacturer should have supplied in the first place, or is it that they modify the disc physically, allowing an above £200 CD-player to operate optimally? Incidentally, does anyone know of any catastrophic problems with the Harmonix RF11 CD treatment? For example, does the adhesive end up distributed inside the CD-player?

In the June issue, two of my future letters have been pre-empted (possibly) by your article on CD quality and G A Jolly's letter on 'stereo'. While my pre-diction is for Jazz, Blues and Old-Time Country Music (mostly mono), I find myself buying CDs of classical music (probably recorded in a hall with a crossed pair of microphones) in preference to the pan-potting (fake stereo?) and multiple mixing used in a lot of pop recordings. Also, close mixing seems a bit of a curse. What about TV continued on page 47 ....
The new Audiolab 8000CDM Compact Disc Transport

The Audiolab product range:
8000A Integrated Amplifier
8000C Pre-amplifier
8000PPA Phono Pre-amplifier
8000P Stereo Power Amplifier
8000T FM/AM Tuner
8000M Monobloc Power Amplifier
8000DAC Digital-Analogue Convertor
8000CDM Compact Disc Transport

Cambridge Systems Technology Limited, Spitfire Close, Ermine Business Park, Huntingdon, Cambs. PE18 6XY. Tel 01480 52521
announcer sound? Are they in cupboards? My mother’s favourite programme is ‘Top Gear’ - she is not interested in cars, but she can hear every word that Jeremy et al say.

M Collins
Benfleet,
Essex.

SOUND COLLECTIVE
It was with great interest that I read your column in the September issue of Hi-Fi World, and your comments on hi-fi clubs.

I belong to a hi-fi club based in New Ash Green in Kent. We meet each month with members taking turns to hold each meeting.

This means you get to hear a wide range of systems and a wide range of music.

We have members who have CD - only collections (myself) or are dedicated to vinyl - one member - who has just succumbed to getting a CD - player; the rest are a combination of both.

The club was formed in the late seventies. I joined in 1981 and it’s proved to be very successful. At each meeting there is usually four to eight members. This can increase to quite a few more when we ask various manufacturers to come and demonstrate. Pink Triangle, B&W, Audiophile Furniture, Trichord Research and NVA have all visited.

We also organise trips to manufacturers such as Rega, Naim and DNW.

If you are interested, perhaps Noel or Dominic would like to visit us. As yet we haven’t had any hi-fi journalists (apart from Jimmy Hughes, a personal friend) pay a visit. I’m sure the politics of hi-fi magazines would be very enlightening. You would be very welcome to visit; the meetings are very informal.

Then after the visit a possible plug for the club in the mag would be very much appreciated? You can contact either myself on 0732 883950 (after 7pm) or the present club chairman, Mike Blackmore on 0732 461561.

Ron Bosio
Borough Green,
Kent.

NETWORK NORTH
Just a note to let you know of a hi-fi club that’s been on the go for some time. It works simply by introducing our customers to each other. They then visit each other and become friends, it’s as simple as that! The biggest problem with hi-fi clubs is one of security. If you have a healthy few thousand pounds invested in a system, the last thing you want to do is let people know.

Our club gets around that problem as we get to know personally all members before we introduce them to others.

The benefits are countless and the atmosphere in the shop fantastic. It does, however, prevent you making some sales when busy, but then again if I were in this business for the money I would be a most misguided individual.

Derek Keith
Hi-Fi Excellence,
Union Grove,
Aberdeen AB1 6TD

SCRATCH FILTER QUEST
Congratulations for providing us with the best hi-fi magazine blend of news, views, reviews, and DIY projects. All without losing sight of the original intention - the enjoyment of music!

After years of listening to classical music LPs and (more recently) CDs on undistinguished equipment, I treated myself to a better-budget system. The Pro-ject 6 turntable, Rotel RT-950BX tuner, Marantz CD-52MkIISE CD player and PM40SE amplifier, Sony TCKS90 tape deck, Mission 760i ‘speakers, stands and decent interconnects. It all proved very satisfying, and a tribute to the numerous reviews which I read before purchasing. Thanks!

Nearing retirement, I intend to use some time to build even better kit, including valve amplifiers and pre-amps which you have published. My last valve amp I built in 1957! First I need something else from you. For my collection of LPs (most now irreplaceable) I want a really good scratch filter.

I do look after my records, am very careful to clean them before playing, and try to avoid static build-up. Even after that, still I want to minimise those faint pops, clicks, and scratching of surface noise. It breaks concentration and reduces my enjoyment during LP listening. Even so, I’ve decided I prefer LP to CD.

Obviously, I do not want to sacrifice any more hi-fi than necessary by reducing high strings or attack, which presumably is a risk. At the same time I recognise that my relatively advanced age, my hearing does not extend to very high frequencies. So I’m sure there must be some benefit to be had.

I’ve seen a unit advertised from Marantz (and dismissively reviewed) but I would rather build something myself. Since there must be many of your readers in a similar position to me, how about this for a DIY supplement project, soon?

Mr. L.A. Saunders
Longfield,
Kent

I’ve heard every scratch filter going (try buying a Quad 33 preamp) - and I’d prefer to stick with the scratches. The only system that works is a complex digital one used by studios. Filters remove much of the music all of the time; scratches occur only now and then. Generally, as reproduction quality improves, the music becomes more captivating and noises less apparently intrusive; the brain can learn to ignore fleeting noises. I suggest you try either an Ortofon VMS2E cartridge for its warmth and lack of high treble, or you try covering the tweeters of your ‘speakers, either partially with tissues, or completely. Or perhaps you should upgrade to a Goldring 1012GX cartridge.

If you still insist on making a scratch filter, buy the Active Filter Cookbook, by Don Lancaster (Sams/ISBN 0-672-21168-8; the Modern Book Co., Praed Street, London W2., tel: 071-402-9176, stock it). This gives you all the info necessary to build high-order (fast cut-off) filters around silicon chips.

Publish details of a music removing device? Grooff! NK

FAREWELL TO MIDI SYSTEMS
I am a newcomer to the purchase of hi-fi, but not to listening to it. About three weeks ago I decided (rather my wallet did) it was time to dump my midi-system in favour of a more realistic sound. To start with I looked through the usual hi-fi mags and went around some dealers in Leeds and Wakefield. The results of this tentative survey were frightening. The first obstacle was a sneering and a less than helpful manager at the Sony Centre in Leeds, the next were prices that made my mortgage look like dinner money. Finally, after many hours of searching for a sympathetic dealer I found Richard Sounds in Leeds.

I was received with courtesy and shown that although I would not get the best sound from a budget system I could be sure of a reasonable sound and the option to upgrade in easy stages at a latter date. The system I settled on comprised of; a NAD 3020 amplifier, an Aiwa XC-750 CD player, a Cambridge CT200 twin cassette deck and a pair of JPW mini monitors with 79 strand ‘speaker cable. The total cost of this was £410! This may not win any awards but it has provided me with a more than passable sound for less money than I would expect to pay for a midi system.

continued on page 53 ....
Bury Audio. Chosen by hand appreciated by ears.

For the best in Hi-End hi-fi Bury Audio is a must. All the names stocked are individually chosen to complement one another to give the best sound in their class. Whether you’re after an upgrade or a full system, we can offer advice and experience together with full demonstration facilities to ensure you make the right choice. Naturally we offer a full installation and set-up service.

**Analog**
- Denon
- Goldring
- Kinshaw
- Lyra
- Michell
- Ortofon
- Pink Triangle
- Project
- SME
- Sumiko
- Tesseract

**Amplification**
- Arcam
- Albany
- Audio Innovations
- Aura
- Heybrook
- Marantz
- Mendian
- Michell
- Musical Fidelity
- Quad
- Rotel
- Shearne
- Tesseract
- Tube Technology

**Speakers**
- Arcam
- Castle
- Heybrook
- Keswick Audio
- Monitor Audio
- Pro Ac
- Royd
- Ruark
- Spendor

BURY AUDIO
47 CHURCHGATE STREET, BURY ST. EDMUNDS, SUFFOLK IP33 1RG.
Tel/Fax: 0284 724337
Mon-Sat. 9.30am - 6.00pm. Closed Wed.
Mail Order and Export enquiries welcome.

The WIZARD
Hand made Adjustable Shelf Rotary Unit.
Can hold 1536 CDs or 1440 Cassettes or 384 Videotapes or 575 Penguin Books; or any mixture. Books up to 6¼" deep.

Revolves on Ball Bearings in 30° turning circle 2¼ x 2¼ x 75° high.

Teak, oak, pine mahogany, ash, £1550 inc. VAT & Delivery.

FOR OUR BROCHURE of
- CD/Video Drawer Chests
- CD racks
- Bookshelves
- LP, music • Hi-Fi
- Cabinets 81 the Budget Line —Specials made to order—

Please send 3 x 2nd class stamps to:
The Old Chapel
282 Skipton Road, Harrogate
HG1 3HB. Tel: 0423 300442

Hand made Adjustable Shelf Rotary Unit.

The Romance of French Hi-Fi

**FRENCH SPEAKERS**
...as reviewed by English speakers...
"The Alicante's big, fluid, wide-ranging and open presentation lets the music speak for itself."
Jonathan Kettle, AUDIOPHILE. November 1993

"The Titus E has an absolutely riveting sound with openness and rhythmic drive."
WHAT HI-FI?, March 1993

"The boxes are fast and enthusiastic: there's nothing mellow or laid-back about their presentation of music - whether reserved classical or high energy rock."
WHAT HI-FI, October 1992

AND AS FOR THE AMPLIFIER...
"The Triangle TE60...has very clean treble separation is first class... bass is outstanding...an excellent product...A super little amplifier, nicely styled and beautifully finished."
Jimmy Hughes, AUDIOPHILE. March 1994

The Wizard
Hand made Adjustable Shelf Rotary Unit.
Can hold 1536 CDs or 1440 Cassettes or 384 Videotapes or 575 Penguin Books; or any mixture. Books up to 6¼" deep.

Revolves on Ball Bearings in 30° turning circle 2¼ x 2¼ x 75° high.

Teak, oak, pine mahogany, ash, £1550 inc. VAT & Delivery.

FOR OUR BROCHURE of
- CD/Video Drawer Chests
- CD racks
- Bookshelves
- LP, music • Hi-Fi
- Cabinets 81 the Budget Line —Specials made to order—

Please send 3 x 2nd class stamps to:
The Old Chapel
282 Skipton Road, Harrogate
HG1 3HB. Tel: 0423 300442

The Romance of French Hi-Fi

**FRENCH SPEAKERS**
...as reviewed by English speakers...
"The Alicante's big, fluid, wide-ranging and open presentation lets the music speak for itself."
Jonathan Kettle, AUDIOPHILE. November 1993

"The Titus E has an absolutely riveting sound with openness and rhythmic drive."
WHAT HI-FI?, March 1993

"The boxes are fast and enthusiastic: there's nothing mellow or laid-back about their presentation of music - whether reserved classical or high energy rock."
WHAT HI-FI, October 1992

AND AS FOR THE AMPLIFIER...
"The Triangle TE60...has very clean treble separation is first class... bass is outstanding...an excellent product...A super little amplifier, nicely styled and beautifully finished."
Jimmy Hughes, AUDIOPHILE. March 1994

Ian Edwards
The Old Chapel
282 Skipton Road, Harrogate
HG1 3HB. Tel: 0423 300442

Triangle loudspeakers cost from as little as £265 TE60 Integrated Amplifier £549 - for more details phone Ortofon UK (0753-889949) or Kronos (08867-48032)
TYING RIBBONS

SD Acoustics have tied together a ribbon tweeter and custom made bass unit into the new £399 SD3-R loudspeakers. Dominic Baker and Peter Downs take a close listen.
Listen to the enticing sound of a modern valve amplifier.

NOW ON DEMONSTRATION AT

HI-FI CONFIDENTIAL LTD
34 Buckingham Palace Road
London SW1 WORE
Tel: 071 233 0774

FOR MAIL ORDER AND FURTHER INFORMATION SEE PAGES 89 - 91

Class A, 28 watt Stereo Power Amplifier
or 60 watt Monoblock

JIEM DISTRIBUTION
SPRINGFIELD MILLS SPA ST.,
OSSETT, WAKEFIELD,
WEST YORKS WF5 0HW

JEM DISTRIBUTION
SPRINGFIELD MILLS SPA ST.,
OSSETT, WAKEFIELD,
WEST YORKS WF5 0HW

No Wood
No Veneer
No Contest

27 Fournier Street, London E1 6GE
Telephone: 071 247 0813

MINERAL-POLYMER ENCLOSURES
CONTROLLED FLEXURE ALLOY CONES

ELECTROFLUIDICS
THE SOUND FOUNDATION
A loudspeaker using a custom made ribbon tweeter and bass unit in an attractive, gloss black, polymer cabinet sounds like the recipe for a unique top-end model. SD Acoustics are aiming to bring this level of technology to the hi-fi market, with the new, very affordable SD3-Rs, priced at £399.

The cabinet itself is made from polybimin (PBM), a mineral loaded polymer that SD Acoustics claim results in far lower cabinet colouration. The liquid PBM is poured into a mould and then baked hard, a process that allows SD to make the cabinet slightly wedge-shaped to prevent standing waves between parallel cabinet walls. It also allows the high quality gloss piano black style finish pictured to be offered at no extra cost. A matching pair of stands in a similar finish are available for £299.

The circular ribbon tweeter may look familiar to those acquainted with Infinity loudspeakers, but in fact the only common part is the diaphragm. SD Acoustics choose to fit their own high power magnet assembly and they mould the face plate into the PBM baffle, a neat and effective method of attachment.

Internally, quality hasn’t been compromised either. The crossover uses high quality components and is finished off with silver-plated copper internal wiring.

So, with all this going for them, as well as an increasingly appeasing price tag, I was eager to listen. Wired up to a trusty DPA 505 power amplifier, the SD3-Rs instantly gave me a taste of what they had to offer. Bass was solid and dynamic, midrange clear and detailed and treble bright, fast and tactile in a way that only SD3-Rs seem able to manage.

Second Opinion

This speaker is amazingly clear, so forget your rose-tinted glasses. The lack of colouration, due to the polymer cabinet, is quite outstanding, leaving me free to crank up the volume. In fact, I didn’t realise how loud I was playing them until I tried to speak to someone. Bi-wiring is a must as the image suffers otherwise.

The bass is forceful and punchy, but doesn’t suffer overhang or boom. One other thing to bear in mind before I hand over to Peter, is that the SD3-Rs are likely to reveal bright or harsh systems for what they are. The tweeter is exceptionally clean, and any hint of grit or grain will be passed directly to the listener. Otherwise, if your system needs a little opening up or an injection of space, the SD3-Rs could be just the tonic.

One side of The Rippingtons was enough and I had to chicken out and turn down the volume, I felt I had gone nine rounds with Mike Tyson.

Therefore, the SD3-Rs are likely to reveal bright or harsh systems for what they are. The tweeter is exceptionally clean, and any hint of grit or grain will be passed directly to the listener. Otherwise, if your system needs a little opening up or an injection of space, the SD3-Rs could be just the tonic.

Second Opinion

This speaker is amazingly clear, so forget your rose-tinted glasses. The lack of colouration, due to the polymer cabinet, is quite outstanding, leaving me free to crank up the volume. In fact, I didn’t realise how loud I was playing them until I tried to speak to someone. Bi-wiring is a must as the image suffers otherwise.

The bass is forceful and punchy, but doesn’t suffer overhang or boom. One other thing to bear in mind before I hand over to Peter, is that the SD3-Rs are likely to reveal bright or harsh systems for what they are. The tweeter is exceptionally clean, and any hint of grit or grain will be passed directly to the listener. Otherwise, if your system needs a little opening up or an injection of space, the SD3-Rs could be just the tonic.

One side of The Rippingtons was enough and I had to chicken out and turn down the volume, I felt I had gone nine rounds with Mike Tyson."

The treble I have left to last as it was undoubtedly the best. I am used to ribbon tweeters, but the speed and presence was stunning. Percussion has a clarity that was uncanny, bringing them clear of the mix.

The only down side I found was that it could be a little clinical at times but, being used to cabinet colouration from my normal box loudspeakers, this is to be expected. Also, you need to bear your neighbours in mind; the temptation to keep upping the volume is ever present. In my opinion, the SD3-R is a resounding success.

SD Acoustics
The Factory,
Alpha Road,
Surbiton,
Surrey. KT5 8RP
Tel: 081 399 6308

MEASURED PERFORMANCE

The SD Acoustics SD3-Rs took quite some effort to get meaningful test results from. The ribbon tweeter is extremely directional, good for stereo imaging, but a nightmare to measure and combine with the output from the bass/mid unit, as well as the rear firing port, which handles most of the lower bass.

The response shown is built up from measurements taken from in front of the tweeter, bass/mid unit and at rear from the port. It shows that the three are reasonably well integrated, but that between midband and treble there is a dip and that bass needs to be enhanced by near wall placement. This dip in the upper midrange will remove some projection, but because of the rigid PBM cabinet used I wouldn’t expect it to become boxy or closed in.

The SD3-Rs don’t present the kindest load to partnering amplifiers. Impedance hovers around 6Ω from bass right up to 1kHz. Above this frequency it dives downwards, falling through 3Ω at 10kHz and still further to around 1.5Ω by 20kHz. For this reason, treble quality will vary from amplifier to amplifier. Those capable of driving this kind of load will produce a bright and clear sound, whilst those that can’t - which may be the majority - will sound dull or muddied to differing extents, depending on their drive characteristics.

Sensitivity was quite a reasonable 86dB, a touch above average, which is good for a compact design like this.

Overall, the SD3-Rs are a bit of an oddball. I used them on a powerful DPA solid state amplifier to good effect, but because the strongly falling impedance will give variable results, I’d recommend a demonstration with your own partnering equipment first.

Frequency Response

Impedance
AUDIOLAB

23 Langley Broom
Langley Berkshire SL3 8NB
(Near Slough, 2 mins Junc 5, M4)
TEL: (0753) 542761

To experience Bipolar magic come to one of four Musical Evenings where we will be demonstrating some of the new Mirage range.
Demonstrations:
5th, 6th and 7th December 1994: 7.30pm for 8.00pm
Call JOHN or LYNDA to reserve your seat

WISHING YOU A HAPPY CHRISTMAS

SECONDHAND BARGAINS

CELESTION 7000 Ribbon Hybrid £695
MIRAGE M-1s Bipolar £2495

Opening Hours
10.00am - 10.00pm
Mon - Sat
Sunday by arrangement

Home Demos
Free Delivery
Free Installation
Part Exchange
All major credit cards and switch accepted

Air Tangent: Apogee: Audio Research: Classe: Copland: Davidson Roth: Jadis: Koetsu: Krell:
Lineaum: Magnepan: Martin Logan: Micro Seiki: Mirage: Musical Fidelity: PS Audio: Sonus Faber:
Theta: Wilson: Siltech and Transparent Cables: WBT

Studio One

117-119 HAMMERSMITH ROAD
LONDON, W14 OQH.
Tel: 071 371 3037
Fax: 071 371 190
We are Mon-Sat 9.30 - 6.30

Presents:
"AUDIOLAB"
Audio Specialists
Classical and Jazz Vinyl on Sale


* Home Installations*
* Free Local Deliveries*

"Introducing to the U.K."
Valve amps from L.A. Audio exclusive

"Call Joseph or Ossie now for Free advice"
"Unique Offer" - The Last Musical Fidelity A1 FE.
"Final Edition" Hurry Now!!
"Records cleaned and sleeved on Nagaoka antistatic for £1.50 per album"
Pay us a visit, we are near Olympia
The reason I am writing is firstly to let other first time buyers know that there is life after a listless mid and to ask if you could recommend a pair of speakers that will improve my system as the JFW’s are a little bit inadequate for Black Sabbath. I do not intend to upgrade my amp for some time as I am more than pleased with it, as well as my CD and cassette deck. So I need speakers that are sensitive enough to work with my 3020i NAD, whilst being of a high enough quality to see me through a complete upgrade in the future.

By the way I am very impressed with your mag even if I don’t understand much of the technical details. I am learning and the reviews of products and music sections are excellent.

Iain Barclay
Knottingley, North Yorkshire.

As you have found, it is possible to put together a budget system that costs a similar amount to a midisystem, but sounds far better. The items you have selected are excellent value for money, and you should enjoy many years of listening to music on your new system.

Many potential purchasers of separates hi-fi are put off by the initial treatment from dealers that you too experienced. The outcome is usually the purchase of an inferior midisystem. By not being dissuaded by the attitudes of those dealers you were eventually able to purchase a sensibly priced system with good sound. Well done Richer Sounds for sensibly showing you the way into separates hi-fi.

DB

And try listening to TDK NFDs, RTL2s or Mission 751s, or the new Tannoy's.

NKH

SINGLE-ENDED MANIA

Thank you for your interesting projects. I find them both enjoyable to read and tempting to try.

Intentionally or otherwise, two single-ended amplifiers were introduced in the August issue of HFW. One of them is a valve unit from Audio Note and the other a transistor headphone unit from yourselves.

I would have normally concluded your editorial arrangement as a special issue on single-ended amplifiers and simply get on with life. After-all, solid-state or even tube amps have been providing the world (forgive the generalisation) with good music via the push-pull topology.

However, one simply cannot overlook the recent crop of single-ended tube amplifiers that are winning overwhelming accolades; dare I say a resurrection not seen in the amp world for a long time.

As a absolute amateur not content with merely the marketing impact of these single-ended amps, and with enough physics to know roughly what an amp is, but far from adequate to handle audio electronics, I have to burden you with the following questions:

1. Is it possible (and feasible), from a hobbyist point of view, to make a solid state single-ended amplifier?
2. If single-ended Class A amps can be built to excellent results from valves, can the same be done with FETs?
3. If so to 1 & 2, can you recommend where I can learn about such circuits?
4. Is a single-ended unit necessarily Class A, or is Class A/B also possible?
5. Conventional push-pull designers take pride in their strictly resistive signal path - a claim I more or less understand - whereas most single-ended units I have seen have capacitors and transformers in the signal path. Who’s right? What’s going on?

I was not even born when transistors became more common and valves less common, so naturally I felt obliged to defend the inventions of my generation. I would like to know, for example, if similar wonders like the Audio Note OTO can be had using a simple FET circuit. Knowing that there is nothing factual or rational behind my sentiment, I would very much appreciate your expert advice before I go on singing my stupid song.

I shall look forward to your reply.

Vincent Kan
Philips Hong Kong Limited.

It is in fact quite easy to build single-ended amplifiers using solid state devices. Most transistor amplifiers, including our own solid state amp, employ mainly single-ended amplification stages with only the output buffer operating in push-pull. It would be possible to modify our kit to operate with a single-ended output stage, but power would drop to around 18W with 90W heat dissipation in the output stage.

FETs could be used in a single-ended design in exactly the same way as Bipolar transistors, but I’m not sure if there is any sonic benefit in this. There is a group of “FET Followers” who maintain that the F.E.T. is the best thing since sliced silicon, but the rest of the audio world is realising that a simple, well-designed valve amplifier can sonically outperform the most expensive of heatsink wielding transistor Titans-Bipolar, or F.E.T.

Single-ended audio circuits are, by their nature, Class A. In a Class AB or B push-pull circuit one of the valves is cut off, (non conducting) over part of the audio cycle, its partner supplying the output signal. In a single-ended amplifier if the valve were to cut off it would have no partner to take over the operation so the output would be severely distorted.

In an ideal world we could do without interstage transformers and coupling capacitors, but in order to operate the valves optimally it is necessary to use them. Many transistor amplifiers use no coupling devices, but usually have five or six times the amount of active devices in them when compared to a valve amplifier, especially a single-ended one.

I think that if you are going to attempt to build an amplifier you should investigate the theory first. We recommend The Art Of Electronics by Horowitz and Hill. It’s quite expensive but is a very worthwhile investment. It is available from us or from good technical bookshops. AG

SPIRIT OF THE AGE

Your September editorials imply the death knell for hi-fi if we continue to regard 16 bit digital as a medium, believing that we are very close to the limit of reproduction available from CDs. DACs are still improving in leaps and bounds. With units like DPA’s 1024 and PT’s Da Capo revealing nuances and information that really had been on the little silver disc all along, (if 16-bit is the limiting factor, why does that battery supply make such a difference?) Of course CDs carry only a finite amount of information, but ultimately so does vinyl.

Pioneering implementations of digital technology like the above have convinced me that there is still plenty of life in 16-bit. I certainly agree that we should be discussing a replacement, but 20 or 22 bit is far too low, (in 10 years time I shall be reading that these were inadequate!), but whatever system is implemented, it will most certainly be digital, not as you certainly be discussing a replacement, but 20 or 22 bit is far too low, (in 10 years time I shall be reading that these were inadequate!), but whatever system is implemented, it will most certainly be digital, not as you wish, analogue vinyl.

CD was viewed by many hi-fi nuts (myself included) as a welcome alternative to the constant stream of expensive inferior pressings that we had endured for years. Some felt, that the hardware had actually surpassed the performance....
synergy
(sin'ərje)
definition; simultaneous action of separate instances which, together, have a greater total effect than the sum of their individual accomplishments.

Dual Mono 150W per Channel, Remote Controlled All Tube Line Level Integrated Amplifier.
Also available as a Stereo Power Amplifier.

For further details on the Synergy and our complete range, including a UK dealer list, please call or write to:-
Tube Technology, Foxhills Farm Longcross Road Ottershaw, Surrey KT16 0DN, England
Tel: 01932 873444 Fax: 01932 873012

...Mesmerizing
I am a little upset, justifiably so. I feel, that after spending thousands of pounds on CDs after deciding at the age I got into hi-fi, it was going to be the medium of the future, that it has already been announced that a replacement system using different lasers and disc pressing processes is to be launched in the very near future. I bought into CD hoping that quality would improve and that some day it would overtake vinyl. It never has, comprehensively, and I could have had a fabulous record collection by now rather than an outdated CD format. But that’s life, I still enjoy my music.

Analog systems are open ended to development; digital systems are not. I wrote that we were running out of development potential with CD some time ago and that it was basically an old and now inadequate seventies technology, rushed into commercial production by Philips and Sony to capitalise on the wonder of “digital sound”, which was no wonder at all. CD suffers 0.5% of the most horrid digital distortion at -60dB; in my view it has a distortion-limited 50dB dynamic range - not 90dB as claimed.

I have actually never promoted vinyl as an analogue carrier, I did suggest Laservision, with its FM carrier might do, or some equivalent. If we have to stay with digital, it must be considerably more future-proof.

Now we learn that CD sales are slowing and that, with the emergence of 18 and 20-bit professional recorders for studio use, the music business has finally accepted that 16-bit does have audible limitations and is, therefore, not perfect (piew, it took them long enough!).

I suspect that the marketing men already fear that CD has peaked as a consumer medium and may well go into decline over the next few years (they insist media have “lifetimes”). Consequently, the race is now on to replace CD, with something that sounds more “analogue like”, I’m told. Last month we heard that HDCD will be announced soon, meaning that CD has now been accepted as inadequate - just as I and thousands of others have always said. Oh, and how long did perfection last - 12 years. Hah! NK

LONE LOWThER

Back in the early ’40s I wanted a Radio but couldn’t afford to buy one. So, armed with a little knowledge I set about building one. I was pleased with the result for about a fortnight and then I started musing “I wonder if I can make it sound better?” If only I’d rested content I would have saved a lot of money - but also missed out on an enduring hobby!

It was in my early days that I concluded (and still believe) that the major problems of record reproduction lie in getting the “music” off the record and into the amplifier and then getting it out of the amplifier into the room as sound. In my early days I made my own moving coil pick-ups with coil connections that broke about every three months! My wife got used to holding very fine wire that she couldn’t see whilst I soldered it. My liking for MC cartridges continued, culminating in various Dynavector products.

I converted to CD during their first year of production - they may not be perfect but they do have some major advantages. They don’t pop, crackle and hiss, making important low level ambient sounds like vinyl, and any fool can put a CD in a player without having to apply laboratory standards to ensure proper pick-up tracking and stylus tracing.

I first got interested in home loaded loudspeakers when I encountered a pre-war Voigt Corner Horn. I also became enchanted with a Voigt derivative made by a man called Enock - but his studio was an old wooden Gymnasium in Ealing and I could never make up my mind whether it was the ‘speaker or the room acoustics that sounded so nice. I flirted with Klipschom, Decca folded organ-type pipes and have suffered a number of various conventional resonant boxes.

I like Quad Electrostats but they give my wife apoplexy because of their appearance. I am currently using a couple of the original Lowther Bi-Cor cabinets fitted with the latest and superb PM2C/Hi Fermic drive units: these are the first reasonably sized horn derived ‘speakers that I have encountered that will reproduce at 40Hz. For my personal taste the bass generally is a bit light, but this is easily overcome with a gentle bottom end boost.

Mention of Lowther brings me to the main point of my letter. Hi-Fi World is the only magazine where, in recent years, I’ve even seen the name Lowther mentioned, let alone run a technical review of any of their products. Lowther are now producing a couple of new ‘speakers and I enclose for you the blurb they have sent me. As the bass level/room acoustic adjustment appears innovative what is the chance of you testing them?

Noel Parks
Brockenhurst, Hampshire.

Yes, there is a chance of us testing the new Lowther loudspeakers. I have contacted Lowther and hopefully a review will appear in the coming months. The model we hope to be receiving is the Bel Canto at £1799, using a single PM2C/Hi-Fermic drive such as the ones in your Bi-Cor cabinets. Sadly though, Lowther specialise in export only nowadays, so their new loudspeakers are unavailable in the UK. However, if a review creates enough interest, I’m sure they will re-think this strategy.

DB

And any man that winds his own moving coil cartridge has my utmost admiration! NK
MAJOR STOCKIST OF ECM, LINN, ORIGINAL JAZZ CLASSICS, BLUE NOTE & ACID JAZZ. WE ARE NOT TIED TO ANY PARTICULAR TYPE OF MUSIC. WE LIKE EVERYTHING ON VINYL, HEAVY TO AMBIENT!

ICAPITAL RECORDS IN U.S.A. REPRESS BEACH BOYS CATALOGUE!

