

with £2.00

# Hi-Fi WORLD

FEBRUARY 1995 £2.00

**SCOOP!**

**TDL'S NEW RTL4 TRANSMISSION LINE LOUDSPEAKERS**

**5 PAGE BARGAIN USED HI-FI SECTION**

**COMPETITION ARCAM CD PLAYERS WORTH £2250**

**SCOOP!**

## HDCD

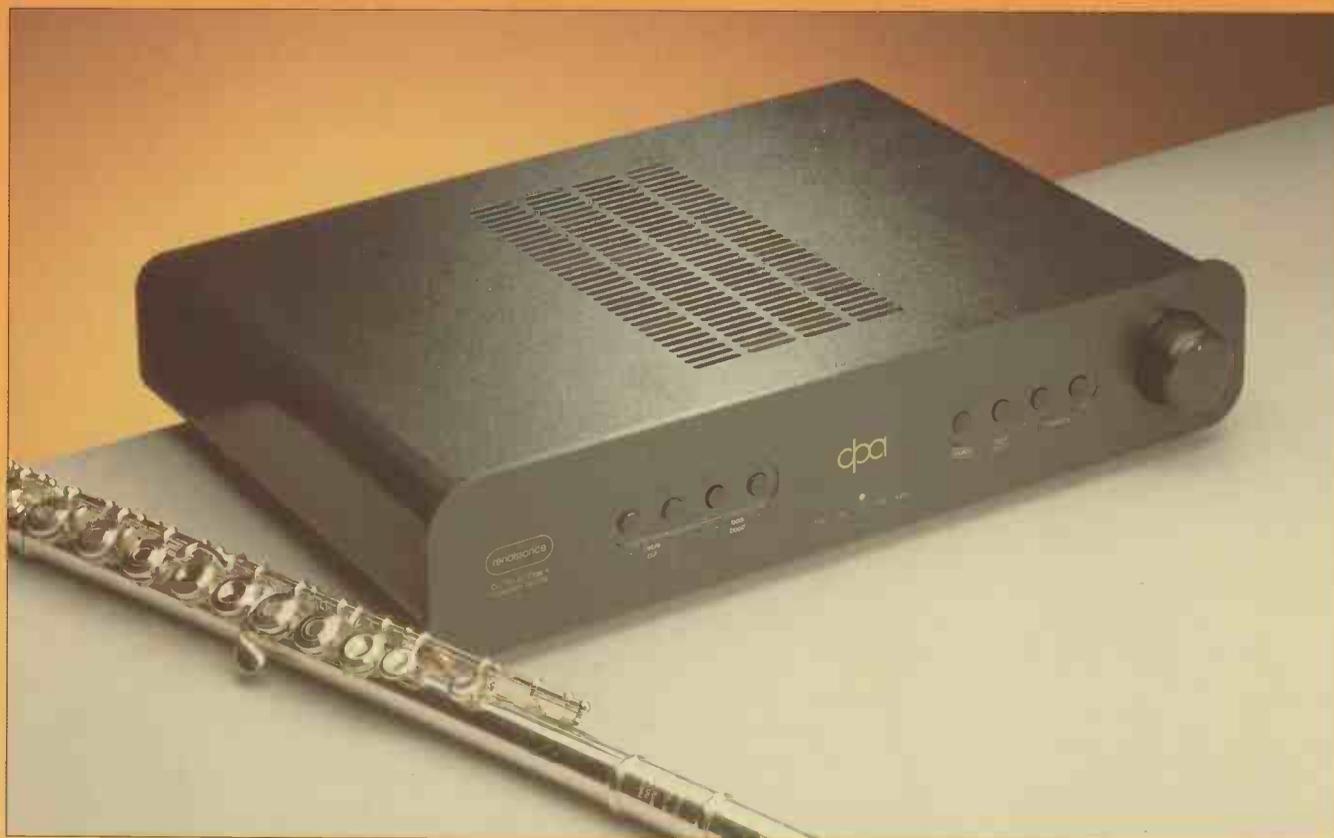
**PINK TRIANGLE LEAD THE WAY**

**SUPPLEMENT NO. 13 banded to this issue**

**QUAD'S FIRST EVER INTEGRATED AMPLIFIER**



# To boldly go where no Hi-Fi has gone before



*The Renaissance integrated amplifier - packed full of dpa innovations that redefine integrated amplifier performance.*

Imagine being able to perceive subtle nuances and delicate details; and then exhilarating dynamics and power.

Imagine high performance electronics, advanced innovative design and construction.

Imagine all of the above but at an affordable price. Impossible? Not after you have experienced the Renaissance Integrated amp, CD player or DAC. Which explains why Hi-Fi World recently said of the integrated amp "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."

## Renaissance - affordable High-End reborn

The logo for dpa, consisting of the lowercase letters 'd', 'p', and 'a' in a stylized, rounded font.

dpa Digital Ltd., 7&8 Willowbrook Lab Units, Crickhowell Rd., St Mellons, Cardiff, Wales CF3 0EF  
Tel: (01222) 795621 Fax: (01222) 794267

**F**unny things are happening in the marketplace.

Prerecorded cassette sales have gone into steep decline, CD player sales are looking shaky and vinyl's making a minor comeback! The world has gone mad - or so it appears.

It looks to me as if some of the trends appearing in Britain, revealed in the BPI's fascinating 1994 Yearbook (end of '94, so it isn't out of date yet) are merely reflections of those already identified in other wealthy economies, especially the U.S.A. and Japan.

First, the figures. Last year the BPI took a long term view, publishing figures stretching from 1972 to 1993 in graphical form for all music formats. You can see how LP sales peaked at 91.6 million in 1975. They started to decline thereafter and it's interesting to see that there was no change in this trend once it had set in, apart from a rally in 1978, which seems to be an anomaly. The curve plunges more steeply in the bad times, like the early eighties, than through the good times, notably the go-go late eighties when, despite the presence of CD whose sales were climbing steeply, sales of LP seemed almost to stabilise. Then as the most recent recession commenced, sales again plunged inexorably downward.

There's an interesting message here: once the rot sets in, it stays. That's a useful predictive rule. Marketing men talk about 'bell curves' depicting the behaviour of a product in a market. Sales start slowly, rise steeply after a few years, then flatten out and, in the end, go into a similarly shaped decline. That appears to tie in with the sales pattern followed by the LP over the years. We can't see the start of the curve, the left hand side of the bell as it were, but the right side follows this pattern reasonably well.

Why am I interested? Because trends can be used to predict, to some degree, what will happen to other media in the future - at

least, the major ones. I've never liked the view that once the LP went into decline, the trend was irreversible, but it does seem to be borne out by these figures. Even before CD came along, sales were in significant decline, so we can't accuse the music business of engineering the effect, by refusing to stock LP for example, to suit its own ends.

Did cassette kill off LP because of its robustness and convenient size? It was up and running well before CD, but when prerecorded sales started to rocket



## Reflections from Noel Keywood kaleidoscope

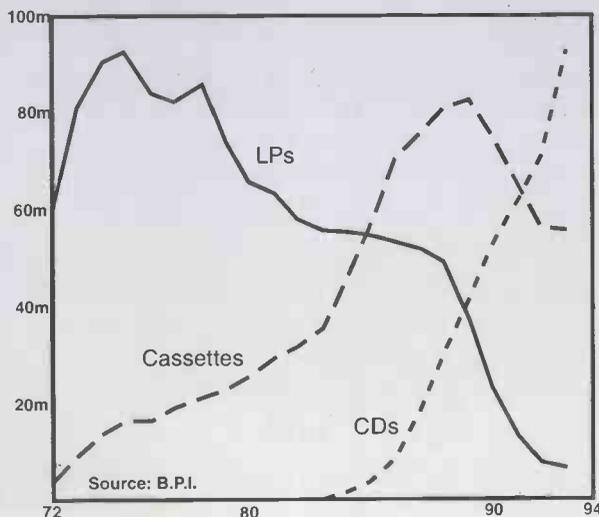
upward in 1983, those of the LP didn't decline commensurately more steeply. Quite the reverse, they benefitted from the same improved economic

promotion can reverse the trend. One implication, which will understandably infuriate many vinyl lovers, is that the LP died of natural causes; it wasn't killed off.

newsagents. Philips on the other hand seems more intent on pushing CD-I at present, and I can understand why. The future of hi-fi looks shaky.

As we report on our news pages, CD player sales are starting to decline. Hi-fi in the form of separates is in decline generally in Britain, down 10% according to the BPI, whilst audio (midi, etc.) systems are up 10%. This is where some of the fall comes from - but not all. Could it be that CD hardware is about to hit the top of the bell curve, software following in a few years time? It would be easy to think that their marketing men are already seeing that the end for conventional CD is in sight, simply because the bell curve says so. Is this why alternatives like HDCD are being lined up?

In a bizarrely fragmenting market, hi-fi may well become a niche lifestyle accessory in future, where there's as much attraction in playing LPs as playing those funny eighties things known as CDs. Just wind up the wax cylinder Mabel ●



conditions, so both were victim to outside circumstance. If cassette was responsible for the demise of LP then as its sales increased, the decline of LP should have steepened, but it didn't.

So it seems to be a brutal fact that products have a 'lifetime' and that once they go into decline no amount of

Now it's the turn of the cassette. Having hit a peak in 1989, aided by the recession, sales have gone into steep decline. That's why Philips decided to launch Digital Compact Cassette (DCC) and Sony went for Mini-Disc (MD). Both are after the global cassette market, which is enormous.

# THIS MONTH'S REVIEWS



Cover Photograph by  
Paul Hartley Studio 071- 482 3768

Editor  
**Noel Keywood**

Assistant Editor  
**Dominic Baker**

Production Editor  
**Ferewini T. Michael**

General Manager  
**Mark Winfield**

Marketing Manager  
**Richard Johnson**

Advertising Executives  
**Amanda Sweeney**  
**Edward Pizey**

Design Engineer  
**Andy Grove**

Technical Assistant  
**Nick Lucas**

Contributors  
**Eric Braithwaite**  
**Richard Brice**  
**Giovanni Dadomo**  
**Peter Herring**  
**Simon Hopkins**  
**Dominic Todd**  
**Jon Clarke**

Cartoonist  
**Freddy Ahmet**

Distributed by:  
COMAG, Tavistock Road, West  
Drayton, Middlesex, UB7 7QE  
Tel: 0895 444055

Origination by:  
Ashford Scanning  
2 Norfolk Drive,  
Fairwood Industrial Park,  
Ashford, Kent TN23 2FB  
Tel: 0233 622042

Printed by:  
Southernprint, Poole, Dorset.  
Tel: 0202 622226

**AUDIO PUBLISHING LTD.**,  
64 Castellain Road, Maida Vale,  
London W9 1EX.  
Tel: 071-289 3533  
10 am. - 6pm.  
Fax: 071-289 5620  
Queries cannot be answered  
by telephone.

**MAIL ORDER**  
Tel: 071-266 0461 (24 hours)

**Subscription Rates:**  
UK: £22,  
Overseas Surface: £29, Airmail:  
£42 (Europe) £52 (USA, Middle  
East), £62 (Australia, Japan).

No material may be reproduced  
from this magazine without  
the publisher's written  
permission.

© Audio Publishing Ltd



## AMPLIFIERS

**QUAD 77** 29  
An integrated amplifier with modern styling and remote control marks a new departure for Quad. Eric Braithwaite puts the 77 through its paces.



**CARY 300B SE** 33  
Can Cary's 300B single-ended amplifiers deliver the famed sweet and open triode sound? Eric Braithwaite listens to these glowing wonders from the States.

**PRO-JECT 7** 58  
Integrated amps with phono stages are becoming increasingly hard to find. David Price finds that Pro-Ject's new £259 model works beautifully.

## COMPACT DISC

**PINK TRIANGLE CARDINAL TRANSPORT & DA CAPO HDCD CONVERTOR** 13  
Pink Triangle are once again at the forefront with their implementation of Pacific Microsonics' HDCD system. This is the first UK review of a Compact Disc system that delivers the sonic goods.

**PIONEER PD-103** 56  
Pioneer's budget £160 PD-103 shows that you don't have to spend a fortune to get reasonable sound from CD. Dominic Baker investigates.

**TEAC VRDS-TI** 65  
It was only a matter of time before TEAC's Vibration free Rigid Disc clamping System reached affordable CD drives. David Price listens to the new VRDS-TI transport.

## LOUDSPEAKERS

**UKD OPERA PRIMA** 26  
Finished in solid walnut and with an affordable £450 price tag, UKD's Opera Primas could be a winner. Dominic Baker listens to these Italian minatures.

**THOMAS TRANSDUCERS BRIO** 36  
One of the largest loudspeakers we've ever reviewed, the Brio goes loud with little power. Dominic Baker finds out whether quantity and quality can be combined.



**TDL RTL-4** 52  
Noel Keywood listens to the latest addition to TDL's critically acclaimed RTL range, the floorstanding RTL-4s.

## TURNTABLE

**THORENS TD180** 21  
This unusual new turntable from Thorens plays 78s. Who better than analogue aficionado Eric Braithwaite to test its abilities?

## CASSETTE

**AIWA AD-S950** 44  
A new addition to Aiwa's cassette deck range, the AD-S950 is the latest model to sport Dolby S. Noel Keywood finds out whether this is the one to challenge Nakamichi.

## TUNER

**YAMAHA TX-580RDS** 42  
With a pretty face and RDS, this new Yamaha tuner is aimed foursquare at the super-competitive sub-£200 sector. David Price takes a good long listen.



## HEADPHONES

**SENNHEISER HE60/V70** 50  
Dominic Todd enjoys his time with these Class A powered electrostatic headphones from Sennheiser, finding they're a reference by which loudspeakers can be judged.



**AMERICAN  
and  
CANADIAN  
SUBSCRIPTIONS**  
- see page 68

## REGULARS

|   |               |
|---|---------------|
| <b>NEWS</b>   | 7             |
| The latest developments in the world of hi-fi.  |               |
| <b>LETTERS</b>  | 38            |
| World readers, not famous for holding back when speaking their minds, have their say in customarily forthright fashion.                                       |               |
| <b>NEXT ISSUE</b>   | 60            |
| Find out why you should be counting the hours until this time next month! You'd hate yourself for missing it.   |               |
| <b>COLUMNS</b>  | 3, 63, 69, 71 |
| The World team get to grips with issues facing both the industry and hi-fi buyers alike.  |               |
| <b>SUBSCRIPTIONS</b>  | 68            |
| Hi-fi World is second to none for news, reviews, comment and music. Dare you risk being left behind with the also-rans? Subscribe, and put your mind at ease. |               |

|   |    |
|---|----|
| <b>SPECIALIST HI-FI DEALERS</b>   | 77 |
| Got a problem - see a specialist. These dealers will be able to give you all the help you need. |    |

|   |    |
|---|----|
| <b>MEET YOUR MAKER</b>                  | 81 |
| Who makes what and how to get in touch. |    |

|   |    |
|---|----|
| <b>WORLD AUDIO DESIGN</b>   | 82 |
| Check out the all-new turbo-charged K5881 PSE. Single-ended power at an affordable price. |    |

|  |    |
|--|----|
| <b>DIAL-A-DEALER</b>                   | 89 |
| Who sells what and where to find them. |    |

|   |    |
|---|----|
| <b>ACCESSORIES</b>  | 97 |
| Quality accessories to get that last ounce of performance from your hi-fi, and storage systems for your treasured music collection. |    |

|  |     |
|--|-----|
| <b>HI-FI WORLD LIBRARY</b>   | 100 |
| A comprehensive selection of titles spanning the history of audio, valve amplifiers, loudspeakers, solid state electronics and more. Affordable and educational. |     |

|  |     |
|--|-----|
| <b>WORLD FAVOURITES</b>                                  | 104 |
| Components which we know to be truly worthy of audition. |     |

|  |     |
|--|-----|
| <b>Q&amp;A</b>   | 111 |
| Whether the turntable has gone out of tune again or the amplifier has spontaneously combusted, the World team offer help and guidance. |     |

|  |     |
|--|-----|
| <b>CLASSIFIEDS</b>   | 121 |
| Essential for those with an interest in 'previously owned' equipment, this is the definitive place to find classic audio components. |     |

|                           |     |
|---------------------------|-----|
| <b>ADVERTISERS' INDEX</b> | 130 |
|---------------------------|-----|

## FEATURES

|  |    |
|--|----|
| <b>HDCD</b>  | 19 |
| The lowdown on one of the major CD developments of recent years, the Pacific Microsonics' HDCD system. |    |

## DIY SUPPLEMENT

Headlining this month's supplement is an all new design for a super audiophile parallel-single-ended valve amplifier using the reliable 5881 beam tetrode. There's also a test on IMP, an affordable loudspeaker measurement system, along with book reviews, Q&A, kit news, etc.

## MUSIC

Our guide to some of the best new releases.

**ROCK RECORD OF THE MONTH:**  
Pearl Jam: Vitalogy

**CLASSICAL RECORD OF THE MONTH:**  
Johann Sebastian Bach: The "Leipzig" Chorales

|                     |    |
|---------------------|----|
| <b>ROCK AND POP</b> | 73 |
| <b>CLASSICAL</b>    | 84 |
| <b>JAZZ</b>         | 93 |

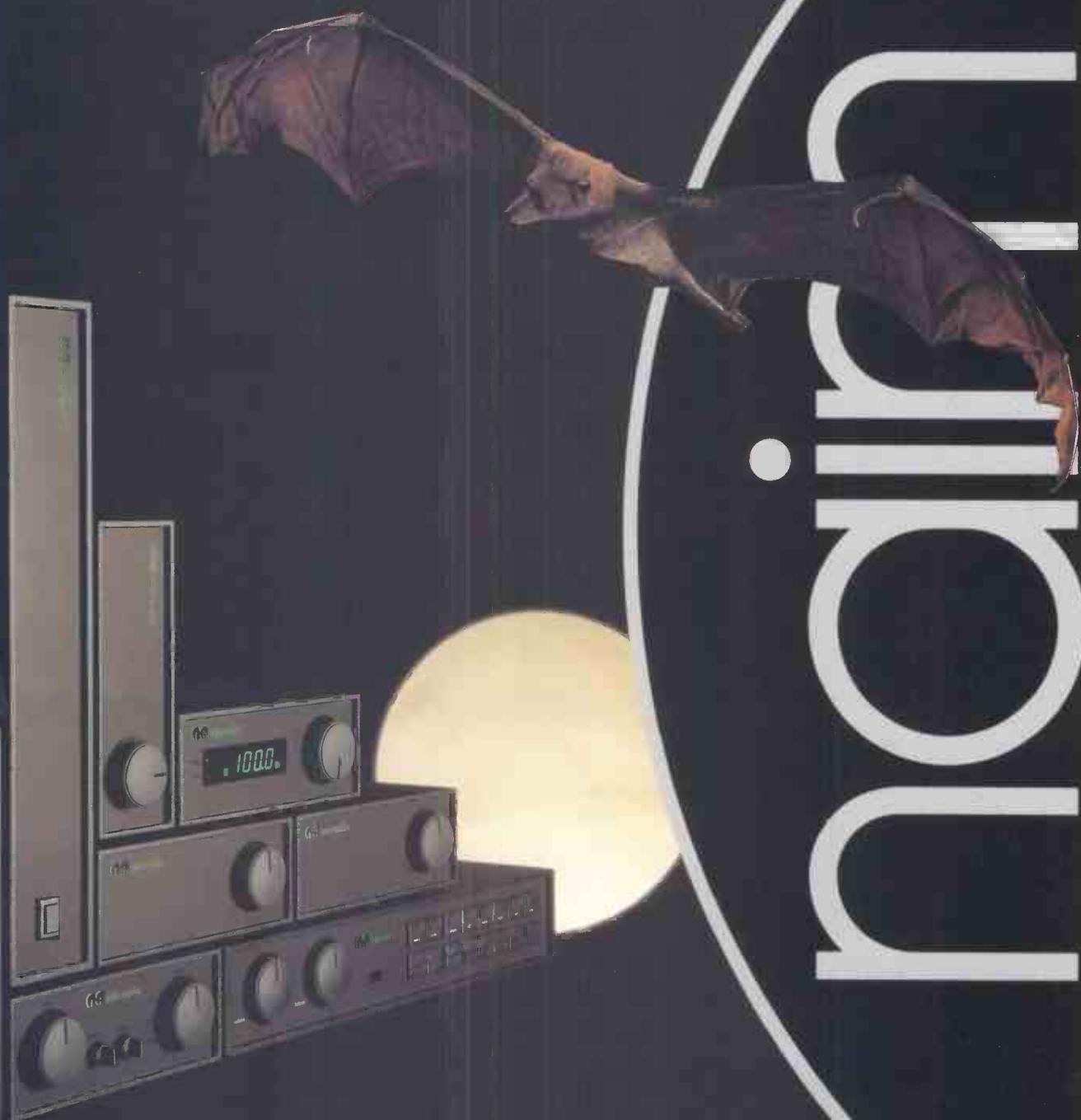
## COMPETITION

Three superb CD players from Arcam worth £2250. One of them could be yours for the cost of a stamp. 1st Prize: Arcam Delta 250 transport and Black Box 500 convertor. 2nd Prize: Arcam Black Box 50 convertor. 3rd Prize: Arcam Alpha One CD player. 66



# CONTENTS

Trust your instincts.



 naim audio  
FOR NATURAL LISTENERS

HI-FI CD PLAYERS AMPLIFIERS  
TUNERS TONEARMS LOUDSPEAKERS

FOR FURTHER INFORMATION, A COLOUR BROCHURE OR THE NAME OF YOUR NEAREST STOCKIST PLEASE RING 01722 332266.  
NAIM AUDIO LTD, SOUTHAMPTON ROAD, SALISBURY SP1 2LN.

## B&W P SERIES

Unveiled at Live '94, B&W's three new P series loudspeakers are now available nationally.

The flagship P6 uses a 165mm Kevlar driver for the majority of the midrange, with a 165mm Cobex bass unit filling in the lowest octaves. The tweeter is a 25mm metal dome, sited on top of the cabinet, which B&W claim, gives "a spaciousness of image usually only found in recording studios and Penthouse suites". The bi-wireable P6 (right) costs £999.

The £799 P5 shares the same driver line up with big brother, but in a smaller cabinet and without the top mounted tweeter. It was the pretty £599 P4s that caught our eye at Live '94. These two-way floorstanders employ a Kevlar bass/mid unit and B&W's folded pipe reflex port, claimed to give deep and clear bass - all will be revealed in March's Hi-Fi World.

**B&W Loudspeakers**  
Meadow Rd,  
Worthing, BN11 2RX  
Tel: 0903 820415



## RETAILERS FIND A MESSAGE IN THE MEDIUM

Whilst their advertisements on Jazz FM were proclaiming "vinyl is dead", we discovered Tower Records were doing very nicely selling LPs from a recently relaunched store in Kingston, Surrey.

Chris Tuft, manager of the Kingston store, told Hi-Fi World they were doing "absolutely fantastic, unbelievable" business, selling everything from 99p deletions to full price triple albums. The demand started from the desire of acid-jazz fans to purchase their favourite music on the format beloved by many jazz musicians. Soon, they were stocking more and more LPs, so the store was relaunched last October with an entire sales floor devoted to vinyl.

Asked why Tower's advertisements were misleading and apparently contrary to their commercial outlook, Chris called the mix-up "a blip", and said they were "happy to be at the forefront of reintroducing vinyl". Chris confessed to being astounded with the enthusiasm surrounding Tower Europe's decision to 'experiment' with LPs after it had declared the format to be dead several years ago.

But it's not just Tower who are tapping into increasing demand. Graham Walker, manager of the HMV Megastore, Oxford Circus, told Hi-Fi World that the LP version of the Beatles' newly released "Live at the BBC" album actually comprised 24% of all sales, making it the second most sought after format. HMV told us that during the store's quarterly vinyl promotions, "people were literally buying basketfuls of vinyl". It looks like the humble vinyl LP just won't die after all.

**Tower Records Kingston**  
Tel: 081 546 2500

**HMV Oxford Circus**  
Tel: 071 631 3423



ANALOGUE/DIGITAL  
DESIGN ENGINEERS

the Colour

Pink

The shape

Triangle

The music

Projects

the Competitors Limited

vital vinyl

POWER SUPPLY  
DESIGNERS

made in britain made in

PINK TRIANGLE PROJECTS LTD.  
THE BASEMENT, CAMBERWELL BUSINESS CENTRE  
LOMOND GROVE, CAMBERWELL, LONDON. SE5 7HN.  
TEL: 0171 703 5498 FAX: 0171 252 6746

PRODUCT  
PARAPHERNALIA

## KEF LAUNCH RAYMOND COOKE SERIES

Loudspeaker specialist KEF has been busy developing three special edition high-end models honouring KEF's founder, Raymond Cooke O.B.E.

Ranging from the evergreen LS3/5s up to the towering 107/2 floorstander, the Raymond Cooke Series carry gold plated plaques to mark their rightful place in loudspeaker history and indicate their special edition status.

The LS3/5as start at £599 a pair. The 104/2 is a floorstander boasting a high 92dB sensitivity, from £1799. The 107/2 comes in two finishes - Santos Rosewood at £3,999 and Piano Black for £4,999.

**KEF Audio**  
Eccleston Rd, Tovil, Maidstone, Kent. ME15 6QP  
Tel: 0622 672261



## CASTLE MARCH FORWARD

Castle are on the march again with a new floorstanding loudspeaker, the Severn.

With a sensitivity of 87dB the Severn is the first to benefit from a new range of drive units Castle are currently developing. The bass/mid unit uses a 130mm injection-moulded cone on a die-cast chassis and features a long throw voice coil. The tweeter is a soft 25mm polyamide dome to which Castle fit their own face plate. This is horn loaded to improve sensitivity.

The 2' 6" high cabinets that grace the Severns are available in nine wood veneer finishes. In standard finishes the Severn costs £499, or £569.90 in Rosewood or Yew.

**Castle Acoustics**  
Park Mill, Shortbank Rd, Skipton, N. Yorks. BD23 2TT Tel: 0756 795333

## CD PLAYER SALES GO INTO DECLINE

Recent BPI figures haven't brought much in the way of Christmas cheer to British specialist manufacturers, showing that sales of hi-fi compact disc players are going into decline. Against a backdrop of a slightly expanding audio hardware market, their sales fell by 13.4% compared to a fall of just 6.4% for turntables.

It seems that nearly half of Britain's households own a CD player, an impressive penetration considering the figure stood at just 14% at the beginning of the decade. These days, however, most of them come with midi systems or personal stereos.

**The British Phonographic Industry Ltd.,**  
25 Saville Row, London W1X 1AA.  
Tel: 071 287 4422

## 300B MANIA AT AUDIO NOTE

Brighton-based Audio Note has three new amplifiers on the market.

Using 300B directly heated triodes in single-ended mode, the P3 (£1,950) is a stereo power amplifier producing 9watts. Its bigger brother is the P4, which comes as a pair of 17watt monoblocks for £3,799. Both have output taps for 4Ω and 8Ω loudspeakers, allowing them to be load matched for best results.

Elsewhere, Audio Note has launched the Meishu phono/line integrated. Again the 300B valve puts in an appearance in single-ended mode in both versions. The Meishu (line) is priced £2,450 and the phono integrated, which has line facilities too, costs £2,950. Single-ended output is 9watts.



**Audio Note UK**  
Unit 1, Block C, Hove Business centre, Fonthill Rd, Hove, E. Sussex. BN3 6HA Tel: 0273 220511

**MERIDIAN STAND TALL**  
A new floorstanding loudspeaker from Cambridgeshire firm, Meridian Audio, is now available across UK dealerships.

Completing Meridian's 500 series, the new A500 is said to have a high sensitivity of 90dB. Finished in Black Ash or Rosewood, the cabinet houses two 6.5" drivers for mid-range and bass and a 1" soft dome silk tweeter.

Weighing in at £695 for Rosewood and £745 for Black Ash, the A500 spans 40Hz to 20kHz with a suggested amplifier requirement of 20-100 watts.

**Meridian Audio**  
14 Clifton Road, Huntingdon, Cambs. PE18 7EJ  
Tel: 0480 52144

## HARMAN'S NEW RANGE

Six new integrated amplifiers have appeared from Harman Audio, joined by a cassette deck and a tuner.

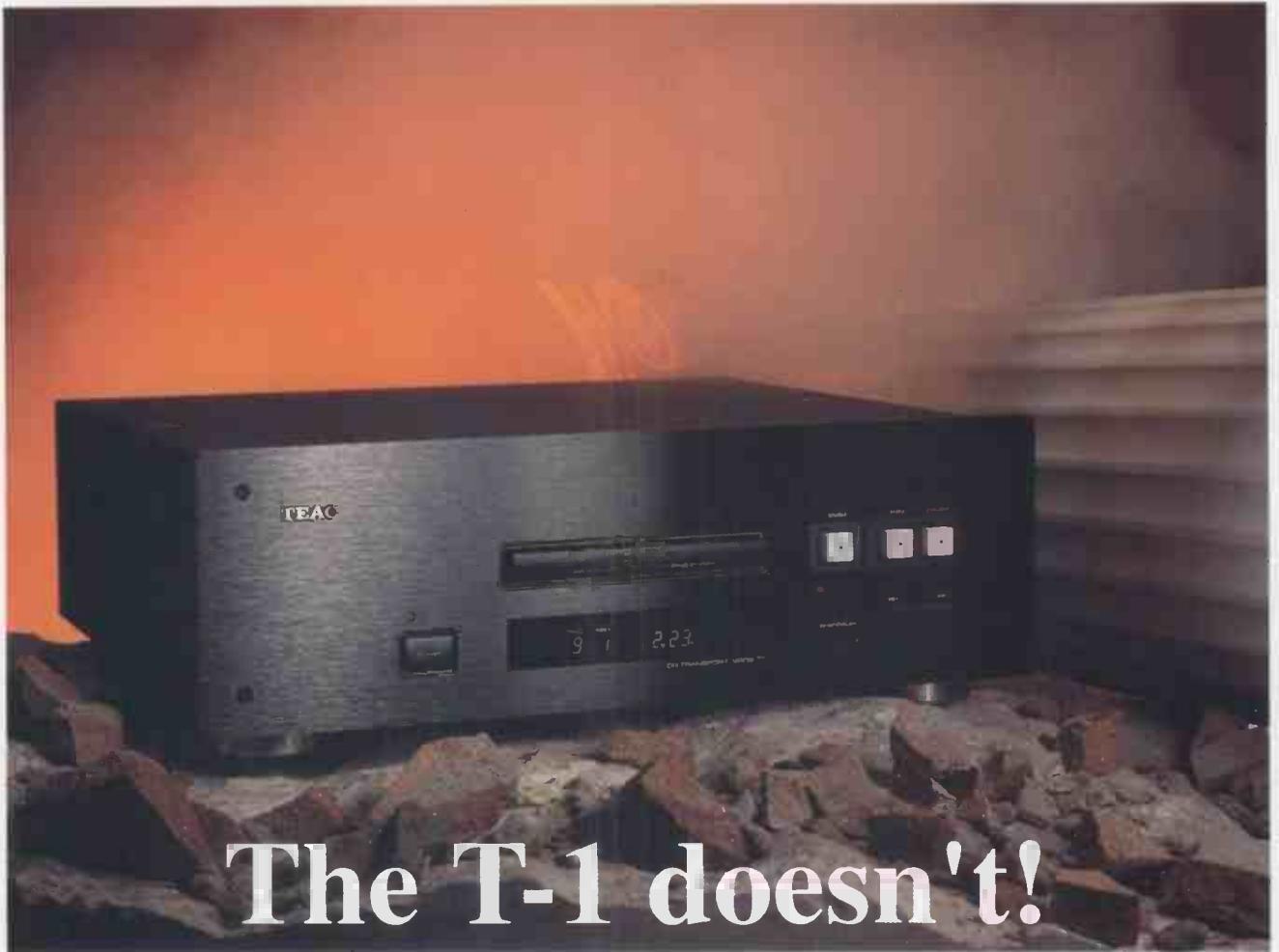
The new range of amplifiers have all benefited from improved circuit design, with reduced open loop distortion allowing feedback to be reduced. The new range comprises: hk610 (£189.99), hk620 (£269.99), hk640 (£399.99), hk660 (£599.99), hk680 (£799.99) and optional add-on PH600 phono-stage, £29.99.

Complementing the new amplifier range, are the TD420 cassette deck and TU930 tuner. The £279.99 TD420's features include Dolby B, C and HX-Pro, bias fine trim, record mute, auto tape selection and MPX filter. The £179 TU930 can store up to 30 AM and FM pre-set frequencies.



**Harman Audio**  
Unit 2, Borehamwood Ind Pk, Rowley Lane, Borehamwood, Herts. WD6 5PZ Tel: 081 207 5050

# POMPEII ROCKS



## The T-1 doesn't!

Even in the shaky surroundings of old Pompeii the New TEAC T-1 CD Transport would still have delivered the goods.

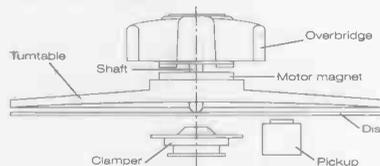
The T-1 places the acclaimed vibration-free VRDS mechanism within reach of those looking for the cost effective path to CD upgrades.

What sets the VRDS mechanism apart from standard CD players is its ability to reduce the vibration induced in the spinning disc.

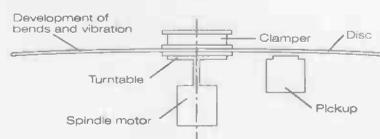
As the diagram on the right shows, a normal CD transport of the type used in budget and high end players alike, only clamps the CD at its centre.

As the disc itself is rotating at high speed it oscillates and vibrates making it difficult for the the pickup lens to track the minute pits on the CD surface with the necessary accuracy.

### VRDS Mechanism



### Standard CD Mechanism



Much of the information available may be read incorrectly or in a corrupt form, contributing greatly to distortion within the signal that is fed to the DAC.

The VRDS mechanism significantly reduces this effect by clamping the whole width of the disc thus reducing the vibration that causes jitter.

This all adds up to a Transport that does the job of retrieving information better than any other comparable drive on the market, providing your DAC with the most accurate signal possible.

Because the T-1 does give you one of the best mechanisms in the world, you can buy in confidence knowing that you have the perfect source for any DAC upgrade, now or in the future.

If it was available to the ancient Romans they would probably still be using it now - in spite of earthquakes!

# TEAC

---

# VRDS

Please send me information on the TEAC VRDS range

Name \_\_\_\_\_

Address \_\_\_\_\_

Postcode \_\_\_\_\_

**TEAC** 5 Marlin House, The Croxley Centre, Watford, Herts  
WD1 8YA TEL: 0923 819630 FAX: 0923 236290

## DENON IMPROVE SOUND FROM CD

Denon announce Alpha Processing conversion technology made affordable with the arrival of the new DCD-1015 CD player, priced at £349.99. This was first available inside the £6,500 DA-SI DAC.

Creating an analogue replay signal of near 20-bit quality from a 16-bit original, Alpha processing produces improved low level resolution, working through an 'intelligent' digital filter.

Hayden Labs  
Chiltern Hill,  
Chalfont St Peter,  
Gerrards Cross,  
Bucks. SL9 9UG  
Tel: 0753 888447



## A NEW AXIS FROM DOWN UNDER

Axis loudspeakers are now to be introduced into the UK by Kronos Distribution. The range will consist of the stand-mounting LS28, which retails between £699-£750 depending on finish; a floorstander, the LS33, retailing between £1199 and £1299, and a high end floorstander which will cost £2,599. Three wood finishes are on offer: Mahogany, Beech and an Australian wood, Babinga.

Kronos Distribution  
35, Farlough Road, Newmills,  
Dungannon, N. Ireland. BT 71 4DU  
Tel: 01868 748632

## TWO AMPLIFIERS IN ONE

Kilmarnock-based Quantum Audio has unveiled a 20 or 30 watt - depending on your valve choice - amplifier dubbed the Minstrel. A hybrid of solid-state power supply and pre-amp and valve output stage, the Minstrel will produce 30 watts into 8ohms with military specification 5881 valves, or 20 watts with 6L6 valves, claim Quantum.

Quantum Audio,  
PO Box 26, Oliphant Drive, Kilmarnock.,  
Scotland KA3 7JA Tel: 01563 71122.

## SOUND-BITES

Dealer activity continues apace - Leicester's Classique Sounds believes it has made a first with a commitment to same-day rebuilds for most vintage valve power amps. Prices begin at £120. The store is also offering the same rapid response on full Garrard 301/401 servicing. Talk to Paul Greenfield on: 0533 835821.

The Audio File in Bishop's Stortford, meanwhile has expanded and now occupies 25-27 Hockerill Street. Its new premises are purpose-built, incorporating four dem. rooms, two for home cinema and two for top-end hi-fi including active systems from Linn and Naim.

Musical Images in London's Covent Garden has hit the ripe old age of ten and marks the event with a face-lift and three new

## TEN OUT OF TEN FOR GAMMA

Berkshire-based Gamma Acoustics has launched no less than ten new products for the valve enthusiast.

First up is the ERA Standard, a full function valve phono pre-amp priced at £999. An improved version, the ERA, with a substantial power supply, retails for £2499. Top of the range of pre-amps is the ERA Reference, which Gamma describe as a "state-of-the-art unit of true pedigree". The price: £3,999.

The Space Reference is a line level integrated amplifier, using the 300B power triode in single-ended mode. Silver-wired, sporting silver caps and copper casework construction, this arrangement delivers 18watts with zero feedback and costs £3,999. Another integrated amplifier at a more affordable level is the £699 Gemini. This uses single-ended triodes to produce 12watts - plenty if you have sensitive loudspeakers.



Freshly updated and with an improved power supply the £11,999 Aeon 30watt single-ended mono-block power amplifiers use the 211 power triode. But Gamma's final word on valve amplification, must rest with its Aeon Signature. For £78,600 you get 90watts (they claim) of pure single-ended power.

If that wasn't enough, Gamma also have a new loudspeaker, the Epoch Reference Fives. Using Kevlar drive units, silver wired and in a heavily braced cabinet, they are available in either oak or piano black priced at £1999 and £2499 respectively.

Gamma Acoustics  
Ivy Lodge, 81 Sussex Place, Slough, Berkshire.  
SL1 1NN Tel: 0753 526939

## NEWS IN BRIEF

dem. rooms at its newest outlet. "Neighbours say they hardly recognise the place", store manager Rahul Haira said. Musical Images now has three shops and recently raised over £13,000 for Save The Children.

## INDUSTRIOUS SPEAKERS

Two leading loudspeaker companies have scooped industry awards. Harbeth has been awarded Japanese magazine Stereo Sound's Component of the Year '94 award for its HL Compact 7. The Compact 7's predecessor, the HL Compact also won this top Japanese title.

Mission, meanwhile, has picked up Commerce Magazine's Company of the Year Award for East Anglia, and Manufacturer of the Year sponsored by publishers Morgan-Grampian.

spendor

25  
years  
in the  
service  
of  
sound

# MASTERING THE ART

Clear, naturally detailed sound with outstanding dynamics from superbly styled cabinets. These exceptional floor standing loudspeakers continue Spendor's adherence to neutrality - our hallmark for 25 years.



spendor

BECAUSE PEOPLE LISTEN

For further information on the range of Spendor loudspeaker systems, contact our UK distributor:  
Michael Stevens & Partners Ltd,  
Invicta Works, Elliot Road, Bromley,  
Kent BR2 9NT  
Tel 0181-460 7299 Fax 0181-460 0499

# HDCD™

HIGH DEFINITION COMPATIBLE DIGITAL™

## MORE THAN A BIT BETTER

From the U.S.A. comes a radical improvement in CD sound quality - HDCD.

David Price and Noel Keywood test the first system to become available in Britain.



**A**fter a long period of development, the first HDCD system has been introduced in Britain. The new system, called DaCapo, is a CD player which can play both standard CDs and HDCD discs. It is the first of a range of products which will be available in the near future. The system is designed to provide a more realistic sound than standard CDs, and is particularly suited to classical music. The DaCapo system is available in two versions, a standard version and a deluxe version. The standard version is priced at £199.99, and the deluxe version at £299.99. Both versions are available from the DaCapo website, www.dacapo.com.

...been introduced in Britain. The new system, called DaCapo, is a CD player which can play both standard CDs and HDCD discs. It is the first of a range of products which will be available in the near future. The system is designed to provide a more realistic sound than standard CDs, and is particularly suited to classical music. The DaCapo system is available in two versions, a standard version and a deluxe version. The standard version is priced at £199.99, and the deluxe version at £299.99. Both versions are available from the DaCapo website, www.dacapo.com.

## Doug Brady Hi-Fi



Pink Triangle da Capo on permanent demonstration at Brady's, along with Michell ISO, Denon, DPA Renaissance, Mission, Rel, Harbeth, Project, Ortofon, NAD, Nakamichi and many more!!

**SO COME AND MAKE FRIENDS AT:  
DOUG BRADY HI-FI  
KINGSWAY STUDIOS, KINGSWAY NORTH,  
WARRINGTON, CHESHIRE  
Tel: 0925 828009 Fax: 0925 825773  
Open 6 days a week**

## ACTION

## ACOUSTICS

AUDIO SALES & SERVICE

FOR

## PINK - TRIANGLE

and other  
SERIOUS HI-FI EQUIPMENT.  
E.G.

AUDIO-INNOVATIONS, DALI, DENON,  
HARMAN-KARDON, J.P.W., N.E.A.T., PRO-  
JECT, SONIC-LINK, SUGDEN, T.D.L.,  
TOWNSEND ETC..

---

### **ACTION ACOUSTICS**

155-157 High Street,  
Redcar, Cleveland TS10 3AN  
Tel: 0642 480723

## fuller's audio



The new high sensitivity  
SULTAN H.E. Loudspeakers  
from Fuller's Audio are rated  
at 97dB 1w/1m

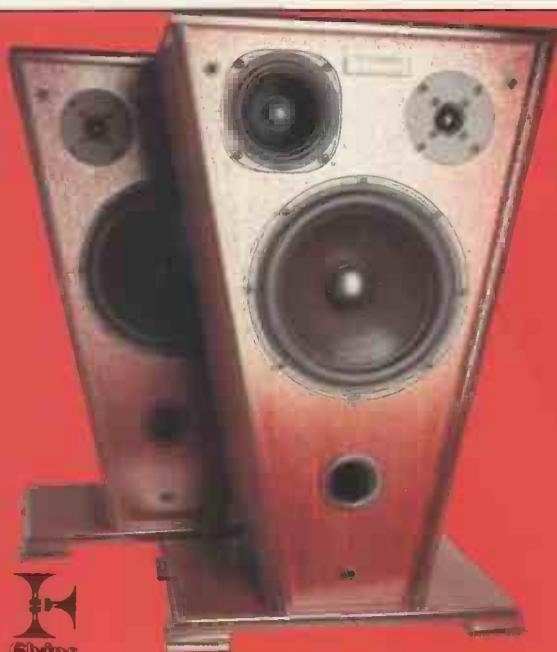
This has been achieved  
without sacrificing sound  
quality and imaging. An  
ideal partner for low  
powered amplification, you  
can now attain realistic  
music levels without having  
to put up with the resulting distortion. The  
matching, optional sub woofer can be added to give  
truly extended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



Elvins 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  
Elvins Acoustic Technology, 12 Brett  
Road, London E8 1JP England.

## CARDINAL TRANSPORT

The style of the Pink Triangle Cardinal CD transport will be instantly familiar to Da Capo users: it's long - perhaps too long at 452mm - slim, and unusually styled. Seemingly well put together, it



nevertheless fails to convey that hewn-from-stone feel that expensive Japanese top-end transports exude. The disc tray moves in and out smoothly enough but doesn't appear particularly robust in location, and the front panel buttons aren't terribly positive in feel.

The facilities on the transport itself are modest, but adequate. Aside from the usual track selection, fast search, play, pause, stop and drawer-open controls, there's only a small, meekly lit display with track number, time and 'music calendar' information. All the usual CD programming facilities are only available from the remote control.

Moving to the rear of the unit, the Cardinal supports BNC-type digital output and clock in connectors, and a standard IEC mains socket.

In keeping with Pink's desire to 'future-proof' their products as much as possible, the Cardinal isn't just a transport though. For £1440 it comes with their DAC-7 Ordinal convertor fitted internally, with either 18 or 20-bit filters to produce a high performance one box player. There's also a more affordable CD player version of the Cardinal on the horizon, details are sketchy at the moment, but it's likely to use Philips' 7350 chipset and retail for £998.

In use the Cardinal is commendably silent and whilst not the quickest in terms of track access times, is fairly satisfying to live with on a day-to-day basis. Auditioned as a transport in its own right, connected to a standard Da Capo, fitted with a Philips 1307 digital filter - our preference - it turned in an excellent performance, sounding as good as anything we've heard to date. Indeed, the Cardinal soon found itself acting as a reference transport used to compare DACs. On Heidi Berry's "Washington Square" the Cardinal/standard Da Capo produced a pleasing enough sound with a large, confident soundstage and voluminous bass. Rhythms were well conveyed and the song's percussive intricacies were not lost.

Connecting the Cardinal to the HDCD Da Capo (but retaining the non-HDCD Heidi Berry disc), taking advantage

of the clock sync facility, things got even better. The song assumed a sense of coherence previously not heard, with percussive instruments such as tom toms and triangles assuming a new importance in the mix, sounding tighter and more finely etched. The sumptuous analogue synth was located more precisely at the back of the mix, and to the front, Heidi and Christopher Berry's acoustic guitars took on a rhythm of their own. The combination of the two new Pink products proved quite formidable on a wide range of music, and that was before its HDCD facility was tried. Broadly speaking, the dedicated HDCD filter gives a warmer and smoother sound than Philips 1307. Little did

we know, but the Pink duo had even more up its sleeve with HDCD discs.

## HDCD SOUND QUALITY

To play HDCD, a CD player must come fitted with a dedicated HDCD digital filter. Since this influences sound quality with normal CD, we listened to HDCD Da Capo with normal discs and HDCD discs, comparing it with another Da Capo fitted with a conventional Philips 1307 digital filter - our reference convertor in fact.

At the time of writing HDCD discs are thin on the ground. I had visions of scratching around - aurally that is - trying to perceive subtle differences in presentation on unfamiliar source material. I shouldn't have worried. The opening bar of Dick Hyman's "From the Age of Swing" said it all. Immediately, there was a consummate sense of the recorded acoustic; I could 'hear' the environment in which the music was being played.

This was impressive. Compact Disc has great problems with capturing important subtleties like this - something that sets it behind high-end vinyl replay. CD rarely

seems able to impart a sense of 'being there', due to its apparent failure to capture and recreate low level information. HDCD seems to side-step this and approach, if not equal vinyl on this count.

I was also impressed by the dynamic grip displayed by the system. Alto and baritone saxophones emoted forcefully - you could readily hear the way the musicians invested their playing with real feeling. The drum kit had a tight, fast delivery; the sound of the snare reverberating around the room was a revelation, and rim shots came across with disarming clarity.

Unlike many detailed sounding conventional CD players, the sound avoided glassiness or brightness in the upper midrange, allowing instruments across the frequency range to find their natural balance.

Indeed, the double bass imaged completely out of the speakers, going down so low with such weight and slam I could not believe I was listening to a five-inch silver disc. The subtlety of fingering work was easy to make out, giving a sense of the musician grappling with the heavy strings of the double bass. Against this it seemed to me that most CD players don't have real bass; some are quite good in the lower regions but this was something else altogether - truly in the wall cracking, glass shattering league.

Most impressive was the way these dynamic improvements worked in conjunction with the way rhythm was handled. This meant that notes started, stopped and got louder and quieter with great speed, making the music exciting to listen to but not, as is often the case, a result of added distortion or hardness.

Despite displaying heart-stopping speed and impact, the Cardinal transport and Da Capo HDCD convertor never sounded tiring. And although they never



The HDCD filter simply plugs in, like the conventional filters.

# Quad introduce the new

**Bowers & Wilkins Ltd**  
1 Becket Building, Littlehampton  
Road,  
Worthing, Sussex. BN13 1QA  
**0903 264141**

**Standens(Tonbridge)Ltd**  
92A High Street, Tonbridge,  
Kent. TN9 1AP  
**0732 353540**

**Amadeus Sound & Vision**  
10 Boldmere Road, Sutton Coldfield  
Warwickshire, B73 5JD  
**021 354 2311**

**A Fanthrope Ltd**  
Hepworths Arcade,  
Silver Street,  
Hull, Humberside. HU1 1JU  
**0482 223096**

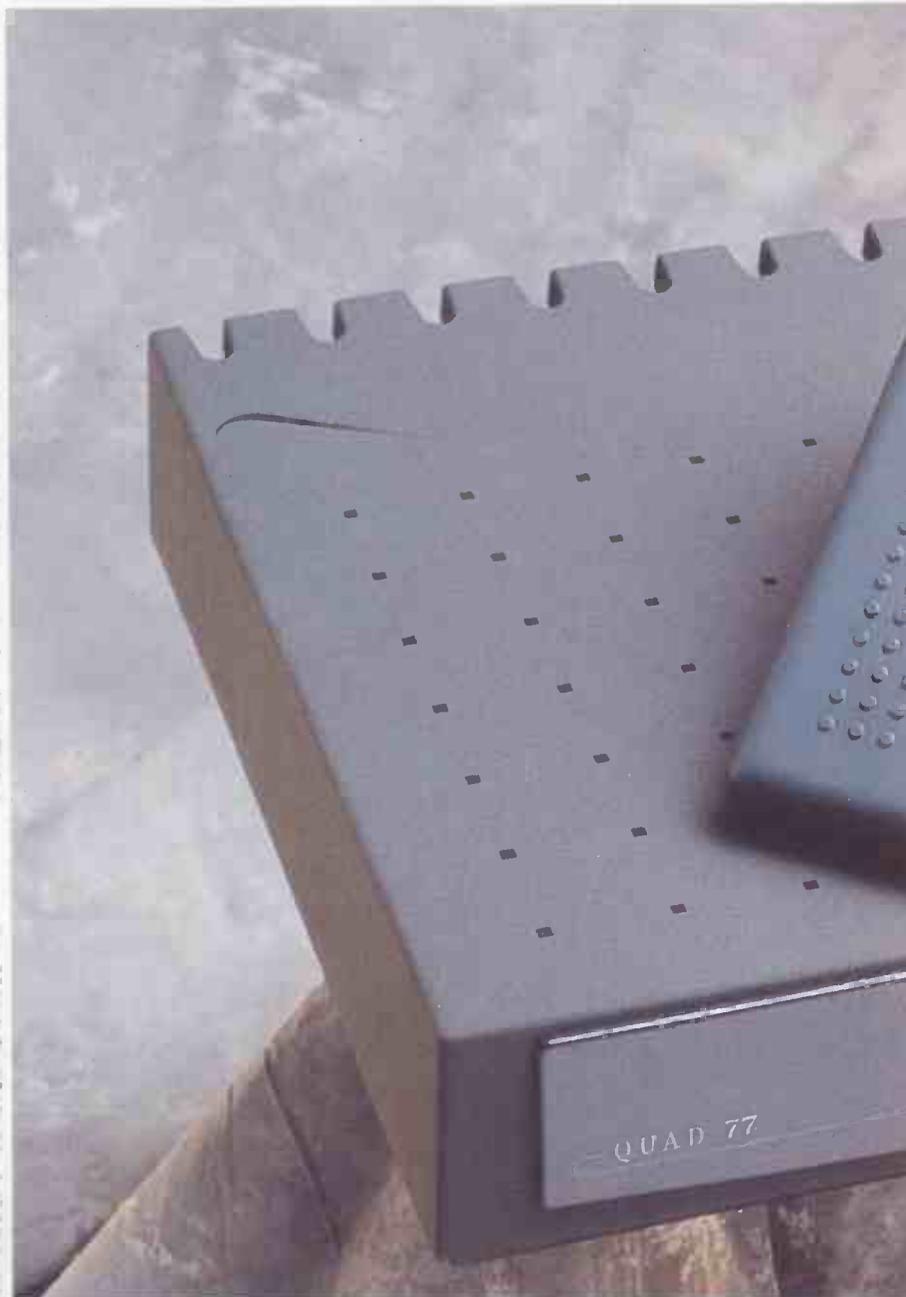
**Melodonia**  
Haugue Du Pommier, Castel,  
Guernsey, Channel Island  
**01481 56647**

**Audio Concepts**  
27 Bond Street, Ealing,  
London. W5 5AS  
**081 567 8703**

**Anglia Audio-Hessett Hi-Fi  
Centre**  
Near Beyton, Bury St Edmunds,  
Suffolk. IP30 9AZ  
**0359 270212**

**Acton Gate Audio**  
4 Ruabon Road, Wrexham,  
Clwyd. LL13 7PE  
**0978 364500**

**Musical Images**  
45 High Street, Hounslow,  
Middx. TW3 1RH  
**081 569 5802**  
(Edgware, Middx,  
tel. 081 952 5535)



**Oranges & Lemons**  
61-63 Webbs Road, Battersea,  
London SW11 6RX  
**071 924 2040**

**Stereoelectrics**  
176 Lee Lane, Horwich, Bolton,  
Lancs. BL6 7AF  
**0204 690292**

**West Midland Audio**  
158 Ombersley Road, Worcester,  
Worcestershire. WR3 7HA  
**0905 58046**

**W Darby & Co Ltd**  
6 Market Place, St. Albans, Herts.  
AL3 5DB  
**0727 850961**

**Watts Radio**  
1 West Street, Somerton, Somerset,  
TA11 7PS  
**0458 272440**

**Upton Electronics**  
31 Torquay Road, Paignton, Devon  
TQ3 3OT  
**0803 551329**

**Surbiton Park Radio Ltd**  
48 Surbiton Road, Kingston Upon  
Thames. KT1 2HT  
**081 546 5549**

**Studio 82**  
82 High Street, Harpenden,  
Hertfordshire. AL5 2SP  
**0582 764246**

**QUAD**

Quad Electroacoustics Limited Huntingdon PE18 7DB

# 77 integrated amplifier



## **French Of Dordon**

52 Dordon Road, Tamworth,  
Staffordshire, B78 1QN  
**0827 892252**

## **HL Elliot Hi-Fi**

29 a&b Lowther Street, Whitehaven,  
Cumbria, CA28 7DJ  
**0946 693671**

## **Hi-Fi Experience (London)**

227 Tottenham Court Road  
London, W1P 0HS  
**071 580 3527**

## **Hi-Fi Attic**

58 New George Street, Plymouth,  
Devon. PL1 1PJ  
**0752 669511**

## **Stamford Hi Fi Centre**

9 Red Lion Square Stamford,  
Lincolnshire. PE9 2AJ  
**0780 62128**

## *Citysound*

4 Queens Road, Hastings,  
Sussex. TN34 1PA  
**0424 429991**

## **Lyric Hi-Fi**

163 Stranmillis Road,  
Belfast, N. Ireland. BT9 5AJ  
**0232 381296**

## **KJ Leisuresound**

26 New Cavendish Street  
London, W1M 7LH  
**071 486 8263**

## **Leicester Hi Fi Company**

6 Silver Walk, St. Martins Square,  
Leicester. LE1 5EW  
**0533 539753**

## **Riverside Hi-Fi**

422 Richmond Road, East  
Twickenham, Middlesex. TW1 2EB  
**081 892 7613**

## **Oxford Audio Consultants**

Cantay House, Park End Street,  
Oxford. OX1 1JE  
**0865 790879**

## **Spaldings**

352-354 Lower Addiscombe  
Road, Croydon, Surrey. CR0 7AF  
**081 654 1231**

## **Audio Projects**

45 Headingley Lane, Leeds,  
Yorkshire. LS6 1DP  
**0532 304565**

## **Music Room (W M Couper)**

98 Bath Street, Glasgow,  
Scotland. G2 2EN  
**041 332 5012**

## **Blumleins**

9a Dragon Street, Petersfield,  
Hampshire. GU31 4JJ  
**0730 266605**

## **Bury Audio**

47 Churchgate street,  
Bury St. Edmunds, Suffolk. IP33 1RG  
**0284 724337**

## **Doug Brady Hi-Fi**

Kingsway Studios, Kingsway North,  
Warrington, Cheshire. WA1 3NU  
**0925 828009**

## **Huddersfield Hi Fi Centre**

1-4 Cross Church Street,  
Huddersfield, Yorkshire. HO1 3PT  
0484 544668

**QUAD**

**U.K. Telephone: 0480 52561 Fax: 0480 413403**

failed to sound thoroughly musical, I couldn't help but be impressed by a wide range of HDCD's individual properties, such as a much expanded soundstage with clear front-to-back and left-right imaging, as well as heightened dynamic range, all of which thoroughly outclassed standard Compact Discs.

To put this into perspective I decided to listen to vinyl, as well as Super Bit Mapped (SBM) Compact Disc via the same CD player, to see how each compared. It wasn't possible to directly compare the same piece of music, so observations are those of the 'general' variety.

Switching from the HDCD recording to the SBM pressing of Dave Brubeck's "Take Five" was interesting, to say the least. SBM CDs do sound good. Most apparent is their more expansive soundstage and deeper, more powerful bass compared to standard CDs.

However, HDCD wasn't going to be having any of this and comprehensively bettered SBM. The alto saxophones on Dick Hyman's "You're Driving Me Crazy" came across with all the force and power of the SBM CD, but without the hardness. To ensure that the Brubeck recording itself wasn't the culprit, I dug up an original vinyl pressing of "Take Five" and duly pressed our Garrard/SME/Ortofon MC30 Supreme into service. Suddenly, the sax was devoid of hardness, and to top it all the turntable managed to convey timbre and rhythmic inflections better than either of the digital carriers. Vinyl also delivered the deepest, tightest and weightiest bass, pipping (if you'll excuse the pun) the Pink Triangle to the post in this department, albeit by a narrow margin.

After hours of intense listening I was still surprised by HDCD. It tackles CD's sonic nasties head on and brings the

medium closer, in a sense, to analogue, as promised. But don't confuse this with it sounding like LP - it doesn't. HDCD still sounds super clean but I'd swear there's a tiny amount of hardness present. Most significantly, it lacks the euphony of top class vinyl. If you can live with this, you'll be profoundly impressed with the system.

**SECOND OPINION**

The first surprise was that there wasn't a surprise; HDCD didn't jump out of the speakers at me. Half expecting a vivid sound with thunderous dynamics, viciously incisive transients and, I suppose, just more of everything, the first restrained bars of Trittico glid smoothly by with graceful ease. But then, isn't it the intrinsic sharpness of CD compared to LP - and even real life - that we complain about?

Our first long exposure to HDCD was at the Scottish Hi-Fi Show held by Hi-Fi Corner in Edinburgh. The great feature of this venue was its size: we had a huge room which allowed an expansive sound to develop, with extended bass uncoloured by room resonances. Orchestral recordings came across beautifully, the power and dynamics of the orchestra being given a greater range of expression than is common on CD. There was never any glare, only silky smooth strings and horns, pleasantly airy chorals and massive, resonant explosions from kettle drum strikes (mandatory!).

Even with normal discs the HDCD digital filter gives a smooth, warm sound. When HDCD decoding comes on though, there's no doubt that the system opens out, becoming relaxing, yet expressive, with a fine sense of space around instruments and a pleasingly natural atmosphere. HDCD is a great improvement upon conventional Compact Disc. **NK**

**HDCDs from REFERENCE RECORDINGS**



- Mike Garson: A Gershwin Fantasia (RR-54CD)
- Mike Garson: The Oxnard Sessions, Vol. 2 (RR-53CD)
- Frederick Fennell & Dallas Wind Symphony: Trittico (RR-52CD)
- Frederick Fennell, Dallas Wind Symphony & Paul Riedo: Pomp and Pipes! (RR-58CD)
- John Rutter: Requiem, Five Anthems (RR-57CD)
- Dick Hyman: From the Age of Swing (RR-59CD)
- John Bruce Yeh: Ebony Concerto (RR-55CD)
- Dallas Wind Symphony, Turtle Creek Corale Testament (RR-49CD)
- HDCD Sampler (RR-S3CD)
- HDCD Sampler (RR-S4CD)
- (further releases are coming soon)

**MEASURED PERFORMANCE**

Our frequency response analysis shows a slow roll down above 5kHz (at right in the trace), level measuring -0.5dB at 21kHz. This sort of characteristic in conjunction with very low distortion and absence of spurious outputs ensures a smooth sound.

There was no detectable distortion at normal music levels and only the usual quantisation noise products at -60dB and lower. Even these were less than usual though, distortion measuring 0.5% at -60dB for example, compared to 1% or so generally. Our unit had a small amount of extra noise on one channel, not audible, but enough to worsen measured results slightly, if not enough to put HDCD Da Capo below the competition, such is its advantage.

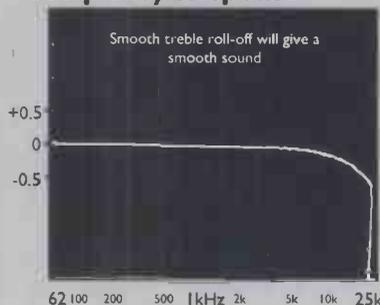
All other parameters measured well, except output was half normal at just 1V. Philips standard calls for 2V and most players deliver more, up to 3V in fact. The HDCD Da Capo measured unusually well in most respects, the only peculiarity being low output. **N.K.**

**TEST RESULTS**

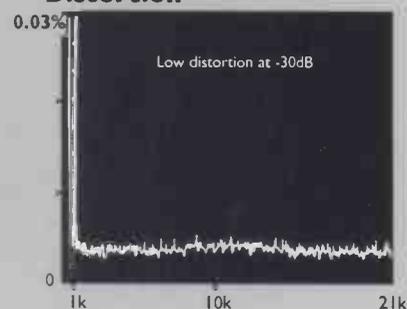
|                         |             |       |
|-------------------------|-------------|-------|
| Frequency response(-dB) | 4Hz-21.2kHz |       |
| Distortion (%)          |             |       |
| -6dB                    | 0.005       | 0.005 |
| -30dB                   | 0.01        | 0.006 |
| -60dB                   | 0.7         | 0.47  |
| -90                     | 36          | 28    |
| -90dB dithered          | 11          | 5     |

|                 |      |        |
|-----------------|------|--------|
| Separation (dB) | left | right  |
| 1kHz            | 116  | 100    |
| 20kHz           | 106  | 97     |
| Noise           |      | -106dB |
| with emphasis   |      | -106dB |
| Dynamic range   |      | 108dB  |
| Output          |      | 1.04V  |

**Frequency Response**



**Distortion**



# WHAT IS HDCD?

The arrival of HDCD from two directions at once - from the USA and from Philips in Holland - has confused some observers. The system reviewed here is High Definition Compatible Digital from Pacific Microsonics of the USA. The other system, which is quite different in basic principle, is High Definition Compact Disc, from Holland (and elsewhere). I'll quickly explain how they differ.

In Mike Ritter's words (President of Pacific Microsonics) his system is 'holistic' - a major differentiating feature from Philips HDCD system. In other words, it embraces the entire recording and reproduction chain, as our diagrams illustrate. HDCD applies very high

resolution analogue-to-digital coding of music during the recording process, and uses similar digital-to-analogue decoding in the domestic CD player when the music is reconstructed; the disc stays the same.

Philips' HDCD system is primarily a hardware development that increases disc storage capacity, making only indirect reference (at present) to the way music is recorded; the disc specification is altered. This form of HDCD isn't dedicated to carrying music and isn't likely to appear for the next year or so at least, it seems.

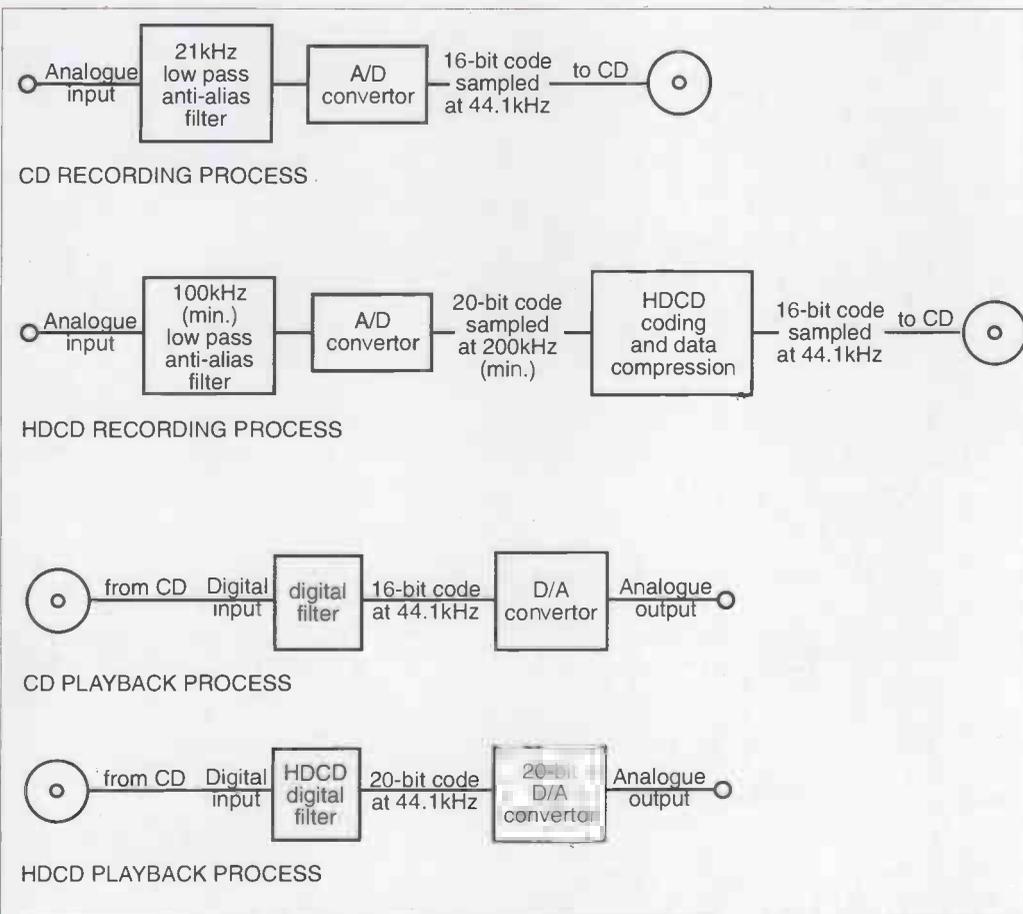
In contrast, Pacific Microsonics HDCD is exclusively a music recording system dedicated to CD as it stands; the hardware for it will become available shortly.

A question mark hangs only over

software availability and price. Mike Ritter told us that HDCD discs in the U.S. carry little or no price premium at all.

Getting music companies to record popular material using HDCD processing may be an altogether more difficult task. Of material already recorded, only that on analogue master tapes is worth using. Mike Ritter told me they expected a major U.S. artist, known to dislike digital sound, to record using the system soon; it could just be that others will follow. At present though, the only HDCD material available on CD comes from a little known American audiophile label, Reference Recordings recordings. Their current list of titles is given elsewhere in this report.

## HOW HDCD WORKS



### RECORDING TO CD

As our diagram shows, with Pacific Microsonics HDCD system music is sampled at around 200kHz when recording (Pacific Microsonics are not specific about this, using the phrase "several thousand kilohertz", which means not less than 200kHz). That's no less than five times the current 44.1kHz sampling rate for CD, giving a bandwidth of 100kHz, against 21kHz at present. Since Pacific Microsonics quote U.S. Army research on psycho-acoustics that identifies parts of the inner ear capable of

detecting signals at 80kHz, the justification for such a high upper limit becomes apparent.

Whilst 20-bit coding gives 220 resolution (968,576), compared to 65,536 for 16-bit - or one helluva lot more - not all data above 20kHz is used. The data is processed to preserve aural cues vital for accurate perception of the original signal, but information not required is discarded.

The processed signal is then re-coded into a normal sixteen-bit word by no fewer than eleven Motorola 56000 CPUs

(Central Processing Units), running at 150 mips (million instructions per second) - a vast amount of processing power. It may seem like getting a quart into a pint pot, but use is made of a buried control code and, I'd guess, some data re-arrangement by over-sampling may be introduced, possibly like that used in SBM. Precisely what techniques are used here will only become clear when Pacific Microsonics divulge them but, whatever, the main signal must (and does) remain compatible with ordinary players, free from anomalies on replay.

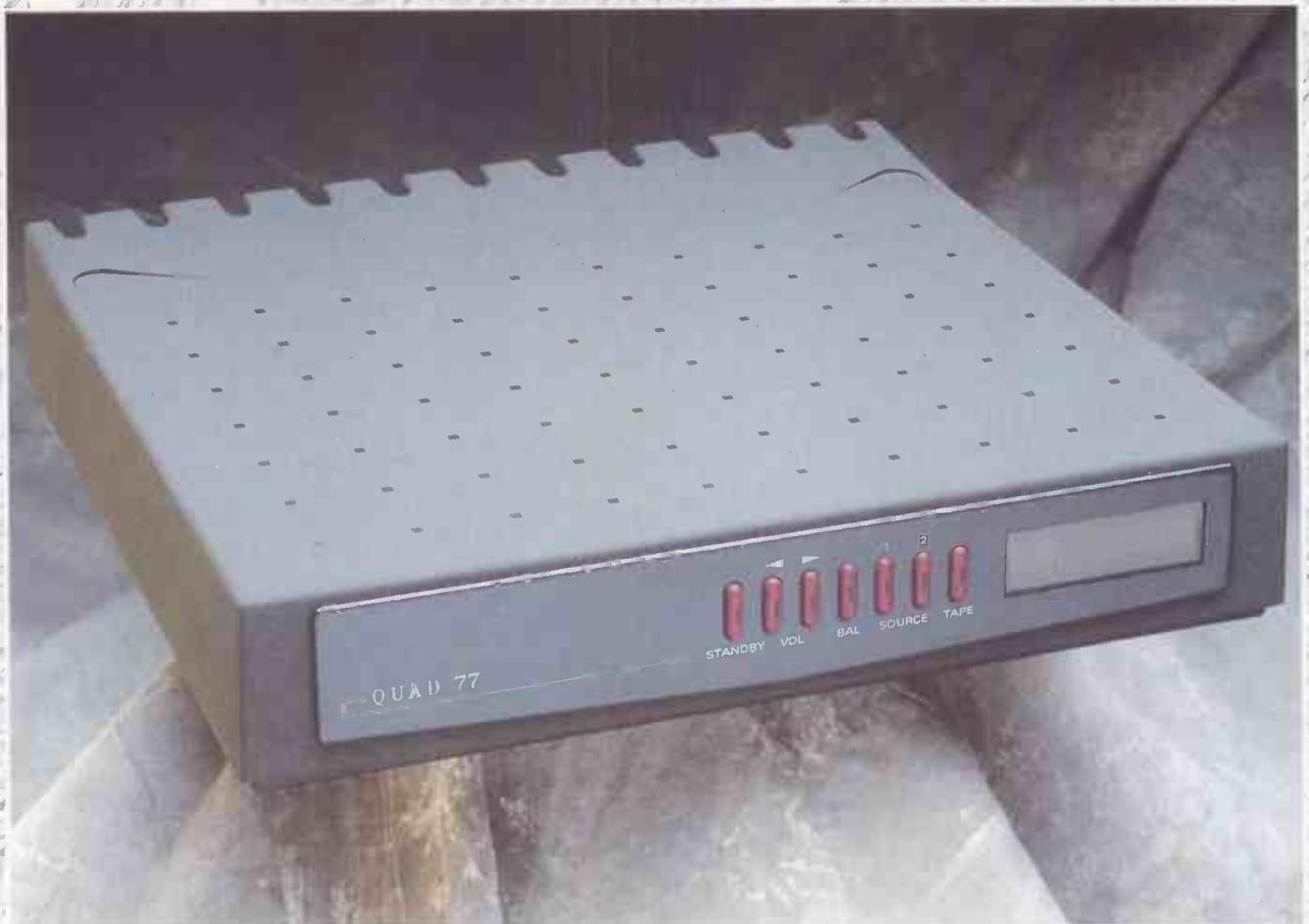
### PLAYBACK FROM CD

HDCD players automatically detect an HDCD disc, lighting a front panel beacon. On the Da Capo a small red front panel LED lights. Full decoding of the signal takes place, relying on

extra information contained within control code to provide a full 20-bit output from the proprietary Pacific Microsonics HDCD digital filter. This is fed to a twenty-bit digital-to-analogue convertor, of any manufacture, yielding a very high quality audio output signal. Pacific Microsonics claim that up to 24-bit code is possible, but no D/A convertors with such resolution yet exist.

With normal discs the HDCD decoder acts as a normal digital filter, albeit one of high resolution ●

# The Quad 77 launch



#### **Billy Vee Hi Fi Systems**

248 Lee High Road,  
Lewisham. SE13 5PT  
**081 318 5755**

#### **Audio Suite**

42 St. Andrew Street, Aberdeen,  
Grampian. AB1 1JA  
**0224 625635**

#### **Aston Audio Ltd**

4 West Street, Alderly Edge  
Cheshire. SK9 7ES  
**0625 582704**

#### **HATV**

131 Barrack Road,  
Christchurch,  
Dorset. BH23 2AW  
**0202 473901**



#### **Chelston Hi Fi**

38 Walnut Road  
Chelston, Devon.  
TQ2 6HS  
**0803 606863**

#### **Chichester High Fidelity**

7 St. Pancras, Chichester  
Sussex. PO19 1S  
**0243 776402**

#### **John Kirk**

70 Chilwell Road,  
Beeston, Nottingham.  
NG9 1FQ  
**0602 252986**

#### **Manx Audio**

Glen Vine, Isle of Man  
**0624 851437**

#### **Studio 99 Ltd. (London)**

79-81 Fairfax Road,  
Swiss Cottage,  
London.  
NW6 4DY  
**071 624 8855**



#### **Downing & Downing**

31-33 Market Street,  
Stourbridge,  
West Midlands.  
DY8 1AB  
**0384 371747**

#### **Mike Manning Audio**

128 Poole road,  
Bournemouth  
Dorset. BH4 9EF  
**0202 751522**

**Quad Electroacoustics Limited**

**Huntingdon PE18 7DB U.K.**

**Telephone: 0480 52561 Fax: 0480 413403**



# THORENS SPEED UP!

**Thorens' new TD180  
comes ready for old  
78s! Eric  
Braithwaite spins  
his shellacs - not  
forgetting the odd  
LP or two.**



*hi* **Best prices for new, xdem & s/h equipment** *fi*

|                                     |          |                                     |          |       |
|-------------------------------------|----------|-------------------------------------|----------|-------|
| Audio Innovations 1st Audi mint s/h | £850     | SP9 mkII                            | mint s/h | £995  |
| Audio Research D115 mint s/h        | £995     | Audio Research SP11 mkII            | mint s/h | £1795 |
| Audio Research D70 mkII             | £795     | Audio Research SP14 black           | mint s/h | £1595 |
| Nestorovic A1 150w valve monoblocks | mint s/h | Audio Research SP15 mkII black      | mint s/h | £3500 |
|                                     | £1995    | LFD LSI line only                   | mint s/h | £495  |
| Jadis Dely 7                        | mint s/h | Trilogy 902 line                    | mint s/h | £695  |
| Naim NAP 135 monoblocks             | mint s/h | Audio Research LS2B                 | mint s/h | £2250 |
| Audio 300b Silver Knights           | mint s/h | Tesseract TAP-A/TAPS/TAHA pr ex-dem | £3995    |       |
| Quicksilver monoblocks              | mint s/h | Audio Research SP8 mkII             | mint s/h | £795  |
| Conrad Johnson MF200                | mint s/h | Audio Innovations L2                | mint s/h | £450  |
| Krell KMA 100 mkII monoblocks       | mint s/h | Audio Synthesis Passion             | mint s/h | £695  |
| Krell KSA 100 mkII                  | mint s/h | Rega Elitit                         | mint s/h | £495  |
| Musical Fidelity P150               | mint s/h | Albarr PP                           | mint s/h | £295  |
| Tesseract Tamp 60 monoblocks        | x-dem    | Linn Majik                          | mint s/h | £395  |
| Mark Levinson ML2 monoblk           | mint s/h | Sonus Faber Extrema + stds          | mint s/h | £3995 |
| Tube Technology Genesis monoblocks  | mint s/h | Sonus Faber Minima Amators + Stds   | min      |       |
|                                     | £1495    | s/h                                 |          |       |
| Cadence Pre/Power 2/MA              | x-dem    |                                     |          | £1995 |
| Denon 2500/4400 pre/pwr             | mint s/h |                                     |          | £895  |
| Beard P35/C35 pre/pwr               | mint s/h |                                     |          | £1095 |
| Exposure XI, IX, IV pre/pwr         | mint s/h |                                     |          | £1295 |
| Musical Fidelity P150/P3A           | mint s/h |                                     |          | £450  |
| Audio Research                      |          |                                     |          |       |

## CHOICE have moved

You said - 'We can't get through'

- So we added more lines

You said - 'Things get sold before publication'

- So we introduced the Hi-Fi Exchange

You said - 'We like the service'  
- We made it better

More Demonstration Rooms  
More Equipment more lines

More **CHOICE**

081 392 1959

081 392 1963

081 392 1994 FAX

Call now for latest stock list

## "SIMPLY STUNNING"

Alvin Gold, Hi Fi Choice



What Hi Fi praised the beautiful build, detailed performance and solid bass. Hi Fi Choice noted the warmth and grace of the sound. Hi Fi News found the treble "breathtaking", with a tight bass and a midrange which positively caresses the human voice". And

Dominic Baker in Hi Fi

World summed up an enthusiastic review with the words "The Callas offer a winning combination".

If this sounds like your idea of a loudspeaker, phone or write for the inside story on the Callas and the complete range of solid wood Opera loudspeakers.

## CALLAS from UKD

**U.K. Distribution**

23 Richings Way  
Iver, Bucks. SL0 9DA  
Tel: 0753 652669  
Fax: 0753 654531

Having trouble putting that new A/V System together. Give Digital Konnections a ring. We will give you free advice about what cables & connection you should be using. Our engineer will make up that special cable for the system you have. We only have high quality components but they are priced at Realistic Prices!

