

Only
£2.00

Hi-Fi WORLD

NOVEMBER 1993 £2.00

**CLASSIC RADFORD
Valve Amplifier**

**NAKAMICHI ST-2
Tuner**

SCOOP!

**GOLDRING ELEKTRA
Budget Cartridge**

**MID-PRICE
CD PLAYERS
Group Test**

**THREE NEW £200
LOUDSPEAKERS
From Harman-Kardon
Tannoy and Philips**

***BARGAIN**
Hi-Fi!
see Readers' Classifieds*

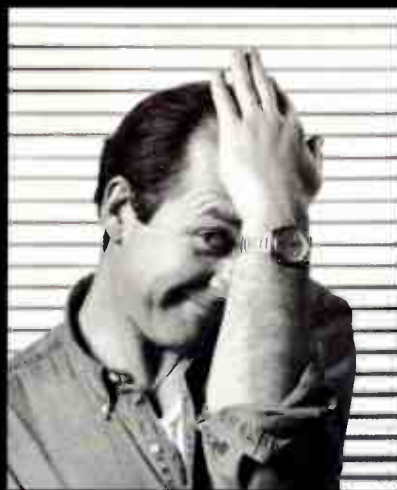
**NEW ROSE POWER
Amplifier**

**COMPETITION - WIN HIGH QUALITY NAIM
AND EPOS SYSTEM WORTH £1500**

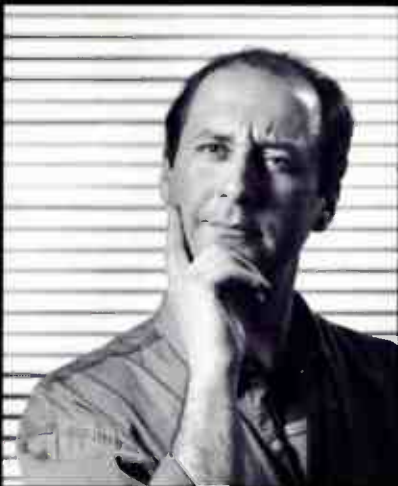




"I've got a pretty good hi-fi system"



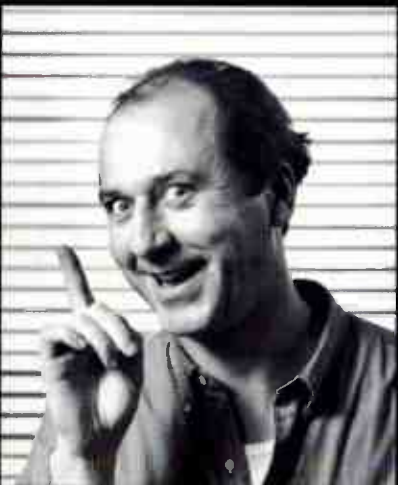
"Friends tell me all the time"



"Sure I'd like a Naim CD player"



"But it would cost me thousands to buy one"



"The CDI costs how much?"



"It'll look great over there!"

Put the expression back into your music with the Naim CDI. You can listen to our integrated CD player, incorporating all the technological innovation and expertise you'd expect from one of the world's leading hi-fi manufacturers, at any of the specialist retailers listed here.

What's more, it's so reasonably priced, you won't even need the brave face.

Now you know what's in a Naim



Naim Audio, Southampton Road, Salisbury SP1 2LN, England. Tel: (0722) 332266

naim audio

World Radio History

LONDON

Audio Venue
24 Church Rd, Crysta Palace SE1 Tel: 061 771 7787
Billy Vee Sound Systems
248 Lea High Rd, Lawisdom SE13 Tel: 061 318 5755
Doug Brady Hi-Fi
18 Monmouth St, Covent Gdn WC2 Tel: 071 378 4010
The Cornflake Shop
37 Wrentham St, W1 Tel: 071 631 0472
Grahams Hi-Fi
Canonbury Yard, 190a New North Rd, N1 Tel: 071 226 5500
Son et Lumiere
87 Tottenham Court Rd, W1 Tel: 071 580 9059
The Sound Organisation London
4 Pichford Wharf, Clink St, SE1 Tel: 071 403 2255
Studio 99
79-81 Fairfax Road NW6 Tel: 071 624 8855
Uxbridge Audio
109 Chiswick High Rd, W4 Tel: 061 742 3444

NEAR LONDON

Infidelity Hi-Fi
9 High St, Hillingdon Wok, Kingston-upon-Thames
Tel: 061 943 3530
Radford Hi-Fi
43 King Edward Court, Windsor, Berks Tel: 0753 856931
The Sound Gallery
85 Cashel St, High Wycombe, Bucks Tel: 0494 531682
Spaulding
352-354 Lower Addiscombe Rd, Croydon Surrey
Tel: 081 654 1231
Studio 99
82 High St, Harpenden, Hertfordshire Tel: 0587 764746
Unifit Products
33 High St, Nine Elms, Surrey Tel: 061 942 9587
Uxbridge Audio
278 High St, Uxbridge, Middlesex Tel: 0895 230404

SOUTH

Audio Designs
26 High St, East Grinstead, W Sussex Tel: 0342 314589
Chester Hi-Fi
7 St Pancras, Chester, Cheshire Tel: 0243 776402
Jeffries Hi-Fi
69 London Road, Brighton, E Sussex Tel: 0273 609431
Jeffries Hi-Fi
4 Albert Parade, Green St, Eastbourne, E Sussex
Tel: 0323 313366
Jeffries Hi-Fi
29 London Road, Portsmouth Hampshire Tel: 0706 663604
Soundcraft
40 High Street, Ashford, Kent Tel: 0233 024441
Sound Waves
1 Holbury Drive, Precinct, Holbury, Hampshire
Tel: 0703 899131
Worthing Audio
20 Teville Gate, Precinct, Worthing, W Sussex Tel: 0903 212133

EAST

The Audio File
27 Woodville St, Bishops Cleeve, Leics Tel: 0279 506676
The Audio File
No 2 Foundry Walk, Stives, Cambridgeshire Tel: 0480 66123
Basic Hi-Fi
The Old School, School Rd, Bracon Ash, N. Norwich, Norfolk
Tel: 0508 70629
Cam Audio
110 Mill Road, Cambridge Tel: 0223 80442
Pro Music
6 Vineyard St, Colchester, Essex Tel: 0206 577519
Rayleigh Hi-Fi
218 Moulsham St, Chelmsford, Essex Tel: 0245 265245
Rayleigh Hi-Fi
122-4 London Rd, Southend-on-Sea, Essex Tel: 0702 435255
Rayleigh Hi-Fi
44A High St, Rayleigh, Essex Tel: 0268 779782

WEST

Audio Excellence
58 Great Rd, Gloucester Tel: 0452 300046
Audio Excellence
65 Park St, Bristol, Avon Tel: 0272 264975
Radford Hi-Fi
8 Pine St, St Marychurch, Torquay, Devon Tel: 0803 326723
Radford Hi-Fi
28 Cornhill St, St Thomas, Exeter, Devon Tel: 0392 218895
Radford Hi-Fi
12 Wilmslow Street, Bath, Avon Tel: 0225 446245
Radford Hi-Fi
107 Cornhill St, Plymouth, Devon Tel: 0752 220011
Radford Hi-Fi
52-54 Gloucester Road, Bristol, Avon Tel: 0272 428248
Mike Manning Audio
110 Middle Street, Yeovil, Somerset Tel: 0935 79361

WALES

Audio Excellence
134 Cruys Rd, Cardiff, South Glamorgan Tel: 0222 228565
Audio Excellence
9 High St, Swansea, West Glamorgan Tel: 0792 474608

MIDLANDS

Creative Audio
9 Dogpole, Shrewsbury Shropshire Tel: 0743 241924
Griffin Audio
64 Bristol St, Birmingham 5, West Midlands Tel: 021 892 1359
Listen Inn
32 Galt St, Northampton Tel: 0604 37871
Sound Advice
The Sound Factory, Dale St, Loughborough, Leicestershire
Tel: 0509 218254
West Midlands Audio
156 Chancery Road, Worcester Tel: 0905 58046
Overture
3 Church Lane, Banbury, Oxfordshire Tel: 0295 272158
Washwood & Mason (Oxford) Limited
46 George Street, Oxford Tel: 0865 247783

NORTH

Audio Projects
45 Hildesbury Lane, Leeds, West Yorkshire Tel: 0532 304300
Better Hi-Fi
16 Cullin Road, Liverpool 2, Merseyside Tel: 051 227 5007
Doug Brady Hi-Fi
The Forge Cottage, 19 Crossgate, Osley, Leeds, West Yorkshire
Tel: 0543 467599
Doug Brady Hi-Fi
401 Smeetham Rd, Liverpool 15, Merseyside Tel: 051 733 6850
Doug Brady Hi-Fi
Kingsway Studios, Kingsway North, Warrington, Cheshire
Tel: 0925 438038
Limtina Audio
8 The Arcade, Metro Centre, Gateshead, Tyne & Wear
Tel: 091 460 0889
Limtina Audio
7 11 Park Lane, Gateshead 8, Tyne & Wear Tel: 091 477 4167
Limtina Audio
23-27 Mansfield Hill, Northgate Upper, Tyne & Wear
Tel: 091 212 2684
Limtina Audio
242 Park View, Whitley Bay, Tyne & Wear Tel: 091 252 4665
Moorgate Acoustics
184 Fitzwilliam St, Sheffield S Yorkshire Tel: 0742 756048
Moorgate Acoustics
9 Alameda, Clarendon Westgate, Rotham, S Yorkshire
Tel: 0709 370666
Murray Hi-Fi
59a Wincoburgh Rd, Handforth, Cheshire Tel: 0625 549277
Murray Hi-Fi
Elliott Amherst Building, Pinnoke Dock St, Hull, Humbershire
Tel: 0482 277587
Sound with Style
61 Nelson, High Rd, Doncaster, S Yorkshire
Tel: 0529 321421
Sound with Style
284 Glassing Rd, Sheffield, S Yorkshire Tel: 0742 737893
The Sound Organisation
28 Gillygate, York Tel: 0904 627108

SCOTLAND

Stereo Stereo
278 St. Vincent Street, Glasgow, Strathclyde Tel: 041 248 4079
Robert Ritchie
102 Murray St, Montrose, Tayside Tel: 0674 73765

NORTHERN IRELAND

Lyric Hi-Fi
183 Stranmillis Road, Belfast Tel: 0232 381296
Lyric Hi-Fi
84 Blenheim St, Portadown, Co. Armagh Tel: 0762 358059



Cover Photograph by
Paul Hartely Studio 071-482 3768

Contents

THIS
MONTH'S
FEATURES
ON PAGE 5



THIS MONTH'S REVIEWS

AMPLIFIERS

ROSE PRE/POWER

Hallowe'en's the time of year when Morticia Addams loves to receive flowers, and we have just the Roses for her. There's no petals on them! 26

RADFORD STA15

With Hallowe'en looming upon us, Dominic Baker finds out if this classic valve amp has 'the bottle' to keep the ghoulies and ghosties away. 50



CASSETTE

SHARP MINIDISC/PHILIPS DCC

Whilst ducking for apples, Simon Cooke gets his teeth into two £400 personal stereos, a MiniDisc from Sharp and a DCC from Philips. 23

LOUDSPEAKERS

NAKAMICHI ST-2

Find out whether this FM-only tuner gets scared by all those spooky sounds floating across the ether. 58

TURNTABLES

GOLDRING ELEKTRA

Just the thing for vinyl Voodoo, a new needle! Goldring's latest budget cartridge is here to breathe life back into your record collection. 49

LOUDSPEAKERS

PHILIPS LEGENDS

With a sensitivity rating of 90dB, these cryptic stone-effect speakers from Philips should go quite frighteningly loud. 41

HARMAN KARDON LS 0300

Strange lights glowing eerily in the darkness. Is it a will-o'-the-wisp or just a pair of speakers with bright yellow Audax drivers? 42



COMPACT DISC

TEAC P700/D700

For the squeamish at Hallowe'en, a nice friendly looking DAC/transport combination from TEAC. But is it a werewolf in sheep's clothing? 16



FIVE ALIVE! GROUP TEST

Simon Cooke joins a coven of CD players to find out which one will sound the best with your Black Sabbath. 29

TANNOY 607 II

In the proper season for the weird and the wonderful, we review some speakers that definitely aren't square, but will they send shivers down your spine? 44

Editor
Noel Keywood

Assistant Editor
Dominic Baker

Editorial Assistant
Simon Cooke

Production Editor
Ferwini T. Michael

Marketing Manager
Richard Johnson

Contributors
Richard Brice
Peter Herring
Simon Hopkins
Malcolm Steward
Dominic Todd

Cartoonists
Freddy Ahmet
David Simonds

Advertising Director
Caroline Knott
Advertising Tel: 071-266 0969

Advertising Executive
Mandy Webster

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
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 & Middle East)
£62 (Australia, Japan & China).

No material may be reproduced
from this magazine without
the publisher's permission.
© Audio Publishing Ltd



AMERICAN
and
CANADIAN SUBSCRIPTIONS
- see page 57

MORE SEE PAGE 5 >>



Experience live music

in your home.

Experience a personal service second to none.

At Sound Gallery we will help you tailor a hi-fi system that sounds exactly the way you want it, not the way you've been told it should sound.

Experience the options in the neutral conditions of our demonstration room, and the professional home installation of your desired system.

**FOR A SOUND EXPERIENCE
AND SOUND ADVICE, CALL**

**▶▶ THE SOUND
GALLERY**

0494 531682

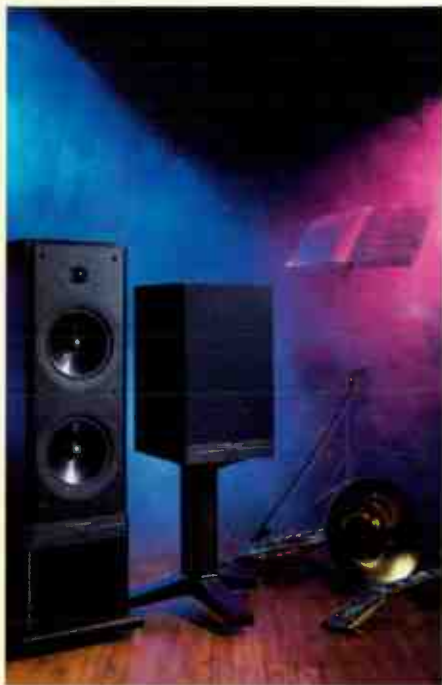
65 CASTLE STREET • HIGH WYCOMBE • BUCKS HP13 6RN

World Radio History

REGULARS

NEWS

A few crackers and the odd incendiary from the industry, just in time for Guy Fawkes' night. **9**



LETTERS

Your occasionally explosive views on current issues. Light blue touchpaper and stand well back! **38**

COLUMNS

Juggling a plateful of hot potatoes, as usual, our asbestos-fingered experts **53,55,61**

SUBSCRIPTIONS

Easier than lighting a bonfire to attract our attention, the subscriptions page. **57**

NEXT ISSUE

The preview of our next issue, and it's going to be a real cracker! Your favourite hi-fi read and a supplement too! Dynamite! **65**

DIAL A DEALER

Here it is, the complete list of conspirators in your area, in the great good-service plot. **73**

WORLD FAVOURITES

Appreciative 'ooh's and 'aah's, in our hitlist of highlights in the hi-fi heavens. **110**

AERIALS

Didn't we tell you not to nail those Catherine Wheels to your aerial? Here's what to do if you did. **117**

QUERIES

Saltpetre, charcoal and sulphur mixed in proportion and well tamped. What more do you need to know? **119**

CLASSIFIEDS

It must be a plot! Barrels of bargains in secondhand, vintage, or new equipment at treasonable prices **128**

AD INDEX

130

FEATURES

THE PENTA SHOW

More scary than Hallowe'en and more inflammatory than November 5th, the Penta Show has come and gone, and here's what it was all about. **20**



MUSIC

Our guide to some of the best new releases

ROCK RECORD OF THE MONTH:

Iggy Pop
American Caesar

CLASSICAL RECORD OF THE MONTH:

William Alwyn
Symphony No. 3/Violin Concerto
London Symphony Orchestra

ROCK AND POP **68**

JAZZ **77**

CLASSICAL **89**

RECORD OFFERS: Whatever your taste, our mail order section will provide some of the best cuts around **94**

ACCESSORIES

Why light up the sky, when you could brighten your system with some serious value for money upgrades. **81**

WAD

Across the country, effigies of our editor are being burned because of this section. **86**

COMPETITION

Here it is, your chance to win a superb system comprising the Naim NAT-03 tuner and NAT 3 amplifier, and a pair of Epos ES11 speakers with stands. But remember if you don't enter you can't win, so don't be shy, get writing on page 66



MAIL
ORDER

PART
EXCHANGE

DEMO
ROOMS

SUNDAY
OPENING



GET
ADDED VALUE FOR YOUR MONEY

AV ~ HOME CINEMA ~ EQUIPMENT SPECIALISTS

MAIN DEALERS

- ACUSTIC ENERGY
- ADCOM
- AIWA
- AKAI
- AKG/AR
- ALPHASON
- APOLLO
- ARCAM
- AUDIO ALCHEMY
- AUDIO INNOVATIONS
- AUDIOQUEST
- AUDIOTECHNICA
- AURA
- B&W
- BANDRIDGE
- BAND & OLUFSEN
- BEYER DYNAMIC
- BOSE
- BOSTON
- CANON
- CASTLE
- CELESTION
- CREEK
- CYRUS
- DENON
- DUAL
- GOLDRING
- HAFLER
- HARMON KARDON
- HECO
- HEYBROOK
- INFINITY
- JAMO
- JPW
- KEF
- KENWOOD
- LEXICON
- LUXMAN
- MARANTZ
- MICHELL
- MICROMEGA
- MISSION
- MITSUBISHI
- MONITOR AUDIO
- MODAUNT SHORT
- MUSICAL FIDELITY
- MICHAELSON
- NAD
- NAKAMICHI
- ORTOFON
- PANASONIC
- PHILIPS
- PIONEER
- PROJECT
- PROTON
- QED
- QUAD
- REVOLVER
- ROGERS
- ROKSAN
- ROTEL
- ROGERS
- SANSUI
- SENNHEISER
- SHURE
- SOUND
- ORGANISATION
- SME
- SONY
- SPENDOR
- STAX
- SYSTEMDEK
- TARGET
- TANNOY
- TEAC
- TECHNICS
- TDL
- THORENS
- TOSHIBA
- VAN DEN HULL
- WHARFEDALE
- YAMAHA
- AND MANY MORE

0% INTEREST FREE CREDIT (MAIL ORDER ALSO) ASK FOR DETAILS

PHILIPS
WIDESCREEN TV



NOW LET PHILIPS OPEN YOUR EYES TO WIDESCREEN TV

Widescreen is the most significant innovation in television since the advent of colour. Its new wider shape brings cinema-style viewing into the home. Discover a whole new viewing experience with philips Widescreen 100Hz televisions. Now available in 36" and 28" screen size

THE FUTURE OF PHILIPS

NOW PREMIERING AT:

PHILIPS

CD-i
YOUR TV'S BETTER HALF



CD-i stands for 'Compact Disc Interactive' and it makes your television exactly that, interactive. There's a huge range of CD-i discs stretching from golf at Palm Spring, for adults, all the way down to Sesame Street, for kids. Since its also a top of the range CD player, you can plug it into your Hi-Fi and play all your existing CDs. There's so much to this incredible new system that the only way to really appreciate it is to try it out for yourself. Once you see a demonstration you'll realise that so far as television goes, you haven't seen the half of it

THE FUTURE OF PHILIPS

CALL IN FOR DEMONSTRATION TODAY

LIVE '93
16-20 Sept. '93 Stand MM2
(next to Hi-Fi Village)

SHOW SPECIAL - IF YOU PLACE ORDER AT THE SHOW FOR

£300 CLAIM GOODS → **£40**
£1000 WORTH → **£150** **FREE**

173 STATION ROAD, EDGWARE
MIDDLESEX HA8 7JX
TEL. (081) 952 5535
FAX. (081) 951 5864

NTH/ N.W
LONDON

45 HIGH STREET, HOUNSLOW
MIDDLESEX TW3 1RH
TEL. (081) 569 5802
FAX. (081) 569 6353

10 MIN FROM
HEATHROW

**BUY
NOW
PAY '94
ASK FOR
DETAILS**

The Musical Images Club

► **Membership of the MUSICAL IMAGES CLUB keeps you abreast of all the leading developments in the world of hi-fi and home entertainment:**

- our regular newsletter keeps you informed of all the new products and new technology in the expanding

world of home entertainment – latest development information from all the top manufacturers. Update bulletins bring any stop-press items between issues.

- **exclusive invitations** to special manufacturers' demonstration nights – your opportunity to sample the very latest products before they hit the shelves.

- **exclusive and priority offers** on both new and ex-demonstration equipment, accessories and all kinds of upgrades and add-ons.

- **competitions, special deals, and added value purchasing** exclusive to club members.



To join the MUSICAL IMAGES CLUB and receive your FREE 6 months subscription to a leading A/V magazine, fill out the form below and enclose a cheque or PO for £15.00, or complete your credit card details.

<input type="checkbox"/>	Yes, please commence my subscription to the MUSICAL IMAGES CLUB for £15, and send my free subscription.	Name _____
<input type="checkbox"/>	I enclose a cheque for £15 payable to Musical Images.	Address _____
<input type="checkbox"/>	Please charge my credit card VISA/ACCESS	Postcode _____
<input type="checkbox"/>	Exp: ___/___/___ Signed _____	

Offer valid until 31/12/93

Offer available to UK residents only. If you do not wish to receive promotional literature from other selected companies, please tick

Please send completed coupon to: MUSICAL IMAGES, 45 High Street, Hounslow, Midd'x TW3 1RH.



and

ROTEL

offer you an amazing CD player bargain!

ROTEL RCD 965 BX LE

The Limited Edition version that evolved from the award winning ROTEL RCD 965 BX.

was ~~£380~~

now £289!

(not with any other offer)

Sales Hotline
081-952 5535



Because we thought about it. Deeply. Our R&D people spend their lives immersed in speaker design – but never out of their depth.

Bathtime operatics may have inspired the SIXES concept, first seen in the original successful SIXES. You see, four-square walls generate standing waves which boost 'boom'. Fine for resonant renditions of 'Nessun Dorma', but fatal to accurate musical reproduction.

Similarly, since sharp edges cause sound diffractions, playing havoc with frequency response and believable stereo imaging, our six-sided cabinets adopt a more oblique approach.

The quest for colour-free sound is unceasing. The senior members of the new SIXES family feature our Dual Concentric sound sources, whilst all models incorporate contoured moulded basscones, low-weight and stiff for agile yet powerful bass response. And tweeters with gold-anodised domes, ensuring treble clarity and smoothness.

To read more about the new SIXES – write today or phone 0236 420199. But for the absolute truth, all you have to do is to listen.

There's
just one reason
why the new
SIXES loudspeakers
look and sound
as they do.



NAME _____

ADDRESS _____

POST CODE _____

Please send me further information on the new SIXES

Please send me details of this new speaker

Tannoy Limited · Rosehall Industrial Estate · Coatbridge · Strathclyde ML5 4TF · Scotland
Telephone (0236) 420199 · Fax (0236) 426200

World Radio History

MUSIC FROM MORDAUNT-SHORT

Mordaunt-Short have a new range of speakers called the 'Music Series', featuring their MCS bass cones, 'minimal crossover design' (which we hope is a design ethos, rather than just laziness), and 25mm aluminium dome tweeters. The two-way speakers are the £130 MS10, the £180 MS20, and the £250 MS30. The three way speakers are, logically, the £380 MS40 and the £500 MS50.

Mordaunt-Short Ltd. 3 Ridgway, Havant, Hants PO9 1JS.
Tel: 0705 407722



POLK AUDIO

The 'S' series is the latest line of loudspeakers from those nice Polk folk, starting with the two-way S4 'speaker at £200, and rising to the three-way S6 at £300, S8 at £450, and the S10 at £600. The new range uses Polk Audio drive units which have been specially developed to reduce small resonances on the surface of the cones. Polk claim that this gives their 'speakers greater clarity.

Polk Audio, Tyttenhanger House, Coursers Road, St. Albans, AL4 0PG. Tel: 0727 827311



LUMLEY REFERENCE

Not a book about the actress, but the name of a stereo valve amplifier. Retailing at £1950, the ST60 delivers 60watts through pentode configuration, and there's an optional triode switch for £175 extra. In triode mode they supply 30watts.

Reference Imports, Pineridge, Theobald's Green, Sandy Cross, Heathfield, East Sussex TN21 8BS Tel: 0435 868004



The truth,
the whole truth,
and nothing but the truth . . .



. . . so help me DPA!

It is a truth universally acknowledged, that clarity of sound allows true involvement with music.

Recognised Hi-Fi critics throughout the world have consistently praised DPA's products for their unrivalled clarity and transparency of sound reproduction. This inevitably leads to more profound musical experiences.

After years of development, the 200S pre and power amplifiers have been perfected. The amplifiers share the technology that has so inspired reviewer's praise in the past. The 200S combination at £1,250 gives state of the art performance at a reasonable price.

If you crave musical truth, contact DPA so we can help.

dpa

DPA Digital Ltd., Unit 7, Willowbrook Tech. Units, Crickhowell Rd., St. Mellons, Cardiff CF3 0E1 Tel (0222) 795621 Fax (0222) 794267

STANDING TO THEIR COLOURS

Soundstyle have launched a range of speaker stands to complement their successful 'Tripod' range. These new stands come in a range of colours, including the ubiquitous (don't yawn) 'Classic Black' and also, more interestingly, 'Rock Red', 'Opus Green', 'Sonata Blue', 'Symphony Grey', and 'Concert Blue'. Stands in this range retail at around £100 per pair, depending on size.

Soundstyle, 8 Greyfriars Road, Bury St. Edmunds, Suffolk, IP32 7DX. Tel: 0284 701 101



ABSOLUTELY NEW

From Absolute Sounds comes the £1675 BL-2 Balanced Line Driver-Input allowing the connection of several single-ended sources to their LS5 pre-amp. They have also upgraded their SP9 preamplifier to a Mark III version, which sports improved input circuit layout and better-quality components. The SP9 Mk III costs £2895, or is available as an upgrade for those who already own the Mark II.

Absolute Sounds Ltd, 58 Durham Road, London, SW20 0DE. Tel: 081 947 5047

CASSETTE CLEANING SERVICE

Some people think you can get anything in the West End, and when you realize that there are people there who take just 24 hours and £34.95 to professionally clean and re-align your cassette deck to optimise performance with your favourite tape, I'm not surprised.

Protape, 33 Windmill Street, London W1P 1HH.
Tel: 071 323 0277

THE PYRAMIDS OF ULSTER

Pyramid Audio is a new name allied to the Shan Acoustics company and Mettec Ltd, the aerospace concern. They have launched the £125/pair Quantara 'speaker stand, which has a polymer composite column and 10mm steel footplate, and the £69/pair Iras, which has a 3" diameter fillable column. Both come in a variety of heights and head plate dimensions. They are finished in gloss black, with other colours available on request.

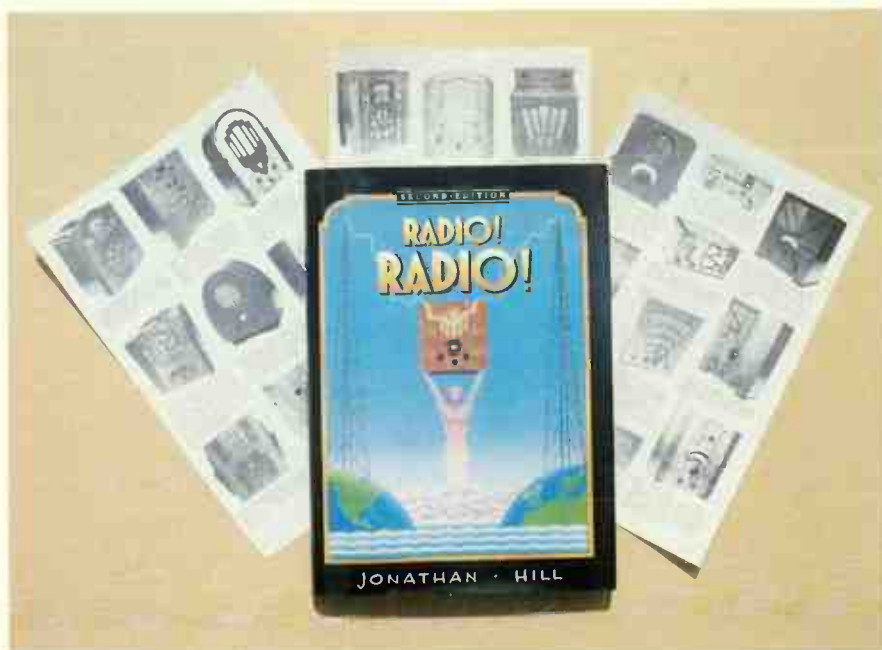
Pyramid also supply a range of isolation platforms and equipment tables.

Pyramid Audio, Unit 2, Cedarhurst Ind. Park, Cedarhurst Road, Newtownbreda, BT8 4RH. Tel. 0232 641870

RE-RELEASE FOR RADIO! RADIO!

Radio! Radio! by Jonathan Hill has been revised and updated, and is now available. You can obtain your copy of this collectors' illustrated history of the radio, ISBN 0 9511448 20, for £25 inc p&p. from Sunrise Press.

Sunrise Press, 2-4 Brook Street, Bampton, Devon EX16 9LY.
Tel: 0398 331532



Speaker-like sound...



...it's in the cans!!!

"...the sound quality is more akin to a pair of speakers than most other headphones we know." *WHAT HI-FI?*

"Frequency response is admirably smooth, and distortion is low even at high listening levels." *AUDIOPHILE*

"Their lightweight comfort and effortless sound make them a joy to use." *WHAT HI-FI?*

**Jecklin Float Two
AND
Jecklin Float
Electrostatic**

"To call these transducers 'head phones' is to do them an injustice. 'Head speakers' would be a more accurate appellation."

AUDIOPHILE

▶ Jecklin Float Two R.R.P. £99.00

▶ Jecklin Float Electrostatic R.R.P. £399.00



FOR LITERATURE AND DETAILS OF YOUR NEAREST STOCKIST.
PLEASE COMPLETE AND RETURN TO MAY AUDIO MARKETING.

Name Address

WH-793

READING HI ►► FI CENTRE

QUALITY HI-FI AT IT'S BEST

ARCAM AUDIOLAB B&W CELESTION EXPOSURE K.E.F MRIDIAN MICHELL MUSICAL FIDELITY MICROMEGA NAKAMICHI QUAD	4 Queens Walk Broad Street Mall Reading RG1 7QF Tel. (0734) 585463 Opening Hours: Tues. - Sat. 10am - 6pm (Thursday until 7pm) Lunch 2- 3pm except Saturdays Closed all day Monday DEM APPTS ADVISED	REGA RESEARCH ROGERS RUARK ROTEL ROKSAN SONY SENNHEISER SYSTEMDEK STAX S.M.E YAMAHA
--	--	---

READING HI ►► FI CENTRE

WOLLATON
A • U • D • I • O

PRESENTING SOME OF THE FINEST EQUIPMENT MONEY CAN BUY



Monarchy Audio M 22 A digital to analogue convertor
From £995



Clements Spatial Image Loudspeakers Model Si 300
From £645

"The Monarchy Model 22 thoroughly trounces the PS Audio Ultralink and the Audio Research DAC1 which cost double and triple the amount of the Monarchy".

Paul Cervantes
The Audio Observatory
November 1992

"All of our panelists thought we were listening to Loudspeakers in the \$1,200 to \$1,500 range.... so far the 300's are the best we have come across in their price range. A 'must listen for all those who take their music seriously'".

The Inner Ear Report
Summer 1992

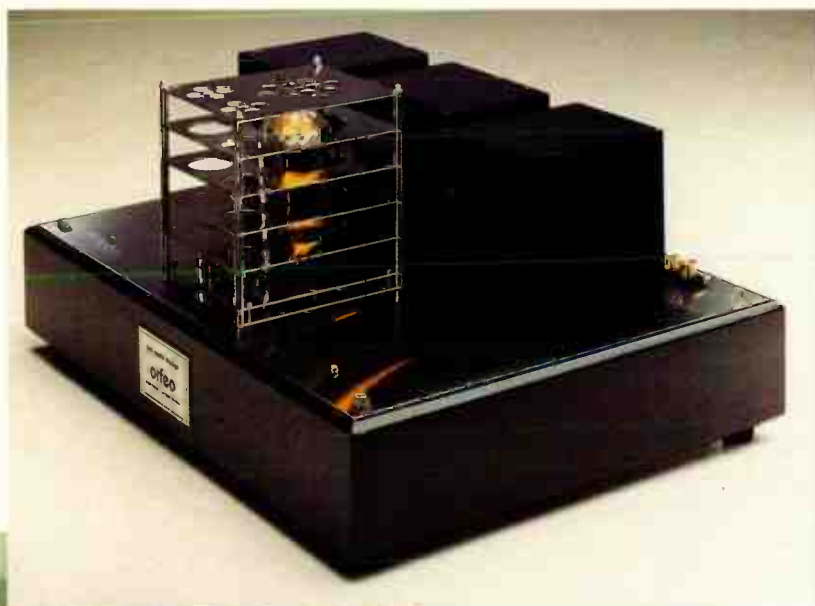
AVAILABLE SOON DT 40 A TRANSPORT £1,495

WOLLATON AUDIO, NOTTINGHAM TELEPHONE / FAX: (0602) 284147

APPEAL OF BEL'S

Bel Canto Designs are appealing to your love of music with two new products. The Aida CD Converter sports three clock frequencies, 33kHz, 44.1kHz, and 48kHz, and retails for around US\$1,900, and the Orfeo is another 845 triode based, feedbackless monoblock to light your listening room (I'm sorry, I mean 'improve your system'), delivering a whole 30watts for just US\$8,600.

Bel Canto Design Ltd. PO Box 396, Excelsior, MN 55331, USA. Tel: (612) 474 3718



REMEMBER THE ALAMO!

That's the cry from the Moth Group, and 'The Alamo' is the name of their latest turntable, a belt-drive model with a medite platter, which costs £170 with tonearm.

Moth Group, 10 Dane Lane, Wilstead, Beds. MK45 3HT. Tel: 0234 741152

AUDION QUATTRO

Erik Andersson and David Chessel are launching a new single-ended amplifier using the 845 'bright emitter' triode valve, often mistaken for a lightbulb. The 'Quattro' consists of two boxes per channel, one containing the audio circuitry and the other the power supply. Developed from a 211 design, and delivering 28watts, the 'Quattro' costs £5000.

Alema UK Ltd. 25 Montefiore Road, Hove, East Sussex BN3 1RD. Tel: 0273 202637

CREEK'S CREEK

The Tannoy Group has agreed to sell the Creek brand name, subject to contract, to an American, Swiss, and German consortium of distributors and Mike Creek, who originally set up Creek. A new company, Creek Audio Ltd, has been formed and Mike will be the new Managing Director. The new address is given below.

Creek Audio Ltd. 2 Bellvue Road, Friern Barnet, London N11 3ES. Tel: 081 361 4133



THE RUBY SERIES FROM JPW



RUBY 2 ▲

RUBY 1 ▲

The Perfect complement to the Ruby 1 and 2, the HS1 and HS2 stands ▶



HS1

HS2



Loudspeakers

World Radio History

SETTING NEW STANDARDS FOR THE SERIOUS LISTENER



RUBY 4 ▲

RUBY 3 ▲

The JPW Ruby loudspeaker series set new standards for the serious listener. Using state of the art technology their aluminium diaphragm drive units guarantee pure piston motion beyond their operating frequencies resulting in a transfer of superbly accurate detailed information.

For more information contact (0752) 607000
JPW Loudspeakers Ltd, Ocean Quay, Richmond Walk,
Stonehouse, Plymouth PL1 4LL, Devon, England

World Radio History



THE MIDAS

Eric Braithwaite takes

and finds out whether they

If you are TEAC, you invent a mechanism for your Compact Disc player that looks like a cross between a duck press and an old-fashioned mangle and call it a Vibration-Free Rigid Disc-Clamping System. Then, to make it a bit less of a mouthful, you lose two letters and simply call it a 'VRDS' player.

TEAC's contrivance has now appeared in the P700 transport. Externally, this oblong shoe-box shaped design looks little different from the company's previous stand-alone transports. Both the P700 transport and partnering D700 DAC, which together will set the buyer back about fifteen hundred notes, are finished in TEAC's traditional gold. Both are substantially built and well-finished, smooth and luxurious to the touch, from the soft firm clunk of the power switches on each, to the remarkably quiet and confidence-building slickness of the CD drawer. Apart from its output, of course, the TEAC transport is near-soundless, just a little discreet chirruping as it reads the disc's Table of Contents. A great change from the wash-day mangling noises some transports make, I must say, in this case thanks to the drawer moving on ball-bearings instead of a simple slide-bar.

As in earlier incarnations, the transport has a minimal amount of controls visible to the naked eye. Power on, Play, Pause, Drawer Open and Close - that's it. No, not quite it - discreetly tucked away under the loading drawer are two tiny gold collar-studs which control track skip forward and back. Everything else must be done from the cranny down the back of the settee - from the remote control, I mean. This allows a full range of tricks to be performed from the armchair: programing up to twenty tracks, search, repeat, switching the display between elapsed time, remaining time and total time left to play on the CD.

Should you wish for four seconds of peace between tracks, the 'Auto Space' button will insert it for you. If you need longer to recover from a track, you'll just have to use 'Pause' or 'Stop'. There's only one objection; as most Japanese manuals do, this one will insist on referring to programing 'Tunes'. If you want to load a few bars of a melody into the memory, you can't, unless they are indexed, and

that's rare these days. TEAC mean 'tracks', although it is possible to repeat an 'A-B' selection.

Now back to the mangle. A CD is a pretty thin piece of plastic and it's usually clamped to the spindle which turns it ten or more times faster than an LP with a fairly insubstantial piece of plastic. Inevitably it will wobble, bringing the error correction circuitry into play as the laser misses the odd pit or two. At least that's the reasoning behind Pioneer using a platter to support the disc and Micromega and Naim using a device not dissimilar to a turntable clamp.

TEAC's VRDS system is a combination. As the drawer carrying the CD slides in, the CD is pushed upwards and held against an eight-millimetre thick aluminium and brass plate which begins spinning courtesy of a hefty motor and spindle bearing. The manual warns against using

"For once, this track sounded as though the band knew what they were doing and performing it absolutely seamlessly."

proprietary stabilizers like the Sicomin dampers or suchlike. Always one to live dangerously, I tried a CD treated with a Harmonix stick-on tuning sheet; the P700 didn't grumble, though I had the distinct impression that the placing of members of the band altered, a flautist being nearer the centrally-positioned double-bass player's elbow than he should have been.

Elsewhere, the VRDS players have met with something of a mixed reaction. It's made a mark, alright, but whether it's a Black Spot or an X marking the hidden treasure seems to be as much in the ear of the beholder as anything else. People either love 'em or loathe 'em. The former seem to be in the majority, but it took me quite a while before I could make up my mind whether to join them, I didn't loathe this transport and DAC combination; but I didn't swoon either.

It's certainly different to the run-of-the-mill, and different to previous TEAC drives. The question is, whether 'different' in this case is a synonym for 'better' or 'worse'. It all depends, more than almost any other transport I've heard (he says, copping-out) on the listener's taste. Now it's not often that word crops up in

listening tests! Gone is the somewhat laid-back approach of earlier TEAC transports. This one is crisper, sharper, much less forgiving than the TEACs of old. It took time to isolate the reasons - but they are not all attributable to the transport's VRDS system, though this evidently plays its part; some come with the DAC.

This affair is also shoe-box shaped, but TEAC have joined the increasing numbers of designers who have begun to allow for more than one digital source. Depending on whether you can look a Toslink connector in its red winking eye, or consign them to the back of a drawer, there are four digital inputs to choose from. Concisely numbered 1-4 on the input selector switch on the fascia, two are optical, two co-axial. The orange display tells you the sampling frequency, and whether the input chosen is 'operating' or 'muting', a reassuring touch.

It will also bring up a legend which tells you whether de-emphasis is applied, though few users are likely to see it, since the CDs that require it are few and far between.

A recording of Villa Lobos pieces on Lontano opened up a splendid vista on music. The 'Sexteto Mistico' for an unusual combination of flute, oboe, guitar, saxophone, celeste and harp displayed all the unusual mixture of timbres, none overlaid by another, a tricky thing to achieve. There was a splendidly defined atmosphere, too. The TEAC combo is not quite as acute as Sugden's SD1/SDA1 transport and DAC at reproducing the merest breath of ambience, but it came close. Using an Arcam 170 transport through the D700, the sound was creamier and warmer, but with a noticeably coarser texture, more depth, but less sharp a focus on individual players.

Turning to a choral piece, the Arcam neatly - too neatly! - separated the sopranos from the contraltos and rendered them down into blocks. TEAC's transport spread them rather more credibly across the space between the speakers, more in the way they would be perceived in a concert hall. Again, vocal textures were warmer using the Arcam. Up in the ranges above middle C, both voices and instruments took on a very marginally hard, glazed quality via the P700/D700; not painful, but more like a fine ceramic glaze which let through an enormous amount of detail. I for one,



two metal boxes from TEAC,
spin his silver to gold.

TOUCH?

analogue replay

Project
 Michell
 Townsend
 Wilson Benesch
 Basis
 Kuzma
 SME
 Sumiko
 Lyra
 Transfiguration

digital replay

TEAC
 Aura
 Micromega
 Counterpoint
 Mark Levinson
 Accuphase

valve amplification

Audio Innovations
 Trilogy
 Audionote
 Tube Technology
 Conrad Johnson
 Lumley Reference
 Counterpoint
 Sonic Frontiers

*solid state
 amplification*

Rotel
 Aura
 Adcom
 John Shearne
 Audiogram

D I V A

a u d i o f i d e l i t y



Experience just how good your LPs and CDs really can sound by listening to them through one of our hifi systems. From £50,000 to £500 we put together the finest hifi to suit every budget.

Our demonstration room is available for booking anytime day or evening from Monday through to Saturday; alternatively, we will demonstrate systems in your own home if you wish. We install both single and multi-room remote control systems, and can put together the finest in audio-visual home cinema. Call us or pop in to arrange a musical experience you'll never forget.

**Workshop 30, Royal Victoria
 Patriotic Building, Fitzhugh Grove,
 Wandsworth Common, London SW18
 0 8 1 8 7 5 9 5 9 3**

Alchemist

LFD
 Michell
 Chord
 Primare
 Mark Levinson

loudspeakers

JPW
 Monitor Audio
 Sequence
 B&W
 Triangle
 Audionote
 SD Acoustics
 Impulse
 REL
 Audiostatic
 Thiel
 Klipschorn
 Townsend

cables & accessories

XLO
 Audioquest
 Audionote
 Cogan Hall
 Silver Sounds
 Seismic Sink
 Tripod
 Frameworks
 Leider

audio-visual

Harman
 Lexicon
 JBL

however, do prefer a rounder. 'fruitier' tone - but, as I hinted before, that is a personal taste.

But it is in its overall perspective that the TEAC excels. If you want to pin down a guitarist's performance string by string or count the frets, then the TEAC is not quite as precise as others, but the whole is placed neatly within a wide, large picture-frame. If this implies a degree of clinical coolness, then so be it: the mid-range and bottom end are that bit lusher than the treble, which is thinner, without the same body to it. When a full band comes into play, deep percussion thunders away in the lower registers, horns and brass swell and swoop with gratifying intensity; if only, I sighed once or twice, the higher strings could sound a little less clinical in comparison.

Where I didn't open my mouth to sigh, but only gape in admiration, was listening to some well-produced rock. James might not be everyone's taste, but where some players split 'sound' into a thrasher's loosely-tied bundle of separate tape tracks, the TEAC made a superbly lively, cohesive whole out of it. For once, this track sounded as though the band knew what they were doing and were performing it absolutely seamlessly. On some players, the drum track will overlay

the voice track or apparently diminish in intensity as the guitar comes in, leaving an imitating impression that the band members were not really playing together in the same space. Not through the P700/D700, though. 'Intensity' is the word for what came out: driving and muscular music, pumping iron with a powerful bass and sure-footed rhythm. Instruments were not projected too forward, nor too artificially layered, yet every player stood, as it were, on his own two feet. This one will rock on with anything else out there.

On John Scofield's *What We Do* album, the TEAC came to grips with the CD instantly, with speedy and hefty drumming and a graunchy saxophone. 'Little Walk' seemed stronger, both in composition and texture, than I had thought, with the underlying structure clearly evident. It was as though the players had been honed to a precise edge. It was a remarkable contrast to using the Sugden transport and DAC, which for once made less overall impact, giving the recording perhaps too much of an air of a live stage performance instead of a considered recording session. Drawn into the one, you mentally applaud at the end of each piece. Listening to the TEAC, I found myself listening more concentratedly to sections and catching

myself saying "Weren't those few bars" (from the saxophonist or the drummer) "really damn good!"

That's the phrase to describe the transport. It really is "damn good". When it comes down to it, TEAC have managed to engineer one which is as authoritative as the very best and exudes quality. If I didn't swoon all over the carpet it's perhaps because the DAC half is somewhat leaner and less passionate by comparison. If you are looking for a hot-blooded, high-tempered converter, that's not what TEAC have produced. It's not lizard-blooded, either, but, considering the competition a very well-balanced performer. Whatever my reservations, they are relatively insignificant viewed against the total enjoyment factor - and that comes out as one of the highest about at the moment. A compromise or two, maybe, but, for a couple of quid under £1,500, well, it's damn good!

P700 Transport £895
 D700 DAC £600
 TEAC (UK) LTD,
 5 Marlin House,
 The Croxley Centre,
 Watford,
 Herts. WD1 8YA
 Tel. 0923 225235

MEASURED PERFORMANCE

TEAC's P700 transport and D700 DAC are distinctively styled in similar shoe-box fashion to their previous high-end CD equipment. The transport has gained TEAC's unique Vibration-free Rigid Disc-clamping System which clamps the upper surface of the spinning disc to an aluminium platter. The DAC uses four 20-bit converters, not Philips' bitstream DAC-7 which is favoured in their cheaper one box VDRS-10 player. Presumably two 20-bit DACs are used per channel in differential mode which lowers distortion. The D700 offers four digital inputs, two coaxial and two optical.

The D700s frequency response is very flat with no irregularities. There is a very slight lift at low frequencies that will give it a solid, but not overblown, bass performance. Treble rolls gently down above 20kHz, before falling sharply at 21.2kHz, which should give it a smooth, but precise, treble.

The distortion figures are a little odd. At high level, -6dB, distortion is as low as anyone has got with current DACs at 0.0045%, but at -30dB (a signal relating to normal music level) distortion rose to 0.043% on the left channel and 0.016% on the right. The better applications of DAC-7 are typically below 0.009% and the Pink Triangle Ordinal we measured at 0.006%, an extremely low value. Looking at the distortion plot taken at -30dB on the left channel the reason for this high value of distortion can be seen. There are very strong 2nd, 3rd, 4th and 6th harmonics

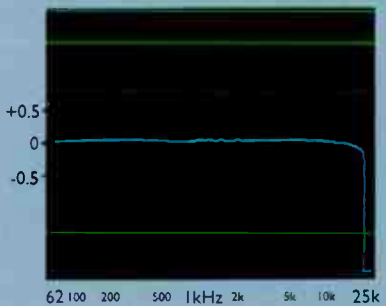
which will boost the overall distortion level. At signals below -30dB the TEAC once again became remarkably linear with only 3.29% with a -90dB dithered signal, nearly as low as is possible.

As would be expected from a 20-bit dual differential convertor dynamic range was good and noise very low. In fact, in all other areas the D700 measured competently showing the thought that has gone into this design.**DB**

TEST RESULTS

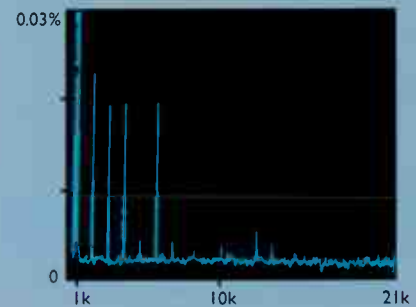
Frequency response	2Hz-21.2kHz	
Distortion %		
-6dB	0.0044	0.0045
-30dB	0.043	0.016
-60dB	0.36	0.36
-90	28.7	28.6
-90dB dithered	3.29	3.29
Separation	left	right
1kHz	108	114
20kHz	83	89
Noise		-109dB
with emphasis		-112dB
Dynamic range		111dB
Output		2.05V

Frequency Response



Flat frequency response

Distortion



Some distortion at 0.043%

THE PENTA HI-FI

A hasty history of the Heathrow happening handed

When I was at school we learned about cavemen and the way they led nomadic lives in summer, then spent the long nights of winter huddled in furs in front of that new-fangled fire stuff which cast long, leaping shadows across the walls of their caves as they gazed into it, listening enraptured to their bards spinning stories and songs passed orally from generation to generation.

Picture that scene, and you have a reasonable idea of what the hi-fi show is all about. The Mighty Hunter (almost all of the visitors to the show still seem to be male), at the end of his summer travels (two weeks in Skagness or, nowadays, Skymis) prepares himself for the long winter ahead with one last festival, gathering together with like-minded folk and listening to songs and stones.

Okay, so the technology's more advanced nowadays, the clothing is better, the bards cut their songs onto plastic discs rather than be there in person, but some of the stones you hear are just as tall as they always were.

It was the Epos display which made me think of cavemen, being decorated with black hangings and demonstrating ES14 'speakers' spotlit from below, which shed a primeval light on the faces of the audience, and sent weird shadows flying across the walls as listeners moved around.

JPW were reporting a high level of interest in the more expensive 'speakers in their 'Ruby' range, especially the model 'B' which retails at around the £1000 mark. Cheaper speakers in the range, they said, were not generating so much interest, so they were concentrating on the top models, and pulling in quite a few people by demonstrating a punchy sounding system, albeit without a particularly wide dynamic range. Once in, visitors seemed intrigued by those bright red 'speaker cones, and with all that going for them, the salesmen didn't have very much work left to do.

In the Ortofon/Project/Albany room they were packing them in with quite a wide ranging display of products, including the impressive turntables from the Czech company Projekt.

In quite a civilized-looking room, Tannoy introduced me to ALF (Ambient Low Frequency, not Alien Life Form), their new sub-woofer, but were playing 'speakers from their new 'Sixes' range which are now badged as mklls and feature a new tweeter.

Alchemist products, on the other hand, were continuing their 'heavy metal' approach to the visual side of hi-fi with their metre-long 500w MOSFET power amplifier

called Thor, which will retail for around £6000. They had a 250w version, called the Vidar, for £4000, and a 100w power amplifier called the Forseti at £900.

Anybody astounded by their wacky grey speakers will be disappointed to learn that they are a one-off design exercise by Alchemist's own designer, and will probably not be available in the foreseeable future.

The Welsh wizards of DPA Digital had a prototype of their new £6000 digital-to-analogue converter (DAC) on show, although you might have been forgiven for missing it, tucked away between two plants in the darkest corner of the room. It's a beautiful-looking piece of equipment with a gold-plated copper chassis, so why not make a show of it? The internals are reputed to be just as interesting as the



DPA Digital's new £6000 pdm ten twenty four CD Converter uses a discrete DAC.

casework, the converter chipset being DPA's own design, rather than an adaptation from another manufacturer's production chip. According to one of their representatives, the price tag made a few people wince, I can't think why.

One of the most prolific companies at the show was Pink Triangle, who launched several new products, including a groundbreaking 1-bit filter module, costing in the region of £300, to upgrade their Ordinal and Da Capo DACs. The filter uses Philips' new 1307 chip, launched just three months ago, and the Pink boys are the first to employ it. They were also demonstrating a small, floor-standing, loudspeaker at £850, a 300w monoblock power amplifier, the Pop at £2800 per pair, and a stereo 100w model, the Poppet at £1400.

Accessories company QED took a leaf out of our own book by demonstrating a new Twin-Positron Digit as part of their 'Reference' range of products. This one-box unit will cost £450, including all required cables. They were also displaying a new remote control preamp for £399, 60w monoblock power amps for £550 each, and a £1200 multi-room system controller package.

Plymouth-based Heybrook were making

much of their seaside connections with a display which intrigued many by looking so incongruously in a hotel setting. Their use of shells, pebbles, and varied pieces of netting around the room arrested the eye, and their full, rounded sound not only had people listening, but was a definite improvement on the rather unfocused sound which I recall from last year's Show. This is a company which obviously puts a lot of thought into the Show, and improves every year. Some of the other companies' display dressers might learn a lot from them. Heybrook were demonstrating their new Integral integrated amplifier, named by one of our readers in the June competition.

Magnepan were having fun promoting their new 'Sinus' pre and power amplifier combination from the Danish company S.L.T. One of their marketing chappies had obviously done his homework, and come up with a robust red wine from France with the same name. The Sinus will cost around £2500 for the monoblock and £700 for the pre-amp.

Another Scandinavian company, Gradient of Finland, were exhibiting 'a new approach to panel loudspeakers' in their 'Revolution' speaker, a panel loudspeaker suitable for positioning near a wall by virtue of a rotating bass unit, which enables rear radiation to be tailored to suit the listener's



They liked the wine so much - they named their amplifiers after it, or was it the other way around?

taste in bass. Unfortunately, I wasn't lucky enough to get to hear these speakers.

One of the products I did get to hear, however, was the new 'Equinox' two-way 'speaker from Ruark. It looks, in the words of Alan O'Rourke, 'very Sonus Faber', and has an external crossover which sits on the back of the dedicated stand. The price tag on these, when they go into production, will be around £1700 for the pair including stands and, as much as you can judge any sound at the hi-fi show, these sounded remarkably clean and open, and just a little forward in the lower midrange.

SHOW 1993

to you by your hurried Hi-Fi World hacks.

Harbeth have been commissioned for another BBC monitor design, the LS5/12A, which they were 'demonstrating' in their room by tucking it away at the back, well out of light and out of mind. I know that monitor speakers are meant to disappear, but that's ridiculous! The LS5/12As will retail at around £1000 for the standard veneer finishes.

On the subject of disappearing speakers the Martin Logan electrostatics in the T&R room were so transparent you could see through them. There seemed to be less interest in these high-tech and 'strange' sorts of products than there has been in recent years. Two years ago, for instance, people were crammed like sardines into the Apogee loudspeaker room. This year Apogee were gone, like so many other companies. A pity, but maybe just

amplifiers.

In the Spitfire suite, Tube Technology had a prototype of their stereo 'Synergy' amplifier, and the response was said to be good despite the projected £4000 price tag. The bright-chrome Synergy looks suspiciously like a throwback to the 1930's 'Flash Gordon' view of the future, as though it had fallen through from some alternative dimension, it was this that drew people through the door, and the sweet, easy sound of Tube Technology's system seemed to be keeping them there.

Another company which relied on looks as much as sound was Union of Italy, demonstrating their range of valve amplifiers. The old cave-man instincts came

Response was quite astonishing - the room was well-nigh impassable for much of the time.

A room which seemed to rather put people off, although I liked it was Goldmund accessories. They had obviously decided to save time in despatch packaging by wrapping the entire room in brown paper. It was a great concept in my opinion, but possibly a little modern for such a 'retro' show as this year's turned out to be.

Downstairs on the ground floor, the range of products was almost as wide as on the floor above. Most of the exhibitors seemed to be doing good business all day, especially the accessories companies.

Moth were displaying their new £170 'Alamo' turntable, and reporting great interest in it, so don't give up hope, vinyl is not yet the sole preserve of the moneyed classes. They were also displaying their £249 active line input stage for the 30 series amplifiers, and their £199 headphone amplifier, along with their current range of products.

Just as a minor addendum to the retro theme, I did overhear talk of someone exhibiting 78rpm microgroove recordings, but this is probably apocryphal. Whatever next? Songs around the fire!

Micromega's concept was to display in The Pool Room, which was rather poorly signposted, and I hope the gentlemen wandering around with the clues were not too disappointed when they found it. The Pool Room, of course, referred to the swimming pool, and I half expected Micromega to be exhibiting waterproof leathers or some such wondrous items, but they were displaying their £1199 T-drive CDMP based transport, with the matching £799 T-DAC, their established range of products and also Jeff Rowland Design Group products, whose products they are now distributing.

That's a very quick sketch of the show for those who didn't make it, and there seem to be a number of people who didn't. It looked as though attendance at the hi-fi show has fallen off somewhat, the corridors appearing less crowded this year, and although all of the sales reps I spoke to said that there was just as much interest as in previous years, one or two did express doubts. With the competition from 'Live '93', just one week later, and companies such as Quid, Derlon, and Yamaha eschewing the Heathrow show for Olympia, it left just the more hard-core audio producers holding the fort. Whether the big boys will change their mind and flock back next year, or whether they'll all be at Live '94 we have yet to see. @



Gradient's new dipole Revolution loudspeaker has a rotatable base to allow it to be properly tuned into a room.



The new BBC LS5/12A monitor is to be built by Harbeth Acoustics.

attributable to the fact that 'Live '93' has taken on the mantle of being the show for new technologies, leaving the Heathrow show with the strictly enthusiast home-audio aficionados.

This limited showing of high-tech products paid dividends for the 'valves and vinyl' school. The Ramada hotel management must have saved a packet in heating costs as the likes of KAL, Nottingham Analogue, Union Tube Technology and, of course, our own World Audio Design boiled their filaments in order to attract attention. Attract it they did!

KAL were pulling people in with their £12,500 211 integrated amplifier, as reviewed in our June edition, as well as a smaller 300B single-ended amp.

Gamma were also exhibiting a 211 single-ended amplifier that is expected to cost a reasonable £5000, but unlike the KAL 211 they are monoblock power

to the fore in here and as the audience craned forward to peer into the fiery light of the filaments I began to worry about being ambushed by a passing woolly mammoth, but it was just David Chester from Alamo squeezing through the cramped entrance.

Lastly but, though I say so myself, not least amongst the valve exhibitors, World Audio Design. We curiously had the airwriage on the publicity front of having published five supplements full of products, so quite a few visitors must have had a vague inkling of what we were about. Dominic and Noel, ably abetted by several helpers, demonstrated the three-way KLS1 'speaker', the two-way KLS2 High Definition 'speaker', the valve pre-amp, and the K3881 and 300B valve amplifiers using either the Micromega CD2 transport with Pink Triangle's Original DAC or a Stone marble plinth mounted Garrard 401 with a special Garrard 401 Celebration SME tonearm (this one was Noel's idea) as sources.

"ISN'T IT BRILL THAT YOU CAN GO INTO ONE SHOP AND CHOOSE FROM ALL THE LEADING BRANDS OF HI-FIDELITY EQUIPMENT AND GUESS WHAT? WE KNOW WHAT WE'RE TALKING ABOUT, AND WE CARE!"



And Oodles More

THE LEICESTER HI-FI COMPANY

OF ST. MARTINS SQ.
EST 1971

6 Silver Walk, Leicester
Telephone: (0533) 539753
Fax: (0533) 626097



BRITISH AUDIO DEALERS ASSOCIATION
BADA
THE ULTIMATE IN SOUND ADVICE

Listen Inn

HI-FI SPECIALISTS

Linn, Naim, Epos, Heybrook, Arcam, Mission, Royd, Audiolab, Creek, Cyrus, Quad, Denon, Rotel, NAD, Marantz, Kef, Chord Company (Naim and Epos Northampton only).

LISTEN INN Northampton
Appointed REGA Agent

32 GOLD STREET, NORTHAMPTON
TEL: 0604 37871
6 HOTEL STREET, LEICESTER
TEL: 0533 623754

Doug Brady Hi-Fi

**A DAC with DIC
(Digital Input Cord)**



Hear this outstanding DAC along with new product from Teac, Meridian and Arcam

Kingsway Studio,
Kingsway North,
Warrington,
Cheshire
(0925) 828009
Open Six days
Fax: (0925)825773

40 Smithdown Road,
Liverpool L15 3JJ
Merseyside
(051) 733 6859
Closed on
Wednesday

14/18 Monmouth Street,
Covent Garden,
London WC2H 9HB
(071) 379 4010
(071) 497 1346
Open seven days
Fax: (071) 497 9205

**GET A LIFE !
GET A NAIM !**



The new affordable range of Naim products now on demonstration

The Forge Cottage,
19 Crossgate,
Otley, Leeds,
West Yorks
LS21 1AA
(0943) 467689
Closed Sun. & Mon.

PHILIPS DCC130

Vs.

SHARP MD-D10E

Simon Cooke referees a bout between two personal stereos championing the DCC and MiniDisc formats.

Ladies and Gentlemen! In the red corner we present, at just under 475grams and 115mm high, the Philips DCC130 Digital Compact Cassette personal stereo, while in the blue corner, at just under 325grams and standing just 110mm tall, we have the Sharp MD-D10E MiniDisc personal stereo.

Both are kitted out in black, the Philips sporting a snazzy hologram-effect DCC logo on the front, complementing silver buttons. The Sharp, in contrast, comes in black offset with white legends.

Both are playback only machines and have similar facilities, offering stop, play, skip, search, text scroll, and bass boost. Due to the difference in formats, the Philips offers tape A/B side switch and auto-reverse which are unnecessary with the single sided MiniDisc.

The Philips sounded like a tape player from the start, a mild hiss being present with DCC digital playback. This vague hiss behind the music I initially thought to be from the original

master tape, but it was absent with MiniDisc. With further listening I discovered that the level of hiss remained constant, which suggests that it may be due to the player's electronics rather than

the recording.

The Philips had a very reasonable bass performance that bounced along holding the rest of the music in time. It was not

eminently suitable for hard, driving, rock.

The midband was a little gritty, becoming a trifle compressed towards the top of the range. It gave a good account of itself with electric guitar especially, allowing the instrument to raunch through the mid and into the treble, and I craved a recording of a good steel guitar to audition this deck with.

Treble notes became steadily more compressed as the level rose, with orchestral arrangements suffering the most, and violins, as usual, bearing the brunt of the oppression.

Analogue reproduction was very reasonable, comparable with the better £100-£150 personal stereos. It was punchy and clean, but a little cold in its presentation, lacking the sweetness of the very best. My only quibble with the analogue playback was the ineffectiveness of the noise reduction circuits; they failed to cut analogue hiss back to what I consider to be a reasonable level.

Where the Philips scored over the Sharp was in portraying the music as an entity. Fewer notes sparkled or hammered out of the picture being painted by the headphones, making this player easier to



quite in the class of a good Nakamichi, losing depth and power in comparison, but was entertaining all the same. This lack of really deep bass is a pity, since otherwise, this machine would have been

NAKAMICHI AND MANKIND SHARE ONE COMMON FUNDAMENTAL GOAL



PERFECT REPRODUCTION

Nakamichi equipment shown:

IA-3 Amplifier - "... the IA-3 is a more natural sounding proposition than the Pioneer A400." - Audiophile, April 1993

CD-4 CD Player - "... this player sounds as smooth as café au lait." - What Hi-Fi, June 1993

DR-3 Cassette Deck - "Well built and superb sounding... trounces even what are, on paper, more impressive machines." - What Hi-Fi, March 1993

ST-2 FM Tuner

Phone 0903-750750 for details of your local stockist



listen to for an extended period, but it also meant that the Sharp was the more involving.

The sound of the Sharp, by contrast, was light and treble-led, which is seemingly inherent to the MiniDisc format. The Sharp's sound was noticeably thinner than the Philips, but gave a better impression of space, due to the lower level of hiss.

Bass was not the Sharp's forte, however, and although it could portray single bass lines adequately, these were easily swamped by the mid and treble. The midrange was quite well portrayed, although it showed obvious signs of compression towards the top end. Otherwise it was clear and clean all the way up.

Although the Sharp was a bright sounding machine the treble wasn't exactly clean or clear. This was less of a problem with soul and rock recordings than with jazz and orchestral work, where the strings, percussion and wind sections turned into a shrill, compressed portrayal towards the top, akin to a cat's claws on glass.

Having tried both machines with the headphones provided, I tried them with various other 'phones, and also sourcing into my stereo. This allowed me to comment as I have on the basis of the machines alone, but you will find that the headphones supplied have a tendency to compress both the bass and treble frequencies. To make the most of either, you should buy a pair of good quality headphones such as those from Sennheiser or Beyer, and sacrifice the facility of 'remote' control on the 'phones supplied.

Tracking ability was good on both, comparable with the better analogue personals around, and a definite improvement on the CD portables I have heard. Both machines made light work of general knocks and bumps, but running on the spot, and up and down stairs, caused the Philips some problems; every

so often it would give up, pause for a moment, and then carry on playing. By contrast, the only time that the Sharp gave up was when suddenly caught between 75 kilos of reviewer and a bus seat as the No 176 pulled away sharply, not giving me time to extricate it from my pocket.

On the subject of buses, or any noisy location where a personal stereo might normally come in handy, it should be noted that the Sharp has been designed to avoid distressing fellow passengers, not by insulating the headphones, but by the simpler expedient of cutting available volume. Even at full whack, playing Sade's 'Love Deluxe' album, I could sit next to another 'Walkman' victim and hear his 'Killer' tape well enough to identify George Michael, rather than Seal, singing. Any extraneous noise leaks in and smoothes the track being played. I never thought I'd say it, but couldn't it be a little louder? Or rather, provided with better insulated headphones?

The Philips, by the way, went more than loud enough for me, but suffered some distortion at the highest volume settings.

It's hard to recommend either of these players above the other for a



variety of reasons, none of which have anything to do with how they performed sonically, because until Philips and Sony reach agreement on the DCC/MiniDisc issue, the choice of which you buy will be made on the basis of whether you want to listen to Polygram (Philips) or CBS (Sony Music).

If you're worried about your street cred, the Sharp definitely carries kudos, as it is stunningly small and light, and gives the cleaner, sweeter sound of the two. The Philips is, by comparison, large and heavy, and sounds it, giving a meatier, more macho performance. You need a bag or extremely large pockets to carry one around, but both machines lose out in style and sound quality to other personal stereo formats.

There's probably no reason why anybody would choose MiniDisc as a home format, since CD is too well established. DCC however, has the advantage of already being a home audio format, so if you buy a player for home use you can use the tapes on the move too. But there we come back to the Philips/Sony debate ●

Philips DCC-130 £400
Philips Consumer Electronics,
City House,
420 - 430 London Road,
Croydon,
Surrey CR9 3QR
Tel. 081 689 2166

Sharp MD-D10E £400
Sharp Electronics (UK) Ltd.
Sharp House,
Thorp Road,
Newton Heath,
Manchester M10 9BE
Tel. 061 205 2333



BLOOMING

Tearing himself away from 'Gardeners' Question Time', Dominic Baker



Five years is a long time to wait for the second half of a pre-power combination, but Sean Sedwards of Rose Industries is something of a perfectionist, only announcing the RP-190 power amplifier when he was completely satisfied with his efforts. Unlike the RV-23S pre-amplifier, the RP-190 is not a valve/transistor hybrid, but relies upon the strengths of transistors alone to produce the quoted 70watts. This has enabled Rose to use a chassis having the same front panel dimensions, but 50mm greater depth.