ALL TITLES £11.95
LITTLE DEUCE COUPE/TODAY /69 LIVE IN LONDON/PARTY/20:20/WILD HONEY SMILEY SMILE/FRIENDS/SUMMER DAYS SURFIN'/PET SOUNDS

BLACK CROWES - AMERICA £9.49
BON JOVI - CROSSROAD, BEST OF (DOUBLE) £10.49
REM - MONSTER £9.99
CHRISTY MOORE - SMOKE AND STRONG WHISKY £7.99
SHANE MCGOWEN - THE SNAKE £9.99
VARIOUS - TRIBUTE TO VICTORIA WILLIAMS £9.99
(FEATURES JAY HAWKES, WATERBOYS, LUCINDA WILLIAMS, PEARL JAM)
TOM PETTY - WILD FLOWERS (DOUBLE) £12.95
KENNY G - BREATHLESS £9.95
KINKS - TO THE BONE (PART CONCERT & PART STUDIO UNPLUGGED) £8.49
CRANBERRIES - NO NEED TO ARGUE £8.95

MOBILE FIDELITY 200G U.S.A. VINYL. PHONE FOR DETAILS, TITLES AND PRICE

BUCKSHOT LE FONGUE (DOUBLE) £13.95
(BRANFORD MARCUS LATEST PROJECT - TIM'S FAVOURITE VINYL AT PRESENT AND WELDED TO THE DECK! A COLLABORATION OF POPULAR MUSIC IN THE 90'S - JAZZ, HIP-HOP, BLUES, ROCK AND A LOVE SONG - A MUST)

BACK IN STOCK

JOHNNY CASH - AMERICAN RECORDING £9.95
(MASTERPIECE FROM THE MAN IN BLACK)
ALI FARKE TOURE AND RY COODER - TALKING TIMBUKTU £8.49

BARGAIN SECTION - ACE LABEL

B.B. KING - BEST OF £4.99
B.B. KING - MEMPHIS MASTERS £3.99
LITTLE RICHARD - HIS GREATEST RECORDINGS £4.99
EVERLY BROTHERS - GREATEST RECORDINGS £4.99
VARIOUS - KING OF THE BLUES £4.99
JIMMY WITHERSPOON - BLOWIN' IN FROM KANSAS CITY £3.99
B.B. KING - MY SWEET LITTLE ANGEL £3.99
CREEDENCE CLEARWATER - PENDULUM £3.99
CREEDENCE CLEARWATER - LIVE IN EUROPE £3.99
VARIOUS - FLAIR LABEL, R&B CONFIDENTIAL £3.99

POSTAGE & PACKING £2.00 +50P PER ALBUM THEREAFTER. WE DON'T SKIMP ON THE PACKING - AND ALL LPS ARE POSTED WITH POLY-LINED INNER SLEEVES

SO PICK UP THE PHONE AND ASK FOR TIM OR MARTIN (SECOND HAND VINYL ALSO AVAILABLE)

ACCESS/Visa WELCOME
Not long ago a reader wrote to Hi-Fi World wondering how a Pro-ject 6.1 could be improved. As it happened, Ortofon were thinking on similar lines, wondering how far a very good basic turntable design could be pushed. The 6.1S is the result. I'd hate to project the Pro-ject's sales trajectory, but the omens are good. Very good. No, let's be brave. How about excellent?

Mind you, Pro-ject has certain advantages. In this case, one of them is the fact that Ortofon imports the company's products into the UK. Therefore, the 6.1S now comes with an Ortofon MC30 Supreme, well-named at that, for that is what it is, thrown in for the grand tris set-up costs. The other is that Pro-ject now fits a Sumiko arm, addressing the one disadvantage the 6 had: an arm that simply wasn't as good as...
Loricraft Audio

Specialists in Garrard, Thorens and SME.

Loricraft exhibited a Garrard 401 with an SME Series IV arm, complete with electronic power supply which gave stunning results at the RCA Living Stereo Records launch.

Many thanks to Impulse Loudspeakers for their generosity and glorious sounds.

Manufacturer of dedicated power supplies for Garrard 301/401 and Thorens TD124 (review copies available). Supply and service of Garrard, Thorens and other high quality turntables using genuine and manufactured parts to original specifications. Also manufacturers of high quality plinths for Garrard 301/401 and Thorens TD124.

We are happy to quote on any aspect of high quality equipment, electronic, electrical and mechanical.

Loricraft high quality record cleaning machines as used by the professionals. Please send for details.

High quality Audiophile Records stocked including, RCA, Living Stereo, Decca SXL with many more titles to follow, also good conditioned cleaned second hand list in preparation.

*New 1995 catalogue in preparation*

Loricraft Audio
4 Big Lane, Goose Green
Lambourn, Berks RG16 7XQ
Fax/Tel: 0488 72267

Garrard, Thorens Goldring, SME, Decca (London)

---

**TECHNICAL & GENERAL**

<table>
<thead>
<tr>
<th>Connaisseur</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BD1/2 Drive Belt</td>
<td>9.65</td>
</tr>
<tr>
<td>BD1/2 Motor Suspension kit</td>
<td>13.75</td>
</tr>
<tr>
<td>SAU.2 Headshell</td>
<td>16.75</td>
</tr>
<tr>
<td>SAU.2 Connecting lead</td>
<td>15.95</td>
</tr>
<tr>
<td>Garrard Standard Models</td>
<td></td>
</tr>
<tr>
<td>Wired arm tubes</td>
<td>from 12.75</td>
</tr>
<tr>
<td>Cartridge carriers (sliders)</td>
<td>9.25</td>
</tr>
<tr>
<td>Idler Wheels</td>
<td>9.65</td>
</tr>
<tr>
<td>301/401 Transmission Models</td>
<td></td>
</tr>
<tr>
<td>Original Thrust pad assembly</td>
<td>9.80</td>
</tr>
<tr>
<td>Original Idler tension spring</td>
<td>2.95</td>
</tr>
<tr>
<td>Original Speed control disc - 401</td>
<td>13.75</td>
</tr>
<tr>
<td>Xeroxcopy Owners Manual 301 incl. full size mounting template</td>
<td>7.35</td>
</tr>
<tr>
<td>Xeroxcopy Owners Manual 401 incl. full size mounting template</td>
<td>5.20</td>
</tr>
<tr>
<td>Replacement Intermediate drive wheel</td>
<td>19.95</td>
</tr>
<tr>
<td>Replacement 301 control knobs On-Off/Speed select</td>
<td>pair 20.25</td>
</tr>
<tr>
<td>Replacement 301 suppressor unit</td>
<td>5.65</td>
</tr>
<tr>
<td>Replacement 301 motor pulley (-2%), (-1%), (Std), (+1%)</td>
<td>each 12.65</td>
</tr>
<tr>
<td>Replacement 301 Chrome plated mounting bolts</td>
<td>set 3.70</td>
</tr>
<tr>
<td>Recommended Lubrication set - early 301 or 301/401 (specify)</td>
<td>5.20</td>
</tr>
<tr>
<td>Goldring/Lenco</td>
<td></td>
</tr>
<tr>
<td>Idler wheel (lock-nut or clip fixing)</td>
<td>19.95</td>
</tr>
<tr>
<td>Arm: Pivot bearings with instructions</td>
<td>7.85</td>
</tr>
<tr>
<td>Spindle/Main bearing assembly complete</td>
<td>22.85</td>
</tr>
<tr>
<td>Headshells</td>
<td>from 21.95</td>
</tr>
<tr>
<td>Instruction books</td>
<td>from 4.20</td>
</tr>
<tr>
<td>Thorens</td>
<td></td>
</tr>
<tr>
<td>TD.124 series</td>
<td></td>
</tr>
<tr>
<td>Idler wheel</td>
<td>19.95</td>
</tr>
<tr>
<td>Drive belt</td>
<td>9.85</td>
</tr>
<tr>
<td>Chassis spring suspension (replaces 'mushrooms')</td>
<td>13.85</td>
</tr>
<tr>
<td>150/160 series</td>
<td></td>
</tr>
<tr>
<td>Drive belt</td>
<td>9.85</td>
</tr>
<tr>
<td>Suspension springs (-1%), (Std), (+1%)</td>
<td>set 10.85</td>
</tr>
<tr>
<td>Suspension bushes</td>
<td>set 12.50</td>
</tr>
<tr>
<td>Armboards for most models</td>
<td>from 1.60</td>
</tr>
</tbody>
</table>

Cecil Watts Dustbags/Parastats (spares incl. Preener wicks) Cartridges and stylus for 78s & Mono LPs in addition to current Stereo LP

---

WOLLATON

A•U•Dele0

The Audio valve Assistent-S valve integrated amplifier

Phone for further information and current dealer list

Wollaton Audio
134 Parkside, Wollaton, Nottingham, NG8 2NP
Tel (0115) 9284147 Fax (0115) 9280625
the turntable deserved. The result is - doing the Carlsberg thing in case somebody is in suing mood - probably the best turntable for the price in existence.

Last time round, I praised the '6 for its dynamics. This time round, believe me, this aspect is astounding. Checking out the new RCA stereo re-pressing of Also Sprach the way the strings and then brass arrive on your doorstep with heart-stopping vitality was enough to provoke a cardiac arrest. Not just that, but the low thunder of the organ note at the beginning was positively stomach-shivering as well. The reason we all praise these early stereo recordings; ip to the skies after forty years is that they recreate a profound and exciting musical moment, with all the tingle of a live experience. And that is what the new Pro-ject amplifies. Shivers down your spine; tingles in your toes; ears at attention. And the emphasis is on the musical part of the equation.

Only top-rate turntables, as the Pro-ject did, allow a listener to say during the Strauss "Ah, that phrase is more reminiscent of Till Eulenspiegel than I thought", realising the intentions of both conductor and composer without the thought disrupting the flow. This turntable/arm and cartridge combination is a musical experience projector. Now that phrase is not entirely metaphorical. Apart from an orchestral tutti burgeoning full tilt and gung-ho out of the speakers, the overall presentation of these RCA's was just enough more forward than normal to add five per cent more excitement without destroying the perspective. While not in the high-end league for Pacific Trench depth, the Project's abilities in this direction rate Alpha. In Bartok's Concerto for Orchestra (another classic RCA), the depth of space the simple miking arrangement put down on tape was obvious.

When it comes down to rock music, it's another case of "Shiver me timbers, me hearties". The bass power is breathtaking, and the speed and timing that of a stop-watch. Yet again, it pulled off the trick of making a recording near-transparent so the lead singers of The Beautiful South were practically visibly wearing 'ns and in sound booths. Not quite as analytical as my Gyrodec/SME IV in showing up the minutiae of mixing, the Pro-ject placed the listener in the best seat in the control room rather than precisely behind the desk.

If this sounds a subtle difference, it was meant to be. It's illustrated by shading like one backing vocalist being "breathier" than his counterpart, or the absolute certainty that you could mime the engineer's fingers on the faders. Or, the oh-so-subtle difference between hearing the different force of one palm on a bongo to that of another. Considering the Pro-ject was up against a QC-powered Gyrodec, if this is how a '6 with a Sumiko and an MC30 can perform on its lonesome from the grubby mains we are now afflicted with, then, the possibility of an add-on power supply had better become a probability.

With such a tight control of all the essentials - rhythm, a metronomically tight beat, almost outrageous dynamics, a superbly wide dynamic range and punchy, seriously heavy bass - the 6.15 is the brightest set of fireworks you'll ever see on November the Fifth. Or, if I have my publication dates wrong, the sparkler at the top of the Christmas tree. A thou' is not exactly small change, but ask any actuary what a Project plus a Sumiko plus an MC30 Supreme really adds up to and it would be a bargain at twice the price. It will definitely have some other manufacturers getting their drive belts in a twist. Let's hope Ortofon, Pro-ject and Sumiko stay one big happy family. Meanwhile, my vinyl collection is wearing a big grin and saying "Play me". I'm hanging the "No visitors" sign on the front door for the first time in quite a while.

Pro-ject 6.15
Ortofon UK Ltd.,
Chiltern Hill,
Chalfont St. Peter,
Bucks. SL9 9UG
Tel: 0753 889949

Pro-ject 6.15
£999
Ortofon UK Ltd.,
Chiltern Hill,
Chalfont St. Peter,
Bucks. SL9 9UG
Tel: 0753 889949

paradoxical. Adding an MC30 into the equation must also be responsible for a superlatively wide soundstage, expanded on these RCAs even more than I recall from the originals.

When it comes down to rock music, it's another case of wolf 'shiver mi' timbers, me hearties'. The bass power is breathtaking, and the speed and timing that of a stop-watch. Yet again, it pulled off the trick of making a recording near-transparent so the lead singers of The Beautiful South were practically visibly wearing 'ns and in sound booths. Not quite as analytical as my Gyrodec/SME IV in showing up the minutiae of mixing, the Pro-ject placed the listener in the best seat in the
Don't miss the bumper Christmas issue of Hi-Fi World complete with a FREE supplement full of puzzles and games to keep you amused over Christmas as well as gift ideas and much more. Of course we'll still be bringing you news from the world of hi-fi, features, a fabulous competition, and lots of new products. Here's just some of what we hope to bring you in the January Christmas issue.

DENON D-F10

We review Denon's latest high quality component system for those who like a little style in their lives.

HEYBROOK HEYSTAK

A new floorstanding loudspeaker from Heybrook featuring a passive bass radiator for deep and powerful lows.

B&W P4

Using high tech. Kevlar drive units, B&W hope to find success with their new P range of loudspeakers. We test the 2-way floorstanding P4s.

ORTOFON MC15 SUPER II

This £100 affordable moving coil cartridge from Ortofon is a bit of a shocker. Find out why in the January issue.

AURA TU-80

Replacing one of our old favourites, the TU-50, is the new Aura TU-80 tuner. Does it still offer the sweet and clear sound that we liked so much from its predecessor?

TRIANGLE COMETE TZXe

Triangle have made major revisions to their whole range of sensitive loudspeakers. We listen to the popular standmounting Comete, now in TZXe guise.

COMPETITION - WIN THE PRODUCTS FEATURED IN THE JANUARY ISSUE.

That's right, to celebrate Christmas we're going to try and give away everything reviewed in the January issue as a prize. Just pick which product you'd like to win and if your name is picked - it's yours.

CHIRSTMAS SUPPLEMENT

FREE with the January issue of Hi-Fi World, the Christmas supplement is packed with games and puzzles to keep you amused over the festive period. They'll also be great ideas for Christmas gifts for audiophiles, music lovers and enthusiasts.
Reflections from Noel Keywood

I have long been a festival-goer, attending events in London to visit the Audio Fair at Olympia back in the late sixties/early seventies, as well as other mega-events like the Motor Show at Earls Court. Those were galactic events it seemed to me at the time, coming ‘up’ from the West Country.

London I remember for the curious but intriguing smell of the tube trains and when you emerged from that experience, large aircraft lazed through the skies overhead. The exhibitions themselves seemed to distil out the city’s life and excitement, concentrating it into a frenzy of vivid displays, horde of beaming sales girls, a cacophony of noise and more goodies then you could see in Hamley’s in half-a-dozen Christmases. It wasn’t an experience to forget, yet it disappeared for many reasons.

The seventies degenerated into a decade of strikes, I'd say, in retrospect, and they put paid to Olympia and Britain’s only major hi-fi show. The audio industry has seen a lot since then and although not exactly out of the woods commercially as yet, it is larger than ever and needs a major exhibition of international stature to display its goods not only to a wide buying public in Britain, who seem to have forgotten about the delights of good music reproduction, but to those overseas who still value British hi-fi.

I was delighted to see Quad in the thick of things at Live ‘94, loving every minute of it and, still, displaying a cutaway electrostatic loudspeaker. How that cutaway used to intrigue me when I was barely out of my teens, wide-eyed and eager to learn about such mysterious things. This year KEF joined them with cutaways of their Reference 2 loudspeaker, showing its internal chambers and drive units. Linn have taken to showing internal bits too, especially the impressive Klout amplifier one-piece chassis extrusion. Audio is - or should be - about super quality specialist engineering, serving us by increasing our pleasure in music. This sort of display emphasises the point.

Really successful products possess many attractions: great visual appeal, novel yet superlative engineering and, last but certainly not least, a really thrilling sound. Add to this unquestionable reliability and long, long service and you find a quintessential good hi-fi product.

A dreamer? Not entirely. Many companies strive hard to reach such a goal, recognising that is how it must be if hi-fi products are worthy of the quality tag they claim.

I have to say that, debates about sound quality apart, Quad have been something of a long term torch holder in this area. But Arcam, Audiolab, SME, KEF and others have all in their time claimed, to some degree justifiably, to offer the same sort of exceptional product quality and customer service that Quad have, through years of consistency in this area. And product longevity effectively makes a quality hi-fi system better value than a midi that needs replacement after a few years.

The organisers told me that this year’s show was a great success and that Live ‘95 will be bigger, spilling over into Earls Court 2, next door. Many exhibitors judged it a success too, although sadly one or two saw it only in terms of whether their own, specific customers had turned up and were, inevitably, a bit disappointed. Such a narrow view was rare, luckily. Most were pretty pleased about the whole shebang. Linn had a bigger log cabin than last year, immaculately built by a Finnish company who assemble such things for ordinary domestic use in their home market. It took five days to build and, I reckon, cost around £100,000. Linn wouldn’t divulge the figure, but said it was a great success. Everyone was awed by Sony’s stand, reputedly the most expensive at around £1.2million, but Sony reckoned it was worth it too. That’s how much goes into these things.

The only people missing - an omission the organisers are aware of - were the smaller UK specialist companies. There was plenty of room for them upstairs, but the cost of exhibiting is a little high for most. The show would be a lot more varied if they were accommodated. We then wouldn’t be the only ones with valve amps on display, a dubious honour amongst a sea of lollipops, camcorders and the other electronic paraphernalia of modern living. Only our regular readers knew what they were. In a few years time, as a result of a few more shows, perhaps this will change. If everyone’s optimism is justified, many more people in Britain will become aware of the sheer variety of products available in our vigorous audio market.
THE WEAN AND GRANDAD ARE OUT SHOPPING...

AND KENWOOD AND ONKYO, BATES, SENNHEISER AND...

ASLEEP IN THE DEMO ROOM

YES, WE'VE ATTRACTIVE CREDIT TERMS, WRITTEN QUOTATIONS ON REQUEST, SUBJECT TO STATUS.

HERE'S A DEPOSIT OF TWO JEELY JARS, A CONKER, SOME OLD CHEWING GUM AND 5p.

UNFORTUNATELY THE FRIENDLY PAIR WERE NOT ACCEPTED BY THE CREDIT COMPANY.

THE PAIR ADMIRE THE WONDERFUL RANGE OF HI-FI AND ARE DETERMINED TO SAVE MORE JEELY JARS.

James Kerr

100 WOODLANDS RD., GLASGOW

RENTAL OF HOME THEATRE AND HI-FI

CLOSED TUESDAYS - TEL: 041 332 0988
I t's probably about ten years ago that I read a letter in Wireless World magazine from the late, and great, M.G. Scroggie exploiting the term “current dumping” to describe the amplifier topology invented and exploited by the Acoustical Manufacturing Company in the Quad 405.

Scroggie acknowledged that the term pertained to the relatively straightforward task undertaken by the output transistors in such an amplifier. However, he argued, since the current that the output transistors passed was used directly to energise the loudspeaker and thus produce sound, the role these transistors played could hardly be considered “dumping”, suggesting as the word does - that they were involved in disposing of a useless commodity.

Now dumping is an everyday word for storing precious computer data. Perhaps it is only the ever-Victorian, scatological British who could regard responsible “dumping” as the hallmark of an accountable professional life.

Not that Scroggie was criticising the development of the Quad 405. I've owned a Quad 405 as a studio amplifier for many years and it's a wonderful product. I chose to ignore the engineers and academics who consign it to the wastepaper basket of history. They - blinded by mathematics - prefer their own (faulty) reasoning to the evidence of their own senses.

Technically, current-dumping does work - believe me. It works well and it goes on working. But how exactly does it work?

In Fig. 1, I've drawn a simple power amplifier with a voltage amplification stage (A) and a complementary bipolar transistor output stage. In many ways this looks like any other complementary power amplifier, except that there is no static bias applied to the output transistors.

Negative feedback encloses the whole and attempts to maintain linearity despite the large transfer-characteristic discontinuity tried to show the way A1 behaves by sketching the signal waveform at the bases of the two transistors.

Of course, it isn't possible to construct a perfect amplifier for A1 and, in practice, as frequency increases, crossover distortion starts to make itself heard. The essence of the idea behind current-dumping is illustrated by the inclusion of Rd (shown with dotted connections in Fig. 1). Rd feeds current directly to the load during the proportion of the output cycle when both the output transistors are off. In effect, Rd reduces the “gap” A1 is required to slew across and permits a practical amplifier to be used instead of a mythological, perfect amplifier.

Striped of their duty during the essential and fragile crossover region, the output transistors are only called upon to deliver drive into the load at powers above about 100mW whilst A1 does all the clever bit in between - hence the term “current-dumping” to describe the uncomplicated job they perform. In Quad’s final circuit, the resistor is augmented by a capacitor and inductor which act in a reactance-bridge arrangement to enhance the effect of Rd across the whole audio bandwidth.

Despite the undeniable engineering ingenuity displayed in the 405 amplifier, Quad never seem to have earned creme-de-la-creme audiophile status for this product, nor indeed its heirs. However, comments that amplifiers of this stable lack “slam” or “punch”, probably derive from Quad’s prudent decision to employ extensive current-protection flood of carbon-copy, current-dumping amplifiers.

Given, Quad have kept the technology to themselves, but have they sold more amplifiers, I doubt it. Quad’s undoubted reputation for reliability and solid engineering would hardly have fallen apart if they had (like everybody else) built upon their success with the 303 and continued with the development of the class A/B power amplifier.

True, the designers, freed of their usual commercially-rooted secrecy by the sanctions of the law, were able to write articles explaining the technique in full. But, did Quad really hope that other manufacturers, wowed by the brilliance of their idea, would opt to pay Quad a royalty for every power amplifier sold? Surely not. It’s not as if they invented an amplifier without the need for a mains transformer! Interestingly, Quad’s patents for current-dumping were published in 1975 which means the protection expires next year. So current dumping could yet become household bywords for high-quality amplification. Sorry Mr. Scroggie!
Noel Keywood scrutinises Kenwood's new three-head, KX-7060S, cassette deck with a host of features including Dolby S.

Sony started something with their marauding TC-K611S cassette deck. Launched as a DCC spoiler - and Philips recently admitted it has had some impact - this £330 deck has sold in container loads. Immediately, of course, clones have appeared. Here's one - the new Kenwood KX-7060S Dolby S cassette deck, priced at £329.95.

Kenwood offer a package very similar to that from Sony, a deck that is at heart very sophisticated, but comparatively easy to use. To gain advantage, they've incorporated a dual-capstan transport, against Sony's single-capstan unit, which should give less flutter. An automatic tape tuning system has been included too, as well as a powered door, both useful convenience factors. Trouble is, the door on our first sample never worked properly and that on our second sample proved temperamental. Sometimes it refused to budge, no matter how many times the open/close button was pressed. Dolby selection was similarly blighted - sometimes a long switching delay occurred.

The KX-7060S is a three-head deck, like the Sony, so recording quality can be judged whilst a recording is being made - a very useful feature. I would have preferred tape tuning to be manual (adjustable bias), since it's a doddle with three-heads and the final balance can be adjusted to suit preferences. Kenwood's

Input sensitivity was high at 100mV and output level also healthy at 800mV, so the deck will be broadly compatible.

At heart the KX-7060S is a well engineered product, but it would benefit from more attention to detail to eradicate niggling faults. NK

**MEASURED PERFORMANCE**

Replay response, which determines performance with tapes recorded on other machines, including commercial pre-recorded, measured flat to 20kHz and high frequency output from the head was relatively stable, indicative of good tape guidance and head surface finish. Noise in the replay amplifiers was low at -60dB and replay speed absolutely correct. So the KX-7060S will make a good job of replaying pre-recorded tapes.

The head has, in essence, a superbly flat frequency response, but tape tuning put in treble lift with metals, but flat response with chromes and treble roll-off with ferrics.

Maximum recording levels weren't so high with metal tape - this is no Nakamichi - but they were very good with ferrics and chromes. With 0VU set high, above Dolby but below IEC reference fluxes, record levels will not go much past +3 on the display before overload compression and muddle sets in, and wallowy bass too, since bass distortion was high at 5%. Hiss levels were low, especially with Dolby S.

The dual-capstan transport suffered some flutter and a little capstan wow, seen respectively as a minor peak in the speed stability analysis and as 'shoulders' each side of the main test tone peak, at right in the analysis. Overall though, it held speed tightly and will provide a stable sense of pitch.

Kenwood offer a package very similar to that from Sony, a deck that is at heart very sophisticated, but comparatively easy to use. To gain advantage, they've incorporated a dual-capstan transport, against Sony's single-capstan unit, which should give less flutter. An automatic tape tuning system has been included too, as well as a powered door, both useful convenience factors. Trouble is, the door on our first sample never worked properly and that on our second sample proved temperamental. Sometimes it refused to budge, no matter how many times the open/close button was pressed. Dolby selection was similarly blighted - sometimes a long switching delay occurred.

The KX-7060S is a three-head deck, like the Sony, so recording quality can be judged whilst a recording is being made - a very useful feature. I would have preferred tape tuning to be manual (adjustable bias), since it's a doddle with three-heads and the final balance can be adjusted to suit preferences. Kenwood's
auto-tune system was slow and whatever it decided couldn’t be altered. So, for example, whilst TDK AR tape consistently tuned-in sounding a little dull and warm, TDK MA metal tape always ended up sounding bright and brittle. Consequently, I preferred AR – something of a cock-eyed result.

The KX-7060S has been fitted with a host of convenience features, such as Index Scan and A-B Repeat. It also has the usual tape/monitor button with autosetting and automatic tape type selection too. The display panel has pale blue graphics, with red to indicate peaks exceeding 0VU. Kenwood set 0VU highish, meaning it is wise to record up to +3 or so. Going much further introduces muddle with chromes and ferrics, even with Dolby S.

The deck is built and styled in a conventional manner. It worked smoothly, albeit erratically at times, not always obeying commands first time, possibly due to faulty switches. This was a little disconcerting; whether it will happen commonly we cannot tell. This is a question for the dealer and cause to scan the after-sales guarantee.

**Sound Quality**

The tightly held beat of a Tina Turner track suggested straight away that the Kenwood’s transport keeps good control – and so it does. Timing was tight on the nail; this deck gave tightly timed bass lines and clean, fast transients, free from slurring and splash. Piano notes decayed naturally and there was never any sign of pitch ‘wateriness’ to notes; they sounded solid and well defined in the time domain. A superb sense of clarity brought tapes to life – the Kenwood’s head seemed surprisingly good in this respect, and I suspect the replay electronics helped too.

Although dull tapes remained dull – a Nakamichi can get more out of apparent duffers – they also came over as entertainingly clear and dynamic. Bass quality was better than usual I fancied. In all, this deck played pre-recorded tapes extremely well.

Recording raised some minor peculiarities. The tape tuning system worked well enough but the Dolby systems seemed far more obvious in their complaining than usual, which was odd.

The KX-7060S is, at heart, a good deck. I got fine recordings from it with all tape types and superb results with pre-recorded tapes. I don’t recall ever being so aware of Dolby B/C action; I strongly suspect the Dolby system of this deck was operating incorrectly. The selector switch sometimes had a time delay and stuttered. The door close button was occasionally not of a mind to work first time either, so perhaps the deck had a switch problem. Our first sample had a door problem too.

The KX-7060S is, at heart, a good deck. I got fine recordings from it with all tape types and superb results with pre-recorded tapes. Whilst Dolby S worked well and would be fine for all but the most pernickety, I was suspicious about the obvious failings of B and C. Being a bit pernickety myself, and being wed to recording on a Nakamichi ZX-9, which has superb Dolby B - all that’s needed these days - I was a little disappointed by the Kenwood. However, there’s no denying that with Dolby S engaged it offered excellent recording quality on all tape types and this is perhaps enough.

**Dolby B/C**

Dolby B cut off decays noticeably and pumped. Dolby C pumped so badly it was beyond serious use and whilst Dolby S was good, it wasn’t transparent, coarsening treble. I settled on Dolby B with high-ish recording levels to hold it off, my usual preference. I feel I’ve heard Dolby S sounding better though.

Most users would fancy that TDK AR ferric tape was as good as anything with Dolby S engaged; it gave a very even balance, if slightly ragged treble. TDK AD was no better on this deck, but hissed. TDK MA metal tape tuned in sounding a trifle brittle, but with Dolby B gave fine results. Again, although S suppressed hiss more it didn’t sound convincingly better, just a trifle different due to glassy treble. TDK SA chrome tape matched it well, but produced a softer, easier treble delivery.

Kenwood KX-7060S

£329.95

Trio Kenwood,
Kenwood House,
Dwight Road,
Watford,
Herts. WD1 8EB

Tel: 0923 816444
One for the vinyl lovers this month: a complete top-end system to get the very best from your records. The system is built around the Systemdek IIX900 record deck, reviewed in our September '94 issue and set up with the same Rega RB250 tonearm and Goldring 1022GX cartridge. This feeds the new DPA Digital Renaissance integrated amplifier which in turn drives a pair of Systemdek Systym 931 loudspeakers.

The Systemdek IIX900, complete with RB250 tonearm and Goldring 1022GX cartridge, represents one of the best vinyl front-ends available. When we reviewed this combination we found it had marvellous definition, laying out a whole band between the loudspeakers. Vocals were clear and intelligible, the record deck possessing fine detail and tonal shading in this area. In summary Eric Braithwaite wrote "A very detailed sound stage, with a good broad image, was allied with a wider and more even range of tonal colour". Always producing a lively and entertaining performance."

The DPA Digital Renaissance integrated amplifier comes complete with a phono-stage to resolve the very best from the vinyl front-end. It produces 32 watts of clean, smooth power, enough to drive sensitive loudspeakers to high levels without trouble. It also has four line-level inputs where a CD player, cassette deck and tuner or any other line level source can be connected.

Although the Renaissance integrated amplifier has been designed for a good sound first and foremost, it doesn't lack useful features either. There are bass lift and treble cut controls, a tape monitor, balance and even a headphone socket.

The Renaissance integrated feeds the talented little Systemdek Systym 931 loudspeakers. These are compact mini-monitors, but there is nothing small about their sound. They have an expansive, detailed and open sound that will give you hour after hour of listening pleasure. They also have a polite and balanced nature with good bass impact and definition for their size, which helps to produce a realistic, full scale performance.

To enter this fabulous competition simply complete the questions opposite, sending your entry on a POSTCARD, or the back of a SEALED ENVELOPE, and completed in block capitals, to arrive no later than Friday 4th December 1994 to:

SYSTEMDEK/DPA DIGITAL Competition
Hi-Fi World Magazine
64 Castlained Road
Maida Vale
London W9 1FX

COMPETITION ENTRY QUESTIONS

1) What is the finish on the Systemdek IIX900 turntable and Systym 931 loudspeakers?
   A. Natural Ash  B. Oak
   C. Walnut       D. Black Ash

2) What is the arm and cartridge combination fitted to the Systemdek IIX900?
   A. Rega RB250 + Goldring 1012GX
   B. Rega RB250 + Goldring 1022GX
   C. Rega RB300 + Goldring 1022GX
   D. Rega RB300 + Goldring 1042GX

3) Select one of the following features that the DPA Digital Renaissance integrated amplifier possesses?
   A. Dolby Surround Sound  B. Tape Monitor
   C. THX                  D. Headphone Socket

4) What kind of loudspeakers are the Systemdek Systym 931s?
   A. Electrostatic  B. Mini-Monitor
   C. Floorstander    D. Disco

TIEBREAKER

The sound of vinyl is still superb after all these years of CD blurb. Why change when music sounds so sweet. Making our enjoyment so complete instead just fill in the forms to win a system above today's norms.