**A Selection of Leads.**

**Longer Leads up to 50m available.**

|                                  |        |
|----------------------------------|--------|
| GP SCART - 3 PHONO 2M            | £23.00 |
| GP SCART - 6 PHONO 5M VHQ        | £46.50 |
| GP SCART - GP SCART 1M VHQ       | £25.50 |
| SVHS - SVHS 5M                   | £19.50 |
| SVHS - SVHS 3M                   | £12.99 |
| SVHS - SVHS 1M                   | £8.99  |
| GP PHONO - PHONO OFC 5M (STEREO) | £30.50 |
| GP PHONO - PHONO OFC 1M (STEREO) | £15.50 |

GP = GOLD PLATED

VHQ = VERY HIGH QUALITY

**DIGITAL KONNECTIONS**

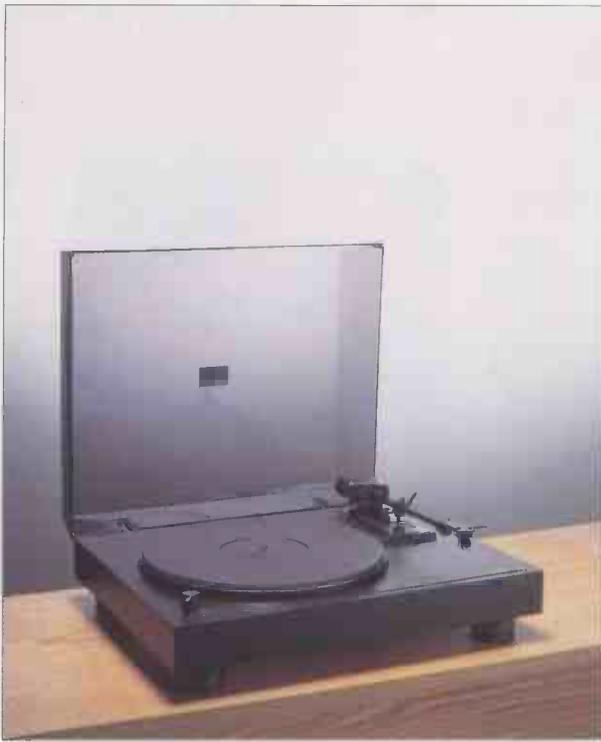
**1 PYE ROAD, HESWALL**

**WIRRAL L60 ODB**

**TELEPHONE NO. 0151 342 3030**

ACCESS • BARCLAYCARD • SWITCH • DELTA •  
AMERICAN EXPRESS

**DIGITAL KONNECTIONS**



**T**hores the turntable manufacturer is almost as old as the 78 shellac record - both are heading fast for a century. It shouldn't be surprising therefore that the company still makes turntables that play 78s. What is a surprise is that it now makes the TD180, an automatic three-speed deck, fits a 78-capable Stanton cartridge and offers it up at £180. Why, you may ask?

Those readers who think this is merely an exercise in nostalgia irrelevant in this digital age should think again and carry on reading, please. For one thing, it's only 30 years since EMI stopped pressing popular releases on 78. For another, collectors who are fascinated by the recordings of opera singers, blues singers or jazzmen of the first three or four decades of this century have nothing else but the 78 to fall back on. Yes, there have been transfers, but many in the early years of LP - and since - have been dire-sounding copies transcribed off worn 78s. It's only recently that EMI have been digitally rescuing some of theirs, but it leaves an awful lot behind.

Way back, when I managed a collectors' record shop, I supplied several hundred 78s to a TV producer, who wanted to mark the supremacy of CD by smashing them on the studio floor. This wanton vandalism barely diminished the total. Please note, I didn't supply Elvis on the Sun label, or any of the great jazz that appeared on labels like Vogue. But believe me, there are still hundreds of thousands of copies of Ernest Lough singing 'Oh for the Wings of a Dove' left over and enough foxtrots to keep hunt saboteurs

politically correct smashing them up for at least another century.

What the Thores TD180 provides is a compromise, but a handy one for those who are not ultra-serious collectors. (A serious collector of 78s is liable to spend, like a young customer of mine in my retail days, £2000 or more on a vintage horn gramophone). The heart of it is the Stanton 500 cartridge, supplied with a plug-in stylus for 78s. This has the advantage of not having to fiddle about changing the cartridge for 78 listening, since by-and-large the same tracking weight can be used for both LP and 78. The groove pitch, warps or

wear on some, however, will mean some alterations: one of mine needed 3gm tracking dialled up. A trifle excessive, but then, some of these 78s were played on gramophones with tonearms like bathroom accessories and playing weights

*“Good 78s, you see, can produce a holistic fore and aft image with instruments of a realistic mix and apparent shape in an acoustic that is perfectly credible. The TD180 did exactly that.”*

measured in ounces.

Some 78s can come as a revelation, though newcomers need to be warned that a 78 ought to look as glossy as an LP for best results. Those that look matt - or worse, white - will generally be so worn they will sound of little but distortion. But at best, like a late-ish Philips disc of Duke Ellington's 'Skin Deep', which has a splendid drum solo, a well-recorded 78 can produce surprisingly high quality sound.

Mono? Who cares? The definition of stick, the sound of the skin, the whole drum kit was superb, well equivalent to LP standard (this 78 was contemporaneous) and better than many standard LPs from the fifties. Good 78s, you see, can produce a holistic fore and aft image with instruments of a realistic mix and apparent shape in an acoustic that is perfectly credible. The TD180 did exactly that.

American Vogue recordings are particularly good at that realistic image and, to boot, well separated instruments and good dynamics. Admittedly the top-

end is somewhat curtailed, but clean nonetheless. Saxophone sounded better than some digital players I've heard. Shock! Horror!

There are one or two limitations, however, for this is a budget deck. Plug in the LP stylus and the Stanton shows its age. It's been around for some time and the reason it is frequently seen in disco decks becomes a little obvious. It has good driving capabilities; there's not much wrong with its tracking, although it tends not to subdue surface noise as much as more modern designs.

While tonally there is little to complain of, it does little more than present the skeleton of the music rather than add flesh to the bones. Tonally accurate, it produces little in the way of dynamic shading and tends to be badly thrown by reverberant recordings, which sound rather lacklustre. Nonetheless, it made a pretty good stab at melodic lines and rhythms on Ian McNabb's Truth and Beauty and put together an adequate recording perspective on the classic Barbirolli 'Cockaigne Overture', with commendable detail.

Experimentally, a Goldring 1022GX was wired into the fixed headshell; even though this is nearly half the price of the turntable, both arm and deck coped with it admirably. Suddenly, those audiophile giveaways - air, space and a better sense of dimensions of instruments and players - became an order of magnitude better. The bass was bigger, drier, and better controlled. Treble was also much more extended, with the

earlier slight softness clearly attributable to the Stanton rather than the arm or deck.

At even this low price, there are a couple of turntables with higher audiophile pretensions. Come what may, the TD180 has a fundamentally more laid-back character than some might like. But it has a very good balance of virtues and it doesn't disgrace a well-set up and quality system. There's only one snag: the auto-lift off at end of the side is certainly convenient, but on 78, the arm is hurled back to the arm rest with the speed of a caber being tossed by Arnold Schwarzenegger. But, dammit, that's the only disconcerting thing about it. A good, basic, budget bargain ●

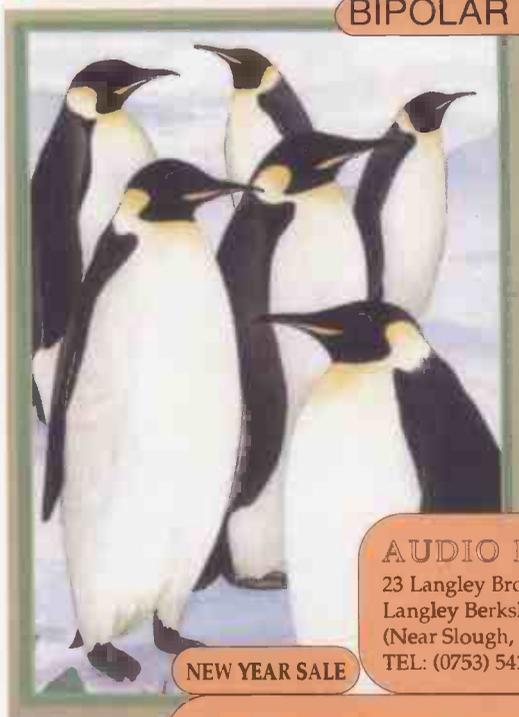
**Thores TD 180**  
**Portfolio Marketing,**  
**67, New Road,**  
**Little Kingshill,**  
**St. Missendon,**  
**Bucks. HP16 OE11**  
**Tel: 0494 890227**

**£180**

Mirage™  
MIRAGE LOUSPEAKERS

## THE UK PREMIERE

BIPOLAR 90i SERIES



BRISTOL HI-FI SHOW  
ROOM 206

❄️ Yes!! The News is  
Out Don't be left out in  
the cold  
UK Premiere of the New  
Mirage Bipolar 90i  
Series, Bristol Hi-Fi  
Show, Room 206,  
Marriott Hotel

24-26 February 1995

### AUDIO ILLUSION

23 Langley Broom  
Langley Berkshire SL3 8NB  
(Near Slough, 2 mins Junc 5, M4)  
TEL: (0753) 542761: (0860) 665662

#### NEW YEAR SALE

|  |          |       |
|--|----------|-------|
| CLASSE 30: Remote Preamp Balanced              | Ex Demo  | £1150 |
| CLASSE 70: Power Amp Balanced                  | Ex-Demo  | £1175 |
| MUSICAL FIDELITY F22: Remote Preamp Inc        |          |       |
| Phono Balanced:                                | Ex Demo  | £895  |
| MIRAGE M-790: Floorstanding Bipolar Radiators: | Ex Demo  | £875  |
| LINN KABER: Latest Spec. Tri Wire:             | Mint S/H | £750  |



ORANGES & LEMONS  
THE INNOVATIVE  
AUDIO/VISUAL RETAILER

O&L

SERVING LONDON FROM BATTERSEA

071-924 2040/3665

61/63 WEBBS ROAD, SW11

# GAMMA

"and the doo-bee-doo-bee doo's in the background  
from Ray Brown gave a sense of reality which would have  
you believe the band was performing just for us!"

"the technology may be rooted in the early years of this century,  
but then some of the best inventions take time to mature".

"if you are into music the Gammas are worthy of serious consideration,  
you may be more than a little surprised" (Hi-Fi Choice Oct '94)

"The Gamma AEON is a welcome new comer to the single ended fold the design  
offers the sort of acoustic treasures that are usually the domain of a far more expensive  
amplifiers". "Gamma is to be applauded for this exciting new product" (Hi-Fi Choice Jan '94).



GEMINI, SPACE REF, ERA STANDARD, ERA ERA REF, ERA SIGNATURE, AEON,  
AEON SIGNATURE, EPOCH REFERENCE FIVE LOUSPEAKERS

Value for money Triode Single Ended Amplification  
from £699.00 to 98,000.00

tel/fax 07535 26939

DISTRIBUTOR/DEALER ENQUIRIES WELCOME  
GAMMA ACOUSTICS, IVY LODGE, 31 SUSSEX PLACE,  
SLOUGH, ROYAL BERKSHIRE, SL1 1NN ENGLAND



Ruark Crusader II Loudspeakers  
"One of the best 3 ways designs around"  
Hi-Fi Choice May '95

## 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 • Shear Audio • Systemdek • Tannoy •  
TDL • Thule Audio

Tel: 0277 221 210

2 INGRAVE ROAD, BRENTWOOD  
Near corner of Brentwood High St. Closed Tuesday

# MICHELL GYRODEC AND QC POWER SUPPLY



A SYMBOL OF PRECISION



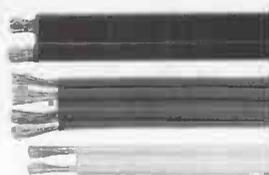
**"THE MOST DESIRABLE DECK BELOW £1500"**

Ken Kessler - Hi-Fi News & Record Review August '94

Michell Engineering, 2 Theobald Street, Borehamwood, Herts WD6 4SE

Tel:- 081 953 0771

# 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.

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

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

## ortofon

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



review **PRIMA  
DONNAS**



Do these entry-level  
minimists have a  
personality to match their  
costly looks? Dominic Baker  
looks to DHD's Opera Primas.

The Italians have a love of solid walnut. With Sonus Faber, Chario and UKD all using such cabinets, you have to ask whether environmental issues are relevant in Italy. Or perhaps it's commercially grown, much like wood pulp for paper.

Whatever, the Opera Primas do look rather special. The miniature cabinets, with inch-thick solid walnut walls, have an incredibly solid feel to them. The walnut smells gorgeous too, having a delightful oily fragrance and feel to it; these cabinets are wonderfully stylish. Even the binding posts on the back are thick, heavily engineered and generously finished in gold, although there is only a single pair, ruling out bi-wiring.

The Primas use a 4.5inch polypropylene bass unit and a 25mm soft dome tweeter, both of Italian manufacture. The bass unit is loaded by a rear-firing bass reflex port, so although small, the Primas are not ideally suited to shelf mounting. A foam bung may be successful here if you really are stuck for space.

Instantly, the most impressive aspect of the Opera Primas is the admirably open and clear delivery they have with vocals and lead instruments. Dave Gilmour's guitar echoed out with a light, airy character on Pink Floyd's A Great Day For Freedom, from their recent Division Bell album. The sax intro to the following track took on similar character, floating out across the room. As a broadcast monitor, with a high level of

intelligibility, the Opera Primas would beat the BBC LS3/5as hands down, and the latter are highly regarded in this area.

In fact, I was so impressed by this area of their performance that it was some while before I took notice of the other areas of the Opera's presentation. Their overall presentation is an interesting one, one uncommon from a miniature. To start with, there's the surprising clarity in their mid-range, which traditionally would be more reserved, in order to place

the range. Surprisingly, Inspiral Carpets' Satum 5 showed that the Operas are capable of producing deep bass, a soft rumble low down from the rolling bass drums coming as a bit of a surprise. It wasn't powerful, and there could usefully have been a little more upper-bass attack, but deep bass certainly was there.

Above all this lies the treble, and not exactly inconspicuously. Again, listening to Satum 5, the tweeter fired cymbals at me. The Operas started out with a bright

presentation but either I got used to it, or they softened up with use. They remained bright, even after several days but, like the ProAc Studio 100s, it came from raised treble energy, rather than distortion or a sharp response peak. Whilst the 'speaker's couldn't be described as sharp or harsh, they're blessed with more than their fair share of treble energy.

Helped by compact dimensions, the Primas manage to produce quite a convincing image, placing Suzanne Vega well in front of

her simple backing guitar and out into the room. The sound-stage this image sits within is wide and spacious too, the Primas filling the room with their light and delicate sound.

Overall, I enjoyed the openness and clarity of the Opera Primas. They are best used in small rooms, but smuggle a REL Strata subwoofer under a coffee table and you have two superb, solid walnut miniatures on display creating a spacious sound, lightly hanging in the room and a subtle, but taut and tuneful bass. Sounds attractive, doesn't it?

*“ Instantly, the most impressive aspect of the Opera Primas is the admirably open and clear delivery they have with vocals and lead instruments. Dave Gilmour's guitar echoed out with a light, airy character on Pink Floyd's A Great Day For Freedom ”*

emphasis on bass. Consequently, their bass seems drier and lighter than that of most miniatures, but not to the extent of unbalancing the sound - but bass freaks won't be especially impressed.

The bass the Operas do have is fast, agile and truthful, though with a delightfully unrestrained quality. Obviously, this area of performance will vary greatly from room to room, but I'd suggest that if your room is much larger than 16x14ft or has especially high ceilings, then you should look at the larger models higher up

## MEASURED PERFORMANCE

Although the Opera Prima is a miniature, using a 4.5inch bass unit, sensitivity measured a respectable 86.5dB, which was a good start. It is often the case that sensitivity is sacrificed by designers to gain a little extra bass extension with miniatures; the Opera Prima appears to combine reasonable sensitivity with good bass, which will make them easier to drive than most of their competitors.

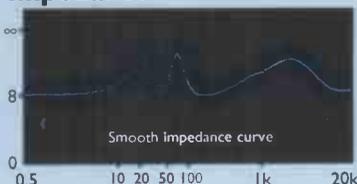
The impedance curve is high and smooth too, never dipping below 8Ω which means that they won't demand much current either. Overall, impedance measured 12.5Ω. The smoothness of the impedance curve could make the Opera Primas a candidate for low or zero feedback amplification.

The frequency response of the UKD Opera Prima is not the smoothest though. The peak around 1kHz in the lower midrange may well add emphasis to notes in this region, and the rising treble will give the Operas a brightness to their sound. To what extent though, can only be assessed in a listening test. **DB**

### Frequency Response



### Impedance



**Opera Prima**  
**U.K Distribution**  
**23 Richings Way,**  
**Iver, Bucks.**  
**SL0 9DA**  
**Tel: 0753 652669**

**£450**



# Studio One

We are flexible with our opening times

117-119 HAMMERSMITH ROAD  
LONDON, W14 0QH.

Tel: 071 371 3037

Fax: 071 371 1790

We are open Mon-Sat 9.30 -6.30



**Presents:**  
**KINSHAW**

**ELECTRONICS**

*Power Amps, Pre-Amps,  
DAC and Phono Stages.*



*We offer home demos on  
Hi-Fi equipment and  
cables.  
So you can make  
your choice.*

Agents for:- Alchemist, Audio Innovations, Audiolab, Aura, Alphason, Atacama, Audio Technica, Boston, B&W, Chord Company, Castle, Denon, Dynavector, Harmon-Kardon, L.A. Audio, JBL, Jecklin, Jamo Oriel, Kinshaw, Michell, Moth, Musical Fidelity, Nakamichi, Ortofon, Pro-ject, S.M.E., Sequence, Teac, Thorens, Totem, Tannoy, Townshend, Tube Technology, Van - Den - Hul, and many more.

\* 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 F.E.*

*"Final Edition" Hurry Now!!*

*"Records cleaned and sleeved on Nagaoka antistatic for £1.50 per album"*

*Pay us a visit, we are near Olympia*

## campaign audio design



Getting a better, more involving, sound often means spending a lot 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.

We have Oxygen Free Copper interconnects (£12.48) up to Pure Silver cables (£120.00) and high definition 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.

Valves, capacitors and transistors are all microphonic, they cannot perform optimally if vibrated. Our set of three Brass Isolation cones (£6.50) are worth their weight in gold - revealing low level resolution and dynamics hitherto 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.

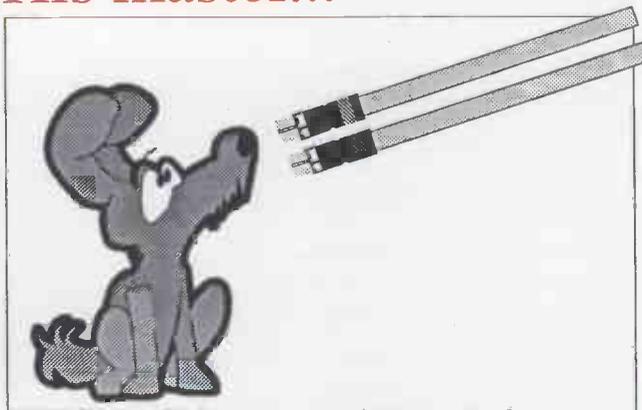
There's lots we can do to bring you closer to the emotion and energy of the performance. So confident are we, that we offer a 14 day money back guarantee.

Ring or write for details:-

**CAMPAIGN AUDIO DESIGN**  
Llandudno Road (HW)  
Cardiff CF3 8PG  
Tel:- 0222 779401

Trade and International Enquiries Welcome.

## His master...



## ...is well connected

Acoustik Solutions is a new company producing a wide range of very high quality interconnects.

Prices from just £25 upwards. Call us to discuss your interconnect requirements.

*We can supply bespoke interconnects to suit your system exactly.*

Acoustik Solutions. 46a Market Street, Longton, Staffordshire, ST3 1BS

FAX  
(0782) 593187



Telephone  
(0782) 595330

*Sound Engineering for the Future*



component via the amplifier, it talks back and enables the remote to display all the possible user options.

For the amplifier, this is balance, volume, source selection and choice of tape input sensitivity. In future, the same buttons will acquire 'labels' from each component and control all normal CD player and tuner functions, Dolby Surround and Pro-Logic set-up and recording and monitoring. Fully future-proof, the remote will simply copy all instructions from the component when it is prompted to talk back in response to an identifying request. If we end up with some new recording format after DCC and MD, then the operational systems will be embodied in the equipment and transmitted to the remote's memory, via the 77 amplifier. It's the end of remotes with forty buttons, since Quad use a menu based command system that is 'intelligent' in that when CD is selected, for example, the remote is then programmed with CD functions, making it look like a CD player. With this system, the 77 remote has just six buttons and a rotating knob.

This is visual GUI (Graphical User Interface) technology applied to hi-fi for the Nintendo and computer generation. The remote even looks a bit like a Gameboy. It's also the end of messy displays on CD players or tuners that can't be read from more than a few feet away: the remote will show information on its own LCD panel. It can even be recharged from a socket in the back of the 77 amplifier.

This approach is certainly different,

# Ghost In The Machine

**Does Quad's new 77 integrated amplifier herald the introduction of 'intelligence' to hi-fi ?**

**Eric Braithwaite checks its IQ.**

Quad have innovated themselves into the 21st century with their first integrated amplifier, the 77. It's an entirely new design, from a new design team backed by an investment of half a million pounds on research, development and production.

Fully remote controllable, this new amplifier forms the heart of an 'intelligent' interlinked system, a CD player and AM/FM/RDS tuner being due early in 1995. Quad's new strategy will effectively spell the demise of signal cables, since linking will take place through their own fully balanced multi-connector interlinks which, they claim, sound better than the usual unbalanced links.

Ironically, in the meantime, the 77 is

revealing enough of cables (it has two normal inputs) to demand caution: I used Sugden silver and horribly expensive XLO Type 6 'speaker cables - which cost as much as the amp - and Kimber and van den Hul The First and Second interconnects.

Briefly, the components will interconnect with a SCSI-type cable, the 'Quadlink' bus carrying power, balanced signal and control instructions from the 77 amplifier to and from all future components. The software is said to be capable of handling up to 256 extra items, if you can imagine that (multi-room: Quad throughout Buck House, maybe?). But this is not like other remote control systems. The £250 controller interrogates each

# Great tracking

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 as 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.



500 Series  
Moving magnet  
cartridges from £30-£100



MC Series  
Moving coil cartridges  
from £80-£110



Q Series  
Moving coil cartridges  
from £140-£500



1000 Series  
Moving coil cartridges  
from £600-£1500

## ortofon

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



### Chord Electronics Ltd

3 Bower Mount Road  
Maidstone ME16 8 AX

Tel. 0622 764874/692000 Fax. 0622 688480

### Chord UK Dealers

|  |              |
|--|--------------|
| Cottage Audio                            | 0522 702834  |
| KJ Leisuresound London W1                | 071 486 8262 |
| Brentwood Music Centre, Brentwood, Essex | 0277 221210  |
| Progressive Audio, Gillingham, Kent      | 0634 389004  |
| Doug Brady Hi-Fi, London WC2             | 071 379 4010 |
| Doug Brady Hi-Fi, Warrington, Cheshire   | 0925 828009  |
| Doug Brady Hi-Fi, Liverpool, Mersyside   | 051 733 6859 |
| Doug Brady Hi-Fi, Leeds, Yorkshire       | 094 346 7689 |
| Photocraft Hi-Fi, Ashford, Kent          | 0233 624441  |
| The Reference Studio, Heathfield, Sussex | 0435 868004  |
| Paul Green Hi-Fi, Bath, Avon             | 0225 316197  |
| Eastbourne Audio, Eastbourne, Sussex     | 0323 25828   |
| Surrey Hi-Fi, Godstone, Surrey           | 0883 744755  |
| Sound Academy, Wallsall, West Midlands   | 0922 493499  |
| English Audio, Hereford, HR4             | 0432 355081  |
| Hi-Fi Experience, London W1              | 071 580 3535 |
| London Hi-Fi Services, London            | 071 263 1015 |
| Music Matters, Birmingham, West Midlands | 021 429 2811 |
| Music Matters Stourbridge                | 0384 444184  |
| V'audio, Stoke Bishop, Bristol           | 0272 686005  |
| In Hi-Fi                                 | 031 225 8854 |
| Audio Reflections                        | 0532 528850  |
| Audible Difference                       | 0379 740227  |

## LEONARD BOOTH



SEE and HEAR THE **NEW**

### QUAD 77

INTEGRATED AMPLIFIER

AT

LEONARD BOOTH  
35 South Street  
Eastbourne BN21 4UR  
0323 731755



not only in the new-style perfectly finished casing, slightly wider than Quad's previous midi-size. Since a few thousand Quad owners will very likely sign up for a 77 before it even hits the shops, a quick cross-check was made with my very own 34 pre-amplifier and 306 power amplifier, wired up, initially, to ESL-63s.

The new 77 has more in common with the crisp, beefy character of the Quad 67 CD player (surprise, surprise, since they have a designer in common) and the upgraded 606 power amp. The 34/306 tends to take a rather cool, clinical look at life, and with a rather large proportion of dynamic 'speakers' can sound macro-dynamically restrained.

The 77 is subjectively much more powerful. While it shares finesse of vocal and instrumental detail with the last-but-one generation, the brass sections of the LSO on Tchaikovsky's Marche Slave or Capriccio Italien blared forth with a much larger scale. Turn the wick up to around 26 (out of 32 on the numerical volume display) with the volume Up/Down buttons and through my 63s it was almost too forceful. At this level, the chorus in the Sixteen's Bach B Minor Mass coarsened slightly, with the band brought rather more forward and depth perspective somewhat lessened. But, like the brass-voracious Tchaikovsky, the impact was pile-driver tough.

Down a few dB, however, brought perspectives back, although with just a trace less of the St Augustine's Kilburn acoustic than through the 306. A definite advantage here, however, was the tonal quality of James Bowman's counter-tenor. From sounding a trace feminine, the 77 clarified those vocal nuances like only the high-end normally manages, or I have heard through the 306 driven by a £1000-plus Argo HR pre-amplifier.

The bass goes a few Hertz deeper and with more strength too, in the fashion of the revised 606. While the timpani on Barbirolli's recording of Cockaigne were much clearer and more defined than usual, except through very high-end amplification, double-basses on Ten Years After or some jazz recordings had some timing uncertainty or 'smearing' as it's known in some quarters. Not noticeably slow, not making the beat or rhythm falter, certainly strong, but with less of the clear-cut 'shape' to bass notes that the

Sugden Stemfoort SF60, say, produces.

Combining the 77 with KEF Reference Series 2 'speakers' reiterated the 77's vocal clarity, remarkably clean and probably least susceptible to sibilance of any around. Guitars on Rod Stewart's Unplugged album, in common with other acoustic instruments, were vividly lifelike, especially in fingering. Better still, from the point of view of listening to music rather than inspecting its technical quality, although the concert-ambience

was less clear than is possible, the 77 concentrated on a 'big' performance, usefully filling out and beefing-up the dynamics, diminishing the worst effects of the compression in this recording.

While Quad has a reputation for being classical-orientated, like the 606, the 77 can rock when it needs to. It also possesses those traditional Quad characteristics of precise and stable imagery and fidelity to tonality.

'The closest approach to the original sound?' Almost. The only aspect you

usually have to pay much more for, excepting the remarkable but fewer-featured Sugden or Stemfoort designs, is that elusive 3-D walk-around through-the-whole-frequency-range solidity of individual bodies - both people and instruments. That's what made Miles Davies' trumpet a bit less moodily plangent than is perfect, although the acoustic 'area' around the drummer and guitarist, recorded in sound booths, was reasonably well defined.

But this amplifier is going to be a classic choice, well worth the relatively low price of entry into an entirely new, infinitely expandable, 21st century kind of hi-fi - one with no signal leads. It's a Quad world!

**77 Integrated Amplifier** £595  
**77 System Remote** £250  
**Basic amplifier remote control** £60

**Quad Electroacoustics Ltd.,**  
**Huntingdon,**  
**Cambridgeshire. PE18 7DB**  
**Tel: 0480-52561**

#### MEASURED PERFORMANCE

Substantially Class B, with limited standing current and not too much feedback, we were told by Quad, the new 77 amplifier measured much as theory would predict, exhibiting more distortion at low levels than at high ones. The products were odd order in nature (see our analysis), suggesting a little possible roughness, but only if the low amount of 0.02% could be detected. Much below 0.1% and this is open to argument; as always, listening tests are best used. In the mid-band, distortion remained low - around 0.004% - at all signal levels. So the new Quad 77 is a low distortion amplifier.

In spite of its small size, it is also a high power amplifier, producing 84watts into 8ohms and no less than 144watts into 4ohms, albeit for a short period of about one second only, before protection circuits cut in. So the 77 will pass short term musical peaks into low loads, but it is likely to object to being driven hard into them. Users are best to beware of using 6 or 4ohm loudspeakers that dip down to 3ohms or so; we've measured some real nasties like this recently. Our 'speaker reviews always carry such information.

Bandwidth measured 8Hz-34kHz, wide enough yet also subject to some sensible limiting. Sensitivity was around average at 320mV through Source 1 & 2, a figure just adequate for some low output budget cassette decks and tuners (300mV). To cover this eventuality - and Leak Troughlines! - a sensitivity of 200mV or so is more common nowadays, but the 77 is really meant to partner Quad items. Why? Well, apart from the remote bus and balanced signal links, the solid-state switches used impose an input overload

ceiling of 2.7V, insufficient to avoid possible overload with CD players from Pink Triangle and various others who are approaching 3V outputs.

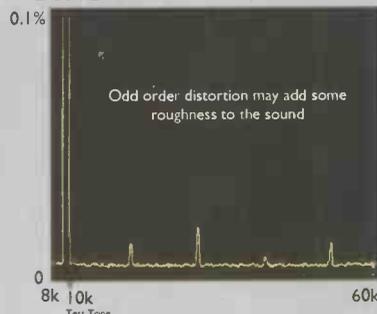
So the 77 is best partnered with a Quad CD player as intended. Let's hope the CD player designed to match this amplifier will sound as good as the Crystal chip-based Quad 67.

The Quad 77 measures well, if not quite as well as some earlier Quad amplifiers. It is powerful and the power supply, with its huge toroidal, has excellent regulation. **NK**

#### TEST RESULTS

|                    |           |
|--------------------|-----------|
| Power              | 84watts   |
| CD/tuner/aux.      |           |
| Frequency response | 8Hz-34kHz |
| Separation         | 90dB      |
| Noise              | -97dB     |
| Distortion         | 0.004%    |
| Sensitivity        | 320mV     |
| dc offset          | 12/32mV   |

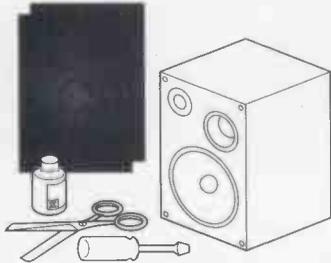
#### Distortion





# DEFLEX<sup>®</sup> acoustic PANELS

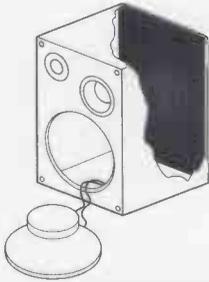
The simplest and most cost effective way to upgrade your existing system



Once you have gained access to the inside of the cabinet, remove foam and/or wool damping from the inside of the speaker (if fitted)

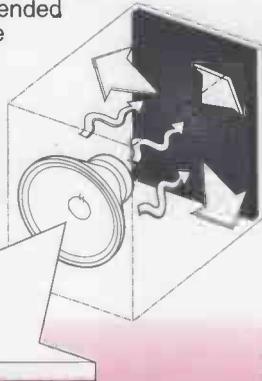


You need at least 2 Deflex panels for a pair of small bookshelf speakers, 4 panels for a pair of Tannoy 6's, and at least 6 panels for larger cabinets



Place the flexible Deflex panel thru' the speaker cut-out and stick to the inside of the cabinet using the recommended adhesive

Now sit back and listen to the extra detail in sound, and far less distortion when played loud



## What the experts have to say...

"...a marked improvement was obvious from the first few bars of REM's *Automatic for the people* album..."  
Hi-Fi News & Record Review - March 1994

"...Deflex panels seemed to give greater tightness and control, improved internal clarity, and pitch definition - all without deadening the sound in any way..."  
Audiophile - January 1994

"...the result was sharper imaging, wider dynamics and a more natural sound..."  
CHOICE VERDICT

Sound Quality   
Value for money   
Hi-Fi Choice - January 1994

"...But one thing for sure - the Deflex panels are no gimmick. They work..."  
Audio Video - November 1994

Standard Panel £7.95 (28cm x 21cm)  
Sub-Woofer Panel £11.95 (34cm diameter)  
Adhesive £3.50 Delivery £4.00

For a **FREE** information pack and details of other products from **SPECTRA DYNAMICS**

Tel (01745) 571600 Fax (01745) 570194

Talargoch Trading Estate, Meliden Road, Dyserth, Clwyd LL18 6DD, United Kingdom.

DISTRIBUTORS WORLDWIDE - U.K. Tel. (01625) 500507 - Fax (01625) 500508 . Australia Tel (03) 429 2199 - Fax (03) 429 9309 . Austria Tel/Fax 43 7472 61529 . Belgium Tel/Fax 09 357 4937 . Canada Tel 514 691 2584 - Fax 514 692 9980 . France Tel 78 95 04 82 - Fax 78 60 76 35 . Germany Tel 2961 51211 - Fax 2961 51640 . Greece Tel 01 246 6576 - Fax 01 246 6713 . Holland Tel 076 715010 - Fax 076 714773 . Hong Kong Tel (852) 898 8111 - Fax (852) 558 0073 . Indonesia Tel/Fax 31 311 598 . Israel Tel 3 924 7524 - Fax 3 924 5117 . Israel Tel 3 540 7279 - Fax 3 540 7438 . Norway Tel/Fax (095) 917 4395 . Russia Tel/Fax (095) 917 4395 . S.Africa Tel 021 439 8450 - Fax 021 439 8451 . Singapore Tel 743 7124 - Fax 747 5330 . Spain Tel 34 3 285 82 10 - Fax 34 3 285 77 94 . Sweden Tel 0660 560 30 - Fax 0660 561 01 . Switzerland Tel/Fax 61 361 64 66 . U.S.A. Tel 608 831 3433 - Fax 608 831 3771

# DARBY'S OF ST ALBANS

HERTFORDSHIRE'S PREMIER  
AUDIO VIDEO DEALER

NOW ON DEMONSTRATION THE NEW

# QUAD 77

THE ULTIMATE FUTURE SAFE  
AMPLIFIER!

PLUS:  
ARCAM • MUSICAL FIDELITY ELECTRA  
• YAMAHA • DENON • SONY •  
JVC • BANG & OLUFSEN  
• MISSION • TDL • RUARK  
• CELESTION • REL • JBL

HOME CINEMA SUITE 1st FLOOR  
Over 50 Years of Sound Advice

6 MARKET PLACE, ST ALBANS, HERTS

TEL: 0727 851596/850961

ACCESS/VISA/SWITCH/MAIL ORDER WELCOME

# Mike Manning

*the hi-fi specialists*

The New  
Quad 77  
in stock now

*Musical Evenings*  
*phone for details*

Naim Audio - Arcam - AVI - Rega - Roksan - ATC - Onix - Rotel - Pink  
Triangle Sugden - Audio Alchemy - Mission - Heybrook - Marantz  
Epos - Philips - LYRA Musical Fidelity - TDL Nakamichi - Denon  
Aura - NAD - Infinity - Aiwa - Ortofon Target - Tripod - Soundstyle  
@quad

Pioneer Reference Centre

**BOURNEMOUTH**  
128, Poole Road  
Westbourne  
Bournemouth  
0202-751522

\* Full Demonstration Facilities  
\* Professional Installation Service  
\* Full Workshop on Premises

CLOSED MONDAYS

**YEovil**  
110, Middle Street  
Yeovil  
Somerset  
0935-79361

# SOUTHERN BELLS

**Eric Braithwaite glows over these seductive 300B single-ended valve amplifiers from Cary, USA.**



Somehow, single-ended and 300B have become this decade's buzzwords. There is not so much a valve revival as an explosion, particularly Stateside, associated with a re-evaluation of what valve amplification means. And mostly, it means amplification that produces more musical music - and that's not a tautology. Talk to almost any of the designers - like Lew Johnson or Bill Conrad, the conrad-johnson duo, for example - and the conversation almost inevitably turns to musical 'naturalness'. Dennis Had of Cary is no different in believing that musical fulfilment in hi-fi means valves as much as beanz meanz Heinz.

In the case of Cary, named, by the way, after a Carolina town, not a person, 300B fervour has surfaced in the form of the 300SE monoblock power amplifiers. Weighty affairs, thanks to the transformers, and a trifle heavy on the purse at £3795 a pair, what they lack in wattage, they certainly make up for in sound quality. Producing only about eight watts, they are tricky to partner. Speaker efficiency is the name of the game, but 'speaker quality even more so. The distributor recommends ProAc - not entirely surprising, as ProAc designs are highly rated in the US among valve aficionados - though they were tried in my flat with Heybrook Quartets and ESL-63s, which they drove with surprising adeptness if not with the kind of volume

that would threaten Jericho's building plans. Rather less, indeed, than the Pye Mozart turned out way back.

Allied with the monoblocks is the SLP90 valve pre-amplifier, a chunky little piece of engineering, with one of the best feeling stepped volume controls my fingers have been in touch with for quite a while. If bought with an onboard moving magnet phono-stage, the British wallet would be slimmer by £2890. Having been happily watching the Bard on the Box while this review was in progress, there, as he would say, lies the rub. At getting on for seven grand, this is hardly an impulse purchase, nor the obvious value-for-money it represents in the US where it sits more in the Mercedes bracket than the Silver Shadow.

What does make the trio worth considering, even if, unlike me, you are not going to be the one in 14 million who is going to win the lottery jackpot, is its American high-end sound. Fronted by a Michell Argo HR and a Mendenhall 500/563, a dab hand at depth, both bass and stage-wise (you see we automatically lapse into transatlanticisms) the power amp pair took the Heybrook Quartet boxes right out of the room. Victoria's Requiem was superbly numinous and 'churchy', with

that extraordinary fluidity of vocal line that turns some listeners into valve die-hards as quickly as Gold Blend granules dissolve sexual inhibitions, if you believe the ads. The 'speakers dissolved as the choir hung in the air between them.

Not that this means the 300SEs are unfocused. They are as good at individual precision images as any high-calibre transistor effort, though without that sharp-edged cut-out effect. Here taste comes into play, for the picture is impressionist rather than cubist. Seek for a studio control-room array of performers blocked into separate boxes and you will have to seek elsewhere. In the Cary scheme of things, you are placed in front of a concert-hall ambience, an orchestra or band filling all the nooks and crannies of space with a fully homogenous, integrated sound. The word for it, and it's in Webster's as well as Chambers', is deliquescent.

However, the Cary set-up is not just for the dewy-eyed musical mystic. There's a richness and sweetness of string timbre that reproduced the equal richness of du Pré's cello in the Elgar Concerto, complete with the serious frisson that has the jaw dropping at this superbly emotional recording.

While the lower limits of bass are perhaps not explored as much as rap or reggae lovers might like, it is well-controlled and just enough on the dry side of warm not to sound woolly.

# CARY SINGLE-ENDED TRIODES

*'The Sweetest Feeling'*



A Cary Class A Triode is an amplifier you "feel". An amplifier that delivers "goose-bumps" and "raised hair" as you transcend into the dream of live music in your home.

The Cary Single-Ended line was inspired by the famous 300B triode vacuum tube of the 30's. The 300B tube is considered by tube aficionados, on a world-wide basis, to be the finest audio tube ever designed.

The Cary Single-Ended Class A Triode Amplifiers have the high-end audio community in a state of complete reappraisal of what hi-fi truly is. We took classical circuits of the golden years of audio and combined these designs and techniques with the components and advances of the 90's.

**Exclusive UK Distributor**

**The Audiophile Club**

P.O. Box 6477, London N13 4AY

Tel. 0181 - 882 2822



**CARY**  
*Audio Design*



**Award winning quality in all shapes and sizes**

**MISSION**

Mission Group Huntingdon PE18 6ED Telephone: 1480 451777



Perhaps, in the kick-drum stakes the attack is a touch slow, and cymbals shimmer a little overlong and sweetly when they should clash a little more, but provided the 'speakers are efficient enough, the Cary's will rock long and

hard. As long as it's the melody that matters for you, rather than voluntary evisceration, the melody lingers on.

At first, in fact, it tends to disguise the fact that the Cary amps are timbrally spot-on. Having listened for anomalies (really a waste of time with a good 300B design) one ends up with very few niggles. It's only the shortage of power - barely enough to light up

the inside of a fridge - that subdues dynamics. I would have wished for the additional oomph that would extend the forcefulness of a full symphony orchestra, which sounded a trifle reined in. It should be said that the pre-amplifier, while being

fully the equivalent of the power amplifiers in transparency and delicacy, sharpened up the act in the upper registers, putting a little bite into top notes and adding crispness, albeit at the expense of reducing the lateral image spread marginally.

Cary have arrived at a winning - and, I hate the word - a synergistic combination which is one of the most glowing (ahem!) exemplars of the best of 300B sound. Going back to the Gold Blend, this is one worth going to bed with: not perhaps for the athletics, but for wrap-around cosiness and musical companionship. But take care with the 'speakers: you will need to shop around and be prepared for a fair proportion of what's on the market not to do the Cary's justice

**CAD 300SE** £3,795  
**SLP 90 Pre-Amp** £2,890  
**The Audiophile Club,**  
**PO Box 6477,**  
**London. N13 4AY**  
**Tel: 081 882 2822**

## MEASURED PERFORMANCE

I measured the power amplifiers independently, since this is the best way of identifying the source (pre or power) of any effects. Output power is rated at 10watts by Cary, but just below visual clip on an oscilloscope, this amplifier produced 8watts. Across the mid-band, the amplifier generates predominantly third harmonic distortion, like most fixed bias designs, which generally results in a bright/sharp, but apparently clear sound.

Luckily, the CAD-300SE displayed a very amenable high frequency distortion characteristic, producing primarily second harmonic, which measured 1% at 8watts output (10kHz). This will be aurally innocuous. Since oh so many fixed bias amplifiers, made worse by an imperfectly loaded output transformer I suspect, produce 5%-10% third harmonic at 10kHz, the Cary did relatively well in this very important respect.

Bandwidth (1watt) measured a satisfactory 12Hz-20kHz (-1dB). There was no high frequency peaking, allowing good square wave reproduction to be achieved. Lack of low frequency filtering allowed the output transformer cores to saturate early at 12Hz, passing 3watts maximum, but this is to be expected. Vinyl users beware: any preceding disc stage should have a warp filter. Otherwise, the output transformers were just man enough to pass full output (8volts/8watts) at 40Hz, again a satisfactory performance.

The input stage uses a Shunt Regulated Push-Pull (SRPP) circuit configuration. It's popular in Japan and looked much like that used in the Japanese Audio Professor 300B amplifier. This stage produced some of the third harmonic we measured, but is known

for good sound and high gain. Sensitivity was low at 1.3V for full output, so a pre-amplifier with gain is needed.

In all, the power amplifier measured well compared to many modern 'esoteric' valve amplifiers, at least in critical areas that affect sound quality.

The power supply uses a re-badged Mullard GZ37 - a very rugged rectifier. This will give the amplifier a slow start. The filaments are fed d.c. which shortens valve life a little, but keeps down hum.

The pre-amplifier has an external, solid state power supply and uses triodes throughout. It had a wide measured bandwidth of 4Hz-53kHz on CD, a 200mV input sensitivity (for 1.3V out) and a gain of x10, which is quite high. All these figures are normal enough. The phono-stage had an enormous x850 gain, making it suitable for high output moving coils, as well as moving magnets. Equivalent input noise measured 0.6µV, a low value for moving magnet cartridges, but not low enough for moving coils, where hiss would be audible. With such gain, input overload set in early at just 20mV (1% distortion). However, since it was pure second harmonic, rising to 2% at 40mV, and more than 5% or so is barely detectable as a lightening of timbre, the Cary was fine in this respect.

The RIAA disc equalisation was accurate, but ideally Cary should add a warp filter in my view, to prevent the possibility of disc warps saturating the output transformer cores. Otherwise, the pre-amplifier worked well and could be used with any power amplifier.

In all the areas that count - those that directly affect sound quality - the Cary combination measured well. **NK**

## TEST RESULTS

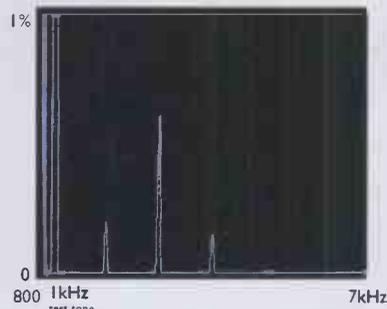
### CAD-300SE POWER AMP.

|                    |            |
|--------------------|------------|
| Power              | 8watts     |
| Frequency response | 12Hz-20kHz |
| Hiss               | -90dB      |
| Hum                | 1.2mV      |
| Distortion         | 0.2%       |
| Sensitivity        | 1.3V       |
| Damping factor     | 4          |

### SLP-90 PREAMP

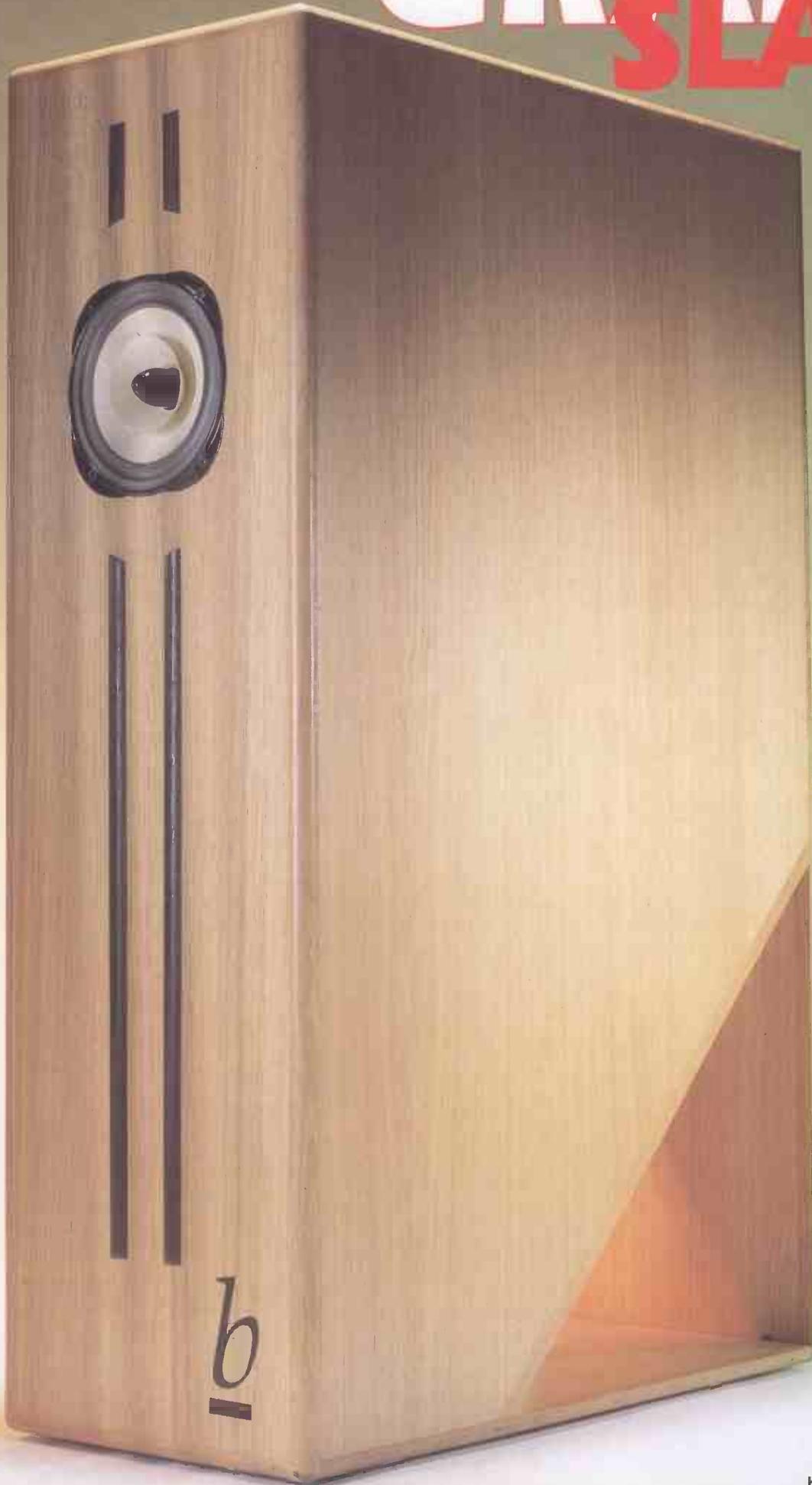
|                    |           |
|--------------------|-----------|
| Frequency response | 4Hz-53kHz |
| Separation         | 68dB      |
| Noise (input)      | 2µV       |
| Distortion         | 0.14%     |
| Gain               | x10       |
| Sensitivity        | 200mV     |
| Overload           | 10V out   |

### Distortion



Third harmonic distortion may give the Cary a bright character.

# GRAND SLAM!



**Thomas  
Transducer's horn  
loaded Brios have  
punch. Dominic  
Baker finds them  
big in every sense  
of the word.**

**M**y girlfriend wasn't impressed. "What the hell are those? Is there a whole band inside them or what?" But it didn't deter me. I was determined to get them into my room and up and running whatever the objections.

My room isn't small, 25ft long and around 16ft wide, but to say that the Brios blended into their surroundings harmoniously would be a lie. But that isn't what the Brios from Thomas Transducers are about. If you want high sensitivity (we measured a staggering 101dB) and the kind of room driving slam and attack a horn can produce, there has to be a trade-off and size is it. In physical terms the Brio is a floor-stander 51 inches high, 15 inches wide and 32 inches deep, with an effective horn length of 15ft. In monetary terms, it has a £4750 price tag.

The Brios use a single Lowther PM6A Hi-Feric driver which covers the entire audio band. It is a bi-axial unit, having a small 'parasitic' cone centrally mounted around a phase plug to extend treble smoothly upwards. The cone itself is made from extremely thin paper, for lightness and fast response to transients. The rear of this unit drives a folded exponential horn which has been designed so that the Brios work best with their backs facing into the corner of a room.

I quickly found that the Brios didn't suit dull or muffled programme material, making a lean, bright CD player the best consistent match. Combined with a valve amplifier, to exploit its smoothness through the midrange, the Brios came alive. The Lowther drivers are so light and fast that even the merest touch of hardness or grit in the source shouts right at you.

Having listened to several horn loudspeakers in the past, I was expecting the bass to have that dry, hollow, colouration that seems to accompany such designs. The bass from horn loudspeakers is always impressive, hitting you in the chest with every kick from a drum. But it is never especially deep or full, because of the sheer physical size of the mouth needed to reproduce the lowest notes. The Brios managed especially well here, having more body and character in their bass than most, which gives them a richness I found agreeable.

It's quality bass too. Not over emphasised to an extent that it swamps the music, but with all the scale and power you could wish for. It stays taut with bass guitar for example, having the agility and speed to follow plucked strings. The Brios keep a performance in nice proportion too, kettle drums growing from back-stage without swamping the room.

As I mentioned earlier, the treble of the Brios was a little too soft for my liking.

Treble energy can be increased by toeing them in towards the listening position more, but too far and the upper-mid-range becomes pronounced, adding a hardness to vocals and strings. I found the best position was with the Brios toed in just a little, so that their forward axes crossed paths around 6-8ft behind my head. Here treble was powerful enough to balance the sound reasonably, without the mid-range coming too far forwards.

In this position they dealt with Inspiral Carpets' Saturn 5 with aplomb. Every crack from the drum stick as it crashed into hi-hats seemingly had great force behind it, even if the upper harmonics needed to provide a really sonorous 'ring' decayed a little too promptly to create the sort of awe inspiring sense of space that some top-end loudspeakers possess.

Overall, I can only describe the way the Brios convey music with such authority, thrusting every note forwards, as majestic. The manner in which they seem able to get progressively louder - and even louder! - without even the slightest hint of compression, giving them great ability to communicate the dynamic contrasts within a recording, or better still from a live Radio

3 broadcast, is nothing short of spectacular compared to that of any conventional box loudspeaker.

The Brios let music flow in a delightfully natural fashion.

Listening to

REM's 'back-to-roots' album *Monster*, these speakers conjured up the just the flavour intended, making plain the sparse, uncomplicated feel of the music. The thin paper cone of the Lowther driver didn't add much colouration to Michael Stipe's voice, and the concentric design, with treble radiating from the centre of the unit, helps the Brios to firmly position band members. They aren't quite as precise in this area as, say, the new KEF Reference Series 2s reviewed in last month's issue, but they certainly didn't disgrace themselves.

At the end of the day, whether or not you get on with a loudspeaker depends greatly on personal choice. Even more so if they cost £4750. The Brios have a lot going for them. They're capable of producing a captivating performance of lifelike proportions with a great air of naturalness. They are incredibly sensitive, needing only a couple of watts at most to go extremely loud. One warning though, as well as a large pocket, you're going to need a very large room ●

**Brio**  
**Thomas Transducers**  
**White House Hall,**  
**Hadlow Road, Tonbridge,**  
**Kent. TN11 0AJ**  
**Tel: 0732 851408**

## MEASURED PERFORMANCE

Memories of the Living Voice Tone Scout came flooding back as I sat hands over ears desperately trying to withstand the sound these 'speakers produced from just one watt of a pink noise test signal during measurement. High sensitivity is all very well, but at this level, it's painful!

Pushing out a massive 101dB at 1m from just one nominal watt (2.8V or 0.6watt in fact, because the Brios have a high 14Ω overall impedance), the Brios will pin you to the wall with ease from a few watts. There are pre-amps around that have enough power to drive loudspeakers like this!

Their frequency response wasn't especially flat, but it is very difficult to get an accurate picture from horn loudspeakers. Through the mid-range the response is quite smooth, up until around 2kHz where a strong peak arises. This will help the sound to project well, but some listeners may find the Brios a little too forward for their liking.

Upper treble extends smoothly to just past 10kHz, after which it rolls off rapidly. This will give a soft and inoffensive treble quality - not always a bad thing.

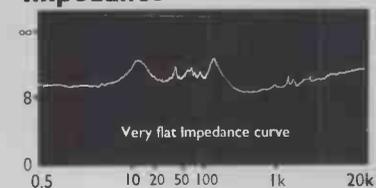
In the bass, the plot shows extension down to 40Hz, and this was with the mic in front of the drive unit. Output from the horn, with room reinforcement, will push bass further downwards, so I would expect deep bass to be audible in normal use.

The impedance curve is extremely flat and smooth, partly helped by the fact that the Lowther PM6A drive unit covers the full range and therefore has no crossover. Impedance was high too, with an overall value of 14Ω, meaning these speakers draw just over half the current of a standard 8Ω loudspeaker. Combined with high sensitivity, this makes the Brios incredibly easy to drive. **DB**

### Frequency Response



### Impedance





### 'MARKET FORCES'

Boycott greedy UK dealers. Here are some price comparisons between US and UK for quality American hi-fi based on a £1.00 to \$1.50 conversion: Monarchy Audio DT-40A transport, £1,000 (US) - £1595 (UK); Counterpoint DAI DAC, £863 (US) - £1,675 (UK); PS Audio Transport Lambada, £1,130 (US) - £1,990 (UK); Theta Data Basic (transport), £1000 (US) - £1990 (UK); Wadia 8 transport, £2,000 (US) - £3,190 (UK) and finally, Audioquest Emerald interconnect £110 (Israel) - £190 (UK).

Why the discrepancy? Any person can purchase the amazing Bedini CD clarifier by buying 40 US dollars from a high street bank and sending the money in a registered letter to: The Cable Company, P.P. Box 579, Byran Road, Point Pleasant, PA 18950, USA. The total cost is £30, which is a lot cheaper than the £95 charged in the UK.

Conclusion: as UK markets obey the rules of supply and demand, your magazine should show UK buyers how to undertake personal imports. You can start off by doing it yourselves. If the dealers who supply your review equipment get angry, you should resist their blackmail!

Remember to specify 240 volts. You could try calling Audio Adviser in Detroit on 616 451 3868 for some helpful advice. Happy Hunting.

**Nicolas Vassiliades**  
Old City Jerusalem,  
Israel.

British dealers have very little to do with this.

Exporters use import agents to handle their products, who then appoint dealers in their territory. Each adds a margin, so the price you see outside the country of origin has an extra margin in it - the importers margin. For their part, the importers are expected to ship and pay the costs, which may be considerable, to stock in depth, to deliver nation wide, to service and repair, and to answer customer enquiries. They may even be

involved in safety certification and liability insurance, being legally responsible for the performance of the goods.

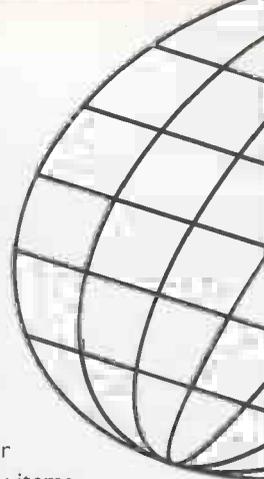
Cost this little lot out and you find that import can be an expensive and sometimes onerous business, which demands margin.

The business of direct personal import (grey imports) raises other questions. It's successful with small, passive items, like cartridges and accessories,

but less so with heavy or complex items, which attract high shipping charges and may need specialist repair. Importers obviously hate grey imports and, since they may be crucially important to a company, have the strength to insist that they be prevented.

How? The manufacturer has to raise prices in the country of origin, to erase

# World



## Letter of

Recently I went to a Quad musical evening at my local dealer, the Audiofile. This was the first time I have heard an all-Quad system and the first time I had heard their ESL 63 electrostatic loudspeakers. As the owner of what I consider to be a fairly high-end Linn system, I was absolutely bowled over by how spatial and 3D-like the sound was. Even though I certainly wouldn't trade in my all-Linn set-up for a Quad system, it did have me thinking how nice it would be if I had a spare room and a few thousand pounds cash. With a Quad system as well, I'd have the best of both worlds.

Where the Quads particularly excelled was on very straightforward, uncomplicated vocal and jazz music, as well as classical music. What surprised me was that the 'speakers even had good bass (yes, I did hear them without the

sub-woofer). The front-end was a Quad 67 compact disc player and amplification was provided by the Quad 66 pre-amp and 606 power-amp.

Where the system did come unstuck was on pop music, where the sound could become somewhat muddled. If I did trade in my Linn for an all-Quad system, I would certainly miss the dynamic punch and slam of the Linn set-up.

The purpose of writing was to say just how impressed I was with the system. If I listened solely to classical music, then the electrostatic loudspeakers are the ones that I would certainly go for. However, I tend to listen, in the main, to soul and jazz/fusion.

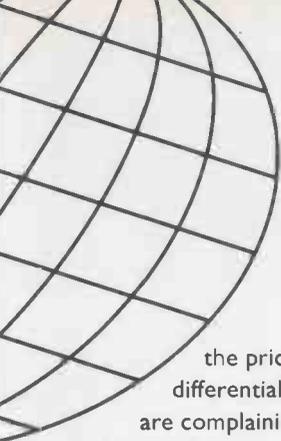
Whilst on the subject I would again ask you to consider including in your excellent publication reviews of soul as well as jazz/fusion. I have to buy CDs sometimes

on spec (mainly G.R.P. releases) and quite often I have wasted my money. I know that you pride yourself that your publication is still only £2, and you do say that if you had the extra space then you would include jazz/fusion and soul reviews. I am sure if Hi-Fi World was increased in price, by say 20-30p, you would still sell just as many. After all, a hi-fi is only a means to an end, and I personally feel that more importance should obviously be attached to the music.

**Jonathan Paul Diamond,**  
Hatfield Broad Oak,  
Bishops Stortford,  
Herts.

Quad Electrostatics can handle Rock, but Quad themselves, as you have recognised, tend to favour classical. We strip ours down, removing the grille cloths and metal protective meshes. This gives them a more transparent sound,

Send your letters to Hi-Fi World Letter Page,



# writes

the price differential you are complaining about. So the local populace pays more, suppressing demand in the country of origin. The manufacturer is forced to decide which market is most valuable.

If US companies don't do this, then it's probably because they value their huge, wealthy home market more than smaller export markets. So the price

differentials you see are hardly a reflection on poor British dealers! They're attributable to importer margins, allied to exporter policy.

The British, by way of contrast, have a smaller and none-too-strong home market, making them more reliant on export. So, unlike the Americans, they are more likely to raise their home margins to minimise such differentials. It might look more equitable to you

in Israel, but it's tough on us Brits! NK

## WEDDED TO HI-FI

I must say I found Dominic Todd's recent piece on Hi-Fi style the most interesting and thought provoking article for some time. Whilst I sympathise with many of Dominic's observations, I do feel there is another side to the debate.

Once fully hooked, there is no doubt that many audiophiles aspire to the more individualist, idiosyncratic of designs. Most would agree that such products are vital to the industry, and I understand Dominic's wish to see more truly stunning products. However, in order to spread the appeal of real hi-fi, there is a need to attract people who don't already place such importance on hi-fi, so that they'll design their homes around around it. Most will already have homes and indeed wives with which the

hi-fi must co-exist harmoniously.

Moreover, I do feel that good design requires far more than good looks. A well developed product should surely also be convenient, practical, durable and adaptable. Linn's electronics, for instance, are a pleasure to use. The equipment stacks up to hide cables; there are no sharp edges to chip, so it lasts, and of course they are highly adaptable with expansion slots, multi-room possibilities and constant retro-fit upgrades, just some of the important assets which place these 'black boxes' at the cutting-edge of design. I should add that I don't own Linn equipment, but I do wish others would sit up and take notice.

Many products are just plainly impractical and through time can end up looking like a dog's dinner. I once owned some 'speakers' finished in

continued on page 41...

## the Month

free from a slight colouration introduced by the mesh. But I wouldn't recommend this to anyone inexperienced or with young children who may be tempted to touch, since beneath a thin protective film lie electrodes carrying high lethal polarising and signal voltages.

To date, we've funded improvements to the magazine by rising sales and increasing business (and we're all a bit pleased that as music lovers and hi-fi enthusiasts, rather than as mainstream publishers, Hi-Fi World has a steadily and healthily rising circulation). So, at present, there's no need to raise cover price to fund extra Jazz reviews.

Hi-Fi World readers will scream the house down when, some day, our price does have to go up (it's been £2 since our launch in 1991). For a long time, Scandinavian producers have

been militating for an increase in paper price and this slid through last September but was absorbed by us. I've always hated those "Due to an increase in paper prices.. blah, blah, we've been forced to raise the price of the magazine" that big publishers love and, thankfully, to date we've managed to avoid using it.

I'm also concerned about maintaining the quality of the reviewers we use - most hopefuls, possibly a little too interested in the idea of free music and not concerned enough about either their qualifications or writing ability, don't make it. Our current music reviewers are highly knowledgeable in their particular fields. When we find someone equally well qualified to handle Jazz/Fusion reviews - and modern Acid Jazz - they'll be grabbed! NK

64, Castellain Road, Maida Vale, London W9 1EX.

### 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.



# 3 Steps To Heaven

## Step 1.

Remove Q-tip from page.

## Step 2.

Apply Q-tip to left, then right ear and twist.

## Step 3.

Visit your Electrocompaniet dealer and  
prepare yourself for the most heavenly sound experience of your life.

*\*To win an item from the Electrocompaniet range, return your used Q-tip with name and address to:  
Electrocompaniet A/S, Norway for free draw entry.*



ELECTROCOMPANIET

*If music really matters...*

Makers of fine audio instruments

### *Worldwide Electrocompaniet Distributors*

*Austria (02) 227992158 - Australia (03) 8820372 - Bangkok 22241669 - Belgium (011) 229659 - Canada (416) 4957485  
Costa Rica (506) 2260282 - Croatia (05) 8589742 - Finland (914) 45751 - France (01) 48918907 - Germany (071) 214779 - Greece (01) 9597560  
Hong Kong 3140811 - Italy (02) 2367595 - Japan 334873441 - Mexico 9054001962 - Norway 22112218  
Portugal 19831112 - Russia (095) 2362377 - Spain (06) 3510798 - Singapore 3391991 - Sweden (031) 133535 - Switzerland (091) 431734  
Taiwan 5512525 - Turkey 2125192280 - U.S.A. (516) 2617700 - U.K. (01243) 533030*

**Electrocompaniet A/S - P. O. Box 92 - N - 1473 Skårer - Norway - Fax: +47 67909787**

black nextel which collected dust like a Hoover bag. A soft brush was partially successful in cleaning them, but they never looked new again. Any cloth used deposited lint and polishing was a disaster. Turntables without dustcovers share these problems too. Pink Triangle and Kuzma seem to have integrated lids into their design without sonic or aesthetic drawbacks.

I share Dominic's view that there is too much black about (even the Japanese seem to be switching to titanium), and I agree that Michell's Gyrodec is a stunner. I should add that it is also brilliantly designed, being easier to set-up and maintain than any other top turntable I've come across.

I can't finish without plugging my own particular favourites which include NVA's Statement, the original Cyrus range, Anthony Michaelson's products and Sequence loudspeakers.

Whilst I too spend hours drooling over pictures in

magazines (hi-fi titles, that is!), I'd rather have the 'hi-fi illiterati' enlightened by cleverly designed and wonderful sounding black boxes than see them carrying home, yet more, midi-system boxes on the bus every Saturday. We need a wide range of styles, but I do wish manufacturers would put as much thought into their products as the best examples we can mention.

**Andrew Baird,  
Tyne & Wear.**

### **INFLUENCE**

It saddens me to see a dispute between yourselves and Pentachord.

If what you say of Dr. Brooks' attempts to manipulate public and readers' perception of Dominic Baker's review of the Pentachords is accurate, then I understand your anger.

What worries and disappoints me regarding yourselves, is that I was one of the people who wrote expressing concern over the standard of Dominic's review,

whilst acknowledging his right to dislike the loudspeakers. But, at no time had Dr. Brooks contacted me to influence me to write the letter. I wrote the letter spontaneously after reading the review.

I believe you are in danger of distorting the truth in an Orwellian, Big Brother manner by simply not printing any of the letters, something I hope and believe you would not be party to.

Then again you could simply dispose of my letter and no-one would be any wiser, that would be a sad response by the hi-fi journal that has set such high standards by using subjective and objective measures in such an open and professional manner.

**Garry Richards,  
Wakefield,  
West Yorkshire.**

I appreciate your letter, which came at much the same time as a call from a dealer who occasionally handles the Pentachord loudspeaker. He, like you,

was at pains to point out that his letter to us in support of Pentachord wasn't sent as part of an orchestrated campaign, even if the supercilious letter sent to us by Oliver Brook of Pentachord (January 1995 issue) appeared to give the opposite impression.

From this end it isn't possible to tell whether a flurry of supportive or sycophantic letters is motivated by genuine appreciation of

a product and its manufacturer, or by collusion with that manufacturer to gain free, apparently impartial promotion. There's nothing Orwellian about this. It's a silly trick, but from time to time, it occurs and, ultimately, it is a cynical attempt to deceive readers. Perhaps in this case there was no such motivation, Oliver Brook's letter just made it appear so. **NK**

### **HALL OF FAME**

The Fons CQ30 was reviewed in Hi-Fi News in 1978, in a notorious comparison with the Linn LP12. It was reprinted in the annual for that year, which I happen to have kept.

According to the reviewer, F.J., the CQ was distinctly better than the Sondek. Anyone know who F.J. was? The CQ was manufactured by Fons International Hi-Fi, Ltd., Maybole, KA197BH, Scotland. At the time it cost £93.50, excluding VAT and without an arm or pick-up. Sic transit.....

**Peter Turner,  
Frampton Mansell,  
Stroud,  
Glos.**

### **A GOTH IN THE QUAD**

I've been reading your magazine for a few months, but have noticed that there appears to be much debate about "which 'speakers do I use with my Quad IIs"?"

The Quad documents tell us, and you are fond of reminding us, that Quad IIs only produce 12watts. However, when we tested my pair we found that we were in fact getting 18watts RMS. My friend (an engineer) who refurbished them said that maybe it's because we're using better components, all the resistors have been replaced with Holcos, the capacitors have been replaced also. Any ideas?

continued on page 47 ....



**Hi-Fi style - Michell's Gyrodec combines eye catching looks with high quality engineering.**

Just a decade ago fears were being voiced over the future of radio, which seemed in terminal decline in the light of the video explosion. In the 1990s, with listening figures rising steadily, those fears look groundless. And with the introduction of the Radio Data System (RDS), many of the annoyances associated with using a hi-fi tuner have been eliminated.

There is no longer any need to think about station frequencies or even the way the pre-sets have been configured. Instead the tuner greets you with the name of the station selected. In the golden age of wireless when the airwaves were the exclusive province of the BBC and a handful of independent local stations, this would not have been such a big deal. But with today's proliferation of ILR stations and new franchises being handed out by the day, RDS is not so much an added convenience as a necessity.

This is where the Yamaha TX-580RDS fits in. Possessing considerable operational sophistication and good build quality, it looks a strong player in an increasingly competitive sector. Parting with five pence less than two hundred pounds buys you a pleasantly finished black box weighing in at just over three kilograms. Maintaining the family image, the Yamaha sports a front panel devoid of clutter and frivolities. As soon as the unit is powered up it displays the frequency of the station selected, which is rapidly replaced by the station name. There is also the compulsory (for Japanese tuners) ski-slope signal strength meter which impresses in the showroom, but not so much at home. Finally, the Yamaha displays pre-set name and tuning mode, which can be either automatic, manual or by pre-sets.

The RDS facilities are easily accessible, allowing quick searches of the airwaves for programme type (news, affairs, sport, culture, etc.), as well as finding the frequency with the best signal for any given RDS compatible station.

As expected, tuning - across FM or AM - proved a breeze, the Yamaha quickly locking onto BBC Radio One and confirming the fact on its display. On the end of a high quality aerial, driving a Denon PMA450SE into KEF Reference Series Model 2s, the TX-580RDS initially sounded highly impressive. Primal Scream's Cry Myself Blind came across with verve and gusto, displaying a keen sense of timing which pulled me into the song. Indeed, throughout the listening period,



# AUTOMATIC PILOT

**Yamaha's TX-580 tuner comes complete with RDS, useful for scanning today's busy airwaves,**

**David Price finds.**

## MEASURED PERFORMANCE

The TX-580RDS has an interesting slow roll down in upper treble output, a feature that's likely to give it a mild presentation - that's if the overall climb upwards in treble output doesn't dominate, as it might; only listening tests can tell which of these two conflicting phenomena will dominate subjectively.

Distortion was a little higher than usual, but comprised mainly second harmonic, as our analysis shows. This doesn't usually sound bad, in large quantity (5% or more) serving only to lighten timbre. At 0.8% maximum this should not be troublesome subjectively, although some slight muddle or 'greyne' in the sound may result.

Channel separation was very high at all frequencies and hiss quite well suppressed at -72dB - about average these

days and low enough for hiss not to be obvious even on Radio 3, during their extended silences.

As expected, the Yamaha was very sensitive and selective; it can pick up weak stations and hold them without interference from powerful ones nearby. The signal strength meter is a simple one with four segments that hit 200µV maximum - a relatively weak signal. Like just about every tuner, this one needs five times as much to work optimally, in full quieting. Audio output from the tuner measured 600mV, a healthy figure high enough to drive all modern amplifiers.

The Yamaha measured well in all areas, although it produces more distortion than is common these days. Whether it will be audible is best decided by listening tests. **NK**



the Yamaha continued to impress with sharply defined leading edges that lend a degree of pace to rock and pop rhythms. However it soon became apparent that the upper midrange was particularly forcefully conveyed - in short, the Yamaha veered towards brightness which on some program material could be fatiguing. Indeed, the sound wasn't a million miles from that of a budget CD player, dealing in broad, well defined brush strokes which did nothing to communicate the nuances of the song. Instead, the Yamaha relied on

its sheer brio to keep the listener interested.

A particular problem area for budget tuners is bass (or rather the lack of it). The TX-580 was actually quite good in this respect, showing a fair degree of extension, but often tripped up and tended to 'one note' the lower frequencies. Another danger area, female vocals, were handled with an unwelcome degree of hardness invariably aggravated by the Optimod signal processing the BBC are so fond of. Switching to Jazz FM

showed the TX-580RDS in a similar light, treading as it did a delicate path between brightness and hardness whilst investing the music with a sense of urgency and force.

The treble was also a mixed bag. Whilst it displayed a respectable amount of detail, high hat and ride cymbals showed signs of splashiness and muddle. On Radio Four the Yamaha proved competent, avoiding sibilance on female voices but lacking the endearing warmth of some other models in this price range, notably the NAD 402. To cap it all, Melody FM, a station whose output is not exactly intended to offend its listeners' sensibilities, came across as quite forward and relentless.

The Yamaha is a thoroughly competent tuner, possessing an excellent user interface, a reasonable sonic performance and good build quality. Unfortunately, that is also its problem. If you want sound quality that will compel you to cut down on your TV viewing, you should look in the direction of the NAD 402. If you want something for casual listening with superior aesthetics, the Yamaha might just be the one for you ●

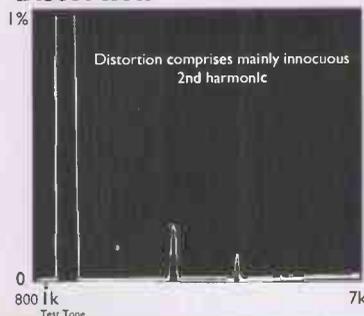
### TUNER TEST RESULTS

|                         |            |                       |            |
|-------------------------|------------|-----------------------|------------|
| Frequency response      | 13Hz-11kHz | mono                  | 1.6µV      |
| Stereo separation       | 54dB       | stereo                | 25µV       |
| Distortion (50% mod.)   | 0.4%       | signal strength meter |            |
| Hiss (CCIR)             | -72dB      | LED No.               | level (µV) |
| Signal for minimum hiss | 1mV        | 1                     | 2.5        |
| Selectivity (at 0.4MHz) | 80dB       | 2                     | 50         |
| Sensitivity             |            | 3                     | 80         |
|                         |            | 4                     | 200        |

### Frequency Response



### Distortion



**Yamaha TX-580RDS** £199.95  
**Yamaha Electronics UK Ltd.,**  
**Yamaha House,**  
**200 Rickmansworth Road,**  
**Watford,**  
**Herts. WD1 7JS**  
**Tel: 0923 233166**



# Heart of Gold

**Aiwa's new AD-S950 is good where you can't see it.**

**Noel Keywood finds a fine performance hidden behind a modest exterior.**

**T**he stylist owns a Micra; at least, that's what I'd expect. It leaves me wondering whether bits wobble on Micras the way they do on the AD-S950, build quality being on the 'light' side, shall I say. But you've got to look at the price - £299.99 - consider the widgets - a full house - and inspect the final performance. Conclusion? Aiwa build to a budget, keep a grip and offer value. The bulbous styling might remind me of a Micra, but the performance of this new deck is less modest.

Rivals? Sony eroded DCC sales with their price-busting TC-K611, relying on Dolby S to offer a similarly hiss-free performance. Aiwa are, these days, a part of Sony and benefit from this initiative too; the AD-S950 is a very similar package to the TC-K611, using Sony-manufactured Dolby chips, for example. It has a dual-capstan transport, one that holds speed tightly I found (some wander badly), three heads (record/replay/erase), Dolby S which offers overload protection as well as very strong noise suppression, and a host of user adjustments, including

variable bias for tape tuning aided by a tune calibration system, adjustable sensitivity for good Dolby tracking, headphone volume, cue/review and track search and, to top it all off, remote control.

Build quality from Aiwa these days is flimsy. In spite of re-locating to Singapore in the eighties, which is where the AD-S950 is made, cost paring permeates this product. Behind the extruded fascia, the sheet metal of the chassis is as thin as it is possible to go. The rear phonos are held on by just one screw, and wobble badly when making connection, the circuit boards are cheap SRBP (resin bonded paper), and so on. Yet in contrast to this, Aiwa use a superb transport and head, and good parts wherever needed to maintain performance, even if this is at the expense of build quality.

The AD-S950 lacks little. It has no back-lighting for the cassette, making the tape difficult to see. It seems that the Japanese have already abandoned last year's widget, the powered cassette

door, so you have to slam this one shut yourself. The Aiwa is no Nakamichi in smoothness of operation, but it doesn't clank too badly.

As expected from the measured performance, the Aiwa performed beautifully, even if some wrinkles showed. The tune calibration system suggested standard TDK MA metal tape couldn't be tuned in, even at maximum bias, yet when I recorded under these conditions, the sound was quite obviously dull and bias needed to be backed off. I feel a little sorry for anyone taking the calibration system seriously, as they are likely to do - quite understandably. It's inaccurate and misleading, and so is the sensitivity calibration system. Aiwa should abandon both of them, explain simply in the handbook how to set bias by ear, and spend the money elsewhere.

With no Dolby, hiss with TDK MA was minimal and recording quality superb, peaking at +6 on the display. Transients from the Latin American percussion and guitars on Songhai 2 were a little rounded, but that's all. Otherwise, recordings were clean, stable and detailed. It would be hard to improve on them, in fact. Violin was screech-free, but the strings did not congeal together, as they tend to with ferric and chromes. Prominent bass caused the sound to constrict a little; Donna Summer had to fight her way through the bass line on Love Is In

Control, unless recording level was reined back to lessen head saturation. Only here was the Aiwa a little less capable than a Nakamichi DR-2, when recording on metal tape.