Inside the attractive chassis is a host of quality components, soldered and wired with similar neatness to that found in Naim Audio's equipment. The eight discrete output devices are mounted on their own individual upright heatsinks (which run hot within half an hour) surrounded by lines of smoothing capacitors and metal film resistors. A large toroidal mains transformer, screwed tightly to the chassis, supplies the power amplifier.

Both the RV-23S pre and RP-190 power amplifiers have well specified connections. The pre has four line level inputs including two tape monitors and one pair of phonos which can be switched

between Moving Magnet and Moving Coil cartridges. Next to the phono inputs are two sockets that accommodate cartridge loading plugs, which is an extremely useful feature. The RV-23S has two pairs of outputs to allow bi-amping. The power-amplifier is no less flexible. It has two pairs of speaker outputs for bi-wiring and can be switched into mono, giving a claimed increase of 25watts, for monoblock operation.

Both the power amplifier and pre-amplifier require a few inches of space above them due to the amount of heat they dissipate, which is a shame, because they look very smart placed on top of each other. Having said this they are both stable, reaching a temperature and staying there, even when driven quite hard in the case of the RP-190.

I left both the pre and the power amplifiers on overnight to give them a chance to burn in and give their best. Out of curiosity I did listen to them whilst cold, but the pre-amplifier sounded vague and the power-amp a little cold and hard. By the next evening things had changed considerably, the RV-23S had come into focus with the atmosphere around musicians clearly depicted and the overall sound being that much more solid. The

RP-190 had lost its chill and was now producing a richer, more subtle, mid and top and a tighter bass.

Switching the input selector to CD and winding up the volume was a pleasurable experience. Not only was the sound enjoyable, but the controls were nicely weighted with a quality feel to them: these are well engineered products inside and out. The RP-190 had plenty of power, even when driving the Quad ESL-63s which are insensitive and an awkward load. With more sensitive conventional speakers the Rose could drive the neighbours out without difficulty.

Starting with The The's latest album *Dusk* I was relieved to find that the Rose combination could conjure up a large, solid and believable soundstage with plenty of atmosphere. Instruments were well defined, the Rose able to pick them out of the mix and clearly follow their path through Matt Johnson's maze of sounds and effects. All of The The's albums have a similar complexity to them, with several melodies simultaneously spiraling through a track, which can confuse lesser systems. The Rose coped admirably, although it did seem to be softening the attack of some transients.

This softening, however, is no bad

ROSES

plants the Rose pre and power amplifier combination in his system

thing. Rose Industries have designed this amplifier with the virtues of valves in mind. To this end the sound is relaxed and easy to listen to, with a clear and open mid range and delicately detailed treble. With Steve Earl's "Esmerelda's Hollywood", which has strong treble energy, the RP-190 played every cymbal smash with all the vibrancy necessary, and smoothly. It was not blunted in any way, but was clear and pure, free from distortion. I used a stripped down pair of Quad ESL-63 electrostatics for the majority of my listening, changing them once to our own 3-way kit 'speakers to see if the RP-190 could provide grip and control in the bass and didn't show any harshness with the Tonigen ribbon tweeter, which has a tendency to do so with lesser amplifiers. The Rose passed this test.

The bass certainly wasn't dry. It's rich, smooth, big and flows out across the carpet to engross you. But it had some punch to it, giving it speed and slam if demanded. In some ways this is a failing, neither having the depth and solidity of a good valve amplifier or the control and dynamics of a good transistor amplifier. In others it succeeds with a velvety texture and an excellent sense of timing. I found it a pleasant change from the amplifiers I have listened to recently, having a much more relaxed and easy sound.

After several albums I was becoming increasingly worried about the influence the pre-amplifier was having on the sound and switched to my normal DPA 50S transistor pre. As I had suspected, the RV23-S was a little closed in, limiting the atmosphere and space of a recording; it was not as open and natural as the 50S. With this system the power amplifier was able to show what it was really capable of doing. As with the Rose pre., the richness was still there in the bass, albeit to a lesser degree, giving it a more neutral balance, but the biggest change was the way it opened out into a more spacious and wider soundstage. Although a very competent performer at its price, the RV-23S does limit the power amplifier somewhat. However, this is the case with nearly all pre/power combinations with one half always restricting the other to a greater or lesser degree.

Having said this, the RV-23S is a very smooth and clean performer. There are no clicks or pops and once past the 60second delay following switch on, which allows the valves to heat up, the Rose functions as fuss free and silently as any transistor amp.

Both the new RP-190 power amplifier and the RV-23S offer very good value for money. The power-amp is held back a little by the pre, but then for £495 you get a valve/transistor pre with an impressive range of inputs including tape monitors and MM/MC phono, good construction and a smooth sound. There are very few others who offer this kind of spec for this kind of money. The power amplifier I would rate slightly higher in terms of absolute sound quality and it would easily be at home with more expensive partners. A pair could be used as monoblocks to provide an easy

upgrade path, taking it even further up the ladder. As a combination, the RV-23S and the RP-190 for just under £1000 together provide an amplification system with a wide range of facilities, an easy upgrade path and a smooth and relaxing sound. What more could you ask for?

RV-23S / RP-190 £495/495

Rose Industries Ltd.,

P.O. Box 13,

Abingdon,

Oxon.

OX14 4XE.

Tel. 0235 847023

MEASURED PERFORMANCE

The RV-23S preamplifier uses valves, with discrete transistors for the disc stages. Modern transistors and FETs can give lower hiss than valves, but whilst the RV-23S moving magnet (MM) was quiet (-74dB hiss), the moving coil (MC) was a little hissy (-65dB), having an equivalent input noise voltage double that needed, consequently it is best used with high output MC cartridges.

Bandwidth through all inputs was wide, stretching from around 5Hz up to 155kHz with CD tuner/tape, and up to 70kHz though phono. The phono input will reproduce subsonics, since it lacks a warp filter; owners of reflex loudspeakers need to beware of cone flap with LP.

Distortion levels were low, just 0.036% of second harmonic, which is subjectively innocuous, being produced through the disc stages to the output. Maximum output from the preamp was 20volts, so it can easily drive all power amplifiers.

The solid state power amplifier produces 78watts per channel into a normal eight ohm load, increasing to 132watts into a low four ohm load, so it will go loud. Sensitivity was low at 1V for full output, meaning the RP190 must be partnered with an active preamp having gain, except with CD. Like the preamplifier, Rose have engineered in wide bandwidth and low distortion; I was glad to see second harmonic predominate.

These are well engineered units with a fine measured performance. I'd expect an interesting sound from their hybrid circuitry. **NK**

RV23-S PRE-AMPLIFIER

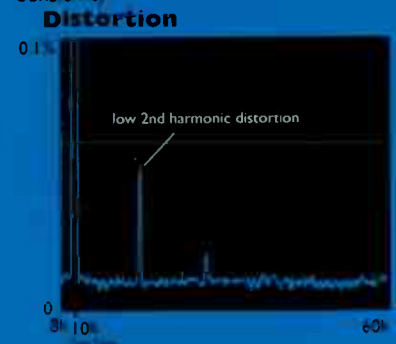
CD/tuner/aux.
Frequency response 5Hz-155kHz
Separation 83dB
Noise -94dB
Distortion 0.036%
Sensitivity 210mV
dc offset 0.0mV

Disc MM
Frequency response 5Hz-70kHz
Separation 85dB
Noise -74dB
Distortion 0.036%
Sensitivity 2.3mV
Overload 420mV

Disc MC
Frequency response 5Hz-70kHz
Separation 82dB
Noise -65dB
Distortion 0.036%
Sensitivity 0.25mV
Overload 48mV

RP190 POWER AMPLIFIER

Power 78watts
Frequency response 6Hz-63kHz
Separation 50dB
Noise -108dB
Distortion 0.006%
Sensitivity 1V





Talking Speakers

At B&W we believe in evolution. For almost thirty years we have been making some of the world's finest domestic and professional monitors, developing our skills and products to meet the needs of the most discerning listener. You.

To achieve such a high standard of reproduction, our designers spend a lot of time listening to feedback. Not from our loudspeakers, but from our professional clients, reviewers and, most importantly, our customers. The result is that we don't release a new range every year or so, but incorporate improved features as the public demands and our



world-renowned R&D department allows.

The 600 series has evolved significantly over the past three years (although considering the reviews on their release, it seemed hardly possible at the time). All of the new series have improved crossovers and ferro-fluid cooled tweeters (metal domed, of course), and the larger models now have one piece moulded bass drivers. The only thing that we haven't been able to improve upon is the classic modern styling by Kenneth Grange.

We'd go so far as to say that the 600 series has evolved to the point where it can speak for itself.

FIVE ALIVE !

Simon Cooke looks for a £300 CD player to put some life into his system.

So you're looking to upgrade your CD player from the entry-level £100-£200 player that's been driving your system? Or maybe you're starting out on the hi-fi road with the help of an amenably large piggy-bank and you're looking for a better than average starter machine? Then this is the review for you.

The first step up and away from the entry-level separates will give you several choices. You can go for a 'lifestyle' product such as the Philips at £350 which should look good as well as sound good. At the other end of the scale, there's the £230 Marantz, of which Alan Sircom said 'those who expect it to better rivals of twice the price will find that their idol has

feet of clay'. The Marantz is here not only to test it against more expensive players, but because a £230 player leaves you with £120 for an outboard DAC connected to its digital output, and that's a long way towards a QED Digit . It's also a start on the road to Perfect Pitch's new Dacula, Micromega's Microdac, or even a DPA

Little Bit, so is it worth buying a £230 machine rather than a more expensive one when you're saving up for a separate DAC?

Perhaps, but it does leave you with a player which only has £230 build quality, and looks like it. This brings us to the £330 players from Yamaha and Denon, and £350 players from Philips and Pioneer. These should give you not only better build quality than a £230 machine, but also better sound quality. How does the popular Marantz shape up against them?

Of course, your decision on which player you buy won't be made just from the players tested here, but from the entire market range. It'll also depend heavily on your priorities. If the look of your hi-fi is important, you'll probably prefer a one-box player, and will also want it to blend with your decor.

If sound quality is most important, you might prefer a cheaper player with an outboard DAC, especially if you want to spread the cost of your player. Conversely, if you're thinking of another upgrade in the near future, you may simply not want to spend too much on this round. Finally, there's

always the question of how you want your hi-fi to sound after the upgrade, and only you know that.



DENON DCD-1290 £330

To me, the Denon is, visually, an uninspiring black-box, albeit redeemed by impressive build quality and a glossy finish. The fascia looks neat, due mainly to a video recorder style flap that hides the lesser used functions, as well as an on-board numerical keypad, from cluttering the plain front panel.

The hidden functions include auto space, time edit, pick (picks the best track combination for using tape time), link (to use edit functions to dub several CDs onto one tape), side A/B, fade, and peak search, for use when taping from CDs.



There are also the more usual program, index and repeat functions.

In addition, there is an interesting feature called 'pitch' for changing the apparent speed of replay in 0.1% increments from -12% to +12%, and hence the pitch of the music. Not much use for the home user perhaps, but great for Mickey Mouse or Deputy Dog fans!

The rear panel sports fixed and variable analogue output phono jacks, with coaxial and optical digital outputs. None of the phono jacks are gold plated.

Denon have made a point of removing the headphone jack and circuitry from this 'UK' version, in order to 'maximise the sound quality on the line outputs' by spending the money on components elsewhere.

SOUND QUALITY

Now here's a conundrum. First impression of the Denon was of a big fish lost in a pool of minnows. It sounded much more coherent, musical, and convincing than the other machines.

However, a longer period of listening showed that the Denon simply had a very different approach to the other players in this test.

The tonal balance of the DCD-1290

was generally good, and better than average on most vocal works, the Denon being a spacious and atmospheric player. Bass frequencies had a modicum of power behind them, and the Denon definitely went low, but there was surprisingly little impact on the really deep notes. The Denon had trouble with kick drum and similar lines which should hammer out. They were just a shade too slow to make the cleanest impression.

On mixed bass/snare drum work, i.e. drum lines moving between the bass and lower midrange, the Denon had some

trouble combining the two into a coherent whole. Otherwise, the midband was smooth and even throughout, especially on strings, although sax had a tendency to be slightly compressed and brassy.

The top end was very good, although it had a tendency to splash transients, and also to add force to strong resonances, such as those of glass harmonica, so that they could be quite

painful to listen to. Sustain on high notes was excellent, however, benefiting vocals and orchestral work.

Soundstaging was good, being a little more solid than average, but still no match for a good outboard DAC.

Both optical and co-axial digital outputs were excellent, with the co-axial being just slightly warmer.

CONCLUSION

If Denon don't have a winner here, I'll eat my headgear. However, it is a very middle of the road kind of machine and to be honest, I have to say that I don't find it all that appealing, since it simply is not exciting enough. To summarize, however, I have to admit that this is a very capable all-round player.

Denon DCD - 1290 £330
Hayden Laboratories Ltd.
Hayden House,
Chiltern Hill,
Chalfont St. Peter,
Bucks.
Tel. 0753 888447

MEASURED PERFORMANCE

The Denon DCD-1290 has a flat response with a slight lift in the bass and treble. This should give it a solid sound with a bright and lively treble that may become a little sharp at times.

The distortion figures are not exceptional; with a -30dB signal, representative of normal music level, the DCD-1290 displays a wide spread of harmonics, shown in the distortion analysis. The strong harmonics seen rising to the top of the plot are all odd order, i.e. 1st, 3rd, 5th, which will give the Denon a sharp, perhaps gritty, treble, especially taking into account the slight response rise at high frequencies.

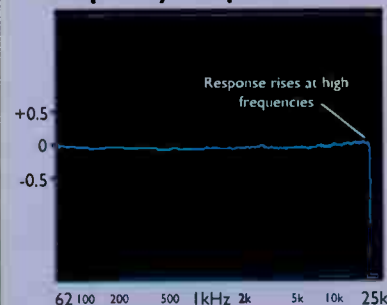
With a -60dB signal distortion rises to as much as 0.81%, indicating that the dynamic range will be lower than the best, which it is at 103dB.

Elsewhere the measured performance was good, with low noise, good separation and output only 0.1V higher than the Philips standard of 2V, so there will be no need to compensate its level in a demo. **DB**

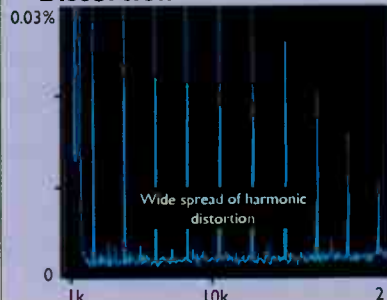
TEST RESULTS

Frequency response	2Hz-21kHz	
Distortion %		
-6dB	0.005	0.004
-30dB	0.098	0.095
-60dB	0.73	0.81
-90	37.6	38.0
-90dB dithered	7.2	7.4
Separation	left	right
1kHz	102	116
20kHz	76	81
Noise	-110dB	
with emphasis	-109dB	
Dynamic range	103dB	
Output	2.1V	

Frequency Response



Distortion



MARANTZ CD-52 mkII £230

Marantz have made their name with several well-received products, often tweaked Philips machines. This is apparent in the finish of this machine, which is light and plasticky, but still quite solid.

The main disappointment with this player was that we're firmly back in standard black-box audio land, with the drawer on the left hand side of the fascia, and the display in the middle. Below the readout is a rank of buttons, open/close, 10 numerical buttons, memory, cancel, repeat, display mode, skip forward and back, and search, from left to right. In the



top left corner of the fascia are play, stop, and pause buttons, and in the bottom left, a gold-plated headphone jack and volume control.

My eye was caught by the two copper-coloured screws on each side, attaching the upper panel to the chassis. The contrast with the black panel which they secure is striking, and slightly incongruous on the side, where they can so easily be seen.

The rear panel has three gold-plated phono jacks, for line out left and right, and digital out. There are also two standard, unplated jacks, for remote control when connected to a Marantz system. There is no facility for optical digital output.

SOUND QUALITY

The Marantz, after some of the other players in this test, simply leapt out through the speakers, being more open and dynamic. The problem was that the foibles of this player simply took longer to show themselves.

Tonally it was good, especially with the bass, which seemed much more expressive than most other players, and also more firm and meaty. Better all-round in fact.

The midband was a trifle gritty, but otherwise stable and capable of giving a

realistic portrayal of the music.

Moving up into the treble range, there was still good detail, with the notes cutting clear and clean through the air. That the treble did not become shrill, however, was mainly due to what seemed to be a roll-off at the very top, and with instances such as Eiji Kitamura's clarinet break on 'After you've gone' (Scott Hamilton Quintet in concert, CCD-4233) the clarinet was held back a little and failed to demonstrate its customary exuberance. Instead, the break seemed a trifle slow, floating out of the speakers, rather than ripping across the room.

The Marantz offered a more open stage than most of the players, although even this was much less well defined than most outboard DACs, with large orchestral arrangements especially, the positioning of instruments and smaller details was simply too fluid and mobile to be convincing.

The co-axial output stage of the Marantz, however, was probably one of the better ones tested here. It reduced the springiness of steel stringed guitar to an acceptable level over the analogue output stage. Bass lines were carried off well, although it had a vaguely mushy air when compared with some of the more solid transports. Overall, however, the digital output stage was clean and musical, without any interference being apparent.

CONCLUSION

The Marantz stood out as one of the better machines auditioned. Whether it would actually win the title is a matter of personal opinion, the Marantz offering a much more forward sound than the others here. Having no optical output on this player means its options as a transport are somewhat limited, but the performance through the coaxial link was good enough not to count against it.

Marantz CD - 52mkII £230
Marantz Hi-Fi UK Ltd.
Kingsbridge House,
Tadbury Oaks,
575 - 583 Bath Road,
Longfield,
Middx. UB7 0EH
Tel. 0753 680868

MEASURED PERFORMANCE

The Marantz CD-52mkII has a very similar response to that of the Denon. A slight lift at either frequency extreme will give it a solid, but lively sound, although perhaps not quite as bright as the Denon's.

The distortion plot taken with a -30dB input level to represent an average music signal shows a wide spread of distortion. Fortunately, the stronger harmonics are even order which tend to sound innocuous, but the reasonably high harmonics will lend some sharpness to the sound.

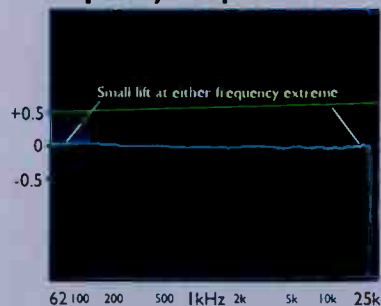
Elsewhere the Marantz measures adequately, although noise could have been a little lower and dynamic range a little higher.

One thing to watch for during a comparative demonstration is the slightly high output level of the CD-52. At just under 2.3V it will be audibly louder at any given volume position, giving it an advantage over competitors. **DB**

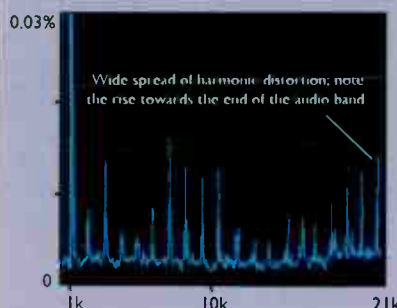
TEST RESULTS

Frequency response	2Hz-21kHz	
Distortion %		
-6dB	0.005	0.006
-30dB	0.028	0.026
-60dB	0.86	0.67
-90	27.7	29.6
-90dB dithered	16.7	9.6
Separation	left	right
1kHz	105	106
20kHz	85	87
Noise	-97dB	
with emphasis	-97dB	
Dynamic range	104dB	
Output	2.27V	

Frequency Response



Distortion



PHILIPS CD 950 £350

The look of this machine is rugged, with its rough matt black powder finish, yet it feels quite light in weight, as though something were missing. The fascia has a centrally positioned drawer, with power button and IR remote sensor to the left and open/close to the right. Above the drawer is a curved LED dot-matrix display and below, a bank of buttons. These include large buttons for the major functions-i.e. play, track skip, stop, pause, and search - situated in the centre, and small buttons for the program functions which are situated to either side.



Buttons to the left of the drawer are for program set, review, cancel, shuffle and scan.

To the right of the drawer lie buttons for track repeat, Favourite Track Selection memory, time format select for the display, and display on/off. This is positioned, redundantly, beneath a small red LED which glows to tell you when the display is unlit.

There's more; a gold-plated headphone jack and volume control to the left of the fascia.

The rear of the player is spartan by comparison, sporting only an optical output, and digital and analogue phono jacks. There are also two jacks for connection to a Philips remote control system.

SOUND QUALITY

The Philips had quite a dry tone, shifting over to thinness in the upper reaches. Resolution was not as good as I had expected, with almost all arrangements coming out with a slightly muddled, veiled air. The exception to this were small, simple arrangements, especially solo vocals, where the tonal quality gave voices an added solitude.

In the bass regions, the notes were

very slightly loose, like a sail; tied down at the corners, but bowed taut and billowing. To complete this impression, bass lines seemed to sail out rather than punch through the air.

Moving up into the midrange, the tonal quality became noticeably drier, with a saxophone and clarinet duet leaning a little too far towards a 'creak and squeak' performance without the usual breath and panache of the other players in this test.

Further up the scale, treble notes became thin and brassy, turning the aforementioned clarinettist's soaring exuberance into shrillness, and higher string and vocal passages were also noticeably compressed.

Compression was also audible on the soundstage, which seemed somewhat confused, but about average.

The reasons for this performance are, quite literally, all too visible. The display seems to cause quite a large quantity, but not all, of the problems

listed above. With this switched off, the performance seemed to become a little cleaner, clearer and neater, and although the very sharpest edges of the performance seemed to disappear, the 'display on/off' button was obviously no panacea.

The coaxial output gave quite a springy, bouncy sound, although the Philips' optical output was noticeably better, improving separation, clarity, and detail. Impressive.

CONCLUSION

Not perfect, but one heck of a long way from being bad. Like most players in this test, it crams as many features in as is humanly possible, and would probably perform a lot better without them, but then, of course, it wouldn't sell so well. It performs best as a simple transport without the display functions, but is well worth a listen on its own account.

Philips CD £350
Philips Consumer Electronics Ltd.
City House,
420 - 430 London Road,
Croydon,
Surrey, CR9 3QR
Tel. 081 689 2166

MEASURED PERFORMANCE

The Philips CD950 had reasonable distortion figures within the audio band which appeared to suggest a well engineered player, but as with other recent Philips players the out-of-band distortion looks quite nasty. You can see at the end of the -30dB plot how the distortion spikes are starting to rise strongly at higher frequencies.

The average distortion in the audio band results in a reasonable dynamic range of 106dB and noise is low at -111dB. The output is a touch high, Philips missing their own 2V standard by around 0.1V, but not enough to make level matching necessary during listening tests.

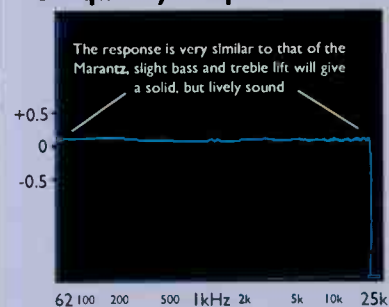
The response of the CD950 is flat with only a slight lift in the bass which will give the player a solid sound.

Within the audio band the CD950 measures well, but the strong rise in distortion out of band is a little worrying. **DB**

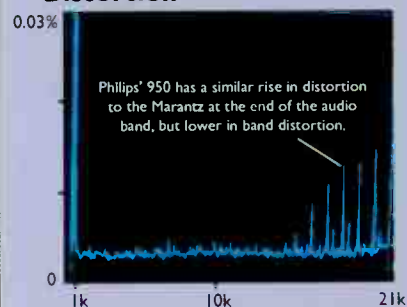
TEST RESULTS

Frequency response	2Hz-21kHz	
Distortion %		
-6dB	0.005	0.005
-30dB	0.013	0.013
-60dB	0.60	0.60
-90	31.7	33.0
-90dB dithered	3.2	3.5
Separation	left	right
1kHz	117	117
20kHz	109	114
Noise	-111dB	
with emphasis	-111dB	
Dynamic range	106dB	
Output	2.1V	

Frequency Response



Distortion



PIONEER PD-S802 £350

The Pioneer is slightly taller than the other players tested, and looks even bigger than it is, a property attributable to fascia styling. It felt good and solid in use, and the platter concept is unusually reassuring I felt.

The slightly curved disc drawer, with its small window, positioned so that you can see the disc turntable, fills the bottom centre of the player. This player employs Pioneer's own 'stable platter mechanism' to reduce disc vibration during play by coupling the disc to a relatively massive platter, in similar fashion to a record deck.

Above the drawer lies the display panel,



and to the left, a single rank of angled buttons. These are for power, display off, time display format, and repeat, as read from left to right. To the right of the drawer lies a double rank, the small buttons on top being for stop, backward search/skip, and forward search/skip. Below these are larger buttons for open/close, pause, and play. Further to the right of the fascia are two LEDs showing analogue and digital output status, and a small gold output selector button.

The rear panel contains plain phono jacks for analogue output left and right, digital coaxial out, and an optical output, as well as a small socket for dedicated operation with a Pioneer cassette deck.

SOUND QUALITY

The first impression of this player was one of the strong hammering of a bass drum line from the speakers. As soon as the music moved up into the midrange, however, it became clear that there was more to this player than meets the eye. Midband was quite heavily forward, and somewhat gritty, whilst also being less firm than the bass.

Moving up into the treble, the performance became noticeably clearer than lower in the range, but also

recessive, due to the treble roll-off.

This forwardness in the mid caused various problems when playing choral music. The difference between male and female solo vocal on one CD accentuated the difference in volume so much that in the quieter male part the Pioneer failed to resolve the information, and almost extinguished the vocals at one point.

Extinguishing notes were not just a failing of the interaction between male and female vocals; on Tom Waits' "Swordfishtrombones" album (IMCD 48), for instance, the glass harmonica opening the final track came across with a broken tone, since not all notes were delivered with the same scrupulousness by the Pioneer. Notes of similar tone and volume can be treated very differently by this player, one being delivered with force, and the next going virtually unnoticed.

Soundstaging was as variable as the tone, at best excellent, at others, well, an advertisement for outboard DACs.

Both the co-axial

and optical outputs on the Pioneer were quite impressive. The co-ax however, still conveyed a slightly muddled stage with a little interference noise apparent. The optical output, on the other hand, was devoid of even the smallest remnants of hiss, giving a nice, clean, upfront sound, with just a slight hint of muddle in the upper reaches.

CONCLUSION

The Pioneer is one of those difficult-to-classify players, which presents music completely differently to any other player around. If you can cope with putting the disc in 'wrong way up', you're probably half way to liking it. The 802 sounds the way it looks, having a very unusual and somewhat 'broken' or 'scattered' sound, but not one which was totally unappealing. It's also good as a transport.

Pioneer PD - S802 £350
Pioneer LDCE Ltd.
Pioneer House,
Hollybush Hill,
Stoke Poges,
Slough
Bucks. SL2 4QP
Tel. 0753 789789

MEASURED PERFORMANCE

There is normally very little difference between the measured performances of modern Japanese players, most are competent with no anomalies. The Pioneer is an exception. In every area apart from one, the PD-S801 was the best in the group.

Distortion was admirably low for a player in this price bracket which will give it a sweet, clean sound. At -30dB only a small amount of first and second harmonic distortion was evident. This low distortion goes hand in hand with a wide dynamic range of 112dB and low noise at -113dB. Output was a little high at 2.45V, so the volume will have to be reduced a little in the demo room to match its output to competitors.

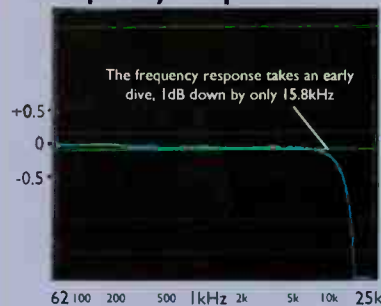
So where does the Pioneer slip up? Surprisingly, in its frequency response. This takes a strong dive from around 10kHz, is 1dB down by 15.8kHz and never actually makes it to 20kHz. As a result the Pioneer will sound soft and unaggressive, but dull.

To sum up the PD-S801 performs well in all areas, but its rounded response will be too dull for most. **DB**

TEST RESULTS

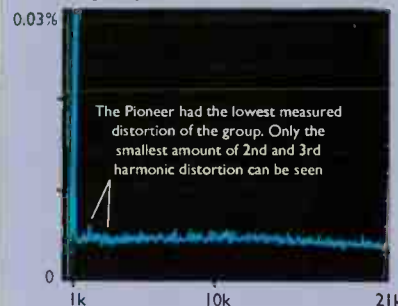
Frequency response	2Hz-15.8kHz	
Distortion %		
-6dB	0.006	0.006
-30dB	0.006	0.005
-60dB	0.32	0.32
-90	28.7	28.7
-90dB dithered		noise only
Separation	left	right
1kHz	120	125
20kHz	94	100
Noise		-113dB
with emphasis		-116dB
Dynamic range		112dB
Output		2.45V

Frequency Response



62 100 200 500 1kHz 2k 5k 10k 25k

Distortion



0 1k 10k 21k

YAMAHA CDX-870 £330

Yamaha seem, with this player, to have tried harder to make the ideal black-box than any of the other manufacturers. They have succeeded in making an acceptably solid machine as well though.

The CDX-870 isn't inspired or inspiring in style, but some visual interest is injected by the slightly curved front panel. An orange LED display sits above a swanky little roll-over panel which is far better engineered than Denon's video recorder style door which felt a little flimsy. To the far right of the fascia, next to the display, you will find the basic



control buttons for open/close, play/pause, and stop. A gold-plated headphone jack and volume control are provided just below these.

To return to the rolling panel: closed, it is simply a piece of black fascia. Press the bottom in, and it rotates to show two rows of small buttons. The upper row, left to right, orders program and tape functions for recording from disc including a 'space' function for inserting additional time between tracks when recording, index, program repeat, random, skip, and search. The lower row comprises an eleven digit numerical keypad, and time display mode.

The rear panel sports fixed and variable phono outputs, as well as coaxial, all gold-plated. There is also an optical output.

SOUND QUALITY

The Yamaha opened up with an easy, relaxed sound, and was quite obviously an undemanding player to partner.

The bass and lower midrange had a tendency to be rather loose, but not so much as to sound empty or hollow by any means. Especially in the bass regions the Yamaha resolved detail well, with the tone of the instruments being very

musical. Despite the slight looseness, it hammers out a drum bass line quite impressively, without letting it flap.

Up in the midrange, the relaxed attitude of the Yamaha began to show itself. This player had a little difficulty with driving guitar and drum rhythms, in that its portrayal of these was slightly too relaxed and short on brio. It didn't quite manage to relay the excitement of live rock recordings, although all of the details and tones seemed to be present, and it gave excellent coverage of even the fastest lyrics.

The upper mid, and especially the treble, had a tendency towards hardness, even glassiness at times. Steel guitar split the two aspects of the midband presentation quite neatly, being very open and relaxed at the bottom, but sliding upwards with little control apparent. Despite this hardness, top end notes seemed to retain all the required detail, with sustain and decay reproduced

impeccably.

Imagery and staging were both adequate, again supported by the resolution, although given this support, it could, perhaps, have been better.

The co-axial output of this player lent a shade more towards the bass and the optical towards the treble. All outputs were adequate however, being clean and clear all round.

CONCLUSION

A nice, uncluttered look and close adherence to the black-box ethos means that this player will appeal to a lot of people, and the sound is so relaxed and undemanding that it would be difficult to fault this player unless you are one of the warts-and-all hi-fi fraternity, or crave pace and excitement above all else. Adrenaline was obviously not part of the design brief on this player, but it gives an adequate, and above all else, relaxing performance.

Yamaha CDX - 870 £330
Yamaha Electronics UK Ltd.
Yamaha House,
200 Rickmansworth Road,
Watford,
Herts.
Tel. 0923 233166

MEASURED PERFORMANCE

Yamaha's CDX-870 measured best all round in this group test; only the Pioneer had lower distortion, but it had problems in other areas. The Yamaha's response rolls gently off at high frequencies which should, along with the low distortion, add up to a smooth sound. There's a small amount of bass lift that will give the bottom end some weight and solidity.

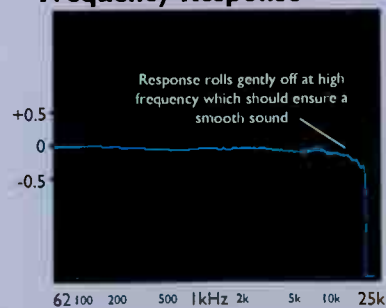
The distortion figures are quite reasonable for a £330 machine. The distortion plot taken from the worst channel at -30dB shows that the Yamaha has a wide spread of harmonic distortion, but none of the harmonics are particularly strong, so this could be a sweet sounding player. The other channel had lower distortion, but a similar spread of harmonics. The low distortion of the CDX-870 means that it has a reasonable dynamic range of 107.5dB.

Elsewhere, the CDX-870 measured well with no serious flaws and output was exactly 2.0V, so no level adjustment will be necessary in the demo room. **DB**

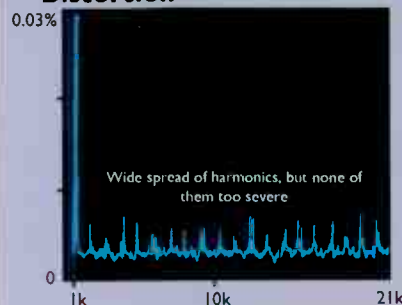
TEST RESULTS

Frequency response	2Hz-20.7kHz	
Distortion %		
-6dB	0.005	0.004
-30dB	0.006	0.025
-60dB	0.44	0.55
-90	31.0	34.2
-90dB dithered		noise only
Separation	left	right
1kHz	100	101
20kHz	74	75
Noise		-110dB
with emphasis		-110dB
Dynamic range		107.5dB
Output		2.0V

Frequency Response



Distortion



CONCLUSION

Let's start summarising with the two stylish centre-transport machines. They offer the same functions, with the £350 Philips which is slightly treble forward,



being a 'lifestyle product', designed mainly to accompany Philip's own systems, so the other centre drawer player, the £350 Pioneer, is the one which will suit most standard systems aesthetically, but it is also the oddball of the test.

The discs are loaded into the Pioneer playing-side up, onto a turntable, and this player sounded as unusual as its loading mechanism. On occasion it endeared itself to me with an almost mesmeric production of the music, and on others I just cringed away from what it was doing to my favourite tracks.

Having had mixed feelings about the Pioneer in the listening room, I understood how real the Pioneer's sound was when I sat just a few feet from the mouth of Scott Hamilton's sax one Sunday. Listening to the music and comparing it to memory, I realised that the Pioneer was presenting the raw atmosphere and splashy acoustic of a small jazz band better than any of the



other players, which were swamping the Hamilton CD with their tonality and evenness.

Sure, the usual hi-fi way of doing it

sounds prettier, but it's a long way from truth, so I've got to say it again: this is a real curate's egg of a machine, and the one that I'd say was essential to audition if you are buying in this price bracket. If you hate it, you've lost nothing by listening, but if you love it, probably no-one else would have recommended it.

There's also the Marantz, Denon and Yamaha players to be considered, and they follow the well-worn left-hand drive (or drawer) black-box

approach which has served so many designers so well. The £230 Marantz, visually and sonically, was by far the most unrefined of the players, showing up the price gap, but I also found the sound of it quite engrossing, having a rough and ready immediacy and charm which the more expensive players lost.

Both the £330 players, the Denon and, especially, the Yamaha are deliberately unobtrusive, and for that reason, conversely eye-catching. They both give a relaxed and informative sound, but can be faulted by those who prefer excitement in their music, which is where the Marantz scores over them.

So what's the outcome of this test? Well, for simple rankings of the players, the Denon and Yamaha players have to share the victor's podium, offering an easy and listenable description of the music, and the best

feel and finish of the batch.

Second place has to go jointly to the Marantz and the Philips, the Marantz giving a good all-round performance, but

without the feeling of the build quality and durability of the more expensive models. The Philips on the other hand, fell down because the finish and sound quality didn't quite equal that of other players, and is rather limited as to partnering equipment by its slightly unusual design.

Third place has to be awarded to the Pioneer, which, of course, is such a variable machine that it would be wrong to rank it any higher. I'm afraid you'll just have to try it for yourself.

The Marantz is here to test its mettle against the pricier machines, and unfortunately it didn't do so well. It's still an excellent £230 machine, but the extra £100 really tells in terms of build finish and smoothness of sound, and the Yamaha and Denon are definitely good players for the price, so the Marantz looks somewhat outclassed.

For the extra £100, you buy not only a better player, but a better sounding transport and coaxial output, as well as



the flexibility of an optical output. If you are looking for a player now that can be upgraded with a DAC in the future, it's worth paying the extra for the solidity and quality of the Yamaha or Denon, unless you feel that you really couldn't live with them in the meantime.

It is a pity that the Marantz's 'feet of clay' were so noticeable when compared to the Yamaha and Denon, although the main difference between them is really what kind of picture of the music you prefer, and personally I'd plump for the grit and raunch of the Marantz, rather than the accomplished roundness of the more expensive players.

So increasing the amount of money you spend doesn't guarantee you a better player. You have to get your hands on the product to feel the build of it and, most importantly, listen and work out whether you like its particular presentation before you buy. I hope our tests and views help you get the right one ●

Now we know what happened to the dinosaurs...



Aura

PERFORMANCE ART

VA100 EVOLUTION AMPLIFIER
CD50 COMPACT DISC PLAYER

Evolution

For details and stockists of the Aura range of hi-fi, 'phone B&W (UK Sales) on 0903-750750

World Radio History

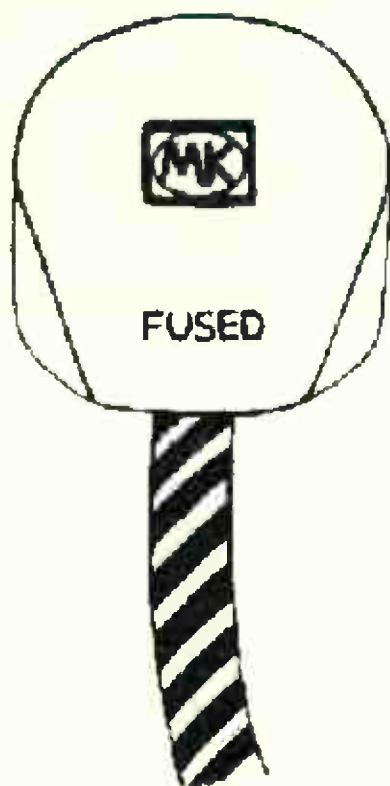
COURT & SPARK

**RHODIUM PLATED MK
MAINS PLUG FOR A
LONGER LASTING
CLEAN CONTACT
SUPERIOR THAN
GOLD RHODIUM WILL
LAST TEN TIMES
LONGER!!**

**13 Amp £10.75
15 Amp £12.75**

**Wall Socket
Single £18.75
Double £26.75**

(p+p included)



**TO ORDER SEND
CHEQUE/POSTAL
ORDER WITH NAME
AND ADDRESS MADE
PAYABLE TO:**

**T. WESTERMAN
41 GREVILLE STREET
HATTON GARDEN
LONDON EC1**

TEL. 071 - 242 2329



Francinstien
STEREO ENHANCEMENT SYSTEM

"Its a gentle elegant effect - and a very even one..... Nothing stands out unnecessarily..... One simply becomes more aware of the music."

Eric Braithwaite - Hi-Fi World

"CD's 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."

Andrew Cartmel - Hi-Fi Choice

"If you want an analogue pickup cartridge sound from your CD, then this equaliser - crossfeed does the trick."

Martin Colloms - Hi-Fi News

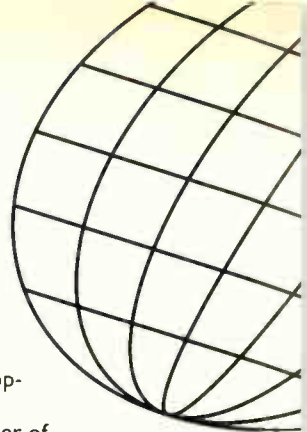
For further information contact:

**Select Systems Ltd., Hanworth Trading Estate, Hampton Road West, Feltham,
Middx TW13 6DH**

Tel: 081-893 8662 Fax: 081-893 4318



World



ARE DCC AND MD INFECTIOUS?

Certain readers and scribes seem to have contracted acute digital fever, a disease concocted in the laboratories of the giant consumer manufacturing corporations, and set loose into the world.

I am referring to the particularly nasty DCC and MiniDisc strains of the virus. In true "emperor's clothes" tradition, we seem determined not to acknowledge the devastating effects of the evil PASC and ATRAC systems being thrust upon us by companies whose only purpose for developing such nonsense can be their desire for even bigger monopolies in the software market: i.e. Polygram, CBS etc. It most certainly is not a desire for technical excellence, or fidelity to the original musical performance.

Has it not occurred to any of the "experts" what a backwards step this technology represents, in purposely limiting the amount of information captured from the real time performance? Who the heck are Philips/Matsushita and Sony, to dictate which portions of the original sound they think I should or should not hear?

Actually, I, like many others, have particularly sensitive ears,

which readily identify details concerning absolute or relative phase, the natural acoustic environment, and a realistic (or otherwise) timbre of known musical instruments. Imagine a symphony being played in a concert hall, or a magnificent organ in a cathedral, or a brass orientated jazz band in a night club. These are all musical experiences rich in harmonic and ambient detail. You simply cannot exclude massive chunks of aural information, on the basis of amplitude and frequency masking, and remain faithful to the original.

Since any professional musician, recording engineer, five year old, or Alsatian dog knows this, so when is the hi-fi fraternity going to wake up to the fact? Analogue die hards are still grieving for the lost wave forms that CD technology inflicted, but at least Compact Disc tries to capture the original, and some small, dedicated recording companies, employing heavy over-sampling and state of the art electronics, do indeed provide interesting results.

With DCC and MiniDisc, we are doomed to listen to a synthetic caricature of music, which can, by definition, never replicate the subtleties of music which has inspired generations. It is surely ironic that in the nineties, many people, myself

included, would rather listen to original recordings made in the forties, fifties and sixties, than that available via certain contemporary technologies.

**Julian Ashbourn
Berkhamsted,
Herts.**

The hi-fi fraternity and many experts (said without perjorative connotations) have expressed concern over the notion of throwing away music that Philips/Sony/Matsushita decide we can't hear.

To be quite fair though, I have attended carefully run listening tests (staged by Decca Studios, just up the road from us) that did show that PASC does a very good job. Also, I have spoken to Gerry Wiertz, the chief

development engineer of Digital Compact Cassette and PASC, many times and I believe he - and Philips - genuinely are trying to produce a system that doesn't significantly degrade music. We have all been very sceptical that so much can be thrown away without audible degradation, but it can.

However, having said all that, the simple bottom line is that neither DCC nor MD seek to improve sound quality. Read carefully and you'll see that this has never been claimed, especially after the Perfect Sound Forever promise from Philips which, in their view, did them a lot of harm (when in the company of Philips engineers, never

Letter of

I read with great interest M. Liers' letter 'What's in a valve'. My Counterpoint 3.A.12 needed new tubes so I 'phoned the importer who told me that it was not cost effective for him to supply them, so I decided to 'phone a few dealers to ask what's the best tube. Easy? You would think so. One London specialist tube shop told me to buy Groove Tubes as they were not microphonic! Rubbish! All valves are microphonic.

After several 'phone calls and more conflicting advice. I decided to 'phone a couple of valve amplifier manufacturers. Audion recommended Sovtek but I could not find them. Tube Technology not only gave me sound advice but they supplied me with a set of Golden Dragons for only £20 (Thanks, Phill).

Anyway, tube buyer beware, dealers talk a lot of bullshit about valves. Yes they do sound different, so come on Noel, give us a test on different brands.

**Robert P. Jeapes
London.**

P.S. The Golden Dragons sound great and has anyone tried Pearl valve coolers? P.P.S. Anyone who pays £14.99 for a CD is a mug. Barry Paul Records of Leather Lane, London EC1 charges £10.99 each or two for £20.

We've heard the differences too, but tests will have to wait until we have amplifiers that can run any particular type optimally under test. Otherwise we'd be listening to the sound of a valve under strain and whilst I'm not averse to torturing the odd transistor or two, I reckon it's safer to leave valves alone! Using our own amplifiers, we could well listen to ECC83s, 5881s, 300Bs, etc and I see no reason why this shouldn't come about.

I strongly suspect that the particular sound of a valve largely determines the overall character of a valve amplifier, all other things being equal; it's

WIN HI-FI WORLD SILVER PLATED COPPER INTERCONNECT CABLES

(1 metre pair)

The writer of the most interesting or funniest letter will receive a free set of Hi-Fi World's own silver plated copper interconnect cables, worth £69.95.



Send your letters to: Hi-Fi World Letters Page,



writes

mention 'Perfect Sound Forever', or 'Black Tulip' - dubbed by the UK Press Black Turnip).

Philips/Sony/Matsushita are in a race for the global cassette market and, in their view, sound quality plays a limited part in the appeal of such a medium. Small size/convenience are seen as most important, hence the perceived need for data compression. Sadly, the pro recording business wants it as well, to extend music storage capabilities.

One of the reasons I started speculating about the nature of future higher quality formats a few issues ago was to start the ball rolling on this subject. Current video disc systems could accept hours of FM modulated, or PCM

encoded music - both analogue formats. The great benefit of analogue, as we now all know, is that it avoids the unpleasant distortions of digital and - better - it can be continuously updated; digital cannot. Even if we choose a better digital system now - say 18-bit - there'll only be another upheaval in years to come when everybody wants something better (which they will!).

Why won't Philips/Sony/Matsushita produce a new, higher performance analogue system? The answer is both simple and prosaic - noise. In their view, hiss, clicks and pops would never be tolerated by today's CD-aware consumers. To avoid them means using error correction systems - and these demand digital coding.

And the reason Philips/Sony/Matsushita don't want to upgrade CD is because the marketing

people believe there's no money in this part of the market. I think there is, but they don't know how to make the right sort of product to attract it.

It could just be that with the new storage media becoming available (recordable CD or CD-E), or with true on-the-fly (real time) digital data compression/decompression, currently being talked about in the States, a variety of new formats may become available in the near future.

I am beginning to suspect that there might never again be a globally accepted, rigidly defined single system, like CD. Smaller, more imaginative companies prepared to cater for the true hi-fi market might well service this need in the future, since the big boys seem unable and unwilling to do so. Their priorities lie in mass production for global markets; they are simply not the right people to handle specialist manufacture any more. **NK**

TUTANKHAMUN'S TREASURES

I recently became a member of that largely low profile and secretive species, generically labelled "Competition Winners" (or, as the Anthropologists would have it "Freebious Ecstasious"). This was entirely due to the generosity (though other competition entrants might call it 'misjudgment') of the Hi-Fi World panel of judges.

Now, I am not a compulsive enterer of competitions, especially those that require a clever tie-break caption, and have never won anything before (though honesty demands that I admit to a winning the egg and spoon race at the Coronation Sports Day when I was a lad - and then only because I had to hold up my calf length navy-blue shorts and I was compelled to progress slowly and smoothly thus reaching the tape ahead of the more athletic competitors who had spent a good deal of the race chasing their papier-mache eggs around the course). I am, therefore, delighted that fate decided to deal me a decent hand when the prize was a pair

of Silver Night 300B amplifiers.

I have no recollection of what my response was on the telephone when I got the word, but I do remember afterwards performing a passable impression of an international footballer celebrating a hat-trick on his debut. This was, in retrospect, a little unfortunate given that I was at work at the time. Some days later a colleague approached with some trepidation (clearly the task had been delegated by an alarmed body of colleagues) and asked if I was feeling better as it was everyone's impression that I had been leaping about the workplace looking decidedly apoplectic and demanding that everyone share my joy in winning 'a pair of ants' in a competition.

It's a strange thing, but after the initial euphoria, I was beset by grave doubts. Could it have been a hoax. Nobody, except my wife (and she is surely too nice a person to play such a dastardly trick) knew about the competition.

Anyway, to cut a long story long, I am a very happy and grateful member of your vast readership. Our record collection has become a musical treasure. The only problem is, I have the impression that, like Howard Carter, I am glimpsing the treasures through a small hole and need a bigger hole (probably in my bank account) to really get amongst those treasures.

I shall end by offering my thanks to the magazine for substantially increasing my enjoyment of music.

**Peter Strickland
Burford,
Surrey.**

SETTLING THE SCORE

I have been compelled to put pen to paper over Richard Brice's recorded message in your August edition. Unless the listener has had some vocal/instrumental training, following a score is not as easy as Richard claims. For the non-musician, knowing that the music is in 3/4, meaning that you count 1,2,3 1,2,3... and that it sounds like a waltz is all well and good

Continued on page 45...

The Month

something that has been occupying my mind a lot whilst I've been developing K5881. It seems almost immune to component changes, but perhaps the anatomy of its circuits suggests it should be, unlike a solid state amplifier.

Let me explain. Between input and output there are just three capacitors and three resistors - and it's possible to get rid of the resistors! Solid state amps have myriads of passive components in the signal path. So valve amps are desperately minimalist, without trying.

Then there are just four active amplifying devices, the valves, plus a transformer, which if it is designed properly, is no great drawback, other than in cost and weight. A solid state amp has myriads of non-linear, distortion producing active devices hidden in every silicon chip, let alone the discrete ones on display. And the chips

have feedback around them, as well as the entire amplifier, so the differences between a valve amp and a transistor amp go very deep.

But with so little in it, of course, a valve amp will be sensitive to the characteristics of the valves in particular. K5881 is very stable in its character, even when output valves are randomly inserted and I believe the Russian Sovtek valves (from Billington Export, by the way) largely set the sound. This won't be so obvious on amps with poor output trannies, or poor components, but that's another story.

On the same front, the other day I asked our tranny manufacturer what length of wire he used in the mains transformer. "That's a new one - why do you want to know?" he asked suspiciously. "Cos I want you to cost it using solid silver wire" I said. The phone went dead. **NK**

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

Try me & save

**on budget, regular and esoteric
Hi-Fi, AV or Home Cinema Units**

SENSATIONAL PRICES GUARANTEED

**TRY ME & SEE LTD OFFERS A QUICK, CONVENIENT
AND COST-EFFECTIVE WAY OF PURCHASING HI-FI.**

Telephone or fax your order now!

Our promise to you is...

- ▶ ... to answer all calls promptly and provide the best price.
- ▶ ... to process orders efficiently and only take payment when goods are ready to be dispatched. (Payments by credit card are protected by the Credit Card Protection Act.)
- ▶ ... to provide insured delivery, anywhere in the U.K.
- ▶ ... that all products sold are brand new with full manufacturer's warranties; – extended warranties available.
- ▶ ... to provide the TMS warranty covering FREE collection and delivery.
- ▶ ... to supply budget, regular and esoteric equipment.
- ▶ ... to never supply discontinued lines, B-stock and grey imports.

Try Me & See Ltd is bound by the rules of the Mail Order Protection Scheme and abides by the Data Protection Act. We will always put our customers first and will 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

Harman Sun Shine

Harman Kardon let the sun shine on their LS 0300 loudspeakers.

Dominic Baker enjoys their brightness.

Harman's new LS 0300 loudspeakers look pretty conventional. They are two-way, reflex loaded, stand or bookshelf mounters, priced five pence below £200. With a black ash vinyl finish and a plain black grille, their appearance is hardly eye catching, but remove the covers and you will get a surprise. Beneath lies Audax's HT130F0 glass fibre bass/mid unit in all of its daffodil-yellow glory.

Glass fibre has the advantage of being very light, yet stiff, making it ideal for high performance drive units. Resting just above this colourful driver is a large soft fabric dome tweeter, also sourced from Audax.

Why did Harman choose to use Audax drivers? They have recently taken on the distributorship of these drive units, which are manufactured in France. The result is the first ever range of loudspeakers wearing the Harman/Kardon badge, designed in and aimed at the U.K. market. After a brief appearance at the Bristol hi-fi show in February they are now on sale.

I was expecting the LS 0300s to be a good, fast and crisp sounding little bookshelf

loudspeaker, so I got a bit of a surprise when I first listened to them. They produced a large, full bodied sound that would push outwards to fill all four corners of a room, not what you would expect for their size.

The LS 0300s have a firm but not particularly deep bass and have a tendency to thud rather than bounce along with abundant energy. I quickly found that they were best distanced by around 30-40cms from a rear wall; in this position they had the fastest and cleanest bass and steered away from sounding too soft and wooly. I also found that open frame stands such as HSB-1s helped a great deal with the bass: it became lighter,

but more tuneful with some spring in it.

On albums without any really low gut wrenching bass the Harmans followed bass lines well, pondering a little too long only when things became a little too complex or furious. However on tracks with low subsonics they fell behind, the low notes could have been coming from a

be sweet and free from any sharpness, but should also integrate well with the bass/mid driver. And indeed it does, the transition from fabric to fibre glass is performed very well with no obvious change in character audible. Although the treble was not hard or aggressive, it was a little too soft, almost dull in comparison to

some.

However it is very smooth and gives a good sense of space to the music.

On to The The's 'Dusk' album which is a maze of voices and complex instrumentation: the LS 0300s coped very well. They accurately followed Matt Johnson's voice from speaker to speaker and in and out of the soundstage while holding the rest of the performance together in a commanding manner.

Overall the new LS 0300s are sweet and open through the mid and top, and have good bass

kick, even if it is not that deep. They don't give quite as much insight into the music or are quite as fast and detailed as the Heybrook Quartets, but then again they are nearly half the price. Sitting on open stands around a foot and half from the rear wall though, they are a thoroughly involving and enjoyable performer.

**Harman Kardon Loudspeaker
LS 0300 £200**
Harman Audio UK Ltd.
Unit 1B
Mill Street,
Slough SL2 5DD
Tel. 0753 576911



different room they were so delayed.

The mid was altogether more pleasing. The lightweight glass fibre cones of the '0300s have a crisp and uncoloured sound only held back by a little boxiness from the cabinet. Although focus was not as sharply etched as, say the Heybrook Quartets, the mid was clean and detailed, relaying the harmonies on the Lemon Trees album 'Open Book' with breadth and atmosphere. The only minor complaint in this area being a slight coarseness in the upper mid and a tendency for any slight sibilance to be exaggerated.

The tweeter on the '0300s is a large soft fabric dome unit, so not only should it

MEASURED PERFORMANCE

Harman Kardon's first loudspeakers use a fibreglass coned Audax bass/mid unit and a large (38mm) fabric dome tweeter. The bass/mid unit we know quite well from the drive unit group test we did in the last supplement. Measured on an open baffle to look at the characteristics of the drive unit alone we noticed that it started to break up above 4kHz or so. Ideally this driver should be rolled off early and the tweeter brought down to fill in the gap. A large diameter tweeter will be able to reach further down making this possible, so it appears that Harman have put a lot of thought into this loudspeaker.

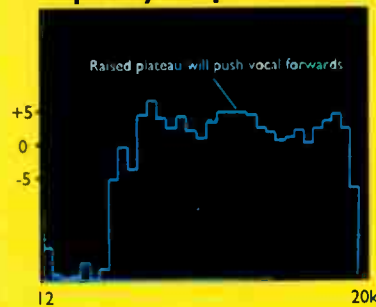
The response plot of the LS 0300s shows bass and treble peaks and a raised plateau centred around 1kHz. The upper peak is probably responsible for the exaggerated sibilance I experienced on some tracks, but at the same time it will add a little sparkle to the top end. The bass rise will give the '0300s a big and solid sound with good kick behind it. Whether by design, or by accident, the raised plateau around 1kHz followed by a shallow dip up to 8kHz will give the '0300s a very

pleasant sound. The rise in the mid will push vocals forwards and give the 'speaker good projection, while any nasties in the drivers will be suppressed, or at least not exaggerated, where the ear is most sensitive, around 6-7kHz.

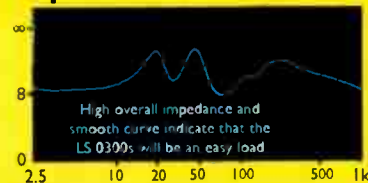
Even though the '0300s use lightweight glass fibre cones they only managed 87dB sensitivity at 1m for a nominal 1w input. This is above average and certainly good for their size; smaller loudspeakers usually trade off sensitivity against bass performance. The majority of the impedance curve sits above 8Ω which gives a high overall impedance of 12.9Ω. The curve itself is reasonably smooth and because it is above 8Ω the LS 0330s will not demand high current from the amplifier that they are partnered with.

Overall the Harman's first venture into loudspeakers has been a successful one. The '0330s are well engineered and use good, high quality drive units. A quality budget integrated amplifier rated at 30-40 watts or so should be more than capable of driving these loudspeakers. **DB**

Frequency Response



Impedance



LEGENDARY LOUDSPEAKERS

**Our very own band of adventurers go merrily a - roving in search of
Philips Legend Loudspeakers**

European countries - those on the other side of La Manche - insist that their loudspeakers must have accentuated bass and treble. But when two highly qualified and serious Philips loudspeaker engineers visited us some time ago from the Hasselt factory in Belgium, they said, "we have traditionally felt the need to add boosts to satisfy the European market, but now we are trying to make our speakers more like those from Britain". By this, he meant more accurate.

Philips' more expensive speakers are accurate, but the marketing department obviously had other ideas about the new Legends, for they have strong bass and treble peaks. At the £200 price point - £199.99 to be precise - they are quite serious in intent, even if their appearance in the company of a midi system in Philips literature suggests otherwise. Inevitably, they have subjective characteristics which make



them 'love 'em or hate 'em' products.

What struck me most about their presentation was the springiness with which they covered everything. It was not the happy, bouncy, feeling of a good-time rockin' box, but an artificial, almost plasticky, rebound from the bottom of the dynamic

range. These boxes will run a tight drum line on snares and similar drums, but for the really big guns, they just don't go low enough.

Most small boxes suffer this problem, but the Philips have a springboard quality to their dynamic floor, so that notes seem to rebound and quiver at the bottom end. The midband is tight and fast, but suffers from a mild quack with brass instruments, especially saxophone, which I find most irritating. At the top end, the notes tend towards the thin and shrill, and vocals, while treated well in the midband, are definitely unpleasant if you

listen to a lot of alto or soprano work. With instruments, tight drums come off best, bodhran and tabla being especially good, but all of the accompanying strings and brass on various CDs fared relatively poorly.

I had a surprise with the image

portrayed by these speakers, since their tone made me think that they should be shy and boxy. In fact they could produce a good soundstage with some amps, although this enhanced the 'spring' of the sound with the most successful case I found. A warmish amp, such as a Creek proved, for me, to be the best compromise, since the warmth cushioned their performance so that I could listen happily.

Having been shown the frequency response graphs which Noel had produced, I tried to improve the presentation by shifting the boxes around the room. With the speakers close to a rear wall, I found that the springboard on the bottom end changed to a drone, which did nothing for the speed or attack. At no time did I think that these speakers were particularly fast since, even with vocals, they had a tendency to smear when the pace became too much for them, and they are

far from vigorous in attack, the dissipation of the imagery diminishing this.

Moving the boxes further away from the wall only brought that bounce back with the sort of 'boing!' associated with the phrase "Time for bed, said Zebedee".

Noel suggested that I should try some acoustic damping (long haired wool) in the ports to improve performance. I did try this but found that, although it suppressed the bounce, it left the speakers with such a small amount of bass as to be not worth the trouble of listening.

It's a pity, I think, that I could not like these speakers more, since the design of them is somewhat out of the ordinary, and they are well built, to boot. The front panel is a solid chunk of stone-effect plastic, well and intricately moulded. It is an eye-catching design too, with a smooth transverse curve worked in, and an ovoid port around the tweeter giving it the

semblance of an eye looking back at you. Not to everyone's taste, but certainly different. That word describes these speakers through and through.

My problem with them, and it is purely a matter of personal opinion, is that they are designed to do everything which I like speakers not to do, but if you like a bouncy and bright presentation, these speakers are far from intrinsically poor and they might just suit.

Philips FB 720 Legends £199.99
Philips Consumer Electronics Ltd.
City House,
420 - 430 London Road,
Croydon,
Surrey,
CR9 3QR
Tel. 081 689 2166

MEASURED PERFORMANCE

Measurement showed the new Legends have strong bass and treble peaks. The tweeter peaks up by +3dB at 12kHz - quite enough to be audible. Down at the lower end of the frequency spectrum the bass peaks up by no less than +5dB at 125Hz, a degree of lift caused by strong bass resonance.

The treble peak will add brightness to the sound, a treble sting and emphasised sibilance. A bass peak results in one-note bass, and at 125Hz it isn't even deep bass with power behind it, so much as a rather obvious "boing, boing" sound. It's best to let final judgements rest upon perceived sound quality, but such peaks would certainly be audible and they will colour music; the Legend is not an accurate loudspeaker.

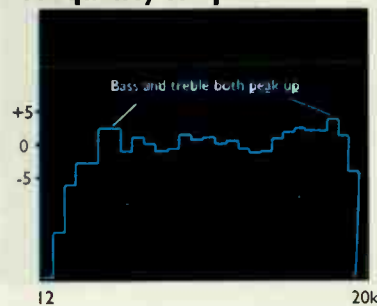
Curious about the engineering Philips might use in such a product, since they possess incredibly sophisticated research facilities, I 'reverse engineered' the Legends.

The basic components within its construction are of high quality. Ironically, stuffing the ports with fibrous cabinet damping material brought the bass peak right down, so this speaker works better as a sealed or 'infinite baffle' enclosure and Philips have not tuned it properly.

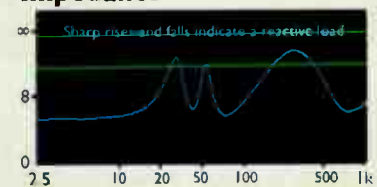
Rated at 6ohms nominal impedance by the IEC method which relates nominal to the minimum, we found Philips figure to be correct. However, overall impedance as an amplifier would see it measured 9Ω, which means that the speakers are an easy enough load. Producing 89.5dB of output for one watt input, the Legends are of high sensitivity, meaning they will go loud with few watts.

Philips' new Legend loudspeakers are built from good basic components, but they have been deliberately mistuned to produce a strongly tailored sound. As they stand, I doubt whether they would appeal to the majority of U.K. ears for they are inaccurate. **NK**

Frequency Response



Impedance



Tannoy Take II

Dominic Todd listens to Tannoy's new 607 II loudspeakers.

Not so long ago the £100 speaker market was absolutely cutthroat, with manufacturers having to make constant improvements for small profits. It now seems that at long last the press and retailers realise that good budget speakers do exist over £100.

An area where competition is still fierce, though, is at the crucial £200-£250 band. There is so much available at this price range that manufacturers have to move with the times if they ranges) but

the Sixes had unique styling. All speakers boosted hexagonal cabinets with plastic cappings top and bottom. Particularly eye-catching was the marble effect laminate top caps. The sixes also had some neat technical depending on model.

To answer some of the criticisms of the twenty-four mouths after the originals hit the shops. However, the changes represent more of a facelift than a complete revamp. All that's changed

ascetically is a change of finish for the top cap. Where it was once a distinctive marble effect, it's matured to a plain gloss black laminate. Look closer and you'll notice a gold anodised tweeter (although not as heavily anodised as say a Monitor Audio) and a new cone surround material. Internally the only change has been to use Tannoy OFC cable, although it looks pretty much like the old stuff to me. The eight inch moulded woofer, twin

rear ports, hard-wired crossover, internal bracing, "draw", bi-wiring pins and of course hexagonal cabinet remain as before.

The 607s should be stand mounted on stands of about 15 inches high. Tannoy make a dedicated stand which matches the hexagonal footprint of the speakers, but the pricing is a little steep at around £90.

However, other stand manufacturers, such as Apollo and Projekt, have spotted the niche and produce stands to fit the entire Six range at more reasonable prices. Because of the rear ports the Tannoys sounded best pulled at least a foot away from the wall and toed in towards the listener.

Unfortunately the sound doesn't quite live up to the looks. Speakers such as the Rogers LS2a2, Cyrus 780 and to a lesser extent B&W 610II's have taught us to expect more from a two hundred pound speaker than was once the case. Against competitors, the 607s have a number of sonic flaws. Despite the novel hexagonal cabinet the Tannoys don't image especially well. The sound tends to group around the speakers, causing confusion on more complex pieces of music. For a speaker of its size, bass extension was a little limited too. There certainly wasn't the quantity of bass that you'd get from the B&W 610s for example. To add salt to the wound, the bass wasn't terribly tuneful. On tracks such as, "Railroad work song" - The Notting Hill Billies, the

lower frequencies weren't particularly detailed, and a single bass note often prevailed. At higher volumes the bass cone could also become unstuck causing distortion. No doubt the small woofer magnet has something to do with this. Simpler vocal music proved to be the

sounded pleasant enough, with good refinement from stringed instruments. Yet the soundstage was never quite convincing, and reproduction of piano was at best hollow and insubstantial. Larger orchestral pieces were portrayed with decent scale, although muddle set in early,

as soon as the piece became in the slightest bit complex. Other sonic flaws manifested themselves with orchestral music. Brass sounded rather constricted, and despite being refined as with the strings, lacked a certain zest associated with the breed. Woodwind could also sound rather "chesty" and veiled, as though a blanket had been thrown over the speaker.

Incidentally, the speakers were bi-wired throughout the listening test. Without bi-wiring the sound simply became more confused, and there wasn't such good definition between the mid and top range.

There's no doubt that the 607s offer a lot of speaker for the money. What's more they are one of the best looking speakers in their price range, even putting some speakers costing three times as much to shame. Tannoy can also be congratulated on their consistently high levels of build quality, and attention to detail unusual at this price. It's therefore a pity that the 607s don't live up to expectations sonically. They are easy enough to live with and won't provide serious compatibility problems, but against class leaders, and even cheaper models in the Six range, they are left trailing. The problem seems to be a prevailing blandness which sucks the life out of all types of music. It would appear that in Tannoy's quest for refinement, all the qualities that made the Planet range so good have been engineered out of the speaker ●



607s saving grace. The smooth treble characteristics, free from notable sibilance and graininess, combined reasonably seamlessly with the mid-range to provide a relaxed and easy going sound. But, the sound did tend to be rather two dimensional and could also smooth over detail which would be picked up by some speakers costing half as much.

The same was still very much the case with Classical music. Simpler Quartets

MEASURED PERFORMANCE

The new Tannoy 607IIs look identical to the mark Is. They share the same bass units and the unusual hexagonal box, but a new tweeter has been inserted along with a revised crossover.