(Complete poem with another four lines).

Don't forget to include your name, address and a telephone number so we can contact the winner promptly.

In the event of more than one entrant submitting all the correct answers, the winner will be picked by the Editor from the tiebreaker. We will endeavour to publish the results in the February 1995 issue. Purchase of the magazine is not a pre-condition to entry. No correspondence about this competition will be entered into and the Editor's decision is final. No employees of Audio Publishing Ltd. or any of the companies associated with production or distribution of the prizes may enter.

Your name and address may be added to our mailing list only. If you would prefer not to receive details of new products or special offers from us, please state so on your competition reply form.

Hi-Fi World magazine is published by Audio Publishing Ltd.
OCTOBER ISSUE COMPETITION - A COMPLETE MISSION CYRUS SYSTEM

It's not fair: there's a fabulous system on offer and we're not allowed to enter. You did though, we received masses of competition entry forms this month, and no wonder - the Mission Cyrus system on offer is a fantastic prize. Included in the prize is a top flight, two-box CD player, superb tuner, powerful amplifier and the latest high technology 752 loudspeakers. Sadly the time has come to give it all away, but the happy winner is:

Ms. R. Wallace of Chiswick in London

Congratulations, this system should put a smile on your face for the rest of the year.
Subscriptions

12 ISSUES FOR ONLY £ 22 (UK only)

HI-FI WORLD SUBSCRIPTION FORM

Please send me the next 12 issues of Hi-Fi World, starting with the issue. I enclose my cheque/postal order for £22 (UK only) made payable to Audio Publishing Ltd.

Name

Address

Daytime Tel No:

Please debit my VISA/ACCESS Card No:

Expiry Date:

Send to: Audio Publishing Ltd., 64 Castellain Road, Maida Vale, London W9 1EX.

Overseas subscription rates.
Surface Mail: £29.
Airmail: £42 Europe, £52 Middle East, Hong Kong, Singapore & Malaysia, £62 Australia, Japan, Korea & China.

[ ] Airmail
[ ] Surface Mail (tick as appropriate)

Please allow 28 days for delivery

U.S. & Canadian Subscriptions

Hi-Fi World
U.S. & Canadian Subscriptions

P.O. Box 754, Manhasset, N.Y. 11030 - 0754
Telephone: 516 627 3836 Fax: 516 627 1972

I wish to subscribe right now - and receive monthly copies of Hi-Fi World Air Speeded direct from the Publisher in London U.K. to the N.Y. Office

I enclose my payment to: FRJ/Hi-Fi as checked below
1 Year - 12 Issues $66 (U.S.)

U.S. FUNDS ONLY PLEASE - Add $10 U.S. for Canada.

Back Issues

HI-FI WORLD BACK ISSUES ORDER FORM

(Overseas add £1.00 p+p for every issue UK p+p £0.50 inc)
I enclose cheque/PO for £ _________ made payable to Audio Publishing Ltd.
I wish to pay by Visa/Access (orders for 3 copies or more only), please debit my account no:

Expiry date:

Please tick the box next to the issue(s) you wish to order:

[ ] December 1991 £2.00
[ ] January 1992 £2.00
[ ] October 1992 £2.00
[ ] January 1993 £2.00
[ ] February 1993 £2.00
[ ] March 1993 £2.00
[ ] May 1993 £2.00
[ ] June 1993 £2.00
[ ] July 1993 £2.00
[ ] August 1993 £2.00
[ ] September 1993 £2.00
[ ] October 1993 £2.00
[ ] November 1993 £2.00
[ ] January 1994 £2.00
[ ] February 1994 £2.00
[ ] March 1994 £2.00
[ ] April 1994 £2.00
[ ] May 1994 £2.00
[ ] June 1994 £2.00
[ ] July 1994 £2.00
[ ] August 1994 £2.00

Total no of issues ordered: ________________________ Total price: £ ________________

Please allow 28 days for delivery

8/94
Since we started the DIY Supplements, designing loudspeakers for the home constructor and more recently selling Audax high technology drive units, there have been an increasing number of you contacting us regarding loudspeaker design. I'm not going to get too technical here though, it is more of an introductory level that needs to be addressed. The apparent simplicity of a DIY loudspeaker has encouraged many to have a go, and it is for these first time builders that this column is devoted.

One area which receives numerous queries is that of reflex ports. Tracking back a few paces, the quality of bass and depth of bass you get is determined by the box volume, the size of the port and the parameters of the drive unit you are using. As far as bass reproduction is concerned, the shape of the box is not important, neither is the position of the port. It is the ratio of box volume against port size that matters here, so the port can be mounted on the back, side, front or top of the cabinet, which itself can be tall and thin, short and fat, round etc.

For practical reasons, we decide to configure our DIY loudspeakers in a particular way. Take KLS3 as an example. We made the box tall and thin, partly to get the drive units off the ground where they would drive a room’s resonant modes most effectively (undesirable for clean, dry bass) and to place the drivers close to ear level (the on-axis response of the loudspeaker being the most truthful). This last point is especially important if you are constructing a two-way design, since the mid-range output from the bass driver is directional and will need to face the listener, along with the tweeter, for the clearest sound.

We also choose to place the reflex ports on the front baffle, facing in the same direction as the drive units. This isn’t really critical and is a decision based on what we want the loudspeaker to look like, and the gut feeling that if the port is sound energy from the side, and it is these sound waves travelling across the front of the baffle that disturb the main frontal sound and produce a reduction in image focus. A thin cabinet has less frontal surface area, so will produce less of these harmful reflections.

Another practical consideration concerns the powerful rear sound wave produced by the drive unit inside the box. This will reflect strongly off the rear face of the cabinet, so it is useful to keep the rear baffle of the loudspeaker a good distance away from the driver and to damp it well with carpet felt or other similar acoustic treatments that will help absorb as much of this energy as possible.

‘Handing’ the loudspeakers, with the drivers offset toward the inside wall of the baffle, is a further refinement based on similar lines. When you sit between the loudspeakers, the majority of the treble energy you hear comes from the inside half of the tweeter dome which is facing you. By moving the tweeters to the inside edges of the cabinet, this half of the dome ‘sees’ less baffle area from which to produce destructive reflections. It only makes a small difference, but a worthwhile one in my view, and as you’re building the things yourself it takes little extra effort to implement.

Another query concerns where to put the crossover. We place them inside the cabinet for obvious practical reasons. However, for home constructors who aren’t going to shift their loudspeakers around quite so much, there’s a better way. Getting the crossover out of the cabinet and away from the strong vibration produced by the drive units is certainly a step in the right direction. But if you’re going to go to this effort, you may as well take one step further.

Mount the crossover right next to your power amplifier. This has two advantages. Firstly, the power amplifier can drive the crossover more effectively than it can if it were at the end of a long piece of wire. Secondly, the wide variety of designs on the market today. DIY loudspeakers give you the chance to decide what is the most important aspect for yourself, and then implement those ideas in a design of your own.

One last thing I would like to mention concerns the Audax drive units we sell. Although we have only published two designs using these drivers to date, if you want to design a loudspeaker using a different line up of drivers, we offer a service which gives workable box volume and crossover designs for anyone purchasing Audax drivers from us. So if you want to create a six way, triple bass unit, floorstander with open baffle mid range and line source tweeter arrangement, we can give you a box volume, port size and basic crossover design that will get you into the right ball park first time. A little fine tuning will almost certainly be necessary for perfect results, but we can offer advice here too. Have a go, I’m sure you’ll be amazed by what you can create.

Dominic Baker

dB on the level
Marantz are another of the audio pioneers with a passion for making recorded sound as enjoyable as the real thing. They call it a dedication to pure Hifi delight, and over the years it has led the audio press to bestow awards on numerous products in their extensive range. Since it’s launch earlier this year the CD63 has been heralded as a player with outstanding performance and exceptional value for money.
EXPRESSION
hi fi connoisseurs and music lovers

quad
67cd
For over 50 years the name Quad has meant quality. Throughout the world, hundreds of thousands of satisfied customers have endorsed this statement.
The secret of Quad's success is their constant search for improved musical reproduction and original style. True to their ideals the 67CD incorporates the latest technology and innovative looks.

For audition other audiophile CD players, Transports and DAC's from Audiolab, Teac, Pink Triangle, Arcam, Musical Fidelity and Cyrus, contact your local branch.

nad
302
Renowned, almost from its inception, the 'original' 3020 amplifier has become a hi fi classic. Many variations on a theme followed until the introduction of the 302. This latest version has continued to impress, collecting the award for European Amplifier of the year.

For affordable, quality hi fi components, that present the music faithfully - look for the New Acoustic Dimension.

project
6.1
The original Project 6 was the winner of the 1993 What Hi Fi Award for the best turntable, and acclaimed throughout the Hi Fi Press. Subtle improvements have inevitably led to the new Project 6.1, helping to make a good turntable even better.

Included within the price is an Ortofon cartridge (option without cartridge) and two different platters - one metal, one glass - thus enabling the most determined audiophile to 'tweak'

Our other audiophile turntables include Pink Triangle and Michell. Picture courtesy of WHAT Hi Fi?

exposure
20
For the past fifteen years Exposure has been one of the small group of companies which made its presence felt more by reputation than promotion.

Many of John Farlowes designs, like the 15, 20, 17 & 18 have been acclaimed both in the UK and abroad for their striking musical performance, and excellent build quality.

That's not all - we also have top quality amplification from Audiolab, John Shearne, Cyrus, Musical Fidelity and Quad for you to consider.

THE COUNTRY...
ring any one of our branches ~ we are always pleased to hear from you.

WHO ARE WE?
Sevenoaks Superfi are at the forefront of Hi Fi retail in the UK. For over 21 years our companies have been selling quality Hi Fi products to discerning customers, and our enthusiasm is undiminished.

AFTER SALES
All our products can be installed in your home. If you wish to use this service please ask your local branch for details.

PEACE OF MIND
All the products we sell are brand new, fully guaranteed and maintained in our own service departments. We also offer our own 'no quibble' extended warranty. Ask for details.

PRICE PROMISE
We always try to ensure our prices are competitive. In the unlikely event of an identical product being available from an authorised dealer at a lower price, we will beat that price by £10.

SALE VALUE:
UP TO £120 = PRICE MATCH
£121 + = £10 PRICE BEAT

SOME USEFUL NUMBERS:
Sevenoaks Central Service Department 0732 459105
Superfi Central Service Department 0602 420414
Mail Order Hotline 0732 458985

BIRMINGHAM
67 Smallbrook, Queensway 021 631 2675 Superfi
Belgrave Theatre 16 Spon Street 0203 223254 Superfi
COTSWOLD ROAD
56 London Road 0343 260020 Superfi
HULL
4 Dock Street 0482 24051 Superfi
LEEDS
7 King Edward Street 0532 449075 Superfi
LONDON
21a High Street 0522 520265 Superfi
LONDON
2-4 Camden High Street 071 388 1300 Superfi
NOTTINGHAM
15 Market Street 0602 412137 Superfi

PEACE OF MIND

Ringing any one of our branches ~ we are always pleased to hear from you.

Car Park
Smallbrook Queensway
Located near M25

BRADFORD
2-4 Milnrow Street
0274 262123

COVENTRY
28 High Street
0203 2232254
Superfi

DERBY
56 London Road
0343 260030

HULL
52 Dock Street
0482 24051
Superfi

LEEDS
7 King Edward Street
0532 449075
Superfi

LONDON
21a High Street
0522 520265
Superfi

LONDON
2-4 Camden High Street
071 388 1300
Superfi

NOTTINGHAM
15 Market Street
0602 412137
Superfi

SHEFFIELD
1 Rockingham Gate, The Moor
0742 723768
Superfi

STOKE ON TRENT
Piccadilly
0782 265010

SOME USEFUL NUMBERS:
Sevenoaks Central Service Department 0732 459105
Superfi Central Service Department 0602 420414
Mail Order Hotline 0732 458985

WHAT HI FI?

D VICE MATCH

SOME USEFUL NUMBERS:

BIRMINGHAM
67 Smallbrook, Queensway 021 631 2675 Superfi
Belgrave Theatre 16 Spon Street 0203 223254 Superfi
COTSWOLD ROAD
56 London Road 0343 260020 Superfi
HULL
4 Dock Street 0482 24051 Superfi
LEEDS
7 King Edward Street 0532 449075 Superfi
LONDON
21a High Street 0522 520265 Superfi
LONDON
2-4 Camden High Street 071 388 1300 Superfi
NOTTINGHAM
15 Market Street 0602 412137 Superfi

Ringing any one of our branches ~ we are always pleased to hear from you.

Car Park
Smallbrook Queensway
Located near M25

BRADFORD
2-4 Milnrow Street
0274 262123

COVENTRY
28 High Street
0203 2232254
Superfi

DERBY
56 London Road
0343 260030

HULL
52 Dock Street
0482 24051
Superfi

LEEDS
7 King Edward Street
0532 449075
Superfi

LONDON
21a High Street
0522 520265
Superfi

LONDON
2-4 Camden High Street
071 388 1300
Superfi

NOTTINGHAM
15 Market Street
0602 412137
Superfi

SHEFFIELD
1 Rockingham Gate, The Moor
0742 723768
Superfi

STOKE ON TRENT
Piccadilly
0782 265010

SOME USEFUL NUMBERS:
Sevenoaks Central Service Department 0732 459105
Superfi Central Service Department 0602 420414
Mail Order Hotline 0732 458985

WHAT HI FI?

PRICE MATCH

UP TO £120 = PRICE MATCH
£121 + = £10 PRICE BEAT

SOME USEFUL NUMBERS:

Sevenoaks Central Service Department 0732 459105
Superfi Central Service Department 0602 420414
Mail Order Hotline 0732 458985

WHAT HI FI?
An invitation from Bill Wilson

Cut the cost of your CD buying by as much as 50%.

Buy your CDs the easy way and save £££'s at the same time with Bill Wilson's CD Warehouse.

Join the ultimate service for discriminating CD collectors who demand the greatest range and the widest choice of top quality CDs at lowest ever cost.

1,000's of CDs at give-away prices from Britain's totally reliable mail order service — established since 1961.

It's just part of the WSL CD service which includes...

- A unique library 'try before you buy' service.
- The CD Index — the only book that tells you all you want to know about CDs.
- If you want the kind of service no other CD club can offer you, contact me now for full details of the Wilson Stereo Library CD service — I'll reply personally and make you a very special offer of membership.

OK Bill Wilson! Tell me about the WSL CD Service and the benefits I can get from it. Including the New CD Warehouse. Without obligation (I enclose two first class stamps for speedy reply).

Name:
Address:
Postcode:

Tel/Fax: Bristol (0272) 686005

Recital

A SELECTION OF COMPELLING SYSTEMS:

CD PLAYER
MICROMEGA STAGE 1 £450
PRE AMP
MUSICAL FIDELITY E200 £599
PWR AMP
MUSICAL FIDELITY E300 £699
SPEAKERS
RUARK BROADWORD £850

CD PLAYER
AVI S2000MC £999
PRE AMP
AVI S2000MP £999
PWR AMP
AVI S2000MM £999
SPEAKERS
ATC SCM20 £1499

CD PLAYER
AUDIOMECA KREATURA £1199
PRE AMP
CR DEVS CARMENTA £659
PWR AMP
CR DEVS AMPHION £1799
SPEAKERS
AUDIOPHYSIC VIRGO £3199

CD TRANS
DPA ENLIGHTENMENT £795
CD DAC
DPA TWO FIFTY SIX £3500
PRE AMP
TRILOGY 918 £2775
PWR AMP
TRILOGY 958 MONOS £2995
SPEAKERS
CABASSE PACIFIC £4600

Recital

289 NEW KINGS ROAD
FULHAM
LONDON SW6 4RE

TELEPHONE REX ON: 071-731 0340
10 TIL 6, MONDAY TO SATURDAY

V'audio
Hi-Fi Consultants

Hype Nº 2

Last month we talked about 'front & back ends', so now it's hype Nº 2, the single speaker demo room. Now I'm not implying that other speakers in the room don't affect the sound, but then everything in the room does. The demo room won't sound exactly like your room at home anyway, so all you can try and do is to determine if a particular speaker comes close to what you require. When you are reasonably happy, then a home demo is vital to make sure it works in your home. That is where my personal involvement also helps, I will give you the benefit of my experience as well, ad if it's not right we start again.

Customers regularly comment on the superb sound in my demo room in spite of 6 or more sets of speakers being present! Why not come and enjoy yourself and hear the new Lyra Clavis DC (£999), (cheaper but better than the old Clavis), in the SME 20A Turntable, through some of the speakers cluttering up my demo room!

By the time this advert appears the demo room should sound even better as sound treatment will have been applied. Don't forget also that we can always demonstrate 'Home Cinema' with results not achieved by anyone at 'Live '94' - Terrible!

Ian C. Vaudin
36 Druid Hill, Stoke Bishop,
Bristol BS9 1EJ
Tel/Fax: Bristol (0272) 686005

Hi-Fi World December 1994
It's been that time of year again. The time when the usually comatose British hi-fi industry leaps into action with a flurry of trade shows and then strong sales up to the Christmas period (well that's the theory at least). 

This year the focus was very much on Live '94. It could hardly fail to have been a success for the audio manufacturers after last year's results, and a massive advertising campaign. This time round, I didn't make the same mistake as last year by going on a Sunday; by mid afternoon the gates had to be closed and I understand it was similarly packed this time round.

'The venue itself was new too. Earls Court provided the desperately needed extra square feet, and a far more logical layout. The most obvious change from the layout at Olympia last year was the abandonment of the 'Real Hi-Fi Village'. This meant that rather than the specialist hi-fi companies all being bundled together, they were spread out throughout the venue. I had mixed feelings about the new arrangement. At first I found it rather confusing, having to weave my way through budding Beadles on camcorders and spotty faced youths gawping at the latest 'beat 'em up' computer game, in order to locate the hi-fi stands. But most of the companies were happy with the new layout, and I could see why.

This year companies such as Tannoy, Mission, B&W, Naim, Linn etc. had just as equal prominence as the big Japanese players. Whilst their stands may not have been quite as flash, I think they were perceived by the public at large, on level terms with the majors. This has to be a good thing, because it not only promotes brand and therefore hi-fi awareness, but it also does a lot to destroy the cliquish elitism of even before I'd set foot in London, was Bose's expensive sounding claim in giving away £50,000 worth of trainers, if you were prepared to nail your old shoes to the floor! I had it sussed. Not wanting to nail any of my own shoes to the floor, I took some tacky BMW flip flops to slip into;

that the real hi-fi industry is often thought of as possessing by the general public. A Real Hi-Fi Village tucked away in the corner of the building simply promotes such a stereo-type (pun definitely not intended!).

As well as the presence of the hi-fi companies, the sheer razzmatazz of the whole event couldn't fail to impress. The glamorous girls (on around £100 per day I was reliably informed), were out in force. It could have easily been the Motor Show rather than an electronics show in only its second year, such was the hype and excitement surrounding everything.

There were some pretty hard-hitting publicity stunts going on too. One such promotion that I was aware of was the Motor Show rather than an advertisement campaign. This meant that rather than the glamour and triviality leave 'Hi', to those brave souls on the stand with a lolly in my mouth would look a wee bit immature, I ducked round the Meridian stand and quickly crunch it up.

Only, when I arrived at the HFW stand I was to find the crew completely disregarding their personal vanity munching on Richer Sounds' lollies; apparently their staple diet for the entire event!

So where does all this mouth, brat fashion, that I came across the Hi-Fi World stand. Thinking that going to say, "Hi", to those ramada. The fact that during its entire duration this year Ramada hosted around 7500 visitors, compared with 25,000 on Wednesday alone at Live, and a staggering total of over 185,000, must weigh heavily on Ramada's future.

Especially as most of the large British and Japanese companies have pulled out of Ramada.

I see no reason, though, why Ramada shouldn't continue as a specialist show, although why on earth can't they be on at the same time? Better still, if the organisers got their heads together, the specialist hi-fi could be moved into some of the rooms around Earls Court, or a nearby hotel. This would make it so much easier for those who don't live in London, and would also help to increase public awareness of hi-fi still further.

So how about it News International - a consumer electronics show akin to America's CES for Live 95? Fingers crossed.

Fair Views

- from Dominic Todd, our man in Scarborough
What do you get if you take John Cooper Clark, guillotine his head off and replace it with a huge wedge of Parmesan cheese, topped off with a mess of used Brillo pads? Easy, you got yourself Lyle Lovett. That's what. But: the eye can be a big deceiver, don't you think? Superficially, this gent's about as geezy as they come, but if seeing were believing then how come this seemingly haphazard hunk of skin and bone should end up being partnered with Julia Roberts, a woman who — if she were French — would most definitely be called Le Renard.

That said, it's somewhat sac, not to mention unjust, that Lovett's name should only be brought up primarily by virtue of his relationship with the divine Ms. R. He is, after all, one of the most engagingly witty and talented songwriters to have come out of the USA in any time. Equally unjust is the fact that, as a result of his general style, and by virtue of the fact that he first came to prominence during the latest so-called Country renaissance, Lovett should be lumped in with the likes of Dwight Yoakam and that maybe bald-headed geezer what wears the stetsons. In fact, and as those with long memories and/or extensive "Hi-Fi World" back number collections will perhaps recall, Lyle and his mates ended up being reviewed in that section of the latest record by — you got it — that geezer who might be bald and wears the XL stetsons.

But today's hair — if you'll allow me the one Gump-ism — is tomorrow's fall-out. Any similarity between Lyle and people who don't need to go to the barber's is purely coincidental. In short, what Lovett does is craft songs of great wit and imagination, and if his material tends towards Country and Western in feel, that's far from all he does, did, or can do. Items such as 'Skinny Legs', 'Penguins' or 'Creeps Like Me' evince a lyrical wit and an even rarer sense of irony you'll be hard pushed to find this side of Randy Newman, and Lovett's words are inevitably matched by an equally broad vocabulary in the music department. On 'I Love Everybody', the singer-songwriter's fifth album, the instrumentation is predominantly sparse, Lovett's vocals and guitar assisted by a simple, classic bass and drums format.

In short, what Lovett does is craft songs of great wit and imagination, and if his material tends towards Country and Western in feel, that's far from all he does, did, or can do. Items such as 'Skinny Legs', 'Penguins' or 'Creeps Like Me' evince a lyrical wit and an even rarer sense of irony you'll be hard pushed to find this side of Randy Newman, and Lovett's words are inevitably matched by an equally broad vocabulary in the music department. On 'I Love Everybody', the singer-songwriter's fifth album, the instrumentation is predominantly sparse, Lovett's vocals and guitar assisted by a simple, classic bass and drums format.

Aided and abetted where Lovett sees fit, and primarily by the sensitive violin of Mark O'Connor, Lovett and friends produce music of much breadth, warmth and, frequently, heart-lifting inspiration. Add a spot of cello or violin here, the occasional gospel-flavoured vocal expansion there, and you wind up with a collection of songs filled out with considerable colour, charm and breadth of vision. Lovett's powers as a long-winded of considerable merit and elegance are never in doubt. Or this instalment, and as with previous for-ay's, 'I Love Everybody' is brim full of evidence that this is a pan-American musical talent of first order.
**RECORD OF THE MONTH**

**R.E.M.**  
**Monster**  
WARNERS 9362-45740

- Monsters - ask any o' Christopher Lee's short-lived co-stars - ought to be approached with at least a modicum of care. So it was with said necessary trepidation that I set myself to lock horns with the latest offering from Athens, Georgia's most famous sons. After all, hadn't Michael Stipe, bless his pointy little head, not warned us that this latest offering would see R.E.M. at their most basic, stripped down, carnal, whatever...a disc conceived and delivered if not in the garage, then at least in a rough contemporary approximation of the same. Like, uh, out the orchestra, choke the cellos, vilify the violins...in short, elbow all the embellishments of recent products and be prepared to meet a re-born R.E.M. one whose heroes, primary sources reported, were Iggy and The Stooges reincarnated. Now, like U2 before them, R.E.M.'s back catalogue was, or is, fast approaching double figures - my, my, don't time fly? So you can't blame them, let alone us, for maybe thinking an, erm, re-think might not be in order.

Aforementioned trepidation well and truly in hand, I gave this monster the once over. And true, this really is just R.E.M., frugal not merely in instrumentation but also in terms of arrangement and melody. In short, if this record were a shirt it would be a plain white St. Michael first-day-of-school cotton/polyester mix, no frilly collar or cuffs, Paisley patterns or fancy tab or button-down collar included.

But hey, as anyone who wasn't born yesterday will happily tell you, there always was more - and less - to R.E.M. than the fancy pageantries of 'Automatic For The People' or its audience-expandingly catchy predecessor.

So sure, you do get the occasional head-down, brains-out, glacially void, straight-ahead 'rock'n'roll' spike a la prime time Stooges ('I Took My Baby Home'). But of course, R.E.M. - bless their pronunciation - has long been a band of little angels and demons for that.

But of course, R.E.M. - bless their pointy little brains - know all this, because, if not, why bother to give the aforementioned Iggy a namecheck into the lyrics of the, ahem, aforementioned song? Iggy's shade pops into love eterna by exposure to those blessed early concoctions delivered by The Kinks and producer Shel Talmy.

But of course, R.E.M. - bless their pointy little brains - know all this, because, if not, why bother to give the aforementioned song? Iggy's shade pops in another guise in the ironically titled 'King of Comedy', both in the lyrics - 'I'm not the King of Comedy/ I'm not your magazine/ I'm not your television... et cetera - as well as in a dense, smoothly mechanical arrangement and whispered Machiavellian vocals that carry echoes not only the of Iggy of The Idiot but also of U2's only recent saving grace, that well-known Edge cut off the predominantly dismal Zooropa effort.

But R.E.M.'s palette has always been nothing if not broad, and without a painful amount of patience and reflection it quickly becomes obvious that, far from having lost it, R.E.M. are as hot as ever they were. From the opening 'What's The Frequency Kenneth' - all wideawake, happy-to-greet-the-day vocals, snappy back-ups and brilliantly resurrected backwards guitar drones - through to the languorously spaced out 'You', where Stipe recalls the Lennon of 'Strawberry Fields' and 'Tomorrow Never Knows', the instruments just sound like they've been abandoned and are drawing an exhausted, if contented, tired last breath. This is a great band proving once again that pop music can be a cure-all of considerable potency and longevity.

In between we have glories such as 'Let Me In', Stipe's suitably heartfelt adieu to the late Mr. Cobain, all agonisingly pure vocals set against the most evocatively restrained guitar and keyboards you'll hear this side of paradise. Place this beside the ensuing 'Circus Envying', an item as engagingly primal and froth-at-mouth energetic as anything put down by everyone from the Kinks to the MC5 and anyone in between or since. Just compare these two cuts and it's immediately and lastingly obvious that Monster is a disc of broad contrasts, wild imagination, the result of considerable thought, much feeling and - for a combo who've been in the saddle so long - admirable longevity.

In short, I give you R.E.M.'s Monster, and to hell with all you uninspired and derivative dolts reckon that's the piece of crap?

**SUEDE**  
**Dog Man Star**  
NUDE 3CD

- Now perhaps it's a question of how old you are and/or how deep your record collection is, but it seems to this old fart at least that we have to draw the line somewhere, and it also seems to me that Suede are what we call in the Smoke, 'Having a laugh'. I mean, does the fact that I happen to be circa 437 years old give me the right to say this record is a piece of pure, unadulterated crap or not? Or does it mean that it's me that's the piece of crap?

Success does indeed breed strange bedfellows. I've just been glancing at a bunch of reviews of Dog Man Star and it is rather amazing how many people who used to think Suede were a bunch of uninspired and derivative dolts reckon they've now, with this second LP, somehow come into their own.

Ho, ho and another ho. don't make me laugh, John. I don't buy that for one second or division thereof. So I sit here looking at a picture of Brett Anderson in
a bomber jacket I wouldn't be cremated in and I ask myself, as I listen to his laughably derivative new record ("screaming my name through the astral plane...shaking around in the underground..." et al), did Sid Vicious die for nothing, so that we could all go back to platform shoes and too-tight bombers and eye-liner and lord knows what other rubbish? I may be embarking on a wild, southern Rab C. Nesbitt-meets-Hunter S. Thompson trip here, but, to quote one of my favourite poets E.E. Cummings - "there is some shit I will not eat".

So either I've lost my marbles or there's something wrong here. And I say to myself, would Brett Anderson have got a band together, let alone a record contract if he looked like the Hunchback of Notre Dame? Well, the answer to that one's easy - yes on both counts. But it'd be a Heavy Metal band on some Death Rock label or other.

But, strangely enough, none of these thoughts seem to have crossed the minds of one's newsprint brothers, they being too busy instead pondering on the dreadfully dilemma of will Anderson and Suede survive the departure of guitarist Bernard Butler, to all intents and purposes the "new" Mick Ronson to Anderson's "new" David Bowie?

There's a short answer to this particular poser: Who gives a toss about Suede? They have all the substance and quality of Bauhaus, of Gary Neuman, of Nelson. And me, I'm left with the age-old question: Is this a record that desperately wants to be an ashtray? Or is it an ashtray dreaming that it's a record? Both.

---

**ERIC CLAPTON**

*From The Cradle*

REPRISE 9362 45735-2

- New Blues boom! Okay, let's wheel out Eric Clapton and let him run through The Songs That Made Him God. In point of fact, the old bloke accuses himself extremely well, thundering through sixteen Blues classics with all the verve, style and precision his reputation requires. The big surprise is the vocals - always his weakest point - appear to have given the big E that world-weary texture this classic music demands. And if it goes on a tad too long, well you can always switch off.

**DINOSAUR JR.**

*Without A Sound*

BLANCO Y NEGRO 4509 96933 2

- Pal of mine, female as it happens, but these things do happen - recently gave up the so-called crusty life. This entailed not only buying more regularly but stopping her aural subscription to the likes of Dino Jr. I find all this a trifle unfair, not only to the laws of hygiene, but also to Dinosaur Jr.'s mainman, J. Mascis, a musician and writer of considerable talent and ability - as usual, he played and produced the bulk of this record, but - as usual again - he's too imaginative an artist by far to be locked in anyone's stylistic or fashionable straight-jacket. Good record...goodnight.

**VARIOUS ARTISTS**

*If I Were A Carpenter*

A&M 540 258-2

- She had a great voice, he had great hair, they were brother and sister and Karen thought square meals were square. Mama Cass should've given her that sandwich but she didn't, end of story. Most of the songs were naff except the one ("Calling Occupants Of Interplanetary Craft") where they pretended - maybe - to be on drugs. The family back catalogue goes through the mincer do the likes of Sonic Youth, 4 Non-Blondes, The Cranberries, Babes In Toyland and other latt not acts. I laughed, I cried etc.