Anyone wanting to suppress the last little bit of hiss on TDK MA are best advised to use Dolby B, since it acts only at low levels. I found there was no benefit in using C or S.

The overload prevention schemes of Dolby C and S are usually needed to rescue ferric and chromes from treble assault. I was taken aback at how far I could push the Aiwa with quality ferrics without Dolby. TDK AR gave excellent results when peaking music at +6, hiss between tracks being banished with Dolby B or S. Dolby S seemed to offer a little benefit at times, but its performance was hardly convincing, even with the emphasised transients of Steve Earle's guitar on Guitar Town.

*“Recordings were clean, stable and detailed. It would be hard to improve on them, in fact”*

TDK AD ferric tape accepts treble better than AR, but it overloads more easily in the bass and at +6 sounded muddled and a little dulled; recording level was too high. The bottom line is, however, that the AD-S950 offers superb recording quality even on budget ferrics, always a sign of a deeply competent recorder. Ferric tape doesn't have to sound awful, as Nakamichi have always demonstrated. Poor decks just make it so.

Much the same situation exists with pre-recorded cassettes. OK, so they're not really high quality sources, but all the same they can sound quite decent on a good machine and again, the Aiwa showed good ability in this respect. Piano was stable sounding and reasonably pure, free from pitch warble. Notes were held beautifully in Chopin's Opus 29 Impromptu, allowing Ashkenazy's technical mastery to shine. There was no sign of shakiness or the muffling normally associated with this medium. Tracks with a fast tempo sped along, aided a little by the positive speed error, but also by the sense of control this deck's transport imparts. Anyone with a collection of pre-recordeds, possibly for a Walkman or car, will appreciate the way this deck plays them.

The Aiwa under-sells itself. Flimsy build and derivative styling do little to distinguish this deck from others; in fact, they help submerge it. That's a pity,

because in all other respects the AD-S950 offers a very high standard of performance, in every area. It matches tapes well, makes superb recordings on ferrics, chromes and metals, and gets the best from pre-recordeds. Most quality decks fall down in one area or another, so the Aiwa is well ahead of the pack. At

the price, its something of a bargain ●

**Aiwa AD-S950** £299.99  
**Aiwa**  
**5, Heathrow Summit Centre,**  
**West Drayton,**  
**Middlesex. UB7 0LY**  
**Tel: 081 897 7000**

**MEASURED PERFORMANCE**

Today the budget side of Sony, Aiwa once specialised in cassette decks. With this role to play, you have to expect Aiwa to cost-cut. The question is: does performance suffer as well?

Briefly - No! I was struck by the excellent surface finish of the head of this deck - it gave unusually steady high frequency output. Other critical head properties are frequency response flatness and distortion/overload. Our response analysis with metal tape (IEC IV Primary Reference type MJ507A) also shows remarkable flatness, with high frequency extension to 20kHz. Low frequencies went down smoothly, without too much bumpiness, to 11Hz, but I did notice that high frequency distortion was a little high at 3.5% with metal tape (IEC 0dB level). Around 1-2% is the best possible, whilst budget recorders produce 6% or so.

In spite of this, the head managed to get high signal levels onto all three tape types - ferric, chrome and metal. With a tape like TDK MA it hit +5dB in the midband (equivalent to +6 on the record level indicator) and +0.5dB at high frequencies, a very respectable result. Ferrics and chromes were well handled too, good mid-band and treble recording levels being achieved. So the AD-S950 head is a good one.

Hiss levels were low with all three Dolby systems, even though the replay amplifier had a few dB more hiss than usual, in practice swamped by tape hiss.

Replay frequency response was flat to 18kHz; Aiwa have engineered accurate replay equalisation and set head azimuth with a good degree of accuracy, even if level at 20kHz was -3dB down, where on a Nakamichi it would be +1dB or so up - an ideal result.

The dual-capstan transport worked very well, holding tight speed and suffering little capstan wow or flutter. However, it ran +1.4% fast, rather more error than usual. Some listeners might notice this as a slight increase of pitch on pre-recorded tapes; it will not affect recordings made on the recorder.

Indicated peak record level has been set to broadly encompass both Dolby flux and IEC 0dB flux, which is +1.8dB higher. The meter hits +10, which is optimistic; +6 is a more realistic figure.

The tape calibration system was a little imprecise for setting sensitivity, failing to resolve a 1.5dB error. Response adjustment was good though and variable

bias on metal tape could just accommodate TDK MA-XG, but not Sony Metal ES, which had a treble peak. As tune systems go it was good enough, bearing in mind that the ear is more effective, especially on a three-head deck, where the original can be compared with the recording directly, using the Tape/Source monitor button. **NK**

**TEST RESULTS**

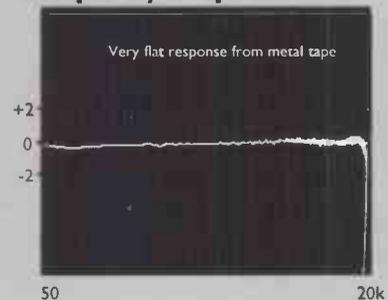
**REPLAY (pre-recorded tapes)**

Frequency response (-2dB) 30Hz-18kHz  
 Speed accuracy +1.4%  
 Hiss (70uS, Dolby out) -57dB

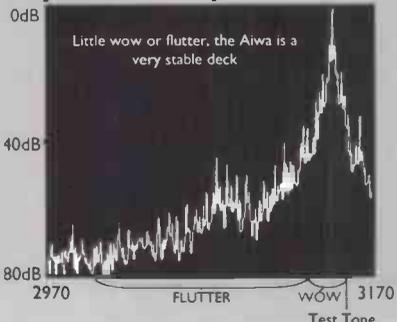
**RECORDING (blank tapes)**

Frequency response (IEC Primary Refs.)  
 ferric (IECI) 11Hz-16kHz  
 chrome (IECII) 11Hz-17kHz  
 metal (IECIV) 11Hz-20kHz  
 Separation (1kHz) -51dB  
 Distortion (315H) 0.8%  
 Hiss (70uS, Dolby out) -55dB  
 Speed variations (DIN total) 0.06%  
 Flutter energy (3-3.13kHz) -27dB  
 MOL/SAT (IEC Refs) 315/10k  
 IEC I (ferric) +4dB/-6dB  
 IECII (chrome) +4dB/-4dB  
 IECIV (metal) +5dB/+0.5dB

**Frequency Response**



**Speed Stability**



# BEST INTERCONNECT

# 1994

WHAT HI-FI? AWARDS 1994



## COBRA



Call now for more information

The Chord Company,  
30A Sarum Business Park, Salisbury, Wiltshire SP4 6EA.  
Tel: 0722 331674, Fax: 0722 411388

Name .....

Address .....

.....

.....

Postcode .....

# RINGMAT

## 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 Grasshopper cartridge 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." **Andrew Marshall (Audio Ideas Guide, Winter '94)**

Hear what your fellow music lovers say:

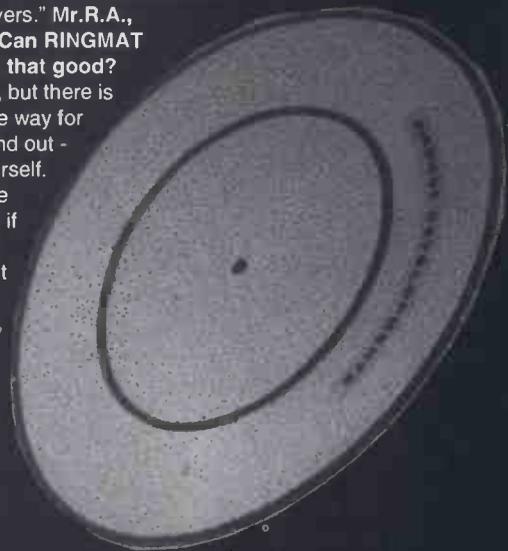
"I would agree with everything you claim for this product. The music is more natural, more musical, and with a loss of a certain rawness which persisted, no matter what, beforehand." **Mr. C.R., Northants**

"RINGMAT goes on my very short list of things that make differences I care about." **Mr. P.F., Washington D.C.**

"This product must be one of the most cost-effective accessories ever to be offered to music lovers." **Mr.R.A., Norway** Can 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!



### Prices

Different versions to suit turntable or budget from £27.50 for RINGMAT 200 to £40 for RINGMAT 330 MKII. 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

.... continued from page 41

I'm currently running them with a pair of Tannoy 607s in a smallish front room, and they give easily enough volume to annoy the neighbours, metaphorically speaking, and bearing in mind that I mostly play Gothic Rock!

I'm told it is possible to parallel valve amps to double-up the output. I don't know what your thoughts on this are. I'm inclined against this option as it seems inefficient.

If the option presents itself, I'm tempted to acquire a pair of acoustic horns. Although unobtainable in the High Street, several kit companies do make them, something that I'm looking into. Your thoughts on this? Assuming of course that I don't have the good fortune to stumble across some Lowthers or Voigts before then!

**Marie Shrewsbury,  
Kirkstall,  
Leeds.**

I've owned Quad IIs and measured 8 dodgy watts from them. They overload so slowly that you can get around 12watts, or so I'm told. We cannot see how 18watts is possible, unless your friend had replaced the valve rectifier with a solid-state equivalent, in which case the H.T. will have risen drastically and fireworks will commence shortly.

You can parallel valve amps, but the optimum load impedance halves, so with 8ohm outputs you should use 4ohm 'speakers. Our own stereo amps can be monoblocked like this, using 16ohm taps we provide for the purpose, and they give a very strong sound. Don't try it with solid-state amps though, since they may well blow up.

Watch it with "acoustic horns". These need careful audition first. Horn theory is complex, making competent designs rare, and well-designed horn speakers are

very large. Domestically acceptable sizes are truncated horns, which suffer very uneven bass, limited bass extension and even poor efficiency - hardly what a horn is about. **NK**

### MARANTZ

For eight years I have been enjoying digital music from CD. My first player was a Marantz CD 45, bought after many reviews and considerations. That machine lasted me five years, the replacement is an Aiwa XA 007. I bought it really to match the rest of my system and because it did get rave accolades from most of the magazines. The rest of my system is Aiwa XA 007 amp, Aiwa ADF 800 and ADF 910 cassette decks, Aiwa D30 turntable, Akai AT S3L tuner, Linn Index 'speakers, and Monsterlink interconnect between the amp and CD player.

I can remember buying my first CD, Abba's Voulez Vous costing £9.99. A year later I saw the same CD in the same shop at £11.99. We were all waiting for CD prices to stabilise, or come down. Now I find the average price is £12.99, for a single CD; some are as much as £14.99. This makes me mad, £12 or £13 for 40 or 50 minutes of music? I thought most CDs hold up to nearly 80 minutes. Not only are we being ripped-off financially, we are also being sold-short on quantity. I recently brought three CDs - Erasure, Chris De Burgh and Howard Jones, only the last one had the the full complement. This seems unfair to the punter, I know production costs are not cheap, but then we the public don't all have big bank accounts. Oh yes, my system does make good music, it is bright, but that is what I like. It's a system that would surprise some reviewers.

**D. A. Graham,  
Co. Armagh,  
N. Ireland.**

### NO FAD GADGET

In your review of the Marantz 63 you said that it offered "no ergonomic improvement on previous models....and dubious aesthetics." Although I thought the review was pretty fair overall I have to say, regarding your comments above: "C'mon, did you really compare it to the '52 Mk2 and Mk2SE?"

1) The 52Mk2 and Mk2SE models only had an Open button not an Open/Close. This meant you had to press Play to close it, whereupon it would, of course, immediately start to play regardless of whether you were in your listening seat or not. Very irritating.

2) The '63's CD drawer opens and closes much faster than the 52Mk2, which was almost leisurely, as well as rather noisy.

3) The 52Mk2 would only fast-forward at one, rather slow, speed. On a long track it seemed to take forever to reach a point near the end. The '63 speeds up after about 4 or 5 seconds of holding the Fast-Forward/Rewind button down, to around double its initial speed, in the manner of most Philips-based machines.

4) The remote-control handset has been redesigned to be less cluttered and easier to use.

5) The '63 accesses tracks much faster than the 52 Mk2, which was painfully slow by comparison to Sony CD players. It would flash up the number of the new tracks and then take another couple of seconds before it would start to play it.

6) The buttons which used to be underneath the track Access and Track-Skip buttons have been moved to the right of the display, after criticism that it was easy to press them accidentally when using the track buttons.

7) The fascia of the '63 is a classy brushed metal, the '52 Mk2 a cheap-looking plastic. The older budget Marantz CD players always looked plasticky, how can you say that the

brushed metal fascia of the '63 is not an improvement?

It seems to me that Marantz have put a great deal of thought into the '53 and '63, not just into the sound, but also the appearance and ergonomics. O.K., so maybe some people find gold buttons a bit tacky, but that's a minor point. I think you must have a very rose-tinted view of the 52 Mk2 and 52Mk 2 SE if you think they were both wonderful to use and look at.

In my view, the revised ergonomics and aesthetics of the '63 are long overdue and very worthwhile. If more expensive Marantz players look classier, you have to remember, the '63 is effectively a budget model and given this, looks damn good.

Finally, you can't criticise the '63 for having unnecessary features like a numeric keypad and editing features. I for one, find these extremely useful and if not on the CD player, an essential on the remote control. You have to remember this is a budget player and it is in this section of the market that features sell. If you want to be a hair-shirt audiophile, (admittedly) not really possible with CD, then go for a more expensive player (I have a Pioneer S 802, which is pretty basic looking and I can't say I really miss lots of buttons on the fascia).

**Julian Osborn,  
Westbury-on-Trym,  
Bristol.**

I stand by my comments about the CD63 being no real advance upon the CD52 (and not standing out from the rest of the crowd) in terms of ergonomics. Let's take your points one at a time.

1) To operate the CD52 when seated, simply leave the draw open, sit down, and then press Play on the remote handset. This will

.... continued from page 49

# 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

Analogue lovers... **SME**



*Our world renowned precision pick-up arms and turntables await you.*

Sales and service enquiries to:

SME LTD • STEYNING • SUSSEX • BN44 3GY • ENGLAND  
☎ 01903 814321      ☎ 01903 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 4268

Dunstable Hi-Fi Studios  
Sunnyfields (0302) 781387

Paul Green Hi-Fi  
Bath, Avon  
(0225) 316197

Hozelmere Audio  
High Wycombe, Bucks  
(0494) 437892

Audio Venture  
Banbury, Oxon (0295) 261863

The Hi-Fi Consultants  
London (071) 380 0866  
Evenings (071) 482 0003

Audible Difference  
Diss, Norfolk  
(0850) 983233 or  
(0379) 740227

K.A.I. (UK) Ltd  
Folkstone (0303) 245005

The Hi-Fi Consultants  
Nottingham (0602) 232450

Impulse Audio Consultants  
Westcliff-on-sea, Essex  
(0831) 616426 or 0374 277736

Sound Academy  
Bloxwich, West Midlands  
(0922) 473499

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

Art Audio (UK) Ltd., 130 Main Street, Calverton, Nottingham, NG14 6LU

England UK  
Tel. 0602 - 653604  
Fax 0602 - 637795

we've produced  
naturally musical loudspeakers  
which have been  
critically acclaimed

So what turns the critics on ?

The answer is simple. The ability of Hi-fi products to reproduce any musical event. That's the already established reputation of successive SYSTYM products, including our award winning SYSTEMDEK turntables. In loudspeakers it means carefully selected drive units, in combination with precision acoustic design to produce the basic SYSTYM criteria, then on to seemingly endless auditioning and fine tuning for listening perfection. The result ensures a detailed and precise natural soundstage and it is little wonder that the music is so real and that the critics climb aboard.

**SYSTYM**  
LOUDSPEAKERS

for further details contact

SYSTEMDEK LTD 34 KYLE ROAD IRVINE SCOTLAND KA12 8LD TEL:(01294) 271251 FAX:(01294) 277095

close the draw and begin the CD when you're ready.

2) A call to Marantz confirmed that the CD52 does in fact have a variable speed scan.

3) Yes, the remote is simpler, but it is also less comprehensive which brings me nicely onto:

4) Features. NAD and Rotel have both proved that you don't need to make a budget machine loaded with features, to sell. Both have proved that by spending money on components rather than gimmicks, the machines sound superior to similarly priced rivals.

5) Yes, the metal fascia does look better, but I'm unconvinced by gold buttons that wobble, and build-quality so light that when you push a button, the whole unit moves!

6) There's no doubt that the '63 is operationally better than the '52. It does access quicker and is quieter, but, unfortunately, this improvement doesn't extend to the finish or the controls.

Finally, there is no way I look at the CD52(SE) with rose-tinted spectacles. As I said in the review, its finish was disappointing and I found it over-rated, sonically, too.

Oh, and by the way, I think the CD63 is a great player and well worth an audition! **DT**

### WIZARD PLAYER

I read your review of the Overture CD convertor with interest. You've missed, however, what must be its best point. The fact that, according to the camera, it possesses the extraordinary ability to hover at least 5" above its support!

If this particular attribute catches on, the future of hi-fi will be assured forever.

**Peter Davies  
Carmarthen,  
Dyfed.**

### HIGHER GROUND

Tweaking pays. My system comprises: Naim/NAP/NAC72/Hi Cap, Oracle Delphi turntable with Koetsu arm and Linn Klyde cartridge, fronted by KEF 104/2 'speakers.

I have been recently cogitating on an upgrade, but no matter whatever path I went up it looked to be an expensive exercise. I therefore decided to try the Hi Cap modification of Audio Physics advertised from time to time in your magazine. I also decided to give my plugs and interconnects the Kontak treatment. Lo and behold it is as if a veil has been lifted from in front of my KEFs. Definition, imagery and transparency have improved on all sources. The improvement is hard to understand. Music (vinyl) simply flows far better than it ever has. This, I think, shows that tweaking can be an inexpensive form of upgrading.

**L.A. Dwyer,  
London.**

### HOPE AND HEALTH

My involvement with hi-fi goes back some 30 years, but due to serious illness some five years ago, I had not played any music for 3 years. After three years of being house-bound and in a sorry state, with no help forthcoming anymore from the medical profession, I decided to try and play some music and asked my wife to buy me a hi-fi magazine. One was Hi-Fi World, which impressed me and aroused my interest.

I was able to use your mail order for accessories and CDs and gradually my enjoyment increased. Taking out a yearly subscription helped as well, but perhaps most of all, interesting articles and reviews by all of you rekindled my enthusiasm.

My system before illness struck had not long been

upgraded to Quad 34/FM4/306 amplification, Linn Axis/Akito/K9, Marantz CD651 ISE, with manufacturer's interconnects.

By obtaining Audioquest 'Quartz' interconnects from you, an immediate sound improvement was noticed, and with an ever-increasing collection of CDs and an increased enjoyment of a full spectrum of music, both old and new, my health and well-being (if not physical condition) improved until I was very content and satisfied.

Alas, the anticipation of your magazine each month also increased causing some anxious moments, and not least some financial poverty! I now have a new Quad 67 CD player and a 606 amplifier, longer Quartz interconnects, more CDs, (I'm now a "Tring" Royal Philharmonic Orchestra fan) and I think my Rogers LS4a 'speakers on Apollo sand-filled stands, sound brilliant - so please don't review too many more 'speakers, or my wife will go through the roof or leave.

Your contributors and magazine strike an ideal balance and varied input which makes compelling reading.

My only criticism would be your music reviews, which should include some mainstream classical, rock, pop reviews and perhaps 1950s and 1960s re-issues, as many young people are finding new music from my era of great enjoyment.

I appreciate the difference between vinyl records and compact disc, but please don't ignore the silver disc, as the sound quality often exceeds that of the same long-play version, albeit perhaps in a different way. Much is to do with actual recording quality and engineer (witness any by Brian B. Culverhouse, even on budget Naxos and EMI).

I well remember the

varying quality of vinyl records and recording standards in its heyday - I still have many poor LPs. The same criteria applies to compact disc regardless of price. Many budget CD reissues of old vinyl recordings and performances highly thought of in the 1960s and 1970s are in fact superior in sound quality. Compact Disc on both my systems have never sounded 'cold' and 'clinical' as perhaps when they were first produced. A CD gives superior frequency range and dynamics and its ease of use allows me to appreciate the music far more than the record.

Perfect sound will never be achieved, and one can only endeavour to achieve the best sound quality relative to financial restraint and each individual's hearing and personal preferences.

In conclusion, many thanks for what you have given me, beside the Compact Disc and I shall, of course, re-new my subscription when due, which may help towards your continuing success.

**N. S. Draper,  
Giltbrook,  
Nottingham.**

### GLOBAL VILLAGE

I should like to thank you very much for having answered my letter in the September '94 issue, under the heading 'IMF in Mauritius', and providing precisely the kind of advice I was seeking.

Your comments have raised quite a lot of interest among the few, but dedicated hi-fi enthusiasts out here. It is worth noting that such a positive interaction through your publication enables us not to feel cut off, but rather members of a big family sharing one great passion, i.e. the love of well reproduced music.

**A.G. Lefebure,  
Port Louis,  
Mauritius**

# MUSIC MUSIC MUSIC Lost in Music

**Sennheiser's HE60/V70 electrostatic headphones and energiser bring a new dimension to personal stereo. Dominic Todd gets carried away.**



**T**here are two ways of looking at Sennheiser's latest £1000 electrostatic headphones. The reactions I got from many, and I must admit my initial reaction, was that £1000 is a hell of a lot to pay for a set of headphones, especially when there are highly capable 'phones for a fifth of the price. But that's missing the point. Take into consideration that Sennheiser's most recent offering benefits from developments that were originally reserved for their £10,000 Orpheus headphone, and the HE60/V70 doesn't start to look bad value after all. Okay, so the new headphone doesn't have the gorgeous valve energiser of the Orpheus, but the specification is still pretty mouth

watering, nonetheless.

Being electrostatic headphones, the HE60/V70 system is made up of two, individually priced, units. The HE60 headset and the HEV70 energiser both cost around £500 each. Provided you are going to listen solely to headphones, then

all you'll need, as well as your sources, is a pre-amp to switch between the various inputs.

The HE60 headset uses a gold-plated diaphragm which is dynamically suspended between two gold-plated electrodes. The diaphragm itself is ultra-thin and light, so that it can respond to even the smallest signal change giving it tremendous resolution of detail. The connecting cable is oxygen-free copper,

with a gold-plated connecting plug. Unlike some electrostatic headphones I've used before, the signal lead produced no noise whilst being handled. The headset is extremely comfortable, with the circumaural design (covered in velour) ensuring the 'phones fit snugly around the ears. Finally, the head band is reinforced with Kevlar to give the 'phones the best chance when being sat on!

The smart metallic grey energiser features a separate power supply and pure Class A amplification. Other quality components include a dual concentric Alps volume control, and high quality phono-sockets.

The great advantage of headphones, of course, is that it doesn't matter where you sit. Wherever you are, you can be assured of the 'phones performing to their utmost ability. With this in mind I donned the comfortable headset, and listened carefully.

The first thing to strike me, using Richard Thompson's Mirror Blue, was the sheer transparency. I know it's one of the oldest clichés in the book, but the Sennheiser's really did reveal information that you'd miss completely on a conventional hi-fi (even a fairly transparent one). And it wasn't so much the quantity of information, more the quality. For example, listening to Fast Food through the loudspeakers I was aware of the support

vocals. But on the Sennheiser's I could actually distinguish the tonal differences between those background vocalists. In this case one of the singers took on an hysterical tone, which just wouldn't be captured on all but the most transparent of 'speakers. They highlighted the sharp intake of breath from the lead vocalist, and the exact movements of the guitar strings. This brutal resolution of detail may sound rather off putting, but I actually found it made the recording more intimate and involving, drawing me deep into the performance.

It certainly is the case that some headphones can sound too sharply etched, and overwhelm the listener with an artificial brightness. Fortunately the HE60/V70s managed not to fall into this trap. Provided the energiser had been left to warm up for half-an-hour or so, the sound was always smooth and unforced, yet still finely etched and articulate.

The Sennheisers really excelled on classical music too. A test disc from loudspeaker manufacturers Cabasse, provided a variety of music from Chamber through to powerful orchestral works. No matter how dense the recording, they always seemed to clearly separate the instruments, and give them

their respective sense of proportion and space. Whilst not quite possessing the 'out of head' feeling of certain Stax rivals, the balance never became stuffy and constrained.

One slight disappointment, which was apparent with all types of music, was the surprisingly curtailed bass extension. There was enough to satisfy those used to compact 'speakers, but anyone who had just come from listening to a decent pair of floor-standers, could be disappointed. Apart from that, the tonal balance was excellent, sounding natural and unforced through the midrange and treble.

*“I know it's one of the oldest clichés in the book, but the Sennheiser's really did reveal information that you'd miss completely on a conventional hi-fi.”*

If there is a negative aspect of such transparency, however, then it shows itself with poorer recordings. Records which had previously seemed fine, were made almost unlistenable with the Sennheisers faithfully picking up every click and pop. This isn't a fault of the headphones, and is a characteristic shared by many of the Sennheiser's adversaries.

As you have probably guessed, by now, I was quite smitten by the Sennheisers. It took a couple of albums to get used to the balance, but once I became accustomed to them, returning to conventional 'speakers always seemed like a backwards step in terms of transparency.

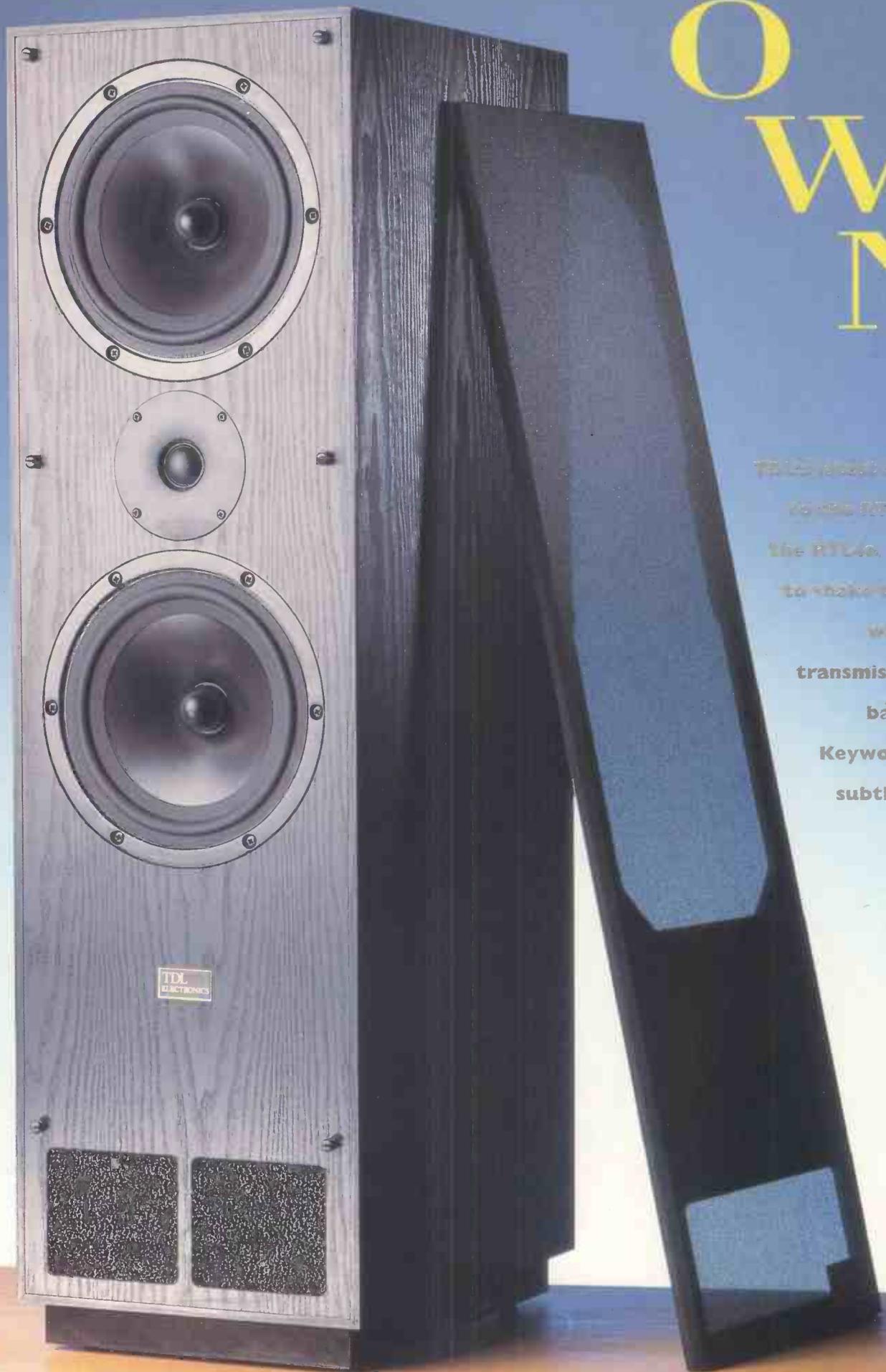
The Sennheisers stand up well against their competition, too. Despite being slightly bass light, and not quite as spacious sounding as some, they proved extremely unfatiguing and rewarding to listen to over long periods of time, which is especially important with headphones. Combine this level of sound quality and comfort, with excellent build quality, and you've a combination that not only sets a class standard, but also provides a strong case for dumping your power amp. and 'speakers altogether, if you're the unsociable type, anyway.

And that is something that I'd never thought I'd say, even when the headphones cost £1000 ●

**Sennheiser HE60/V70** £1000  
**Sennheiser UK**  
12 Davies Way,  
Knaves Beech Busines Centre,  
Loudwater,  
High Wycombe,  
Bucks.  
HP10 9QY  
Tel: 0628 850811



# SHAKE DOWN



TDL's recent addition to the PTL range, the PTL4a, looks set to shake the floor with their transmission line bass. Noel Keywood finds subtlety too.

John Wright, founder of TDL, seems to have an uncanny knack of getting bass depth and power from a loudspeaker. Both the popular RTL range and the upmarket Studio series are known for their earth shaking bass. If you crave deep bass, think TDL.

The RTL range of loudspeakers were introduced little over a year ago now, using a shortened transmission line to achieve a compromise between bass depth and reasonable cabinet size. The Studio range all produce more powerful bass, but the RTLs are easier to drive, making them suitable for a wider range of amplifiers, including esoteric valve and low powered Class A designs. The RTLs do produce less bass power than TDL's Studio 'speakers, but don't be put off, they still kick out enough to shake most competitors to pieces.

The RTL range has been incredibly popular - and quite rightly too. They are competitively priced, use high quality drivers, mainly constructed in-house, and do everything their competitors can. But they have that aforementioned special ingredient that can make all the difference.

We found the smaller floorstanding RTL3s powerful, driving large listening rooms with ease. Keen to show off his talents in the lower octaves, John Wright has now introduced the RTL4s. Using two 8inch polypropylene bass units, a 25mm soft dome tweeter and having two large transmission line vents, there isn't much wood left on the front baffle. The RTL4s look mean and powerful.

### SOUND QUALITY

The RTL4 is a warm and fulsome sounding 'speaker, with plenty of low end grunt. Its balance veers away from the thinness or forwardness of many 'hi-fi' loudspeakers and in offering such a balance the RTL4s may well appeal to those who find too many of the breed go for detail at the expense of balance. It gives orchestras a sense of majesty, imparting scale by putting prodigious low end power behind kettle drum and plucked bass, and fully reproducing massive crescendos with almost laconic ease; Wagner's Lohengrin swept from diminuendo to crescendo with frightening power. It was an impressive performance marked by a sense of smoothness, as well as of scale, yet my monoblocked K5881 amplifiers were almost idling, these speakers need so little power.

It was with classical music that the RTL4s were most effective, though that is not to say faultless. Strings came across sounding smooth and string sections well separated; under pressure these speakers don't crack up. They are, however, boxy and plucked basses grumbled rather noticeably, setting off a pronounced boominess; the sudden introduction of strings was accompanied by a 'whoomph'. This was balanced to a goodly degree by other properties. The ebb and flow of Cesar Franck's intriguing Opus 18 and 19,

played on the organ of Saint-Semin by Peter Hurford was superbly captured; on this sort of music many hi-fi speakers squeak disappointingly. The RTL4s conveyed this organ's massive power, as well as highlighting the way Franck exploits its contrasts, from gentle liturgical melody to deep thunder from the Contrebasse pipes.

*“The RTL4 gives orchestras a sense of majesty, imparting scale by putting prodigious low end power behind kettle drum and plucked bass, and fully reproducing massive crescendos with almost laconic ease”*

But I haven't said much about Rock, and this - as you might guess - is where the RTL4s are less happy. They produce a strong, deep, boxy thud that gives the impression of bass, but it goes little past that: an impression. I found it difficult to perceive changes in pitch of deep fundamentals, whilst the seeming absence of upper bass made the speaker sound slow and ill-defined especially on kick drum. On albums with genuine lows, like

the unusual deep rumbling bass of Aye, by Angelique Kidjo - quite well sorted by KEF's Reference Series 2s - the RTL4s grumbled distractingly. Here, I found them difficult to use, they sounded so boxy.

My only other gripe is that, on occasion, they could spit a little; the tambourine on Steve Earle's Esmerelda's Hollywood had a stinging bite to it.

This was strong when sitting on-axis with the tweeter which, at roughly 2ft off the ground, means sitting low. The sound gelled better in this position, as measurement suggested it would; listening just above the tweeter gave a smoother sound, but a less cohesive one due to phase cancellations.

Whilst I found bass from the RTL4s intrusive and at times distracting, and I missed the smack of hand drums and kick drums, these speakers have strengths. They are smooth and easy on the ear, warm and quite cohesive, missing out little. They convey plenty of detail, but do it in an easy manner. There was a fine sense of timbral richness to instruments, especially orchestral strings and horns - lovely! - and vocals sounded natural enough too. All this, and awesome power, from just a few watts. Some might find the 4s a perfect match for a low powered amplifier - through them even a mouse could roar. For Rock fans wanting cohesive, impactful percussion and sheer pace, however, they may not appeal - listen first ●

**TDL RTL 4** **£649.95**  
**TDL Electronics Ltd.,**  
**Unit 2, Pilot Trading Estate,**  
**High Wycombe,**  
**Bucks. HP12 3AB**  
**Tel: 0494 441 191**

### MEASURED PERFORMANCE

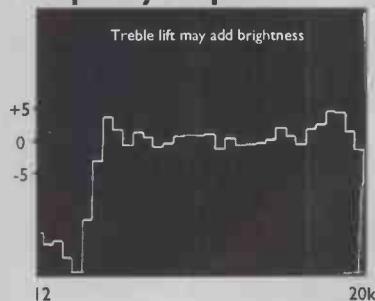
The RTL4s are the latest to join TDL's successful series of reflex transmission line loudspeakers. As with other large TDL loudspeakers which produce prodigious amounts of bass, they were not the easiest to measure in our smallish test room. Bass can be seen to extend well down, the peak at 60Hz corresponding to the dimensions of the test room where output is emphasised. In a larger room, the TDLs should have a smooth and deep bass with terrific power.

The midrange is essentially flat and smooth, and the rising output around 3kHz will help to push detail forwards and out of the box. The only area of the response that does look problematical is the strongly rising treble output, which was clearly audible with the pink noise test signal I used. It was phasey too, moving the microphone causing a suck-out to appear.

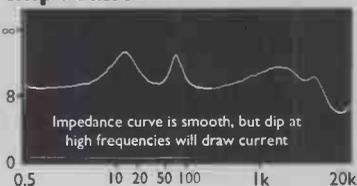
The RTL range of loudspeakers all have good high sensitivity, the RTL4s continue this with a measured 90dB sound pressure level at 1m using a nominal watt (2.83V)

pink noise signal. This, and the smooth impedance curve, measuring 8.4Ω overall, makes the RTL4s an easy load and they will go loud with few watts. **DB**

#### Frequency Response



#### Impedance



# Connect the dots.



Introducing The Parts Connection's first complete DIY kit: the Assemblage DAC-1 Digital Processor.

It comes in a small package (24cm x 5cm x 18cm chassis), but packs a big punch and a very musical sound. Designed for the rookie or first time kit builder, the only tools required are a pencil tip soldering iron, a screw driver, a wrench, a pair of electronics pliers, and a wire stripper or hobby knife. With only 21 solder joints and a handful of nuts and bolts, this kit goes together in one evening (typically about an hour). It's as easy as connecting the dots.

The parts quality is top notch. The board comes assembled and tested, implementing the Burr Brown 1702 DAC, a Crystal 8412 input receiver, an NPC 5813 digital filter, Analog Device's AD844 and 847 op amps and a custom potted toroidal power transformer.

At \$449 US, the Assemblage DAC-1 offers an outstanding value in digital conversion and comes with a *Satisfaction Guarantee* (return it with-

in 30 days of purchase for a full refund) and an *Assembly Guarantee* (if you can't get it running, we will!). We challenge you to find a DAC anywhere near this price with better measured performance, component quality, and most importantly, sound quality. Call us for more specific information on the performance or construction features.

To order the DAC-1 kit or to order The Parts Connection 1994 Catalog (for £3), full of a lot of other exciting stuff (including a \$10 US discount coupon good on your first order over \$100 US), send us your request and mailing address - or call with credit card information.

**THE PARTS CONNECTION**  
A DIVISION OF SONIC FRONTIERS INC

A S S E M B L A G E

2790 Brighton Road, Oakville, Ontario, Canada L6H 5T4  
Telephone 0101-905-829-5858 Facsimile 0101-905-829-5388

Toll Free Order Line 1-800-769-0747 (U.S. & Canada only)



## Vacuum Tubes for Audio Are Back!

*Glass Audio* brings together yesterday's tube with today's improved components, voltage control, and the exciting new Soviet tubes, to make smooth sound in your livingroom possible again!

# YES!

Please send my first issue of *Glass Audio*. I'll pay just \$45.00 for six issues (1 year); \$80.00 for 12 issues (2 years) of the best information on tubes to be found anywhere. I understand that my satisfaction is guaranteed!

Name \_\_\_\_\_

Street & Number \_\_\_\_\_

City \_\_\_\_\_ Postal Code \_\_\_\_\_

Country \_\_\_\_\_

REMIT IN US \$ DRAWN ON A US BANK ONLY. PRICE GOOD THROUGH DECEMBER 31, 1995.

We Accept MC/VISA.

## *Glass Audio*

PO Box 176, Dept. HFWS, Peterborough, NH 03458-0176 USA  
Phone: (603) 924-9464 or FAX 24 hours a day (603) 924-9467

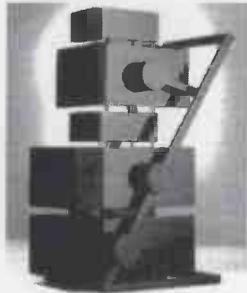
Distributor clears stock, export-  
discount **50%** or more

# HIGH END SALE

## WELL TEMPERED



Record Player,  
Classic, Signature **£590**  
export price from



**GOLDMUND**  
Studietto, ST4, T5,  
Cartridge, Mimesis amplifier  
series, Super-Dialogue,  
Apologue (picture)

**AUDIO RESEARCH**  
DAC1, SP9, SP15, D250 MkII,  
M300 MkII, Classic150

**KOETSU** Black, Rosewood  
Signature, Onyx Signature

**MARK LEVINSON**  
MLC1, JC1, ML6, HQD-system  
(2xML6A, 2xLNC2, 6xML2,  
2xHartley/Quad/Decca-array)

Also: **Berning, Breuer,  
Cotter, Eureka, Fidelity  
Research, Linn,  
Moersch...**

**Call for catalogue!**

Glotta AB, phone +46 8345251, fax +46 8346533

## 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

### Analogue Replay CD Replay

Denon,  
EAR,  
Goldring,  
Kinshaw,  
Kuzma,  
LFD,  
Lyra,  
Michell,  
Ortofon,  
Pink Triangle,  
Project,  
SME,  
Sumiko,  
Tesseract,

### Amplification

Arcam,  
Albarray,  
Audio Innovations  
Aura  
Conrad Johnson,  
EAR,  
Heybrook,  
LFD,  
Meridian,  
Michell,  
Musical Fidelity,  
Proceed,  
Quad,  
Rotel,  
Shearne,  
Tesseract,  
Tube Technology,

### Speakers

Arcam,  
B&W,  
Castle  
Heybrook  
Kewick Audio,  
Klipsch,  
Monitor Audio,  
Magnaplaner  
Pink Triangle,  
ProAc,  
Royd,  
Ruark,  
Spendor,  
UKD,



## 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 enquires welcome

## synergy (sin' ə r jē)

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





# Pioneer for the People

**Pioneer's budget PD-103 CD player should tempt the cost-conscious music lover.**

**Dominic Baker checks his loose change.**

A CD player for under £150 doesn't normally conjure up too exciting an image for the budding audiophile. But the latest PD-103 from Pioneer, priced at a lowly £140, is certainly worth considering by those on a tight budget. But before I explain why, more about the player itself.

The PD-103 sits at the bottom of Pioneer's range of separate CD players. It is not the kind of thing a company like

*“On a quick audition, it'd stand a good chance of giving a two hundred and fifty-pounder a run for its money.”*

this would be willing to send a magazine for review, especially one which holds sound quality to be of paramount importance. In fact, they didn't send it to us - we slipped into Hi-Way hi-fi and borrowed it.

As you'd expect for £140, the PD-103 is simple to use and understand. It comes with a good range of features too, including a peak search which is useful for setting record level on your tape deck.

Another useful little feature, for home taping, is 'compu program edit'. It sounds more complicated than it really is. All you have to do is punch in the length of the tape you are recording onto and the CD player automatically re-arranges the tracks to fit the tape.

The PD-103 doesn't come with a remote control; the PD-203 does for £20 more. Neither have a digital output, which may be a consideration if you intend to upgrade at a later date.

I began my listening with Nirvana's MTV Unplugged - Live in New York. Straight away the PD-103 sounded warm and relaxed. Perhaps aware of the reputation cut-price players have, Pioneer have engineered a sound that is completely the reverse of the sharp, gritty and thin sound budget players are normally tarred with.

Whilst bass lacked the slam, depth and dynamics of a good mid-priced player, the mid-range and treble had an uncanny smoothness lacking even in some players costing twice as much. The live version of Come As You Are did sound a little over-damped and closed-in though, and swapping to a player of known abilities showed that part of the Pioneer's smoothness was down to softer than usual treble. However, in the budget systems the PD-103 is likely to end up in, this softening may prove suitable.

Again, with Counting Crows' August and Everything, some of the spaciousness of the studio was lost, the band huddled closer together than usual and seemed to be playing through a thin curtain that was absorbing any ring or tinkle from the treble; nuances had vanished. But the enthusiasm and pacy rhythm of the music wasn't lost, coming through well enough to create a surprisingly enjoyable performance. The Pioneer doesn't offend, an important quality.

Swapping to Blur's Parklife, where the emphasis moves away from delicate upper harmonics and ambience towards punchy and driving upper bass with good attack, the PD-103 was far more confident in its behaviour. In fact, on a quick audition, it'd stand a good chance of giving a two hundred and fifty-pounder a run for its money.

The PD-103 is quite light and dry in the lowest bass, but has good weight further up, which suits pop tracks especially. The soft treble character will help bright or harsh discs to sound more balanced with a fuller, more

*“ Whilst bass lacked the slam, depth and dynamics of a good mid-priced player, the mid-range and treble had an uncanny smoothness lacking even in some players costing twice as much. ”*

rounded sound. In this way, the '103 has been targeted well, suiting the kind of music that, in the majority of cases, will find its way into the drawer.

Classical listeners may find the ultimate lack of openness and tonal neutrality too much to suffer, but even here smoothness is likely to appeal. For £40 more the NAD 501 offers a far better insight into the music and will suit a wider range of systems. But, if money's tight, the PD-103 has a degree of refinement that has traditionally been lacking from sub-£150 CD players ●

**Pioneer PD-103** £140  
**Pioneer GB**  
**Pioneer House,**  
**Hollybush Hill,**  
**Stoke Poges,**  
**Slough,**  
**Berks.**  
**SL2 4PQ**  
**Tel: 0753 789789**

**MEASURED PERFORMANCE**

The PD-103 is Pioneer's entry level CD player, sitting at the bottom of their range. However, you wouldn't suspect it from the measurements. The PD-103 measures as well or better than many designs costing several times more.

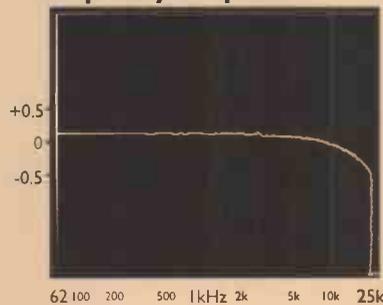
Distortion was low at all levels. At -30dB, a signal chosen to represent a typical music signal, the plot shows a complete absence of distortion harmonics, yielding a super low 0.004%. At lower signal levels, distortion rose as you'd expect, but even at -60dB the figure of 0.45% was one of the lowest we've measured.

This, combined with the smoothed response and rolled-off treble should give the PD-103 a warm and inoffensive sound. My only worry is that the treble roll-off starts so early that on some systems the PD-103 could possibly sound a little too warm, perhaps lacking some high frequency definition.

The low distortion at -60dB gives a correspondingly wide dynamic range of 108.5dB (EIAJ test) and output was just above the Philips 2V standard, measuring 2.14V. For the money, the PD-103 appears to be very well engineered. **DB**

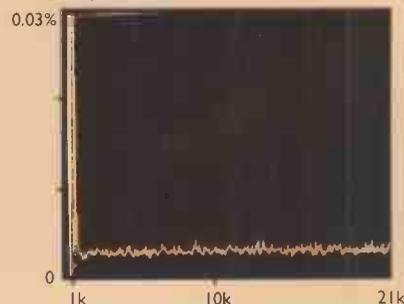
|               |         |
|---------------|---------|
| Noise         | 106dB   |
| with emphasis | 107dB   |
| Dynamic range | 108.5dB |
| Output        | 2.14V   |

**Frequency Response**



**Rollled off treble will give a soft sound.**

**Distortion**



**Very low distortion**

**TEST RESULTS**

Frequency response 4Hz-20.75kHz

|                 |       |       |
|-----------------|-------|-------|
| Distortion (%)  |       |       |
| -6dB            | 0.006 | 0.006 |
| -30dB           | 0.004 | 0.004 |
| -60dB           | 0.45  | 0.48  |
| -90dB           | 29.5  | 30.2  |
| -90dB dithered  | 13.0  | 13.2  |
| Separation (dB) | left  | right |
| 1kHz            | 103   | 103   |
| 20kHz           | 90    | 90    |

**P**ro-ject Audio Systems have bucked the trend and produced an integrated amplifier with a phono stage which they describe as 'very sophisticated and high quality'. Designed by a Prague university professor, the £259 7 is a dual-mono design (with the exception of the mains transformer) with five line inputs, in addition to an MM/MC phono stage.

You could be forgiven for thinking that the vinyl disc is to all intents and purposes extinct and a disc stage like this an irrelevance. But if you look closely there's actually a vibrant second hand vinyl scene and many new releases are still available on black plastic if you're prepared to order them.

This helped 1994 see the introduction of a plethora of separate phono stages, a consequence of both the tendency of amplifier manufacturers to produce line level only preamp sections, and a renewed interest in the sonic properties of the phono stage.

The front panel layout of the Pro-ject 7 initially caused a degree of suspicion. The smooth perspex panel covering input and volume LED indicators looks neat enough, but there was always the feeling that money could be better spent on sonics.

However, this proved totally

unfounded the moment the amplifier was powered up.

At the heart of the World reference system comprising Garrard 401/SME 312/Ortofon MC30 Supreme and KEF Reference Series Two loudspeakers, the little Pro-ject instantly impressed. A Denon PMA-450SE was used as a benchmark, being a strong budget contender, having as it does a strong, powerful sound which was manifest on Jamiroquai's *When You Gonna Leam*. Opening strings came through with power, tightly located left to right and forward of the speakers. Bass was a touch light but very supple and tuneful and the Denon displayed its muscular character as volume was wound up.

With such a strong performance from the PMA-450SE I got the feeling that I couldn't really expect anything more at this price, but I was wrong. The tonal characteristics of the Pro-ject were noticeably different, with a warm, valve-like richness that stood in contrast to the light, bright Denon. Piano took on greater weight and was more expressively conveyed, percussion sounding less mechanical and better syncopated with the bass guitar.

Differences were most obvious at frequency extremes. The Pro-ject conveyed the full power of the bass guitar, going down deeper, stopping and starting

faster. The treble was smooth, crisp and incisive where the Denon's had been a touch glassy, albeit no less detailed. It soon became clear that whilst the Czech amplifier was tonally richer and less bright, it was no less controlled - quite the reverse in fact - the Pro-ject seeming to have a firmer grip on the behaviour of the KEFs' drive units.

Moving to another acid jazz classic, The James Taylor Quartet's *Jungle Strut*, the Pro-ject once again took the day, conveying a greater sense of the recorded acoustic and a truly expansive soundstage imaging, unlike the Denon, behind the speakers. The bass guitar was once again highly tuneful and extended, with timing spot on. Back to the PMA-450SE, and the bass moved back in the mix, losing the groove which is so central to the song's purpose. Whilst lead saxophone was more emphatically presented due to the Denon's penchant for treble, ride cymbals assumed a glare which detracted from the enjoyment of other instruments.

The difference between the two amps was becoming clear. Whilst the Japanese design got its commendable sense of speed from its natural brightness which emphasised the leading edges of notes, the Czech succeeded through greater control, enabling it to be both fast and tonally rich at the same time - a desirable combination.

This meant that on all types



# Bohemian Rhapsody

**Czech firm Pro-ject has come up with a budget integrated amp that is bound to attract attention and sales. David Price listens in.**

**MEASURED PERFORMANCE**

The Pro-Ject amplifier looks unusual. A trifle wary, I applied the most difficult and revealing test first: distortion at 10kHz under full output. It sailed through this test, producing 0.02% distortion, with equal amounts of second and third harmonic evident, as our analysis shows. At very low outputs the distortion patterns and behaviour of this amplifier were unusual, but levels remained quite low at 0.13% maximum.

Output power measured 36watts into 8ohms and nearly double, 64watts, into 4ohms, so the Pro-Ject has a beefy power supply. It has a wide measured bandwidth that reached to 130kHz on CD and 80kHz on MM cartridge.

Input sensitivity on CD was normal enough at 330mV, but unusually low via the phono input (MM) at 7mV and MC at 0.7mV. The volume control will have to be wound up high with many cartridges, budget high output types being most suitable in consequence. Input overload was high.

Accurate RIAA equalisation ensured flat

phono frequency response, a low frequency roll-off below 24Hz giving a little warp suppression (-3dB at 13Hz). The Pro-Ject didn't suffer slow bass roll off on MM, but it did on MC, so I'd expect a little more low-end weight on MM than that of many amplifiers, if not on MC.

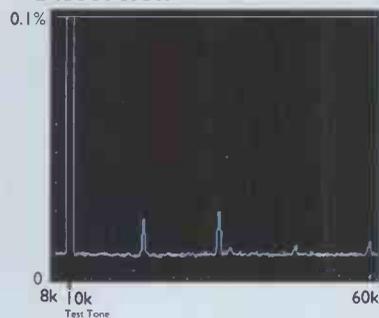
In all areas this 36watt amplifier measured well, except that low phono sensitivity (MM) makes high quality, low output cartridges unsuitable and will result in hiss on MC. **NK**

**TEST RESULTS**

|                    |             |
|--------------------|-------------|
| Power              | 36watts     |
| CD/tuner/aux.      |             |
| Frequency response | 18Hz-130kHz |
| Separation         | 90dB        |
| Noise              | -102dB      |
| Distortion         | 0.01%       |
| Sensitivity        | 330mV       |
| dc offset          | 11/4mV      |
| Disc (MM)          |             |
| Frequency response | 24Hz-80kHz  |
| Separation         | 60dB        |

|                    |            |
|--------------------|------------|
| Noise              | -84dB      |
| Distortion         | 0.02%      |
| Sensitivity        | 7mV        |
| Overload           | 75mV       |
| Disc (MC)          |            |
| Frequency response | 44Hz-92kHz |
| Separation         | 60dB       |
| Noise              | -65dB      |
| Distortion         | 0.02%      |
| Sensitivity        | 0.7mV      |
| Overload           | 7.5mV      |

**Distortion**



of music, the Pro-Ject never failed to impress.

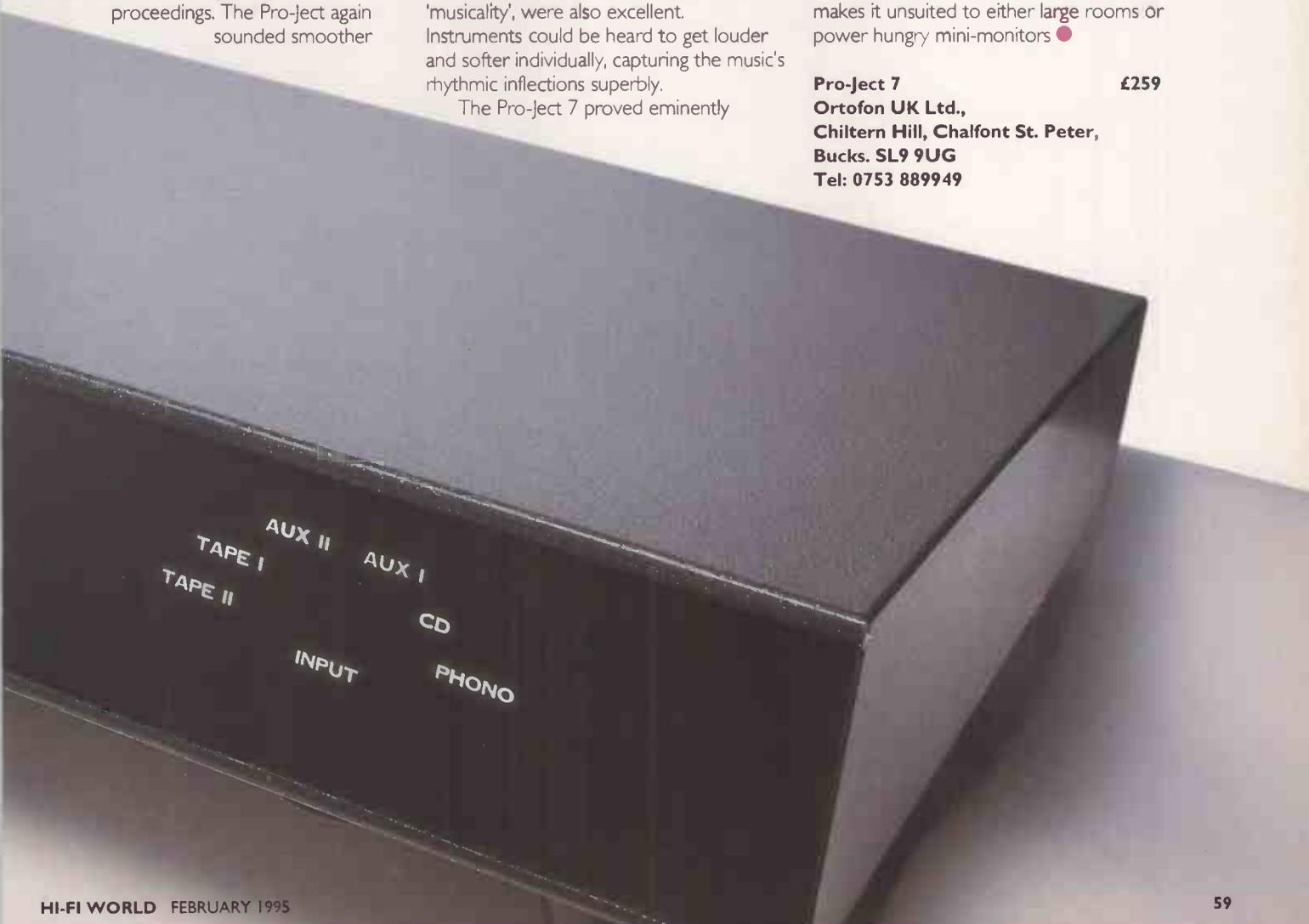
On Kraftwerk's Computerwelt, a vintage piece of electronic music which sounds warm due to the analogue synthesisers of the day, the Denon added a useful but artificial brightness to proceedings. The Pro-Ject again sounded smoother

but exhibited far greater control, with the sub-bass going down low but remaining tight. Intricate, multi-layered strands of electronic percussion were also handled with greater panache. Relative dynamics, which go hand in hand with timing as the key components of what is often called 'musicality', were also excellent. Instruments could be heard to get louder and softer individually, capturing the music's rhythmic inflections superbly.

The Pro-Ject 7 proved eminently

enjoyable and listenable throughout the entire audition period, with a rare mixture of sophistication and fun, which at the price makes it an absolute bargain. The fact that it's got a phono stage that gives little away to some offboard units is even better. The only reservation is that its modest power makes it unsuited to either large rooms or power hungry mini-monitors ●

**Pro-Ject 7** £259  
**Ortofon UK Ltd.,**  
**Chiltern Hill, Chalfont St. Peter,**  
**Bucks. SL9 9UG**  
**Tel: 0753 889949**



# IN THE MARCH ISSUE

The holiday hangovers are but faint memories and the hi-fi new year is finally getting into the swing of things with a plethora of new products. Hi-fi World gives you the bottom line on all of the new equipment.

Here are just some of the exciting products we hope to bring you in the March issue.

## **ORTOFON MC15 Super II**

A top quality £110 moving coil cartridge offering a taste of the high end at moving magnet money. Get the full story on this super value cartridge next month.



## **AUDIONOTE SORO SE**

Big brother to the impressive OTO SE, the Soro single-ended valve amplifier offers more power in the same convenient integrated package. Auditioned with the sensitive Audionote E loudspeakers.

## **PIONEER A-103**

Being black and neatly styled is nothing to write home about, but having a famous bigger brothers is. We ask is this new amplifier as hot as the A400?

## **YAMAHA CDX480**

Pitched foursquare at the competitive end of the market, can Yamaha's new budget CD player sway you to invest in Compact Disc? We take a long hard look.

## **DPA ENLIGHTENMENT 2-BOX**

DPA's latest CD transport and discrete convertor at £695 and £795 respectively. We assess their potential.

## **AUDIOVALVE LC8/PPP30s**

This £1995 German valve pre-power combination has a style of its own. We ask if the sound lives up to its lustrous exterior.



## **DENON DRM-740**

With three heads, three motors and dual capstans for £259, this new Denon cassette deck looks like a steal. Noel puts it through its paces.

Hi-Fi World is still only £2, but with more editorial than most rivals. With the most enthusiastic and expert editorial team in hi-fi journalism, can you afford to miss it? Make sure you don't by filling in this order form and handing it to your newsagent.

## **B&W P4**

A floorstanding loudspeaker using high tech Kevlar drive units, real wood veneer and with an attractive price tag of £599 certainly caught our attention. See next month's Hi-Fi World to find out if the ingredients add up.



Please reserve/deliver\* Hi-Fi World on a regular basis, commencing with the next issue, until further notice.

Name: \_\_\_\_\_

Address \_\_\_\_\_

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

• Delete as appropriate

Distributed to the news  
trade by

**COMAG**  
MAGAZINE MARKETING

# Francinstien

STEREO ENHANCEMENT SYSTEM



## The CD Filter with a difference

When we listen to music, both the high and low frequency sounds help our brains to paint a 3-dimensional stereo picture. But when we listen to CD, the high and low pictures do not perfectly realign. With their clinically clean electronics, CD players lack the beneficial, subtle signal handling of analogue equipment which can actually "re-converge" the two stereo images. So creating the convincing illusion that is the hallmark of good analogue systems.

**Francinstien**, originally developed for the recording industry, breathes life into digital stereo. By simulating the best aspects of analogue equipment, it restores the sense of depth – and even height – to digital recordings. And it does it without introducing any of analogue's vices!

Simply plug **Francinstien** between your CD player and pre-amplifier (or integrated amplifier) and you can

have your cake and eat it. Analogue imaging and "involvement" with the clarity and "bite" of digital.

*"It's a gentle elegant effect – and a very even one ... One simply becomes more aware of the music."*

— Eric Braithwaite – Hi-Fi World

*"CDs sounded better defined, the soundstage having a more definite shape. It was as if there was more air around each strand in the mix, allowing you to hear it more distinctly, more separately... I didn't immediately want to switch the CD player off and relax with some LPs, instead I went on to make further explorations of my CD collection"*

— Andrew Cartmel – Hi-Fi Choice



Perfect Pitch Music is a trademark of Select Systems <sup>TM</sup>

For further information please complete the coupon below and send it to:

Select Systems Ltd. Hanworth Trading Estate Hampton Road West Feltham Middx TW13 6DH Tel: 081 893 8662 Fax: 081 893 4318

Please send me further information on (please tick boxes):

Francinstien + CD enhancer

Dacula DAC

Light Metal Loudspeakers

isolat/jsolat pre-amp combination

Title: \_\_\_\_\_ First Name: \_\_\_\_\_ Surname: \_\_\_\_\_

Address: \_\_\_\_\_ Post Code: \_\_\_\_\_



THE HI-FI  SPECIALISTS

*L i s t e n i n n*

- STOCKISTS OF
- ARCAN
  - AUDIOLAB
  - CHORD COMPANY
  - CREEK
  - CYRUS
  - DENON
  - EPOS
  - HEYBROOK
  - LINN
  - MARANTZ
  - MISSION
  - NAD
  - NAIM
  - NEAT
  - NAKAMICHI
  - ONIX
  - REGA
  - ROTEL
  - ROYD
  - TDL

*...and she thought she was getting a new washing machine*

6 HOTEL ST, LEICESTER  
TEL: 0533 623754

32 GOLD ST, NORTHAMPTON  
TEL: 0604 37871

# SINGLE ENDED

Single ended valve mono block power amplifiers

KT66 .....£350.00/pair

KT88 .....£528.75/pair

Valve phono stage MM .....£179.00  
- line level only -

Valve pre-amplifiers

4 \* Line level inputs .....£243.00

4 \* Line & MM Phono.....£364.00

All units are fully assembled and tested.

Prices include Delivery and VAT

2 week money back guarantee

SAE for data sheets

**F&S Trading**

**31 Brooks Road, Sutton Coldfield**

**West Midlands B72 1HP**

**Tel: 021 321 3357**



## JORDAN JX Series

**Congratulations to the rest of the world - you're finally waking up.**

E.J. Jordan Designs has been working with metal cone loudspeakers for over 40 years. We've tried and rejected avenues other manufacturers are still exploring today and our JX Series of drive units represent the cutting edge of loudspeaker technology.

Our design services, supported by in-house R & D facilities and unmatched experience have been commissioned by a number of major high end clients at home and abroad including the BBC.

Our JX Series of foil cone drivers are now available world wide, from ourselves or our appointed agents.

Please contact us for colour brochure.

### E.J. JORDAN DESIGNS

The Dak, Manorbier, Tenby, South Pembrokeshire, SA70 8QR. Tel: 0834 871209 Fax: 0834 871770

## 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 condition cleaned second hand list in preparation.

*T.M. O'Sullivan*

**4 Big Lane, Goose Green Lambourn,  
Berks RG16 7XQ**

**•New 1995 catalogue in preparation•**

Fax /  
Ansaphone:

**0488 72267**

Last month I introduced my concept for building the "Maximalist" pre-amplifier - a design so fully featured that it would be future-proof in my hi-fi set-up for a good ten years or so. As I explained last month, a decade on from my last home-built preamplifier design, I'm getting increasingly frustrated by the lack of facilities on my existing unit. Most of all, I yearn for a digital tape-loop so that I can record directly from CD to DAT or DCC without plugging and re-plugging digital interconnects between my outboard DAC and the DAT player. This month, I thought I'd start my consideration of the design proper. Starting (unlike Julie Andrews!) at the very end - with the transformer output circuitry.

The reason for the proposed transformer coupling is a result of the possible fixed connection to the Soundblaster card. I own several power amplifiers and all of them are earthed. Unfortunately so are computers and this unhappy state of affairs results in inevitable ground-loops which cause audible hum. Lifting earths is very dangerous and I never do it on principle so the only option, given the circumstances, is to use line-bridging transformers.

The output stage design (shown in Fig. 1) incorporates the Sowter 3575 transformer. I've found this is an excellent device provided several requirements are fulfilled - the most important being the correct loading of the secondary winding. Without the correct load, the 3575 manifests considerable "ringing", revealing its +18dB resonance peak in the 100kHz region.

The time-domain performance of the output stage is illustrated in Fig. 1, by my sketches of observed oscilloscope waveforms. As you can see the frequency response of the Sowter part is exemplary, being essentially flat (10k load)

from 15Hz to well beyond 20kHz. Distortion is very low too, rising to 0.5% THD at 50Hz at +26dBu - a level well below that used for domestic (pseudo -10dBV) operation.

You'll note one unusual factor in the design, the 10nF (ground-tie) capacitor C1. This ensures that all screens are "earthy" at radio frequencies. Without this, radio frequency interference (r.f.i.) from the computer and other sources can interfere with the power amplifier by being accidentally rectified in the



Message but this month's an exception. I've just finished (at 2 o'clock yesterday morning in fact) arranging and co-producing the score to a new children's West End musical and if you want to take your kids (7 to 11 years olds) to a fun show in town this Christmas let me suggest, Mumsie's Christmas Escapades at the Jermyn Street Theatre. Starring Sandra Caron (the eponymous Mumsie from Channel 4's Crystal Maze) with music by American actor Eric Loren, the show is a celebration of the

# recorded message

## Left by Richard Brice

amplifier's input circuitry.

Starting a design from the end is a game plan I've discovered in the process of designing many professional audio products. It has the advantage that I may listen to the design as it evolves. Consider the opposite - and apparently more logical - alternative of starting at the input and working towards the output. It's often many months before the input circuitry is suitably augmented by the necessary subsequent circuitry in

order to create an auditionable design. Starting at the end and 'working backwards', the opposite is the case and I can audition the design as I progress. I'm happy to say that this output stage passes listening tests with full marks, proving to be clean and detailed. Next month, I'll describe the digital-audio output stages.

### Mumsie

I don't normally cover more than one topic in Recorded

bizarre and off-beat. Also starring champion body builder Kevin Finch assisted by Lionel Blair's 12 year-old son Matthew in his formal theatrical debut, the financiers who have backed the show have allowed Sandra Caron to donate whatever small fortune the box office generates on this first run to the Great Ormond Street Hospital. So you can have fun and do good at the same time! (Jermyn Street Theatre Box-Office 071-287-2875) ●

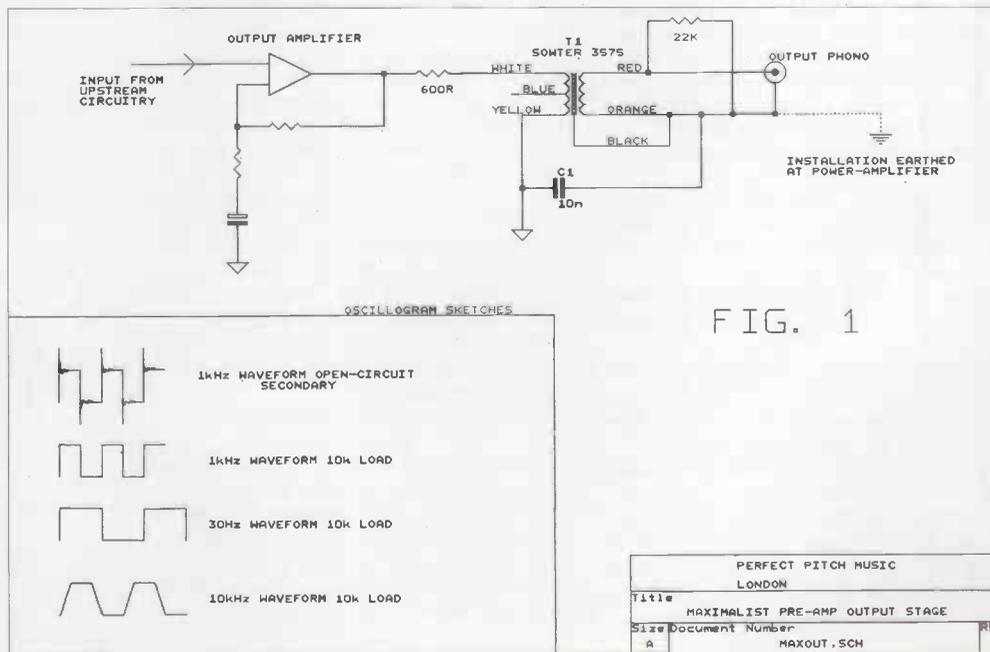


FIG. 1

# Tim's Tips ?

"Ken Kessler", author of the original article in *Hi-Fi News*, November 94, does not share the views expressed in this advertisement

This Month: Support for Tim's claims about modern tube reliability by David Chessell

November 23, 1994 / Volume 1

## We agree with Tim

You probably read Tim De Paravicini's glowing speech on single ended amplifier design in *Hi-Fi News* November '94.

We at Alema must whole heartedly agree with his statements, and we all should be proud that Tim has the stature to publicly admit the problems of audio design specifically those concerned with tubes.

> Tim: "Designing our single-ended amplifier has proven more difficult than I first imagined."

We agree! "SINGLE ENDED" amplifiers are the most difficult to design properly. To produce one with full frequency response and low distortion without feedback the problems multiply, on top of that throw in a decent triode and some designers steer clear as very few circuits work correctly.

> Tim: "The first major problems were the reliability and quality of current production triode tubes."

We agree! Not only triode tubes but finding reliable consistent components of any description is a "MAJOR PROBLEM" even capacitors and resistors.

With respect to triodes, hundreds of thousands has been spent improving the quality of the current production, even then a percentage must fail.

The "RELIABILITY" of components lies in the hands of the manufacturer and the designer.

With careful design tube life (all tubes) can be extended dramatically.

Through the diligence of manufacturers and distributors, through a burning in period along with extensive testing in the static and dynamic states, rogue tubes can be eliminated and returned to source. They should never reach the end user, you the customer.

With experience and technical knowledge we have in the last 3 years supplied thousands of reliable tubes to our customers, we are currently running a long term reject rate below 0.5% this including customers with over 5000 hours use without loss of emissions (tube life)

> Tim: "Driven hard in single ended mode these tubes give 10 watts but with poor reliability" - "only a few hundred hours use"

We agree! The 300B tube has a design parameter for long term operation or maximum operation as a single ended class "A" audio amplifier.

When over driven in a poorly designed circuit the life expectancy reduces dramatically.

When the curves of currently available 300B are plotted and studied for long life operation the maximum out should be 7 watts (low distortion >1% no feedback audio use).

When "DRIVEN HARD" beyond suitable design parameters (over voltage or over current) any tube becomes unreliable even a light bulb, and life expectancy becomes unpredictable, in the worst case as low as "ONLY A FEW HUNDRED HOURS". This is a world wide problem of poorly designed amplifiers.

> Tim: "And diabolical performance"

We agree! The current production of 300B tubes are very linear in operation (real triodes are the most linear amplifying devices available) and as such can faithfully reproduce incoming signals from a correctly applied source without introducing excessive distortion.

However the tube (and all triodes) is notoriously difficult to drive effectively and thus a poorly designed driver stage will be faithfully reproduced with "DIABOLICAL" results.

> Tim: "Surely no customer wants to be spending hundreds of pounds on new output valves every couple of months?"

We can only agree! we would be idiots if we did not, but 3 years with the 300B triode we have yet to find a customer which has had to change their output tubes outside the warranty period (1 year for ROD tubes in our designs backed by the tube manufacturer).

Fortunately they will be in production for years to come, the EL509 on the other hand is already becoming scarce and prices have already doubled from some suppliers since Tim's glorious article. They will become collector rarities in the future.

> Tim: "Enhanced triode mode operation"

We agree! The method used in Tim's designs enables the PL509 to operate a form of pseudo triode mode operation, avoiding the problem of the low screen grid voltage rating when compared to the anode voltage.

This is only an "ENHANCED" mode for the EL509 and should not be classified as an enhancement over a true triode or even a pentode designed for audio use (not TV use) when operated in a properly designed circuit.

> Tim: "I turned to conventional tetrodes and pentodes. Sadly, as was the case with the above-mentioned triodes, none could deliver the goods in either power or longevity."

We agree! the same old nugget single ended class "A" and push pull class "A" DC operating parameters are similar, poorly designed amplifiers do not work in any manner. Class "B" amplifiers on the other hand can quite easily be made to last for longer periods (20,000 hours minimum) due to the under running of the tubes but this type of industrial amplifier should not be used for audio amplification except in large auditoriums i.e. football grounds where sound reinforcement is a requirement and the sonic qualities of high end audio are unnecessary.

> Tim: "It's cheap and lasts for ages."

We agree! the EL509 is cheap (well it was last year) and lasts for ages when used as a class "C" or class "D" operation as it was intended to be used as a switch producing a sawtooth wave form in tv sets. Even then ages did not last so long as tv engineers after constantly replacing them turned to the slightly more

reliable EL519 (another rare tube) in the hope of some satisfaction for their customers.

As Tim De Paravicini has been so gracious to enter the amplifier EAR 859 into the public domain (*he would not give it to a friend*) it becomes open to a public forum for discussion.

The specifications for the Amplifier as published, At 13 watts full power <2% at 1Khz <5% at frequency extremes would be reasonable for a no feedback single ended amplifier but generally a feedback amplifier of any description can resolve figures closer to 0.005% at all frequencies quite easily depending on the amount of feedback somewhere in-between would be quite reasonable but these figures should be the absolute maximum without feedback for audio use. *Fortunately he only gave us the left channel circuit maybe the right channel is better*

A new SINGLE TUBE 300B design we worked on recently, operating within long life conditions measured fully, returned the following results without feedback into 8ohms 20hz to 20khz.

7 Watts < 1%  
13 Watts < 5%  
21 Watts < 15% maximum output

For an amplifier without feedback this shows remarkable linearity, the lack of feedback also enables the true dynamic contrasts of the music to be portrayed fully with a true to life spacious sound. The addition of feedback would reduce the distortion dramatically and also assist the driving of difficult loads with some sonic losses.

From current production and receiving world wide acclaim especially in Japan (probably the largest S.E triode market in the world) comes the small but dynamic 300B S.E. stereo retailing in the U.K for £995.00 inc. as a 1 input power amplifier and £1250.00 with full line level inputs. The results were similar to those above with <2% distortion at 7 watts without feedback, a good result for what can be classed as a budget priced 300B amplifier.

Fully burned in and dynamically tested 300B super or titanium tubes are available from Audion dealers with the brand name R.O.D. (Research on dynamics) these tubes carry a 1 year return to base warranty when used with approved circuit designs or a 3 month guarantee as standard.



FACT NOT FICTION  
ALEMA U.K. 25 MONTEFIORE ROAD  
HOVE BN3 1RD SUSSEX ENGLAND  
Dealer enquiries 01273 722250 fax

**"T**he time: 1986...a corner of the R&D laboratory at Teac headquarters...a lone engineer spent long days and nights developing a completely new CD drive mechanism. Even though CD sound was critically acclaimed throughout the world, he was already convinced that it could be better."

Well, it's nice to know that according to their publicity material, nothing gets past Teac engineers. Some might say that you don't need to be knee-deep in measuring equipment to notice that mid-eighties compact disc could strip wallpaper at a hundred paces. So it's something of a relief to say that Teac's new VRDS-TI is more than a just a pretty face.

At £499, this entry-level transport has been introduced to provide an affordable way of getting that digital data off the silver disc into a separate DAC. It is impressively built, giving a reassuring sense of solidity in use. The VRDS-TI sports a stripped-down version of Teac's Vibration-free Rigid Disc Clamping System with copper shielding, and improved power supply and electronics. The purpose of Teac's much vaunted VRDS acronym is to "totally eliminate oscillation and vibration", a thoroughly commendable aim, as any disc wobble can cause mistracking which in turn will get sound-degrading error correction circuits working overtime.

Although a £500 CD transport may not be used with state-of-the-art convertors, I chose to audition it through Pink Triangle's superb Da Capo to truly test its mettle. After all, it's likely that

buyers could start off with the TI and something like a QED Digit to give them a high-value entry into the world of two-box CD separates, later upgrading the DAC to something approaching the Pink. If the Teac is flexible enough to handle that, it will prove very popular indeed. And so the VRDS-TI found itself feeding data into the Da Capo one-bit discrete convertor. As a reference, a Pink Triangle Cardinal transport (not sync-locked, to keep a level playing field) was used.

First impressions were favourable. In use the TI was quiet and had commendably fast access. As soon as 'The Sun Rising' by The Beloved kicked off it was clear that it was doing something right with a warm, fulsome bass that powered the song along. There was a lot of detail coming through, and in conjunction with a rhythmic feel to proceedings the Teac sounded nicely musical. The lead vocal possessed body and was tightly located betwixt the KEFs.

Switching over to the Cardinal transport, it became clear that whilst there wasn't a profound improvement, the Cardinal was doing things better. The Teac, whilst giving an enjoyable rendition, was blurring the fine treble detailing on the hi-hats, failing to capture their rhythmic inflections, tending to sound 'samey' regardless of what was actually going on. Bass proved deeper and more controlled, start-stopping with greater alacrity, but less weight.

Moving on to the Boo Radleys' 'Bamey and Me' proved equally illuminating. The Teac gave a bright rendition of the opening steel-stringed

guitars, and a deep, warm bass guitar thrum. As the track progressed the Teac remained enjoyably rhythmic if a tad unincisive, failing to separate out all the players. Moving back over to the Pink and it became clear that the VRDS-TI was muddling things slightly, masking the heavily fuzzed lead guitar and Rob Cieka's percussion. Nevertheless, unlike the Teac, the Pink veered toward thinness on Martin Carr's voice. This point was emphasised by the Teac's voluminous bass which made up in weight what it lacked in control.