The frequency response of the 607IIs is rather a ragged one. From the bass up to around 1.5kHz the response is very flat, but shortly after it takes a dive. This crevasse in the response is centred around 2.5-3kHz which suggests that there may be a problem where the tweeter meets the large polypropylene bass/mid unit. Again, further up the response there is another dip, this time less severe and luckily between 6-8kHz where the ear is most sensitive and any nasties need to be suppressed. However,

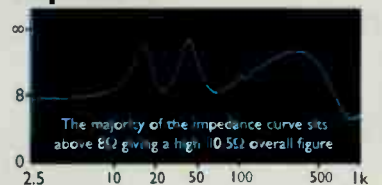
these chunks taken out of the high frequency response of the 607IIs don't leave much behind. And in addition the treble level is a touch below the rest of the response as it is, so I would expect a thin and slightly dull treble.

The 607IIs are quite sensitive, pumping out 88dB at 1m for a nominal 1w input, so they will go louder than most for the same position on the volume control. The majority of the impedance curve sits above 8Ω which gives an overall figure of 10.5Ω. The high impedance means that the 607IIs will not need much current to drive them. This combined with the above average sensitivity makes them an easy amplifier load, so transistor integrated amps of around 30watts should be fine. **DB**

Frequency Response



Impedance



providing that the music does sound like a waltz. Unfortunately, there are many pieces, such as Dukas' "Sorcerer's Apprentice", which you count in three that do not remotely sound like a waltz! Mr Average would need more than a theory book to read this score.

Score reading is made easier if the listener can aurally recognise instruments playing at any given time. They can then relate sounds to notes written on manuscript. However, I am sure that most non-musicians would struggle to tell the difference between the sound of a bassoon and french horn. Listeners to modern rock and pop music simply don't stand a chance. These scores are only an approximation of the recording. Most do not even split the music into the component instrumental parts. Any of the subtle detail the listener would hope to find via the score, has simply been edited out as an irrelevance!

I have taken the liberty of including some advice to someone attempting to follow a score for the first time.

1. Choose a slow movement of a conventionally notated string quartet as a starting point. Each instrument normally has a part independent of each other so should be relatively easy to follow.

2. Find out what rests look like and highlight long ones on the score. It is far easier to hear when an instrument is not playing than trying to follow one that is. You can then use rests as a reference point should you get lost.

3. Choose a theory book that explains words in a clear and concise manner.

4. Do not get discouraged if you initially find it hard.

You could gain a great deal of self satisfaction from successfully score reading. However, I know of an instant upgrade to any hi-fi, from a Dansette to an Ongaku based system, that doesn't involve reading music. Simply shut the curtains, switch off the light, switch on the hi-fi and close your eyes. You will suddenly be engulfed in a wealth of detail that you had never previously heard.

**Andy Plank
Fleetwood,
Lancs.**

That score reading is solely the province of musicians is the belief I had hoped to dispel in my original Recorded Message. I'm saddened that you are so

keen to sow the fast-germinating seeds of doubt in reader's minds that the opposite is the case. You obviously agree that score reading is indeed a worthwhile practice and perhaps you are concerned that I gave the impression that it was easy in my article. I hadn't intended to trivialise the task of following a score only to demonstrate that it is not impossibly difficult. However your comment concerning rock music is well taken. No musical snobbery was meant and I should have made the point that score-following is a useless "upgrade" to the solely rock-music listener.

As for your "shut out the light" upgrade, I have to say I totally disagree. The point I hoped to make was that most

with the new (to them) technology of valves may be more than a little confused.

Under normal operating conditions, the input signal to a valve is applied between the control grid (g1) and cathode and, for audio signals, virtually no grid current flows. So the basic operation of a valve as an amplifier is simply that a changing voltage on g1 produces a corresponding change in anode current. This relationship is defined by the 'mutual conductance' (or simply the 'slope') of the valve and has the units mA/V and the symbol gm.

It is important to realise that, when talking about valve characteristics, a valve does not produce an output voltage, only a change in anode current. To turn this current change into a



Valve advice: Mike Grieve writes

of us with busy lives and demanding careers find it difficult to concentrate on listening to music. If I turn the lights out when listening to music on a weekday evening, one of two things happens; 1) I start thinking about some aspect of my work, 2) I fall asleep. Following a score helps me overcome my brain's tendency towards worry and unconsciousness! I'm sure I'm not alone in this.

I disagree too that the use of graphic scores (for instance of Bussotti) will present problems for the untutored, indeed a lack of preconceptions may help. Certainly (as a musician) I find them incomprehensible! **RB**

VALVE BASICS

Please may I pick up a point in Martin Billington's response to a reader's letter on page 39 of your August 1993 issue, where he refers to the 'current gain' and 'voltage gain' of valves. Unfortunately, these two concepts - as applied to valves - are meaningless and readers who are trying to get to grips

voltage change, an anode load is typically used and this can include a resistance, a choke, a transformer primary or even another valve. Thus a valve cannot have a current gain and can only have a voltage gain when in a given circuit.

So far as valve matching is concerned, the way we used to do it 'in the old days' was to select two valves which had well-matched anode currents with given voltages on the control grid and anode (and screen grid if a tetrode or a pentode). For an ECC88 triode, for example, with 250V on the anode and -1.25V on the control grid, we would be looking for an anode current of about 12.5mA and this (we reckoned) also ensured the slope was about right for most purposes. If we could find two EC88s, each giving about 12.5mA, then these gave us our matched pair. In the same way, a double triode could be selected where both triode sections were matched.

**Mike Grieve
Lorton,
Cumbria.**

SPELLING AND PUNCTUATION

My boyfriend regularly groans at basic spelling and punctuation mistakes in Hi-Fi magazines. Although he admits that yours is one of the better ones, he did let out a plaintive howl at the inexplicable use of an apostrophe in the caption "Personal Stereo's for Summer" (p. 65 July edition). He also noted (crossly) that the "Complete Audio Visual System" advertised as the prize for the competition did not, for some bizarre reason, actually go so far as to include a television set - which is why we did not enter it, since we don't already have one.

PLEASE save me from yet another ear bashing by being a bit more accurate in future. Alternatively, send me a television and I'll trade in the boyfriend!

**Miss S. Leitch
Southampton.**

It annoys your boyfriend - how do you think we feel? After reading the 53,000 words or so, every issue, three or four times over looking for mistakes, be they spelling or punctuation, but mostly 'mechanicals' like typing transpositions, we still manage to miss the occasional obvious error. Being a small, independent magazine, three editorial staff write, commission, plan, sub, edit, etc every article you read. Trying to sub edit a complicated article while the phones, doorbell and fax machine simultaneously squeal is not easy and can become very frustrating.

When you are at home relaxing and flicking through the pages of Hi-Fi World it is all too easy to spot errors. We do it ourselves. I see articles in the magazine when they return from the printers with mistakes that we all missed several times over during the rush imposed by tight schedules.

And bear in mind that we are also very concerned to ensure the validity of our content as well, which embraces the technology, measurements and subjective quality of what we review, as much as the mechanical correctness of the typography. It would be little use achieving perfect English if what we were saying was rubbish.

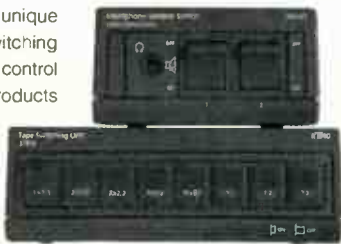
Finally we did not include a television in the Audio Visual Competition Prize for two reasons;

1. we only offer prizes that we have reviewed and liked and,
2. neither Kenwood or

Continued on page 47...

SOLUTIONS

A 50 unique switching and control products



B Remote control Multiroom systems



C Award Winning Loudspeaker and interconnect cables



D Digital Processing & Amplification Products



Please send me your new 32 page catalogue. I am interested in the following Products

 I enclose a 1st class stamp

NAME: _____

ADDRESS: _____

POSTCODE _____

QED

QED AUDIO PRODUCTS LTD, RIDGEWAY HOUSE, RIDGEWAY CLOSE, LIGHTWATER, SURREY. GU18 5XU, ENGLAND

Pyramid AUDIO

Illustrated is our new *Qantara Stand*. It features our unique rigid composite in a central column with a heavy steel base and provides the best support for your loudspeakers at £125/pair.



Also available is our new *Iras Stand* with a robust fillable central column and generous top and bottom plates. A more economical solution at £69/pair.

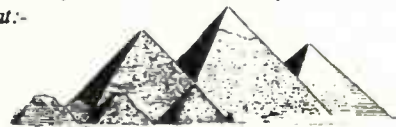
Both Stands are available in 18", 21" and 24" heights with a variety of top plate sizes. (please specify when ordering)

Our new *Akasa isolation platform* provides essential environmental isolation for cds, amps, etc., by using our unique composite as a top-plate with an internal suspension. Dimensions are 18"x13"x2". Please specify cdlamp weight when ordering. Price per unit is £99. A rigid support table (3" high) is available to raise the platforms above floor level for power amps at £45 each.

All products are finished in black gloss with other colours available on request at a £10 supplement.

All our products are available mail order only and prices include insured delivery in U.K. We offer a full 14 day trial with a money back guarantee.

For further information and orders please contact Pyramid Audio at:-



UNIT 2, CEDARHURST INDUSTRIAL ESTATE, NEWTOWNREDA BT8 4RH.
 TEL 02321 641870 FAX 02321 644870

Peerless CC FORCE

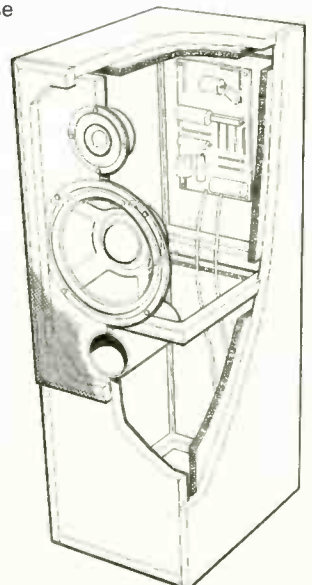


Wilmslow Audio's NEW range of speaker kits from Peerless.

This new range of four kits utilise CC technology drive units for optimum performance.

The kit contains all the cabinet components (accurately machined from smooth MDF for easy assembly).

Pictured here the *Force 6*, a large floor standing design.



Dimensions: 800 x 275 x 335 mm
 Response: 32 HZ-20 KHZ
 AMP Suitability: 30-120w
 Impedence: 8 ohms

Price	carr./ins.	
Force 2	£167	£15 pr.
Force 4	£190	£15 pr.
Force 6	£210	£18 pr.
Force 8	£265	£18 pr.

All kits are available in Plus and Basic forms.

Wilmslow Audio

Wellington Close,
 Parkgate Trading Estate
 Knutsford, Cheshire
 WA16 8DX
 Tel: (0565) 650605
 Fax: (0565) 650080



Telephone credit card orders welcome



...continued from page 45

Celestion manufacture televisions so one was not available.

If you had entered and won the competition you could have hired a TV for around £15 a month, surely good value for a full AV system. **DB**

STATESIDE SUBSCRIBES

Congratulations on your second year! I've just finished reading through the nostalgia of Mr. Keywood's musings regarding the dawn of your excellent magazine.

It was sometime in August of 1991 when I visited Britain for the first time. As soon as I got off the plane at Gatwick I checked out the news stands for Hi-Fi mags. After going through the "mainstream" British publications I noticed this obscure rag called Hi-Fi World. Going through the pages, I quickly realized your open minded approach and recognition of the joys and virtues of listening through thermionic devices and vintage gear.

The first opportunity I had to go around London, I searched for the subway line that would take me to Maida Vale. I almost got lost because your place was really at an obscure corner. Anyway Alan Sircom greeted me at the door and I inquired about the availability of back issues. I purchased all that was available and Akila signed me for a subscription. I did have trouble getting issues in Manila, but I eagerly awaited each issue.

The first thing I did after getting out of JFK airport last October was to have my latest issue of Hi-Fi World. I also would like your readers to be aware of a new publication here in the United States called Sound Practices. It offers fresh "new-old" insights on horns, single-ended triode operation, DIY and experimentation is highly encouraged. Highly recommended reading for valve and vintage audio lovers. Further information can be obtained through this address.

Sound Practices
Joe Roberts, editor
Box 19302
Alexandria, VA
USA 22320

Thank you for your attention! By the way soon, I will be signed up for a US subscription.

Joseph Esmilla
MD,
USA.

THE FUTURE OF DIGITAL

Having recently read Noel

Keywood's Kaleidoscope article on the future of digital audio and Philip's announcement that eighteen-bit coding is to be introduced to DCC, it would seem that now is an appropriate time to investigate further these new developments, possibly by means of an article.

I have a number of questions concerning improved digital specifications, especially in relation to compact disc. Firstly, is 24-bit coding ideal and are there any real benefits to be gained by increasing the sampling frequency to 120kHz? I understand CD has several channels, one for audio and at least another for video encoding, so would it be possible to use both channels for storing first audio code thereby offering the opportunity for an improved format without having to wait for developments in 'blue laser' technology?

Furthermore, can existing domestic digital / analogue converters handle higher bit and sampling rates? I understand that 18 and 20 bit systems already exist in the professional area of recording.

As an example, having already been very impressed with the Pink Triangle Da Capo at the recent Bristol Hi-Fi show, I am left wondering whether it is capable of receiving a potential 24 bit 120kHz digital signal if fitted with an appropriate filter and delta-sigma chip?

The overall question is therefore what technological



Pink Triangle's Da Capo - ready for 24 bit?

hurdles have to be overcome to make these ideas a reality, if they are not feasible at the moment?

I would also like to add to the format debate that we can no longer think in terms of just Hi-Fi but also video and computers as these are now very much part of the 'home entertainment' industry which was not the case fifteen years ago, and so a new format has much greater competition. This is now reflected in the main retail 'record' shops.

Robert W. Fraser
London.

TONY GRIFFITHS REPLIES

Is 24Bit Coding Ideal?

In a linear system properly instrumented, the number of bits relate to the signal to noise ratio that is achievable. Since 24 bits give a range greater than the audible dynamic range in a good listening situation, it is doubtful that any benefit for the listener is gained by coding to such a great accuracy even if it were possible. Once the noise is inaudible making it even quieter seems to offer no benefit. For the professional, an increased electrical performance is useful for post production reasons so that the eventual programme has a high specification and therefore the initial coding required depends on the process from recording to listener.

Increase sampling to 120kHz?

The performance of an A/D convertor is limited by component and design performance. If a design is used to extend the frequency response upwards then penalties will be paid in some other area such as signal to noise ratio. Spending effort on reproducing inaudible components at the expense of performance over the audible range does not seem a sensible way to optimise A/D conversion.

Even if there were evidence that higher frequencies were

needed (and I don't believe that at present) the penalty paid for what could only be the very smallest benefit

would be very considerable to the performance in the audible range.

The CD

The CD does not have a video channel. There is a low rate data capability which can provide graphics etc. but the capacity available is insignificant compared to what is required for digital audio. Any change to the present 16 bit standard would really require a fresh approach and almost certainly a different disc standard. 16 bit

performance including noise shaped dither gives a S/N ratio at the limit of what is audible and therefore there would seem no need for such an "improved" standard.

**Tony Griffiths
General Manager,
Decca Recording Centre.**

Some of the assumptions upon which coding systems are devised are misleadingly in my view. Look at the reasoning behind 16-bit. It offers, in theory, 96dB dynamic range, which seems more than enough. But there are problems here. A 16-bit digital signal - 60dB down is, for hi-fi purposes, intolerably distorted, suffering 1% or so of extremely coarse sounding digital distortion. It's commonly said that the distortion is, in this case, -40dB below the signal, or at -100dB, and it is therefore inaudible - but it isn't! It matters not that the distortion itself is low, only that the signal sounds distorted - which it palpably does.

So in practice, a 16-bit system has around 60dB useable range, which is simply not enough. In our listening room, which has 45dB background noise (Central London) we can hit 110dB peaks, meaning a clean 65dB minimum is needed; others will need more.

Matters become even more fraught when recording, because introducing headroom for peaks reduces the range even more - to 50dB or so. When making voice tapes for radio not long ago I had to abandon DAT and go to cassette (Nakamichi ZX-9 with metal tape) because the analogue system was so much better. It had less hiss and a clearer sound.

It is agreed amongst hi-fi engineers with experience in digital audio that 16-bit, all that 1970s technology was capable of, is inadequate for high quality music reproduction. We need an 18, or to be safe, 20 bit system to get enough dynamic range - and we also need a higher sampling rate to be able to use less critical filters above 20kHz; a 60-80kHz rate should be enough.

Noise will not become more audible, because whilst a wideband noise measuring instrument will read a higher voltage, the human ear will not discern it, hearing mainly that level which exists around 7kHz. It will, however, hear other problems associated with high order filtering at 21kHz. **NK**

NUMBERS ALWAYS 'IN STOCK'

The best hi-fi Dealers know when they're on to a good thing. Get on to a good thing too by quoting these award winning numbers on your next hi-fi shopping spree.

AT-110E

← MOVING MAGNET →



AT-0C5_{MC}

← MOVING COIL →



AT-95E

← MOVING MAGNET →



ATH-L1a

HEADPHONES



Available at Good Hi-Fi Stores **ONLY**



audio-technica
INNOVATION PRECISION INTEGRITY

ATC-003

CAMBRIDGE HI-FI LTD

**NATIONAL HI-FI
DEALER OF THE
YEAR - 1987/88**

1 -3 HAWTHORN WAY,
CAMBRIDGE
CB4 1AT.

TEL. 0223 67773,
FAX. 0223 353741

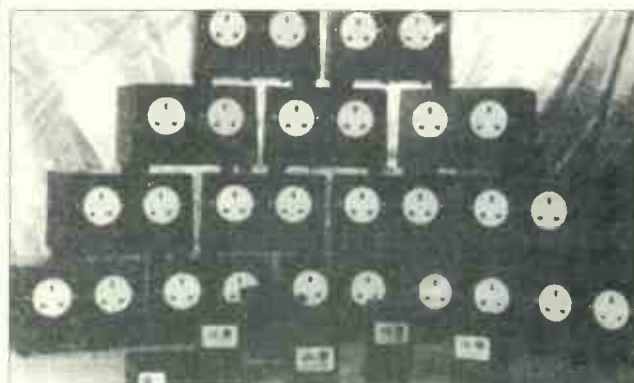
BOSE, KEF,
PIONEER,
MARANTZ,
KEYWOOD, B&W,
TECHNICS,
JAMO, MOR-
DAUNT SHORT,
YAMAHA

*AV Prologic
Separates &
Systems
40" Pioneer
projection screen
on AV Demo*

**WIDE RANGE OF
LASER DISC
SOFTWARE
LATEST
AMERICAN &
BRITISH TITLES**

**1/2 PRICE LASER
DISC PROMOTION
NOW ON**

LYNWOOD MAINS CONDITIONER



Price:-	Source	£295.00
	Basic	£49.95
	Advanced	£149.95
	Mega	£275.00
	Rack	£345.00

For further information and dealer list send
SAE to:

LYNWOOD ELECTRONICS
Coley Lane Farm
Wentworth
Rotherham
South Yorkshire

PROGRESSIVE AUDIO



Micromega CD Players, transports and converters now on demonstration. The Solo and Duo combinations offer contrast to our existing CD range both in styling and sound.

The best of Digital and Analogue all under one roof — why not pop along for a listen.

To arrange a demonstration call Dave on Medway (Kent)
0634 389004.

CD Players By Sonographe, Meridian, Stax and Marantz.

Turntables by Systemdek, Pink, Michell, Alphason, Voyd, VPI and Basis.

Amplification by Conrad Johnson, Sonographe, Mark Levinson, Audio Innovations, Ray Lumley, Convergent, Audio Technology, Chord, BB Audio, Oakley, Rose, Moth, Sudgen, Kelvin, Marantz (PM405), Inca-Tech Designs, and Alphason, Tube Technology.

Arms by SME, Eminent Technology, Graham, Kuzma, Helius and Rega.

Cartridges by Audio Technica, Koetsu, Kiseki, LYRA, Micro Benz, Decca and Goldring.

Speakers by ProAc, Acoustat, Sound LAB, Dahlquist, Ruark, TDL, Audionote (Snell), Townshend, Diamond Acoustics, JPW and Spica.

Headphones by Stax.

Cables by Qed, Supra, Straightwire, Kimber Audionote, Vecteur and Cogan Hall.

Stands by Target, Koudos Foundation and Huygans.

Home Demonstrations a pleasure



Goldring Elektra

Noel Keywood assesses Goldring's latest offering, the £24.99 'Elektra' budget cartridge

The Elektra sits unflashily at the bottom end of Goldring's range, something of an odd man out. Goldring these days have a superb range of cartridges made at their own factory at Bury St Edmunds, England. I was surprised to see that the budget Elektra is made in Japan and no attempt has been made to harmonise its appearance with the models above it.

Whereas the well performing 1000 Series range of cartridges have a snout-like black Potan body into which slides a stylus assembly, the Elektra comes with a square, bright finish aluminium body and a red stylus carrier. It looks pretty standard and workmanlike as budget cartridges go, which in truth it is.

The Elektra tracks at Goldring's preferred downforce of 1.7gms. Consequently, it will suit budget tonearms, since there's enough downforce to counteract sticky or erratic arm bearings. Compliance has been kept low, which allows the unit to cope with warped records, even in a heavy arm. So Goldring have made this unit sturdy to cope with difficult conditions. It will match heavy arms, cope with stiff-ish arm bearings and ride warped records.

To help high frequency tracking, the

stylus has not been mounted on a rondel. The trade off is that there will be greater sensitivity to dust and fluff, the Elektra won't plough through depths of grunge, even though it's durable in other important areas. For the low-ish compliance used tracking force could well be higher, but Goldring have fitted an elliptical stylus and this imposes an upper limit of 2g maximum.

I mounted the Elektra in a Rega RB300 arm, working on a He-Proof TT2 turntable. It was no trouble to fit, being absolutely standard in dimensions and weight. It has a soft-ish presentation on vocals, with a certain amount of 'fuzziness' around the image, as it were, due to the upper mid-range droop and the stylus. There wasn't great insight in the treble regions, but not did it spit on solans. I found the closely tracked and normally loose acoustic guitar strings and details on Teaser and the Precat were smoothed over, which was disappointing. But this is a budget cartridge and loss of treble detail, due to poor tip profiling, is only to be expected to some degree. The loss on my sample was quite great; this cartridge does not possess much weight into a performance.

Lower down in the audio range the

Elektra gave tight, bouncy bass that fairly sped along. It doesn't willow, or sound soft and flabby. There was plenty of attack with drums; the powerful accompaniment John Bonham (you can tell I was trawling through my oldies) contributed to Led Zep. was very well conveyed by the Elektra. It isn't uncommon for cartridges to smother over low frequency dynamics, but not this one. It does not, however, seem to reproduce really deep bass.

I heard the occasional shakiness and coarseness on peaks, as the Elektra became unsettled and started to mistrack a little, but it wasn't too often. As expected, it was drums and low frequency events that unsettled it. A little more tracking force wouldn't go amiss with its low compliance, 2g might well be a little better.

The Elektra is a competent budget cartridge free from obvious weaknesses. It doesn't offer much insight, but it does avoid all sorts of other problems associated with the breed, such as treble coarseness and screech, poor tracking and sloppy bass. It's a good buy for anyone wanting an inexpensive cartridge to keep their record deck revolving and those old LPs in use. ●

MEASURED PERFORMANCE

Traditionally budget cartridges like the Elektra have been equipped with a diamond stylus bonded to a small shank, known as a rondel. It helps prevent the stylus becoming clogged with fluff, but adversely affects tracking at high frequencies by adding mass at the stylus tip. Although the Elektra is simple and sourced from Japan, doubtless for low cost, it has a 'nude' diamond tip, one without a rondel. Tracking was good in the midband as a result, 20cms/sec being cleared with just a murmur; even top cartridges rarely get past 23cms/sec or so. Down at low frequencies low-ish compliance in the stylus cantilever hinge made its presence known by limiting tracking ability a little, at least when compared to the best. All the same, the Elektra showed it could stay in the groove well, even under arduous conditions, tracking at its recommended down force of 1.7gms.

Low-ish compliance put arm resonance in a Rega RB300 right up at 15Hz, meaning the cartridge rides warp well. Our frequency response plot shows this phenomenon as a

peak at far left of the trace. Generator losses start to take effect above 2kHz, as usual with moving magnet cartridges, as coil impedance approaches load impedance (47k). The usual upper midrange droop results, in this case measuring a not-too-great -1.5dB up around 8kHz. Tip mass resonance at 16kHz or so brings treble up in a peak, visible at far right in the response analysis. All this should result in the usual slightly warm sound so many cartridges give, with some slight treble sharpness.

The good square wave response of the cartridge further confirms flat frequency response, as well as showing good cantilever hinge damping and transient control.

A high vertical tracking angle of 26degrees (quoted by Goldring and confirmed by our measurements) results in a second harmonic distortion content of 3% on vertical modulation, but laterally the figure was a low 0.65%, again second harmonic. As cartridges go, these are respectable figures.

Output was a healthy 6mV at 5cms/sec rms, the channels being well balanced. **NK**

TEST RESULTS

Frequency response	20Hz-20kHz
Separation	22dB
Distortion	1.8%
Output	6mV
Tracking	
400Hz lat./vert.	63µm/45µm
1kHz	18cms/sec
Vert. Tracking Angle	26degs.
Tracking force	1.7g
Weight	4.2g

Frequency Response



RADIANT RADFORD

Dominic Baker warms to the sight and sound of a glowing vintage valve amplifier, the Radford STA15.

Vintage equipment is normally regarded as the realm of hi-fi boffs who hang around second hand junk shops in their duffle coats looking for anything with valves in it. The image may not be inaccurate, but they aren't as daft as they look. Whilst so many are paying large sums of money for the latest killer transistor amplifier, they are paying thirty quid for a dusty old valve amp that offers a musical and enjoyable sound.

One they aren't likely to encounter though is the Radford STA15. It remains a sought after rarity, unlikely to pop up in any car boot or jumble sale. This workmanlike-looking amplifier was the result of a basic circuit which Arthur Radford designed to give the lowest distortion possible with feedback disconnected.

Even though it was designed for low distortion Radford decided to reduce distortion further. The more feedback applied, the lower the distortion becomes in an amplifier, but the tendency for the amplifier to oscillate increases, so Radford applied as much feedback as possible whilst retaining a good margin of stability. The result was a stable, low distortion, high quality circuit which Radford used as the basic building block for a range of amplifiers.

In 1965 Radford had a range of four

valve power amplifiers, all of which used this same basic circuit configuration. The circuit used an EF86 high gain pentode for the input stage followed by a 6U8 pentode/triode used as a phase splitter and driver for the two EL34 push-pull output tubes. This stable and rugged circuit

that GT Audio have bright chrome plated the two top plates that the valves stand on (the originals were dull zinc or cadmium) and replaced the phono sockets with high grade gold plated alternatives.

These small modifications enhance the visual appeal of the amplifier, but do not affect its performance. However, remove the bottom plate and you will reveal hours of careful restoration work. To say that it looks as good as new would be an understatement, any

components that had drifted out of tolerance have been replaced with top quality military spec.

alternatives and the coupling capacitors replaced with modern polypropylene types. All of the internal wiring has been replaced and meticulously re-routed. The restored Radford appears to be more a piece of art than electronics.

The cost of this kind of restoration job, not only because of the components used, but the number of hours it takes to complete such a job, is beyond the reach of most. Because of this, GT Audio supply restoration kits which are available in stages. A basic kit would just contain the

components that are likely to have gone out of tolerance and need replacing to get the amplifier performing to original spec. A full restoration kit contains everything needed to restore and improve the amplifier to the spec. of the one we were



was used in the STA15 to provide 15watts per channel. The amplifier was made up from two monoblock MA15s on one chassis, and the same basic circuit was also run at a higher supply voltage and with the output valves operating in fixed bias mode to provide the STA25 and

MA25 25watt monoblocks.

The Radford STA15 we borrowed for review was loaned to us by GT Audio who specialise in restoring and repairing vintage hi-fi equipment. It is basically original, the only visual difference being

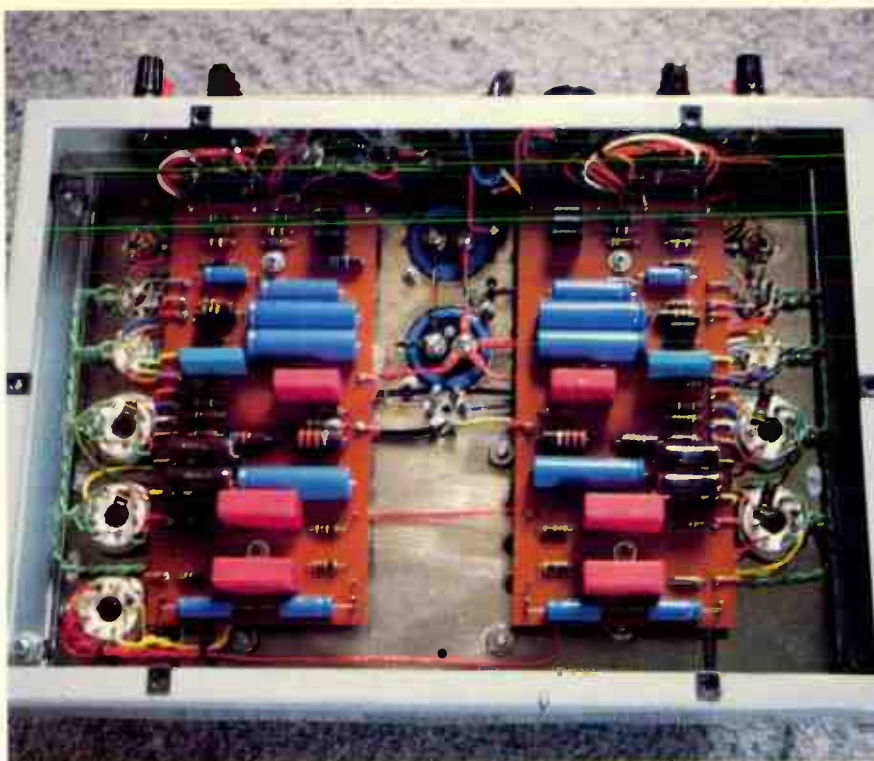
"The STA15 was fast and coherent, with plenty of energy and a superbly open and detailed midrange."

loaned for review. These restoration packs are quite cheap to buy and require little experience as it is basically just a job of removing the old and replacing with new, but beware, there is more than an evenings work involved if you want your amplifier to perform like this one.

The restored STA15 works like new. The impedance selector and power switches had a positive action and there were no clicks or buzzes on turn on. It sounds like a modern amplifier too and would certainly give many new valve power amplifiers a good run for their money. When the words "vintage audio" are mentioned you think of scruffy old valve amplifiers and a crackly, dull or distorted sound. This is a misconception and is certainly not a fair picture as regards much vintage equipment. Once restored, in most cases, vintage equipment is every bit as good as its newer alternatives and in some cases far better.

The Radford STA15 has a large, sweet, full bodied sound that is uncommon in modern amplifiers. It also has a good amount of bass drive and kick for a 15watt amplifier, which was a pleasant surprise. I used our own DIY High Definition loudspeaker for the majority of my listening, because it presents a very easy load to an amplifier, but to check that it could handle difficult loads I also tried a pair of Quad ESL63s.

With our loudspeaker the STA15 was fast and coherent, with plenty of energy and a superbly open and detailed midrange that leapt out of the box. The treble was clearly focused and clean, free from sibilance or any other unwanted colourations and the bass tuneful and controlled. With the Quads it lost a little speed and precision, but still retained a



spacious and very musical presentation.

I have been using GT Audio's restored STA15 for a couple of months now with a variety of sources and music and not once has it disappointed. When the music is dynamic the STA15 is too, when the music is subtle and delicate it responds giving a performance the air and atmosphere it deserves. The STA15 is a natural and musical amplifier that will never fail to please in a good system, which is quite a remarkable feat considering that it is nearly 30years old. It is a great tribute to Arthur Radford that the basic circuit has lasted as long as the

beautifully engineered chassis, showing that it was truly built to last in a way that only Quad, Leak, Garrard and a few others can match.

If you have an old Radford amplifier sitting in the attic, or fancy a change from the black box audio of today, quality vintage equipment such as this does offer a serious alternative. In most cases hours of careful work are needed, but it is well worth the time, money and effort for a sound that is sweet, full bodied and musical, let alone the pride and satisfaction of bringing a piece of audio history back into life, working in the nineties ●

MEASURED PERFORMANCE

Rated by the factory at 15watts per channel, the STA15 - always a highly regarded unit, even in its day - actually produces 18watts. I was happy to see a good, consistent performance between channels on our rebuilt sample, since unrestored valve amplifiers commonly suffer a host of problems due to age, usually reduced power, early distortion and uneven performance between the channels. This sample was squeaky clean in its output, showing that the transformers were in good condition even though, I'm told, transformers can deteriorate with age.

The low distortion figures claimed by Radford were met under test. In the midband, just 0.02% of second harmonic distortion existed, rising to 0.1% at frequency extremes. The unit could manage 0.1% in the midband at full output, like the Mullard 5.20 of the same period. Distortion rises at frequency extremes though, as usual with valve amplifiers, but this actually affects sound quality little, since it colours only peaks. So the STA15 is a low

distortion amplifier, as claimed.

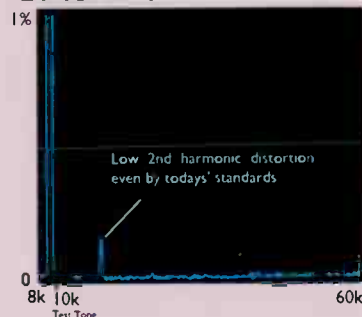
No attempt has been made to limit subsonic amplification, which in the days of record warps I believe was unwise, since output transformers core saturate (magnetic overload) at very low inputs as frequency decreases. It does give the STA15 a wide measured frequency response though - 5Hz-25kHz.

Channel separation was good at 66dB and noise reasonably low at -96dB, in light of a medium sensitivity of 450mV input for full output. I was interested in hum level, which needs to be 1mV or less. The Radford reached down to 0.8mV on one channel, but no better than 2mV on the other - a good if not exceptional performance.

Even by modern standards the STA15 measures well. Arthur Radford built his products meticulously and was not afraid to use complex and detailed metalwork, to which was applied a high standard of finish. The STA15 showed this to good effect - it looks superb alongside modern, featureless black boxes. **NK**

Power	18watts
Frequency response	5Hz-25kHz
Separation	66dB
Noise	-96dB
Distortion	0.02%
Sensitivity	450mV

Distortion



Little distortion at 0.02%

MARY BLACK

On Tour 1993

NOVEMBER :

26TH YORK Barbican 0904 636668
27TH MANCHESTER Leisure Centre 0161 275 0081
28TH LIVERPOOL Philharmonic 051 709 3789
30TH BIRMINGHAM Town Hall 021 256 2392

DECEMBER :

1ST WARWICK Arts Centre 0905 524 524
2ND CAMBRIDGE Corn Exchange 01223 357 851
3RD READING Hexagon 07543 691 591
5TH OXFORD Apollo 01865 244 544
6TH MANCHESTER Apollo 061 267 3660
7TH NEWCASTLE City Hall 091 261 2606
9TH GLASGOW Royal Concert Hall 0141 227 5511
10TH EDINBURGH Usher Hall 031 228 1155
12TH LONDON Royal Albert Hall 071 580 8212
13TH LONDON Royal Albert Hall 071 580 8212

FOR MORE INFORMATION CONTACT THE GRAPEVINE LABEL
UNIT 32 THIRD FLOOR CAMDEN LOCK PLACE
CHALK FARM ROAD LONDON NW1 8AF

TEL : 071 267 7770 FAX : 071 284 2112

THE HOLY GROUND ALBUM THE FIRST NEW MATERIAL IN TWO YEARS

NEW SINGLE RELEASED 4 • 10 • 93

'FLESH AND BLOOD' / 'DON'T EXPLAIN'

the
Grapevine
label

Grapevine

We've just come back exhausted from running a stand and - this year - a room as well at the Penta Hi-Fi Show. And the news is good. In spite of Penta being overshadowed this year by Live 93, due to be held in Olympia just weeks later, we were fairly mobbed by visitors and readers.

Recession? Business was up by around 30% on our stand. Declining interest in hi-fi? Our room was packed all day every day with people keen on building their own amplifiers or loudspeakers.

The final bit of good news came from W.H.Smiths in the form of a June'92-June'93 sales analysis of Britain's hi-fi magazines: Hi-Fi World is the only one with a steadily rising circulation, up by around 24% over the year. All the other magazines are in steady decline, as they have been since the mid-seventies.

That's why I started Hi-Fi World in 1991. I was convinced that enthusiasts were being poorly catered for - or even shunned - by the magazines and large sectors of the industry.

The magazines are faced with a dilemma of the industry's own making. Too many manufacturers and their advertising agencies link advertising placement with editorial coverage. This fosters the 'commercial' outlook in articles that turns so many readers off and loses the magazines sales. By 'commercial' I mean excessive concentration on new product coverage and reviews, at the expense of a broader balance. Non-commercial articles are those that don't sell things on behalf of the industry, like Leak Troughline reviews and Garrard 401 features. We get swamped by interest in these, yet they are anathema to many in the hi-fi industry and, as a result, commonly criticised or sneered at.

Many manufacturers glibly see reviews as free promotion, a disastrously narrow and - in the long term - destructive view. I have personally had two major British manufacturers shouting down the telephone at me, demanding reviews as and when they see fit, always

with the implication that they should be favourable. Being what I am, I discussed their ancestry with them and suggested they go elsewhere to find such co-operation. They did - and they have.

Magazines are for their readers. Both the industry and the other publishers must realise, before it is too late, that to produce a magazine people want to read requires far more effort and appreciation of what is needed than is currently being shown. In my view it has always been the case that publishers have displayed scant regard for the editorial value of their magazines compared to their appeal to advertisers.

In spite of circulations falling from around 45,000 in the 70's to 20,000 now, I can still see the same publishing directives being applied. During the summer, industry 'wisdom' has it that

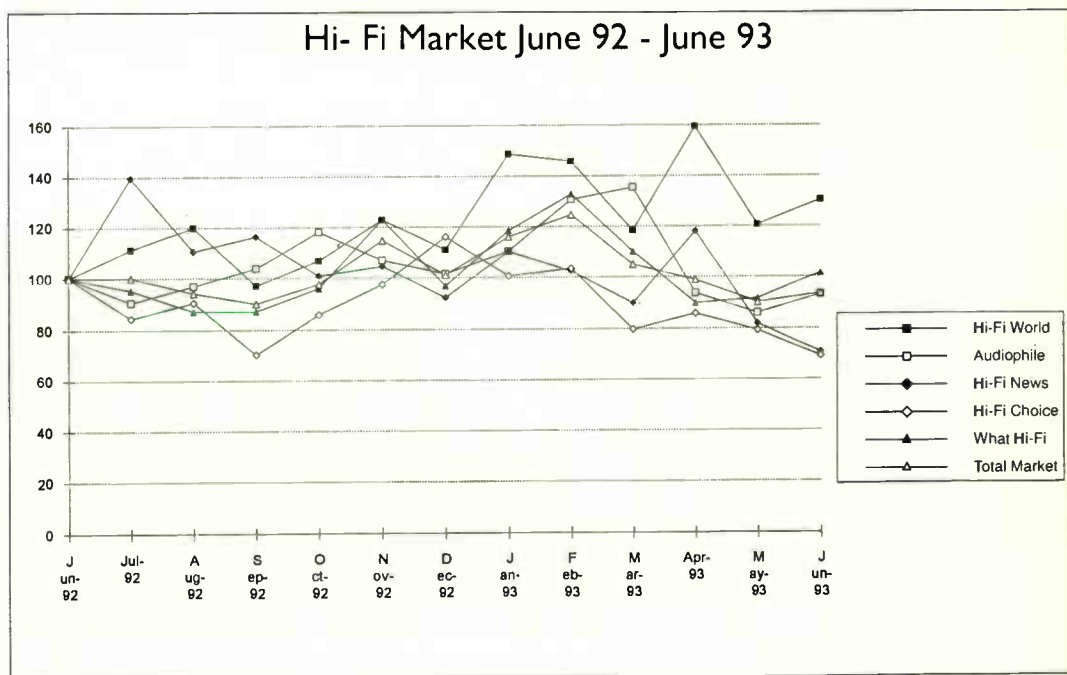


total and full extent of their logic.

What nobody appreciates is that DIYers are true, dyed-in-the-wool enthusiasts who, when they build a new pair of 'speakers, will go out and buy a better amplifier and CD player to match. They are not the ones who buy a budget midi-system for £600 at Rumbelows, believing it's a 'hi-fi' and then spend no more for the next five years.

That the industry - especially the magazines - should have shunned DIY for the last decade or two in Britain is, quite frankly, staggering. Not only is this a

Reflections from Noel Keywood kaleidoscope



pages should be cut back - and they were this summer. One magazine dropped to just 98 pages, another to 120, both lower than Hi-Fi World which I set at 130 minimum to offer good, steady, reliable value for our readers. I don't associate with the notion of reducing print costs in the summer to compensate for any fall off in advertising, because this deprives readers of the very thing they pay their money for - a good read.

We also decided to ignore

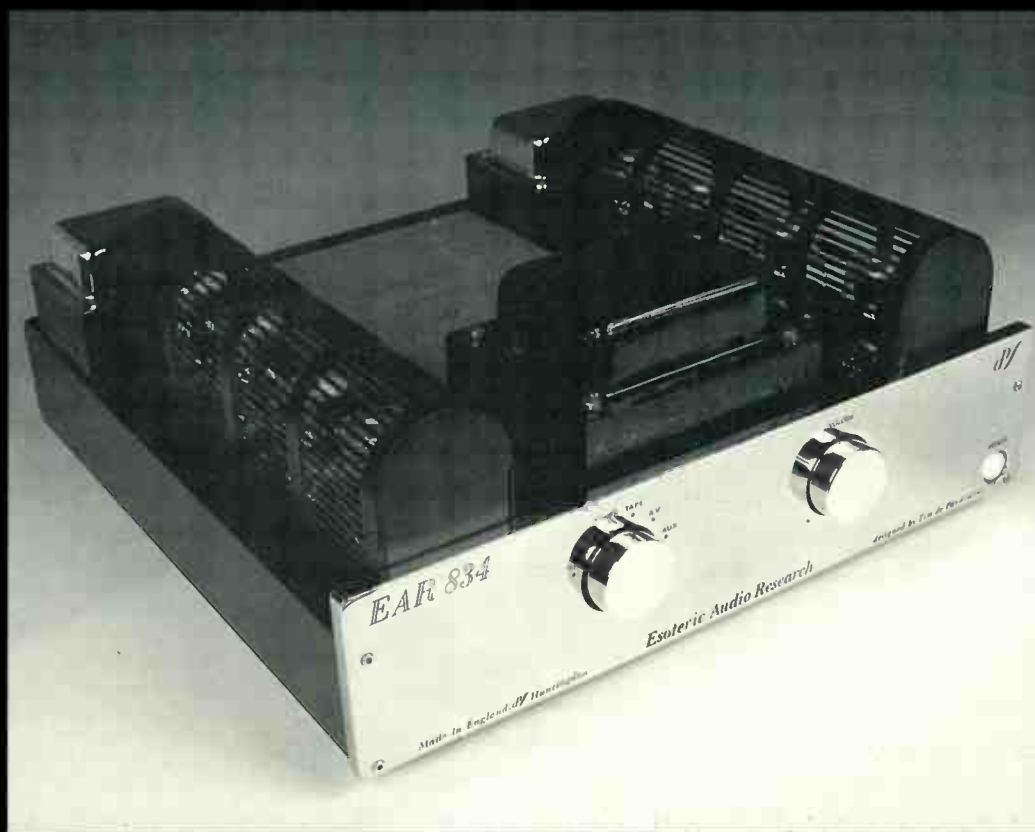
industry wisdom on 'promotions' and continued to offer our DIY Supplements through the summer. In truth of course, these Supplements are not a 'promotion' but a regular feature, provided because of their enormous popularity with our readers. Yet many in the industry detest DIY - our Supplements included. They reason that for every person who builds something, a sale is lost - and that's bread taken from their mouths. That is the sum

cynical attempted manipulation of the market, but a mindless and needlessly destructive influence on a thoroughly enjoyable and educational leisure/hobby industry.

I have to say that in Britain, we have got it WRONG in publishing, in retailing and often in manufacturing and we are paying the price.

Continued on page 61...

EAR



Designed by Tim de Paravicini

"The EAR is certainly powerful, precise, detailed and vivid. In common with other Paravicini designs, it has a very tight grip on every kind of music."

Eric Braithwaite, *Hi-Fi World*, February 1993

*The EAR834: 40 watts of pure music power, six line level inputs, precision engineered for a lifetime of enjoyment.
£1295*

Esoteric Audio Research
Unit 11, Stukely Meadows, Huntingdon, Cambs. PE18 6ED
Tel: 0480 453791

Last month I described the way in which two loudspeakers create a stereo illusion. If you read it, you'll (hopefully) remember that the illusion is created by eliciting within the mind of the listener two simultaneous and coexistent stereo images; a "high-frequency intensity derived image" and a "low-frequency, delay-derived image".

The brain, when it experiences a stereo recording, receives signals from the ears which are very similar to those it expects to hear when it listens to real instruments in real space. But only very similar because conventional two loudspeaker stereo ('drawing-room' stereo) cannot create a perfect illusion, the problem being that the two simultaneous images are not in exact register. In other words, the high frequency components of each instrument or voice emanate from one place within the stereo image and the low frequency components emanate from another place. The result, to use a visual analogy, is a slight 'smearing' or 'blurring' of the stereo picture.

SOLUTIONS

Many researchers have endeavoured to find a solution to this effect. It may seem odd that this drawback, which has been known about since the earliest days of stereophonic research, has yet to be solved. The reason is that, whilst it is easy enough to bring about changes in stereo image quality, it is difficult to achieve without incurring penalties of colouration, distortion and deterioration of transient response.

Sadly, in the absence of a practical solution and due to the fact that the distortion is not severe, the belief has grown up that 'drawing-room stereo' is capable of perfect results. This is most certainly not true.

In 1931, a young engineer at EMI's research laboratory wrote a paper entitled, "Improvements in and relating to sound recording and sound reproduction systems". Even today, this

patent is breathtaking in its vision and engineering scope. In it its author, Alan Blumlein, describes a two channel 'stereo' recording system and its possible application in the production of gramophone records and film soundtracks. It sounds tame today, but bear in mind this application was written a couple of years after the first 'talking picture'!

Blumlein described an intensity controlled two channel stereo signal used to produce a convincing wideband stereophonic illusion. He appreciated too

that the system was not perfect. His remedy involved matrixing the left and right stereo signals into sum and difference signals (in exactly the same way it is done today for stereo radio transmissions) and inserting in the difference channel a filter of special and unique characteristics before matrixing back to the normal left and right signals.

Sadly, there Blumlein's work stopped. It was soon whisked away on secret radar work. He was during trials of a radar system that the plane in which he was flying crashed and he was killed. It was only after the war that the EMI team working on a practical stereo system implemented his serial filter known as the 'Shuffler' circuit.

Unfortunately, this circuit was found to introduce distortion and tonal colouring and was eventually abandoned.

Blumlein's theoretical work was correct, it was only the practical implementation of the 'Shuffler' that was flawed. More modern and sophisticated derivatives of the 'Shuffler' have appeared throughout the years. Others, like the stereophonics researcher Edeko, have taken a more unusual approach to solving the 'blurring' problem. It is a fundamental



vinyl and CD. It gave me a unique opportunity to compare analogue and digital reproduction because I also had a copy of the original master tape. Unhesitatingly, I should say, the CD was 'nearer' the master, but vinyl produced a 'better' stereo image - in fact, better than the master tape! A conundrum indeed.

After much deliberation and armchair theorizing I set about doing some experiments. Late nights with an oscilloscope eventually uncovered that electrical and mechanical crosstalk within

recorded message

Left by Richard Brice

characteristic of the 'blurring' problem that the brain perceives the high frequency, intensity derived stereo image as generally wider than the low-frequency, delay derived image. With this in mind, Dr. F. Edeko conceived a way of solving the problem acoustically.

His system involved the construction of two special three-way loudspeakers which were positioned on their side. In this way, the angle between the left and right woofer, the left and right midrange unit, and left and right tweeter respectively decreased at the listening position. This clever idea, combined with carefully designed crossover units, enabled Edeko to construct a stereophonic system in which stereo image quality could be improved without tonal distortion.

I can vouch for Edeko's methods because I built a prototype system and was surprised by the improvement in stereo image quality it brought about. Indeed, it was Edeko's articles which first alerted me to the fact that 'drawing room' stereo could be improved. That, and one other unforgettable experience.

Several years ago I was involved in my first recording which appeared on

the cartridge and pre-amp were causing a stereo image manipulation which was similar to that brought about by the Blumlein 'Shuffler' circuit and Edeko's loudspeakers - all the important narrowing of the stereo image at high frequencies. It supported what I and so many hi-fi fans knew to be the case, that vinyl really does sound better than CD - especially in LP's presentation of a realistic soundstage.

The excitement for me was discovering that high frequency crosstalk emulated the effect of the 'shuffler' circuit and improved the stereo image without incurring tonal penalties from sum and difference processing. The result of my work was a patent application and the development of a frequency dependant crosstalk injection network named 'Francinstien'. I reasoned that this circuit could be fitted onto the output of any CD player or DAC and be used to enhance the image quality from digital. Two years on and sixty years late, to my knowledge Francinstien still represents the first commercially (and sonically) successful implementation of the last piece in Blumlein's stereo ●

CLASSIFIED ADS

... CONTINUED FROM PAGE 128

PRIVATE

B&W DMI SPEAKERS, Armstrong 521 amplifier, Armstrong 524 tuner and Akai GX-M10 cassette deck. Offers invited, all or separate. Also Garrard/ SME/ Shure phono for right offer. Tel 0753 888407 Eves

SHARP MINIDISC PORTABLE player MD-D10E (BK). RRP £399.99. Unwanted competition prize. Reasonable offer considered Tel 0622 745489

GARRARD 401, SME 3009/II ARM and Shure cartridge. Good original condition £240 ono. Linn Saras and stands £250. Also Pioneer PDS 801 CD player, very little use from new £190 Tel 091 487 7796

AUDIO RESEARCH SPI4, £1695. Counterpoint SA220, Groove Tubes, 550 wpc into 4Ω, £995. Oracle Delphi mkII Sumiko Mdc 800 'The Arm' tone arm terminator turbo supply, £995. All mint. Tel 0273 775302

'DECCA VOLT' UNITS. Ribbon speakers plus spare ribbons. £100 pair. Volt B250 10" speakers £100 pair. Bi-wire Xovers, air cored, polypropylene caps £50 pair. Cabinets, long haired wool, if required. Tel 021 430 4660

REVOX A77 MK1 TAPE MACHINE, cleaned, re-aligned many spares £180. Sony TC153 SD quality portable cassette deck, old but immaculate £65. Decca London ribbon horn tweeters plus bass cabinets, KEF B200s and xovers, £120. Solatron valved oscilloscope, £10 Tel 081 998 8131

LINN AXIS TURNTABLE, K9 cart. As new, little used, £250. Why buy new? Tel 081 852 8155 (SE London)

MUSICAL FIDELITY A100 AMP and MC2 speakers with Target stands. £200 each or £375 for both. Tel 0636 640593 or 0860 747871

PRIVATE

LOFT CLEAROUT: Meridian MCA-1 with MC and TAPE modules. Sound Organisation table, Target TT2 table, Linn LVX tonearm, Audio Technica OC7 and AT31E cartridges. No reasonable offers refused Tel 0494 863305

SONY TOP ONE BOX CD player, X77ES, 20 hours (£1295) £495. STD 305s/SME gold, 1982 LP12 rival (£505) £175. Audio Technica AT33E MC second to ART-1 in Japan. Unused (£595) £245 Tel 0273 882535 (David)

KLIPSCHORN SPEAKERS, ideal for low powered valve amps £275. Lux valve amp £425. Classic American Gas Ampzilla power amp £420. Electrocampanit class A power amp £195. Tel 0626 66415

CYRUS I £170; **CELESTION** SLS6s £150, Walkerdeck CJ55 £50, SME II £50, Mayware Formula IV arm & MC cartridge £65. Quad FM2 tuner £50, Leak Varislope pre amp (mono) £20 Tel 0482 447441

VOIGHT CORNER HORNS. Matched pair with Lowther PM6 units. Mint condition. Unique opportunity. £1500. Tel 0202 707901

LINN LP12, BLACK, BASIK LVX. Serviced, New Valhalla & motor £375. Musical Fidelity MVT pre amp with PSU (£1400) £500. Pair MA50s, 8 months old £400. Tel 0273 738870

LINN SONDEK LP12, Grace 707 arm. Totally original and mint condition £250 onvo. Marantz 2120 AM/FM stereo tuner, mint condition £40. Technics SU9011 pre amp also mint condition £60. Tel 0933 625436

APOGEE CALIPER Signature speakers. 4 months old, boxed, as new £1995. Krell KSA 80 £2100 ono. Quad 606 power amp & 44 pre amp. £495. All in mint condition & PX considered. Tel 0225 423354

PRIVATE

MARANTZ CD-72, five star rating 'What Hi Fi' Feb 92. Only 6 months old, guaranteed, mint (£450) £280. Technics RS-BX 606 3 head tape deck. "World Favourite" Nov 91. 10 months old, guaranteed, mint (£170) £110. Tel 0483 503473 (Guildford)

AUDIO INNOVATIONS SERIES 800 Mk1 power amp £345. Townsend Rock/ Linn LVX plus tonearm/ A+R MC £435. Dean Alto 3s £150. Rata turntable support £75. Target HJ15 stands £65. 2 x 2m Rotel Supra 10 £20. Tel 0532 559475

AUDION REFERENCE VALVE PRE AMP, list £1300 sell for £700. Albarry M408 monoblock power amps, list £850 sell for £425. Manticore Mantra turntable in Mahogany with Rega RB300 tonearm & Linn K9 cartridge, list £700 sell for £325. All in mint condition, will split. Tel 081 878 1127

LINN PRETEK/ POWERTEK AMP (£800) £475 ono. Pioneer PD9700 CD player (£400) £190 ono. Both 1 year, immaculate, boxed. Linn K9 cartridge, new stylus £40. Tel Andrew 0256 488768 & 0491 835125 Eves

SYSTEMDEK 11X/900 with Moth arm and Arcam E77 cartridge, virtually unused. Will exchange for Philips CD850 II or similar (eg Denon DCD960 etc). Must have digital output. Tel 0782 550802

REVOX A77 MkIV, 3.75 and 7.5 IPS, half track plus 29 10.5" NAB reels, other smaller reels and edit kit. Offers £800 ono. Tel 0923 894546

COMPLETED HI FI WORLD DESIGN 3-Way loudspeaker cabinets (not kit). Machine cut panels, shaped and chamfered front baffles, internally damped. Black woodgrain finish. Offers or swap for amplifier. Tel 0787 374399

PRIVATE

SPEAKER UNITS, KEF B139 £75pr, B110B £25pr, T32 £20pr, Xover for above £18, Isophon KK8s £15pr, Peerless K010HFC £8pr, Leak Delta 70 amp teak £65. Collection or carriage. Tony 0472 878919

MUSICAL FIDELITY A120 Class A integrated amplifier 1 year old £325. Micromega Optic CD player £350. Micromega Microdac £175. All as new boxed. Carriage can be arranged. Tel 0983 755205 (I.O.W.)

SNELL A2 Loudspeakers, Mahogany, boxed, instructions, limited use in dedicated room, mint condition £2200 (list £5200). Audio Note 'Nova' silver wired step up transformer, bargain £600 (list £1600). Target AE4 equipment stand £85 (list £155). Tel 0932 349314

WANTED

SLATE AUDIO are looking for Garrard 301s and 401s. Fair prices paid for fair examples, better prices paid for fine examples. We can arrange collection if necessary. Telephone Peter Soper on 0525 384 174

TECHNICS SB4500 linear phase loudspeakers, or drivers from such. Tel 0209 715960 after 6.30pm

WANTED: TANNOY AUTOGRAPH + other 15" Tannoy speakers; old Lowthers, Western Electric + Simens Klangfilm Cinema speakers, EMT turntable, Ortofon tonearms + SPUs. SELL: Marantz 8B - triode power amp, Macintosh MR67 + MR80 tuners, Macintosh C22 preamp, Lectron JH-50 poweramp. Tel 0444 881184

WANTED NAIM PRE/POWER AMPS, eg 72/140. Must be in excellent condition. Will visit for demonstration and collection. Tel 0483 768048 Eves & weekends

Back Issues

HI-FI WORLD BACK ISSUES ORDER FORM

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

- September 1991 £2.00
- October 1991 (incl. CD) £2.00
- December 1991 £2.00
- January 1992 £2.00
- March 1992 £2.00
- June 1992 £2.00
- September 1992 £2.00
- October 1992 £2.00
- December 1992 £2.00
- January 1993 £2.00
- February 1993 £2.00
- March 1993 £2.00
- May 1993 £2.00
- June 1993 £2.00
- July 1993 £2.00
- August 1993 £2.00
- September 1993 £2.00

Total no of issues ordered Total price

We are now offering back issues of Hi-Fi World. Unfortunately, all issues prior to September 1991 are completely sold out, but subsequent issues are available for £2.00 including postage and packaging. Issues with Compact Discs (Oct.'91) are now available for £2.00.

(Overseas add £1.00 p+p for every two issues UK p+p free)

I enclose cheque/PO for £ made payable to **Audio Publishing Ltd.**
I wish to pay by Visa/Access, please debit my account no:

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Expiry date:

--	--	--	--

Name

Address

.....

.....

Post Code Tel:

Please send completed order form together with your cheque/PO to:
HI-FI WORLD, 64 Castellain Road, Maida Vale, London W9 1EX.

Subscriptions

12 ISSUES FOR ONLY £22 (UK only)

HI-FI WORLD SUBSCRIPTION FORM

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

Name

Address

.....

Daytime Tel No:

Please debit my VISA/ACCESS Card No:

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Expiry Date: Tel: 071-266 0461

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

Overseas subscription rates.

Surface Mail: £29.

Airmail: £42 (Europe & Middle East),
£62 (Australia & Japan).

- Airmail
- Surface Mail (tick as appropriate)



U.S. & Canadian Subscriptions



Hi-Fi World

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

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

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

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

OR

Please charge my Credit Card with the amount indicated.
(All major Credit Cards accepted)

No:

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Expiry Date:

--	--	--	--

Signature: Name:

Address:

.....

City: State: Zip:

Or Telephone:

516 627 3836

Or Fax:

516 627 1972



THE 'NAK' OF TUNING

Nakamichi are attacking the £400 tuner market with their ST-2 tuner.

Simon Cooke wonders if there's a knack to building a best-seller

Nakamichi have a long-standing reputation for cooking up some of the best cassette decks around, but their other hi-fi separates have generally met with rather less success. This could be partly due to the fact that they rarely feel as though they aspire to the same quality as their cassette decks.

The first impression of the ST-2 tuner, unfortunately, is not of engineering excellence. It feels like any other mass produced tuner and lacks the awe-inspiring build quality which Nakamichi can attain. It is contained in a standard-width black box, constructed from fabricated sheet steel, with a large centrally positioned orange LED display in the fascia. To either side of this display is a sizeable rotary knob, the left-hand knob being for preset selection, and the right for tuning.

Both of these are click-stopped, which I thought

reasonable for the preset selector, but for the tuning knob I found myself yearning for the smooth tuning control of the Leak Troughline, used as a reference in this test. But whilst the Troughline is a manual tuner, the

ST-2 is a synthesiser tuner that steps up through the band at 0.05MHz intervals. I often have the nagging feeling that a station might be sitting halfway between 0.05MHz points. It may not be the case

in reality, for such tuners actually tune more accurately and are more stable on a station than the old analogue types, but there are a lot of buyers out there - of whom I am one - who prefer smooth tuning controls simply for their own peace of mind - but that's no reflection upon the Nakamichi of course.

Apart from the two rotaries, there are seven small press buttons on the fascia, two to the left of the display for preset memory input, two to the right for band search, locating the next station on the band, and three underneath the display for stereo/mono select, narrow/wide band selector, and mute.

For me, hiss was an audible factor of the performance on all of the stations available, slightly diminishing the impact of quieter passages on classical music and plays, but I'd prefer to deal with the sound quality first, and come back to that later.

so obviously goes above or below the dynamic range being conveyed. Some equipment is good at masking this, albeit mild, absence of frequencies in the listening room, if they suffer from it, but the Nakamichi was simply too honest. For instance, listening to some dub reggae on one of London's community radio stations, the Nakamichi diminished the rumbling beat and left me listening to a West Indian poet keeping rhythm with his tapping feet. Where were the drums, the heavy synth beat, the woof? Wherever they were, the Nakamichi wasn't looking hard enough to find them.

The notion that these anomalies were caused in transmission by compression and gain-riding was easily dispelled by a quick burst on the Leak. I was suddenly inundated with rumbling bass and clean-cut treble cascading out of the speakers. Return to the Nakamichi and it all dried up.

With all that said, the midband was very clear and lucid, and music of any kind bopped along quite happily within certain restraints. Within this portion of the spectrum the Nakamichi exhibited an easy, relaxed sound which was quite

"The Nakamichi exhibited an easy, relaxed sound which was quite capable of a captivating performance, as long as the tonal range of the music did not stray too far from the mid."

Tonally, the Nakamichi is a little compressed, with frequency extremes softened. The problem is not so much that treble and bass frequencies are missing, but that the music being played

capable of being captivating, as long as the tonal range of the music did not stray too far from the mid.

The top end suffered the same symptoms as the bass, but although it

seemed to occur to a greater degree, it was sonically less noticeable than the missing bass line. It is, however, most annoying when you listen to an orchestral work you like and find that the recording sounds like it was the one made when most of the violin section were on their tea-break. But this isn't uncommon to solid state tuners based on current chip sets; they often sound restricted at frequency extremes.

SHARP AND CLEAR

Staging was an area where the Nakamichi excelled by exhibiting the ability to space the voices in a play into a good semblance of their expected positions. Interviews sounded sharp and clear, bouncing easily from one speaker to the other, which would lend them added urgency, but you probably won't buy a Nakamichi tuner just to listen to Sir

Robin Day dissecting politicians. It was unfortunate that this ability started to fall apart with larger works, big bands and orchestras sounded compressed and instruments could not be positioned properly.

I mentioned earlier that the Nakamichi seemed quite prone to hiss. This was audible in studio discussions like Round Britain Quiz on Radio 4, we found. A slight but discernable hiss accompanied the panellists, one not apparent on the Troughline. The Nakamichi seemed a little glassy across the midband too, which probably helped emphasise this effect.

So how does this tuner measure up against the competition? It is definitely competent, but there are many other equally or more capable machines around - especially at the price. In truth, the ST-2 can even be outstripped by some less expensive members of the

competition; Denon and Aura come to mind. There is, unfortunately, only one cast-iron reason for buying this tuner and that is to complement a Nakamichi system. Otherwise, it's worth bearing in mind the fact that the renowned Quad FM4 costs just twenty-five quid more. When you consider that, you begin to wonder whether the Nakamichi is such good value. ●

Nakamichi ST-2 £400
Nakamichi B&W Loudspeakers
 Marlborough Road,
 Churchill Industrial Estate,
 Lancing,
 West Sussex
BN15 8TR
Tel: 0903 750750

MEASURED PERFORMANCE

The ST-2 proved as competent all-round as most Japanese tuners, but it also displayed their usual foibles. The latter are a signal strength meter of little practical value and high selectivity even when it isn't required or selected, namely in Wide IF mode. The metering problem revolves around customer perceptions; Japanese manufacturers universally believe (and so do some UK manufacturers these days) that if the signal strength meter doesn't read maximum, when that of a rival does, then the customer will buy the latter, believing it is more sensitive. Perhaps they are right, but somehow I doubt whether the ploy of rigging the meter to read maximum with a very weak signal is the only or best solution to this difficulty. Hitachi sold their FT-5500 MkII very well in the UK for example, and it had a superb meter, so sales aren't inextricably linked to meters that read maximum prematurely.

The Wide/Narrow selectivity option rarely effects much change in performance on Japanese tuners; they are always very selective and sacrificing this hard fought for property seems to go against the grain. Ideally, Wide should give around 60dB alternate channel selectivity, a satisfactory if unexceptional figure, but much better sound quality. On the ST-2 selectivity remained very high at well above 80dB even on wide mode. In fact, I noticed Narrow actually gave worse selectivity, suggesting that on this tuner - like most of its rivals - the facility is a gesture rather than a real benefit.

These niggles aside, the ST-2 measured well enough. It has a flat frequency response that reaches up to 16kHz, giving it good basic tonal balance. A slight rise in output of +0.4dB around 5kHz, visible in the analysis as a shallow hump, will however push detail in

the sound forward and is likely to be heard as either a degree of brightness or sheen, or possibly just as a welcome strengthening of reproduced detail; only listening tests can tell.

Channel separation was wide on stereo and distortion levels reasonably low all round. Little pilot tone (19kHz) or sub-carrier (38kHz) leaked out, but I was disappointed to find that hiss was an unremarkable -70dB minimum - right on the border lines of audibility. The ST-2 isn't perfect for critical Radio 3 listening, since a slight background hiss may on occasion be just audible (for comparison, cassette with Dolby C gives -76dB hiss).

Sensitivity proved good at 30µV, if not exceptional. Output was a high 750mV, enough to drive a lot of power amplifiers direct, so the ST-2 will work through passive preamps.

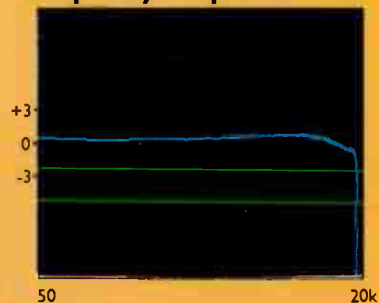
The ST-2 measured well, but it breaks no new ground, it is a little noisier than rivals and it shares their blemishes too; technically it is competent. **NK**

TEST RESULTS

Frequency response	5Hz-16kHz
Stereo separation	-40dB
Distortion (50% mod.)	0.3%
Hiss (CCIR)	-70dB
Signal for minimum hiss	700µV
Selectivity (at 0.4MHz)	>80dB
Sensitivity	
mono	2µV
stereo	30µV
signal strength meter	

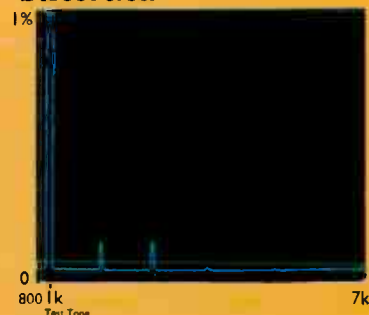
LED No.	level (µV)
1	1.6
2	5
3	10
4	40
5	160

Frequency Response



A slight rise in frequency response across the mid-band produced some glassiness in the sound.

Distortion



Distortion was low at 0.3% average, although bettered by rivals.