**CEMENT**

*The Man With The Action Hair*

WORLD SERVICE RTD 157.1745.2

- Second LP from the new band fronted by the original vocalist with Faith No More (viz. circa It's A Dirty Job, etc.). Chuck Mosley, as he be called, spends more time muttering and mumbling than he ought. Caught in full flow - "Magic Number" is a good example - he has tonsils to kill for. But the man can also spit venom with the best of 'em; on the self-explanatory Hotel Diabo, to name but one, Chuck sounds like PM Dawn on a wicked mix of speed and testosterone. No bad thing.

---

**COME**

*Don't Ask Don't Tell*

BEGGARS BANQUET BBQCD 160

- If P.J. Harvey has any serious competition then it's Thalia Zadek, singer/guitarist with Boston quartet Come. Ths, their second album, is a tour de force of awesome power and majesty. Listen to 'yr reign', easily one of the most breathtakingly impressive performances laid down anywhere, by anyone in 1994. Class 'A' rock'n'roll.
VOX MAGAZINE: "You can be confident that BADA members are reputable, financially sound businesses which will sell you hi-fi in a professional manner."

HOMES & GARDENS: "A tried and tested way of finding trustworthy dealers...BADA whose members are specialist Hi-Fi Dealers."

GRAMOPHONE: "Over 100 member shops...from Aberdeen to Plymouth...Helping customers to identify, clearly and satisfy their needs through the demonstration of suitable hi-fi products."

LOOK FOR THE BADA LOGO WHEN YOU CHOOSE YOUR REAL HI-FI DEALER

Write for a FREE Fact Sheet, BADA benefits and full members list to P.O. Box 229, London N1 7UU. Tel: 0171 226 4044 Fax: 0171 359 7620

SOUTH

BUCKINGHAMSHIRE'S PREMIER HI-FI DEALER

Arcam, Denon, Linn Products, Naim Audio, Meridian, Rotel, Yamaha, NAD, Quad, Trippod, Nakamichi, Rega, Creek, Epos, Mordaunt Short, Celestion, Marantz, Mission, Cyrus, etc. ...

65 Castle Street, High Wycombe, Buckinghamshire.

Open Monday - Saturday 9am - 7pm

Hi-FI WORLD DECEMBER 1994 77

FRANKIE IS BACK!

Ex-Luxman, Carver & Harman Chief Engineer with his own back up team can custom-modify, rebuild, up-grade or repair any high-end equipment. Japanese spares, speaker bi-wiring service. To restore the best sound for modern & old classics, call Francis Wong on:

Toll: 0303 41130 or Fax 0303 431953

SPECIALIST HI-FI OUTLET

DEMONSTRATION ROOM - PARKING

27 BOND STREET, EALING LONDON W5 5AS

TEL: 081 - 567 8703


10 - 6 pm Mon., Tues., Fri. & Sat., Late night Thur., closed Wed.

Two demonstration rooms. Free local delivery and installation. Repairs and Services

FOR THE GREAT SOUND OF MUSIC:

37 WINDMILL STREET LONDON W1P 1HH

071 631 0472 Fax: 071 436 7165

We stock ATC, Arcam, Meridian, Naim, Rega, Royde, Roksan, AV1, Monitor Audio

D Nim, as well as offering a marvellous mail-order worldwide service + Crunch

Just 2 minutes off Junc. 6 M25 (A25)

GODSTONE 0883 744755 46 High St., Godstone, Surrey RH9 6LS

The Hi-Fi Shop

GUILDFORD'S SPECIALIST SINCE 1956

We are at:
3 BRIDGE STREET, GU1 1XH
01483 731010

We offer Hi-fi/Audio and video sales and service. We stock ATC, Arcam, Meridian

Naim, Rega, Royde, Roksan, AV1, Monitor Audio, D Nim, as well as offering a marvellous mail-order worldwide service + Crunch

27 HOCKERILL STREET, BISHOP'S STORTFORD, HERTS.

TEL: 0279 50576
STATION SOUNDS
WORKING FOR A SELECTION OF VALVE AMPLIFIERS AND OTHER OUTSTANDING EQUIPMENT

Valve amplifiers (combs and hi-fi) overhauled at sensible rates.
Audio HiFi speakers and used Audio innovations amplifiers stocked
Valve and equipment always wanted.

Mike Pointer 0903 239980 (including Fax)

THE AUDIO SPECIALISTS
for the most exciting range of equipment available in the Midlands which includes:

AudioLab, Audiolab, Audioquest, Audio Technica, Canon, Celestion, Chord, Cyrus, Deltec, Denon, DPA, Dual, Epos, Exposure, Harman, Heybrook, Impulse, Infinity, KEF, Kenwood, Kitchin, Lexicon, Luntley, Marantz, Meridian, Michell, Micromega, Mission, Mordaunt-Short, Monitor Audio, Monitor, Musical Fidelity, NAD, Naikamichi, NVA, Onkyo, Panasonic, Pink Triangle, Pioneer, Polk, Pro-Ac, Pro-Jet, REI, Rega, Rogers, Roksan, Rotel, Royd, Raups, Sansui, SD Acoustics, Sentineller, SME, Stratline, Systemdek, Sydentex, Tannoy, Target, Thorens, Wharfedale, Yamaha etc...

OPENING TIMES:
Tuesday - Thursday 10.30 - 6.00
Friday 10.30 - 6.00
Saturday 10.00 - 5.00
Demonstration by Appointment

Worthambridge Stourbridge, West Midlands OY8 ITP
Tel: 0384 444 184
93-95 Hobmoor Rd, Solihull,
West Midlands B92 8AJ
Tel: 021-742 9224

“We are a BADA dealer” and “full service facilities”
INTEREST FREE (for Ltd Period) APR 0%
Written details on request. Licensed Credit Broker
Switch card accepted

W. OWEN 
Audio/Video Specialists
Pioneer. Reference Point. Kenwood
Sony. Akai & B&W

Hi-Fi World December 1994

3 Floors. 3 Demonstration Rooms. 3000 sq feet in the Pursuit of Hi-Fi Excellence

AudioLab - Audio Alchemy - Arcam - Alphonson - Sony - Akai & B&W

Hi-Fi World December 1994

3 Floors. 3 Demonstration Rooms. 3000 sq feet in the Pursuit of Hi-Fi Excellence

AudioLab - Audio Alchemy - Arcam - Alphonson - Sony - Akai & B&W
Specialist Hi-Fi Dealers

Peter Ellis Audio
A wide range of audio products always in stock including: Quad, Denon, Stax, Marantz, Arcam, Creek, Squeak, GED, Castle, Rogers, Celestion, Tannoy, Nakamichi, Yamaha - Home Cinema available -

79, Kirkgate, Newark, Nottinghamshire NG24 1AD
0636 704571

Welcome to Peter Ellis Audio where we stock the leading Hi-Fi brands including:

- Arcam
- Sony
- Panasonic
- Nakamichi
- B&W
- Pioneer
- Technics
- Dyno.
- Magiko.
- Grado.
- Musical.
- Monitor.
- Chord.
- SME
- Spendor
- Target
- TDK
- TDL
- Thorens
- etc.

Keith OED, Quad, Revox, Sennheiser, Sequence Design, SME, Speaker, Target, Teac, Townshend Sound, O.E.O., van den Haar, The Sign & The Second Cables.

Demonstrations by appointment in LEEDS, or in your own home without obligation. For further details contact JOHN BLEEPLEY. Phone/Fax: LEEDS (0532) 528880 (evening calls welcome). Part Exchange and Second Hand Equipment available.

Audio Reflections
DISCOVER ACCURACY IN FIDELITY


Demonstrations by arrangement in LEEDS, or in your own home without obligation. For further details contact JOHN BLEEPLEY. Phone/Fax: LEEDS (0532) 528880 (evening calls welcome).

Part Exchange and Second Hand Equipment available.

CVC
Chelmer Valve Company for Audio Valves
Buy CVC PREMIUM Hi-Fi valves direct from us. All valves processed for improved performance. We also have Stock of MAJOR BRAND types including: MULLARD, GEC, BBHHAR, RCA, GE, etc.

130, New London Road, Chelmsford, Essex, CM2 ORG
Tel: 0245 265965 Fax: 0245 490064

TECHNICAL & GENERAL
THE ORIGINAL TURNTABLE SPECIALIST for the Great Classical Turntable, Arms, Cartridges, Styli
CONNOISSEUR • GARRARD • GOLDRING • LENCO • ORTOFON • SHURE • S.M.E. • THORENS • WATTS
All available Genuine spares and our own re-manufacture obsolete parts
Servicing and Overhulls, to original technical specifications.

NO ILLUSORY 'IMPROVEMENT' NO DUBIOUS OR HARMFUL 'MODIFICATIONS'
Remedial Services available

Cartridge and styli, correct radius diamond, for early recording - 78s & Lps

TECHNICAL & GENERAL
P.O.Box 53 Crowborough, East Sussex TN6 2BY
Tel: 0989 65 45 34

SOunds AROUND
NEW & USED HIFI
Professional Service Repairs and Accessories
146A Clarendon Park Road, Leicester
Telephone: 0533 702442

SUSSEX SURPLUS
Original Mullard GEC Valves for sale & wanted for cash
Sussex Surplus
13 Station Road, Horsham, West Sussex.
Tel: 0403 251302

SOvTEST VALVES
6550WA, 6LAWG5881, EL.34G.
12AX7WB/7025, EF666267
Over 1000 different types of valves stockeld S.A.E. for list
DEPT. HWP
Wilson Valves, 28 Banks Ave, Golcar,
Huddersfield, West Yorks, HD7 4LZ.
Tel: 0484 65650/430774 Fax:0484 655699
Mail order only, Visa, Mastercard.

HI FI WORLD DECEMBER 1994
**G T AUDIO**

Specialises in the repair of all types of audio equipment (including valve). All work is guaranteed and carried out to the highest standard.

Tel: 0895 833099

**AUDIO COUNSEL**

Major credit cards welcome

Imperial Studios, Maxwell Road, Borehamwood, Herts, WD6 1WE

**L.G.S AUDIO SERVICES**

Quality Audio Equipment and Hi-Fi Systems Repaired and Serviced at Reasonable Cost

2nd Floor, Forest Mills, 133 Alfredon Road, Radford, Nottingham NG7 3JL

Tel: 0602 24443

**STAFFS & DERBY**

How to save £1000 on Hi-Fi

Choosing the right Hi-Fi and saving money is a difficult task, make it easy on yourself.

To get your copy of "Guide to Buying Hi-Fi" just telephone

FREEPHONE 0800 373039

We will send you one Free of Charge together with our Fact Pack and see how you can save £1000 on recommended Hi-Fi Systems.

**Active Audio**

12 Dormanston Rd, 29 Market Street, 56 Stafford Street, Derby

Staffs - Stoke-on-Trent.

**MUSIC**

CD Selections

The UK’s leading suppliers of bargain CDs and music for your free catalogue contact

CD Selections PO Box 1011 Dorchester Dorset D12 7YG

Tel: 0300 848 725

**Services & Consultants**

Service and repairs

maintenance to almost all brands of hi-fi. in guarantee repairs to Kenwood, pioneer, Aiwa, Panasonic, Technics, Teac, Yamaha and others. All repairs guaranteed for 3 months.

mews electronic services.

5, King St Delph, Oldham.

Tel/fax 0457 920862

**OVERSEAS**

Sum of the parts.

MT Multi-Cap • Wonder Cap • Kimber Kable • Solen • Siemens • Hotland MusicCap • Wima • Gold Aero • RAM • N.O.S. Tubes

**T.V.M. Audio Visual**

The Antenna Specialists

Suite 33, Kinetic Centre, Theobald Street, Borehamwood, Herts WD6 4SE

Tel: 081 207 6159; Fax: 081 953 1118

Suite 33, Kinetic Centre, Theobald Street, Borehamwood, Herts WD6 4SE

**Sum of the parts.**

MT Multi-Cap • Wonder Cap • Kimber Kable • Solen • Siemens • Hotland MusicCap • Wima • Gold Aero • RAM • N.O.S. Tubes

**Hi-Fi World Specialist Dealer Directory Order**

Book 12 Months For A 30% Discount!! Or 6 Months For A 20% Discount.

I wish to be included in Hi-Fi World’s Specialist Dealer Directory starting the issue for a total of insertions.

Please find enclosed my artwork/copy details.

I wish to book column centimetres at £12.50 per col. cm.

Name

Company Address

Postcode Telephone No.

Please return to Amanda Sweeney Hi-Fi World, 64 Castelain Road, London W9 1EX
A superb, Class A, 20watt stereo power amplifier that uses the Russian 5881 output valve, a military version of the American 6L6, designed for low distortion audio work. It has super-quality output transformers (4/8/16Ω selected internally) to minimise distortion and the input stage uses triode working. A rugged, sixteen-gauge, all-welded steel chassis is provided, together with protective bottom plate for safety.

The kit comprises a strong 16-gauge mild steel chassis, fully punched, welded and ground smooth. Finish is a durable 'powder coat' black. A protective bottom plate is provided for safety. Output terminals (one pair) take 4mm plugs axially and radially for bi-wiring, or heavy gauge bare cable. Output options of 4/8/16Ω are selected internally at the transformer. A small circuit board carries most of the components. Can be monoblocked for 60watts.

All parts are included in the kit, except valves since different 300B makes are available.

**SPECIFICATION**
- **Power**: 20 watts/ch.
- **Frequency resp.**: 16Hz-40kHz
- **Distortion**: 0.02%
- **Separation**: 54dB
- **Noise (CCIR)**: -103dB
- **Sensitivity**: 240mV
- **Weight**: 16kgs (341bs)
- **Dim. (mm)**: 300x400x180

**300B VALVE AMP KIT £850**

The 4W Single-Ended amplifier kit is a line level integrated amplifier. It comes with three line level inputs and a tape output. High quality components are used throughout, including polypropylene signal capacitors, Alps volume control, custom C&K gold plated selector switch etc. Valves are included.

**SPECIFICATION**
- **Power**: 4 watts
- **Freq. Response**: 9Hz-9kHz
- **Distortion**: 1.3%
- **Separation**: 74dB
- **Noise (hiss)**: -100dB
- **(hum)**: 0.7mV
- **Sensitivity**: 180mV
- **Weight**: 10Kgs (22lbs)
- **Dim. (mm)**: 260x200x180

**DEMONSTRATIONS!!**

Most of our products are on demonstration at Hi-Fi Confidential, 34 Buckingham Palace Road, Victoria, London. Phone the patient and understanding Luigi on 071-233-0774 to check availability. He's a valve afficianado, and stocks plenty of good products - including World Audio Design.

See page 83 for order form...
WORLD DESIGNS
by Mail Order

VALVE LINE LEVEL PRE-AMPLIFIER
£295

Constructed from heavy gauge steel with an aluminium anodised and polished front panel. This new chassis comes with the complete kit of parts necessary to build the valve line level pre-amp. The components are all high quality and include a special screened toroidal transformer, Military Spec. Russian valves, Alps potentiometer, polypropylene signal capacitors, silver plated copper wire etc. Dimensions (mm) 290x200x80

CLASS A 36W SOLID STATE MONOBLOCKS
£580/pr.

A pure Class A transistor design offering superb clarity and transparency. The Class A monoblocks use special new super grade audio transistors. They are extremely fast and linear, giving a super measured performance without the need of high levels for feedback.

We can supply a parts pack containing only those specialised parts not widely available: eight output transistors (4 per channel) and two circuit boards cost £129.40 inc P&P and VAT. Individual output transistors cost £9.80 each, the 2SC2240 and the 2SA970 are 80p each.

SPECIFICATION
Power (8Ω) 36 watts
Frequency Resp. 1Hz-50kHz
Distortion (%) 1W Full O/P
Noise -104dB
0.003
1kHz 0.005
2kHz 0.04
THD 0.008
10kHz 0.008 0.04

HIGH DEFINITION LOUDSPEAKER

The High Definition loudspeaker is ideal for low power, high quality amplifiers, transistor or valve. It goes very loud with just 1-5watts, having an enormous sensitivity of 94dB - that's 8dB more than most other speakers. It is also a very easy load for valve amps (8ohms) and it gives a terrifically dynamic and fast sound. This speaker is also unusually suited to low powered vintage amplifiers, such as Quad IIs, Radfords, Pye Mozarts and such like.

The High Definition loudspeaker is available in two forms: as a drive unit pack containing two bass units and two tweeters modified and tested, or complete with all crossover components, gold plated bi-wire terminal dishes, silver plated copper wiring and long haired wool.

Drive Unit & Crossover kit etc
£195
Drive Unit Pack
£145

HIGH TECH AUDAX DRIVE UNITS

The 1994 range of Audax drive units sees many modern high tech materials and technologies that would normally be unavailable to the home constructor. We offer a small range of the highest quality drivers, including High Definition Aerogel (HDA) units, carbon fibre and three superb soft dome tweeters. Sadly there isn't enough room to print the specs, but if you are interested in any of the following drivers, please ask us for a detailed spec sheet.

Audax Drive Units:
CAST CHASSIS UNITS
HDA, HM130Z0, HM170Z0, HM210Z0
CARBON FIBRE, HM130C0, HM170C0, HM210C0
NEW 3inch HDA mid, HM100Z0

CLASS A 36W SOLID STATE MONOBLOCKS
£580/pr.

A pure Class A transistor design offering superb clarity and transparency. The Class A monoblocks use special new super grade audio transistors. They are extremely fast and linear, giving a super measured performance without the need of high levels for feedback.

We can supply a parts pack containing only those specialised parts not widely available: eight output transistors (4 per channel) and two circuit boards cost £129.40 inc P&P and VAT. Individual output transistors cost £9.80 each, the 2SC2240 and the 2SA970 are 80p each.

SPECIFICATION
Power (8Ω) 36 watts
Frequency Resp. 1Hz-50kHz
Distortion (%) 1W Full O/P
Noise -104dB
0.003
1kHz 0.005
2kHz 0.04
THD 0.008
10kHz 0.008 0.04

HIGH TECH AUDAX DRIVE UNITS

The 1994 range of Audax drive units sees many modern high tech materials and technologies that would normally be unavailable to the home constructor. We offer a small range of the highest quality drivers, including High Definition Aerogel (HDA) units, carbon fibre and three superb soft dome tweeters. Sadly there isn't enough room to print the specs, but if you are interested in any of the following drivers, please ask us for a detailed spec sheet.

Audax Drive Units:
CAST CHASSIS UNITS
HDA, HM130Z0, HM170Z0, HM210Z0
CARBON FIBRE, HM130C0, HM170C0, HM210C0
NEW 3inch HDA mid, HM100Z0

THREE WAY CARBON-FIBRE DRIVER LOUDSPEAKER

This is our third loudspeaker design and the most advanced to date. KLS3 uses extremely light and stiff carbon fibre cone drive units for a fast and accurate sound. A dedicated 4inch carbon fibre midrange drive unit provides the cleanest, smoothest and most detailed midrange characterised by superb projection. The treble is handled by a sweet sounding fabric dome tweeter and for real bass power and articulation a light and stiff 8inch carbon fibre bass driver is employed.

KLS3 has been engineered to get the best from your amplifier; be it valve, solid state, single-ended or zero feedback. Its High 90dB sensitivity and near flat 8Ω impedance make it one of the easiest loudspeakers to drive. KLS3 is available in three forms: Drive unit pack £230; Drive units + crossover etc (just about everything but the wood) £350; fully built, tested and finished in high quality, real wood veneer for £1500.

FABRIC DOME TWEETERS

TVV025M0 (25mm 92dB suitable for 2-way systems)
TW025S0 (25mm 92dB suitable for 3-way systems)
TV034X0 (34mm 93dB a large dome with powerful sound)
Peter Herring

A pan-European selection
with music from Renaissance Italy, twentieth-century Denmark, by a Pole whose finest work was created in Britain, and work from a Hungarian for whom east European folk music proved an endless source of inspiration.

BELA BARTOK
Rhapsody No2 for violin and piano/Hungarian Folk Songs/Sonatina/Hungarian Folk Tunes/ Sonata No I for Violin and Piano
Susanne Stanzeleit, violin; Gusztav Fenyo, piano
ASV CD DCA883 (DDD/68.41)

This is the second collaboration between these musicians in the music of Bela Bartok and the partnership once again produces highly enjoyable results (the previous release was on ASV CD DCA852). As the booklet note points out, although Bartok was a virtuoso pianist, it is not at all surprising that he also made a substantial contribution to the violin canon. During his years in Hungary, he partnered some of the finest violinists of the age. And then there was the long tradition of violin playing at the heart of Hungarian and Romanian folk music.

The Magyar flavour permeates much of the music here, although the folk element is explicit in only two works, both transcriptions for violin and piano from the piano original. In the Hungarian Folk Songs of 1908-09, Bartok collaborated with Tivadar Orszagh and, in the Hungarian Folk Tunes of the same period, but to a lesser extent, with the legendary Jozsef Szigeti. It's infectious stuff, played with great elan and evident enjoyment.

Of the other works here, the First Violin Sonata of 1921 came at a critical time in the composer's development. Within the formal, three-movement structure, Bartok gives his imagination and his technique free rein and the result is compelling and exciting, not least in the rondo finale, with its clear debt to Romanian folk music.

Romanian folk dances and, for that matter, several aspects of folk dancing's performing style, are distilled into the exhilarating Second Rhapsody, which inspires Susanne Stanzeleit and Gusztav Fenyo to some breathtaking playing. And the same can be said of the Sonatina, another set of transcriptions for violin and piano, this time by Andre Gertler. Above all, the programme here provides a revealing insight into the way that classical disciplines were fused so effectively with eastern European folk music and performing styles in Bartok's music. If, like me, you enjoyed the first CD in this series, you'll love this one.

CARL NIELSEN
Prelude to Act II of Saul and David Op25/Clarinet Concerto Op57/An Imaginary Journey to the Faroe Islands/Flute Concerto/ Springtime on Funen-Lyric Humoresque Op42
Asa Baverstram, soprano; Kjell Magnus Sandve, tenor; Per Hoyer, baritone; Linnea Ekdahl, girl soprano; Andreas Thors, boy soprano; Swedish Radio Choir; Stockholm Boys' Choir; Swedish Radio Symphony Orchestra; conductor, Esa-Pekka Salonen
SONY CLASSICAL SK 53276 (DDD/75.02)

An all-Scandinavian production: Swedish performers, Finnish conductor, and music by Denmark's greatest composer. Not, for once, one of the six symphonies which are the cornerstone of Nielsen's output, but two of his concertos and three less-well known orchestral pieces.

Continue on page 87 .... ▶▶
Classical Record Reviews

The greatest composer of the High Renaissance was they who were invited to Rome with an accolade.

There were concerts over three days in the splendid setting of the Basilica of Santa Maria Maggiore, one of four religious foundations in Rome in which Palestrina is known to have been employed. The Basilica was chosen for both its splendid acoustic and because it has little changed since Palestrina's time.

Should there have been any lingering question about the international status and appeal of Britain's Tallis Scholars, here surely is the ultimate recognition. It was they who were invited to Rome last February to celebrate the four-hundredth anniversary of the death of Giovanni Pierluigi da Palestrina, arguably the greatest composer of the High Renaissance and, for Italians, the musical equivalent of Michelangelo, Raphael or Leonardo. By any measure, quite an accolade.

The grieving mother stood, weeping by the Cross, and we can forgive him for denying the choir the applause which follows each work. Somehow, spiritual quietude will have to adjust to the applause which the Tallis Scholars' finely-shaped performance demonstrates, three of the five movements remain rooted in the 'old' polyphonic style. Was this Palestrina's way of making the change evident in the other two movements all the more emphatic? Certainly, the double-choir motets reflect the new approach, with the music quite clearly the servant of the words.

Peter Phillips unashamedly admits that the opportunity to perform the famous Miserere by Gregorio Allegri in this moment of self-indulgence. Originally, this setting of the Miserere (Psalm No5) was the exclusive property of the Sistine Chapel Choir and sung by them just once a year, during Holy Week. Anyone caught trying to smuggle out a copy of the piece was liable to nothing less than excommunication (and you thought today's record contracts were draconian!). But copies did reach the outside world and a certain Wolfgang Amadeus Mozart, having heard the work just once, promptly wrote it out from memory.

Allegri's Miserere shares, along with the rest of the music here, fine recorded sound, engineered by Philip Hobbs with the assistance of Ben Turner. But those accustomed to listening to the Tallis Scholars in a kind of spiritual quietude will have to adjust to the applause which follows each work. Somehow, applause doesn't seem to equate with the celestial, contemplative nature of this music but, it would be churlish to deny the choir the appreciation it has so richly earned. In his usual lucid notes, Peter Phillips reveals: "I felt that we had touched the spirit of this unsurpassed master as never before. I couldn't have put it better."

GIOVANNI PIERLUIGI DA PALESTRINA
Missa Papae Marcelli/ Stabat Mater/Motets: Surge illuminare; Alma Redemptoris Mater/Magnificat and Nunc dimittis
GREGORIO ALLEGRI
Miserere
The Tallis Scholars, director Peter Phillips
GIMELL CDGIM994 (DDD/73.19)

It is not just the uniqueness of the occasion which makes this recording so reasonable, or the fact that one is simply swept away by the performances. Equally commendable is the attempt to represent the full range of Palestrina's art, from the brilliance of the double-choir motets to the profound, deeply-moving setting of the Stabat Mater (Stabat Mater dolorosa, luxta crucem lacrimosa - The grieving mother stood, weeping by the Cross), one of the supreme achievements of the late Renaissance, and of the composer's last years (it dates from around 1589-90). What a contrast with the bright exultation of the Magnificat, which of course presents a very different depiction of the Virgin.

As mentioned in the introduction above, the Missa Papae Marcelli marked a turning point in music yet, as the Tallis Scholars' commemorative concerts, 'Live in Rome', demonstrated, three of the five movements remain rooted in the 'old' polyphonic style. Was this Palestrina's way of making the change evident in the other two movements all the more emphatic? Certainly, the double-choir motets reflect the new approach, with the music quite clearly the servant of the words.

Peter Phillips unashamedly admits that the opportunity to perform the famous Miserere by Gregorio Allegri in this moment of self-indulgence. Originally, this setting of the Miserere (Psalm No5) was the exclusive property of the Sistine Chapel Choir and sung by them just once a year, during Holy Week. Anyone caught trying to smuggle out a copy of the piece was liable to nothing less than excommunication (and you thought today's record contracts were draconian!). But copies did reach the outside world and a certain Wolfgang Amadeus Mozart, having heard the work just once, promptly wrote it out from memory.

Allegri's Miserere shares, along with the rest of the music here, fine recorded sound, engineered by Philip Hobbs with the assistance of Ben Turner. But those accustomed to listening to the Tallis Scholars in a kind of spiritual quietude will have to adjust to the applause which follows each work. Somehow, applause doesn't seem to equate with the celestial, contemplative nature of this music but, it would be churlish to deny the choir the appreciation it has so richly earned. In his usual lucid notes, Peter Phillips reveals: "I felt that we had touched the spirit of this unsurpassed master as never before. I couldn't have put it better."

The Tallis Scholars' 'Live in Rome' is also available on VHS videocassette - GIM VP994 - and Laserdisc - GIM LD994 - both highly recommended if you want to combine the visual experience with the aural.

St John Lateran has been extensively rebuilt, St Peter's was impractical and, if you have heard recordings made in the Sistine Chapel, you will know that the adjective 'atmospheric' barely begins to describe the amorphous clouds of sound it produces.)

Palestrina's position at the apex of Renaissance music remains unassailable, not only through the matchless body of work which he produced, but because he stands at one of music's great crossroads. By the mid-sixteenth century, the development of the Franco-Flemish style of composition had reached such a level of elaboration and technical effect that the Church was coming to the conclusion that composers had completely lost sight of the original purpose - music was intended to enhance understanding of liturgical texts, not obscure them in a web of sound.

Discussion of the problem which - difficult as it may be to accept these days - could have altered the whole course of the development of western music, was instigated by Pope Marcellus II in 1553 and discussed by his cardinals at the ensuing Council of Trent. It is probably a mixture of fact and fiction, but the story goes that Palestrina wrote his Missa Papae Marcelli to demonstrate to the Pope and his clerics that it was possible to combine liturgical demands and musical aspirations to the satisfaction of both parties, with a style of polyphony, fusing clarity and concision with beauty and splendour.

Given the historical importance of this work, it was only fitting that it should become the centrepiece of the Tallis Scholars' commemorative concerts, 'Live in Rome'.

The glorious acoustic of Santa Maria Maggiore was irresistible. Hearing the end result, with Deborah Roberts' soprano hitting those spine-tingling high Cs and the thrilling antiphonal interplay between the voices, you can forgive him this moment of self-indulgence.

Originally, this setting of the Miserere (Psalm No5) was the exclusive property of the Sistine Chapel Choir and sung by them just once a year, during Holy Week. Anyone caught trying to smuggle out a copy of the piece was liable to nothing less than excommunication (and you thought today's record contracts were draconian!). But copies did reach the outside world and a certain Wolfgang Amadeus Mozart, having heard the work just once, promptly wrote it out from memory.

Allegri's Miserere shares, along with the rest of the music here, fine recorded sound, engineered by Philip Hobbs with the assistance of Ben Turner. But those accustomed to listening to the Tallis Scholars in a kind of spiritual quietude will have to adjust to the applause which follows each work. Somehow, applause doesn't seem to equate with the celestial, contemplative nature of this music but, it would be churlish to deny the choir the appreciation it has so richly earned. In his usual lucid notes, Peter Phillips reveals: "I felt that we had touched the spirit of this unsurpassed master as never before. I couldn't have put it better."

The Tallis Scholars' 'Live in Rome' is also available on VHS videocassette - GIM VP994 - and Laserdisc - GIM LD994 - both highly recommended if you want to combine the visual experience with the aural.

The glorious acoustic of Santa Maria Maggiore was irresistible. Hearing the end result, with Deborah Roberts' soprano hitting those spine-tingling high Cs and the thrilling antiphonal interplay between the voices, you can forgive him this moment of self-indulgence.

Originally, this setting of the Miserere (Psalm No5) was the exclusive property of the Sistine Chapel Choir and sung by them just once a year, during Holy Week. Anyone caught trying to smuggle out a copy of the piece was liable to nothing less than excommunication (and you thought today's record contracts were draconian!). But copies did reach the outside world and a certain Wolfgang Amadeus Mozart, having heard the work just once, promptly wrote it out from memory.

Allegri's Miserere shares, along with the rest of the music here, fine recorded sound, engineered by Philip Hobbs with the assistance of Ben Turner. But those accustomed to listening to the Tallis Scholars in a kind of spiritual quietude will have to adjust to the applause which follows each work. Somehow, applause doesn't seem to equate with the celestial, contemplative nature of this music but, it would be churlish to deny the choir the appreciation it has so richly earned. In his usual lucid notes, Peter Phillips reveals: "I felt that we had touched the spirit of this unsurpassed master as never before. I couldn't have put it better."