Omar's 'There's Nothing Like This' served only to crystallise the differences between the two transports. The Pink was lighter, tighter and communicated rhythms very deftly. The Teac's solid, powerful bass impressed, but it didn't appear as happy with high hats which were given a touch of splashiness and timing imprecision.

It is of course inevitable that the Cardinal should prove to be ultimately more musically communicative, being the more expensive of the two. The point is that the Teac always turned in an insightful, enjoyable performance which, considering its excellent build, finish and keen pricing, makes it a thoroughly good buy ●

**TEAC VRDS-TI**

**£499**

**TEAC UK**

**5 Marlin House,  
The Croxley,  
Watford,  
Herts. WD1 8YA  
Tel: 0923 819630**

# BATTLESHIP BLACK



**Teac's affordable VRDS-TI CD**

**transport is built like a battleship. David Price finds that it sounds heavyweight too.**

# WIN ARCAM CD PLAYERS WORTH £2250

There are three superb Arcam CD players up for grabs this month, each offering a high standard of performance from Compact Disc. Top of the pile - and the prize for the winning entry - is the flagship Arcam

Delta 250 transport, complete with Black Box 500 discrete-DAC CD convertor. The Delta 250 stand alone transport uses the latest Philips CDM-9 mechanism, to ensure maximum detail is retrieved from Compact Discs. This is connected to the Black Box 500 convertor, which with its discrete Bitstream convertor design by Arcam, is one of the most advanced available. A special sync-lock optical cable runs between the two to reduce jitter, resulting in a smoother and more detailed sound.

The second place prize is aimed at the audiophile on the upgrade path. Winner of our May issue group test, the Burr Brown PCM-69 equipped Arcam Black Box 50 convertor is one of the best available at the price. In fact there are few that better it at twice its £450 price. This design has a superb performance, pulling the music together to form a complete and enjoyable performance. It has both a coaxial electrical and an optical input and can be connected to the majority of one box players as an instant upgrade. Or, even better, a Delta 250 transport could be added at a later date to take advantage of the sync-lock feature.

Third prize is the latest Arcam Alpha One CD player. At £299.95 this is the most affordable British player on the market to date. With an emphasis on sonic performance rather than gadgets, the Alpha One is one of the best players in its class.

To enter this competition, simply complete the questions and tie breaker opposite.

Please send your entry on a POSTCARD, or the back of a SEALED ENVELOPE, and completed in block capitals, to arrive no later than Monday 5th February 1995 to:

**ARCAM CD COMPETITION**  
**Hi-Fi World Magazine,**  
**64 Castellain Road,**  
**Maida Vale,**  
**London W9 1EX.**

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

## COMPETITION ENTRY QUESTIONS

- 1) What is the system called that reduces jitter between the Arcam Delta 250 transport and Black Box 500 convertor?
 

|                |                 |
|----------------|-----------------|
| A. Jitter-lock | B. Jitter-sync  |
| C. Sync-lock   | D. Optical-lock |
  
- 2) What transport mechanism does the Delta 250 transport use?
 

|           |           |
|-----------|-----------|
| A. CDM-4  | B. CDM-9  |
| C. CDM-12 | D. CDM-15 |
  
- 3) What chipset does the Black Box 50 use?
 

|                   |                            |
|-------------------|----------------------------|
| A. Philips DAC-7  | B. Analogue Devices AD1867 |
| C. Crystal CS4328 | D. Burr Brown PCM-69       |
  
- 4) The Alpha One CD player is the most affordable British player on the market. What does it cost?
 

|            |            |
|------------|------------|
| A. £249.95 | B. £299.95 |
| C. £399.95 | D. £349.95 |

## TIE BREAKER (Obligatory)

Arcam make CDs sound sweet,  
 all their players look so neat.  
 With latest chips,  
 and discrete convertors,

.....  
 .....  
 .....

Complete the ditty above in no more than thirty words.

## COMPETITION RULES AND CONDITIONS OF ENTRY

1. Only one entry per household will be accepted. Multiple entries will be automatically disqualified.
- In the event of more than one entrant submitting all the correct answers, the winners will be picked from the tie breaker by the Editor. We will endeavour to publish the results in the April 1995 issue. Purchase of the magazine is not a precondition 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 alone please state so on your competition reply form. Hi-Fi World magazine is published by Audio Publishing Ltd.



**DECEMBER ISSUE  
COMPETITION - A  
COMPLETE  
SYSTEMDEK/DPA  
DIGITAL VINYL  
SYSTEM**

Comprising a Systemdek IIX900 turntable complete with RB250 tonearm and Goldring 1022GX cartridge, DPA Renaissance amplifier and Systemdek 931 loudspeakers, the entries for this one flooded in. There can only be one lucky winner though, who is:

C. Barber of Bognor Regis

Congratulations..



If you were asked what the Personal Computer (PC) had to do with the enjoyment of music, you'd probably respond with a resounding "nothing". But the link between the PC and hi-fi is becoming increasingly strong. At every stage of the chain from recording the original music to playing it back in your home, the computer is involved, and its involvement is increasing all the time.

In the recording studio, computers are used extensively, controlling the mix, adding effects, editing, checking the digital masters to make sure they are error free and so on. They control the recording process, and the machines that produce the software.

Computers feature heavily too in the development of the hi-fi components you listen to. They have become so powerful, and the software so advanced, that a product can be designed and tested on screen before an engineer even picks up a soldering iron. Circuit simulators can model an amplifier for example, allowing you to investigate what happens if a component fails, or the effect component tolerance variation will have on performance. It will predict what power you will get from the circuit, and how it will behave under stress.

This helps the engineer to design a more reliable product. You can model, for example, what would happen if a component fails, and what effect it will have on the rest of the circuit. So before you've even built the first working model, you can be pretty sure of a reliable and competent product - which is good news for consumers.

We use computers to help us with the kit loudspeaker designs for the Supplement. A drive unit can be measured using a computer controlled measurement system, like the IMP test system reviewed in the supplement this month, and the data conveniently stored for reference later. The computer will calculate the

Thiele-Small parameters for that particular drive unit and then cross check them to ensure accuracy. This data can then be used by an enclosure design package, which will model the driver in a box and allow you to optimise the cabinet volume and reflex port tuning frequency.

From the drive unit's frequency response, impedance curve and phase plot, a network analyser will even model the crossover for the loudspeaker from the measured data, allowing the designer to select which order of filter is best suited



Dominic Baker

## dB on the level

and what the crossover frequency should be. But that's not all, the computer will calculate the circuit and component values for impedance compensation, conjugate loading, zobel networks and a whole range of other things which would take hours of painstaking maths to calculate. The PC does it near instantaneously, and is generally far more accurate too.

Even valve amplifiers can be modelled on a computer, the valve data loaded in and the circuit checked. So it's not just modern digital circuits that benefit from these computer design packages, it's every area of hi-fi design.

Once the design has been finalised the computer can route the printed circuit board positioning the components to give the shortest signal path and a layout that will perform well when it comes to noise, channel separation etc. Of course, extensive listening tests are still the only way to fine tune a product, even

the most advanced computers only point you in the right direction, giving a useful starting point for a new design.

So you can see that the computer already features strongly in the hi-fi chain. Computers control the way hi-fi develops, and will be more and more responsible for future advances. Even Quad's new 77 integrated amplifier takes advantage of computer technology with its 'intelligent' remote control, which is effectively a hand-held computer.

Perhaps the future of hi-fi will feature computers as a source for your music collection, replacing the CD transport. Instead your computer will supply the digital music signal from its hard disc, there is no physical process involved, so effectively a perfect error free signal is sent to your digital-to-analogue convertor.

To buy a new album, you will be able to take your hand held PC into a bureau, browse the networked database which has access to every record

label, and download the album you want. Once home, the information can be transferred to the main computer ready to play through your system. The need for software would be completely eliminated and you'd always be able to get the album you want, it wouldn't be out of stock or no longer available.

The Internet has already put a lot of this technology in place, allowing anyone with a computer and a modem to 'log-on' and select the information they want. Buying a new album could be just as simple,

after all the digital code on a CD is just another form of information.

So, is all of this computer modelling a good thing? Or will the unique, innovative products that come from the imagination of a good designer become a thing of the past as we see more computer optimised hi-fi? As computers advance, those innovative engineers can realise their designs far faster, so I think that it is a good thing. Also, the real design input comes from a human designer, and the computer does little more than check their maths.

We can't be certain about future developments in hi-fi, but one thing is for sure, the computer will certainly be a prominent feature as the maths behind today's circuits becomes increasingly complex. Hopefully, relying on computers won't mean more mediocrity and less innovation, but more advanced design that pushes hi-fi forwards both in performance and reliability ●

## Hotlines

081 569 5802  
 081 952 5535  
 071 497 1346



## Open

Sundays  
 Mail Order  
 Worldwide

# Bargains!

was now save

£ £ £

|                         |     |     |    |
|-------------------------|-----|-----|----|
| Rotel RA 930 AX MKI amp | 170 | 120 | 50 |
|-------------------------|-----|-----|----|

|                         |     |     |    |
|-------------------------|-----|-----|----|
| Rotel RA 935 BX MKI amp | 200 | 130 | 70 |
|-------------------------|-----|-----|----|

|                            |     |     |    |
|----------------------------|-----|-----|----|
| Rotel RCD 945 AX CD Player | 230 | 140 | 90 |
|----------------------------|-----|-----|----|

|                          |     |     |    |
|--------------------------|-----|-----|----|
| Infinity Ref 10 Speakers | 200 | 140 | 60 |
|--------------------------|-----|-----|----|

|   |     |     |    |
|---|-----|-----|----|
| Mission 760i Speaker/<br>Atacama SE 24 Stands | 200 | 150 | 50 |
|---|-----|-----|----|

|  |     |     |    |
|--|-----|-----|----|
| Mordaunt Short MS10 Speakers/<br>Target HS 20 Stands | 200 | 150 | 50 |
|--|-----|-----|----|

|  |     |  |  |
|--|-----|--|--|
| Canon S30 Speaker                                    | 180 |  |  |
| <i>claim £50 voucher against any other purchase.</i> |     |  |  |

was now save

£ £ £

|   |     |     |     |
|---|-----|-----|-----|
| A/V Speaker Package<br>2 Pairs B & W Team and a<br>B & W Centrale | 430 | 300 | 130 |
|---|-----|-----|-----|

|   |      |      |     |
|---|------|------|-----|
| Tannoy D500 (ex demo)<br>(Black / Walnut) | 1470 | 1200 | 270 |
|---|------|------|-----|

|                                  |     |     |     |
|----------------------------------|-----|-----|-----|
| Harman Kardon LSO500<br>Speakers | 300 | 200 | 100 |
|----------------------------------|-----|-----|-----|

|  |     |     |     |
|--|-----|-----|-----|
| NAD 705 Reciever (graded)<br>Mission 7601 Speakers | 460 | 350 | 110 |
|--|-----|-----|-----|

|                        |      |     |     |
|------------------------|------|-----|-----|
| Castle Howard (graded) | 1000 | 800 | 200 |
|------------------------|------|-----|-----|

|                          |      |      |     |
|--------------------------|------|------|-----|
| KEF 105/3 Black Spkrs    | 2295 | 1500 | 795 |
| KEF 105/3 Rosewood Spkrs | 2395 | 1500 | 895 |

**Special**  
 Marantz PM44SE1 amplifier  
 Marantz CD52SEII CD Player  
 Mission 760i Speaker

|      |      |      |
|------|------|------|
| was  | now  | save |
| £630 | £430 | £200 |

Limited stock. Offer good until stocks last. Not with any other offers or promotions. E. & O. E.

## Audio Visual Specialists • Demonstration Rooms

45 High Street, Hounslow,  
 Middlesex TW3 1RH

☎ **081 569 5802**  
 Fax: 081 569 6353

173 Station Road, Edgware,  
 Middlesex HA8 7JX

☎ **081 952 5535**  
 Fax: 081 951 5864

18 Monmouth Street, \*Covent Gdn.,  
 London WC2H 9HB

☎ **071 497 1346**  
 Fax: 071 497 9205

**B**enjamin Franklin said "there are two certainties in life - death and taxes", he missed one other certainty:

inflation. No matter how low inflation may be, it's rare for it to go negative into deflation. In the context of someone's lifetime, the cost of goods will invariably be higher at death than at birth.

Generally this is true of hi-fi too. Over the last nine years (as far back as my oldest hi-fi books go), the cost of a Linn LP12 has increased from £449 to £894 (at the time of writing). To save you the finger work, that's an increase of 99%.

Other hi-fi components show similar rises. The Quad 306/34 amp combination has shown a 49% increase, Audiolab 8000A, 51%, Nakamichi CR7 67%, and the Quad ESL 63 'speakers a whopping 106% price increase since 1986. Admittedly, these price rises have often been brought about by improvements, particularly in the case of the Linn and Audiolab. However, such improvements often cost the manufacturer little.

Also, taking into account how much more efficient manufacturing processes have become over the last nine years (particularly with companies the size of Linn and Quad), it's likely that inflation (pushing up material and labour costs) is to blame for these price rises. This is nothing unusual though, car and clothing prices have generally risen by similar amounts. So what's the big deal?

Well, the hi-fi industry seems completely split over the question of prices. On the one hand, prices for many items have been rising steadily, as the above figures show. But, in the cut-throat budget sector, where most volume sales are made, exactly the opposite seems to have happened over the past nine years.

Rather like portable colour televisions and videos, where prices seem to have remained static or even come down, budget hi-fi equipment has defied inflation by remaining at set price points. Hence we still

have a £100 'speaker category, a £150 amplifier category and a £200 CD player category. These rungs haven't melted away from the bottom up, the £100 limit becoming £120 for example, as they might have done.

The falling price of CD players is understandable. Philips' entry-level models have dropped in price by 35%, NAD's by 45% and Denon's by 31%. This is explained by the manufacturers selling higher volumes and perhaps due to reduced component costs.



## Fair Views

- from Dominic Todd, our man in Scarborough

What is less easily explained, however, is the similar reluctance of budget loudspeakers and amplifiers to change in price.

Mission and NAD's product prices spring to mind. Interestingly - and it's no coincidence - both are also market leaders in the budget sector. Looking back nine years, the development of Mission's cheapest 'speaker has gone something like this. In 1986 the budget Mission model was the 70MkII, price £100. By the end of 1988, the price had gone up to £110. In 1989 the model was replaced by the 731, priced at £120. As this model's price slowly crept up, Mission introduced a new baby model, the 760, which once again brought the entry price down to £100. The 760 improved and prices gradually crept up from £120 to £130 (today's price). This brings us bang up to date, with Mission's latest effort, the 731, priced at £130. In nine years, Mission's budget 'speaker has not once ventured over £130. This means that, in real terms (excuse the politico-speak), the Missions have come down in price, taking into account inflation.

NAD's story is even more baffling. A 3020 cost £140 in 1986. Today, they have launched a new model, the 310, which NAD themselves say is the spiritual successor to the 3020, and yet it only costs £130. So in nine years, NAD's cheapest amplifier has actually fallen in price by around 7%.

So where's this all leading? There's no doubt that customers today buying a budget CD player have, excuse Harold MacMillan's phrase, "never had it so good". Sound quality on budget machines has come on by leaps and bounds in the past nine years, whilst in many cases features have increased and build-quality become consistent. This means that, if you purchase a budget CD player today, you're getting a good deal more for your money than a decade ago.

However, it has to be said that the same is not really the case for budget amplifiers and 'speakers. Manufacturers appear concerned about keeping performances similar, and holding prices down, rather than improving budget equipment, maybe at the expense of a slight price

rise. A recent listen to a pair of Mission 70s and Goodmans Maxim 2s, showed how little budget 'speakers have advanced. The only area I could find any real improvement in the Mission 731s was with slight advantages in imaging and treble sweetness. Otherwise, the two 'speakers were extremely close and both sound good with cheaper, less revealing equipment.

Much the same is true with the NAD 3020 versus the new 310. There isn't a great deal to tell them apart,

bar perhaps ultimate detail retrieval. This doesn't mean the 310 is a bad amp. Far from it, in fact. It's simply that the 3020 was so good in its day that it seems things haven't really advanced much.

Yet, things have advanced. If the 3020 had continued to rise in price at the rate of more expensive hi-fi, it would be the price of the NAD 304 (£240). So, in effect, the real predecessor of the 3020 is the 304. It also happens to be an excellent amplifier and a country mile ahead of the 3020 in most aspects. It's not just NAD and Mission that continue to offer better value either. Other manufacturers, though not all, seem unable to depart from their beloved price points, no matter where they are.

I've no complaints if manufacturers hold, or even slightly increase, the level of sound quality, whilst holding the price. What worries me is that, sooner or later something has got to give. Let's just hope it's the price rather than performance. Otherwise, the distinction between mass market audio and hi-fi separates will become increasingly blurred ●

# You Decide

Main Authorised Dealers  
For Over 100 Manufacturers



# We Provide

Dedicated Audio Visual  
Demonstration Rooms

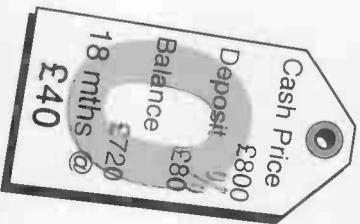
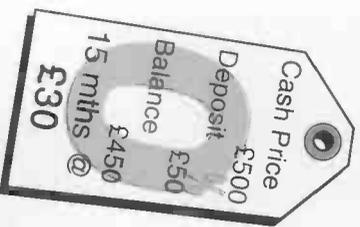
## The Power House Of Choice

1. Decide what you want to buy
2. Decide what you want to pay per month
3. With 0% apr interest FREE credit you can suit your taste and your pocket

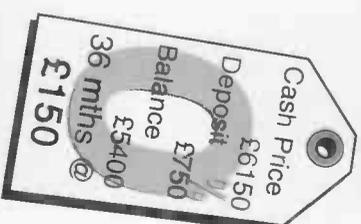
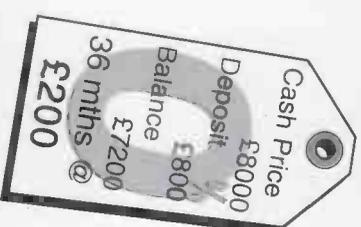
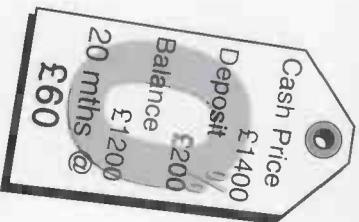
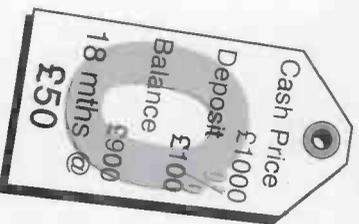
Subject to status. E. & O. E. Ask for details.  
Offer not valid with any other promotions or offers.

### You Decide • We Provide

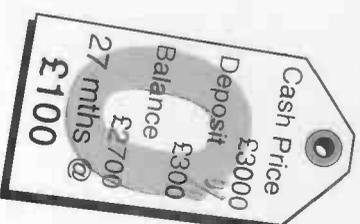
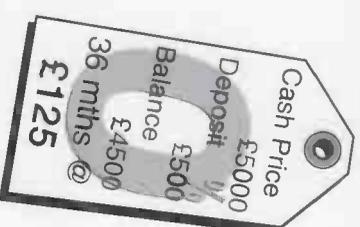
Anywhere in the UK. Ask for Details



We Are Open Sundays  
Part Exchange



Professional Advice  
Design & Installations



45 High Street, Hounslow, Middlesex TW3 1RH

W/SW London  
☎ 081 569 5802

173 Station Road, Edgware, Middlesex HA8 7JX

NNW London  
☎ 081 952 5535

18 Monmouth Street, Covent Gdn., London WC2H 9HB

Central London  
☎ 071 497 1346

# The Music of Daddy

rock & pop record reviews

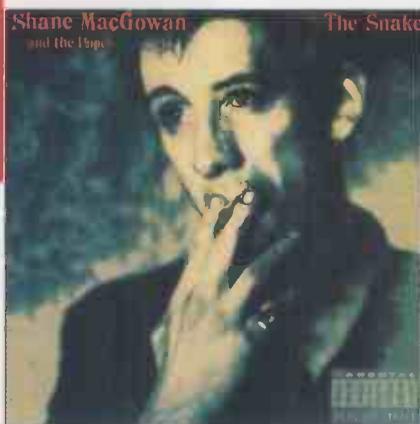
and debauchery more easily spring to mind - but on this track this Irish waster has produced a song of deceptively subtle lyricism.

There are other delights here on what could have so easily have been Shane's last stumbling swansong. The delicate 'Bring Down The Lamp', the rousing 'Donegal Express' and the lilting 'A Mexican Funeral in Paris'. Yes, no doubt about it, Shane is still a lad to be reckoned with.



**THE WOLFGANG PRESS**  
**Funky Little Demons**  
CAD 4016CD

● Any band which has Tom Jones cover their material has to be definitively funky, and back after a two year lay-off, The Wolfgang Press are well and truly "Funky Little Demons". This is not the way the band's early fans would have described them - from Gang of Four agit-prop to a mellow funk groove within just a couple of years is some move. A band that has come of age - no doubt about it, their best work to date.



**SHANE MACGOWAN AND THE POPES**  
**The Snake**  
ZTT4509-98104-2

● There's nothing like a survivor to warm the cockles of your heart - or for that matter, the heart of your cockle - but that's another story. Shane MacGowan, truth be told, was fired from the band he conceived and created. Master McGee, so they said, was so ruined by various abuses - alcoholic and narcotic - that he could no longer cut the proverbial rug. Well well, the holy surprise is that The Snake is quite probably the most exquisitely perfect record that has ever stumbled out of young Shane's erratic career pathway.

With even relatively trivial verbal throwaways as the self explanatory 'I'll Be Your Handbag' hitting hard and heavy, handsome and perfect. And as for the ballads such as 'Her Father Didn't Like Me Anyway', they are as sublimely touching as anything in this man's canon. Take for instance 'Victoria', innocence and deportment are not the qualities normally associated with Shane, depravity



**BIG AUDIO**  
**Higher Power**  
COLUMBIA 477 2394

● Two things about Mick Jones - he has virtually no voice and he only has one, maybe two tunes to his name. With this latest B.A.D. incarnation (volume the

Giovanni Dadomo

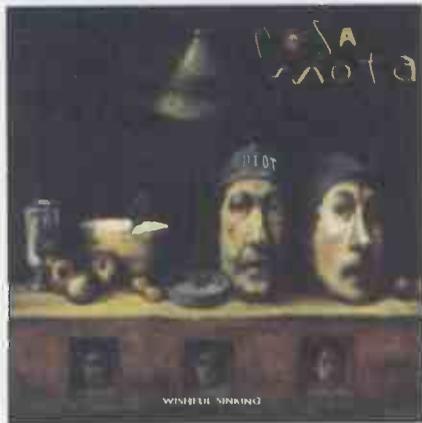
## INDEX

### RECORD REVIEWS

|                             |    |
|-----------------------------|----|
| <b>ROCK &amp; POP</b> ..... | 73 |
| Giovanni Dadomo             |    |
| Jon Clarke                  |    |
| <b>CLASSICAL</b> .....      | 85 |
| Peter Herring               |    |
| <b>JAZZ</b> .....           | 93 |
| Simon Hopkins               |    |
| Simon Cooke                 |    |

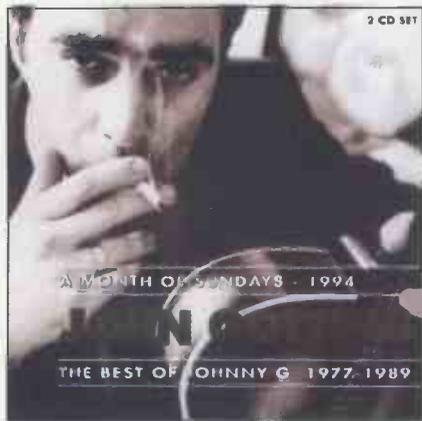
third, methinks) we're back on familiar territory, bits and bobs of TV and movie clips spliced amidst familiar paeans to his beloved 'London Tahn'. Not that many people could get this excited about the Harrow Road!

But right at the end of a fairly predictable disc comes a glorious Small Faces-style stomper, by the name of 'Hope' - one of the best songs Mick's penned this side of 'Should I Stay or Should I Go'. Someone'll put it on a TV ad one day and it'll be a massive hit. Or so one can hope.



**ROSA MOTA**  
**Wishful Sinking**  
J3THCD2

● Praiseworthy homegrown grunge is a pretty rare item. However Wishful Sinking, the first effort of newcomers Rosa Mota is that item. All the right elements are blended together in a heavy, tuneful and intelligent mix. They won't be doing any stadium headliners in the near future, but there can be no doubt that they're headed in the right direction.

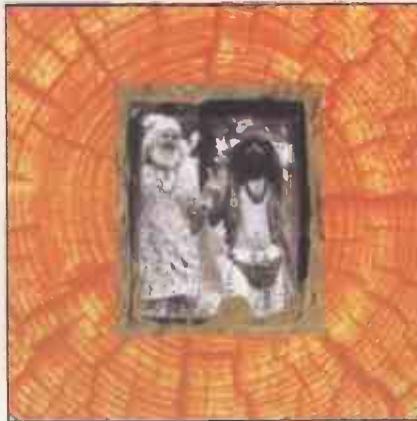


**JOHN GOTTING**  
**A Month of Sundays - The Best of Johnny G.**  
JGCD1

● Semi-legendary bluesmen that you've never heard of don't come from England. They come from way down

someplace hot and steamy, and by the time they've gained their legendary status they are usually well dead and gone.

Not so with John Gotting, this man is alive and kicking, steaming even. Billed as a one man band, Johnny G has a lot of help from his friends on this compilation. Sadly he'll probably never be famous away from the pub gig circuit - but what an awesome pub gig the man does. Blues, ska, cajun, country and western - a master of the blues guitar. This album is your chance to take the best pub blues gig you've ever heard home with you.



**VARIOUS ARTISTS**  
**Woodstock 94**  
A&M 540 322-2

● "I came upon a child of God, he was walking along the road", unfortunately he was so loaded down with promotional materials and merchandising freebies that there was absolutely no way he could see where he was going. It really is a very long way from Yasger's farm, and this record's connection with the most defining event of the sixties is pretty tenuous. Apart from that, it's not a bad album. Dismiss your Woodstockian preconceptions from your mind and settle down to some well neat performances.

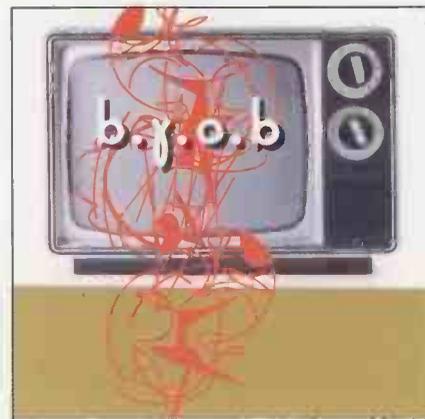
From the middle-aged brigade, Bob Dylan proves that he can still rasp out a number with the best of them, as do a specially reformed Traffic. Peter Gabriel puts in a definitive performance of his classic protest song 'Biko', and Joe Cocker shows that he's still 'Feelin' Alright'.

However, it's the more recent names, the artists who were too young to get into the movie, who really shine here. The Violent Femmes put in a fabulously neurotic performance while Cypress Hill and Salt'n'Pepa show their worth. So settle down, hit the groove, get mellow and remember to keep away from the bad acid.



**MERCYLAND**  
**Spillage**  
RYKODISC RCD 10314

● If you've heard of David Barbe at all, I'll wager it's in his current employ as bassman/sometimes songwriter for Bob Mould's mighty - and mightily successful - Sugar. And listening to this selection of material - a second LP plus some bits and bobs - from his previous group, it's easy to see why he tickled Mould's fancy. An Athens, Georgia power trio with more than a little in common with the early works of Mould's own vastly influential Husker Du, Mercyland come on with all the engagement and passion of a stripped-down Nineties' offspring of The Clash at their most primitive. True perhaps that Barbe doesn't quite have Mould's ease with a catchy tune, but if you like your thrash hard, fast and passionate, there are no reasons for disappointment here. Anyone fancy a stagedive?



**B.Y.O.B.**  
**B.Y.O.B.**  
RYKODISC RCD 10310

● An eclectic mix of funk, rap, samples, uptown soul - you name it, all courtesy of D.C. Basehead, working name for producer/mainman Michael Ivey - I responded particularly to the haunting "distances", but the whole thing sounds like a slice of the street plonked right in one's inner ear; at times threatening, seductive, hypnotic, never anything less

**PEARL JAM**

**Vitalogy**

EPIC EK66900

● Probably the most unlikely, least predictable of all indie crossover bands - their tunes are by and large unremarkable, ditto singer Eddie Vedder's voice and looks - but for all that Pearl Jam seem to have spent several lifetimes on stage at last year's MTV and other 'Best Of...' award ceremonies. And *Vs* was only their second album. All these things considered it seems a fairly safe bet that 'Vitalogy' will be one of the coming year's Big Jobbies.

Not that Pearl Jam don't have their strong spots - the first of no doubt several single spin-offs is a nouveau punk riffer with a guitar motif of stunningly catchy simplicity the likes of which the original *Damned* would rightly have been proud of. Eat your heart out Brian 'where are you now' James, ditto 'Bugs', one of a handful of deceptively simplistic throwaway shortlings.

In fact the whole enterprise positively glows

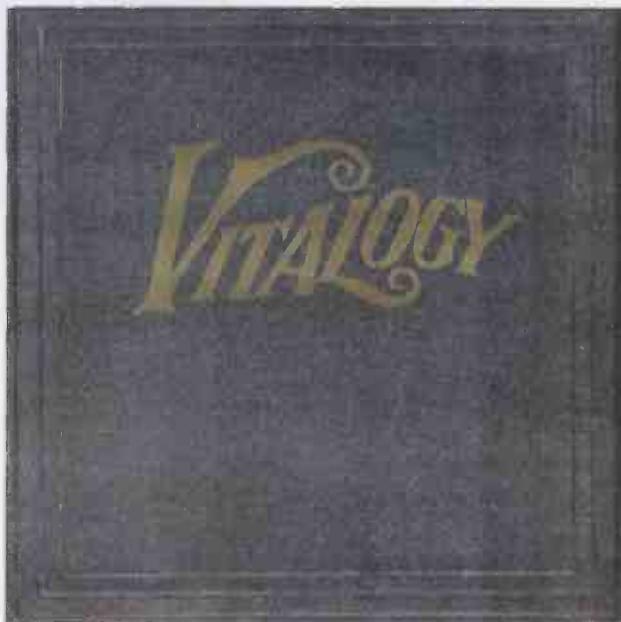
with a charmingly well-wrought faux-naivet , from its charmingly antique styled sleeve logo to the references aplenty to the turn-of-the-century home encyclopaedia whence both the title and general inspiration are said to have been derived. So then the movingly abrasive Steve Jones-out-of-Johnny Thunders guitar thrashings of 'Corduroy', or the wierdly titled yet enticingly melodic

'Tremor Christ'.

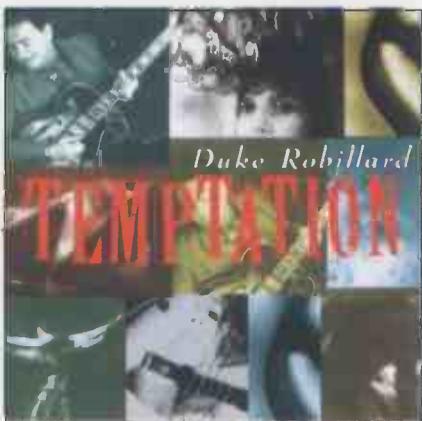
And so on, from such patently deliberate abrasiveness as the self-explanatory 'Not For You' through to the closing (and to be honest perhaps a mite overlong) 'Stupid Mop' - the n-th musical tribute-cum-epitaph to the geezer from Nirvana who put himself out of his misery and thousands of others into theirs. But treats abound - take 'Whippings',

with such sweet lines as, "don't need a helmet/ I got a hard, hard head", or such, er, lyrical lyrics as the one about the geezer who "caught a bolt of lightening, cursed the day he let it go".

Myself, I think I'd still prefer to live on a desert island with Soundgarden's sublime "Superunknown", but who knows? Time will no doubt tell, and the odd spot of self-indulgence aside - a tad too many little spots of "sorry man, one spliff too many that night" studio fripperies, not to mention the sleeve-note cobblers, *Vitalogy* is nothing to be ashamed of, and as third LPs go, promises to be sturdier and longer lasting than most.



than moving. Collage for the ears, '94 style, reaching parts mere words don't dare take you to.



**DUKE ROBILLARD**

**Temptation**

POINTBLANK VPBCD 20

● This man could only have come out of America - a smokey-voiced singer of vast power and feeling, and Blues-grounded guitar-player of equally

awesome potency. Duke sounds like nothing so much as Huey Lewis with balls or an unfairly long-lost second cousin to ZZ Top. The songs are familiar reflections on love, its vagaries and disappointments, but the key-word here, both in the singing and playing, is passion. When Robillard sings "Baby I live to give everything to you", you know he means it. Cracking selection. It's like Creedence Clearwater Revival never went away. All together now: E viva Swamp Rock!

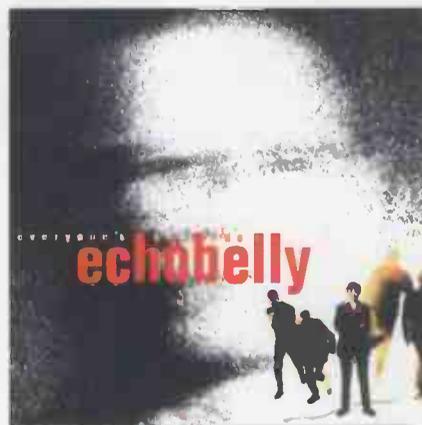
**ECHOBELLY**

**Everyone's Got One**

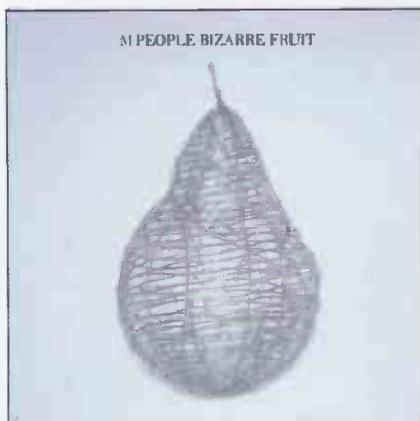
FAUV 3 CD

● Small wonder they were (are?) Morrissey's fave group. Echobelly are from start to finish, a rather drab, not to say sad re-tread of Morrissey/Marr's Greatest Hits. Exceptions? The lead vocalist's a girl (wasn't she always?) and the tunes are nothing to take home. I don't buy it. Sorry kids, but your UB40's waiting.

Rock



## Jon Clarke

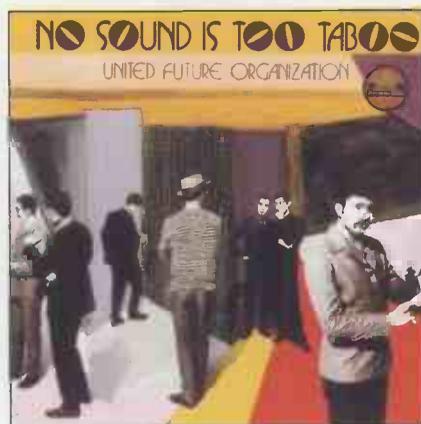


**M PEOPLE**  
**Bizarre Fruit**  
REC N°

● Bizarre Fruit is where M People join the heady ranks of Duran Duran, Kylie and Take That. Because, the once critically acclaimed media darlings have gone for the big one. With LP three, Britain's finest dance floor divas have finally succumbed to commercial pressure and chucked all cutting edge pretence out of the window. And, it appears that the perfectly crafted house/dance LP *Elegant Slumming*, of only a year ago, has merely become the springboard for *Bizarre Fruit*, the perfectly crafted pop/dance album. Having found the perfect pop formula, you might argue, why not? And commercially speaking you'd be right. But it does seem a little strange that England's most celebrated house specialists should have just won the prestigious "Mercury Music Prize" touted for originality and flair within the most adventurous music industry in the world when much more creative bands like Blur and Pulp were left out in the cold.

It's not that *Bizarre Fruit* is a bad album, it's not. It definitely has many decent moments. We first start to hear the band's finer qualities with the pumping 'Open Your Heart'. But it is not until the excellent disco anthems 'Precious Pear' and 'Walk Away' that M People as we know it really get under full steam. The voice of the delightful Heather (boyfriend of England rugby league bruiser Shaun Edwards) is as ever sweet and melodious, and the percussion of now regular band member Shovel, adds the perfect live beat dimension to the band's drum machine. London's M People, who most Brits think are either American or Mancunian, have already had chart success both here and stateside, and should boost their reputation and following four fold with

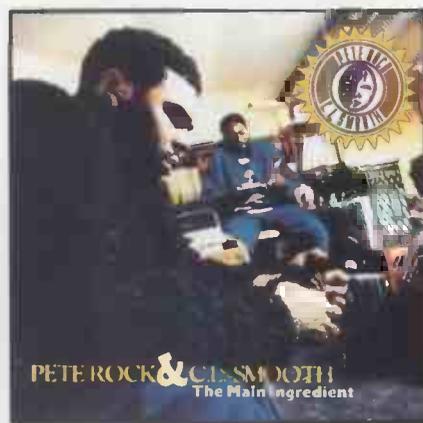
this new offering. The clever marketing ploy is to release *Bizarre Fruit* hot on the heels of previous LP *Elegant Slumming*, which is still sitting very much on people's turntables and has hardly left the top 40 all year. In that way, while the new album is not quite as fresh and original as earlier recordings, it will get the media and public attention it needs to become a major hit. Sitting somewhere between juicy fruit and rotten apple, this bizarre fruit isn't exactly pick of the bunch. But it will be picked nonetheless.



**UNITED FUTURE ORGANISATION**  
**No Sound Is Too Taboo**  
BROWNSWOOD 522 271-2

● The (yet) little known United Future Organisation really get off the ground with their new LP on Talking Loud. Not riding on the crest of a populist commercial wave, like M People, UFO score their points with a very streetwise, club-friendly vibe, because this wonderful slice of Asiatic progressive jazz/funk, is fine, pure fine. And quite a remarkable achievement for a trio of Japanese groovers based so far from the essential cutting edge club market that is England. But their reputation is such, that a large list of US and British collaborators queued up to record tracks on the album. And what a list of collaborators it includes - among the 10 sweet tracks on this great LP can be found the talents of US jazz vocalist Cleveland Watkiss, mixmaster Gilles Peterson, DJ Krush and various other musical odds and bods from the Mo Wax, London and Acid Jazz record labels. Taking off with the delightful 'United Future Airlines', the album waxes through a fusion of jazz, samba and soul tracks. It climbs highest with Cleveland Watkiss's scary vocal range on 'Make It Better', the Bosanova

groove 'Sunday Folk Tale' and the funky dance floor killer 'Doopsylalolic' with its haunting sitar melody. *No Sound Is Too Taboo* is a wall to wall selection of instruments and styles, and if you're looking to see where the current cutting edge of street sounds is at, you can't go further.



**PETE ROCK AND CL SMOOTH**  
**The Main Ingredient**  
ELEKTRA 755 961 661-2

● When LP Mecca and the Soul Brother came out two years ago, Pete and CL were acclaimed as the right ingredient of rap music. With laid back relaxed beats and intelligent Islam inspired lyrics, it was a big seller and got voted in *The Face's* top ten albums of 1992. Since then, out of the woodwork have crept Snoop Doggy Dog, Warren G and numerous other Gangster rappers to steal the limelight. The harder West Coast rap scene has taken over from its poorer, quieter East coast cousin, as guns, drugs and whores reign the day. The sort of music to compliment the *Reservoir Dogs* of the film world, it is often mindlessly shocking in content, but mightily entertaining.

But as the tail end of 1994 fizzles out, back bounces intelligent East Coast rap in the shape and form of Brand Nubian's *Everything is Everything* LP and this, Pete Rock and CL Smooth's fourth album. A firin' moody album, it is as laid back as rap can get. On a very Tribe Called Quest tip, *The Main Ingredient* is groovy, off beat and artistic. The 16 tracks kick off quietly, but gradually pick up in pace and style, the best moments sitting in the centre with the title track, 'Worldwide' and the soulful anthem 'All The Places'. The rest of the album doesn't let down

either. A real antidote to the mindless macho mouthings of Gangster rap, *Main Ingredient* is the best Pete and CL album to date and probably worthy of *The Face's* top five.

Rock + Pop

# Specialist Hi-Fi Dealers

**BADA DEALERS COME HIGHLY RECOMMENDED**



Hear the difference.

**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, clarify and satisfy their needs through the demonstration of suitable hi-fi products."

BRITISH AUDIO DEALERS ASSOCIATION



THE ULTIMATE IN SOUND ADVICE

**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, Tripod, Nakamichi, Rega, Creek, Epos, Mordaunt Short, Celestion, Marantz, Mission, Cyrus, etc. ...

65 Castle Street, High Wycombe, Buckinghamshire.  
Open Monday - Saturday  
0494 531682 / 464670

**INHAUS AUDIO**



Suppliers of the finest Hi-Fi equipment available

Tel. (0702) 465892 or Mobile (0831) 616426  
Viewing & demonstrations strictly by appointment only



ROKSAN J NAIM J REGA J MICROMEGA J ARCAM J CREEK J ROTEL J MARANTZ J DENON J RUARK J EPOS J SYSTEMDEK J AUDIOLAB J NEAT J SHAHINIEN J SOUND ORGANISATION J SOUND FACTORY J CHORD COMPANY J AUDIO TECHNICA J MANA ACOUSTICS J

Records also available  
PRO MUSICA  
6 Vineyard St., Colchester, Essex  
0206 577519



THE INNOVATIVE AUDIO AND VISUAL HI-FI RETAILER

SERVING LONDON FROM BATTERSEA

**ORANGES & LEMONS**

071-924 2040/3665  
61/63 WEBBS ROAD, SW11



7 ST. PANCRAS, CHICHESTER, WEST SUSSEX  
CLOSED ALL DAY MONDAY  
Tel: (0243) 776402

Appointed stockists of: A+R Cambridge, Castle Acoustic, Creek, Dual, Goldring, Linn Products, Monitor Audio, Naim, Nakamichi, Quad, Rega, Rogers, Royd Audio, Spendor

**LONDON & SOUTH EAST**

**"One of the 5 best hi-fi shops in the world"**

**GRAHAM'S HI-FI**

Canonbury Yard, 190a New North Road  
London N1 7BS, ☎ 071-226 5500.  
Ring for a chat, an appointment and a map!



For the great sound of sound :

**The Comflake Shop**  
37 Windmill Street London W1P 1HH  
071 631 0472 Fax. 071 436 7165

We stock ATC, Arcam, Meridian, Naim, Rega, Royde, Roksan, AVI, Monitor Audio, DNM; as well as offering a marvellous mail-order worldwide service • Crunch •

**The Hi-Fi Shop**  
GUILFORD SPECIALIST SINCE 1950

We are at:  
3 BRIDGE STREET, GUILDFORD  
(By the traffic lights - next door to Alfred Marks)  
0483 504801 • 0483 304756  
Access • Visa • Switch  
Open Monday-Saturday 9am-6pm (later by appointment)



79/81 Fairfax Road  
Swiss Cottage  
London NW6 4DY  
071 624 8855/6  
Mon-Fri 10-7 Sat 10-6

alphason apollo audio innovations audion audio note audioquest dpa fuller helius heybrook impulse ixos kar lyra michell morel oriolan pierre lurne project projekt qed royd sonic link sound organisation soundstyle townshend trichard van den hul voyd home demonstrations, wide range valvetransistor/analogue/digital, nice people, peculiar adverts

**Signals** hifi for grown-ups  
martlesham heath ipswich (0473) 622866

**WORTHING AUDIO**

20 Treville Gate, W. Sussex, BN11 1UA  
(0903) 212133  
The friendly shop with the best sound system in the South. Friendly advice  
• 3yr guarantees • easy parking  
Open Mon-Sat. 10am-6pm Late night Wed. 7.30pm  
Agencies include: Arcam, Exposure, Kinshaw, Naim Audio, Marantz, Ruark, Audio Technica, Target, Tripod, JPW, TDL, Orelle, and many more.....

**Infidelity**  
indecently good hi-fi

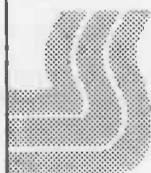
9 High Street, Hampton Wick, Kingston upon Thames, Surrey KT1 4DA. Tel: 081-943 3530  
Open Tues - Sat 10.30am - 7.00pm.

**FRANKIE IS BACK!**

Ex-Luxman, Carver & Hafler 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:-



Tel: (0582) 411480 or Fax (0582) 451957



**Spaldings**  
ESTABLISHED IN SOUND

☎ 081-654 1231/2040  
352/4 LOWER ADDISCOMBE RD., CROYDON, SURREY

**The Audio File**



27 HOCKERILL STREET, BISHOP'S STORTFORD, HERTS.  
TEL: 0279 506576

# Specialist Hi-Fi Dealers

◆ Open 9-5.30  
◆ Demo Room  
◆ Free Parking  
◆ 0% Finance  
◆ Closed Wed.

**A + R + C  
AUDIO**  
QUALITY HI-FI

Denon, Harman Kardon, JPW, Monitor Audio, Micromega, Rogers, Rotel, Ruark

0344 762201

**Chelston  
HI-FI**

STOCKIST OF: HEYBROOK, NAD ROTEL, PHILIPS, MARANTZ, QUAD, PINK TRIANGLE, ACOUSTIC ENERGY, JPW, CELESTION, MUSICAL FIDELITY, TANNAY, TDL, NAKAMICHI, YAMAHA, KEF, SONY, AURA, PIONEER, ALBARRY AND MANY MORE...

38 WALNUT ROAD, CHELSTON, TORQUAY, DEVON TQ2 6HS  
TELEPHONE: (0803) 606863

Come to us for the largest selection of surround sound systems in the South West

**STATION SOUNDS**  
W O R T H I N G  
FOR A SELECTION OF VALVE AMPLIFIERS AND OTHER OLDER QUALITY EQUIPMENT

Valve amplifiers (combos and hi-fi) overhauled at sensible rates.  
Audio Note speakers and used Audio Innovations amplifiers stocked  
Valve and other equipment always wanted.

Mike Pointer 0903 239980 (including Fax)

DOWN PLATFORM WORTHING STATION SUSSEX

**EIRE**

**Acoustic Dimension**

"How can I buy the best HiFi?  
Phone us to find out!

Choose from: AVI • Audio Innovations • LFD • Albary • Heybrook • Triangle • Amrita • Proac • TDL • ATC • Micromega • Pierre Lumé • AMC • Rotel • Marantz • Kinshaw.

We can help you choose wisely!  
Part exchange • Credit Card accepted • 3 demo rooms.  
Acoustic Dimension 16, Idrone mews, Idrone Lane, Black Rock, Co Dublin Fax/Tel: 01-2884612

**We Never Compromise On Quality**

**CLONEY  
AUDIO**

55 Main St Blackrock Co Dublin  
Tel 2889449/2888477 Fax 2834887  
Open Tue/Sat 10AM-6PM, Thur/Fri 'till 9pm - Closed Monday

## MIDLANDS

**CREATIVE AUDIO**  
9 DOGPOLE, SHREWSBURY, SHROPSHIRE  
Tel: (0743) 241924  
Closed Mondays

- Comfortable listening rooms
- Home demonstrations available
- Part exchange welcome
- Free home installation
- Interest Free credit

Authorised retailer for:  
A & R ARCAM, AUDIOLAB, CELESTION, CYRUS, DENON, DUAL, MERIDIAN, MISSION, MONITOR, AUDIO, QUAD, REVOLVER, ROKSAN, ROTEL, YAMAHA, EPOS, NAIM, KEF, RUARK

**W. OWEN** EST 1901  
Audio/Video Specialists  
Pioneer • Reference Point • Kenwood  
Sony • Akai • B&W

Free Installation and Home Delivery

58 Market Street, Oakengates Telford, Shropshire Tel: (0952) 613818  
2A Stratford Street Newport, Shropshire Telford Tel: (0952) 810876

**Moorgate Acoustics Hi-Fi**



Frustrated and confused?  
Call in and get some help and advice from a company that cares enough about its customers to put them first.  
184 Fitzwilliam St., Sheffield. Tel: (0742) 756048  
8 Westgate Chambers, Rotherham. Tel: (0709) 370666

Well engineered products for accurate sound reproduction from: Arcam, ATC, Audioquest, Audio Technica, AVI, Beyer, Cable Talk, Castle, Chord, Denon, Dual, Klipsch, Michell, Nakamichi, Ortofon, QED, Quad, Revox, Sennheiser, Sequence Design, SME, Spendor, Target, TDK, TDL, Thorens, etc., Keith Monks Record Cleaning Machine.

Five Ways Hi-Fidelity Ltd., (Est. 1972)  
12 Islington Row  
Edgbaston, Birmingham B15 1LD

**MUSIC MATTERS** HI-FI

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

Aiwa, AKG, Alchemist, Alphason, Apollo, Arcam, Audiolab, Audioquest, Audio Technica, Aura, Beyer, B+W, Cabletalk, Cambridge Audio, Canon, Celestion, Chord, Cyrus, Deltec, Denon, OPA, Dual, Epos, Exposure, Harman, Heybrook, Impulse, Infinity, KEF, Kenwood, Kinshaw, Lexicon, Lumley, Marantz, Meridian, Michell, Micromega, Mission, Mordaunt-Short, Monitor Audio, Monster, Musical Fidelity, NAD, Nakamichi, NVA, Onkyo, Panasonic, Pink Triangle, Pioneer, Polk, Pro-Ac, Pro-ject, REL, Revox, Rogers, Roksan, Rotel, Royd, Ruark, Sansui, SD Acoustics, Sennheiser, SME, Straitwire, Systemdek, System, Tannoy, Target, Thorens, Wharfedale, Yamaha etc...

**OPENING TIMES:**  
Tues - Thurs 10.30 - 6.00  
Friday 10.30 - 8.00  
Saturday 10.00 - 5.00  
Demonstration by Appointment

351 HAGLEY ROAD, EDGBASTON, BIRMINGHAM B17 8DL  
Tel: 021-429 2811

156/7 LOWER HIGH STREET STOURBRIDGE, WEST MIDLANDS DY8 1TS  
Tel: 0384 444 184

93-95 HOBBSMOAT RD, SOLIHULL, WEST MIDLANDS B92 8JL  
Tel: 021-742 0254

"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

**FRANK HARVEY**  
Hi-Fi EXCELLENCE

163 Spon Street, Coventry, CV1 3BB Tel: 0203 525200.  
Mon to Sat 9.30 till 5.30. Closed Thursday

**MUCH MORE THAN HI-FI**  
WE ARE A BADA DEALER MAILORDER • EXPORT • HOME TRIALS

Audiolab • Audio Alchemy • Arcam • Alphason • Bose • Bang & Olufsen • Celestion • Cyrus • Denon • Dual • Foundation • Kef • Marantz • Monitor Audio • Mission • Musical Fidelity • Nakamichi • Nad • Quad • Rega • Rogers • Rotel • Target • Tipod • Tannoy • Thorens • Van Den Hul • Yamaha

3 Floors, 3 Dem rooms, 3000 sq feet in the pursuit of Hi-Fi Excellence



**AUDIO EQUIPMENT FROM LEADING AND SPECIALIST BRANDS ON TWO FLOORS FOR YOU TO LISTEN AND CHOOSE FROM**

- 3 Demonstration Rooms
- Home Trials
- Home Cinema - Instore Demonstration Theatre
- Audio Visual Equipment
- Evening Demonstrations by appointment
- Inhouse Service Department
- Mail Order Available
- Interest Free Credit on Selected Items (Apr. 0% - Written details on request)

**Hi-Fi for the Beginner, the Enthusiast and the Audiophile Telephone (0922) 493499/473499**

ACUSTIC ENERGY • ARCAM • ALEM • AUDIO LAB • APOLLO • A.T. • AUDIO ALCHEMY • AUDIO QUEST • B&W • BOSE • BEYER • CABLE TALK • CHORD COMPANY • CHORD • CYRUS • CELESTION • DPA • EPOS • EXPOSURE • INFINITY • JPW • KEF REFERENCE • KENWOOD • MARANTZ • MICHELL • MONITOR AUDIO • MONSTER • MORDAUNT SHORT • MERIDIAN • MICROMEGA • MISSION • MOTH • MUSICAL FIDELITY • NAKAMICHI • ORTOFON • PROJECT • QUAD • ROKSAN • ROGERS • ROTEL • SENNHEISER • SONY • SPENDOR • SUMIKO • SYSTEMDEK • TARGET • TDL • THORENS • TRIANGLE • TUBE TECHNOLOGY • VAN DEN HUL • VANDERSTEEN • YAMAHA • YBA

Sharing the ASDA Carpark with ample free parking, Off High Street, Blaxwich, Nr. Walsall, West Midlands Near M6 Jnc. 10 & 11  
Open 6 Days, 9am - 6pm  
Late night Friday

Blaxwich, Blaxwich La, Walsall M6, Bham, M54, M5, M6, M10, M11, M12, M13, M14, M15, M16, M17, M18, M19, M20, M21, M22, M23, M24, M25, M26, M27, M28, M29, M30, M31, M32, M33, M34, M35, M36, M37, M38, M39, M40, M41, M42, M43, M44, M45, M46, M47, M48, M49, M50, M51, M52, M53, M54, M55, M56, M57, M58, M59, M60, M61, M62, M63, M64, M65, M66, M67, M68, M69, M70, M71, M72, M73, M74, M75, M76, M77, M78, M79, M80, M81, M82, M83, M84, M85, M86, M87, M88, M89, M90, M91, M92, M93, M94, M95, M96, M97, M98, M99, M100

# Specialist Hi-Fi Dealers

You can come and visit us at:  
**25 HENLEY STREET,  
 STRATFORD CV37 6QW**  
 Contact Dirk or Jamie on:  
**Tel/fax No. 0789 414533**  
 We are stockists of the leading  
 Hi-Fi brands including:

**ARCAM, SONY, PANASONIC, NAKAMICHI, B&W, PIONEER,  
 TECHNICS, DENON, NAD, KEF, MARANTZ, ROTEL, MUSICAL  
 FIDELITY, MONITOR AUDIO, MISSION, TANNON, QUAD, TDL &  
 SENNHEISER, YAMAHA, CELESTION, ACOUSTIC RESEARCH,  
 AUDIOQUEST, MONSTER, TARGET, BEYER, SYSTEMDEK.**

2% Finance is available on selected products and all major credit cards  
 accepted. We also have a Demonstration Room and Service Facilities.  
 Monday to Saturday 9.30-5.30. Late night Wednesday  
 "WHERE FRIENDLY SERVICE STILL COUNTS!"

**Audio Reflections**  
 DISCOVER *ACCURACY* IN FIDELITY

On permanent demonstration exclusively in Yorkshire and the North East of  
 England - ATC, SCM10, SCM20, SCM20 Tower, SCM50A and SCM100A,  
 ATC, AV International, Briston Amplifiers, Castle York, Chester & Howard,  
 Concordant, Chord SPM Power Amplifiers, Equinox, Harbeth Acoustics,  
 JPW, Sequence Loudspeakers, Marantz, Michell Gyrodec, Michi, Ortofon  
 premier range, Rotel, Sansui, reference grade fully balanced CD players  
 and integrated amplifiers, SME, Spondor, Target, TEAC, Townshend  
 Seismic Sink, Q.E.D. van den Hul, The First & The Second Cabies.  
 Demonstrations by arrangement in LEEDS, or in your own home without  
 obligation. For further details contact JOHN BLEAKLEY. Phone/Fax  
 LEEDS (0532) 528850 (evening calls welcome)  
 Part Exchange and Second Hand Equipment available.

**TEAC** **MICHI** **spondor** **CASTLE**  
 Perfectly Balanced Sound **Avi** **ORFON**  
**AC** **ACUSTIC ENGINEERS** **BUCKLETON** **SANSUI**  
**VINTAGE LINE**

**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 Overhuls, 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: 0892 65 45 34

## WEST & WALES

**ENGLISH audio BADA**

**CYRUS CENTRE**  
 PINK TRIANGLE-AUDION-SYSTEMDEK-HEYBROOK-  
 MICHI-KEF-REFERENCE-MICROMEGA-NAKAMICHI-  
 CHORD-ARCAM-MUSICAL FIDELITY-ROGERS-NAD-  
 ROTEL-DENON-TANNOY-MARANTZ-MISSION-STAX-  
 DUAL-TDL-ALBARRY-JPW-EXPOSURE-AND OTHERS

Free installation. Credit facilities: Service department  
 Mon - Sat 10 - 6  
 37 Whitecross Road, Hertford. HR4 0DE

Near Norwich  
 Norfolk  
 Tel. (0508) 570829

**Basically Sound of Norfolk** Arcam, Naim, Audiolab,  
 STOCKISTS OF LEADING HI-FI Audio Innovations, Epos,  
 Denon, Nakamichi, Acoustic Energy, Heybrook,  
 Micromega, Rotel, Royd, TDL, The Chord  
 Company, Sound Style etc...

**• SOUNDS AROUND •**  
 NEW & USED HIFI  
 Professional Service Repairs and  
 Accessories

146A Clarendon Park Road, Leicester  
 Telephone : 0533 702442

**V'AUDIO** 36 Druid Hill  
 Tel: 0272 686005 Stoke Bishop

ATC, AVI, Acoustic Energy, Audio Innovations,  
 Alon, Audiomeca, Audio Technica, AMC,  
 Analogue Electronics, Cadence Valve, Chord  
 Amps, Electrocompaniet, Exposure, Goldring,  
 Harman Kardon, Heybrook, Jamo, LFD, Lyra,  
 Ortofon, Perception, Pink Triangle, Ruark,  
 Michell, REL, Sansui, SME (inc. 20A), Sonic  
 Link, Stax, Sugden, Sumiko, Townshend,  
 Triangle, Wadia.

Demos by appointment only. Home trial facilities.  
 Free installations. Servicing facilities.  
 We are not a shop

**Swift**  
 THE hi-fi SPECIALISTS

ST ANN'S PARADE (ON A34) WILMSLOW CHESHIRE  
 ☎ (0625) 526213

● 2 YEAR GUARANTEE ● EASY PARKING  
 ● DEM ROOM ● PART EXCHANGE

Aiwa - Audio Lab - Aura -  
 B & W - Castle - Denon - Cyrus  
 Celestion - JPW - Kenwood  
 Marantz - Mission - NAD -  
 Pioneer - Rotel - Systemdek  
 Tannoy - Technics

**Sussex Surplus**  
 Original Mullard GEC Valves  
 for sale & wanted for cash

Sussex Surplus  
 13 Station Road, Horsham, West Sussex.  
 Tel: 0403 251302

**SOVTEK VALVES**  
 6550WA. 6L6WGC/5881. EL34G.  
 12AX7WB/7025. EF86/6267

Over 1000 different types of valves stocked S.A.E. for list  
 DEPT. HFW  
 Wilson Valves, 28 Banks Ave, Golcar,  
 Huddersfield, West Yorks, HD7 4LZ  
 Tel: 0484 654650/420774 Fax: 0484 655699  
 Mail order only, Visa etc.

## NORTH

**ASTON AUDIO HI-FI SPECIALISTS**

ARCAM • MERIDIAN • MISSION •  
 CYRUS • AUDIOCAB • B & W •  
 NAKAMICHI • AJRA • DENON •  
 QUAD • YAMAHA •  
 KEF • MARANTZ •

ROKSAN • NAD • MF • AIWA •  
 DUAL • CELESTION • ROGERS •  
 AUDIOQUEST • TECHNICS •

WEST STREET • ALDERLEY EDGE • PLUS HOME CINEMA •  
 CHESHIRE • TEL. 0625 582704 •  
 INTEREST FREE CREDIT • DISCOUNT CD & TAPE • BADA •

**HI-FI YOU CAN'T AFFORD**  
 not to listen to

EQUIPMENT BY ABSOLUTE SOUNDS,  
 AUDIO INNOVATIONS, SUGDEN, IMPULSE, MICHELL, ROKSAN,  
 PINK TRIANGLE, ACCUPHASE, THIEL, COUNTERPOINT, SONIC  
 FRONTIERS, TRICHORD RESEARCH ETC.  
 By appointment only

**SERIOUS KIT**  
 061-707 4823

**REPAIRS/DIY**

**AUDIO COUNSEL**  
 HI-FI SPECIALISTS

LINN, NAIM, REGA, ARCAM, ROTEL, ROYD,  
 SHAHINIAN, DYNAVECTOR, EPOS, MARANTZ,  
 NAKAMICHI, MICROMEGA and many more ...  
 "Time spent with staff may prove to be a particularly wise investment"  
 Audiophile

12/14 Shaw Road, Oldham OLI 3LQ  
 Tel. 061 633 2602

*Retailers of Fine Audio Equipment*  
**Gongletam**

► EPOS  
 ► ONIX  
 ► DENON  
 ► LINN  
 ► AUDIO ALCHEMY  
 ► ARCAM  
 ► B&W  
 ► NAKAMICHI  
 ► ROYD  
 ► TARGET  
 ► TRIPOD  
 ► LOUSY COFFEE

► SUPERB DEMO FACILITIES  
 ► FULL INSTALLATION & HOME DEMO SERVICE

OPEN 6 DAYS A WEEK  
 OTHER TIMES BY APPOINTMENT

**0260 297544**

1/1A Duke St Congleton Cheshire CW12 1AP

**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,  
 BRIMAR, RCA, GE, etc  
 130, New London Road, Chelmsford, Essex, CM2 0RG  
 Tel: 0245 265865 Fax: 0245 490064

**Sowter Transformers**  
 EA Sowters Ltd  
 PO Box 36  
 Ipswich IP1 2EL  
 0473 219390/252794

Output and mains transformers for GEC KT88 circuits.  
 Can also make any other transformer to order. Send  
 SA for lists and data.

**Lockwood Audio**  
 THE AUTHORIZED TANNON SPECIALIST

SPARES AND REPAIRS

DEALERS IN VINTAGE AND USED EQUIPMENT AND RECORDS

Callers welcome by appointment  
 Imperial Studios Maxwell Road  
 Borehamwood Herts. WD6 1WE  
 Phone: +44(0)181 - 207 4472  
 Fax: +44(0)181 - 207 5283

# Specialist Hi-Fi Dealers

## REPAIRS/DIY

### GT 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

## 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. 0305 848 725

### THE MUSIC Station

MISSION • DENON • ROTEL • PIONEER • SONY • KEF • TEAC •  
WHARFEDALE • CELESTON • JAMO • MUSICAL FIDELITY •  
• MARANTZ •

LISTENING FACILITIES AVAILABLE  
FOR ALL THE BEST IN HI-FI

Contact  
THE MUSIC STATION  
49 Church Street, Inverness. Tel: (0463) 225523

## SERVICES & CONSULTANTS

### L.G.S AUDIO SERVICES

Quality Audio Equipment and Hi-Fi Systems  
Repaired and Serviced at Reasonable Cost  
2nd Floor, Forest Mills, 133 Alfreton Road,  
Radford, Nottingham NG7 3JL

Tel:- 0602 244443

**EXCITING!** New Service starting for Buying & Selling your Quality used Hi-Fi. INTERESTED? Please ring now - 0782 534361 - for details. **NO TRADERS**

## T.V.M. Audio Visual

The Antenna Specialists

52 St Andrews Street  
Northampton NN1 2HY  
Tel:- (0604) 37769  
Fax:- (0604) 601845

High quality FM Radio and T.V. Aerials. Mail Order  
Please phone for more details

## REVOX SERVICE

A77, B77 PR99

For fully guaranteed professional service and repairs, call RamTek.

Tel: (081) 207 6159. Fax: (081) 953 1118  
Suite 33, Kinetic Centre, Theobald Street,  
Borehamwood, Herts WD6 4SE

## STAFFS & DERBY

### HOW TO SAVE £100 ON YOUR 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 £100 on recommended Hi-fi Systems.

## Active Audio

12 Osmaston Rd. 29 Market Street, 95 Stafford Street,  
The Spot, Tamworth Hanley.  
Derby Staffs. Stoke-on-Trent.  
Tel: 0332 340385 Tel: (01827) 53355 Tel: 0782 214994

## 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 Castellain Road,  
London W9 1EX

## SCOTLAND

### ANCURUM ELECTRONICS

## YOUR LOCAL HI-FI SHOP

PIONEER, TECHNICS, PROLOGIC AMPS + LASER  
DISC FOR HOME ENTERTAINMENT  
TEL: (0382) 480030  
39 GRAY ST., BROUGHTY FERRY DUNDEE  
Dedicated Dolby, Pro-logic listening rooms

Silver Sounds and Sonic Link cables tailor-made to your requirements.

Check out the latest impedance matched Goertz cable from Townsend Audio. Cogan-Hall Cables.

Contact Mike Gilmour for professional advice and friendly service.



Lismore, Avoch, Ross-shire IV9 8RP  
TEL/FAX 0381 620655

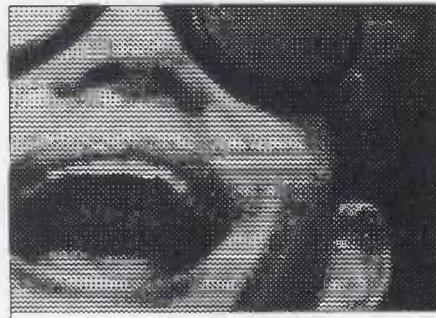
## OVERSEAS

### Vitamin - Q Caps

We have a limited supply of metal case, paper/oil caps, Sprague, Westcap, Gudeman, J.Fast etc. Send for a list

### Kurluff Enterprises

4331 Maxson Rd., El Monte, CA 91732 USA  
8818/444-7079 \* Fax 818/444-6863



## It could happen to you.

You're already obsessed with audio. Are you ready for a little experimentation? Try a hands-on approach. Start off simple - put together your own cables, apply dampening material to a chassis. And then it happens - the DIY bug bites.

Order The Parts Connection 1995 Catalog & Resource Guide and we'll be there to support your first steps towards DIY audio. It's an entertaining read loaded with invaluable resources, how-to information, premium audiophile-grade parts, upgrade and complete kits to get you on your way.

Simply send £7 and mailing information to receive the 1995 Catalog & Resource Guide\* as well as a Discount Coupon worth \$10 off a purchase over \$100 or \$25 off a purchase over \$250.\* Do it today - then do it yourself.

\*or \$10 US, or credit card information available in March  
\*discount coupon values are in US Dollars



### THE PARTS CONNECTION

A DIVISION OF SONIC FRONTIERS INC

2790 Brighton Road, Oakville  
Ontario, Canada L6H 5T4

Toll Free Order Line  
1-800-769-0747  
(U.S. & Canada only)

Tel (905) 829-5858  
Fax (905) 829-5388

# Meet-Your-Maker

A reference guide to Britain's Manufacturers and Distributors.

**ACOUSTIC ENERGY**, 3a Alexandra Road, London W13 ONP. Tel: 081 840 6305. Acoustic Energy manufacture the award winning Reference Series AE1 and AE2 loudspeakers and the new Aegis Series Model 1, all of which feature the unique AE metal cone drive units. The AE distribution division offers superb high end products from WADIA, GRYPHON, ENSEMBLE and TARA LABS.

**ACOUSTIC SOLUTIONS** Present an innovative range of interconnect for the audiophile. We specialise in bespoke manufacture to your exact requirements. Phone us for a chat on 0782 595330. ASL 46a Market Street, Longton, Staffs ST3 1BS

**ALCHEMIST PRODUCTS**, 4 Rosebury Mews, London N10 2LG. Call us for a list of our dealers in many areas including:- London, Kent, Hampshire, Wilts, Milton Keynes and N. Ireland and for product information on the Kraken, Freya, Bragi, Odin, Genesals and more. Tel: 081 883 3008

**ALEMA UK LTD.**, 25 Montifore Road, Hove, BN3 1RD. Tel: 0273 202637. Audion \* Edison \* Andersson \* (Trade enquiries welcome for our newly extended range)

**APPOLLO**, The UK based designers and manufacturers of high quality speaker stands and equipment racks have now added to their comprehensive range a modular system ideal for housing audio visual products and CD storage. Please send for our free brochure to Zenith Crown Ltd. Tipton Rd, Dudley, West Midlands, DY14 Tel. 021 520 5070. Fax. 021 522 2055. - All export trade enquiries welcome.

**ARCAM**, Pembroke Ave, Denny Industrial Centre, Waterbeach, Cambridge, CB5 9PB. Tel: 0223 440964 or Fax: 0223 863384. Manufacturers of the Delta 290 Amplifier and the Delta 280 Digital FM Tuner. The two together produce a sound that has been described as "subtle and intriguing" and that provide "real clout" - discover this for yourself. For information on not only these products but also the Arcam CD Players, Speakers, Cassette Decks etc., "Phone or write in to request a brochure - The pleasure is all yours!"

**ATACAMA AUDIO SUPPORTS** from Sambell Engineering Ltd. We are the sole manufacturers of the 'SE' range of speaker stands, consisting of an 8", 12", 16", 20" and the award winning 24" high stand. Also three specialist models for the Tannoy 'sixes' Loudspeakers.

**AUDIONOTE CO**, Unit 1, Block C, Hove Business Ctr. Fonthill Road, Hove BN3 6HA. Tel: 0273 220511. Audionote supply a range of very high quality and very expensive audiophile components including valve output transformers.

**AUDIO SYNTHESIS**, 99 Lapwing Lane, Manchester, M20 0UT. Tel: 061 434 0126. Audiophile design, development and distribution. Please contact us for details of: PASSION the passive controller everyone's talking about. SILVERBLUE pure silver interconnect cable and the ultra analog based dac - DSM.

**BANDRIDGE LTD** are the premier suppliers of quality audio and video leads, connectors and speaker cables in the UK. In addition to probably the widest range available, including PROFI GOLD, SUPER GOLD and SUPER +, offering a level of quality that meets the needs of the most exacting specification. Bandridge of London Ltd. Premier House, Deer Park Road, Wimbledon SW19 0B1 543 3633.

**CABLE TALK** PO Box 413, Woking, Surrey, GU22 8YZ. Telephone 0483 750667. Fax 0344 360866. Designers and manufacturers of British made high quality, value for money, interconnect and speaker cables. Phone or fax for a free full colour brochure on our What Hi-Fi? 5 star rated products.

**CAMPAIGN AUDIO DESIGN**, Llandudno Road, Cardiff CF3 8PG. Tel: 0222 779 401. Supplies / manufacturers mailorder, high purity silver interconnects, loudspeaker cables, internal wires and bespoke mains cables. Generous two week trial period.

**CANFORD AUDIO PLC**, Crowther Road, Washington, Tyne & Wear, NE38 0BW. UK Sales 091 415 0205. Admin 091 417 0057. Fax 091 416 0392. UK's leading manufacturer and distributor of professional audio equipment 9000+ products are detailed in a bi-annual catalogue which is available free of charge to professional users. Next day deliveries when possible.

**CHORD ELECTRONICS**, 3 Bower Mount Road, Maidstone, Kent. Tel: 0622 764874 Audition the Chord SPM 1200 at any of the following branches: Doug Brady HiFi - Liverpool/Leeds/London/Cheshire, Audio Reflections - Leeds, Music Matters - West Midlands and many others. Please call us for details.

**CREAK AUDIO LTD** 2 Bellevue Road, Frien Barnet, London N11 3ES. Tel: 081 361 4133, Fax: 081 361 4136. Manufacturers of the 4240 Integrated Amp, P42 and A42 Pre/Power Amps, CD42 CD Player. Please

write for further details.

The Exultant Power Amp fitted to Quad II Hardware. **DBS AUDIO**, PO Box 91, Bury St. Edmunds, Suffolk, IP3 0NF. Tel: 0284 828926. Fax: 0284 828026. The DBS6 loudspeaker kit, as designed by Dave Berriman and featured in Hi-Fi News Feb/Mar 92, is still available only from DBS Audio. To find out what these comprise, cost and how to order plus any other information on DBS products please telephone, fax or write in to the above address and numbers.

**D H M DESIGN**, - BUNDEE CD REPAIR PROTECTION SYSTEM- Tried and tested on Tomorrow's World. Repairs and protects over 50 CD's, even those scrubbed with steel wool. Effective for all laser disc formats including CD ROM, MiniDisc and CDi. RRP £14.95. Why buy a new one when you can clean, repair and protect fifty? Contact David Mather for details of your nearest stockist or distributor. Export enquiries welcome. DHM Design Ltd, Studio 6, Bentinck Court, Bentinck Road, West Drayton, Middlesex. UB7 7RG Tel: 0895 449559 Fax: 0895 420540

**ECA DISTRIBUTION**: For the "naturally neutral" chain. Nothing added; nothing taken away. The VISTA line-amp; The LECTERN S power-amp and the SERV0 A.2 speakers. Resulting from their own Research and Development, the ECA Design Team provides a "super-symmetry" circuit with the barest minimum of wiring in the amps vacuum impregnated air-coils in the custom-made midrange unit for the speakers. P.O.Box 3023 London NW2 7RW. Tel: 081 830 5128

**IAN EDWARDS**, The Old Chapel, 282 Skipton Road, Harrogate, Yorks. Tel: 0423 500442. Somebody Somewhere must make better storage units for CDs, Music, LPs, HiFi, Books, etc. than Ian Edwards. BUT until he appears, why not send for the brochure showing a selection of HAND MADE units. To do this please send 3 x 2nd class stamps.

**E J JORDAN DESIGNS**, The Oak, Manor Bler, nr Tenby, S Pembrokeshire, SA70 8OR. Tel: 0834 871 209. or Fax: 0834 871 770. Curvilinear metal cones loud speakers were first developed by Ted Jordan in 1963. E.J. Jordan Designs are now World leaders in foil cone technology. First and foremost.

**ELECTROMAIL**, PO Box 33, Corby, Northants, NN17 9EL. Tel: 0536 204 555. The branch of the well known R.S. Components trade mail-order business that deals with the public. They have a huge range of components - and catalogues to match.

**EMF**, 2a Bellevue Road, Frien, Barnet, N11 3ES. Tel: 081 361 6734. Manufacturer of Sequel 50w integrated amplifier and the Crystal D2A converter. Amplifier and DAC. Please write in for details.

**FALCON ACOUSTICS LTD.**, Tabor House, Norwlch Road, Mulbarton, Norfolk, NR14 8JT. Tel: (0508) 78272. U.K. distributors of FOCAL drive units and SOLEN (chateauroux) polypropylene capacitors and the largest inductor manufacturer in the U.K. Comprehensive range of DIY Speaker Parts and Kits, Sub-Bass and Electronic Filters.

'Everything but the wood'

**FARADAY SOUND**, 248 Hall Road, Norwich, NR1 2PW. Tel: 0603 762967. Loudspeakers in CONCRETE: the ultimate enclosure. Now you can build your own low density concrete cabinet enclosure Faraday FS1, Siren, FS5, FS10 or a design of your own choice. Stunning sound and reviews. Simple DIY skills only. Full instruction guide including cabinet construction for only £3.95. Includes reviews, photos etc. and at least £5 discount off any further products purchased from us e.g. ready made cabinets. Also £25-£150 off any complete loudspeakers!!!

**FOUNDATION AUDIO**, 53 Beccroft Way, Dunstable, Beds. LU6 1EE. Tel: 0582 477550 or Fax: 0582 604001. We have long been acknowledged as the market leader in sonically superior stands and major in 'specials'. Send for our brochure and details of your nearest stockists.

**FULLERS AUDIO**, 20 Tunbridge Road, Southend on Sea, Essex SS2 6LT. Tel: 0702 612116. Fuller's audio produce a range of innovative products. Amplification - a10 a single ended class A semiconductor power amplifier - £1200, b70 a mosfet power amplifier of high standard - £599, pre and pre + matching pre-amplifiers - £599/£649, genii phono stage for mm and mc cartridges £299. Loudspeakers - Pharaoh system, upgradable from 1 pair of cabinets to 3 pairs for truly extended bass, passive/active options £649-£2499, Sphinx a 3 way floor standing unit £849, Sultan H.E., 98dB sensitivity £439, matching Sub Woofer £559, Sultan, 91.5dB sensitivity £309.

**F & S TRADING LTD**, 31 Brooks Road, Sutton Coldfield, West Midlands B72 1HP Tel: 021 321 3357.

"Single-ended amplifiers"

**J E SUGDEN & CO LTD.**, Valley Works, Station Lane, Heckmondwike, West Yorkshire, WF16 0NF. Tel: 0924 404088. Manufacturers of hand crafted audio products. "A world of Music". Call or write in for information on our SDA-1 Digital to Analogue Converter, SDT-1 CD Player, A21a Class "A" Amplifier, A25B Intergrated Amplifier, A48 Intergrated Amplifier, Au51c Pre Amplifier, Au51p Power Amplifier and more.

**JORDAN WATTS ACOUSTICS LTD.** Cyntra Place, 201 Mare Street, Hackney, London E8 3QE. Tel: 081 985 1646. Jordan Watts Acoustics for Sight AND Sound. **KESWICK AUDIO RESEARCH**, 54 Coach Road, Outwood, Wakefield, W Yorks, WF1 3EX. Tel/Fax 0924 870606. "I'd say that the Figaro is the best miniature speaker I have heard" Audiophile March 1993. Write in or call for details on our full product range and your nearest stockist.

**KRONOS DISTRIBUTION**, 35 Farrough Road, Dungannon, N. Ireland. BT714 DU. Tel: 0868 748632. Fax: 0868 448281. Kronos is the UK distributor of some of the finest Hi Fi products in Europe. These include Audiomeca digital products and turntables; Lieder silver speaker and interconnect cables; Pro-Ject turn-tables and amplifiers; Triangle speakers and electronics; and YBA amplifiers. We also handle Frameworks equipment tables; Arion valve amplifiers and mains filters and Essex Audio digital products from the UK. Please telephone or write for product details and dealer lists.