**2nd
GREAT YEAR!**



THE NORTHERN VIDEO & HI-FI SHOW '93

THE NORTH'S OWN BIG HOME ENTERTAINMENT EVENT

**PLUS THE 1993 WHAT
SATELLITE SHOW**

presented by
What Video, What
Camcorder, What
Satellite TV and
Camcorder User
in association with

CLEARTONE

**VIDEO
HI-FI**

CAMCORDERS
plus plus plus plus

LASER DISC plus adjacent Holiday Inn Hotel
HOME CINEMA AND MUCH MORE!

**MANCHESTER
G-MEX
CENTRE
OCT 29-31
1993**



TICKETS BY POST (right) ►

▼OR BRANCHES OF CLEARTONE

Branches are: (North West) **BOLTON** Blackburn Rd. Tel: 0204 31423. **MANCHESTER** Bridge St. Tel: 061 835 1156. **MANCHESTER** Sony Centre, Bridge St. Tel: 061 832 2081. **ROCHDALE** Drake St. Tel: 0706 524652. (Yorkshire) **BRADFORD**, Rawson Square. Tel: 0274 370638. **KEIGHLEY**, Cavendish St. Tel: 0535 602933. (Midlands and West) **GLOUCESTER**, Worcester Street. Tel: 0452 419777. **DARLSTON** Woods, King Street. Tel: 021 526 2872. **WEDNESBURY** Woods, Upper High St. Tel: 021 556 0473. **BIRMINGHAM**, Horntons, Lower St. Tel: 021 643 4059. **BIRMINGHAM**, New St. Tel: 021 633 4944. **WORCESTER**, The Cross. Tel: 0905 726 375. **WORCESTER** David Waring, High St. Tel: 0905 27551. **COVENTRY**, Lower Precinct. Tel: 0203 632086.

10%

**CLEARTONE
SHOW DISCOUNT**

This voucher entitles the bearer to 10% off any item (except those already reduced or on promotion) on the Cleartone stand at the show.

**ADVANCE TICKETS FROM
'TICKETS' 57-59 ROCHESTER PLACE,
LONDON NW1 9JU**

Please send me _____ (quantity) tickets to the Northern Video and Hi-Fi Show '93 at the special price of £2.50 each.

I enclose a cheque no. _____ for £ _____ payable to WV Publications, or please debit my Visa/Mastercard card no. Exp. date _____

Discount tickets also available at Cleartone stores

SIGNATURE _____

NAME _____

ADDRESS _____

TEL NO. _____

.... Continued from 53

Both Germany and the U.S.A. have two specialist DIY magazines apiece, for example, yet we have nothing like it in Britain. Here, publishers have acquiesced to the views of those who have shouted loudest against DIY in the industry and, as I can testify from experience, empty vessels make most noise.

In Japan, the magazines constantly publish circuits of valve amplifiers, usually based upon old and difficult valves like 300Bs and 845s. Apparently, Japan has a huge interest in these amplifiers, the word there being that they are the best. In fact, throughout the East, as well as in the U.S.A. the 300B valve is revered. Now

ask yourself - when did you see the 300B appear in Britain? Until we published a unique modern design in Supplement No 4, just to prove that in this country we too have the knowledge and skills to make such amplifiers, nothing significant had ever appeared.

In Germany there are kit loudspeaker shops. would you believe! Their hi-fi market is huge and DIY is a significant part of it. Oh, and they are coming over here, by the way, to do the things we refuse to do, so I hope not to hear squeals of protest from retailers when a large loudspeaker kit outlet opens on the M25 or in Central London, mimicking the success of IKEA, but selling hi-fi!

Some retailers have got it wrong too, although the

majority are open minded. Retailers should attempt to give this resilient part of the audio market due consideration, instead of peremptory dismissal.

Manufacturers vary a little more in their attitudes. Many, I know, started like me by building their own hi-fi and then - like me - decided to make a living out of it. Amongst them, quite a few harbour an affection for the whole business of experimenting and building. Others are more bloody minded and simple about it; their only interest is to get people to buy their product, no matter what. Any distraction to that is to be routinely opposed tooth and nail. The latter need to be handled with some degree of resolution by those around them. As a dyed-in-the-wool enthusiast myself, this

comes easily to me; I'm upset and angered by such people. They ruin it for everyone, even themselves in the long term.

What a cruel irony (for some!) that the magazine that is least commercial, Hi-Fi World, is the only magazine that, in the long run, will prove to be most commercial. Whilst the others appeal to the sensibilities of their advertisers, we only know how to appeal to our readers, simply because we have the freedom and desire to write about what interests us as enthusiasts.

The Penta Show this year was a great experience for us, better than ever, and my thanks to everyone who collared me about their interests and their hi-fi. We all seem to be enjoying ourselves and doing well ●

Yippe-chi-ay, as Bruce Willis would say, we've just had the best piece of news since the magazine started back in 1991. As you will have just read, our circulation, according to W.H. Smith figures which are independent and free from corruption, is up by 24% over the last year. It's such a nice feeling to find, after spending the last 12 months bashing our heads against a wall, that we finally seem to be breaking free from the rest of the pack. At last the hard work is being appreciated by the people who count most to us, the readers: thank you for supporting us.

We have all been given a new lease of energy, even after the gruelling, but enjoyable, Penta hi-fi show where so many of you gave encouraging support. Unfortunately we haven't had time to celebrate yet, and with a supplement issue and all its extra workload I don't think we will for some time yet, but we certainly aren't short of motivation now, if we ever were.

I share the same feelings with Noel that the DIY supplement has played a great part in this uplift, catering for a whole group of you who previously had been excluded, but I feel there is more to our recent success

than just DIY articles. I now feel that we are offering a broader range of articles than ever before; DIY, theory, readers' systems, factory visits, letters, Q&A, columns, group tests, music reviews, vintage equipment etc. let alone straight reviews, and whilst overall general interest certainly is falling in hi-fi, something we are trying to oppose as strongly as possible, the enthusiast core is becoming increasingly stronger and more determined to stay.

We receive a bundle of letters every month from people who stopped buying hi-fi magazines five or ten years ago, but who have just been lured back by articles aimed more at the enthusiast reader and less towards promoting the latest 'box of tricks'. This is great, but not

enough to stop the overall falling interest in this wonderful hobby/leisure activity. What is worrying is the lack of young blood coming into the hi-fi fraternity. We receive very few letters from young people seeking advice on their first system, or looking



marketing job, that to the average teenager an £800 Kenwood is considered to be the best hi-fi available. Most don't even know that hi-fi exists, or more importantly that it doesn't cost any more than the sonically inferior midi system. We need to pay more attention to this problem if hi-fi is ever to overcome the competition from Nintendo, Sega, laser disc etc. which is marketed with bright colours and a young exciting image.

Retailers can help here, by convincing the teenager that separates will give them a 'wicked' sound, with better bass, stronger vocals and faster treble, but that it will cost them no more. They are helping to secure their, and the industry's, future. Once you hear a good hi-fi, it is hard to live with anything

Dominic Baker dB on the level

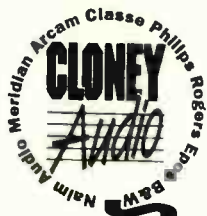
to upgrade from midi systems. Although music is almost certainly the number one interest of most teenagers, they don't seem to care about the quality with which they hear it.

Unfortunately the Japanese have done such a powerful and effective

less, and so a path of upgrades follows. That same teenager, now a young professional a few years into his career, will have built up a system worth several times the £800 Kenwood, and will continue to spend. Hi-fi is a hobby, not a passing interest ●

EIRE

We Never Compromise On Quality



55 Main St Blackrock Co Dublin
Tel 2899449/2888477 Fax 2834887
Open Tue/Sat 10AM-6PM. Thur/Fri 'till 9pm - Closed Monday

Acoustic Dimension

67 Mountjoy Street, Dublin Tel: 305633 Fax: 305839
AURA - AUDIOSTATIC - AVI - AMC - AIWA - JPW -
HEYBROOK - TDL - RUARK - ALBARRY - SONOGRAPHE -
PROAC - IMPULSE - ION - STRAIGHTWIRE - EAGLE - VLS -
YAMAHA - ROTEL - MARANTZ - + ACCESSORIES
PART EXCHANGE - CREDIT CARDS ACCEPTED
DEMONSTRATION ROOMS.
DECEMBER/JANUARY SALE OF USED AND DEMO STOCK

Peter Dand & Company Ltd Established 1963

Bang & Olufsen, Quad, KEF, Thorens,
TEAC, and many more!
2 Demonstration Rooms
2 Year Guarantee
111 Clonskeagh Road, Dublin 6
Tel. 01035 31 269 4433

LONDON & SOUTH EAST



SPECIALIST HI-FI OUTLET
DEMONSTRATION ROOM - PARKING
QUAD • AUDIOLAB • FURUKAWA • TDL •
TUBE TECHNOLOGY • TARGET • REL
ACOUSTICS • NAKAMICHI • KEF •
THORENS • MAGNUM • ROTEL • MARANTZ
• DENON • MICHELL • SILVER SOUNDS •
TANNOY • JPW
'LUMLEY REFERENCE IN STOCK'
Just 2 minutes off Junc. 6 M25 (A25)
GODSTONE 0883 744755
45 High St., Godstone, Surrey RH9 8LS

Spaldings ESTABLISHED IN SOUND

☎ 081-654 1231/2040
352/4 LOWER ADDISCOMBE RD.,
CROYDON, SURREY

**"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!



HI-FI & COMPONENTS

84 Battersea Rise SW11 1EH

WHAT HI-FI?
BEST BUYS
in stock
as well as those hard to find
accessories and stylis
Established 29 years
Tel & Fax No
071 - 223 1110
All major Cards accepted

DENON -
TANNOY - NAD -
ROTEL - BOSE -
DUAL - QED -
WHARFEDALE -
CELESTION -
KENWOOD -
ORTOFON -
INFINITY - SHURE

The Cornflake Shop

(071) 631 0472 Fax (071) 436 7166 Multiroom (071) 323 4554
37 Windmill St London W1P 1HH
(Just off Tottenham Ct Rd, south of Goodge St)
The Most Amazing Sound for your budget, with our famous
service, also catering for Multiroom & AV

ATC, AVI, ARCAM, NAIM, REGA, POKSAN, MERIDIAN, LINN,
DYNAUDIO, ROYD, DNM, EPOS AURA ROTEL NAKAMICHI,
JPW.

TUNE INN

BUYING?
THREE THINGS MATTER
QUALITY! PRICE! SERVICE!
HUGE STOCK OF FULLY GUARANTEED
USED HI-FI AT A FRACTION OF NEW COST

SELLING?
CALL NOW TO SELL OR PK ALL
HI-FI, AUDIO, TV AND VIDEO
(COLLECTION ARRANGED)

CREDIT CARDS ACCEPTED. FINANCE ARRANGED
(WRITTEN DETAILS ON REQUEST)

TO BUY, SELL, OR PART EXCHANGE CALL:
MON-SAT 10.00am - 6.30pm
081-698 4446
124-126 ST. MILDREDS ROAD,
LONDON SE12 0RG



79/81 Fairfax Road
Swiss Cottage
London NW6 4DY
071 624 8855/6
Mon-Fri 10-7 Sat 10-6

Seas Hi-Fi Speakers

Top quality chassis units for DIY and
replacement 4" to 10" Bass, Bass-Midrange,
soft and Metal Dome Tweeters, Midranges etc.

HENRY'S

404, Edgware Road, London W2 1ED
Tel 071 724 3564 Open 6 Days a week.

The Hi Fi Shop GUILDFORD'S SPECIALIST SINCE 1950

We are at:-
3 BRIDGE STREET, GUILDFORD
(By the traffic lights - next door to Alfred Marks)
0483504801 • 0483 304756
Access • Visa • Switch
Open Monday-Saturday 9am-6pm (later by appointment)

WEST & WALES

ENGLISH audio



CYRUS CENTRE
PINK TRIANGLE AUDIOPHILE SYSTEMS HEYBROOK MICHELLE
KEF REFERENCE MICROMEGA NAKAMICHI CHORD ARCAM
MUSICAL FIDELITY ROGERS NAD ROTEL DENON TANNOY
MARANTZ MISSION STAX DUAL TDL ALBARRY JPW CELESTION
ION SME RUARK MOTU AUDIO TECHNICA AND OTHERS
Free installations • Credit Facilities • Service Department
Mon - Sat 10 - 6
95 Whitecross Road, Hereford HR4 0DG (0432) 355081

V'Audio

Tel: 0272 686005

36 Druid Hill,
Stoke Bishop
Bristol BS9 1EJ

TC AW Acoustic Energy, Audio Innovations, AMC Analogue
Electronics, Cadence Valve, Chord Amps, Exposure, Jomo, IFD, Pink
Triangle, Ruark, Michell, Rel, Sansui, SME (inc 20A), Sonic Link, Stax,
Townsend, Vodka, Audio Technica, Goldring, Lyra, Ortofon, Sumiko

Demos by Appointment only. Home trial facilities.
Free Installation, Servicing Facilities. We are not a shop.

R&J AUDIO

All makes of valve power and pre-amp
serviced and repaired by engineer with full
test facilities and over 30 years
experience.

Tel. 0934 842785 (Avon)

audio excellence

WHERE THE MUSIC MATTERS

Bristol
65 Park Street
Bristol BS1 5PB
(0272) 264975

Cardiff
134/6 crwys Road
Cardiff CF2 4NR
(0222) 228565

Gloucester
58 Bristol Road
Gloucester GL1 5SD
(0452) 300046

Swansea
9 High Street
Swansea SA1 1LE
(0792) 474608

TUESDAY - SATURDAY 9.00 - 5.30
CLOSED MONDAY

ACTION GATE AUDIO

THE HI-FI CENTRE IN
WREXHAM

Aiwa, Albarray, Arcam, B&W, Conon, Celestion, Cyrus, Mastler,
Marantz, Michell, Mission, NAD, Nakamichi, Quad, Radford, Rego,
Rogers, Rotel, Ruark, Spondor, Teu, Tonmay, Thorens, Whafadde, Yamaha
"Yamaha cinema DSP club authorised dealer"

4 RUABON ROAD, WREXHAM
Tel. 0978 364500

EAST

The Audio File

27 HOCKERILL
STREET, BISHOP'S
STORTFORD, HERTS
TEL: 0279 506576
2 FOUNDRY WALK,
MARKET HILL,
ST. IVES, CAMBS.
TEL: 0480 66123



SOUTH

RADLETT AUDIO

"They have a breadth of
knowledge and experi-
ence in Hi-Fi that is rare."

N. Keywood, Hi-Fi World
July '92.

141 Watling Street, Radlett, Herts.
WD7 7NQ
0923 856497

All roads lead to Bournemouth
It's where you'll find superb Hi-Fi listening facilities, staff with expert knowledge and one of the finest selections of Hi-Fi equipment including...

LINN, DENON, YAMAHA, ROTEL, MONITOR AUDIO, NAD, MARANTZ, CREEK, ARCAM, NAKAMICHI, CELESTION, AIWA, DUAL, AUDIOLAB, QUAD, QED, WHARFEDALE, TANNOY, SONY ES, SENNHEISER, TARGET, SOUND ORGANISATION, ADCOM, and others

If you're serious about Hi-Fi you probably know these names and you probably already know the name SUTTONS... we've been around for 42 years.

Suttons
18 Westover Road, Bournemouth BH1 2BY. Tel: 0202 555512

Stockists of: ARCAM • CREEK • EPOS
HEYBROOK • MICROMEGA • NAIM AUDIO
NEAT • REGA • ROKSAN • ROTEL • ROYD
TEAC • YAMAHA

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.

GOSPEL MUSIC AUDIO
32A High st, Kington Hertfordshire. Tel: 0544 230254
Castle Video, 1 Spa Centre, Station Crescent, Llandrindod, Wells. Tel 0597 824020

Alphason • Allison • Revolver • Luxman • Yamaha • QED • audio Systemline • Wharfedale • Jamo • Micromega •

No appointments necessary, Home trial facilities.
Service department. Open till 5.30 + evening demonstrations.

the powerplant

BRIGHTON'S LEADING HI-FI SHOP

Roksan, Micromega, Audiolab, Exposure, Aura, Epos, B+W, Ruark, and other fine equipment.

66 Upper North Street, Brighton
Telephone 0273 775978

WORTHING AUDIO
20 Tревилle 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 10amp-6pm Late night Wed 7.30pm
Agencies include: Arcam, Exposure, Naim Audio, Marantz, Ruark, Audio Technica, Target, Tripod, JPW, TDL, Orelle and many more...

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, Spondor

MANA - CASTLE - ALCHEMIST - ALBARRY - AUDIO INNOVATIONS
NR PETERSFIELD HAMPSHIRE

AUDIO GALLERY

"THE UK'S ONLY MANA DEALER"

FOR OPENING HOURS AND APPOINTMENTS PLEASE RING ANYTIME

HOME DEM AUDIO SYNTHESIS ACROUSTIC ENERGY WADIA & MICROMEGA CDA, TDL, SML, TEAC, VRS 10, IMPULSE

KLIPSCH, DECAPO & LYRA

0730 - 895194
VALVE SPECIALISTS ON A SUPERIOR LEVEL
AUDIO ALCHEMY - TEAC - NAD - TRIPPO - ALPHASON - PIONEER - DENON

MIDLANDS

THE MOST EXCLUSIVE INDEPENDENT HI-FI STUDIO

The internal atmosphere and easy access make it so much more exciting choosing your hi-fi from the finest audio products available.

Just off the High Street. Bloxwich, nr. Walsall. West Midlands.
(Ample free parking)
(OFF M6 JUNCTION 10)

TEL: (0922) 493499 - 473499

Open 6 days a week. Mon - Sat
All major Credit Cards accepted
Pari Exchange enquiries welcome

ALBARRY • ACOUSTIC ENERGY • ARCAM • ART AUDIO
• AUDIOLAB • AUDIO QUEST • B+W • BOSE • CABLE
TALK • CHORD • CYRUS • DPA • DYNAUDIO • ENSEMBLE • EPOS • EXPOSURE • JPW • KEF • REFERENCE • MARANTZ • MERIDIAN • MICROMEGA • MISSION • MOTH • MUSICAL FIDELITY • NAKAMICHI • ORTOFON • PROSPECT • PROJECT • QUAD • ROKSAN • ROGERS • ROTEL • SONICLINK • SYSTEM DEK • TDL • THORENS • TRIANGLE • TOWNSEND • TUBE TECHNOLOGY • VAN DEN HULL • YBA •

CA Chantry Audio
"No Ordinary Hi-Fi Dealer"

A fresh approach to the World of Specialist Hi-Fi

NEW SHOP - NEW STOCK - 3 DEM. ROOMS

Pink Triangle, Micromega, Rotel Inc. Michi, N.V.A., Monitor Audio, Alchemist, Michell, S.M.E., Ortofon, d.p.a., Celestion, Ruark, SD Acoustics, Lumley, Diamond Acoustics, Ortofon, Croft, A.M.C., Aiwa, Sequence, Project, Denon, + much more.
Friendly service and advice in relaxed surroundings
First time buyers to high-end enthusiasts
Easy access Free parking

18-18A Eldon St., Tuxford,
Near Newark, Notts NG22 0LH.
Tel: 0777-870372 Fax: 0777 870437

THE STATE OF THE ART...

EXPERT ADVICE
CREDIT FACILITIES
- PART EXCHANGE WELCOME
- REPAIRS

Come and hear - NAD • B+W • NAKAMICHI • BOSE • QUAD • BEYER-DYNAMIC • SENNHEISER • AURA - and lots more in our listening room.

Tel. 0743 - 355166

AVON Hi-Fi Limited
12 Barker St. Shrewsbury
Plenty of parking - park and ride buses stop outside!

MIDLAND VALVE HI-FI

AGENTS FOR: Audion, Audio Innovations, Audio Note, Impulse, K.A.L., Townsend, Micromega, Ortofon, Triangle, Vojd, Star, Harmon-Kardon, Edison, Sumiko, Apollo, Soviet, Dynavector, Perception, Elmdon, etc.

VINTAGE: Leak, Quad, Radford, B.T.H. Rogers, Beam Echo, Verdik, Mullard, Altobase, R.C.A. Chapman. Plus original valves, circuit diagrams etc.

Part exchange - home demonstration a speciality
flexible hours 7 days
Tel. 021 - 722 2317

MUSIC MATTERS HI-FI

THE AUDIO SPECIALISTS

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

Arcam, Aiwa, Alchemist, Alphason, Apollo, Arcam, Audiolab, Audioquest, Audio Innovations, Audio-Technica, Aura, Beyer, Cambridge Audio, Canon, Celestion, Chord, Cyrus, Deltec, Denon, Dual, Epos, Exposure, Heybrook, Impulse, Infinity, KEF, Luxman, Marantz, Meridian, Michell, Micromega, Mission, B+W, Mordaunt-Short, Michaelson Audio, Monitor Audio, Monster, Musical Fidelity, Nakamichi, NVA, Panasonic, Pink Triangle, Pro-Ac, Revox, Rogers, Roksan, Rotel, Royd, Ruark, Sansui, Sennheiser, Straitwire, Systemdek, Target, Technics, 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

INTEREST FREE
(for Ltd Period) APR 0%.
Written details on request.
Licensed Credit Broker.
Switch card accepted

ELECTRO CENTRE
311 SOHO RD HANDSWORTH BIRMINGHAM
TEL 021 552 1878 & 5232425

FULL RANGE OF HI-FI.
PIONEER, TECHNICS, KENWOOD, JVC, SONY, AIWA, AKAI
Guaranteed the lowest price in the UK.
24 Hour Mail Order Facility Available

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

FRANK HARVEY
Hi-Fi EXCELLENCE

163 Spon Street, Coventry, CV1 3BB Tel: 0203 525200.
Mon to Sat 9.30 AM 5.30. Closed Thursday

MUCH MORE THAN HI-FI
WE ARE A BADA DEALER

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 - Tripod - Tannoy - Thorens - Van Den Hul - Yamaha

MAILORDER - EXPORT - HOME TRIALS

3 Floors. 3 Dem rooms. 3000 sq feet in the pursuit of Hi-Fi Excellence

Elmdon Audio

Esoteric Audio Research

834 Integrated, Troughline/decoder, valve phono stage, on demonstration.

REFERENCE IMPORTS

Lumley ST60, 120 Monoblocks,
Diamond Acoustics, Silver Sounds, etc...

Orfon top part exchange prices, used bargains always available.

PHONE FOR DETAILS

(BIRMINGHAM) 021-784 8765

NORTH



THE HI-FI STUDIOS

HEYBROOK, MONITOR AUDIO, ART AUDIO VALVES, DUAL, SUGDEN, ALPHASON, TDL, MICHELL, ACOUSTIC ENERGY, TEAC, A&R, AURA, ORIGIN LIVE, SYSTEMDECK, EPSILON, SHURE, AUDIO TECHNICA, GOLDRING, ALBARRY AND OTHERS FROM THE COMPANY THAT CARES FOR CUSTOMERS.

DEMONSTRATION IN OUR LISTENING ROOMS OR AT HOME

SUNNYFIELD, DONCASTER

Tel: (0302) 781387

AUDIO COUNSEL HI-FI SPECIALISTS

LINN, NAIM, ARCAM, ROYD, JBW, NAKAMICHI, ROTEL, CELESTION, CREEK, DENON, MARANTAZ and many more....

Also full service facility, AV • dem room and multi - room installation.

12/14 Shaw Road, Oldham OL1 3LQ

Tel. 061 633 2602

HI-FI
VIDEO+TV



■ TECHNICS ■ SONY ■ PIONEER
■ PANASONIC ■ KENWOOD ■ DUAL
■ AIWA ■ CASTLE ■ QUAD ■ B&W
■ MARANTAZ ■ SPENDOR ■ ARCAM ■ ROTEL

■ WHARFEDALE ■ DENON ■ YAMAHA ■ TANNAY
■ PHILIPS CD ■ CELESTION ■ ROGERS ■ MORDAUNT
SHORT ■ MONITOR AUDIO ■ JPW ■ TDL ■ AND MANY MORE

BIG DISCOUNT • TWO YEARS GUARANTEE ON HI-FI
EXCELLENT COMPARATOR DEMONSTRATION
PRIVATE LISTENING ROOM • FREE HOME INSTALLATION

CHORLEY (0257) 271935

54 Chapel Street, Chorley

REPAIRS & D.I.Y

Lockwood Audio

Tel: 081-207 4472

Fax: 081-207 5283

WE BUY AND SELL
NEW, USED AND VINTAGE
SPEAKERS, DRIVERS, CABINETS, PARTS.

SPEAKER REPAIRS

THE

Authorised **TANNOY** Specialist

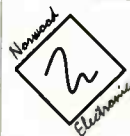
MAJOR CREDIT CARDS WELCOME



IMPERIAL STUDIOS,
MAXWELL ROAD,



BOREHAMWOOD, HERTS. WD6 1WE



Audio Components Catalogue

Everything for the DIY audiophile!

D/A Converters, Digital Filters and
Interface IC's, Audiophile Op-amps,
Capacitors, Resistors, Boxes, Optical
Devices/leads, Crystals,
Kits for Power Amplifiers, DAC's etc.

Send today for our free catalogue of components, kits and
application advice!

Norwood Electronics, Unit 8, Pinbush Rd, South Lowestoft
Industrial Estate, Lowestoft, Suffolk, NR33 7NL.

REVOX SERVICE & REPAIRS "Authorised agent for Revox Products"

• 17 Years experience, ex-Bauch •
• All repairs carried out and guaranteed •
• Fast turnaround •

Tel: 0923 893711

Suite 10, Smugoak Business Centre,
Lye Lane, Bricketwood, Herts. AL 23UG



RATA

Edge Bank House, Skelmergh, Kendal,
Westmorland, LA8 9AS
Telephone: 0539 823247

If you like the Hi-Fi equipment you have but want a better
performance, don't change it -

UPGRADE IT!

You can build better than you can buy and we offer kits,
ports and instructions for anything from simple component
upgrades to complete rebuilds, plus kits to build high end
equipment from scratch.

New Upgrading Service.

If you are daunted at the prospect of taking the lid off your
prized possession, send it to us and we can do the upgrade
for you. We will advise on feasibility and cost before starting
work and upgrade to the level of performance you require
and can afford. We have a secure, low cost collection and
delivery service within the UK.

Upgrades to: Audio Research, Celestion, KEF, Krell, Linn,
Marantz, Meridian, Naim, Niytech,
Pioneer, Quad, Leak, Radford, Rotel etc....

Send now for full details and a copy of our 1993 Audiophile
Components Catalogue No. 2.
To cover postage Europe 5 x IMCs, World 9 x IMCs, or
quote your credit card number (Visa or Mastercard only).
UK - free.

TECHNICAL & GENERAL

THE ORIGINAL TURNTABLE SPECIALISTS

for the Great Classic Turntable, Arms, Cartridges, Styli.

CONNOISSEUR • GARRARD • GOLDRING • LENCO
• ORTOFON • SHURE • S.M.E. • THORENS • WATTS

All available Genuine spares and our own
re-manufacture of obsolete parts
Servicing and Overhauls, to original technical
specifications.

NO ILLUSORY 'IMPROVEMENTS', NO DUBIOUS OR
HARMFUL 'MODIFICATIONS'

Cartilages and styli, correct radius diamonds, for early
recordings - 78s & LPs
Remedial service available

TECHNICAL & GENERAL

P.O.Box 53, Crowborough, East Sussex TN6 3BY.

Tel. 08 92 65 45 34

STRAD

Traditional Audio

"Classic Loudspeaker Enclosures
Handcrafted from Authentic Blueprints"

Thomas Henry Wostencroft,
29 Meadowfield, Whaley Bridge,
Stockport, Cheshire

Tel: 0663 733383

HEATHERLEY LTD.

CYNTRA PLACE, 201 MARE STREET, HACKNEY, LONDON, E8 30E

Telephone: 081 985 1646

PRECISION WOODWORKERS & CABINET MANUFACTURERS

ESTABLISHED 1934

HEATHERLEY LIMITED

MANUFACTURERS OF SPEAKER CABINETS SINCE 1962

For sale speaker cabinets manufactured by craftsmen in various
sizes and finishes made for the trade surplus to requirements. Set
up your own speakers in professional built cabinets and get the
sound you want to hear.

TOP QUALITY AUDIO TUBES from West Europe/USA.

We have 1 Million values/tubes in stock including vintage and high quality audio types. Please enquire for any type not listed below.

2A3 Chinese	£15.16	85A2 Mullard	£5.98	ECC85 Tungram	£2.66	SOCKETS	
5AR4, refer to GZ34/GZ37		211 GE	£42.56	ECC88 Russian	£3.32	UK4, used for types	
5C-450A	£295.00	300B Chinese	£70.00	ECC88 Mullard	£5.51	2A3/300B etc	£2.32
5R4BY, RCA	£4.98	805 United USA	£33.25	ECL82	£2.59	VT40/211 ceramic	£14.36
5U4G W European	£7.99	807 RCA	£9.29	ECL86 Mullard	£4.38	B5	£3.99
5Y3WGTA Sylvania	£3.99	811A Russian	£10.40	EF86 GEC UK CV4085	£22.61	UK5 McMurdo	£1.86
6AS7G Russian	£4.38	845 Chinese	£36.00	EF86 Russian	£3.45	B7A Teflon, used for	
6B4G American	£33.25	4212e STC UK	£120.00	EF804S AEG	£25.00	types 6C33CB etc	£1.60
6BH6 RCA	£2.19	56B7 USA	£5.99	EL34 Chinese Billington	£7.96	B7G McMurdo UK, chassis	
6C33CB Russian	£27.93	5751 USA	£6.50	EL84 Mullard	£9.30	mounted and skirted	£0.63
6CG7 Mazda	£4.32	58R16L 6WGB Russian	£4.98	EL84 Tungram	£3.05	Octal McMurdo Chassis	£0.86
6DJ8, refer to ECC88		6189 Mazda	£5.99	EL94 GE USA	£3.92	Octal PCB	£2.99
6L6GC GE USA	£14.63	6201, refer to CV4024		EL519 Russian	£8.24	B9A chassis unskirted	£0.69
6L6GC Russian 5881	£4.98	6550 Chinese	£12.36	GZ32 Mullard UK	£8.37	B9A chassis skirted	£0.79
6L6GC ECG Philips	£18.62	6550A GE USA 1991	£29.00	GZ34 Mullard UK	£12.00	B9A gold pins	£1.73
6SL7GT STC UK	£5.98	CV4003 Mullard	£7.31	GZ34 genuine Russian	£5.98	Topcap for 807	£2.66
6SN7GT STC UK	£6.58	CV4004 Mullard	£14.63	GZ37/CV378 Mullard	£4.39	Topcap for 5B-254-254M, 12E1, PL519 etc	£2.66
6V8GT STC UK	£3.45	CV4024 Mullard UK	£7.65	KT66/7581A GE	£15.89		
6X4 UK MOO	£2.39	CV4085, refer to EF86		KT88 Chinese Billington	£13.96		
12AT7, refer to CV4024/ECC81		DG7-32 Tungram	£28.80	KT88, refer to 6550A GE			
12AT7WC Sylvania	£3.92	E82CC, refer to CV4003		M8136, refer to CV4003/ECC82			
12AU7, refer to ECC82		E83CC, refer to 12AX7WA		M8137, refer to CV4003/ECC83			
12AX7WA Russian	£3.05	E90CC-01 Mullard	£13.29	M8162, refer to CV4024/ECC81			
12AX7WA ECG Philips	£9.99	ECC31/2A, refer to 6SN7GT		MU14 Bimar UK	£3.99		
12BH7A Sylvania/RCA	£10.97	ECC35, refer to 6SL7GT		PL519 Sylvania UAS	£7.91		
12E1 STC FIT UK	£13.30	ECC91 Bimar UK	£3.12	VT4C GE	£42.56		
1303 CV4068	£5.99	ECC82 Mullard UK	£4.65				
13E1 STC UK	£133.00	ECC83 Russian	£3.05				

BILLINGTON EXPORT LIMITED,

1E Gillmans Industrial Estate, Billingham, W Sussex RA12 9E9, UK

Tel: 0403 784961 Fax: 0403 783519

MINIMUM ORDER - UK £50.00 + 17.5% V A T EXPORT £100.00 Callers strictly by appointment only

Formerly Billington Values of Horsham. One million electronic valves, cathode ray tubes, klystrons in stock.

Bank: Lloyds, 1 West Street, Horsham RH12 1BP, Account 0702305, Sort Code 30-94-41 Gatwick Airport (south London) 15 miles away,
Company registered in London no. 2728987 Directors: M H Billington, C H Billington



TAI ARGOCH TRADING ESTATE,
MELIDEN ROAD, DYSERTH,
CLWYD LL18 6DD.

Telephone: (0745) 570194

Simply The Best

FIT DEFLEX ACOUSTIC PANELS TO YOUR LOUDSPEAKERS &
IMPROVE THE SOUND OF YOUR HI-FI SYSTEM BY 50%

- RESULTS NEVER ACHIEVED BEFORE -
- UNEQUALLED IN PERFORMANCE -
- THE ULTIMATE UPGRADE -

Replaces the existing damping materials inside your loudspeakers - quick and easy to fit.

By controlling the energy inside the enclosure, these revolutionary panels eliminate standing waves and unwanted cabinet resonances, and enhance the overall performance of the system

Independent tests show a 50% gain

Full range of kits available for any loudspeaker - Phone for details



Pat. Pending

"NEW APPROACH STUNS THE EXPERTS"
"BIGGEST BREAK-THROUGH IN YEARS"

AFTER FITTING DEFLEX PANELS

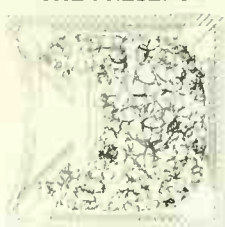
"My £300 Missions now sound better than a friends £1,000 ★★★★★"

"The music is faster, brighter, cleaner"

"Deep bass, and well controlled"

GET THE MUSIC OUT OF YOUR SYSTEM & LET YOUR SPEAKERS BREATHE

THE PAST &
THE PRESENT



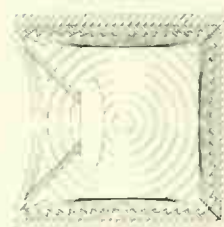
Inside a Typical Cabinet



KITS FROM
£49.95



LISTEN TO
THE FUTURE



Deflex Panels Fitted

UK DISTRIBUTOR

The
SPEAKER
Company

Unit 9, Waterside Mill,
Waterside, Macclesfield,
Cheshire SK11 7HG

Phone 0625 500507

IN THE DECEMBER ISSUE

MOTH ALAMO

We'll be bringing you a review of the latest Moth turntable, which is organizing a last stand against the rising tide of silver discs at the £170 price point.

THE NAIM NAIT 3

Naim have recently brought out another addition to their well-respected range of amplifiers, in the shape of the NAIT 3 integrated amplifier. We'll be putting the Nait through its paces and assessing how it measures up to the competition.

LEAK TUNER

One of our favourite pieces of vintage equipment hits these pages again as Dominic Baker gets both feet in the Troughline.

THE GROUP TEST

Following our reviews of three sub-£200 loudspeakers in this issue, we have a group test of 'speakers at around the £200 price point.

DACULA

Yes, we know we've promised you this before, but we couldn't get it to come

out in the daytime. This time, however, we'll bring you a review of Select Systems' £376 Crystal-based converter, if you'd just stop waving that garlic around!

ALL THAT AND THEN SOME!

All the regular items, news, reviews, information, dealer guides, your queries, the definitive answers, special offers, the competition, classified ads, and in a possible new column on the great audio buyers of history, we'll be asking Alexander the Great about horn loudspeakers. Or maybe not.

AND THE SUPPLEMENT!

Yes, Santa's elves have been scribbling away again, and will be delivering DIY supplement No.6, containing details of our new Single-Ended amplifier design, along with our December issue. How could you bear to be without it?

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.



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

WIN A NAIM/EPOS

COMPETITION ENTRY FORM

- 1) Naim are based in;

<input type="checkbox"/> Stafford	<input type="checkbox"/> Shropshire
<input type="checkbox"/> Salisbury	<input type="checkbox"/> Southwark
<input type="checkbox"/> Selkirk	

2. Which month of 1972 saw Naim become a limited company?

<input type="checkbox"/> April	<input type="checkbox"/> May
<input type="checkbox"/> June	<input type="checkbox"/> July
<input type="checkbox"/> August	

3. Epos loudspeakers are distributed by;

<input type="checkbox"/> Mission Electronics	<input type="checkbox"/> Musical Fidelity
<input type="checkbox"/> Mordaunt-Short	<input type="checkbox"/> Monitor Audio
<input type="checkbox"/> Morel	

4. What exactly is an *annus mirabilis* anyway?

<input type="checkbox"/> A year of large tax increases	<input type="checkbox"/> A year of miracles
<input type="checkbox"/> A year of surprises	<input type="checkbox"/> This year
<input type="checkbox"/> Last year	

THE TIE BREAKER (Obligatory)

Complete the following ditty in no more than thirty words:

The logo of Naim looks incredibly pretty,
 their sound through the Epos' will be smooth, not gritty,
 this system's the prize for completing this ditty,
 in original form, and it's got to be witty

Name _____

Address _____

Postcode _____

Daytime Tel.No: _____

Evening Tel. No: _____

This month we're giving you the chance to win a complete tuner-sourced system from two of the most respected names in British hi-fi, Naim and Epos.

The prize, in detail, consists of the new Naim NAT 03 tuner, reviewed by Noel Keywood in our September issue, Naim's very latest amplifier, the new NAIT 3, and a pair of Epos ES11 speakers with dedicated stands.

Naim have been at the forefront of home audio since they became a limited company in June 1972, swiftly to become one of those companies whose name is whispered in awed tones wherever and whenever hi-fi buffs meet. The build quality and reliability of their products are legendary, and they have a dedication to sound reproduction which is second to none, and lends all of their products that unmistakable 'Naim' quality.

They not only sound good, but look good too. Noel mentioned in his review of the NAT 03 that the green light allowed to seep out from around the Naim logo on the front panel 'adds a little bit of magic to the otherwise stark appearance'.

Did I say Naim products sound good? Well, you don't need me to tell you that, so here's a few of Noel's comments on the sound, compared to his Leak Troughline:

'it paints up a softly pure and slightly warm sound reminiscent of valves'

'bass lines came across well, having plenty of heft'

'a convincingly natural and unusually relaxing sound that is unique and distinctive'

That's just the first part of the prize! There's more to come. Naim aren't the sort of company who rush out 'upgrades' to their current range every few months, so 1993 has been something of an *annus mirabilis*, since Naim have been beavering away at their Salisbury headquarters and have actually launched two new products this year. The second of these products is the NAIT 3 integrated amplifier, which follows Naim's standard livery and matches the NAT 03 tuner. There isn't much that we can tell you about the NAIT 3 amp as yet, since it's so new we haven't even had time to review it ourselves!

TUNER SYSTEM

However, a quick preliminary audition shows that it should live up to the grand tradition of Naim amplification.

Building a 'speaker' which can do justice to the front end could have left our winner with quite a headache, so we had decided to throw in a packet of aspirin, but then somebody had the bright idea of asking Naim which speakers they would recommend. A preferred pairing was with the Epos ES11, they told us. This was generally popular, having stood the test of time well.

The Epos ES11s are notoriously choosy partners, being the kind of 'speaker' which only really sings with good amplification. Luckily, the Naim NAT3 lives up to the Naim tradition of being amongst the best amplifiers available, so we don't expect our winner to have any problems.

In previous tests we have run on the Epos ES11s (built and distributed by Mordaunt-Short), such as the group test in our January 1992 issue, comments like 'coherence, subtlety and graceful presentation' or simply 'finesse' have flown fulsomely from the word processors of our reviewers. Since their inception they have been, and continue to be, benchmark products.

That's the prize then, Naim NAT03 tuner, NAT3 amplifier, and Epos ES11 speakers with stands - and it can be yours for just the price of a stamp and a little brain power applied to our tie-breaker. What could be simpler!

Please send your entry form, completed in block capitals, to arrive no later than Friday 5th, November, to:

NAIM/EPOS COMPETITION
Hi-Fi World Magazine,
64 Castellain Road,
London W9 1EX



In the event of more than one entrant submitting all the correct answers, the winner will be decided with a tiebreaker. We will endeavour to publish the results in the January '94 issue. Audio Publishing Ltd. reserve the right to publish such entries or parts of entries as the company sees fit. We regret that photocopies or facsimiles of the entry form cannot be accepted. No correspondence about this competition will be entered into and the Editor's decision is final. Employees of Mordaunt-Short, Naim Audio, and Audio Publishing Ltd. may not enter. ❊

Audiolab System Winner August Issue Competition

Despite the summer holidays, the response to our August Competition was overwhelming. The winner of the Audiolab tuner and amplifier combination was Mr. D. Wilkinson of Newport, Isle of Wight. Happy listening, Mr. Wilkinson!

The Music Pages

INDEX

RECORD REVIEWS

ROCK & POP 68

Giovanni Dadomo &

Theresa Bolster

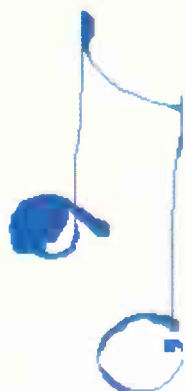
JAZZ 77

Simon Hopkins

CLASSICAL 89

Peter Herring

RECORD MAIL ORDER 94



Giovanni Dadomo



SWERVEDRIVER Mezcal Head

Creation CRE CD 143

● 'Mezcal Head' is the second long-player from Oxford-originated Quartet Swervedriver, although on superficial hearing you could easily be forgiven for thinking it's the latest Nirvana LP. Singer/guitarist Adam Franklin's vocals have a strong tendency towards a very Kurt Cobainish drawl - at its strongest on 'Duel', 'MM Abduction' and the closing 'You Find It Everywhere'. On the other hand, I still think KC himself sounds like he's modelled his vocal

stylings strongly on one Sting. Still, this is all very bye the bye, and ultimately Swervedriver commit no sin other than being part of the current indie mainstream, i.e. creating amiably (for the most part) well-balanced collisions of melodic pop and quasi-Metal, the whole more than capably sewn up by a dense, texture-rich production c/o the band working in tandem with indie stalwart Alan Moulder, whose previous credits include Smashing Pumpkins, Curve, Ride and My Bloody Valentine. Indeed there are touches of the last mentioned audible on 'Mezcal Head' too, great wedges of thundering guitar waterfaling against one another with far from unpleasant results - note particularly the far from chilly cauldron of sound that is 'Blowing Cool' with its classic chord laden spinal riff and gem percussion from one Jez. This last mentioned and sumameless gent punishes his skins admirably throughout, but never to better effect than on 'MM Abduction', again providing a perfect backdrop for the guitar duels of Franklin and fellow string bender Jimmy Hatridge. Other standouts include 'Harry and Maggie' with a riotous, primally screaming riff that's as old (and as new) as class-A Hendrix Experience; a whiff of Sixties' surrealism too on 'Last Train', a dense, storming whirlwind of sound topped off with amiably Dylanish vocal phrasings.

On the other hand (that's the third hand, if anyone's keeping count) there are times when Swervedriver, try as they may, don't quite hit the spot - the failed atmospheric of 'Girl On a Motorbike' or the final 'You Find It Everywhere' which is muscular in an anabolic steroid way, i.e. lacking in real substance or evidence of hard work.

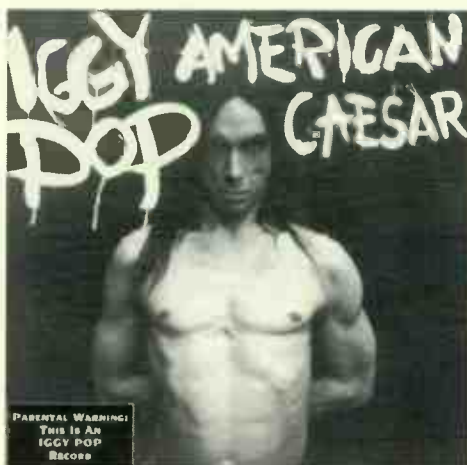
Still, you can bet your life this makes for cracking live music - and funnily enough the group are spending the Autumn touring our fair land mostly supporting Curve, who think they're hot stuff and I dare say they're more right than not.

RECORD OF THE MONTH

**IGGY POP
American Caesar
VIRGIN CD VUS 64**

● With well nigh a quarter century of rock'n'roll madness under his belt, Iggy Pop's well qualified to be regarded as one of the eminence grises of the musical pantheon: small wonder he's been dubbed a godfather figure of practically every sub-genre to have emerged in the past twenty years. A key influence with any punk band worth their salt, Iggy's subsequently gone on to be a prime mover in the disco/techno crossover, and been rediscovered (after 'Blah! Blah! Blah!' and subsequent releases) as a King of Heavy Metal. And, despite being dangerously close to Keith Richard age-wise, Iggy remains one of the most vibrant, exciting, plain dangerous performers on the planet, and he

still has a torso most twenty five year olds would kill for!
Many reviewers have already hailed



'American Caesar' as Iggy's best album since 'The Idiot'. That's possibly true, but for money, Iggy's never actually made a totally bad album, and the great ones (even 'Zombie

Birdhouse' has its fervid supporters) tend to be a matter of personal taste. On 'American Caesar' Iggy retraces familiar favourite themes - drugs, madness, those fave staples of the plugged in beast - and tries on the old pair of new shoes (touchingly moving slow grooves such as 'F***ing Alone' or 'Jealousy') and in between there are more than enough touches of the old fire and fervour to both satisfy the old aficionados and seduce some new friends too. There are stark, ironic monologues, stories of the street aplenty ('N.Y. Girls') and that wild and crazy sense of humour that is so often undervalued. Small wonder that Iggy's teamed up with that other wild 'n' crazy artist-popster Henry Rollins on one cut. It's a match made in Hell, but Heaven to the ears and soul. James Jewel Osterberg is alive and well - 'Yeah, yeah and a boo hoo'.

**MAGAZINE
BBC RADIO 1 LIVE IN CONCERT**

**THE FALL
BBC RADIO 1 LIVE IN CONCERT**

● Two seminal sounds from Manchester, recorded in their heyday in the case of the long-defunct Magazine, or first flush, if you like, when it comes to Mark E Smith's still-running Fall.
Between them these two bands helped bridge the gap between the



angry, undisciplined sounds of punk and the broader, more Catholic music that was to follow. Somewhere between the pointed, fairground barker mutterings of Smith and the paranoid insect whinnings of the young Howard Devoto you can trace the roots of Joy Division; and the Technicolor pop of New Order and legions thereafter can be heard in embryo in the florid colourings of the

infant Magazine.
The latter, recorded live at London's cosily sexy Paris Theatre in November of '78, were fully formed and flying at this period in their brief but inspired biography, early masterpieces like the endlessly evergreen 'Shot By Both Sides' nestling comfly alongside the snarling 'Give Me Everything' whose funksome bass underpinning anticipates the dance-time brilliance which would see its apotheosis in the dazzling peaks of the 'Correct Use Of Soap' LP.

Magazine, for those who don't recall, were DeVoto's kiss goodbye to The Buzzcocks, who he'd co-founded alongside Pete Shelley after seeing The Sex Pistols (and the future) a couple of years previously. With him he took his distinctive, not to say insidious, vocal style and a way with lyrics equalled by few writers of his or any other pop generation. But while his old band went on to define bouncy chart-pop anew with a string of hit singles Magazine were another kettle of piranhas altogether, and the evidence is all here, from the mad carnival of 'Great Beautician In The Sky', the measured rhythmic thrust of 'Back To Nature' ('I couldn't act naturally if I wanted to', confesses DeVoto in his best demented arachnid growl), or the lush, witsome arrangement of 'Definition Gaze'. All this stuff's been heard before, of course, but - aside from the odd minor hiccup it's still worth having, be it as a fine and varied introduction to



a great band, or as an indispensable addition to the completist's archive.
Like DeVoto himself, Mark E. Smith is that kind of distinctive, original stylist who (like the great Captain Beefheart, a common hero to both) tends to split listeners neatly into fervid fan or totally repelled unbelievers. For my part I always loved DeVoto's work, but found a lot of The Fall's output rather irksome, largely due to antipathy as regards Smith's vocal style which frequently strikes me as lumpish and unwieldy.
All this is probably deliberate of course, and if nothing else you have to admire anyone who can plow his own furrow with as much tenacity and imagination as Mark E. Smith has.
You have to admire too the man's capacity to come up with frequent ear-blitzing surprises; witness the brilliant make over of R. Dean Taylor's golden oldie 'There's A Ghost In My

House', the whooping vocal flourishes of 'Australians In Europe' (a masterful piece of foresight considering how the Antipodeans have colonised our airwaves and television in subsequent years) or the catchy pop of 'Shoulder Pads'. But there's the odd drawback also; a certain muddy sound means the lyrics are largely lost in the mix, while one or two numbers just go on too long for total armchair comfort, no matter how well they may have worked live.



STIFF LITTLE FINGERS
BBC RADIO 1 LIVE IN CONCERT

● Before U2, there was Jake Burns' Stiff Little Fingers, a breath of fresh fiery air that wafted across the Irish Sea, oozing street cred from every pore and giving even brand leaders like The Clash more than a run for their money with Burns' rabid vocals and guitar carrying more promise than any son of Erin to have come along since Van The Man.

But Style is very much a thing of the moment and when that moment has passed (in this case April of '81) then what? Well, the sad but unarguable truth of the matter is that looked at down the dusty corridors of time, Stiff Little Fingers emerge as little more than a comma in the pages of history, one that owes more than a little to Strummer's old band, often uncomfortably so. Thus 'Safe As Houses' is little more than a muted 'Clash City Rockers', and both 'Roots Radicals, Rockers and Reggae' and 'Just Fade Away' are based on

percussion tracks which positively reek of Topper Headon - while both being based on the one barely indistinguishable guitar phrase.

On the plus side there's a distinct pleasure to be gained from Burns' singular blend of 'Oirish' fury and reggae phrasing, the frequently admirable smart turns of phrase ("She asked me out and I asked her in" etc.) and some devilish fretboard freneticism. Unfortunately the pluses hardly outweigh the minuses. Hardly essential.

DEAD CAN DANCE
Into The Labyrinth
4AD DADC 3013CD

● Dead Can Dance are one of the best kept secrets in Indie-dom. The sound-child of multi-instrumentalists Brendan Perry and Lisa Gerrard, Dead Can Dance introduce an intriguing multi-instrumental mix which draws



on too many sources to mention, but carrying strong hints of Indian, North African and various Middle Eastern musics. I suppose it wouldn't be entirely unkind to call them 21st century hippies, but that too is something of a misnomer, as they easily put the main bulk of their cross-cultural predecessors to shame.

Titles such as 'Yulunga (The Spirit Dance)', the mysterious 'Saldek', or 'Towards The Within' could easily summon images of weirded out acid freaks in grubby kaftans dabbling in freaky aural holiday snaps ("and this is one we learned off this monk on the

beach at Goa, maaan") but this would be doing the group a huge injustice. Their music is catholic in the best sense of the word - and, no, the Pope has nowt to do with it - utilising a vastly impressive array of instruments and influences to admirable effect. They're by turns traditionally folksy, poly-cultural, and even (perhaps surprisingly in such a classically various context) catchy. They're also frequently moving ('Tell Me About The Forest') and never less than inspired.

This is not music words can really do any sort of justice to - suffice to say they do not in any way means or form deserve to be dismissed without a fair hearing. And fair hearing is what this wild, mild (in the best sense of that word) and never less than magical music is capable of. Listen and be amazed. And everyone should hear 'How Fortunate The Man With None' at least once in their lives. Hearing is learning; learning is earning - a true enriching of the spirit.

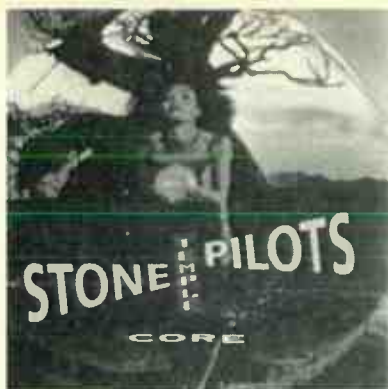
Theresa Bolster

THE STONE TEMPLE PILOTS
Core

Atlantic 7567824182

● The Stone Temple Pilots are a relatively new band from Los Angeles and this, their debut album, has proven incredibly successful for them in America. It has sold one million copies spawned three (soon to be four) highly successful singles and the

Rock + Pop



band members have become stars overnight. Although its reception here in Britain has been far quieter, 'Core' has all the right ingredients and should prove a winner in time.

Judging from the gloom that pervades 'Core' it would be tempting to peg the Stone Temple Pilots as world-class cynics. Their sound is intense and powerful hypercharged heavy rock. It's by no means 'cockrock' however. Vocalist and songwriter Weiland's lyrics are too disturbing for any frivolity or egoism. Weiland says he finds the darker shades of life more attractive than the yellows and oranges, and his lyrics rely heavily on themes of alienation, apathy and guilt. Musically and lyrically it is at times quite disturbing and often angry. Alice in Chains (without the drug allusions) is a good reference. Unfortunately at times the Stone Temple Pilots sound so much like Alice in Chains it's bizarre. The vocalists of both bands have very similar singing styles. Although other aspects of the Stone Temple Pilots' music seem highly derivative if you can ignore these suggestions. 'Core' is worthwhile investing in for the music's energy and power, if not its originality.

The first single 'Sex Type Thing' with its raging verses and awesome guitar work from Dean DeLeo is a good example of what to expect from 'Core'. If you listen closely it's a nasty little song about an impending date-rape situation told from the viewpoint of the odious man. Most of 'Core's songs have such a double edge. They seem initially to be simply great rock, verging on radio-friendly. A darker underside lurks in all the songs however with many references to rot (spiritual and physical), pain and death. The great music saves it all from becoming a chore to listen to. The second single 'Plush' has been described as Seattle-esque and it's certainly the most commercial of all the songs on 'Core'.

The Stone Temple Pilots are huge in America and they'll be huge here too. They sound like Alice in Chains, they sound like Nirvana, so what?

'Core' provides an adrenalin rush, the best legal buzz around, indulging is highly recommended.

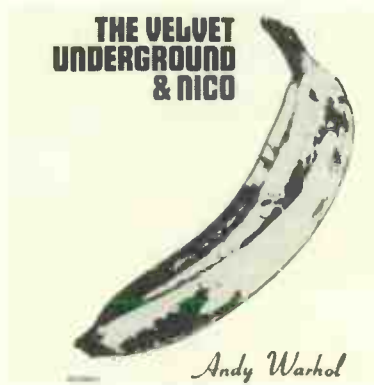
VARIOUS ARTISTS
Velvet DownUnderground
Bird CDOOI Shock Records

● With the 25th anniversary of the release of Velvet Underground's debut album imminent, a gaggle of Australian bands collectively decided to record a Velvet Underground tribute album. While tribute albums are a dime a dozen lately (Leonard Cohen, the Beatles, Neil Young) this one's a little different as the songs were re-recorded by these bands in the exact order they appear on the original. Some of the artists appearing on this album may be familiar to those who haunt the import bins at record shops - the Cosmic Psychos the Underground Lovers, Bored - whilst many will be unknown to most.

Often these tribute albums are of little value beyond the novelty and 'Velvet DownUnderground' is prone to this limitation. The problem is that many of the bands bring little or no interpretation to the songs. Many of them are straight cover versions with some of them hovering so close to

Lovers interpret 'I'll be Your Mirror' beautifully. The vocals are excellent and they manage to blend their own idiosyncratic sound with the spirit of the original. Ripe, another highly regarded Melbourne outfit, provide an awesome version of 'Heroin'. It's sinister, unnerving and makes the original seem tame. The final track 'European Son' covered by an unknown band called Snark is an outrageous and very weird burst of noise which pushes far beyond the original in terms of brutality and length, adding four minutes to the sonic assault.

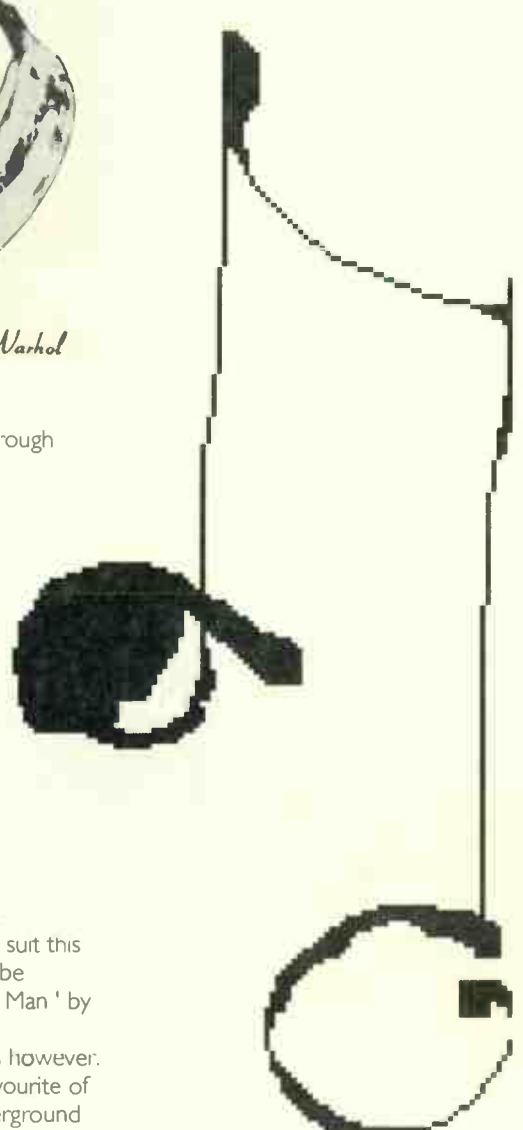
'Velvet DownUnderground' will be of interest to those who collect tribute albums and those looking to discover Australian music. This album serves as a fine introduction to some of the best talents gathering international interest, as well as those still known only locally. It's a shame, however, that some of the artists didn't put a little more effort into their chosen songs and do the albums concept, and indeed, the Velvet Underground, justice.



Andy Warhol

the original that they'd be indistinguishable if heard through someone else's bedroom walls. The Cosmic Psychos are well known and hugely admired in America, but their version of 'There She Goes Again', although a little heavier than the original, is very dull. Likewise the Painters and Dockers (named after an infamous workers union) and their version of 'Sunday Morning'. This band are usually quite raucous, but it would seem that they have toned down their sound to suit this song. Lou Reed would not be impressed. 'Waiting for the Man' by Bored is quite awful.

There are a few goodies however. Recent 4AD signing and favourite of Ivo Watts-Russell the Underground



you don't have to be a ..



.. to discover the **BEST** Hi-Fi Sales & Service in Somerset

mike manning audio

"the *hi-fi* emporium"

our wide range includes

Naim Audio - AVI - Audiolab - Arcam - Rega - Roksan - ATC - Rotel - Pink Triangle - Audio Alchemy - Mission - Heybrook - Marantz - Micromega - Epos - Shahinian - LYRA Acoustic Energy - JPW - Nakamichi - Denon - Pioneer - Aiwa - Yamaha

Listening Lounge - Home Installations - 2 Year Guarantees - Full Servicing Facilities
Mail Order - Instant Credit Facilities - Access-Visa - Part Exchanges - Top Tape

110 Middle Street, Yeovil, Somerset. Telephone (0935) 79361 (Closed Mondays)

0% - INTEREST FREE CREDIT - PLEASE PHONE FOR DETAILS 0%

Au. 51

The

reference standard against which all others should be judged.



SUGDEN

J.E. SUGDEN & CO. LTD. VALLEY WORKS, STATION LANE,
HECKMONDWIKE, WEST YORKSHIRE WF16 0NF TEL. 0924 404088

Hi-Fi World Dial-a-Dealer

AVON

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, B59 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, Sansul, Sonic Link, Stax, Townsend, Audio Technica, Goldring, Ltra, Ortofon, Sumiko. Demos by appt only. home trial facilities, free install. service facilities.

BEDFORDSHIRE

SOUND DEALS, 52 Shortmead Street, Biggleswade, Beds, SG18 0AP. Tel 0767 312249. FAX 0767 315714. Private listening rooms. Audio/Visual demonstration room. Free delivery and installation. Part exchange welcomed. Pre-owned equipment available. Top tape agents. All major credit cards accepted. Credit facilities (including interest free) STS. Agencies include: AR, Alphason, B&W, Castle, Celestion, Denon, Heybrook, KEF, Marantz, Manticore, Nakamichi, NVA, Pioneer, Ortofon, Rotel, Ruark, Sequence, TDL, Teac etc...

BERKSHIRE

NEWBURY AUDIO, 2 Weavers Walk, Northbrook Street, Newbury, Berks, RG13 1A1. Tel. 0635 33929. Linn, Creek, Epos, Denon, Nakamichi, Shahinian, 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.

READING HIFI 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, sennheiser, Top Tape Centre, and many more.

BUCKS

DEJAC HIFI 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.

CAMBRIDGE

CAMBRIDGE HIFI, 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 9.30-5.30pm. 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.

AUDIO FILE, 2 Foundry Walk, Market Hill, St Ives, Cambs. Tel 0480 66123. Linn, Naim, Rega, Quad, Cyrus, Arcam, Musical Fidelity, 9.30am-6pm 6 days. 0% credit.

CHESHIRE

ASTON AUDIO, 4 West Street, Alderley Edge, Cheshire. Tel. 0625 582704. Products include: Celestion, Creek, Yamaha, Monitor Audio, B&W, Aiwa, Aura, AKG, Musical Fidelity, Tannoy, Sennheiser, Marantz, Dual, Denon, Quad, Sansui, Technics, Spondor, Mission, SME, Nakamichi, Audiolab, Rogers, Audioquest, Mordaunt-short, Meridian, Deltac, Roksan, Arcam, Kef, NAD, Cyrus and others. Discount CD and tape. Extended guarantee, interest free credit and written details on request.

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 bull****.

CONGLETON HI-FI, 1/1a Duke St. Congleton, Cheshire, CW12 1AP. (0260) 297544. Acoustic Energy, Arcam, B&W, Denon, Epos, Linn, NAD, Nakamichi, Onix, Royd, Target, 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.

DECIBELS, 12 The Bull Ring, Northwich, Cheshire, CW9 5BU. Tel (0606) 350 343. Free Home Demonstrations. Free Delivery. Free installations. Single speaker listening room. High quality audio AND Home Cinema equipment. Second hand HiFi catalogue on show. Rotel,

NAD, Yamaha, Celestion, JPW, Systemdek, Thorens, Sequence, Target, QED, Goldring plus a variety of cables and accessories. Open Mon-Sat 9-6.

DOUG BRADY HIFI, Kingsway Studios, Kingsway North, Warrington, Cheshire, WA1 3NV. (0925) 828009. "Largest choice of specialist hifi in NW. All credit cards 3 dem rooms. Fair demonstrations and home trial facilities. Open 6 days.

CORNWALL

ART OF MUSIC , nr. Launceston, Cornwall, Tel. 0566 86649. AC Magnum, Basis, C.A.T., Cogan Hall, Diamond Acoustics, Grahams, Groove Tubes, Lumley Reference, Moth, Magnum Dynalab, REL Acoustics, Silver Sounds, Transfiguration. Dem Studio appts necessary, home trial facilities, free install. open 7 days.

CUMBRIA

MISONS SOUND & VISION, 11 Warwick Road, Carlisle CA1 1DH Tel (0228) 22620. Bang & Olufson, B & W, Quad, NAD, Yamaha, Sony. Demo Suite. No appts nec. Home trial facilities. Free installation. Service Department 9 - 5.30 Mon - Fri, Thurs 9-1, Sat 9-5.

DEVONSHIRE

CHELSTON HI-FI, 38 Walnut Road, Chelston, Torquay, Devon TQ2 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.

DORSET

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 fact pack and quotation on request.

DORSET

SUTTONS HIFI, 18 Westover Road, Bournemouth, 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

PRO MUSICA, 6 Vineyard Street, Colchester, Essex. Naim, Roksan, Rega, Arcam, Audiolab, Creek, Systemdek, Rotel, Marantz, Denon, Shahinian, Micromega, Neat, Aura, Heybrook, EPOS, RUarc, Monitor Audio, Tripod, Sound Organisation, Lots of records, 2 dem rooms, No appts necessary, Service dept, Part exchange, Finance available. 10-6 Mon-Sat.

TWENTY 20 AUDIO VISUAL LTD. Unit 205 Lakeside Shopping Centre, West Thurrock, Grays, Essex OM16. Tel. 0708 891818 Fax. 0708 891300. For your total home entertainment requirements. From a 2" Casio to a 50" Pioneer screen. Dolby surround specialists with three dem rooms dedicated to pro-logic, laser disc software in stock, from Harman Kardon. Prologic from Yamaha, Marantz, Pioneer, Technics, Kenwood and B&O.

RAYLEIGH HI-FI, Chelmsford, 216 Moulsham Street. Tel: 0245 265245 Rayleigh, 44a High Street. Tel: 0268 779 762 Southend, 132/4 London Road Tel: 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% finance.

AUDIO T, 442-444 Cranbrook Road, Gants Hill, Ilford, Essex, IG2 6LL. (081) 518 0915. Fax (081) 554 8463. Great Hi-Fi from Arcam, Audiolab, B&O, Bose, Cyrus, Denon, KEF, Marantz, Meridian, Mission, Micromega, Nakamichi, Rotel, Sony, 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. Home Cinema specialists. BADA Bonded.

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. (0242) 583960. Fax (0242) 226435. Great Hi-Fi from Arcam, Audiolab, Denon, Epos, Linn, Marantz, Meridian, Mission, Quad, Rogers, 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. Single speaker listening room. BADA Bonded.

HAMPSHIRE

AUDIO GALLERY, Near Petersfield, Hampshire. Mana, Castle, Alchemist, Albarry, 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.

AUDIO SOUTH, 24 (The Woolmead) East Street, Farnham, GU9 7TT. (0252) 714 555. Audio Innovations, Audio note, Deltac, JPW, Marantz, Rotel, Teac, Voyd, Hifi and audio visual dem rooms. Evening appts available. Home trial facilities, free installation. Access/Visa, 10.30-6.30 Mon-Sat, Closed Tuesday.

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 Fratton Road, Portsmouth, Hants, PO1 5BX. Tel. 0705 822 155, Fax. 0705 830 753

JEFFRIES HIFI (Portsmouth) 29 London Road, Portsmouth PO2 0BH. Tel. (0705) 663604. Individual dem rooms. Full credit facilities, late night Wednesday, Closed Mondays.

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. (0256) 24311. Fax (0256) 24430. Great Hi-Fi from Arcam, Audiolab, Denon, Linn, Meridian, Mission, Naim, Rotel, Sony, Yamaha & many more. Mon-Sat 9.30-5.30. 3 year guarantee on Hi-Fi. Free delivery & installation. 30 day free upgrade scheme. Home demonstrations. Part exchange. Single speaker listening room. BADA Bonded.

HEREFORDSHIRE

ENGLISH AUDIO, 95 Whitecross Road, Hereford, HR4 0DG. (0432) 355081. Musical Fidelity, Arcam, Pink Triangle, Denon, Marantz, Mission, Cyrus, A.I., Rotel, NAD, Nakamichi, TDI and others. Single speaker dem room, home trial facilities, free installation, service dept, Access/Visa, Credit arranged. Open Mon-Sat, 10-6pm.