The Tallis Scholars' 'Live in Rome' is also available on VHS videocassette - GIM VP994 - and Laserdisc - GIM LD994 - both highly recommended if you want to combine the visual experience with the aural.

...Peter Phillips unashamedly admits that the opportunity to perform the famous Miserere by Gregorio Allegri in this moment of self-indulgence.

Originally, this setting of the Miserere (Psalm No5) was the exclusive property of the Sistine Chapel Choir and sung by them just once a year, during Holy Week. Anyone caught trying to smuggle out a copy of the piece was liable to nothing less than excommunication (and you thought today's record contracts were draconian!). But copies did reach the outside world and a certain Wolfgang Amadeus Mozart, having heard the work just once, promptly wrote it out from memory.

Allegri's Miserere shares, along with the rest of the music here, fine recorded sound, engineered by Philip Hobbs with the assistance of Ben Turner. But those accustomed to listening to the Tallis Scholars in a kind of spiritual quietude will have to adjust to the applause which follows each work. Somehow, applause doesn't seem to equate with the celestial, contemplative nature of this music but, it would be churlish to deny the choir the appreciation it has so richly earned. In his usual lucid notes, Peter Phillips reveals: "I felt that we had touched the spirit of this unsurpassed master as never before. I couldn't have put it better."

The Tallis Scholars' 'Live in Rome' is also available on VHS videocassette - GIM VP994 - and Laserdisc - GIM LD994 - both highly recommended if you want to combine the visual experience with the aural.
NIELSEN
FLUTE CONCERTO, CLARINET CONCERTO
Springfield Symphony Orchestra:
Rosengren the clarinetist, and both are
used most effectively.

The Imaginary Journey to the Faroe
Islands is a kind of orchestral narrative,
not unlike Nielsen's magnificent Helios
Overture which, I believe, has yet to
appear on CD. It begins slowly,
broodingly, evolving into a glorious
orchestral tutti. Nielsen derived some of
the thematic material from a Faroese
works and the Clarinet Concerto evokes
with its 'disruptive' role for the side-drum.

Delightful performances throughout,
and the recording—made using Sony's
20-bit Super Bit Mapping system—is
strangely truthful.

ANDRZEJ PANUFNIK
Sinfonia Concertante for
Flute, Harp and Strings*/
Concertino for Timpani,
Percussion and Strings/Harmony
Karen Jones, flute®; Rachel Masters,
harp®; Richard Benjafield, percussion;
Graham Cole, timpani;
London Musici; conductor, Mark
Stephenson
CONIFER CLASSICS CDCF 217
(DDD/54.48)

- From first to last, an enriching musical
experience. What a distinctive and
appealing voice, Andrzej Panufnik
possessed, and how the earlier neglect of
his work now seems so misguided and
unfair. I had not read the booklet note
before playing the first piece here, the
Sinfonia Concertante. Beguiling,
charming work ends with an ecstatic
proclamation of spring's arrival.

But it is not an exclusive pleasure: anyone
can share in and enjoy this richly
expressive, highly inventive music, and I
feel sure the composer would have
appreciated Mark Stephenson's finely-
judged and clearly sympathetic direction.
The playing of both soloists and orchestra
in what Panufnik considered his 'Fourth
Symphony' is first-class.
The Concertino for Timpani,
Percussion and Strings is a more extravert
piece. As with so much of Panufnik's
music, the music grows organically from a
'cell' or motif. Such as this case made up of the
four notes F-G-B-C. Its development is then
governed by both musical and extra-
musical considerations (Panufnik was
fascinated by geometric patterns,
especially those occurring in nature).

Equally apparent here, though, is the
composer's mastery of instrumental
colour: sample the eeriness of the pedal
timpani played glissando in the fourth
movement. Canto II. The work opens
with a dialogue between the tubular
chimes and strings, punctuated by a
dazzling solo on the vibraphone, then
continues to explore the potential of the
last instrument, along with the timpani, in
music of vivid originality. The Intermezzo
finds four unpitched drums, three
triangles and three cymbals having a
splendid time against a backcloth of
chordal strings in quintuple time, while
the finale is an explosion of triple rhythms
and cross-accents culminating in an
exhilarating quasi-cadenza for timpani
and unpitched drums. The Concertino was
composed in 1979-80 and received its
first concert performance in 1981. Quite
why no recording company has seized
upon its sonor potential before is quite
beyond me, so all credit to Conifer, and
to Technics Hi-Fi who, as with a number
of other Panufnik recordings, have
provided the finance to allow this
recording to be made.

The final work here, Harmony, dates
from 1989, just two years before the
composer's death. No diminution of
creative power or energy is evident from
the intensity and craftsmanship of the
writing; quite the reverse. Andrzej
Panufnik's creative spirit was as fertile as
ever, producing a haunting dialogue
between strings and woodwind groups
and enlarging the normally vertical notion
of harmony into other planes. The playing
here, as throughout this recording, is
wholly committed and the recorded
balance is exemplary. Andrzej Panufnik,
for so long denied proper exposure for
his music, could wish for no more
eloquent exponents.

HI-FI WORLD DECEMBER 1994
THE NEW CROFT EPOCH VALVE PRE-AMPLIFIER SETS NEW STANDARDS OF PERFORMANCE AT A VERY AFFORDABLE PRICE. IT IS THE IDEAL PRE-AMPLIFIER FOR DRIVING ANY OF TODAY’S POWER AMPLIFIERS INCLUDING SINGLE ENDED/TRIODE DESIGNS. SEE KEN KESSLER’S REVIEW IN THE OCTOBER ISSUE OF HI-FI NEWS. IT IS ALSO A PERFECT MATCH FOR DRIVING CLASSIC AMPLIFIERS SUCH AS LEAK, RADFORD, RCA, BEAM ECHO, AND ALL MULLARD 5-10/20 DESIGNS.

(The Croft Epoch now replaces the Micro)

AGENTS FOR CROFT, NOTTINGHAM ANALOGUE, POSSELT, UKD CALLAS, MONARCHY AUDIO, XLO, GROOVE TUBES, GOLD AERO, TOWNSHEND, CLEMENTS, METAXUS, UNISON RESEARCH

TELEPHONE 0895 833099

DEMONSTRATIONS STRICTLY BY APPOINTMENT ONLY

---

ROUNDMAT FOR RECORD LOVERS

First record support to be properly designed

Hear what reviewers say:

“A carefully researched and innovative product which genuinely transforms analogue replay at nominal cost. The string bass was more dynamic, the separation cleaner and, more importantly, the phrasing of the music was more fluid - you heard the vocal line arch fall.” Christopher Breunig (Hi-Fi News, September ‘93)

“I found I preferred the RINGMAT and will carry on using it. The results were wholly positive…” Jason Kennedy (Hi-Fi Choice, April ‘93)

“RINGMAT gave a sharper, cleaner, more solid sound, with better fine detail and clarity. On complex material the improvement in stability and focus was remarkable, easily comparable to an expensive tonearm, cartridge or power supply upgrade… Any drawbacks? None I could detect…” Jimmy Hughes (Audiophile, October ‘93)

“I found the sound of my LPs improved significantly, reminding me of the experience of listening to records on a Goldmund reference turntable with a van den Hul Grasheppcartridge with its nude stylus. All of a sudden, much more of the music, and the space in which it was performed, was evident. I’m sure that the legions of Linn and Rega owners out there who still play their LPs will want to make the modest investment required for major improvement in vinyl play.”


Hear what your fellow music lovers say:

“I would agree with everything you claim for this product. The music is more natural, more musical, and with a loss of a certain rawness which persisted, no matter what, beforehand.” Mr. C.R., Northants

“RINGMAT really be that good? Yes, it is, but there is only one way for you to find out - try it yourself. But be warned: if you let your best friend borrow it, you will finish up buying another!”

This product must be one of the most cost-effective accessories ever to be offered to music lovers.” Mr. R.A., Norway Can

Rings your price!

Different versions to suit turntable or budget from £25 for RINGMAT 200 to £40 for RINGMAT 330 MKI

They can be obtained through good Hi-Fi retailer or on mail order direct from:

RINGMAT DEVELOPMENTS
PO BOX 200 BRENTWOOD ESSEX CM15 8QG
Tel.: 0277 200 210 Fax: 0277 201 225
(p&p: additional £2.50 UK, £5.50 outside)

USA: Something Worth Hearing, Rochester, N.Y.
Tel.: 716 461 1295

TAIWAN: Taifu Electronic Corporation, Taipei,
Tel.: 8862 341 9137

GERMANY: Fortissimo, Düsseldorf, Tel.: 211 482 372

---

THE NEW NA CD3

now on demonstration

at

Hi-Fi Showrooms

12a West Street, Congleton,
Cheshire, CW12 1JR
Telephone (0260) 280017.
**DOUG BRADY HIFI, 401. Smithdown Road, Liverpool.**
Tel.- 061 839 8869 See our main entry under Lancaster.

**HARROW AUDIO, 27, Springfield Rd., Harrow, Middlesex.**
Free delivery & installation. 30 day free upgrades. Home fuller Audio, Trilogy, Lyra, Sumiko, Ortofon, Decca. Target, Adcom, Arcam, Audiolab, Celestion, Denon, Maranta, AUDIO T, 159a Chase Side, Enfield. Middlesex, EN2 OPW.

**MUSICAL IMAGES, 173 Station Road, Edgeware, Middlesex.**

**LISTEN INN, 32 Gold Street, Northants NN1 IRS.**

**MINISTRY OF SOUND, 1A Mission Road, Lisburn, Down.**
Tel: 0232 380 0777. Fax: 0232 380 0764. We stock the widest range of hi-fi equipment available in the UK. We have been trading for over 15 years and are well known in the hi-fi world for our high quality products and services. We can supply anything from a single speaker system to a complete hi-fi system. We offer a wide range of services including installation, repair and maintenance.

**MIDLANDS TOWN HIFI, 55 Rugby Street, Rugby. Warwickshire.**
Tel: 0345 333 3333. Fax: 0345 333 3333. We stock the widest range of hi-fi equipment available in the UK. We have been trading for over 15 years and are well known in the hi-fi world for our high quality products and services. We can supply anything from a single speaker system to a complete hi-fi system. We offer a wide range of services including installation, repair and maintenance.

**THE WEATHERFORD, 99 High Street, Weatherford.**
Tel: 0345 333 3333. Fax: 0345 333 3333. We stock the widest range of hi-fi equipment available in the UK. We have been trading for over 15 years and are well known in the hi-fi world for our high quality products and services. We can supply anything from a single speaker system to a complete hi-fi system. We offer a wide range of services including installation, repair and maintenance.

**RIVERBANK HI-FI, 26 Riverbank Road, Lincoln.**
Tel: 0345 333 3333. Fax: 0345 333 3333. We stock the widest range of hi-fi equipment available in the UK. We have been trading for over 15 years and are well known in the hi-fi world for our high quality products and services. We can supply anything from a single speaker system to a complete hi-fi system. We offer a wide range of services including installation, repair and maintenance.

**THE WEATHERFORD, 99 High Street, Weatherford.**
Tel: 0345 333 3333. Fax: 0345 333 3333. We stock the widest range of hi-fi equipment available in the UK. We have been trading for over 15 years and are well known in the hi-fi world for our high quality products and services. We can supply anything from a single speaker system to a complete hi-fi system. We offer a wide range of services including installation, repair and maintenance.

**RIVERBANK HI-FI, 26 Riverbank Road, Lincoln.**
Tel: 0345 333 3333. Fax: 0345 333 3333. We stock the widest range of hi-fi equipment available in the UK. We have been trading for over 15 years and are well known in the hi-fi world for our high quality products and services. We can supply anything from a single speaker system to a complete hi-fi system. We offer a wide range of services including installation, repair and maintenance.

**THE WEATHERFORD, 99 High Street, Weatherford.**
Tel: 0345 333 3333. Fax: 0345 333 3333. We stock the widest range of hi-fi equipment available in the UK. We have been trading for over 15 years and are well known in the hi-fi world for our high quality products and services. We can supply anything from a single speaker system to a complete hi-fi system. We offer a wide range of services including installation, repair and maintenance.
The official story on how this record happened is this... While at work in Iceland in 1991 on his film “Holozan”, an adaptation of Max Frisch’s apocalyptic novella “Man in the Holocence”, Eicher found himself frequently listening to the Officium Defunctorum of the 16th century Spanish composer Crisobal Morales, the Tenebrae Responsorios of Morales’ Italian contemporary Carlo Gesualdo, and to the work of one of his label’s stars, the Norwegian tenor and soprano saxophonist Jan Garbarek. Eicher had an initial impulse to marry the work of Garbarek and these 16th century masters to his film, and although he later dropped this idea, in his own words “The vision remained”.

Two years later Eicher brought together Garbarek and the Hilliard Ensemble, a vocal quartet specializing in - perhaps perversely - early, pre-baroque European music and late 20th century work. The group have worked widely for the ECM New Series, recording work as diverse as that of the 13th century father of polyphony Perotin and the recent new work of genius composers like the Estonian Arvo Part and the Briton Gavin Bryars.

Together, Garbarek and the Hilliards take as a starting point excerpts from Morales’ Officium, 15th century pieces by La Rue and Dufay, and even earlier anonymously-written chants. To this Garbarek adds soprano and tenor saxophone, with a combination of written and extemporised lines which seem to flow organically out of the singing. In his notes to the recording, one of the group’s two tenors, John Potter, makes much of the fact that Garbarek’s saxophone often seemed like an extension of their own voices. I would add to that that while much of his recent work with the Jan Garbarek Group – to all intents and purposes a jazz-rock group, albeit a very sophisticated one – has been increasingly reserved, the saxophonist’s two outstanding albums of the last few years have been recorded with vocalist: 1992’s collaboration with the Pakistani Ustad Fateh Ali Khan, Ragas and Sagas, and 1991’s blissful Rosensfole, a collection of Norwegian medieaval music recorded with the breathtaking Scandinavian singer Agnes Buen Garmas. There is quite simply something in the nature of the human voice which brings out the most lyrical and plangent side in Garbarek’s playing.

There are already signs that the classical music establishment will turn Officium into this year’s answer to Gorecki’s Symphony No 3, but as with that piece, too much public attention will sell this record short. Like the Gorecki 3rd, this is a record which, while superficially gorgeous and highly accessible, only offers its real fruit on repeated and close listening. This is music of an emotional intensity at once bleak and lovely. It’s certainly a record which, while superficially gorgeous and highly accessible, only offers its real fruit on repeated and close listening. This is music of an emotional intensity at once bleak and lovely. It’s certainly a record which, while superficially gorgeous and highly accessible, only offers its real fruit on repeated and close listening. This is music of an emotional intensity at once bleak and lovely. It’s certainly a record which, while superficially gorgeous and highly accessible, only offers its real fruit on repeated and close listening. This is music of an emotional intensity at once bleak and lovely. It’s certainly a record which, while superficially gorgeous and highly accessible, only offers its real fruit on repeated and close listening. This is music of an emotional intensity at once bleak and lovely. It’s certainly a record which, while superficially gorgeous and highly accessible, only offers its real fruit on repeated and close listening. This is music of an emotional intensity at once bleak and lovely. It’s certainly a record which, while superficially gorgeous and highly accessible, only offers its real fruit on repeated and close listening.
**Peter Erskine**  
*Time Being*  
ECM 521 719-2

While *Officium* is the kind of genre-straddling work of greatness for which ECM first gained its reputation, Peter Erskine’s *Time Being* is one of two straight jazz records released by the label this month which, while undoubtedly fine sets, nonetheless do little to expand the music’s horizons. But then, they hardly set out to, and any comparison with the Garbarek/Hilliard record is bound to be unfair.

*Time Being* is a follow-up to *You Never Know*, the ECM debut for a trio of British pianist John Taylor, Swedish double bassist Palle Danielsson and drummer-leader Erskine. That record established the trio’s reputation for finely-crafted, fragile, exquisite improvisations which heavily recalled the work of one of the trio’s collective heroes, the late American pianist Bill Evans. *Time Being* is again drenched in Evans’ highly lyrical music to jazz improvising, but this time out the group are altogether tougher, the lyricism of songs like Evansong and Liten are closer, *Triptych*, a fifteen-minute group improvisation which develops from a Surman/Taylor duet and spontaneously suggests its own structure. This is highly developed group improvising at the outer limits of consonant, acoustic jazz and personally I could have taken a whole album of this along. Not earth-shattering stuff, then, but highly enjoyable for all that.

**John Surman Quartet**  
*Stranger Than Fiction*  
ECM 521 850-2

Although this group of musicians has played together in a huge variety of combinations over the last thirty years, *Stranger Than Fiction* is in fact a debut recording for this particular quartet: leader John Surman, the baritone and soprano saxophonist whose solo records - exquisite, highly pastoral, multi-tracked affairs using synthesizers and saxophones - have been one of the chief points of musical enjoyment for this hack over the last few years; once again, pianist John Taylor, adapting himself with ease and skill to yet another group; double bassist Chris Laurence, an alumnus of Surman’s large group, the Brass Project, whose oblique lines underpin that music in a constantly surprising way; and the underused, but fiercely swinging drummer Mike Stone, all new names to me. Together they tackle Horvitz’s work with bassist Eberhard Weber’s jazz-rock group Colours for as fine a blending of drive and grace as you’ll hear from any jazz-rock drummer.

Together the group rework seven Surman pieces which date from throughout the saxophonist’s career, from 1973’s Promising Horizons to 1992’s Across the Bridge: it’s a set which easily demonstrates this group’s ability to swing from the urgent to the lyrical, from the abstract to the tangible. It’s music at once highly accessible to the experienced listener (and, indeed, certainly nothing new to him or her) and a strangely unique sound-world for the newcomer. And despite Surman’s undoubtedly tremendous contribution to jazz composition, perhaps the piece I’d recommend most highly here is the closer, *Triptych*, a fifteen-minute group improvisation which develops from a Surman/Taylor duet and spontaneously suggests its own structure. This is highly developed group improvising at the outer limits of consonant, acoustic jazz and personally I could have taken a whole album of this along.

**Pigpen**  
*V As In Victim*  
AVANT AVAN-027

There’s been a plethora of hugely enjoyable recordings out on John Zom’s Japan-based label Avant lately; for space reasons, we’ve barely been able to touch on them here, a situation I hope to put right soon with an Avant round-up. Before then, however, a brief mention for one of the label’s stand-out recent releases.

Pigpen is the latest in a series of fine groups led by Wayne Horvitz, the chameleonic keyboard wunderkind whose melding of cheesy B-movie organ, Lennie Tristano-inspired hard-bop piano and jazz-rock synth-abuse (a sort of Jan Hammer on serious psychedelics) made him the natural choice of keyboardist in Zom’s own freewheeling eclectic collagists Naked City.

In Pigpen he’s joined by bassist Fred Chalenor, alto saxist Briggan Krauss and drummer Mike Stone, all new names to me. Together they tackle Horvitz’s fantastic take on jazz-rock as play area for jazz heads with a serious penchant for garage-band enthusiasm, cocktail-lounge sleaze and prog-rock weirdness. Into the bargain, Horvitz throws in some of the best keyboard sounds heard since someone first stuck a Fender Rhodes through a fuzz box, and a desolate reworking of guitarist Bill Frisell’s *Again* - which is as fine a piece of music as I’ve heard all year.

Highly recommended stuff.
THE NORTHERN JAZZ ORCHESTRA

Good News
LAKE LACD38

- Roll over Glenn Miller; the band members' average age is 19, they recorded this in Blackburn College, and the recording sessions had to be timetabled around school exams. But, they breed 'em tough up north, and the band passes with flying colours, playing a set that ranges from the 'Starsky and Hutch' theme to 'Harlem Nocturne' and similar standards, which are acceptably well recorded.

This month's treat for big band fans.

MARION MONTGOMERY

Makin' Whoopee
OWSCD 2602

- Like an eggshell, fragile, smooth and seamless, and without the glossy finish of many performers, Montgomery's voice is well suited to the slower Trad-based jazz offered here. Many tracks have more than a hint of torch-song about them ('The Inkspots' 'I get the blues when it rains', taken slow, for example) and the title track has a perfect knowing air about it which leaves most other versions standing, basically. Marion Montgomery is a world-class jazz singer, and it shows.

Mart Rodger and his band make an excellent backdrop for Montgomery, all damped brass and shrilling clarinet, they bring out the elusive soul of Trad jazz in a way that the usual breakneck Trad treatments of tunes fail to. There is a depth and emotional palette worthy of the finest mainstream players here.

Well-recorded, well played, and fronted by Marion Montgomery. What more do you want?

BRUCE ADAMS/ALAN BARNES QUINTET

Side-Steppin'
BEAR CD38

- Soft bebop from two fine exponents of the style, supported by Brian Dee on piano, Len Skeat on double bass, and Bobby Orr on drums, saying tunes ranging from Horace Silver's 'Opus De Funk' to Berlin's 'The best thing for you is me'. Perhaps only acceptably well-recorded, but expert, impressive, energetic stuff.

RUBY BRAFF

Cornet Chop Suey
CCD-4606

- Ruby Braff is more of a musician than a jazz player, using notes and phrases sparingly because every nuance overflows with emotion, and the kind of player who returns from a half-hour set break to find his last note still hanging in the air. For Ruby Braff to play a venue is to spoil it for other players, as his sound hangs in the air long after the notes have died.

Here, the solid Braff-Alden-Tate trio supported by Ken Peplowski's clarinet and Ronnie Zito's drums - skips lightly through a range of the usual thirties and forties tunes, like the Satchmo title track and a 'High Society' medley, ending with Hammerstein/Romberg's 'Lover come back to me', a track that'll doubtless get the man swamped with Valentines in '95.

When Braff plays, any description becomes superfluous, suffice to say that Concord have done their transcription to disc well enough for me to leave you with these words of advice; just buy it.

CLaire Martin

Old Boyfriends
LINN AKD 028

- The much publicised latest from this Linn stalwart although, for those who don't know her work, the next item may be preferable.

An anthology of jazz artists available on Linn; Claire Martin, David Newton, Carol Kidd, Tommy Smith (a personal favourite), Stefan Grapelli, and Martin Taylor.

An excellent chance to dip into the Linn jazz catalogue, and worth recommending as a sampler for Linn's recording quality alone.
The Troika is a handsome piece of furniture for storing away CDs and cassettes.

The Troika has 3 drawers and a definitive, patented system for arranging any combination of CDs, and audio and video cassettes. It measures approx. 23″ high x 20″ wide x 17″ deep, and can store away up to 306 CDs.

The Troika is available fully-assembled in light or dark oak finish £295 including delivery.

For details, write or fax:
Reflection Furniture
Hill Cottage Workshop
Moon Hall Road
Ewhurst Surrey GU6 7NP
Fax 0483 277352

"Listening to the HL-P3, I found its mid-band clarity and life the most striking feature... Imagery is also clear and highly three-dimensional... I would be hard pressed to find a better, more neutral sounding, design anywhere near the price."

Hi-Fi World magazine - Alan Sircom - February 1993

"A successful hi-fi-oriented update on the revered LS3/5A."

Hi-Fi Choice magazine - Recommended - September 1993

"Sound - in a word, stunning. In another word, clean."

With "an astonishing amount of bass for such a small speaker."

Sterephile magazine (USA) - John Atkinson - December 1993

"Instruments had near perfect tonality; vocal colour and intonation is excellent."

Audiophile magazine - Eric Braithwaite - July 1993
HI-FI WORLD SOLID SILVER INTERCONNECTS.

Constructed from solid strands of pure silver wire, and with a thick outer casing and screening braid, these interconnects offer the ultimate in transparency, openness and detail. Superb Neutrik Profi phono plugs are silver soldered to the cables in pseudo-balanced configuration for lowest noise/interference and extensive use of adhesive heat-shrink is used to strengthen the join between cable and plug for long life. Available exclusively through Hi-Fi World Mail Order.

1M WITH IEC PLUG £139.95/PAIR
1M FIGURE 8 PLUG £19.20
1M 4-WAY BLOCK £31.95

HI-FI WORLD SILVER PLATED COPPER INTERCONNECTS.

A similar construction to our solid silver cables, but using silver plated copper and standard Gold Phono plugs. Because the majority of the audio signal passes through the skin of a cable these can approach the quality of silver, but at the cost of normal high quality copper cable.

1M WITH IEC PLUG £69.95/PAIR
1M FIGURE 8 PLUG £19.90
1M 4-WAY BLOCK £31.95

HIGH QUALITY MAINS CABLES.

Supplied to Hi-Fi World by Campaign Audio Design these mains cables are screened to reduce Radio Frequency and Electromagnetic Noise. They also come with a VDR fitted which protects equipment from mains spikes. The MK plugs have a silver plated fuse and holder for the cleanest supply. Available with IEC or Figure eight (Marantz/Philips CD players) equipment plugs or with a hard wired, soldered 4-way mains block.

1M WITH IEC PLUG £139.95/PAIR
1M FIGURE 8 PLUG £19.20
1M 4-WAY BLOCK £31.95

4-WAY MAINS BLOCK WITH RF FILTER

Similar to the standard 4-way mains block featuring 2m screened mains cable, Mk plug with silver plated fuse and holder and VDR to stop mains spikes reaching your equipment. A special RF filter has now been added which cuts out even more mains bounce interference. Suitable for top-end systems.

1M RF FILTER £45.50
1M 4-WAY MAINS BLOCK £47.95

EQUIPMENT SPIKES

Machined from solid brass these equipment spikes can be placed under equipment to help ground harmful vibration and enhance the visual appearance of your equipment. The spikes come in sets of three and will support equipment weighing up to 10kg. We hope to introduce a larger spike suitable for heavier equipment and loudspeakers within the coming months.

1M WITH IEC PLUG £139.95/PAIR
1M FIGURE 8 PLUG £19.20
1M 4-WAY BLOCK £31.95

AFFORDABLE SILVER PLATED COPPER INTERCONNECT

A 'budget' interconnect featuring high quality silver plated copper coaxial cable and standard gold plated phono plugs is now available. The plugs are silver soldered to the cable for good electrical contact and high mechanical strength.

£28.00/PAIR

HIGH QUALITY AERIAL LEADS

If you've just spent a lot of money on a good tuner and aerial, then you'll want to connect the two together with the best cable possible to ensure the signal is preserved. We now have a high quality copper coaxial cable furnished with gold plated connectors which does just that. Because the length of cable required for different circumstances will vary greatly, we are offering a custom termination service for this cable.

£19.95/M + £2/EXTRA M

GARRARD 401 CELEBRATION SME IV TONEARM

A special version of the SME IV cast magnesium alloy tonearm, dedicated to the Garrard 401. The SME IV is precision engineered to be fully adjustable, making set-up easy and precise. If you want to get the best from your Garrard 401, this is a fantastic tonearm, sympathetically styled to form a perfect combination.

GARRARD 401 CELEBRATION SME IV TONEARM £820
ATTENTION ACCESSORIES

**Hi-Fi World**

**NEWT**

**NITTY GRITTY RECORD CLEANER**

Bring a glossy shine to your LPs with the Nitty Gritty series of record cleaners. Several versions are available from the basic machine to the near fully-automated Mini-Pro (pictured) which cleans both sides of the LP together. Review in Hi-Fi World August 1994, these machines are a must for the dedicated Vinyl collector.

**BASIC RECORD CLEANING SYSTEM**

£199.90

**RECORD MASTER RECORD CLEANING SYSTEM FOR ALL SIZES (7/10/12") WITHOUT ADAPTOR**

£249.90

**1.5 FI FULLY AUTOMATIC SINGLE SIDED RECORD CLEANING SYSTEM**

£199.90

**MINI-PRO 1 RECORD CLEANING CLEANING SYSTEM BOTH SIDES CLEANED SIMULTANEOUSLY**

£599.00

For further details and cleaning fluid cost please contact the Mail Order Department on 071-266 0461.

**MINICHILL ENGINEERING PLUGS**

Craftsmanship marks out Michell Engineering's rage of gold and rhodium plated plugs from the competition.

**GOLD-PLATED SIDE ENTRY BANANA PLUGS**

£10.00

**GOLD-PLATED 4MM BANANA PLUGS**

Heavy-duty, gold-plated banana plug with a unique type of axial solderless connection for loudspeaker cables. The cable is stripped back and pushed into a clamping collar which is then screwed down tight, accepting cable up to 6mm external diameter and 4mm core diameter. Supplied in sets of four.

**BANANA PLUGS (4)** £8.00

**RHODIUM-PLATED SURE-LOC BANANA PLUGS** £14.95

**GOLD-PLATED SPEAKER CABLE CONNECTORS** £10.00

**RECORD STORAGE CUBE**

Designed to hold about a hundred LPs, with an internal width of 37cm, height of 32.5cm and depth of 32cm. The cubes can be stacked or placed alongside each other and are even strong enough to be used as seats! Made from 15mm MDF (Medium Density Fibreboard) with a smart durable black paint finish, the cube is supplied in flat-pack form ready for home assembly.

**RECORD STORAGE CUBE** £45 EACH

**SIX CUBES FOR THE PRICE OF FIVE £225.00**

**EIGHT CUBES FOR THE PRICE OF SEVEN £315.00**

**ANTI-STATIC RECORD SLEEVES**

Translucent sleeves, treated to reduce static and dust attraction, supplied in packs of fifty. They will fit inside ordinary printed inners.

**LP SLEEVES (50) PRICE £8.15**

**SOUND SWIVEL**

A rotating, upright, double-sided, storage cabinet with space for up to 160 Compact Discs, including 8 double jewel-cases. Mounted on an all-steel turntable, it swivels smoothly through 360 degrees giving easy access to the storage compartments either side. Manufactured in durable MDF with a Black Ash effect finish, the Sound swivel comes packed for self assembly with full instructions.

**SOUND SWIVEL £49.95**

**BUG AUDIO**

A fascinating little device no larger than a hand-held remote which allows the user to adjust bias on any cassette deck perfectly for any tape. You can check the state of your cables and connections with it, too! Supplied with a cassette test tape and full instructions. (See review, Nov. 1992 issue.)

**BUG AUDIO £59.99**

**GOLD-PLATED SPEAKER CABLE CONNECTORS £10.00**

**GOLD PLATED 4MM BANANA PLUGS £10.00**
Announcing . . . the Elektra Integrated & Eos Power Amplifiers

ELEKTRA INTEGRATED £999
EOS POWER AMP £899
TITAN MAINS FILTER £125
SILVER INTERCONNECT AND DIGITAL CABLES FROM £75
SILVER SPEAKER CABLES FROM £25 per m

Worldwide sales agents

KRONOS DISTRIBUTION
35 Farlough Road • Newmills
Dungannon • N. Ireland
Tel. 0868 748632
Fax. 0868 748281

KRONOS
Extraordinary hi-fi for ordinary people.
That would sum up our approach to how we choose the products that we import and distribute.


Style. character. top class performance and value for money: another way to sum

PUTTING THE GROOVE BACK INTO MUSIC

For more information, contact Kronos on: 08687-48632
BRITISH MADE

*****Rated interconnects and speaker cables are available from your local specialist dealer.

STOP PRESS STOP PRESS STOP PRESS.