**LANGREX SUPPLIES LTD**, 1, Mayo Road, Croyden, Surrey. CR0 2DP. Tel: 081 684 1166. Fax: 081 684 3056. We are one of the largest stockists and distributors of electronic valves, tubes and semiconductors in the UK. Over 6,000 types in stock. We specialise in obsolete types including original UK and USA made audio valves. Telephone or fax for an immediate quotation.

**LECSON SYSTEMS LTD.**, Unit 19, Nuffield Rd, Ind. Est., St. Ives, Huntingdon, Cambs, PE17 4LD. Tel: 0480 498211. Call for info on our range of integrated and four channel integrated bi-amplifiers. Stereoplus, Quattra and Quattraplus analogue and digital interconnects and loudspeaker cables. As a compliment to the LFD range of accessories GOLD plated mains 13A plugs and sockets now available.

**LOCKWOOD AUDIO**, Imperial Studios, Maxwell Road, Borehamwood, Herts, WD6 1WE. Tel: 081 207 4472/ **RORICRAFT AUDIO**, 4 Big Lane, Goose Green, Lambour, Berks. RG16 7SQ. Tel: 0488 72267.

Specialist restoration of 301's and 401's using genuine spares and re-manufactured parts to original pristine standards in our newly built work shops designed primarily for these purposes.

**LYNWOOD ELECTRONICS**, Coley Lane Farm, Wentworth, Rotherham, S62 7SQ. Tel: 0709 873667. Lynwood Electronics is famous for manufacturing the only range of audio mains cleaners that really work. A complete range is now available to suit every system and every pocket.

**MAY AUDIO MARKETING U.K. LTD.** 83 Main Street, Burley in Wharfedale, North Yorkshire. LS21 7BU. Tel: 0943 864930. Distributors of High Quality audio products from Duson Electronics, Totem Loudspeakers, Jecklin Float Headphones and quality recordings from Proprius, Prophone, Opus, MAP and Swadish Society. IF ITS MUSIC YOU LOVE, TELEPHONE OR WRITE FOR LITERATURE.

**MICHELL**, 2 Theobald Street, Boreham Wood, Herts, WD6 4SE. For full information on our full range of excellent products including the Gyrodec, Alecto, Iso, Argo and others please telephone us on 081 953 0771. Michell - Symbol of Precision

**NORLOSTONE**, Granite Audio Stands. The ultimate solution to problems of resonance and tonal accuracy. For 'bespoke' designs consult NORLOSTONE, West Dean Road, West Tytherley, Salisbury. SP5 1QG. Tel: 0980 862253

**QUANTUM AUDIO LTD.** PO Box 26, 1 Oliphant Drive, Kilmarnock KA3 7JA. Tel: 0563 71122 Fax 0563 71133. Quantum's craftsmen produce the £899.99 MINSTREL 30 Watt, Ultra Linear, zero feedback correction, integrated, line level, valve amplifier. Don't buy any old fashioned valve amplifier before hearing the unique improvements modern technology provides to valve sounds. AAn audition will immediately convince the listener of the Minstrel's superiority.

**SELECT SYSTEMS (PERFECT PITCH MUSIC)**, Hanworth Trading Estate, Hampton Road West, Feltham, Middlesex, TW13 6DH. Tel: 081 893 8662. Fax: 081 893 4318. We manufacture the Franconstein CD enhancement system, The Dacula DAC and Perfect Digital and Analogue interconnects. Perfect Pitch also

provide freelance design, manufacture, prototyping and test, also valve and solidstate specials. Trade enquiries welcome.

**REL ACOUSTICS**, Unit 2, New Street, Bridgend Ind Est. Bridgend, Mid Glamorgan, CF31 3UD. UK. Tel: 0656 768 777, international +44 656 768 777. Fax: 0656 766 093. international. +44 656 766 093. The UK's only specialist sub-bass speaker manufacturer. "The only one that works". Get your dealer to give you a home demo and find out what the fuss is all about.

**REL. HARMAN AUDIO**, Unit 2, Borehamwood Ind. Park, Rowley Lane, Borehamwood, Herts. WD6 5PZ. Tel: 081 207 5050, Fax 081 207 4572. Sub Base Systems - Rel Strata, Stadium, Stentor, Studio

**RICHARD ALLAN AUDIO**, Bradford Road, Gomersal, Cleckheaton, W Yorks. BD19 4AZ. Tel: 0274 872442. Fax 0274 869935. Manufacturers of very high quality loudspeaker enclosures and drive units. Examples being the £270 rare series 2 as supplied to the BBC and the 5" reviewed Minette 2 at £120.

**SAMBELL ENGINEERING LTD.** Winstone Avenue, Croft, Leicestershire, LE9 6GQ. Tel: 0455 283251.

**SEQUENCE DESIGN LTD.** 83 Main Street, Burley-in-Wharfedale, Yorkshire. LS29 7BU. Tel: 071 495 0775. Fax 071 495 0281. Slim Loudspeakers which stand close to a wall or hang like pictures. "Likely to cause a glint in the audiophile's eye" (Audiophile); "the answer to a prayer....a bargain in the extreme" (HiFi News). Available with light or dark grilles and various solid wood finishes. From £199.95 a pair. Call or write in for an information kit and reviews re-prints.

**SHEARNE AUDIO**, PO Box 22, Stevenage, Herts, SG2 8HF. Tel: 0438740953. Following the success of John Shearn's Phase 1 pre power combination, (reviewed in HFW), is the phase 2 reviewed earlier in HFW and listed as a world favourite. Having many of the design features of the phase 1 R.R.P. £549, 50 wpc and same finish as Phase 1 pre-power. Also, option of phono stage for phase 2 mm £65 mc £75

**SLATE AUDIO**, makers of 'THE FINEST SPEAKER SUPPORTS IN THE WORLD' have never had a bad review, our reputation is legendary. Contact us now for details on our CUSTOM STANDS, as well as our solid marble GARRARD 301/401 PLINTH SYSTEM (Hi-Fi World Dec 93) THE GLASSMATT platter mat and the very special SEMI GARRARD 301 or 401 CELEBRATION ARMS. 47 Gemini Close, Leighton Buzzard, Bedfordshire, LU7 8UD. Tel: 0525 384174.

**THE SPEAKER COMPANY**, Unit 9, Waterside Mill, Waterside, Macclesfield, Cheshire, SK11 7HG. Tel: 0625 500507. The Speaker Company are a new company offering a wide range of loud speaker units from Audax, Celestion, KEF, Morel SEAS and many more. Also a wide range of speaker accessories the keen builders.

**THE TDI GROUP**, Unit 1 Summerlea Court, Alton Road, Herriard, BASINGTOKE, Hampshire. RG25 2PN. Tel: 0256 381 514. Fax: 0256 381 692. Electronic Components distributors specialising in Mains Power Connectors, Jack Plugs and Sockets, 4mm Connectors, Din and Mini Din Connectors, Phono Connectors, DC Connectors, XLR Connectors, Rotary Potentiometers, 0 Type and IDC Type Connectors, Co Axial and BNC Connectors, Switches, LEDs, Diodes, Bridges and Rectifiers, Fuses and Thermal Tips. - Have you got one of our new 1994 General Product Catalogues?

**TARGET AUDIO PRODUCTS PLC**, Britannia House, Leagrave Road, Luton, LU3 1RJ. The Audio equipment, rack and speaker stand specialist. For information on our products please telephone or write.

**TRICHORD RESEARCH LIMITED** Following on from the highly acclaimed CD clock oscillator modifications the Pulsar Series one digital to analogue converter. This unique design is part multibit and part bitstream to give absolute linearity over an extremely wide dynamic range. Switchable between 18 or 20 bit resolution this converter will become the standard for CD replay. For details telephone (0684)573524

**WOLLATON AUDIO**, 134 Parkside, Wollaton, Notts, NG8 2NP. Tel/Fax: 0602 284147. Imported high end at lower prices. XLO interconnects and loudspeaker cables - "The Best in the World". Clements loudspeaking ribbon and transmission line technology to reproduce the finest sounds. Monarchy digital - trant, DAC, DAC+ pre and DIP anti jitter module. Matches the best at a fraction of the price. 'NEW' Audio Valve aers - Simply gorgeous. Call us for details.

**WILMSLOW AUDIO LTD.** Wellington Close, Parkgate Trading Est. Knutsford, Cheshire, WA16 8DX. Tel: 0565 650605. Extensive range of drive units and over 30 different designs of self-assembly kits. Everything required for the loudspeaker builder and four dem rooms to listen to the kits in built-up form.

# KITS HAVE NEVER BEEN SO GOOD!

## K588 IPSE KIT

£650

An audiophile parallel-single-ended valve amplifier at an affordable price. K588 IPSE uses the reliable Russian 588I output valve, a military version of the American 6L6 designed for low distortion audio work, in parallel-single-ended mode for outstanding detail and atmosphere. It produces 17watts, enough to drive most loudspeakers, making high-end sound quality and design available to everyone.

**NEW!**



The World Audio Design range of kits are engineered like no others. Features of World Audio Design valve amplifiers include:

- Pure Class A working
- 4/8/16 $\Omega$  taps for optimum speaker matching
- Custom designed transformers for unrivalled performance.
- Audiophile components
- Choke regulated power supplies
- Can be easily monoblocked for double power
- Welded steel chassis
- Hard wearing 'baked on' powder coat finish



## K588I KIT

£395

A superb, Class A, 20watt stereo power amplifier that uses the Russian 588I output valve, a military version of the American 6L6, designed for low distortion audio work.

Designed for long life, low running costs and excellent sound quality, K588I is sensitive enough to be used with a simple passive pre-amp. or our own line-drive pre-amp, and it matches modern loudspeakers well.



## 300B VALVE AMP KIT

£850

This is a specialised amplifier based on the highly linear 300B triode valve. Our 300B runs in Class A, giving one of the most sweet, open and neutral sounds possible today. Matched with good loudspeakers, it is unsurpassed. Can be monoblocked for 60watts.

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

## 4W SINGLE-ENDED VALVE AMP KIT £385

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.



World Audio  
*design*

**VALVE LINE LEVEL PRE-AMPLIFIER £295**

The line level preamplifier uses one of the simplest and most elegant circuits to give a sound with remarkable clarity and detail. 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.



**THREE WAY CARBON-FIBRE DRIVER LOUDSPEAKER**

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.

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.

- Drive Unit & Crossover kit etc £350
- Drive Unit Pack £230
- Built £1500

**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.

- 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**

|                    |               |                  |            |
|--------------------|---------------|------------------|------------|
|                    | 4 inch mid    | 6.5inch bass/mid | 8inch bass |
| HDA .....          | HMI30Z0 ..... | HMI70Z0 .....    | HM210Z0    |
| CARBON FIBRE ..... | HMI30C0 ..... | HMI70C0 .....    | HM210C0    |

**NEW 3inch HDA mid, HMI00Z0**

**FABRIC DOME TWEETERS**

- TW025M0 (25mm 92dB suitable for 2-way systems)
- TW025M1 (25mm 92dB suitable for 3-way systems)
- TW034X0 (34mm 93dB a large dome with powerful sound)

**CLASS A 36W SOLID STATE MONOBLOCKS**

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.

- Circuit board + output transistors £129.40

**DEMONSTRATIONS!!**

World Audio Design Products are on demonstration at:

|   |   |  |
|---|---|--|
| Hi-Fi Confidential<br>34 Buckingham<br>Palace Rd,<br>Victoria, London.<br>Tel: Luigi on<br>071-233-0774 | Horsham Hi-Fi<br>28 Queensway,<br>Horsham,<br>W. Sussex.<br>Tel: Jeff on<br>0403-251587 | Hi Fi Corner<br>1 Haddington Place<br>Edinburgh<br>EH7 4AE<br>Tel: Lennie on<br>031 556 7901 |
|---|---|--|

**World Audio**  
*design*

See page 83 for order form...

# Classica

*Peter Herring*

**Bach as it should be played;  
Mexican music as it surely can  
only be played; scintillating  
Strauss; - eloquent Elgar; but  
Giulini's 'Pastoral'? It's  
beautiful, but is it the bucolic  
Beethoven?**



**LUDWIG VAN BEETHOVEN  
Symphony No6 in F Major  
Op68 'Pastoral'/Overture  
Coriolan Op62/Egmont  
Overture Op84**

La Scala Philharmonic Orchestra;  
conductor, Carlo Maria Giulini  
SONY CLASSICAL SK53974 (DDD/65.28)

● Over time, a work such as the 'Pastoral' Symphony can become so familiar that it takes a quite exceptional performance to remind the jaded ear of the qualities of the music. For me, that 'exceptional performance' came with Roger Norrington's revelatory period instrument recording for EMI Reflexe, issued back in 1988. It has been rather strange, therefore, hearing it played in what might variously be described as an 'orthodox' or 'old-fashioned' way. The first thing to say about Giulini's interpretation is that it is beautifully played by the Milan orchestra and if, as the recording data suggests, was recorded live, then the achievement is all the more notable. The playing, from strings and woodwinds especially, is wonderfully poised and refined, the phrasing seductively shaped. The performance emphasises the lyricism of Beethoven's bucolic musings and this is nowhere better heard than in the gently ambling slow movement, the 'Scene by the Brook'. Here, Giulini is almost two minutes slower than Norrington but the momentum is maintained and the playing is utterly beguiling. The first movement, too, is generally successful but the third movement, the 'Merry gathering of country folk' as Beethoven described it, is altogether too restrained an affair. It should surely be far more 'unbuttoned' than this, wonderfully played as it is; too often, Giulini slips from the poetic to the ponderous.

Given the pictorial nature of this work - it was the first 'programme'

symphony - one would assume that Beethoven would have wanted the musical imagery contained within the fourth movement, the storm, to be conveyed to maximum effect, which Norrington does. Giulini appears to treat this as a purely symphonic movement, largely oblivious to its descriptive content, which - to be fair - does fit in with his concept of the whole work. Giulini brings a radiant, celebratory air to the final movement and, as a result - at 10'55" - takes over two minutes more than Norrington's joyful romp.

For many, Giulini's interpretation will appeal, even standing as it does at one extreme of the tempo spectrum. Norrington is at the other. I'm not suggesting he has it absolutely right, but overall I can but feel it is closer to the spirit of Beethoven's rustic ruminations. In recent years, the octogenarian Giulini has preferred increasingly slow tempos. In much music - Bruckner, for example - it can have a luminous effect; elsewhere, the result is merely leaden-footed, and this is a case in point. The two overtures here largely mirror the performance of the symphony: fine in the grander moments, but missing the urgency and tension which also pervades both pieces.

**EDWARD ELGAR  
Variations on an original  
theme ('Enigma') Op36/  
Concert Overture: In the  
South (Alassio)/Pomp and  
Circumstance March No4 in G  
Major**

Royal Philharmonic Orchestra;  
conductor, Yehudi Menuhin  
TRING/ROYAL PHILHARMONIC  
COLLECTION TRP018 (DDD/59.19)

● These are fine Elgar performances from Menuhin and the RPO, but what I

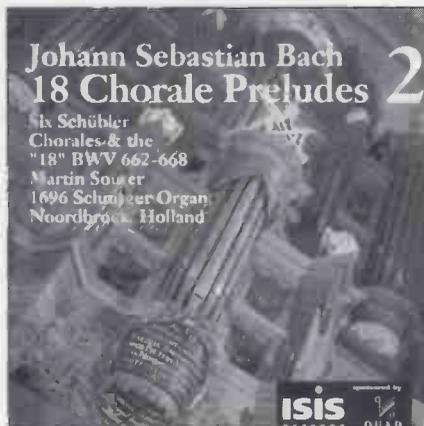
Continue on page 86 ...



The conductor, Otto Klemperer, was once asked why, in six decades as a musician, he had rarely extended his repertoire beyond the giants of the Austro-German school - Mozart, Beethoven, Brahms, Bruckner, Wagner. He replied that he saw no need to, adding that you could devote a lifetime to the Beethoven symphonies alone. I daresay instrumentalists would say the same about the works of Johann Sebastian Bach, especially organists. Bach's organ works are the cornerstone of their repertoire and understanding them and interpreting them could easily become a lifetime's quest. The same could be said of appreciating the works as a listener. You begin with the sadly hackneyed, Toccata and Fugue in D minor (which, ironically, may not have been composed by Bach in the first place), progress to the other popular pieces and then slowly discover the myriad, and often more rewarding riches of this vast legacy.

And, while undertaking this journey, you encounter the varied styles of playing Bach: the scholarly, the flamboyant, the romantic, the spartan. I was introduced to Bach's organ music by the recordings of the Swiss organist, Lionel Rogg, and continued my explorations with Helmut Walcha (monumental, if indisputably spirtual), Charles Benbow (excitingly fresh) and - more recently - Peter Hurford, Tom Koopman, Piet Kee, Marie-Claire Alain

and Kevin Bowyer. To this distinguished list - and at, or close to the top - must now be added Martin Souter whose latest CD, concluding his recording of the 'Leipzig Chorales', confirms his status as one of the most distinguished and illuminating of contemporary Bach interpreters.



**JOHANN SEBASTIAN BACH**  
**The "Leipzig" Chorales Nos**  
**II-18: Chorale Preludes**  
**BWV662-668/Six Schübler**  
**Chorales BWV645-**  
**650/Chorale Prelude Liebster**  
**Jesu wir sind hier/Prelude**  
**and Fugue in G Major**  
**BWV541**

Martin Souter, organ  
 ISIS RECORDS CD008 (DDD/75.31)

● This is the companion volume to Isis CD007, reviewed in the November issue, and so completes Martin Souter's survey of the 'Leipzig' chorale preludes, the so-called '18'. As with the first volume, the organ used is a very special instrument indeed: the 1696 Schnitger organ in the Hervormde Kerk in the village of Noordbroek, Holland. What distinguishes this instrument - built only forty-six years after Bach's death - is that, where most organs from this period have undergone radical rebuilding in the ensuing centuries, the sound of the Noordbroek organ remains more-or-less the same as it was three hundred years ago. It was modified in 1768, when its lower register was extended and a vox humana added, and then sympathetically restored by Herman Freytag in 1809. Freytag gave it a new, enlarged case, made up a full complement of bass pipes and fitted the stops still used today. The organ has remained untouched since that date, making it one of the very last unrestored instruments in Europe. How did it escape the 'modernisers'? Its remoteness helped (Noordbroek lies in the north-eastern corner of The Netherlands) and the paucity of church funds simply did not permit a full-scale restoration to be undertaken. As a result, the venerable Schnitger may creak and wheeze a little, but what a sound it produces: warmly expressive,



suspect will attract many to this recording will be its impressively wide ranging and richly detailed sound, engineered - as with the Dvorak issue reviewed last month - using 20-bit recording, editing and mastering and employing Sony's Super Bit Mapping technology. Immediately evident is a fullness to the string sound and a striking clarity to the woodwind and brass writing, all contained within a broad and spacious sound picture and balanced in the most convincing way. The range of the recording brings the kind of thunderous impact to the tympani in

Enigma seldom encountered in other recordings of this work yet without, I should add, any sense of exaggeration. On the minus side, the brass in the tuttis has a hard, even fierce edge.

These works, of course, cry out for a brilliant orchestral sound: this is Elgar at his most 'public', despite the mysterious secret supposedly contained within the Enigma Variations. It was this work which, in 1899, brought Elgar the recognition he deserved, just at a time when he was despairing of ever making his mark as a composer. The famous theme was simply something he picked out while improvising at the piano; it was his wife, Caroline, who latched on to its plaintive delicacy and asked him to repeat the melody. Rightly, it is the 'C.A.E.' variation (Caroline Alice Elgar) which opens this colourful and affectionate sequence of musical portraits of the composer's friends, acquaintances and - the argument goes - lost loves.

Menuhin's performance is affectionate yet thankfully truthful and unmannered yet misses some of the personality which, for example, Barbirolli brought to the work in what, I accept, is a wholly idiomatic but nonetheless unforgettable

recording on EMI. Menuhin is more characterful in that splendid concert overture In the South, Elgar's celebration of things Italian, including the grandeur of its Roman past. Composed some three years after the Enigma Variations, Elgar displays a mastery of orchestral scoring and colour to rival that of Richard Strauss (who was a great admirer of his English contemporary). In the South was also something of a proving ground for the compositional skills which Elgar so earnestly wished to bring to fulfillment in a large-scale symphony. It was to be another three years, however, before that aim was fulfilled.

This RPO release from Tring concludes with that familiar Elgar 'lollipop' the fourth of the Pomp and Circumstance Marches (am I alone in thinking this the finest, most sublimely regal of the five?). It seems an odd piece of programming because the time available on the CD would have permitted the recording of a complete work, the Cockaigne overture, for example. Or is it a matter of marketing, and the general 'recognition' of the words 'Pomp and Circumstance'? Whatever, it's a stirring performance and a stunning recording.

intimate and with a subtle palette of colours rarely encountered with other instruments. It is the ideal instrument for playing Bach (and, one would imagine, Buxtehude and Sweelinck, for that matter), especially as the acoustic of the Hervormde Kerk is entirely appropriate for the instrument: atmospheric and spacious but not so reverberant as to blur detail.

The eighteen 'Leipzig Chorales' present something of a mystery in Bach's organ literature since they do not fit any obvious liturgical function. All are revised versions of chorales composed during Bach's Weimar period (1708-17), with the changes varying from the structural to minor changes in notation or ornamentation. The manuscript of the first fifteen chorales is in Bach's own hand, beautifully and meticulously written out. The remaining three, along with a version of the Canonic Variations, are partly in the handwriting of one of Bach's pupils (the composer's eyesight was rapidly worsening during this period). Given the absence of any specific liturgical purpose, was Bach here gathering together some of the works for which he had a special affection for one final revision and presentation? We shall probably never know, but the suggestion is plausible given the consistent inspiration and beauty of these chorales. From the gentle, almost ethereal opening of *Allein Gott in der Hoh sei Ehr*, Martin Souter gives a most

persuasive account of these musical jewels, the Schnitger organ responding with the most subtle and luminous of tone colours.

As well as completing the 'Leipzig Chorales', Martin Souter also offers superb performances of the well-known Schubler Chorales which, unlike the bulk of his music, were actually published during the composer's lifetime, in 1741. The first five chorales are arrangements of canata movements and the sixth probably has a similar origin, except that the original has been lost. Again, the Schnitger organ proves the ideal instrument since the Schubler Chorales demand an organ with two manuals and two pedals so that the bass line, the chorale melody above it and any other voices employed can be clearly differentiated. The fluency of Martin Souter's playing here, its suppleness and flexibility and response to colour and rhythm, is immensely satisfying.

This generous programme concludes with a little known gem from among Bach's organ works - the charming *Liebster Jesu wir sind hier* - and the magnificent G Major Prelude and fugue BWV541, which the Schnitger organ takes in its stride. As well as Martin Souter, credit for this outstanding Bach issue (and its companion disc) must go to the production team of Edward and Geoffrey Horn who withstood below freezing temperatures and, no doubt, the cold wind that always seems to blow in from the sea across northern Holland, and to the hi-fi manufacturers Quad who have been quietly but consistently sponsoring these recordings on the Isis label. I don't believe they'll be disappointed in Huntingdon when they listen to this latest product of their generosity on Electrostatics!

Classical



**MANUEL PONCE**  
**Violin Concerto\***  
**CARLOS CHAVEZ**  
**Symphony No2 ('Sinfonia India')**  
**SILVESTRE REVUELTAS**  
**La Noche de los Mayas**  
 Henryk Szeryng, violin\*; Royal Philharmonic Orchestra\*; Orquesta Filarmonica de la Ciudad de Mexico; conductor, Enrique Batiz  
**ASV DIGITAL CD DCA866 (DDD/71.41)**

● ASV have really struck a rich musical

vein with their 'Musica Mexicana' series. This is the second volume to appear and, like the first, it is brimful of music of exciting and colourful originality and colour. The three composers featured here were among those who distilled a 'national' style for Mexican music from several disparate ingredients, principally the indigenous music of the Mexican indians, the music which was imported from Spain along with the conquistadores, and nineteenth century orthodox European classicism. The composers also have personal links: Chavez was a pupil of Manuel Ponce and conducted the first performance of the Violin Concerto recorded here; Chavez and Revueftas once played as an instrumental duo.

The Violin Concerto was Ponce's last major work, completed in 1942 and premiered in 1943, when the soloist - as in this recording - was Henryk Szeryng. The romanticism and rich melodic content of the work evidently still appeal to Szeryng fifty years on, for he gives a radiant account of the solo part. In the first movement, the soloist carries the melodic line, while in the second movement Ponce quotes wryly from one

of his songs, a song which became so popular, it should have earned him a fortune - except that he unwittingly relinquished all rights in it to his publisher!

The third movement of this sumptuously-scored work is a free rondo, its mood reminiscent of the *manitas*, a form of Mexican popular song. The RPO, under the baton of Enrique Batiz, accompany with panache and zest. While not lacking in Mexican flavour, the Ponce concerto does belong firmly to the western classical tradition. Not so Carlos Chavez's 'Sinfonia India', the sixth of seven symphonies which he penned. Chavez's career blossomed with his 'Aztec' ballet *El nuevo fuego* and the *Sinfonia India* of 1935-36 continues in similar 'primitive' vein. It is in one movement, full of audacious rhythmic departures and bold instrumental brushstrokes (among the unorthodox sounds employed are those of a water gourd, the strings of deer hooves and butterfly cocoons - I quote the sleeve notes here!) yet the structure of the piece is taut and lean, the energy of the music sustained throughout. Again, a fine performance from Enrique Batiz, this time with his own Mexican State Orchestra.

But for a colourful orchestral romp, Silvestre Revueltas's music for the film *La Noche de los Mayas* (The Night of the Mayas) takes some beating. Full of rhythmic twists and turns, exotic combinations of orchestral colour and unashamedly outlandish dramatic effects, this is an orchestral showpiece par excellence and receives a suitably exciting, unbuttoned performance. The recording, too (produced in Mexico, like the Chavez symphony), is appropriately full-bodied and vivid. The Ponce concerto, I should add, was taped in London, but the separate sessions seamlessly come together in this trans-Atlantic effort. Like Mexican cuisine, Mexican music leaves you positively glowing with pleasure.



**RICHARD STRAUSS**  
**Don Juan\*/Till Eulenspiegels lustige Streiche\*/Dance of the Seven Veils (from Salome)\***  
**THOMAS CANNING**  
**Fantasy on a Hymn Tune**  
 Stadium Symphony Orchestra of New York\*; Houston Symphony Orchestra; conductor, Leopold Stokowski  
**EVEREST EVC9004 (AAD/51.09)**

● The Everest label came to prominence during the late 'fifties and early 'sixties both on the technical and artistic fronts. First, it attracted some notable conductors to make recordings, not least the legendary Leopold Stokowski. Second, it explored an interesting technological avenue by making its recordings in three-channel stereo on 35mm magnetic film rather than the conventional quarter-inch tape. The original Everest masters are now held by Vanguard Classics which has been busily remastering them using Sony's 20-bit Super Bit Mapping technique. Apart from the sampler CD, reviewed last month, this Stokowski compilation is the first of these reissues to come my way.

Have these famous recordings stood the test of time? In the main, yes, and I get the impression that the remastering has done full justice to what was contained on the original masters which, to be fair, included a touch of roughness in the upper registers and a certain 'hollowness' to the brass sound. But the

spatial effects and perspectives remain thrillingly immediate and, for all their musical attributes, the two Strauss tone poems - Don Juan and Till Eulenspiegel - are glorious sonic showpieces. And what performances Stokowski gives, full of vitality, humour and flamboyance; his Till Eulenspiegel is quite special and the New York orchestra responds to every nuance of the score. But then, Stokowski had this effect on what was an ad-hoc ensemble, witness the Tchaikovsky *Francesca da Rimini* and *Hamlet* which I see are on Vanguard's list for forthcoming Everest reissues - well worth looking out for (EVC9025).

Stokowski and his orchestra are also in top form with the *Dance of the Seven Veils* from *Salome*, giving full voice to its earthy eroticism, and with a recording as vivid as the performance. In sharp contrast is the *Fantasy on a Hymn Tune* by Thomas Canning, who was born in Pennsylvania in 1911. The hymn tune in question is *Amanada* by Justin Morgan (1747-98), one of a group of New England composers of that period. The scoring of the piece - for double-string quartet and string orchestra - as well as its 'fantasia' form bring immediate echoes of Vaughan Williams *Fantasia on a Theme of Thomas Tallis*; indeed, I would be very surprised if Canning was not directly influenced by the Vaughan Williams. Canning's treatment of Morgan's tune is sympathetic and eloquent, if lacking the soaring inspiration of VW, and is beautifully played. It is Stokowski's Strauss, though, that makes this Everest reissue desirable.



**ITALIAN BAROQUE ORGAN MUSIC**  
**Works by Bernardo Pasquini, Domenico Scarlatti, Giovambattista Martini, Gaetano Valeri, Giuseppe Gherardeschi and Anon**  
 Luigi Ferdinando Tagliavini, organ  
**FONE 90F33CD (DDD/49.09)**

● Last month, it was the dazzlingly virtuosic violin music of Pietro Antonio Locatelli; this month, the Italian Fone label offers a colourful tapestry of organ music from the Italian baroque, once

again with a recording that is remarkably truthful in its reproduction of the colours, timbres and acoustic of what is an exceptional instrument. As with the Locatelli, a Neumann valve microphone was employed, fed to a Teac digital recorder, with Audio Research power amplifiers and Ruark Accolade loudspeakers used for monitoring, all wired up with Van Den Hul cables. Fone's engineers, like many of their British and American counterparts, demonstrate that you do not need a truckload of equipment to make good recordings. A good acoustic helps, of course, in this case the Priory of San Michele Arcangelo in Vignole.

Then there's the organ, built by one of the founders of the two famous organ workshops in Pistoria, Pietro Agati. Pistoria's Church of St Ignazio (now St Spirito) remains home to the organ built there by the Flemish Jesuit, Willem Hermanns. The sound of this instrument, with the unusual colours available from its da concerto stops, both fascinated and influenced Agati and the Vignole instrument shares much of the varied and piquant tonal palette of the Pistoria original.

Among the composers here, the only name known to me was that of the Neapolitan Domenico Scarlatti, best-known for his five-hundred-odd sonatas for harpsichord. He apparently wrote just three pieces specifically for the organ, a delightful G Major sonata Kk328 which is included here. The other Scarlatti offering is the youthful D minor sonata Kk77 which, according to the score, can be played on any instrument and certainly suits its organ arrangement very well.

The other composers featured here are more shadowy figures from Italian music in the seventeenth and eighteenth centuries but the music chosen to represent them is, without exception, delightful. There is nothing especially heavyweight here; it is more a selection of toccatas, sonatas and so forth to test the virtuosity of the player and to explore the panoply of sounds available, from the jewellike brilliance of the soprano stops to the reedy resonances of the bass pipes. Enhanced by the superb recording, I found it all utterly seductive but, then, that also has much to do with the stylish playing of Luigi Ferdinando Tagliavini.

The Bologna-born Tagliavini is one of Italy's foremost exponents of this repertoire, as well as a prominent scholar of Baroque music. As well as performing, teaching and music editing, he devotes a great deal of his time to lovingly restoring and preserving historic instruments, and it is not difficult to hear that affection for the music, its period, and the instrument being communicated here. Signor Tagliavini clearly enjoyed recording these works on this near two-hundred-year-old but still fine-sounding organ; I venture you will enjoy listening to him.

# Hi-Fi World-a-Dealer

**AUDIO EXCELLENCE** 'Where the music matters', 65 Park Street, Bristol BS1 5PB. Tel. 0272 264975 Fax.0272 251327. Great Hi-Fi carefully selected and demonstrated by friendly enthusiastic staff. Home installations and check-ups. Two year warranty from our own service department. Open 9.00-5.30 Tuesday - Saturday closed Monday.

**PAUL GREEN HI-FI LTD.** Kensington Showrooms, London Road, Bath. Tel. (0225) 316197. Musical Fidelity, Krell, Creek Rogers, Quad, Cust. car park. Best selection in the West.

**VAUDIO**, 36 Druid Hill, Stoke Bishop, Bristol, BS9 1EJ. Tel. 0272 686005. ATC, Acoustic Energy, Ruark, AVI, Exposure, Pink Triangle, Wadia, Audio Innovations, SME (incl 20A), Chord Amps, Michell, AMC, Analogue Electronics, Cadence Valve, Jamo, LFD, REL, Sansui, Sonic Link, Stax, Townsend, Audio Technica, Goldring, Ltra, Ortofon, Sumiko. Dems by appt only. home trial facilities, free install. service facilities.

**WENTWORTH AUDIO**, 83 High Street North, Dunstable, Beds. MK6 1JJ. Tel. 0582 6633 83. Marantz, Pioneer, Rotel, Audiolab, Mission Cyrus, Moth, Sony, HK, NAD, Pink Triangle, Yamaha, Systemdek, Albury, etc. Free installation & delivery. Home dems. Part exchange. Interest free credit -6, 9, 12, 18 & 24 month terms. Free car parking at rear of shop. Free refreshments (alcoholic or otherwise!) on 10-6pm Tues-Sat

**TECHNOSOUND LTD**, 79 West Street, Dunstable, Beds. Tel. 0582 663297 - See our main entry under Bucks.

**NEWBURY AUDIO**, 2 Weavers Walk, Northbrook Street, Newbury, Berks, RG13 1A1. Tel. 0635 33929. Linn, Creek, Epos, Denon, Nakamichi, Shalhinan, Marantz, Micromega, JPW, Ruark Single speaker dem room. Appt. necessary. Home trial facilities, free install. service dept, late appts. Access/Visa. interest free credit subject to status. 6 days 9.30am - 6.00pm.

**ARC AUDIO**, 9 Dukes Ride, Crowthorne, Berks, RG1 16L (0344) 762201. Denon, Harman Kardon, JPW, Marantz, Monitor Audio, Onyx, Rogers, Tannoy, Thorens, Yamaha. Demonstration facilities, no appointments necessary, home trial facilities, free installation. Access, Visa, Diners. Open Mon-Sat 9-6pm (closed Wed at 1pm)

**READING HI-FI CENTRE**, 4 Queen's Walk, Reading RG1 7QF. Tel. 0734 585463. "The best equipment, advice and service from Berkshire's premier HiFi emporium". Products include: Arcam, exposure, Audiolab, Meridian, Rotel, Sony, semheiser, Top Tape Centre, and many more.

**ASTLEY AUDIO**, Walfording, 0491 839305. See our entry under OXFORDSHIRE

## BUCKS

**D.I. CHITTENDEN LIMITED**, 59-61 The Broadway, Chesham, Bucks, HP5 18B (Opposite Boots). Tel: 0494 784441. Philips, Denon, Kenwood, Canon Audio, Koss, Wharfedale, Mitsubishi, Target, Grundig, QED, Mordaunt-Short, Toshiba. Dolby Prologic Systems, Nicam TV and Video, Surround Sound, AV Systems. Showroom Demonstrations from expert and friendly staff. No appointments necessary. Service Department. Credit facilities available. Open 8.30 to 5.30 Mon-Sat.

**AUDIO INSIGHT** - 53 Wolverton Rd, Stony Stratford, Milton Keynes, Bucks - 0908 561551 - See our main entry under Technosound.

**DEJAC HI-FI Consultants**, 21 the Broadway, Old Amersham, Bucks, HP7 0HL. Tel. (0494) 433173. AMC, Arcam, Bose, Meridian, Quad, Denon, NAD, Tannoy, Mission, TDL, 2 dem rooms, Appts necessary. Free Installation, Tricity finance, instant credit, open 9.30-5.30 pm. including Saturdays.

**NORTHWOOD AUDIO II**, 98 Cambridge St, Aylesbury, Bucks HP20 1BA. Tel. 0296 28790 (A/P). Selected sounds from Alchemist, Aura, Boston, B & W, Cabeltack, Castle, Celestion, Denon, Exposure, Gyrodek, Harman Kardon, Heybrook, Marantz, Micromega, Monitor Audio, Moth, NAD, Nakamichi, Rose, Rotel, Royd, Ruark, Systemdek, Tannoy, TDL, Thorens etc ect. Export orders welcome. 2 Dem rooms. Credit facilities available.

**TECHNOSOUND LTD**, 7 Granville Square, Wilton, Milton Keynes. MK15 9JL. Tel. 0908 604499. Audiophile Hi-Fi Specialists. All major brands stocked from Arcam to Yamaha. Demonstration facilities and expert advice. Mon-Sat 9.30 - 5.30 late night Friday. Credit Cards accepted. Finance available.

## CAMBRIDGE

**CAMBRIDGE HI-FI**, 1-3 Hawthorne Way, Chesterton, Cambs. CB4 1AT. Tel. 0223 67773. Kenwood, Pioneer, Ariston, Kef, Technics, Yamaha, Marantz, B&W, AR, Mordaunt-Short, Bose. Single speaker dem room. Tues-Sat 9.00-5.30pm. Closed Monday. Free install. service dept. Vis/Access credit facilities.

**STEVE BOXSHALL AUDIO**, 41 Victoria Road, Cambs. CB4 3BW. Tel. 0223 68305. 10.00-6.00pm 6 days. 3 dem rooms Denon, Rotel, Yamaha, Mission, Nakamichi, Tannoy, Audiolab, Marantz, Krell, Martin Logan, Magneplanar, Wadia. Home trial facilities. Appointments preferred. Free Install. and service dept. Access/Visa.

**UNIVERSITY AUDIO**, 1-2 Peas Hill, Cambridge. 0223 354237. Mission-Cyrus, Arcam, Rotel, Denon. Meridian, Ruark, ATC, AVI, Quad, Linn. £ dems. 1 single speaker. Home trial, free install, Service Dept. VISA, ACCESS, AMEX, Credit Terms. Open 9-5.30

**SWIFT HI-FI**, St. Annes Parade, Wilmslow. 0625 526213. Aura, B&W, Denon, Kenwood, Marantz, Nad, Pioneer, Rotel, Systemdek, Tannoy, Revolver, J.P.W., M. Short, Mission, Celestion, Technics, Audiolab, Castle. Open 9.30-6. Dem room. No pressure. BADA member.

**THE HI-FI SHOWROOMS**, 12A West Str, Congleton, Cheshire (0260)280017, 1 Stanley St, Leek (0533)383780, Celestion, Creek, Exposure, Marantz, Musical Fidelity, Pink Triangle, Project, Rotel, Ruark, Systemdek, Tannoy, Technics, 5 Dem Rooms. Noappts nec, Home trial, Free install, ServicedeptAccess,Visa, Lombard Tricity. Open 9-5.30, Closed Wed.

**HALE HI-FI**, 2 Bold St, Hale Road, Altringham, Cheshire WA14 2ER. Tel:061 929 0834. Open Mon - Sat 10am-6pm & later by appointment. Specialising in equipment by: Naim, Quad, Royd, Nad, Denon plus selected others. Large range of quality accessories. On site service department. Installation & delivery. Home demonstrations a pleasure

**ASTON AUDIO**, 4 West Street, Alderley Edge, Cheshire. Tel. 0625 582704. Products include: Bang & Olufsen, Arcam, Audiolab, B&W, Cyrus, Denon, Epos, Meridian, Micromega, MF Mission, Nakamichi, Quad, Rotel, TDL & other leading brands. Demonstration Rooms, Installation Service, Interest Free Credit, Access, Visa. Open Mon-Sat

**CHRIS BROOKS AUDIO**, 29 Gaskell Street, Stockton Heath, Warrington, Cheshire, WA4 2UN. Tel (0925) 261212. Tues-Sat 10.00-6.00. 2 dem-rooms. credit facilities. All credit cards. Established 1978. Total absence of bulls'\*\*.

**CONGLETON HI-FI**, 1/1a Duke St, Congleton, Cheshire, CW12 1AP. (0260) 297544. Acoustic Energy, Arcam, B&W, Denon, Epos, Kef, Linn, NAD, Nakamichi, Onix, Royd, Target, Yamaha, etc. Superbly appointed single speaker demo facilities. No appointments necessary, home trial facilities, free installation. 2 year guarantee on all equipment. Access, Visa. Open Mon-Sat, closed Weds.

**DOUG BRADY HI-FI**, Kingsway Studios, Kingsway North, Warrington, Cheshire, WA1 3NV. Tel (0925) 828009. "Largest choice of specialist hi-fi in NW. All credit cards 3 dem rooms. Fair demonstrations and home trial facilities. Open 6 days.

**PRACTICAL HI-FI**, 88 Bridge Street, Warrington, WA1 2RF. Tel:- 0925 632179. See our main entry under Preston, Lancs.

## CLEVELAND

**GILSON AUDIO LTD**, 172 Borough Rd., Middlesbrough. (0642) 248793. Linn, Exposure, Arcam, Mission, Cyrus, Denon, Marantz, Rotel, Pioneer, Audiolab, Tannoy. Demonstration facilities in main shop and one demonstration room. Appointments necessary. Home trial facilities. Free installation on request. Service department. Access, Visa, H.P. 10-5-6 days.

**ACTION ACOUSTICS**, 155-157 High Street, Redcar, Cleveland. TS10 3AN. 0642 480723. Audio Innovations, Denon, Harman Kardon, JBL, Michell, Musical Fidelity, Pink Triangle, Revox, Rogers, Sugden, Sonic Link, Townsend, TDL, Thorens, etc. Dem room. Appointments nec. Home trial facilities, free installation, service dept. Access, Visa & HP. Open 9.15-5.30.

## CORNWALL

**RJF AUDIO VISUAL**, 84 Pendarves Street, Tucking Mill, Camborne, Cornwall. TR14 8NJ. 0209 710777/612260. Audio Analysis, Audio Innovations, JBL, Teac, TDL, Monitor Audio, Musical Fidelity, NAD, Nakamichi, B&W, SME, Micromega, Pink Triangle, Pro-ject, Perception, Sugden, Harman Kardon, Triangle. Integral dem/showroom and special home dems. Appts nec, home trial, free install, service dept. All cards Switch and Transax. Open Mon-Sat 9.30-5.30.

## COUNTY DURHAM

**HI-FI EXCHANGE DARLINGTON**, 30a Larchfield Street, Darlington, County Durham. The North's only used Hi-Fi Specialist. Hear our Quad, Naim, Oracle, Neat, Thorens etc. Separate Dem Room. 3 months warranty on all systems. Full range of leading Japanese makes Technics, Sony etc. Tel. 0325 463007

## CUMBRIA

**MISON'S SOUND & VISION**, Viaduct House, Victoria Viaduct, Carlisle, CA3 8EZ. Tel (0228) 22620. Bang & Olufson, B & W, Castle, Sonic Link, Quad, NAD, Yamaha, Sony, Rotel. Demo Suite. No appts nec. Home trial facilities. Free Installation. Service Department 9 - 5.30 Mon - Fri, Thurs 9-1, Sat 9 - 5.

**PETER TYSON**, 6 Abbey Street, Carlisle, Cumbria, CA3 8TX. Cumbria's premiere hi-fi centre'. Part exchange welcome. (0228) 467556. Linn, Musical Fidelity, Cyrus, Marantz, Denon, Philips, Nakamichi, Technics, Pioneer, Creek and more. Dem Rooms. Dems without obligation. Home trial. Free installation. In-house service dept. Access, Visa, HP. 9-5.30pm

**PRACTICAL HI-FI**, 106 English Street, Carlisle, CA3 8ND Tel:- 0228 44792 See our main entry under Lancaster.

## DEVON

**THE HI-FI ATTIC**, 58 New George St, Plymouth, Devon. PL1 1RR. 0752 669511. We stock most leading brands including Linn, Arcam, Denon, Pioneer, Musical Fidelity amongst others, and have an expert enthusiastic staff. Premises include attractive hi-fi and home cinema demonstration rooms. We offer free installation and credit facilities (written details on request) also a fully equipped service department. We can also provide a mail order service for all your LaserDisc requirements. We accept Visa, Access, Amex.

**CHELSTON HI-FI**, 38 Walnut Road, Chelston, Torquay, Devon TO2 6HS Tel.(0803) 606863. Denon, Marantz, Rotel, Musical Fidelity, Acoustic Energy, NAD, Castle, Heybrook, Celestion, JPW etc. Two dem rooms. Home trial. Free installation. Access, Visa, Amex, Diners, HiFi Markets Chargecard. Credit facilities. 9.30-7.30 Mon-Fri. 9.30-6.00 Sat.

**UPTON ELECTRONICS**, 31 Torquay Road, Paignton, Devon. TQ3 3DT. Tel: 0803 551329. Pioneer Reference Point Dealer. Denon, Sony, Technics, Harmon-Kardon, Drellie, Kinshaw, Creek, Quad, Audio-Innovations, Target, Tannoy, Mordaunt-Short, Castle, TDL, Ruark, JPW, Royd, Project, Monitor-Audio, Micromega, Chord, van den Hul, Jamo, Full range of accessories etc. Demonstration room, Home dems, free delivery and installation, own in-house service dept. AAccess, Visa, Amex. Credit facilities 9.00 - 5.30, 9.00 - 1.00 Wed.

## DERBY

**STRAD TRADITIONAL AUDIO**, 29 Meadowfield, Whaleybridge, nr Buxton, Derbyshire. SK12 7AX. Tel. 0663 733383. We construct custom made reproductions of classic 1950's loudspeaker enclosure designs using authentic blueprints. These have never been bettered for valve amplification. Requests for specific designs considered and researched. Superb new speaker units from Richard Allan and Lowther are used.

**ACTIVE AUDIO**, 12, Osmaston Street, The Spot, Derby. Tel: 0332 380385. Fax: 0332 385185. We have three studios including a dedicated Audio Visual studio for the demonstration of quality equipment from the largest range in the Midlands. Open six days per week. Own service department. Free local delivery, home trial facility. Current special offers and buyers pack detail and quotation on request.

## DORSET

**DAWSONS**, 23 Seamore Road, Westbourne, Bournemouth, Dorset. 0202 764965. B&O, Castle, Canon, Jamo, JBL, Pioneer, Sony, Target, TDL, Technics. No appts necessary. Free Installation. Service Dept. Various credit facilities available. Open 9-5.30 6 days a week.

**SUTTONS HI-FI**, 18 Westover Road, Boumemouth, Hants. Tel. 0202555512. Linn, Arcam, Mission, Quad, Audiolab, Rotel, Yamaha, Denon, etc. 2 single speaker listening rooms. Home demonstrations and free installation. Mon-Sat 9.00-5.30. Call for details.

## ESSEX

**AUDIO T**, 442-444 Cranbrook Road, Gants Hill, Ilford. (0181) 518-0915. Great Hi-Fi from Arcam, Audiolab, Cyrus, Denon, Marantz, Meridian, Mission, Micromega, Nakamichi, Rotel, Technics, Yamaha and many more. Mon-Sat 10-6. 3 Year Hi-Fi guarantee. Free delivery & installation. 30 day free upgrades. Home demonstrations. PX. Selected Interest Free Credit. 2 Listening Rooms. Home Cinema specialists. BADA Bonded.

**BRENTWOOD HI FIDELITY**, 2 Ingrave Road, Brentwood, Essex CM15 8AT. Tel: 0277 221210. Aura, Audio Innovations, Castle, Chord, Crimson, Denon, DNM, E.A.R., Impulse, Marantz, Mission, Micromega, NAD, Pink Triangle, Project, QUAD, Ruark, Rehdero, Sheame Audio, Systemdek, Tannoy, TDL, Thule Audio Single speaker dem rooms, home trials, dems and installations. Mon-Sat 9.30-5.30. Access, Visa, service facilities. Simply THE place to visit if you're serious about music.

**RAYLEIGH HI-FI**, Chelmsford, 216 Moulsham St. 0245 265245. **RAYLEIGH HI-FI**, Rayleigh, 44a High Street. 0268 779762. **RAYLEIGH HI-FI**, Southend, 1324 London Rd. 0702 435255.

Over 21 years experience of supplying the best. "The best dealer, the best Hi-Fi equipment, the best service" Carefully selected Hi-Fi from: Arcam, Audiolab, Cyrus, Denon, Epos, Linn, Meridian, Mission, Naim, Nakamichi, Quad, Rega, Roksan, etc. etc. - 3 years guarantee on Hi-Fi systems. 0% credit facilities.

## GLOUCESTERSHIRE

**AUDIO EXCELLENCE** 'WHERE THE MUSIC MATTERS', 58 Bristol Road, Gloucester, GL1 5SD. Tel. 0452 300046 Fax. 0452 310680. Great Hi-Fi carefully selected and demonstrated by

friendly enthusiastic staff. Home installations and check-ups. Two year warranty from our own service department. Open 9.00-5.30 Tuesday - Saturday closed Monday.

**AUDIO T**, 40-42 Albion Street, Cheltenham, Gloucestershire, GL52 2RQ. (01242) 583960. Great Hi-Fi from Arcam, Audiolab, Aura, Denon, Epos, Linn, Marantz, Meridian, Mission, Quad, Rotel, Technics, Yamaha, & many more. Mon-Fri 10-6. Sat 9.30-5.30. 3 year Hi-Fi guarantee. Free delivery & installation. 30 day free upgrades. Home demonstrations. Part exchange. Selected Interest Free Credit Listening room. BADA Bonded.

**AUDIO GALLERY**, Near Petersfield, Hampshire. Mana, Castle, Alchemist, Albary, Audio Innovations, Wadia, Deltac, Tube Technology, Denon, Pioneer, Alphason, Tripod, Nad, Teac, Audio Alchemy, Klipsch, AMC, Proac, JPW, Moth, Pink Triangle. Mail order cabinets supplied to order in any size, wood & hand painted finishes, stone-granite-marble shelving. For a demonstration with home comforts call us for an appointment on: 0730 895194.

**HOPKINS HI-FI**, 'FOR THE BEST SEAT IN THE HOUSE' experience home cinema sound with Technics, Denon and Kenwood. Award winning products. Now on demo at HOPKINS HI-FI. 38-40 Fratford Road, Portsmouth, Hants, PO1 5BX. Tel. 0705 822 155, Fax. 0705 830 753

**HAMPSHIRE AUDIO LTD**, 2-12 Hursley Road, Chandlers Ford, Hants SO5 2FU. (0703) 252827/265232. 3 hifi and 2 home cinema/surround sound dem studio's. Thurs late evening, closed Mondays (except in December). Service dept on site (2 yr guarantee). Large free car park - junctions 4 (M27/M3), 5 (M27), 12 (M3) and 13 (M3) all within 3 miles, est. 1969.

**AUDIO T**, 4 Feathers Lane, Basingstoke, Hampshire, RG21 1AS. (01256) 24311. Great Hi-Fi from Arcam, Denon, Linn, Meridian, Mission, Naim, Rotel, Technics, Yamaha & many more. Mon-Sat 9.30-5.30. 3 year Hi-Fi guarantee. Free delivery & installation. 30 day free upgrades. Home demonstrations. Part exchange Listening room. BADA Bonded.

## HANTS/POWERSHIRE

**ENGLISH AUDIO**, 95 Whitecross Road, Hereford, HR4 0DG. (0432) 355081. Musical Fidelity, Arcam, Castle, Ruark, Rogers, JPW, Micromega, Chord, Audion, Systemdek, Heybrook, Kef, Stax, Pink Triangle, Denon, Marantz, Mission-Cyrus, A.I., Rotel, NAD, Nakamichi, TDL and others. Single speaker dem room. home trial facilities, free installation, service dept, Access/Visa, Credit arranged. Open Mon-Sat, 10-6pm. BADA members.

**DAVID ORTON AUDIO VISUAL**, 6-8 Bancroft, Hitchin, Herts. Tel: 0462 - 452246. Mission, Cyrus, Denon, Pioneer, Marantz, Aura, Kenwood, Rotel, Ruark, Celestion, JVC, Polk and many more. Open Mon-Sat 9.30-5.30. All major credit cards accepted. Finance available. (See our main advert pg 106).

**DYNAMICS**, Welwyn, Herts - Europe's largest stockist of ex-dem and second hand equipment. High End Audio - Bought, Sold or Exchanged. Many items in stock. (see our main ad pg. 128). Efficient servicing Dept. All items guaranteed. All major credit cards accepted. Please telephone 0438 - 714038 for appointment.

**GOSPEL MUSIC AUDIO**, 32a High Street, Kington, Herefordshire, HR5 3BJ. (0544) 230254. Alphason, Allison, Revolver, Luxman, Yamaha, QED Audio, Systemline.

**ACOUSTIC ARTS LTD**, 101, St. Albans Rd., Watford, Herts. 0923 245250. Fax 0923 230798. Absolute Sounds, Adcom, Acoustic Energy, Audiolab, Chord, Denon, Marantz, Meridian, Orrellie, S.M.E., T.D.L. 3 dem rooms, multi-room & home theatre. Expert installation. Credit facilities available, Tues-Sat 10-6.

**STUDIO 82**, 82 High Street, Harpenden, Herts AL5 2SP. 0582 764246. Fax 0582 467022. ATC/AVI, Arcam, Aura, Audiolab, B&O, Denon, Epos, Mission, Cyrus, Naim Audio, Nakamichi, Quad, NAD etc. Quiet single speaker dem room. Appts nec. Home trial, free installation. Service dept. Visa, Access and finance terms. 9-5.30 (Mon-Sat) Closed Weds.

**THE AUDIO FILE**, 27 Hockerill St., Bishop's Stortford, Herts, CM23 2DH. Tel 0279 506576. Fax 0279 506638. Linn, Naim, Roksan, Quad, Rega, Mission, Arcam, Proac, Marantz, Sony etc. 4 dem rooms, installation service. Min 3 year warranty, 0%, BADA.

**HERTFORD MUSIC**. We want you to feel good when choosing your system in our 3 demonstration rooms (and bar!) Systems from budget to £15,000. Products include : GR Developments, Micromega, REL Acoustics, Acoustic Energy, Michell, Magnum, Diamond Acoustics, Beard, Lumley, Renaissance, etc. AAccess, Visa, Mail Order. Please telephone: 0992 442425.

**RAOLETT AUDIO**, 141 Watling Street, Radlett, Herts, WD7 7NQ. Tel. 0293 826497. Mark Levinson, Proceed, Proac, Magneplan, Martin Logan, Tube Technology, Teac, Roksan, Audiolab, Stax, Systemdek, Jardi, Conslud, ATC, Audio Alchemy, AVI, EAR, Sumiko, Quad, Coplan, Sony Faber, Home trial facilities, free installation, Service Dept. Visa/Access 9-5.30 Mon-Fri 10-5.30 Sat.

**REVIX Service & Repairs**, Sulle 10, Smuogak Business Centre, Lye Lane, Brickwood, Herts. AL2 3UG. Tel 0923 893711. Seventeen years experience, ex-Bauch. Authorised agent for Revox products, sales and spares. All repairs carried out are guaranteed. Fast turnaround. Any enquiries telephone: 0923 893711.

# Hi-Fi World-a-Dealer

**ZEN AUDIO** - George Street, Hull Tel: (0482) 587397 - Evening (0964) 670849. Audioblab, Audio Innovations, Aura, B&W, Cabletak, DPA, Heybrook, JPW, KAR, Micromega, Michell, Harmon Kardon, Impulse, RuArk, Rotel, Sugden. Comfortable Listening Room, Home Trial facilities, free installations - personal friendly service

**PROGRESSIVE AUDIO**, 2 Maryland Court, Rainham, Nr Gillingham, Kent. ME8 8QY. Tel. 0634 389004. Agencies include: Audio Innovations, Audion, Audionote, Audiostatic, Audiotechnica, Chord amps, Cogan Hall, Conrad Johnson, Convergent, DALI, Decca, Eminent Technology, Goldring, Impulse, Koetsu, Levinson, L.F.D., Lyr, Lumley Reference, Mission, Rotel, Ruark, Tannoy, Technics. Dem rooms and home trial facilities. Mon-Sat, 9-5.30. Thurs. Free install. Credit to £1,000. Access, Visa and credit charge. Service Dept.

**JOHN MARLEY HI-FI CENTRES**, 2 Station Road, West Canterbury. (0227)769329. Also at Dover - 0304 207562. Arcam, Audioblab, Aura, B&W, Heybrook, JPW, Proac, Pioneer, Rotel, Ruark, Tannoy, Technics. Dem rooms and home trial facilities. Mon-Sat, 9-5.30. Thurs. Free install. Credit to £1,000. Access, Visa and credit charge. Service Dept.

**KIMBERLEY HI-FI**, 193 Broadway, Bexleyheath, Kent. Tel 081 3043272. Pioneer, Technics, Kenwood, Marantz, Denon, NAD, Aiwa, Tannoy, Mission, Rotel, Wharfedale, Castle. Separate dem room, no apt necessary. Free installation, service dept, instant credit facilities. no early closing.

**V.J. HI-FI**, 29 Guildhall Street, Folkestone, Tel. 0303 256860 Mon-Sat 9-6. NAD, Yamaha, Marantz, Sony, Tannoy, Denon, Kenwood, Rogers, Musical Fidelity, Quad, Aiwa, Aura, Heybrook, Castle, Mission, Yamaha, REL, JBL, Poik. Dem rooms in both stores. free install. Credit facilities available, specialists in home theatre, Amex, Diners, Visa, Access, Service Dept.. We are BADA dealers.

**THE WESTGATE HI-FI**, 2 Station Road West, Canterbury, Kent. 0227 769329. Suppliers of quality hi-fi equipment including: Arcam, Akai, Aura, B&W, Denon, Jamo, JPW, Mordaunt Short, NAD, Panasonic, ProAc, Quad, Rotel, RuArk, TDL, Technics, Tannoy. Part exchange. Listening room. Service and repairs. Credit facilities. Access/Visa. Open 6 days 9-5.30.

**DOVER HI-FI**, 43 High Street, Dover. Tel: Dover 207562. Suppliers of quality hi-fi equipment including: Arcam, Akai, Aura, B&W, Denon, Jamo, JPW, Mordaunt Short, NAD, Panasonic, ProAc, Quad, Rotel, RuArk, TDL, Technics, Tannoy. Part exchange. Listening room. Service and repairs. Credit facilities. Access/Visa. Open 6 days 9-5.30.

## LANCASHIRE

**RODMERS HI-FI CENTRE**, 94-96 High Street, Rishton, Blackburn, Lancs. Tel 0254 887799. Stockists of: Sony Esprit HI-FI, Technics, Marantz, Musical Fidelity, Pioneer, Kenwood, Rotel, Tannoy, Mission, Ruark, B&W and many others. Dem room, service dept, free delivery and installation (local area) Access/Visa and Switch.

**PRACTICAL HI-FI**, 43 Friargate, Preston. Tel: 0772 883958. The audio visual specialist, expert advice, instant demonstrations, best prices, instant free credit, part exchange welcome. Extended warranty. Stockists of Yamaha, Kenwood, Denon, Sony, Technics, Onkyo, Marantz, Pioneer, Mission, Kef, Jamo, Celestion, B&W. Also stockists of LaserDiscs.

**PRACTICAL HI-FI**, 84 Penny Street, Lancaster, LA1 1XN Tel: 0524 39657 - See our main entry under Lancaster.

**PRACTICAL HI-FI**, 33/35 Knowsley Street, Bolton, Lancs Tel: 0204 395789 - See our main entry under Lancaster.

**PRACTICAL HI-FI**, 10 Preston New Road, Blackburn, BB2 1AW Tel: 0254 691104. See our main entry under Lancaster

**PRACTICAL HI-FI**, 81 Whitegate Drive, Blackpool, FY3 9DA Tel: 0253 300599. See our main entry under Lancaster.

## LEICESTER

**LEICESTER HI-FI COMPANY**, 6 Silver Walk, St Martin's Square, Leics. LE1 5EW. Tel. (0533) 539753. Fax (0533) 626097. Acoustic Energy, Arcam, Marantz, Micromega, Mission/Cyrus, Musical Fidelity, Nakamichi, Meridian, Rogers, Roksan and "oodles more" 2 dem rooms, home trial arranged, free install, service dept. Credit facilities, Access/Visa/Diners/Amex. 6 days. 9.30-5.30

**THE LISTENING ROOMS**, 6 Hotel Street, Leicester. Tel. 0533 623754. fax. 0533 623758. Linn, Audioblab, Arcam, Tannoy, Definition, Oenon, Rotel, Nad, Heybrook, TDL etc. Open 10.00-5.30 (Six days)

**STEREO SHACK**, 1-3 Guildhall Lane, Leicester. Tel. 0533 530330. Aiwa, A.R, Denon, Kenwood, Jamo, Mission, NAD, Philips, Pioneer, Home Cinema specialists. Free installation. Open 9.30-5.30 6 days. Credit available.

**805. DR. HI-FI CENTRE** 65a Wide Bargate, John Adams Way, Boston, Lincs PE21 6SG. Tel: 0205 365477. Quad, Nakamichi, Arcam, Marantz, NAD, Castle, Tannoy, Rogers etc. Separate demonstration studio inc. home cinema. Free installation. Access, Visa, Tues-Sat 9-5 pm.

**COTTAGE AUDIO**, 17 Bridge Street, Saxilby, Nr Lincoln. LN1 2PZ. Tel. (0522) 702834. Evenings: (0522) 696708. ATC, AVI, Chord amplifiers, Harbeth, LFD, Michell, Origin Live, Kinshaw, OED, Royd, Sansui. Sequence, Something solid, Sonic Link, etc. Demonstration rooms. Home trial facilities. Free installations and above all a personal, friendly service.

**STAMFORD HI-FI CENTRE** - 9 Red Lion Square, Stamford, Lincs. PE9 2AL. (0780) 62128. Pioneer, Technics, Cyrus-Mission, Rotel, NAD, Yamaha, Kenwood, Marantz, Quad plus all major speaker manufacturers. Expert Advice, Comparator demonstrations, part-exchange HI-FI purchased for cash. No appts necessary. Home trial facility, free installation. Service Dept, Mastercard, Visa and credit charge. Mon-Sat 9-5.30 pm. Closed Thursdays.

## LONDON

**ANALOG AUDIO**, 849 High Road, Finchley, N12. (081) 445 3267 For friendly service and advice. AR, AKG, Alison, AT, Cerwin, Vega, Denon, Dual, Harmon Kardon, Jamo, Infinity, Marantz, NAD, Pioneer, Rotel, Revolver, Sonab, Teac, Thorens, Tannoy, Wharfedale, Yamaha. Speaker cables and accessories. Free installation. service

**AUDIO CONCEPT**, 27 Bond Street, Ealing, W5 5AS. Tel: (081) 567 8703. Acoustic Energy, Audioblab, Aura, B&O, B&W, Boston Acoustics, Canon, Castle, Denon, Dual, Evolution, Infinity, JPW, KEF, Marantz, Mission, Monitor Audio, Musical Fidelity, NAD, Nakamichi, Onix, Quad, Revox, Rogers, Rotel, Systemdek, Target, Teac, Thorens, Van der Hul. Two dem rooms. Interest free credit, free local delivery & installation, service department.  
"Hi-Fi Specialists without the attitude"

**AUDIO T**, 190 West End Lane, West Hampstead. (0171) 794-7848. Great Hi-Fi from Arcam, Audioblab, Aura, B&W, Denon, Epos, Linn, Marantz, Meridian, Mission, Rotel, Micromega, Nakamichi, Yamaha & many more. Mon-Sat 10-6. 3 Year Hi-Fi guarantee. Free Delivery & Installation. 30 Day Free upgrades. Home Demonstrations, PX. Selected Interest Free Credit. 2 Listening Rooms. BADA Bonded.

**BARBER ELECTRONICS**, 158 Uxbridge Road, West Ealing, London, W13 8SB. (081) 579 6315. Akai, Aiwa, A&R, Celestion, Dual, Goodmans, Harmon Kardon, JBL, JVC, Kenwood, Marantz, Panasonic, Sennheiser, Sony ES range, Tannoy, Technics, Wharfedale, Yamaha.

**THE CARTRIDGE MAN** - Front end problems? It doesn't have to cost an arm and a leg to get the best listen to my Koetsu - and - Decca - Eater. Also agents for Croft, Sugden, Thorens, Pentachord Speakers and Notts Analogue. (Plus a cartridge re-tipping service. Tel. 081 688 6565.

**GOLF ELECTRONICS**, 311 Kentish Town Road, NW5 2TJ Tel 071 482 2518. Fax 071 284 3381. Authorised dealers for: Sony, Panasonic, Aiwa, Aakai, Mitsubishi, Philips, Grundig, Bose. We carry an extensive range of hardware from Walkmans to camcorders, including a wide range of TV and video equipment. Free local delivery & installation on selected items. Open 10-6 Mon-Sat. We regularly have special offers on different products. A visit to GOLF ELECTRONICS could save you ££££

**HI-FI & COMPONENTS**, 84 Battersea Rise, London, SW11 1EH. (071) 223 1110. Denon, Tannoy, NAD, Rotel, Bose, Dual, OED, Wharfedale, Jamo, Celestion, Kenwood, Ortofon, Infinity, Shure, to name but a few! Established over 29 yrs. Appts necessary. Service dept. 10-6 (closed Weds)

**HI-FI EXPERIENCE**, 227 Tottenham Court Road, London W11. 071 580 3535. Arcam, Audioblab, Mission, Cyrus, Quad, Celestion, Kef, Meridian, Rogers, Tannoy, Yamaha, TDL, Thorens, Marantz, Nakamichi, Musical Fidelity and many more. Open 10.00-7.00 Mon-Fri. 9-6 on Sat. Service dept, Credit facilities, delivery and free installation.

**THE HI-FI SURPLUS STORE**, 62 Weymouth Street, W1 Tel. 071 486 9981/071 935 7582. Stock a full range of goods including: Aiwa, Akai, B&W, Bose, Dual, JVC, Jamo, Kenwood, Marantz, Mordaunt-Short, Mission, NAD, Pioneer, Rotel, Sony, Technics, Teac, Thorens, Tannoy, Wharfedale. Full range of "Target" speaker stands always on stock. All goods are brand new in sealed cartons with full 1 yr guarantee. We aim to be the cheapest however if you can buy any of our products cheaper, tell us & we'll try to beat it by £10. Access/Visa welcome. Open Mon-Sat 9.30-6pm. Late night 'till 6.30 Thurs.

**KAMLA ELECTRONICS**, 251 Tottenham Court Road, London W1P 9AD. Telephone. 071 323 2747. Fax. 071 637 2690. Acoustic Research, Aiwa, Akai, Albany, Alchemist, Alphason, Audio Alchemy, Audio Innovations, Audio Technica, Audioquest, Aura, Audiostatic, B&W, Cerwin Vega, Conrad Johnson, CopenHagen, Furukawa, Goldring, Infinity, IXOS, JPW, JVC, KEF, Kenwood, Kuzma, Lynwood, Maxwell, Micromega, Mitsubishi, Monster, Mordaunt Short, Motect, Nakamichi, Oracle, Ortofon, Panasonic, Pioneer, Project, QED, Rotel, Ruark, Sansui, Stax, TDK, and many more!

**K J WEST ONE**, 26 New Cavendish St., London W1M 7LH. 0171 486 8262/63. Fax 0171 487 3452. Two hi-fi & two home cinema dem studios. Appts pref. Home trial. Installation by arrangement. Service dept. Major credit cards. Interest free credit on selected items. Major brands stocked. Arcam, Audio Alchemy, Audio Innovations, Audion, Aura, Audioblab, Audio Research, B&W, Chord, DPA, Epos, Harmon Kardon, Impulse, Krell, Martin Logan, Meridian, Michell, Musical Fidelity, Nakamichi, Nitty Gritty, Orelle, Pink, ProAc, Quad, Rel, Roksan, Sonus Faber, Stax, Tannoy, Theta, Trichord. Open 6 days.

**BILLY VEE SOUND SYSTEMS**, 248 Lee High Road, SE13 (081) 318 5755. Arcam, Linn, Naim, Quad, Creek, Cyrus, Marantz, Nad, Rotel, Rega, Denon, Yamaha, Tannoy, Mission, Micromega, Heybrook etc., 2 dem rooms, instant free credit, Access/Visa, Closed Thursdays

**CONNECTIONS**, 13 John Prince's Street, London W1M 9AH. Tel. 081 348 5676. Dealers in: Absolute, Audio Note, Audioquest, Deltec, Harmonix, Kimber, Mandrake, MIT, Siltech, Symco, Van den Hul, WBT and others.

**THE LISTENING ROOMS**, 161 Old Brompton Road, London SW5 0LJ. (071) 244 7750/59. Fax (071) 370 0192. Linn, Quad, Meridian, Nakamichi, Arcam, Audioblab, Acoustic Energy, SME, Audio Research, Krell, Wadia, Theta, Apogee, Martin Logan, Pioneer, Tannoy, Systemdek, Stax, Pink Triangle, Michell, Monitor Audio, Yamaha, Marantz, Kef, Bose, Celestion, Epos, Mission, Denon, Neat Padite. Mon-Sat 10-6pm.

**THE CORNFLAKE SHOP**, 37 Windmill Street, London W1. (071) 631 0472 (domestic), (071) 323 4554 (multiroom). Fax (071) 436 7165. Tues-Sat 10-7 Rega, Roksan, Naim, Monitor Audio, Arcam, Nakamichi, Rotel, Epos etc. 3 dem rooms (incl. home cinema) Friendly professional service. Home trial facilities, appts preferred. Full delivery and repair service. Multiroom specialists. Access & Visa.

**MUSICAL IMAGES**, 173 Station Road, Edgware, Middlesex. Tel. (081) 952 5535. See advert under Middlesex for more information.

**MUSICAL IMAGES**, 45 High Street, Hounslow, Middlesex. Tel. (081) 569 5802. See advert under Middlesex for more information.  
**AUDIO T**, 190 West End Lane, West Hampstead, London, NW3 1SQ. (071) 794 7848. Fax (071) 431 3570. Great Hi-Fi from Adcom, Arcam, Audioblab, B&W, Denon, Epos, Marantz, Meridian, Michell, Mission, Philips, Rotel, Proac, Micromega, Nakamichi, Yamaha, & many more. Mon-Sat 10-6. 3 year guarantee on Hi-Fi. Free delivery & installation. 30 day free upgrade scheme. Home demonstrations. Part exchange. 2 listening rooms. BADA Bonded.

**ORANGES & LEMDS**, 61-63 Jubbs Road, Battersea, SW11. Tel: 071 - 924 2040/3665. Jubcy fruit from London's newest, freshest HI-FI/Home Cinema retailer. Telephone demonstrations, or just pop in. All the usual ie. friendly and efficient service, free home installation, credit cards, plus... all the very best from: Arcam, Chord Co., Meridian, Mission, NAD, NAIM, Roksan, Royd, Cable Talk, QUAD ..... with more to come. The Innovative Audio/Visual retailer.

**ZEBRA**, 18-24 Brighton Road, South Croydon. Tel: 081 - 688 2093. The UK's First and Finest Home Cinema Store. 3 Demonstration Rooms. Laser Disc CRT and Projection TV Centre. Many brands stocked including Arcam, Audioblab, Meridian, Lexion, Kef, Pioneer, Rotel, Yamaha, REL and

Panasonic. Mon-Sat 9.30-6.00pm. All major credit cards accepted. Finance available. Evening demonstrations by appointment.

**SOUND SENSE**, 350 Edware Rd. London W2 10X. 071 402 2100. Alphason, B&W, Kenwood, Nakamichi, Celestion, Denon, Monitor Audio, Marantz, NVA, Sony ES, Yamaha, Appts preferred. Installations available, Access, Visa, Standard credit Facilities. Mon- Sat 9.30-6.30.

## GREATER MANCHESTER

**THE AUDIO COUNSEL**, 12 Shaw Road, Oldham, Manchester, OL1 3LQ. Tel. 061 633 2602. Linn, Arcam, Naim, Yamaha, Creek, Nakamichi, Denon, JPW, Marantz, Royd, Lexion. 3 dem rooms, free install, Visa/Access, Licensed credit brokers up to £1,000 instant credit. Full multi-room & A.V. installation. 10.00-5.30pm Mon, Tues, Wed, Sat, 10.00-7.00pm Thurs & Fri.

**CENTRAL RADIO (Manchester) Ltd**, 30-32 Shudehill, Manchester M4 1EZ. Tel: 061 834 6700. Est 1946 we have a wide range of Hi-Fi separates, systems, Pro-logic, TV, Video, Portable Audio, Tape, Stylus and Accessories. In House Service Dept. Agents for Aiwa, Beyer, Bose, B&W Cerwin-Vega, Canon, JBL, Kenwood, Marantz, Mission, Panasonic, Pioneer, Sennheiser, Sony, Technics, Thorens, Wharfedale, etc. We accept Access, Visa, Am/Ex. Switch, Cheques upto £1500 & Finance subject to status. Open 9.00am to 5.30pm Mon to Sat. Easy Parking. Call for directions.

**ORPHEUS AUDIO (HOME DEMONSTRATION SPECIALIST)** - for a Musical system tailor-made (sonically and visually) to your Home requirements. Arion Acoustics (Valves), Audiomeca, Audio Synthesis, Audio Valve Amplification, Kinshaw, Lieder, Ortofon, Pro-ject, Teac, Triangle, YBA. Orpheus Audio, please tel: 0257 426100 or Fax: 0257 473175 for appointment.

**HALE HI-FI**, Tel 061 929 0834. See our main entry under Cheshire,

**BILL HUTCHINSON HI-FI**, 50-52 Deansgate, Manchester M3 2FE. (061) 8321600. For the largest selection of HI-FI and audio visual equipment in the North West. Specialist A.V. demonstrations of the highest quality. Best prices guaranteed. Minimum 2 year warranty and an optional 5 yr guarantee available. Instant credit and mail order service on offer throughout the U.K. Pioneer, Denon, Kenwood, Yamaha, Technics, Marantz, Mission, Tannoy plus many more.

**PRACTICAL HI-FI** 65 Bridge Street, Manchester M3 3BQ Tel: 061 839 8869 See our main entry under Lancaster

## MERSEYSIDE

**DOUG BRADY HI-FI**, 401, Smithdown Road, Liverpool, L13 3JJ. (051) 733 6859. fair demonstrations and home trial facilities. All credit cards. Largest choice of specialist hi-fi in N.W. Closed Wednesdays and lunch 1-2.15pm.

## MIDDLESEX

**HARROW AUDIO**, 27, Springfield Rd., Harrow, Middlesex. Tel: 081 863 0938. Open Mon-Sat 9.30-5.30. Most brands available- see our regular advert for full range including Audioblab, Arcam, Audioquest, Apogee, Aura, B&W, Cyrus,

## TO FIND YOUR AREA Use our COLOUR REFERENCE



To Advertise in this section, please contact Hi-Fi World Sales Dept on:

**0171 289 3533**

# Hi-Fi World Dial-a-Dealer

Denon, Epos, Krell, Marantz, Mission, Nacamichi, Tannoy, Target, Yamaha etc. AV Specialist including installation, Interest Free Credit - ask for details. The largest range of accessories for miles around. 2 dem rooms. Plus Carriage Free Mail Order.

**PURE SOUND/ THE AUDIO ROOM.** We specialise in high quality valve & solid state amplification, with matching quality speakers & signal source components, & we cover London & the South East. Call us for a personnel demonstration of some of the finest equipment around. We offer too many brands to list here but they include Audio Note, Anon Acoustics, Audio Innovations, Lumley, Impulse, Townsend, Pink Triangle, AAudioemca, XLO, Micromega, Frameworks... 0784 458176/ 081 893 4485

**AUDIOCRAFT,** 18 Hillingdon Road, Uxbridge, Middlesex, UB10 0AD. (0895) 253340. Unbelievable but true you can audition these brands here. Audion, Proac, Michell, Erelle, LFD, Lumley, Levison, Lume, Triangle, Sente, Mag Audio, Teac, VHD, Silversound, YBA, Stax, Theta, Monitor Audio, Fuller Audio, Trilogy, Lyra, Sumiko, Ortofon, Decca, Target, Project, Moth, Kevin, Townsend, Edison, Audio Alchemy, Kesiki, Musical Fidelity.

**AUDIO T,** 159A Chase Side, Enfield. (0181) 367-3132. Great Hi-Fi from Arcam, Audiobab, Cyrus, Denon, Linn, Marantz, Meridian, Micromega, Mission, Rotel, Yamaha and many more. Mon-Fri 10-6. Sat 9.30-5.30. 3 year Hi-Fi guarantee. Free delivery & installation. 30 day free upgrades. Home demonstrations. PX. Selected Interest Free. 2 Listening Rooms. Home Cinema Specialists. BADA Bonded.

**MUSICAL IMAGES,** 45 High Street, Hounslow, Middlesex. Tel. (081) 569 6802. Fax. (081) 569 6353.

**MUSICAL IMAGES,** 173 Station Road, Edgeware, Middlesex. Tel. (081) 952 5535. Fax. (081) 952 5535. Most brands available - see full page advert. Interest free credit, ask for details. Demo rooms. Repairs & Service. Sunday opening - Open all week. A Home Cinema Specialist. Mail order. Part exchange.

**AUDIO T,** 159A Chase Side, Enfield, Middlesex, EN2 0PW. (081) 367 3132. Fax (081) 367 1638. Great Hi-Fi from Arcam, Arcam, Audiobab, Celestion, Oenon, Marantz, Meridian, Micromega, Mission, Philips, Rotel, Yamaha, & many more. Mon-Fri 10-6. Sat 9.30-5.30. 3 year guarantee on Hi-Fi. Free delivery & installation. 30 day free upgrade scheme. Home demonstrations. Part exchange. 2 listening rooms. Home Cinema specialists. BADA Bonded.

## NORFOLK

**BASICALLY SOUND,** The Old School, School Road, Bracon Ash, Norwich, Norfolk, NR14 8HG. Tel. (0508) 517 70829. Arcam, Heybrook, Chord Co. Rotel, Sound Style, TDL, Royd, Oenon, Naim, Spondor, Sound Organisation, Audio Technica, Creek, Epos etc. 2 comprehensive dem rooms, home trial facilities, free installations, Visa/Access, HP facilities. Tues-Fri 9.30-1.00pm. 2.00-5.30pm. Saturday 9.30-5.30pm.