GOSPELMUSIC/AUDIO, 32a High Street, Kington, Herefordshire, HR5 3BJ. (0544) 230254. Alphason, Allison, Revolver, Luxman, Yamaha, QED Audio, Systemline.

HERTFORDSHIRE

HERTS HIFI, 93 High Street, Hoddesdon, Herts. Tel. 0992 441172. Specialists in Audio-Visual & In-Car Entertainment. Main dealers for Aiwa, Celestion, Kenwood, Marantz, Panasonic, Tannoy and others.

RADLETT AUDIO, 141 Watling Street, Radlett, Herts, WD7 7NQ. Tel. 0923 856497. Mark Levinson, Proceed, Proac, Magneplan, Martin Logan, Tube Technology, Teac, Roksan, Audiolab, Stax, Systemdek, Jardiis, Copland, ATC, Audio Alchemy, AVI, EAR, Sumiko, Quad, Sonus Faber, Home trial facilities, free installation, Service Dept. Visa/Access 9-5.30 Mon-Fri 10-5.30 Sat.

REVOX Service & Repairs, Suite 10, Smuogak Business Centre, Lye Lane, Bricketwood, Herts. AL2 3UG. Tel 0923 893711. Seventeen years experience, ex-Bauch. Authorised agents for Revox products, sales and spares. All repairs carried out are guaranteed. Fast turnaround. Any enquires telephone: 0923 893711.

SOUND DEALS, 1 Drapers Way, Stevenage, Herts, SG1 3DT. Tel: 0438 369999.

Private listening rooms. Audio/Visual demonstration room. Free delivery and installation. Part exchange welcomed. Pre-owned equipment available. Top tape agents. All major credit cards accepted. Credit facilities (including interest free) STS.

Agencies include: AR, Alphason, B&W, Castle, Celestion, Denon, Heybrook, KEF, Marantz, Manticore, Nakamichi, NVA, Pioneer, Ortofon, Rotel, Ruark, Sequence, TDL, Teac etc...

ULTIMAT AUDIO VISUAL, 22-24 St. Andrews Street, Hertford. Tel: 0992 583399. At Ultimad Audio Visual we have two single speaker dem rooms and one home theatre, with the very latest in Dolby pro-look equipment. Our fully trained staff look forward to helping you with any enquiry. All systems including multiroom fully installed.

VIDEO VISION, 160 Hollybush Lane, Welwyn Garden City, Herts. Tel: 0707 323610. For a friendly service, pop in to Video Vision for a chat. Stockist of Arcam, Denon, Marantz, Technics, B&W, Tannoy, JPW, Quad, Allison, Panasonic, Sony, Sennheiser, Bose, Audiotechnica, Aura, Castle, Heibrook and many more.

Hi-Fi World Dial-a-Dealer

KENT

ASHFORD, SOUNDRAFT HIFI, 40 High Street, Tel. 0233 624441. Seeking music lovers, male or female any age, to share common interest in. Multi room, Home Cinema etc. Attractive unusual equipment in unusual setting, your place or ours, we guarantee lasting pleasure. Open Monday - Saturday. Appointment service or just pop in. Bada dealers.

PROGRESSIVE AUDIO, 2 Maryland Court, Rainham, Nr Gillingham, Kent. ME8 8QY.

Tel. 0634 389094. 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, Meridian, Michell, Micromega, Moth, Origin Live, Pink Triangle, Proac, Proceed, Ruark, Silversounds, SME, Sugden, Sumiko, Systemdek, Snell, Target, T.D.L., Transfiguration, Townshend, Tube Technology, Voyd, V.P.I., etc.etc...

Demonstrations by appointment please.

VOLUME ONE, 41 Upper Wickham Lane, Welling, Kent, DA16 3AD. 081 304 4622. Arcam, Dual, Epos, Exposure, JPW, Marantz, Micromega, Nakamichi, Pink Triangle, Rotel, Ruark, Royd, Sony, Systemdek, Alchemist, Celestion, B&W. Large dem room, no appts necessary, Evening dems in shop by appt. Home trial facilities, free delivery and installation. Access/Visa. 10.00-6.00pm Mon-Sat.

KIMBERLEY HIFI, 193 Broadway, Bexleyheath, Kent. Tel 081 3043272. Pioneer, Technics, Kenwood, Denon, NAD, Aiwa, Tannoy, Mission, Rotel, Wharfedale, Castle. Separate dem room, no appt necessary, free installation, service dept, instant credit facilities. no early closing. V.J. HIFI, 29 Guildhall Street, Folkestone, Tel. 0303 256860 Mon-Sat 9-6. NAD, Yamaha, Marantz, Sony, Tannoy, Denon, Kenwood, Rogers, Musical Fidelity, Quad, Dem and home trial facil. free install. Credit to £1,000, Amex, Diners, Visa, Access, Service Dept.

LANCASHIRE

AUDIO CLASSICS, 8 Lowe Mill Lane, Hindley, Wigan, Lancs. WN2 3AF. Sorry but we are unable to answer queries in writing. I buy, sell, modify and repair all vintage and valve hifi equipment. Advice is free. New equipment by EAR, croft, Richard Allen and more soon. Phone if just for a chat. Credit cards accepted. Quick worldwide delivery, callers by appointment. Tel. 0942 57525 or Fax. 0942 525861. 7 days a week. NORMAN AUDIO, 131 Fnargate, Preston, Lancashire, PR1 2EE. Tel. 0772 253057. Fax. 0772 562731. Marantz, Pioneer, Yamaha, Audiolab, Arcam, Mission, Cyrus, B&W, Kef. Send for your catalogue. Home cinema dem room plus three sales areas. no appt necessary, free install. service dept, instant credit subject to status. Open 9.30-5.30, late night Wed - 8pm..

ROMERS HIFI CENTRE, 94-96 High Street, Rishton, Blackburn, Lancs. Tel 0254 887799. Stockists of: Sony Espirit Hifi, 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.

LEICESTER

LEICESTER HIFI 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

LISTEN INN, 6 Hotel Street, Leicester, Tel. 0533 626097. Wide range of records and accessories stocked. Our commitment to standards of service is apparent to our satisfied customers. Two dem rooms and free home install service available.

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.

LINCOLNSHIRE

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, QED, Royd, Sansui. Sequence, Something solid, Sonic Link, etc. Demonstration rooms. Home trial facilities. Free installations and above all a personal, friendly service.

STAMFORD HIFI 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 Hifi purchased for cash. No appts necessary. Home trial facil, free install, Service dept. Mastercard, Visa and credit charge. Mon-Sat 9-5.30 pm., Closed Thursdays.

LONDON

ANALOG AUDIO, 849 High Road, Finchly, N12. (081) 445 3267 For friendly service and advice. AR, AKG, Allison, 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, Aura, B&O, B&W, Boston Acoustics, Canon, Castle, Denon, Dual, Evolution, Infinity, JPW, Marantz, Mission, Monitor Audio, Musical Fidelity, NAD, Nakamichi, Onix, Quad, Revox, Rogers, Rotel, Systemdek, Target, Teac, Thorens. Two dem rooms. Interest free credit, free local delivery & installation, service department.

'Hi-Fi Specialists without the attitude'

AUDIO VENUE, 24 Church Road, Crystal Palace, London. SE19 2ET, Tel: 081 771 7786. Purveyors of finest coffee, tea and Hi Fi, including: Nescafe, PG, Naim, Creek, Ruark, Roksan, JPN, Rotel, Denon, Nakamichi, Revolver, Royd, Sennheiser, Audiotechnica, Lyr, Epos, Heybrook. All servicing to HiFi, TV, Video. Turntable set ups undertaken. Credit facilities. 0% finance. Guaranteed the coolest dem room in London. 1000's of collectable records. AND NO SCOTTISH BULL****

BABBER ELECTRONICS, 158 Uxbridge Road, West Ealing, London, W13 8SB. (081) 579 6315. Akai, Aiwa, A&R, Celestion, Dual, Goodmans, Harman Kardon, JBL, JVC, Kenwood, Marantz, Panasonic, Sennheiser, Sony ES range, Tannoy, Technics, Wharfedale, Yamaha.

COVENT GARDEN RECORDS, 84 Charing Cross Road, London WC2 (071) 379 7635. Fax (071) 836 1345. London's premier digital audio centre, photo CD, DCC, CD and 16X9 TV's. Audio lab B&O, Marantz, Mission Cyrus, Philips, Pioneer, Rotel, Rogers, Quad, Sony, Technics, Single Speaker Dem rooms, appointments suggested, installation service available. All major credit cards accepted. Mon-Sat. 10.00-7.30pm.

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.

COVENT GARDEN RECORDS, The Studio, 133 Tottenham Lane, London N8. Tel. (081) 340 7775. Audiolab B&O, Marantz, Mission Cyrus, Philips, Pioneer, Rotel, Rogers, Quad, Sony, Technics, Single Speaker Dem rooms, appointments suggested, installation service available. All major credit cards accepted. Mon-Sat. 10.00-7.30pm.

DIVA AUDIO FIDELITY: For the finest in real HiFi, AV and Multiroom systems. Acuphase, Audio Innovations, Audio Note, Audiostatic, Aura, Chord, Conrad Johnson, Impulse, Klipschom, Levinson, Lumley, Lyr, Michell, Micromega, Monitor Audio, Primare, Rel, Rotel, SME, Triangle, Trilogy, XLO. Call us or pop in for a musical experience you'll never forget. Open 10-6, Mon-Sat at Workshop 30, Royal Victoria Patriotic Building, Fitzhugh Grove, Wandsworth Common, London SW18. Tel/Fax: (081) 875 9593. Also see our full page advertisement on page 7 of this issue.

DOUG BRADY HIFI, 18 Monmouth Road, London WC2H 9HB. Tel. (071) 3794010 or (071) 479 1346. Fair demonstrations and home trial facilities. Wide range of top specialist hifi from Britain, America and Japan. Open 6 days.

HIFI & COMPONENTS, 84 Battersea Rise, London, SW11 1EH. (071) 223 1110. Denon, Tannoy, NAD, Rotel, Bose, Dual, QED, Wharfedale, Jamo, Celestion, Kenwood, Ortofon, Infinity, Shure, to name but a few! Established over 29 yrs. Appts necessary. Service dept. 10-6 (closed Weds)

HIFI EXPERIENCE, 227 Tottenham Court Road, London W11. 071 580 3535. Arcam, Audiolab, 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 HIFI SURPLUS STORE, 62 Weymouth Street, W1 Tel. 071 486 9981. 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. No grey imports. 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, Albarry, 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, Maxell, Micromega, Mitsubishi, Monster, Mordaunt Short, Moth, Nakamichi, Oracle, Ortofon, Panasonic, Pioneer, Project, QED, Rotel, Ruark, Sansui, Stax, TDK, and many more!!!!

BILLY VEE SOUND SYSTEMS, 248 Lee High Road, London 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.

THE LISTENING ROOMS, 161 Old Brompton Road, London SW5 0LJ. (071) 244 7750/59. Fax (071) 370 0192. Linn, Quad, Meridian, Nakamichi, Arcam, Audiolab, Acoustic Energy, SME, Audio Research, Krell, Wadia, Theta, Micromega, Apogee, Martin Logan, Revox, Rogers, Pioneer, Tannoy, Systemdek, Stax, Pink Triangle, Michell, Monitor Audio, Yamaha, Marantz, Kef, Bose, Celestion, Epos, Mission, Denon, Neal Petite. Mon-Sat 10-6pm.

PRECISION CABLES LTD, 53 Effingham Road, Lee Green, London SE12 8NT. Tel. 081 297 0255. A customised cable service that it simply unbeatable. The best available today and tomorrow. Please phone for a free catalogue on products that include Neutnk, Musiflex, Michell amongst others.

STUDIO 99, 79-81 Fairfax Road, Swiss Cottage, London, NW6 Tel 071 624 8855 or Fax. 071 624 5315. Linn, Naim, Meridian, Rega, Quad, Nakamichi, Mission/Cyrus, Kef, B&O, Yamaha, Creek, etc. 2 single speaker dem rooms. Appts necessary. Home trials, free installation, Visa/Access, 10-7pm Mon-Fri, 10-6pm Saturday.

ZEBRA, 18-24 Brighton Road, South Croydon, CR2 6AA. (081) 688 2093. Rotel, Nad, Technics, Philips, Aiwa, Kenwood, Tannoy, Wharfedale, MA Infinity and large range of A V equipment. Single speaker and comparator demo in a more casual environment. Service Dept. Mon-Sat 9.30-6.00. Access/Visa. Instant Credit upto £1,000 subject to status.

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, Audiolab, 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.

GREATER MANCHESTER

THE AUDIO COUNSEL, 12 Shaw Road, Oldham, Manchester, OL1 3LQ. Tel. 061 633 2602. Linn, Arcam, Naim, Yamaha, Rotel, Micromega, Creek, Nakamichi, Denon, JPW, Marantz, 3 dem rooms, free install, Visa/Access, Licensed credit brokers up to £1,000 instant credit. 10.00-5.30pm Mon, Tues, Wed, Sat, 10.00-7.00pm Thurs & Fri.

Continued on next page . . .

TO FIND YOUR AREA
Use our
COLOUR REFERENCE



To Advertise in this section, please
contact Caroline Knott on:

071 266 0969

Hi-Fi World Dial-a-Dealer

BILL HUTCHINSON HIFI, 50-52 Deansgate, Manchester M3 2FE. (061) 8321600. For the largest selection of HiFi 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.

MERSEYSIDE

DOUG BRADY HIFI, 401, Smithdown Road, Liverpool, L13 3JJ. (051) 733 6859. Fair demonstrations and home trial facilities. All credit cards. Largest choice of specialist hifi in N.W. Closed Wednesdays and lunch 1-2.15pm.

P & A AUDIO (BIRKDALE) LTD. 31 Liverpool Road, Birkdale, Southport (0704) 68373. Arcam, Cambridge, Creek, Denon, Michell, Mission/Cyrus, Mordaunt-Short, NAD, Pink Triangle, QED, Revolver, Rogers, Rotel, Royd, Tannoy. 3 Single speaker demo rooms and Naim surround sound dem room. Free delivery, installation (Merseyside) Service dept. Mon-Sat 9-5.30 Half day Tues. Access, Visa, Lombard.

MIDDLESEX

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, Sentec, Mag Audio, Teac, VHD, Silversounds, YBA, Stax, Theta, Monitor Audio, Fuller Audio, Trilogy, Lyra, Sumiko, Ortofon, Decca, Target, Project, Moth, Kelvin, Townshend, Edison, Audio Alchemy, Kesiki, Musical Fidelity.

RIVERSIDE HIFI, 422 Richmond Road, East Twickenham, Middlesex, TW1 2EB. Tel. (081) 892 7613. Fax. (081) 892 7749. A.R., Arcam, Audio innovations, Audiolab, B&O, B&W, Castle, Dali, Denon, Dual, Kef, Marantz, Meridian, Michell, Micromega, Mission, Monitor Audio, NAD, Nakamichi, Pioneer, Quad, Revox, Rotel, Sendor, Systemdek, Tannoy, TDL, Yamaha. 5 demo rooms. In car demo for car hifi systems. Appointments not always necessary. Home trial facilities, free installation, service department, Lombard Tricity, Access/Visa/Amex/Diners/club.

MUSICAL IMAGES, 45 High Street, Hounslow, Middlesex. Tel. (081) 569 5802. 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 Adcom, Arcam, Audiolab, Celestion, Denon, 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 8HE. Tel. (0508) 70829. Arcam, Linn, Denon, Naim, Sendor, Sound Organisation, Audio Technica, Creek, Rega, 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 cruciforms etc. Please send SAE for full current price list. Trade enquiries welcomed. Tel. 0603 482193.

NORTHAMPTON

CLASSIC HIFI & VIDEO, School Lane, Kettering, Northants. (0536) 515766. Rotel Musical Fidelity, Wharfedale, Yamaha, Cyrus, NAD, Pioneer, Marantz, KEF, Celestion, and many more. Home trial, Free install, Service dept, Access & Visa. (30-5.30pm).

LISTEN INN, 32 Gold Street, Northants NN1 1RS. Tel. (0604) 37871. Wide range of records and accessories stocked. Our commitment to standards of service is apparent to our satisfied customers. Two dem rooms and free home install service available.

NOTTINGHAMSHIRE

ART AUDIO, 130 Main Street, Calverton, Nottingham NG14 6LU. Tel. 0602 653604.

Fax. 0602 637795. Midland dealer for all Art Audio amplifiers & Concordant amplifiers, Mordaunt-Short speakers. Home demonstration & installation service. 9-5 Mon-Fri, 10-6 Sat.

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, Snell, Wadia, Micromega, Deltec, 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.

PETERELLIS AUDIO, 29 Kirkgate, Newark, Notts NG24, 1AD. Tel. 0603 704571. QUAD, Castle, Arcam, QED, Sugden, Tannoy, Threns, Marantz, Denon, Teac. Demo room, free install, Service dept, Access, Visa. Mon-Sat 9-5.30. Closed Thursdays.

CHANTRY AUDIO, 18-18a Eldon Street, Tuxford, Nr Newark, Notts, NG22 0LH.

Tel. 0777 870372. Pink Triangle, DPA, Rotel/Michi, 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 demo by appointment.

OXFORDSHIRE

AUDIO T, 19 Old High Street, Headington, Oxford, OX3 9HS (0865) 65961. Fax (0865) 60415. Great Hi-Fi from Arcam, Audiolab, Cyrus, Denon, Epos, KEF, Marantz, Meridian, Mission, Musical Fidelity, Rotel, Sony, Yamaha & many more. Mon-Fri 10-6. Sat 9.30-5.30. 3 year guarantee on Hi-Fi. Free delivery & installation. 30 day upgrade scheme. Home demonstrations. Part exchange. 2 listening rooms. Home Cinema specialists. BADA Bonded.

WESTWOOD & MASON, 46 George Street, Oxford. Tel. 0865 247783. AMC, Creek, Marantz, Naim, Arcam, Rotel, Rega, Epos, Tannoy, JPW, Mission, Nakamichi, Denon, Aiwa, Quad, Aura, Yamaha, Klipsch Speakers. Open 9.30-5.00pm. Dem room. Closed Thursdays.

SHROPSHIRE

AVON HIFI, 12 Barker Street, Shrewsbury, Shropshire, SY1 1QJ. Tel. 0743 355166. Aiwa, Beyer-Dynamic, NAD, Quad, B&W, Mordaunt-Short, Kenwood, Bose, Nakamichi, Revolver. 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.

SOMERSET

MIKE MANNING AUDIO, 110 Middle Street, Yeovil, Somerset, BA20 1NE. Tel. 0935 79361. Fax. 0935 32923. Mobile 0850 325965. Naim, Roksan, Pink Triangle, A&R (Arcam) ION, NAD, Pioneer, Rotel, Denon 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 four 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.

GRANGE HIFI LTD., 153 Branston Road, Burton-upon-Trent, Staffordshire, DE14 3DQ. Tel. 0283 33655. Arcam, Albarray, Audio innovations, Audionote, Castle, Denon, Dual, JPW, Marantz, Moth, Pink Triangle, Quad, Rogers, Rotel, SME, Systemdek, Tannoy, TDL, Yamaha, Stockists of DCC. Access/Visa. 2 dem rooms. Closed Monday & Weds pm and for lunch 12.00-12.30pm. Appts necessary on Saturday 9.00-5.30pm.

MUSICAL APPROACH, Unit 7, Woodings Yard, Bailey Street, Stafford. Tel. 0785 55154. Also branch at 37 High Street, Aldridge, nr Walsall. Tel. 0922 57926. Arcam, Audiotech, Apollo, Celestion, Heybrook, Linn, Marantz, Rotel, Royd, Sennheiser, Target, single Speaker Dem rooms, free installation and credit facilities.

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

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, Audiolab, 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.

SURREY

PJ HIFI, The HIFI Shop, 3 Bridge Street, Guildford, Surrey GU1 4RY. Tel. (0483) 504801. 9-6 Mon-Sat. Linn, Meridian, Rega, Arcam, Quad, Revox, Musical Fidelity, Rotel, NAD, Nakamichi, Marantz, KEF, Reference etc.

ROGERS 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.

AUDIO SOUTH 24 (The Woolmead) East Street, Farnham, Surrey, GU9 7TT. (0252) 714 555. Audio Innovations, Audio note, Deltec, JPW, Marantz, Rotel, Teac, Voyd, Hifi and audio visual dem rooms. Evening appts available. Home trial facilities, free installation. Access/Visa, 10.30-6.30 Mon-Sat, Closed Tuesday.

SURBITON PARK RADIO, 48 Surbiton Road, Kingston-upon-Thames, Surrey. (081) 5465549. QUAD, Castle, Denon, Dual, Kenwood, Mordaunt-Short, JBL, Rotel, Pioneer, QED, 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, Audiolab, TDL, Tube Technology, Rel Acoustics, Nakamichi, Kef, Thorens, Magnum, Rotel, Marantz, Denon, Michell, Furukawa, Tannoy, Target, JPW. Lumley Reference in stock. Single speaker dem rooms. Appts not necessary. Home trial facilities, free installation service dept, Access/Visa/Mastercard. Open 9-6pm Closed Wednesday.

SUSSEX (EAST)

JEFFRIES HIFI, 4 Albert Parade, Green Street, Eastbourne, East Sussex, Tel. 0323 131336. 2 dem rooms. Closed Mon. Late night Wednesday. Free parking, Credit facilities.

JEFFRIES HIFI, 69 London Road, Brighton, East Sussex, Tel. 0272 609431. 2 dem rooms, closed Mon, late night Wed. free parking and credit facilities.

THE POWERPLANT "Brighton's Leading Hifi Shop", 66 North Street, Brighton, Tel. 0273 775978. Comfortable listening rooms. Knowledgeable and approachable staff. Roksan, Micromega, Musical Fidelity, Exposure, Audiolab, Onix, Epos, Rotel, Marantz 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, Mordaunt Short, Audio Technica, Target, Tripod, Sennheiser, AR and many more.

SUSSEX (WEST)

AUDIO DESIGNS, 26 High Street, East Grinstead, West Sussex, RH19 3AS. Tel. 0342 314569. Friendly understanding Hi-Fi specialists. Audiolab, Arcam, Cyrus, Epos, Linn, Marantz, Mission, NAIM, NAD, Neat, Quad, Rotel, Sony, Stax, Tannoy, Target, Thorens, Yamaha. Dem rooms, free installation, service dept, credit facilities, mail order, credit cards, 9.30-6.00 6 days a week.

BOWERS & WILKINS Ltd. (est. 1945). 1 Becket Buildings, Little Hampton Road, Worthing, Tel. (0903) 2 6414. Top names in Hifi and audio visual including B&W, Nakamichi, Castle, Denon, Philips, Quad, Technics, Aura, Thorens and many more. 3 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 Panchras, Chichester, W Sussex, PO19 1SJ. Tel. 0243 776402. Linn, Naim, Rega, Creek Nakamichi, A&R, Denon, Roksa, Epos, JPW, Ruark, Rotel, Quad, Sendor. Evening appts available.

JAYSOUND AUDIO, 5 Waterloo Square, Bognor Regis, Tel. 0243 826355. Aiwa, B&W, Beyer, Denon, Dual, Goodmans, Heco, Jamo, JVC, Marantz, Mitsubishi, Pioneer, QED, Samsung, Sennheiser, Sharp, Shure, Teac, Wharfedale. Free local delivery and install. Part exchange welcome, licensed credit broker, Repairs on all makes of Hifi & TV/Video. Open 9am-6pm. Cl. Weds.

TAYSIDE

J.D. BROWN, 28-36 Castle Street, Dundee DD1 9NZ. Tel: (0382) 26591. Rotel, Denon, Pioneer, Technics, Aiwa, Mission, Castle, Mordaunt-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).

Hi-Fi World Dial-a-Dealer

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 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.

WARWICKSHIRE

STRATFORD HIFI, 25 Henley Street, Stratford-upon-Avon, CV3 9W. 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. Audioblab, 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 Thursday. All credit cards incl. Amex & Diners. Instant credit and interest free facilities. Home trials. Free installation, home cinema A/V 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 Sink, 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, Audioblab, Musical Fidelity, Mission/Cyrus, Meridian, Kef, Monitor Audio, Pink Triangle, Ruark, Epos, Exposure, Pioneer. 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.

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. Advent, Albary, AKG, Alphason, AMC, AR, Arcam, Audioquest, Auditechnica, Beyer, Bose, Castle, Chord, Denon, Dual, Gold Ring, Meridian, Michell, Monitor Audio, Nagaoka, Nakamichi, Ortofon, QED, Quad, Revox, Sennheiser, Spondor, Target, TDK, TDL, Thorens, Wharfedale. K Monks Record Cleaning Service. Closed Mondays.

MUSICAL APPROACH, 37 High Street, Aldridge, nr Walsall. Tel 0922 57926. Arcam, Audiotech, Apollo, Celestion, Heybrook, Linn, Marantz, Rotel, Royd, Sennheiser, Target, single Speaker Dem rooms, free installation and credit facilities.

WEST MIDLANDS AUDIO, 158 Ombersley Road, Worcester WR3 7HA. Tel 0905 58046. Fax. 0905 57585. Naim, Rega, Rotel, Marantz, Nakamichi, NAD, Audioblab, Roksan, Meridian, B&W, Audio Research, Krell, Martin Logan, Arcam. 9-5.30 Mon-Sat, eve's by appt only. Free SOUND ACADEMY, Just off the high Street, Bloxwich, Walsall, W. Midlands. (Ample free parking). Tel. 0922 493499. Alberty, Art Audio, Acoustic Energy, Arcam, Audioblab, Audioquest, B&W, Bose, Chord, Cyrus, Cable Talk, DPA, Ensemble, Epos, JPW, Kef, Reference, Marantz, Meridian, Mission, Moth, Musical Fidelity, Nakamichi, Ortofon, Project, Quad, Roksan, Tube Technology, Triangle and many more. Open 6 days a week. Mon-Sat. All major credit cards taken. Part exchange, enquiries welcome.

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.

WILTSHIRE

AUDIO T, 60 Fleet Steet, Swindon, Wiltshire, SN1 1RA. (0793) 538222. Fax (0793) 487260. Great Hi-Fi from Arcam, Audioblab, Denon, Linn, Marantz, Meridian, Mission, Rotel, Sony, Yamaha & many more. Mon-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 Bordered.

YORKSHIRE (SOUTH)

HIFI STUDIO'S, Sunnyfields, Doncaster, Tel 0302 781387. Heybrook, Monitor Audio, Art Audio, Michell, Sugden, Acoustic Energy, Alphason, Teac, AMC Valves, Ruark, Albary, Proac, Impulse loud speakers, Rel sub-woofers, Yamaha surround sound, Project, TDL, 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 HIFI, 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 HiFi 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-Hecoco-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.

AUDIO REFLECTIONS, The Northern Alternative. "Discover accuracy in high fidelity" On permanent demonstration exclusively in Yorkshire and the North East of England- ATC: SCM10, SCM20, SCM20 Tower, SCM50A and SCM100A. ATC, AV International, Castle, Chester, Winchester, Concordant, Chord SPM Power Amplifiers, Equinox, Harbeth Acoustics, JPW, Sequence Loudspeakers, Marantz, Michell Gyrodec, Michell ISO 'HR', Argo 'HR' and Alecto amps, Michi, Music link, Ortofon premier range, Jeff Rowland, Rotel, SME, Sum. Slate Audio, Sony, Sugden, Target, QED. Further details are available on request. Please phone or fax (0532) 528850 (evening calls welcome). Part exchange and second hand equipment also available.

SCARBOROUGH HIFI, 14 Northway, Scarborough, North Yorkshire YO11 1JL. Tel. 0723 374547. Albary, Aura, B&W Matrix, Cyrus, Pioneer, Philips, Marantz, Cabasse, Bose, Tannoy, DCC wide screen and lazer vision. Home trial facilities and free installation, service dept, Access/ Visa, Credit charge, £1,000 instant credit/ Amex/Diners.

THE SOUND ORGANISATION (YORK) 2b Gillygate, York. YO3 Tel. (0904) 627108. Linn, Meridian, Micromega, Naim, Rega, Arcam, Creek, Nakamichi, 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 HIFI, 24 Gillygate, York. (0904) 629659. Audioblab, Harmon Kardon, Marantz, Musical Fidelity, Pink Triangle, Quad, Systemdek, Tannoy, Technics, and lots more. 3 dem studio's. (2 by appointment). Superb showrooms. 2 yr guarantee on all hifi 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)

AUDIOVISION (BRIGHOUSE) LTD. 5 Bethel Street, Brighouse, W. Yorks. HD6 1JR. Tel. (0484) 713996. 1 mile from junction 25, M.62. Yorkshire's experts for the entire range of Technics HiFi separates & systems. Panasonic Nivacam TV, Satellite Audio, VCR's and Camcorders, Philips Widescreen TV, CD-I and Laserdisc players, Yamaha Cinema DSP separates, Castle, Mordaunt-Short, Bose, TDL, Cerwinvega! and Aiwa HiFi separates. HiFi. Home cinema and Dolby pro-logic surround systems on continuous demonstration. Free specialist advice and expert installation. In-store service department, Access/Visa/Credit charge. Mon-Sat 9-5.30.

BILL HUTCHINSON HIFI, 26-28 Woodhouse Lane, Leeds (0532) 427777. For the largest selection of HiFi 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 HIFI, The Forge Cottage, 19 Cross Gate, Otley, West Yorks, LS21 1AA. Tel. (0943) 467689. Naim, Arcam, Rotel, Pink Triangle, Meridian, Epos, Castle, Two dem rooms, fair demonstrations and home trial facilities. Access/Visa. Open 10.00-6pm Tues-Sat.

SCOTLAND

EDINBURGH

BILL HUTCHINSON HIFI, 43 South Clark Street, Edinburgh. (031) 667 2877. For the largest selection of HiFi 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.

ABERDEEN

AUDIO SUITE, 42 St Andrew Street, Aberdeen Tel 0224 625635. Agent: Linn, NAD, Magneplanar, Audio Research, Quad, Audio Innovation, Snell, Absolute Sounds, etc. We offer unsurpassed personal service in the most professional manner.

GLASGOW

STEREO STEREO, 278 St Vincent Street, Glasgow, Scotland. Tel 041 248 4079. Closed Tuesday. Installations throughout Scotland. Credit facilities available.

BILL HUTCHINSON HIFI, 43 Hope Street, Glasgow, (041) 2482857. For the largest selection of HiFi 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.

IRELAND

DUBLIN

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.

PETER DAND & 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.

NORTHERN IRELAND BELFAST

LYRIC HIFI, 163 Stanmills 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-Frid 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

CLWYD

ACTION GATE AUDIO, 4 Ruabon Road, Wrexham, North Wales, Tel. 0978 364 500. Arcam, B&W, Marantz, Mission, NAD, Quad, Rega, Rotel, Tannoy, Yamaha, etc. Dem facilities, A.V. on dem. Mail order. No appts nec, home trial fac. Free install, Service Dept. Access, Visa. 9.30-5.30 closed Weds pm.

NORTH WALES

ELECTRO TRADER, 19 Colwyn Crescent, Rhos on Sea, Colwyn Bay, Clwyd, Wales, LL28 4RN. (0492) 548932. Rotel, Yamaha, NAD, Harman, Kardon, Teac, Alphason, Heco, Infinity, KEF, JBL, Tannoy, Rotel Michi, Haybrook, Acoustic Research, RUarc 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 Crwys Road Cardiff CF2 4NR, Tel. 0222 228555 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.

John Coltrane died about a month after I was born. As far as I can recall, the first time I heard

his name - and it's definitely a case of in one ear and out the other - was as an early teenager; a fellow classmate, nauseatingly precocious, delivered an 'assembly' which largely consisted of an attack on the

greatest of all tenor and soprano saxophonists. On two counts. Firstly (bear in mind that this bright young schoolkid was a "traditional" jazz fan - though Heaven only knows why, aged thirteen in the early 80s) that Coltrane's music was simply a horrible racket. Secondly that Coltrane had inspired an entirely bogus religion - a "Church of Coltrane".

Now, like I said, this went zoom! right over my head. To a teenager into Pink Floyd, Tangerine Dream and Steve Hillage, jazz was just plain boring; whether it was Acker Bilk or Miles Davis was pretty much irrelevant. And as a card-carrying sceptic, I reckoned a bunch of loonies who worshipped some dead saxophonist weren't necessarily any dafter than more mainstream believers. So that was that. John Coltrane's name, let alone his work, didn't mean anything to me for a good few years.

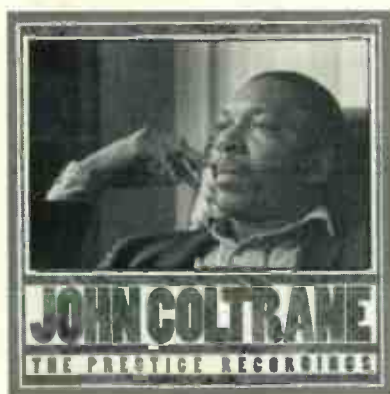
Now all this would be

egomaniacal biography if it weren't for the fact that the lies about Coltrane's legacy that Master Green's little sermon summed are so widely held. Despite being, with the exception of Miles, perhaps the most famous post-war jazz musician, Coltrane was responsible for a huge amount of music, swathes of it unknown to the general public and widely reviled by jazz fans. And despite being, it seems even to me, not one given to hero-worship, a totally admirable figure - a junkie who kicked his habit, a massively dedicated musician who privately practiced constantly and publicly displayed an unquenchable thirst for new modes of self expression, and a personally deeply spiritual individual who nonetheless never let his religious staunchness get in the way of his endless tolerance and kindness - he remains to many either a daunting figure or a risible one, a man out of touch with the secular, materialistic world around him.

Over the next couple of pages I've picked out just a few gems from Coltrane's oeuvre; there's a whole load more out there, some of which I mention, but the Coltrane newcomer - and for anyone else this column will be redundant, just a bit more opinion stacked on to a career already drowning in both professional and amateur opinion - I hope this serves as a useful guide.

This month Simon Hopkins takes a look at the career and music of possibly the greatest saxophonist jazz has ever known.

Simon Hopkins



The Prestige Recordings
PRESTIGE 16PCD-4405-2

● For Coltrane as leader, it all starts here. The young tenor player had already shot to fame in Miles Davis' late 50s group, his harsh timbre and long, questioning, sometimes overly ambitious solos providing such a great foil to the altogether sweeter, bluesier sounds of Julian "Cannonball" Adderley, the group's other saxophonist. This fame led him him into a deal with the New York

Prestige label, and over the next few years he recorded a dozen albums as leader or co-leader for the label: 'Cattin With Quinquette', 'Coltrane', 'Lush Life', 'Traneing In', 'The Last Trane', 'Soultrane', 'Settin The Pace', 'Black Pearls', 'The Standard Coltrane', 'Stardust' and 'Bahia'. In addition he recorded on a good nineteen albums featuring other leaders. This 16 CD boxed set, beautifully packaged in a 12x12" box featuring a superb 34 page book of essays, discographies, original LP artwork and dozens of

photographs, brings together every single session that Coltrane recorded for the label over an amazingly short timespan - just over two years (although, in a fact, the LPs recorded as leader were all recorded in just eighteen months).

For Coltrane, this period was essentially a period of transition: from the sideman of his early years to the world-renowned leader of his final period; from an ambitious, dedicated player whose techniques and knowledge couldn't always keep up

with his concepts to the most virtuosic and explorative saxophonist in post-war jazz; and from a name simply given as leader of ad hoc sessions to a composer and leader whose sense of compositional architecture was at least as great as his improvising skills. So: a period of becoming.

Added to this fact are the special circumstances of Prestige's recording sessions. Prestige is, of course, one of the great labels in jazz history, and ranks alongside labels like Blue Note, Impulse! (sic) and Riverside for contribution to the music of the 50s and early 60s. But Prestige were also a business, and the way they made money, as demonstrated here by the sheer volume of music recorded in such a short period by one man, was to put a lot of music out onto the market. They constantly brought together ad hoc groupings of players to record a mixture of standards and possibly originals by one or other musician on the recording date. No, or at least very very few, alternate takes of tunes were recorded, in order that as much music as possible could be released, sometimes across several albums. So as much as Prestige provided Coltrane with his first break as leader, they yet stifled, or at least discouraged many of his non-improvising ambitions. Post-Prestige Coltrane is remarkable for its sense of total integration, music in which composition, improvising, arrangement and overall structure go hand-in-hand. But for Prestige Coltrane could only ever really be a name on a record sleeve and almost certainly that record's finest player.

Nonetheless, this music is still a revelation. For those followers who view Coltrane as somehow divinely gifted, it provides a glimpse of a

musician grappling with ideas at times slightly out of his reach, and one who, by the end of his tenure, by sheer dint of hard graft, had begun to develop his so-called "sheets of sound" technique, splattering seemingly every permutation of a chord's notes over every chord of a song's changes. Not that this is purely an archaeological treasure trove; not withstanding the limitations on Coltrane, the music in this box - literally a whole day's listening (though I'm not advocating that!) - is all a worthwhile listen, and much of it highly enjoyable, featuring the contributions of musicians as great as Paul Chambers, Hank Mobley, Donald Byrd, Sonny Rollins, Zoot Sims, Philly Joe Jones, Louis Hayes and Kenny Burrell. It's just that this material is inevitably overshadowed by the huge achievements yet to come.

Over all then, a worthwhile, if hefty investment, and one essential for completists. Those with more conservative tastes, daunted by the Herculean prospects of later Coltrane may settle for this (and I should point out that all Coltrane's Prestige albums are available individually on the Original Jazz Classics label) but the enquiring musical mind will want more. And will surely get it...

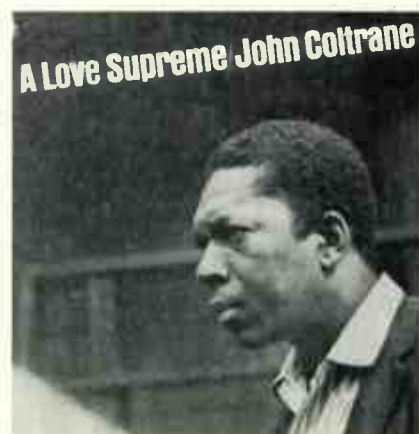
In 1959 Coltrane moved from Prestige to Atlantic for whom he recorded seven albums, the first of which, 'Giant Steps' (Atlantic 781337-2) was virtually a manifestation, announcing simultaneously what he'd achieved at Prestige, and what he had yet to do. Not all the Atlantic albums live up to this promise, however, although 1960's 'The Avant Garde' (Atlantic 90041-2), featuring three quarters of Omette Coleman's classic group (trumpeter Don Cherry, drummer Ed Blackwell and bassist Charlie Haden) remains a corker, and it's his work for Impulse!, to whom he moved from Atlantic, which concerns us here.

A Love Supreme MCA/IMPULSE! MCLD 19029

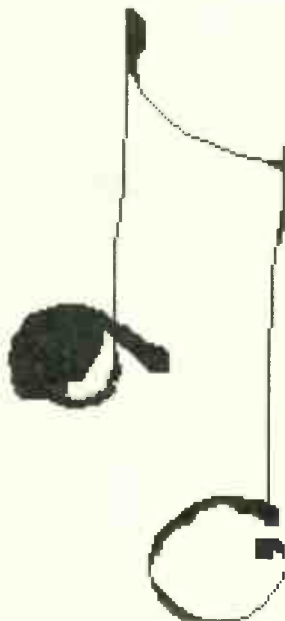
● The best albums made during the first half of Coltrane's Impulse! tenure were made by one of those groups now considered to be one of the finest in all jazz history, certainly the very finest in modern jazz: Coltrane, pianist McCoy Tyner, bassist Jimmy Garrison and drummer Elvin Jones. 'A

'Love Supreme' is among their last studio statements as a quartet, and undoubtedly their finest hour, albeit one in which they were on the verge of splitting at the seams. It's also probably the most talked about jazz album of the last thirty years. With its black and white sleeve shot of an intensely serious Coltrane, the inspirational poem printed on the original gatefold sleeve (and thankfully reproduced on this CD reissue), the chants which give the work its central hook, even the four movements' very titles 'Acknowledgement', 'Resolution', 'Persuance' and 'Psalm', with all this the album has become an icon of spiritual searching far outstripping its purely musical achievement.

That's not to say that the record's detractors - and many have reacted



adversely to the adulation the album has had heaped upon it - are any fairer than its acolytes. 'A Love Supreme' remains Coltrane's first truly great statement: the apotheosis of modal jazz, its riff-based themes providing each group member, but above all the leader with the space to explore the outer space of the music's harmony, and the inner space of its spirit. A revolutionary record, then, and utterly essential: sometimes, you can believe the hype.



the group thrash about, half in disbelief. And for all this, 'First Meditations' is probably my favourite record by the quartet: not the masterpiece of its successor, but a lot more fun.

to favouring live albums by and large. This four CD set, over three and a half hours of music, is magnificent stuff, if difficult. Even early in his career, Coltrane was noted for his long solos (a famous anecdote has him commenting to Miles that once

he starts a solo, he just can't seem to stop; "try taking the horn out of your mouth" was the trumpeter's reply). Here, joined by Sanders, wife Alice on piano, Garrison and Ali, he's on hugely expansive form. The final disc, for instance, consists purely of a 57 minute rendition of 'My Favourite Things'. But the brute force of the music blows away any charges of self-indulgence. This is definitive energy music.



The Major Works of John Coltrane

Ascension
Om
Kulu Se Mama
Selflessness



The Major Works of John Coltrane

GRP/IMPULSE! GRP 21132

● This double CD set brings together five of the most esoteric works in the Coltrane canon, all with larger groups, all with increasingly pan theistic spiritual aims, and all recorded between June and October 65: 'Om', 'Kulu Se Mama', 'Selflessness' and two versions of the huge piece 'Ascension'. The music brings Coltrane into collision with some of the leading lights of 60s Free Jazz - Sanders, tenorist Archie Shepp, and altoists Marion Brown and John Tchicai among them - and the results are explosive. This is Coltrane music at its rowdiest, the closest it gets to the kind of noise-feast group improv that was getting a foothold in Chicago at the time.



Interstellar Space

GRP/IMPULSE! GRP 11102

● Coltrane's penultimate recording, made in February 67, but surely his true final statement. A duet recording with Rashid Ali, this is one of the most explorative, questioning, expansive LPs in all modern jazz; a fitting end (although, it goes without saying, given its promise, a tragic one) to the career of the most important jazz musician since Charlie Parker.



Live in Japan

GRP/IMPULSE! GRP 41022

● There's a huge amount of live Coltrane on the market, so I ought to recommend some, although I'm not given

jazz

First Meditations (For Quartet)

GRP/IMPULSE! GRP 11182

● A couple of months after laying down 'A Love Supreme', the quartet went back into the studio to record the session which makes up 'First Meditations', the group's final studio document. Ten months later, in February 1965, Coltrane would record this same suite, plus one part as simply 'Meditations' (MCAD39139) with drummer Rashid Ali (much more a pure-percussionist than Jones, and more interested in drumming-as-pure-noise than in the mesmerizing polyrhythms of the latter) and 'New Thing' sax screamer Pharoah Sanders added. The very fact that he added these two - avant gardists reviled by more conservative fans who adored Coltrane's sheer virtuosity - shows the direction in which Coltrane was moving. The constraints of straight-time post-bop could no longer really contain his spiritual or musical ambitions.

But this earlier version of the suite is interesting to me precisely because this group - beset now by who knows what personal tensions - is the very benchmark by which all music that Coltrane was now trying to break free from is judged. And so the tension is palpable, with Coltrane's playing constantly bursting through the very fabric of the quartet. There are times when his harmonic squalls and barely articulate (or should that be super-articulate) grunting honks sound like they're in another universe to the rest of the group, most particularly Elvin Jones' virtuosic panache.

Where 'A Love Supreme' is totally in balance, if teetering on the brink, the record has crashed over, as though Coltrane can hear the later version of the piece in his head and is trying to play all the extra stuff himself, while the rest of

SOUNDS LIKE ...



...AN EXPERTS CHOICE

SEXTET

" Easily one of the most refined and subtly impressive loudspeakers currently available "

HI-FI WORLD - FEB 92

QUARTET

" The Company again has a gem "

WHAT HI-FI - FEB 93

" Animation and verve by the bucketload "

AUDIOPHILE - MAR 93

TRIO

" The Trio's command of detail, dynamics, bass and timing is excellent. They're compelling speakers with unbounded enthusiasm "

WHAT HI-FI - AUG 93

HB-1

" It's first and foremost a communicator helping to break down the barriers between performers and listeners a Best Buy rating is entirely appropriate "

HI-FI CHOICE - SEPT 91

SOLO

" Potentially among the best speakers in this group "

WHAT HI-FI - MAY 93

PRIMA

" Here's a bookshelf speaker that can deliver "

WHAT VIDEO - SEPT 92

SIGNATURE AMPLIFIERS

" Voted the very best sounding of any amplifier in our survey "

HI-FI CHOICE - AUG 92

For more information and a list of dealers in your area contact:



HEYBROOK

Heybrook Hi-Fi Ltd. Estover Industrial Estate, Plymouth. PL6 7PL

Tel: 0752 731313 Fax: 0752 733954

Hi-Fi World SPECIAL MAIL ORDER

HI-FI WORLD SOLID SILVER INTERCONNECTS.

Constructed from strands of solid core silver wire and silver soldered to the excellent Neutrik Profi phono plugs which are probably the best available. These line level interconnects offer the ultimate in transparency, openness and detail. The plugs are bonded to the cable with adhesive heatshrink to ensure that the cable has a long life without fatigue occurring at the plug join. Available exclusively through Hi-Fi World Mail Order
HI-FI WORLD SOLID SILVER CABLE.....£139.95/1M PAIR.



HI-FI WORLD SILVER PLATED COPPER INTERCONNECTS.

These have a similar construction to our solid silver cables, but use silver plated copper and standard Gold Phono plugs. Because the majority of the audio signal is passed through the skin of a cable these can approach the quality of a silver cable with the cost of a normal high quality copper cable.
HI-FI WORLD SILVER PLATED COPPER INTERCONNECTS £69.95/1M PAIR.

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



ALLSOP DCC CLEANER

The new Allsop Digital Compact Cassette cleaner has been officially approved by Philips. This cleaner effectively removes tape particle residue and other contaminants which can cause signal dropout. Its unique autoreverse feature cleans both sets of capstan and pinchrollers. Each pack comes with two sets of refill parts.

ALLSOP DCC CLEANER £14.99

ANTI-STATIC RECORD SLEEVES



Translucent sleeves, treated to reduce static and dust attraction, supplied in packs of fifty. They will fit inside ordinary printed inners.

LP SLEEVES (50) PRICE £7.50

KONTAK

An effective cleaning solution that removes contaminants from electrical connections. After application, a system regains its original life, sparkle and vigour.

KONTAK £19.00

HI-FI WORLD DRY STYLUS CLEANER

Keep your stylus sharp and bright for perfect tracking without using fluid. Cut a strip about the size of a match-box striker off this sheet of card and draw it gently under the stylus from back to front. One sheet of this card, with its aluminium-oxide micro-abrasive coating, should be enough to clean your stylus at least forty times.

DRY STYLUS CLEANER ... £1.95

SME RECORD CLAMP



This superbly engineered record clamp from SME, originally developed for the legendary Model 30 turntable, will iron out warps in your records. Suitable for all non-detachable record spindles from 10mm to 1.7mm.

SME RECORD CLAMP £79.95.

MILTY TRIPLE A

Suitable for all types of cassette players including auto-reverse, the Milty Triple A wipes clean single/dual capstans and pinch rollers with a non-abrasive cleaning action.

MILTY TRIPLE A £6.50

MILTY MAGNET IX

The Milty Magnet IX comes complete with battery. It requires approx one second to de-magnetise the heads removing magnetic charge build up. Recommended after every 30 hours of playing time.

MILTY MAGNET IX £10.50



NAGOAKA CD CLEANING KIT

Careful manual cleaning is the most effective way of removing surface contaminants. Nagaoka's kit includes a solvent and chamois leather pad to bring back a pristine shine to Compact Discs.

NAGOAKA CD CLEANING KIT £10.50



GOLDRING EXSTATIC MAT

For vinyl users, the Goldring Exstatic is a felt mat made with fine carbon fibre strands. This helps to reduce positively charged static electricity that builds up on the surface of records.

GOLDRING EXSTATIC MAT.....£7.50



SUPER EXSTATIC CARBON FIBRE DISC CLEANER

Effectively removes dust and grime from record grooves, this cleaner is a combination of one million carbon fibre filaments and a soft velvet cleaning pad.

EXSTATIC CARBON FIBRE CLEANER £9.75

Hi-Fi World AUDIO ACCESSORIES

accessory offers

AUDIO-TECHNICA GREEN CD RING STABILIZER

Detachable rings which fit around the circumference of a Compact Disc, which add a small but significant amount of mass, improving its stability when it rotates at high speed in the CD player. Improvements can include better focused images and a denser and richer sound.

GREEN RING STABILIZER (5)
£6.50

AUDIO-TECHNICA RECORD CLEANING SYSTEM

Removes both dirt and static; a tiny amount of cleaning agent in the handle removes

fingerprints, oil and film, while a pad lifts off dust. Pad brush and fluid are supplied.



AUDIO-TECHNICA RECORD CLEANING SYSTEM £10.50

AUDIO-TECHNICA CD LENS CLEANER

A disc the size of a CD, with fine brushes - one of which is dampened with cleaning fluid. As the disc spins in the player, the brushes clean the laser lens. It may not suit all machines.

CD LENS CLEANER £16.25

AUDIOQUEST LASER GUIDE

Laserguide is a silicone based treatment - not a cleaner - for CD which has a refractive index close to that of a disc's polycarbonate surface. Applied using a cotton cloth, it allows the laser to read the pits below the transparent layer more clearly. Openness and depth of sound are said to be improved, while Laserdiscs benefit with a sharper picture and less noise. one bottle treats approximately 300 CDs.

AUDIOQUEST LASERGUIDE
£14.95



this green coating, formulated by Japanese company Mitsubishi, to the inner and outer edges of the CD reduces this interference, improving sound quality.

LASAWAY GREEN PEN £8.50

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** .. £42 EACH

FREE!

20 RECORD SLEEVES WITH 2 CUBES
50 RECORD SLEEVES WITH 4 CUBES

6 CUBES FOR THE PRICE OF FIVE £210
8 CUBES FOR THE PRICE OF SEVEN! £294

LASAWAY GREEN PEN

When red laser light hits the reflective surface of a CD, some of it can be scattered off the edges of the disc, causing optical interference. Applying

PIXALL MK II RECORD CLEANER

Made in the UK, this simple record cleaner uses a replaceable roll of sticky tape which lifts dust out of the groove. After use, the dirty length of tape can be peeled off, reducing the risk of any gritty particles picked up being ground back into the vinyl. When the tape runs out, a new roller is simply clipped in.

PIXALL MARK II £10.75
REFILL ROLLER £2.75

ON STYLUS CLEANER

A simple but effective cleaning kit, consisting of a stylus brush and cleaning solution. Used carefully, it will keep your stylus sparkling.

STYLUS CLEANING KIT
£2.50



Record storage cubes

Hi-Fi World

SPECIAL MAIL ORDER



SWEATSHIRTS AND T SHIRTS

Printed with 'Hi-Fi World' and our slogan 'The Magazine for Enthusiasts' front and back to prove to everybody you read probably the best magazine in the universe.

SWEATSHIRTS £12.00
T-SHIRTS £7.99



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

MICHELL ENGINEERING PLUGS

Craftsmanship marks out Michell Engineering's range of gold and rhodium plated plugs from the competition. Simple but elegant.

GOLD-PLATED SIDE ENTRY BANANA PLUGS (4) £10.00
GOLD-PLATED SURE-LOC BANANA PLUGS (4) £14.95
RHODIUM-PLATED SURE-LOC BANANA PLUGS £18.95
GOLD-PLATED SPEAKER CABLE CONNECTORS £10.00



ARCAM RCA PHONO PLUGS

This heavy-duty phono plug, specially made in Japan to Arcam's specification, will accept cable up to 7mm in diameter. The body is nickel-plated, the contacts plated in gold. Supplied in pairs marked with either one ring or two to allow directionality to be taken into account.

RCA PHONO PLUGS (4) £15.50

GOLD PLATED 4MM BANANA PLUGS

We have a new style, heavy-duty, gold-plated banana plug with a unique type of axial solderless connection for loudspeaker cables. The cable is stripped back and pushed into a clamping collar which is then screwed down tight, accepting cable up to 6mm external diameter and 4mm core diameter. Supplied in sets of four.

BANANA PLUGS (4) £8.00

GOLD-PLATED SPADE CONNECTOR

A heavy-duty gold-plated spade connector for loudspeaker screw terminals with a unique axial clamp connector which requires no soldering.

SPADE CONNECTOR (4) £10

NEW FROM HI-FI WORLD!

CD/MC TOWER

Ready built, the CD Tower is of all metal construction with slot-in side panels finished in either mahogany or black ash. Each of the trays slides out for access to the stored cassettes and discs. Total capacity is 160 CDs and 52 cassettes.

CD/MC TOWER £199.90



LIFT JUMBO

This aluminium Compact Disc stacker holds seventy-five CDs, which can be flipped forward by the fingertips to display the insert. Browse through your CD collection without having to squint at the small lettering on the spine.

LIFT JUMBO £44.95

Hi-Fi World

SPECIAL MAIL ORDER

EQUIPMENT SUPPORTS

FrameWorks is an innovative range of strong, rigid, and versatile hi-fi supports. They

for several months now and have yet to find anything that comes close. They are supremely rigid and hard wearing and will extract the



HI100 ISOLATION TABLE

achieve a high standard of strength and rigidity from their 'triangulate' design. The shelves are supported on struts of thin cross-section, which in turn are rested on struts of thicker section, and through these connected to four sturdy corner columns.

This variety of cross-sectional frame members effectively reduces resonances through their spread and dissipation. The supporting columns may also be filled, to further optimise these supports for your equipment.

Versatility is guaranteed by the variety of two and three shelf supports available as well as the stacking unit for additional shelves and the isolation shelf, which can be used as a stand-alone unit on a shelf or floor, if preferred.

So these shelves will stack and expand as your system grows. All you need do is add components as and when you feel the need.

FrameWorks stands come with attractive toughened smoked glass, which is fully 10mm thick. This is supported on spikes which have rubber dampers around them to reduce vibration and lessen the tendency for the glass to slide. Metal parts are finished in a hardwearing satin black powder coat.

We at Hi-Fi World have been using Frameworks stands

best out of any equipment. Frameworks' excellent hi-fi equipment stands are now available through our Mail Order Department. Please phone for further details: 071 266 0464



H700 3 SHELF EQUIPMENT RACK

Stacker **H175**

Isolation **H100**

H900 Self assembly

H500

H700

PRICES FOR FRAMEWORKS EQUIPMENT STANDS ARE AS FOLLOWS;

CODE	HEIGHT	PRICE
H100	100MM	£109
H175	175MM	£119
H500	500MM	£205
H700	700MM	£275
H900	900MM	£305

ALL FRAMEWORKS SHELVES ARE 550MM WIDE BY 450MM DEEP.

All prices include VAT & p+p for UK only.

HI-FI WORLD

WORLD DESIGNS

by Mail Order

K5881 KIT

£395 ▼



Here's a superb, Class A, 20watt stereo power amplifier that uses the inexpensive Russian 5881 output valve, a military version of the obsolete American 6L6, intended for low distortion audio work. It has super-quality output transformers (4/8/12Ω selected internally) to minimise distortion and the input stage uses triode working. A rugged, sixteen-gauge, all-

welded steel chassis is provided, together with protective bottom plate for safety; a protective top cover is an optional extra.

Designed for long life, low running costs and excellent sound quality, K5881 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. There is a choke-regulated power supply, plus heavy 4mm speaker terminals that accept bi-wiring.

K5881 costs just £395 as a kit of parts, £495 for an easy-build version with made-up tag board and wired mains supply, and £595 fully built from an approved build service. The U.K./ Europe version has a 240/220V transformer but 120/110V can be supplied as an alternative - see Overseas details on Order Form, page 63.

SPECIFICATION

Power	20watts/ch.
Frequency response	16Hz-40kHz
Distortion	0.02%
Separation	60dB
Noise (CCIR)	-103dB
Sensitivity	240mV
Dimensions (mm)	400w,300d,180h
Supply	110/120V or 220/240V, 220W
Weight	16kgs(34lbs)

VALVE LINE LEVEL PRE-AMPLIFIER £295 ►

We now have finished the design of a super high quality chassis for the line level pre-amplifier. It is constructed from heavy gauge steel with an aluminium anodised and polished front panel. This new chassis comes with the complete kit of parts necessary to build the valve line level pre-amp.

The components are all high quality and include a special screened toroidal transformer, Military Spec. Russian valves, Alps potentiometer, metal film resistors, polypropylene signal capacitors, silver plated copper wire etc.



◀ HIGH DEFINITION LOUDSPEAKER

£295

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.

As well as being just about unmatched as a partner for esoteric amps, this speaker is also unusually suited to low powered vintage amplifiers, such as Quad IIs, Radfords, Pye Mozarts and such like.

The High Definition DIY loudspeaker is available as a complete kit, including flat pack cabinet, drivers modified and tested by us, all crossover components and hardware. The flatpack cabinet is finished in an attractive satin black and requires no further finish, but for those who prefer something a little more traditional a mahogany veneer is an option.

If you would like to build your own cabinets we are also offering a drive unit pack that comprises two tweeters and two woofers, modified and tested.

KLS2 LOUDSPEAKER

Satin Black/Mahogany Veneer
Drive Unit Pack

£295/£345
£145

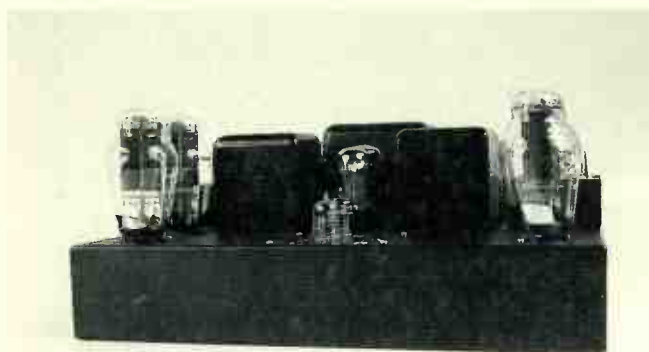
WORLD DESIGNS

by Mail Order

world audio design mail order

300B VALVE AMP KIT

£750 ▼



This is a specialised amplifier based on the highly linear 300B triode valve, designed in 1928 for minimum distortion in amplifiers that had no feedback. Our amplifier similarly has no overall feedback; Tim de Paravicini designed it - including the massive transformers - for minimum distortion, remaining true to the ideal behind the original 300B. But if you want feedback (tertiary or overall), it can be applied without difficulty.

Delivering a conservative 28watts from a 40watt rated valve, our 300B runs its prized assets gently, giving one of the most sweet, open and neutral sounds possible today. Matched with good loudspeakers, it is unsurpassed.

The kit comprises a strong 16-gauge mild steel chassis, fully punched, welded and ground smooth. Finish is a durable 'powder coat' black. A protective bottom plate is provided for safety; a protective top cover is an optional extra. Output terminals (one pair) take 4mm plugs axially and radially for bi-wiring, or heavy gauge bare cable. Output options of 4Ω or 8Ω are selected internally at the transformer. A small circuit board carries most of the components. The U.K./Europe model comes with a 240/220V transformer but 110/120V can be supplied as an alternative - see Overseas details and prices on Order Form.

All parts are included in the kit, including polypropylene power supply capacitors, but not the valves, since these are expensive and many different but specialised versions are available.

A fully built version from an approved build service is also available for £1050 (valves extra).

Availability - end of September 1993

SPECIFICATION

Power	28watts
Frequency response	5Hz-36kHz
Distortion	0.2%
Separation	54dB
Noise (hiss/hum)	-100dB/-72dB
Sensitivity	240mV
Dimensions (mm)	405w,295d,175h
Supply	110/120V or 220/240V, 220W
Weight	20kgs(44lbs)

HIGH PERFORMANCE 3-WAY LOUDSPEAKER £729

Our high performance 3-way DIY loudspeaker featured in Supplement Nos. 3 & 4 is now available as a complete kit. Included in the kit are all drive units, crossover components and tag boards, precision engineered flat pack cabinet, wadding hardware etc. The cabinet has been designed to be extremely easy to build (even though there are 36 panels for the pair) requiring only wood glue and stretchy carpet tape to clamp the panel in place.

When built, the loudspeaker is comparable to those costing more than twice the price, with a transparency and openness in the midrange that is unmatched by most. The price for this entire kit, including VAT and p&p is £729.

Because some of the drive units in this kit are difficult to source we are offering a drive unit pack, which contains 2x Tonigen Ribbon tweeters, 2x MW-1145 midrange units, 2x MW1075 Bass drivers, all crossover components, tag board and terminals. Price is £420 in p&p.

K5881 SET OF TRANSFORMERS £220

£220

For those who want to build their own chassis and get the rest of the parts we are making a transformer set available. There are four transformers in all, weighing 12kgs.

1) Mains (1 off)

Secondary: 0-360, 1 x 6.3V centre tapped. Primary 220/240 or 110/120 - please state which on order form. Drop through fixing.

2) Output (2 off)

Designed for low distortion and broad load compatibility, these transformers use high quality materials and complex winding arrangements. The cores are centre-hole fixing to avoid corner flux concentrations, the laminations are thin and of best quality grain orientated steel. Output tapped 4Ω, 8Ω and 12Ω. Drop through fixing.

3) Choke

For smoothing of the H.T. line to provide best sound quality, a 5H choke that fixes under the chassis. Frame mounting.

300B SET OF TRANSFORMERS £430

£430

For those who want to build their own chassis and get the rest of the parts we are making a transformer set available. There are seven transformers in all, weighing 16kgs (35lbs)

1) Mains (1 off)

Secondary: 490V-0-490V, 6 x 5V, 1 x 6.3V.

Primary 220/240 or 110/120 - please state which on order form. Drop through fixing.

2) Output (2 off)

Designed for low distortion and broad load compatibility from the 300B, these transformers use high quality materials and complex winding arrangements. The cores are centre-hole fixing to avoid corner flux concentrations, the laminations are very thin and of best quality grain orientated steel. Output tapped 4Ω and 8Ω. Drop through fixing.

3) Intervale/phase splitter (2 off)

So secret they are potted in a steel case! We can't tell you anything about these, other than Tim says they are very special. Drop through tags.

4) Chokes (2 off)

For individual smoothing of the H.T. lines to provide best sound quality, two 5H chokes that fix under the chassis. Frame mounting.

WARNING
THESE ARE EXPERT KITS, NOT FOR THE INEXPERIENCED.
THE VALVE KITS CONTAIN LETHAL VOLTAGES. WE CANNOT BE HELD RESPONSIBLE FOR ANY ERRORS ARISING FROM
THE CONSTRUCTION OF THE KITS.

ORDER FORM

Please send your completed order form to: **WORLD AUDIO DESIGNS**, 64 Castellain Road, Maida Vale, London W9 1EX
 Tel: 071 266 0461 Fax: 071 289 5620

240/120 option - delete the voltage NOT required.

Valves included except where stated.

'BUILT' - we can supply the amplifiers built up and tested by an approved service, for safety and guaranteed performance to specification.

DESCRIPTION	ORDER No.	QTY	PRICES	
			UK (inc VAT & carriage)	OVERSEAS. (net)
K5881 20W budget valve amplifier				
KIT	K5881-K240/120	<input type="checkbox"/>	£395	£350
EASY BUILD	K5881-E240/120	<input type="checkbox"/>	£495	£450
BUILT	K5881-B240/120	<input type="checkbox"/>	£595	£550
optional top cover	K5881-C	<input type="checkbox"/>	£60	£50
transformer set	K5881-TR240/120	<input type="checkbox"/>	£220	£180
300B 28W specialised valve amplifier (prices do not include valves)				
KIT	300B-K240/120	<input type="checkbox"/>	£750	£650
EASY BUILD	300B-E240/120	<input type="checkbox"/>	£900	£800
BUILT	300B-B240/120	<input type="checkbox"/>	£1050	£950
optional top cover	300B-C	<input type="checkbox"/>	£70	£60
transformer set	300B-TR240/120	<input type="checkbox"/>	£430	£370
KLPI line preamplifier				
KIT	KLPI-K240/120	<input type="checkbox"/>	£295	£250
BUILT	KLPI-E240/120	<input type="checkbox"/>	£395	£335
KLS1 3-way floorstanding loudspeaker				
KIT	KLS1-K	<input type="checkbox"/>	£729	£650
Drive units and hardware	KLS1-D	<input type="checkbox"/>	£429	£370
KLS2 2-way, high definition, floorstanding speaker				
KIT (Satin Black)	KLS2-K	<input type="checkbox"/>	£295	£250
Mahogany veneer	KLS2-KM	<input type="checkbox"/>	£345	£295
Drive units	KLS2-D	<input type="checkbox"/>	£145	£120
Loudspeaker measurement mic and preamp + test disc	3382B	<input type="checkbox"/>	£440	£390

NAME: _____

ADDRESS: _____

POSTCODE: _____ TEL: _____

I enclose a cheque/postal order for £ _____
 made payable to **World Audio Designs Ltd.**

I wish to pay by Access/Visa, please debit my account no:

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------

Expiry date:



CREDIT CARD ORDERS TELEPHONE 071-266 0461 (24 HOURS)

OVERSEAS PRICES AND DETAILS

All our kits can be supplied overseas, free of UK tax (VAT). However, allow for your own local import taxes (customs duties) and for carriage charges, which must be added to our net price.
 Surface mail is slow (1-4 weeks) but inexpensive; airmail is fast (up to 7 days) but more expensive. Couriers like Amtrak we recommend for speed and door-to-door service.
 We package overseas orders strongly.

METHODS OF PAYMENT

International money order in Sterling, Visa, Mastercard/Access, Local Currency at agreed exchange rate by registered mail.
 Payment in advance. Contact us for details.

CONTACT: RICHARD JOHNSON

London, England.