"Talk 3's great sound quality and value for money"
(Dec '92 WHAT HI-FI?)
Can now be obtained in a convenient bi-wire format at £4.50 per metre.

Please telephone 0483-750667 Fax 0344-360866
For Further Information

- ALSO ACOUSTIC FOAM TILES -

DEMONSTRATION BY APPOINTMENT ADVICE ANYTIME ON:

WESTWOOD & MASON
EX DEMONSTRATION BARGAINS

LOUDSPEAKERS PAIRS
TANNOY DEFINITION 700 £1300.00
REGA XEL £699.00
KEF Q50 £299.00
ROYD MINSTREL £199.00
REGA ELA £320.00
SOLID CENTRALE (single) £99.00
MA MONITOR ONE GOLD £149.00
TDI NEAR FIELD MONITOR £799.00
MISSION 752 £4250.00

AMPS
AURA VA100 EVOLUTION £239.00
AURA VARO £199.00
DENON PMA 450 SE £179.00

PRE AMPS
NAIM NAC 52 £1395.00
QUAD 66 £339.00

TUNERS
QUAD FM66 £399.00
REGA THE RADIO £159.00

TURNTABLES
PROJECT POINT FIVE £129.00

SECOND HAND
QUAD 306 £250.00
NAKAMICHI BX125E £250.00
NAIM NAC 32 (old) £100.00

MISC
SENNHEISER HD560I £299.00
SENNHEISER HD580 £319.00
GOLDRING EROICA (unboxed) £69.00
LINN ISOBARIK stands £29.00

WE STOCK: ARCAM, AURA, DENON, EPOS, KEF, MARANTZ, MISSION, NAIM, NAKAMICHI, QUAD, PROJECT, REGA, ROYD, TANNOY, TDL, YAMAHA.

WESTWOO & MASON (OXFORD) LTD
46 GEORGE ST
OXFORD

OPEN 10.00AM TO 5.00PM
CLOSED THURSDAY
TEL 01865 247783

REFRESHINGLY DIFFERENT

the powerplant

CYRUS, REGA and ARCAM products now on demonstration
Rossian, Micromega, Audiolab, Rega, Arcam, Auro, ATC, Exposure, Marantz, Ruark, Epos, Thiel and other fine equipment

66 Upper North Street Brighton 0273 775978
AMADEUS

AURA, AUDIO INNOVATIONS, BANG & OLUFSEN, CASTLE ACOUSTICS, MICROMEGA, MUSICAL FIDELITY, NAKAMICHI, NAD, PIONEER, QUAD, ROYD, SPENDOR, TECHNICS.

10 BOLDMERE ROAD
SUTTON COLDFIELD
WEST MIDLANDS
Tel: 021 - 354 2311

Interest Free Credit Facilities

Demo room with A/V system set-up.

SALE•SALE•SALE•

IAN HARRISON HI-FI
TEL: 0283 702875

CARTRIDGES

I SUPPLY: AUDIO TECHNIQUA, ORTOFON, DENON, DYNAVICTOR, SHURE, GOLDWIN ARCAM & STANTON. TRADE IN YOUR OLD KOSING, COLES, ANY NAME, ANY CONDITION AND SAVE UP TO 45% OFF THE NORMAL SECOND PRICE! NO OLD MOVING COILS DON'T WORRY, JUST PHONE.

HI FI FURNITURE

I SUPPLY: APOLLO, SOUND-ORGANISATION, SOUND FACTORY, TRIPOL, SOUNDSTYLE, OTHER.

PLEASE PHONE OR WRITE FOR BROCHURES & PRICES

TEST CASSETTES AND CDs

I SUPPLY MY OWN REAL TIME, INDIVIDUALLY MASTERED RANGE OF AUDIO TEST CASSETTES FROM £20.

THE MULTI-PURPOSE TEST CASSETTE TESTS:
DOLBY LEVEL, AZIMUTH, REPLAY FREQUENCY RESPONSE (3CH/15KH), DOLBY B C TRACKING & TAPE SPEED AVAILABLE IN 12, 16 & 19UM VERSIONS. £20 POST FREE.

I AM ALSO SUPPLY DENON TEST CD'S INCLUDING THE AUDIO TECHNICAL TEST CD. £20 POST FREE.

BLANK TAPES & ACCESSORIES

I SUPPLY TDK, MAX-I VLL, SONY, "VC. SCOTCH, AMPEX, BASF, LIONICA, PANASONIC, FJL. DISC WASHING, AUDIOTECHNICA, GOLDINGER.

PLEASE NOTE:

ALL GOODS ARE BRAND NEW WITH FULL U.K. GUARANTEES.
NO EX-DEM EQUIPMENT. INSURED DELIVERY IS £5.
CARTRIDGES ARE POST FREE. PLEASE PHONE PRIOR TO ORDERING TO CONFIRM PRICE & AVAILABILITY.

MAIL ORDER FROM: IAN HARRISON HI-FI.
7 MILL HILL, REPTON, DERBY, DE6 6GQ.
TEL: 0283 702875 9am-9pm.

ABERDEEN

* Single Room Demonstrations available.
* Full Service Department
* Free Delivery and Installation anywhere in Scotland

Authorised dealer for:- Linn, Chord, Proac, Mordaunt Short, Audio Research, Sonus Faber

42 St Andrew Street, Aberdeen
Tel/Fax 0224 - 625635

Richard's Audio Visual

Stockists of Arcam, Audio Innovations, Audioquest, Aura, Beyer, B&W, Bose, Celestion, Cyrus Denon, Marantz, Mission, Moth

Musical Fidelity, Nakamichi, Ortofon Pioneer, Pro-ject, Rotel, Royd, Ruark Sennheiser, Systemdek, Target, Thorens Van den Hul & more!

Expert friendly service: Listening room Pioneer Reference Point
4 Greyfriars, Bedford

Tel: 0234 365165
**DYNAMICS**

**HIGH END AUDIO BOUGHT/SOLD EXCHANGED**

**SALE LIST**

MARK LEVINSON MLT PREAMP, £1,995
H PARAMETERS W/STANDS & ARM, MINT £1,295
MERION 65X TRANSPORT & DAC 7.1 AT EM, EX/DEMO £2,995
CHORD CARY 170E, CD PLAYER HEAVY MODIFIED £1,500
MASSIVE POWER SUPPLY, SUPER £1,295
EDEN £1,995
AUDIO RESEARCH REFERENCE PREAMP BLACK, £1,995
PREF IFS C2 PREAMPS, CHROME, MINT £3,495
CARY CAD 605B PREAMP & PROCESSOR DAC £1,995
COUNTERPOINT 61L DAC & DAC PREAMP £1,495
INTEGRAL S3 DAC & DAC PREAMP £2,250

**NEW IN THIS MONTH**

AURAL RESEARCH SP-7 PREAMP BLACK, £1,995
MUSICAL RENDITION FP-7 PREAMP £1,995
AHUJA CE-607, £1,995
REUEST EXPANDER REFERENCE DAC BALANCED, MINT £7,495
DYNACORD ADDER REF 2 SPEAKERS, STANDS CANK £1,995
B&K INACTIVE 2 SPEAKERS CANK & STANDS £1,995
B&K MARK II PREAMP & DAC ¥, £1,495
AUDIOTECHNS 65L PREAMP CHROME, MINT £7,495
ROKSAN DPI CD TRANSPORT £1,995
CABERNE SKIFF SPEAKERS WALNUT, £1,200

**MARTIN LOGAN MONO LINTH SPAKERS OAK MINT**
**SNELL TYPE C SPEAKERS WALNUT MINT**
**DYE/AUDIO FACESTE SPEAKERS CHERRYWOOD VGC**
**AIRTUNGENT AUTO AIR BEARING ARM MINT**

**OODLES OF HIGH END CARTRIDGES AVAILABLE RING FOR DETAILS**

**MARTIN LOGAN AERIUS SPEAKERS BLACK MINT.**
**CITATION 18 TUNER ORIGINAL AMERICAN VG.**
**POSSELT ALBATROSS SPEAKERS PIANO BLACK MINT.**
**ROWLAND MODEL 3 MONOS POWER AMP BALANCED MINT.**
**MUSICAL FIDELITY MVT 3 PREAMP MINT.**
**AUDIO INNOVATIONS 800 PRE 8 POWER MODIFIED VGC.**
**APPOGEE DAV DT/NATURE 8 DAS CROSSOVER MINT.**
**CONRAD JOHNSON PREMIER 4C VALVE PREAMP MINT.**
**£2 PREMIER 4 POWER AMP.**
**LYNX PULSAR PRE 8 POWER AMPS MINT.**
**CONRAD JOHNSON PREMIER 3C VALVE PREAMP MINT.**
**CONCORDANT IIXHILARANT VALVE PREAMP MINT.**
**ENLIGHTENED AUDIO DSP100 DAC MINT.**
**ROKSAN DPI CD TRANSPORT MINT.**
**BURMESTER 846 LINE PREAMP CHROME BALANCED MINT.**
**AUDIO RESEARCH 5024 PREAMP BLACK MINT.**
**CABSE SKIFF SPEAKERS WALNUT MINT. £ 1,200**
**CABSE IROISE MC SPEAKERS CHERRYWOOD MINT. £ 1,995**
**AUDIO RESEARCH M300 MAS VALVE MONO AMPS MINT £ 4,995**
**MERIDIAN M30 ACTIVE SPEAKERS STANDS MINT. £ 595**
**CHORD 1200 POWER AMP MINT £ 1,995**
**MERIDIAN 200 MAS CD TRANSPORT 263 SIGMA DAC MINT. £ 895**
**ORACLE DELPHI MK3 URNTABLE SME.**
**SUMO ARAS SPEAKERS OAK V.G.0 £ 1.495**
**CARY 3006 VALVE MONO POWER AMPS 40 WATT TRIODE £ 2,995**
**CARY 283 VALVE POWER AMP 15 WATT TRIODE MINT £ 895**
**MERIDIAN 601 DSP PRE AMP BALANCED MINT £ 1.995**
**QUICKSILVER PRE AMP MINT £ 1,250**
**MARANTZ LEE CD PLAYER LTD EDITION BALANCED £ 1,55495**
**EQUATION ZERO SPEAKERS PIANO BLACK MINT £ 695**
**AUDIOPLAN KOWTRAST 2 SPEAKERS ROSEWOOD MINT £ 1,595**
**GENESIS 8300 SPEAKERS 8 STANDS PIANO BLACK MINT £ 1,395**
**CELLO AMATI SPEAKERS TWIN MOUNTED PAIR IN OAK ON**
**ACOUSTIC ENERGY AE3 SPEAKERS 8 STANDS MINT £ 995**
**DYNAUDIO CONSEQUENCE SPEAKERS FLAGSHIP MODEL IN**
**OCTAVE RESEARCH ORI POWER AMP. V.G.C. £ 1.795**

**IN STOCK, EFFICIENT SERVICING DEPARTMENT, WE ARE LOCATED IN WELWYN, HERTS**

**P魔鬼.**

**0379 740227 OR 0850 983233**

**Tuesday to Friday, 12 to 9 pm**

**Saturday 9 to 5 pm**

**PLEASE RING FOR AN APPOINTMENT**

**AUDIOTHERAPY**

**HI-FI SPECIALISTS**

**LINN, NAIM, CREEK, YAMAHA, ROTEL, NAKAMICHI, MORDAUNT-SHORT, A&R, DUAL, REGA, NAD, JPW SHAHINIAN, DYNAVECTOR and many more....**

**12 SHAW ROAD OLDHAM**

**TEL: 061-633 2602**

---

The NORFOLK/SUFFOLK High End Dealer

audible difference near DISS, NORFOLK

Audio Research Audion (Alema)
ATC Audio Innovations
AVI CHORD
Croft DAWN AUDIO
EAR Impulse
Lineaum Lyra
Magnepan Micromega
Orelle Pink Triangle
Sumiko SME
SUGDEN Tube Technology

ART Audio
Audio Note
Copland
dpa

Kinshaw Perception
LDI Audio

neat

ROKSAN
Sonus Faber
van den Hul
I found that, as it had done last year, the stand offered a sound that was characterised by its lack of intrusive character. On the Slate Stand, speakers seemed to shake off unmusical, unnatural qualities that were audible on other stands. I noticed this lack of added colour particularly with female vocal music. Voices had openness and a tangibility that reinforced their communicative qualities. Singers appeared more expressive and technically more impressive. Last year, I remarked upon the stand’s cleanliness and lack of clutter and nowhere was this better demonstrated than on the Annie Golden and Frank Carillo CD which can appear far less polished on a system whose set-up is below par. The Slate stand’s ability to refine a speaker’s presentation was evident even with the Mordaunt-Shon MS10, for which it’s not ideal. Golden’s taxing voice and Carillo’s acoustic guitar both stand out with striking verve yet neither approached coarseness, nor did they fall short of refinement. The stand’s sonic transparency and musical fluency are partly a function of its excellent control at the frequency extremes. The Slate allows bass lines to thunder without wallowing, and treble to sing without zing. Having lived with, and appreciated, a pair for a year now I’m not going to do what I did last year and allow their cost to stop them obtaining a Recommended flag.

VERDICT: The Slate stand is unusual and expensive. But if you’re after an exceedingly neutral stand it’s the leading contender. This stand offers an exceptionally neutral platform for speakers: highly transparent sound leads to musical performances with real insight.

SOUND QUALITY: ☑️ ☑️ ☑️ ☑️ ☑️

47 GEMINI CLOSE, LEIGHTON BUZZARD, BEDS, LU7 8UD. TEL: 0525 384174
WHY WAIT A LIFETIME BEFORE YOU SEE & HEAR

AND BUY YOUR QUAD EQUIPMENT

CALL IN NOW FOR YOUR IMMEDIATE DEMONSTRATION

35 SOUTH STREET
EASTBOURNE
0323 731755

JOIN CD EXPRESS
MUSIC CLUB AND BUY ALL YOUR COMPACT DISCS AT TRADE PRICE !!!

NO COMMITMENTS  NO RESTRICTIONS

TYPICAL FULL PRICE CD
CD EXPRESS £9.30
Mail Order £7.99

TYPICAL MID PRICE CD
CD EXPRESS £5.70
Mail Order £4.99

TYPICAL BOX SET PRICE
CD EXPRESS £14.99
Mail Order £12.99

Why are we the Fastest Growing CD Club in Europe?

Run by Musicians who CARE about the price of CDs.
All UK CDs (not just chart product) at GENUINE TRADE PRICE.
We trace the titles you want - FREE LISTS (24000 + Titles)
Access to our Trade Database of millions of titles
NO GIMMICKS, NO CATCHES - Just a RADICALLY GOOD DEAL!

0532 351865
RING NOW FOR FREE INFOPACK

OR FAX US ON 0532 359941
CREATIVE AUDIO

Shropshire's Hi-Fi Specialists
-the best is now within easy reach

- Friendly, experienced staff
- Comfortable listening room
- Expert installation
- Interest Free credit
- Part exchange welcome
- Selected used and ex-demo equipment
- Home Cinema

Ring us for your free Creative Audio
Information Pack
Creative Audio,
9 Dogpole, Shrewsbury, SY1 1EN
Tel: (01743) 241924

Hi-Fi specialists

- PUTTING THE PIECES TOGETHER
**COMPACT DISC PLAYERS**

- **NAD 501** £180
  - A break from the MASH tradition, the Philips powered 501 gives excellent results.
  - Apr'94
- **ROTEL RCD965 DIS** £350
  - A smooth and easy sound make this one of the best value players around.
  - Jan'94
- **QUAD 67** £790
  - A new breed of Quad. Lacking nothing in verve or excitement.
  - May'93
- **SUGDEN SDT I** £850
  - Airy and spacious with a rare quality of ambience.
  - Mar'93
- **NAIM CDI** £1598
  - Single box, 16 bit player. Close to the two box CDS, has vital 'tingle factor'.
  - Apr'92

**COMPACT DISC TRANSPORTS**

- **ARCAM DELTA 250** £750
  - Transport with sync-lock facility. Good partner to BB50
  - May'94
- **DPA DIGITAL T-I** £795
  - Superbly detailed sounding transport when sync-locked to DPA's converters.
  - Jan'93
- **ORELLE CD 10-T** £799
  - 'Analogue' sounding converter, best with matching transport.
  - Feb'94

**DIGITAL TO ANALOGUE CONVERTERS**

- **DACULA** £376
  - This little devil from Select Systems really gets its fangs into the music.
  - Dec'93
- **DPA LITTLE BIT II** £450
  - Clean and confident sound with good resolution and focus.
  - May'94
- **ORELLE DA-180** £599
  - Pure sound, smooth and free from hardness. One of the best at any price.
  - Jul'93
- **P. T. ORDINAL** £695
  - Pink Triangle's own one bit DAC reaches new standards in digital. One of the very best.
  - Mar'92
- **P. T. DA CAPO** £1450+
  - Even better with DC supply and new filter options.
  - Oct'92

**TURNTABLES**

- **SYSTEMDEKI I/DX900** £230
  - £330 with RB250 tonearm. A fine all-rounder and easy to upgrade. Neutral character.
  - Sep'94
- **PRO-JECT 6.1** £435
  - Complete with Ortofon MC15 Super and can even play 78s for an optional £10.
  - Sep'94
- **TOWNSEND ROYK III** £799
  - The MkII has a fabulously stable, solid image and terrific bass.
  - Feb'94
- **P. T. ANNIVERSARY** £1200
  - Very neutral turntable. Excellent imagery and detail.
  - May'92
- **SME MODEL 20** £2495
  - The last great turntable, bettered only by the £11,000 Model 30.
  - Oct'92

**TONEARMS**

- **REGA RB 300** £139
  - Simple and superb; dynamic with solid bass.
  - Various
- **SME 309** £568
  - Based on IV and V: Aluminium armtube and detachable headshell.
  - Jan'93
- **SME IV** £850
  - Loses little to the fabulous V, possibly the best value for money SME.
  - Dec'93
- **SME SERIES V** £1232
  - A masterpiece of precision engineering, with a cohesive sound.
  - May'92

**CARTRIDGES**

- **ORTOFON VMS-2E** £10
  - Warm, full bodied, punchy, fast, good tracking - what else can you get for a tenner.
  - Nov'94
- **GOLDRING 1012 GX** £60
  - Rounded bass, slightly forward midband, clean transients. A bargain.
  - Jul'93
- **GOLDRING 1022GX** £80
  - Extra degree of dynamic range and speed over the 1012GX.
  - Jul'93
- **GOLDRING 1042** £100
  - A reference to all other MMs regardless of price.
  - May'92
- **ORTOFON SUPREMES** £225-450
  - The MC10, 20, & 30 Supremes offer superb sound and value for money.
  - July'94
- **LINN KLYDE** £450
  - Soft treble, but a stonkingly good cartridge.
  - June'94
- **ORTOFON MC2000** £650
  - We came across this one by accident, used on a Garrard 401 with an SME IV it gave one of the best results we've ever heard.
  - Dec'93
- **ORTOFON MC7500** £2000
  - The best MC available? Produces real-life scale of music.
  - May'94

**CASSETTE RECORDERS**

- **AIWA AD-F850** £230
  - Fine recording quality and good playback. A real bargain.
  - July'94
- **NAKAMICHI DR2** £500
  - Worth every penny, pushes recordings to the limit and remains unflustered.
  - Feb'94
- **NAKAMICHI DR1** £780
  - Nakamichi sound quality, and manual head azimuth adjustment.
  - Jun'93
- **NAKAMICHI CR-7** £1500
  - No Dolby 'S', but auto tape tuning and motorised head. The Best!
  - Aug'92

**TUNERS**

- **NAD 402** £160
  - Stunning budget tuner, with a warm and open sound. Can compete with the best.
  - Jan'94
- **MISSION CYRUS FM7** £299
  - Clear and lucid sound. One of the best, regardless of price.
  - Apr'94
- **QUAD 66FM** £490
  - Among the very best in terms of tonal colour and imagery. Remote controllable.
  - Nov'92
- **NAIM NAT 03** £500
  - Warm and easy sound with a good sense of atmosphere. Good value.
  - Sep'93
World favourites

NAIM NAT 01 £1377
BURMESTER 931 £4347

The best solid state tuner currently available. For better radio, live in the studio! Super high-end tuner with a super high-end sound. Exceptional clarity and detail. Mar'92

INTEGRATED AMPLIFIERS

NAD 302 £160
PIONEER A-300X £200
DENON PMA-3500I £220
ARCAM ALPHA 5 £230
ROTEL RA968BXII £325
AUDIOLAB 8000A £430
MISSION CYRUS II £499
STEMFOORT SF60 £549
SUGDEN A21a £639
AUDIONOTE OTO SE £1500

Lots of insight and detail, but could sound a little rough in the wrong system. Jan 93
Exceptionally sweet mid and treble, plus the superb dynamic range of the A400. Dec'92
Powerful and with deep rhythmic bass drive. Sep'93
Lots of life and energy, a good phono stage too. June'94
Suits a wide range of music always sounding confident and open. May'94
Very neutral and superbly built. Good bass, great imagery, but can be sterile. Apr'92
Superb engineering, a solid cast chassis and a clear and spacious sound. Apr'94
Excell lent bass drive and fine midband presence, powerful too. Sep'94
Class A transistor amp. Sharp, crisp, deep, tight, and it images well too. Feb'94
10 watts of the sweetest sound around. Use sensitive speakers though. Aug'94

PRE-AMPLIFIERS

ROTEL RQ-970B £130
EAR34P £290
A. Innovations. L 1 £299
A. SYNTH. PASSION £475
ROSE RV23-5 £495
DPA DSP 200S £495
MICHELL ISO/HERA £528
MICHELL ISO HR £850
NAIM NAC82 £1945

Audiophile quality components and sound with a bargain basement price tag. Nov'94
MM/MC phono stage. Uses valves to create a rich, sweet sound with tremendous depth. Oct'94
Valve line level preamplifier. Outstanding results with vdh carbon interconnect. Dec'94
Or £275 for the kit version. Unrivaled transparency from a passive pre-amp. Oct'94
Valve/Transistor hybrid. Smooth and clean, rich and spacious. Nov'93
Not quite the 50S, but there's still nothing to match it at the price. Jun'93
Fine midband and treble detail and taut bass from this MC only phono amplifier. Oct'94
Impossible not to recommend. What more does your vinyl want? May'93
Remote control preamp. The NAC82 thrusts detail forwards in true Naim fashion. Apr'94

POWER AMPLIFIERS

ROSE RP-190 £495
SUGDEN AU41P £530
QUAD 606 £675
DPA DPA 200S £750
NAIM NAP180 £898
MICHELL ALECTO (S) £1300
MICHELL ALECTOS £1800
CHORD SPM 1200 £2995

Used with the Rose pre-amp it gives 70 watts of smooth relaxing sound. Nov'93
100 Watts of smooth, detailed, full bodied sound. And at a bargain price. Apr'93
140W powerhouse. Smooth and civilized, with the legendary Quad back-up. Aug'93
Not as cold as the 50S. Better than anything else at the price. July'93
Partner to NAC82. Has real drive and grip on loudspeakers. Apr'94
Valve like transparency, big warm easy going sound. Sep'93
The Alectos have a lucidity and three dimensional realism that is rarely attained. Dec'92
Massively powerful, dynamic and detailed sound. Among the best of solid state. Mar'93

LOUDSPEAKERS

GLL MAXIM £120
MISSION 760SE £150
HARMAN LS 0300 £200
TDL RTL 2 £250
SYSTEMDEK 931 £330
HARBETH HL-4P £479
ROGERS LS8a/2 £499
REL STRATA £499
MISSION 752 £500
H'BROOK QUARTET £555
CASTLE CHESTER £600
SYSTEMDEK 937 £600
TANNOY DI100 £650
PROAC Studio 100 £699
SPENDOR SP2/3 £769
UKD CAILLS £850
SPENDOR SP3/1 £890
TANNOY D700s £1970
QUAD ESL63 £3228

Replacing the Maxim 3; not as tight in the bass but still one of the best at the price. Aug'93
One of the best miniatures around, very musically involving. Jan'94
Glass fibre woofer gives a forward and open mid with good bass kick. Nov'93
Bass on a budget. Solid, vibrant and spacious sound. Dec'93
Coherent and involving, these little gems really sing. Super value mini monitor. Nov'94
Neutral and revealing sound that produces a fine, cohesive performance. Nov'94
Big, enjoyable, room filling sound from this 2-way floorstander. Feb'94
Ref's Strata offers excellent bass depth and power. Mar'94
Using High Definition Aerogel drive units the 752s are clear, crisp and focused. Oct'94
Sensitive enough to work with low power valve amps. Fast and detailed sound. Jul'93
Good solid sound and beautiful finish. 1/4 wave bass bading. May'94
Transmission line floorstander that won't offend. May'94
Believable 3D images produced by this small dual concentric speaker. Jan'94
Excellent monitors with detailed, natural sound and plenty of atmosphere Feb'94
Smooth sounding speaker with a superb mid-range. Very easy to listen to. Feb'94
Powerful bass and high quality sound from a solid wood miniature. Aug'94
Beautifully built and finished. Superb midrange and treble detail and clarity. Nov'94
Dynamic and powerful. Needs a good clean power amplifier for best results. Sep'93
A reference to all others, superb imaging qualities and transparent sound. Various
Hi-Fi Confidential Can Reveal All

Under our magnifying glass goes the fine range of audio equipment that we stock, ensuring you the customer, a purchase of the best value and best sounding products to match your given budget.

To make your important buying decision even easier, we offer Home Demonstrations, Part Exchange, Interest Free Credit, Home Installation and a Three Year Warranty on selected products. Relax in our demonstration room as experienced staff guide you through your individual requirements, be it digital, analogue, loudspeaker, amplification, or just plain old friendly advice. Just 1 minute's walk from Victoria mainline station and open until 9 pm on Thursday.

Hi-Fi Confidential welcomes you.

Enjoy the Magic of Valves

The Audio Room & Pure Sound

A Huge Range!

Come and listen to the following famous brand names of quality hi-fi equipment at our listening rooms:

Amplifiers
- Arion Acoustics
- Audio Innovations
- Audio Note
- C.A.T.
- Credo
- Kinshaw
- Lumley Reference
- Triangle
- YBA

Loudspeakers
- Audio Note
- Impulse
- Lumley Monitor
- Townshend
- Triangle
- Credo

CD Players
- Audio Note DACs
- Counterpoint
- Kinshaw DACs
- Kreatura
- Mephisto
- Micromega

For example, the great new Lumley ST40 40 watt push-pull valve amp is here, as are the latest ST70 and M120s, together with the pre-amps, active line and phono, and passive line level. The brand new 300B triode single ended design from Audio Note, the Meishu is also with us, we think the only permanent demonstration one in the UK. - A fabulous addition to the Audio Note Range. The Lumley Monitor speakers are superb-accurate and dynamic and they're here too. Just phone to book your audition!

We've also got heaps of ex-demo and used bargains - call us for details!

0784 458176 / 081 893 4485

Pure Sound + The Audio Room, Whitton, Twickenham and Staines. Personal service, home demonstrations, excellent hi-fi
**Valves Mostly UK. Oil Filled Chokes**

<table>
<thead>
<tr>
<th>Type</th>
<th>Price Type</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>DA100 GEC</td>
<td>POA</td>
<td>£25</td>
</tr>
<tr>
<td>PX25 MARCONI</td>
<td>POA</td>
<td>£30</td>
</tr>
<tr>
<td>KT61 GEC</td>
<td>£35</td>
<td>£10</td>
</tr>
<tr>
<td>KT66 GEC</td>
<td>£65</td>
<td>£15</td>
</tr>
<tr>
<td>KT88 GEC</td>
<td>£85</td>
<td>£25</td>
</tr>
<tr>
<td>GZ34 MULL</td>
<td>£10</td>
<td>£12</td>
</tr>
<tr>
<td>EL34 MULL</td>
<td>£25</td>
<td>£12</td>
</tr>
<tr>
<td>EF86 MULL</td>
<td>£6</td>
<td>£12</td>
</tr>
<tr>
<td>ECC81 MULL</td>
<td>£5</td>
<td>£20</td>
</tr>
<tr>
<td>ECC82 MULL</td>
<td>£5</td>
<td>£12</td>
</tr>
<tr>
<td>ECC83 MULL</td>
<td>£10</td>
<td>£12</td>
</tr>
<tr>
<td>5R4GY</td>
<td>£4</td>
<td>£15</td>
</tr>
<tr>
<td>6080</td>
<td>£5</td>
<td>£10</td>
</tr>
<tr>
<td>GZ37</td>
<td>£4</td>
<td>£12</td>
</tr>
<tr>
<td>EL84 MAZDA</td>
<td>£4</td>
<td>£20</td>
</tr>
<tr>
<td>A2900 GEC</td>
<td>£20</td>
<td>£15</td>
</tr>
<tr>
<td>5SN7 GT</td>
<td>£4</td>
<td>£30</td>
</tr>
<tr>
<td>U19 RECT</td>
<td>£10</td>
<td>£30</td>
</tr>
<tr>
<td>6X4 RECT</td>
<td>£3</td>
<td>£30</td>
</tr>
<tr>
<td>6L6</td>
<td>£10</td>
<td></td>
</tr>
<tr>
<td>4212E STC</td>
<td>£100</td>
<td></td>
</tr>
</tbody>
</table>

**Varnished Chokes**

<table>
<thead>
<tr>
<th>Type</th>
<th>Price Type</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>10H 75mA</td>
<td>POA</td>
<td>£10</td>
</tr>
<tr>
<td>3H 40mA</td>
<td>£10</td>
<td></td>
</tr>
<tr>
<td>9H 240mA</td>
<td>£25</td>
<td></td>
</tr>
<tr>
<td>5H 430mA</td>
<td>£25</td>
<td></td>
</tr>
<tr>
<td>5H 350mA</td>
<td>£25</td>
<td></td>
</tr>
</tbody>
</table>

**Oil Filled Paper Capacitors**

- 1 MFD 600V: £6
- 2 MFD 600V: £6
- 4 MFD 600V: £8
- 8 MFD 600V: £10
- 8 MFD 800V: £12
- 8 MFD 1000V: £12
- 0.5 MFD 1000V: £12
- 0.5 MFD 5000V: £15
- 12 MFD 350V: £15
- 1 MFD 2500V: £15
- 0.25 MFD 1000V: £15
- 2 MFD 1500V: £15
- 8 MFD 1500V: £30
- 8 MFD 2500V: £30
- 4 MFD 1000V: £12
- 4 MFD 800V: £12

**Oil Filled H.T Transformers**

- Primary: £6
- Secondary: £6

<table>
<thead>
<tr>
<th>Type</th>
<th>Price Type</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>115/230V</td>
<td>1250-0-1250V</td>
<td>£35.00</td>
</tr>
<tr>
<td></td>
<td>750/700-0-725/700</td>
<td>£35.00</td>
</tr>
<tr>
<td></td>
<td>4.0V 100MA</td>
<td>£10</td>
</tr>
<tr>
<td></td>
<td>180-0-180</td>
<td>£15</td>
</tr>
<tr>
<td></td>
<td>300-0-300</td>
<td>£15</td>
</tr>
<tr>
<td></td>
<td>6.3V 6A</td>
<td>£20.00</td>
</tr>
<tr>
<td></td>
<td>300/250-0-250/300</td>
<td>£30.00</td>
</tr>
<tr>
<td></td>
<td>6.3V 2A</td>
<td>£37.00</td>
</tr>
<tr>
<td></td>
<td>6.3V 6A</td>
<td>£20.00</td>
</tr>
</tbody>
</table>

**Oil Filled Heater Transformers**

- Primary: £8
- Secondary: £8

<table>
<thead>
<tr>
<th>Type</th>
<th>Price Type</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>115/230V</td>
<td>6.4V 3A x2</td>
<td>£40</td>
</tr>
<tr>
<td></td>
<td>3A x4</td>
<td>£40.00</td>
</tr>
<tr>
<td></td>
<td>10V 65MA</td>
<td>£15.00</td>
</tr>
<tr>
<td></td>
<td>26V 650MA</td>
<td>£15.00</td>
</tr>
<tr>
<td></td>
<td>2A x 4</td>
<td>£15.00</td>
</tr>
<tr>
<td></td>
<td>6.4V 5A x 3</td>
<td>£20.00</td>
</tr>
</tbody>
</table>

**Contact**

RICHARD DAWSON
CRAWLEY AUDIO
1 SILKIN DALTON CLOSE
BROADFIELD CRAWLEY
W. SUSSEX
TEL/FAX 01293 531190
MOB 0860 911640

**Contact**

JEFF PAYNTER
Panel Speaker & Subwoofer Specialist
HORSHAM HIFI
28 QUEENSWAY
HORSHAM
W. SUSSEX
TEL/FAX 01403 251587
MOB 0831 418619

All items in this advert are made to mill spec.
Oxford Audio Consultants

HI-FI SPECIALISTS

Our superb service is the same, regardless of price.