**PROTECT-A-DISC,** Unit 4, Elvin Way, Sweetbriar Industrial Estate, Norwich, NR3 2BB. Tel: 0603 482193. Producers and suppliers of finest quality card record and CD sleeves with taped edges, poly-lined or unlined, mailers and crumfuchs etc. Please send SAE for full current price list. Trade enquiries welcomed. Tel: 0603 482193.

## NORTHAMPTON

**THE AUDIO SHOP,** 6 Hill Street, Raunds, Northants, NN9 6NN. Tel: 01933 622325. Rotel, Denon, Marantz, Philips, Kinshaw, Moth, Pro-ject, Royd, TDL, JPW, Bose, Wharfedale, Goldring, Ortofon, Chord Co., Van Den Hul, Audioquest, OED, Sound Org., Beyer, Sennheiser, etc. Service Dept., Home Demos., Free Installation, Easy Parking, Open 9:30am to 5:30pm (closed Wednesdays).

**LISTEN INN,** 32 Gold Street, Northants NN1 1RS. Tel. 0604 37871. Fax 0604 601430. Naim, Linn, Rega, Audiobab, Arcam, Cyrus, Royd, Nakamichi, Mission, Oenon, Rotel, Nad, Heybrook, Marantz, Chord Co. etc. etc., Open 10.00 - 5.30 (Closed Thurs)

**THE AUDIO SHOP,** Hi-Fi Specialists. Appointed stockists of Ariston, Creek, Denon, Dual, Goodmans, JPW, Mordaunt-Short, Rotel, Royd, Tannoy, 6 Hill Street, Raunds, Northamptonshire. Tel:- 0933 622325

## NOTTINGHAMSHIRE

**DEFINITIVE AUDIO,** Tel. (0602) 813562. For a carefully considered approach to building a true high fidelity audio system with components derived from the following manufacturers: Audio innovations, Wadia, Micromega, Deltec, E.M.T., Horning, Voyd, Systemdek, SME, Revox, Impulse, Ortofon, Pioneer. Also the remarkable Living Voice Air Partner loud speaker system. Demos by appt. Please phone for further details, install. free of charge. Mon-Sat 10.00-7pm. Closed Wed a.m.

**PETER ELLIS AUDIO,** 29 Kirkgate, Newark, Notts NG24 1AD. Tel. 0636 704571. QUAD, Castle, Arcam, OED, Sugden, Tannoy, Thorens, Marantz, Oenon, Teac. Demo room, free install. Service dept, Access, Visa, American Express. Mon-Sat 9.5-3.0. Closed Thursdays PM.

**CHANTRY AUDIO,** 18-18a Eldon Street, Tuxford, Nr Newark, Notts, NG22 0LH. Tel. 0777 870372. Pink Triangle, DPA,

Rotel/Michell, Micromega, NVA, Alchemist, Michell, Monitor Audio, Lumley, SME, Audion, and much more! Three dem rooms, home trial, free installation, service department. Access & Visa, credit facilities, Mail order, Mon-Sat 9.30-6.00, Sun and evenings home dem by appointment.

**NOTTINGHAM HI-FI CENTRE,** 120-122 Alfreton Road, Nottingham. Tel:- 0602 786191. Over 25 years experience, superb demo rooms, extensive range, free parking. Mon-Sat 9-5.30

## OXFORD

**AUDIO T,** 19 Old High Street, Headington, Oxford, OX3 9HS (01865) 65961. Great Hi-Fi from Arcam, Cyrus, Denon, Marantz, Meridian, Mission, Rotel, Sony, Yamaha & many more. Mon-Fri 10-6. Sat 9.30-5.30. 3 year Hi-Fi guarantee. Free delivery & installation. 30 day free upgrades. Home demonstrations. PX. Selected Interest Free. 2 listening rooms. Home Cinema specialists. BADA Bonded.

**WESTWOOD & MASON,** 46 George Street, Oxford. Tel. 0865 247783. Creek, Marantz, Naim, Arcam, Rotel, Rega, Epos, Tannoy, Mission, Nakamichi, Denon, Aiwa, Quad, Yamaha, Monitor Audio. Open 9.30-5.00pm. Dem room. Closed Thursdays.

**ASTLEY AUDIO LTD,** 3 Marketplace, Wallingford (3 miles from Berkshire border). 0491 839005. Aura, B&W, Technics, Panasonic, Pioneer, Kenwood, Sony, Yamaha, Denon, Dual, Marantz, Mission, Tannoy, 1 listening room. Home trial. Free installation. Service department. Access, Visa, Amex, Diners. Instant credit. Tues-Fri 9-5.30, Sat 9-5. Records & CDs stocked.

**AVON HIFI,** 12 Barker Street, Shrewsbury, Shropshire, SY1 1QJ. Tel. 0743 355166. Aiwa, Beyer-Dynamic, NAD, Quad, B&W, Mordaunt-Short, Kenwood, Bose, Nakamichi, Onkyo, Teac, Sennheiser. Dem room. Home trial. Free install. Service dept. Access/Visa. £1,000 instant credit. Mon, Tues, Wed, Fri, Sat 9-5.30.

**SHROPSHIRE HIFI,** St Michael Street, Shrewsbury, Shrops. SY1 2ES. Tel. 0743 232065. Stockists of Musical Fidelity, Mordaunt Short, Sony, Kenwood, Pioneer, Rotel, Denon, B&W, Proac. Audio Visual. Products available. Open 9.30-5.30pm Mon-Sat.

**MID SHROPSHIRE AUDIO,** 24 Peveril Bank, Davley, Telford TF4 2BU (0952) 502097. Pink Triangle, T.D.L., Marantz, Denon, JPW, Ortofon, Project, Yamaha, Ruark, Royd, Michell, Musical Fidelity, Yamaha. Target (Tables, Speaker Stands, best prices). Free Delivery nationwide. Good Discounts with no p/lex. Surround sound specialist. Home demonstrations a pleasure. 0% finance.

## SOMERSET

**MIKE MANNING AUDIO,** 110 Middle Street, Yeovil, Somerset, BA20 1NE. Tel. 0935 79361. Fax. 0935 283346. Mobile 0850 325965. Naim, Roksan, Pink Triangle, A&R (Arcam) ION, NAD, Pioneer, Rotel, Denon, TEAC, ONYX etc. Dedicated listening lounge, for relaxed and unpressured demos. Appts not necessary but best to telephone first. Home trial facilities on request, free installation and service dept, instant credit, Access/Visa etc. 9-5.30, closed Mondays.

## STAFFORDSHIRE

**ACTIVE AUDIO,** 95, Stafford Street, Hanley, Stoke-on-Trent, Staffs. Tel: 0782 214994. Fax: 0782 283346. We have 4 studios including a dedicated Audio Visual studio for the demonstration of quality equipment from the largest range in the Midlands. Open six days per week. Own service department. Free local delivery, home trial facility. Current special offers and buyers fact pack and quotation service on request.

**MUSICAL APPROACH,** Unit 7, Woodings Yard, Bailey Street, Stafford, Tel. 0785 55154. Also branch at 37 High Street, Aldridge, nr Walsall. Tel. 0922 57926. Linn, Rega, Arcam, Rotel, Royd, Heybrook, Marantz, Teac, Celestion, Apollo, Target. Mon-Sat 9.30-5.30. Home cinema equipment stocked. 2 single speaker dem rooms. Service dept and free install. Credit facilities. We are now agents for Rega products. Stafford branch only.

**ACTIVE AUDIO,** 29, Market Street, Tamworth, Staffs. Tel: 0827 53355. Fax: 0827 59513. We have two studios including a dedicated Audio Visual studio for the demonstration of quality equipment from the largest range in the Midlands. Open six days per week. Own service department. Free local delivery, home trial facility. Current special offers and buyers fact pack and quotation service on request.

## SUFFOLK

**AUDIO IMAGES,** 7 All Saints Road, Pakefield, South Lowestoft, Suffolk, NR33 6JL. Tel/fax: 0502 582853. Quad, Triangle, Arcam, Castle, Rotel, Moth, JPW, Sugden, Mission, Project, Oenon, Yamaha surround sound. Audio Innovations, plus the amazing ROTHWELL range. Separate dem room, no appts nec. 10-6.30 Tues-Thurs, 7pm Fri. 6pm Sat.

**SIGNALS** Martlesham Heath, Ipswich. Tel: (0473) 622866. See display/advertisement for brands. Turntables, high end CD drives/DAC's as well as integrated players, valve and solid state amplification, wide range of cables and loudspeakers. Home demonstrations/equipment trial service. Please telephone for directions and to book appointment.

**BURY AUDIO,** 47 Churchgate Street, Bury St Edmunds, Suffolk, IP33 1RG. Tel. 0284 724337. Arcam, Audio Alchemy, Heybrook, Marantz, Michell, Meridian, Nakamichi, Pink Triangle, Quad, Rotel, Sonus Faber, Stax., Tube Technology., Single speaker dem room. Free install. Credit facilities. Mon-Sat 9.30-6.00, closed Wed. Evening dems by appointment.

**EASTERN AUDIO,** 41 Bramford Road, Ipswich, Tel. 0473 217 217. Fax 0473 215705. Quad, Arcam, Audiobab, Meridian, Mission, Denon, Rotel, Marantz, NAD, Sony, Rogers, Nakamichi, Systemdek, Technics, Celestion, B&W, Tannoy, Morel Thorens and Top Tape. Also stock a wide range of accessories usual credit facilities. A BADA dealer.

## GLoucestershire

**SPALDINGS HIFI,** 352-4 Lower Addiscombe Rd., Croydon, Surrey. 081 654 1231/2040. 3 dem rooms and home dem. Free installation/credit. Linn, Naim, Quad, Arcam, Audiobab, Cyrus, Marantz, Denon, Ruark. Mon-Sat 9-6, Tues 9-8, Closed Wed. Service dept.

**PJ HIFI, The HIFI Shop,** 3 Bridge Street, Guildford, Surrey GU1 4RY. Tel. (0483) 504901. 9-6 Mon-Sat. Linn, Meridian, Rega, Arcam, Quad, Revox, Musical Fidelity, Rotel, NAD, Nakamichi, Marantz, KEF, Reference etc.

**RDGERS HIFI,** 13 Bridge Street, Guildford, Surrey, (0483)61049. Aiwa, Creek, Denon, Dual, JPW, Marantz, Onix, Pioneer, Systemdek, Ruark, Tannoy, Teac. Dem facilities available, no appts necessary, free installation, service dept. Access/Visa. instant credit upto £1,000 subject to status. Monday-Saturday, 9.30-6pm, later by appt.

**SURBITON PARK RADIO,** 48 Surbiton Road, Kingston-upon-Thames, Surrey. (081) 546 5549. QUAD, Castle, Denon, Dual, Kenwood, Mordaunt-Short, JBL, Rotel, Pioneer, OED, B&W and Tannoy. Demo facil. Access, Visa and Switch. 9.30-5pm.

**SURREY HIFI,** 45 High Street, Godstone, Surrey, RH9 8LS. (0883) 744755. Specialist HiFi outlet, demonstration room and parking available. Quad, Audiobab, TDL, Tube Technology, Ref Acoustics, Nakamichi, Kel, Thorens, Musical Fidelity, Van Den Hul cables, Bose, Sennheiser, Beyer headphones, Marantz, Denon, Michell, Van den Hul, Musical Fidelity, Tannoy, Target, JPW. Single speaker dem rooms. Free installation service dept. Access/Visa/Mastercard. Open 9-6pm. Closed all day Wednesday.

## SUSSEX (EAST)

**THE POWERPLANT "Brighton's Leading HiFi Shop,"** 66 North Street, Brighton, Tel. 0273 77578. Comfortable listening rooms. Knowledgeable and approachable staff. Roksan, Micromega. Exposure, Audiobab, Epos, Rotel, Marantz, Cyrus, Regai, Arcam, Mission and more.

**WORTHING AUDIO,** 20 Treville Gate, W Sussex, BN11 1VA. Tel. 0903 212133. "The friendly shop with the best sound systems in the South". Friendly advice, 3 yr guarantees, easy parking, open Mon-Sat 9-6pm. Late night Wed. Arcam, Exposure, Naim Audio, Marantz, Ruark, Restek, Clear Audio, Audio Technica, Target, Tripod, Sennheiser, AR and many more.

**CHURCHERS HI-FI,** 154 Montague St. Worthing, Sussex. BN11 3HK. Tel. 0903 821595. All major well know brands of Hi-Fi stocked. Please call for details.

**HEATHERDALE AUDIO LTD,** 202 Findon Road, Worthing, Sussex. Tel:- 0903 872288 or 0860 660001 eves. Three comfortable demonstration lounges where you can audition: Audionote, Krell, Audio Research, Klipsch, Martin Logan, Apogee, Sonus Faber, Theta, S.M.E. Copland, Voyd, Magneplanar, E.M.F., Lumley Reference, Creek, Rotel, Heybrook, Clearaudio. Phone for used stock list. "We are the South Coast's Premier Hi-Fi Specialist"

## SUSSEX (WEST)

**BOWERS & WILKINS Ltd.** (est. 1945). 1 Becket Buildings, Little Hampton Road, Worthing, Tel. (0903) 2 64141. Top names in HiFi and audio visual including B&W, Nakamichi, Castle, Denon, Philips, Quad, Technics, Aura, Teac, Sugden, Mission Thorens and many more. 4 dem rooms (budget - high end.) expert friendly advice, service dept, local installations free, one minute from A24 & A27, free local parking. Access/Visa, Instant Credit up to £1,000 subject to status. Open 6 days

**CHICHESTER HIFI,** 7 St Pancras, Chichester, W Sussex. PD19 1SU. Tel. 0243 776402. Linn, Naim, Rega, Creek Nakamichi, A&R, Denon, Roksa, Epos, JPW, Ruark. Rotel. Quad, Spondor. Evening appts available.

**CRAWLEY AUDIO,** 1 Silklin, Dalton Close, Broadfield, Crawley, West Sussex. Tel: 01293 531190, Mob: 0860-911640. RCA "Living Voice" Recordings, Alchemist, Burmester, Manhattan Acoustic, German Physiks, Chord Co, Cable Talk, Systemdek, Gravis Subwoofer, WAD, Apollo, CAD, Ortofon, Fullers Audio, Loricraft (Garrard) SME, Denon cartridges, Polk Audio,

Atacama, Magneplanar. Purpose Built Dem Rooms, Home Demos available. Part Exchange, Credit Cards Accepted.

**HORSHAM HI-FI,** 28 Queensway, Horsham, West Sussex. Tel/Fax 01403 251567. Mobile: 0831-418619. RCA "Living Voice" Recordings, Alchemist, Burmester, Manhattan Acoustic, German Physiks, Chord Co, Cable Talk, Systemdek, Gravis Subwoofer, WAD, Apollo, CAD, Ortofon, Fullers Audio, Loricraft (Garrard) SME, Denon cartridges, Polk Audio, Atacama, Magneplanar. Purpose Built Dem Rooms, Home Demos available. Part Exchange, Credit Cards Accepted.

## TYNE & WEAR

**BILL HUTCHINSON HIFI,** 87a, Castle Street, Newcastle-upon-Tyne, (091) 230 3600. For the largest selection of HiFi and audio visual equipment in the North East. Specialist AVF demonstrations of the highest quality. Best prices guaranteed. Minimum 2 year warranty and an optional 5 yr guarantee available. Instant credit and mail order service on offer throughout the U.K. Pioneer, Denon, Kenwood, Yamaha, Technics, Marantz, Mission, Tannoy plus many more.

## WARRICK

**STRATFORD HIFI,** 25 Henley Street, Stratford-upon-Avon, CV3 0W. Tel. 0789 414533. Pioneer, Technics, Denon, Marantz, NAD, Rotel, Musical Fidelity, Monitor Audio, Mission, Tannoy, Quad, TDL, Sennheiser, 0% finance is available on selected products and all major credit cards accepted. Dem Rooms. Service facilities, open 9.30-5.30pm. Late night Thursday until 8.00pm.

## WEST MIDLANDS

**FRANK HARVEY HI-FI EXCELLENCE,** 163, Spon Street, Coventry CV1 3BB. Tel: 0203 525200. The Midlands first choice for specialist Hi-Fi. Audiobab, Audio Alchemy, Arcam, Audio Quest, Alphason, Bose, Bang & Olufsen, Celestion, Cyrus, Denon, Dual, Foundation, Kef, Reference, Marantz, Monitor, Audio Mission, Musical Fidelity, Nakamichi, Nad, Rega, Rogers, Rotel, Quad, Systemdek, Target, Tripod, Tannoy, Thorens, Van den Hul, Yamaha. 3 floors, 3 demonstration rooms. Open 9.30 till 5.30. Closed Thursdays. All credit cards incl. Amex & Diners. Instant credit and interest free facilities. Home trials. Free installation, home cinema AV floor. We are a BADA dealer.

**MIDLAND VALVE HIFI,** Specialising in true fidelity systems built around valve amplification: Audion 300B Silver Nights, Audio Innovations, Impulse, Audio Note, KAL, Townsend Audio, Ortofon, Voyd, Micromega, Edison, Stax, Apollo, Dynavector, Seismic SLK, Valves. Home demonstrations and part exchange. Also vintage: Leak, Quad, Croft, Radford, etc. Flexible opening 7 days. 'phone Gary 021 722 2317.

**MUSIC MATTERS,** 351 Hagley Road, Edgbaston, Birmingham, B17 8DL. Tel. 021 429 2811. Roksan, Nakamichi, Arcam, Audiobab, Kenwood, DPA, Tannoy, Royd, Heybrook, Michell, Panasonic, Aura, Celestion, Musical Fidelity, Mission/Cyrus, Meridian, Kel, Monitor Audio, Pink Triangle, Ruark, Epos, Exposure, Pioneer and many, many more! 2 single speaker dem rooms. Appts necessary. Home trial facilities and free install. Service dept. Access/Visa/instant credit upto £1,000. Interest free credit available also. Tues - Thurs 10.30-6pm, Friday 10.30-8.00pm, Saturday 10.00-5.30pm. Check out the new branch in Solihull - Phil works there so it can't be bad! 021 742 0254

**COVENTRY HI-FI,** 126, Church Lane (off Walsgrave Road), Coventry. CV2 4AJ. Tel: 0203 440529. Quad sales & service agent, Pioneer Reference Point. Kenwood, Aiwa, T.D.L. B&W, Tannoy etc. Private listening room. 2 year guarantee on all new hi-fi. Open 9.30-5.30 Mon-Sat Closed Thursday.

**ELECTRO CENTRE,** 244 Soho Road, Handsworth, Birmingham, Tel. 021 554 1878. Full range of HiFi, Pioneer, Technics, Kenwood, JVC, Sony, Aiwa, Akai, "Guaranteed the lowest price in the UK". 24 hour mail order facility available.

**ELMDON AUDIO,** Tel. 021 784 8765. Reference Imports Lumley, Alon etc. Esoteric Audio Research 834 integrated on demonstration. Home demonstration can be arranged. Top part exchange prices, lots of used bargains. Quad, Leak, etc. Valves and valve testers, new GEC KT66s available.

**FIVEWAYS HI-FIDELITY LTD.** 12 Islington Row, Edgbaston, Birmingham, B15 1LD. 021 4550667. Arcam, ATC, Audioquest, Audio Technica, AVI, Beyer, Cable Talk, Castle, Chord, CRD (Valve), Denon, Dual, Klipsch, Michell, Nakamichi, Ortofon, OED, Quad, Revox, Sennheiser, Sequences Design, SME, Spondor, Target, TDK, TDL, Thorens, Trilogy (Valve) etc. Keith Monks Record Cleaning Machine. Closed Mondays.

**MUSICAL APPROACH,** 37 High Street, Aldridge, nr Walsall. Tel. 0922 57926. Linn, Arcam, Rotel, Royd, Heybrook, Marantz, Teac, Celestion, Apollo, Target, and others. Mon-Sat 9.30 - 5.30. Closed Thursdays. Home Cinema equipment stocked. Dem rooms, service dept. Free installation and credit facilities. Free parking at rear of shop.

# Hi-Fi World Dial-a-Dealer

**SOUND ACADEMY**, The ultimate experience for those seeking Hi-Fi. Ac. En., Arcam, Audiobal, AudioQuest, B&W, Bose, Chord, Cyrus, Cable talk, DPA, Epos, Kef ref, Marantz, Meridian, Mission, Mus. Fid., Nacamichi, Ortofon, Project, Quad, Roksan, Tube Tech, Rotel, Micromega, KAR, Kenwood, Lexicon, Cannon, Celestion, Beyer & more. 3 Single speaker dem. room on two floors incl. A/V Cinema. Open 6 days a week. Mon-Sat. All major credit cards taken. Part exchange, enquiries welcome. Just off the high Street, Blownich, W. Midlands. Tel: 0922 493499. (ample free parking)

**AMADEUS SOUND & VISION**, 10 Boldmere Road, Sutton Coldfield, West Midlands, Tel. 021 354 2311. Audio Innovations, B&O, Castle, QED, Wharfedale. Single speaker demo, appts preferred, service available, installations, B&O link install, home trials, Access/Visa, interest free credit available subject to status. 9.30-6.00pm 6 days.

**GRIFFIN AUDIO**, 94 Bristol St., Birmingham, Tel. 021 622 2230/021 692 1359. Tues-Sat 10 a.m.-6 p.m. Enjoy music at home with a system from Griffin Audio. We demonstrate and install the very best hi-fi, with systems from £500 to £25,000. Ask for Bob, Tim or Alex. Linn, Naim, Shahinian, Quad, Arcam, Rega, Denon, Marantz, Rotel.

**THE AUDIO EXCHANGE**, 52 Morse Street, Swindon, Wiltshire SN1 5DP, (0793) 539008. Acoustic Energy, Audio Innovations, Beard, Cerwin Vega, C.R. Developments, Impulse, Magnum, Micromega, Michell, REL, Sequence. AV and single speaker demo room. Home trial facilities, free installation, service dept. Mon-Sat 10-6.

**AUDIO T**, 60 Fleet Street, Swindon, Wiltshire, SN1 1RA. (01793) 538222. Great Hi-Fi from Arcam, Denon, Linn, Marantz, Meridian, Mission, Naim, Rotel, Technics Yamaha & many more. Mon-Sat 9.30-5.30. 3 year hi-fi guarantee. Free delivery & installation. 30 day free upgrades Home demonstrations. Part exchange. 2 listening rooms. Home Cinema specialists. BADA Bonded.

**P.R. SOUNDS** 58 Castle Street, Trowbridge, Wilts BA14 8AU Tel: 0225 777799. Authorised dealer for Pioneer, Technics, Marantz, Kenwood, Mission, JBL, and many more. Cinema Sound Specialists with Listening Room. For all that's best in Hi-Fi at a Price you can afford! Open Mon-Sat 9-6 Credit Cards accepted. Finance available.

## WORCESTERSHIRE

**LYNDEN AUDIO**, 0527-873766. Exclusive Midlands Audio Synthesis Dealer, Audio Physic, Adyton, Essex Audio, LFD, Sequence Design Wall Speakers, Harmon Kardon, JBL, REL, etc. Specialist Engineering Dept. offers Custom Design and Up-grades, all Kits etc., built to Customers requirements. Open Tues.-Sat. 10am-5pm. Evenings by appointment.

**SPAINS HI-FI**, 2 +2a New Rd., Bromsgrove, Worcs. Tel: 0527 872460. Aura, B&W, Beyer, Denon, Heco, JVC, Kenwood, Marantz, Mission, Monitor Audio, NAD, Nacamichi, Pioneer, Rotel, Sennheiser, Soundstyle, Sony, Systemdeck, Tannoy, Target, Thorens. Integral demo room/showroom for instant comparisons on Hi-Fi & AV equipment. Free installation. Part exchange welcome. Service department. Access, Visa, 0% finance on selected products. Mon-Sat 9.00-5.30 pm. Closed Thursdays.

**COLORAMA HI-FI**, 27 Kingfisher Walk, Kingfisher Centre, Redditch, Worcs B97 4EY (0527) 597260. Aura, NAD, Onkyo, Kenwood, Denon, TDL, Polk Audio, B&W, Tannoy. Full Pro-logic products. In-store integrated dem facilities. No appts required, service dept. Access, Visa. Open 9-5.30, closed Thursdays.

## WEST MIDLANDS

**WEST MIDLANDS AUDIO**, 158 Ombersley Road, Worcester WR3 7HA. Tel 0905 458046. Fax. 0905 457585. Naim, Rega, Rotel, Marantz, Nacamichi, NAD, Audiobal, Roksan, Meridian, B&W, Audio Research, Krell, Martin Logan, Arcam. 9-5.30 Mon-Sat, eve's by appt only. Free

## YORKSHIRE (SOUTH)

**HIFI STUDIO'S**, Sunnyfields, Doncaster, Tel 0302 781387 TDL, Sugden, ProAc, Ruark, Teac, Impulse, Systemdek, Alphason, Target, Albany, Heybrook, Monitor Audio, JPW, Totem, Harbeth, Keswick Audio Research, Michell Engineering, AMC (CD and Valves), CR Developments (Valves), Art Audio (Valves), REL Acoustics, Projekt, Origin Live, Dual, Yamaha plus home Cinema pro-logic dems. Listening room demo's. Home trial, free install, licensed credit broker, 2 yr guarantee on all equipment, service available, Access/Visa. 10-8pm 6 days. phone for further information and free fact pack.

**TRC HI-FI**, 3 Kings Cross Street, Halifax, HX1 (0422) 366832. Agents for Kenwood, Denon, Castle, Rotel. Demonstrations and advice a pleasure. Call at any time to audition some of the best Hi-Fi and pro-logic systems. Delivering and installation free within 20 miles. "The family firm where the customer matters most."

## YORKSHIRE (NORTH)

**AUDIO CLINIC**, 22 Lord Mayors Walk, Yorks, YO3 7HA. Tel. (0904) 646309. Revox-Qed-Audio Innovation-Allison-Celestion-Yamaha-Teac-Revolver-JPW-Kenwood-Bose-Thorens-Mission-Snell-B&W-Heco-Cannon-NAD-JVC-Musical Fidelity-Wharfedale-Micromega-Ruark-Heybrook. Surround sound and demo rooms, free installation. Service Dept. Credit facilities on request. Access, Visa, Open 10am-5pm 6 days a week

**THE SOUND ORGANISATION (YORK)** 2b Gillygate, York, YO3 Tel. (0904)627108. Linn, Meridian, Micromega, Naim, Rega, Arcam, Creek, Nacamichi, Mission, Denon, Epos, Royd, Rotel. 3 single speaker dem rooms, appts. preferred, home trial facilities, free install, service dept. Credit facilities on request. Access/Visa. 10.00am-5.30pm. Tues-Sat. Sony dealer award nominated '86, '87 and '88.

**VICKERS HI-FI**, 24 Gillygate, York (0904) 629659. Audio Innovations, A. E. Audiobal, Beyer, Harmon Kardon, JBL, Kef, Kenwood, Marantz, Michell, Mission, Monitor Audio, Mordant Short, Pickering, Pink Triangle, Pioneer, Quad, Rogers, Systemdek, Tannoy, Technics, Heybrook, TDL, Thorens, Dual and lots more. Dem Rooms 4. (3 by appointment). Superb showrooms. 2 yr guarantee on all hi-fi products. Appts. as above. Home trial facilities, free install. service dept. Qualified and experienced staff, over 25 yrs experience. 12 mths interest free credit. 10.30-5.30 Mon-Sat.

## YORKSHIRE (WEST)

**BILL HUTCHINSON HI-FI**, 26-28 Woodhouse Lane, Leeds (0532) 427777. For the largest selection of Hi-Fi and audio-visual equipment in the Yorkshire. Specialist A.V. demonstrations of the highest quality. Best prices guaranteed. Minimum 2 year warranty and an optional 5 yr guarantee available. Instant credit and mail order service on offer throughout the U.K. Pioneer, Denon, Kenwood, Yamaha, Technics, Marantz, Mission, Tannoy plus many more.

**DOUG BRADY HI-FI**, The Forge Cottage, 19 Cross Gate, Otley, West Yorks, LS21 1AA. Tel. (0943) 467689. Naim, Arcam, Rotel, Pink Triangle, Meridian, Epos, Castle, 2 dem rooms, hi-fi demonstrations and home trial facilities. Access/Visa. Open 10.00-6pm Tues-Sat.

**HUDDERSFIELD HI-FI CENTRE**, 4 Cross Church St, Huddersfield. (0484) 544668. B&W, Cyrus, Kenwood, Denon, Rotel, Arcam, Musical Fidelity, Quad, Audio Lab, Marantz, Mission, ect. Dem facilities - appointment reqd. Mon-Sat 9-5.30, Thurs 9-8. Closed Wed. Free installation, credit facilities. Access, Visa.

**AUDIO PROJECTS**, 45 Headingley Lane, Leeds. Tel: 0532 304565. A&R, Audiobal, Creek, Heybrook, Linn, Musical Fidelity, Naim, Quad, Rega, etc. Free installation, home trial, 2 year warranty, appts preferred. Tues-Fri 9.30-6. Sat 2.30-5.30.

**ASTON AUDIO**, 19 Crossgate, Otley, Leeds, LS21 1AA 0943 467689. Products: Naim, Arcam, Audiobal, Cyrus, Denon, Epos, Meridian, Micromega, MF, Mission, Nacamichi, Quad, Rotel, TDL & other leading brands. Demonstration Rooms, Installation Service, Interest Free Credit. Access, Visa, Open Tues - Sat.

## SCOTLAND

### EDINBURGH

**BILL HUTCHINSON HI-FI**, 43 South Clark Street, Edinburgh. (031) 667 2877. For the largest selection of Hi-Fi and audio-visual equipment in Lothian Specialist A.V. demonstrations of the highest quality. Best prices guaranteed. Minimum 2 year warranty and an optional 5 yr guarantee available. Instant credit and mail order service on offer throughout the U.K. Pioneer, Denon, Kenwood, Yamaha, Technics, Marantz, Mission, Tannoy plus many more.

**MUSIC MILL** - 72 Newhaven Road, Edinburgh EH6 5QG. Tel: 031 555 3963. Stockists of Micromega, Proac, Audio Innovations, Lumley Reference, Tube Technology, DNM, B&W, Systemdek, Nottingham Analogue, Nacamichi, Rehdeko, Dali, Crimson, Harmon Kardon, Goldring. Mon-Sat 10-4.30 pm by appt. Closed Wednesdays. All Major Credit Cards Accepted. Contact Fraser or Mark

### ABERDEEN

**HOLBURN HI-FI**, 441 Holburn Street, Aberdeen. Tel: 0224 565713. Arcam, Audiobal, B&W, Celestion, Denon, Dual, Epos, Heybrook, ION, Kenwood, Creek, Marantz, Meridian, Mission, Cyrus, M.S., NAD, Nacamichi, Pioneer, QED, Quad, Revox, Rotel, Ruark, Tannoy, Technics, Wharfedale, Yamaha. 9.30-5.30 Mon-Sat.

**HI-FI EXCELLENCE**, Hi-Fi Innovators & product designers with 15 years experience. Very much in the business for the music. Musical Fidelity key dealer. Largest Rotel retailer in the area. Particularly keen to make the buying of Hi-Fi a fun experience. Situated in the West End away from the bustle of the City centre - the perfect environment to enjoy quality Hi-Fi. Full time service engineer. Open Mon-Tues 10-6, Wed 10-1, Thurs 10-7, Sat 10-5 or later by appointment. Hi-Fi Excellence, 293 Union Grove, Aberdeen. Tel: 0224 322520

**AUDIO SUITE** 42 St Andrews Street, Aberdeen. Tel: 0224 625635 Single Room Demonstrations available. Full Service Department. Free Delivery and Installation anywhere in Scotland. Authorised dealer for Linn, Chord, Proac, Mordant Short, Audio Research, Sonus Faber. All Major credit cards accepted.

## AYRSHIRE

**LASER AUDIO**, Now at new premises - 1 St Marnock Place, Kilmarnock KA1 1DT. Tel: 0563 40292. Audiobal, Aiwa, Celestion, Cyrus, Denon, Dual, Marantz, Mission, Philips, Pioneer Systemdek and Tannoy. 2 demonstration rooms, AV dem room. Appointments preferred, home trial facilities. Free installation, service facilities. Access, Visa and written credit. Open Tues- Fri 10-5.30 Sat 9.30-5.30.

**THE SOUND FOUNDATION**, 22 Nelson St., Kilmarnock, Ayrshire. KA1 1BA 01563 74185 Agents for Sugden, Pink Triangle, Micromega, Audio Innovations, Harman Karmon, Castle, Revolver, Michell. Single speaker dem. room. Home dems. & delivery installation service available. Full credit facilities available. For more info. phone Kevin. Be Different Pay Us a Visit.

## GLASGOW

**HI-FI MATTERS**, 272 Vincent Street, Glasgow G25RL. Call Garry or Ewan on 0141 226 2400 for unbiased advice based on over 25 years experience in tailoring systems to individuals needs. Agencies include: Audio Innovations, Arcam, Shearman, Roksan, JPW, Aura, Heybrook, Michell, REL, Systemdek, Impulse, Morarty & Rogers. Open 10-6 six days a week.

**STEREO STEREO**, 278 St Vincent Street, Glasgow, Scotland. Tel 041 248 4079. Closed Tuesday, installations throughout Scotland. Credit facilities available.

**BILL HUTCHINSON HI-FI**, 43 Hope Street, Glasgow. (041) 248 2857. For the largest selection of Hi-Fi and audio visual equipment in South West. Scotland Specialist A.V. demonstrations of the highest quality. Best prices guaranteed. Minimum 2 year warranty and an optional 5 year guarantee available. Instant credit and mail order service on offer throughout the U.K. Pioneer, Denon, Kenwood, Yamaha, Technics, Marantz, Mission, Tannoy plus many more.

## INVERNESS

**THE MUSIC STATION**, 49 Church Street, Inverness, IV 1DR. Tel: 0463 225523. Beyer Dynamic, Celestion, Denon, Jamo, Kef, Kenwood, Mission, Pioneer, Rotel, Sony. Listening room, service department, free local delivery, part exchange, full range of credit facilities.

## TAYSIDE

**J.D. BROWN**, 28-36 Castle Street, Dundee DD1 9NZ. Tel: (0382) 26591. Rotel, Denon, Pioneer, Technics, Aiwa, Mission, Castle, Morant-Short, Monitor Audio, Bose, Infinity. All equipment ready for demonstration, No appt. nec, free installation, service dept. Open 9.30-6pm six days a week, (close 5pm Sat).

## IRELAND

### DUBLIN

**ACDUSIC DIMENSION**, 16 Idrone Lane, Rear of Main Street, Blackrock, Co. Dublin. Tel 2884612 Fax 2833521. (from UK + 0103531). Stockists for speakers: ATC, Acoustic Energy, JPW, Triangle, ProAc, Ref 3A, RuArk, Heybrook, Polk Audio, TDL, Impulse, Chario, Audio Static. Amps by: Albany, AVI, LFD, NVA, Alchemist, Marantz, Audio Innovations, Rotel, CR Developments, EAR, Kinshaw, CD Players and DACs by: AVI, Pierre Lume, Micromega, Kinshaw. Turntables by: Project, Tables/Stands: Apollo. Cables: Straightwire, Ixos, VLS, Eagle. Credit cards and mail order.

**CLONEY AUDIO**, 55 Main Street, Blackrock, Co Dublin, Tel. 2889449/2888477 Fax. 2834887. Products include: Arcam, Classe, Philips, Rogers, Epos, B&W, Naim Audio, Meridian and others. Open Tues/Sat 10am-6pm. Thurs/Fri 'till 9pm Closed Mondays.

**LAFAYETTE HI-FI**, 50 Wellington Quay - Dublin. Tel: 010 353 1677 0443. Dublin's Hi-Fi Separates Specialists. All leading brands, demonstrations available on request. Open Monday - Saturday 10 am - 6 pm.

**PETER DAM & CO LTD**, 111 Clonskeagh Road, Dublin 6. Tel. 0103531 2694433. Products include: B&O, Quad, Kef, Thorens, TEAC & many more! 2 demonstration rooms and 2 year guarantee.

## BELFAST

**LYRIC HI-FI**, 163 Stanmillis Road, Belfast (0232) 381296. Linn, Naim, Rega, Arcam, Denon, Rotel and more. Mon-Sat, 10.00-6.00pm. Late night Thurs.

**ZEUS AUDIO**, 6 Hope Street, Belfast, (0232) 332522, Audio Innovations, Pink Triangle, Roksan, Marantz, Celestion, Meridian and more. Mon-Sat 10.00-5.30pm. Late night Thursday.

## COUNTY DOWN

**ASTON AUDIO**, Unit 8, Kings Road Shopping Centre, Kings Road, Belfast. (0232) 402220. Akai, Technics, JVC, Samsung, Toshiba, Panasonic and many more. Demos. Open Mon-Fri 10-8pm Sat 10-5pm.

## LONDONDERRY

**ZEUS AUDIO**, 23a Kingsgate Street, Colrairie, BT52 4LB. Tel. (0265) 56634. Marantz, Mission Cyrus, Aiwa, Akai, Alphason, Sony, Pink Triangle, Celestion, Rotel. Mon-Sat 10-5.30pm. Closed Thurs.

## WALES

### Gwynedd

**ACTON GATE AUDIO**, 4 Ruabon Road, Wrexham, North Wales. Tel. 0978 364 500. Audio Visual Specialists. Aiwa, Arcam, AMC, Bose, B&W, Beard, Canon, Celestion, Castle, Cyrus, Jamo, Marantz, Michell, Mission, Mordant Short, Musical Fidelity, NAD, Nacamichi, Micromega, QUAD, Radford, Rotel, Rogers, Rega, Ruark, Spondor, Tannoy, Thorens, Wharfedale, UKD, Yamaha, DSP Club Member, Demo Room, installation service. Easy Parking and Motorway access. All major credit cards accepted. 9.30 - 5.30 daily. Closed Weds pm.

**ELECTRO TRADER**, 19 Colwyn Crescent, Rhos on Sea, Colwyn Bay, Clwyd, Wales, LL28 4RN. (0492) 548932. NOW APPOINTED SUGDEN DEALER FOR THE NORTH WEST. Rotel, Yamaha, NAD, Harman, Kardon, Teac, Alphason, Heco, Infinity, Kef, JBL, Sugden, Tannoy, Rotel Michi, Haybrook, Acoustic Research, Ruark and Soundstyle tri-pod racks etc. Dem room appts. preferred. Home trial. Free install. Access, Visa, Open 9.30 - 1.00, 2.00 - 5.30 Mon-Sat.

### GLAMORGAN (SOUTH)

**AUDIO EXCELLENCE 'WHERE THE MUSIC MATTERS'**, 134-6 Crays Road Cardiff CF2 4NR, Tel. 0222 228565 Fax. 0222398201. Great Hi Fi carefully selected and demonstrated by friendly enthusiastic staff. Home installations and check-ups. Two year warranty from our own service department. Open 9.00-5.30 Tuesday - Saturday closed Monday.

### GLAMORGAN (WEST)

**AUDIO EXCELLENCE 'WHERE THE MUSIC MATTERS'**, 9 High Street, Swansea, SA1 1LE. Tel. 0792 474608 Fax. 0792 645087. Great Hi Fi carefully selected and demonstrated by friendly enthusiastic staff. Home installations and check-ups. Two year warranty from our own service department. Open 9.00-5.30 Tuesday - Saturday closed Monday.

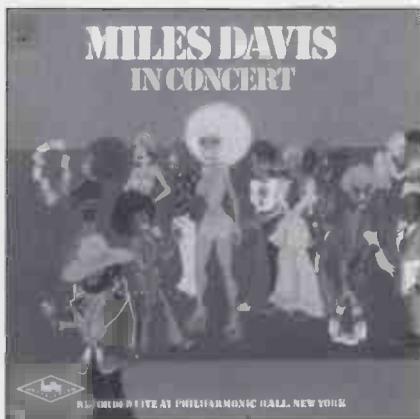
## GWYNEDD

**I&H GRIFFITHS & SONS**, 313 High Street, Bangor LL57 1YA. 0248 370655. Audio Visual Specialists in Dolby Prologic systems. Yamaha, Tannoy, Teac, Sony, B&W, Wharfedale, Rotel, JVC. Home trial facilities, free installation, service dept. After hours dems by appointment. Access, Visa, Lombard credit charge. Mon-Sat 9-5.30, Wed 9-1.

**TOP TAPE**, 1 Crystal Way, Elmgrove Road, Harrow, Middlesex, HA1 2BJ. Tel: 081 427 1404. The UK's oldest and largest Tape Mail Order Service. TDK, Maxell, Sony, Ampex audio cassettes plus Fuji, JVC, Konica, Memorex, Scotch & TDK video tapes. Send for complete list of latest prices and offers including Video 8, VHS-G, S-VHS, DAT, MiniDisc and Open Reel and tape accessories including Alliso. Local Dealer Listing available. Telephone orders on 081 427 1404 Mastercard, Visa & Switch accepted.

TO ADVERTISE IN  
THIS SECTION PLEASE  
CALL THE  
HI-FI WORLD  
SALES DEPARTMENT  
ON 0171 289 3533

## Simon Hopkins



**MILES DAVIS**  
**In Concert**  
COLUMBIA 14-476910-10

● We have the good work of the French offices of Columbia to thank for a couple of cracking - and thoroughly essential - Miles Davis reissues this month. For altogether too long now a huge swathe of music which the great bandleader and trumpeter recorded in the seventies (between 1969 and 1976) has been only available on mortgage-inducingly expensive Japanese import, so it's nice that gradually, one by one, Davis' albums from this period (not to mention an increasingly large number of

bootlegged live shows) are seeing the light of day as domestic CD releases within Europe.

Quite apart from the fact that fans of Miles' seventies work are finally getting to collect this stuff on CD without ending up living on the street, the emergence of this catalogue is having a welcome and significant effect; namely the complete reappraisal of the work that Davis committed to wax in the seven years after the recording of the seminal *Bitches Brew*. The plain fact is this: in this short space of time, Miles Davis, a musician who'd already been a major part of three complete jazz revolutions - and arguably the instigator of two of them - managed to put together a body of work which easily equals the work of any other single musician of the 20th century.

It was a body of work which embraced modal jazz improvisation, rock instrumentation and arrangements, post-Darmstadt composition, and funk rhythms; it was a music which fused Duke Ellington and Jimi Hendrix and Stockhausen and James Brown; and it was a music almost totally ignored by critics and audiences alike, both at the time and for a long time since. When Miles himself re-emerged in the early 80s after a half-decade of illness even he had turned his back on this music and was content to spend the rest of his career ploughing the light fusion furrough.

If you are a newcomer to this music, then there are other records you should investigate first. The aforementioned *Bitches Brew*, a studio double album, really kicked everything off, and remains one of the great albums of all time, regardless of genre. Between it and the three live doubles recorded in Japan at the very end of this period - *Dark Magus*,

*Pangaea* and *Agharta* - you'll have enough music to change your preconceptions forever. But for the fan, both this, and *Live At Filmore*, will be essential.

*In Concert* is the later of the two albums. Recorded live at New York's Philharmonic Hall in the September of 1972, the album came with a sleeve so dripping in pimp chic that it looks the blueprint for a thousand current crappy funk bands who reckon that a few dated threads, an afro, a wah-wah pedal and some cheesy synth make great funk. But where it's impossible to imagine *Bitches Brew* without Mati Klarwein's inspirational artwork, *In Concert*'s happy street scene cover belies the darkness that's evident at the heart of this music from the minute the album opens with fast, furious, and ritualistic funk underpinning Davis' bleak, screaming trumpet.

The band is nine-strong, and bloody well sounds like it: Davis on trumpet - often heavily processed with wah wah and fuzz box - and organ, Carlos Garnett on soprano, Cedric Lawson on keyboards, Reggie Lucas on guitar, Khalil Balakrishna on sitar, Michael Henderson on bass (Davis borrowed Henderson, brilliantly, from Stevie Wonder, perhaps the only musician to equal Davis in the seventies in redefining Black music) Al Foster on drums, Badal Roy on tabla, and percussionist Mtume Foreman.

Ultimately, this isn't the finest band that Davis worked with in this period - I'd personally reserve that judgement for one of the Reggie Lucas-Pete Cosey double guitar line-ups that came later - and it's not one of the best recordings, either. But this is still inspired music-making, and still a challenge to musicians twenty years on.



**MILES DAVIS**  
**Miles Davis At Filmore**  
**COLUMBIA COL 14-476909-10**

● Now this is a classic band, recorded two years earlier at New York's famed Filmore concert hall. It's a smaller band than that on *In Concert*, a septet which was pretty much the core group of the Bitches Brew line-up: Steve Grossman on soprano; Chick Corea on electric piano; Keith Jarrett on organ; Dave Holland on bass; Jack de Johnette on drums; Airtio Moreira on percussion; and Miles, of course, on trumpet.

This reads like a who's who of seventies fusion, and surely all these players would go on to highly successful solo careers, and highly diverse ones, from the highly-wrought, complex jazz rock of Chick Corea's *Return to Forever* group to Jarrett's epic, neo-Romantic piano improvisations. But the music here - a stripped-down and funkier version of the Bitches Brew material - has more going on inside it than all the music Miles' alumni would churn out between them. A music rich in possibilities.

The apparent current resurgence of interest in Miles' music from the seventies - from the darker strands of jazz-drenched hip-hop appearing through the Mo Wax label to the monstrous, industrial jazz that London's God grind out - is a welcome thing for sure. If it's taken twenty years for these strands of musical DNA to have finally made it into the cells of mainstream contemporary music, no matter, we're getting there at last.

**HERBIE HANCOCK**  
**The Complete Warner Bros. Recordings**  
**WARNER ARCHIVES 9362-45732-2**

● In the first few years after the various members of the Bitches Brew line-up dispersed, some of the musicians did go on to make some pretty extraordinary music. The idea that after Miles Davis' great leap forward all his cohorts went on to careers of either unbridled conservatism - say, the defiantly purely acoustic music of Jarrett - or ridiculous commerciality - witness the immensely

popular but pretty vacuous fusion of Corea's *Return to Forever* - is a tad sensationalist, and very unfair (although it's a generalisation this hack's usually happy to make).

The truth, as ever, is more complex. Saxophonist Wayne Shorter and keyboardist-composer Joe Zawinul went on to form Weather Report, and while that group is undoubtedly best known for the funky, uplifting, and fairly trite music of its middle years - and particularly for their hit single "Birdland" - the music on their first clutch of albums was a rich combination of deeply resonant composition and immensely sympathetic group improvisation. As for guitarist John McLaughlin, he formed the famed jazz rock supergroup Mahavishnu Orchestra, whose first three or four albums, despite the remaining critical prejudice against them - a prejudice certainly not helped by preposterous album cover graphics that wouldn't go amiss on a Yes album, and titles like *Visions of the Emerald Beyond* and *Between Nothingness and Eternity* - were an incendiary blend of mammoth post-Hendrix rock freakouts and hugely complex, visionary structures.

But of all the musicians to come out of Miles' great groups of the late 60s and early 70s, the keyboardist Herbie Hancock perhaps came the closest to fulfilling the promise of *Bitches Brew*. Hancock had been in Davis' group immediately before the trumpeter "went electric", the group which saw Miles move from an acoustic, modal jazz which so stretched the formula as to be on the brink of Free Jazz. He'd followed Miles through into his early electronic experiments, and brought all this experience to bear on three staggering albums which he recorded in the early 70s.



This Warner Archives double brings together the first of these monumental albums, *Mwandishi* and *Crossings*, with the album he recorded immediately before, *Fat Albert Rotunda*. This first album - basically a soundtrack to a Bill Cosby cartoon series - has its charm, but it's a pretty limited affair, all sassy urban funk and no real exploration, although fans of the newly-rediscovered tenorist Joe Henderson will find it of interest. But for *Mwandishi* Hancock pulled together a

sextet which pretty much remained constant for three albums: himself, bassist Buster Williams, drummer Billy Hart, trumpeter Eddie Henderson, bass clarinetist Benny Maupin and trombonist Julian Priester. The music this group made on *Mwandishi* was shocking enough, blending tropical funk with austere horn arrangements and radically free group improvisation, but by *Crossings* the group had gone even further out, adding a vocal quintet and Patrick Gleason's freakish synthesiser to this already vibrant, mutant music.



**HERBIE HANCOCK**  
**Sextant**  
**SONY SRCS 7047**

● But perhaps the group's masterpiece was their final album, *Sextant*, recorded for Columbia. On this album the group attained a perfect balance of eerie synths (Hancock was, and remains, one of the great innovators in electronic keyboards, and here he's still in the company of Gleason), dank funk, complex odd meters, tribal drumming and free group improvising. After this album, Hancock would go on to a much more financially successful brand of funk, but on *Sextant* he reached the apotheosis of Jazz Rock.

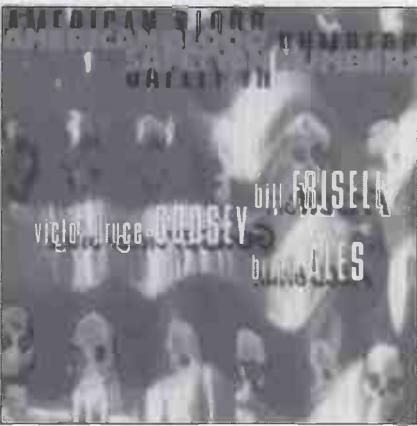
*Sextant* unlike its predecessors on Warners, remains available only as an expensive Jap import, but completes a trio of some of the most important, and criminally overlooked, albums of the 70s.



# Jazz

## BILL FRISELL/VICTOR BRUCE GODSEY/BRIAN ALES American Blood/Safety In Numbers

VERABRA VBR2064 2



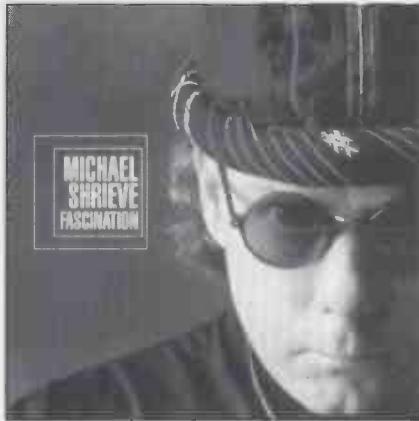
● A couple of different settings for the American guitarist Bill Frisell, at one time a frequent visitor to these pages, largely absent of late. There can be no doubt that by the mid-eighties Frisell was one of the most progressive jazz guitarists on the scene, but recent solo records and live appearances in the UK have been hampered with a certain conservatism, so it's good to have two such wildly different contexts - contexts in which he's not got the mantle of bandleader to constrict him - in which to gauge the current state of his art.

The American Blood album features the two intriguing long, multi-part pieces of the album's title. On 'Safety in Numbers', sampling and electronics man Brian Ales has constructed a huge ten-movement piece from fragments of a single Frisell guitar improvisation. To this Frisell has added a part-by-part improvised commentary on guitar, banjo and ukulele. The result's always enjoyable and at times quite stunning. Frisell retains a unique ability to balance the whimsical - even the sentimental - with the brutal, and the range of his musicality here - in terms of technique, genre and emotion - is immense.

'American Blood' sees Frisell and Ales

joined by the poet-narrator and singer Victor Bruce Godsey. Again Ales constructs a backing track from Frisell's guitar playing, to which the guitarist has added yet more guitar and Godsey has added a narration of his own poems. In concept, this is highly esoteric stuff, for sure. But in practice, the music here is highly accessible, if fairly constantly searching - and the combination of it and Godsey's evocative voice is compelling stuff.

## MICHAEL SHRIEVE Fascination CMP CMPCD67P



● Frisell is also one third of drummer Michael Shrieve's trio on Fascination, alongside longtime-compadre from John Zorn's Naked City "supergroup", organist Wayne Horvitz. But this is altogether a more regular set than the American Blood album, unsurprisingly, given its leader's background. A scan of Shrieve's two and a half decade career would take in work with Santana, Tangerine Dream founding-member Klaus Schulze, Steve Winwood, John McLaughlin, and solo projects which feature the likes of Andy Summers and trumpeter Mark Isham. It's an impressive list for sure, but not necessarily one you'd associate with real musical innovation.

So it's a bit of a surprise finding him in the company of two New York noisemakers, recreating - and attempting, perhaps, to redefine - the classic jazz guitar-organ-drums trio. By happy coincidence, Fascination's accompanying

press release quotes Shrieve as saying that this music is directly inspired by "post-60s Miles Davis stuff like Live at the Fillmore" (see above), and it's instructive to listen to this set back-to-back with the Davis record. For despite the highly responsive and dextrous improvising that these three musicians turn in, the music here - with the sole exception of the album's final piece, the highly atmospheric ambient piece 'Sounding in Fathoms' - is pretty traditional stuff, using the tried and tested formula of post-bop jamming as its basis. The group may dip into the odd bit of grunge or space-rock, but always quickly return to contemporary jazz familiarity. Fascination may have much of Live at Fillmore's sense of space and freedom, but the implications of Davis' richly fertile forebodings are never so much as touched on.

All that said, you'd have to be a miserable sod not to get some considerable enjoyment from this record. These players are far too sensitive and creative to let their obvious accomplishment get in the way of the music, so this never descends into session musician jazz fusion narcissism. And the sheer sound of this group is superb; Horvitz and Frisell weave a rich and colourful tapestry between them, and if Shrieve isn't contemporary jazz's most interesting composer, he's nonetheless a fine drummer, both fiercely swinging and timbrally diverse.

All in all, not the explorative stuff one might have hoped for, but highly enjoyable for all that.



# Jazz

Simon Cooke



**KETAMA/TOUMANI DIABATE/JOSE SOTO**  
**Songhai 2**  
HNCD 1383

● And, as they say, now for something completely different...

Those of you who are familiar with the original 'Songhai' album featuring Toumani Diabate and 'new flamenco' wizards Ketama will undoubtedly be amazed that this sequel album is being reviewed under 'jazz', but why not? It is the product of the cross-pollination of Spanish flamenco with traditional Malian styles which creates a sound which is not easily definable, but which rewards consideration and repeated listening.

I wouldn't recommend this CD to anybody with a sharp sounding System as the highly strung lyrics and stinging flamenco' guitar will do your tweeters - or your ears if you are brave enough to use headphones - no good at all. Around these are built complex layers of strings,

percussion, vocals, and musical mysteries of old Africa of which I confess ignorance; Balafon and ngora. Each layer is beautifully and faithfully recorded, a point which serves the ethereal quality of the vocals especially well. These are not mainstream, technically 'perfect' singers, but artists using traditional idioms which are often translated unsympathetically by recording or mastering engineers. As 'world music' becomes more popular this is becoming less common, but it still, unfortunately, occurs. Happily it has not happened here.

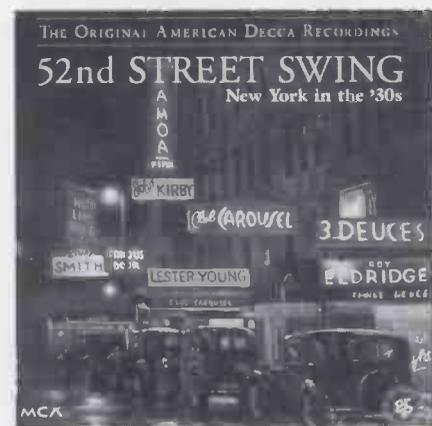
Even if you can imagine a Malian/Spanish crossbred musical form, this CD will reveal many different facets to the careful listener; to me there are elements of oriental music in here, the odd cadence from East European and Arabic devotional music, National guitars, twinkling Andean music and even a disconcerting hint of the 'Sturm und Drang' of Northern Europe to temper the hot Hispanic and African blood, but I'll warn you now, others have heard nothing but 'Fawity Towers' Manuel strangling a cat. It's weird, wonderful, and only for the serious student of esoteric music.

**ELLA FITZGERALD**  
**The War Years (1941-1947)**  
GRP 26282



● A double CD totalling 43 tracks and including a previously unreleased take of Rose/Harburg/Arlen's 'It's only a paper moon' and two of Lewis/Hamilton's 'How high the moon'. Of course, no mere compilation album could do justice to a performer of Fitzgerald's standing but, like the rest of the series, this is serious quality nostalgia for older listeners or interesting archaeology for the young. Take your pick.

**52nd STREET SWING**  
**New York in the '30s**  
GRP 16462



● This is another of the Original American Decca Recordings series partly reviewed in the January edition. With two tracks from The Delta Four and Sam Price, three from the Spirits Of Rhythm, Stuff Smith, John Kirby and Hot Lips Page, and four from the Leonard Feather All-Stars, also including Dick Katz' nostalgic booklet notes - excellent notes are a forte of this series - this is a bargain collection of top-notch swing. If you buy just one 'American Decca' recording, make it this one.

**MILDRED BAILEY**  
**The Rockin' Chair Lady**  
GRP 16442



● With a voice like a canary and a build like a battleship, Mildred Bailey remains one of the most underrated female Jazz talents. The twenty tracks on this CD cover the career of a voice that sounds remarkably like your Grandma's singing. It's something else entirely.

## AUDIO ACCESSORIES



### HI-FI WORLD SOLID SILVER INTERCONNECTS

Top quality silver with the right balance between conductivity and resistance, offering excellent performance in terms of speed and detail. The gold plated RCA connectors are hand soldered to the cables by a skilled technician to ensure for long life. The interconnects are held together by a special adhesive that makes it look like a single piece, the joint between the two conductors is long life. Available exclusively through Hi-Fi World and Hi-Fi World Online.

.....£139.95/1M PAIR.

### HI-FI WORLD SILVER PLATED COPPER INTERCONNECTS

A silver plated copper cable with solid silver RCA connectors. Because the majority of the signal passes through the skin of a cable, the silver plated copper provides the quality of silver cables at the cost of normal high quality copper cables.

.....£69.95/1M PAIR.

### AFFORDABLE SILVER PLATED COPPER INTERCONNECT

A silver plated copper cable with high quality silver plated copper RCA connectors. The RCA connectors are hand soldered to the cable for good electrical contact with high impedance amplifiers.

.....£28.50/1M PAIR

### HIGH QUALITY AERIAL LEADS

If you've had a good aerial, a good amplifier and a good tuner, then you'll want to connect the TV to your hi-fi with the best cable possible to ensure the signal is preserved. We now have a high quality copper aerial cable fitted with gold plated connectors which does just this 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



## AUDIO ACCESSORIES

### 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 .....£45.00 EACH**

**SIX CUBES FOR THE PRICE OF FIVE..... £225.00**  
**EIGHT CUBES FOR THE PRICE OF SEVEN!**

.....£315.00



### 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**



### 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 .....£19.20**  
**1M FIGURE 8 PLUG .....£15.75**  
**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 bourne interference. Suitable for top-end systems

.....£45.50

### 8-WAY MAINS BLOCK

New from Campaign Audio Design, this 8-Way mains block features a high quality silver plated copper cable, silver soldered to an MK plug which itself is fitted with a VDR, which prevents mains spikes reaching your equipment. The cable is plaited together to reduce noise. The 8-Way block represents the highest quality way to supply eight items of hi-fi from one socket.

**8-WAY + 1M CABLE .....£93**  
**8-WAY + 2M CABLE .....£107**

### ELASTOMER DAMPED EQUIPMENT SPIKES

In addition to the standard equipment isolation spikes, Campaign Audio Design have now added an improved version with Elastomer damping. As the spike transmits energy away from your sensitive equipment, the Elastomer absorbs any energy that may be reflected and cause the spike to resonate. There are three in a pack.

**ELASTOMER ISOLATION SPIKES .....£22.50**

### 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.



.....£6.50

# Hi-Fi World WORLD LIBRARY

## VALVE BOOKS

**AN APPROACH TO AUDIO FREQUENCY AMPLIFIER DESIGN**, seventeen circuits from 5 to 1100watts. General Electric Co. £19.95

Seventeen high quality amplifier designs from the Research Laboratories of the General Electric Company (UK). Designs range from 5 to 100watts, using KT66s, KT88s, DA100s, etc. Also includes two valve pre-amplifiers complete with valve phono stages.

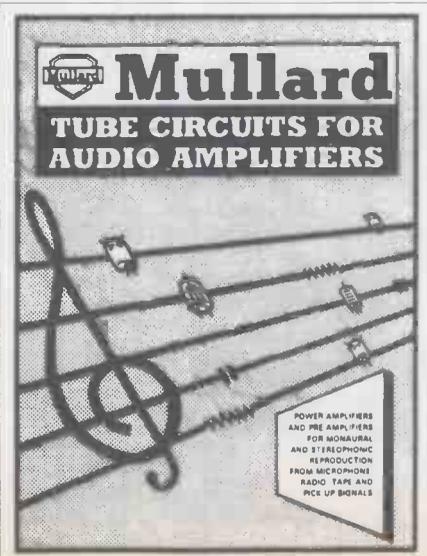
AN APPROACH TO  
**AUDIO FREQUENCY AMPLIFIER DESIGN**

Seventeen Circuits from 5- to 1100-watts

A PUBLICATION OF  
THE GENERAL ELECTRIC CO. LTD. OF ENGLAND  
REPRINTED AND DISTRIBUTED BY  
Audio Amateur Press

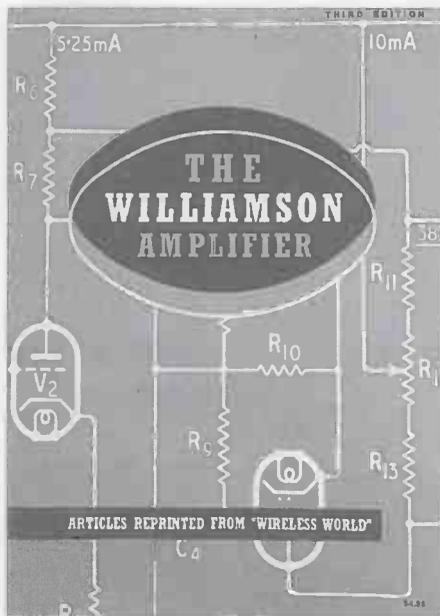
**MULLARD TUBE CIRCUITS FOR AUDIO AMPLIFIERS.** £13.95

First published in 1959 by Mullard, this book includes full designs for eleven power and control amplifiers, including the 5-20, using valves. This book begins with a four-chapter tutorial on getting the best sound from valve amplifiers.



**THE WILLIAMSON AMPLIFIER**, by D. T. N. Williamson. £9.95

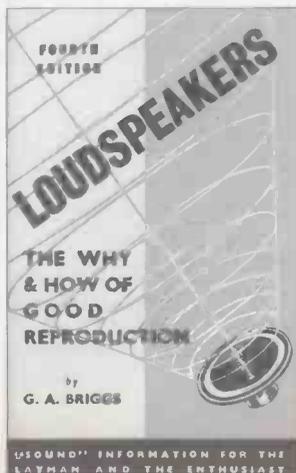
In April 1947, Williamson's valve power amplifier become an overnight success. The author takes you deep into his design decisions and offers practical advice on how to build the amplifier and set it up for best performance.



## LOUDSPEAKERS

**LOUDSPEAKERS: THE WHY AND HOW OF GOOD REPRODUCTION**, by G. A. Briggs. £10.95

A popular and easy to understand book on building loudspeakers, using empirical techniques that pre-date computer analysis. A fine grounding, written by a manufacturer with first hand experience - recommended for beginners.



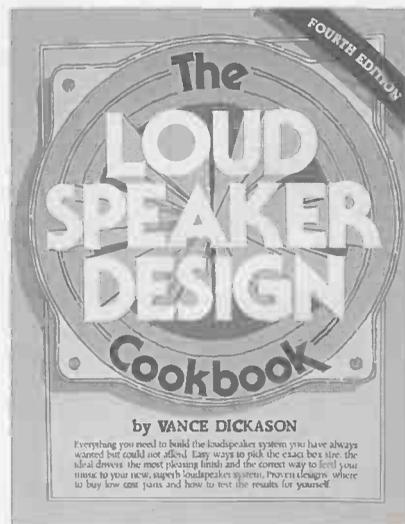
**ELECTROSTATIC LOUDSPEAKER DESIGN AND CONSTRUCTION**, by Ronald Wagner. £19.95

**ELECTROSTATIC LOUDSPEAKER DESIGN AND CONSTRUCTION**

RONALD WAGNER

This book takes you step by step through the design and construction of a full range electrostatic loudspeaker, including the basic operating principles behind electrostatics. Whether you intend to build your own electrostatic, repair and restore a vintage electrostatic or are just interested in the principles behind electrostatics, this book is a must.

**THE LOUDSPEAKER DESIGN COOKBOOK**, by Vance Dickason. £23.75



This best selling book in the field of loudspeakers offers good, up-to-date practical design information for the home constructor. Like today's manufacturers it uses modern Thiele Small theory and parameters

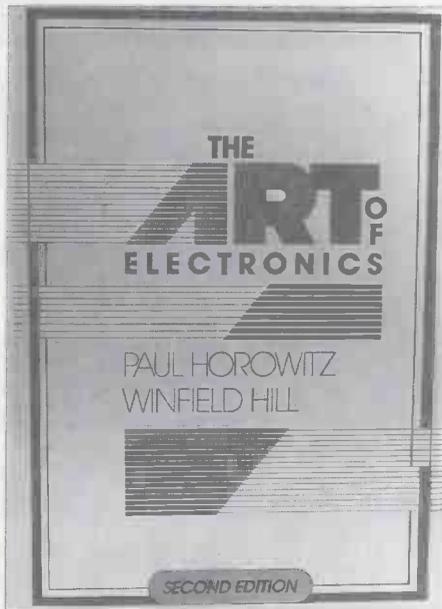


# Hi-Fi World WORLD LIBRARY

## SOLID STATE ELECTRONICS

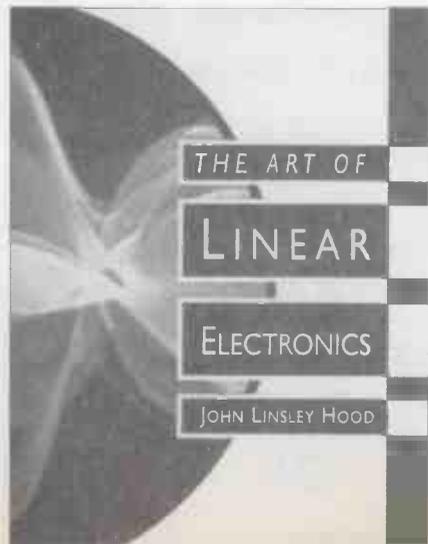
### THE ART OF ELECTRONICS, by P. Horowitz and W. Hill. £35

The definitive electronics book. The Art of Electronics is an ideal book for the beginner through to the engineer. Written in easy to understand English, each chapter takes you from basic first principles through to full design exercises and practical circuits.



### THE ART OF LINEAR ELECTRONICS, by J. Linsley- Hood. £16.95

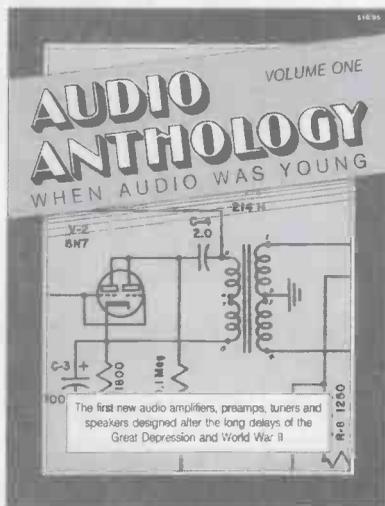
Concentrates specifically on analogue electronics for audio and goes into detail on obscure topics like the drawbacks of feedback, as well as its advantages. Covers mainly solid state but also includes valves. A must for serious enthusiasts and budding designers.



## AUDIO ANTHOLOGIES

### Audio Anthologies - When Audio Was Young

There are five volumes of the Audio Anthologies, listed below with a brief description and guide to their contents. They cover one of the most exciting and important eras of hi-fi, from the end of the second world war, through the introduction of stereo, magnetic recording, binaural recording and the FM Multiplex decoder. They contain many ground breaking circuits and theory covering all aspects of hi-fi design. A must for valve enthusiasts.



### Volume One - May 1947 to December 1949

The first new audio amplifiers, tuners and speakers designed after the long delays of the Great Depression and World War II.

**Summary of Contents:** 9.5watt, 5watt and 6.5 watt 6A5G amplifiers, 30watt 300B amplifier, valve FM tuning indicator, 30watt 211 power amplifier, cathode follower amplifier using 6V6, an adaptation of the Williamson amplifier, valve phono preamplifier, several horn and reflex loudspeaker designs and much more.

### Volume Two - January 1950 to July 1952

More great amplifiers, preamps, loudspeaker designs, and the first glimmer of the stereo revolution plus magnetic recording aids.

**Summary of Contents:** Ultra linear 6L6 design and operation of the Williamson, a direct coupled amplifier, Williamson type amplifier using 6A5s, 40watt 845 push-pull amplifier, valve phono and line preamps, valves and loudspeaker damping, design and construction of reflex and horn loudspeakers.

### Volume Three - August 1952 to June 1955

Seven power amplifiers, eighteen preamps, twelve loudspeaker designs, including four horn types and binaural recording techniques.

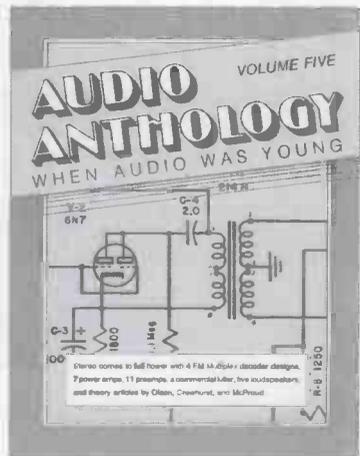
**Summary of Contents:** Simple valve phono stage, transformerless amplifier using 6082, 20watt 5881 amplifier, 10watt 6V6 amplifier, stereo valve preamp, high quality valve phono stage, a preamp for the Williamson, low distortion tone control preamp, binaural or stereophonic?, transistor phono amp, corner horn loudspeaker, concrete horn loudspeaker.

### Volume Four - July 1955 to December 1957

How to plan an audio system, twelve amplifiers and preamps, solid state techniques and circuits introduced and six loudspeaker designs.

**Summary of Contents:** 18watt 5881 amplifier, 4watt single-ended tweeter amplifier, budget 11 watt amplifier, versatile bass/treble control, transistor theory, transistor preamp, transistor techniques, battery powered transistor phono preamp, loudspeakers explained.

### Volume Five - January 1958 to December 1959



Stereo comes to full flower with four FM Multiplex decoder designs, seven power amps, eleven preamps, a commercial killer, five loudspeakers, and theory articles by Olson, Crowhurst and McProud.

**Summary of Contents:** Stereo valve multiplex decoder, 7watt EL84 amplifier, valve active crossover and 20watt treble amp/50watt bass amp., monaural, binaural, monophonic and stereophonic explained, heterodyne FM multiplex adapter, transistor preamp, 60watt EL34 amplifier, high power audio amplifiers, hi-fi loudspeaker enclosure.

Price  
All five for

£14.95each  
£69.95

# **Try me & see** **For the very best** **DEALS for 1995!**

**on any current Hi-Fi, A/V,  
Home Cinema unit or VCR -  
AND all Award Winners**

**AMAZING PRICES GUARANTEED**  
**PHONE NOW** - you'll get first-class  
**service, savings and support**

- ✔ Budget, Regular and Esoteric Equipment.
- ✔ Insured Overnight Delivery, anywhere in the U.K.
- ✔ Major Credit Cards, Switch/Connect accepted.
- ✔ All goods carry comprehensive Warranty.
- ✔ Goods under Warranty collected and delivered FREE.
- ✔ Extended Warranties up to 5 years available.

*You can always buy from TMS with the complete confidence that we will never let you down. We ever put our customers first and constantly upgrade and update our systems in order to improve our service.*

**081-563 0003**  
**Fax 081-563 0300**

**Try Me & See Ltd,**  
**5 Rocks Lane, Barnes,**  
**London SW13 0DB**



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

Arion  
ACOUSTICS

MAKE THE LEAP  
FROM AUDIO TO  
REALITY

Worldwide sales agents

**KRONOS DISTRIBUTION**

35 Farlough Road • Newmills

Dungannon • N. Ireland

Tel. 0868 748632

Fax. 0868 748281

## 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 minutes walk from Victoria mainline station. and open until 9 pm on Thursday  
Hi-Fi Confidential welcomes you.

*Enjoy the Magic of Valves*



SYNERGY

HI-FI  
CONFIDENTIAL

34 Buckingham Palace  
Road, London, SW1W

### Products Include;

Valve Amplifiers by;

EAR, D.D. Audio,

Tube Technology, Conrad

Johnson, Lumley Reference,  
Audio Innovations, Amplifiers  
by; Musical Fidelity, Kinshaw,  
Quad, Alchemist, Denon, Orelle,  
Albary, Pioneer, John Shearne.

Loudspeakers by; Monitor  
Audio, ProAc, System, Sendor,  
Tannoy, Celestion, Castle,

Triangle, KEF, UKD Digital by;  
Pink Triangle, Quad, Sony, DPA,  
Audio Alchemy, Pioneer, Orelle,  
Musical Fidelity, Micromega,  
Kinshaw, QED, Marantz,

Sugden, TEAC Analogue Replay  
by; Pink Triangle, Systemdek,  
Alphason, Thorens, Townsend

Cassette Decks by; Yamaha,  
Sony, Marantz, Nakamichi,  
Aiwa, Denon Accessories; Gold  
Aero Tubes, QED Audioquest,

0%

INTEREST FREE  
CREDIT  
ON SELECTED  
ITEMS

NEW PRODUCTS  
PINK  $\Delta$  DAC  
VENTRICLE  
TUBE TECH SEER PRE  
PEARL VALVE COOLERS  
DYNAUDIO SPEAKERS  
EAR 859

HI-FI CONFIDENTIAL LTD.