PHONE (9.30am-6pm) 071-289-3533

ANSWERPHONE (24hrs) 071-266-0461

FAX (24hrs) 071-289-5620

Classical

Peter Herring

Schoenberg at his most sensuous - and surprising; the 'in-scapes' of Haydn's keyboard music and the string quartets of Elgar and Delius; and music from two composers - and a conductor - all of whom found success by stepping aside from the twentieth century mainstream



ANTON BRUCKNER
Symphony No.7 in E Major
North German Radio Symphony Orchestra; conductor, Gunter Wand
RCA VICTOR RED SEAL 09026 61398 2 (DDD/65.05)

● The eighty-one year old Gunter Wand now strikes a very frail figure as he comes to the podium, but as anyone who heard his performance of the Brahms First Symphony at this year's Proms will testify, this octagenarian is still capable of producing interpretations of the greatest fidelity and authority. The secret lies in the preparation, and in the kind of ethic embodied in the old term, *kapellmeister*. Though we tend to use the term somewhat condescendingly here, in Germany -

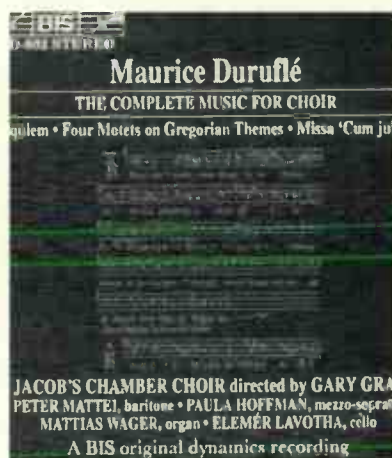
where the term originated, of course - the contribution of provincial music directors has been of fundamental importance since the time of Bach and Telemann.

Gunter Wand honed his conducting skills within this ancient tradition, as did many of the great Austro-German conductors before him. At its heart lies the notion that the music and the composer's wishes are paramount; that the conductor's role is to convey the musical experience as intended, not interpose his own personality between composer and audience. In recent years the rich and accumulated experience of Gunter Wand's career, working with the very best of the German provincial orchestras, has resulted in a series of remarkable recordings of the composers that have been so much part of his heritage: Mozart, Beethoven, Schubert, Schumann, Brahms and - above all, I would venture - Bruckner.

This glowing account of the Seventh Symphony comes from performances given over three days in March last year in the open but not over-reverberant acoustic, of the Musikhalle in Hamburg. The accompanying notes do not reveal whether one performance was used with errors corrected by other takes, or whether movements were plucked from various concerts. Whatever, it is of no significance for the end result is seamless and coherent, proof of Wand's clear-eyed view of the work, his meticulous attention to detail and painstaking preparation (apparently he still demands five rehearsals for a work which both he and his orchestra know inside-out) and his refusal to impose anything which is not implied by the score.

The pacing of this Bruckner Seventh is especially convincing, with Wand rightly perceiving the apex of the work as its majestic adagio, Bruckner's epitaph for his idol, Wagner. He was working on the movement's coda when he heard of Wagner's death and wrote in his diary, "And then I began to write the real funeral music for the master." Interestingly, at the climax of the movement, Wand eschews the cymbal, triangle and tympani which

were inserted by Bruckner after the first performance in Leipzig in 1884. He was pressurised into doing this by the conductor of that premiere, Arthur Nikisch, and by his pupil, Josef Schalk. It was typical of Bruckner to bow to such well-meaning suggestions but, as the booklet note points out, the question marks he placed alongside the glued-in strip of extra orchestration display the doubts he retained about its conclusion. In opting for Bruckner's original thoughts, Wand in no way lessens the impact of the moment; indeed, it is one of the high-points of what must be one of the finest Bruckner Seventh on record. An essential addition to any Bruckner collection.



MAURICE DURUFLE
Requiem Op.9/Four Motets on Gregorian Themes Op.10
Mass: 'Cum Jubilo' Op.11
Peter Mattei, baritone; Paula Hoffman, mezzo-soprano; Elemer Lavotha, cello; Mattias Wager, organ; St Jacob's Chamber Choir, Stockholm; director, Gary Graden.
BIS CD-602 (DDD/70.56)

● This generously-filled CD embraces all of Durufle's choral music, the Requiem of 1947 - his most popular composition by far - the Four Motets of 1960, and the Mass 'Cum Jubilo' of 1966: separated by nineteen years, yet linked by consecutive opus numbers. Durufle, you will have gathered, was not exactly prolific; barely a dozen works, despite living to the age of 84.

He was born in 1902 and enjoyed

Meet-Your-Maker

A reference guide on where to find Britain's manufacturers and what they make. (Some Distributors also listed).

ACOUSTIC ENERGY, 3a Alexandra Road, London W13 0NP. 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.

ALCHEMIST PRODUCTS, 4 Rosebury Mews, London N10 2LG. Call us for a list of our dealers in many areas including:- London, Kent, Hampshire, Wiltshire, Milton Keynes and N. Ireland and for product information on the Kraken, Freya, Bragi, Odin, Genesis and more.

ALEMA UK LTD., 25 Montifore Road, Hove, BN3 1RD. Tel. 0273 202637. Audion * Edisson * 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!

AUDIIONOTE 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 REFERENCE, Kismet Bridge Hill, Epping, Essex. CM16 4ER. 0992 560051. Speaker cabinets made to your specification. Example, small transmission line made with 15mm MDF and 18mm baffle, all apertures cut, grille frames supplied. Veneered and finished £150. We also manufacture high quality speakers at affordable prices.

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.

BANDOR, Studio II, Penfold Cottages, Penfold Lane, Holmer Green, Bucks. HP5 6XR. Tel. 0494 714058. Aluminium anodised cone drivers with only 1.8 gm moving mass giving full detail to sound covering 2/3 of the frequency spectrum.

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.

CAMPAIGN AUDIO DESIGN, Llandudno Road, Cardiff CF3 8PG. Tel. 0222 779 401. Supplies / manufactures 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. U.K. Sales 091 415 0205. Admin 091 417 0057. Fax 091 416 0392. Canford Audio is the UK's leading manufacturer and distributor of professional Audio Equipment. Their 6000+ products are detailed in a bi-annual catalogue which is available free of charge to professional users. The majority of products are on stock items, therefore Canford can, more often than not, offer a next day delivery service to UK customers.

CHELMER VALVE CO - For Audio Valves - 130 New London Road, Chelmsford, Essex, CM2 0RG. Tel. 0245 355296/265865. Fax: 0245 490064. We manufacture the high quality alternatives to all those famous brand names of yester year such as Mullard, MOV, GEC etc. With over 30 years experience in this field, we process valves from worldwide sources using our specially developed factories. For CVC premium valves inclusive of Pre-amp and Power-amp, also Rectifiers and Sockets call Chelmer Valve Company.

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.

CONCORDANT PREMIER TUBE, 14 Glyn Close, Barwell, Leicester, LE9 8GL. Tel. 0455 843752.

The Excelsior - Designed for the analogue enthusiast. The Exhilarant - Designed for the line enthusiast. The Exquisite - Designed for the analogue and line enthusiast.

The Exhilarant Power Amp fitted to Quad II Hardware.

CONNECTIONS, 11 Archer Street, London W1V 7HG. Tel. 081 348 5676. Dealers in: Absolute, Audio note, Audioquest, Deltec, Harmonix, Kimber, Mandrake, MIT, Siltech, Symo, Van den Hul, WBT and others.

DBS AUDIO, PO Box 91 Bury Saint Edmunds, Suffolk, IP3 0NF. Tel: 0284 828926 or fax: 0284 828026. The DBS6 loudspeaker kit, as designed by Dave Berriman and featured in Hi-Fi News Feb/March '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.

DPA DIGITAL, Unit 7, Willowbrook Technical Units, Crickhowell Road, St Mellons, Cardiff, CF3 0EF.

Why do reviewers across the world rave about DPA products? Listen to DPA's DACs, transports, amplifiers and cables and discover for yourself.

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 Bier, nr Tenby, S Pembrokeshire, SA70 8QR. Tel. 0834 871 209. or Fax. 0834 871 770. Curvilinear metal cones loud speakers were first developed by Ted Jordan in 1963.

EJ Jordan Designs are now World leaders in foil cone technology. First and foremost.

EMF, 2a Bellevue Road, Friem, Barnet, N11 3ES. Tel. 081 361 6734. Manufacturer of Sequel 50w integrated amplifier and the Crystal D2A converter. Please write in for details.

FALCON ACOUSTICS LTD., Tabor House, Norwich Road, Mulbarton, Norwich, 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. 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 instructions including cabinet construction for only £10. Includes reviews, photos etc. and at least £10 discount off any further products purchased from us e.g. ready made cabinets. Also £25-£150 off any complete loudspeakers!!!

FOUNDATION AUDIO, 53 Beecroft 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 'specialists'. Send for our brochure and details of your nearest stockists.

FULLERS AUDIO, 20 Tunbridge Road, Sounthend on Sea, Essex SS2 6LT. Tel. 0702 612116. Fuller's Audio produce a range of loudspeakers priced from £329 to £2499 and a complimentary Pre and Power amp combination (electronic

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, SDD-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.

KAL, 45 Old High Street, Folkestone, Kent Tel. 0303245005. Specialists in valve amps & Speakers. Now on demonstration:- KAL VT4c/211. Other products are Alphonson, AMC, B&W, DPA and many more.

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.

LFD AUDIO, 110 Oxford Crescent, Clacton-on-Sea, Essex, CO15 3PZ. Tel. 0255 422533. Fax: 0255 221370. From the £479 Integrated 0 to our state of the art battery disc pre-amplifier, LFD Audio aim to offer top quality amplification at realistic prices. To get the best from your amplifiers, why not try our value for money analogue and digital interconnects and loudspeaker cables. As a complement to the LFD range of accessories, GOLD plated mains 13A plugs and sockets are now available.

LOCKWOOD AUDIO, Imperial Studios, Maxwell Road, Borehamwood, Herts, WD6 1WE. Tel. 081 207 4472/ Fax. 081 207 5283. Tannoy and Lockwood loudspeaker specialist. Suppliers of drive units, cabinets, crossovers, grille-cloths etc.. The authorised Tannoy service agent. Dealers in vintage HiFi.

LORICRAFT 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.

MARANTZ HIFI UK LTD., Kingsbridge House, Padbury Oaks, 575-583, Bath Road, Longford, Middlesex UB7 0EH. Tel. 0753 680868 or Fax. 0753 680428. Marantz is a manufacturer of Hi-Fi separate components, including CD, DCC, cassette decks, amplifiers, tuners, receivers and speakers. Also now active in Home Cinema with Pro-Logic amplifiers and receivers, plus Nicam VCR and video projector.

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

MICROMEGA UK, Box No 13, London E18 1EG. Micromega produce the world's widest range of digital front end products from any one manufacturer. Phone or write for a full colour brochure.

PEAR AUDIO, 3 Northumberland Mews, Alnmouth, Northumberland, NE66 2RS. Tel. 0665 830862. A wide range of products including Shalinian Loud Speakers - Super elfs, ARCs, Obelisks, Hawks and Diapasons. Dynavector amps and cartridges and Bedini amongst others.

QUANTRUM AUDIO LTD. PO Box 26, Kilmamock, Ayrshire, Scotland, KA1 1BA. Tel. 0563 71122.

Audiophile CD's & LP's. The UK's largest specialist: FONE REFERENCE RECORDINGS, SHEFFIELD LAB, WILSON AUDIO, KLAIVIER 7 V.T.L. etc. Write or phone for full listings and prices.

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.

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 RA8 series 2 as supplied to the BBC and the 5" reviewed Minette 2 at £120.

SAMBELL ENGINEERING LTD. Winston Avenue, Croft, Leicestershire, LE9 6GU. Tel. 0455 283251.

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.

SELECT SYSTEMS, Hanworth Trading Estate, Hampton Road West, Feltham, Middlesex, TW13 6DH. Tel. 081 893 8662. Fax. 081 893 4318. We manufacture the Francinsten CD enhancement system, The Dacula DAC and Perfect Digital and Analogue interconnects. Select also provide freelance design, manufacture, prototyping and test, also valve and solidstate specials.

SEQUENCE DESIGN LTD. 24 Brook Street, Mayfair, London W1Y 1AE. Tel. 071 495 0775. Fax 071 495 0281.

Slm 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 an earlier issue of HFW, newly launched John Shearn's Phase 2 integrated amp with many of the design features of the Phase 1. R.R.P. £495, 50 wpc & same finish as Phase 1 pre power also option of phono stage for Phase 2 £95.

SLATE AUDIO, 47 Gemini Close, Leighton Buzzard, Beds. LU7 8UD. Tel. 0525 384174. Slate have NEVER had a bad review. Discover why? For yourselves. See the excellent review in Hi Fi Choice's latest stands supplement. Contact us now for more information on this and also on our Garrard 401/301 marble plinths. Slate- still the best loudspeaker stands in the world.

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.

TARGET AUDIO PRODUCCIES PLC, Britannia House, Leagrave Road, Luton, LU3 1RU. The Audio equipment, rack and speaker stand specialist. For information on our products please telephone or write.

WOLLATON AUDIO, 134 Parkside, Wollaton, Notts, NG8 2NP. Tel/Fax. 0602 284147. Trying to bring imported high end down in price with Wollaton is the UK distributor of the following products: XLO interconnects and loudspeaker cables - "The best in the world". Clements loudspeakers; ribbons and/or moving coil drive units in outstanding value loudspeaker systems. Monarchy Digital: transports and converters (including the model 33 D to A with built in high quality preamp) to match the best at a fraction of the price.

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-assembled kits. Everything required for the loudspeaker builder and four dem rooms to listen to the kits in built-up form.

To Advertise in this section, please contact

Caroline Knott on:

071 266 0969

RECORD OF THE MONTH

It's sobering to reflect that when William Alwyn recorded his Third Symphony for Lyrita some twenty years ago, the label founded by Richard Itter was the only one with the vision and commitment to record new British music by the likes of Alwyn, Rubbra, Finzi and Malcolm Arnold. While the Lyrita catalogue remains a cornerstone of the discography of British music, it no longer has to carry the flag alone. It has since been joined in the promotion of contemporary British music by the likes of Hyperion, Conifer, Nimbus, Virgin Classics and, of course, Chandos.

The music of William Alwyn has become one of the most recent of Chandos's explorations, under the baton of the prodigious and multi-

faceted Richard Hickox. And what marvellous music that exploration is bringing to light, in terms of symphonies, concertos and other orchestral works.

William Alwyn was born in 1905 and educated at the Royal Academy of Music where, at the age of fifteen, he was awarded scholarships in flute and composition. He was a professor of composition himself at twenty-one and continued in that post for thirty years. In 1936, Alwyn joined the legendary British Documentary Film Unit and proved especially adept at film scores: there are over 200 to his name. He also became a major figure in British musical administration and organisation, most illustriously as one of the founders of the Composers' Guild of Great Britain and as the vice-president of the

Society for the Promotion of New Music. Alwyn was also a gifted poet, linguist and artist. Witness the painting reproduced on the cover of the insert booklet accompanying this new recording of the Third Symphony.

Alwyn was a neo-romantic, but if his music employed traditional forms it was only to convey his own remarkable originality of thought. There is no striving to be self-consciously different: the harmonic, melodic and rhythmic language is wholly and immediately comprehensible; no outrageous demands are made upon the instruments. The originality is in the handling of these forces, in Alwyn's own imagination and in his highly distinctive and appealing musical voice.

WILLIAM ALWYN
Symphony No. 3
Lyrita

Lydia Mordkovich, violin; London Symphony Orchestra; conductor, Richard Hickox

CHANDOS CHAN 9187 (DDD/74.51)

● The Third Symphony was written to a commission from the BBC in 1955-56. The first performance should have been conducted by Barbirolli, long a champion of Alwyn's symphonies, but he was too ill to undertake the task and his place was taken at the Royal Festival Hall by Sir Thomas Beecham. The work was well received; Alwyn's fellow-composer, John Ireland, thought it the finest British symphony since Elgar's Second - quite an accolade.

In this three-movement work, Alwyn decided upon a compositional framework that divided up the twelve semitones of the scale into groups of eight and four. The first movement, for example, a vigorous, incisive piece of writing reminiscent of Shostakovich, employs the eight-semitone group with a central tonality of F flat. In the second movement, Alwyn sets himself the more taxing limitations of the four

semitone group, but there is no denying the scheme works quite magically in this poco adagio. In the concluding allegro con fuoco, both groups are first used alternately and then combined in the coda to bring this tautly argued symphony to a close.

The Third Symphony perfectly illustrates Alwyn's own comment that

result, it remained unheard for some fifty years after its first performance - with piano reduction replacing the orchestral parts - at a wartime recital on March 3, 1940.

This first recording shows it to be a work of great melodic charm and invention, with some quite beautiful and virtuosic writing for the soloist. The serene slow movement is interrupted by a cheerful tune reminiscent of an Irish folk melody, while the finale is all dashing exuberance until a change to 3/4 time and a quietening to pizzicato strings and the ring of the glockenspiel. There is a fanfare on the brass and the work concludes with a final flourish from the soloist.

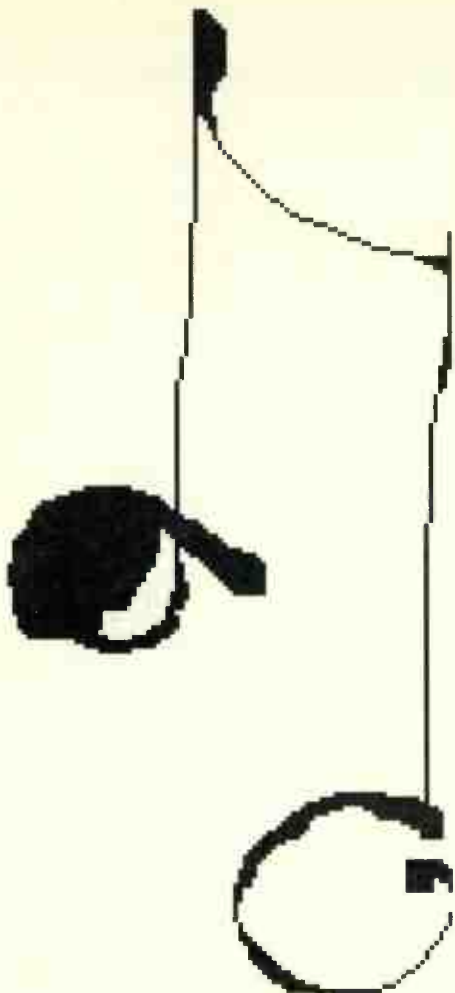
The playing here suggests that Lydia Mordkovich, the soloist, is fully persuaded of the qualities of the work: her contribution is passionate and persuasive, as

well as technically exhilarating. Similarly, Richard Hickox directs both works with complete conviction, and a good deal of fire and imagination. The orchestral playing is first rate and the ample, spacious yet detailed sound from All Saints, Tooting, does full justice to these brilliant scores. An important issue but, more critically, one which brings Alwyn's music vividly alive.



"All symphonies are dramas - dramas of contrast and emotion, whether (composed) by classical composers or romantics."

It is coupled on this generously-filled CD by the Violin Concerto which, unlike the Third Symphony, did not prove to be to the BBC's tastes and was rejected for the Promenade Concerts, despite the enthusiastic advocacy of Sir Henry Wood. As a

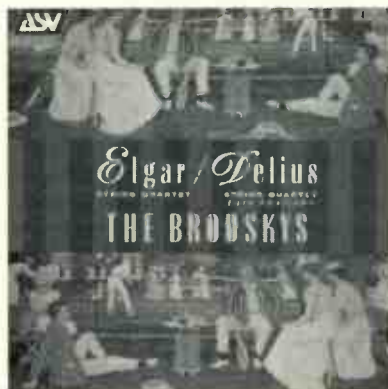


a musical education very much in the French 'cathedral' tradition. He was taught organ by Toumemire and Vieme, and composition by Paul Dukas (of 'Sorcerer's Apprentice' fame). Like his contemporary, Olivier Messaien, Durufle became resident organist of a Paris Church - in his case, St Etienne du Mont and retained the post for most of his life. Again, like Messaien, he gained a professorship at the Paris Conservatoire. But there the similarities end, musically, at least: both shared a profound religious faith. Where Messaien went on to explore new sound worlds and modes of expression, Durufle maintained an archaic style that drew heavily on themes from Gregorian chant, was greatly influenced by his French predecessors, Faure, Ravel and Debussy, and acknowledged none of the great shifts in twentieth century music.

Though derivative, Durufle's music does not want for individuality or sincerity, and there is no denying he creates some sweetly appealing sounds. As with Faure's setting, his Requiem is more concerned with reconciliation than retribution (he emulates Faure by omitting the Dies Irae). In the Four Motets, he quite brilliantly adapts the rhythmic patterns of Gregorian chant, as laid down in

long-standing tradition at the Abbey of Solesmes and, in the Mass 'Cum Jubilo', the unison melodic line is entirely derived from the Gregorian melody long associated with this text.

The performances here, both from the young soloists and the equally youthful choir, are committed and well-projected and their American director, Gary Graden, displays an evident empathy with Durufle's highly idiomatic style. As with all BIS issues, it is also very naturally and spaciouly recorded, in St Jacob's Church and with just two Neumann U89 microphones and a Fostex DAT recorder: a minimalist approach that produces maximum results.



SIR EDWARD ELGAR
String Quartet in E minor
Op.83

FREDERICK DELIUS
String Quartet

Brodsky String Quartet.
ASV DIGITAL CD DCA526 (DDD/55.35)

● In the last months of his life, the gramophone became Elgar's chief source of consolation. During one of his visits to the composer, his friend, Troyte Griffith, put on the Stratton Quartet's recording of Elgar's solitary string quartet. After the slow movement, Griffith commented: "Surely that is as fine as any movement by Beethoven?" Elgar answered: "Yes it is, and there is something in it that has never been done before." Griffith inquired what it was.

"Nothing you would understand, merely an arrangement of notes."

A modest assessment of a movement that distills so many emotions into its less-than-ten

minute span. It was music that had a profound effect on Lady Elgar at the first private performance of the quartet in January 1919; sadly, within a year, that self-same music was being played at her funeral in the little Catholic chapel in Malvern.

Elgar had turned inward, and into the abstract world of chamber music in the wake of the horrors of the First World War. He produced three undeniable masterpieces: a Violin Sonata, a Piano Quintet and the String Quartet recorded here. For some reason, the last has never been accorded quite the status of its companions, a misjudgement which this committed and eloquent performance wholly corrects.

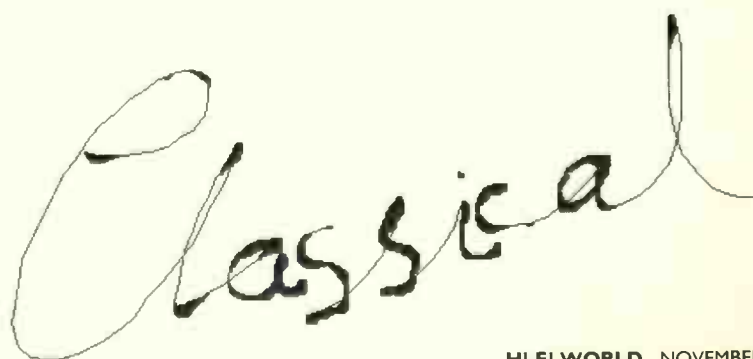
This was the Brodsky Quartet's first recording, a John Boyden/Tony Faulkner production from 1984 whose warm, detailed and well-balanced sound has been recaptured in this new CD transfer. The playing, too, has retained its impact, powerfully expressive and emphasising the melancholy and anguish of the slow movement. These qualities are shared by the performance and recording of the Delius, another work of splendid isolation which Delius completed in 1916. It is lighter than the Elgar (even folk-like in the finale), but the ebb-and-flow of the work is well understood by the players and their use of rubato is finely judged.

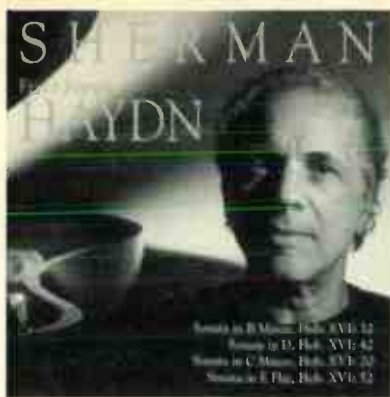
The Delius remains even less well known than the Elgar, although you may be familiar with its slow movement, subtitled 'Late Swallows', and arranged for orchestra by Eric Fenby. Solitary works these may be, but they surely rank among the finest string quartets written this century. It is difficult to conceive of the case being more persuasively argued than in this ASV reissue.

FRANZ JOSEF HAYDN
Keyboard sonatas No.36 in C minor Hob.XVI:20/No.47 in B minor Hob.XVI:32/No.56 in D Major Hob.XVI:42/ No.62 in E flat Major Hob.XVI:52

Russell Sherman.
TROY031 (DDD/69.17)

● A taste for the keyboard sonatas of Haydn is something I've enjoyed





acquiring of late, principally through the series of recordings on Philips by Alfred Brendel, but also through one-off recitals such as this by the American pianist, Russell Sherman.

While not possessed of the soul-searching nature of, say, the Beethoven sonatas, these works reveal a good deal about a composer whose prime role - at least in his orchestral works - was to provide music to entertain his aristocratic employers. That it was also music of supreme quality was almost incidental, although Haydn's genius did not go unrecognised in his time.

Haydn's career spanned the late Baroque-the world of Carl Philip Emmanuel Bach - and musical revolution sparked by Beethoven (and included the entire, brief lifespan of Mozart), so it is hardly surprising that these sonatas embrace both archaic and late 18th century avant garde styles. The important thing, it seems to me, is to take each one on its merits and not to seek out influences, or pointers to the past or future, but rather to uncover the personality within: the 'private' Haydn. We know he was a pious man, and a humane and civilised one, but also possessed of a delicious wit. We also know that 'Papa' Haydn, as he was affectionately known, had his periods of inner turmoil and uncertainty, which manifested themselves in the works of the 'Sturm und Drang' period. You can hear that in the urgency of the B minor sonata and, perhaps, the resolution of the conflict in the benediction, like the andante of the C minor. The gentle side of Haydn's nature is evident in the tender poignancy of the first movement of the D Major. But these are not grandly declamatory statements; the emotional range is contained, subtly expressed within a formal framework which is what makes the process of discovery all the more rewarding.

While Russell Sherman's playing may not have the hypnotic quality of Brendel in this music, or project such a strong personality, his playing is no less considered or characterful. He treads sympathetically in Haydn's world, scrupulous to the letter and

the spirit of the score. The scale, too, is finely-judged: not excessively and unnecessarily intense, but by no means lightweight. The end result - which is agreeably recorded - may not be as idiomatic as Brendel but is no less revelatory.



ARNOLD SCHOENBERG Gurre-Lieder/Four Orchestral Songs Op.22

Marita Napier; Yvonne Minton; Jess Thomas; Sigmund Nimsgern; Kenneth Bowen; Gunter Reich; BBC Singers; BBC Choral Society; Goldsmith's Choral Union; Gentlemen of the London Philharmonic Choir; BBC Symphony Orchestra; conductor, Pierre Boulez.

**SONY CLASSICAL SM2K 48459
(2 CD SET) (ADD/112.03)**

● Schoenberg was already well-advanced along the serialist road when, in 1900, he began work on the vast musical pageant that is Gurre-Lieder. Far from anticipating the twelve-note world of his pupil, Webern Schoenberg looks back to Wagner and, most specifically, to the lush eroticism and symbolism of Tristan.

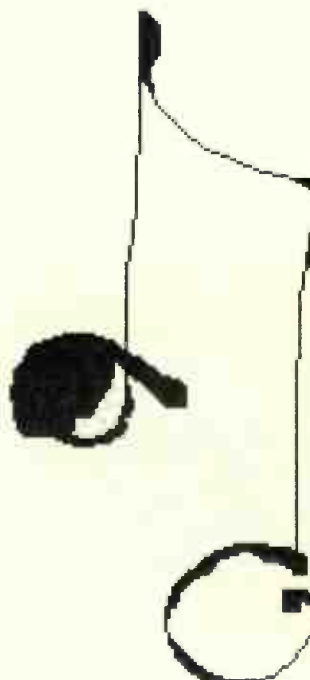
Essentially, the work is a sequence of concert tableaux for soloists and gigantic choral and orchestral forces, setting German translations of poems by the Dane, Jens Peter Jacobsen, which draw on ancient Danish myth and legend and combine the age-old themes of secret love, death and damnation. In most respects, it is a wholly conventional work, if writ large, and some Schoenberg scholars have tended to dismiss it as an aberration. But disassociate Gurre-Lieder from the rest of Schoenberg's output and you have a work of ravishing sensuousness and luxuriance (Gurre, incidentally, is the castle where the tragedy is played out).

The sumptuous beauty of the score is perhaps best expounded by Ozawa's recording for Philips, but it is the Boulez version-originally on CBS and here reissued by Sony Classical-which best brings out the heroic qualities of

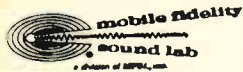
this musical epic. The drama is powerfully delineated, with the Wagnerian overtones strongly underlined. Tempos are generally slow, warmly expressive without becoming excessively indulgent.

Of the soloists, Yvonne Minton is outstanding, especially in the most famous of the Lieder, the Song of the Wood-Dove. Boulez shapes this magical music wonderfully well, slowly building to its darkly ominous climax. Yvonne Minton is also the splendid soloist in the Four Orchestral Songs of 1913-16, which set texts by Ernest Dowson (one) and the German lyric poet, Rainer Maria Rilke (three).

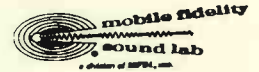
Graced with superb orchestral playing and choral singing, and enhanced by vivid, atmospheric recording and the kind of broad sound-stage demanded by such forces, Boulez's performance of Gurre-Lieder remains compelling. The transfer from the 1975 and 1982 CBS masters - done using Sony's 20-bit SBM (Super Bit Mapping) technique - has resulted in a sound quality of great freshness and translucency, one that fully accommodates this colossal late Romantic anachronism of a score.



MOBILE FIDELITY



24 CARAT GOLD PLATED COMPACT DISCS



A unique opportunity to obtain the ultimate in CDs. For high resolution and immortality Mobile Fidelity plate these discs with 24 carat gold. Almost unobtainable elsewhere, they are not cheap - but what price excellence?

Mobile Fidelity Gold Discs offer better sound quality for many reasons, not least in that they are specially manufactured in Japan using real gold as a coating. The gold Ultradisc was developed in conjunction with the Ultech Corporation. It has fewer pinholes, better durability and a more extended life. Accelerated ageing tests have shown that these gold discs outlast normal types by a considerable margin.



BOSTON
THIRD STAGE
SANTANA
ABRAXAS
STEVIE WONDER
INNERVISIONS
ROY ORBISON
MYSTERY GIRL
LYNYRD SKYNYRD
SECOND HELPING
KEITH RICHARDS
TALK IS CHEAP
CREAM
DISRAELI GEARS
JOHN LEE HOOKER
THE HEALER
RUSH
MOVING PICTURES
U2
WAR
DOORS
LA WOMAN
DOORS
STRANGE DAYS
ROBERT CRAY
STRONG PERSUADER
DAVE BRUBECK
TIME OUT
BOB DYLAN
BLONDE ON BLONDE
PAUL & LINDA MCCARTNEY
RAM
JACKSON BROWN
LATE FOR THE SKY
JANIS JOPLIN
PEARL
STEVE WINWOOD
ARC OF A DIVER
WILLIE NELSON
SHOTGUN WILLIE
JONI MITCHELL
COURT AND SPARK
ELVIS PRESLEY
THATS THE WAY IT IS
QUEEN
A NIGHT AT THE OPERA
BEACH BOYS
PET SOUNDS
STEVE MILLER
FLY LIKE AN EAGLE
ALBERT KING
BORN UNDER A BAD SIGN
ERIC CLAPTON
461 OCEAN BLVD
SLOW HAND
BRYAN ADAMS
RECKLESS
STING
NOTHING LIKE THE SUN
JOHN COLTRANE
BLUE TRAIN
B B KING
LIVE AT THE REGAL

EARL KLUGH
FINGER PAINTINGS
TOM PETTY
DAMN THE TORPEDOES
HARD PROMISES
CHARLIE MUSSLEWHITE
MEMPHIS, TENNESSEE
BELAFONTE
RETURNS TO CARNEGIE HALL
MAXINE SULLIVAN
SINGS THE MUSIC OF BURTON LANE
THE WHO
QUADROPHENIA (DOUBLE)
TOMMY (DOUBI E)
WHO ARE YOU
SUPERTRAMP
BREAKFAST IN AMERICA
CRIME OF THE CENTURY
FRANK SINATRA
SONGS FOR SWINGING LOVES
TUMBLEWEED CONNECTION
HONKY CHATEAU
MADMAN ACROSS THE WATER
GOODBYE YELLOW BRICK RD(DBL)
BOZ SCAGGS
SILK DEGREES
ROD STEWART
EVERY PICTURE TELLS A STORY
JEFF BECK
BLOW BY BLOW
WIRED
JOE JACKSON
NIGHT & DAY
BLIND FAITH
BLIND FAITH
HUEY LEWIS & THE NEWS
SPORTS
JETHRO TULL
THICK AS A BRICK
STAND UP
THE POLICE
SYNCHRONICITY
MOODY BLUES
DAYS OF FUTURE PASSED
IN SEARCH OF THE LOST CHORD
ALLMAN BROTHERS
LIVE AT FILLMORE EAST(DBL)
EAT A PEACH (DBL)
STEELY DAN
AJA
GAUCHO
CAT STEVENS
TEASER & THE FIRECAT
TEA FOR THE TILLERMAN
DEF LEPPARD
HYSTERIA
PYROMANIA
BEACH BOYS
SUPER GIRL SURFIN USA (DBL)
JOHN KLEMMER
TOUCH
JEFFERSON AIRPLANE
CROWN OF CREATION
VOLUNTEERS
CARPENTERS
SONG FOR YOU
THE BAND
MUSIC FROM THE BIG PINK
STING
THE DREAM OF THE BLUE TURTLE
HALL & OATES
VOICES
HARRY NILSSON
NILSSON SCHMILSSON
AFTER THE HURRICANE
SONGS FOR MONSERRAT
PINK FLOYD
THE WALL (£38.99 GOLD CD)
DARK SIDE OF THE MOON
All Gold CDs: £25.00 (single);
£35.00 (dbl)

MARY BLACK PROMOTION

CD & VIDEO FOR £12.99 (inc p+p) WHILST STOCKS LAST

This video compilation contains four recordings live at the Royal Albert Hall whilst Mary Black was on tour. The pack also contains her new album, The Holy Ground which is available on CD. A superb idea for a gift at an ideal price.



★★★ NEW TITLES ★★★

Mastersound Album Classics remastered with Sony's 20-bit 'Super Bit Mapping' process. The reflective coating is pure 24-carat gold.

AEROSMITH TOYS IN THE ATTIC CK 525857	BILLY JOEL 52ND STREET CK 5258
BOSTON BOSTON CK 52856	MILES DAVIS KIND OF BLUE CK 52861
DAVE BRUBECK TIME OUT BOB DYLAN BLONDE ON BLONDE CK 53016	BRUCE SPRINGSTEEN BORN TO RUN CK 52859
Special price: £32.95	WEST SIDE STORY ORIGINAL CAST CK 53152

**A rich and varied selection of recordings,
all offered at very competitive prices!**

HI-FI WORLD

RECORD MAIL ORDER

NEW THIS MONTH



CUMBIA CUMBIA 2 LA EPOCA DORADA DE CUMBIAS COLOMBIANAS £6.95 (CD ONLY)

SEE FOR MILES VINYL

A WILD SELECTION OF LIMITED STOCK VINYL WHICH IS UNFORTUNATELY DECREASING ***** GET THEM WHEN YOU CAN AT THE RIGHT PRICE!

THE ANIMALS

THE EP COLLECTION

PP ARNOLD

THE BEST OF

KEVIN AYERS

THE COLLECTION

CHUCK BERRY

THE EP COLLECTION

DAVE BERRY

THIS STRANGE EFFECT

ROBERT CALVERT

HYPE

CARAVAN

THE BEST OF

BOBBY CHARLES

SMALL TOWN TALK

EDDIE COCHRAN

THE EP COLLECTION

THE CRICKETS

FILE 61-65

BO DIDDLEY

THE EP COLLECTION

THE EAGLES

SMASH HITS

HERMANS HERMITS

THE EP COLLECTION

THE HOLLIES

THE OTHER SIDE OF

NOT THE HITS AGAIN

STEVE HOWE WITH

BODEST

THE EARLY YEARS

MARSHA HUNT

WALK ON GUIDED SPLINTERS

BB KING

BLUES IS KING

THE KINKS

THE EP COLLECTION

THE EP COLLECTION VOL. II

JERRY LEE LEWIS

THE EP COLLECTION

ROBERT PALMER WITH

ALAN BOWN

THE EARLY YEARS

PINK FLOYD

ALBUM SAMPLER

THE SEARCHERS

THE EP COLLECTION

THE SHADOWS

THE EP COLLECTION VOL. I

THE EP COLLECTION VOL. II

SANDIE SHAW

THE EP COLLECTION

TOMMY STEELE & THE

STEELEMAN

THE ROCK 'N' ROLL YEARS

THE TROGGS

WILD THINGS

HANK MARVIN GUITAR

SYNDICATE

SAME TITLE

NEW YORK DOLLS

PERSONALITY CRISIS



SEE FOR MILES LPS £ 7.99

ISIS RECORDS

HANDEL AND SCARLATTI
BACH GREAT ORGAN WORKS
HANDEL'S 1720 HARPSICHORD
HENRY PURCELL SUITES

CD ONLY £12.99

SPECIAL DELIVERY TOPIC (CD ONLY)

JUNE TABOR
AIRS AND GRACES
ASHES AND DIAMONDS
MARTIN CARTHY
RIGHT OF PASSAGE
JOHN KILPATRICK
PLAIN CAPERS
PETER BELLAMY
THE TRANSPORTERS
RICHARD THOMPSON
STRICT TEMPO
MARTIN CARTHY & DAVE SWARBRICK
SKIN AND BONE
TERRY ALLEN
LUBBOCK (ON EVERYTHING)
WOODY GUTHRIE
STRUGGLE
NICK JONES
PENGUIN EGGS (CD ONLY)
DICK GAUGHAN
GAUGHAN (CD ONLY)
RON KAVANA
HOME FIRE
PETER HOLSAPPLE & CHRIS STAMEY
MAVERICKS
PATRICK STREET
IRISH TIMES
RORY BLOK
TURNING POINT (CD ONLY)
GREGSON/COLLISTER
MISCHIEF
A CHANGE IN THE WEATHER
LOVE IS A STRANGE HOTEL
THE LAST WORD (£12.99 CD ONLY)
CLIVE GREGSON
WELCOME TO THE WORKHOUSE

JONATHAN RICHMAN
I, JONATHAN
JONATHAN GOES COUNTRY
JONATHAN RICHMAN
REBIRTH BRASS BAND
REBIRTH KICKIN' IT LIVE
VARIOUS ARTISTS
HARD CASH
MARTIN CARTHY AND DAVE SWARBRICK
LIFE AND LIMB
BLOWZABELLA
VANILLA
BOBBY KING & TERRY EVANS
LIVE & LET LIVE
RHYTHM, BLUES, SOUL
SUGAR RAY & THE BLUETONES
KNOCKOUT
ROBERT EARL KEEN JNR
WEST TEXTURES
THE METERS
THE METERS JAM
GOOD OLD FUNKY MUSIC
CDs £10.99

CLASSIC ROCK CDS

GRAM PARSONS
WARM EVENINGS
NEIL YOUNG
TRANS
NEIL YOUNG
OLD WAYS
BLOW UP
O.S.T.
SPARKS
SPARKS
THE ZOMBIES
BEGIN HERE
MOODY BLUES
THE MAGNIFICENT
JOHN MAYALL
NOTICE TO APPEAR
RY COODER
CHICKEN SKIN MUSIC
WISHBONE ASH
THERES THE RUB
TOM WAITS
NIGHTHAWKS AT THE DINER
STEVE MILLER BAND
SAILOR
TIM BUCKLEY
GOODBYE & HELLO
SANTANA
SANTANA
THE GRATEFUL DEAD
ANTHEM OF THE SUN
CLASSIC ROCK CDS £11.99

BULLSEYE BLUES

ANN PEEBLES
FULL TIME LOVE
SUGAR RAY & BLUETONES
DONT STAND IN MY WAY (CD)
CHAMPION JACK DUPREE
FROM NEW ORLEANS (CD)
LITTLE JIMMY KING & THE MEMPHIS SOUL SURVIVORS
LITTLE JIMMY KING (CD)
OTIS CLAY
SOUL MAN (CD)
Bullseye CDs £11.99

Four excellent test CDs recommended by HI-FI World for sound quality and sound checking. Both Chesky jazz sampler CDs provide a wide selection of listening tests and music for audiophiles. Volume 2 includes 37 new tests including height tests, dynamic drum tests and many many more. Well worth having in your collection.



Chesky jazz sampler vol. 1
£13.49



Chesky jazz sampler vol. 2
£13.49



SOUNDCHECK The professional audio test disc - £19.95



DENON Audio technical CD £15.00



Mary Black - The Collection
£11.99



The Sheffield Track and Drum Record - £14.49

ROUNDER

(AVAILABLE ON CD ONLY)
ALISON KRAUSS
I'VE GOT THAT OLD FEELING
OTIS CLAY
I'LL TREAT YOU RIGHT
LEADBELLY
MIDNIGHT SPECIAL
ROD PIAZZA & THE MIGHTY FLERS
ALPHABET BLUES
TOM RUSSELL
HURRICANE SEASON
IRIS DEMENT
INFAMOUS ANGEL
SPANIC BOYS
STRANGE WORLD
MISSISSIPPI JOHN HURT
AVALON BLUES 1963
WORRIED BLUES 1963
AARON NEVILLE
MY GREATEST GIFT

DUKE ROBILLARD & THE PLEASURE KINGS
TOO HOT TO HANDLE
DUKE ROBILLARD
YOU GOT ME
SWING
ROCKIN BLUES
RORY BLOK
HOUSE OF HEARTS
BEST BLUES & ORIGINALS VOL I
BEST BLUES & ORIGINALS VOL II
RHINESTONES & STEEL STRINGS
I'VE GOT A ROCK IN MY SOUL
BLUE HORIZON
HIGH HEELED BLUES
JOHNNY COPELAND
WHERE THE RAIN STARTS FALLIN
AIN'T NOTHING BUT A HOUSE-
JOHNNY ADAMS
SINGS DOC POMUS - THE REAL ME
(WITH DR. JOHN/DUKE ROBILLARD)

IRMA THOMAS
NEW RULES
REBIRTH BRASS BAND
FEEL LIKE FUNKIN' IT UP
SOLOMON BURKE
SOUL ALIVE
WALTER 'WOLFMAN'
WASHINGTON
WOLF AT THE DOOR
NATHAN & THE ZYDECO
CHA CHAS
YOUR MAMA DON'T KNOW
CLARENCE 'GATEMOUTH'
BROWN
TEXAS SWING
Rounder CDs £11.99

LYRICHORD

WORLD MUSIC SAMPLER
£7.99
MUSIC OF THE RAIN
FORESTS PYGMIES
JAPANESE KOTO CONSORT
PERU-MUSIC FROM THE
MACCHU PICCHU (HIGH
ANDES)
INDIAN BAMBOO FLUTE
GOUR GOSWAMI & STAVEN
GORN
Lyrichord CDs £12.99

MUNICH

CHARLES BROWN
SOMEONE TO LOVE
ALL MY LIFE
RORY BLOCK
AIN'T I A WOMAN
MAMAS BLUES
CULTURE IN CULTURE
CULTURE
IRMA THOMAS
LIVE - SIMPLY THE BEST
Munich CDs £10.99

AMALTHEA

THE DUKE ROBILLARD BAND
TURN IT AROUND
AFTER HOURS SWING SESSION
(Amalthea CD £11.99)

COOKING VINYL

THE OYSTER BAND
STEP OUTSIDE (CD ONLY £6.99)
LITTLE ROCK TO LEIPZIG
DESERTERS
FOUR BROTHERS
MAKOROKOTO
MICHELLE SHOCKED
TEXAS CAMPFIRE TAPES
EDWARD II & THE RED HOT
POLKAS
LET'S POLKASTEADY
SWEET HONEY IN THE ROCK
BREATHS...THE BEST OF
DAVY SPILLANE
ATLANTIC BRIDGE
COWBOY JUNKIES
TRINITY SESSIONS
JUNE TABOR
ANGEL TIGER
JUNE TABOR & THE OYSTER
BAND
FREEDOM AND RAIN
HAPPY END
TURN THINGS UPSIDE DOWN
BRUCE COCKBURN
LIVE
CLANNAD
FLAITH
BOILED IN LEAD
ORB
Cooking Vinyl
CDs £10.99

WORLD CIRCUIT

PEREGOYO Y SU COMBO
VACANA
TROPICALISIMO
BHEKI MSELEKU
CELEBRATION(CD ONLY)
JEAN TOUSSAINT
WHAT GOES AROUND(CD ONLY)
OLODUM

REVOLUTION IN MOTION
JOE ARROYO Y LA VERDAD
REBELLION
BLACK UMFOLOSI
UNITY
JALI MUSA JAWARA
SOUBINDOOR
LISANDRO MEZA
LISANDRO'S CUMBIA (NOT ON
LP)
ABDEL GADIR SALIM ALL-
STARS
THE MERDOUM KINGS PLAY
SONGS OF LOVE (NOT ON LP)
ALI FARKA TOURE
THE RIVER
ALI FARKA TOURE
OUMOU SANGARE
MOUSSOULOU
ABDEL AZIZ EL MUBARAK
STRAIGHT FROM THE HEART

World Circuit LPs £5.95
CDs £8.99

GRAPEVINE

MARY BLACK
THE HOLY GROUND
COLLECTION
BABES IN THE WOOD
NO FRONTIERS
BY THE TIME IT GETS DARK
WITHOUT THE FANFARE
COLLECTED
MARY BLACK
LPs £7.99 CDs £10.99

AUDIOQUEST

AUDIOQUEST
RECORDINGS ARE
RECORDED AND
MASTERED ON VALVE
EQUIPMENT - NOT ONLY
THAT, BUT USING
MICROPHONES, TAPE
DECKS AND AMPLIFIERS
BUILT OR CUSTOMISED
BY OUR OWN
FAVOURITE VALVE
EXPERT TIM DE
PARAVICINI NO LESS.
COMBINED WITH SIMPLE
MIC TECHNIQUES,
THESE RELEASES HAVE
AN UNPARALLELED
PRISTINE PURITY AND
CLARITY OF SOUND

WORKS OF ART VOL I
WORKS OF ART VOL II
(CD ONLY £7.99)
ROBERT LUCAS
USIN' MAN BLUES
LUKE & THE LOCOMOTIVES
BUILT FOR COMFORT
STRUNZ & FARAH
MISTERIO
TUXEDO COWBOY
WOMAN OF THE HEART
TRIO GALNTERIE
18TH CENTURY MUSIC FOR LUTE
& STRINGS
MOKAVE VOLI
MOKAVE VOLII
LARRY WILLIS
STEAL AWAY
VICTOR LEWIS
FAMILY PORTRAIT
BRUCE KATZ BAND
CRESCENT CRAWL
AUDIOQUEST CD £14.95 LP
£16.95

LINN RECORDS
HURRY - THERE
ARE ONLY LIM-
ITED STOCKS OF
LINN VINYL
AVAILABLE
THE LINN COLLECTION - 1992

(CD ONLY)
OTIS GRAND & THE DANCE
KINGS
ALWAYS HOT
THE HORSEFLIES
HUMAN FLY
JOHNNY ADAMS
ROOM WITH A VIEW OF THE
BLUES
UDITEI AMANT
17TH CENTURY ITALIAN LOVE
SONGS
BLUE NILE
A WALK ACROSS THE ROOFTOPS
HATS
CLAIRE MARTIN
THE WAITING GAME
CAROL KIDD
CAROL KIDD
ALL MY TOMORROWS
NICE WORK
THE NIGHT WE CALLED IT A DAY
GLAD WE MET
DAVID NEWTON
EYE WITNESS
VICTIM OF CIRCUMSTANCE
MARTIN TAYLOR
DON'T FRET
NIGEL NORTH
BAROQUE LUTE
NEW LONDON CONSORT
MUSIC FROM THE TIME OF
COLUMBUS
POLISH CHAMBER ORCH.
MOZART/VIVALDI/BACH/BARTOK/
ELGAR (DBL) £11.99 (LP &
CD)
WILLIAM CONWAY
& PETER EVANS
CELLO SONATAS
ENGLISH CLASSICAL
PLAYERS
MOZART 40TH & SCHUBERT STH
(DBL) £11.99 (LP & CD)
Linn Records LPs £7.99
CDs £11.99

RECUT RECORDS
BEETHOVEN
5TH SYMPHONY £8.99
LINN SELEKT
RECORDS
ROBERT CRAY
FALSE ACCUSATIONS
ABC
LEXICON OF LOVE
THE BEAUTIFUL SOUTH
WELCOME TO...
STAN GETZ/CHARLIE
PARKER
JAZZ SAMBA
JONI MITCHELL
CHALK MARK IN THE RAINSTORM
ELLA & LOUIS
ELLA & LOUIS AGAIN
TALKING HEADS
STOP MAKING SENSE
ELTON JOHN
ICE ON FIRE
KATE BUSH
THE DREAMING
LISA STANSFIELD
AFFECTION
COUNT BASIE
KANSAS CITY SUITE
THE EAGLES
HOTEL CALIFORNIA
NEIL YOUNG
HARVEST
STEVE EARLE
COPPERHEAD ROAD
SOLOMON BURKE
A CHANGE IS GONNA COME
MILCHO LEVIEV QUARTET
BLUES FOR THE FISHERMAN
CRUSELL CLARINET
QUARTETS
THEA KING/ALLEGRI ST. QUARTET
DEBUSSY/RAVEL STRING
QUARTETS
FAIRFIELD QUARTET
T-BONE BURNETT
PROOF THROUGH THE NIGHT
J. B. LENOIR
ALABAMA BLUES!
MUSICIANS OF SWANNE
ALLEY

IN THE STREETS & THEATRES OF
LONDON
AL GREEN
LET'S STAY TOGETHER
JUNE TABOR & THE OYSTER
BAND
FREEDOM & RAIN
LONDON SYMPHONY
BRAHMS SYMPHONY NO. 4
HANDEL
WATER MUSIC
CORELLI
CONCERTI GROSSI
KAPSBERGER
PIECES FOR LUTE
Linn Selekt LPs £8.99

GIMELL RECORDS

AN EXCELLENT
SELECTION OF DIGITAL
RECORDINGS FROM
GIMELL RECORDS
WHICH HAS WON
ACCLAIM AROUND THE
WORLD, AND HAS
PICKED AWARDS FROM
GRAMOPHONE.



FEATURING THE TALLIS
SCHOLARS DIRECTED BY
PETER PHILLIPS
RENOWNED FOR THEIR
CLARITY AND PERFECT
INTONATION
ANTOINE BRUMEL
MISSA ET ECCE TERRAE MOTUS
THOMAS TALLIS
SPERM IN ALIUM
LAMENTATIONS OF JEREMIAH(CD
ONLY)
PALESTRINA MASSES
MISSA ASSUMPTA EST MARIA/
MISSA SICUT LILLIUM
MISSA BENEDICATA ES(CD ONLY)
MISSA BREVIS
MISSA NIGRA SUM
ALLEGRI
MISERERE(CD ONLY)
HEINRICH ISAAC
MISSA DE APOSTOLIS(CD ONLY)
JOSQUIN
L'HOMME ARME MASSES
MISSA PANGE LINGUA/MISSA LA
SOL FA RE MI
WILLIAM BYRD
THE THREE MASSES(CD ONLY)
THE GREAT SERVICE
CLEMENS NON PAPA
MISSA PASTORES QUIDNAM
VIDISTIS
JOHN TAVERNER
IKON OF LIGHT(CD ONLY)
VICTORIA
REQUIEM
TENEBRAE RESPONSORIES(CD
ONLY)
GIMELL LPS £8.49 CDS
£12.99

HANNIBAL

VARIOUS ARTISTS
THE YOUNG FLAMENCOS CD
ONLY
R&L THOMPSON
SHOOT OUT THE LIGHTS

HOKEY POKEY
RICHARD THOMPSON
HANDS OF KINDNESS
HENRY THE HUMAN FLY
JUNE TABOR
SOME OTHER TIME
BALKANA
MUSIC OF BULGARIA
All Hannibal CDs £11.99

HANNIBAL BOX SETS

SANDY DENNY
WHO KNOWS WHERE THE TIME
GOES (3XCDS: £35.95) (4XLPs:
£29.95)
NICK DRAKE
FRUIT TREE (4XCDS: £38.95)
(4XLPs: £29.95)

DEMON

DUKE ROBILLARD & THE
PLEASURE KINGS
DUKE ROBILLARD & THE
PLEASURE KINGS
CLIVE GREGSON
STRANGE PERSUASION
GEORGE THOROGOOD &
THE DESTROYERS
GEORGE THOROGOOD & THE
DESTROYERS
T BONE BURNETT
TRUTH DECAY
CHRISTY MOORE
ORDINARY MAN
RORY GALLAGHER
DEFENDER
IRISH TOUR '74
JOHN LEE HOOKER
THE DETROIT LION
ELVIS COSTELLO & THE
ATTRACTIIONS
THIS YEARS MODEL
GET HAPPY
TRUST
PUNCH THE CLOCK
JOHNNY WINTER
JOHNNY WINTER
SECOND WINTER
STEVE NIEVE
KEYBOARD JUNGLE
ELVIS COSTELLO AND THE
ATTRACTIIONS
TEN BLOODY MARYS AND TEN
HOWS YOUR FATHERS
BLOOD AND CHOCOLATE
BILL HURLEY (WITH JONNY
GUITAR)
DOUBLE AGENT
IAN DRURY AND THE
BLOCKHEADS
SEX & DRUGS & ROCK & ROLL
DO IT YOURSELF
EARL KING & ROOMFUL OF
BLUES
GLAZED
JOHNATHAN RICHMAN &
THE MODERN LOVERS
MODERN LOVERS '88
GRAHAM PARKER
THE MONA LISA'S SISTER
HUMAN SOUL
PERCY SLEDGE
WANTED AGAIN
OTIS RUSH
TOPS
RIGHT PLACE WRONG TIME
THE BYRDS
SWEETHEART OF THE RODEO
SCREAMIN' JAY HAWKINS
BLACK MUSIC FOR WHITE PEOPLE
TIM BUCKLEY
DREAM LETTER(LIVE IN LONDON
1968)
SEFRONIA
LOOK AT THE FOOL
BEN E KING
HERE COMES THE NIGHT
THE PARAMOUNTS
WHITER SHADES OF RIN'B
DEL SHANNON
I GO TO PIECES
THE EVERLY BROTHERS
TWO YANKS IN ENGLAND
PASS THE CHICKEN AND LISTEN
BO DIDDLEY
THE 20TH ANNIVERSARY OF

THE POINT
**CAPTAIN BEEFHEART & HIS
MAGIC BAND**
THE LEGENDARY A&M SESSIONS
GERRY RAFFERTY
BLOOD AND GLORY

All Demon LPs £7.99,
CDs £11.99

NEW CLASSIC ROCK ON VINYL - NOW LIMITED STOCKS

JONI MITCHELL

BLUE
JIM CROCE
DOWN THE HIGHWAY
CHRIS ISSAK
HEART SHAPED WORLD
T-REX

ELECTRIC WARRIOR
MINISTRY
TWITCH

THE LAND OF RAPE & HONEY
FREDDY MERCURY
MR BAD GUY (LIMITED USA
EDITIONS)

JEAN MICHEL JARRE
OXYGENE
LED ZEPPELIN

THE SONG REMAINS THE
SAME(SOUNDTRACK FROM THE
FILM)DBL
PRESENCE

IN THROUGH THE OUT DOOR
TEARS FOR FEARS

THE HURTING
**TOM PETTY AND THE
HEARTBREAKERS**

SAME TITLE
**BOB MARLEY AND THE
WAILERS**

CONFRONTATION
BLIND LEMON JERRIFERSON
ONE DIME BLUES

CAT MAN BLUES
VAN MORRISON

TB SHEETS
VAN MORRISON

**TOM PETTY & THE HEART-
BREAKERS**

YOU'VE GOTTA GET IT
RY COODER

CROSSROADS(SOUNDTRACK
FROM THE MOTION PICTURE)

JACKSON BROWN
THE PRETENDER

**JIM MORRISON/MUSIC BY
THE DOORS**

AN AMERICAN PRAYER
LOU REED/JOHN CALE

SONGS FOR DRELLA
Single LP £8.99
Double LP £12.99
Triple LP £14.99

SHEFFIELD LABS

DIRECT TO DISC

**LINCOLN MAYORGA AND
DISTINGUISHED COL-
LEAGUES VOL I I**

THE MISSING LINK
**LINCOLN MAYORGA AND
DISTINGUISHED COL-
LEAGUES VOL III**

CREME DE LA CREME
WAGNER

DON RANDI & QUEST
NEW BABY

**AMANDA MCBROOM &
LINCOLN MAYORGA**

GROWING UP IN HOLLYWOOD
TOWN

PAT COIL
STEPS

**THELMA HOUSTON &
PRESSURE COOKER**

IVE GOT THE MUSIC IN ME
**HARRY JAMES & HIS BIG
BAND**

THE KING JAMES VERSION
STILL HARRY AFTER ALL THESE

YEARS

DAVE GRUSIN

DISCOVERED AGAIN

**HARRY JAMES & HIS BIG
BAND**

COMIN' FROM A GOOD PLACE

**THE SHEFFIELD TRACK
RECORD**

& THE SHEFFIELD DRUM RECORD

**JAMES NEWTON HOWARD
AND FRIENDS**

ROCK INSTRUMENTALS

SHEFFIELD LABS CDS £14.49

CHESKY RECORDS

**JAZZ SERIES COMPACT
DISCS**

Oversampled x 128

**Audiophile Quality,
considered by some to be
the finest quality jazz
recordings.**

JAZZ SAMPLER

& AUDIOPHILE TEST CD VOL I

JAZZ SAMPLER

& AUDIOPHILE TEST CD VOL II

A NIGHT OF CHESKY JAZZ -

LIVE FROM THE TOWN HALL

MCCOY TURNER

NEW YORK REUNION

MONTY ALEXANDER

CARIBBEAN CIRCLE

RED RODNEY

THEN AND NOW

TOM HARRELL

PASSAGES

DAVID CHESKY

TANGOS AND DANCES

THE NEW YORK CHORINHOS

CLUB DE SOL

JOHN PIZARELLI

MY BLUE HEAVEN

HERBIE MANN

CAMINHO DE CASA

PEGGY LEE

MOMENTS LIKE THIS

JOHNNY FRIGO

& **JOHN PIZZARELLI**

LIVE FROM STUDIO A

PHIL WOODS

HERE'S TO MY LADY

LUIS BONFA

NON STOP TO BRAZIL

PAQUITO D'RIVERA

TICO! TICO!

HAVANA CAFE

CLARK TERRY

PORTRAITS

LIVE AT THE VILLAGE GATE

ANA CARAM

THE OTHER SIDE OF JOBIM

RIO AFTER DARK

AMAZONIA

NATASHA

NATASHA

SARA K

CLOSER THAN THEY APPEAR

KENNY RANKIN

BECAUSE OF YOU

Chesky CDs £13.49

NEW CHESKY

CLASSICAL CDS

EARL WILD

PLAYS MEDTNER

TRANSCRIPTIONS OF GERSHWIN

CHOPIN: 4BALLADES, 4 SCHERZI

GARY SCHOCKER (FLUTIST)

BACH: HANDEL, TELEMANN

RACHMANINOFF

PIANO CONCERTO NO.2/ ISLE OF

THE DEAD

SIBELIUS

SYMPHONY NO. 2

TCHAIKOVSKY/DOHNANYI

PIANO CONCERTO NO. 1/VARI-

ATIONS ON A NURSERY SONG

DVORAK/WAGNER

SYMPHONY NO. 9/ OVERTURE

FROM THE FLYING DUTCHMAN

BRAHMS

SYMPHONY NO. 4

MOZART/HAYDN

SYMPHONIES 35 & 41/ NO. 104

STRAUSS/RAVEL/

TCHAIKOVSKI

DER ROSENKAVALIER/BOLERO/

ROMEO & JULIET OVERTURE

BEETHOVEN

SYMPHONIES 2 & 5/LEONORE

OVERTURE NO. 3

BRAHMS/STRAUSS

PIANO CONCERTO NO. 2/

SALOME DANCE OF THE 7 VEILS

BIZET/TCHAIKOVSKI

SYMPHONY IN C/FRANCESCA DA

RIMINI

RESPIGHI

PINES OF ROME/ROMAN

FESTIVALS, FOUNTAINS OF ROME

RACHMANINOFF

CONCERTO NOS 4 & 1,

RHAPSODY ON A THEME OF

PAGANINI

TCHAIKOVSKI

VIOLIN CONCERTO

BRAHMS

SYMPHONY NO. 1

STRAVINSKY

PETROUCHKA, LA SACRE DU

PRINTEMPS

Chesky CDs £13.49

ORIGINAL BLUES CLASSICS FROM FANTASY

**WILLIE DIXON/MEMPHIS
SLIM**

WILLIE'S BLUES

KING CURTIS

TROUBLE IN MIND

REV. GARY DAVIS/PINK

ANDERSON

GOSPEL, BLUES, AND STREET

SONGS.

SAY NO TO THE DEVIL

REV. GARY DAVIS

HARLEM STREET SINGER

JESSE FULLER

THE LONE CAT

JESSE FULLER'S FAVOURITES

ORIGINAL BLUES CLASSICS

SAMPLER

WITH JIMMY WITHERSPOON,

MEMPHIS SLIM,

LONNIE JOHNSON, ALBERTA

HUNTER, AND OTHERS

SONNY TERRY

SONNY'S STORY

LIGHTIN' HOPKINS

BLUES IN MY BOTTLE

MEMPHIS SLIM

ALL KINDS OF BLUES

JIMMY WITHERSPOON

EVENIN' BLUES (LP ONLY)

TAMPA RED

DON'T TAMPA WITH THE BLUES

(LP ONLY)

OTIS SPANN

THE BLUES NEVER DIE

JOHN LEE HOOKER

THAT'S MY STORY

THE COUNTRY BLUES OF JOHN

LEE HOOKER(CD ONLY)

MEMPHIS SLIM/TAMPA RED/

LONNIE JOHNSON

BAWDY BLUES(CD ONLY)

LPs £7.99 CDs £11.99

ORIGINAL JAZZ CLASSICS

ERIC DOLPHY

OUTWARD BOUND

OUT THERE

AT THE FIVE-SPOT. VOL.1

AT THE FIVE-SPOT. VOL.2

KENNY DORHAM

JAZZ CONTRASTS

ART BLAKEY AND THE JAZZ

MESSENGERS

CARAVAN

CHARLES MINGUS

MINGUS AT THE BOHEMIA

PHIL WOODS

WOODLORE

KENNY DREW

KENY DREW TRIO

CLARK TERRY

SERENADE TO A BUS SEAT

RED GARLAND

RED GARLAND'S PIANO

THEOLONIUS MONK

MONK'S MUSIC

MISTERIOSO

PHIL WOODS SEPTET

PAIRING OFF

JOHN COLTRANE

TRANEING IN

BILL EVANS TRIO

WALTZ FOR DEBBY

BILL EVANS

MOONBEAMS

MILES DAVIS ALL-STARS

WALKIN'

WILLIS JACKSON

COOL GATOR

ETTA JONES

SOMETHING NICE

PAT MARTINO

STRINGS!

CLARK TERRY

DUKE WITH A DIFFERENCE

MILT JACKSON AND WES

MONTGOMERY

BAGS MEETS WES!

MILT JACKSON & STRINGS

FEELINGS

MILT JACKSON SEXTET

INVITATION

MCCOY TYNER

SAHARA

FLORA PURIM

BUTTERFLY DREAMS

SHHELLY MANNE & HIS

FRIENDS

MY FAIR LADY

THE JOE NEWMAN QUINTET

JIVE AT FIVE

ELLA FITZGERALD

ELLA A NICE

MONGO SANTAMARIA

MONGO AT THE VII LAGE GATE

THE OSCAR PETERSON TRIO

THE GOOD LIFE

DUKE ELLINGTON

THE PIANIST

SONNY ROLLINS

WAY OUT WEST

ANDRE PREVIN AND RUSS

FREEMAN

DOUBLE PLAY!

PLAYS SONGS BY JEROME KERN

ART FARMER

PORTRAIT OF ART FARMER

BENNY CARTER

SWINGIN' THE 20'S

BARNEY KESSEL

SOME LIKE IT HOT

FEELING FREE

ART PEPPER + ELEVEN

MODERN JAZZ CLASSICS

ART PEPPER

MEETS THE RHYTHM SECTION

GETTIN' TOGETHER

ART PEPPER TODAY

OSCAR PETTIFORD

THE NEW OSCAR PETTIFORD

SEXTET

GERRY MULLIGAN

MULLIGAN PLAYS MULLIGAN

DESMOND

BILLY TAYLOR

BILLY TAYLOR TRIO WITH

CANDIDO

ERIC DOLPHY

OUTWARD BOUND

BILL EVANS

NEW JAZZ CONCEPTIONS

INTERPLAY

SUNDAY AT THE VILLAGE

VANGUARD

ART BLAKEY AND THE JAZZ

MESSENGERS

CARAVAN

CHAR

CHARLIE PARKER
 BIRD AT ST NICKS
PHILWOODS QUARTET
 WOODLORE
MODERN JAZZ QUARTET
 DJANGO
THELONIOUS MONK/SONNY ROLLINS
 THELONIOUS MONK/SONNY ROLLINS
JOHN COLTRANE
 COLTRANE
 SOULTRANE
 SETTING THE PACE
BILL EVANS TRIO
 EXPLORATIONS
 PORTRAIT IN JAZZ

Fantasy LPs £7.99

ANTILLES

BEN SIDRAN
 BOP CITY
 OLD SONGS FOR THE DEPRESSION
 Antilles CD only £10.99

ECM

JOHN ABERCROMBIE
 WHILE WE'RE YOUNG
EDWARD VESALA/SOUND & FURY
 INVISIBLE STORM
JON BALKE
 NONSENTRATION
ARVO PART
 MISERERE
 PETER MAXWELL DAVIES & PHILIP GLASS
KENNY WHEELER
 MUSIC FOR LARGE & SMALL ENSEMBLES
KEITH JARRETT
 J.S. BACH WELL-TEMPERED KLAVIER (CD ONLY)
JAN GARBAREK/MIROSLAV VITOUS/PETER ERSKINE
 STAR
ELENI KARAINDROU
 MUSIC FOR FILMS
SHANKAR
 MRCS
ARILD ANDERSEN
 SAGN

JAN GARBAREK
 TWELVE MOONS
 WAYFARER
 EVENTYR
 THOSE BORN WITH WINGS
 PATHS AND PRINTS
PAT METHENY
 TRAVELS (DOUBLE)
 OFF RAMP
 AS WICHITA FALLS
 LIVE 80/81
 AMERICAN GARAGE
 CHAUTAUQUA
 WATERCOLOURS
 BRIGHT SIZE LIFE
 FIRST CIRCLE
 REJOICING
DAVID TOR
 CLOUD ABOUT MERCURY
CHICK COREA
 TRIO MUSIC LIVE IN EUROPE
RALPH TOWNER/GARY BURTON
 SLIDE SHOW
MARK JOHNSON
 SECOND SIGHT
 BASS DESIRE

OREGON CROSSING
ABERCROMBIE/ JOHNSON/ ERSKINE
 LIVE
KEITH JARRETT
 CELESTIAL HAWK
 PARIS CONCERT
 NUDE ANTS
 KOLN CONCERT(DLB)
 STANDARDS VOL I
 PERSONAL MOUNTAINS
 DARK INTERVALS
 STILL LIVE
 CHANGELESS
KEITH JARRETT TRIO
 BYE BYE BLACKBIRD
Z.HUSSAIN/J.MC,LIN
 MAKING MUSIC
RALPH TOWNER/SOLSTICE
 SOUND & SHADOWS
 OLD FRIENDS NEW FRIENDS
 BLUE SUN
CHICK COREA
 TRIO MUSIC (DOUBLE)
 LIVE 80/81
GARY BURTON/CHICK COREA
 DUET

ECM LP (single): £8.99,
 (double): £12.99

ECM CD (single): £12.99
 CD (dbl): £16.99

INDIGO RECORDS

JAY OWENS
 THE BLUES SOUL OF JAY OWENS
JIMMY WITHERSPOON
 THE BLUES, THE WHOLE BLUES AND NOTHING BUT THE BLUES
LIGHTNIN' SLIM
 BLUE LIGHTNING
HONEYBOY EDWARDS
 DELTA BLUESMAN
 Indigo CDs £10.99

WATER LILY ACOUSTICS

RY COODER & V M BHATT
 A MEETING BY THE RIVER
WATER LILY CD £ 10.99

BLACK TOP

RONNIE EARL & THE BROADCASTERS
 TEST OF TIME- A RETROSPECT
ROD PIAZZA & THE MIGHTY FLYERS
 ALPHABET BLUES
CAROL FRAN & CLARENCE HOLLIMAN
 SOUL SENSATION
 Black Top CDs £11.99

ATHENA

FOR AUDIOPHILES
 Athena have gone back to the beginning when stereo recording meant two microphones and two tracks, with valves everywhere. They have selected a few purist recordings from the Turnabout label, and carefully re-cut them using the original master tapes through refurbished equipment. On virgin vinyl, in limited pressings, these LPs offer a clarity of sound about as close to the master tape it is possible to get without buying one. There might as well be an Ampex studio tape recorder running at thirty inches a second between the speakers - this is the art of the recording engineer laid bare.