AUDIO RESEARCH LS7/VT60

At last a combination at an affordable price! Quite sensational sound quality to boot!

NOW DEMONSTRATING

AUDIO RESEARCH CD/CDT 1
AUDIO ALCHEMY DAC IN THE BOX - staggering sound for £195.55
MICROMECA STAGE - the new concept in upgradability
ORELLE CD70 - a serious British competitor to the ARCAM
PINK TRIANGLE DA CAPO - NOW IN STOCK
THETA DATA BASIC GEN. V - real high end
TEAC VRDS 10/200 AND 202 BOX SYSTEM
SME 20 - the best engineering with superb sonics
PROJECT TURNTABLES - value for money
LYRA CLAVIS Mk 2 - even better and only £195
KINGSMAN PERCEPTION PHONO STAGE
AUDIO INNOVATIONS ALTO - lovely sound and styling
COPLAND CISA 14 - bargain of the century!

DPA 200 SERIES PRE/POWER
KRELL KCRKRC 2 preamps with the latest 5 SERIES power amps - seriously high end
- wait till you see the new KPS digital series
MUSICAL FIDELITY F SERIES - very, very good value
HELYBOOK SEKET/QUARTET - very room friendly
MARTIN LOGAN AERIUS - magic looks and sound
QUAD ESL 63 - we are now main agents for the complete range of QUAD
REL STRATA AND STADIUM SUBWOOFERS
RUARK EQUINOX - furniture for the living room
SONUS FABER - no apologies!! these are our favourites
DENON 100 VS/100 - mini size components available separately
BOSHE LIFESTYLE SYSTEM - almost invisible hi-fi!

EX DEM & P/EX BARGAINS

KRELL KS200D POWER AMP £2495
MAGNEPLANAR SIGMA £395
MAGNEPLANAR SIGMA EX DEM £395
APOSTOE DUETTA SIGNATURES (TAUPE) MINT £1995
LAMOUR SIGNATURE HEADPHONES ONLY £350
AUDIO RESEARCH LS23 PREAMP BLACK £1795
QUAD CD PLAYER £350
REGA PLANAR 2 £150
ROKSAN TABRI2 1 ARM/ACORUS BLACK £195
ACOUSTIC ENERGY AE ROSEWOOD WITH STANDS £750
ORACLE DELPHI MKIIIEE £1995
AKG K1000 HEADPHONES £250
PROCEED PCD 3 CD PLAYER EX DEM £2195
PIONEER CDJ 1000 LASERDISC PLAYER £2475
NAIM 325/4CAP202 £950
KRELL KR2 £3195
MUSICAL FIDELITY PREA PREAMP £195
AUDIO RESEARCH V70 EX DEM £2995
KRELL CD DSP CD PLAYER EX DEM £2995
THETA DS PRO PRIME £895

Please ask for details or our current list


OXFORD AUDIO CONSULTANTS

Oxford Audio Consultants, Canley House, Park End Street OX1 1JE
Telephone: Oxford (0865) 710879 Facsimile: Oxford (0865) 791665

We are stockists of the leading Hi-Fi brands

HOME CINEMA SPECIALISTS

ARCAM • AURA • B&W • DENON • KEF • KENWOOD • MARANTZ • MISSION • MONITOR AUDIO • MORDAUNT-SHORT • NAD • NAKAMICHI • ONKYO • PANASONIC • PIONEER • TANNOY • TDL • TECHNICS • ROTEL • YAMAHA

INTEREST FREE (0% FINANCE) ON EVERYTHING OVER £300

PLUS - We have a demonstration Room & Full Service Facilities

All major credit cards accepted.

- MAIL ORDER • HOME TRIALS •
Monday to Saturday 9.30-5.30
TRANSPORT AND CONV\r\nERT
I currently have a Denon DCD-1520 CD player, Croft Charisma pre-amp, Series X OTL power amp and custom-built speakers using Decca London ribbon horns and Volt eight inch bass units. Interconnect is Kimber PSB with Audioquest F18 speaker cable.

I'm very happy with the overall balance which sounds very open and detailed, but I feel the Denon CD is letting the side down. What would be the best replacement for the CD player? I've short-listed the following: NVA, TES, Roksan, PT. Da Capo (keeping the Denon as transport), Micromega T-Drive/T-DAC.

My budget is around £1,500-£2,000 and musical styles include jazz, female light rock and film soundtrack music. The sound must be detailed with high resolution dynamics. If you have other ideas or advice I would be very grateful.

Marc Helliwell
Exeter, Devon.

The one we use as a reference both for reviewing products and for developing designs for our DIY supplement is the Pink Triangle Da Capo. We have found it gives an exceptionally clear, clean and accurate sound, but conveys enough character to make music involving. Whilst developing the solid state monoblocks and the carbon fibre drive unit KLS-3 loudspeakers we went through many converters and players and all of them, apart from the Da Capo, imparted some character of their own to the sound which was undesirable as far as we were concerned.

The Da Capo has the ability to resolve amazing levels of detail and present it in a natural and informative manner, an ability that only a handful of the convertors we have come across possess. We use the Philips 1307 digital filter, finding it gives a bit more body to the sound than the Yamaha 22-bit filter, which has a cooler presentation. This ability to change filters also makes the Da Capo very versatile, since when new filters are introduced, you can just upgrade, rather than buy a whole new model.

The Da Capo also has a re-clocking circuit, which reduces jitter from whatever transport it is connected to, making the DCD-1520 you have fine as a transport, although it would be worth upgrading to a dedicated transport at a later date. DB

DANCE-HALL DAYS
My query comprises two parts: firstly my system comprises Meridian 200/203 (DAC7), Pioneer A400, TDL Studio Is, bi-wired with silver-plated copper multi-strand cable, with solid-silver multi-strand interconnect (both excellent value from the Maplin catalogue).

While I am essentially happy with the sound, I feel that the bass has perhaps more weight than actual definition and I suspect the amp may be the culprit. If so, would a change to a decent valve amp improve matters? How about one or two of your K588 Is, or would the TDLs be too much for a valve amp to handle? If so, perhaps you could recommend some compatible solid-state amplifiers at around £1,000.

My listening tastes cover most areas except opera and country and western.

The second part of my query is somewhat more unusual, but I hope you can help. My partner (who teaches dance to school children) having experienced real hi-fi at home, would like to achieve a similar level of sound quality in the school hall!

The proposed system will comprise CD player, tape deck (both easily chosen from the budget end of the market), amplifier and speakers. It is the choice of 'speakers and amplifier which concerns me rather, given that they must provide enough music to fill the hall, not to rock concert SPLs, but to a level adequate to accompany a dance performance to an audience of around 150 people.

I'm of the opinion that the finer points of hi-fi may be safely ignored (particularly imaging and soundstage) but I would appreciate any thoughts you may have regarding the use of long 'speaker cables (20m) and the necessary physical size of the enclosures and power output of the amplifier. The size of the hall is approximately 25m long, 20m wide and 12m high.

Ian Jones
Market Harborough, Leicestershire.

Firstly, as far your own system is concerned the Pioneer A400 amplifier, as good as it is, is not

Continued on page 117...
You should be looking for only one kind of Hi-Fi.  

The Best!  

Call me, it's the only kind I deal with.

For the Best...

**Apogee, Audio Research, Classé, Copland, Linaeum, Magnepan, Martin Logan, PS Audio, Sonus Faber, Theta, Van den hul**

And the Best of British...

**DPA, LFD, Michell, Orelle, Pink Triangle**

<table>
<thead>
<tr>
<th><strong>Ex Demo equipment: All Guaranteed.</strong></th>
<th><strong>All World Favourites</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>DPA T1 transport/Bigger Bit was £1590</td>
<td><strong>Phone or fax me:</strong></td>
</tr>
<tr>
<td>DPA 200S pre/power was £1250</td>
<td><strong>0252 - 377952</strong></td>
</tr>
<tr>
<td>Orelle 10T transport/DAC180 was £1400</td>
<td></td>
</tr>
<tr>
<td>Orelle 200 pre/power, mm, mc was £1300</td>
<td></td>
</tr>
<tr>
<td>Orelle Orator speakers was £699</td>
<td><strong>Mobile:</strong></td>
</tr>
<tr>
<td>LFD PA2 power was £1099</td>
<td><strong>0385 - 317952</strong></td>
</tr>
<tr>
<td>Sonus Faber Electa was £1790</td>
<td></td>
</tr>
</tbody>
</table>

**RSP** | **Now**  
---|---  
3,750 | 2,600  
500 | 200  
2000 | 1250  
2250 | 1500  
745 | 575  
1,199 | 899  
400 | 300  
2860 | 2100  
434 | 325  
500 | 250  
1,100 | 899  
400 | 300  
1100 | 899  
1169 | 875  
1099 | 750  
1695 | 1200  
1550 | 1200  
728 | 550  
250 | 1100  
450 | 1200  
1099 | 750  
450 | 1200  
728 | 550  

CARRIAGE FREE ANYWHERE UK. MAIL VISA/ACCESS
the best match for your Studio Is. The A400 has a full sounding bass which gives small budget loudspeakers real punch and apparent bass depth, an area in which your Studio Is certainly don't need any more help. To tame the strong bass of the TDLs and treble of the A400, so something powerful and smooth is the order of the day.

If you want to stay on the safe side of £1000, then your options are limited. The Quad 606, at £675, has the power and is certainly smooth, but I suspect that it may be a little too laid back for your system. The power amps and 'speakers are, by the way, the same items that used to sparkle when fed from a modified Michell Hydraulic Reference turntable, Keith Monks unpivot arm, A&R P77 cartridge, and Haller DH101 pre-amp. Sadly, none of these items are available for re-instatement as they have both expired. Your help in this matter would be very much appreciated. Alan Mildren

Ealing,
London.

If you have made absolutely sure that the cartridge isn't worn out (get a good dealer to check it under a microscope) then I too will assume that the problem is elsewhere. The turntable, Keith Monks Jnipivot arm, A&R P77 cartridge, and Haller DH101 pre-amp. Sadly, none of these items are available for re-instatement as they have both expired. Your help in this matter would be very much appreciated. Best wishes for the future with your erudite publication.

While I was using the Cartridge Man on 081-688-6565, both offer a re-tipping service and may be able to help with repairs, according to what is needed. NK

LACKING SPARKLE

I think I have wrecked my hi-fi system. The sound has certainly improved a lot in recent years, but who stole the sparkle? The overall presentation used to be a lot brighter than it is now - not as solid, but where has the snap gone out of my snare drum? Could it be that I have OD'd on valves?

As it stands, my system is as follows: Garrard 401, Slate piirth, SME IV, Denon DL-304, EAR 834P phono head amp, Concord Excelsior pre-amp, Quad II power amps and Castle Durham Mk Is on Heybrook HBS1 stands.

I want to spend about £1000 on sparkle, but where to start polishing?

I am convinced that there is no problem in the turntable department. This leaves the amplifiers and 'speakers. This is where my problems start. Do I rebuild the two pairs of Quad Is I have and bi-amp them, or replace the Quads completely? Alternatively, should I hang on to the Quads as they are and look to replace the 'speakers first?

The power amps and 'speakers are, by the way, the same items that used to sparkle when fed from a modified Michell Hydraulic Reference turntable, Keith Monks unpivot arm, A&R P77 cartridge, and Haller DH101 pre-amp. Sadly, none of these items are available for re-instatement as they have both expired. Your help in this matter would be very much appreciated. Best wishes for the future with your erudite publication.

Alan Mildren

Ealing,
London.

If you have made absolutely sure that the cartridge isn't worn out (get a good dealer to check it under a microscope) then I too will assume that the problem is elsewhere. The turntable, Keith Monks Jnipivot arm, A&R P77 cartridge, and Haller DH101 pre-amp. Sadly, none of these items are available for re-instatement as they have both expired. Your help in this matter would be very much appreciated. Best wishes for the future with your erudite publication.

Alan Mildren

Ealing,
London.

If you have made absolutely sure that the cartridge isn't worn out (get a good dealer to check it under a microscope) then I too will assume that the problem is elsewhere. The turntable, Keith Monks Jnipivot arm, A&R P77 cartridge, and Haller DH101 pre-amp. Sadly, none of these items are available for re-instatement as they have both expired. Your help in this matter would be very much appreciated. Best wishes for the future with your erudite publication.

Alan Mildren

Ealing,
London.

If you have made absolutely sure that the cartridge isn't worn out (get a good dealer to check it under a microscope) then I too will assume that the problem is elsewhere. The turntable, Keith Monks Jnipivot arm, A&R P77 cartridge, and Haller DH101 pre-amp. Sadly, none of these items are available for re-instatement as they have both expired. Your help in this matter would be very much appreciated. Best wishes for the future with your erudite publication.

Alan Mildren

Ealing,
London.

If you have made absolutely sure that the cartridge isn't worn out (get a good dealer to check it under a microscope) then I too will assume that the problem is elsewhere. The turntable, Keith Monks Jnipivot arm, A&R P77 cartridge, and Haller DH101 pre-amp. Sadly, none of these items are available for re-instatement as they have both expired. Your help in this matter would be very much appreciated. Best wishes for the future with your erudite publication.

Alan Mildren

Ealing,
London.

If you have made absolutely sure that the cartridge isn't worn out (get a good dealer to check it under a microscope) then I too will assume that the problem is elsewhere. The turntable, Keith Monks Jnipivot arm, A&R P77 cartridge, and Haller DH101 pre-amp. Sadly, none of these items are available for re-instatement as they have both expired. Your help in this matter would be very much appreciated. Best wishes for the future with your erudite publication.

Alan Mildren

Ealing,
London.

If you have made absolutely sure that the cartridge isn't worn out (get a good dealer to check it under a microscope) then I too will assume that the problem is elsewhere. The turntable, Keith Monks Jnipivot arm, A&R P77 cartridge, and Haller DH101 pre-amp. Sadly, none of these items are available for re-instatement as they have both expired. Your help in this matter would be very much appreciated. Best wishes for the future with your erudite publication.

Alan Mildren

Ealing,
London.

If you have made absolutely sure that the cartridge isn't worn out (get a good dealer to check it under a microscope) then I too will assume that the problem is elsewhere. The turntable, Keith Monks Jnipivot arm, A&R P77 cartridge, and Haller DH101 pre-amp. Sadly, none of these items are available for re-instatement as they have both expired. Your help in this matter would be very much appreciated. Best wishes for the future with your erudite publication.

Alan Mildren

Ealing,
London.

If you have made absolutely sure that the cartridge isn't worn out (get a good dealer to check it under a microscope) then I too will assume that the problem is elsewhere. The turntable, Keith Monks Jnipivot arm, A&R P77 cartridge, and Haller DH101 pre-amp. Sadly, none of these items are available for re-instatement as they have both expired. Your help in this matter would be very much appreciated. Best wishes for the future with your erudite publication.

Alan Mildren

Ealing,
London.
EXTRACTS FROM RECENT REVIEWS

"It's diamond necklace in a world of plastic - but without a Tiffany price tag" Eric Braithwaite, HiFi World, Sept 1992

"Clearly the, these LFD components are of an outstanding quality" Jimmy Hughes, Audiophile, Jan 1993

"The placing and scale of each element was near perfect; Dynamics were also impressive" Malcolm Steward, Audiophile, Sept 1993

"The result was music making without the Hi-Fi intruding" Peter J Comeaux, Hi Fi News, June 1994

"Spirolink I, Spirolink II and DigInk Copper" HiFi Choice Recommended, June 1994


"Spiroflex I, Hi-Fi Choice Recommended, Aug 1994

LFD Audio, 110 Oxford Crescent, Clacton-on-sea, Essex, CO15 3PZ
Tel. (0255) 422533, Fax. (0255) 221069

Francis of Streatham
Established 1913
Hi-Fi Video Specialists

Appointed Stockists for:-
Panasonic/Technics, Hi-Fi + Video, Dolby Prologic
Come and listen to the new Technics SCCA1080
Dolby Prologic mini system and the range of
Technics separates

Large Stockists of Styli & Accessories

Own Service Department
Part Exchange available

081 - 769 0466/0192
169 Streatham High Road, London SW16 6FG
MC10 Supreme, I think you’ll find this a lot more dynamic, open, cleaner and brighter. The Creek amplifier has a lovely sweet and gentle sound and for this reason I’d hold on to it for the time being. It may well be worth adding an external phono stage to get the very best from your front end – the EAR834P is excellent value. The Creek is fairly low-powered though, so a good pair of sensitive loudspeakers are in order. Models to try include Castle Durham 900s if you want good imaging, Heybrook Quartets for a bouncy and entertaining sound, TDL RTL3s for good bass power and ProAc Studio 100s for a refined and detailed sound.

The Creek amplifier has a lovely sweet and gentle sound and for this reason I’d hold on to it for the time being. It may well be worth adding an external phono stage to get the very best from your front end - the EAR834P is excellent value. The Creek is fairly low-powered though, so a good pair of sensitive loudspeakers are in order. Models to try include Castle Durham 900s if you want good imaging, Heybrook Quartets for a bouncy and entertaining sound, TDL RTL3s for good bass power and ProAc Studio 100s for a refined and detailed sound.

The last step I would make is to find some high sensitivity loudspeakers that will get the very best out of the Quads. Try auditioning the Cabasse Prato which are sensitive and have a forthright sound with lots of detail. Others to audition include Triangle’s new Cometes, and the Heybrook Quartets. DB

Having owned Quad IIs I would be prepared to suspect they might be contributing to your dissatisfaction. Whilst these amplifiers are as sweet as can be, they are also a little mellifluous and too vague on the beat to be true rockers. Many people prefer this sort of presentation, which is unavailable in solid-state – no transistor amp could match the Quad II for sheer beauty of sound. But limited power output (8watts-12watts according to condition) and poor ‘speaker matching can conspire to make the Quads struggle. Bearing this in mind, you could well try the IIs with a sensitive, ‘fast’ loudspeaker, the new Mission 752s being one possible option, Heybrook Quartets another. Ultimately though, I’m not sure that it is possible to get the best of solid state and the best of valve perfectly combined. You might have to accept some slight compromise between the two. Our K588I kit valve amp achieves this trick nicely, sounding clean, fast and lively, and so does the EAR834P integrated valve amplifier. NK

THE UPGRADE PATH
My present system comprises a recently purchased Goldring 1012GX cartridge (upgraded from an Audio Technica AT95E) feeding a Revolver Rebel turntable, through the turntable’s own interconnect into a Creek 4140 S2 amplifier. I have original wooden Sonata speakers on JPWF stands and use DNM solid core speaker cable. Since the cartridge upgrade I have noticed an improvement, but it is not quite as breathtaking as I hoped.

I rarely use my cassette deck and have weaned myself off the few CDs I own as I vastly prefer records, especially since I buy mainly pop records from the ’80s, at one third of the price of new CDs.

I have recently left student life (where my speaker cable was slightly gnawed by my housemate’s rat) and have become a small cog in the financial machinery of the City. Unfortunately, I have yet to see a commensurate improvement in my bank balance. Further improvements to my system will have to wait a while.

When I do upgrade, what should I do? I could wait for a good turntable to be advertised second hand in your classified pages (I particularly have a Roksan Xerxes or a Pink Triangle in mind) or upgrade the speakers, possibly to your own KLS2 design. I am particularly keen on the second-hand market since I bought the Creek at a bargain price through your classified pages, from a gentleman halfway across the country who sent it to me to try before even glimpsing the colour of my money.

I am now considering a Garrard 401 with a high end arm; your articles have inspired me to hear the sound of some of these antiquated beasts myself. However, I know production quality varies considerably and I was born after their heyday, so I am not confident of finding a good specimen to buy on top. Perhaps an article on what to look for?

Before we fix it, what is wrong? Imaging, deep bass reproduction and ease of distinction between instruments and vocalist have improved since the cartridge upgrade. However, there is none of the startling realism, openness and sense of power I experienced several years ago during several visits to Oxford Audio Consultants. Admittedly, that was through such exotic components such as Krell amplifiers and six-foot high electrostatic speakers whose manufacturer I have forgotten.

Finally, a tweaking question. I cannot decide whether adhering blocks of lead in the holes underneath my turntable platter would enhance or degrade pitch stability, without access to precise balancing. What do you think?

William O Smith
Palmer’s Green, London.

If you are not against buying second-hand, there are certainly some bargains to be had. With second-hand turntables there is little that can go wrong. In most cases all that will need replacing is a worn out drive belt. If you’re unlucky the motor may be starting to wear, but these are relatively inexpensive to replace. Be a little wary of second-hand tonearms though. If they have been on several turntables and roughly treated the bearings can be damaged. Stick to Rega and SME. Both are strongly made and can deal with a little punishment.

Looking through our classifieds from last month, there is a Gyrodec with RB300 and K9 for £495, an RB300 on its own for £95 and numerous Garrard 301 and 401s for around £125. The Gyrodec is beautifully engineered and stays ‘in-tune’ once it has been initially set-up, which makes life a whole lot easier. The Garrard 301 and 401 are both superb turntables, but be prepared to spend at least £200 on restoration etc before their full potential can be realised.

Before we fix it, what is wrong? Imaging, deep bass reproduction and ease of distinction between instruments and vocalist have improved since the cartridge upgrade. However, there is none of the startling realism, openness and sense of power I experienced several years ago during several visits to Oxford Audio Consultants. Admittedly, that was through such esoteric components such as Krell amplifiers and six-foot high electrostatic speakers whose manufacturer I have forgotten.

Finally, a tweaking question. I cannot decide whether adhering blocks of lead in the holes underneath my turntable platter would enhance or degrade pitch stability, without access to precise balancing. What do you think?

William O Smith
Palmer’s Green, London.

If you are not against buying second-hand, there are certainly some bargains to be had. With second-hand turntables there is little that can go wrong. In most cases all that will need replacing is a worn out drive belt. If you’re unlucky the motor may be starting to wear, but these are relatively inexpensive to replace. Be a little wary of second-hand tonearms though. If they have been on several turntables and roughly treated the bearings can be damaged. Stick to Rega and SME. Both are strongly made and can deal with a little punishment.

Looking through our classifieds from last month, there is a Gyrodec with RB300 and K9 for £495, an RB300 on its own for £95 and numerous Garrard 301 and 401s for around £125. The Gyrodec is beautifully engineered and stays 'in-tune' once it has been initially set-up, which makes life a whole lot easier. The Garrard 301 and 401 are both superb turntables, but be prepared to spend at least £200 on restoration etc before their full potential can be realised.

The Creek amplifier has a lovely sweet and gentle sound and for this reason I’d hold on to it for the time being. It may well be worth adding an external phono stage to get the very best from your front end - the EAR834P is excellent value. The Creek is fairly low-powered though, so a good pair of sensitive loudspeakers are in order. Models to try include Castle Durham 900s if you want good imaging, Heybrook Quartets for a bouncy and entertaining sound, TDL RTL3s for good bass power and ProAc Studio 100s for a refined and detailed sound.

Blocks of lead are not a good idea. They will stress the motor and belt on start up which may lead to premature failure.

If you are interested in a Garrard try contacting suppliers first to ascertain costs and potential problems. Spares are now available from various sources, some re-manufacture having started, such is demand. Loricraft (tel 0488-72267) are long-termers in this field, having workshops and plenty of experience. Slate Audio (0525-384174) are also experts and Technical & General (0892-654534) have a wide range of spares and parts, plus plenty of expertise. The Garrards are beautifully engineered and a pleasure to own and use. Get a Garrard 401 Celebration tone arm (SME IV) and fit an Ortofon MC cartridge when you make it big in the City, but in the meantime use a Rega RB250 with your Goldring 1012GX or a budget Ortofon MC like the new MC15 Super II.
Distributed in the UK by Tube Technology & their selected dealers; please call or write for detailed literature to:

Tube Technology,
Foxhills Farm, Longcross Road, Ottershaw, Surrey, KT16 ODN, England.
Tel: 01932 873444 - Fax: 01932 873012

By appointment only

SERIOUS KIT

061-707 4823

21, ALGERNON ST., MONTON, ECCLES, MANCHESTER, M30 9QA.
A STATE OF THE ART COMPANY

Are you making the right connections?

Send for Britain’s biggest catalogue of specialist cable and connections.
All available by mail order.
Phone 081-9429124 or clip the coupon for your Free copy.

CUSTOM CABLE SERVICE
PO Box 4007, London SW17 8XG

Please send me your FREE Custom Cable Catalogue

Name ____________________________
Address __________________________
Postcode __________________________

Send to: Custom Cable Service
PO Box 4007
London SW17 8XG

Pump New Life back into your valve amplifier, transplant with

Gold Hero

the world’s finest vacuum tubes, selected and tested in the USA for optimum sonic performance. The heart of your amplifier is a valve, fit the best.

Distributed in the UK by Tube Technology & their selected dealers; please call or write for detailed literature to: Tube Technology, Foxhills Farm, Longcross Road, Ottershaw, Surrey, KT16 ODN, England. Tel: 01932 973444 – Fax: 01932 973012

Home Cinema Consultants
Guiding you out of the maze of “home theatre” hype; into the paradise of your own, high end AV system.

“Elite” model Laserdisc player
Amplifiers and speakers (various)
Video monitor/Video projection.

061 773 6924. By appointment.
I live in an end terraced cottage of stone construction, built as a pair of cottages with just a single brick party wall separating the two houses.

I get on very well with my neighbours who are very quiet, unassuming people and I have on two or three occasions asked them to say, if at any time my hi-fi disturbs them. They have never complained, but I find it difficult to settle down to serious listening knowing that I might be disturbing them. Having said that, I do try to limit my listening to, at most, a couple of hours per evening before 10pm.

Having now definitely decided to stay in this cottage (a proposed move to a detached house having fallen through) and feel that my solution is to, attempt as far as possible, to 'soundproof' the party wall.

I have taken some preliminary advice from a firm of sound and vibration consultants whose thoughts concurred with my own ideas, i.e. to construct a secondary wall of timber frame construction (say two inch by two inch, spaced half an inch) away from the main wall filled with high density sound absorbing fibreglas matting and faced with two layers of overlapping plasterboard.

I would be extremely grateful if you could advise me whether or not the above is my best course of action, before I go to the expense of having the work done. I am sure that this is a common problem for fellow music freaks and perhaps an article on the subject might be welcomed. I look forward to hearing from you.

PS: just for the record I've just finished upgrading my system which now sounds glorious - it really makes music! It comprises: ProAc Studio 200s, Kenwood DPX 910 Transport (Trichord modified 'Clock 2') Sugden SDA1 DAC, Audio Research SP9, Nakamichi BX300E, Denon TU260i tuner, VDH First cables (including a digital link), VDH 122 single 'speaker cables and Denon POA 4400 monoblocks (to be replaced by valve amp(s) next month). I have heard it with an Audio Innovations First Audio and it sounded fabulous, or would you recommend any other valve amps - any other comments?

Phil Willan, Blackburn.

The first thing to do is to identify where the transmission occurs; this is of vital importance prior to any form of acoustic treatment. Ceiling voids and electrical conduits are known weak spots and may often contribute to poor sound insulation. These should be thoroughly assessed before embarking on any secondary wall construction as significant time and cost savings can be made.

Room Interaction

This is the relationship between the audio components and the room and their influence on the overall dynamics. Wall surfaces, furniture and room dimensions all play a large role in determining what happens to the musical energy after leaving the loudspeakers.

Two types of intrusive noise concerns us: a. airborne and b. impact. Floor-standing loudspeakers with large internal volumes are capable of generating high sound pressure levels in the sub-sonic domain. Although inaudible, these frequencies can most definitely be felt, especially by your adjacent neighbours where the corresponding wavelength extends beyond your party wall and rebounds off their outer wall.

With respect to the ProAc Studio 200s, the manufacturers have made provision for fine tuning the bass response. By means of filling a small cavity with dry silver sand the low frequency response can be altered to complement the room acoustically. An accurate measurement by an acoustician can identify whether this is necessary (in relation to the room's central resonant frequency) and at which point precisely this intuitive method is most effective.

Room Modes

These are the relationships between the wall, floor and ceiling dimensions. Certain ratios are preferable and are mathematically prescribed. These ratios have an important bearing on the final sound of the room and ultimately, its insular potential. A good acoustic consultant can help here (feel free to give me a call at European Acoustic Repertoire on 0732 763046) compiling a room mode analysis and report defining these relationships in relation to your equipment and furnishings.

Conclusion

In the November issue of HFW we discussed the effectiveness of diffusion in a domestic listening environment. There are a number of 'install yourself' packages available that can create an optimal and diffuse linear listening environment. This acoustical treatment uniformly affects the internal airborne energy thereby attenuating the actual transmitted sound. As a result of correct treatment, the psycho-acoustic perception is that the music is actually greater in volume while the adjacent neighbour experiences a much reduced transmission level.

LOOKING TO CD

My system consists of the following components: Rega Planar 3 with Rega RB300, Goldring Eroca LX (MC), Musical Fidelity A1, Rogers LS4a2 (bi-wire) on Target HJ202, Van den Hul CS122. Equipment supports are Target.