34 Buckingham Palace Road,  
London, SW1W 0RE

Tel: 071 233 0774 ~ Fax: 071 233 7226

# World favourites

## 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 1     | £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 |
| ORELLE CD10-T   | £799 | Very involving, unforced and natural when used with Orelle's DA-180 DAC. | 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   | 'Analogue' sounding converter, best with matching transport.                            | Feb'94  |
| P. T. ORDINAL     | £695   | Pure sound, smooth and free from hardness. One of the best at any price.                | Jul'93  |
| P. T. DA CAPO     | £1450+ | Pink Triangle's own one bit DAC reaches new standards in digital. One of the very best. |         |
|                   |        | Even better with DC supply and new filter options.                                      | Mar'94  |
| DPA 1024          | £6000  | A reference for all other converters. DPA's own discrete design.                        | July'94 |

## TURNTABLES

|                    |       |   |        |
|--------------------|-------|---|--------|
| SYSTEMDEK IIX900   | £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 |
| TOWNSHEND ROCK III | £799  | The MkIII 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 |
| PRO-JECT 6.1SA     | £999  | A top flight turntable complete with Sumiko arm and Ortofon MC30 Supreme MC.        | Dec'94 |

## TO NEARMS

|              |       |  |         |
|--------------|-------|--|---------|
| 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 SMEIV 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  | The best solid state tuner currently available. For better radio, live in the studio! | Mar'92 |
| BURMESTER 931 | £4,347 | Super high-end tuner with a super high-end sound. Exceptional clarity and detail.     | Nov'94 |

## INTEGRATED AMPLIFIERS

|                   |       |   |         |
|-------------------|-------|---|---------|
| NAD 310           | £130  | A full bodied sound and useful features put this budget amplifier ahead of the crowd. | Jan'95  |
| NAD 302           | £160  | Lots of insight and detail, but could sound a little rough in the wrong system.       | Jan'93  |
| DENON PMA-350II   | £220  | Powerful and with deep rhythmic bass drive.   | Sep'93  |
| ARCAM ALPHA 5     | £230  | Lots of life and energy; a good phono stage too.                                      | June'94 |
| DENON PMA-450SE   | £270  | A polite and refined sound with plenty of power makes the 450SE a good all-rounder.   | Jan'95  |
| ROTEL RA960BXII   | £325  | Suits a wide range of music always sounding confident and open.                       | May'94  |
| AUDIOLAB 8000A    | £430  | Very neutral and superbly built. Good bass, great imagery, but can be sterile.        | Apr'92  |
| MISSION CYRUS III | £499  | Superb engineering, a solid cast chassis and a clear and spacious sound.              | Apr'94  |
| STEMFOORT SF60    | £549  | Excellent bass drive and fine midband presence, powerful too.                         | Sep'94  |
| DPA RENAISSANCE   | £595  | Rich and smooth, the Renaissance is one of the sweetest amps. around.                 | Dec'94  |
| SUGDEN A21a       | £639  | Class A transistor amp. Sharp, crisp, deep, tight, and it images well too.            | Feb'94  |
| AUDIONOTE OTO SE  | £1500 | 10watts of the sweetest sound around. Use sensitive speakers though                   | Aug'94  |

## PRE-AMPLIFIERS

|                   |       |   |        |
|-------------------|-------|---|--------|
| ROTEL RQ-970BX    | £130  | Audiophile quality components and sound with a bargain basement price tag.      | Nov'94 |
| A. SYNTH. PASSION | £475  | Or £275 for the kit version. Unrivalled transparency from a passive pre-amp.    | Aug'93 |
| ROSE RV23-S       | £495  | Valve/Transistor hybrid. Smooth and clean, rich and spacious.                   | Nov'93 |
| DPA DSP 200S      | £495  | Not quite the 50S, but there's still nothing to match it at the price.          | Jun'93 |
| MICHELL ISO/HERA  | £528  | Fine midband and treble detail and taut bass from this MC only phono amplifier. | Oct'94 |
| MICHELL ISO HR    | £850  | Impossible not to recommend. What more does your vinyl want?                    | May'93 |
| NAIM NAC82        | £1945 | Remote control preamp. The NAC82 thrusts detail forwards in true Naim fashion.  | Apr'94 |

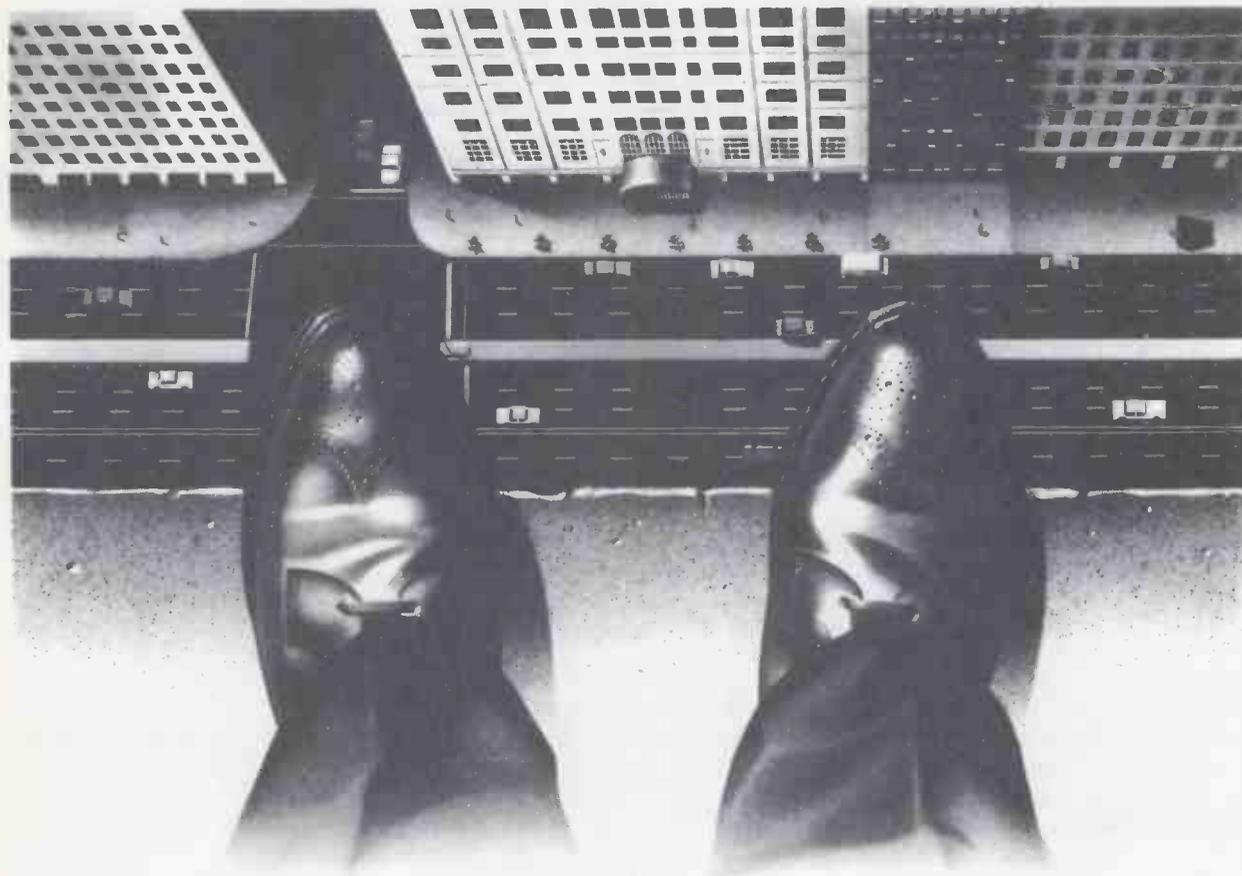
## POWER AMPLIFIERS

|                    |       |  |         |
|--------------------|-------|--|---------|
| ROSE RP-190        | £495  | Used with the Rose pre-amp it gives 70 watts of smooth relaxing sound.             | Nov'93  |
| SUGDEN AU41P       | £530  | 100 Watts of smooth, detailed, full bodied sound. And at a bargain price.          | Apr'93  |
| QUAD 606           | £675  | 140W powerhouse. Smooth and civilized, with the legendary Quad back-up.            | Aug'93  |
| DPA DPA 200S       | £750  | Not as cold as the 50S. Better than anything else at the price.                    | July'93 |
| NAIM NAPI80        | £898  | Partner to NAC82. Has real drive and grip on loudspeakers.                         | Apr'94  |
| MICHELL ALECTO (S) | £1300 | Valve like transparency, big warm easy going sound.                                | Sep'93  |
| MICHELL ALECTOS    | £1800 | The Alectos have a lucidity and three dimensional realism that is rarely attained. | Dec'92  |
| CHORD SPM 1200     | £2995 | Massively powerful, dynamic and detailed sound. Among the best of solid state.     | Mar'93  |

## LOUDSPEAKERS

|                  |       |   |         |
|------------------|-------|---|---------|
| GLL MAXIM        | £120  | Replacing the Maxim 3; not as tight in the bass but still one of the best at the price. | Aug'93  |
| MISSION 760ISE   | £150  | One of the best miniatures around, very musically involving.                            | Jan'94  |
| HARMAN LS 0300   | £200  | Glass fibre woofer gives a forward and open mid with good bass kick                     | Nov'93  |
| TDL RTL 2        | £250  | Bass on a budget. Solid, vibrant and spacious sound.                                    | Dec'93  |
| SYSTEMDEK 931    | £330  | Coherent and involving, these little gems really sing. Super value mini monitor.        | Nov'94  |
| HARBETH HL-P3    | £479  | Neutral and revealing sound that produces a fine, cohesive performance.                 | Nov'94  |
| ROGERS LS8a/2    | £449  | Big, enjoyable, room filling sound from this 2-way floorstander.                        | Feb'94  |
| REL STRATA       | £499  | Rel's Strata offers excellent bass depth and power.                                     | Mar'94  |
| MISSION 752      | £500  | Using High Definition Aerogel drive units the 752s are clear, crisp and focused.        | Oct'94  |
| H'BROOK QUARTET  | £555  | Sensitive enough to work with low power valve amps. Fast and detailed sound.            | Jul'93  |
| CASTLE CHESTER   | £600  | Good solid sound and beautiful finish. 1/4 wave bass bading.                            | May'94  |
| TANNOY D100      | £650  | Believable 3D images produced by this small dual concentric speaker.                    | Jan'94  |
| PROAC Studio 100 | £699  | Excellent monitors with detailed, natural sound and plenty of atmosphere                | Feb'94  |
| UKD CALLAS       | £850  | Powerful bass and high quality sound from a solid wood miniature.                       | Aug'94  |
| SPENDOR SP3/1    | £890  | Beautifully built and finished. Superb midrange and treble detail and clarity.          | Nov'94  |
| KEF REFERENCE 2  | £1500 | Clarity, detail and precise imaging are just a few of the Model 2's properties.         |         |
|                  |       | Highly recommended.   | Jan'95  |
| SPENDOR SP7/1s   | £1970 | An easy load for valve amplifiers and a lucid sound make the SP7/1s very appealing.     | Jan'95  |
| TANNOY D700s     | £1970 | Dynamic and powerful. Needs a good clean power amplifier for best results.              | Sep'93  |
| QUAD ESL63       | £3228 | A reference to all others; superb imaging qualities and transparent sound.              | Various |

Once you've chosen your Hi-Fi by  
Mail Order, the next step is obvious...



If you think buying good Hi-Fi is simply a matter of reading magazines and ordering by phone, then think again. At best, reviews only offer a sketch of the market place: for the complete picture it pays to visit a specialist dealer. With 15 years experience under our belts, we realise that each customer has a unique set of requirements - there is simply no such thing as a blanket "Best Buy" system. It takes time and skill to put together a system which will thrill you for years - but that's our speciality!

**So before you take the plunge, why not pick up the phone and give us a call - we might just save your life!**

Authorised Retailer for:  
Arcam, Audiolab, Celestion, Cyrus, Denon,  
Epos, KEF, Lyra, Meridian, Mission, Naim,  
Quad, Rega, Roksan, Rotel, Ruark,  
Sound Organisation, Tripods.

*Ring us now for a free Creative Audio Information Pack*  
**CREATIVE AUDIO - Hi-Fi Specialists**

9 Dogpole, Shrewsbury, SY1 1EN. Tel: (0743) 241924

# VALVES WANTED

**TOP PRICES PAID FOR NEW BOXED VALVES  
SEE LIST BELOW:-**

|                                   |         |                     |         |
|-----------------------------------|---------|---------------------|---------|
| Px25 MARCONI OR OSRAM GLOBE SHAPE | £90 ea  | DA30/DA60 G.E.C     | £80 ea  |
| Px4 MARCONI OR OSRAM              | £50 ea  | KT66 G.E.C          | £35 ea  |
| PP3-250 MAZDA OR ASRAM            | £50 ea  | KT88 G.E.C          | £50 ea  |
| 805/845/211 USA ORIGINALS         | £25 ea  | EL34 MULLARD        | £12 ea  |
| STC 4212E UK.                     | £100 ea | 300B U.S.A OR S.T.C | £150 ea |
| DA100 G.E.C                       | £100 ea | EL37 MULLARD        | £10 ea  |

**ALSO WANTED USED VALVES AND OLD  
VALVE AMP EQUIPMENT  
LEAK, QUAD RADFORD, ETC..  
SEND, PHONE, FAX, LIST, INSTANT DECISION**

**H I - F I Y O U  
C A N ' T A F F O R D  
n o t t o l i s t e n t o**

EQUIPMENT BY ABSOLUTE SOUNDS, AUDIO INNOVATIONS,  
SUGDEN, IMPULSE, MICHELL, ROKSAN, TRICHORD RESEARCH,  
VOYD, LYRA, MICROMEGA, WILSON BENESCH, ORTOFON, TARGET,  
KINSHAW,

**By appointment only**

**SERIOUS KIT**

**061-707 4823**

21, ALGERNON ST., MONTON, ECCLES, MANCHESTER, M30 9QA.  
A STATE OF THE ART COMPANY

# WANTED

## VINTAGE VALVE HI-FI EQUIPMENT

Valve Amplifiers/Tuners. Leak, Quad, Rogers, Avantic, RCA, Fisher, Marantz, PYE, Revox, Mullard, Scott, Dynaco, W/E. etc Working or not.

### TURNTABLES

Garrard 301/401, Thorens 124/125, EMT, SME, Decca, FFSS etc

### VALVES

Mullard, Osram, Brimar, GEC etc

### SPEAKERS

Quad, Electrostatic, Lowther, Early Tannoy, Dual Concentric, Voigt etc  
Collection can be arranged

VINTAGE VALVE AMPLIFIER REBUILDS from £100.00

Unique 1 day rebuild service From £120.00

### FOR SALE

Quad FM3 £80.00

Townsend Avalon/Moth Arm £225.00

Quad FM2 £85.00

Quad 606 power amplifier £395.00

Audio Innovations series 500 £195.00

Scott Valve Integrated £225.00

### NEW GARRARD 301/401 (97 VOLT)

Power supplies using quality toroidal transformer £95.00

Handcrafted 301/401 plinths £200.00

Plinths can be made to customers own measurements if reqd. at no extra cost.

### PURE SILVER INTERCONNECTS

Double screened

Half metre terminated £50.00

One metre terminated £70.00

Other lengths add £15.00 per metre

Various Vintage Amplifiers and Turntables also for SALE Ring for details.

Part Exchange Welcome

### CLASSIQUE SOUNDS CLASSIQUE HOUSE

61 AYLESTONE DRIVE

AYLSTONE LEICESTER

ENGLAND LE2 8QE

Telephone/Fax: Paul Greenfield on: 0533 835821 ANYTIME

EXPORT ENQUIRIES WELCOME

# Alon

## The World's Best Dynamic Loudspeaker?

Probably, if it combines Dipole and Point Source Technology

Is the Bass Deep and Tight? **Yes**

**NEED WE ASK MORE?**

Do all these qualities blend to make the Alon sound like any other loudspeaker? **No**

Is the treble detailed, extended and airy? **Yes**

Is the mid-range presentation nothing short of remarkable? **Yes**



Should you be forced to listen to alternatives? **No?**

Call us to know why

**SOUND IMAGE LTD**  
103a Colney Hatch Lane,  
Muswell Hill, London  
N10 1LR

**Why not?**

What about the Sound Stage and Imaging? **Superb**

Tel: 0181 883 6068  
Fax: 0181 883 6142

# THE MIDLANDS FIRST CHOICE FOR REAL HI-FI

## FRANK HARVEY HI-FI EXCELLENCE

THREE FLOORS - THREE DEMONSTRATION ROOMS  
3000 SQ FEET IN THE PURSUIT OF HI-FI EXCELLENCE

THE FIRST CHOICE FOR THE BEST NAMES  
IN HI-FI SET AMIDST THE ELOQUENCE  
OF OUR 14TH CENTURY SHOWROOMS  
**OUR NEW HOME CINEMA  
FLOOR IS NOW OPEN**



ON DEMONSTRATION WE HAVE  
THE LATEST DOLBY PRO-LOGIC  
& THX HOME CINEMA PRODUCTS  
FROM

ARCAM, BOSE, CANON, CELESTION,  
DENON, YAMAHA, POLK AUDIO, JBL,  
JAMO, PIONEER (INC. LASER DISC),  
MERIDIAN, KENWOOD, AND MUCH  
MUCH MORE IN STORE

CAREFULLY SELECTED  
PRODUCTS  
CAREFULLY SELECTED  
AGENCIES

Audiolab - Audio Alchemy - Aura - Arcam  
Audio Quest - Alphason - Apollo - Bang &  
Olufson - Bose - Castle - Canon - Cable Talk  
Celestion - Creek - Chord - Cyrus - Denon  
Dual - Foundation - Heybrook - Kef Refer-  
ence - JPW - Jamo - Laser Disc - Marantz  
Meridian - Monitor Audio - Mission - Michell  
Gyrodek Monster Cable - Musical Fidelity  
Nakamichi - NAD - Panasonic - Pioneer  
Polk Audio - Quad - REL - Rega - Rogers  
Rotel - Sennheiser - Systemdek - Target Tech-  
nics - Tripod - Tannoy - Thorens - TDL Van  
Der Hul - Wessex - Yamaha Home Cinema

**ALL THATS BEST IN HOME THEATRE IN STOCK**

**MUCH MORE THAN HI-FI**

FREE CARRIAGE  
UK MAIL ORDER  
WORLD WIDE EXPORT SERVICE  
PART EXCHANGE SERVICE  
2 YEAR FULL GUARANTEES  
FULLY EQUIPPED  
SERVICE FACILITIES  
5 YEAR GUARANTEES AVAILABLE

**FRANK HARVEY**  
**HI-FI EXCELLENCE**  
163 MEDIVAL SPON STREET

**COVENTRY**  
TEL. 0203 525200 FAX 0203 631403

INTERESTED FREE CREDIT ON  
SELECTED PRODUCTS  
(WRITTEN DETAILS ON REQUEST)  
APR 0%  
FREE INSTALLATION AND

# HQ VINYL & GOLD CDs

## ANALOGUE PRODUCTIONS: 180gm HQ VINYL & 24ct GOLD CDs

### AUDIOQUEST: 180gm HQ VINYL & CDs

THE CD PRICE FOR THE FOLLOWING TITLES IS £15

|  |     |
|--|-----|
| MIGHTY SAM McLAIN - Give It Up To Love | £17 |
| ROBERT LUCAS - Built For Comfort       | £17 |
| ROBERT LUCAS - Layaway                 | £17 |
| MOKOVE - AFRIQUE                       | £17 |
| BRUCE KATZ BAND - Transformation       | £17 |

### DECCA SXL: 180 gm HQ VINYL LPs

|  |     |
|--|-----|
| SXL 2001 TCAHAIKOVSKY - Capriccio Italien/1812 Overture  | £25 |
| SXL 2011 STRAVINSKY - Petrushka (Ansermet)               | £25 |
| SXL 2110 SCHUBERT - The Trout Quintet (Curzon)           | £25 |
| SXL 2136 DEBUSSY - La Boite A Joujoux (Ansermet)         | £25 |
| SXL 2246 MENDELSSOHN IN SCOTLAND (Maag)                  | £25 |
| SXL 2289 DVORAK - Symphony No.5, The New World (Kertesz) | £25 |
| SXL 2312 MONTEUX CONDUCTS DEBUSSY & RAVEL                | £25 |

### PROPRUS: 180gm HQ VINYL LPs

|                                 |     |
|---------------------------------|-----|
| ANTIPHON BLUES                  | £17 |
| CANTATE DOMINO                  | £17 |
| JAZZ AT THE PAWN SHOP (2LP)     | £25 |
| JAZZ AT THE PAWN SHOP VOLUME II | £17 |
| GOOD VIBES AT THE PAWN SHOP     | £17 |

### MOBILE FIDELITY: 200gm HQ VINYL NOW £22

ALL AVAILABLE ON 24ct GOLD CD

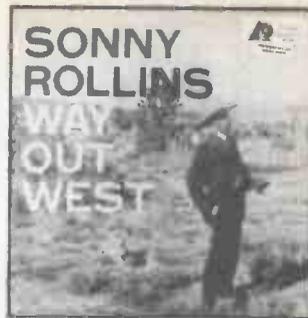
|  |     |
|--|-----|
| MUDDY WATERS - Folk Singer                       | £22 |
| PINK FLOYD - Atom Heart Mother                   | £22 |
| ALAN PARSONS PROJECT - Tales Of Mystery...       | £22 |
| THE MODERN JAZZ QUARTET - Blues At Carnegie Hall | £22 |
| STAN GETZ & JOAO GILBERTO - Getz & Gilberto      | £22 |
| TRAFFIC - Low Spark Of High Heeled Boys          | £22 |
| JOHN HIATT - Bring The Family                    | £22 |
| JEAN MICHEL JARRE - Oxygene                      | £22 |
| THE MOODY BLUES - On The Threshold Of ...        | £22 |
| QUEEN - The Game                                 | £22 |

### MOBILE FIDELITY: 24ct GOLD CDs

HERE IS A VERY SMALL SELECTION OF AVAILABLE TITLES

|   |     |
|---|-----|
| PINK FLOYD - Dark Side Of The Moon            | £24 |
| PINK FLOYD - Meddle                           | £24 |
| STING - Dream Of The Blue Turtles             | £24 |
| ERIC CLAPTON - Slowhand                       | £24 |
| THE CARPENTERS - A Song For You               | £24 |
| JOHN MELLENCAMP - Scarecrow                   | £24 |
| QUEEN - The Game                              | £24 |
| STEVE WINWOOD - Back In The High Life         | £24 |
| THE MOODY BLUES - On The Threshold Of A Dream | £24 |
| JOHN MAYALL & ERIC CLAPTON - Blues Breakers   | £24 |
| JOHN COLTRANE - GIANT STEPS                   | £24 |

|   |             |     |
|---|-------------|-----|
| SONNY ROLLINS - Way Out West                | Top right   | £25 |
| BILL EVANS TRIO - Waltz For Debby           |             | £25 |
| ART PEPPER - Meets The Rhythm Section       | A Classic   | £25 |
| BEN WEBSTER - Live At The Renaissance       |             | £25 |
| ART PEPPER - Smack Up                       |             | £25 |
| BENNY CARTER - Jazz Giant                   |             | £25 |
| LIGHTNIN' HOPKINS - Goin' Away              | Suberb      | £25 |
| DUKE ELLINGTON - This One's For Blanton     |             | £25 |
| ART PEPPER + 11                             | New Release | £25 |
| RALPH SUTTON - Partners In Crime            | New Release | £25 |
| THE DON EWELL' QUARTETTE - Yellow Dog Blues |             | £25 |
| CHICO FREEMAN - Spirit Sensitive            | New Release | £25 |
| JIMMY ROGERS - Blue Bird (HFN - A*:1)       | HQ LP       | £25 |
| JIMMY ROGERS - Blue Bird (HFN - A*:1)       | Aluminum CD | £15 |



SONNY ROLLINS - WAY OUT WEST  
180 gm HQ VINYL & GOLD CD £25



TRAFFIC - LOW SPARK OF...  
200 gm HQ SUPER VINYL £22  
GOLD GAIN SYSTEM CD £24

### RCA LIVING STEREO: 180 gm HQ VINYL

WE STOCK ALL THE LATEST RELEASES OF THESE STUNNING LPs

|   |                 |
|---|-----------------|
| LSC 1806 STRAUSS-Also Sprach Zarathustra (Reiner) | £28             |
| LSC 1817 OFFENBACH-Gaite Parisienne               | £28             |
| LSC 1900 BERLIOZ - Symphony Fantastique (Munch)   | £28             |
| LSC 1934 BARTOK - Concerto For Orchestra          | £28             |
| LSC 2201 MUSSORGSKY - Pictures At An Exhibition   | £28             |
| LSC 2222 DEBUSSY-Iberia (Reiner)                  | £28             |
| LSC 2225 WITCHES BREW (Gibson)                    | Fabulous I £28  |
| LSC 2313 SOLTI - VENICE (Royal Opera House)       | £37             |
| LSC 2398 KABALEVSKY - The Comedians(Kondrashin)   | £28             |
| LSC 2400 BALLET MUSIC FROM THE OPERA              | New release £28 |
| LSC 2449 GOUNOD-Faust / BIZET - Carmen (Gibson)   | £28             |
| LSC 2456 LALO - Symphonie Espagnole (Szeryng)     | £28             |
| LDS 6065 THE ROYAL BALLET - Gala Performances     | £50             |

### GRP: 20-BIT 24ct GOLD

NEW RELEASES; MASTERED DIRECTLY FROM THE ORIGINAL MASTER TAPE

|  |                 |
|--|-----------------|
| LEE RITENOUR - Wes Bound                         | £25             |
| THE GLENN MILLER ORCHESTRA - In The Digital Mood | £25             |
| DAVE GRUSIN - The Gershwin Connection            | Recommended £25 |
| ROBBEN FORD - The Blue Line                      | £25             |
| DIANE SCHUUR - In Tribute                        | £25             |
| JOHN COLTRANE - The Gentle Side Of...            | Recommended £25 |

### AUDIOPHILE INTERNATIONAL LTD

TO ORDER CALL: +44 (0)1276 855578 P.O. BOX 303, CHOBHAM  
OR FAX: +44 (0)1276 855580 SURREY, GU24 8YP  
FOR OUR HUGE 50 PAGE CATALOGUE, & TO JOIN OUR MAILING LIST, SEND A £2 STAMP (OVERSEAS 5 x IRC'S) ORDERS OVER £35 FROM THIS ADVERT RECEIVE A FREE CATALOGUE, P&P £3 FIRST LP 75P EACH ADDITIONAL, £2 FIRST CD 50P EACH ADDITIONAL (FIRST CLASS RECORDED SUPER PACKED)  
OVERSEAS RATES - PLEASE CALL. WE ACCEPT VISA & ACCESS

### DEBUSSY



ANSEMET - L'Univers de la Suite Bourgeoise  
SXL 2136 DEBUSSY - CHILDREN'S BALLET  
180 gm HQ VINYL LP £25

# V'audio

Hi-Fi Consultants

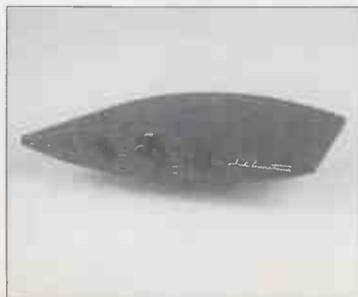


As a Hi Fi consultant I spend my time either evaluating equipment or demonstrating equipment here or in customers homes. In the end the latter invariably applies as even if a customer selects an item after listening in my demo room I would invariably require to ensure it does the job in situ. But what is so frustrating at the moment is the number of systems i hear which sound awful and have cost a small fortune, invariably bought second hand.

People seem to believe they can just go out and buy S/H equipment that appears to be well thought of/expensive, throw it all together and wonder why they aren't enjoying it! Two recent systems must have cost £10K and yet I could easily get better sound for less than £2K at new prices. The fact that both systems included large expensive Krell Power Amplifiers may be purely co-incidental, but considering one can buy for example,

|    |               |       |       |                    |       |
|----|---------------|-------|-------|--------------------|-------|
| a) | AVI CD PLAYER | £1150 | or b) | AVI CD PLAYER      | £1150 |
|    | AVI PRE-AMP   | £750  |       | HEYBROOK SIGN. AMP | £2000 |
|    | ATC SCM50A    | £4700 |       | RUARK ACCOLADE     | £2500 |
|    | TOTAL         | £6600 |       | TOTAL              | £5650 |

And be able to sit back and enjoy listening to music, then the purchase of £10K of S/H equipment appears somewhat foolish! The more expensive, the more difficult it can be to get it to sound good; that's where a good Hi Fi Consultant can save you thousands and yet people will still ring around trying to get the best price. If only it was that SIMPLE!



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

# 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 retails.

Order your free catalogue, call:  
**0484 603333**

or fax on 0484 607774

**RDL**  
ACOUSTICS

20 Cleveland Way, Shelley  
Huddersfield, HD8 8NQ

FREE  
32 pg.  
AUDIO  
catalogue

# DYNAMICS

## HIGH END AUDIO BOUGHT/SOLD EXCHANGED

|   | SALE    |         | LIST    |
|---|---------|---------|---------|
| MARK LEVINSON ML7A PREAMP. MINT   | 2995    | S/HAND  | £8800   |
| WELL TEMPERED W/MT TURNTABLE & ARM. MINT  | £1,085  | EX/DEMO | £1,995  |
| MERIDIAN 602 TRANSPORT 606 DAC 7 LATEST. MINT   | £2250   | EX/DEMO | £3,100  |
| CAMBRIDGE CD1 CD PLAYER HEAVILY MODIFIED WITH MASSIVE POWER SUPPLY SUPERB               | £1,295  | S/HAND  | PHONE   |
| METAXIUS ICARUS INTEGRATED AMPLIFIER CHROME. MINT                                       | £595    | EX/DEMO | £895    |
| PINK TRIANGLE PIP 2 MK2 VISHAY MODIFIED PREAMP. MINT                                    | £1,795  | S/HAND  | £4,500  |
| CARY CAD 5500S PREAMP PHONO & PROCESSOR. MINT   | £995    | EX/DEMO | £2,250  |
| BURMESTER 808 MK3 PREAMP BALANCED. MINT   | £3,995  | S/HAND  | £5,000  |
| AUDIO RESEARCH D70 MK2 POWER AMP. MINT  | £895    | S/HAND  | £1,929  |
| MARK LEVINSON ML2 REFERENCE MONO POWER AMPS, BALANCED SUPERB V.G.C.                     | £3,995  | S/HAND  | £15,000 |
| MARK LEVINSON ML3 POWER AMP. MINT   | £3,995  | S/HAND  | £8,250  |
| BALANCED HIGH POWER WITH SEDUCTION V.G.C.   | £5,500  | S/HAND  | £13,000 |
| CONRAD JOHNSON MV75 VALUE POWER AMP. MINT   | £1,295  | S/HAND  | £2,500  |
| OCTAVE RESEARCH ORI POWER AMP. V.G.C.   | £1,795  | S/HAND  | £4,500  |
| MERIDIAN ORKOD DIGITAL ACTIVE SPEAKERS STUNNING LOOKS AND SOUND TO MATCH. MINT          | £5,750  | EX/DEMO | £7,630  |
| CELLO AMATI SPEAKERS TWIN MOUNTED PAIR IN OAK ON GRANITE STANDS SUPERB V.G.C.           | £5,500  | S/HAND  | £20,000 |
| CANON ESO SPEAKERS & STANDS BLACK MINT  | £250    | S/HAND  | £400    |
| DYNAUDIO CONSEQUENCE SPEAKERS FLAGSHIP MODEL IN CHERRYWOOD DYNAMIC DRAMA, STUNNING MINT | £10,250 | EX/DEMO | £15,275 |
| MERIDIAN ARGENT 3 SPEAKERS NEW/OLD MINT   | £395    | NEW     | £1,495  |
| PROAC PROSTATIC ELECTROSTATIC SPEAKERS V.G.C.   | £1,995  | S/HAND  | PHONE   |
| SNELL A3 SPEAKERS WALNUT V.G.C.   | £4,495  | S/HAND  | £6,995  |
| APOGEE DIVA & DAX TAUPE SPEAKERS MINT   | £6,995  | S/HAND  | £15,000 |
| METAXIUS IRAKLIS MK2 POWER AMP CHROME MINT  | £895    | EX/DEMO | £1,500  |
| AUDIO RESEARCH D125 KT90 VALVES AMP. MINT   | £2,250  | S/HAND  | £ 4,850 |
| MUSICAL FIDELITY P270 MK2 POWER AMP. MINT   | £895    | S/HAND  | £1,500  |
| APOGEE CALLIPER SIGNAL PROCESSORS GREY MINT   | £1,995  | EX/DEMO | £3,995  |
| SYNTHESIS REFERENCE SPEAKER SYSTEM ASH MINT   | £3,995  | S/HAND  | £8,000  |
| METAXIUS CHARISMA PREAMP CHROME MINT  | £895    | EX/DEMO | £1,500  |
| EQUATION ZERO SPEAKERS PIANO BLACK MINT   | £695    | S/HAND  | £1,300  |
| MARANTZ LEIZ CD PLAYER LTD EDITION BALANCED QUICKSILVER PRE AMP MINT                    | £1,5495 | S/HAND  | £3,000  |
| MERIDIAN 601 DSP PRE AMP BALANCED MINT  | £1,995  | NEW     | £1,750  |
| CARY 2A3 VALVE POWER AMP 15 WATT TRIODE MINT  | £895    | EX/DEMO | £2,750  |
| CARY 3003 VALVE MONO POWER AMP 40 WATT TRIODE   | £895    | EX/DEMO | £1,400  |
| GYRODEC EXPORT BLACK & GOLD GYROPOWER SME V MINT.                                       | £1,295  | S/HAND  | £2,230  |
| HELVIS CYALENE ARM MINT.  | £795    | S/HAND  | £1,400  |
| BEARD B8100 MK2 VALVE INTEGRATED AMO MINT.  | £895    | EX/DEMO | £1,300  |
| PINK TRIANGLE DECAPO DAC MINT.  | £1,195  | EX/DEMO | £1,500  |
| AUDIO RESEARCH M300 MK2 VALVE MONO AMPS MINT.   | £4,995  | S/HAND  | £12,000 |
| CHORD 1200 POWER AMP. MINT.   | £1,995  | S/HAND  | £3,000  |
| CABSSE IROISE MC SPEAKERS CHERRYWOOD MINT.  | £1,995  | EX/DEMO | £2,700  |

### NEW IN THIS MONTH

|   |        |         |         |
|---|--------|---------|---------|
| AUDIO RESEARCH SP14 PREAMP BLACK MINT                 | £1,995 | S/HAND  | £3,300  |
| MUSICAL FIDELITY 3A PREAMP MINT                       | £225   | S/HAND  | £400    |
| RESTEK CHALLENGER INTERGRATED AMP. MINT NEW           | £799   |         |         |
| RESTEK EXPOSITION REFERENCE MONO BALANCED MINT        | £7,995 | EX/DEMO | £12,000 |
| DIAMOND ACUSTIC REF 2 SPEAKERS & STANDS OAK MINT      | £395   | S/HAND  | £2,250  |
| B & W ACTIVE 1 SPEAKERS OAK & STANDS VGC              | £695   | S/HAND  | £1,400  |
| BURMESTER 846 LINE PREAMP CHROME BALANCED MINT        | £795   | S/HAND  | £1,650  |
| AUDIO RESEARCH CLASSIC 30 POWER AMP MINT              | £1,595 | S/HAND  | £2,600  |
| ROKSAN DPI CD TRANSPORT MINT.                         | £795   | S/HAND  | £1,195  |
| ENLIGHTENED AUDIO DSP1000 DAC MINT.                   | £595   | S/HAND  | £1,000  |
| AUDIO RESEARCH LS2 LINE PREAMP BALANCED MINT.         | £1595  | S/HAND  | £2795   |
| CONRAD JOHNSON PREMIER 3C VALVE PREAMP MINT.          | £1595  | S/HAND  | £3600   |
| CJ PREMIER 4 POWER AMP                                |        |         |         |
| CONRAD JOHNSON PREMIER 4C VALVE PREAMP MINT.          | £1995  | S/HAND  | £5000   |
| LYNX PULSAR PRE & POWER AMPS MINT                     | £795   | S/HAND  | £1450   |
| AUDIO INNOVATIONS 800 PRE & POWER MODIFIED VGC        | £795   | S/HAND  | £1400+  |
| MELOS 222B PREAMP BALANCED MINT.                      | £695   | EX/DEMO | £2995   |
| MICROMEGA TRIO CD PLAYER MINT                         | £2495  | S/HAND  | £4495   |
| KLYNE SK 5A PREAMP MINT                               | £1495  | S/HAND  | £2750   |
| CITATION 18 TUNER ORIGINAL AMERICAN V.G.C             | £295   | S/HAND  | £650    |
| MUSICAL FIDELITY MVT 3 PREAMP MINT                    | £495   | S/H     | £1100   |
| SUGDEN AU51C PREAMP 2 BOC MODIFIED BY AVONDALE V.G.C. | £895   | S/HAND  | £1800   |
| ROWLAND MODEL 3 MONOS POWER AMP BALANCED MINT         | £2495  | S/HAND  | £4000   |
| POSSELT ALBATROSS SPEAKERS PIANO BLACK MINT.          | £1495  | S/HAND  | £2200   |
| MERIDIAN 605 MONO AMPS BALANCED MINT.                 | £1550  | E/D     | £1900   |
| MARK LEVINSON NO 20 REFERENCE MONO BALANCED           | £5995  | S/HAND  | £17000  |
| SITA COSMOS VACUUM PLATTER MINT                       | £1995  | S/HAND  | £4400   |
| CRYSTAL REFERENCE TURNTABLE (WALLMOUNT)               | £1495  | S/HAND  | £2500   |
| NAKAMICHI OMS 7E CD PLAYER VGC                        | £795   | S/HAND  | £1500   |
| GRYPHON LTD EDITION PREAMP BALANCED MINT.             | £3995  | S/HAND  | £8000   |
| AUDIOTECH M7 SILVER PREAMP MINT.                      | £2250  | S/HAND  | £8000   |
| DYNAUDIO FACESTE SPEAKERS CHERRYWOOD VGC              | £1200  | E/D     | £2800   |
| SNELL TYPE C SPEAKERS WALNUT MINT                     | £1295  | S/HAND  | £2550   |
| KEF 105/3 SPEAKERS BLACK ASH MINT                     | £1395  | S/HAND  | £2100   |
| QUAD ESL 63 SPEAKERS BLACK LATEST MINT                | £1595  | S/HAND  | £2400   |
| MENTOR TURNTABLE & ARM GRAPHITE PLATTER MICROSCANNER  | £1495  | S/H     | £3395   |
| CRYSTAL SIGNATURE TABLE TOP TURNTABLE BRUAR 8 ARM     | £2995  | S/H     | £8450   |
| MARK LEVINSON NO 26 PREAMP FULLY BALANCED MINT        | £2995  | S/H     | £6000   |
| MARK LEVINSON NO 38 PREAMP FULLY BALANCED MINT        | £2995  | S/H     | £3995   |
| MARK LEVINSON NO 23 POWER AMP BALANCED MINT           | £3995  | S/H     | £7450   |
| ROWLAND MODEL ONE POWER AMP BALANCED MINT             | £1795  | S/H     | £3150   |
| TUBE TECHNOLOGY GENESIS VALVE MONO AMPS MINT          | £1495  | S/H     | £2600   |
| SONUS FABER EXTREMAS & STANDS WALNUT WALNUT MINT      | £4795  | S/H     | £8900   |
| WILCOX WATT 2 PUPPY 1 SPEAKERS PIANO BLACK MINT MINT  | £6495  | S/H     | £13000  |
| PROAC RESPONSE 3 SPEAKERS BLACK ASH MINT              | £1995  | S/H     | £3065   |
| PROAC RESPONSE 2 SPEAKERS OAK NEW MINT                | £2395  | NEW     | £3065   |
| ORACLE DELPHI MK2 SME V ARM BIG SUPPLY MINT           | 995    | S/H     | 2500    |
| SONIC FRONTIERS SFD-2 DAC BALANCED MINT               | 2995   | S/H     | 4700    |
| LYNX KARRICK NUMERIC CD PLAYER (LATEST) MINT          | 1645   | S/H     | 2572    |
| PINK TRIANGLE ORDINAL DAC, VARIOUS CHIPS MINT         | 595    | E/D     | 900     |
| PIONEER PD91 CD PLAYER MINT                           | 495    | S/H     | 900     |
| DENON 4400 MONO POWER AMPS BALANCED MINT              | 395    | S/H     | 600     |
| ROWLAND MODEL 5 POWER AMP BALANCED MINT               | 2750   | S/H     | 5250    |
| TANNONY D700 SPEAKERS WALNUT MINT                     | 1395   | S/H     | 2100    |
| TDL MONITOR SPEAKERS TEAK MINT                        | 995    | S/H     | 2000    |

### JANUARY SALE

|  |      |     |       |
|--|------|-----|-------|
| SOTA STAR SAPPHIRE 3 TURNTABLE MINT  | 995  | E/D | 2500  |
| VPI HW19 TURNTABLE MK3 MINT  | 595  | S/H | 1600  |
| MARK LEVINSON ML7 PREAMP MINT  | 1995 | S/H | 5800  |
| AUDIO RESEARCH SP15 REVISION A BLACK MINT  | 2995 | S/H | 7000  |
| COUNTERPOINT SA11 & SA9 PREAMP REMOTE MINT                                       | 4995 | S/H | 12600 |
| QUICKSILVER PREAMP VALVE MINT  | 795  | NEW | 1750  |
| QUICKSILVER SILVER MONO AMPS KT88 VALVES MINT                                    | 1295 | E/D | 2250  |
| NRC A401M MONO 400W CLASS A AMPS BAL. MINT                                       | 3995 | S/H | 13000 |
| NRC A201S STEREO AMP 200W CLASS A MINT   | 2995 | S/H | 8500  |
| NESTRONIC A1 VALVE MONO AMPS BALANCED MINT                                       | 1595 | S/H | 6600  |
| DYNACO ST70 SERIES 2 VALVE POWER AMP MINT  | 495  | S/H | 1100  |
| COUNTERPOINT SA4 OTL VALVE MONO AMPS VGC   | 2495 | S/H | 8000  |
| APOGEE DUETTA SIGNARE SPEAKERS ANTHRACITE MINT                                   | 1995 | S/H | 4995  |
| APOGEE SCINTILLA SPEAKERS 10HMGREY GC  | 795  | S/H | 5000  |
| SNELL A2 SPEAKERS WALNUT MINT  | 1995 | S/H | 6400  |
| DUNTECH CROWN PRINCE SPEAKERS BLACK VGC  | 2995 | S/H | 6500  |
| DIAMOND ACOUSTIC REF2 SPEAKERS OAK & STANDS MINT                                 | 795  | S/H | 2250  |
| AUDIO PLAN KONTRAST 2 SPEAKERS ROSEWOOD MINT                                     | 1295 | S/H | 2800  |
| SUMO ARIA PANEL SPEAKERS OAK VGC   | 795  | S/H | 3000  |
| GENESIS 8300 SPEAKERS & STANDS PIANO BLACK MINT                                  | 995  | E/D | 1895  |
| MARTIN LOGAN CLS 1 ELECTROSTATIC SPEAKERS MINT                                   | 1095 | S/H | 3000  |
| MARTIN LOGAN MONOLITH SPEAKERS OAK MINT  | 2495 | S/H | 8000  |
| CONRAD JOHNSON SYNTHESIS REF. SPEAKER SYSTEM 4 TOWER SYSTEM FINISHED IN OAK MINT | 3495 | S/H | 8000  |

"ODDLES OF HIGH END CARTRIDGES AVAILABLE RING FOR DETAILS" MANY MORE ITEMS IN STOCK, EFFICIENT SERVICING DEPARTMENT. WE ARE LOCATED IN WELWYN, HERTS ALL ITEMS GUARANTEED - ALL MAJOR CREDIT CARDS ACCEPTED RING FOR DETAILS AND DEMONSTRATION 0438 714038  
10.00 AM - 7.00 PM MON - SAT 10.00 AM - 1.00 PM SUN

# readers' queries



## CD ADDITION

I want to add a CD player to my existing system - Quad 33/303 driving Rogers LS3/5As.

I listen mainly to classical music, but I have some jazz and rock favourites.

I read with interest your reviews of the NAD 501 and Marantz CD 63. Would either of them work reasonably well in my system?

**Neil Sparks**  
Stanmore,  
Middlesex.

The Quad 33 pre-amp (control unit) has a buffered input of 100mV sensitivity,

**Write in with your problems to Hi-Fi World, 64 Castellain Road, Maida Vale, London W9 1EX.**

**Our panel of experts will endeavour to solve them, or at least offer some practical advice.**

comprising a BC109 in emitter follower

configuration, working from a 12V rail. Although we thought this would just about accept 2V from CD, on enquiring the company told us there was a "headroom limitation". They recommend you use a PCD316M CD attenuator (10dB), available from them at a cost of £17.71 including post and packing. Write to Quad Electroacoustics, Huntingdon, Cambs PE18 7DB, Tel: 0480-52561, or ask a Quad dealer to supply.

Through the 33/303 I'd recommend a player with good, positive treble, the Rotel RCD940BX being

appropriate. A Quad 67 CD player would be another good choice; it has forceful bass and sweet treble, but at £825 perhaps it is beyond your budget. **NK**

## DCC PRICES

For my sins, I unfortunately purchased, 12 months ago, a Philips DCC tape deck, before discovering the tape cassettes in England costs £9-£10, a price I flatly refuse to pay.

I have friends living in Hamburg, Germany who sent me the following prices: Scotch 60, DM 11.95; 90s, DM13.95; BASF 60 DM 12.90 and 90s DM 14.90 I would appreciate your assistance in finding a stockist in the country who can offer similar prices.

I have been enjoying Hi-Fi World for 11 months. My friends in Hamburg would like to know how to obtain regular copies in Hamburg?

**K L Hooper**  
Barnstaple,  
Devon.

The recommended retail price of a Philips DCC90 tape is £6.99, Philips tell us, or £5.99 for a DCC60, which compares with German prices. Some



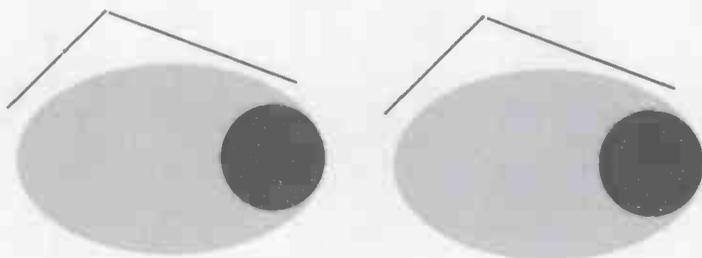
The positive treble of the Rotel RCD940BX should suit the Quad 33/303 well.

Continued on page 113...



# NORTHWOOD AUDIO

0% credit  
part exchange  
Mail Order



Dem Rooms  
7 - Day Exchange  
Free Installation

## Look At What We Offer

Part Exchange, 0% Credit Facilities, Dem rooms, Wide choice of equipment, Free installation and delivery, 7 day exchange plan, Mail Order

We are at:  
126 PINNER ROAD  
NORTHWOOD  
MIDDX  
HA6 1BP  
Tel: 0923 820877

and also at:  
98 Cambridge Street  
Aylesbury  
Bucks  
HP20 1BP  
Tel: 0296 28790

Products stocked include:

Alphason, Aura, Akai, Alchemist Products, Audio Alchemy, Audio Innovations, Audio Technica, B&W, Boston, Cable Talk, Canon, Castle, Celestion, Cerwin Vega, Denon, Exposure, Harmon Kardon, Heybrook, Infinity, Ixos, JBL, JPW, KEF, Marantz, Michell, Micromega, Moth, NAD, Nakamichi, NVA, Ortofon, Perfect Pitch (Dacula), Pioneer, Project, QED, Rose, Rotel, Royd, Ruark, Sequence, Sennheiser, Stax, Tannoy, Target, TDL, Thorens, Triangle



The  
Audio Room



Pure Sound



Hi-Fi Consultants

## Happy New Year to All Our Readers

And to make it even happier and more musical, call us to discover the bargains to be had at our massive New Year SALE! Selected items at 50% off list price. Call for details and make the year start with some extra style!

Arion Acoustics, Audio Innovations, Audio Note, C.A.T., Credo, Kinshaw, Lumley Reference, Triangle, YBA, Impulse, Lumley Monitor, Townshend, Counterpoint, AudioMeca, Micromega, Graham, Pro-Ject, Wilson/Benesch, Ortofon, Transfiguration, Cogan Hall, Goertz, Isolda, Lieder, Revelation, Silver Sounds, XLO, Appollo, Base, Frameworks

0784 458176 / 081 893 4485

Pure Sound + The Audio Room cover London + the South-East with personal service, home demonstrations, excellent hi-fi

.... Continued from page 111

retailers seem to want to charge up, as we've found in Central London, where £8 is not uncommon. In fact, Philips suggested they should be prepared to charge a little under the recommended price. Anyway, DCC tapes at these prices are available to you in Devon by Mail Order from Dutch West (Tel: 0434 320452). Alternatively, call Philips Consumer Help Desk on 081 689 4444, who can tell you who your nearest Philips stockist is (for Philips blank tapes).

Your friends in Hamburg can subscribe to Hi-Fi World, see page 68 for details. **NK**

**VALVE CANDIDATE?**

I am considering buying some new hi-fi equipment. Initially, I will base a system around my personal CD, a Technics SL-XP700. Not perhaps the best way to go about things, but it gives a pretty acceptable sound and will allow me to use funds to support it.

I am particularly taken by your range of 'in-house' designed equipment. I am therefore considering the KLPI line-level pre-amplifier with either the 20 watt K5881 kit, or your new 36watt solid-state unit. Would it be possible to provide a review, both personally, and from a third party assessing your designs? This would help me in my final decision. Also, can you recommend a suitable pair of 'speakers either commercial or DIY, or second-hand to match the above combinations, up to £300? I have had Rogers LS6a before, so I think the 'BBC sound' is preferable. I have quite a small room, 3m X 5m so stand-mounts may be impractical.

**Steve Stoddart  
Cambridge.**

It is very difficult to give an 'unbiased' view on our own products, and what we

normally suggest to potential customers is that they have a listen for themselves at Hi-Fi Confidential, call Luigi on Tel: 071 233 0774. The only thing I would say, is that because we are a magazine and in the 'public eye' as such, we wouldn't dare let any of our products on to the market unless we were completely sure of their abilities and performance - in the same manner as any reputable manufacturer.

It is hard to recommend a loudspeaker for you without knowing what kind of music/presentation you like, but any 'speakers with sensitivity above 85dB or so will provide a good match for 5881. You can save by building your own, and personally I'd strongly recommend this route. Otherwise models from TDL, Systemdek, Rogers, Castle and ProAc are normally well engineered for fine sound quality and are suitably sensitive. **DB**

**WOOLLY BASS TAMER?**

After reading one or two references to Spendor BC1s in recent issues of Hi-Fi World, I understand that the woolly bass problem associated with these 'speakers, can be cured with a 20Ω resistor across the bass 'speaker terminals. Can you confirm this works and suggest any improvement?

**R  
Thompson.  
Burham,  
Bucks.**

The 20Ω resistor in parallel will make virtually no difference at all if you are using a modern

transistor or valve amplifier with feedback, other than to draw more power from the amp. which is dissipated through the resistor, confirmed Derek Hughes of Spendor.

However, if an amplifier with a high output impedance is used, like our zero feedback 300B, the 20Ω resistor will draw power away from the loudspeaker, reducing bass power which may well give a cleaner bass performance. So the effect of this modification depends on your amplifier rather than the loudspeaker.

Apparently, later BC1s had a modified reflex port fitted which re-tuned the bass and improved performance considerably. Before you experiment with the modification above, Derek suggested that you contact Mike Stevens of Bromley, Tel: 081 460 7299, with the serial number of your BC1s so that they can identify whether your BC1s had this modification fitted. If not they carry out a service which will bring them up to latest spec. **DB**

**NO BOOM IN THE HOUSE**

Could I, through your columns, perhaps obtain

some advice on loudspeaker placement? The problem is that I bought Mission 753s a few months ago and installed them in our, then, small lounge (4m X 4m). There is not much bass, but I thought all would be well when I moved them into the new lounge in an extension; not so.

The new lounge is 7.6m X 4m with the loudspeakers firing down the long axis, but with alcoves (see plan). The problem is that I know what the 'speakers and the amplifier (NAD 1020A pre and Crimson Elektrik power) is capable of.

The 'speakers are 60cm out from the back wall so that their fronts are clear of the fireplace. If I push them back there is no improvement. I have tried them across the short axis and there is a slight improvement. Curiously the bass in the alcoves is prodigious and boomy. Are the alcoves acting as cabinets in some way and not allowing the bass out?

Any thoughts on what I can do? If I were to put cupboard doors over the alcoves, how much would I need to destroy the alcove effect and place the Missions in their correct relationship to the wall?

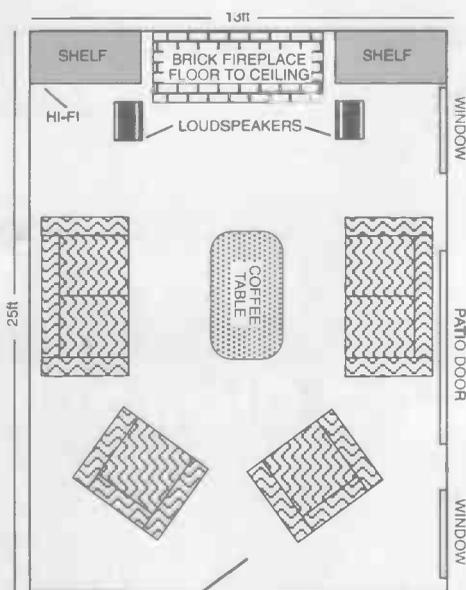
On another subject your magazine extols vinyl over CD. For me at the bottom-end of hi-fi, I find the difference to be unimportant, (CD - NAD 5420, vinyl - Thorens TD160, SME IIIs and Ortofon MCI0). However, I use CD mainly because the lack of faffing around with sleeves, cleaners, arm etc.

Keep up the good work with respect to DIY.

**Phil Catchesides  
Thornbury,  
Bristol.**

There are a number of possibilities regarding the lack of bass.

The Mission 753s benefit greatly from a solid rear wall.



Phil Catchesides needs more bass from his Mission 753 loudspeakers; repositioning them may help.

Continued on page 115...

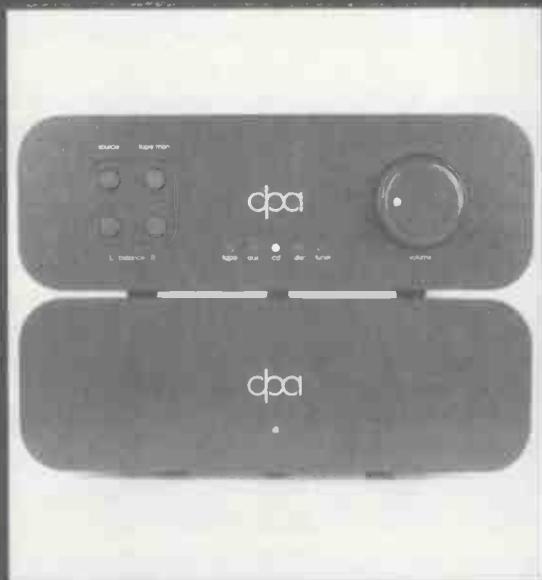


dpa

# 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**



**KJ WEST ONE**  
26 New Cavendish  
Street,  
London W1M 7LH.  
Tel: 071 486 8262

**audible difference**

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

**Doug Brady Hi-Fi**

Kingsway Studios,  
Kingsway North,  
Warrington.  
Tel: 0925 828009



34, Buckingham palace  
Road, London SW1W 0RE  
Tel: 071 - 233 0774  
Fax: 071 - 233 7226

**Oxford Audio Consultants**

Cantay House,  
Park End Street,  
Oxford OX1 1JE  
Tel: 0865 790879  
Fax: 0865 791665

**Zen Audio**

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

**Audio Suite**

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



152A High Street,  
Bloxwich,  
West Midlands.  
Tel: 0922 493499



3 Bridge Street,  
Guildford,  
Surrey.  
Tel: 0483 504801

**SHROPSHIRE HI-FI**

St. Michael's Street,  
Shrewsbury,  
Shropshire SY1 2ES.  
Tel: 0743 232317



41 Victoria Road,  
Cambridge.  
CB4 3BW.  
Tel: 0223 68305

**ZEUS AUDIO**

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



**MUSIC MATTERS**



93 Hobs Moat Road,  
Solihull,  
W. Midlands  
Tel: 021 742 0254

## AT OUR KEY DEALERS

### dpa digital ltd

Unit 7, Willowbrook Technical Units,  
Crickhowell Road, St. Mellons, Cardiff CF3 0EF, Wales, UK  
Phone: 0222 795621 Fax: 0222 794267

... Continued from page 113

This is a general rule of thumb for most transmission-type loudspeakers. In this case the 'speakers are in compromising positions in respect of the room. The room has great length and height ratio. This means in order to preserve the bass, the 'speakers need as much environmental reinforcement as possible.

The essential 'kicking' area (200-500Hz) which corresponds to approximately 2-4 feet is effectively diffused and minimised by the present location. The shelving behaves like a low frequency absorber/diffuser resulting in the apparent rise (prodigious boom) in the alcoves and lack of bass in the listening position. Furthermore, the left and right channels are separated by the inglenook, resulting in two independent rather than interactive channels. There is a distinct possibility that, as you acknowledge, the alcoves are operating as independent resonators. This means that at some stage in the signal

path there is potential phase cancellation resulting in further loss of signal integrity. Finally, the two settees act as absorbers and also attenuate low frequencies.

The solution: move the 'speakers to the opposite side of room where they will benefit from the more solid structure. The response will be far more linear and natural. The amplifiers will also breathe a sigh of relief because the room acoustic will be providing a natural reinforcement and amplification of the signal: lower operating power, greater head room and signal dynamics. The far wall (inglenook, alcoves and bookshelves, will now act as effective mid to high frequency diffusers resulting in a more accurate sound stage and improved presence.

Also try to avoid absolute bi-lateral symmetry. With regard to your diagram, both settees are equidistant from the 'speakers and the room boundaries. I suggest you try alternatives in order to break up any standing waves

and redirect any possible problematic reflections.

#### DF-D BALANCED BASS- HEAD

I am planning to upgrade my system in the near future and need your advice on amp and 'speaker combinations.

After reading your DIY supplements and loudspeaker reviews, I have short-listed the following: IPL S3s; Mainhattan Acoustics CT77 and the TDL RTL 2s. The amplifiers I've considered are the Aura VA-50 (1st choice), Denon PMA 350II, or a second-hand Audiolab 8000A, if I can obtain one cheaply.

As you can see, any combination of the above components will give me loads of bass; that's what I'm after, but I don't want to end up with something that is unbalanced. Since you have recently built the two kit 'speakers the advice you could give me will be the only thing I'll have to go on, so the merits and faults will be quite important. Can you help?

Also I have a Pioneer PL 12D turntable. Is it possible or even worthwhile fitting a decent arm and cartridge to it? I listen, mainly to alternative indie music - much the same as Dominic in fact. I hope you can help.

Current system: Technics SU 610 amp; M/Short MS310 'speakers; Aiwa AD F40 cassette deck; Sony ST 70 tuner and a NAD 501 CD (soon).

**Derek Anderson  
Fife,  
Scotland.**

For the kind of music you're into the CT77s are excellent. They have superb bass depth and dynamics, but without sounding unbalanced. The bass isn't peaked up or forward, just fantastically deep. Bear in mind though that you will need quite a large room to realise their full potential. Mike Malone of Tabula Rasa, the importers of the Mainhattan CT77, now lives in Scotland, so it

may be possible to arrange a home demonstration before you buy - always worthwhile. Give Mike a call. Tel: 0334 838841.

Of the amplifiers you mention, the Aura VA-50 has recently been replaced by the VA-80, but you may be able to get a bargain on the VA-50 if there are still some in the shops.

Otherwise, as you seem willing to shop for second-hand, there are a few other amplifiers worth keeping an eye out for. The Mission Cyrus II has a lovely sound, and there are thousands of them around to pick from, starting at £80 for a Mk I, and up to £200 for a mint condition latest spec. version. Beware of the Pioneer A400 though, which although extremely good, would not work especially well with the CT77s because of its full bass and may lead to the unbalanced sound you wish to avoid.

The PL 12D is not really worth the effort of a new arm, tune-up etc. For under £200 both the Pro-ject 0.5 and I are superb value and would be a far better bet.

By the way, the NAD 501 is a good choice; it has a sweet and smooth sound that is more enjoyable than that of most budget players. **DB**

#### ROB'S QUEST

After being a student for six years and on the dole for a further year, I have finally got a job. With my new-found wealth I would like to improve my hi-fi system which I've built up "on the cheap" from warehouse clear-outs and second-hand bargains. Unfortunately, my budget is still tight due to the debts built up over the last few years; I have about £400 to spend.

Unfortunately, my upgrade path is not too clear to me. My current system

Continued on page 117....



Mainhattan CT77s could be just the ticket for deep and balanced bass.

# HI-FI EXCHANGE DARLINGTON

The North's largest selection of used British and Japanese separates.

Now on permanent demonstration the Neat Petite and latest Neat Critique Loudspeakers.

|  | List   | S/H   |
|--|--------|-------|
| Audio Note OTO SE Single-ended Valve Integrated (6 months old) | £1500  | £1000 |
| Audio Innovations Series 1000 pre amp                          | £1500  | £950  |
| Snell JIII's ex dem  | £800   | £575  |
| Magneplanar SMGA Speakers                                      | £800   | £375  |
| Thorens 2001 turntable ex dem                                  | £700   | £480  |
| Quad 306/34 Pre pwr  | £750   | £475  |
| Albarray AP3 Pre amp ex dem                                    | £300   | £220  |
| Revox A700 excellent condition just serviced                   | Offers |       |
| Rotel RD 955 Cassette Deck ex dem                              | £200   | £160  |
| Mission 770  | £400   | £180  |
| Marantz CD 52 MKII mint and boxed                              | £170   |       |
| Technics SAGX 530 Prologic receiver ex dem                     | £380   | £280  |
| Sony CDP 911E ex dem   | £300   | £235  |
| Harmon Kardon 300 Loudspeakers                                 | £200   | £165  |
| Denon DRM34 3 head Cassette Deck boxed                         | £329   | £185  |
| Sugden A48B with phono stage Ex-dem boxed                      |        | £420  |
| Wilmslow Audio Transmission line with KEF D139 Drive Units     |        | £250  |
| Rogers LS6   | £400   | £320  |
| Nakamichi BX125E Cassette Deck                                 | £400   | £250  |
| Yamaha CR2020 Receiver mint                                    |        | £250  |
| B&W DM7  |        | £250  |

All equipment guaranteed. Quality Hi-Fi separate wanted for cash.  
Large stock of Japanese separates by Technics, Marantz, Sony etc.

All types of Hi-Fi bought and exchanged

Tel:- 0325 463007  
Hi-Fi Exchange Darlington  
30b Larchfield Street  
Darlington, Co. Durham.



The MANA Reference 5-tier Amplifier Stand with Sound Stage

Photo: Paul Hartley Studios

Mana Acoustics  
Music with care

For information on MANA products please contact:  
MANA ACOUSTICS, 59 Jubilee Close, Pinner, Middx. HA5 3TB. Tel/fax 081-429 0118



## THE MINSTREL BY QUANTUM AUDIO LTD

30 Watt, Ultra Linear, integrated, hybrid, valve, line level amplifier



You must hear this amplifier, your ears will convince you of its sonic superiority. There is nothing whimsical about the sound, the Minstrel is promoted as quick and dynamic. It is . . . but it could equally have been called solid and meaty. This is a big hearted amplifier, which can put on a surprising burst of volts and amps when pushed, and quickly too. When the pushing is done by a piano recording or something similarly percussive.

I was surprised, even shocked by the Minstrel's dynamic range, which is utterly convincing and un-tube like, yet the delicacy and fine detail of Debussy or Ravel orchestral music is beautifully handed. A real mailed first in a velvet-glove type performance. Alivn Gold, Hi Fi, Choice, October 1994.

For further details, dealers lists and demonstration appointments, contact the producers:

Quantum Audio Ltd., PO Box 26, 1 Oliphant Drive, Kilmarnock, Scotland KA3 7JA  
Tel: (0563) 71122

# Klipsch

HORN LOUDSPEAKERS

IMMORTAL SOUND FORESIGHT

Hear KLIPSCH for yourself in: Avon 0934 520248/0272 686005. Bucks 0296 28790. Cheshire 0925 828900. Cornwall 0209 612260. Hants 0730 895194. Herts 0923 856497. Kent 0303 256860. London (W1) 071 486 8262. (NW3) 071 431 7423. (NW6) 071 794 7848. Middx 081 892 7613. N. Ireland 0232 403634. Northants 0604 37871. Notts/Lincs 0777 870372. Oxon 0865 247783. Scotland 0381 620655. Suffolk 0284 724337. Sussex 0903 872288. Wales 0978 364500/0745 343060. W. Mids 021 429 2811/455 0667/742 0254/354 2311, 0203 525200. Worcs 0384 444184. Yorks 0302 781387. UK Distributor 021 430 7817

.... Continued from page 115

comprises: Rega Planar 3 with homemade Linn-based suspension system added, Linn Basik LVX, Goldring 1042, Cambridge CT50 cassette deck, Technics tuner (only used for listening to Radio 4), Cambridge C70 pre-amp, Quad 303 power amplifier, Heybrook Solos on very sturdy, open, spiked stands, Tannoy gold-plated leads throughout, Cyrus solid core to the 'speakers and a Target wall shelf for the record deck.

Firstly, I want to get a CD player (I had a Marantz CD40, but have now given this to my father). My intention, at the moment, is to get a cheap CD player now and to add an outboard DAC later (the CD40 has no digital output,

The second option is to blow all the money on one component in my system - £400 would get me an Arcam Alpha CD player, £300 (£100 for XC-333) could be spent on new 'speakers. I like my solos, but I think their high frequency end could be improved (the Solo's tweeters can ring at certain frequencies, though this has been largely cured by sticking Blotak behind the tweeter flange) and I would like to improve the depth and height of the sound-stage.

Would the Quad 303 drive Epos ES11s, or would I be better trying a BBC studio monitor derived 'speaker? I like the Heybrook Quartets - should I wait until I can afford these? (Some time in the future I'd like to try my hand at building a valve amp and so

impressed with the valve amps I heard at the Bristol Hi-Fi Show. I could just about afford to get your K5881 kit now, but I don't think my Solos would be a good match. Also, I think I would like to try my hand at the Maplin valve amp kit, on which I could test my soldering and electrical skills, before I put too much money into a valve amp kit.

I would be interested to hear your opinions on my various options.

My hi-fi is kept in a room 4m X 5m with a bay window at the opposite end of the room to the 'speakers.

I listen to a wide variety of music from Rock and Blues to Classical (via Jazz); everything except House, rave and Disco which I enjoy when I'm "out on the town", but wouldn't want to bring home!

Have you any thoughts on doing an article on information which is now available via the electronic mail and Internet News. There are a number of computer sites, especially in the States, and news groups dedicated to hi-fi news, views and information, all of which are accessible in Britain via modem. I think many of your readers would be

interested in what is available. I got information on how to rewire my CD40 for a digital output from an Internet news group.

**Rob Nichols  
Leeds.**

**Congratulations on finding a job at last. We can't make sure you spend your limited budget of £400 perfectly, but we can hopefully steer you away from what I would consider to be mistakes.**

I've used a Goldring 1042 and an Elite and, even though I like MCs, I significantly prefer the 1042, even if it is a bit warm and fulsome. The

Elite, in my view, has vague or smeared treble, due to an inferior stylus, even if it does come across initially as more up-front sounding, with good imaging. If you want to change to a budget moving coil, try an Ortofon MCI5 Super MkII, which is a cracker.

If getting a CD player is a priority, perhaps to be able to use a CD collection you have built up in the past, then a good player might be the best investment at present, since a good DAC costs around £500 minimum. Rather than going for a stand-in like the Aiwa, try a good budget machine, like a NAD 501 or a Philips CD740 Bitcheck player. Get a demo if possible. Then at least you'll be able to listen to something half decent until you've the loot for something more ambitious.

Since you seem happy enough with the Quad 303, and it's a good workhorse, then perhaps you should stick with it, at least until the 'speakers are greatly improved. However, the 303 is warm and a bit woolly in its sound, being bettered sound quality wise even in its day. I do not recommend you buy another for bi-amping; this is a bad idea.

For £200 or so you can get a very decent modern loudspeaker and here I believe you should consider spending the other half of your budget. Harman Kardon LS0300s are a bargain at £200 and are sensitive enough too for a valve amplifier in future. Again, do try and audition first at a dealers, a close stockist being Bill Hutchinson hi-fi.

This approach spends your cash on good, modern budget products, ones that will last quite a few upgrades elsewhere. I don't think you should blow your money on mediocre dribs and drabs, even if they do look like bargains. You're just buying in more mediocrity. **NK**



**NAD's 501 is a super budget CD player with a smooth sound.**

though I do know how to wire one in). I am thinking of getting an Aiwa XC-333 which, at £100, is too good a bargain to miss. This would leave me £300 which I would like to spread around the rest of the system. Around £70 would get me a second 303 to bi-amp, £169 a QED Opto (Positron power units to be added when funds allow) or possibly a Dac-in-a-box, and the rest on a Goldring Elite cartridge. I like the tonal balance of the Goldring 1042, but I also like the better imaging I've heard with moving coil (eg. MCI5).

it would be good to have the Quartets ready for this future upgrade).

Another option is to improve my amplification. I am very pleased with the Quad 303, which at the price was a great buy and a significant improvement over the Arcam Alpha 2 it replaced. However, it is very long in the tooth and I wonder whether I would be well advised to change it for something else, like a Moth 30 series power amp.

As I said earlier, I would like to try a valve amp in the future, since I was very

## Thinking of buying new Hi-Fi or A/V loudspeakers ?

well

Richard Allan make ★★★★★ reviewed speakers which are better than the competition and at up to 50% less you'll ask

### HOW DO THEY DO THAT ?

PHONE NOW TO DISCOVER HOW  
**01274 87 24 42**

or fax 01274 86 99 35  
CAN YOU AFFORD NOT TO

# Richard Allan

Manufacturing quality British loudspeakers since 1947  
BRADFORD ROAD GOMERSAL CLECKHEATON WEST YORKSHIRE BD19 4AZ

## CABLE TALK

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

## WESTWOOD & MASON



### The new Quad 77 at Westwood & Mason:

We stock: Arcam, Aura, Celestion, Denon, EPOS, KEF, Marantz, Mission, Naim, Nakamichi, Project, Quad, Rega, Rotel, Tannoy, TDL, Yamaha and many more

**WESTWOOD & MASON (OXFORD) LTD**  
46 GEORGE ST  
OXFORD

OPEN 10.00AM TO 5.00PM  
CLOSED THURSDAY  
TEL 01865 247783

|                              |          |
|------------------------------|----------|
| STOP PRESS: NAIM NAC 82 USED | £1495.00 |
| NAKAMICHI CR7E USED          | £995.00  |
| REGA XEL EX DEMO             | £699.00  |
| REGA ELA EX DEMO             | £320.00  |

## 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

Quad 77 Integrated Amp - Absolutely brilliant!  
KRELL KPS 20i CD Player - The best one box CD player bar none!!  
AUDIO RESEARCH CD1/CDT 1  
AUDIO ALCHEMY DAC IN THE BOX - staggering sound for £199.95  
MICROMEGA STAGE - the new concept in upgradeability  
ORELLE CD490 - a serious British competitor to the ARCAM  
PINK TRIANGLE DA CAPO - NOW IN STOCK  
THETA DATA BASIC & GENERATION V - real high end  
TEAC VRDS 7/10/20 AND 700 2 BOX SYSTEM  
SME 20 - the finest engineering with superb sonics  
PROJECT TURNTABLES - value for money  
LYRA CLAVIS Mk 2 - even better and only £995  
KINSHAW PERCEPTION PHONO STAGE  
AUDIO INNOVATIONS ALTO - lovely sound and styling  
COPLAND CSA 14 - bargain of the century!!  
DPA 200 SERIES PRE/POWER  
KRELL KRC/KRC 2 preamps with the latest S SERIES power amps - seriously high end - wait till you see the new KPS digital series  
MUSICAL FIDELITY F SERIES - very, very good value  
HEYBROOK SEXTET/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 DF 10 - mini size components available separately  
BOSE LIFESTYLE SYSTEM - almost invisible hi-fi!

### EX DEM & P/EX BARGAINS

LINN AXIS/K9 £250  
PINK TRIANGLE ANNIVERSARY/ SME V/ KOETSU RED £1995  
HEYBROOK SEXTETS £895  
LFD INTEGRATED 0 £295  
MICROMEGA T DRIVE/ T DAC EX DEM £1695  
DPA 200S PRE/ 2 X 200S POWER AMPS £995  
AUDIO RESEARCH LS3 PREAMP EX DEM £995  
SONUS FABER MINIMA AMATORS AS NEW £1195ARAGO  
2004 POWER AMP £650  
MAGNEPLANAR SMGA £395  
LAMBDA SIGNATURE HEADPHONES ONLY £350  
ORACLE DELPHI MK3/SME V £1595  
PIONEER CLD 800 LASERDISC PLAYER £275  
MUSICAL FIDELITY PRE3A PREAMP £195  
AUDIO RESEARCH V70 EX DEM £2995



Please ask for details or our current list  
Agencies include: Aura, Accuphase, Acoustic Energy, Air Tangent, Apogee, Audio Alchemy, Audio Research, Audio Technica, Basis, B&W, Castle, Classe, Copland, Denon, Denon Cartridges, DPA, Dual, Goldring, Harmonix, Heybrook, HPW, Kimber, Koetsu, Jadis, Krell, Lyra, Magneplanar, Magnum, Mandrake, Marantz, Martin Logan, Micheli, Micromega, Music Fidelity, NAD, Nakamichi, Onix, Orelle, Ortofon, Pink Triangle, Pioneer, Polk, Proceed, PS Audio, QED, Quad, REL Subwoofer, Revox, Rogers, Roksan, Rotel, Ruark, SD Acoustics, Seismic Sink, Sennheiser, Sequence, Sequerra, Slate Audio, SME, Sonus Faber, Stax, Target, TDL, Teac, Theta, Thorens, Van den Hul, Wadia, Wharfedale, Wilson

TAX-FREE EXPORT SERVICE  
MAIL-ORDER AVAILABLE ON MANY ITEMS  
Open Mon-Sat 10am-6pm

## Oxford Audio Consultants

Oxford Audio Consultants, Cantay House, Park End Street OX1 1JE  
Telephone: Oxford (0865) 790879 Facsimile: Oxford (0865) 791665

# THE RECORD SHOP

66 FIFE ROAD  
KINGSTON-UPON-  
THAMES  
SURREY  
KT1 1SP  
TEL: 0181-546 3880  
FAX: 01372 360996  
EST. 1968

SPECIALIST IN NEW VINYL  
RECORDS

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!

**HAPPY NEW YEAR TO ALL OUR CUSTOMERS. HOPE YOU ALL HAD LOST OF  
VINYL IN YOUR CHRISTMAS STOCKING!**

EAGLES - HELL FREEZES OVER £12.95  
(NEW LIVE ALBUM)

ARTHURS LOUIS - KNOCKING ON HEAVENS DOOR £8.49  
(CLASSIC BLUES ROCK ALBUM FROM 1976 NOW RE-PRESSED ON 145g VINYL - WITH  
ERIC CLAPTON & GENE CHANDLER)

BEATLES - LIVE AT THE B.B.C. £11.95

SINEAD O'CONNOR - UNIVERSAL MOTHER £9.95

PAUL BRADY - TRICK OR TREAT £5.99

HERBIE HANCOCK - THRUST £6.99  
(CLASSIC '74 JAZZ-FUNK)

MARTIN TAYLOR - SPIRIT OF DJANGO £8.95  
(LATEST FROM LINN RECORDS STALWART)

ANITA BAKER - RHYTHM OF LOVE £10.95

DODGY - HOME GROWN £9.49  
(POP ALBUM OF '94 MIX OF BLUR/BEATLES/LA'S - PURE MAGIC)

## BACK IN STOCK

KEITH JARRETT - KOLN CONCERT £14.95  
STING - TEN SUMMONERS TALE £9.95 - SOUL CAGES £5.99  
DANIEL LANOIS - FOR THE BEAUTY £12.95  
JACKSON BROWNE - I'M ALIVE £12.95  
JENNIFER WARNES - THE HUNTER £12.95

HERBIE HANCOCK & WAYNE SHORTER -  
TRIBUTE TO MILES £12.95

JOHN CALE - PARIS 1919 £7.95

BRUCE HORSBY - HARBOUR LIGHTS £12.95  
(MAGIC ALBUM, FEATURING PAT METHENY & JERRY GARCIA)  
DONNY HATHAWAY - LIVE £7.95

## FAVOURITE VINYL SELECTION OF '94

THOSE ALBUMS MOST OFTEN FOUND ON OUR DECKS WHICH WERE RELEASED LAST  
YEAR ON VINYL ARE STILL IN STOCK.

TOAD THE WET SPROCKET - DULCINEA  
BUCK SHOT LE FONGUE (BRADFORD MARSALIS)  
COUNTING CROWS - AUGUST AND EVERY THING AFTER  
GIL SCOTT - HERON - SPIRITS

VARIOUS - RED, HOT & COOL

NEIL YOUNG - SLEEP WITH ANGELS  
TOM PETTY - WILLOW FLOWERS  
TEA PARTY -

EDWIN COLLINS - GORGEOUS GEORGE  
TED HAWKINS - NEXT 100 YEARS

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**

HI-FI



HI-FI

**Attic Music**

# LOUDSPEAKERS

**BOUGHT & SOLD**

**ACOUSTIC ENERGY • ATC •  
B&W • ENSEMBLE • EPOS • JBL •  
LINAUM • LINN • MARTIN LOGAN  
• MISSION • MONITOR AUDIO •  
MOREL • NEAT • TANNOY • TDL •  
THIEL • TOTEM**

**- ALSO ACOUSTIC FOAM TILES -**

**DEMONSTRATION BY APPOINTMENT  
ADVICE ANYTIME ON:**

**0181 948 5568**

# 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 BROADSWORD      | £850  |
| CD PLAYER | AV1 S2000MC           | £999  |
| PRE AMP   | AV1 S2000MP           | £699  |
| PWR AMP   | AV1 S2000MM           | £999  |
| SPEAKERS  | ATC SCM20             | £1499 |
| CD PLAYER | AUDIOMECA KREATURA    | £1199 |
| PRE AMP   | LUMLEY PV1            | £1500 |
| PWR AMP   | LUMLEY ST70           | £2000 |
| SPEAKERS  | LUMLEY MONITOR LM2    | £2500 |
| CD TRANS  | DPA ENLIGHTENMENT     | £795  |
| CD DAC    | DPA TWO FIFTY SIX     | £3500 |
| PRE AMP   | TRILOGY 918           | £2775 |
| PWR AMP   | TRILOGY 958 MONOS     | £2995 |
| SPEAKERS  | AUDIOPHYSIC VIRGO     | £3199 |

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

**289 NEW KINGS ROAD,  
FULHAM, LONDON SW6 4RE**

•SALE•SALE•SALE•

IAN HARRISON HI-FI  
TEL: 0283 702875

| SENNHEISER        | BEYER             | AUDIO TECHNICA   |      |         |  |
|-------------------|-------------------|------------------|------|---------|--|
| HEV70 £399        | DT911 £170        |                  |      |         |  |
| HE60 £399         | DT901 £155        |                  |      |         |  |
| HD580P £150       |                   |                  |      |         |  |
| HD565 £105        | IRS890 £155       | ATH911           | EPOA |         |  |
| HD1000 £173       | IRS790 £140       | ATH910P          | EPOA |         |  |
| HD25 £115         | DT811 £140        | ATH90811         | EPOA |         |  |
| ORPHEUS EPOA      | DT801 £119        |                  |      |         |  |
| IS850 EPOA        | DT511 £ 77        | KOSS             |      |         |  |
| IS550 £140        | DT431 £ 69        |                  |      |         |  |
| IS450 £119        | DT411 £ 55        | ESP950           | E850 |         |  |
| OTHER MODELS EPOA | OTHER MODELS EPOA | OTHER MODELS POA |      |         |  |
| NAKAMICHI         |                   | TEAC             |      | AIWA    |  |
| DRAGON £2150      | V7010 EPOA        | XDS1100          | £750 |         |  |
| CR7E £1850        | V8000S £825       | XKS9000          | EPOA |         |  |
| DR1 EPOA          | R9000S £450       | XKS7000          | EPOA |         |  |
| DR2 EPOA          | VRDS-7 £550       |                  |      |         |  |
| DR3 EPOA          | VRDS-10 £699      | SONY             |      |         |  |
| OTHER MODELS EPOA | VRDS-20 £1170     |                  |      |         |  |
|                   | X-1 EPOA          | DTC60ES          | £699 |         |  |
|                   | X-1S EPOA         | TCDD7            | EPOA |         |  |
|                   |                   | PCM2300          | EPOA |         |  |
|                   |                   | PCM2700          | EPOA |         |  |
| QUAD              |                   | QED              |      | MARANTZ |  |
| CD87 £725         | DIGIT £109        |                  |      |         |  |
| 66 £775           | DIGIFLEX £16      |                  |      |         |  |
| 605 £625          | DAC PACK £169     | CD69             | £199 |         |  |
| 34 £365           | DIGIT REF £350    | CD53             | £100 |         |  |
| FM4 £390          | PDSITRON £69      | CD52             | EPOA |         |  |
| FM66 £485         | AMPS EPOA         | SD63             | £215 |         |  |
| ESL-83 £2500      | OPTIFLEX £20      | SD53             | £185 |         |  |
|                   |                   | SD415            | £169 |         |  |
|                   |                   | ST53             | £139 |         |  |
|                   |                   | ST40L            | £115 |         |  |
| DENON             |                   | SHURE            |      |         |  |
| DL-304 £160       | VNSMR £115        |                  |      |         |  |
| DL110 £ 60        | OTHER             | PN700AV          | £375 |         |  |
| DL103 £75         | STYLI EPOA        | PM53             | £199 |         |  |
| DL103D EPOA       |                   | PM43             | £185 |         |  |
| DL160 £70         | ME97HE EPOA       | PM32             | £115 |         |  |
|                   |                   |                  |      |         |  |
| I also supply     | TTR117            | SR82             | £699 |         |  |
| Kuzma, Benz-      | TEST £12 50       | SR73             | £599 |         |  |
| Micro, & Conrad   | RECORD            | SR63             | £265 |         |  |
| Johnson.          |                   | SR53             | £215 |         |  |

**CARTRIDGES**

I SUPPLY: AUDIO TECHNICA, ORTOFON, DENON, DYNAVECTOR, SHURE, GOLDRING ARCAM & STANTON. TRADE IN YOUR OLD MOVING COIL(S); ANY MAKE, ANY CONDITION AND SAVE UP TO 45% OFF THE NORMAL SELLING PRICE!! NO OLD MOVING COIL? DON'T WORRY, JUST PHONE.