ALSW 10001: RACHMANINOV
 SYMPHONIC DANCES OP45,
 VOCALISE OP34; DALLAS SYMPHONY ORCHESTRA/
 DONALD JOHANOS
ALSY 10002 DEBUSSY, RAVEL
 PIANO WORKS; IVAN MORAVEC
ALSY 10003 PROKOFIEV
 ALEXANDER NEVSKY; ST LOUIS SYMPHONY ORCHESTRA/
 LEONARD SLATKIN
 Athena LPs £34.50

NATASHA IMPORTS

MILES DAVIS, STAN GETZ
 TUNE UP (LIVE IN GERMANY)
BILL EVANS
 LIVE IN EUROPE 65 -72
 Natasha CDs £10.9

RECORD MAIL ORDER SERVICE ORDER FORM

PLEASE FILL IN THE DETAILS BELOW IN BLOCK CAPS

ARTIST	TITLE	LABEL	PRICE	LP	CD	DAT
_____	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sometimes titles on vinyl may be deleted without notice. If you would like an alternative please use the space below.

In the United Kingdom add £1.00 per item for postage and packing. Five or more items postage free.
 Overseas: add £2.00 per item P&P. Five or more items add £1.00 each.

Total number of albums ordered: _____ Total for P&P: £ _____ Total Price: £ _____

I enclose cheque/postal order for £ _____
 made payable to **Audio Publishing Ltd.**

Send to: **Hi-Fi World, 64 Castellain Road,
 Maida Vale, London W9 1EX.**

I wish to pay by Visa/Access, please debit my account no:
 []

Name: _____
 Address: _____

Expiry date: []

Daytime tel. no: _____



CREDIT CARD ORDERS
TELEPHONE 071-266 0461
(24 HOURS)

Delivery within 28 days subject to availability.
 Prices are subject to alteration without prior notice. E&OE

Oxford Audio Consultants

HI-FI SPECIALISTS



Our superb service is the same, regardless of price.

SONUS FABER GUARNERI

The nearest thing to a musical instrument you've ever heard!!

NOW DEMONSTRATING

KRELL DSP CD PLAYER – Give it a go!
KRELL STUDIO DAC
THETA COBALT 307 – stunning value for money
THETA DATA 2/DS Pro Prime
ORELLE DIGITAL PRODUCTS – JUST IN!
MARANTZ CD 10 – The latest **MARANTZ** heavyweight
ROKSAN RoK-DPL CD TRANSPORT WITH DA1 CONVERTER & DS1 psu
WADIA – latest range on demonstration
TEAC P700/D700 2 BOX COMBO – brilliant!
NEW AGENCY: AURA CD, AMP & TUNER
MARANTZ PM44SE AMPLIFIER – SUPERB VALUE
PROCEED SERIES 3 CD DIGITAL PROCESSOR & CD TRANSPORT
MICHELL GYRODECK – Still a Classic!
LYRA LYDIAN CARTRIDGE – simply stunning!
MUSICAL FIDELITY F22 & F15 pre/power amp
KRELL KSA 100S & KRC 2 (remote control) – Fabulous
CLASSÉ 30/70 Combo
AUDIO RESEARCH LS2B & LS3 PREAMPS & V70 POWER AMP
COPLAND CTA 401
PIONEER A400X
SONUS FABER – THE COMPLETE RANGE; WE LOVE THEM ALL!
MARTIN LOGAN AERIUS – Stunning looks and sound
REL STADIUM SUBWOOFERS
VAN DEN HUL CABLES
MANDRAKE INTERCONNECT CABLE – THE ULTIMATE!!
HARMONIX ROOM TUNING DEVICES – Incredible!!

EX DEM & P/EX BARGAINS

AUDIO RESEARCH LS1 £795
KRELL KBL PREAMP £2495
WADIA 8 CD TRANSPORT £2250
AUDIO RESEARCH LS2 £1995
CASTLE DURHAM MK1 SPEAKERS £95
LINAEUM LFX SPEAKERS EX DEM £399
ROTEL RA840BX4 AMP £100
APOGEE STAGES £1795
AUDIO RESEARCH DAC 1-18 £1795
KRELL KSL INC PHONO BOARD £1995
TEAC P500 TRANSPORT £499
APOGEE DUETTA SIGNATURES £2995
REVOX H11 cassette deck £495

Please ask for details or our current list

Agencies include: Accuphase, Acoustic Energy, Air Tangent, Apogee, ART Accessories, Audio Alchemy, Audio Research, Audio Technica, Basis, B&W, Castle, Copland, Denon Cartridges, DPA, Dual, Goldring, Harmonix, Heybrook, JPW, Kimber, Koetsu, Krell, Lyra, Magneplanar, Magnum, Mandrake, Marantz, Martin Logan, Michell, Micromega, Musical Fidelity, NAD, Nakamichi, Onix, Orelle, Ortofon, Pioneer, Proceed, PS Audio, QED, REL Subwoofers, Revox, Rogers, Roksan, Rotel, Ruark, SD Acoustics, Seismic Sink, Sennheiser, Sequence, Sequerra, Slate Audio, SME, Sonus Faber, Stax, Target, T.D.L., Teac, Theta, Thorens, Van den Hul, Wadia, Wharfedale.

TAX-FREE EXPORT SERVICE
MAIL-ORDER AVAILABLE ON MANY ITEMS.
 Open Mon-Sat 10am-6pm.

Oxford Audio Consultants

Cantay House, Park End Street, Oxford OX1 1JE
 Telephone: Oxford (0865) 790879
 Facsimile: Oxford (0865) 791665

The SPEAKER Company

For all your needs in DIY speaker and crossover construction

We offer a large range of speaker chassis and crossover components for hi fi, car audio, public address & studio uses. The Speaker Company also offers a range of specialist services.

Hi-Fi chassis speakers, crossover's, cabinet kits, cable, cabinet damping materials, spike kits etc

Car Audio chassis speakers, crossover's, sub bass cabinets and amplifiers.

Public Address chassis speakers, crossover's, mixers, amplifiers, cabinets, microphones and stands.

Plus a comprehensive range of accessories

Chassis speakers by

Audax, Seas, Morel, Rcf, Kef, Elac, Rcl, Richard Allan, Fane, McKenzie, Celestion, Eminence, Peerless, Volt, Altai, Soundlab, P.H.L. Please phone or post for a copy of our free comprehensive catalogue and price list which includes hints and tips on DIY loudspeaker construction.

Unit 9, Waterside Mill, Waterside
 Macclesfield, Cheshire SK 11 7HG

Tel: 0625-500507

Fax: 0625-500508

All goods dispatched within 24 hours subject to availability

Open 9 am to 6 pm Monday to Friday & 9 am to 5 pm Saturday

SLATE AUDIO



HI-FI Design & Cable Services

THE SPEAKERSTAND Custom made to suit any loudspeaker. Solid slate, supremely rigid & totally stable. P.O.A.

"Immaculately finished, sublimely rigid, on a par with the best stands I've used."

Ken Kessler, Hi-Fi News/RR March '89

"An astonishing degree of instrumental separation, stable and holographic, with great precision and remarkable poise. The ultimate in high fidelity supports."

David Prater, Hi-Fi Answers Sept. '89

"Superbly finished, the sound quality was considered to be first rate."

Marin Colloms, Hi-Fi News/RR May '90

"The sound quality when using the Slate Audio stands proved to be a revelation, something special."

Paul Messenger, Hi-Fi Choice, May '91

"The finish is excellent, the sound quality magnificent and breathtaking."

Tom Bryant, The Telegraph, June '92

The Finest Speaker Supports In The World

GARRARD 401/301 PLINTH SYSTEM With 20 years of experience, we are the leading experts on the 401/301. Our solid marble plinths transform these decks into world class beaters. (Free fitting) £349 + £25 p/p

SME 309/312/IV/V With special graphics "Garrard 401 Celebration"

£568.39 £660.93 £827.20 £1232.49

THE TURNTABLESLAB Solid slate spiked turntable platform, can be placed anywhere with remarkable results. Size 17" x 14" £175.00

THE TABLESLAB Solid slate shelf which replaces any other shelf normally fitted to equipment racks, dramatically improving your turntable's performance. Slate size: £125.00

THE SPEAKERCABLE LC OFC. Meets the same high standard set for our loudspeaker stands. A supremely neutral and clean sound. Please state length required. £15 per metre

THE SPIKEKIT Specially developed to fit directly to floor standing loudspeakers or any wooden support. Adjustable and very simple to fit. £20.00

THE STONESET Spike kit for use with stone, slate or marble only. Fully adjustable. £20.00

ALL PRICES INCLUDE PACKING AND FREIGHT UNLESS OTHERWISE STATED. (U.K. MAINLAND)

I ENCLOSE A CHEQUE/P.O. for £ made payable to SLATE AUDIO

Name:

Address:

Tel:

47 GEMINI CLOSE, LEIGHTON BUZZARD, BEDFORDSHIRE, LU7 8UD. TEL 0525 384174

CLEAR • CRYSTAL • SYSTEMS

WANTED: EARLY HI-FI

Loudspeakers and Units:

Tannoy Gold and Red units, IILZ, Lancaster, York, GRF etc. Western Electric/Westrex drivers and Cinema speakers. Lowther, Voigt, Axiom 80, RCA, Parmeko, Seimans, Vitavox, Lockwood, Altec, Quad, JBL, Dual Concentric units etc.

Turntables:

Garrard 301, 401, BBC, EMT 927/930
Thorens TD124 and TD224

Pickup Arms and Heads:

SME 12" Arms, Ortofon Arms and Heads,
FR-64 and FR-66, Decca FFSS, EMT

Valve Amplifiers:

Dynatron, Quad, Radford, McIntosh, Leak,
BTH, AEI, Western Electric, Pye, RCA etc.

Valves:

Audio Valves: DA30, DA60, KT66, KT88, KT77
ECC83, GZ34, PX4, PX25, PP5/400, WE300 etc.

Interesting early Hi-Fi and Valves Bought and Sold.

John Petrie-Baker,

CLEAR CRYSTAL SYSTEMS

Flat 2, 18 Canfield Gardens, London NW6 3JY

Tel: 071-328 9275 - Fax: 071-833 3008

Mobile: 0831-860499.

Soundcraft Hi-Fi

The New Musical Experience



Our single speaker listening room.
There are no other loudspeakers
interfering with the sound.

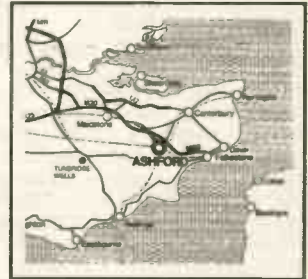
No comparators or degrading
switches are used. Allowing you
to hear all differences clearly.

The result is sound closer to what
you'll hear at home.



For your convenience we
offer an appointment service,
where you can hear the best
equipment available today.
You are welcome to bring
your own records or CDs,
and by arrangement, any part
of your existing system for
comparison.

We guarantee that you will
be thrilled with your music, not just for the first few months
but over many years of listening.



Soundcraft Hi-Fi, Music For Life

409 HIGH STREET, ASHFORD,
KENT TN24 8TE

TEL: 0233 624441 FAX: 0233 640333



A & R • Audiolab •
Audioquest • Audio Technica • Aura • B & W • Beyer • Cyrus • Denon • Dual •

HARROW AUDIO MAIL ORDER

Carriage Free To Your U.K. Address
✓ Best Buy Nomination

Speakers

Acoustic Energy AE1 763
Aegis New 452
B & W 2001 119
2002 159
DM600 179
DM610 239
Acoustitone Sub. Woofer 199
DM805 845
Epos ES11 395
Mission M760 129
M760-SE 149
M761 179
M762 249
Cyrus 780 199
751 299
753 699
Monitor MA9 Gold 289
Audio MA11 349
MA14 Gold 469
CC200 Centre AV 179
Tannoy 603 II 139
607 II 219
609 II 294
611 II 429
TDL Near Field Monitor 99
RTL 1 159
RTL 2 249
RTL 3 399
Wharfedale New Low Price 2130 Satellite + Sub System 249

D-A Convertors

QED Digi MB52 139
QED MB62 (optical skt) 169
Positron Pwr. Supply 85
DAC-PAC with Free Digiflex 224
Mission D-A 299
Arcam Delta Box 50 449
Audiolab 8000DAC '93' 749

Compact Disc

Denon DCD595 179
Marantz CD42II 199
Yamaha CDX470 199
Denon DCD895 199
Yamaha CDX570 239
Denon DCD890 269
Marantz CD52 II Se 299
Mission DAD5 299
CD5 DAD5 + DAC5 + Isoplat 549
Yamaha CXC635 - 5 Discs 299
Rotel RCD965BX 299
Denon DCD1290 329
Mus. Fidelity CD2 350
Nakamichi CD4 379
Aura CD50 399
Arcam Alpha 5 449
Nakamichi MB3 Mus.Bank 649
Arcam Delta 250 Transport 749
Arcam Delta 270 799
Marantz CD10 - New 1099

Turntables

Dual CS505-4 229
Thorens TD180 NC 78rpm 179
incl TD280-IV 229
AT95E TD186/TP50 arm 269
TD166/Mega arm 299
TD3001 no arm 629

A-V Systems

Anti-On FX Amps
Marantz PM700 449
Yamaha DSP-E200 3 Ch. 369
DSP-E1000 5 Ch. 669

5 Chan. System Amps

Denon AVC1530 479
AVC3020 729
AVR1000 FM Recvr 519
AVC3020 729
AVC3530 999
Yamaha DSP-A500 469
RXV470 FM Recvr 399
DSP-A1000 7 Ch. 899
DSP-A2070 7 Ch. 1099

Yamaha Effects Soks
NS-C80 Centre Spk 99
NS-E80 Rear Spkrs 119
YST-SW50 Active 199
YST-SW100 Sub Woofer 259

== FREE Info Leaflet ==

ACCOUSEL '93

Target	New Low Prices	Audioquest
Speaker Stands		
TR30 or TR40	55	Turquoise 1 Metre 29.99
TR50 or TR60	55	Topaz 1 Metre 42.99
HS12 or HS16	67	Ruby 1 Metre 62.99
HS20	68	Quartz 1 Metre 89.99
HS24 or HS28	75	Emerald 1 Metre 179.99
HJ17/2 Heavyweight	100	
Hi-Fi Stands & Tables		
TT2 Table	70	F14 1.75
TT4aa Flat Pack	102	Type 2 2.75
TT5aa Flat Pack	115	F18 3.25
AER2 Deluxe	110	Type 4 4.05
AER3	128	Indigo 6.75
AER4 Racks	158	Crystal 12.50
AER5	170	Midnight 2 19.95
		Cobalt 2 37.95
Video & Optical - each		
SoundStyle Tripod Table RED 189		Video X 1 Metre 26.99
Sennheiser "New Low Prices"		Video Z 1 Metre 35.99
HD 55	32	Digital Pro 1 Metre 80.99
HD 440 II	32	Optilink X 1 Metre 44.99
HD 450 II	40	Optilink Z 1 Metre 89.99
HD 480 II	55	
HD 480 II Classic	62	
HD 520 II	75	
HD 530 II	85	
HD 250 II Closed Back	105	
HD 560 II	115	
IS 490 Infra Red	165	
Beyer DT311 H/phone	45	
Denon DL304 MC Cart	199	
Denon Mini Systems		
D65 New Budget Model	poa	
D70 Excl. Spkrs	589	
D110 Excl. Spkrs	799	
D250 Excl. Spkrs	929	
RIAA Pre-Amp		
QED Discaver	34	

== Check for full range ==

TOP TAPE Bargains
Send for our Mail Order List - over 200 different tape lines in stock at the lowest prices

All goods insured against loss or damage in transit. Prices correct at time of going to press (5 Weeks prior to publication). Prices incl. VAT and are valid for current month. Next Day FREE delivery on cleared payments. E&OE

Mail Orders to:

Harrow Audio
27 Springfield Rd.
Harrow
HA1 4QF

Credit Card Line:
081 863 0938

Fax Orders:
081 863 2443

I enclose Cash/ Cheque/ Card N° + Expiry Date

Name _____

Address _____

Daytime Tel. N° _____

Please Send Me _____

THE "AWARD WINNER" SYSTEM - £799.00
Best Buy CD - Marantz CD52 MkII Special Edition
Best Buy Amp - Marantz PM44 SE Amplifier +
Best Buy Speakers - Mission Cyrus 751 Speakers
Price includes 10m QED 79 Speaker wire plus 1m Audioquest
Turquoise Interconnect, 2 Year Guarantee and FREE UK Delivery

Musical Fidelity • Nagaoka • Nakamichi • Ortofon • QED • Quad • Revox •
Epox • Goldring • Jeklin • KEF • Marantz • Mission • Monitor Audio •

Northwood



A U D I O

Hi-Fi Specialists

10% FREE

ACCESSORIES WITH ANY PURCHASE OVER £200

Can't separate the wood from the trees?

Come and audition the very best that Hi-Fi has to offer and let your ears hear music like they've never heard before!

RUARK, ALBARRY, ROTEL, CELESTION, NAD, TANNOY, MICROMEGA, GYRODEK, HEYBROOK, MARANTZ D.C.C./A.V., PIONEER, EXPOSURE, CREEK, AUDIOLAB, MERIDIAN, AUDIO INNOVATIONS, TDL, MISSION, HECO, THORENS, DENON, KEF, TARGET, plus many more

BOTH BRANCHES NOW HAVE 2 DEM ROOMS INCLUDING AUDIOVISUAL DISPLAYS

FINANCE AVAILABLE.

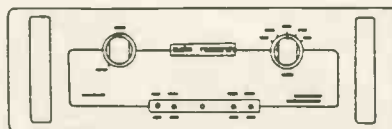
EXPORT AND MAIL ORDER SPECIALISTS

126 Pinner Rd, Northwood
Middx HA6 1BP.
Tel: (0923) 820877.

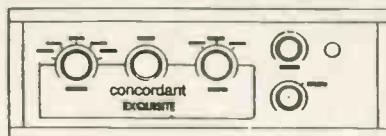
NEW BRANCH NOW OPEN AT:-

98 Cambridge Street
Aylesbury, Bucks HP20 1BA
Tel: (0296) 28790.

WHAT HAVE



THESE PRODUCTS



IN COMMON ?

They both feature valves and offer the very best sound quality

Apart from that, very little!

Where else but K.J. can you hear them together?

The brand new Audio Research LS5 reference pre-amplifier sets new standards.

The sought after Concordant range offers traditional styling with a rare sound quality.

COME AND HEAR THEM WITH OTHER SELECTED COMPONENTS RECENTLY ADDED TO OUR RANGE.

- AUDION - Silver Night triode mono blocks
- AUDIO INNOVATIONS - 700 Int. & mono block amps
- SONIC FRONTIERS - valve power amps
- AUDIO RESEARCH - LS3B Line stage Pre-amp
- AUDIO RESEARCH - D400 Mk2 power amp
- IMPULSE - H2 & H6 Speakers
- KRELL - KSA 100s Power amp
- MICHELL - Alec to mono block power amps
- MUSICAL FIDELITY - A1000 Integrated amp
- PINK TRIANGLE - DCAPO & Ordinal DAC's
- SONUS FABER - Minima Amator speakers
- THETA - Data Basic Transport & Cobalt DAC
- TANNOY - D700 Definition speakers
- HARMONIX - Tuning Devices
(What are they? - magic!)
- ORELLE - CD 10T/DA180 CD player

Where else in London are you going to find a line-up like this all under one roof. A positive Aladdins cave of hi-fi.

Not only do we have available such a great choice but we make paying easier with our **INTEREST FREE CREDIT** schemes allowing up to 10 months to pay

Established brands stocked by KJ

Accuphase * Acoustic Energy * Albany * Alchemist * Apogee * Arcam
Audio Alchemy * Audio Innovations * Audion * Aura * Audiolab
Audio Research * B & W * Castle * Chord * Craft * DPA * Epos * Gradient
Impulse * KEF * Krell * Marantz * Martin Logan * Meridian * Micromega
Michell * Mission Cyrus * Morch * Monitor Audio * Musical Fidelity
Nakamichi * Nitty Gritty * Orelle * Pink Triangle * Pioneer * ProAc * Quad
Rogers * Roksan * Rotel * Siltech * SME * Sonus Faber * Stax * Spendor
Systemdek * Tannoy * Theta * Thiel * Wadia

Home Cinema Brands - * Celestion * B & W * Denon * Infinity * KEF * Lexicon * Monster * NAD * Pioneer * Yamaha *

kj K.J. WESTONE

26 New Cavendish Street, London W1M 7LH
(Close to Marylebone High Street)

Tel: 071 486 8262/8263 · Fax: 071 487 3452

Open: Mon-Sat 10.00 a.m.-6.00 p.m. Thurs until 7.00 p.m.





SEVENOAKS SUPERFI

This advertisement is valid until at least 30th September 1993

Display, Demonstrations and After Sales

Unlike many of our competitors, all products (subject to availability) are on display and may be auditioned in dedicated listening rooms in any of our branches. Our helpful staff enjoy and understand the equipment they sell and will be only too happy to assist you through the Hi Fi choices that lie ahead. Our Sevenoaks Superfi service dept is one of the largest and best equipped in the business and will maintain your purchase in tip-top working order at all times.

SUGGESTED SYSTEMS

The suggested systems priced below all include the popular NAD 5120 turntable but an alternative turntable or CD player is available at extra cost. Please see "OPTIONS" list below for further details.

SPEAKERS	AMPS	CD Players	Turntables
JPW Sonata (V) Celestion I Goodmans M100	Marantz PM32 275.95	Marantz CD52SEII Add £199	Dual CS503.2 Add £79
Celestion 3 MK II JPW Sonata (W) Tannoy 603 MK II Mission 760i Widate Diamond 5 B & W 2001	291.95	NAD 502 Add £79	Dual CS505.4 Add £129
Tannoy 605 MK II Mon/Audio One Mission 760i SE	319.95	Philips CD930 Add £99	Thorens TD280 IV Add £99
Celestion 5 MK II B&W DM600 Kef K120 Heybrook Solo Mission 761i Mon/Audio R7	327.95	Pioneer PDS801 Add £229	Systemdek IIX900 (+ choice of arm) Add £49
Tannoy 607 MK II B&W DM610 Celestion 7 MK II	359.95	Technics SLPG340 Add £49	
Rogers LS2A-2 JPW AP3 Kef 140	375.95	Technics SLPG440 Add £69	
Mission 762 Castle Durham II Heybrook HB173	391.95		
Rogers LS4A-2 Tannoy 609 MK II	399.95		
	412.95		
	428.95		
	452.95		
	480.95		
	495.95		
	503.95		

FREE

- with suggested Systems
- Cartridge (turntable based systems only)
- Speaker Leads (80 strand cable)
- Carriage (Systems over £300)

Options

The following Compact Disc Player or Turntable may be ordered instead of the NAD 5120 in the above systems.

CD Players

- Aiwa XC300
- Denon DCD595
- Denon DCD695
- Denon DCD890
- Denon DCD1290
- Denon DCD211
- Marantz CDA211
- Marantz CD5211

- Add £49
- Add £79
- Add £99
- Add £169
- Add £229
- Add £99
- Add £129

Turntables

- Marantz CD52SEII
- NAD 502
- Philips CD930
- Philips CD692
- Pioneer PDS801
- Technics SLPG340
- Technics SLPG440

- Add £199
- Add £119
- Add £99
- Add £39
- Add £229
- Add £49
- Add £69

- Technics SLPG520AK Add £99
- Technics SLPG620AK Add £129

Turntables

- Dual CS503.2
- Dual CS505.4
- Thorens TD280 IV
- Systemdek IIX900 (+ choice of arm)

- Add £79
- Add £129
- Add £99
- P.O.A.

0% FINANCE

We offer 0% finance on a wide range of manufacturer's products. **Option 1:** 10% deposit followed by 6 equal monthly payments. Example: Cost £600. Deposit £60 plus 6 payments of £90. **Option 2:** 25% deposit followed by 9 equal monthly payments. Example: Cost £600. Deposit £150 plus 9 payments of £50. **Both options:** minimum balance £400. Subject to status. **0% APR.** Personal shoppers only. Written details on request. 0% finance not available on Suggested Systems or 'Price Match' sales. Added value offers not available on 'Price Match' sales.

FREE HEADPHONES

Spend over £500 on any Hi Fi Products before 30th September and claim a pair of Audio Technica ATH-610 headphones worth £40



FREE!

ON PERMANENT
DEMONSTRATION

Audion 300B / Silver Nights
Standard & Export



RING FOR DETAILS
UXBRIDGE, MIDDLESEX (0895) 253340

Unbelievable but true you can audition these brands here. Audion, Proac, Michell, LFD, Lumley, Levison, Lurne, Triangle, Sentec, Mag Audio, Teac, VHD, Silversounds, YBA, Stax, Theta, Monitor Audio, Fuller Audio, Trilogy, Lyra, Sumiko, Ortofon, Decca, Target, Project, Moth, Kelvin, Townshend, Edison, Audio Alchemy, Kesiki, Musical Fidelity.

KIMBERLEY HI-FI

"A Sound Investment"

DENON

LIFESTYLE
HI-FI SYSTEMS
on demonstration

DENON ● TECHNICS ● KENWOOD ● AIWA ● DUAL ●
WHARFEDALE ● CASTLE ● MISSION ● TANNÖY ● HECO ● PIONEER
● MONITOR AUDIO ● B&W ●

193, BROADWAY, BEXLEYHEATH, KENT.
TEL: 081-304 3272

Full A/V Demonstrations and Facilities

Babber ELECTRONICS

HI-FI CENTRE, SALES & SERVICE
158 UXBRIDGE ROAD, WEST EALING,
LONDON W13 8SB

PIONEER

REFERENCE
POINT

Tel: 081 579 6315

MAIL ORDER ACCESSORIES

- Cables - - Audioquest, Furukawa, Heybrook Ixos, Ortofon, QED, Van Den Hul
- Stands - - Alphason, Goldring, Sound Organisation, Stands Unique, target
- Cartridges - - Arcam, A.T., Denon, Dynavector, Goldring, Lyra, Ortofon, Sumiko
- Headphones - - Beyer, Sennhiesser, Stax
- Accessories - - Allsop, BIB, Discwasher, Hunt, Kontak Last, Michell, Milty, Nagoaka, Pixall, QED
- LP's/CD's - - Audioquest, Klavier, Opus, Reference Recordings, Sheffield Labs.

TO ORDER OR FOR A FULL CATALOGUE

PHONE 0850 565693

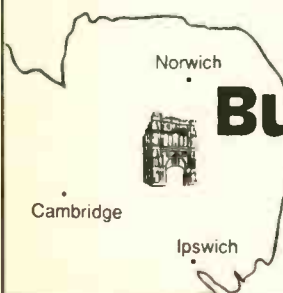
VISA



NOW ON PERMANENT DEMONSTRATION
THE MICHELL ENGINEERING RANGE

ISO
ARGO
ALECTO

THE PINK TRIANGLE RANGE INC. THE ORDINAL



Bury Audio

47 Churchgate Street
Bury St. Edmunds
Suffolk IP33 1RG
Telephone 0284 724337

europadisc

SPECIAL AUTUMN CD PROMOTION

decca



PHILIPS

Full price CDs, £10.95 per disc

Below is an extract from our current special offers. A complete list of hundreds more is available FOC.

Some further reductions are made on orders of 20 or more items, which can be selected from any labels generally available in the UK. This very competitive rate is designed to benefit Libraries, Universities, Music Clubs, or the avid collector.

We offer a straightforward, problem free and experienced overseas service to match the individual requirements of customers in 53 countries. Payment is in £ sterling, US dollars, DM, or by credit card. EEC citizens can now take advantage of new regulations.

VISA



BEETHOVEN	9 Symphonies (1960's) (5CD)	Karajan	£ 27.37
BERNSTEIN	On the Town	Tilson Thomas	£ 10.95
DVORAK	9 Symphonies (6CD)	Kertesz	£ 32.00
HAYDN	104 Symphonies (32CD) (£28 per 4CD set)	Dorati	£195.00
MAHLER	Symphony No. 5	Abbado	£ 10.95
MESSIAEN	Turangalia Symphony	Chailly	£ 8.00
MOZART	Early Symphonies (3CD)	Pinnock	£ 42.00
NIELSEN	6 Symphonies (3CD)	Jarvi	£ 32.00
ROSSINI	La Cenerentola (2CD)	Bartoli Chailly	£ 21.00
SCHUBERT	Symphony No. 9	Blomstedt	£ 10.95
SCHUBERT	Lieder (21CD)	Fischer-Dieskau/Moore	£ 91.20
SHOSTAKOVICH	15 Symphonies (11CD) Individual discs £8	Haitink	£ 80.00
VERDI	Requiem + Sacred Pieces (2CD)	Abbado	£ 21.00
WAGNER	Ring (15CD) (*14CD)	Karajan/Solti or Bohm*	£106.00
WAGNER*	Rheingold (2CD)	Barenboim Bayreuth 1991	£ 23.00
WAGNER*	Walkure (4CD)	Barenboim Bayreuth 1992	£ 46.00
VARIOUS			

* Teldec, also available on VHS & Laserdisc Video Formats

Bartoli £ 10.95

ALL UK CDs, POST FREE

No customer details are released to computer marketing firms.
EUROPADISC, 89-91 NORTH STREET, SUDBURY, SUFFOLK CO10 6RF, UK
Telephone 0787 375743 FAX 0787 311469

LFD Gold

LFD Audio now offers to discerning Audiophiles, a range of **GOLD plated accessories and value for money Interconnect and Loudspeaker cables.**

Cables

0.7m Spirolink I Interconnect	£27.50
1.25m Spirolink I Interconnect	£36.50
0.7m Spirolink II Interconnect	£54.95
1.25m Spirolink II Interconnect	£69.95
0.7m Trilink Interconnect	£119.95
1.25m Trilink Interconnect	£159.95
3m Airoflex Loudspeaker	£44.95
5m Airoflex Loudspeaker	£59.95
3m Spiroflex I Loudspeaker	£74.95
5m Spiroflex I Loudspeaker	£95.95
3m Spiroflex II Loudspeaker	£129.95
5m Spiroflex II Loudspeaker	£184.95
3m Spiroflex II Bi-Wire	£194.95
5m Spiroflex II Bi-Wire	£279.95
1m Dglink Copper	£21.95
0.5m Dglink Silver	£29.95
1.0m Dglink Silver	£39.95
1.25m Hi Amp Mains lead	£69.95
1.25m PC - OCC Mains lead	£69.95

Gold Plated Electrical Mains Accessories

Dual unswitched MK 13A mains socket	£24.95
Single unswitched MK 13A mains socket	£17.95
IEC plug (mates with IEC socket)	£9.95
MK 13A Tough Plug (BLACK)	£15.95
MK 13A Safety Plug (WHITE)	£15.95
Standard 13A Mains Plug	£13.95
6 ways 13A MK Distribution socket (2m cable)	£140.00

All Interconnects are terminated with phono plugs, Loudspeaker cables in 4mm Banana plugs and Mains cables use gold plated 13A plug/gold IEC plug. For different lengths and other terminations, please contact LFD Audio.

High Quality Gold plated Phono Plugs

Black body, 6mm entry (crimps cable)	£4.95/pair
Bronze body, 7mm entry (crimps cable)	£6.95/pair
Silver body, 8mm entry (collet type)	£9.95/pair
LFD Gold 4mm Banana plugs (<2.0mm dia conductor)	£4.45/pair
LFD 22 swg Silver Solder (min. 2% silver)	£1.50/m
LFD 0.6mm single strand LC-OFC, Nat PTFE sleeved	£4.20/m
LFD 1.0mm single strand LC-OFC, Nat PTFE sleeved	£5.60/m
PC-OCC 7/0.1mm, High Temp Insulation (Red/Black)	£1.80/m

All prices include VAT, for orders less than £50 carriage £2.00 per order.

LFD Audio
110 Oxford Crescent
Clacton-on-sea
Essex CO15 3PZ
Tel. (0255) 422533
Fax. (0255) 221370

For further information on LFD Gold Accessories, please fill in your details and return to LFD Audio with a stamped address envelope.

Name _____
Address _____

V' AUDIO

36 Druid Hill, Stock Bishop, Bristol BS9 1EJ
0272 686005

BARGAINS GALORE

We are always trying to bring outstanding bargains to the attention of customers, and are pleased to point out the **Project I Turntable**, which comes complete with an **Ortofon 510 MM** cartridge for a mere £170. Even after living with the SME 20A and a number of MC cartridges (coating more than the **project I** package alone) for some weeks now, the **project I** is a real bargain. But then everything we sell in the end is a bargain, as we invariably ensure that any item bought is to the customer liking and that we are also satisfied that it interfaces properly. We come across so many dissatisfied people who have gone along to the shop and bought what they or the magazines rave about. We are amazingly patient; it can take six months to sort some people out and we cover the whole of England south of Liverpool.

One bargain becoming increasingly popular is **ATC SCM 50A**, which may seem expensive at around £4.5K, but with 350 watts of power in each speaker, actually is quite cheap. Customers can then sit back knowing they have nowhere else to go and can save a fortune in the long term.

Alchemist Products

UK DEALER LIST

LONDON AREA

KAMILA ELECTRONICS W1	TEL: (071) 323 2747
HIFI CONFIDENTIAL SW1W	TEL: (071) 233 0774
BRADYS WC2H	TEL: (071) 379 4010
CORNFLAKE SHOP W1	TEL: (071) 631 0472
KJ WEST ONE W1M	TEL: (071) 486 0552
DIVA SW18	TEL: (071) 924 5286
WILFRED AUDIO SE6	TEL: (081) 698 7386
MUSICAL IMAGES HOUNSLOW	TEL: (081) 569 5882
MUSICAL IMAGES EDGWARE	TEL: (081) 952 5535
NORTHWOOD AUDIO MIDDX	TEL: (0923) 820877
HARRODS (HIFI DEPT.) SW1	TEL: (071) 730 1234

KENT

SEVENOAKS	TEL: (0732) 439 333
STANDENS	(Check also local branches)
VOLUME ONE	TEL: (0732) 353 510
	TEL: (081) 304 4677

HAMPSHIRE

AUDIO GALLERY	TEL: (0730) 895 194
BRYANT HIFI	TEL: (0252) 20728

WEST MIDLANDS

MUSIC MATTERS	TEL: (021) 429 2811
---------------	---------------------

MANCHESTER

MUSIC ROOM	TEL: (061) 835 1366
------------	---------------------

WILTSHIRE

SALISBURY HIFI	TEL: (0722) 322 169
----------------	---------------------

MILTON KEYNES

AUDIO INSIGHT	TEL: (0908) 561 551
---------------	---------------------

NOTTINGHAM

CHANNY AUDIO	TEL: (0777) 870 372
--------------	---------------------

YORKSHIRE

ERIC WILEY (W.YORK)	TEL: (0977) 553 066
SCARBOROUGH HIFI (N.YORK)	TEL: (0723) 374547
HARROGATE HIFI (N.YORK)	TEL: (0423) 584274
BRADYS HIFI (W.YORK)	TEL: (0943) 467689

NORTHERN IRELAND

ZELUS AUDIO	TEL: (0230) 332 522
-------------	---------------------

GLASGOW

MUSIC ROOM	TEL: (041) 332 5012
------------	---------------------



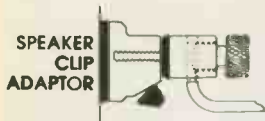
THE MICHELL CONNECTION

"The ultimate connectors for all quality speaker cables"

AN ORIGINAL MICHELL PRODUCT

Made in England

WARNING: Beware of inferior copies!



SURE-LOC: Rhodium or Gold Plated Expanding Plug

Details from:

J.A. Michell Engineering Ltd.

2 Theobald Street, Borehamwood, Hertfordshire, England. Telephone: 081-953 0771

IAN HARRISON DISCOUNT HI-FI

AUDIO TECHNICA FULL RANGE OF CARTRIDGES, HEADPHONE, MICROPHONES, CLEANERS & ACCESSORIES	ORTOFON MC5000 MC3000II MC2000II QUASAR QUATTRO QUARTZ MC15SII MC10S	DENON DL304 DL103D DL103 DL110 DL160	£180 £POA £80 £60 £70	DYNAVECTOR DVXX I DVXX1L DV170MKII DV23RSMKII DV10X4MKII DV50X4MKII	SENNHEISER HD100 HD560II HD250II HD540II HD530II HD520II HD480CII	£179 £112 £104 £96 £85 £76 £59	MARANTZ CD72 CD62 CD52II CD42II	SONY CD PLAYERS CASSETTE DECKS MINI DISC DAT VIDEO TUNERS AMPLIFIERS WHARFEDALE, ATC, SPENDOR SPEAKERS; POA	HIFI FURNITURE APOLLO, SOUND ORGANISATION, GOLDRING BLACK SATIN, PIONEER IN CAR HIFI; POA.	OED DIGIT £109
*CABLES FROM	T3000 T20II	GOLDRING, SHURE, ARCAM, CARTRIDGE POA	KOSS ESP950 FULL RANGE POA	BEYER IRS790 DT911	£140 £170	PHILIPS CD950 £315				

*TRADE IN YOUR MOVING COIL FOR A BRAND NEW ONE AT A SUBSTANTIAL DISCOUNT!! ON OLD MOVING COIL, DON'T WORRY, JUST PHONE.
*ALL GOODS ARE BRAND NEW WITH FULL U.K. GUARANTEE. PLEASE PHONE OR WRITE FOR DISCOUNT PRICE. PLEASE CONFIRM AVAILABILITY PRIOR TO ORDERING. (ALSO APPLIES TO: MAMEL, SONY, JVC, AMPEX, BASF, FUJI TAPE. I PRODUCE A RANGE OF HIGH QUALITY, REAL TIME, INDIVIDUALLY MASTERED AUDIO TEST CASSETTES, PRICE FROM £5 - £20.

IAN HARRISON HI-FI (MAIL ORDER ONLY), 7 MILL HILL, REPTON, DERBY DE65 6GQ. TEL: 0283 702875 9am - 9pm



Klipsch®

HORN LOUDSPEAKERS

UK DISTRIBUTOR

021-430 7817

A LEGEND IN SOUND KLIPSCH AND ASSOCIATES, INC.

Pentachord Direct

*If Beethoven had chosen
loudspeakers ...*

British built
to the highest
standards of
design and
sound quality

For information
on these and
other speakers
in our range
contact:

Pentachord
Loudspeakers
49 Rusholme Rd
Putney
London
SW15 3LF

Telephone:
081-788 2228



he'd have chosen



Pentachord speakers are now only sold direct from the manufacturer. This means that there are big reductions in the prices of these high quality designs.

Made of solid timber and real wood veneers, all the speakers are fine pieces of furniture in their own right and their sonic excellence has been universally recognised. Our speciality is the "satellite/subwoofer" system which combines magnificent imaging with a superb bass response and sense of scale. We have a policy of continuous upgrade and the current Mark II models have substantially improved drive units.

Alan Sircom in *Hi-Fi World* wrote that our "A + B" system was "amongst the most refined and integrated subwoofer/satellite systems on the market today", while Geoffrey Horn in *Gramophone* said the Pentacolumns had a "quite astonishing" bass response - "not only is the quantity revelatory but the fast realistic attack and decay betters that of the vast majority of allegedly wide-range loudspeakers"

Examples of the price reductions it has been possible to achieve by direct marketing are as follows:

"A" Miniatures + "B" Bass, including active crossover and bass amplifier reduced from **£1460 to £999.**

"A" Miniatures + Pentode Bass, including active crossover and bass amplifier reduced from **£1599 to £1199.**

Pentacolumns, including active crossover and bass amplifiers reduced from **£2499 to £1785.**

All speakers systems can be heard by appointment in southwest London, or can be sent to you on approval for 2 weeks' home trial. Home demonstrations can be arranged in southeast England.

CLEAR AS CRYSTAL



LISTEN TO THE STATE OF THE ART EMF AUDIO CRYSTAL DAC

For further information, please contact:

EMF
AUDIO

2a BELLVUE ROAD
FRIERN BARNET
LONDON N11 3ES
TEL: 081 361 6734
FAX: 081 368 3952

"Mike Creek has brought to the market, at an affordable price, a genuinely different high quality converter that is an interesting alternative to the Philips/Burr-Brown options we have been served to date." Noel Keywood - Hi-Fi World April 1993



It costs the same to get it right as it does to get it wrong.

At the Listening Rooms, we pride ourselves on matching your needs with exactly the right equipment, whatever your budget, and because we only stock the best, that's what you get.

What you'll also get is sound professional advice and a chance to relax and listen to some of the world's finest Hi-Fi equipment.

• LINN • QUAD • MERIDIAN • NAKAMICHI • ARCAM • AUDIOLAB • ACOUSTIC ENERGY SME • AUDIO RESEARCH • KRELL • CLASSE AUDIO • WADIA • THETA • APOGEE • MARTIN LOGAN • SONUS FABER • MUSICAL FIDELITY • REL • REVOX • ROGERS • PIONEER • TANNOY • STAX • AURA • LEXICON • SYSTEMDEK • PINK TRIANGLE • MICHELL MONITOR AUDIO • YAMAHA • MARANTZ • KEF • BOSE • CELESTION • EPOS • MISSION • DENON • NEAT PETITE •



THE

listening rooms

161 Old Brompton Rd. London SW5 0LJ. Tel: 071-244 7750/59. Fax: 071 370 0192
Monday - Saturday 10am-6pm. Nearest Tube; South Kensington or Gloucester Road.

World favourites

COMPACT DISC PLAYERS

SONY CDP-497	£160	Superb starter CD Player, packed with facilities.	Aug'92
DENON DCD 890	£270	Exciting and forceful sounding player, but slightly characterful	Nov'92
CREEK CD60	£500	16-bit player. Excellent rhythmic properties and a superb bass performance.	Apr'92
QUAD 67	£790	A new breed of Quad. Remarkable solidity and 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

DPA DIGITAL T-1	£795	Superbly clean and detailed sounding transport when sync-locked to DPA's converters.	Jan'93
M'MEGA DUO CD2	£1850	Seriously priced, serious CD using Philips' CDM-9 PRO mechanism. Exemplary.	Apr'93

DIGITAL TO ANALOGUE CONVERTERS

QED DIGIT/OPTO	£39/169	Philips Bitstream. Excellent value, with no rough edges. Now with optical input (Opto).	May'92
DPA LITTLE BIT II	£450	Building on the qualities of the original Little Bit, the 'II' is clear and open.	Sep'93
DPA DACS	£450-2K	The current masters of DAC-7, their DACs offer superb performance at a range of prices.	
SUGDEN SDA-1	£650	16-bit Philips based. A wide, open window for the transport to flow through. V. neutral.	Jun'92
P. T. ORDINAL	£695	Pure sound, smooth and free from hardness. One of the best at any price.	Jul'93
M'MEGA DUO PRO	£1050	Spacious and dynamic presentation, with a detailed and informative manner.	Apr'93
DPA PDM ONE III	£1280	Less ruthless than, but staggeringly close to, the PDM 2. Two box, DAC-7 affair.	Mar'92
P. T. DA CAPO	£1350	Pink Triangle's own one bit DAC reaches new standards in digital. One of the very best.	Jan'93

TURNTABLES

PROJEKT 2	£245	Czech built turntable with much to offer. Very coherent.	May'92
THORENS TD166	£270	Fitted with Rega RB 250 arm. Good basic deck, with tweakability.	Jun'92
MICHELL MYCRO	£397	Inbetween the Synchro and Gyrodeck, the Mycro has superb midband clarity and poise.	Apr'92
ROKSAN XERXES	£785	Highly analytical and exciting turntable. Can be almost CD like in its presentation.	May'92
P. T. ANNIVERSARY	£1200	Very neutral turntable. Excellent imagery and detail. A natural partner for the SME V.	May'92
SME MODEL 20	£2495	The last great turntable, bettered only by the £11,000 Model 30.	Oct'92

TO NEARMS

REGA RB 300	£139	For Pink Triangles, Michells, Roksans, and Systemdeks. Simple and superb; dynamic with solid bass.	
MORCH DP-6	£665	'Unipivot plus' tonearm. Silken and rich quality. Perfect match for the Da Capo cartridge.	Jul'92
SME 309	£568	Based on IV and V: Aluminium armtube and detachable headshell. High end value for money.	Jan'93
SME SERIES V	£1232	A masterpiece of precision engineering, with a cohesive sound.	May'92

CARTRIDGES

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
SUMIKO BLUE POINT	£100	The blue point casts a romantic charm over all types of music. Robust too.	Oct'92
ORTOFON MC15	£100	Moving coil cartridge at a moving magnet price. Has a tight grip on rhythm.	Jun'92
GOLDRING 1042	£100	A reference to all other MMs regardless of price	May'92
SHURE VST-V	£150	One of the finest moving magnets currently available. Excellent tracker.	Jul'92
GOLDRING ELITE	£200	British made moving coil. Good value, smooth and detailed, but can sound brittle at times.	Apr'92
MORCH DA CAPO	£500	Scan-Tech designed moving coil cartridge. Musical and accurate, without any flaw.	May'92

CASSETTE RECORDERS

NAKAMICHI DR2	£500	Worth every penny, pushes recordings to the limit and remains unflustered.	Mar'93
PIONEER D-500	£600	Very smooth sounding DAT deck, but still slightly coarser than the original source.	Apr'92
TEAC V8000S	£699	Dolby 'S' deck. Easy to use, very stable sound, with instrumental textures close to perfect.	Jun'92
NAKAMICHI DRI	£780	'Domestic' deck with Nakamichi sound quality, and manual head azimuth adjustment.	Jun'93
NAKAMICHI CR-7	£1500	No Dolby 'S', but auto tape tuning and motorised head. Astonishing complexity; The Best!	Aug'92

World favourites

TUNERS

AURA TU-50	£230	Superb FM-only tuner. Produces a delightful, three-dimensional sound. A cracker.	May'92
YAMAHA TX-950	£260	Fine all-rounder, with good AM section.	Jul'92
H/K TU9400	£300	Fairly basic facilities, but sound which beats anything at the price.	Jul'93
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, Excellent value.	Sep'93
NAIM NAT 01	£1377	The best solid state tuner currently available. If you want better radio, live in the studio!	Mar'92

INTEGRATED AMPLIFIERS

H/K HK6150	£159	Good sounding starter amplifier. Great dynamic range, excellent bass.	Jun 92
NAD 302	£160	Lots of insight and detail, but could sound a little rough in the wrong system.	Jan 93
PIONEER A-300X	£200	Exceptionally sweet mid and treble, plus the superb dynamic range of the A400.	Dec'92
DENON PMA-350II	£220	Powerful and with deep rhythmic bass drive.	Sep'93
H/K HK6550	£349	Thoroughly refreshing, tonally neutral amplifier with a realistic price tag	Nov'92
AUDIOLAB 8000A	£430	Very neutral and superbly built. Good bass, great imagery, but can be sterile.	Apr'92
SUGDEN A48B	£460	Gentle performer, but never masks the music with warmth. Tonally very even.	Apr'92
AUDIONOTE OTO	£1250	12w Valve amplifier. More in tune with music than hi-fi. Superb dynamic range.	Jun'92
EAR 834	£1295	Valve integrated amplifier with a sweet, open and detailed sound.	Feb'93

PRE-AMPLIFIERS

A. I.SERIES 200	£350	Valve preamplifier. Rather coloured but very dynamic. Best with Innovations equipment.	May'92
A. SYNTH. PASSION		£475Or £275 for the kit version. Unrivalled transparency from a passive pre-amp.	Aug 93
DPA DSP 200S	£495	Not quite the 50S, but there's still nothing to match it at the price, use with 200S power.	Jun'93
MICHELL ISO HR	£850	Impossible not to recommend. What more does your vinyl want?	May'93

POWER AMPLIFIERS

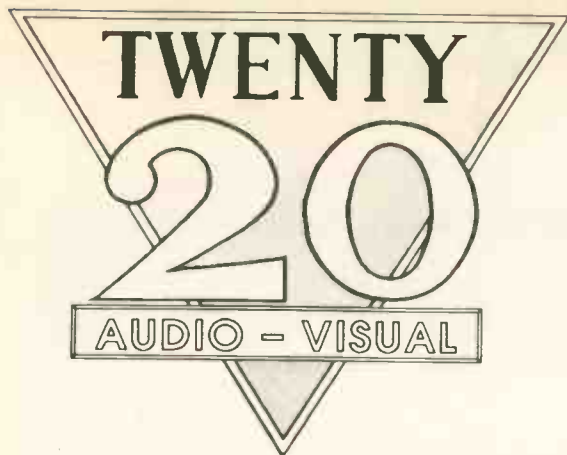
SUGDEN AU41P	£530	100 Watts of smooth, detailed, full bodied sound. And at a bargain price.	Apr'93
QUAD 606	£675	140W powerhouse. Smooth and civilized, with the legendary Quad back-up.	Aug'93
DPA DPA 200S	£750	Not as cold as the 50S. Better than anything else at the price.	July'93
MICHELL ALECTO (S)	£1300	Valve like transparency, big warm easy going sound.	Sep'93.
A. I. SER. 1000	£1500	50W valve monoblocks. Powerful sound.	May'92
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
E.A.R. YOSHINO	£25,000	Single-ended valve design. Noel is still suffering withdrawal from this product.	Jul'93

LOUDSPEAKERS

CELESTION I	£99	Low price, compact size, big sound. An exciting all round performer.	Oct'92.
R' ALLAN MINETTEII	£120	Fast and lively sounding, competent bass.	Sep'93
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 760i	£120	Detailed, fast, and have bags of rhythm. Ear bashing pleasure.	Nov'93
TANNOY 603	£125	A rich and smooth blend that offer their best when bi-wired.	Sep'92
ROGERS LS2a2	£209	So far the most correct speaker we have discovered at the price. Sweet and even natured.	May'92
TRIANGLE COMETE	£375	Highly efficient small-box loudspeaker with a superb mid band. Great for valve amps.	Apr'92
HARBETH HL-P3	£400	There probably isn't a more neutral sounding design anywhere near the price.	Feb'93
H'BROOK QUARTETS	£555	Sensitive enough to work with low power valve amps. Fast and detailed sound.	Jul'93
JPW RUBY I	£500	Metal driver 'speaker with an exciting and lively presentation.	Aug'93
A. E. AEGIS	£620	Depth and transparency. Fast and lively metal driver loudspeaker	Apr'93
REL STADIUM SUB.	£695	Mono, self-powered subwoofer that works! Very flat frequency response.	Jun'92
PROAC RES I S	£918	Small box design. Can convey the spirit, drive, and passion of music in a small room.	Jul'92
APOGEE CENTAUR	£1200	Hybrid ribbon design. Great imaging and detail. Good value for panel fans.	Jul'92
TANNOY D700s	£1970	Dynamic and powerful. Needs a good clean power amplifier for best results.	Sep'93
TANNOY GRFM	£3500	Giant loudspeakers. Capable of awesome sound. Need good valve amplification.	Jul'92

MISCELLANEOUS

BEYER DT411	£54	Excellent 'studio quality' headphones. Deep bass, powerful sound, if a bit splashy at times.	Jun'92
CELESTION DLP 600	£349	Digital signal processor for the Celestion 600 loudspeakers. Sounds like a £400 upgrade.	Jun'92



3 Stylish demonstration rooms including BANG + OLUFSEN and PRO LOGIC

Stockists Of:

Technics ♦ *Pioneer* ♦ *Kenwood* ♦
Aiwa ♦ *Yamaha* ♦ *Marantz* ♦

Sony ♦ *Mitsubishi* ♦ *Panasonic* ♦ *JVC* ♦ *AR* ♦ *Mordaunt-Short* ♦

NHT ♦ *B&W* ♦ *Kef* ♦ *Bose* ♦ *Sennheiser*

Wharfedale ♦ *Akai* ♦ *Canon* ♦ *Grundig* ♦ *Hitachi* ♦ *Philips* ♦

Toshiba ♦ *Alphason* ♦ *Target etc.*

TWENTY 20 AUDIO VISUAL LTD

UNIT 205 LAKESIDE SHOPPING CENTRE
WEST THURROCK, GRAYS RM16 1ZQ.

TEL: 0708 891818 FAX: 0708 891300

Opening hours: Mon-Thurs 9.30am – 8.00pm, Fri 9.30am – 9.00pm, Sat 9.30am – 7.30pm.



DEFLEX PANELS THE ULTIMATE UPGRADE

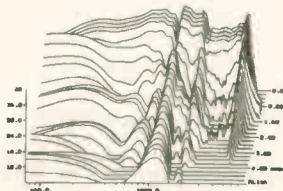
A major development in acoustic panel technology
- unequalled in performance

These revolutionary panels not only eliminate standing waves and unwanted cabinet resonances, but by controlling the energy inside the enclosure, enhance the overall performance of the system.

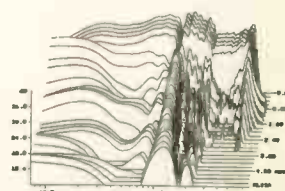
Independent tests show a 50% performance gain, (MLSSA cumulative spectral decay).

This amazing upgrade is so outstanding that having heard the difference you might find it impossible to listen to music without them!

Test Results
Enclosure - Standard



Test Results
Enclosure - With Panels



Pat. Pending 9307186.8

Kits from £49.95
Sold in sets - with full fitting instructions

Sole U.K. Distributor



The
SPEAKER
Company

Unit 9 Waterside Mill
Waterside Macclesfield
Cheshire
SK11 7HG
Phone : 0625-500507
Fax : 0625-500508



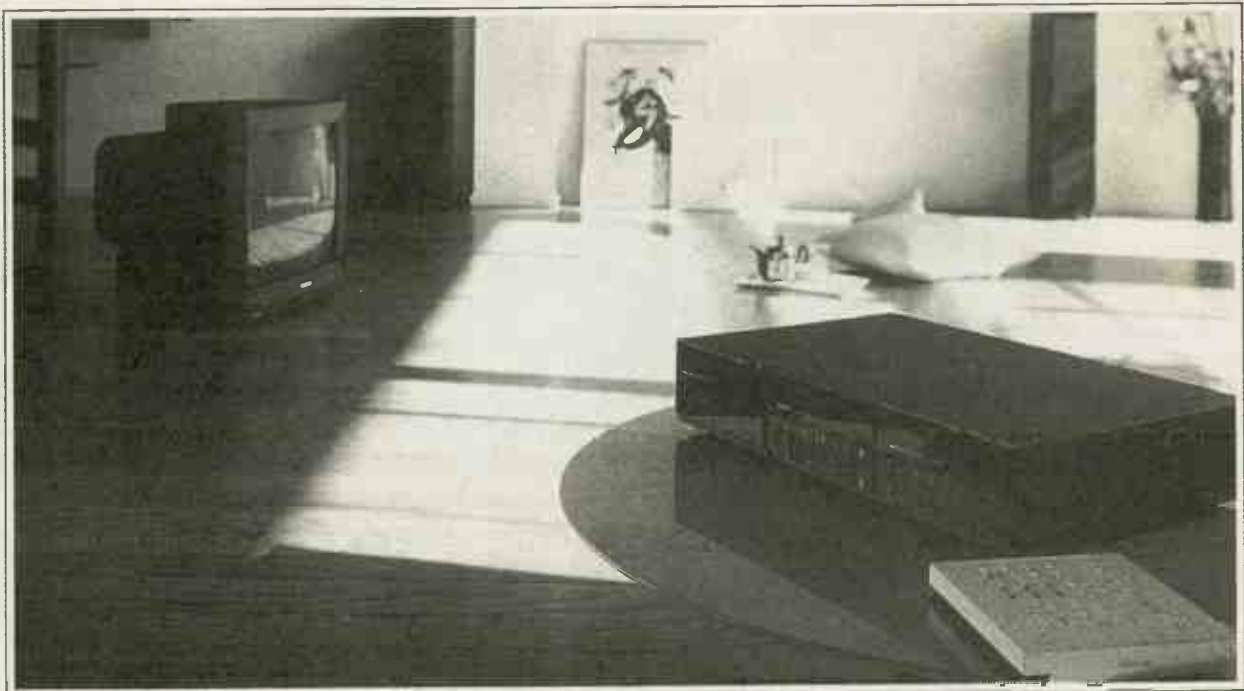
MUSIC MATTERS



THE AUDIO SPECIALISTS

THE FINEST HI-FI AND AUDIO VISUAL SYSTEMS

From our comprehensive range we can assemble for the discerning customer carefully selected and matched components from a simple audio system at around £500 to a complete hi-fi and video installation costing many thousands of pounds. Illustrated is a selection from the magnificent Meridian range which includes compact disc players from £995, amplifiers, tuners, loudspeakers and even facilities for multi-room to enable music to be carried to other locations in the home. With the addition of a television, V.C.R. and surround sound processor you can be transported into the concert hall, opera house, cinema, stadium or even join the crowd at major sporting events. Please contact us to arrange a demonstration. We are confident you will not be disappointed!



We also stock a wide selection of classical compact discs at competitive prices.

**INTEREST FREE
CREDIT AVAILABLE**

APR - 0% Written details on request.
Licensed Credit Broker



OPENING HOURS

Tuesday - Saturday
10.30 - 6.00

Late night Friday till 8.00
Demonstrations by Appointment

351, Hagley Road, Edgbaston, Birmingham B15 8DL

Tel:- 021 429 2811

156/7, Lower High Street, Stourbridge DY8 1TS

Tel:- 0384 444184

Alwa, Alphason, Alchemist, Apollo, Arcam, Audiolab, Audio-Technica, Aura, Beyer, B&W, Canon, Celestion, Chord, Cyrus, Denon, DPA, Ducl, Epos, Exposure, Heybrook,

Panasonic, Pioneer, Pink Triangle, Pro-ac, Revox, Rogers, Roksan, Rotel, Ruark, Sennheiser, Systemdek, Tannoy, Target, Teac, Technics, Thorens, Tripod, Wharfedale, Yamaha.

JPW, KEF, Lexicon, Marantz, Meridian, Michell, Micromega, Misslon, Monitor Audio, Moth, Musical Fidelity, Nakamichi, NVA,

TECHNICS AUTOMATE

Technics have automated their new RS - BX747 cassette deck, but Noel Keywood finds they run into problems

Technics' new RS-BX747 tested here, like Sony's latest Dolby S decks, attempt to raise the perception of quality available from the standard cassette, by offering potentially high quality at an affordable price; the RS-BX747 costs £299.95

This deck follows on from a successful showing in the marketplace made by the RS-BX404 and 606 decks. It offers just about every important feature needed to wring good sound quality from the humble cassette, a medium devised by Philips in the early Sixties for dictation purposes. Almost

exactly thirty years after its launch, the cassette can be coerced into giving even DCC a run for its money in terms of sound quality, as any Nakamichi owner knows, but it takes a fair bit of technology - and the 747 has most of it.

The list of features is a long one, but I was surprised by one apparently major omission, that of a dual-capstan transport. These are complex but usually necessary to suppress flutter, a rapid speed variation that dirties the sound. All the same, the '747 has superb speed stability even with its single-capstan arrangement I found.

More obvious and popular with anyone who used this deck was its cassette loading system. It reminded me of the Venus Flytrap. When a fly alights on its hinged leaves, they spring shut. The 747 has a door that similarly shuts automatically directly a cassette is dropped into it, sensing its arrival in an uncanny fashion. Unlike the Venus Flytrap though, the 747 returned the cassette in

unmangled form every time.

The cassette disappears deep into this recorder and, with no backlighting, it isn't easy to see. That was a pity, because the 747 has other tricks up its sleeve: it changes its reeling speed automatically too, in response to some concealed stimulus. I suspect the reeling motor

showed the 747 is hissy both in its record amps and in its replay amps. And if there is one thing cassette doesn't need, it is added hiss!

As well as auto-tuning Technics fit the deck with Dolby B and C hiss reduction systems, and Dolby HX Pro treble overload prevention system. The latter

wasn't very effective in the face of over-biasing, which caused the deck to overload early with strong treble signals.

This is a three-head deck, having independent, 'siamesed' record and replay heads. So a recording can be monitored whilst it is being made to check quality.

Technics cassette decks come in a restrained,



senses torque, for it would start slow, speed up, slow down as if there was a reason to be cautious, then speed up again. It always sensed the impending end of a tape and slowed down for it, coming to a halt with a gentle click. This sort of logic control is an impressive party trick, but it is peripheral to good sound quality of course.

To help get the latter Technics have used a complex tape tuning system that adjusts record equalisation as well as bias and record gain (sensitivity). But incorporating this feature has introduced more problems than it has solved. Adjusting record equalisation in addition to bias is, theoretically, the best way of going about things, but at a practical level it makes little difference to overall performance and, in any case, the balance it effects in terms of overload levels is open to question. The trade off on the 747 has been excessive noise; tests

perhaps I should say sombre, charcoal grey. Although well finished they feel a little light and insubstantial compared to the increasingly sturdy products of British manufacturers, but then no one in the UK attempts to make a cassette deck of this complexity at such a low price. The controls wobble a little, as if they turn on flimsy spindles and the record level display is small and cramped. In fact, the knobs were small too and, curiously, Technics have given them all a violent action. Turn the balance control a few degrees and one channel goes dead; turn the bias control a few degrees and sound quality alters drastically. It was all a little odd, as if they have brought in an ergonomics expert who has decided to re-arrange everything. Even the cramped record level display seemed to match the smallness of the knobs. The overall impression this recorder made on me during use wasn't especially positive.

SOUND QUALITY

Replay hiss was audible, but it wasn't intrusive above the hiss of pre-recorded tapes. I did find however that the machine is very hum sensitive; a small CD convertor transformer 12in away induced hum, suggesting the need for shielding. There was no shortage of seemingly precise, even 'sharp' treble - this deck plays pre-recorded tapes with surprising insight. Yet it lacked bass slam, or much sense of lower midrange dynamics or drive. As a result, the 747 came across as thin and sharp sounding with pre-recorded tapes.

Hiss became intolerable with ferric tape, Dolby out, whereas a Nakamichi will record onto a good formulation like Maxell XLIS and turn in quite acceptable

results under similar circumstances. I found that Dolby C just had to be used, which rather compromises transients, since this noise reduction system does alter sound quality. And yet again, a hard sharp quality to the deck's sound was apparent, not ameliorated by a bass end seemingly out on vacation.

I can't say matters were any better with chrome or metal tape, although with the latter record levels could be pushed up to maximum and Dolby B used instead of C. Auto tape tuning always gave a sharp sound, but a small twist on the bias control nailed this problem. But I had to ask myself why Technics had bothered with such complexity in the tune system when a quick twist of the bias control was enough to tune tapes in satisfactorily. The likely answer is that complex gizmos sell

cassette recorders, or so their Japanese marketing department believes.

The RS-BX747 is a peculiar machine in many respects: peculiar in its performance due to excessive hiss, peculiar in its ergonomics and peculiar in its sharp, thin sound. This is no successor to the RS-BX404 or 606; it's one of those strange brews the Japanese come up with every now and then, just to keep us all guessing. If Technics produce a simplified version of the '747, without the gizmos, it could well be more successful ●

Technics RS - BX747 £300
Panasonic (UK) Ltd.
Panasonic House,
Willoughby Road,
Bracknell,
Berks. RG12 8FP
Tel. 0344 862444

MEASURED PERFORMANCE

The first sample of the RS-BX747 I tested was so noisy (10dB worse than normal) that I asked for a second. Often this only serves to confuse the issue, even though in theory at least it offers manufacturers a chance to rectify any possible fault and also ensure that if a problem exists it doesn't reach production, or at least is eradicated.

In this case a second sample winged its way in from Japan, but I'm afraid to say the basic faults remained, though they were better suppressed. Noise had been lessened, but the '747 remains 5dB hissier than its rivals, hardly an impressive result.

I noticed a 25Hz tone existed on the output of the first sample too and it was present on the second. I suspect the motor control electronics.

Why is the '747 hissy? Probably because Technics have built in an unusually sophisticated and theoretically correct method of tape tuning. When I pressed the ATC button (Automatic Tape Calibration) up popped the legend EQ. Tape tuning systems almost never vary EQ; it's too complex a business and not entirely necessary in my view. Trouble is, varying EQ means altering high frequency gain in the record amps (much like adjusting a treble tone control). It has to be carried out electronically, by a Voltage Controlled Amplifier and almost certainly, Technics have used a noisy one.

Noise in the replay amplifiers wasn't especially low either, so somebody seems to have thrown the rule book out of the window when it came to designing this machine. I suspect it is possible to alter high frequency gain within the record amps without incurring such a large noise penalty.

Otherwise, the RS-BX747 works well enough. Tests showed that the single-capstan transport has better speed stability than a Nakamichi, which with cassette tape results in a clearer, purer sound, due to a lessening of wow and flutter modulation products. The speed stability analysis clearly shows an unusually thin spike at right (the test tone), with just two capstan peaks either side. That

shows just how pure a tone is reproduced. There's no doubt that this transport will not waver at all with piano; it holds rock steady speed.