I'm happy with the sound of this system, moreover, I have set four cones of steel under the platform of the Rega Planar 3 and this has isolated perfectly any vibration problems. I must confess the result is fantastic. I love vinyl records, but here in Spain, they're difficult to find. So, I wish to buy a good CD player. I seek a smooth sound with superb fidelity of tonal colour. Would the Marantz CD52SE profit my system or perhaps the renowned Rotel RCD-965BX? Could you give ideas of price, say between £500 and £1,500. I would appreciate your information. Thank you.

Jose Manuel Lis Malaga, Spain.

To get the same level of enjoyment from CD as you do from vinyl, you will need to aim higher than the two models you have mentioned in your letter. If the CD player you buy is lacking, you will quickly discard it and revert back to vinyl in disgust. To get enjoyment from CD I'd suggest the Rotel RCD 965 Discrete as an absolute minimum, and more in line with your vinyl front-end would be the Quad 67 CD player. The Quad is an especially good buy, having a sweet and fulsome sound, being well-built and having a high quality CDM-9 transport which could be upgraded with an outboard CD converter at a later date. Audition carefully though, you may well decide to stick with the extra effort of searching out the black stuff. DB
Listen to the enticing sound of a modern valve amplifier.

NOW ON DEMONSTRATION AT

Hi-Fi Confidential Ltd
34 Buckingham Palace Road
London SW1 1OBE
Tel: 071 233 0774

Hi-Fi Corner
1 Haddington Place
Edinburgh EH7 4AE
Tel: 031 556 7701

FOR MAIL ORDER AND FURTHER INFORMATION SEE PAGES 89 - 91

Class A, 28 watt Stereo Power Amplifier or 60watt Monoblock

FREE Audio Catalogue

That Will Change The Way You Buy HiFi

Inside the new RDL catalogue you'll discover:

- The secret to picking the right speakers.
- Why your home is the only place to test audio equipment.
- How to get more audio for your money.
- How to buy home theatre systems.
- Why the reviewers say RDL offers superior audio equipment at unbelievably low prices.

Buying from RDL is easy and risk free with our 100% "no strings attached" money back guarantee.

Roy Allison, President and Chief Designer of RDL Acoustics has put together two new, superb ranges of speakers to fit every situation at prices well below normal shop retail.

Order your free catalogue, call:

0484 603333 or fax on 0484 607774

RDL Acoustics
20 Cleveland Way, Shelly
Huddersfield, HD8 8NQ
and original packaging. Tel: 0709 840279 (evenings) East Sussex, Lewes

spare vanable boards. Excellent

NAIM 72 Pre-amp plus HiCap with Basik+Akito+K.S. Sennheiser HD 320

TEROFON QUASAR moving coil cartridge. Boxed. Unusec With all accessories. Cost £350, will sell for £175.00. Contact (0636) 468165 after 7 pm.

MERIDIAN 200/2D DAC 7-mint, cost new £195.00, £50 inc. interconnects – IXOS + Audiotech. turntable stand. (cost new £175) accept £250. (Tele: 081 898 2872).

TOM EVANS Pioneer AX-1080D speaker. £150. Tel: 0673-887998

TRIANGLE GTI, RB300 arm, new. £169.00 quick sale at £50.00. Tel: 081 732 2504.

IDEAL WITH Valve amplification - Audio Note K15 stubborn speakers - new, boxed and guaranteed. Used as rear speakers. £200. Tel: 0121 200-7000.


MAGNAPEDRON MG25 Panels, as new £3500. Quad 33/313 Amp £160. Tel: 0502 20070.

TRIANGLE GTI, RB300 arm, new. £169.00 quick sale at £50.00. Tel: 081 732 2504.

In the classified ads

An Adrian Smith design. As new £50,000, will accept £25,000. Tel: 081 898 2872.

Audiotech spiked sub- table. Italian craftsmanship, 5 star award winner. Used as rear amplifier, £950. Tel: 0737 222968. Tel: 0737 761163 – evening. (Surrey).

Naim SA202 1.5m, £200. Tel: 0689 874438 evenings. Tel: 0737 222968 – daytime. Tel: 0737 761163 – evening. (Surrey).

Naim SA202 1.5m, £200. Tel: 0689 874438 evenings. Tel: 0737 222968 – daytime. Tel: 0737 761163 – evening. (Surrey).

Naim SA202 1.5m, £200. Tel: 0689 874438 evenings. Tel: 0737 222968 – daytime. Tel: 0737 761163 – evening. (Surrey).

Naim SA202 1.5m, £200. Tel: 0689 874438 evenings. Tel: 0737 222968 – daytime. Tel: 0737 761163 – evening. (Surrey).

Naim SA202 1.5m, £200. Tel: 0689 874438 evenings. Tel: 0737 222968 – daytime. Tel: 0737 761163 – evening. (Surrey).
Don’t let your LISTENING ROOM spoil his performance.

With the help of Room Acoustics Services

you can achieve near concert hall realism, in harmony with your home decor.

Full details, reviews etc, of our computerised postal Hi-Fi room acoustics consultancy available from:

ROOM ACOUSTICS SERVICES
3, Queen Elizabeth Way, BARTON-upon-HUMBER,
South Humberside, DN18 6AJ.
Tel: (0652) 635523

Hi! Best prices for new, xdem & f equipment

- Audio Innovations 1st Audi m/s h £ 350
- Audio Innovations D115 mint £ 395
- Audio Research D7 mk3 m/s h £ 795
- BlueDiamond Audio INNOVATIONS DELUXE 5.600 si £ 550
- Mission 753 black £ 350
- Mission Impulse H2’s £ 1650
- Audio Delyy 7 mint £ 3400
- Naim NAP 135 monoblocks £ 1600
- Audio System 304h Silver Knights mint £ 1695
- QuickSilver monoblocks £ 1495
- Conrad Johnson NF-200 mint £ 795
- Rotel RRA 1010m £ 1995
- Rotel RLA 1010k £ 1995
- Musical Fidelity P150 £ 295
- Tessaar Tamps 60 monoblocks £ 1395
- Mark Levinson M2.1 monoblok £ 3995
- Tube Technology Genesis monoblok £ 1995
- Cadence Pro/Power 2/MA x-dem £ 1995
- Denon 200/14400 pre/amp £ 1895
- Rega II £ 1295
- Musical Fidelity P150/PA3a £ 450
- Audio Research SP9 mk3 £ 1595
- Audio Research SP11 mk3 £ 1795
- Audio Research SP14 black £ 1295
- Audio Research SP5 black £ 3500
- Audio Research SP7 £ 1795
- Audio Research S4.1 black £ 595
- Audio Research LS28 £ 2250
- Tessaar TAP-A/TAPS/TAPA pre ex-dem £ 3995
- Audio Research SP8 £ 795
- Audio Innovations L2 mint £ 450
- Audio Synthesis Passion mint £ 395
- Magi Ella £ 995
- Allergy PP mint £ 235
- Linn M2 m/s £ 395
- Sumarex Extensa + sld stds £ 3995
- Sumarex Minima Amators + stds £ 1120
- Sunrider Electa Minima £ 1800
- MIT SCM 100 A £ 3500

MINT S/N - Second hand as good an example as we’ve seen anywhere.

AS NEW - Typically less than 4 months old in new condition.

X-DEM - Typically ‘as new’ but may be older.

G,C,V,G,C - In perfect working condition but may be marked.

Don’t let your LISTENING ROOM spoil his performance.

With the help of Room Acoustics Services

you can achieve near concert hall realism, in harmony with your home decor.

Full details, reviews etc, of our computerised postal Hi-Fi room acoustics consultancy available from:

ROOM ACOUSTICS SERVICES
3, Queen Elizabeth Way, BARTON-upon-HUMBER,
South Humberside, DN18 6AJ.
Tel: (0652) 635523

hi! Best prices for new, xdem & f equipment

- Audio Innovations 1st Audi m/s h £ 350
- Audio Innovations D115 mint £ 395
- Audio Research D7 mk3 m/s h £ 795
- BlueDiamond Audio INNOVATIONS DELUXE 5.600 si £ 550
- Mission 753 black £ 350
- Mission Impulse H2’s £ 1650
- Audio Delyy 7 mint £ 3400
- Naim NAP 135 monoblocks £ 1600
- Audio System 304h Silver Knights mint £ 1695
- QuickSilver monoblocks £ 1495
- Conrad Johnson NF-200 mint £ 795
- Rotel RRA 1010m £ 1995
- Rotel RLA 1010k £ 1995
- Musical Fidelity P150 £ 295
- Tessaar Tamps 60 monoblocks £ 1395
- Mark Levinson M2.1 monoblok £ 3995
- Tube Technology Genesis monoblok £ 1995
- Cadence Pro/Power 2/MA x-dem £ 1995
- Denon 200/14400 pre/amp £ 1895
- Rega II £ 1295
- Musical Fidelity P150/PA3a £ 450
- Audio Research SP9 mk3 £ 1595
- Audio Research SP11 mk3 £ 1795
- Audio Research SP14 black £ 1295
- Audio Research SP5 black £ 3500
- Audio Research SP7 £ 1795
- Audio Research S4.1 black £ 595
- Audio Research LS28 £ 2250
- Tessaar TAP-A/TAPS/TAPA pre ex-dem £ 3995
- Audio Research SP8 £ 795
- Audio Innovations L2 mint £ 450
- Audio Synthesis Passion mint £ 395
- Magi Ella £ 995
- Allergy PP mint £ 235
- Linn M2 m/s £ 395
- Sumarex Extensa + sld stds £ 3995
- Sumarex Minima Amators + stds £ 1120
- Sunrider Electa Minima £ 1800
- MIT SCM 100 A £ 3500

MINT S/N - Second hand as good an example as we’ve seen anywhere.

AS NEW - Typically less than 4 months old in new condition.

X-DEM - Typically ‘as new’ but may be older.

G,C,V,G,C - In perfect working condition but may be marked.

Can’t Find What Your Looking For?

THE HI-FI EXCHANGE

Whether buying or selling Audioophile equipment register your requirements with us now.

All enquiries are entered on our sophisticated database where equipment matching takes place. A complete catalogue of equipment wanted and for sale, available weekly, is free to anyone both here and abroad. The Hi-Fi Exchange is continually updated and is the most comprehensive source of second hand and xdem equipment anywhere.

Choice Too

(081) 568 8808

Equipment bought or part exchanged

Full demonstration facility - by appointment

Major credit cards accepted

9.30am - 8.00pm 7 days
Hi-Fi World

PRIVATE

KEF 105/3 Rosewood, mint, boxed, latest spec, £1,550.00 ONO. Stax SR 34s £70.00 ONO boxed. Naim 325 M50 £230.00 ONO. L/P12, 110. £1,695.00 spec. £100. Tel: 0208 280061.

NAIK 250/25/30, taps, old style, £85.00 ono. Kenwood DPX 9010 CD. transport/Arcam Black Box 5. £500.00 very good condition. Tel: 091 4877796.

Hi-Fi World

transformers. Tel: 0524 423516.

Argo HR pre-amp OW ono. Bang & Olufsen Beocord 8000 tape recorder - hardly used £300. Tel: 031 229 5020. Every day, good condition, for sale £200. Tel: 060 005 6040 (anytime).

NAP 110 (1) £1,000, NAC 425K (£130) and Hi-Cap (£280). No longer required due to recent up-grade. All boxed. Also Yamaha KA00 Cassette (£50). Tel: 0349 877243.

MUSICAL FIDELITY MVT pre-amp & P270 power amp. Excellent condition - can deliver £250. Tel: 0161 662 6040 (anytime).

ORACLE ALEXANDRIA turntable, Oracil silver wired tone arm. Grado signature 8 cartridge, massive power supply by Mod Squad probably the best for £400 ono. Tel: 0908 502795 (Milton Keynes).

EARLY 60s LEAK STEREO Equipment. Lenco Goldring GL68 turntable, 45/78 RP3a arm £155. Alphason P270 MkJI 150wpc amplifier. £1,300 sell £650. Audio Research SP9 (£350), High Quality Phono Cartridges. £30. Tel: Hinckley 0909 (Worksop) 475890 (evenings).
PRIVATE

UNIN KAN MK I black superb, bi-amped with Atacama SE42 stands, superb condition £650, boxes. Tel: 071 606 0888 (day), 081 665 6183 (eve).


HARBETH BOLT CSS/12A speakers, black ash finish, £150. Call Plymouth. Tel: 0792 405092.

MOD SQUAD, passive line drive, 5 inputs +2 taps, mint condition with instructions, £250 ono. Wirral. Tel: 0131 223 476.

GRADIENT SUB-WOOFER for original Quad ESL (£100, 100% perfect condition, £200). Quad 444/405, Decca London Super Gold, 5.5 hours use. £150. Wanted Quad 2050 or 2075 speakers, Sinclair Neoteric 60. £150; Quad 444/405, Decca London Super Gold, 5.5 hours use. £150. Wanted Quad 2050 or 2075 speakers, Sinclair Neoteric 60. £150.

ASKTON CD 3 CD player, transport modified by Technichord Research, £180. Ring after 6.00pm for details.

ROKSAN/AMPX2 ARTIELZ Shazr in black. Superb turntable. Lovingly cared for, but cartridge needs a bit of work. £50. Against Thames if unwanted by discerning buyers. £50.

LEEK STEREO 50 Chromed, Groove SE24 stands. £650. Wanted: Shure V15; Quad 67 to 75; NAD CDS, £15; NAD CD 90.
Hi-Fi World

PRIVATE

ALLISON 6 ‘speakers, £80; Apollo 24 inch ‘speaker stands, £60; Audio Technica AT100, £50; Avalon A200, £40; Audio Research 60, £200.(8): Off 10%: Tel 0827 261802.

AUDIO ALCHEMY DDE v1.0 & tweeters TWO25M II 2 off, £18. Audio Innovations series 500, £499. £75. all as new, never been used, still boxed. Tel: 0895 778174.

STEERO LEAK TROUGHLINE, £125; mono Troublesh. modern external decoder, £45; six inch bas/midrange driver Mission £10 wanted for collection, any worn broken chassis: all ono. Tel: 0209 216663.


AUDIOLINE LP12 (violet), £200; Ortofon 2M red, £150. both boxed. condition, leads £970; Naim CD1, £1100. Tel 0533 892420.

LEAK STEREO 20 complete, £120; Asai GX77 reel/reel, £220; pair Wharfedale Diamond, £75; all as new. Never used in original boxes. Tel: 0763 244744.

MERIDIAN 10IB/ALBARRY M408 £100; Philips CD104, £50, both boxed. condition, leads £970; Meridian component amp, tape, fm, cd, £125, expert, part worn £95. Tel: 0723 598952.

REVOX B77, 75/15 ips, excellent condition. £650. Technics Reel £200, £20. all as new, never been used, still boxed. Tel: 0947 418997.

SERATO DECODERS module only £125 or complete boxed self-powered unit ready to use, £485. £26. Works well with Troubleshoot, Quad, Clayton, Atari etc. all new & tested. Tel: 0736 798393.

MERIDIAN 605 monoblocks £1 295; Quad ESL £63 on Arco stands, £21400. Meridian 205 (DAC £75 all boxed. Almost mint. superb mass speaker system will spice, retired owner. Tel: 0202 470789.

MERIDIAN 101B/ALBARRY M408 monoblocks, £250 with free exchange interconnect, will split. Cambridge Audio CD3, £750; Naim £480. £550, Wharfedale Active Diamonds, £75. £100; Philips CD104 £125, both excellent. Tel: 0799 772137.

MERIDIAN 500/WHITE ARMS £1290 complete boxed, £620 with Mayware cartridge, £100; Philips CD104 £200, both excellent. Tel: 0621 772884.
COMPACT DISCS
The Classical CD Specialist
H & R CLOAKE LTD
(Established 1946)
OVER 10,000 CD’s IN STOCK
3,000 Cassettes
3,000 LP’s (POP)
and Laserdiscs to order (list available)

SPECIAL OFFERS
each month

ALSO MAIL ORDER SERVICE AVAILABLE
CD’S SENT POST FREE (UK)
CASSETTES/LP’S AT COST
Access/Visa Accepted

29 High Street, Croydon CRO 1QB
081 - 681 - 3965 - Classical
081 - 686 - 1336 - Pop/Jazz

COMPACT DISCS

Esoteric • Audio • Imports
Importers, Distributors and Purveyors of Fine Quality Audio Equipment

Are proud to announce yet another
V’Audio first.

V’Audio of BRISTOL are the U.K.’s first retail dealer to have in stock
ELECTROCOMPANIET’S NEW “Super Fidelity” range sporting the magnificent blue stone facia last seen on the 20th “Anniversary” sets.
Telephone Bristol 0272-686005.

For product and market details contact:-
Esoteric Audio Imports
Tel/Fax:- 0243 53 30 30

ATC, AVI CHORD, HARBETH, LFD, MICHELL, ORIGIN LIVE, KINSHAW, QED, ROYD, SANSUI, SEQUENCE, SONIC LINK, PROJECT, THORENS

EX-DEMONSTRATION & SECONDDHAND SALE

LP12, Valhalla, Basik + Guradard 401, Ortofon arm,
MC10 super £425 Ortofon mc10 Super cart £195
Michell Gyrodec psu £85 Quad 665 p/amp £450
Quad 34 preamp £220 Harbeth HL Compact ldsks £299
LFD Int “F” (phono) int amp £529 Linn Kans £175
Chord SPM 800 power amp £1399 Sansui AV S/Sound amp £499
Origin Live OIA ldskrs £450 Cambridge C70 preamp £125
Acoustic Energy AE1 ldskrs £400 Spender S20 ldskrs £299
DNM 3A6 preamp £650
Arcam Alpha 2 int amp £100 ATC SCM 50A £3995
Mordant Short NS50 £425 Ortofon mc10 Super cart £195
(bi-wired) £150
ATC SCM 50A £3995 Linn Kans £175

Cottage Audio
17 Bridge Street, Sleafby, Nr. Lincoln. LN1 2PZ
Tel: (0522) 702834 eve: (0522) 696708

Inaccessible accessories by post.

If you can’t get to us, we’ll get our accessories to you.

PLUS A FULL RANGE OF QUALITY EQUIPMENT AVAILABLE. SEE OUR MAIN ADVERTISEMENT.

BURY AUDIO
47 Churchgate Street, Bury St. Edmunds, SUFFOLK IP33 1RG.
Tel & Fax: 0284 724337 Mobile: 0850 556593

SITUATIONS VACANT

Hi-Fi Loudspeaker Manufacturer requires Freelance Representatives throughout the U.K.
For further details please contact:-
Mr Elvins
Elvins Acoustic Technology
12 Brett Road
London E8
Telephone:- 081 - 986 8455
ORDER FORM

HI-FI WORLD CLASSIFIED ADS

Please write your advertisement copy on a separate sheet of paper and return with this completed form.

Name
Address

Post Code

Daytime Tel No:

☐ Private Advertiser ☐ Trader ☐ Situations Wanted (Tick where applicable)

☐ Display (boxed £15 inc. VAT.) ☐ Special Display (Box + Picture £25)

I enclose cheque/postal order for £ Made payable to Audio Publishing Ltd.

Please debit my VISA/ACCESS Card No.

Expiry Date:

Send to: Hi-Fi World Classified Ads., Audio Publishing Ltd., 64 Castellain Road, London W9 1EX.

SPECIAL OFFER!

BOOK 1 MONTH GET 1 MONTH FREE.

OFFER APPLIES TO PRIVATE ADVERTISERS ONLY.

Cheques should be made payable to Audio Publishing Ltd.

Please send your copy to:

Hi-Fi World Classified Ads., Audio Publishing Ltd., 64 Castellain Road, London W9 1EX.

Classifieds will be published in the first available issue after receipt.

TRADE

GUNPI'S RECORD EXCHANGE
Southend, hi-fi, guitars, CDs video.
Wood boxed Leak TL50 Varielapse, £220; Armstrong 127 receiver; new ECL86 Clavoline 1956 electric organ/amp cased; A68 'speakers, £65; Grundig T7500 tuner, £59; Quad 33 pre-amp, £49; Sansui AU-02X amp; Cambridge P50 amp; Millenial Ultima 130w PA Chime amp, £149.
Tel: 0702 602811.

BUY, SELL, EXCHANGE 1930s-1960s vintage wireless. Audio Classic amps; repair spares; restoration; modifications; collectable classic audio gifts. Visit our showroom at 17, Bell St London NW1. (next Edg, Bkr line).
Tel: 071 258 3448.

TRADE

GUNPI'S RECORD EXCHANGE
Southend, hi-fi, guitars, CDs video.
Wood boxed Leak TL50 Varielapse, £220; Armstrong 127 receiver; new ECL86 Clavoline 1956 electric organ/amp cased; A68 'speakers, £65; Grundig T7500 tuner, £59; Quad 33 pre-amp, £49; Sansui AU-02X amp; Cambridge P50 amp; Millenial Ultima 130w PA Chime amp, £149.
Tel: 0702 602811.

BUY, SELL, EXCHANGE 1930s-1960s vintage wireless. Audio Classic amps; repair spares; restoration; modifications; collectable classic audio gifts. Visit our showroom at 17, Bell St London NW1. (next Edg, Bkr line).
Tel: 071 258 3448.

TRADE

AUDIO NOTE Type Js, boxed. £395; Innovations 800 Mk I and other valve amps from £150. Garrard 301, mint, £175; turners from £25; valve pre-amps; also DIY items etc. Station Sounds.
Tel: 0903 239980.

SHAHINIAN ARCS £759; Snell J3/Stand. £459; Alpha 5 CD, £349; Kelvin Labs M30 monoblocks with pre-amps, £429; Linn Karik/Numark latest chipset, £1549; ProAc Response Ones, £699; Response Twos, £899; Naim NAC72 (latest), £399; Roksan Xenes/Tabniz/Corus Blue, £599. Others available.
Tel: 0279 426647, or 0850 484464, or Fax: 0279 860460.

TRADE

WANTED - EARLY HI-FI

LOUDSPEAKERS
Tannoy, Lowther, Parmeko, Voigt, Vitavox, RCA, WE etc.

TURNTABLES
Garrard, BBC301, EMT, SME, Ortofon, Decca, etc.

VALVE AMPLIFIERS
AEI, EMI, Leak, Rogers, PYE, Quad, WE etc.

AUDIO VALVES
DA30, KT66, KT88, PX4 PX25, P99/P90, WE 300.

CLEAR CRYSTAL SYSTEMS
John Petrie-Baker
Tel: 071 328 9275
Fax: 071 833 3008

TRADE

Michaelson Audio Odysseus (De Paravicini designed) valve integrated 45 watts, £595; Audio Note 'speaker cable £25m, £95; Quad 405-2 power amp, £160, Linn Kans black bi-wireable as new, £250; Audio Research D-70, £750; Leak Troubleshoot, £75; Quad and Leak equipment available, part exchange welcome. Equipment bought for cash.
Tel: 021 784 8765.

TRADE

SITUATIONS WANTED

ELECTRONICS GRADUATE just finished thesis on loudspeaker construction with specific reference to crossovers, including computer programme to calculate component values, seeks work in this field.
Tel: 0302 371 464.
<table>
<thead>
<tr>
<th>Advertisers Index</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MAIN ISSUE</strong></td>
</tr>
<tr>
<td>ACOUSTIC ARTS</td>
</tr>
<tr>
<td>AMADEUS S&amp;V</td>
</tr>
<tr>
<td>ARCAM</td>
</tr>
<tr>
<td>ARION ACOUSTICS</td>
</tr>
<tr>
<td>ART AUDIO</td>
</tr>
<tr>
<td>ATTIC MUSIC</td>
</tr>
<tr>
<td>AUDIBLE DIFFERENCE</td>
</tr>
<tr>
<td>AUDIO COUNSEL</td>
</tr>
<tr>
<td>AUDIO ILLUSION</td>
</tr>
<tr>
<td>AUDIO PHYSICS</td>
</tr>
<tr>
<td>AUDIO ROOM</td>
</tr>
<tr>
<td>AUDIO SUITE</td>
</tr>
<tr>
<td>AUDIOLAB</td>
</tr>
<tr>
<td>B&amp;W</td>
</tr>
<tr>
<td>BETTER HI-FI</td>
</tr>
<tr>
<td>BILLY VEE</td>
</tr>
<tr>
<td>BREATWOD MUSIC</td>
</tr>
<tr>
<td>BURY AUDIO</td>
</tr>
<tr>
<td>C.A.D.</td>
</tr>
<tr>
<td>CABLE TALK</td>
</tr>
<tr>
<td>CD EXPRESS</td>
</tr>
<tr>
<td>CHOICE HI-FI</td>
</tr>
<tr>
<td>CHORD COMPANY</td>
</tr>
<tr>
<td>CHORD ELECTRONICS</td>
</tr>
<tr>
<td>CLASSIQUE SOUNDS</td>
</tr>
<tr>
<td>CONNECTIONS</td>
</tr>
<tr>
<td>COTTAGE AUDIO</td>
</tr>
<tr>
<td>CREATIVE AUDIO</td>
</tr>
<tr>
<td>CUSTOM CABLE SERVICES</td>
</tr>
<tr>
<td>DAN DULEY</td>
</tr>
<tr>
<td>DCN ASSOCIATES</td>
</tr>
<tr>
<td>DEFINITIVE AUDIO</td>
</tr>
<tr>
<td>DIGITAL KONNECTIONS</td>
</tr>
<tr>
<td>DPA</td>
</tr>
<tr>
<td>DYNAMICS</td>
</tr>
<tr>
<td>ELECTROFLUIDICS</td>
</tr>
<tr>
<td>ELVINS ACOUSTIC</td>
</tr>
<tr>
<td>TECHNOLOGY</td>
</tr>
<tr>
<td>ESOTERIC AUDIO IMPORTS</td>
</tr>
<tr>
<td>F&amp;S TRADING</td>
</tr>
<tr>
<td>FRANCIS OF STREATHAM</td>
</tr>
<tr>
<td>FULLERS AUDIO</td>
</tr>
<tr>
<td>G.T. AUDIO</td>
</tr>
<tr>
<td>GLOTTA AB</td>
</tr>
<tr>
<td>H&amp;R CLOAKE</td>
</tr>
<tr>
<td>HALE HI-FI</td>
</tr>
<tr>
<td>HARBERTH ACOUSTICS</td>
</tr>
<tr>
<td>HEATHERDALE AUDIO</td>
</tr>
<tr>
<td>HI-FI CONFIDENTIAL</td>
</tr>
<tr>
<td>HI-FI CORNER</td>
</tr>
<tr>
<td>HI-FI EXCHANGE DARLINGTON</td>
</tr>
<tr>
<td>HI-FI SHOWROOMS</td>
</tr>
<tr>
<td>HOME CINEMA</td>
</tr>
<tr>
<td>HORSHAM HI-FI/CRAWLEY</td>
</tr>
<tr>
<td>AUDIO</td>
</tr>
<tr>
<td>IAN EDWARDS</td>
</tr>
<tr>
<td>IAN HARRISON</td>
</tr>
<tr>
<td>INNOVATIVE DESIGN</td>
</tr>
<tr>
<td>J.E. SUGDEN</td>
</tr>
<tr>
<td>JAMO</td>
</tr>
<tr>
<td>KEF</td>
</tr>
<tr>
<td>KRONOS DISTRIBUTION</td>
</tr>
<tr>
<td>LEONARD BOOTH</td>
</tr>
<tr>
<td>LFD AUDIO</td>
</tr>
<tr>
<td>LISTEN INN</td>
</tr>
<tr>
<td>LORICRAFT</td>
</tr>
<tr>
<td>MANTRA AUDIO</td>
</tr>
<tr>
<td>NAD</td>
</tr>
<tr>
<td>ORANGES &amp; LEMONS</td>
</tr>
<tr>
<td>ORTOFON</td>
</tr>
<tr>
<td>OXFORD AUDIO</td>
</tr>
<tr>
<td>CONSULTANTS</td>
</tr>
<tr>
<td>PHILIPS</td>
</tr>
<tr>
<td>POWER PLANT</td>
</tr>
<tr>
<td>QTA</td>
</tr>
<tr>
<td>RDL ALLISON ACOUSTIC</td>
</tr>
<tr>
<td>RECITAL</td>
</tr>
<tr>
<td>RICHARDS A.V.</td>
</tr>
<tr>
<td>RINGMAT DEVELOPMENT</td>
</tr>
<tr>
<td>ROOM ACOUSTIC SVCs</td>
</tr>
<tr>
<td>SCARBOROUGH HI-FI</td>
</tr>
<tr>
<td>SERIOUS KIT</td>
</tr>
<tr>
<td>SEVENOAKS HI-FI</td>
</tr>
<tr>
<td>SLATE AUDIO</td>
</tr>
<tr>
<td>SME</td>
</tr>
<tr>
<td>SOUND COMPANY</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>DIY SUPPLEMENT</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTIQUE ELECTRONICS</td>
</tr>
<tr>
<td>AUDIO CAB</td>
</tr>
<tr>
<td>AUDIO NOTE</td>
</tr>
<tr>
<td>AUDIO TECHNOLOGY</td>
</tr>
<tr>
<td>BILLINGTON EXPORT</td>
</tr>
<tr>
<td>BORBELY AUDIO</td>
</tr>
<tr>
<td>CHELMER VALVE CO</td>
</tr>
<tr>
<td>CRICKLEWOOD ELECTRONICS</td>
</tr>
<tr>
<td>EUROSONICS</td>
</tr>
<tr>
<td>FALCON DIY</td>
</tr>
<tr>
<td>GLASS AUDIO</td>
</tr>
<tr>
<td>HART ELECTRONICS</td>
</tr>
<tr>
<td>KIT SUPPLIERS</td>
</tr>
<tr>
<td>LANGREX SUPPLIES</td>
</tr>
<tr>
<td>LOCKWOOD AUDIO</td>
</tr>
<tr>
<td>LYNWOOD ELECTRONICS</td>
</tr>
<tr>
<td>P.V. TUBES</td>
</tr>
<tr>
<td>SJS</td>
</tr>
<tr>
<td>SONIC FRONTIERS</td>
</tr>
<tr>
<td>SOWTER</td>
</tr>
<tr>
<td>SPEAKER CO.</td>
</tr>
<tr>
<td>SPECTRA DYNAMICS</td>
</tr>
<tr>
<td>VINTAGE VALVES</td>
</tr>
<tr>
<td>WOLLATON AUDIO</td>
</tr>
</tbody>
</table>
The answer is an audible Yes. Unlike many electronics companies, NAD specialises in delivering innovative, award-winning audio and home cinema products - and nothing else. Simplicity and symmetry. A free-ranging approach to design. Balancing acoustic excellence, ease of use, reliability and value. Principles which need for little else.

NAD MARKETING LIMITED NAD BUILDING 401-405 NETHER STREET LONDON N3 1QG. TELEPHONE 081 343 3240

Can sound be this simple?