**HI FI FURNITURE**

I SUPPLY: APOLLO, SOUND ORGANISATION, SOUND FACTORY TRIPOD, SOUNDSTYLE PLEASE PHONE OR WRITE FOR BROCHURES & PRICES.

**CABLES**

I SUPPLY: AUDIOQUEST, SONIC LINK, QED & GOLDRING.

**TEST CASSETTES AND CD'S**

I SUPPLY MY OWN REAL TIME, INDIVIDUALLY MASTERED RANGE OF AUDIO TEST CASSETTES FROM £5-£20 THE MULTI-PURPOSE TEST CASSETTE TESTS: DOLBY LEVEL, AZIMUTH, REPLAY FREQUENCY RESPONSE (30Hz-15KHz), DOLBY B/C TRACKING & TAPE SPEED. AVAILABLE IN 120us & 70us eq VERSIONS. £20 POST FREE.

I ALSO SUPPLY DENON TEST CD'S INCLUDING THE AUDIO TECHNICAL TEST CD, £12 POST FREE.

**BLANK TAPES & ACCESSORIES**

I SUPPLY: TDK, MAXELL, SONY, JVC, SCOTCH, AMPEX, BASF, LONICA, PANASONIC, FUJI, DISCWASHER, AUDIOQUEST, GOLDRING.

**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.

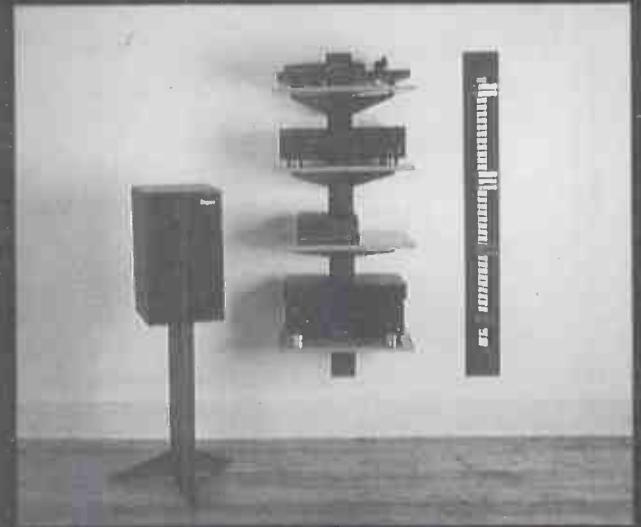
MAIL ORDER FROM: IAN HARRISON HI FI, 7 MILL HILL, REPTON, DERBY, DE65 6GQ.

TEL: 0283 702875 9am-9pm. Inc. Sunday

# MONOSTEM

## Audio Support System

hi-fi wall units speaker stands accessory stems  
Designed by Ashley Miles Dennis



tel or fax 0533 433233  
for a full colour brochure

innovative design the coach house school lane  
houghton - on - the - hill leicestershire le7 9gd

# AMADEUS SOUND & VISION

Audio Innovations, Aura,  
Bang & Olufsen,  
Castle Acoustics,  
Micromega, Mordaunt-Short,  
Musical Fidelity, NAD, Pioneer,  
Quad, Spondor, Technics

10 BOLDMERE ROAD  
SUTTON COLDFIELD, WEST MIDLANDS  
Tel: 021 -354 2311

## Inaccessible accessories by post.

If you can't get to us, we'll get our accessories to you.  
**CARTRIDGES:** Arcam, Audio Technica, Denon, Dynavector, Goldring, Lyra, Ortofon, Sumiko. **CABLES:** Audioquest, Cable Talk, Goertz, Heybrook, Ixos, Kimber, Kontak, LFD, Monster, Ortofon, Precious Metals, QED, Sonic Link, Van den Hull, XLO. **STANDS:** Alphason, Apollo, Atacama, Sound Organisation, Sounds Style, Stands Unique, Target. **HEADPHONES:** Beyer, Sennheiser, Stax. **ACCESSORIES:** Audio Technica, Audioquest, BIB, Discwasher, Goldring, Hunt, Ixos, Kontak, Last, Michell, Milty, Moth, Nagoaka, Pixall, QED, Shure, Townshend. Plus a full range of quality equipment available.

PLUS A FULL RANGE OF QUALITY EQUIPMENT AVAILABLE. SEE OUR MAIN ADVERTISEMENT.



**BURY AUDIO**  
TEL & FAX: 0284 724337  
MOBILE: 0850 565693

47 CHURCHGATE STREET,  
BURY ST. EDMUNDS,  
SUFFOLK IP33 1RG.

# The WIZARD



Hand made  
Adjustable Shelf  
Rotary Unit.

Can hold 1536 CD's  
or 1440 Cassettes  
or 384 Videotapes  
or 575 Penguin  
Books; or any  
mixture. Books up  
to 6 1/2" deep.

Revolves on Ball  
Bearings in 30.4"  
turning circle  
21 1/2 x 21 1/2 x 75" high.

Teak, oak, pine  
mahogany, ash,  
£1937 inc.  
VAT & Delivery.

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

Please send 3 x 2nd  
class stamps to:

**Ian Edwards**

The Old Chapel  
282 Skipton Road, Harrogate  
HG1 3HB. Tel: 0423 500442

HFV

FOR SALE: 1) Synrix LE1 ARM; 2) SME3009 ARM (inc. LMG1 Headshell); 3) Tandberg TR1000 Receiver. Reasonable offers please. Mr New 0442 822756 evenings.

**ROKSAN ARTEMIZ** arm 1991 mint (new £800) £375 o.n.o. Also free Shiraz cartridge (not working) worth £200 on your part exchange for new model. Tel: 0903 261931 Sussex.

**REGA PLANAR 3** Split Slab Modification ATOC7 bargain £200. Philips CD850 CD Player (£400) only £160. Hart Electronics MC/MM Phono Stage with separate P.S.U. New only £150. Tel: 0202 888832.

**SPENDOR SP2/2** Speakers, Mahogany, boxed, mint condition. Best offer around £475. Yamaha NS230 speakers, very rare collectors item. flat kidney shaped, woofers, late 1960's design. £100/offers. Tel: (0865) 248-585. (home).

**ORIGINAL DUNLOP** Systemdek (grey) AT1100 arm, spare tube, armboards, Ortofon VMS 20E £195. Revox A77/4 1/2-track suitcase model (amps/speakers) accessories PZ mikes tapes £275. Tel: 0983 297903.

**REGA ELA** Floorstanding Transmission Line Loudspeakers - ace! Only £285. Partnering Naim Nait 2 amp for above - ideal! £200. Naim Nac4 speaker cables 5 metres, pair £20. Zonal Tape, unused 2.500' on Nab spools £5 each. Tel: 0462 678158 N. Herts.

**NAIM 250/32/Snaps**, old style, recently serviced and updated by Naim with 72 boards in 32. £700 o.n.o. Linn Isobariks P.M.S. with Naim Naxo crossover, stands and leads £500. Tel: 0326 280 259.

**UHER CR160** Portable Tape Recorder. Excellent condition £450.00. Armstrong 626 receiver £180.00. Straightwire Maestro Interconnect 1m £120.00. Naim Nac4A speaker cable 5m pair. £200.00. R.S. Low Noise cable 22m £15.00. Tel: 081-801 5053 evenings and weekends.

**CYRUS DISCMASTER/Dacmaster/ 2 x P.S.X.** units, 4 months old in immaculate condition. Total new cost £2,400, asking £1,400 o.n.o. New priorities force sale. Tel: 0296 437314 (evenings) Aylesbury.

**NAIM ARO TONEARM**. Mint. Boxed. As new with Linn Armboard. Bargain £450.00. No offers (new £900.00). Chris 0302 349901.

**GARRARD 401** Turntable, with SME 3012, 12" arm, with Shure M75EDII. Mounted on custom plinth and lid. Mint condition. Hence best offer secures. Tel: 0636 74101 evenings.

**ROCK REFERENCE/Excalibur, A.T. Art I** £2,100, Deltac DPA/DP550 with Black Slink Interconnects £1,600. Ruark Crusader 3-way speakers (Rosewood) £800. All light usage and in excellent condition. Tel: 0704 541420 eves.

**COPPER CHASSIS** build better sounding amplifiers with these heavy, .051 Ga. blank copper chassis. 2 sizes available: 405 x 305 x 75mm Stereo amp.: 95\$US - 330 x 230 x 50mm Preamp or Monobloc: 75 \$US. Bottom plates 12 \$US ea. C. Phaneuf 972 Guillaume Boisset, Cap-Rouge (Quebec) Canada G1Y 1Y9.

**L.F.D. PRE-AMP LS.2**. Wonderful sounding amp. cost new £1,200. Sell for £600. L.F.D. Phono Stage (Headamp). One of the best you can buy. Cost £650, sell for £350. Only 14 months old. £800 for both. Phone 0884 324665.

**MILLENIUM 4-20 Valve Amplifiers** (reviewed Hi-Fi World November Supplement), 25 Watt Monoblocs, Sovtek Valves, built and tested £195 each. Williamson 30 watt Ultralinear Monoblocs £250 each. Tel: 081-427 1378 (Harrow).

**CYRUS DISCMASTER/Dacmaster**, 4 months old. Cost new £1,800, asking £1,000. 2 x Cyrus PSX (latest edition), cost new £300 each, asking £200 per unit. Tel: 0296 437314 (Aylesbury) evenings.

**TDL MONITOR** Speakers, black ash with stands. Perfect condition, superb performance but too large for domestic tranquillity. £1,100 o.n.o. Philips CD850 Bitstream FTS CD Player, £100. Tel: 0294 835519 (Ayrshire).

**LINN LP12 Deck & Basik Arm** £150; Linn Sara Speakers £350; Electrocompaniet Power Amp £75; Meridien 103 pre-amp £50. Call Richard on 061-941 1405 (S. Manchester).

**ENTHUSIAST'S** clear out: various amps, both valve/transistor, turntables, CDs, DACs, speakers, accessories. Eg. Naim Nac72, VTL deluxe, Thorens TD160/2. Please send SAE: Mick, 12 George Street, Leamington Spa, Warks.

**QUAD 44 PRE-AMP** with Quad 306 power amp. Excellent condition. £425 o.n.o. Tel: 0379 650 722 (Norfolk).

**COUNTERPOINT SA12** Classic Hybrid Power Amplifier mint boxed £500.00. MagnaPlanner SMGa Panel Loudspeakers oatmeal Grills Brass or oak trims boxed £325.00. Phone Paul 7-8pm 0481 723280.

**KEF 104/2** Reference speakers, Rosewood, mint, boxed, the works! £890. Reasonable delivery. Tel: 0932 - 868 045 (Surrey).

**MUSICAL FIDELITY** Synthesis £120; Thorens TD160 with SME IIs and Linn K9 £120; £220 together. High Wycombe 0494 716909.

**ROKSAN XERXES** in rosewood, no arm, cut for SME £325. Leak Troughline Stereo with Paravicini Valve Decoder £200. Goodmans LS3/5A £220. Tel: 081-591 2937 evenings.

**ROTEL RCD965BX LE Discrete** £250. Valve Monoblocks 36 WPC Class A 12 months old £400. (Willi P/X Audioclub 8000A +£100 for these). Aiwa XC750 CD, new, £100. Edison 12 Valve Power (Stereo) 12 WPC Class A £225. Sony WMD6C Pro Walkman, case, adaptor, phones, MIC, £165. Systemdek IIX900/Mission 774SM/ Eroica, Acrylic Platter (£750) £300. Tel: 0706 345418.

**LINN EQUIPMENT** - Kabers, Walnut, latest £499, Kaim Pro £449, Arkiv £449, Basik/KS £149, tunebox £149, K9 Cartridge £25. Nakamichi 700 Tri-Tracer, Needs work £50. Tel: 0585 373735 / 0628 782040.

**NAIM SBL** Speakers (teak) £800; Magneplanar MG1c speakers (grey cloth) £450; both boxed, mint, can demonstrate; AR EB101 turntable £100. Tel: 01734 843740 (Reading).

**MISSION 767** Loudspeakers Rosewood with LFA unit and PSX Power Supply upgrade £1,700.00. Meridian 101B preamp moving coil plus line and pair of 105 power amps £250.00 Can demonstrate. Carlisle 0228-21533.

**LINN AXIS/AKITO/K9** Turntable, genuine and virtually unused, £350. Linn Helix Loudspeakers/spiked stands bi-wired, £220. Creek 4140 S2 Amplifier £150. Denon DR-M12HR Cassette Deck, £150. All boxed and absolutely mint. Target 4 shelf table £30. Tel: 0342-323949.

**WANTED**, Sound Shelf or Table, Leak Stereo 20, Speaker Cable, Interconnect, MC Cartridge. Any condition any make considered. Tel: 0244 671148 Chester area.

**QUAD 22 FM TUNER**: Stereo Control Unit 2 Quad II amplifiers: 2 Wharfedale Speakers £300 o.n.o. Tel: 0494 488251 (Bucks).

**WORLD AUDIO DESIGN**, Pair of KS881 40 Watt Valve Monoblocks with KLPI Valve Line Level Pre Amp. May demonstrate in your system if required. £1,100. Tel: 0895 426655 (work), 0973 323521 (home).

**GARRARD 401 AND SME 3009** with Ortofon VMS20E (new Stylus) mounted in a custom made wood and black perspex plinth. Beautiful condition, known history, little use, sounds wonderful. £195 o.n.o. Tel: 0924-458811.

**PAIR AUDIO Innovations 2nd Audio** Triodes, 6B4G 15 watts. Superb Dynamics, mint condition. Tel: 0242 236981. Gary.

**SNELL E II** Speakers complete with Pirate stands £800. Very sensitive - make ideal partners for Audio Innovations amplifiers. Please call Mark on 0252-845128 (Fleet, Hampshire).

**CREEK TUNER CAS3140** the original classic compared in reviews to Naim 01&02. £85 can dem. Tel: 0922 401896 work, 0902 632415 home.

**LINN SONDEK LP12** with Mission 774 arm with moving-coil cartridge. Excellent condition teak finish £450.00. Tel: 0533 -541 980.

**SNELL TYPE JII** American Light Oak, good condition with Foundation stands £395 o.n.o. 2 x 8m Audionote A.N.B. gold plugs £100 o.n.o. Myst T.M.A.3, good condition. £85 o.n.o. Phone Guildford 0483 572 796.

**AUDIO INNOVATIONS Series500** Triode coupled £500; S800 MC Transformer £90; both in VGC and boxed. Phone Matt, 0273 884009 evenings, 0903 822000 ext. 3197, daytime.

**ROKSAN XERXES/Artemiz** final specification, XPS3 and DSU I. Absolutely perfect. All items boxed. £1,100.00. Tel: 0245 473331 x 3321 (daytime), 0245 358387 (evening).

**HARBETH HL-P3** Speakers £325. REL Acoustics Stygian MK2 Active Sub-Woofers, ideal for cinema sound system (cost £405) sell for £310. Tel: (0794) 514916 Romsey, Hants. Before 12 noon.

**JBL - L212**, SPEAKER SYSTEM, comprises 2 x 3 way satellites each 38" x 16" x 6" + active 100w sub-woofer, oiled walnut, smoked glass top. Was JBL's ultimate speaker system, £600 (£1,800). Wanted Martin Logan Aerius. Tel: 0604 584 630.

**SAGE AUDIO** Supermos 500 power amp. Help spare module needed for this amp. If anybody has spare or has information about getting hold of one contact Nick 0793 642633.

**CROFT SERIES 3 OTL** Valve Power Amplifier, good condition. £350. Tel: 0403 891349, W/Sussex. Evenings/Weekends. Long ring.

**NAKAMICHI CR7E** Cassette Deck. Purchased new from manufacturers by present owner 3 years ago. Superb example. £1,000 cash only. Buyer collects. Phone 0273 206767, 7-10pm (answerphone at other times) Brighton area.

**MAGNEPLANAR MG1c** Speakers £300. Meridian 501 pre-amp £350. Meridian 205 Mono Blocks £700. Tel evenings: Luton 0582 582 540.

**CASTLE HOWARD** Loudspeakers, mint condition £550 o.n.o. Spendor S20 Loudspeakers mint £295. Various cartridges and cables, offers. Wanted ALON Speakers or Posselt Albatross Speakers. Tel: 01603 38752.

**RADFORD SC22** valve preamp (tweaked) with custom P.S.U. £215. Jordan Watts PR, 8" bass, 2" tweeters, x'overs £100. KEF B139 Bass Units £100 pair. Peter 081-340 9455.

**FOR SALE** Counterpoint SA-9 all valve phono amp W/valve P/S, black; counterpoint SA11 remote controlled valve line stage, black. Mint condition. £3,750 for both. Audio Research SD-10 Mark II, silver. £1,200. Jim 071-823 8366.

**KEF Q60 BI-WIREABLE** Speakers, unmarked, boxed, 2 years old, cost £400+ new, sound great! Plus spiked Target stands (cost £35+ new). Can demo. Buyer collects. £300. Tel: 0793 763934 (Swindon) evenings.

**TANNOY CHEVIOT MKII** Loudspeakers, 12" D.C. Units (Type 3128), Floorstanding Monitors, oiled Teak exceptional, can demonstrate £400 o.n.o. Tel: 0886 888 772 (West Midlands).

**ROTEL RB850** £110.00, Mission 763s Black £230.00. Systemdek Ibx inc Akito, KS £260. Tandberg TD 20A £150.00 o.n.o. Linn Isobariks £650.00. KEF 103/4 black £800 unused. Tel: 0792 280061

**(WANTED) TRIO K.A. 907** Amplifier or Luxman amp L-550. Must be excellent condition. Please phone 0837-54683 evenings after 6.30 pm (Malcolm).

**LINN LK2** Power Amp + Leads - excellent - £150. One pair each KEF B110B bass/mid, T52B Tweeters, DN27 x/overs. Boxed + virtually new. (Cost £200) DIY ERS. Bargain £100. Tel: (0772) 621337.

**LINN LP12, ITTOK** Karma, boxed £600. Quad 34, FM4 Tuner, 405/2 amplifier - 34 needs attention £350. Meridien MCD Palyer £150. Linn Kan speakers and stands £200. Tel: 0420 842 84. (Hampshire).

**CELESTION SL6Si** Speakers (Walnut) £250. Audio Technica ATH-70 electret Headphones and adapter £85. SME 3009 Series III tonearm with flexible link £50. All boxed, pristine. Tel: 0539 734531 (Cumbria).

**SONY MDS-501**, minidisc, 'finest recorder, excellent recording' unfulfilled order forces quick sale: £799 retail, sell for £499 no offers. Tel: 0956 414494

# THE EMPORIUM

28 St. Nicholas Street, Diss, Norfolk  
TEL (01379) 650744 FAX (01379) 641932

Open MON - SAT 10.30am - 5.30pm

**We Buy & Sell Grunge Audio**

**Valve Amps**



**1000s of used Records & CDs (Folk, Classical, Rock, Jazz)**

**FOR SALE VALVE AMPS etc**

|   |                    |
|---|--------------------|
| Original LEAK Stereo 20 .....                   | £180               |
| Rebuilt LEAK T42+ (Pair) .....                  | £350               |
| Rebuilt LEAK TL12+ .....                        | £350               |
| TripleTone 12 Watts Monoblocks .....            | £120 (Pair)        |
| Grundig NF10 with ELL80 stereo .....            | £100 (2 available) |
| Armstrong 227M Receiver .....                   | £35 (4 available)  |
| Armstrong 222 Stereo Integrated .....           | £40                |
| RSC Stereo 10 Integrated .....                  | £40                |
| Radford FMT1 Mono Tuner .....                   | £50                |
| LEAK Troughline III Mono Tuner .....            | £50                |
| Edison 12 (Upgraded GT Audio) 2 available ..... | £250               |

ALSO Rogers, Heathkit, Radford, Pye,

BTH, Avantic, & Scott available

**GRUNGE AUDIO**

|                      |          |
|----------------------|----------|
| Cassette Decks ..... | from £35 |
| Amps .....           | from £45 |
| Turntables .....     | from £35 |

Lowther TP1 Corner Horns .....

LINN LP12 Valhalla/Morch

DP4 .....

NAIM NAIT2 .....

REGA 3 .....

TROKIA .....

EKOS on .....

**WANTED**

CD Players & CDs

LEAK TL10 .....

LEAK TL25+ .....

LEAK TL12 .....

QUAD 2/H/II .....

Radford MA15 .....

Armstrong A10 II .....

ALSO Pye, RCA, Avantic

ON THE SPOT VALVE AMP REPAIRS

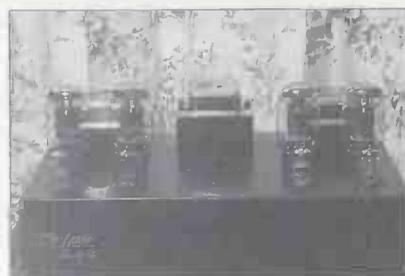
MAINS TRANSFORMERS AVAILABLE

VALVES ORIG USA 2A3 OFFERS

KT66 & KT88 Available

**Foreign enquiries welcome**

## THE DELPH DA CAPO



**Cottage Audio are proud to announce a FIRST!**

We are the UK's FIRST specialist retail dealer to stock Delph Electronics' Da Capo. A 30 watts per channel valve stereo power amplifier of superb poise, power and finesse. In short an experience not to be missed!

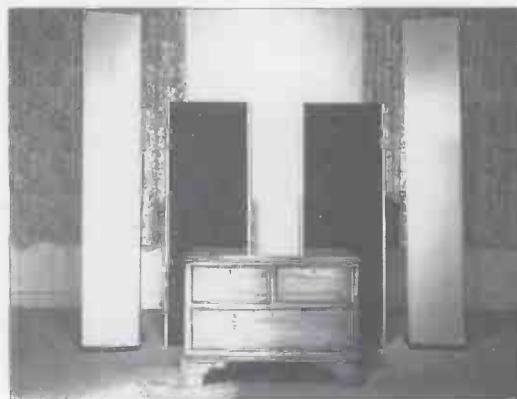
For more details phone  
Lincoln 0522 702834

## HORSHAM HI FI

Suppliers of Fine Audio Equipment

M  
A  
G  
N  
E  
P  
L  
A  
N  
A  
R  
  
S  
E

G  
R  
A  
V  
I  
S  
  
S  
U  
B  
W  
O  
O  
F  
E  
R  
S



The excellent new range of Magneplannar SE loudspeakers are now on permanent demonstration. These attractive Panel Speakers coupled with the Gravis Active Subwoofer with its real Yew or Mahogany veneered cabinet will give you High End sound quality at an affordable price.

In addition we have the World Audio KLP-1 Valve Pre-amp and the awesome 300B Valve Power Amp on permanent demonstration. This amplifier has to be heard by anyone contemplating valves. It possesses many fine qualities such as exceptional Transparency, low level resolution, deep soundstaging, bass slam and extension.

CALL FOR A DEMONSTRATION IN OUR PURPOSE BUILT LISTENING ROOM.

Home Demonstrations Arranged Part Exchange Welcome  
OPEN Monday to Saturday 10am to 8pm  
28 Queensway Horsham West Sussex  
Tel: 01403 251587 / 0831 418619

**A unique opportunity to own one of the Audiophile CDs from 'Clarity Recordings' value £19.95RR.**

**Absolutely FREE!!!**

These Audiophile quality Silver Disks are recorded to the highest standard, using twin back to back microphone technique, valve amplification and 3 step mastering.

Foundation Audio are offering **ONE FREE DISK** for every pair of Foundation Speaker Stands purchased on selected models.

**NO CATCH! . . . NO GIMMICKS!**

You get to choose from one of eight titles in the Clarity catalogue.

This offer is for a limited period only while stocks last.

For further information on this offer please contact your dealer or:

**FOUNDATION AUDIO LTD**

53 Beecroft Way, Dunstable, Beds., LU6 1EE

Tel: 0582-477550 Fax: 0582-604001

Reg No. 2916603

## PRIVATE

WANTED: SHURE VSTV Hafler Iris; Sugden AU51P or YBA3. Selling: Sheame Phase 1 pre £450, Power £550; Voyd Valdi + Moth + Goldring Electra £475; Audio Innovations S500 £495. Tel: 071-730 1614.

**PAIR LEAK Stereo 20s, rebuilt and mono-switchable. Leak Troughline FM Tuner, Moth Series 30 Monoblocks and passive pre. Offers? WANTED: Keith Monk's record cleaner. Tel: (0223) 327 280 - answerphone.**

QUAD IIs, 22 and FM2, recent Quad service, groove tubes, £370 o.n.o. Tel: 01280 817321 evenings.

WIFE WANTS Spare Room Back! Sugden A28 Class A amp £125, Quad 33/303 pre/power amp £125; Leak stereo 70 £45, Delta 70 £50; Marantz 2215BL, Leak 1800, Pioneer SX-450 receivers £45 each, KEF Reference 104ab speakers £65, KEF Delta 2 speakers £45, Celestion Ditton 22 Speakers £60, Richard Allan Chaconne speakers £45. Guildford 0483 - 233952.

ARCAM ALPHA 5 CD £300, Gale 301 MK II Loudspeakers £175, Musical Fidelity B200 Integrated Amp £150. All boxed in excellent condition. Tel: (071) 652 1960.

MERIDAN 203 DAC, excellent condition. £200. Tel: 0592 772806 (Fife).

UNWANTED INHERITANCE. QUAD QCII Controller. Quad FM3/30/303. Quad ESL Gold (Pair). Garrard 401/SME 3009/Plinth. All with original manuals. £600 o.n.o. Tel: 0633 614919.

MICHELL SYNCRO Turntable - RB250 Arm, Nagaoka MP-II Boron. 13 months old. Pristine condition, boxed £280 o.n.o. WANTED: Quad 44/405 MK2, must be in excellent condition. Tel: 0582 573286.

MICROMEGA SOLO II CD. Player, top loader. Warranty to match, new £1,600 accept £825 o.n.o. Audiolab 8000A MK1 Amplifier, £160. Musical Fidelity Ref 4 speakers. Black. £400 new, sell £160. Tel: (0271) 46300.

JPW AP3s complete with target single pillar stands. Pristine condition. Boxed. £160. Tel: 0252 614574 (Hampshire).

SPENDOR BCIII, custom stands and cables £600 o.n.o. Demo possible. Tel: 0689 874 438 evenings. Near London SE.

ROYD TOPAZ £173, sell £85. Royd Sintra II £375 sell £299. TDL N.F.M. £119 sell £65. N.A.D. 306 amp 50 watts £329 sell £249. All as new. Boxed. Demo. Tel: 0865 59737. Steve

GYRODEC RB300 Linn K18 £450. Revox A77 33/4 - 71/2 Dolby, cover remote control £475. Lecson API and AP3 pre/power amp £400. Yamaha cassette deck (wedge shape by Bellini) TC - 800GL £85. AR CD4 Player £60. All above very good condition. Stored last 3 years. Tel: 081-948 7694.

RADFORD STA15, SC2 pre power £390. Rogers cadet 2 pre/power £90. Cadet 3 pre/power £85. Garrard 401, SME 3009 £95.00 o.n.o. Pioneer PL12 £25.00. Reading (0734) 314269.

LESLIE SPEAKER Model 825 400W Two Channel Pre-amp. Two Speed Foot Control. Suit organ/disco. £250.00 o.n.o. Tel: 0323 411 807.

GOODMANS ACHROMAT 400s wanted. Working preferred but anything considered. Depending on response to this ad, may have pair of RB 35s for sale, excellent condition. £40. Tel: 081-777 8939 (anytime) Roy.

LEEK STEREO 20 original mint condition. Sounds superb. £225 Leek Varioslope Stereo Pre Amp £45 Leek Troughline II Tuner £60 Linn Asak Mc Cartridge, little use £80. Akai Tape Deck £45. Offers invited. Please ring evenings 0629 733634.

KENWOOD M-76G 6 component midi system - cost £830 - absolutely as new with boxes £620 o.n.o. Also Hitachi music centre cost £450 as new £120 o.n.o. Tel: 0278 455165.

AUDION 300B signature (prof model) monoblocks. Audion Active Valve Preamp with Dual PSU. Audio Innovations Nova Transformer. Audio Note silver SP spk cable 4 x1.5 mtrs. All as new, will split. Offers. Tel: 0635 36599.

LINN SONDEK LP12 black ash, Valhalla, mint, virtually unused with brand new Ekos MK 2 arm and K18 cartridge fitted last week with full service & set up. £1,395. Phone: 081-658 8091/0973-228 114.

NAIM 32/140, NAIM 32/Snaps/250 / Hi-Cap/72 MM MC Quad 34/405/2 Quad 66/606. Linn Kabers (rosewood) Naim I.B.Ls want latest spec. Oracle Delphi Michell Gyrodec. Garrard 301 Linn Akito. Linn Ittok. Rega RB250. Koetsu Black Linn Troika Linn K18/K9. All mint and boxed. Best offers secure. P.X. considered. Tel: 0742 486493.

QED DIGIT Modified, Rogers Cadet. Garrard 301, 401, Quad electrostatics, Leak Varioslope Musical Fidelity B200 amplifier, MC2 speakers, Heybrook stands Heathkit valve tuner, MA12 monoblocks, Partridge and Magnequest SE300B OPTX. Tel: 0642 559543.

**PINK TRIANGLE PT-TOO Turntable, with external power supply. SME Model-309 Tonearm and OTC-5 cartridge. Superb sound/condition. Cost £1,500 new, must sell hence £550 or best offer. Guildford (0483) 34599. Chris evenings.**

LINN ISOBARIK DMS Loudspeakers, black finish, immaculate condition, with Linn spiked stands. Awesome sound, can demonstrate. Original boxes. £975. Tel: (0487) 840023 (Cams), Evenings.

NAIM SBL LOUDSPEAKERS, black, passive crossovers £895. EPOS ES14 Loudspeakers, walnut £200. Target sand filled speaker stands £30. Sound Organisation table £20. Mike Tel: 01799 530839.

ROKSAN XERXES Deck, Artemiz arm, black, excellent condition. Boxed £875 o.n.o. Free Shiraz cart not working worth £200 as your part exchange. Tel: (0903) 261931 Sussex.

STAX LAMBDA Signature Headphones. SRMT1 Valve Energiser. Mint. Boxed. £825. Revox G36 tape recorder. Superb. £495. Musical Fidelity P170. £300 P150. £175. 3A preamp £175 P180/CRPS £675. Exposure VII preamp/quality PSU £275. Linn. Valhalla (Black)/Ittok. Eroica. Excellent. £585. Quad ELS Loudspeakers. Bronze £300 Nakamichi 600 cassette £285. Leak Troughline. Stereo. Hard case. Superb £150. Sony SW1 Radio £90. Might P/X. Revox B77? Wanted Ampex or similar reel to reel tapes. Tel: 0225 868819.

301 STROBE GARRARD WITH MAT £100. BBC 301 £150. Strathclyde 305M SME 3009/11 AT155 LC £120. Rogers HG88 MkIII Amp & Tuner £200. Troughline Stereo £80. Quad II Control Mono £25. Goodsell Williamson Amp, KT66s, offers. Leavers Rich E141M valve mono studio tape recorder, swap for 3 head cassette or Croft Micro or FM4. Armstrong Pre & Monoblock power amps, excellent condition. Offers. Tel Liverpool 051 734 0965

MICRO SEIKI CD-M100 the CD player with the Analogue sound and the looks to please the wife. New £4,000, sale price £750. John 0276 62765.

LINN LK100 Power Amp, 4 months old. Can dem £370.

MERIDIAN 203 DAC-7, superb first upgrade £230 ono, boxed in superb condition. Tel: 0254 812881 (eve) 061 773 9121 (X2945 day)

GARRARD 401 £150, Quad 34 £125, NAD402 £90, Musical Fidelity 2A £110, Dual CS503/2 unused £85, Koetsu tonearm. £175. All items in good condition. Most boxed. Tel: 0280 701145.

LINN LP12, Ittok, Trak + K9, 45 adapter, boxed, instructions £450; Rogers HG88 MkIII, fine integrated valve amp. £180; Armstrong 526 receiver £50; Cyrus 2 amplifier boxed, £80; KEF B110 drive units, unused boxed, £50 pair; Decca C4E, £50. Tel: 0121 706 2068 (Midlands).

LINN ACTIVE SYSTEM: LP12, Lingo, Ekos, Klyde, Kanik, Kaim, Aktiv Keildhs, two LK100s. Less than two years old, original cost £8,000, will accept £4,000, or may split. Wigan Tel: 0942 272187 (eve).

ARCAM DELTA 170.3 CD transport + Black Box 5 DAC (January 1994); Sync-Lock remote; classic Arcam style and effortless sound; immaculate, boxed, save £500 on original rp: £650. Tel: 0608 811349. (Oxon).

ORIGIN OL2 SPEAKERS for sale in new Walnut finish, brand new, will accept £500. Tel: 0634 361640 (home).

NAIM NAT 02 tuner wanted, will pay £500 plus carriage. Tel: 010 3531 4591432.

CAMBRIDGE CD2 CD player, digital output, no box or remote hence £125; Thorens TD160 Mark II, classic turntable, includes Mission Solitaire cartridge, good condition, excellent sound, £85. Tel: 0480 460502 (Cambridge area).

LOWTHER BICOR 2000, balanced horn 'speakers (mahogany) each with two new PM6 drive units, 98dB; incredibly dynamic and detailed sound, comparable 'speakers over £2K, yours, £629, may p/x. Tel 0274 545219.

SUMO POLARIS 100 wpc class AB solid-state stereo power amplifier, £375 ono; Art Audio VPI active/passive valve pre-amp, including phono-stage, £320 ono. Sage Digitrap £10. Tel: 01962 851802.

GARRARD 401 HOUSED in satin black plinth, SME 3009 S2 + fluid damper, Nagaoka MP11 Boron cartridge Goldring sound cones, excellent, £225 ono. Ariston RD110 Rosewood, Linn Akito, Linn KS, spare arm boards, immaculate, £230 ono. Tel: 081 669 1088 anytime (Sutton/Croydon).

MUSICAL FIDELITY MVX-2 pre-amp, £950, Marantz CD94 with Trichord mod., £950, Spondor SP1 'speakers, £400, Spondor S100 monitors. £950 both with stands. Tel: 071 584 8494 (day) 071 352 1786 (eve).

SME 3009, no headshell, Ortofon arm and headshell, Ferrograph reel-to-reel, Truvox RE102, connoisseur BDI for spares, offers or p/x for Rega RB300. Tel: Patrick 081 443 4860.

LOWTHER PM6-A (Alnico), drive units, pair with Acousta, Blue Print £195 ono, new. Tel: 021 705 1060.

MARCONI SPECTRUM ANALYSER, Audio 110 MHz, £650; TF2100 precision AF oscillator, £60; precision level meter/attenuator for above £40; Dymar THD meter £70; 25MHz digital storage scope £195; double-beam scope, £75, Marconi sig. generators to 470MHz, £60. H/Packard RF generator to 65MHz, £55 TF 2700, precision RCL bridge portable, £110. Tel: 0344 27869.

ARCAM DELTA walnut veneer, £185, KEF Quattro (C10 and CS200 subwoofers), £165; Gale 301 Black Ash veneer, £170, Dual CS505, £65, ARI 8BX, £80, all boxed vgc. Tel 0257 263403 (Lancs)

WANTED SQ quadrophonic decoder, working condition. Please Tel: 0543 671265, anytime.

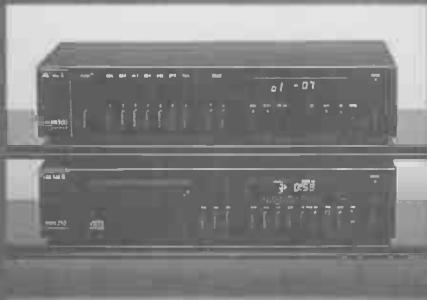
TANDBERG 3001 FM tuner, retail price £2,300, high spec sensitivity/selectivity sound, very good condition, working perfectly; official UK service available, £300, ex Dublin. Tel: 010 3531 4591432

SUGDEN AU41 pre/power, £350; Linn Helix c/w stands, £215; Mission 780 c/w stands, £140 (all mint); DPA PDMI MkII, £220 (good); Mission 700, £100 (excellent). Tel: Michael 061 304 8400 (day) 0204 651540 (evening), can demo.

## 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**

## definitive audio nottingham

Tel/Fax 0602 813562

Import/Export

From first time buyer to seasoned audiophile - from budget system to the very high end, Definitive Audio has always offered fresh exciting solutions to the traditional problems of domestic audio.

Specialising in low power valve amplification and high sensitivity loudspeakers, Definitive Audio has, in conjunction with major manufacturers, introduced ground breaking products from £400 to £14000.

For expert and informed guidance phone 0602 813562 Monday - Saturday 9.30 - 7.00

Agencies include Wadia Micromega Monarchy Voyd Systemdek Townshend Horning Lowther Vitavox Living Voice Border Patrol Audio Innovations Impulse Dali SME EMT Pioneer and other selected brands.

| SECOND HAND GOODS FOR SALE                                  |                | Gauss 1502 HF Bullet Ring Raditor (pair) 110 db/w) |                                |
|---|----------------|--|--------------------------------|
| # Denotes full warranty                                     | Carriage extra |  | £300 £460                      |
|   | PRICE          | RRP  |                                |
|   |                |  | Acoustic Energy AEII           |
|   |                |  | Rosewood Perfect               |
|   |                |  | # Voyd Valdi Mahogany          |
| Krell KRS 200 Power Amp & Reference Pre Amp                 |                |  | # Micromega Leader As New      |
| A Very Unusual Opportunity                                  | POA            | £25,000  | # Audio Innovations S1000 Pre  |
| Tannoy Arden Studio Monitors (15" Dual Concentric 98 db/w.) | £1000          |  | # Audio Innovations S500       |
| # Horning Agathon - Ex Dem                                  | £2500          | £3400  | # Audio Innovations S800C      |
| # Snell AII Mahogany  | £1900          | £5000  | # Audio Innovations S800 MCT   |
| # Wadia 6 Integrated  | £2500          | £3850  | Pink Triangle PT1/RB300 As New |
| # SME V (Audio Note Silver Wiring Harness)                  | £950           | £1555  | Krell PMA1 Dual Pre Amp        |
| # Voyd .5 Reference Oak                                     | £2300          | £3600  | # Impulse H6 Oak - Ex Dem      |
|   |                |  | Arcam Alpha 5                  |

Lowther Drive Units (PM 6,7,2,4) all available from stock with drawings for all vintage and contemporary Lowther designs including Mini Acousta, TP1 and Audio Vector (including Audio Vector Auditorium)

Vitavox Pressure Drivers, Cone drivers and Horn Dispersive Units available from stock.

Phone or fax direct 0602 813562



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



### 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, HiFi News, June 1994**

"Spirolink I, Spirolink II and Digilink Copper"  
**HiFi Choice Recommended, June 1994**

"Airoflex, \*\*\*\*\* Rating" **What Hi-Fi, Feb 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

FISHER STEREO with Garrard 401 turntable; all-valve tuner, thirty years-old, still good, offers invited.  
Tel: 0371 850 917.

PINK TRIANGLE PT TOO/RB250/Chorus Black all in immaculate condition + box, little use. Will gladly demonstrate, £465 ono.  
Call Richard on (01276 684561 anytime (Surrey)

MERIDIAN 200 (MK1) transport and 203 (DAC 7), both boxed and mint condition, buyer collects, £600 for both.  
Tel: 0565 632796.

GARRARD 401, SMÉ 3009 arm with M75 ED cartridge on plinth; Leak Delta FM tuner; Armstrong 521 amp, £170, the lot, or ono.  
Tel Tony, 081 535 6647 (day).

LINN LP12 CIRCUS, Naim ARO, Troika, £1,400. Exposure X1 pre-amp, £1,700; Naim SBLs, black, £1,350; Exposure V X-over + PSU, £750; Meridian 201, £500; SME IV, £500, all excellent condition.  
Please phone: 01934 522 635

NAIM CD1 CD PLAYER, 2 years-old, little use, £1,200; Elite Rock 2, van den Hul rewired RB300 OC9 cartridge, five hours use, £700.  
Tel: 0803 297691 (Torquay/South Devon).

AUDIO INNOVATIONS A500, new Sovtek valves, £500; Michell Mycro RB300, Goldring 1042, £350; original packing.  
Tel Paul: 0702 467757 (Southend)

LP12 LINGO EKOS, boxed, excellent condition, £1,350 ono, Roksan Xerxes, £495 ono\*. Artemiz Arm, £375 ono excellent condition boxed.  
Tel 0903 261931 \*free Shiraz cartridge not working, worth £200 as p/x.

LINN ISOBARIKS lead-filled stands, VDH cable, £950; Denon DCD1520; remote volume, audiophile quality, £245; Thorens TD160B £100; Rotel RT550 tuner, £35; Audioquest Topaz, £30; Magnum MF250, 125 Wrms, £220; Yamaha KX630 cassette, remote/c, all excellent condition p/x.  
Tel: 0206 861457 (eve).

STAX SRD 6/SRS classic electrostatic earspeakers, £50. Wanted: Afromosia sleeve for Quad 33/FM3 and excellent Garrard 401 chassis.  
Tel: 0625 535299.

LINN SYSTEM, black Sondek latest spec, £500; Lingo, £500; Ekos, £750; new Troika, £500; Kairm £900; LK280, £350 each; Active x/over, £600 Kabers Active, £700.  
Tel: 0753 851429 (eve).

LINN SONDEK LP12, Linn Basik plus tonearm & Sound Organisation Table, £230; Linn Kans/Kan stands, £200; 'Dual' C808 tapedeck, £25; Naim Nait amp, £200.  
Tel: 0892 862369.

WANTED: BEARD PIO1 amp.  
Contact: J. Bos, J. Teulingslaan 95, Amstelveen 1187 SH, Netherlands.  
Tel: 206458715.

MISSION CYRUS 782 'speakers black Ash immaculate condition, boxed with stands only 1-2 hours use, house move forces sale. Cost £400, bargain £300. Welwyn Garden City.  
Tel: 0707 322962.

STAX LAMBDA SIGNATURE headphones; SRM T1 valve energiser, extension lead, £395; Sony ST 700 ES tuner. FM/MW/LW 'Best Buy' 1987, £130. All mint condition.  
Tel: 0752 773369 (Plymouth).

COLLECTOR SELLING CLASS mint as new boxed Hi-Fi Revox 436 respected by Revox; Teac A3440 7.5"15" 10.5" reel; Quad ELS Black, protection boards, late model; Thorens 124/II/SME. Yamaha receiver CR1020. New spare for above. For details.  
Tel: 0202 823818.

QUAD 22 power and pre-amp set unused since recent Quad service (documented), £330.  
Tel: 081 806 7289.

LFD LS2 LINSTAGE pre-amp, cost £1,100, sell £600; PSI phono-stage, cost £650, sell £375; PA 1 power amp. cost £750, sell £450. Having to spend crazy money to better this sound.  
Tel: 0884 32465.

QUAD II/22 CONTROL unit stereo valve amplifier, vgc, recently overhauled, £295; Quad 33/303/FM3 with Afromosia sleeve, vgc £299; Ferrograph series 7 hi-speed reel-to-reel, £95; Wharfedale Dovedale 3 pair, £50. All can be demonstrated.  
Tel: Andrew on 0420 479343 eves/w/ends, or 0344 413203 (day)

MISSION 78 AMP, £95; Revolver turntable, Linn Basik LX arm, K9 cartridge, £100; Yamaha K320; cassette deck, £95; £345 the lot (cost £1,000)  
Tel: 0746 766362 (Shropshire).

KT 66 VALVES for sale Marconi/GEC boxed, seven at £20 each or £120 the lot; Rogers Cadet 3, £60; Leak Troughline 3 Stereo 30 in case, £95, call Alan.  
Tel: 01604 846465.

MICHELL QC power supply, new £225 ono; Tesseract Gyro power supply, new £305 ono.  
Tel: 081 854 6738.

SPENDOR SP2/2 in Rosewood with Madrigal (Mark Levinson) rewired inside + Fram stands A1 condition, £600 ono. Ariston turntable RD 80SL with Alt I ADC arm and NAG mp10, cartridge £100 ono A1 condition. Decca London cartridge (maroon) needs retipping, £65.  
Tel: 0482 831652.

FOR SALE PIONEER M-73 power amp class A/B switching, Rosewood end cheeks, boxed, beautiful condition, £350. WANTED, Carver M400A power amp Cube-shaped, must be good condition, no silly prices.  
Tel: 041 881 1748.

LINN LP12 Lingo, Akito, K9, 2 years use, £650 ono; Denon POA6600 monoblocks, 2 years use, £650 ono; Conterpoint SA6 valve m/c stage, £200; Audioquest Emerald interconnect, 1m pair, £100.  
Tel: 0782 415 699.

SONUS FABER Minima Amators, £100; AVI 250wpc poweramp, £900; Audio Research LS1, £750; Orelle CD10T/DA180, £875; Orange valve pre-amp, £400; Huygens stands, £110, half-price Madrigal/Deskadel cables.  
Tel 021 427 6661 (Roy)

ROKSAN XERXES deck with Rega RB300 arm, excellent condition, £325.  
Tel: 021 350 0744.

REVOLVER TURNTABLE with Linn LVX arm and Linn K9 cartridge, mint condition, £130 ono; WANTED, Audio Technica AT 0C3 cartridge.  
Tel 0245 267872, or 0585 491353.

RADFORD STA 25 with SC22 control unit, excellent condition £450. WANTED single mono Armstrong A10 Amplifier, also Technics EPA 500 arm or arm tubes and Decca SC4e cartridge.  
Tel: 0533 626508 (anytime).

MISSION DAD 5 CD player, boxed as new £100.  
Tel: 0703 328573 (Chris, Southampton)

MUSICAL FIDELITY TEMPEST amp and matching CD2 CD player, cost £650, £250 mint, prize win.  
Thomas Tel: 0582 765871

DYNACO USA VALVE equipment: ST70 power amp, £275; PAS 3 pre-amp, £150; FM 3 tuner, £120; PAT 4 transistor pre-amp £100; FM5 tuner, £100, All excellent.  
Tel: 0372 467264 (Esher).

REVOX PAIR F-36 stereo valve recorders, new heads on one, £375; Sugden Craftsman 3 turntable chassis, 3-speed, £75; Mono pick-ups: Garrard TPA 10/Goldring 600, £35; Leak Dynamic 78rpm MC head/transformer, £45; Heals wall cabinets for Quad valve system, £75; Heals folding wall cabinet with Thorens TD 124/Shure M212, £275; single speakers, 1 mini Acousta PM6, 2 Sandwich 600, 3 12" Axiom 300. Offers or buy single. WANTED, single monoblocks, Quad II nearest to No2727. Leak TL 10.  
Tel: 071 372 3724

JBL 4X L-100 monitors, Signature series, £395 pair; Tannoy Chevening, HPD 295, £275 pair; Rogers 2-way export monitors, £195; Yamaha B-2 power amp, massive dual supply, £495; Thorens TD-126 Mk4, Thorens arm, brand new, £295; Vitavox S-3 drivers, new + Vitavox Radial horns, used £595  
Tel: 071 625 8966.

NAIM/LINN buy sell: 52, CDS, 250, 135, 140, SBL, ARO etc.  
Tel: 0382 819732 (Bob)

QUAD 606, £400; Equinox pre-amp, cost £1,800, sell £650; Ruark Talisman speakers, £500; Pink Triangle Ordinal DAC, £530; Micromega T Drive T DAC, £1,400.  
Tel: 0977 643629.

AUDIO INNOVATIONS series 300 Mk1 integrated valve amplifier, fitted with upgraded valves, mint condition, boxed, only £200. Absolute bargain hence no offers.  
Tel: 01403 254992 (after 6pm).

SNELL E11 speakers teak with Pirate stands, excellent, boxed, £600  
Tel: 0255 675115

REGA ELA Loudspeakers, £265; Cyrus 3 amp, £360, or exchange for Nait 3, both mint boxed as new.  
Tel: 0638 508193 (eve until 10pm)

PAIR SUPERB LOWTHER Acousta horn speakers (walnut), original (Alnico) PM7 units, £375; Garrard 301 mint, £150; Troughline tuner, perfect, £75; Quad and Leak valve sets. Phone for details.  
Tel: 0364 72153.

NAIM NAP 135 monoblock amplifiers, great sound, excellent condition, All leads, original boxes, £1425 (pair), Surrey.  
Tel: 0372 452529.

DPA PDM2 two box DAC complete with Deltran clocking unit, £1,600 ono.  
Tel: 0883 653165. (Surrey)

NAIM NAP 135 power amps, excellent condition (boxed), old style case can demonstrate or deliver (cash sale). Price £1,325 ono  
Tel: 0284 763853 (eve/w/end, or 0621 854444 x 412 day)

CROFT MICRO A PRE-AMP with series five power amp, £500. Will not split, no offers Please phone Steve.  
Tel: 01922 640737 (Walsall, West Midlands).

AUDIO NOTE SINGLE-ENDED 300B amplifier, as Kit One, £750 as kit, will sell for £680 Complete and in perfect condition Croft Micro A pre-amp, £160.  
Tel: 092872 4589.

TOWNSHEND ROCK reference Excaliber tonearm, boxed, just serviced by manufacturer, £2,200; B&W Silver Signature 'speakers mint complete with State Audio stands, cost £6,000, accept £2,800. Concordant Exquisite pre-amp, £1,450; Alphonson 4 tier Rosewood rack, £140; Roxsan Xerxes RB300 supply 3, £495.  
Tel: 081 450 7384.

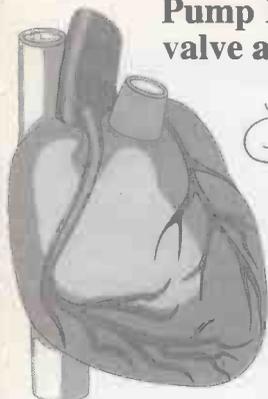
MONOBLOCKS 2 PAIRS; one pair Denon POA4400A, 140 watts each, boxed as new. £450 (cost £900); one pair Sugden P128 vgc £300, both can be heard (bi-amped?).  
Tel: 0634 365153 (Kent).

HFV KLS-1 3-WAY speakers, oak veneer, 18mm MDF cabinets, external crossover, boxes, silver-plated cable. Too large for new house, excellent condition, £335.  
Tel 0902 374786 (Wolverhampton).

WANTED TRIO L-07D turntable, working or not. Also spares, accessories, packaging etc. for same. Good prices paid.  
Tel: 0782 680 376.

AUDIO RESEARCH V 70 power amp (black) mint, £2,700; 5 metre pair sterling silver interconnect £100  
Tel: 071 437 1988 (day, London).

KEF 104/2 ROSEWOOD Reference series, vgc (new £1,000) asking price £600 ono, can demo. Deliver within reasonable distance.  
Tel: 0635 42278 (Berkshire).



Pump New Life back into your valve amplifier, transplant with

*Gold Aero*

the worlds 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 0DN, England. Tel: 01932 873444 ~ Fax: 01932 873012

**LOUDSPEAKERS**  
WHEN MUSIC MATTERS

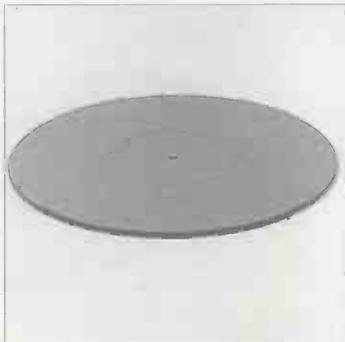


FEATURING  
ACTIVE/PASSIVE X-OVERS  
REAL WOOD VENEERS  
ALUMINIUM CONES  
OFC CABLING · STANDS

**Q.T.A. SYSTEMS**  
2 WHEATSHEAF WAY · LINTON  
CAMBS · CB1 6XB · TEL: 01223 891091

**SLATE AUDIO**

HI-FI Design & Cable Services

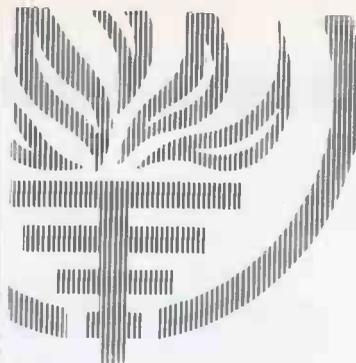


THE GLASSMAT

This turntable platter mat was designed to improve the performance of the Garrard 301 and 401 record players. However it was soon realised that it gave astonishing results on other turntables. So good was its performance that we decided to make it available as a universal replacement mat, suitable for any other deck. We had known for some time that the surface on which a record is placed has a profound influence on its sound quality. We also knew that any ringing or resonance in the platter would be transmitted into the pick-up and inevitably introduce colorations. In order to cure the inherent ringing present in both the 301 and 401 platters, it was clear that what was needed was a mat capable of a high degree of damping. A new rubber mat was considered, but after extensive tests on various compounds, it was discovered that rubber was the least likely candidate for the job. Although successfully damping the platter, in all cases rubber introduced colorations of its own, as well as robbing the music of large amounts of detail and ambience. Other materials were tried, all of which varied in their performance according to the relative hardness. We therefore came to the conclusion, that in order to achieve maximum information retrieval with optimum damping, a hard and unyielding material was required. Glass was found to be ideal in every respect, damping is complete, the playing surface being quite simply sublime. In terms of detail resolution and sheer three dimensional ability, no other mat comes close. But then you still have to consider the absolute clarity, precision and solidity of the presentation. This is the ultimate platter mat.

PRICE £65.00 PLUS £3.50 FREIGHT. UK MAINLAND

47 GEMINI CLOSE, LEIGHTON BUZZARD, BEDS, LU7 8UD. TEL: 0525 384174



**REFRESHINGLY  
DIFFERENT**

*the powerplant*

CYRUS, REGA and ARCAM products now on demonstration

Roksan, Micromega, Audiolab,, Rega, Arcam, Aura, ATC, Exposure, Marantz, Ruark, Epos, Thiel and other fine equipment

66 Upper North Street Brighton 0273 775978

*Esoteric • Audio • Imports*

*Importers, Distributors and Purveyors of Fine Quality Audio Equipment*

You will have seen in the December '94 issue of **Hi-Fi Choice** a free to enter competition run by **Electrocompaniet**. (advert page 52) Please ensure your cotton buds are returned to Norway **by 31 January '95**

This issue of **Hi-Fi World** offers a repeat opportunity, **Electrocompaniet** advertisement (see page 40 of this issue) your cotton buds from this issue must be returned to Norway **by 31 March '95**, winners of both draws will be notified by the countries official distributor, countries with no official distributor, the winner will be notified directly from Norway.

**GOOD LUCK TO YOU ALL**  
TEL/FAX:- 01243 53 30 30

AUDIO RESEARCH SP-8, £700; Quad 606(II) and Quad 34, £650; NAD Monitor pre-amp, £90; Leak Stereo 30 plus amp and Troughline stereo tuner, £140.  
Tel: 0273 684424 (Brighton).

ENTHUSIAST'S CLEAROUT, Leak amps, tuners Stereo 20s, pair of TL12s, 301 etc. Want recent Teac-Revox reel. Additional 10.5" reels (new), hi-fi books magazines brochures etc. 1980s, manuals Teac X10R, Pioneer 950011 amp list  
Tel: 0392 860182 (eve).

IMPULSE HORN H4 speakers, £550 ono or swap for Epos ES14 plus stands; Townshend Rock turntable with Roksan Tabriz arm with Isoda interconnect cable £350 ono. Phone after 5pm Tel: 081 658 2490.

TRICHORD PULSAR series 1, six months old, £950.  
Tel: 081 979 3297, or 081 943 3771 (Eve. only)

NAIM NAIT 3, 2 months old, £400.  
Tel: 0235 765986.

FOR SALE PR TANNNOY Oxfords, £100, PR Rogers LS5s, £75, Nait 2 amp; £250, PAS-02 passive pre-amp Penny and Giles pot, £150, Hart phono amp with power supply, £75 ono. R Dadson, 27 Sydney St. Folkestone, CT19 6HG

NAD 7120 stereo receiver, 5330 CD player (slightly marked), 6050 C cassette deck, all good working condition and value at £50 each; Monitor Audio R252 speakers £50 pair Tel: 0482 898322.(Hull).

QUAD 22 control unit and two amplifiers restored (high quality metal film resistors, polypropylene capacitors, electrolytics); FM II stereo tuner (valve) (recent Quad service), all excellent condition, best offer secures  
Tel: 0736 60367.

TURNTABLES TRANSCRIPTORS, hydraulic reference arm and brush - kinematic arm, £350. Thorens TD-124/III SME Decca, £250, outperforms 301/401. Thorens TD150 (Linn Mk 0?), £50. Mission 774 original dampable arm, boxed, £75.  
Tel: 081 991 0762.

QED A240SA INTEGRATED amplifier, including super analogue phono stage, 40w per channel. Excellent sound for both vinyl and CD mint condition, boxed, £125 ono. Call Gary  
Tel: 0327 706714 (Gary - Northants).

AUDIO INNOVATIONS second audio triodes (ECC 88/2A3); £1150 or would take first audio triodes in p/x; DPA PDM One series 2 DAC, £200 (£625 new).  
Tel: 081 688 6397

IMPULSE HORN H4 speakers, £550 ono, also Townshend Rock turntable with Roksan Tabriz arm, £350, both excellent condition. Phone after 5pm Tel: 081 658 2490.

QUAD SYSTEM, 67 CD player, 66 tuner, 66 preamp + remote, 606-2 power amplifier, £2,000 ono, months old; Triangle floor standing speakers (on offer), rebuilt Garrard 401 turntable, £125 ono, Logic turntable + Datum arm and cartridge, £100 ono; Project 2 turntable + arm, £75 ono; various speaker stands and cables.  
Tel: 0292 441544.

BLACK LINN LP12 Valhalla/Fidelity Research FR 64 tonearm vgc £495 ono; Counterpoint SA20 power amp; Hybrid 420 w/c 4ohm 220 wpc 8ohm. Immaculate, £780 (new £3,000)  
Tel: 0375 392225.

LEAK SANDWICH MkII speakers, excellent condition original boxes and interconnectors, £120; Leak Troughline Tuner 3 vgc. mono £100; Wharfedale Isodynamics headphones, £20 ono  
Tel: 0453 546191

ART AUDIO VP 1 valve pre-amp Golden Dragons, Pearl Coolers, £250, Blackhead MC transformers (by Tim de Paravicini), £50 Eroica and Orofon X3mc cartridges, offers  
Tel: 051 526 9760.

LINN BASIK turntable, arm and K9 cartridge, barely used, £300.  
Tel: 0248 351193 (eve, Bangor).

MISSION CYRUS 2, £195, Nakamichi BX1, £195; Linn Index speakers £200, Technics SL-P220, £125 Goodmans Acromat 100 speakers £100; Castle Richmonds, 65, Dovers £145 (rosewood) Leak 2200, Stereo 70, Troughline (stereo), Sandwich speakers, £265, the lot, Garrard Turntable, £35  
Tel: 091 3873205 (anytime).

SME V GOLD new boxed £1,195, Quad II (pair), £295; Quad 22 pre-amp, £25, Quad 4 pre-amp, £165, Musical Fidelity A100, £165, Quad ELS (serviced), £350, Leak Troughline II (stereo), £165.  
Tel: 0444 459196.

CROFT BEST EVER, the Mega pre-amp from Nottingham Analogue for £3,600, extra large power supply and separate pre-amp box £2,050 ono. Leak stereo 20 and pre-amp, £220.  
Tel: 0604 415182 (Northampton).

MERIDIAN 563 DAC as new with 2 year warranty left with Audio Quest 2 interconnect, £495 ono; Ruark Talisman speaker finished in rosewood, mint condition £290 ono  
Tel: 0242 574152

AUDIOLAB DAC MkII boxed immaculate, £450; Ortofon Quasar cartridge (unused) £200; Musical Fidelity MA65s + pre-amp 8 new trade price; TDL 0.5 speakers + stands (new) £475 possible p/x  
Tel: 01952 502097 (Telford).

USED BANG & OLUFSEN turntable: BEOGRAM 7000 or 4500 in top condition.  
Tel: 0453 860223 (Glos).

WANTED ROGERS CADET II. Contact: Lars Berggren, Lohegatan 1 B, S-633 55 Eskilstuna, Sweden.

MISSION 753 loudspeakers, rosewood veneer, latest specification with upgraded plinths, immaculate condition and boxed, £525 (new price now £799).  
Tel: 0522 568330.

NAIM 32-5 PRE-AMP, 72 boards, K boards, phono, mint boxed, £300. Nakamichi BX1 cassette deck, new head, £75.  
Tel: 0543 686 845 (eve/w/ends).

DPA DSP 50S 3 box pre-amp, disc stage and power supply, £625 (£1,320), LFD PA1 power amp, £425 (£999); Creek T40 tuner £100. Answerphone.  
Tel: 081 888 6902 (Simon).

ARCAM DELTA 90 2 amplifier, Arcam Delta 80 tuner, Arcam 70.3 CD player, Castle Chester speakers, all boxed, very low use, only just over two years old mint condition, £1,300 ovno.  
Tel: 0564 770429.

BEREAVEMENT SALE of Quad system: 606 power amp, 44 control unit and FM4 tuner, £750. Also ESL-63 Electrostatic speakers, £1,500. All in excellent condition.  
Tel: 0483 232672. (Guildford, Surrey)

GARRARD 401 strobe platter, wooden plinth, near mint, £20 ono, SME 3009 arm vgc. complete with Shure cartridge M75EJT2, offers please. Leak Stereo 70 amplifier, offers please.  
Tel: 0580 241208.

AUDIO INNOVATIONS S1000 pre and Mk2 power amps, power amps 25w each triode coupled: Snell Ks, S1000 step-ups transformer 2 and 3, tier Apollo racks on items.  
Tel: Mike, 0903 723031.

LINN KAN II, bi-wired walnut with Linn stands immaculate, £295, plus Linn speakers cable K400 2x6 metres, £75 and K20 2x9 metres, £45, both bi-wired: current prices per metre £14.95 and £5.95, respectively.  
Tel: 0483 37286 (Surrey)

MERIDIAN 207B CD; pre-amp, Meridian 209, remote, £450; Meridian M3 Active speakers and stands; Meridian 101B pre-amp, Meridian 104 tuner, £450.  
Tel: 0493 851296 (Gt. Yarmouth).

CHORD SPM 1200 B, barely used, boxed, as new (much better than standard 1200), £1,900. Also KEF R107-2 semi-active speakers finished in rosewood, mint condition, £1,950.  
Tel: 0121 422 0340.

HEYBROOK TT2 integrated turntable, Moth (Rega) arm, Roksan Corus black cartridge, walnut finish, smooth, dynamic sound, ex-condition, £250 ono; Naim Nait (Mk1) MM Boards, mint £175 ono; Linn K20 4x5m (terminated), £65 ono. David.  
Tel: 081 741 3119 (day) 081 348 0612 (eve)

MOREL 602 loudspeakers with Morel stands (£1,250), £750; QED Vector Reference r/c pre-amp (£400), £295; Linn Theta tuner (£475) £200 Albary S508 power amplifier (£500) £275.  
Tel: 0296 713311 (Bucks)

MERIDIAN M20 Active loudspeakers in excellent condition, complete with stands and original boxes, £395 ono; Arcam "S" Nicam Stereo TV tuner, excellent condition, boxed, £150 ono, eves. Hants.  
Tel: 0705 467938.

BARTOLOMEO REFERENZA stereo power amp, hugely powerful 100 watts per channel, will drive any speaker, £1500 (cost £2,750 new), boxed, mint condition; 2x2 metres of Isoda HC/08PS1 interconnect cable terminated with phono plugs & Naim Din plugs (offers); 2 off bi-wired pairs of Naim speaker cable ie 1 off 11 metres long, 1 off of 8 metres long, all terminated with Banana plugs (offers).  
Tel: 021 559 6972 (eve/w/ends, 0384 371586 (Bryan Newton).

KRELL KSA100, £1250; Audio Research SP9, £950; Pioneer PD91 CD, £450; Linn LP12 Ittok Koetsu black K, £850; Toshiba 33" Dolby surround TV, £800, all excellent condition.  
Tel: 0922 402320 (W Midlands).

LINN LP12 Valhalla Afro Ittok LV11 Blk arm, Supex 900 Vital stylus. £450.  
Tel: 0532 504990.

CAMBRIDGE CD2, boxed with remote control £225; Linn Basik plus arm, K9 cartridge & Linn arm board, £45; Target 3-shelf equipment stand, £30. Target wall shelf, £15.  
Tel: 0942 818752

VANDERSTEEN 2CE speakers, a rare opportunity to buy these highly rated speakers (see Hi-Fi News Oct '92, £895, ono, (cost £1,400); brand new KEF 103/4s (rosewood), £775 ono (cost £1300) consider p/x for KEF 105/3s.  
Tel Southampton 738935.

LINN LP12/Lingo/Ekos/Ortofon MC3000 Afro finish, £1500; Meridian 208 +209 remote control, £675, both boxed and in excellent condition, will haggle!  
Tel: 0924 290749.

MULLARD 5-20 monoblocks expertly built, Partridge, Parmeko etc. £350 ono; Silversounds 16/4 bi-wireable cable 2X7mtrs, cost £400, accept £150; Denon DL304 as new, £100 Nagoaka TS11, £30 unused. Empire 1000MkII, £20 unused.  
Tel: 0742 738153, or 723621.

AUDIO NOTE ANJ speakers (walnut) as new, £325, Lowther Acoustas, new PMA drive units, £250; Nagaoka TS11 cartridge unused, £25; Empire 1000 MkII cartridge unused, £20.  
Tel: 0742 738153 or 723621

HARMAN KARDON PM 665 VX1 amplifier, HD800 remote CD player, TD 392 cassette, TU 920 tuner, finished in champagne, with boxes as new £750.  
Tel: 0483 766490.

TRADE

LUMLEY REFERENCE, KRELL, LUMLEY MONITOR, MAGNUM/DYNALAB

CLEARAUDIO, S.M.E, AUDIO RESEARCH, CREEK, E.M.F, GRAHAM

## HEATHERDALE AUDIO LTD.

202, Findon Road, Findon Valley, Worthing, West Sussex  
Tel. 0903-872288 or 0860 660001 (after hours) Fax 0903-872234  
THREE COMFORTABLE DEMONSTRATION LOUNGES.

### HEATHERDALE PRE-OWNED

This month's pre-owned bargains:

|                                      |       |  |       |
|--------------------------------------|-------|--|-------|
| Magnum Reference 300 pre-amp         | £325  | Linn LP12 / SME / Ori. MC20 cartridge    | £795  |
| Magnum Reference Int. amp            | £299  | Nakamichi high com II noise red system   | £495  |
| Audio Innovations 1st Audio          | £995  | Apogee Centaur Minor loudspeakers        | £995  |
| Audio Innovations 1000 pre-amp       | £995  | Tannoy Buckingham Loudspeakers           | £1500 |
| Audio Innovations 200 power amp      | £995  | Pioneer CT 93 Reference Cass deck        | £650  |
| Audio Innovations 300 int.amp        | £375  | Linn Sars Speakers                       | £995  |
| Audio Innovations 800 MC transformer | £120  | TDL Reference Monitors                   | £275  |
| Linn LP12                            | £395  | Meridian CD208 CD Player/ Pre-amp        | £1295 |
| Wadia X 32 DAC                       | £795  | Meridian 605 mono amps (pair)            | £995  |
| Sony 702 DAC                         | £795  | Lumley 120 monoblocks (switchable)       | £2795 |
| Audionote ANJ speakers               | £650  | Nakamichi 1000 ZXL cassette deck (rare)  | £2500 |
| Magneplanar Tympani IV speakers      | £2095 | Magneplanar SMGb speakers (new unopened) | £795  |
| Just refurbished by Absolute Sounds  | £1295 | Alon 2 reference monitors                | £1200 |
| Audio Research SP9 (BLACK)           | £1295 | Voyd/SME IV/ Clearaudio Delta Ex-dem.    | £2000 |

VISA SWITCH MASTER CARD WELCOME.  
WE TAKE PART EXCHANGE ON NEW & USED STOCK

HEYBROOK, MAGNEPLANAR, MARTIN LOGAN, ROTEL, THETA, BASIS

VOYD, KLIPSCH, APOGEE, COPLAND, SONUS FABER, AUDIONOTE, CAT

## Audio Physics

PROFESSIONAL DESIGNERS AND SUPPLIERS OF  
COST EFFECTIVE UPGRADE SERVICES INCLUDING:

- The CLEANLINE range of modifications to Naim Hi Cap and Snaps power supplies. Also an expanding range of upgrades to most other high quality audio equipment. e.g. better power supplies, precision clocking.
- COMPUTER AIDED DESIGN service for your special requirements. eg active crossovers, passive pre-amps.
- A build & test service for your kits, prototypes and one offs. Specialists in the IMP LOUDSPEAKER TESTING KIT.

Call Geoff Mead on 0895 637846 for details

## 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

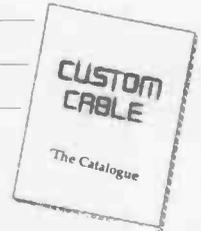
Name \_\_\_\_\_

Address \_\_\_\_\_

Postcode \_\_\_\_\_

NO FURTHER INFORMATION REQUIRED

Send to: Custom Cable Service  
PO Box 4007  
London SW17 8XG



HFV/784



## MANTRA AUDIO

- CARTRIDGES AND STYLUS
- MAIL ORDER DIRECT 1-10 DAYS
- COMPETITIVE PRICE (inc P&P)

| MAKE           | MODEL             | CARTRIDGE | STYLUS   | MAKE                               | MODEL                           | CARTRIDGE  | STYLUS  |
|----------------|-------------------|-----------|----------|------------------------------------|---------------------------------|------------|---------|
| Audio Technica | AT 95 E           | £21.00    | £13.50   | Ornelon                            | 510                             | £29.00     | £19.00  |
|                | AT 110 E          | £26.00    | £16.00   |                                    | 520, 520P (T4P)                 | £49.50     | £36.00  |
|                | AT 450 E          | £57.00    | £33.00   |                                    | MC 3 TURBO                      | £54.00     | £45.00* |
|                | AT420 E           | £36.00    | £22.00   |                                    | MC 3 TURBO                      | £99.00     | £82.50* |
| Denon          | AT DC 3           | £96.00    | £64.00+  | MC 18                              | £76.00                          | £65.00     |         |
|                | AT DC 5           | £110.00+  | £90.00*  | MC15                               | £99.00                          | £82.00     |         |
|                | DL 110 MC         | £85.00    | £52.00*  | MC 10 Superme                      | £200.00                         | £150.00*   |         |
|                | DL 160 MC         | £75.00+   | £68.00*  | MC 20 Superme                      | £315.00                         | £236.00*   |         |
|                | DL 304 MC         | £180.00   | £155.00* | Shure                              | VN 35 MR                        | (V 15 III) | £63.00  |
| Goldring       | ELECTRA           | £24.00    | £16.00   | VN 45 MR                           | (V 15 IV)                       | £90.00     |         |
|                | 1006              | £44.00    | £29.00   | V 15 VMR                           | £225.00                         | £130.00    |         |
|                | 1012 GX           | £58.00    | £38.00   | SWISS QUALITY DIAMOND STYLUS PRICE |                                 |            |         |
|                | 1022 GX           | £76.00    | £49.00   | ADC                                | R20 XE, DLM 32/34/36, XLM III   | £12.50     |         |
|                | 1042              | £94.00    | £61.00   | Alwa                               | AN 5/11/8745                    | £8.00      |         |
| Nagaoka        | Eroica (LX/IV)    | £90.00    | £55.00*  | Alka                               | RS 33/35/38/84/85/90            | £3.00      |         |
|                | MP 11             | £26.00    | £12.50   | Dual                               | DN 145/155/165, DN 149S         | £12.50     |         |
| Ornelon        | MP 11 Boron       | N/A       | £26.00   | Ornelon                            | FF 15/VMS 10/20 EII, OM/P 10/20 | £12.50     |         |
|                | OM10, OMP10 (T4P) | £29.00    | £18.00   | Shure                              | N75 ED/EJ T2, N95 ED/EJ         | £10.00     |         |
|                | OM20, OMP20 (T4P) | £54.00    | £31.50   | Sony                               | ND 133/134/142/150/155/200 G    | £8.00      |         |
|                | OM30, OMP30 (T4P) | £72.00    | £58.00   | Technics                           | EPS 23/24/25/27/290, P 30/33 D  | £3.00      |         |
|                | OM N'CLUB S       | £29.00    | £18.00   |                                    |                                 |            |         |

\* Exchange any MC ★★★ Over 500 stylus type stocked ★★★ Tel (0757) 288652

All above items UK supplied/UK guarantees - No grey imports

MANTRA AUDIO (HFV), 22 GARTH AVENUE, NORTH DUFFIELD, SELBY, NORTH YORKS YO8 7RP

## RECRUITMENT

Manufacturers/Dealers are you currently looking  
for staff?

If so, why not advertise the vacancy in the pages of  
Hi-Fi World.

'I had a tremendous response from my advert  
within Hi-Fi World, and have since  
successfully employed 4 members of staff in  
the last month'

Mr Elvins - Elvins Acoustic Technology

So call us now on 0171 - 289 3533

for more information.



The appreciation of music is what we at Audio Suite strive for.  
'Audio Suites' personalised service enables you to experience the  
purity of sounds from the market leaders in the most professional  
conditions.

- \* 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







# SUGDEN

HAND CRAFTED ■ FAIT À LA MAIN

DESIGNERS & MANUFACTURERS OF HI-FI & AUDIO EQUIPMENT

J. E. SUGDEN & CO. LTD.

Valley Works,

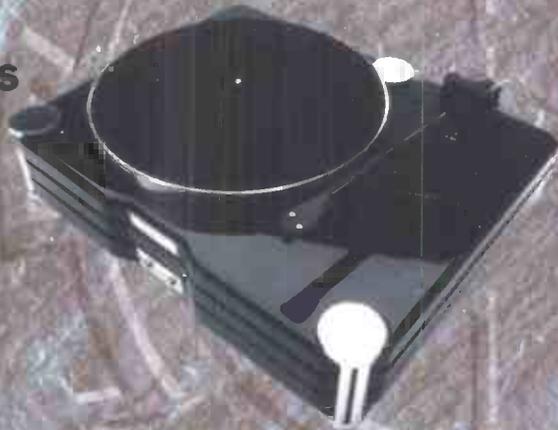
Station Lane, Heckmondwike,

West Yorkshire WF16 0NF

Tel. Heckmondwike 0924 404088/9

Fax No 0924 410069

TMS



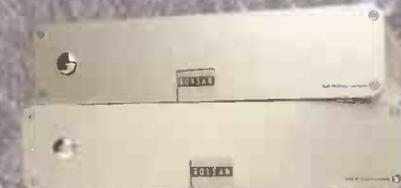
L 2.5 Pre-Amp



S 1.5 Stereo Power Amp



DS 1.5 Power Supply



M 1.5 Mono-Powered Amplifiers



**ROKSAN**

L 1.5 Pre-Amp



Atessa



Ojan 3

*HOTCAKE Loudspeakers  
What Hi-Fi? Best Design 1985  
"Recommended"*

*DARIUS Loudspeaker  
Hi-Fi Choice - Product  
Excellence 1990  
"Recommended"*

*RADIUS Turntable under 500  
1992  
"Winner"*

*TABRIZ Tonearm  
1991  
"Recommended"*

*CORUS Cartridge  
What Hi-Fi? - Best cartridge  
1991  
"Recommended"*

*RADIUS Turntable  
F B A - Best turntable under  
1992  
"Winner"*

*ROK-DP1 CD Transport  
Audiophile - Award for  
excellence 1992  
"Winner"*

*Touraj Moghaddam Signature  
(TMS) Turntable  
Audiophile - Award for  
excellence 1993  
"Winner"*

*Touraj Moghaddam Signature  
(TMS) Turntable  
Audiophile - Award for  
excellence 1993  
"Winner"*

*Touraj Moghaddam Signature  
(TMS) Turntable  
Stereo Sound - Reviewers Top  
Turntable 1993  
"Number 1"*

*XERXES Turntable  
Stereo Sound - Reviewers Top  
Turntables 1993  
"Number 2"*

*OJAN 3 Loudspeaker  
Hi-Fi Choice - 1994  
"Recommended"*

**ROKSAN** • Stockley Close  
Stockley Road • West Drayton  
• Middlesex UB7 9BB

Telephone: 01895 436 384  
Facimile: 01895 436 385