The tape tuning system was questionable in its complex workings. It sets bias first, balancing off low frequency against high frequency tape overload limits, but favouring the former over the latter. Then record equalization is adjusted for flat frequency response and finally sensitivity is set to ensure correct Dolby tracking. Tests showed that there was little difference between options of High, Standard and Low bias settings. Even though frequency response invariably came out flat, even with difficult tapes like dual-layer TDK SA-X and MA-XG, a little manual tuning often produced a better result.

Summarising, the heads Technics use are good ones, giving flat frequency response and reasonably high overload levels when recording. But the tape tuning system, whilst admirably comprehensive in its actions, introduces too much noise.

Correct head azimuth and replay equalisation contribute to an accurate replay frequency response, enabling the RS-BX747 to replay pre-recorded tapes accurately in terms of total balance. High frequency output extended right up to 20kHz (-2dB). Again, however, the replay amps were noisier than usual, measuring -55dB instead of the usual -60dB. That's an audible increase in noise and an unwanted one with cassette, a medium where every effort has been made to suppress this innate weakness.

The record level indicator was very accurate, even if it is small and cramped. Calibrated to the IEC standard, it hits -8 maximum, which accords exactly with the limit of a top quality metal like TDK MA-XG.

Output measured 450mV, enough to drive all amplifiers, except passive pre-amps linked to an insensitive power amplifier.

The RS-BX747 is highly specified and works well in all areas except one: it is noisy. This deck is simply too complex for its own good. If Technics introduce a simpler model (6477) without automatic tuning - and without the noise - then it could be a good deck. **NK**

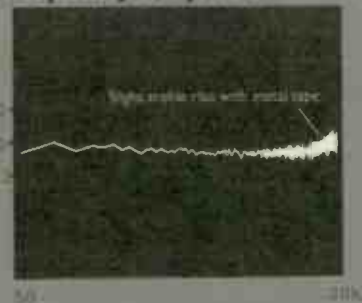
REPLAY (pre-recorded tapes)

Frequency response (-2dB)	30Hz-20kHz
Speed accuracy	+0.4%
Hiss (70µs, Dolby out)	-55dB

RECORDING (blank tapes)

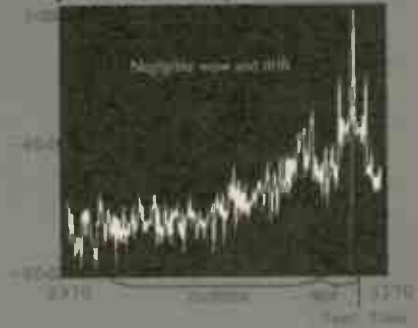
Frequency response (IEC Primary Refs.)		
ferric (IECI)	35Hz-18kHz	
chrome (IECII)	35Hz-17.6kHz	
metal (IECIV)	35Hz-20kHz	
Separation (1kHz)	60dB	
Distortion (15Hz)	0.4%	
Hiss (70µs, Dolby out)	-52dB	
Speed variations (DIN total)	0.03%	
Flutter energy (3-3.13kHz)	-26dB	
MOL/SAT (IEC Refs)	315/10k	
IECI (ferric)	3.5dB-9dB	
IECII (chrome)	3.5dB-9dB	
IECIV (metal)	3.5dB-9dB	

Frequency Response



50 20K

Speed Stability



0.2710 3.370

For all Your Listening Needs!

Hi-Fi aerials for Radio 3,
Nicom Stereo on your TV,
a stereo soundboard for the PC
or stereo "Virgin 1215" via Satellite

Talk to us now on
051 521 8000
for a service that's sure to delight.

Merseyside Satellite Consultants Ltd.

Antenna House, Atherton Road, Aintree, Liverpool L9 7EL

GET THE BEST FROM YOUR HI-FI


100's OF AERIALS, 100's OF FITTINGS FOR HI-FI
AERIALS, TV AERIALS & SATELLITE DISHES
DIY OR FITTED BY OUR ENGINEERS
Quality equipment stocked eg.

ANTIFERRENCE, TRIAX, LAB GEAR ETC...

THE AERIAL SHOP

188 HALFWAY ST, SIDCUP, KENT.
(LONDON SE & KENT AREAS COVERED)

(081) 300 5588/8990/7454

Authorised Agent for  Television

PRECISION CABLES LTD

We really do stand alone for UNBEATABLE SERVICE both in QUALITY and REALISTIC PRICES making our customised cable service simply the best available TODAY AND TOMORROW.

OLYMPIC RANGE OF HI-FI CABLES

BRONZE QUALITY

Precision Neutrik XLR. Jack Plugs
Musiflex cable is well known
throughout the Professional Music
Industry for its neutral transparent
sound.

DESCRIPTION	LENGTH	PRICE
Phono-Phono pair	0.25m.	£12.75
Phono-Phono pair	0.5m.	£13.50
Phono-Phono pair	1m.	£15.00
Phono-Phono pair	2m. now	£17.00
Phono-Phono quad	0.25m.	£27.00
Phono-Phono quad	0.5m.	£28.50
Phono-Phono quad	1m.	£31.50
Phono-Phono quad	2m. now	£34.50
Jack-Jack patch lead		£8.00
Jack-Jack	0.5m.	£7.50
Jack-Jack	1m.	£8.00
Jack-XLR (mic)	1m.	£8.50
Jack-XLR (mic)	2m.	£9.50
Jack-XLR (mic)	5m.	£12.50
XLR-XLR	1m.	£8.50
Scart-Phono pair	1m.	£10.00
Scart-phono quad	1m.	£16.00

Please add £1.00 per extra m. single

Please add £2.00 per extra m. pair

Please add £4.00 per extra m. quad

SILVER QUALITY

Neutrik ProFI Connectors, Sharkwire.

DESCRIPTION	LENGTH	PRICE
Phono-Phono pair	0.25m. now	£25.00
Phono-Phono pair	0.5m. now	£25.75
Phono-Phono pair	1m. now	£27.50
Phono-Phono pair	2m. now	£31.00
Phono-Phono quad	0.25m. now	£50.00
Phono-Phono quad	0.5m. now	£51.50
Phono-Phono quad	1m. now	£55.00
Phono-Phono quad	2m. now	£62.00

Musiflex cable

Scart-Phono pair	1m	£17.00
Scart-Phono quad	1m	£26.00

Please add £3.50 per extra m pair

Please add £7.00 per extra m quad

PC OSC CABLE USED

Unterminated per m. £2.00

Gold plated 4mm banana plugs std.

J. A. Michell available.

DESCRIPTION LENGTH PRICE

4mm-4mm	2m.	£16.50 ea.
4mm-4mm	4m	£20.50 ea.
Jack-Jack	2m.	£12.50 ea.
Jack-Jack	4m.	£16.50 ea.
Jack-XLR	2m.	£13.00 ea.
Jack-XLR	4m.	£17.00 ea.
XLR-XLR	2m.	£13.50 ea.
XLR-XLR	4m	£17.50 ea.

Prices are for single cables (per channel) not pairs.

PC SCREENED MAINS CABLE

16 amp 1.5mm per m. £4.50

20 amp 2.5mm per m. £6.20

To: PRECISION CABLES LTD. 53

EFFINGHAM ROAD, LEE GREEN, LONDON

SE12 8NT.

TEL: 081-297-0255.

Please send me:

Enclose Cheque/Postal Order (Made Out To Precision Cables Ltd.) / Cash

For

£

Name:

Address:

Post Code:

tel:

Please Phone for FREE catalogue

All Prices Include V.A.T.

Please add £5.00 for postage.

Personal Callers only by appointment.

LORICRAFT AUDIO

Turntable Repair and Record Cleaning
Service.



A new improved version of our original design concept of a stable platform effectively isolated from any musical or vibrational feedback, and incorporating a unique and effective suspension system to provide optimum turntable damping and isolation for ultimate performance.

The exterior plinth materials is 28mm ash or oak, with heavily reinforced corner bracing and massive internal pier to accommodate the unique suspension system within the main plinth body

Full service facilities for Garrard including 301/401, using genuine or re-manufactured parts in our new dedicated workshops. This service also for many other including Thorens. Other hi-fi repaired/services supplied.

New 301/401 Damper rings Dramatically reduce ringing of platter.

£5.00 per pair including p/p.

New Catalogue
now
available

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

Tel. 0488 72267

AMADEUS SOUND & VISION

Arcam, Audio Innovations,
Bang & Olufsen, Carver,
Castle Acoustics, Hafler,
Micromega, Mordaunt-Short,
Musical Fidelity, Pioneer, Quad,
Spendor, Technics.

10 BOLDMERE ROAD
SUTTON COLDFIELD
WEST MIDLANDS

Tel: 021-354-2311

WHY A HI-FI TUNER NEEDS A GOOD AERIAL

For best sound quality, a hi-fi tuner must have a strong signal of around 1mV minimum.

The question is: how do you get it?

INDOOR AERIALS

Simple pin-up wire types (dipoles) only provide enough signal within a few miles of a transmitter. Otherwise they are noisy and prone to receiving multipath signals that produce distortion.

We've tested powered indoor aerials and expensive hi-tech designs costing up to £50 and find they give no more signal than simple, horizontal dipoles, either of the wire type or of rigid aluminium. Their only benefit is smaller size. It is better to buy a rigid aluminium dipole and mount it high, upstairs on a wardrobe, at the top of a stairwell, or similar.

LOFT AERIALS

Loft aerials have the advantage of height and, if there are many elements, gain as well, so they provide a stronger signal than a simple dipole indoor aerial. In areas of reasonably high signal strength - which usually means within ten miles or so from a transmitter, a loft aerial may be satisfactory.

Usually with three elements, a director rod (short), reflector rod (long) and dipole element in between, loft aerials are also directional: they must be pointed toward the transmitter. They reject interference and reflected signals better than dipoles, giving a cleaner signal to the tuner.

The best mounting position is high up in the V of the roof, away from metal objects like water tanks. A long downlead will be needed, preferably of good quality to minimise signal loss.

BALCONY & WALL MOUNTING AERIALS

Balconies in blocks of flats have the advantage of height, giving a much stronger signal. However, the balcony should face the transmitter for good results.

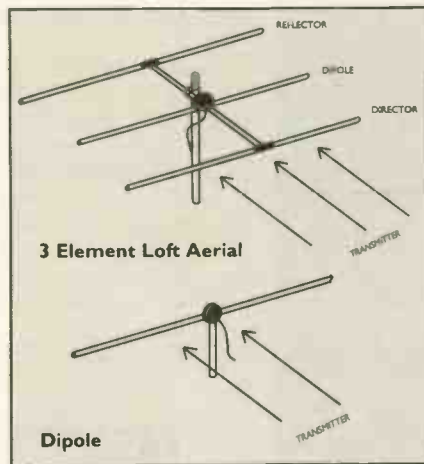
It is often possible, if a little difficult, to wall-mount an aerial on a stub mast outside a window, but you may need consent to do so. Hanging out of a window can be dangerous, so consider using a professional installer. And make sure the wall faces toward the transmitter of course.

OUTDOOR AERIALS

In most locations, only an outdoor aerial will give a signal strong enough and clean enough (i.e. free from interference and multipath reflections) to provide true hi-fidelity from a good tuner. Benefits are height (the higher the better), crucial for

obtaining a strong signal free of reflections, and number of elements, which determine both gain and directionality.

Multi-element aerials are used in areas of medium to weak signal strength, meaning up to around forty miles from a transmitter. Any further away is judged as a 'fringe' area and will demand even more elements.



ALL-ROUND AERIALS AND WHIPS

Whip aerials, vertical dipoles and all-round aerials (curved horizontal dipoles) provide less signal than a simple, indoor dipole (i.e. negative gain). They are suitable only for areas of high signal strength.

Although whips and curved dipoles offer all-round reception, this means they provide little rejection of reflections, interference and distant stations. They are not especially suitable for hi-fi use.

AERIAL AMPLIFIERS AND ROTATORS

Aerial amplifiers are useful only at the masthead to overcome losses in a very long downlead. They are also used to provide enough signal for distribution around a house.

These roles apart, amplifiers boost noise and rubbish from an aerial by the same amount they boost wanted stations, giving no gain in quality, even though the signal strength meter of a tuner might go up. Not recommended.

Rotators are used to swing a directional aerial around, to receive more stations. A simpler solution is to have two aerials pointing in different directions, with their outputs dplexed together or, for more signal but less convenience, twin

downleads with an aerial switch at the bottom.

ATTENUATORS

When it's necessary to use a directional aerial to cut down reflections from tower blocks, but the aerial then gives too much signal (i.e. more than 10mV), an in-line attenuator can be used to prevent tuner overload.

AERIAL INSTALLERS

The best and overriding reason for using an installer is personal safety; roof work is very dangerous. Installers are also very quick and well equipped; DIY may take the large part of a day. Local installers should know about area-specific problems, the location of repeat and fill-in transmitters, and such like - all matters that are likely to be a mystery to most people.

Finally, good installers should have a Field Strength Meter that not only enables them to see whether an aerial is giving the required result, but can prove this to the satisfaction of the customer. Around 1mV is wanted, meaning powerful stations will come in higher (say 3-5mV) but weak ones a bit lower (0.3-1mV). If for no other reason, knowing that the aerial works properly is enough reason for using an installer.

Discuss this matter with them first though. In some areas, it may be impossible to obtain such a strong signal, no matter what aerial is used; get a variety of opinions if necessary.

CONFEDERATION OF AERIAL INDUSTRIES

The CAI has a countrywide list of aerial installers who are members that abide by the rules below.

To find a local service, contact -

CAI Ltd.,
Fulton House Business Centre,
Fulton Road,
Wembley Park,
MIDDLESEX HA9 0TF

Tel: 081-902-8998
Fax: 081-903-8719

CAI members must employ staff competent for the business conducted. They must follow standards of practice, agree to investigation, examination or test at any time. They must guarantee any aerial, equipment and/or installation work for a minimum period of twelve months ●



STAFFORD
WOODINGS YARD
0785 55154

ALDRIDGE
37 HIGH STREET
0922 57926

A fresh approach to customer care!

When you buy a product from **Musical Approach** our service doesn't end at the cash register. Far from it - we pride ourselves on our superior customer service, from demonstration in our listening rooms to free expert installation in order to achieve the best possible sound in your home.

Now available for demonstration surround sound systems

For six and twelve month check-ups phone for full details :



The quality of Musical Approach's customer service is matched by the quality products we supply including :

L I N N , M A R A N T Z ,
R O T E L , R O Y D E , A R C A M ,
A U D I O T E C H , A P O L L O ,
C E L E S T I O N , H E Y B R O O K ,
S E N N H E I S E R .
and TARGET amongst others.



Our job is to make sure you will be thrilled with your music for years to come.

Phone for a demonstration or just for advise on :

STAFFORD
WOODINGS YARD
0785 55154

ALDRIDGE
37 HIGH STREET
0922 57926

Peter Ellis Audio

A wide range of audio products always in stock including :

Heco, Denon, Stax, Marantz, Quad, Arcam, Creek, Sugden, Cambridge, QED, Castle, Rogers, Celestion, Tannoy, Nakamichi, Yamaha, Michell

★ Interest free credit on selected items ★

29 Kirkgate, Newark
Nottinghamshire NG24 1AD
0636 704571



The Seismic Sink

A revolutionary approach to equipment support



For £169 the Seismic Sink provides a more impressive upgrade to the sound of your CD player than adding an outboard D/A converter -- even the Award-winning £700 Audiolab DAC! (*WHAT HI-FI? December 1992*)

Spikes are essential for speakers, but - contrary to popular belief - are not the solution to equipment isolation. More vibration is fed into the equipment from so-called 'ground' than is taken away.

Reviews to date have shown that the Seismic Sink outperforms Sorbothane, cones, MDF, glass and all spiked tables. The acoustic open circuit afforded by the Seismic Sink eliminated structure-borne vibration, dramatically improving the performance of your CD player, turntable, amplifier (especially valve kit), Laser Disc, VCR - even an outboard DAC.

Standard size: 43cm x 35cm (W x D), takes up to 7Kg
Heavy duty version (£189) takes up to 20Kg
Custom size for esoteric audio components available to order.
The ultimate isolation platform, with built-in, spirit level and three adjustable feet for precise levelling.

Can be shipped worldwide. Contact your local dealer or Townshend Audio for further information and specifications.

Townshend Audio, Tims Boatyard, Timsway, Staines, Middx.
TW18 3JY
Tel: (44) 0784 455866. Fax: (44) 0784 45504

NOTTINGHAM ANALOGUE STUDIO



hand crafted hi-fi

**N
A
S**

Over a history of years, the traditional hi-fi cartridges became strongly polarised, with moving magnets filling the bottom end ('sounds for pounds') and the upper price ranges being dominated by moving coils, the prices of some of which would bankrupt many a Third World economy.

Over the last four years, we have developed a range of moving magnet cartridges, the "ANALOGUE TRACERS", which we believe cover the range from mid-range to the top in terms of performance, at prices which, compared with equivalent moving coils, could leave enough change in your pocket to buy

the step-up device you no longer need - or even a "SPACE" or "MENTOR" arm to be the ideal partner!

ANALOGUE TRACER 1

Spherical stylus, alloy cantilever, giving an excellent start to the range at the price of £98

ANALOGUE TRACER 2

Elliptical stylus in a Boron tube cantilever. Wonderful quality and value at its price of £ 170

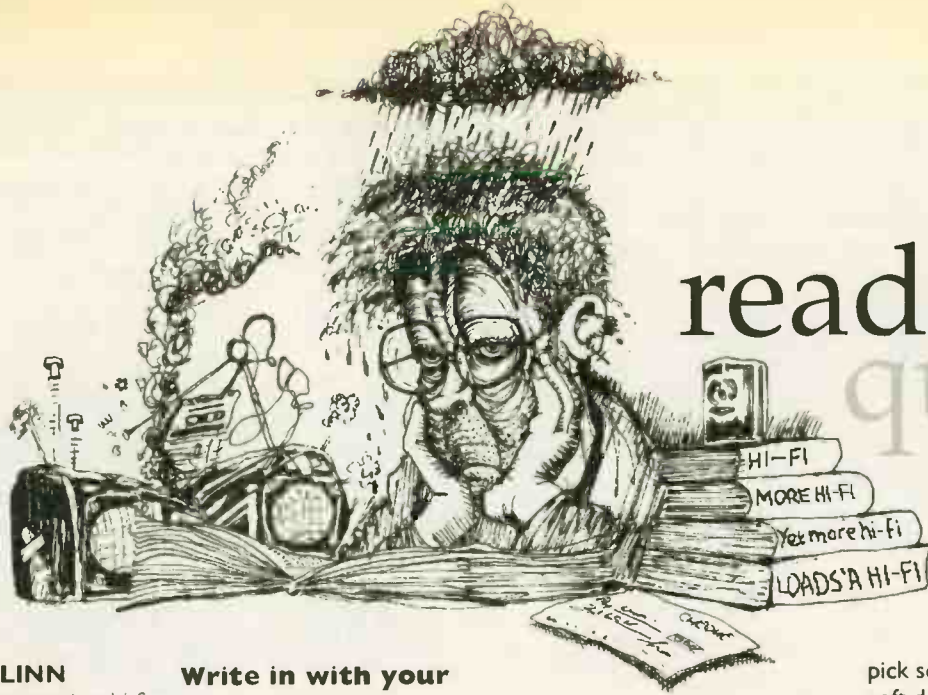
ANALOGUE TRACER 3

Super line contact stylus in a thin walled Boron tube cantilever. Outstanding detail resolution, sound stage and musical integrity, with surface noise generally inaudible. Sets a new standard at its price of £350

ANALOGUE TRACER 4

Further attention has been paid to both internal and external damping. Finished with hardwood side cheeks. When fitted to suitable arm, audition it against any of the opposition and marvel at its price of £500

0773 762947



readers' queries

RETURN TO LINN

I have only just returned to hi-fi proper after buying a system nine years ago- A.R. Legend and Linn LV V, Rotel RA820B and Heybrook HBIs. The return was mainly due to an acquaintance offering me a Linn Akito which I bought and had fitted - I was stunned with the results (using an Ortofon OM10 super cartridge). However, it has now highlighted shortcomings in my system which I will have to put right as finances allow. My present system consists of: A.R. Legend, Akito, Ortofon OM10 super, Rotel RA820B, Heybrook HBIs rigidly fixed to Linn Kan stands and wired with QED79 strand.

I like listening mainly to Rock. My listening room is approximately seventeen feet square by nine feet high with one wall (the one the 'speakers face) having a patio door virtually its whole length. The floor is woodblock on

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.

concrete, as a consequence it is rather "bright".

I feel that the weakest links are the cartridge, amplifier, loudspeaker connections and the tweeters. I am looking for a less clinical, warmer sound. I would also like to, if possible, build or modify components myself (I am a carpenter and

joiner so the 'speakers present no problems).

Any suggestions? I am looking from the angle of greatest cost effectiveness.

**Malcolm R Coulson
West Glamorgan.**

The Ortofon OM10 super is a very smooth and clean sounding cartridge, so I doubt if this is the cause of the clinical sound of your system. However, both the Rotel amplifier and the HBI loudspeakers may be responsible for adding some sharpness or edge to the sound. The easiest way to solve this and considerably upgrade your system at the same time would be to try a new amplifier. The new Denon PMA-350II, reviewed in our September '93 issue, has a fine phono stage with a

smooth and powerful sound. Integrated amplifiers with good phono stages are becoming increasingly difficult to find, so this one is certainly worth an audition.

I would suggest that you built one of the very good kit loudspeakers from either Wilmslow Audio, IPL Acoustics or The Speaker Co., but none of these companies are exactly local to you, making an audition difficult - and I wouldn't advise buying any loudspeaker without first hearing it. If you do decide to take a risk,

pick something with a good soft dome tweeter. On the whole, these tend to give sweeter results than metal domes. You could certainly build the boxes yourself, but be careful to stick to the recommended dimensions as they are critical to the correct operation of the loudspeaker.

One final thing that may be worth doing is to take your Ortofon cartridge into a hi-fi dealer with a stylus microscope. They will be able to tell you whether it is excessively worn and in need of replacement. If you do want to upgrade it, you can't go wrong with any of the Goldring 1000 series, the 1022GX being the best value for money in the range, but the Ortofon OM10 is certainly good enough for the time being. **DB**

GARRARD ZERO 100

Having fiddled with electronics many years ago in my teens I find your magazine a very enjoyable and informative read. It has also set the dominant D.I.Y. spark alight once more and I am at present having a go at building your 'speaker design, which I hope will perform in my modest system purchased a year ago (the silver lining of a black cloud.)

Although my system is CD fronted, what I seek to gain from your knowledge concerns the vinyl side, as broadly speaking I am a 'vinyl virgin.'

Recently, I decided to dig out my small LP collection and a Garrard Zero 100 SB with a parallelogram arm I bought

Continued on page 121... ▶▶



The popular Ortofon OM10, still a good cartridge



Bill Hutchinson Ltd.

PIONEER
REFERENCE
POINT

HI-FI, AUDIO & CD CENTRES – MAIL ORDER AVAILABLE

When you purchase from Bill Hutchinson you're buying the best names in Hi-Fi from the best name for Hi-Fi. Our product guarantee and pricing policy ensure you obtain an excellent deal, my staff and I look forward to being of service to you.



PD-S801
Compact Disc Player

HEAR PIONEER'S CD PLAYERS WITH LEGATO LINK

- PIONEER A 300X AMP – Recommended Buy 1992
- MISSION 760i SPEAKER – Recommended Buy 1992
- MARANTZ CD52 MkII CD Player – Recommended Buy 1992
- DENON D70 SYSTEM – Recommended Buy 1992
- KENWOOD KA-V8500 AV Product – Recommended Buy 1992
- ROTEL RT-950BX TUNER – Recommended Buy 1992

Licensed credit broker Written details on request

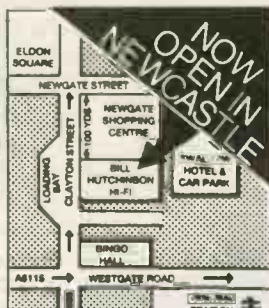
ALL WITH 2 YEAR GUARANTEE BEST PRICES GUARANTEED



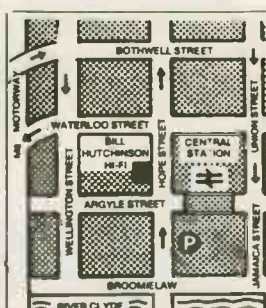
26-28 WOODHOUSE LANE
LEEDS
0532-427777



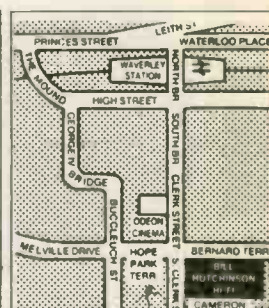
50/52 DEANSGATE
MANCHESTER
061-839 8800



87a CLAYTON STREET
NEWCASTLE NE1 5PY
091-230 3600



43 HOP STREET
GLASGOW G2 6AE
041-248 2857



43 SOUTH CLERK STREET
EDINBURGH EH8 9NZ
031-667 2877

Continued from page 119

nine years ago for £25. I used to play this through a Philips D8644 'ghetto blaster.' Dusting the deck off, I plugged it into my amplifier and immediately got a buzz from it. Sadly, not the sort from enjoying music off vinyl, but an annoying constant buzz through the 'speakers. I have tried it with a

recollection its structural integrity was minimal, and neither platter nor motor are up to today's standards.

Unfortunately, I couldn't backtrack and find any details for fitting a cartridge, though the principles are the same as any other. I suspect, however, that the headshell had a thoroughly idiosyncratic fixing method which would need

screens are not connected to it, forming a loop.

As Eric suggests, it isn't really cost effective to restore the Garrard, except as a working museum piece, as it were. **NK**

BECOMING MORE OPEN

My system is a Rotel RC 960BX and RB 960BX pre-amp and power amp, both four months old, plus a Sony X55ES and an AR Basic turntable with an A&R E77 cartridge. It feeds a pair of Musical Fidelity MC6 loudspeakers.

My problem: the sound is very good, but I would prefer it to be more open. The sound stage is excellent from wall to wall.

My other problem: I am 74 and aiming to become a centenarian, so

require reliability (and more cash than a basic pension provides!)

What I hope you might advise on is whether I could replace the RC960 with a 'tube' or semi-'tube' pre-amp, to achieve this open sound, or maybe you might suggest an all electronic pre-amp, price range £400-500.

I had originally thought of

above this bracket I suspect.

I would be very much obliged for your comments. Oh yes - my taste is classical and opera, and for LP, even if an add-on disc stage is essential.

E J Frith
Tynemouth.

Since your taste is for classical music and vinyl, I would concentrate on the turntable end first. Fundamentally, the AR should survive, and could cope with a better arm than the fairly ordinary affair that it came with. I would explore the possibility of a Rega RB300 or an Alphason Xenon and a better cartridge - a much better cartridge! Good options are any of the Denons (from around £70 up), The Goldring GX moving magnets (see our recent review) or maybe the Ortofon Quattros or MC15. This should give your front-end a whole new lease of life, especially if you buy a phial of oil to lubricate the AR's bearing every now and then and a dozen spare drive belts so you can replace them once a year or eighteen months. Then upgrade the Rotel to say a Sugden 41 or 51 series - but either will cost more than the money you currently have available. Start at the beginning. **EB**

SYSTEM MATCHING

I have recently acquired a pair of B&W DM 610i 'speakers. The following day B&W information arrived on my doorstep showing your review of the 'speakers from your September 1991 magazine.



Reviving a vintage turntable could cost as much as a new Rega Planar 2.

different amplifier and my old 'ghetto blaster' with the same results. What could be the cause(s) of this and its cure? Should there be a ground wire between deck and amplifier? It does not have one currently and probably most important of all, is it worth repairing and how is the arm/cartridge set up?

Your answers will be gratefully received.

Chris Canham
Suffolk.

It's most probable there is a missing earth connection somewhere betwixt cartridge and lead-out wires. Have you checked the connections to the cartridge in the headshell? Frankly, I can't see that the Garrard is worth servicing, since the cost of having someone take it to bits will rack up to half or more the price of a new Rega Planar 2, for example, which will be far better. While the Garrard's arm was a clever idea, in attempting to solve one problem - that of tracking a record in a straight line instead of an arc - it introduced another. From my

surgery. Dustbin time, really. **EB**

Ouch! I loved the styling of the Zero 100S and even the idea of its parallelogram arm, which did successfully reduce tracking distortion. But as Eric says, it sacrificed rigidity in the process and, I believe, the miniature bearings were a problem. All the same, even the mention of a dustbin hurts! I think of all those people who, convinced the 401 was useless because it rumbled badly, threw theirs away. Now who is kicking themselves?

The Zero 100 had a headshell slide whose rear connections could become faulty: check them and the fine connecting leads. Record decks must always be earthed through to the amplifier, and the cartridge body must be earthed too, but earths must not be duplicated or a hum loop will result. There were two methods: either earth the deck's metalwork to one of the signal lead earths (a la Rega), or lead a separate earth back for the metalwork, making sure the cartridge



The B&W 610s deserve a good budget amplifier.

Musical Fidelity, Sugden and Michell, but I never seem to be able to get a price for the latter; it's more than likely

Generally the review was extremely good. The one

Continued on page 123...



Sound Deals

THE HI-FI SPECIALISTS

PRIVATE LISTENING ROOMS • AUDIO/VISUAL
 DEMONSTRATION ROOM • FREE DELIVERY &
 INSTALLATION • PART EXCHANGE
 WELCOMED • PRE-OWNED EQUIPMENT
 AVAILABLE • TOP TAPE AGENTS • ALL MAJOR
 CREDIT CARDS ACCEPTED • CREDIT FACILITIES
 (INCLUDING INTEREST FREE) S.T.S

Agencies include :

*AR, Alphason, B&W, Castle, Celestion, Denon,
 Heybrook, KEF, Nakamichi, NVA, Pioneer,
 Ortofon, Rotel, Ruark, Sequence, TDL, Teac etc...*

1 Drapers Way, Stevenage,
 Herts, SG1 3DT
Tel. 0438 369999

52 Shortmead Street,
 Biggleswade, Beds, SG18 0AP
Tel. 0767 312249 Fax. 0767 315714

Partington and Company

Toppers

Partington Toppers can be used with your loudspeakers,
 and a variety of other Hi Fi Equipment - CD Players, Pre
 Amps, Etc, to greatly improve sound quality.

Use Toppers on your loudspeaker stands for enhanced focus
 and bass control.



IMPROVE PERFORMANCE FOR MERE POCKET MONEY

Prices:	Toppers	Pack of 6 :	£5.95
		Pack of 8 :	£7.95
	Big Toppers	Pack of 4 :	£7.95

*** Another sound investment form Partington ***

Please phone for details on the full range of Partington
 Stands and Accessories.

Partington and Company

UNIT 9 KESTNER INDUSTRIAL ESTATE
 KING EDWARD ROAD,
 GREENHITHE, KENT, TEL: 0322 383712
 DA9 9AP ENGLAND FAX: 0322 381117

OPENING HOURS
 MON.- SAT 10 -6PM

HI-FI CONFIDENTIAL

TAX FREE WORLDWIDE
 EXPORT SERVICE

TO EXPERIENCE THE MAGIC OF VALVES COME TO US



◆ Demonstration room available ◆ Part exchange welcome ◆ Home trail ◆ Free
 Professional Advice ◆

Valve equipment from E.A.R, Audio Innovations, Musical Fidelity, Rothwell
 always available for demonstration

We stock :-

Alchemist, Quad, Pink Triangle, Spender, Orelle, Micro Mega, Monitor Audio,
 KEF, Proac, Ruark, Castle, JPW Snell, and many others.

HI-FI CONFIDENTIAL LTD
 34 Buckingham Palace Road,
 London SW1 W0RE (near Victoria Station)
 Tel. 071 233 0774
 Fax. 071 233 7226

Continued from page 121

statement that your review made was "I can only warn you that if you match the 'speaker carelessly you could suffer a thin relentless sound." I have a JVC amplifier A-GX2/A which has an output of fifty five watts per channel driven into eight ohms from 40Hz to 20kHz. I have read that the 610s can be considered as a four ohm 'speaker. As a novice when it comes to the technical side of hi-fi and not having a trained ear for sound, would my system be classed as careless matching? If the answer is positive please would you recommend a suitable amp (within the budget range) to replace the JVC A-GX2/A.

**M W Barker
Fleet,
Hants.**

First of all you do not need a trained ear to know what sounds good or bad to you. What I would suggest you do is to cart your B&Ws along to a local Hi-Fi Dealer and have a listen to your speakers with a more modern budget amplifier and see if you can hear an improvement. Both the Harman Kardon HK6150 and the NAD 302 are excellent amplifiers, more than capable of driving your speakers, and reasonably priced at around £160. From the information I could glean out of JVC your amplifier is a budget model, around 8 years old. Budget amplifiers have improved a great deal since then and I would expect both the Harman and the NAD to offer a considerable improvement.

If you are still unsure in the demo room a good dealer should be able to offer you the facility of a home demonstration where you can compare the best of the new amplifiers with your own JVC side by side. If you are still not convinced that an upgrade would be worthwhile, celebrate the saving you will have just made by adding a few new albums to your collection. **DB**

UPGRADING TO NEUTRALITY

My system is :
Linn Sondek/Basik/K9,
Cambridge Audio C100 pre-amp, Cambridge Audio A70

power amp x2 (bridged and used as mono) Aiwa F800 cassette deck (very rarely used)

Ruark Rhapsodys

My problem is I have £1000 to spend on upgrades, but I don't know which order to do it in. I was considering fitting a Lingo, but don't know if the amp/rest of the system are up to it. My tastes in music are the likes of Pink Floyd, Genesis, REM, Enya, and Classical.

I am also interested in a neutral sound that brings the group into my room.

**Mr Reith
Salisbury ,
Wilts.**

Considering the front end you are using, I'd be inclined to leave it as is, and concentrate on the amplification. My

rather tame for your taste, but with the Sondek front end it should balance out. Alternatively, try the Sugden AU41P/AU41C combination reviewed in the same group test, which falls better into your system financially.

Of course, there's always the Linn Pretek and Powertek combination for around £800. If you like the 'Linn sound', this could well be for you, but the Ruarks may not be the perfect speakers for this combination.

The classic solution to this problem, on the other hand, would be to pick up one of the many secondhand Ittok arms around, and a new Linn Klyde moving coil cartridge. The remainder of the money could usefully go towards a phono head amp such as the

and right bass, and vice versa. Could one amp be used to drive both parts of one speaker?

Finally, if one doesn't use a pre-amp and merely uses the two integrateds, what happens when using a splitter to put the turntable through both phono inputs? Should it be earthed to both amps or just one?

I hope over the coming months to have a go at building your 300B triode power amp, so long as I can afford it, but for the time being would appreciate your answers on the above. I feel this information will be of interest to many as a cost effective way of managing upgrades now that people are being freed from the dogma that has blighted hi-fi for the last 20 years.

**Andrew Baird
Tyne and Wear.**



Quad's 34/606 pre/power will give a smooth relaxed sound

system currently runs through a C100 pre-amp, but only one A70 power amp, so I know this quite well, and it's leaving me wanting more clarity and a better image.

You don't actually say what you feel the problem currently is, so it is difficult to suggest a cure. Starting with the cheapest option, have you tried using the C100 as a passive pre-amp? Passive and active outputs are provided at the back, and you'll find a great difference in sound quality. You'll lose something in bass power unfortunately, but if this isn't a problem, you'll gain in openness and clarity of detail.

If this doesn't solve your problems, try the Quad 34/606 combination reviewed in our April issue. Personally I think you'll find the Quads

Michell Iso. To keep within your budget, you could try the Audiolab 8000A integrated amp instead, which has an excellent phono input stage. It's worth taking your amps down to a local dealer and auditioning them against the Audiolab to see what you think. **SC**

BI-AMPING ADVICE

I want to try bi-amping with two Musical Fidelity AIs, and would like your advice on some aspects.

Firstly, is it OK to use these with a preamp such as the Rose RV-235 via one of their line inputs?

Secondly, as an alternative to using one amp for both tweeters and the other for both bass units, I have heard it suggested that one ought to use one amp for, say, left treble

The Rose pre-amp would most likely be excellent for this application, and even has two sets of outputs especially for bi-amping. However, we suspect you have misunderstood bi-amping. The power amplifier stages are paralleled up and work into a bi-wireable loudspeaker with its links removed. Just one pre-amp is used, otherwise you'll have to turn both volume controls at once and keep them in perfect synchronism, which is hardly practicable! A good solution with two integrateds is to use them as power amps by turning volume up to full and feeding the output of the preamp into the auxiliary, tuner, or tape inputs.

In answer to the second part of your query, the best way to use these power amps would be as if they were monoblocks so that one amp drives the right channel speaker and the other amp the left. Using them in this way will ensure that the maximum channel separation is maintained, and you will get better imagery and staging between the speakers as well as the increased control you get from using a power-amp on each drive unit. **SC**

TUNER TROUBLES

My partner and I have two hi-fi systems, each of which has its own FM tuner - in one case an Hitachi FT-5500 MkII and in the

Continued on page 125...

definitive audio nottingham

Tel/Fax (0602) 813562

Import/Export

Definitive Audio is conveniently situated at the heart of the motorway network allowing easy access from Birmingham, Leicester, London, Northampton, Leeds and Sheffield.

Definitive Audio specialises in combining high quality low power valve amplification with high sensitivity horn loudspeaker systems, - this approach has achieved considerable national and international influence. Last year Penta '92 saw the introduction of the Living Voice 'Air Partner' loudspeaker system, a controversial product stimulating heated debate within the industry, see for example "Personal Messages" in this month's Hi-Fi Choice.

This year at Penta '93 Definitive Audio will introduce a follow up to the Air Partner. A more modestly proportioned design, again a three way horn system, with an equally liberating 104dB/W sensitivity. The 'Tone Scout' will require an amplifier of between 5 and 10 watts, and will retail for £5,000.

Of equal interest will be the UK launch of the Hørning Agathon. This 3-ways horn has a clear coherent and unambiguous presentation that provides one of the most enjoyable listening experiences you could possibly wish for. The Agathon retails for £3,500.

Definitive Audio will be exhibiting at PENTA '93 in Room 1016.

Second hand products for sale

* Denotes full warranty

		Price £
IMPULSE	H2 MAHOGANY	• 1700
IMPULSE	H2 ASH	• 1700
IMPULSE	H5 ASH	• 1400
IMPULSE	H6 PIANO BLACK	• 900
AUDIO INNOVATION	5 • 200 PRE	• 200
	5 • 1000 PRE	• 700
	5 • 800 III	• 600
	2 ND AUDIO	• 2000
	1 ST AUDIO	• 900
	5 • 800 MCT	• 140
	5 • 1000 MCT	• 190
QUAD II		200
LEEK VARIOSLOPE		100
LEEK TL 50		400
LINN NEXUS		200
HELIVS CYALENE		700
REVOLVER TURNTABLE		150
VOYD	ASH	• 850
APOGEE STAGE		2000
VOYD REFERENCE	OAK	• 2900
PINK TRIANGLE	PPT • TOO RB300	500

Tel / Fax : 0602 813562

IMPULSE - HØRNING - LIVING VOICE - WADIA VOYD - SME
AUDIO INNOVATIONS - TRANSMUTATION

Partington and Company

The Trophy

A TRUE AUDIOPHILE STAND AT AN
AFFORDABLE PRICE

Designed for bookshelf type speakers, the partington trophy brings out the full potential of your loudspeakers, whether they be budget or high-end



Size: 60cm High
Top Plate: 16.5cm x
16.5cm

Please phone for details on the full range of Partington
Stands and Accessories

Partington and Company

UNIT 9 KESTNER INDUSTRIAL ESTATE
KING EDWARD ROAD,
GREENHITHE, KENT,
DA9 9AP ENGLAND

TEL: 0322 383712
FAX: 0322 381117

“ We don't offer
comparisons.
Only absolutes. ”



COLIN WELFORD

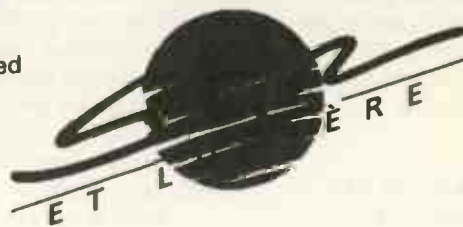
At Son et Lumière, you won't find us trying to confuse you with numerous hi-fi solutions. As far as we're concerned, we've only got one answer to your requirements.

We hold what we believe is the best audio solution at every price level from £800 to over £25,000.

SON ET LUMIÈRE, 67 TOTTENHAM COURT ROAD, LONDON W1P 9PA. TEL 071 580 9059.

With our purpose built listening rooms, we make a point of inspiring you with a musical solution that will give unbridled listening pleasure.

Whatever your aspirations.



other a Sony STS-370. We are reasonably happy with both. The two are fed from a single roof-mounted aerial, with the down-lead routed through a simple splitter purchased from Tandy's. The signal remains so powerful that we have to use the switchable signal attenuator in the Sony to eliminate audibly obvious distortions caused by aerial overload.

This is not, of course, a problem. It would be easy and cheap enough to buy an attenuator even if the tuner did not already have one built in and with the Hitachi we do, indeed, sometimes use an attenuator equipped with a small potentiometer to regulate aerial input, though I have my suspicions as to how 'hygienic' a practice this is

Our problem is as follows - both tuners have signal strength read-outs calibrated in dBs, with 0dB indicating a 'no signal' condition. The readings of the tuners of the same aerial input are, however, considerably at variance and the instruction manuals offer no help at all as to what the dB values actually mean in terms of millivolts or microvolts of signal.

With some music, especially of the compressed type that can make background noise quite difficult to hear (even when it is at a measured level which would be judged intolerable in a Radio 3 transmission) it is difficult to judge by ear alone the best compromise between minimal noise and subjectively evident distortion caused by too high an input from the aerial. It would obviously help a great deal if one could use the dB values to establish the optimum attenuator setting. Can you comment or, better still, offer a solution?

Tim Horrocks
Birmingham.

Unfortunately, two different ways have been devised to express signal strength in dB and your tuners just happen to use both of them! The easiest to comprehend is that used by your Hitachi, which simply expresses signal level relative to a 1µV (terminated/p.d.) reference level - so low as to appear to be a no-signal condition, as you put it. This makes a x1000 step up, or +60dB, equivalent to 1mV.

Sony told me that the STS-370 uses the IHF (Institute of High Fidelity, an American body) alternative method devised, the Standard says, to overcome rating problems. It uses the notion of power into the aerial to harmonise ratings for different impedances (300ohm and 75ohm), a problem more evident in the U.S. where both types of aerial are common. This uses a horrid unit known as a femtowatt, which is one thousandth of one millionth of a watt, or about the power of a flea coughing.

A femtowatt into the Sony is equivalent to 0.55µV, which puts its 0dB reference input level -5.2dB below that of the Hitachi - so that's the difference between the two scales, plus the reason why they are different.

As a rule of thumb, signals over 10mV (80dB on the Hitachi) are best attenuated down, since they are likely to cause front-end overload and intermodulation, even though quoted limits are higher. For optimum results, do not let the signal in sink below 1mV (60dB on the Hitachi), since this represents full quieting for most tuners. Some stations will be more powerful than others; choose attenuation so that most lie in the 1-10mV range. Noise will become obvious below about 200µV.

Beware of sources of distortion other than front-end overload caused by excessive signal. Tuners can transmit from their aerial input. Running two from one aerial could cause a problem with spurious response; try switching one off when checking. The diagram gives signal levels in dB and what they mean. Bear in mind that tuner dB scales are approximate, although the Hitachi's can be relied upon. **NK**

MORE "BITE" FROM CD

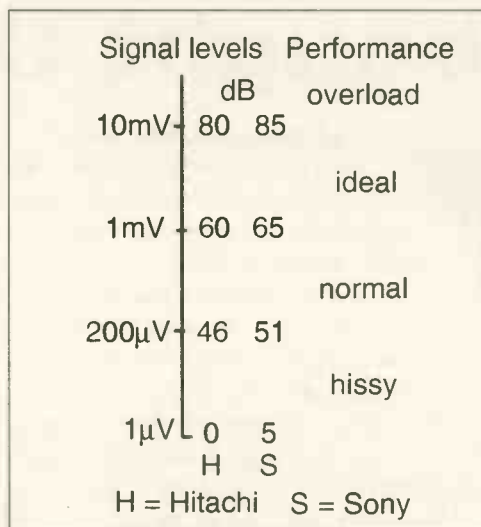
I have recently discovered what my two year old Harbeth HL-P3 'speakers can sound like by replacing my Cyrus II and PSX integrated amplifier with a pair of Audiolab 8000M Monoblocks and Audiolab 8000C pre amplifier. This combination Bi-wired with Linn K20 'speaker cable gives an excellent fast and easy going sound with good imaging which meet my musical tastes for Classical and adult Rock.

The 'speakers are sited on foundation designer stands.

The rest of my system comprises a Meridian 200 CD transport and a Deltec PDMI Series II/The Power DAC convertor, Technics ST-G70L

If it's 'bite' you want, the DPA converter ought to be supplying it. The problem, I suspect, therefore lies in the transport rather than the converter.

My own fave rave for a while has been the Sugden SDT-1/SDAI transport and DAC combination, which come in at a little over your budget, but the transport makes a good partner for DPA converters, so you needn't buy both at once. Another transport I've recently had



tuner, Ariston Pro Deck with Linn K9 cartndge.

I listen mainly to CDs and the radio. I wish to replace the CD and the convertor in order to get more bite - which I think is also important when listening to classical and especially string quartets.

So far I have only short listed the new improved 8000DAC convertor which I have not heard yet. But then I take the risk to find myself with a nearly single brand system with neat boxes piled on each other like a midi system. Is this acceptable for serious listening in the case of my system? Could you suggest better alternatives? My budget is £1500.

Yves Pinton
Vincennes,
France.

through my hands is the Teac P700, which would also supply a little more additional bite, but not as much as the Sugden. Since you're in France, don't forget the Micromega transports, which turned out a very good, detailed, crisp performance with a DPA Little Bit II in my flat not too long ago. **EB**

Mission's Cyrus amplifiers are highly regarded by us; in your case I strongly suspect that the Audiolab monoblocks, which we use and are well acquainted with, have more grunt and it is this that the Harbeth HL-P3 speakers appreciate, since they reach a low impedance of 3.2ohms at low frequencies, demanding good current delivery; in this the Audiolabs excel. **NK**



DPA's PDMI Series3 CD convertor should give your system bite.

No one was ever sorry that they bought the best!



As audiophiles you demand the ultimate.

Groove Tubes Performance tested valves certainly measure up every time to those demanding standards. Whatever kind of music you prefer, you'll appreciate it better with Groove Tubes. Simply changing to Groove Tubes will create a whole different set of tonal characteristics to your amplifier, and they are used or approved as the ultimate upgrade to any preamplifier or any power amplifier, by many manufacturers.

Hundreds of professional musicians like Bryan Adams, ZZ Top, Tina Turner, Genesis and Chris Rea use Groove Tubes and G.T. Electronics in their stage and recording amplification.

Now we are introducing the Groove Tubes D.75s power amplifier to the Audiophile market.

This is a professional 75 watts per channel stereo amplifier currently in use in top recording studios around the world and of course it comes complete with Groove Tubes as standard.

So use Groove Tubes, sit back and hear the difference!

For further information and your nearest stockist contact the Groove Tubes Hotline now.

Telephone: 0902-620156
Fax 0902-620207

The Groove Tube Centre, 8 Barn Green,
Bradmore, Wolverhampton WV3 7AY England.



“ We know how
to inspire you
with music. ”



COLIN WELFORD

At Son et Lumière, we make a point of inspiring you with a musical solution that will give unbridled listening pleasure.

In our purpose built listening rooms, we hold what we believe is the best audio solution at every price level from £800 to over £25,000. So, you won't find

us trying to confuse you with numerous hi-fi solutions. As far as we're concerned, we've only got one answer to your requirements.

Whatever your aspirations.



SON ET LUMIÈRE, 67 TOTTENHAM COURT ROAD, LONDON W1P 9PA. TEL 071 580 9059.

352-354 Lower Addiscombe Road,
Croydon, Surrey CRO 7AF
Telephone: 081 654 1231/2040

Fax: 081 655 3922

High Fidelity/Loudspeaker
and Video Specialists



SPALDINGS THE Hi Fi SHOP

THAT HAS
THE HIGHEST STANDARDS
IN THE SOUTH EAST.

Whether you are a complete beginner or have many listening hours under your belt, you need the facilities a really good hi-fi shop offers to ensure you get the best value.

We carefully select equipment in every price range, from good value products at around £200 per item, to more expensive and even more enjoyable systems costing thousands.

In our demonstrations we use listening rooms separate from the main shop and our extensive experience enables us to get the best from every piece of equipment. This makes differences and improvements pleasantly obvious.

We offer free of charge the most vital part of any hi-fi system, the detailed preparation and installation necessary for us to achieve the best sound in your home.

We guarantee that you will be thrilled with your music, not just for the first few months but over many years of listening.

Equipment From:

ARCAM•AUDIOLAB•LINN•NAIM•QUAD
DENON•ROTEL•MARANTZ•KEF
RUARK•EPOS•MISSION•CYRUS
CELESTION•DUAL•MERIDIAN•MICHELL
AND OTHERS

PLEASE DO NOT HESITATE TO CONTACT
US TO ARRANGE A DEMONSTRATION OR
JUST FOR ADVICE ON:
081 6541231

QUINTET 25w Stereo

CONCERTO 40w Stereo

TEMPO 30w Mono

All Class A with hard wired P.C.B. and Star earthing (the best of both worlds).

IN THE NORTH
Doncaster Hi-Fi Studios,
Sunnyfields (0302) 781387

Hi-Fi Experience
Glasgow (041) 226 4268

IN THE SOUTH
Vinyl Tube Audio
43-45 Fortress Road
Kentish Town
London
071-485-4854

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

What do the critics say:

QUINTET

The Art Audio gives you music with a sense of rightness that you don't really question but simply get on and enjoy. Sweet, open and lucid, the music is produced with an easy sense of naturalness which makes long term listening fatigue free and especially rewarding.

Roy Gregory, Hi-Fi Choice.

TEMPO

I feel that the Art Tempo amplifiers are among the finest valve power amplifiers currently available. The imagery that the Tempos create is vivid, lifelike and full of space and air.

Alan Sircom, Hi-Fi World

MAESTRO

... they are just so stunningly gorgeous and open to listen to, I can barely imagine anything more alluring.

Noel Keywood, Hi-Fi World

...the Maestro is part of that rare breed of hi-fi that makes you forget about the equipment and think about the music. In all, unlike the car, the Maestro lives up to its name.

Alan Sircom, Hi-Fi World



130 MAIN STREET, CALVERTON, NOTTINGHAM NG14 6LU Tel: 0602 653604

For your pleasure we present the new

"SILVER NIGHT"



Audion 300B
Push Pull
"SUPPER LINEAR"
Direct heated triode
amplifier's
Positively no feedback
Pure Class "A"

"Probably the best amplifier in the world" Under £2000, affordable high end!
Now performing at the following selected dealers

Audio South, Farnham 0252-714555
Audiocraft, Usbridge 0895-253340
Progressive Audio, Kent 0634-389004

English Audio, Hereford 0432-355081
K.J. Leisure 071-486 8262
Chantry Audio, Nottingham 077-870372
Sound Academy, West Midlands 0922-473499

G T. AUDIO HAS ON DEMONSTRATION

CROFT Amplification. Pre-amps start from £200 and Power Amps from £549. The integrated is also available at £599. All units come with a comprehensive 2 years guarantee.

NOTTINGHAM ANALOGUE We are now stocking the very latest turntable from Tom Fletcher called "The Illusion". It is based on the well established spacedeck and sells for £600. The "Graphic" turntable is also available at £1200 along with the space and Mentor arms.

ANALOGUE TRACER I, II, III, and IV Reference MM cartridges. "the new IV at £500 is a revelation, taking analogue a step nearer the real thing."

POSSELT Loudspeakers "Probably, the finest Loudspeaker in the world." 93dB efficiency, an excellent match for all types of amplification. Price £2000

MONARCHY AUDIO Model 22 "jitter free" Digital to Analogue converter, US award winner using the K version Burr Brown chip set and balanced outputs, all for £1200

CLEMENTS Loudspeakers. The range starts with the 90dB 100Si at £299, and the 89dB 300Si at £645. These compact speakers give a very natural performance with extraordinarily good bass performance for their size.

XLO ELECTRIC Cables and interconnects POA.

MATISSE Reference pre-amplifier and Reference Line stage. Its superb looks and finish is only matched by its sound quality. From £2000

ZIKRO AUDRO 600 SE Mono blocks: "20 watts of pure class A using the legendary 300B triodes in single ended operation"

GROOVE TUBES "The only alternative replacement valve."

G T AUDIO CABLES "Loudspeaker and interconnects made by Graham Tricker to your own requirements".

ATACAMA equipment supports.

We are situated in Buckinghamshire on the Borders of London, 5 minutes from junction 16 of M25/M40 Motorway.

DEMONSTRATION BY APPOINTMENT ONLY Tel: 0895 833099

CLASSIFIED ADS

PRIVATE

PINK TRIANGLE EXPORT turntable, Roksan Tabriz tonearm, Ortofon Quartz cartridge. Excellent condition. Can demonstrate. £500. Tel 061 434 8779

CROFT SERIES 4SA valve power amp, 60w per channel, £550, or exchange for power amp. Cambridge Audio C75 pre-amp, MM / MC input, £150. Tel Marc 0202 315330

ARCAM BB3 DAC, 6 months old with Audioquest and Goldring interconnects, £225. Pioneer F401L tuner, 12 months old, £110. Both perfect condition and boxed. Tel 0625 619076

ORIGIN LIVE TURNTABLE, Rega RB300, Nagoka MP11 Boron. £165. Sound Org. three tier table £30. Target TT1 shelf £25. Leak 2060 speakers and Leak 2000 receiver, offers. Tel 0675 470556

CYRUS TWO AND PSX MkII. Immaculate condition, finished in black. Powerful, punchy sound. Boxed as new. £450 ono. Tel 0332 751474 (after 7.30pm)

THORENS 160 MkIIS, Hadcock 128S Unipivot tonearm, Decca Gold(a classic combination), £160. SME3009 S2 £30. SME plinth and lid for Garrard 301 / 401 £20. Tel 0422 843863

WANTED: OLD TANNOY speakers, old Lowther speakers. old Vitavoxs, Ortofon tonearm 301 / 212, BBC Garrard 301, Ortofon SPU cartridge, vintage valve amps, Scott 310E and FisherFM 200 / 300 / 1000 tuner. Sell MacIntosh MR 67 and MR 80 tuners, EMT-930 turntable, Telefunken V 69a studioamps, Lectron JH-50 power amp, Radford STA 25 Mk4 power amp Ser. Nr. 40. Tel 0444 881184

EXPOSURE XX LINE AMP plus 8m Exposure cable. Cost £530 together. Excellent condition, will demo, £350. Tel 0634 409107 (after 2pm)

PRIVATE

MAGNAPLANER SMGa, crossovers modified and fitted with rigid stands, £370. Leak Troughline tuner, mint. Tel 0604 415182

LINN AXIS TURNTABLE with Akito arm and Linn K9 cartridge. Only used a dozen times- box and receipt available. Accept £325 ono. Tel 081 368 2747

QUAD II POWER AMPLIFIERS £300. Quad electrostatics (two pairs) £750. Garrard 301 motor unit £75, 401 £75. Quad 22 pre-amplifiers £45, Quad FM2 tuners £45. Tel 0444 459196

LINN AKITO £85, 9 months use only. Delttec Gortex interconnect 1m length £100, no offers. Tel 0443 423402 (S. Wales)

NAIM CDS, 1 month old, immaculate, boxed, with 2 year warranty, £2200. Linn Sara 9 speakers, bi-wired, black ash, with stands and cable £420 Tel 0524 381389

LEAK VALVE STEREO TL12 plus gold Golden Dragons. Stereo 20 gold Groove Tubes. Troughline tuners MkII & III, Garrard 401, Decca arm, Super Gold cartridge. Any reasonable offers considered. Tel 0295 261863

LIKE TO OWN ONE of the new Hi Fi World kits but lack the experience to build it? I will build, set up and test it to specification at a moderate cost. For details call Norman Butler on 081 427 1378

HELP!!! I am looking for valve data books. Make your offer specifying type, printing data and price to :Daniel Pinault, 3 Rue Farabeuf, 77320, Beton Bazouches, France.

TOWNSEND GLASTONBURY II (prototype) speakers. Latest drivers and protection circuitry including stands £650. Garrott Decca microscanner cartridge. Little use since new tip £150. Saisho CD player £50. Pioneer TX-6500II tuner £20. Tel 0934 876561

PRIVATE

AUDIO RESEARCH SPI0 Mk2 pre amp in black. Immaculate condition. Cost £3995 will accept £1400 ono Tel 071 735 6257

MISSION CYRUS TWO, 5 months old, excellent condition £250. Cyrus One mk1 £50. Linn Index speakers plus matching stands £100 or p/x towards Audio Innovations 500 amplifier. Tel 0270 669391

SILVER WIRE 0.68mm £4 per metre. Make you own speaker cable or interconnects, save a fortune. Instructions and advice given. Teflon tape and tube available. Quad II rebuilt £290 Tel 0642 532696

QUAD 33/FM3/405 £250. Kef 104 ab Monitors £150. Tel 0908 617535

LEAK TL 50s rebuilt £500. Audio Research SP8 pre amp £600. Tannoy Lancasters 15" gold £600. Garrard 301 solid medite plinth, Helius arm £250. Small integrated valve amps from £60. Tel 0709 555403

CABLE CLEAROUT. Tara Labs Quantum CD 1/2 m £25. Delttec Slink 1m £20. Furukawa FS-2T14 5m £35. Supra 4 5m £20. All pairs terminated. Video Z 1/2m £20. Rega Planar 3 with super bias, mint £190, no offers. Tel 081 871 2345

ART AUDIO TEMPO monoblock amplifiers. Stunning sound, mint condition and boxed. £1500 new, will accept £750 ovno. Please phone Bob after 6.00pm on 0275 393980 (Bristol area)

AMC CVT 3030 AMPLIFIER £260. Cary CAD 955 CD player £490. Creek 4140 S2 amplifier £80. Dolby prologic decoder with remote £85. Wanted good AV amp. Tel 0260 274470 (Cheshire)

QUAD 44 PRE-AMP, 405 MkII power amp, FM4 tuner £595 ono. Tel 0270 589322

PRIVATE

GARRARD 301/401 £150 each. Dynavector 17 DII m/c cartridge £125. Rogers HG88 III valve amplifier £120. Thorens 124 turntable £150. Wanted Leak TL12 +25 valve amplifier. Tel 0533 835821

MERIDIAN 200 TRANSPORT, new spec, 2 months old, £695. Audioplan musicable speaker leads, 2 x 6.5m, £160 (1/2 price). Various Furukawa and Van Den Hul interconnects. Tel 0442 877853

GALE GS 401A (chrome ended) speakers £250. Custom wall mount stands included if required. Meridian 101B pre-amp + pair of 105 power amps both modified to final spec by makers £250. Tel 0303 893560

COMPLETE SALE ONLY, very little use, all boxed. LP12 Ittok LVII Troika Naim 32.5 250 Hicap SBL SPKs, Nad tuner, Denon DRM14 HX c/ deck. 50 unused tapes in storage units, over 300 records & table and stands purchased and upgraded by Sound Org. A sensible offer. Tel 081 743 5690

LUMLEY REFERENCE 120 MONOBLOCKS (pair), almost new, 120 wpc. Mortgage arrears force sale. New price £3200, £1900 the pair. Tel 0273 541462

ROGERS STUDIO I loudspeakers, excellent condition, £395 (pair). (Moving house hence mobile phone) Tel 0836 380344

AUDIO RESEARCH SPI0 £1200 or exchange for ARC D115 or Krell. Custom Audionote M7 valve pre-amp £450. Thorens TD150 LVX+ AT30E £150. Sfernice 100K dual potentiometer £10. Neal cassette deck. 0642 559543

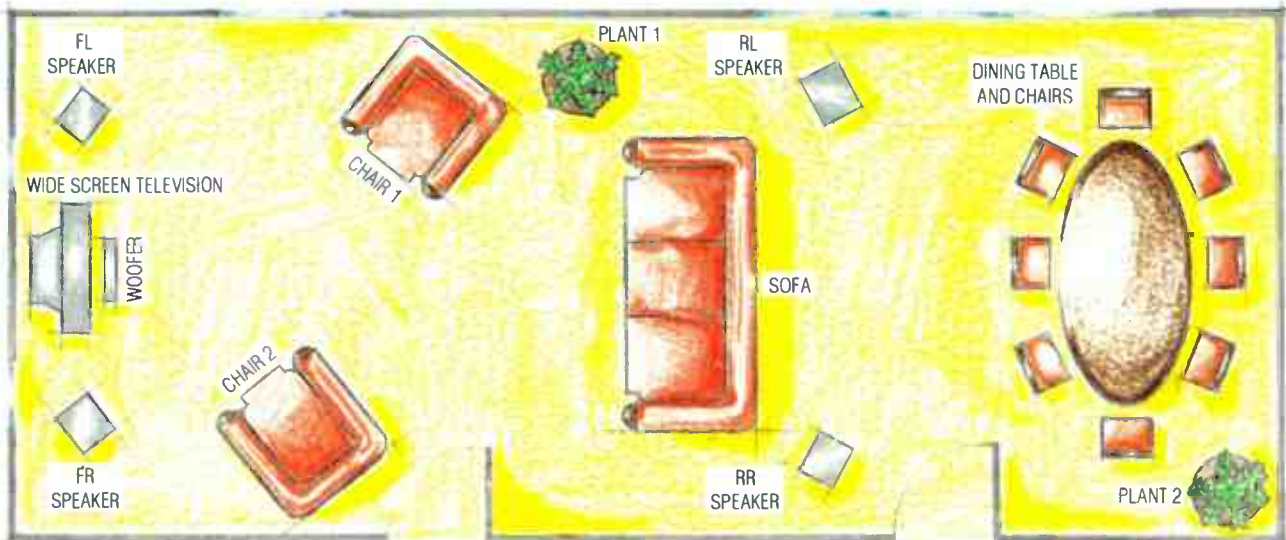
PRIVATE CLASSIFIED ADS
CONTINUED ON PAGE 56

Advertisers Index

AERIAL SHOP	116	GROOVE TUBES	126	OXFORD AUDIO	99
ALCHEMIST		HARROW AUDIO	100	PARTINGTON	122
PRODUCTS	105	HEYBROOK	80	PARTINGTON	124
ALEMA U.K.	127	HI-FI CONFIDENTIAL	122	PENTACHORD	106
AMADEUS SOUND		IAN HARRISON	106	PETER ELLIS	118
& VISION	116	J. E. SUGDEN	72	PRECISION CABLES	116
ART AUDIO	127	J.P.W	6/7	PROGRESSIVE AUDIO	48
AUDIO		K.J. LEISURE	101	PYRAMID AUDIO	46
COMPONANTS	107	KIMBERLY HI-FI	104	Q.E.D.	46
AUDIO CRAFT	104	L.F.D. AUDIO	105	READING HI-FI	12
AUDIO TECHNICA	48	LEICESTER HI-FI CO.	22	SELECT SYSTEMS	40
AURA	36	LISTEN INN	22	SEVEN OAKS	102/103
B&W	28	LISTENING ROOMS	109	SLATE AUDIO	99
BABBER		LORICRAFT	116	SONET LUMIERE	124
ELECTRONICS	104	LYNWOOD		SONET LUMIERE	126
BILL HUTCHINSON	120	ELECTRONICS	48	SOUND CRAFT HI-FI	100
BRYANTS	108	MARY BLACK	52	SOUND DEALS	122
BURY AUDIO	104	MAY AUDIO		SOUND GALLERY	4
CAMBRIDGE HI-FI	48	MARKETING	12	SOUND ILLUSION	107
CAMPAIGN AUDIO		MERSEYSIDE		SPALDINGS	127
DESIGN	107	SATTELITE	116	SPEAKER CO.	112
CLEAR CRYSTAL		MICHELL		STUDIO ACOUSTICS	107
SYSTEMS	100	ENGINEERING	106	TANNOY	8
COURT & SPARK	40	MIKE MANNING	72	THE SPEAKER CO.	99
D.P.A. DIGITAL	10	MISSION	B.C.	TOWNSEND AUDIO	118
DEFINITIVE AUDIO	124	MUSIC MATTERS	113	TRY ME & SEE	38
DIVA	18	MUSICAL APPROACH	118	TWENTY 20 A.V	112
DOUG BRADY	22	MUSICAL IMAGES	14/15	V'AUDIO	105
E.A.R.	54	NAIM	I.F.C.	WEST MIDLANDS	
E.M.F.	109	NAKAMICHI	24	RADIO	106
EUROPA DISC	104	NORTHWOOD AUDIO	101	WILMSLOW AUDIO	46
G. MEX	60	NOTTINGHAM		WOLLATON AUDIO	12
G.T. AUDIO	127	ANALOGUE	118	YAMAHA	I.B.C.

YAMAHA LSI

Semiconductors for Sound Synthesis and Sound Signal Processing Applications



DRAFT SURROUND SOUND ROOM LAYOUT
ISSUE: 1 DRAWN BY: S.F DATE: 21/5/93

From sound synthesis to sound signal processing, Yamaha LSI has the solution to your application.

By combining its experience in building electronic musical instruments with high-tech R&D work,

Yamaha has mastered the fine art of manufacturing sophisticated semiconductors.

For further information and a free copy of the 1993 Yamaha Condensed Catalogue, please contact: Mr. Richard 'TT' Bethell or complete and fax/post the reply slip below.

Name: _____

Position: _____ Tel: _____

Company: _____

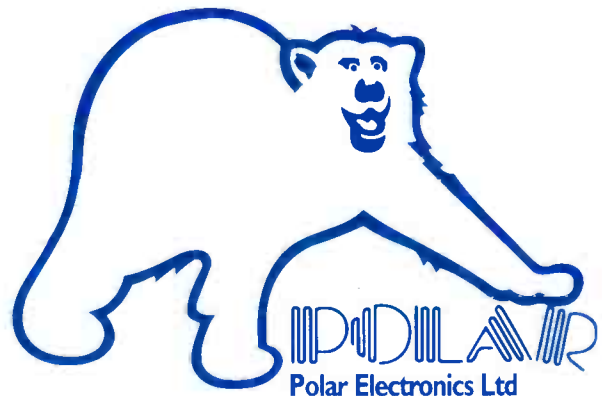
Address: _____

Postcode: _____

Polar Electronics Ltd

WNIEE/6/93

Cherrycourt Way, Leighton Buzzard, Bedfordshire LU7 8YY. ENGLAND
Telephone: 44 (0) 525 377093 • Fax: 44 (0) 525 378367
Polar Support Tel: 44 (0) 525 853071 • Fax: 44 (0) 525 853070



MISSION

because...

